

English



FUJITSU Software BS2000

AVAS V8.5A

Statements

User Guide

Edition June 2017

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Certified documentation according to DIN EN ISO 9001:2008

To ensure a consistently high quality standard and user-friendliness, this documentation was created to meet the regulations of a quality management system which complies with the requirements of the standard DIN EN ISO 9001:2008.

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1 Preface

The complexity and workload of computer centers are constantly increasing. DP operations therefore require clear structuring, high levels of transparency and flexibility, and constant productivity enhancement. The automation of batch production is an essential factor to reach this aim.

The AVAS (in German: **Auftragsverwaltungs- und Abwicklungssystem**) job administration and processing system provides computer center operators with a means of automating their job production to such an extent that operator intervention is reduced to an absolute minimum. Transferring batch processing into system layers that do not require operator intervention is greatly facilitated.

AVAS automates planning, preparation, release, control and monitoring of batch job processing in BS2000. The AVAS administration and control functions also run in BS2000.

From the BS2000 platform AVAS can start and monitor jobs on other systems:

- In the homogeneous BS2000 multiprocessor network AVAS uses the HIPLEX MSCF functions for job distribution and monitoring.
- The use of the AVAS-SV-BS2 server enables Remote BS2000 systems to be connected to AVAS via the Socket interface

The transfer of files to other vendors' systems is supported with an openFT connection.

In all cases the definition, preparation and monitoring of production is performed centrally by AVAS on a BS2000 system.

AVAS enables the computer center to automate its production jobs and to handle the necessary planning, preparation and monitoring tasks interactively. AVAS supports both decentralized work scheduling in the various non-DP departments and the central storage of information on jobs.

The *net description* defines the arrangement of jobs in the net, timing specifications, job characteristics, restart variants, and dependencies on other nets and jobs, and on condition values and resources.

Time scheduling uses calendars with symbolic dates or procedure names which, together with the net descriptions, form a *production plan*.

During *production preparation*, it is possible to supply the nets with runtime parameters from the production plan via user masks or from parameter files.

During the *release for production*, transport lists and tape mount listings can be created for the required data volumes by accessing the MAREN catalog. After the net has been released, it is started by the run control system in the *production execution* stage in accordance with the predefined time specifications and dependencies.

Production monitoring, like all of the preceding steps, is carried out online. If an error occurs, predefined restart processing is activated. Depending on the specifications in the net, restart is either executed automatically or initiated explicitly by the user, the latter permitting further manual intervention. The entire production sequence within the planned nets is logged and can be reconstructed on the basis of the journal. Under AVAS, the runtime logs of jobs can be saved and displayed.

1.1 Objectives and target groups of this manual

This manual addresses AVAS users and the AVAS administrator.

1.2 Structure of the AVAS documentation

The following documentation is available for the AVAS software product under the BS2000 operating system:

AVAS Functions and Tables

The “**AVAS Functions and Tables**” manual [1] is intended for AVAS users. It initially provides an overview of the AVAS functions, and then a detailed description of how to define and handle production runs. The manual also includes brief descriptions of multihost operation and of administration, plus tables and overviews.

AVAS Statements

The “**AVAS Statements**” manual is intended for AVAS users and the AVAS administrator. It contains all the AVAS statements in alphabetical order. The masks are described together with the corresponding AVAS statements.

The manual also contains information on

- conducting a dialog
- preparing jobs for execution under AVAS
- the CHECK function.

AVAS for the Administrator

The system administrator guide “**AVAS for the Administrator**” [2] is intended for those responsible for administrating the AVAS system. This manual describes all the tasks performed by the AVAS administrator, from generating the system to the administration of the AVAS system. The manual also includes information on

- the utility routine AVAS-QUER
- combining AVAS with MAREN
- AVAS reports
- BATCH functions
- external creation of AVAS elements
- program interface
- AVAS-SV-BS2

You can find these manuals online at <http://manuals.ts.fujitsu.com> or you can order them in printed form for a fee at <http://manualshop.ts.fujitsu.com>.

Readme file

The functional changes to the current product version and revisions to this manual are described in the product-specific Readme file.

Readme files are available to you online in addition to the product manuals under the various products at <http://manuals.ts.fujitsu.com>. You will also find the Readme files on the Softbook DVD.

Information under BS2000

When a Readme file exists for a product version, you will find the following file on the BS2000 system:

```
SYSRME.<product>.<version>.<lang>
```

This file contains brief information on the Readme file in English or German (<lang>=E/D). You can view this information on screen using the `SHOW-FILE` command or an editor. The `/SHOW-INSTALLATION-PATH INSTALLATION-UNIT=<product>` command shows the user ID under which the product's files are stored.

Additional product information

Current information, version and hardware dependencies, and instructions for installing and using a product version are contained in the associated Release Notice. These Release Notices are available online at <http://manuals.ts.fujitsu.com>.

1.3 Changes since the last edition of the manual

The following change has been made since the last edition of the manual:

The connection of other vendors' systems (Linux, Windows etc.) with AVAS-SV is no longer supported.

1.4 Notational conventions

References to other publications are specified in the text using abbreviated titles. The full title of each publication, which is referenced by a number, can be found under “Related publications” after the corresponding number.

Cross-references within this manual indicate the number of the relevant page in the manual and, if appropriate, the name of the section or chapter. References to information described in other manuals include only the abbreviated title of the corresponding manual. You can use the index of the manual indicated to find the appropriate place in the text.

Supplementary information appears under the heading “Notes”.

The following notational conventions are used in this manual:



This symbol denotes important information which you should always observe.



This symbol and the word **CAUTION!** precede warning information. In the interests of system and operating security you should always observe this information to prevent the loss of data.

`fixed`

Path and file names as well as phase names and procedure examples are displayed using a `fixed` font.

bold
`fixed`

Entered by the user on the screen.

1.5 Licensing regulations

The licensing regulations for the OpenSSL package and the TLS-FTP patch of Peter 'Luna' Runestig are printed below.

LICENSE ISSUES

=====

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts.

OpenSSL License

```

/* =====
 * Copyright (c) 1998-2016 The OpenSSL Project. All rights reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
 *
 * 1. Redistributions of source code must retain the above copyright
 *    notice, this list of conditions and the following disclaimer.
 *
 * 2. Redistributions in binary form must reproduce the above copyright
 *    notice, this list of conditions and the following disclaimer in
 *    the documentation and/or other materials provided with the
 *    distribution.
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2 Interactive prompting

The mask-driven AVAS dialog system can be started under any BS2000 user ID. Entering a statement first causes an overview of all referenced objects to be displayed. The statement can now be applied to any of these objects. Alternatively, the set of objects to be processed can be limited by means of the marking facility. Once a statement has been successfully processed, the user receives an acknowledgment. In the case of invalid inputs, processing errors or unauthorized access attempts, the error is displayed in the message line. Information on the statement can be obtained by calling help screens.

2.1 Interactive mode with AVAS

The dialog with AVAS is started with the AVS.DIALOG procedure, which is an element of type J in the SYSPRC.AVAS.085 library. When communicating with the AVAS system, the user is prompted with masks (see [page 28](#)). To sign on to the AVAS system, the signon mask AVS010 is displayed.

2.1.1 Signing on to the AVAS system

Once the dialog procedure has been started, AVAS displays the signon parameter input mask AVS010 in the user's interactive task. The user must enter the following signon parameters in the ASV010 mask in order to identify himself or herself as authorized to use the AVAS system.

AVS010 – Mask for signing on to AVAS

AVAS-USER-ID	Input parameter. Name of the AVAS user.
PASSWORD	Input parameter. Password of the AVAS user. The input field is blanked out.
AVAS-SYSTEM-ID	Input parameter. Name of the AVAS system with which the user wishes to work. Five invalid input attempts mean that the signon operation is aborted with a corresponding message.
NEW-PASSWORD	Input parameter New password of the AVAS user. This parameter should only be specified if the user's present password is to be changed. The input field is blanked out.
REPEAT-NEW-PASSWORD	Input parameter New password of the AVAS user. This password is only accepted if this entry is identical to the password specified under NEW-PASSWORD. The input field is blanked out.

Users can also change their password in the SIGNON mask if they are not authorized to use MODIFY-SYSTEM-PARAMS.

2.1.2 Calling AVAS system statements

Once the user has successfully signed on, the AVS020 mask is displayed with a list of the statements which the user is authorized to use and execute. If necessary, the user can page forward or backward in this list with the paging functions.

One of the listed statements can be selected by means of the S mark and the EXECUTE operation or by entering the corresponding statement in the CMD field. In addition, operands of the marked or entered statement can be specified in the OPR field. In this way, the object, element or set to be processed is determined directly.

Note

It is pointless to mark more than one statement, since only the first S mark is processed.

When AVAS users sign on, they receive authorization to apply commands and functions to AVAS objects (such as, for example, nets and jobs). This authorization can be granted to a single user group or to all user groups. Authorizations are defined in the file AVAS.USER.GENPAR.

To execute statements that call other AVAS statements, the user must also be authorized to use the subordinate statements or functions (e.g. in the case of CREATE-ORDER).

2.1.3 Signing off from the AVAS system

Termination of the AVAS dialog is initiated by means of the END statement.

The END statement can be entered in the CMD field of any AVAS mask, provided a change of statement is permissible. Otherwise the current processing operation must first be terminated by means the RETURN or SAVE operation.

The END statement disconnects the files from the AVAS dialog task and releases all elements locked by the task. END terminates the AVAS dialog. The user is no longer joined to the AVAS system.

If a user wants to terminate work under the current user name and continue under a different user name, he can make use of the SIGNON statement. The SIGNON statement makes it possible to terminate the current AVAS dialog and immediately start a new one. Like END, SIGNON initiates termination of the AVAS dialog and clears all connections to the user. Thereafter, control branches to the AVAS signon procedure. The user is presented the AVAS signon mask to open a new AVAS dialog.

Line 1 contains the **information section**:

```
AVAS-Vnn.yxmm/AVzii          text          #####/#####
```

where:

AVAS-Vnn.yxmm/ AVAS system version where:
 nn = main version of the AVAS system
 y = revision version
 xmm = version update

AVzii Name of the AVAS system mask, where:
 z = function group
 iii = number of the system mask

text Name of the function and designation of the data processed
 (e.g. AVAS-SIGNON).

```
#####/#####
```

Date/Time of day in the form: tt.mm.jjjj/hh:mm:ss

Note

Data in columns 1–13 of the first line of the AVAS system masks can be overwritten, since it must be possible to position the cursor there for the hardcopy function.

Processing section

Lines 2 through 21 contain the processing section:

This is used as an input/output area for function-specific data of the processed objects. This area is structured differently for each individual mask. It consists of text fields and variable fields. All parameters are displayed and entered in the variable fields.

In the case of overview masks, the names of the selected objects are displayed in this section. The objects can be marked in this area. The actions of the system are acknowledged here.

Control section

Lines 22 and 23 contain the control section:

CMD: _____ Input field for the statement name and the operations.
Length = 22 characters

... OPR: _____ ... Input field for the operands:
_____ ... Two fields with a total length of 129 characters. AVAS
combines the two fields to form a single continuous
string. The operands must be entered in the form
name1=value1[,name2=value2]... , with the
sequence of operands being arbitrary.

Message section

Line 24 contains the message section:

MSG: _____ ... Area for execution, system and error messages.
Length = 75 characters.

2.2.2 Working with masks

By way of the following mask fields, the user enters the statement name of the function, the operands and – as an alternative to using the function keys – a statement/character for the operation in the control section of the masks:

CMD field: operation name or character or statement name of the function

OPR field: operands

In addition to a syntax check, AVAS also checks whether the user is authorized to use the function. The mark column enables the user to select statements (statement selection screen) or to mark elements for processing and position the work window (processing section of the mask).

CMD field with operation name or character:

By entering an operation name or character it is possible to control interactive prompting – as an alternative to using the function keys. The operation name can be specified in abbreviated form to the point where it remains unique. When the operation has been executed, it is deleted in the CMD field and the current statement of the function is displayed

The following operation characters/names are available:

+/-	Paging function over two or more work windows when there is more data than can be displayed in a single mask. + Page forward by one work window. – Page backward (towards start of listing) by one work window. If paging goes beyond the end or start of data, positioning takes place as with ++/--.
+n	Page forward n lines ($1 \leq n \leq 9999$) +n displays the n-th record following the first record in the first line of the work window as the first record of the new work window. If this goes beyond the end of data, positioning takes place as with ++.
++	Positions to end of data. The last record stands in the last line of the work window.
LAST	Positions to end of data, like ++.
-n	Page backward n lines (toward start of data, $1 \leq n \leq 9999$) -n displays the n-th record preceding the first record in the first line of the work window as the first record of the new work window. If this goes beyond the start of data, the display is positioned to the first record.
--	Positions to start of data. The first record stands in the first line of the work window.

FIRST	Positions to start of data, like --.
?	Branch to the information functions assigned to the current statement. If a system mask of the statement has already been displayed, the information is specific to the fields of this mask.
RETURN	1) Abort element processing. 2) Return from the information function.
EXECUTE	Execute the statement immediately; start element processing. EXECUTE must be entered by the user.
PRINT	Output to a SAM file Output listings for documentation purposes in connection with the statements SHOW-NET-DESCRIPTION, CREATE-PLAN-NET, SHOW-PLAN-NET, SHOW-DOCUMENT, SHOW-JOB, SHOW-PROD-JOB, SHOW-JOB-LOG, SHOW-NET-STATUS, NET-CONTROL and SHOW-JOURNAL. PRINT must be entered by the user (see page 41).
DOCUMENT	Displays the documentation element, that is assigned to the current element, with the following statements: SHOW-NET-DESCRIPTION, SHOW-NET-STATUS, NET-CONTROL and RESTART-NET With the CREATE-NET-DESCRIPTION and MODIFY-NET-DESCRIPTION statements, a branch occurs to processing of the documentation elements.
CHECK	Calls up the CHECK function. This operation can only be specified in masks that are called up by the statements CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET. Depending on the result of the checks, an appropriate message is output in the mask on completion of the CHECK operation.
JOBLOG	Displays the runtime logs for a job. The operation may only be specified in those masks called by the statements SHOW-NET-STATUS, NET-CONTROL and SHOW-JOURNAL. Depending on the current statement and mask, the logs are displayed on completion of the JOBLOG operation. If an EDT procedure was preset by the AVAS administrator, the user can start this procedure using the statement @do n (n = number of the workfile to be queried with the AVAS administrator).
CONTINUE	Causes a change of mask within an object description when data must be entered or displayed for these objects over more than one mask. Data entered via the existing mask is saved.

IGNORE	Same as CONTINUE, but the entered data is not saved.
SAVE	A processed object is stored in the file associated with the object or in the specified file.
VISIBLE	Switches the display of BS2000 passwords between visible and blanked out.

Note

- All operations can - as an alternative to entry in the CMD field - also be entered via function keys. The assignment of function keys to the operations is made through the AVAS generation parameters.
- All operation names can be specified in abbreviated form to the point where they remain unique. The statement overwritten by the operation in the CMD field need not be cleared. However, the operation must be terminated by at least one blank. After execution of the operation, the overwritten statement in the CMD field is displayed in its entirety.

In addition to the operations described above, the following character strings (#gn) can also be used where “g” indicates the group (1=GENERAL, 2=NET, 3=JOB, 4=CONDITION, 5=JOURNAL/JOBLOG, 6=planning/release, 7=BS2000 objects), and “n” is a sequential number within the group.

Group 1 (GENERAL)

CMD: #1n	This group includes the operations “Save”, “Return” etc. The following operations are possible:
#11	corresponds to EXECUTE
#12	corresponds to SAVE
#13	corresponds to CONTINUE
#14	corresponds to RETURN
#15	corresponds to IGNORE
#16	corresponds to CHECK
#17	corresponds to DOCUMENT
#18	corresponds to PRINT
#19	corresponds to JOBLOG

Group 2 (NET)

CMD: #2n This group branches to NET processing.
The following operations are possible:

- #21 Call the HOLD-NET function
- #22 Call the RESUME-NET function
- #23 Call the CANCEL-NET function
- #24 Call the RESTART-NET function
- #25 Call the START-NET function
- #26 Call the MODIFY-SUBMIT-NET function

Group 3 (JOB and Subnet)

CMD: #3n This group branches to JOB processing.
The following operations are possible:

- #31 Call the MODIFY-SUBMIT-JOB function
- #32 Call the SHOW-SUBMIT-JOB function
- #33 Call the NET-CONTROL function for structure element with FU=S and TYPE=NET

Group 4 (CONDITION)

CMD: #4n This group branches to CONDITION processing.
The following operations are possible:

- #41 Call the ADD-CONDITION-DESCRIPTION function
- #42 Call the MODIFY-CONDITION-DESCRIPTION function
- #43 Call the SHOW-CONDITION-DESCRIPTION function
- #44 Call the SHOW-NET-STATUS function

Group 5 (JOURNAL/JOB-LOG)

CMD: #5n This group branches to journal and JOB-LOG processing.
The following operations are possible:

- #51 Call the SHOW-JOURNAL function
- #52 Call the SHOW-HISTORY function
- #53 Call the ADD-JOB-LOG function
- #54 Call the SHOW-JOB-LOG function
- #55 Call the START-EXIT function

Group 6 (planning/release)

CMD: #6n This group branches to the functions for net planning and release.
The following operations are possible:

- #61 Call the CREATE-PLAN-NET function
- #62 Call the CREATE-PROD-NET function
- #63 Call the SUBMIT-NET function

Group 7 (BS2000 objects)

CMD: #7n This group performs operations on BS2000 objects.
The following operations are possible:

- #71 VISIBLE: operation displays/blanks out passwords of the BS2000 user IDs
- #72 BS2INFO: in BS2000 the SHOW-JOB-STATUS command for started jobs, the SHOW-FILE-TRANSFER command for started FT requests or the SHOW-JV command for the job variable of a COND-JVA structure element
- #73 CANCEL: in BS2000 the CANCEL-JOB command for started jobs or the CANCEL-FILE-TRANSFER command for started FT requests
- #74 WRITEJV: in BS2000 the MODIFY-JV command (modifies the value of the job variable)
- #75 XINFJOB: in BS2000 the INFORM-JOB command (sends a message to the job)
- #76 YINFPROG: in BS2000 the INFORM-PROGRAM command (sends a message to the STXIT routine of a job)
- #77 THOLD: in BS2000 the HOLD-TASK command (places a started BS2000 job in the wait state)
- #78 RESUME: in BS2000 the RESUME-TASK command (cancels the wait state of a BS2000 job)
- #79 OUTSYS: operation displays SYSOUT file (copies the current status of the SYSOUT file of an active BS2000 job to EDT)

Notes

- The name of the operation itself can be entered instead of the operation number , e.g.: #11 or #EXECUTE, #25 or #START-NET.
- The entries #operation and #function cannot be made via F or K keys.
- The operations #gn in group 1 are available for all statements. The other operations are documented under the relevant statements.

Positioning the work window with marks + and –

Entering + or – in the mark column positions the work window to the marked line.

- + A + in the mark column of a line positions the work window so that the marked record appears as the first record in the work window.
Only one line may be marked with +. There must be no – mark in the same work window.

If the operation character + or – is specified in the CMD field, the position selected by the mark + in the work window will be the active position.

If ++ or -- is specified in the CMD field, a mark + will be ignored.

- A – in the mark column of a line positions the work window so that the marked record appears as the last record in the work window.
Only one line may be marked with –. There must be no + mark in the same work window.

In the first work window (start of data), the – mark has no effect.

If the operation character + or – is specified in the CMD field, the position selected by the mark – in the work window will be the active position.

If ++ or -- is specified in the CMD field, a mark will be ignored.

CMD field with statement name of function:

The name of a statement is composed of two or more name parts connected by hyphens. The name may be entered complete or with abbreviated name parts, provided the name parts can be identified uniquely.

For interactive prompting purposes, input of a modified statement name takes precedence over all other inputs. This means that a new statement name interrupts current statement processing, provided that a change of statements is permissible.

If the CMD field is cleared, the most recent valid statement is entered here. An overview of statements is obtained by entering CMD:.

If a statement from the overview of statements is marked, the operands valid for the previously active statement can be taken over and used again. If this is not desired or if the operands are not permissible for this statement, the operands must be deleted.

OPR field:

The operands have the following format:

```
operand-name-1=operand-value[, operand-name-2=operand-value, ...]
```

The sequence of operands is arbitrary. These are keyword operands.

The operand names are governed by the same abbreviation rules as the statement names. Operand values must not be abbreviated; they must always be specified in full, even in the case of keyword operands.

In the event of a modification in the CMD field and/or the OPR field, no parameters from the mask concerned are taken over except the RUN-CONTROL-SYSTEM operand and the user group. Both parameters can continue to be used in the following commands until they are reentered.

Specification of the RUN-CONTROL-SYSTEM operand is omitted if the requested statement does not permit this operand. In any subsequent statement which requires the RUN-CONTROL-SYSTEM operand the last value specified is retained if the operand is not defined.

If required the NET-STATUS and CANCEL-TYPE operands are also removed; their values are not retained.

Selecting statements and elements

Once the user has successfully signed on to AVAS, the system displays a list of statements which he is allowed to work with. By using the paging functions +/-/FIRST/LAST (see [page 31](#)) he can scan the entire list of statements. Statements can be selected in various ways:

- With S in the mark column and the EXECUTE operation.
- With S in the mark column and pressing the ENTER key.
- By entering the statement name in the CMD field and the corresponding operand in the OPR field.

The statements are used for processing elements from AVAS libraries and files.

Entering S in the mark column together with the ? operation causes (help) information to be displayed for the marked statement.

If the user has specified a fully qualified element name, the element will be processed directly.

If the user has specified a partially qualified element name as an operand, he will receive an overview mask with a list of elements relevant to his purposes. Using this list, he can then select the elements he wishes to process by marking them with S, Y or N.

- Selecting elements by entering S in the mark column and starting element processing with the EXECUTE operation or just by pressing the ENTER key:
The S mark means that an element can still be modified before the statement is executed (except for SHOW ... statements). S always causes a new mask to be displayed (e.g. MODIFY-NET-DESCRIPTION).

- Selecting elements by entering Y or N in the mark column and starting element processing with the EXECUTE operation or just by pressing the ENTER key:

Unlike S, the marks Y (process marked elements) and N (exclude marked elements from processing) mean that an element no longer needs to be modified before the statement is executed (e.g. COPY-NET-DESCRIPTION).

Only S or Y or N can be entered as a mark for selecting elements. A mixture of marks is not permitted. With some statements, marks A and D can be used to add or delete information.

S mark

The first element selected via S is presented on the screen for processing. Once the user has processed the element, he can continue as follows:

- Write the element to the file/library with the SAVE operation, or abort processing with the RETURN operation.

If the write operation cannot be performed correctly, a corresponding message is displayed in the message line and the immediately preceding screen is displayed again. SAVE can be entered after the required correction has been made.

If the user aborts element processing with RETURN, the next element is presented for processing.

Once element processing has been started by means of the EXECUTE operation or by pressing the ENTER key, all marked elements are processed in a cycle. Following the final element, the overview screen is redisplayed. The marks for the processed elements are erased and the result is entered in the RESULT column. To save the result, SAVE must be entered.

The user can start the same statement again by repeating the mark and entering the EXECUTE operation or pressing the ENTER key. He can change statements by specifying a new statement name in the CMD field and entering the corresponding operands.

- If it is possible to process an element via two or more masks (e.g. in the case of CREATE-NET-DESCRIPTION), the user can have the next screen displayed by means of the CONTINUE operation.

Element processing is completed by entering SAVE or RETURN.

- SAVE means that the element is written to the file/library.
- RETURN means that element processing is aborted without a write operation.

Y mark

Elements marked with Y are processed from the overview mask. The result is entered in the RESULT column.

If all elements have been processed in sequence, or even if an element could not be processed correctly, a corresponding result is displayed in the RESULT column. No SAVE operation is required to save the results. Elements which it has been possible to process correctly are written, after the processing, into the assigned library/file.

N mark

An N mark means that all elements will be processed except those marked with N. If no elements are marked, this means that all elements will be processed (i.e. no elements are excluded by means of N).

The N mark is prohibited in conjunction with the DEL... statements so as to prevent inadvertent deletion.

If other marks are used for a particular function, this is indicated in the description of the statement.

Example: Using masks with CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION

Element processing entries are made via masks AVN001, AVN020, AVN006 and AVN004. You can move to the next mask by entering CONTINUE or by changing the operand value of OBJECT.

With CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION, the CONTINUE operation is prohibited in mask AVN004. However, you can switch to mask AVN001, AVN020 or AVN006 via the OBJECT operand.

If JOB or COND control records are marked in mask AVN004, you can start processing them by entering the EXECUTE operation.

If the marks in a mask caused further masks to be displayed at the next level (e.g. AVN004 → AVN002/AVN042/AVN052/AVN003), the user must return to the calling level via the CONTINUE or IGNORE operation before the element can be written with SAVE.

CONTINUE means that the entries made via the mask are included and the next element control record is displayed.

IGNORE means that the entries made via the mask are not included and the next element control record is displayed.

If the user enters the RETURN operation in mask AVN002/AVN042/AVN052/AVN003, element processing is aborted and the overview mask is redisplayed.

With CREATE-NET-DESCRIPTION, the user can also abort element processing in mask AVN001/AVN020/AVN006/AVN004. The overview mask is then redisplayed.

Using the PRINT operation

The PRINT operation can be used to generate lists of objects or object descriptions in list form for documentation purposes.

The user can specify the PRINT operation only in the masks called by the following statements:

AVAS statement	Mask	List	Remark
CREATE-PLAN-NET	AVP001	AVL013	Structure of a net
	AVP011	AVL014	Net list
NET-CONTROL	AVI022	AVL020	
	AVI023	AVL024	
SHOW-CALENDAR	AVC001	AVL053	
	AVC002	AVL052	
	AVC010	AVL051	
SHOW-DOCUMENT	AVS019	AVL035	
SHOW-JOB	AVE010	AVL041	
SHOW-JOB-LOG	AVI016	AVL036	without mark
		AVL038	with mark Y
	AVI017	AVL037	without mark
		AVL039	with mark Y
	AVI018	AVL038	without mark
		AVL039	with mark Y
SHOW-JOURNAL	AVI005	AVL031	
	AVI006	AVL032	
	AVI014	AVL033	without mark
		AVL031	with mark Y
SHOW-NET-DESCRIPTION	AVN001	AVL001	
	AVN002	AVL004	
	AVN042	AVL004	
	AVN052	AVL004	
	AVN003	AVL005	
	AVN004	AVL003	
	AVN006	AVL002	
	AVN008	AVL005	

AVAS statement	Mask	List	Remark
SHOW-NET-DESCRIPTION (cont.)	AVN011	AVL006	without mark
		AVL001	with mark Y
	AVN015	AVL007	
	AVN016	AVL008	
	AVN020	AVL001	
	AVN021	AVL004	
	AVN022	AVL005	
	AVN023	AVL005	
	AVN024	AVL005	
	AVN030	AVL005	
	AVN031	AVL005	
	AVN032	AVL005	
SHOW-NET-STATUS	AVI002	AVL021	
	AVI003	AVL022	
	AVI004	AVL023	
	AVI007	AVL023	
	AVI008	AVL023	
	AVI009	AVL023	
	AVI010	AVL023	
	AVI012	AVL020	
	AVI013	AVL024	
	AVI025	AVL025	
	AVI026	AVL026	
SHOW-PLAN-NET	AVI001	AVL012	
	AVI011	AVL011	
SHOW-PROD-JOB	AVE010	AVL041	

All lists are output in a format that has been edited for printing. The maximum record length is 132 characters.

Following CMD:PRINT, AVAS displays the mask AVS015 with the name of the SAM file for list output. When the PRINT function is called for the first time, either the default name in the form LST.AVAS.ug.avuser.yymmdd.hhmmss or the file name defined via the BS2000 command /ADD-FILE-LINK LINK=AVASPRT, FILE-NAME=filename is output in the parameter field LIST-FILE-NAME. This name can be changed (see [section "Naming conventions" on page 73](#)). On further calls with PRINT, AVAS provides the last name entered. If the name is not changed, it is retained for the next output.

Note

The messages from the CHECK functions are likewise output to the currently assigned PRINT file (see CHECK operation).

The EXECUTE operation starts the output under the specified file name, and processing is resumed.

If the user wishes to abort the print function, he must specify the RETURN operation in the CMD field of mask AVS015. The mask for the previous processing operation is displayed.

AVS015 – Mask for entry of print parameters

LIST-FILE-NAME	Input/output parameter Name of a SAM file. The displayed name of this output file can be overwritten, if necessary. Standard name: LST.AVAS.ug.avuser.yymmdd.hhmmss
EXTEND	Input/output parameter {YES / NO}
YES	An existing output file is to be extended or a new file created.
NO	A new output file is to be created. If a file having the same name already exists, it will be overwritten (OVERWRITE=YES).

List AVL001: SHOW-NET-DESCRIPTION / NET-PARAMETER

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL001  CMD:SHOW-NET-DESCRIPTION  OBJECT:NET-PARAMETER          AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

NET-NAME=

NET-TEXT=

```

NET-DOC           =
RUN-CONTROL-SYSTEM=
NET-TYPE          =
USER-PAR-FILE    =
CALENDAR-NAME    =
NET-CAT           =
NET-USER          =
NET-ACCOUNT      =
NET-CLASS        =
NET-LOG           =
NET-PARAMETER    =
SELECT-TURNUS    =
SELECT-PLAN-TYPE =
    
```

```

PLAN-START
SYMDAT / DATE      TIME      LATEST-START  DELAY-SOLUTION  LIFE-TIME
*NONE              .          .              .                .
.                  .          .              .                .
.                  .          .              .                .
    
```

```

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1      10      20      30      40      50      60      70      80      90      100     110     120     130
    
```

List AVL002: SHOW-NET-DESCRIPTION / NET-FORMAT

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL002  CMD:SHOW-NET-DESCRIPTION  OBJECT:NET-FORMAT          AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

NET-NAME=

NET-TEXT=

FORMAT-NAME FORMAT-TEXT

```

      .
      .
      .
    
```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```

List AVL003: SHOW-NET-DESCRIPTION / NET-STRUCTURE

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL003  CMD:SHOW-NET-DESCRIPTION  OBJECT:NET-STRUTCURE      AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

NET-NAME=

NET-TEXT=

INDEX	FU	TYPE	NAME	SYNC.- INDEX	RESTART-INDEX V1	V2	V3
-------	----	------	------	-----------------	---------------------	----	----

```

      .
      .
      .
    
```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```

List AVL004: SHOW-NET-DESCRIPTION / JOB-PARAMETER

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL004  CMD:SHOW-NET-DESCRIPTION  OBJECT:JOB-PARAMETER  AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

NET-NAME=

NET-TEXT=

JOB-NAME=

JOB-TEXT=

JOB-DOC =

FUNCTION =

JOB-TYPE =

JOB-INDEX =

SYNC-INDEX=

RESTART	-INDEX	-NAME	-TYPE	AUTOMATIC
VARIANT=1	.	.	.	.
2	.	.	.	.
3	.	.	.	.

ENTER-FILE

= |
FILENAME = | -> Only those parameters are output
SERVER-NAME = | which are possible with the function FU.
USER-PAR-FILE=

ENTER-PARAMS =

JOB-CAT =

USER =

JOB-ACCOUNT =

JOB-CLASS =

LOG =

JOB-PARAMETER=

SELECT-TURNUS=

SYMDAT-NAME	LATEST-START	DELAY-SOLUTION	LATEST-START
.	.	.	.
.	.	.	.
.	.	.	.

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
    
```

List AVL005: SHOW-NET-DESCRIPTION / CONDITION-PARAMETER

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxm/AVL005  CMD:SHOW-NET-DESCRIPTION  OBJECT:CONDITION-PARAMETER  AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

```

NET-NAME=

NET-TEXT=

COND-NAME =

COND-TEXT =

COND-DOC =

FUNCTION =

COND-TYPE =

COND-INDEX=

SYNC-INDEX=

RESTART	-INDEX	-NAME	-TYPE	AUTOMATIC
VARIANT=1
2
3

COND-JVA-NAME=

JVA-POSITION =

JVA-LENGTH =

COND-VALUE = / > / <

CONDITION CREATED BY:

NET-NAME = --> Only those parameters are
INDEX = output which are possible
OCCURE-VALUE = the function FU and
TYPE.

ERROR-VALUE =

SELECT-RESTART-VARIANT=

SELECT-TURNUS=

+/-SYMDAT LATEST-OCCURE DELAY-SOLUTION

OCCURE-DATE	OCCURE-TIME	LATEST-OCCURE	DELAY-SOLUTION
.	.	.	.
.	.	.	.
.	.	.	.

```

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1      10      20      30      40      50      60      70      80      90      100     110     120     130

```

List AVL006: SHOW-NET-DESCRIPTION/NET-LIST

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL006  CMD:SHOW-NET-DESCRIPTION  OBJECT:NET-LIST                AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

```

NET-NAME          PLAM-DATE
.
.
.
.
.
    
```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```

List AVL007: SHOW-NET-DESCRIPTION/SUBNET-PARAMETER-LIST

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL007  CMD:SHOW-NET-DESCRIPTION  OBJECT:SUBNET-PARAMETER        AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

```

NET-NAME=
NET-TEXT=
    
```

```

SUBNET-NAME =
SUBNET-TEXT =

SUBNET-DOC =
FUNCTION =
SUBNET-TYPE =
SUBNET-INDEX =
    
```

```

SYNC-INDEX=
RESTART      -INDEX      -NAME              -TYPE              AUTOMATIC
  VARIANT=1  .              .                  .                  .
             2  .              .                  .                  .
             3  .              .                  .                  .
    
```

```

SELECT-TURNUS=
    
```

```

+/-SYMDAT-NAME          LATEST-START      DELAY-SOLUTION      LIFE-TIME
.
.
.
    
```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```


List AVL008: SHOW-NET-DESCRIPTION/FT-PARAMETER

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL008 CMD:SHOW-NET-DESCRIPTION OBJECT:FT-PARAMETER AVAS-USER:avuser DATE:tt.mm.jj TIME:hh:mm:ss PAGE:nnn

```

```

NET-NAME=
NET-TEXT=

```

```

FT-NAME  =
FT-TEXT  =
FT-DOC   =
FUNCTION =
FT-TYPE  =
FT-INDEX =

```

```

SYNC-IND =
RESTART  -INDEX  -NAME          -TYPE          AUTOMATIC
  VARIANT=1  .      .              .              .
           2  .      .              .              .
           3  .      .              .              .

```

```

DIRECTION =
PARTNER-NAME =
REMOTE =
REMOTE-FTRADM=
LOCAL-FILE =
REMOTE-FILE =
FT-PARAMETER =

```

```

SELECT-TURNUS=

```

```

SYMDAT          LATEST-START  DELAY-SOLUTION  LIFE-TIME
.               .              .              .
.               .              .              .
.               .              .              .

```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

List AVL011: SHOW-PLAN-NET / NET-LIST

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL011  CMD:SHOW-PLAN-NET          OBJECT:NET-LIST          AVAS-USER:avuser      DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

```

NET-NAME          EARLIEST-START          NET-STATUS
                  /
.
.
.
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1      10      20      30      40      50      60      70      80      90      100     110     120     130
    
```

List AVL012: SHOW-PLAN-NET / NET-STRUCTURE

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL012  CMD:SHOW-PLAN-NET          OBJECT:NET-STRUCTURE  AVAS-USER:avuser      DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

NET-NAME=

NET-TEXT=

```

EARLIEST-START  =      /
NET-STATUS      =
RUN-CONTROL-SYSTEM=
    
```

```

INDEX  FU   TYPE      NAME          STATUS          SYNC.-  RESTART-INDEX
          INDEX  V1   V2   V3
.
.
.
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1      10      20      30      40      50      60      70      80      90      100     110     120     130
    
```

List AVL013: CREATE-PLAN-NET

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL013  CMD:CREATE-PLAN-NET      OBJECT:NET-STRUCTURE      AVAS-USER:avuser      DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

NET-NAME=

NET-TEXT=

CALENDAR-NAME =

PLAN-START-SYM =

EARLIEST-START =

PLAN-START =

LATEST-START =

LIFE-TIME =

RUN-CONTROL-SYSTEM=

SELECT-TURNUS =

SYMDAT-NAME =

INDEX	FU	TYPE	SYNC- INDEX	RESTART-INDEX V1 V2 V3
.
.
.

List AVL014: CREATE-PLAN-NET / NET-LIST

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL014  CMD:CREATE-PLAN-NET      OBJECT:NET-STRUCTURE      AVAS-USER:avuser      DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

NET-NAME	EARLIEST-START	R-C-SYS	S-T	CALENDAR-NAME	PLAN-START-SYM	PLAN-START-DATE	RESULT
\$bk_netname	tt.mm.jj/hh:mm:ss	*STD	1	CAL3	SYM1	tt.mm.jj/hh:mm:ss	NO-PLAN

List AVL022: SHOW-NET-STATUS / JOB-PARAMETER

```

1      10      20      30      40      50      60      70      80      90      100      110      120      130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL022  CMD:SHOW-NET-STATUS      OBJECT:JOB-PARAMETER      AVAS-USER:avuser      DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

```

```
NET-NAME      =                               NET-STATUS =
```

```
JOB-NAME      =
JOB-STATUS    =
FUNCTION       =
JOB-TYPE      =
```

```
JOB-INDEX     =
SYNC-INDEX    =
```

```
RESTART      -INDEX  -NAME                               -TYPE      AUTOMATIC
  VARIANT=1   .       .                               .         .
              2     .       .                               .         .
              3     .       .                               .         .
```

```
LATEST-START = /
```

```
DELAY-SOLUTION=
```

```
ENTER-PARAMS =
JOB-CAT       =
USER          =
JOB-ACCOUNT   =
JOB-CLASS     =
LOG           =
JOB-PARAMETER =
```

```
-----
ENTER-FILE   = |
FILENAME     = | -> Only those parameters are output
SERVER-NAME  = |   which are possible with the function FU.
-----
```

```

1      10      20      30      40      50      60      70      80      90      100      110      120      130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

List AVL023: SHOW-NET-STATUS / CONDITION-PARAMETER

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL023  CMD:SHOW-NET-STATUS  OBJECT:CONDITION-PARAMETER  AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

```

```
NET-NAME      =                               NET-STATUS=
```

```
COND-NAME     =
COND-STATUS   =
FUNCTION       =
COND-TYPE      =
```

```
COND-INDEX    =
SYNC-INDEX    =
```

```
RESTART      -INDEX  -NAME                -TYPE      AUTOMATIC
  VARIANT=1    .      .                    .          .
              2    .      .                    .          .
              3    .      .                    .          .
```

```
-----
LATEST-OCCURE =
DELAY-SOLUTION=
COND-JVA-NAME =
JVA-POSITION  =
JVA-LENGTH    =
COND-VALUE     = / > / <
```

```
FULL-CON-NAME = --> Only those parameters
OCCURE-VALUE  = | are output which are possible
                | with the function FU and
ERROR-VALUE   = | TYPE.
```

```
DATE          =
TIME          =
```

```
CONDITION CREATED BY:
NET-NAME      =
INDEX         =
SELECT-RESTART-VARIANT=
```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

List AVL024: SHOW-NET-STATUS / NET-STRUCTURE

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL024  CMD:SHOW-NET-STATUS      OBJECT:NET-STRUCTURE      AVAS-USER:avuser      DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

```

NET-NAME= NET-STATUS=

NET-TEXT=

INDEX	FU	TYPE	NAME	STATUS	SYNC.- INDEX	RESTART-INDEX V1 V2 V3
.
.
.

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

List AVL025: SHOW-NET-STATUS / SUBNET-PARAMETER

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL025  CMD:SHOW-NET-STATUS      OBJECT:SUBNET-PARAMETER      AVAS-USER:avuser      DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

```

NET-NAME= NET-STATUS =

SUBNET-NAME =
SUBNET-STATUS =
FUNCTION =
SUBNET-TYPE =

SUBNET-INDEX =
SYNC-INDEX =

RESTART	-INDEX	-NAME	-TYPE	AUTOMATIC
VARIANT=1
2
3

LATEST-START = /

DELAY-SOLUTION=

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

List AVL026: SHOW-NET-STATUS / FT-PARAMETER

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL026  CMD:SHOW-NET-STATUS  OBJECT:FT-PARAMETER  AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

NET-NAME = NET-STATUS =

FT-NAME =
 FT-STATUS =
 FUNCTION =
 FT-TYPE =

FT-INDEX =
 SYNC-INDEX =

RESTART	-INDEX	-NAME	-TYPE	AUTOMATIC
VARIANT=1
2
3

LATEST-START = /
 DELAY-SOLUTION=

DIRECTION =
 PARTNER-NAME =
 REMOTE =
 REMOTE-FTRADM =
 FTID =
 LOCAL-FILE =
 REMOTE-FILE =

FT-PARAMETER =

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```


List AVL031: SHOW-JOURNAL / SET-LIST

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL031  CMD:SHOW-JOURNAL          OBJECT:SET-LIST          AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

```

```
NET-NAME=                                NET-STATUS=
```

```

COMMAND          ACT/RES      DATE      TIME      INDEX FUNC NAME          AVAS-USER  SSL-FNR
.                .            .         / .       .      .      .          .          .
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1      10      20      30      40      50      60      70      80      90      100     110     120     130

```

List AVL032: SHOW-JOURNAL / JOURNAL-SET

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL032  CMD:SHOW-JOURNAL          OBJECT:JOURNAL-SET      AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

```

```
NET-NAME=                                NET-STATUS=
```

```

COMMAND =
ACTION/RESULT =
DATE = /
AVAS-USER =

```

```

FUNCTION =
TYPE =
NAME =
OUTPUT-KEY = -
OUTPUT-AREA=

```

```

-----
|
|
|
|  --> Depending on the key in the OUTPUT-KEY
|         field a text is output
|         or in accordance with TYPE the
|         information is edited.
|
|
|
|
-----

```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130

```

List AVL033: SHOW-JOURNAL / NET-LIST

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL033  CMD:SHOW-JOURNAL      OBJECT:NET-LIST      AVAS-USER:avuser    DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

NET-NAME                NET-STATUS

.
.
.
.
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1      10      20      30      40      50      60      70      80      90      100     110     120     130

```

List AVL035: SHOW-DOCUMENT / DOCUMENT-LIST

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL035  CMD:SHOW-DOCUMENT    OBJECT:DOCUMENT-LIST  AVAS-USER:avuser    DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

DOCUMENT-NAME=

.
.
.
.
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1      10      20      30      40      50      60      70      80      90      100     110     120     130

```

List AVL036: SHOW-JOB-LOG / LIST OF NET

```

110     20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL036  CMD:SHOW-JOB-LOG    LIST OF NET          AVAS-USER:avuser    DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

NET-NAME

.
.
.
.
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1      10      20      30      40      50      60      70      80      90      100     110     120     130

```

List AVL037: SHOW-JOB-LOG / LIST OF JOBS

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL037  CMD:SHOW-JOB-LOG      LIST OF JOBS      AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

```

NET-NAME      IND  DATE      TSN  JOB-NAME      CATID STATUS
    
```

.
.

.

.

.

.

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```

List AVL038: SHOW-JOB-LOG / LIST OF ASSIGNED JOBLOG-FILES

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL038  CMD:SHOW-JOB-LOG      LIST OF ASSIGNED JOBLOG-FILES  AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn
    
```

```

NET-NAME      DATE      CATID TSN  STATUS      JOBLOG-FILENAME
    
```

.
.

.

.

.

.

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```

List AVL039: SHOW-JOB-LOG / LIST OF JOBLLOG-DATA

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL039  CMD:SHOW-JOB-LOG      LIST OF JOBLLOG-DATA      AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

NET-NAME=                DATE=                CATID=                TSN=                STATUS=

INDEX=    JOB-NAME=                JOBLOG-NAME=

function log
log record
.
.
.
    
```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```

List AVL041: SHOW-JOB / JOB-LIST

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL041  CMD:SHOW-JOB      OBJECT:JOB-LIST      AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

JOB-NAME=                FUNCTION
    
```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```

List AVL051: SHOW-CALENDAR / LIST OF CALENDARS

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL051  CMD:SHOW-CALENDAR  LIST OF CALENDARS      AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

CALENDAR-NAME            DATE

calname                jjjj-mm-tt
    
```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
    
```

List AVL052: SHOW-CALENDAR / LIST OF SYMDATS

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL052 CMD:SHOW-CALENDAR          LIST OF SYMDATS          AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

CALENDAR-NAME=calendar          FIRST-CAL-DATE=tt.mm.jjjj  LAST-CAL-DATE=tt.mm.jjjj  SYMDAT-NAME=sym

DD.MM.YYYY  DAY  TYPE  SYMDATE

```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

List AVL053: SHOW-CALENDAR / LIST OF FREE DATES

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
AVAS-Vnn.yxmm/AVL053 CMD:SHOW-CALENDAR          LIST OF FREE DATES          AVAS-USER:avuser  DATE:tt.mm.jj  TIME:hh:mm:ss  PAGE:nnn

CALENDAR-NAME=calendar          FIRST-CAL-DATE=tt.mm.jjjj  LAST-CAL-DATE=tt.mm.jjjj  SYMDAT-NAME=*sym

SYSTEM-SYMDAT-NAMES
LAST WORKING DAY OF THE MONTH  ultimo
EVERY DAY                       tgl          DAY OF THE MONTH          k
EVERY WORKING DAY               wt           WORKING DAY OF THE MONTH  a

TYPE OF THE DAY ( WORK/NWRK/WKND/HLDY/FREE )
MON=type  TUE=type  WED=type  THU=type  FRI=type  SAT=type  SUN=type

SPECIAL NWRK OR FREE DATES
tt.mm.jjjj=type  tt.mm.jjjj=type  tt.mm.jjjj=type  tt.mm.jjjj=type  tt.mm.jjjj=type

```

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

Using the DOCUMENT operation

The user may only specify the DOCUMENT operation in the masks called by the statements in the table below. With all other statements and on the element overviews of the specified statements entry of the DOCUMENT operation is rejected.

After the DOCUMENT operation, depending on the current statement and mask, the following documents are displayed via EDT:

Statement	Mask	Documentation file	DOCUMENT operation
CREATE-NET-DESCRIPTION	AVN001	NET-DOC	process
	AVN002	JOB-DOC	process
	AVN042	JOB-DOC	process
	AVN052	JOB-DOC	process
	AVN003	COND-DOC	process
	AVN004	NET-DOC	process
	AVN006	NET-DOC	process
	AVN008	COND-DOC	process
	AVN015	SUBNET-DOC	process
	AVN016	FT-DOC	process
	AVN020	NET-DOC	process
	AVN021	JOB-DOC	process
	AVN022	COND-DOC	process
	AVN023	COND-DOC	process
	AVN024	COND-DOC	process
	AVN025	SUBNET-DOC	process
	AVN030	COND-DOC	process
	AVN031	COND-DOC	process
AVN032	COND-DOC	process	
MODIFY-NET-DESCRIPTION otherwise see CREATE-NET-DESCRIPTION	AVN011	---	invalid
ADD-COND-DESCRIPTION	AVD040	---	invalid
	AVD030	COND-DOC	process
MODIFY-COND-DESCRIPTION	AVD040	---	invalid
	AVD030	COND-DOC	process
	AVD031	---	invalid
SHOW-COND-DESCRIPTION	AVD040	---	invalid
	AVD030	COND-DOC	display
	AVD031	---	invalid
SHOW-NET-DESCRIPTION otherwise see CREATE-NET-DESCRIPTION	AVN011	---	

Statement	Mask	Documentation file	DOCUMENT operation
SHOW-NET-STATUS	AVI012	---	invalid
	AVI002	NET-DOC	display
	AVI003	JOB-DOC	display
	AVI004	COND-DOC	display
	AVI007	COND-DOC	display
	AVI008	COND-DOC	display
	AVI009	COND-DOC	display
	AVI010	COND-DOC	display
	AVI013	NET-DOC	display
	AVI025	SUBNET-DOC	display
AVI026	FT-DOC	display	
NET-CONTROL	AVI022	---	invalid
	AVI002	NET-DOC	display
	AVI003	JOB-DOC	display
	AVI004	COND-DOC	display
	AVI007	COND-DOC	display
	AVI008	COND-DOC	display
	AVI009	COND-DOC	display
	AVI023	NET-DOC	display
	AVI025	SUBNET-DOC	display
	AVI026	FT-DOC	display
RESTART-NET	AVD012	---	invalid
	AVD007	NET-DOC	display
	AVD005	JOB-DOC	display
	AVI026	COND-DOC	display
		FT-DOC	display

Masks AVN001, AVN002, AVN042, AVN052, AVN003, AVN008, AVN015, AVN016, AVN025, AVN026, AVN030, AVN031, AVN032 and AVD030 are output via the statements CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION, ADD-CONDITION-DESCRIPTION and MODIFY-CONDITION-DESCRIPTION. The documentation files can be assigned to the nets, to the individual structure elements in a net and to the condition specifications via of the parameter fields contained in the masks:

NET-DOC	mask AVN001
JOB-DOC	mask AVN002, AVN042, AVN052
SUBNET-DOC	mask AVN015
FT-DOC	mask AVN016
COND-DOC	masks AVN003, AVN008, AVN030, AVN031, AVN032 mask AVD030

The following entries are permitted in the parameter fields (see the CREATE-NET-DESCRIPTION statement on [page 228](#)):

{*STD / element / *NONE}

*STD	The documentation is sought or stored under the standard name in the DOCLIB, where: NET-DOC: \$bknet_netname JOB-DOC: \$bknet_netname.jobname COND-DOC: \$bknet_netname.condname SUBNET-DOC: \$bknet_netname.sname FT-DOC: \$bknet_netname.ftname Note that with the netname_yymmdd[_hhmmss] form of the NET condition, no documentation element can be referenced via *STD. An element name must be given here.
element	Element name for the documentation of the net in the DOCLIB or DOCSYS. \$ugnet_docname \$ugsys_docname docname The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$bksys_docname is specified, the documentation is sought in the DOCSYS.
*NONE	No documentation is used.

If the DOCUMENT operation is entered for the net, a job or a condition of the net, the following message is output:

```
AVS4090 THE DOCUMENT FUNCTION IS NOT AVAILABLE
```

The documentation elements are processed using the EDIT-DOCUMENT statement or through the DOCUMENT operation in the case of the CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION statements (see above).

Processing using EDIT-DOCUMENT has no influence of the assignment of the documentation elements to the nets. The assignment is made only via the name specified in the net or the standard name assumed with *STD.

When the documentation elements are processed by the DOCUMENT operation within the CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION statements, the name of the documentation element can be modified. After returning from EDT, another name can be entered in the NEW-ELEMENT-NAME field of the AVS016 mask.

The DOCUMENT operation can only be used to process (overwrite) those elements where the user group of the documentation element is the same as the user group of the net. Documentation elements of a different user group can be used as input elements (read access) but may not be overwritten. The entry of NEW-DOCUMENT-NAME is expected, where only the user group of the net is permitted.

Documentation elements with the system user group occur when they are transferred to the DOCSYS by means of the COPY-SYSTEM-ELEMENT statement.

Using the CHECK operation

The user may only specify the CHECK operation in those masks called by the following statements:

CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET

The CHECK operation is rejected when specified by any other statement.

Depending on the result of the checks, either an error log is displayed via EDT or an appropriate message is output in the mask on completion of the CHECK operation.

Messages from CHECK are spooled to the associated PRINT file (see the PRINT operation, mask AVS015, parameter LIST-FILE-NAME).

Statement	Mask	CHECK operation
CREATE-NET-DESCRIPTION	AVN001	valid
	AVN002	invalid
	AVN042	invalid
	AVN052	invalid
	AVN003	invalid
	AVN004	valid
	AVN006	valid
	AVN008	invalid
	AVN015	invalid
	AVN016	invalid
	AVN020	valid
	AVN021	invalid
	AVN022	invalid
	AVN023	invalid
	AVN024	invalid
	AVN025	invalid
	AVN030	invalid
AVN031	invalid	
AVN032	invalid	
MODIFY-NET-DESCRIPTION otherwise as for CREATE-NET-DESCRIPTION	AVN011	invalid

Statement	Mask	CHECK operation
MODIFY-SUBMIT-NET	AVD011	invalid
	AVD001	valid
	AVD002	invalid
	AVD003	invalid
	AVD004	valid
	AVD009	invalid
	AVD010	invalid
	AVD016	invalid
	AVD017	invalid
	AVD025	invalid
	AVD026	invalid

Notes

- The CHECK operation is rejected on the element overviews of the valid statements.
- The CHECK operation is not allowed in the following parameter masks for structure elements:
AVN002, AVN042, AVN052, AVN003, AVN008, AVN015, AVN016 , AVN021, AVN022, AVN023, AVN024, AVN030, AVN031, AVN032 and AVD002, AVD003, AVD009, AVD010, AVD016, AVD017, AVD025 and AVD026.

The current entries in these masks are not accessible to CHECK until after the CONTINUE operation.

CHECK in conjunction with the SAVE or EXECUTE operations

The statements CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET perform internal calls to the CHECK function in the SAVE operation. If the CHECK function generates an error log, the log is displayed via EDT.

The following takes place, depending on how EDT processing is terminated:

- If EDT is terminated with RETURN, AVAS branches back to the display from which the CHECK function was activated (the SAVE operation is not performed).
- If EDT is terminated with HALT, net processing is terminated (the SAVE operation is executed), and the result is displayed in the RESULT field.

The statement COPY-ELEMENT (with MODE=LIBIN/SAMIN and AVAS-USER-LIB=NETLIB) performs an internal call to the CHECK function in the EXECUTE operation.

Messages from CHECK are output to the currently assigned PRINT file (see PRINT operation on [page 41](#)).

Statement	Mask	CHECK and SAVE operations
CREATE-NET-DESCRIPTION	AVN001 AVN004 AVN006 AVN020	CHECK is called CHECK is called CHECK is called CHECK is called
MODIFY-NET-DESCRIPTION	AVN001 AVN004 AVN006 AVN020	CHECK is called CHECK is called CHECK is called CHECK is called
MODIFY-SUBMIT-NET	AVD001 AVD004	CHECK is called CHECK is called
		CHECK with the EXECUTE operation
COPY-ELEMENT with MODE=LIBIN/SAMIN AVAS-USER-LIB=NETLIB	AVS011	CHECK is called for all nets that are to be copied.

Notes

- MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET statements:
 - Overview processing with S mark
Nets in which errors (warnings) have been detected are written back and displayed in the AVN011 or AVD011 masks with the result WARNING.
 - Processing of single statements with fully qualified net names
Nets in which errors (warnings) have been detected are written back and a warning message displayed in the AVS030 mask.
- COPY-ELEMENT statement:
 - If CHECK creates an error log, a message containing the LIST-FILE-NAME is output (BATCH only).
 - Nets that were not copied because of serious errors are displayed in the AVS011 mask with the result ERROR.
 - Nets that were copied despite containing errors are displayed in the AVS011 mask with the result WARNING.

Using the JOBLOG operation

The user may only specify the JOBLOG operation in masks called by the statements SHOW-NET-STATUS and SHOW-JOURNAL (see [page 909](#)).

Statement	Mask	JOBLOG operation
SHOW-NET-STATUS	AVI012	invalid
	AVI002	invalid
	AVI003	display
	AVI004	invalid
	AVI007	invalid
	AVI008	invalid
	AVI009	invalid
	AVI010	invalid
	AVI013	display
SHOW-JOURNAL	AVI014	invalid
	AVI005	display
	AVI006	display

With all other statements and on the element overviews of the specified statements, entry of the JOBLOG operation is rejected.

Depending on the current statement and mask, the log is displayed on completion of the JOBLOG operation.

The log for each job can be taken from the journal file and displayed using the SHOW-JOURNAL statement.

In contrast, the SHOW-NET-STATUS statement only displays the log for the last job or a single job.

If a number of logs were processed by AVAS in a task, all the logs are displayed when these statements are used.

If an EDT procedure was predefined by the AVAS administrator, the user can start this procedure by entering the statement @do n (where n = number of the workfile to be queried with the AVAS administrator).

Information function

The user calls the information function by means of the operation character ?. The called function always refers to the statement specified in the CMD field. In response to ? the user is given information functions specific to the mask involved. The user can page back and forth over two or more screens within the information function by means of the operation characters + and -.

Entering the RETURN operation returns the user to the processing level.

Overview of the operation names, characters and marks

Operation names and characters

CMD:	Paging
FIRST	from first page
--	from first page
-	one page back
-n	n records toward start of data ($1 \leq n \leq 9999$)
+	one page forward
+n	n records toward end of data ($1 \leq n \leq 9999$)
++	last page
LAST	last page

Note

Paging may cause output of the following messages:

MSG:5070 END OF DATA REACHED

The last record/element is displayed in the work window.

MSG:5071 START OF DATA REACHED

The first record/element is displayed in the work window.

If positioning to the start/end of data is performed explicitly by means of the FIRST, --, LAST or ++ operations, these messages are not output.

CMD: Element processing

EXECUTE	Start element processing from element overview (process marks)
SAVE	Store element
RETURN	Abort element processing

CMD: Records of an element

EXECUTE	Start record processing from record overview (process marks)
CONTINUE	Display next record (mask), in the process writing the data entered in the current mask into a buffer (with SHOW functions no data is stored)
IGNORE	Display next record (mask), do not store data

CMD: Miscellaneous

PRINT	Output data in accordance with mask in LIST-FILE or default list
DOCUMENT	Display assigned documentation element
CHECK	Call CHECK-NET functions
JOBLOG	Display a runtime log
?	Call information function: information on statement in CMD field
??	Overview display of statements

Marks

Positioning the work window

- + : The marked line is the first record in the work window
- : The marked line is the last record in the work window

Element selection

a) With SHOW, MODIFY, COPY and CREATE statements:

- S: The marked element is presented for processing (with EXECUTE).
- Y: The marked element is processed as per the statement (with EXECUTE).
- N: The marked element is not processed (with EXECUTE).

b) With DELETE statements:

- Y: The marked element is deleted (with EXECUTE) – RESULT=DELETED.

Selecting records

- S: The record is presented for modification.
- Y: The record is processed as per the statement.
- N: The record is not processed.

Deleting and adding a record

- D: The record is deleted.
- A: The record is added.

Processing a symbolic date (SYMDAT) of a record in conjunction with the calendar statement MODIFY-CALENDAR.

- A: The SYMDAT specified as an operand is added to the record.
- D: The SYMDAT specified as an operand is deleted from the record.t

Notes

- If a fully qualified element name is specified as the operand of a statement, element processing (editing) is started without EXECUTE.
- IGNORE and CONTINUE have no effect in masks containing record overviews.

2.3 Naming conventions

Naming conventions and maximum name lengths are governed by the following rules:

The maximum name lengths are determined by the type of storage and planned processing involved.

For PLAM libraries: max. length = 64 bytes (element names)

For ENTER calls: max. length = 38 bytes (file name + element name)

Name format of elements in the PLAM libraries:

NETLIB:	\$ug_netname	max.length = 18 bytes
NETSYS:	\$ugsys_netname	max.length = 18 bytes
JCLLIB:	\$ug_jobname	max.length = 30 bytes
JCLSYS:	\$ugsys_jobname	max.length = 30 bytes
DOCLIB:	\$ug_docname	max.length = 43 bytes
DOCSYS:	\$ugsys_docname	max.length = 43 bytes
NPRLIB:	\$ug_netname_yymmdd_hhmmss	max.length = 32 bytes
JMDLIB:	\$ug_jobname[_netname[_yymmdd_hhmmss[_index]]]	max.length = 57 bytes
JMDSYS:	\$ugsys_jobname[_netname]	max.length = 43 bytes
CALLIB:	calendar	max.length = 20 bytes
NETMAP:	format	max.length = 8 bytes
JOBMAP:	format	max.length = 8 bytes
LOGSYS:	\$ug_netname_yymmdd_hhmmss_catid_tsn_yyyymmdd	max.length = 51 bytes (S portion)
	\$ug_netname_yymmdd_hhmmss_catid_tsn_yyyymmdd_nn	max.length = 54 bytes (D portion)

Overview of names and name parts, together with their lengths:

Name	Length in bytes	Meaning
calendar	1–20	Name of a calendar
format	1–8	Name of a user mask

Name part	Length in bytes	Meaning
\$	1	
ug / ugsys	1–4	Name of the user group / system user group
–	1	
jobname / condname	1–24	Name of a job or a condition description
–	1	
netname	1–12	Name of a net
–	1	
docname	1–37	Name of a documentation element Standard names: NET-DOC: netname JOB-DOC: netname.jobname FT-DOC: netname.ftname SUBNET-DOC: netname.subnetname COND-DOC: netname.condname
–	1	
yymmdd	6 (fixed)	Date specification: <year> <month> <day>
–	1	
hhmmss	6 (fixed)	Time of day: <hours> <minutes> <seconds>
–	1	
catid	1–4	Name of a catalog identifier
–	1	
tsn	4 (fixed)	Task sequence number
–	1	
yyyymmdd	8 (fixed)	Processing date: <year> <month> <day>
–	1	
nn	2 (fixed)	Sequence number

Notes

- AVAS data subject to BS2000 conventions (e.g. FILE-NAME, NET-USER, NET-ACCOUNT etc.) is not checked by AVAS.
- The characters @, – and _ must not be used for the names of the AVAS elements in the job and net libraries, in the calendar library and in the period file. These characters are AVAS delimiters and are reserved for identifying parts of the names.

- The digits 0–9 are not permitted as the first character of a name.

The character \$ may only be used as the first character for the following names:

CALENDAR-NAME, SYMDAT-NAME, PERIOD-NAME, CONDITION-JVA-NAME, RUN-CONTROL-SYSTEM and FORMAT-NAME.

Periods (i.e. periods of time within the calendar) are stored in the ISAM file PERDAT.

Name	Length in bytes	Meaning
period	1–20	Symbolic name of a period (time interval).

Notes

- The same rules that apply to the elements in the AVAS libraries also apply to the names of the periods in the period file.
- The names must not contain special characters - these are also illegal in library elements. The reserved characters “@”, “-” and “_” as well as the digits 0–9 must not be used as the first character of the period name.
- \$ can be used as the first character.

2.3.1 Entry of partially qualified element names

Users entering partially qualified element names receive an overview of all elements in the assigned AVAS file which have been defined by a partially qualified name.

The following partially qualified names are permissible:

- Element names consisting of parts of names separated by “_” (underscore) can be specified up to and including “_”. AVAS adds an asterisk to this partial qualification.

[\$ug_]jobname_[netname_[yymmdd_[hhmmss]]]

[\$ug_]netname_[yymmdd_[hhmmss]]

Partial qualification using “.” (period) is not permissible.

- Element names can be shortened as desired by using “*” (asterisk). The “*” replaces any string which follows it.

Examples

NET-NAME=\$UGR1_FI*

All nets of user group \$UGR1 which begin with the string FI are selected.

NET-NAME=FI*

All nets of the user’s own user group which begin with the string F1 are selected.

NET-NAME=\$A*

All nets of all user groups which begin with the string \$A are selected.

Keywords, names of run control systems (avak), and the system user group \$ugsys cannot be specified as partially qualified names.

2.3.2 Wildcards in user groups and element names

The user group and the remainder of element names must be regarded separately when entering wildcards. This means that the maximum length of the user group cannot be exceeded. The entire wildcard term cannot be longer than the maximum length of the relevant element name.

Wildcards **cannot** be entered for a calendar name, period name or format name. Likewise, the entry of wildcards is also prohibited for accessing AVAS-external libraries/files (COPY-ELEMENT statement with MODE= LIBIN,ELEMENT/GROUP=) and condition entries in the run control file (SHOW-COND-DESCRIPTION/MODIFY-COND-DESCRIPTION).

Wildcard	Bedeutung
*	Replaces any character string, even a blank character string.
/	Replaces any one character.
<wildcard ₁ , ... >	Replaces all character strings to which one of the specified wildcards applies.
<wildcard ₁ ,wildcard ₂ >	Replaces a character string that meets the following criteria: <ul style="list-style-type: none"> – it is at least as long as the shortest wildcard character string – it is not any longer than the longest wildcard character string – it comes between wildcard₁ and wildcard₂ when sorted alphabetically; numbers are sorted after letters – wildcard₁ can also be the blank character string that comes first when sorted alphabetically.
<wildcard ₁ :wildcard ₂ >	Wildcards of type <wildcard ₁ :wildcard ₂ > can also be specified as a list. Every extent specification of this kind is governed by the above rules. The system implements a logical OR link, i.e. the wildcard list replaces all character strings to which one of the extent specifications applies. The length attributes apply in pairs, i.e. for each extent specification, not for the entire list.

Notes

- Given the length restriction, it does not make sense to specify wildcards for the user group in angle brackets.
- The BS2000 wildcard syntax is described in detail in the “Commands” [5] manuals (see SDF metasyntax, data type suffix “with-wild”).

2.3.3 Syntax description

The following metacharacters are used for the syntactic representation of the statements and their operands:

Notation	Explanation	Examples
UPPERCASE LETTERS and special characters	Uppercase letters and special characters denote constants, which must be entered by the user in precisely this form.	NETNAME=\$XYZ_NET.X
() and ''	Parentheses and quotes denote particular objects and must be entered.	(bs2000-servername) The following must be entered: (SERV0001)
lowercase letters	Lowercase letters denote variables, for which the user must substitute current values upon input.	NETNAME=\$ug_netname Enter: NETNAME=\$ABCD_NET1
{ } and /	Braces enclose alternatives, i.e. one of the entries must be chosen. The alternatives are separated from each other by vertical bars.	OBJECT={NET / MAP / STR} Enter: OBJECT=NET or OBJECT=MAP or OBJECT=STR
[]	Square brackets enclose optional entries.	[\$ug_]netname Enter: \$ABCD_NET1 or NET1
<u>Underscore</u>	Underscoring serves to denote default values. These are the values adopted by AVAS when the user fails to make an entry.	{ <u>NET</u> / MAP / STR} Enter: NET or MAP or STR or nothing (is the same as entering NET)

3 Preparing jobs for execution under AVAS

Logically related jobs are combined together to form job nets for execution under AVAS. The processing sequence and the requirements for starting individual steps must be defined in the net structure, as well as provisions for the restart of the net after an error.

After execution of the BS2000 jobs, the runtime logs generated can be transferred to AVAS management.

In the AVAS run FT requests are treated like jobs. However, they have no job-descriptive data (JCL, JC-L components) and are therefore not affected by job preparation.

3.1 AVAS statements and AVAS variables in jobs

Jobs and JCL elements are created and edited in the user library JCLLIB by means of the EDIT-JOB statement.

When jobs and JCL elements are created or edited, it is possible to incorporate additional information into the JCL statements. This is done by predefining symbolic names, which are interpreted by the AVAS system as AVAS statements and AVAS variables. They can only be used in the following contexts:

- facilities for adapting values which vary from run to run
- facilities for assigning JCL elements which are stored externally
- facilities for passing run control information to AVAS with the aid of a task job variable
- restart facilities following errored behavior on the part of a task.

AVAS statements are executed within the framework of modification. The run control information is evaluated by the run control system.

The following symbolic names, when used in jobs and JCL elements, are automatically reserved by the AVAS system and are interpreted as statements. They must be located in the task starting at column 1 of a record.

Symbolic name	Function of the statement
#AVM#	Assign a mask for run parameter input.
#AVS#	Call a JCL element.
#AVD#	Call an element from any library or file
#AVJ#	Send information to AVAS using a task job variable.
#AVA#	Enter information in the journal
#RA	In the event of a restart, replace the next statement by the contents of this statement.
#RI	In the event of a restart, insert the contents of this statement.
#RU	In the event of a restart, suppress the next statement.

AVAS statements can also be entered as /REMARK or /WRITE-TEXT commands. In this case, they must begin in column 9 or column 15, respectively:

```
/REMARK #AVM#...
/WRITE-TEXT C'#AVM#...
```

Jobs containing AVAS statements in /REMARK or /WRITE-TEXT commands can be executed under BS2000 without being modified. The function of the AVAS statements, however, is only carried out at the production preparation stage within AVAS (CREATE-PROD-NET/CREATE-PROD-JOB). AVAS recognizes the symbolic names of the statements, even if preceded by /REMARK or /WRITE-TEXT commands, and performs the corresponding function.

The following symbolic names are recognized as AVAS variables. They may be located in any record, starting at any location within that record.

Symbolic name	Function of the variables
P#nnn	AVAS variables from job masks (CREATE-PROD-JOB/CREATE-PROD-NET).
S#nnn	AVAS variables from system fields (nnn = 000–200) The user's AVAS variables (nnn = 201–999) (CREATE-PROD-JOB/CREATE-PROD-NET)
N#nnn	AVAS variables from net masks (COLLECT-NET-PARAMS, CREATE-PROD-NET).
F#nnn	AVAS variables from the USER-PARAM-FILE (CREATE-PROD-JOB/CREATE-PROD-NET).

The symbolic name indicators P#, S#, N# and F#, which are normally preset for the AVAS system, can be defined differently by the AVAS administrator. Internal processing is however optimized on the use of the standard indicators.

The functions of the statement and variable codes preset on the system side are described in the following sections, together with the character strings thereby reserved.

3.1.1 AVAS statements

#AVM# - Assign user mask for run parameter input

If the JCL statements of a task (job) are to be modified with the aid of a user mask, the #AVM# statement must be specified in the task. This statement assigns the corresponding user mask to the task.

The #AVM# statements are processed within the framework of job modification (see the CREATE-PROD-JOB statement on [page 374](#) and the CREATE-PROD-NET statement on [page 380](#)), and in each case cause the associated user mask to be displayed. In the course of this operation, the AVAS variables (P#nnn) are assigned the current values of the run parameters. These values remain valid until the next user mask of the task appears or until the processing initiated via CMD:EXECUTE is terminated. Only those AVAS variables belonging to the most recent user mask take effect.

#AVM#format	[text]
-------------	--------

#AVM#	Symbolic name of the statement. It must begin in column 1 or be located after /REMARK or /WRITE-TEXT.
format	Name of the user mask assigned when the mask was created with FHS/IFG (see page 111). The name may be up to 8 characters long and must immediately follow the AVAS statement.
text	Any text (comments) entered must be located in columns 21–70.

The #AVM# statement must not be used in a JCL element.
 In S procedures, the #AVM# statement is only evaluated in the parameter area.

#AVS# - Call JCL element

This statement calls a JCL element stored in the JCLLIB or JCLSYS library, and incorporates it in the element during job modification at the location where the #AVS# statement was issued.

The JCL element may be an element with BS2000 commands, server statements or data records.

A JCL element may contain AVAS variables, AVAS restart statements and #AVJ# statements for defining the task job variable, but it must not contain any #AVM#, #AVS# or #AVD# statements.

JCL elements can be used in jobs. The JCL elements in the JCLLIB and JCLSYS are assigned the relevant function J or P.

During modification, the specified function of the element used is checked for validity.

The following combinations are permitted:

Element	Function of the element
BS2000 job (FU=J)	FUNCTION=J
S procedure (FU=P)	FUNCTION=P or J

A JCL element with a different function will not be found by the CREATE-PROD-JOB/CREATE-PROD-NET statements.

```
#AVS#[ $ug_ ]name [text]
```

#AVS# Symbolic name of the statement. It must begin in column 1 or be located after /REMARK or /WRITE-TEXT.

\$ug_name Name of a JCL element from the JCLLIB or JCLSYS.

If a user group \$ug_ is specified, it must be either the user group of the net in which the element is used or the system user group BKSYS ("BK" being the German abbreviation for user group). If no user group is specified, the JCL element is first sought in the JCLLIB and then, if not found there, in the JCLSYS.

The name of the element must come directly after the symbolic name #AVS# (it must not contain blanks). The name (without \$ug_) can be up to 24 characters long.

text If any text (comment) is entered, at least one blank must be specified between the name of the element and the text.

Nesting of #AVS# statements is prohibited.

In S procedures, the #AVS# statement is evaluated only in the procedure area or job area.

If parameters are specified after the separator string in a JCL element with the function FU=P, these are not transferred to the JMDLIB.

The elements used in an S procedure are not modified.

#AVD# - Call external element

This statement calls an element stored in any library or file and places it at the location at which the #AVD# statement is issued during job modification.

The element that is read in is not subject to modification and is entered unchanged in the element.

The element must not contain any AVAS variables or #AVM#, #AVS# and #AVD# statements.

The element is logged in the journal (CREATE-PROD-NET).

The element can be used in jobs.

The #AVD# statement is only evaluated in S procedures in the JCL area, but not in the parameter area.

```
#AVD#filename / lib(element[,type]) [text]
```

#AVD#	Symbolic name of the statement. It must begin in column 1 or be located after /REMARK or /WRITE-TEXT.
filename	Name of the file in which the element is stored. The name can be up to 54 characters long.
lib(element[,type])	The element is sought in the specified element of the defined library with the specified type of library department. If the type of library department is not specified, type S is used. The expression can be up to 72 characters long.
text	If any text (comment) is specified, at least one blank must be entered between filename or lib(element[,type]) and text.

Note

A file or a library element must come directly after the symbolic name #AVD# (it must not contain blanks).

#AVJ# - Set errors and restart variant via task job variables

This statement makes it possible to set errors and, optionally, to enter additional messages in the journal file. When outputting JCL statements from the run control file to the ENTER file, the AVAS run control system converts this statement to the BS2000 command

```
/MODIFY-JV JV=(JV-NAME=jvname,POSITION=129,LENGTH=55),SET-VALUE=C'RV=n,text'
```

The name of the task job variable (“jvname”) is assigned by the run control system.

```
#AVJ#RV=n,errortext
```

#AVJ#	Symbolic name of the statement. It must begin in column 1 or be located after /REMARK or /WRITE-TEXT.
RV=n	<p>This specifies the restart variant with n = 0, 1, 2 or 3.</p> <p>If n is equal to 1, 2 or 3, the error text is to be stored in the journal file and the prompt <code>INITIATE RESTART VARIANT n</code> is to be output to the associated console.</p> <p>If <code>AUTOMATIC=YES</code> has been specified in the restart variant selected via <code>RV=n</code>, the run control system automatically initiates restart via the specified variant.</p> <p>If <code>AUTOMATIC=YES</code> has not been specified, no automatic restart is initiated (the other variants are not searched for <code>AUTOMATIC</code>).</p> <p>If <code>n=0</code> the error text is stored in the journal file. No output to the console occurs. Then, for <code>RV=0</code>, the restart variants 1, 2 and 3 are searched for <code>AUTOMATIC</code>.</p> <p>If no automatic restart can be initiated (<code>AUTOMATIC=NO</code>) and a restart variant has been set via <code>RV=n</code>, the restart requested by the <code>RESTART-NET</code> statement is initiated through the defined variant unless the user enters a different restart variant using the parameter fields of the assigned masks.</p>
errortext	<p>Any text, up to 55 characters long.</p> <p>It is stored in the journal file regardless of the value n.</p> <p>If <code>RV=n</code> is not specified, only the text is entered in the task job variable and is displayed via <code>SHOW-NET-STATUS</code> or <code>NET-CONTROL</code>. The contents of the job variable are output to the journal file with the record key 52-07 or 52-08.</p>

Notes

- In BS2000 the monitoring job variable can be accessed via its JV link name. Therefore, instead of the AVAS statement #AVJ# itself, the user can issue the BS2000 command resulting from it by using its JV link name to reference the task job variable allocated by the run control system:

```
/MODIFY-JV JV=*LINK(LINK-NAME=*SMONJVJ, POSITION=129, LENGTH=55),-
/          SET-VALUE=C'RV=n, text'
```

Note that no additional blanks may be specified in the string 'LINK-NAME=*SMONJVJ'. LINK-NAME=*SMONJVJ must be specified in the same statement line.

The run control system evaluates the monitoring job variable in conjunction with the values entered via BS2000 and the #AVJ# statement, and sets the following statuses for the job in question:

Contents of the task job variable		Job status for AVAS	Restart possible?
BS2000 status values	Value created by the #AVJ# statement		
\$A	no value (129,3)	end with error	yes
\$A	and value (129,3),C'RV='	end with error	yes
\$T	and value (129,3),C'RV='	end with error	yes
\$T	no value (129,3)	normal end	no

#AVA# - Enter information in journal

This statement enters information in the journal file. When outputting the JCL statements from the run control file to the ENTER file, the AVAS run control system converts this statement into the following two BS2000 commands:

```
/WAIT-EVENT UNTIL=*JV(COND=((jvname,1,1)=C' '),TIME-LIMIT=600)
/MODIFY-JV JV=(JV-NAME=jvname,POSITION=1,LENGTH=256),SET-VALUE='text'
```

The name of the communication job variables (jvname) is set by the run control system. The /WAIT-EVENT command is used to prevent a text that has not yet been collected by the run control system from being overwritten.

#AVA#text

#AVA#	Symbolic name of the statement. It must begin in column 1 or be located after /REMARK or /WRITE-TEXT.
text	Text which is to be entered in the journal file using the record key 08-01. The text must begin with the character \$.
	\$J,... makes an entry in the journal file
	\$M,... makes an entry in the journal file and the information MODIFIED is also stored for the net.
	If the text does not begin with the character \$, AVAS assumes that a text containing \$x,... appears for the journal file in another user job variable.
	In this case, the JV-NAME or LINK-NAME syntax of the SET-VALUE= parameter of the BS2000 command /MODIFY-JV must be adhered to for text.

#AVA#\$H - Enter information in the journal file and the HISTORY file

This statement enters information in the journal file and the HISTORY file. When outputting the JCL statements from the run control file to the ENTER file, the AVAS run control system converts this statement into the following two BS2000 commands:

```
/WAIT-EVENT UNTIL=*JV(COND=(jvname,1,1)=C' ',TIME-LIMIT=600)
```

```
/MODIFY-JV JV=(JV-NAME=jvname,POSITION=1,LENGTH=256),SET-VALUE=text
```

The WAIT-EVENT command is used to prevent a text that has not yet been collected by the run control system from being overwritten.

The name of the communication job variables (jvname) is set by the run control system

#AVA# Symbolic name of the statement. It must begin in column 1 or be located after /REMARK or /WRITE-TEXT.

text Text which is to be entered in the journal file using the record key 08–01 and in the HISTORY file in the record with KEY=04. The text must begin with the character \$H01.

The fields for the following parameters are defined in the record with KEY=04 in the HISTORY file:

Parameters for the statement #AVA#\$H01

Parameter	Value	Length	from pos.	to pos.
key	\$H	2	1	2
record number	01	2	3	4
operating system	systemname	12	5	16
system version	Vnn.nAmmmm	10	17	26
HOST (BCAM) name	host-name	8	27	34
IP address	nnn.nnn.nnn.nnn	15	35	49
CPU usage	nnnnnn.nnnn	11	50	60
Number of I/Os	nnnnnnnnnnnnnnnn	16	61	76
Reserved		51	77	127
User information	text 1...128	128	129	256

The user must enter the values including \$H01 in a user job variable. The syntax for SET-VALUE= of the BS2000 command MODIFY-JV must then be adhered to in the #AVA# statement, e.g.:

```
#AVA#(JV-NAME=...,POS=...,LEN=...)  
#AVA#LINK(LINK-NAME=...,POS=..., LEN=...)
```

Notes

- The AVAS statement #AVA# is only processed for structure elements where TYP=STD or TYP=MOD and FU=J or FU=P.
- The AVAS statement #AVA# does not cause an ERROR status for the structure element involved. This can be achieved with the AVAS statement #AVJ# or by terminating job execution abnormally.
- AVAS places the values that the user transferred to AVAS using the AVAS statement #AVA#\$H01 in the HISTORY record with KEY=04 (field H04UINF=User Info) without checking them.

Statements for restart case #Rx

If, during net processing, errors occur in an associated job, these errors can be recovered or circumvented in another net processing run. To this end, it must be ensured when defining the job that the net can be restarted by the RESTART-NET statement, i.e. that the job is given the status ERROR by AVAS. This can be done using, for example, the BS2000 command /EXIT-JOB MODE=*ABNORMAL or the AVAS statement #AVJ#.

Furthermore precautionary measures in the jobs can be taken, in the form of restart statements. The restart statements define whether and if so how the individual JCL statements should process the jobs and JCL elements in the event of an error. For example, JCL statements can be interchanged (#RA), suppressed (#RU) or executed in addition (#RI).

Only when the net is processed in RESTART mode will the functions in the restart statements be executed by the run control system.

The table below shows when the restart statements are processed:

Symbolic name of the restart statement	RESTART-TYPE=	
	NORMAL	RESTART
#RA	no	yes
#RI	no	yes
#RU	no	yes

Restart statement Meaning

#RA	<p>The JCL statement following the #RA statement in the job is to be replaced by the JCL statement defined with #RA. This is done by shifting the contents from position 4 (without #RA) to positions 1–71 of the following JCL statement. The contents of column 72 and onwards are retained.</p> <p>If necessary, the continuation character must be entered in column 75 of the JCL statement defined with #RA.</p> <p>The statement following the #RA statement must not be an AVAS statement as otherwise this will likewise be replaced by the #RA statement.</p>
#RI	<p>The contents of this statement are to be inserted in the job as a JCL statement. To do this, the contents are shifted from position 4 (without #RI) to position 1.</p> <p>If necessary, the continuation character must be entered in column 75 of the JCL statement defined with #RI.</p>

#RU The next statement is to be suppressed.
 The statement following the #RU statement must not be an AVAS
 statement as otherwise this will likewise be suppressed.

If the restart statements are entered using the BS2000 /REMARK command, the contents are shifted from position 12 to position 1.

If the restart statements are entered as using the BS2000 /WRITE-TEXT command, the contents following the first single quote (from position 19) are shifted to position 1. The concluding single quote is deleted.

The processing of restart statements within the nets is canceled when the run control system for the net in question switches to normal processing mode (N mode).

In the restart job index level range from 900 to 999, the switch from RESTART mode to NORMAL mode can be controlled via the parameter RESTART-TYPE of restart variant 1. RESTART mode is exited by specifying RESTART-TYPE=NORMAL for restart variant 1. RESTART mode is automatically left when the first index level of normal processing (index 001–899) has been completely processed.

For a general description of the restart procedure, see the manual "AVAS Functions and Tables" [1].

3.1.2 AVAS variables

Values (run parameters) which are to be different from run to run can be specified in jobs and JCL elements as AVAS variables. The symbolic name of the AVAS variable must always be preceded by the number nnn, which must consist of three digits. These variables are converted into current values at the production preparation stage within the framework of job modification.

The AVAS statement #AVM# in a job causes a user mask to be displayed. When this is done, the variable fields in the user mask are assigned AVAS variables, e.g. P#nnn. In this way, the AVAS variables used in jobs and JCL elements can be addressed and modified with the aid of the user masks. Modification causes an executable copy (production job) of the job from the JCLLIB or JCLSYS library to be created in the JMDLIB library. The AVAS variables are replaced by current values in the (output) records of the production job thus created.

If a record comprises only AVAS variables and no values are assigned to these, the empty record thereby generated will not be output.

AVAS variables S#

These AVAS variables can be used in all jobs and JCL elements which are subject to modifications (CREATE-PROD-NET/CREATE-PROD-JOB).

Depending on the numeric part of the name key S#nnn, a differentiation is made between

- variables from the system fields (reserved value range 000–200) and
- user variables (nnn = 201–999).

An S#nnn field can be addressed as often as you want.

AVAS system field variables S#

The fields with the keys S#001 and S#002 are taken from the most recently displayed mask and added to the output record; the other fields are taken from a data area internal to the AVAS system.

Key	Value	Meaning	Length
S#001	dd.mm.yy	current date	mask field (8)
S#010	dd.mm.yyyy	current date	mask field (10)
S#002	hh:mm:ss	current time of day	mask field (8)
S#008	yyyymmdd	current date	8
S#013	yymmdd	current date	6
S#012	hhmmss	current time of day	6
S#003	netname	NET-NAME with BK_, _date_time	32
S#011	netname	NET-NAME without BK_, _date_time	variable (max:12)
S#004	keyword	for NET-STATUS	variable
S#005	jobname	JOB-NAME (from net descr. [with BK_])	30
S#014	jobname	INPUT-JOB-NAME without BK_	variable
S#015	jobname	OUTPUT-JOB-NAME without BK_	variable
S#006	keyword	for JOB-STATUS	variable
S#099	symdatname	PLAN-START of the net as Symdat	20
S#100	symdatname	selection of the net structure viaSymdat	20
S#101	jjmmtt	date of EARLIEST-START	6
S#102	hhmmss	time of EARLIEST-START	6

(Note: "BK" is the German abbreviation for "user group".)

The values for S#013 and S#012 are redefined for a net which is to be modified, and remain the same until net modification has finished.

If the fields S#001 and/or S#002 are not present in the mask, the variables are set via the current system time.

AVAS user variables S#

The fields containing the keys S#201 to S#999 and the values assigned to them can be defined by the AVAS administrator at generation time and/or can be modified, deleted and created using the MODIFY-SYSTEM-PARAMS statement.

The defined value of the variables is used during modification.

The assigned value of the variables is made up of any character string consisting of 1 to 48 characters.

If “value” is specified in quotation marks, the character string can contain blanks. Two quotation marks must be entered for one quotation mark within “value”.

AVAS job mask variables P#

The AVAS variables P#nnn can be used in all jobs and JCL elements which are subject to the performance of modifications (see the CREATE-PROD-NET statement on [page 380](#) and the CREATE-PROD-JOB statement on [page 374](#)). A P#nnn field can be addressed as often as you want. The P#nnn variables are available until a new mask is assigned (system mask or user mask).

The format of the record in the production job (output record) is governed by the following rules:

- The variable field addressed by the AVAS variable P#nnn is included in the output record in the length with which it was defined when the user mask was generated. The contents of the input record are shifted accordingly. (The input record is the record in the job with the symbolic name of the AVAS variable.)

A field therefore always occupies five positions in the input record, and 1–80 positions in the output record.

Provided the following conditions are met, positions 72–80 are taken unchanged from the input record to the output record:

Input record column 01 = ' ' (BS2000 command)

and column 72 = '-' (continuation character).

If AVAS variables cause shifts to occur, characters in the input record will be lost (parameter longer than 5 characters) or blanks will be appended (parameter shorter than 5 characters).

If BS2000 commands of this type contain AVAS variables in positions 73–80, the AVAS variable is not changed and is thus not extended in a current output record.

- If a variable field is to be included in the output record, but not in the length defined when the user mask was generated, the end-of-field mark X'4A' must be entered in this field. The end-of-field mark is represented on data display terminals as C''.

In this case, the character string to be added to the output record can be 0–79 positions long, i.e. the entry of the end-of-field mark at the first position of a variable field causes the field to be excluded from the output record.

- If fields in which nothing is to be entered are not to be transferred to the output record, the filler character '' must be entered in these fields when generating the user mask (FHS parameter JUST=(N, ',N, ')).

AVAS net mask variables N#

These variables can only be used in jobs and JCL elements which are subject to net modification (see the CREATE-PROD-NET statement on [page 380](#) and the COLLECT-NET-PARAMS statement on [page 197](#)).

An AVAS variable with the symbolic name N# can be used as often as you want, and in any jobs or JCL elements in the net.

The same rules govern the inclusion of the values of N# variables in the production job as apply to AVAS variables with the symbolic name P# (see above).

AVAS USER file variables F#

These variables can only be used in jobs and JCL elements which are subject to job and net modification (see the CREATE-PROD-NET statement on [page 380](#) and the CREATE-PROD-JOB statement on [page 374](#)). An AVAS variable with the symbolic name F# can be used as often as you want, and in any jobs or JCL elements in the net.

The values of F#nnn variables are included in the production job in the length with which they are stored in the USER-PARAM-FILE.

- The file must be a SAM file with variable-length records. The maximum record length is 124 (including the record length field).
- Each record in the file may only contain one value assignment.

- Format of the value assignments:

F#nnn='value'[_]*text

nnn three-digit number between 000 and 999.

value any character string consisting of 0 to 72 characters.

If 'value' is specified in single quotes, the string may contain blanks (_). If a single quote occurs within 'value', the quote must be duplicated. If no single quotes are specified, the string begins after the equal sign and ends at the first blank or at the end of the record.

text Any text (comments) entered must begin with an asterisk (). At least one blank must be specified between value and *text.

- A parameter file can be assigned to a net or a task (FU=J/P) via the net description.
- The symbolic name F# must begin at position 1 of the record. It is illegal to intersperse blanks.

Example

		<u>Value</u>
F#001='290500'	*Day of booking	290500
F#030='AV0026'	*Volume input	AV0026
F#040='AV1036'	*Volume output	AV1036
F#050='C'PASSW____'		C'PASSW____'
F#060=ABCDEF		ABC
F#070='C'PASSW____'		Syntax error !

Note

F#nnn values with a syntax error are not used. During modification the message
PARAMETER F#nnn NOT FOUND is output to the journal file.

- During modification of an S procedure (FU=P), the name of any parameter in the USER-PARAM-FILE can be selected. This name can be up to 48 characters long.
- During modification of a BS2000 job (FU=J), only parameters with the defined name F#nnn can be processed.

Rules for S procedures

S procedures can be used with TYPE=STD/MOD/EXT/EXX.

S procedures with TYPE=EXT/EXX are not managed by AVAS.

Only in the case of S procedures which are defined with the function FU=P and TYPE=MOD in the net specification are procedure parameters supplied by the run control system with the ENTER-PROCEDURE call. These procedure parameters are stored in the JCLLIB/JCLSYS or the JMDLIB/JMDSYS in the element which follows the procedure.

AVAS inserts a separator string between the fields, as a separator. This separator string can be defined by the AVAS administrator at generation time. If no parameters are being used, the separator string is the last record in the element.

The separator string must be specified by the user if S procedures are to be imported into the AVAS system by a COPY-ELEMENT after being created outside the AVAS system.

The two areas (S procedure and procedure parameters) can be edited using the statements EDIT-JOB/SHOW-JOB, EDIT-PROD-JOB/SHOW-PROD-JOB and MODIFY-SUBMIT-JOB. In EDT, the display uses workfiles 0 and 1.

The parameters are specified by 'parametername='

When doing so, note the following:

- The parameter name must always start in column 1, may contain 1–48 characters, and this string must not contain any blank characters. It cannot start with “SYS” and must end with “=”.
- AVAS variables identified by the key fields P#nnn, N#nnn and F#nnn can be used in the procedure parameter area as the parameter name.
- AVAS variables identified by the key field S#nnn can be used in the procedure parameter area as the parameter name or as a variable for assigning a value to the specified parameter name (example: S#nnn= or parametername=S#nnn).
- Statements which have a blank or * in column 1 are not processed during the modification routine (comments).
- If an arbitrary text item (comment) is specified, it must start with an *. There must be a blank between parametername= and *text.

In the job or net modification routines (CREATE-PROD-JOB/CREATE-PROD-NET), only the procedure parameter area is processed. The S procedure itself is copied unmodified into the JMDLIB.

For statements, the format of value assignment and storage is:

JCLLIB	JMDLIB
parametername=	parametername=assigned value
S#nnn=	S#nnn=value of S#nnn
parametername=S#nnn applies only to AVAS variables with the key S#nnn	parametername=value of S#nnn
parametername=default value	parametername=default value

Values can be assigned using

- a direct entry in the procedure parameter description (defaulting)
- the USER-PARAM-FILE (net/job)
- a net parameter (an AVAS variable from the net masks)
- a job parameter (an AVAS variable from the job masks)
The user mask assignment is effected by the #AVM# statement in AVAS.
#AVM# is processed only in the procedure parameter area.
- a system parameter.

In addition, JCL elements (#AVS# and #AVD# statements) can be called in the S procedure area (not in the parameter area).

Unlike when a job is being modified, during modification of procedure parameters a search is also made for parameter names which do not satisfy the naming conventions for F#nnn, N#nnn and P#nnn.

In the case of mask parameters (net parameters and job parameters), REM must be used to assign the parameter name to a mask field. For system parameters, the user must specify in addition the S#nnn parameter name, or its name as modified during generation.

During the modification routine, the value assignments for the specified parameters are sought in the following areas in the order given:

- in the variable from the USER-PARAM-FILE (job)
- in the variable from the job mask
- in the variable from the net masks
- in the variable from the USER-PARAM-FILE (net)
- in the job description (default value)

If a variable name is used more than once in the various areas (job mask, net mask and USER-PARAM-FILE), the value of the first variable found (according to the search process) is used.

Note

Positional parameters are not supported for ENTER-PROCEDURE calls (with procedure parameters) in the run control system.

3.2 Transferring runtime logs to AVAS

The runtime logs of jobs or S procedures started by the AVAS run control system can be brought together under AVAS and stored in a central library.

Two programs, which have to be integrated into the job, are provided for transferring the runtime logs to AVAS:

- The SIGNAL program tells AVAS that a log is to be transferred, and
- the TRANSFER program transfers the job from the user's work area into AVAS.

The DCAM application CENTRAL has been added to the AVAS system. CENTRAL takes the log and stores it in the log library (AVAS pool).

The dialog statement and the BATCH statement ADD-JOB-LOG are provided for the subsequent storage of selected logs.

A maximum of 99 logs can be selected and stored for each job.

The logs can be displayed using the statements SHOW-JOB-LOG, SHOW-NET-STATUS, NET-CONTROL and SHOW-JOURNAL.

Logs can be saved and deleted as part of a reorganization exercise. Individual logs can also be deleted by the dialog statement or the BATCH statement DELETE-JOB-LOG.

Collecting the logs

A DCAM application is provided for storing the logs while the job is in progress. The application consists of several inter-communicating DCAM programs. The programs SIGNAL and TRANSFER notify the main task, CENTRAL, that logs are available and transfer them to the central library respectively.

CENTRAL tasks

CENTRAL is a shareable DCAM application.

It consists of a primary task and a specific number of secondary tasks. The primary task provides the central DCAM task resources and controls the application.

The secondary tasks handle requests from the DCAM programs and store the logs in the central library.

In addition to the central access tasks (ZDs), the CENTRAL task, which runs on the same computer under the same user id., is started by the ENTER call. CENTRAL is logged under the ZDs as a special task (similar to AVAK).

SIGNAL program

SIGNAL is a non-shareable DCAM program.

SIGNAL is loaded as the first program in an AVAS job, immediately after /SET-LOGON-PARAMETERS and the ASSIGN-SYSOUT allocation. It identifies the AVAS job from the task job variable and the name of the file containing the SYSOUT data and sends them to CENTRAL, along with other control parameters. SIGNAL logs any problems that occur in program job variables.

If additional logs (e.g. SYSLST) are to be stored centrally, the SIGNAL program must be called for each one.

TRANSFER program

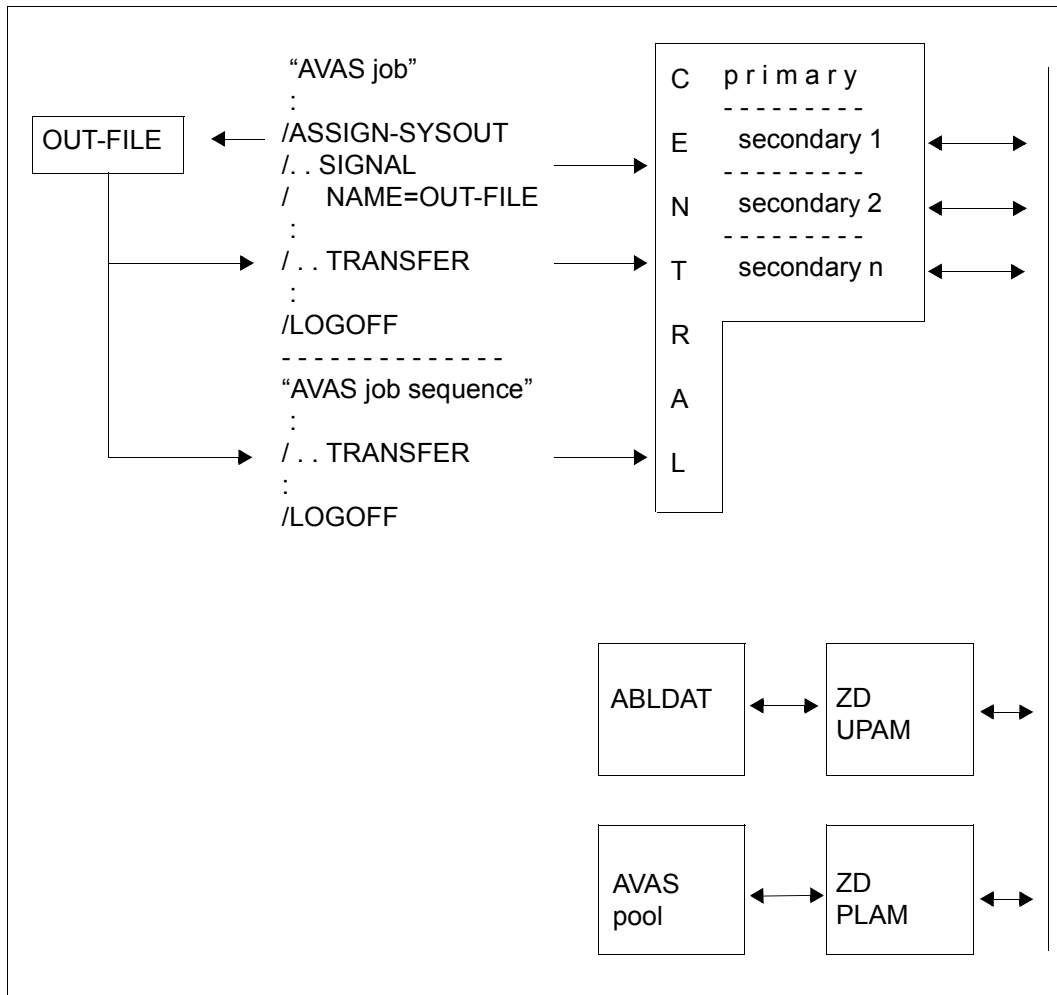
TRANSFER is a non-shareable DCAM program. It is either loaded into the AVAS job as the last program, immediately before the /EXIT-JOB (or /LOGOFF) statement, or is started by AVAS as a program and job in its own right.

TRANSFER identifies the AVAS job from the task job variable and sends it to CENTRAL, along with any other parameters that may have been specified. If this data is correct, CENTRAL attempts to transfer the log in directly. If this is not possible, CENTRAL requests the TRANSFER program to transfer the data in the log. Any problems that occur in the TRANSFER program are logged in a program job variable.

Note

In the case of ADD-JOB-LOG and in the TRANSFER program, the log data is read via SYSDTA. Possible file formats are described under the BS2000 command ASSIGN-SYSDTA (see the “Commands” [5] manual).

Transfer of runtime logs to AVAS



Restrictions

The log records must not exceed the maximum length of the software being used. This means that AVAS can enter log records with a maximum length of 2028 bytes in the log library. Using EDT, on the other hand, the SHOW functions can only display records that are 256 bytes in length. If a record is longer, the current function terminates with an error.

3.2.1 Starting and terminating the SIGNAL program

Starting the SIGNAL program

The SIGNAL program must be loaded in an AVAS job, for which it requires a task job variable. It gathers all the information required to transfer a log and sends it to the CENTRAL task. SIGNAL may be called several times within the same job, though using the same log name will result in an error. The log records of the first selected file for a job can be called up and displayed in the function SHOW-NET-STATUS, NET-CONTROL or SHOW-JOURNAL.

The SIGNAL program is started by calling the procedure AVAS.SIGNAL or from within an AVAS job by a procedure (or command sequence) written by the user. AVAS.SIGNAL is an element of type J in the SYSPRC.AVAS.085 library.

The following parameters for controlling program execution can be specified through STSDTA:

APPLICATION={{(ptnname,proname) / jobvariable}}

(ptnname,proname)

ptnname is the application name for the CENTRAL task. proname is the processor name for the CENTRAL task.

jobvariable

The application name of the CENTRAL task starts at position 1 of the specified job variable, the processor name at position 9.

The APPLICATION parameter must be specified.

FILE-NAME={*STD / file name}

*STD

The file name for the SYSOUT log is determined by SIGNAL. If no file name has been allocated to SYSOUT, the SIGNAL program terminates with an error.

Within a job, the SIGNAL program is to be called immediately after SYSOUT has been passed a file name. Note that any data specified before the file name assignment will not be entered in the file.

file name

Specifies the name of the log file to be passed to CENTRAL. This enables any SAM or ISAM file (minus the index key) to be transferred.

Note

This parameter is only required in cases where a log file different to the one specified with /ASSIGN-SYSOUT is to be collected.

TRANSFER-OPTION={ENDED / ERROR / NO}

ENDED	<p>The run control system starts a follow-up job to transfer this log if the log was not transferred during execution of the job by a call to TRANSFER.</p> <p>The error-free transmission of this log is not a precondition for the normal termination of the job in the AVAS system.</p> <p>The job status is not affected by the outcome of the log transmission.</p>
ERROR	<p>The run control system starts a follow-up job to transfer this log if the log was not transferred during execution of the job by a call to TRANSFER.</p> <p>The error-free transmission of this log is a precondition for the normal termination of the job in the AVAS system.</p> <p>A job status of ERROR is returned if the log could not be transferred. A restart should be initiated for the net/job in such cases.</p>
NO	<p>The run control system does not start a follow-up job to transfer this log.</p> <p>If the log was transferred during the job, users must flag normal or abnormal job termination themselves, and thus the status of the job in AVAS, by evaluating the return codes for the job.</p>

Notes

- If the TRANSFER-OPTION parameter is not present, the value specified when CENTRAL was started will be used.
- The run control system does not start a follow-up job in the case of logs that the system attempted to transfer during the job but was unable to do so because of an error.
- If transfer of a log is abandoned as the result of an error, any data transferred up to that point will not be saved.
An ERROR status is allocated to that log in the log directory.
- If several logs with different TRANSFER-OPTIONs are flagged, they will be treated differently accordingly.

DELETE={YES / NO}

The DELETE parameter is only to be specified with SIGNAL when several logs are flagged and the files are to be handled differently following successful transmission and TRANSFER is called up by the run control system in a follow-up job.

The files are deleted by TRANSFER.

YES

The file is to be deleted after the data has been successfully saved.

NO

The file is retained under the new user ID.

Note

If the DELETE parameter is not present, the value specified when CENTRAL was started will be used.

This value can still be modified from the TRANSFER program.

Terminating the SIGNAL program

The SIGNAL program terminates when all data has been sent to the CENTRAL task. If errors occur during the SIGNAL program (e.g. incorrect parameter specified, CENTRAL task not available, etc.), a message is output. If a program job variable was specified when SIGNAL was started, the message number (minus AVS) will be entered in the return code indicator field of the program job variable.

Problems during the execution of SIGNAL must result in an entry in the task job variable (see [page 87](#)) or must terminate a job abnormally, so that the status ERROR is set in the net structure element.

Notes

- If a job has several logs, the JOBLLOG operation in the SHOW-NET-STATUS, NET-CONTROL and SHOW-JOURNAL functions will only display the first log. It therefore makes sense to flag the file designated by the ASSIGN-SYSOUT statement as the first file.
- Tasks with TYPE=EXX can only use the SIGNAL program if the external monitoring job variable can be addressed as a task job variable via the JV link name *SMONJVJ.

3.2.2 Starting and terminating the TRANSFER program

Starting the TRANSFER program

The TRANSFER program transfers logs to the CENTRAL task, for which it requires a task job variable. Transfer takes place in the same job or a follow-up job.

To transfer the log in the same job, the procedure AVAS.TRANSFER or a procedure (or command sequence) written by the user is included in the AVAS job.

AVAS.TRANSFER is an element of type J in the SYSPRC.AVAS.085 library.

Transfer from a follow-up job is controlled by the TRANSFER-OPTION parameter in the SIGNAL program.

The following parameters for controlling program execution can be specified through STSDTA.

APPLICATION={{(ptnname,praname) / jobvariable}

(ptnname,praname)

ptnname is the application name for the CENTRAL task. praname is the processor name for the CENTRAL task.

jobvariable

The application name of the CENTRAL task starts at position 1 of the specified job variable, the processor name at position 9.

The APPLICATION parameter must be specified.

FILE-NAME={*ALL / *LAST / file name}

*ALL

All logs flagged by the SIGNAL program are to be transferred.

*LAST

The most recently flagged log is to be transferred. The log not yet processed by TRANSFER at this time is the one that will be transferred.

file name

Name of a log file.

The name of the log must be flagged and consequently known to the CENTRAL task.

Note

The default value of the parameter is *ALL. The default value can be modified in the CENTRAL task to *LAST.

DELETE={NO / YES}

NO The file is retained under the new user ID.

YES The file is to be deleted after the data has been successfully saved.

Note

If the DELETE parameter is not present, the value specified when SIGNAL was started or the value specified by CENTRAL will be used.

The DELETE value set by TRANSFER supersedes the one set by SIGNAL.

Terminating the TRANSFER program

The TRANSFER program terminates once it has sent all information and data to the CENTRAL task.

If errors occur during the TRANSFER operation (e.g. incorrect parameter specified, CENTRAL task not available, file READ password-protected, etc.), a message is output. If a program job variable was specified when TRANSFER was started, the message number (minus AVS) will be entered in the return code display field of the program job variable.

Problems during the execution of TRANSFER must result in an entry in the task job variable (see [page 87](#)) or must terminate a job abnormally, so that the status ERROR is set in the net structure element.

Note

Tasks with TYPE=EXX can only use the TRANSFER program if the external monitoring job variable can be addressed as a task job variable via the JV link name *SMONJVJ.

3.2.3 Notes on the control parameters

Parameters for controlling the execution of SIGNAL and TRANSFER are specified via SYSDTA when the programs are started. The default values for these control parameters are selected to provide a simple way of compiling the data required for a log. These parameters also provide a way of transferring further SAM or ISAM files into the central AVAS pool so that the production of jobs in the computer center is as complete as possible and not susceptible to change.

Notes on the control parameters

FILE-NAME= with the TRANSFER program

This parameter is necessary when only one log is to be compiled, even though a number have been flagged. Specifying a name permits a 1 to 1 relationship between SIGNAL and TRANSFER to be established.

The value *LAST allows a job to be controlled on the "last in – first out" principle. This principle can still be applied even if an error occurs in the TRANSFER program.

FILE-NAME=*ALL is always used if the TRANSFER program is started by the run control system as a follow-up job.

TRANSFER-OPTION with the SIGNAL program

The transfer of the logs flagged by SIGNAL during an AVAS job can be performed by issuing a TRANSFER call in the AVAS job or by the run control system starting a follow-up job that includes a TRANSFER call. As a rule, the run control system checks whether TRANSFER was started from the AVAS job and starts a follow-up job if this is not the case. The user does not have to give this follow-up job any special attention as far as the AVAS net structure is concerned.

- If TRANSFER-OPTION=NO is specified, the start of a follow-up job for the transmission of logs can be inhibited, irrespective of whether TRANSFER was called in the AVAS job or not.
 - If TRANSFER was called from the AVAS job and errors occurred during the transfer, the user can evaluate the return codes to determine whether the job terminated normally or abnormally. The flagged logs can be subsequently brought together using the ADD-JOB-LOG statement.
 - If TRANSFER was not called from the AVAS job and an error occurred while transferring a log, the TRANSFER-OPTION parameter can be used to decide whether or not the error is to affect the job status.
- If TRANSFER-OPTION=ENDED is specified, the job status is not affected when an error occurs during transfer of a log. The status set when the AVAS job terminates is the only one that counts as far as the job status is concerned.

- If TRANSFER-OPTION=ERROR is specified, the job status ERROR will be set if an error occurs while transferring a log. A job status of ENDED will only be reached when the AVAS job terminates normally and the flagged logs have been successfully transferred.

DELETE={NO / YES} in the SIGNAL and TRANSFER programs

This parameter determines whether log files are deleted following the successful transfer of a log.

- If the parameter is not specified with either SIGNAL or TRANSFER, the default value specified when the CENTRAL task was started will be used.
- If the parameter is not specified with SIGNAL, the default value for the CENTRAL task will be used.
- If the parameter was specified with TRANSFER, the value specified with SIGNAL will be overwritten.

3.3 Creating the AVAS user masks

User masks can be used to supply jobs with current runtime parameters. To do this, the jobs must be given dummy parameters, which are replaced by values from the user masks. In this way, the variables in a job can be modified at the production preparation stage with the current values required for each run, i.e. they can be replaced and assigned to the job.

User masks can be created using FHS or IFG. AVAS supports +-formats and #-formats in the user masks.

There are two kinds of user mask:

- masks for entering parameters which are valid throughout the net, i.e. net parameters (COLLECT-NET-PARAMS statement) and
- masks for entering parameters for a particular job (CREATE-PROD-NET/CREATE-PROD-JOB statements), which are called from the job via an AVAS statement (#AVM#).

As regards the information, control and message sections, every user mask must have the same structure as a system mask.

Lines 2–21 contain the application-specific processing section.

The control section must contain the variable fields for the operation, statement and operands, with the text field names and the sequence of entries being the same as in the system masks. Interchanging these mask fields will cause processing errors.

The same remarks apply to the message section as to the control section.

If a user mask does not comply with the prescribed AVAS conventions, it is not possible to perform parameter modification via masks. The mask is rejected by AVAS with an error message.

The user is responsible for assigning the variable fields in the masks to the variables in the jobs and JCL elements. When creating masks, he should make sure that these variables are not used more than once per mask, and remember that only the most recently entered values apply during subsequent processing (no memory function). This means that a mask must contain **all** the information required for the subsequent processing operation. Values are assigned using the FHS parameters EXIT and REM; the name of the AVAS variable must be specified under REM.

When IFG is used, EXIT=YES and REM=name must be specified for the variable fields, where “name” is the name of the AVAS variable.

Storing user masks in libraries

The masks used for collecting net parameters (net masks) and for entering job parameters via a mask called in the job (job masks) can be stored in different mask libraries. AVAS expects net masks to be in the NETMAP library, and job masks in the JOBMAP library. When masks are created using FHS or IFG, the names of the libraries must be specified (see the “FHS” manual [3] or the “IFG for FHS” manual [4]).

There are no special AVAS rules for assigning mask names. However, the names must not begin with AVM\$... as this character string is reserved for AVAS system masks. The user should set up rules for assigning mask names that allow him first of all to tell whether a user mask is a net mask or a job mask, and then to assign a user mask to a particular net or group of nets. Since net masks require different system fields than job masks, interchanging the masks will lead to processing errors in the assigned AVAS components.

The names must be unique throughout all the mask libraries. This is because the masks are kept resident once they have been loaded for the first time from the FHS mask library, and when the mask name is called again the library entry is no longer processed (the mask is first sought in the internal FHS mask table, where in this case it is also located and displayed).

3.3.1 User masks for net modification

When setting up a user mask for collecting net parameters (COLLECT-NET-PARAMS statement), note the following rules:

Each user mask must always be formatted in the same way as a system mask (see [page 28](#)).

The system parameters S#003 (net name) and S#004 (net status), can be specified in the processing section. These parameters are then assigned the appropriate current values when the mask is displayed. Entries in the S#nnn fields are not processed.

The location of the user parameters within the processing section is freely selectable. The user parameters, AVAS variables N#001 to N#999, are valid for one net and must not appear more than once in the same mask.

Several net masks may be used for one net definition. When two or more masks are defined for collecting net parameters, the user parameters must be unique throughout all the masks. AVAS does not check that this is the case; each user is responsible for the values assigned to the parameters.

Entry of the parameters for netwide modification (COLLECT-NET-PARAMS) must be performed before the production preparation stage (CREATE-PROD-NET). If the same user parameter is included in more than one mask, it is affected the corresponding number of times (for each mask) whenever the user parameters are entered or modified.

In the course of production preparation, the user parameters which are valid throughout the net (AVAS variables N#nnn) are replaced by the value from the first user mask defined and edited in the net.

3.3.2 User masks for job modification

As a rule, user masks for job modification (CREATE-PROD-NET/CREATE-PROD-JOB statements) are formatted in the same way as system masks (see [page 28](#)).

The processing section may contain the system parameters S#003 (net name), S#004 (net status), S#005 (job name) and S#006 (job status), which are then supplied with the appropriate current values when the mask is displayed. Entries in the S#nnn fields are not processed.

The AVAS variables P#001–P#999 should be employed as user parameters.

The values of these variables in a user mask are retained **only** until another user mask is called or until the processing initiated via CMD:EXECUTE is terminated.

The same user parameter must not occur more than once in a mask. This rule holds true even when two or more job modification masks are defined, since each time a value is entered via another mask a new value is assigned to the user parameter.

Example of user mask format

The following sample mask, created with FHS, illustrates net modification. For information on FHS macros see the “IFG for FHS” manual [4].

```

AVAS-Vnn.yxmm/format          format-description          #####/#####
user-param-description
NET-NAME= _____          NET-STATUS= _____
VOLUME      : _____
DATEINAME   : _____
CMD: _____ OPR: _____
MSG: _____
    
```

Meanings of the mask fields

Line 1: Information section

AVAS-Vnn.yxmm/	<p>AVAS system version (optional)</p> <p>nn = main version of the AVAS system y = revision version xmm = version update</p> <p>FHS macro calls: MDFLD POS=(1,1),LEN=13,EXIT=YES,REM='SYSVERS'</p>
format	<p>Name of the mask (optional). Up to 8 characters are allowed.</p> <p>FHS macro call: MDFLD POS=(1,15),LEN=8,ATTR=(PROTRET)</p>
format-description	<p>Designation of the mask (optional). The length is limited only by the number of columns available (e.g. the maximum length for POS=(1,22) is 40).</p> <p>FHS macro call: MDFLD POS=(1,22),LEN=40,ATTR=(PROTRET)</p>
#####/#####	<p>Date/Time of day in the form: dd.mm.yy/hh:mm:ss</p> <p>FHS macro calls:</p>
Date	<p>MDFLD POS=(1,63),LEN=8,ATTR=(PROTRET), EXIT=YES,REM=C'S#001' MDFLD POS=+0,CONT='/'</p>
Time	<p>MDFLD POS=(1,72),LEN=8,ATTR=(PROTRET), EXIT=YES,REM=C'S#002'</p>

Lines 2–21: Processing section

user-param-description

Purpose of the mask (optional).
The length is limited only by the number of columns available.

NET-NAME=netname

Name of the net.
The variable field must be defined.
Specification of the text field is optional. In this example it has the name NET-NAME=.

FHS macro calls:

```
netname      MDFLD POS=(7,2),CONT='NET-NAME='
             MDFLD POS=(7,11),LEN=32,ATTR=(PROTRET),
             EXIT=YES,REM=C'S#003'
```

NET-STATUS=keyword

Status of the net.
The variable field must be defined.
Specification of the text field is optional. In this example it has the name NET-STATUS=.

FHS macro calls:

```
keyword      MDFLD POS=(7,48),CONT='NET-STATUS='
             MDFLD POS=(7,60),LEN=20,ATTR=(PROTRET),
             EXIT=YES,REM=C'S#004'
```

VOLUME

Data volume.

FHS macro calls:

```
volume      MDFLD POS=(11,4),CONT='VOLUME : '
             DFLD POS=(11,16),LEN=8,ATTR=(UNPROT),
             EXIT=YES,REM=C'N#nnn'
```

FILE-NAME

Name of the file.

FHS macro calls:

```
file-name   MDFLD POS=(13,4),CONT='FILE-NAME : '
             MODFLD POS=(13,16),LEN=24,ATTR=(UNPROT),
             EXIT=YES,REM=C'#nnn'
```

Lines 22 and 23: Control section

CMD: _____

Input field for the statement name and the operations.
Length = 22 characters

OPR: _____ ...

_____ ...

Input field for the operands.
Length = 129 characters. The operands must be specified in the
form name1=value1[,name2=value2]... .

FHS macro calls for the control section:

	MDFLD	POS=(22,1),LEN=4,CONT='CMD: '
SYSCMD	MDFLD	POS=(22,5),LEN=22,ATTR=(UNPROT,BRT[,IC]), EXIT=YES,REM=C 'SYSCMD'
	MDFLD	POS=(22,27),LEN=5,CONT=' OPR: '
SYSOPR	MDFLD	POS=(22,32),LEN=129,ATTR=(UNPROT,BRT), EXIT=YES,REM=C 'SYSOPR'

Line 24: Message section

MSG: _____ ...

Area for execution, system and error messages.
Length = 75 characters.

FHS macro calls for the message section:

	MDFLD	POS=(24,1),LEN=4,CONT='MSG: '
SYSMSG	MDFLD	POS=(24,5),LEN=75,ATTR=(PROT,BRT), EXIT=YES,REM=C 'SYSMSG'

IFG mask: MODIFYING YOUR USER PROFILE 0702
 Select: Default values for the use of IFG

IFG mask: MODIFYING YOUR USER PROFILE 0703
 DEFAULT VALUES FOR THE USE OF IFG
 Modify: Retain field attributes: YES
 Modify: Max. number of used lines/columns in formats ... : 24 /080

Note: Changing the maximum number of used lines to 24 is not mandatory for AVAS; it does, however, correspond to the layout of the AVAS system masks and to the default of the sample mask being used.

IFG mask: MODIFYING YOUR USER PROFILE 0702
 Select: Input/validation attributes for each field type

IFG mask: MODIFYING YOUR USER PROFILE 0708
 INPUT/VALIDATION ATTRIBUTES FOR EACH FIELD TYPE

	Text field	Input field	Input field numeric	Output field
Modify: Automatic input:	NO	YES	YES	YES

IFG mask: MODIFYING YOUR USER PROFILE 0702
 Select: Application library specifications

IFG mask: MODIFYING YOUR USER PROFILE 070B
 DEFAULT VALUES FOR FORMAT PREPARATION FOR FHS APPLICATION LIBRARY SPECIFICATIONS

Enter: Preparation of In library
 - Formats : YES NETMAP / JOBMAP
 - Addressing aids: YES

Note: regarding NETMAP / JOBMAP
 The DMS names for the NETMAP or JOBMAP are contained in the "Generation" chapter of "AVAS for the Administrator" [3].
 The file name listed for NETMAP or JOBMAP is to be entered here.
 regarding addressing aids
 If the input/output is processed using the AVAS computer center exits for the user masks, a library name is to be specified and YES entered in response to the format preparation query.

Once the user profile has been modified, the calls to create a mask are issued as follows:

IFG mask: INTERACTIVE FORMAT GENERATOR 0001
Select: Create format

IFG mask: CREATING A FORMAT 0101

Enter: Format name: NETPARAM

Note: regarding NETPARAM

The format name NETPARAM has been chosen at random for the purposes of this example. The name of the user mask is to be entered here.

The mask name must not start with the characters AVM\$.

IFG mask: DRAFTING AN IMAGE FOR FORMAT <format> 0110

Enter: Layout of the sample mask, or image desired for <format>. Useful information on this topic can be found in the manual "IFG for FHS".

Note: The layout of the entire mask is defined in this IFG mask.

Once the layout of the sample mask or another AVAS user mask has been defined, each field in the mask is described in more detail in the subsequent IFG masks. Only global data is specified for the IFG masks. The values for each field of the sample mask are defined in the table that follows.

IFG mask: CREATING THE FORMAT <format> 0104

Select: - the display attributes of the format fields

Select: - the symbolic names of the format fields

Select: - the input/validation attributes of the format fields
(part I)

Select: - the editing attributes of the format fields

Note: In this IFG mask, the lines shown above must be selected one after the other. In the following IFG masks, the user determines the attributes and names for the individual mask fields.

IFG mask: DISPLAY ATTRIBUTES OF FORMAT <format> 0305

Enter: YES or NO to select display attributes for the highlighted field.

IFG mask: FIELD NAMES OF FORMAT <format> 0306

Enter: No entries for AVAS user masks need to be made in this IFG mask. If, however, the mask is to be edited by the user via the AVAS computer center exit AVEX6601 and/or AVEX6602 (or AVEX6801 and/or AVEX6802), field names for an addressing aid can be specified here.

IFG mask: INPUT/VALIDATION ATTRIBUTES (1) OF FORMAT <format> 0307
Enter: No entries for AVAS user masks need to be made in this IFG mask.

IFG mask: EDITING ATTRIBUTES OF FORMAT <format> 0308
Enter: The corresponding identifier for each field to be taken into account when using AVAS to modify a net (or job in the case of job masks) is to be specified (identifier = computer center exit code (REMARK):). The identifiers N#001 and S#001, among others, are used in the sample mask. The other editing attributes are to be defined as shown in the following table.

The mask description is now complete. To enable the mask description data to be accessed from AVAS, format preparation under the names that AVAS uses is required. The following IFG masks must be called for this purpose:

IFG mask: INTERACTIVE FORMAT GENERATOR 0001
Select: Prepare format

IFG mask: FORMAT PREPARATION 0501
Enter: - Do you want your format application file to be updated? YES
Enter: - Do you want your addressing aids library to be updated ? YES or NO

Note: You must reply YES to the prompt regarding the addressing aids library if you are working with the AVAS computer center exits described above.

Table of fields and field attributes in the sample mask

- (1) Line (0110) – The number in brackets is the number of the IFG mask
- (2) Column (0110)
- (3) Length (0110)
- (4) High-intensity: (0305)
- (5) Low-intensity: (0305)
- (6) Field accessible by program (0306)
- (7) Protected (0307)
- (8) Input/output left-justified (0308)
- (9) Uppercase only (0308)
- (10) Processing by exit (0308)
- (11) Exit code (REMARK) (0308)

*) The field attributes below have been changed.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	Comments
1	1	13	NO *)	YES	YES	NO	YES	NO	NO		In AVAS masks the version, in user masks anything, so that hard copy can be initiated
1	14	1	NO	YES	NO	YES	NO	NO	NO		Separator between version and mask name
1	15	8	NO	YES	NO	YES	NO	NO	NO		Mask name (e. g. NETPARAM)
1	31	18	NO	YES	NO	YES	NO	NO	NO		Title or mask heading
1	63	8	NO	YES	YES	YES	NO	NO	YES *)	S#001 *)	System variable date of modification
1	71	1	NO	YES	NO	YES	NO	NO	NO		Separator between date and time
1	72	8	NO	YES	YES	YES	NO	NO	YES *)	S#002 *)	System variable time of modification
5	2	22	NO	YES	NO	YES	NO	NO	NO		Section heading within a mask
7	2	9	NO	YES	NO	YES	NO	NO	NO		Name for the next input field
7	11	32	YES *)	NO	YES	YES	NO	NO	YES *)	S#003 *)	System variable net name for the modification
7	49	11	NO	YES	NO	YES	NO	NO	NO		Name for the next input field
7	60	20	YES *)	NO	YES	YES	NO	NO	YES *)	S#004 *)	System variable Net status for the modification
11	4	12	NO	YES	NO	YES	NO	NO	NO		Name for the next input field

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	Comments
11	16	6	YES	NO	YES	NO	YES	YES (*)	YES (*)	N#001 (*)	Net variable Tape number of the modification
13	4	12	NO	YES	NO	YES	NO	NO	NO		Name for the next input field
13	16	24	YES	NO	YES	NO	YES	YES (*)	YES (*)	N#002 (*)	Net variable File name for the modification
22	1	4	NO	YES	NO	YES	NO	NO	NO		Name for the AVAS statement field
22	5	22	YES	NO	YES	NO	YES	YES (*)	YES (*)	SYSCMD (*)	AVAS system field for statement
22	27	5	NO	YES	NO	YES	NO	NO	NO		Name for AVAS operand field 1st part
22	32	49	YES	NO	YES	NO	YES	YES (*)	YES (*)	SYSOPR1 (*)	AVAS system field for the operand's 1st part
23	1	80	YES	NO	YES	NO	YES	YES (*)	YES (*)	SYSOPR2 (*)	AVAS system field for the operand's 2nd part
24	1	4	NO	YES	NO	YES	NO	NO	NO		Name for the AVAS message field
24	5	75	YES (*)	NO	YES	YES	NO	NO	YES (*)	SYSMMSG (*)	AVAS system field for the messages

Restrictions

With IFG, the operand area cannot be defined as a field.

Notes

- Lines 22 to 24 must be defined as shown in the example. The cursor can be positioned anywhere.
- Processing by (computer center) exit and the exit code must be entered as shown in the example.
- Output fields in the mask that are filled via system parameters (S#nnn) must be defined as output fields with automatic input.
- If the user enters an end marker in the mask (EM key), the message AVS4070 may be output.

4 CHECK function

The AVAS CHECK function checks the structure of the net descriptions and checks the restart variants. An error report is output if the nets do not conform to AVAS conventions.

The CHECK function is implemented through the CHECK operation in the CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET statements. These statements call CHECK themselves when a net is modified. If the CHECK function generates an error log, this log is displayed via EDT.

The COPY-ELEMENT statement performs a CHECK on the nets when MODE=LIBIN/SAMIN and AVAS-USER-LIB=NETLIB.

If CHECK is called by COPY-ELEMENT, CREATE-NET-DESCRIPTION or MODIFY-NET-DESCRIPTION, the parameters (JOB/NET) are also checked, and the record sequence in the net (NETLIB) is checked to see that it conforms to AVAS conventions.

A message is generated for each error detected. These messages are added to the associated PRINT file (see PRINT operation on [page 41](#)), together with some printer control characters.

The name of the PRINT file can also be defined using the BS2000 command

```
/ADD-FILE-LINK LINK=AVASPRT, FILE-NAME=filename.
```

EXTEND will be set to YES in this case.

If the command is not entered and no PRINT file has been allocated, the messages will be sent to the file LST.AVAS.ug.avuser.yymmdd.hhmmss.

If CHECK detects an error that makes further checking pointless (consequential errors), no further checking will be performed.

CHECK uses a weighting system for each error it detects during the checking process. If errors are found, the return code passed back to the statement will be the code for the most serious error; this code will also be stored as a check flag in the net description (NETLIB).

For each net in which errors were detected, a start record containing the name of the library and the net name is output before the first error message. In situations where CHECK was called internally by the COPY-ELEMENT statement, both the name of the library from the EXTERNAL-FILE (AVS011 mask) as well as the OUTPUT net name are included in the start record.

AVS6050 START-CHECK <libname> <netname>

with <libname> = NETLIB for CREATE-/MODIFY-NET-DESCRIPTION
ABLDAT for MODIFY-SUBMIT-NET
filename for COPY-ELEMENT

An end message is output if all the checks were performed (error code < 5):

AVS6051 END-CHECK <libname> <netname>

An error message is output if the checks were canceled (error code = 5):

AVS6052 CANCEL-CHECK <libname> <netname>

If an error was detected that can be assigned to a structure element, a structure identification record containing the index and the name of the structure is output before the error message:

AVS6040 IDENTIFICATION: <ind> <structurename> <rectype>

At least one record is output for each error that is detected. The user can examine the log using EDT.

4.1 Checking parameters (NET, JOB, FT, SUBNET, COND)

Checks are performed by COPY-ELEMENT with MODE=LIBIN/SAMIN and AVAS-USER-LIB=NETLIB and by CREATE-NET-DESCRIPTION and MODIFY-NET-DESCRIPTION. BS2000 parameters are not checked.

Checking the data structure in NETLIB

- Record length
The minimum and maximum record lengths for the type of record must be observed. If they are not, a message will be output and the checking process canceled.
- Record sequence
The record sequence in the net (NETLIB) must conform to AVAS conventions (N1–N5, J1–J3, C1–C3, A1–A3, M1–M3, D1–D3, W1–W3, S1–S3, F1–F3).
If it doesn't, a message will be output and the checking process canceled.
- N1–N5 records, general
The net name (with user group 'ugnet') and the index '000' are entered into records N1–N5 by COPY-ELEMENT.

- Structure element records 1–3, general
Index, name, function and type must be identical in all three records.
Otherwise a message is output and the checking is terminated.
Depending on the record type, the following combinations of FUNCTION and TYPE are possible:

Record type	FUNCTION	TYPE
J1/J2/J3	C'J' = JOB C'P' = PROCEDURE C'P' = PROCEDURE	X'46' = EXT X'47' = MOD X'5E' = STD X'51' = EXX
S1/S2/S3	C'S'=START	X'21'=NET
F1/F2/F3	C'F'=FILE	X'BA'=TRA
C1/C2/C3	C'C' = COMPARE	X'21' = NET X'3C' = JVA X'70' = JOB X'71' = RES X'72' = VAL
A1/A2/A3	C'A' = ADD	X'71' = RES X'72' = VAL
M1/M2/M3	C'M' = MODIFY	X'71' = RES X'72' = VAL
D1/D2/D3	C'D' = DELETE	X'21' = NET X'70' = JOB X'71' = RES X'72' = VAL
W1/W2/W3	C'W' = WAIT	X'73' = TIM

The formal checks which are carried out on the structure element name are dependent on the combination of the FUNCTION and TYPE parameters:

FUNC	TYPE	name	bksys	bknet	fremder bk	USER-PAR-FILE
J, P	EXT	\$bk_jobname 1-24	yes	yes	no	no
	STD	\$bk_jobname 1-24	yes	yes	no	no
	MOD	\$bk_jobname 1-24	yes	yes	no	no
	MOD	\$bk_jobname 1-20	yes	yes	no	yes
S	NET	\$bk_netname 1-12	yes	yes	no	
F	TRA	\$bk_ftname 1-24	no	yes	no	
P	EXX	\$bk_jobname 1-24	yes	yes	no	
C D	JOB	\$bk_jobname 1-24	no	yes	yes	
			no	yes	no	
C D	NET	\$bk_netname 1-12	no	yes	yes	
			no	yes	no	
C A D M	RES	\$bk_resname 1-24	no	yes	yes	
			no	yes	no	
			no	yes	no	
			no	yes	yes	
C A D M	VAL	\$bk_valname 1-24	no	yes	yes	
			no	yes	no	
			no	yes	no	
			no	yes	yes	
C	JVA	name 1-24	no	no	no	
W	TIM	\$bk_name 1-24 *DATE	yes	yes	yes	
			no	no	no	

- Number of structure elements
The maximum number of structure elements (256) must not be exceeded. Otherwise a message is output.
- In structure elements with FU=J/P and TYPE=MOD, jobname can only be 20 characters long if a USER-PAR-FILE is defined for the job.

N1–N3 records

- **SELECT-TURNUS**
Valid values for SELECT-TURNUS are 1, 2, ... 8 or 9.
This parameter is only present in the N1 record.
- **SELECT-PLAN-TYPE**
The following keys are valid values:
X'53' = NWRK
X'54' = WORK
This parameter is only present in the N1 record.
- **DATE/SYMDAT**
The scheduled start of *NONE must be specified as the first entry (only in the case of the N1 record). No more than 130 additional scheduled starts may be specified.

A scheduled start may be specified in symbolic form (as SYMDAT) or real form (as DATE). For each scheduled start, the time of day must be specified in a START-TIME parameter. No START-TIME may be assigned to the scheduled start *NONE. There must be no duplicates.

Formal checking of SYMDAT-NAME: symdat(±n) / symdat(±w)

START-DATE: *dd.mm.yy

START-TIME: hhmmss

For each scheduled start which is specified, the parameters LATEST-START, NET-DELAY-SOLUTION and LIFE-TIME must also be present. If there is no scheduled start, these parameters must also be omitted.

Formal checking of LATEST-START: ddd.hh.mm / *dd.hh.mm / *NONE

LIFE-TIME: ddd.hh.mm / *STD / *NONE

NET-DELAY-SOLUTION

The following codes represent valid values:

X'41' = CANCEL

X'43' = WAIT

X'44' = START

X'45' = IGNORE

N4 record

- NET-TYPE
The valid values for NET-TYPE are 1, 2 or 3.
- RUN-CONTROL-SYSTEM
Formal checking of RUN-CONTROL-SYSTEM: name / *STD
- DOCUMENT-NAME
Formal checking of DOCUMENT-NAME: value / *STD / *NONE
The document name may only begin with the '\$' character if a user group is specified.
- USER-PAR-FILE
Formal checking of USER-PAR-FILE: *NONE / filename / libname(element[,type])
- NET-PASSWORD
Formal checking of NET-PASSWORD: password / *NONE
password
The password must be specified in the form:
C'.....' (1–8 alphanumeric characters) or
X'.....' (1–8 hexadecimal characters)
no checking of BS2000 parameters

N5 record

- FORMAT-NAME
Formal checking of FORMAT-NAME.
A check for the presence of duplicates.
A maximum of 32 FORMAT-NAMEs may be specified.

J1/S1/C1/A1/M1/D1/W1/F1 records

- **SELECT-TURNUS**
Valid values for SELECT-TURNUS are 0, 1, ...9 or blank.
0 is only permitted in position 1; position 1 may not be a blank; if position 1 is equal to 0, all the other positions must be blanks.
Duplicates of the values 1 to 9 are not permitted.
- **SYMDAT**
Formal checking of SYMDAT-NAME: *NONE / *STD / symdat
The first entry must specify *NONE for SYMDAT-NAME.
The only permitted specification for the second entry is *STD or 'symdat'.
For the 3rd to 51st entries, only 'symdat' is permitted. There must be no duplicates.
In some cases, there are additional parameters for a SYMDAT entry; in such cases, these parameters must also be specified.

The assignment of parameters is as follows, and depends on the record type (or FUNCTION):

Record type	LATEST-START LATEST-OCCURE OCCURE-TIME	DELAY-SOLUTION	LIFE-TIME
J1/S1/F1	yes	yes	yes
C1	yes	yes	no
W1	yes	no	no
A1/M1/D1	no	no	no

If no SYMDAT is present, the parameters LATEST- START, DELAY-SOLUTION and LIFE-TIME must also be omitted.

- Formal checking of LATEST-START: ddd.hh.mm / *dd.hh.mm / *NONE
LATEST-OCCURE: ddd.hh.mm / *dd.hh.mm / *NONE
OCCURE-TIME: ddd.hh.mm / *dd.hh.mm / *NONE
LIFE-TIME: ddd.hh.mm / *NONE
DELAY-SOLUTION
The following codes represent valid values:

X'41' = CANCEL
X'44' = START
X'45' = IGNORE

J2/S2/C2/A2/M2/D2/W2/F2 records, general

- **SYNC-INDEX**
The valid values for SYNC-INDEX are NXT, END or a numerical value.
For index levels 001–898, the following rules apply for numerical values:
The SYNC-INDEX must be greater than the INDEX assigned to the structure element and less than an index value of 900.
At index level 899 only NXT and END are permissible.
For index levels 900–999, only NXT is permissible.
- **RESTART-VARIANT 1 / 2 / 3**
Each restart variant is checked for completeness.
- **RESTART-INDEX**
A numeric value or end are the valid values, with END only being permissible for structure elements at index levels 001–899.
- **RESTART-NAME**
Valid specifications are *ALL, *ERROR, *NAME, *DATE or name.
- **RESTART-TYPE**
The following codes represent valid values:

X'48' = NORMAL-MANUAL
X'49' = RESTART-MANUAL
X'4E' = RESTART-AUTOMATIC
X'4F' = NORMAL-AUTOMATIC
- **DOCUMENT-NAME**
Formal checking of DOCUMENT-NAME: value / *STD / *NONE
The document name may only begin with the '\$' character if a user group is specified.

J2 record

- **ENTER-PARAMS**
The following codes represent valid values:

X'21' = NET
X'9D' = LOGON

S2 record

- no special parameters/data for SUBNET

C2 record

- TYPE=JVA
 - COND-JVA-NAME
The COND-JVA-NAME parameter must be specified.
 - JVA-POSITION
This parameter must be specified.
Valid values for JVA-POSITION are 001–256.
The sum of JVA-POSITION and JVA-LENGTH must be less than 258.
 - JVA-LENGTH
This parameter must be specified.
Valid values for JVA-LENGTH are 001–256.
The sum of JVA-POSITION and JVA-LENGTH must be less than 258.
The value must match the length of the comparison value actually specified in the COND-VALUE field.
 - JVA-PASSWORD
Formal checking of JVA-PASSWORD: password / *NONE

password
The password must be specified in the form:
C'....' (1–4 alphanumeric characters) or
X'.....' (1–4 hexadecimal characters)
- TYPE=NET
 - CREATED BY NET-NAME
The CREATED BY NET-NAME parameter must be specified.
Formal checking of NET-NAME: \$ug_netname[_date[_time]] / *NONE
The name of the structure element (COND-NAME) and CREATED BY NET-NAME (ug and netname) must be the same, unless *NONE is specified for CREATED BY NET-NAME.
- TYPE=JOB
 - CREATED BY NET-NAME
The CREATED BY NET-NAME parameter must be specified.
Formal checking of NET-NAME: \$ug_netname[_date[_time]]
The user group for the NET-NAME parameter must correspond to the user group of the structure element name.
 - CREATED BY INDEX
The CREATED BY INDEX parameter must be specified. Any numeric index value is valid.

D2 record

- TYPE=NET
 - CREATED BY NET-NAME
The CREATED BY NET-NAME parameter must be specified.
Formal checking of NET-NAME: \$ug_netname[_date[_time]]
The name of the structure element (COND-NAME) and CREATED BY NET-NAME (ug and netname) must be the same.
- TYPE=JOB
 - CREATED BY NET-NAME
The CREATED BY NET-NAME parameter must be specified.
Formal checking of NET-NAME: \$ug_netname[_date[_time]]
The user group for the NET-NAME parameter must correspond to the user group of the structure element name.
 - CREATED BY INDEX
The CREATED BY INDEX parameter must be specified. Any numeric index value is valid.

F2 record

- DIRECTION
The following codes represent valid values:
X'E3' = TO
X'C6' = FROM
- PARTNER-NAME
The PARTNER-NAME parameter must be specified.
- REMOTE
The following code represents a valid value:
X'C2' = *BS2000

J3 record

- **PASSWORD**
Formal checking of PASSWORD: password / *NONE
password
The password must be specified in the form:
C'.....' (1–8 alphanumeric characters) or
X'.....' (1–8 hexadecimal characters)
- **FILE-PASSWORD**
Formal checking of FILE-PASSWORD: password / *NONE
password
The password must be specified in the form:
C'....' (1–4 alphanumeric characters) or
X'.....' (1–4 hexadecimal characters)

no checking of BS2000 parameters
- **USER-PAR-FILE**
Formal checking of USER-PAR-FILE:
Blank / *NONE / *STD / filename / libname(element[,type])

S3 record

- no special parameters/data for SUBNET

C3 record

- TYPE=JVA
 - COND-VALUE
The COND-VALUE parameter must be specified.
- TYPE=NET
 - OCCURE-VALUE
The OCCURE-VALUE parameter must be specified.
There must be no duplicates present. The following codes represent valid values:
X'14' = ABENDED
X'15' = ENDED
X'3F' = IGNORED
X'40' = MISSING
 - ERROR-VALUE
The following codes represent valid values:
X'14' = ABENDED
X'15' = ENDED
X'3F' = IGNORED
X'40' = MISSING
 - SELECT-RESTART-VARIANT
Valid values for SELECT-RESTART-VARIANT are 1, 2 or 3.
- TYPE=JOB
 - OCCURE-VALUE
The OCCURE-VALUE parameter must be specified.
There must be no duplicates present. The following codes represent valid values:
X'14' = ABENDED
X'15' = ENDED
X'16' = ERROR
X'3E' = SKIPPED
X'3F' = IGNORED
X'40' = MISSING
X'7C' = NO-PLAN
X'7D' = DELETED
X'85' = NO-SUBMIT

- ERROR-VALUE
The following codes represent valid values:
 - X'14' = ABENDED
 - X'15' = ENDED
 - X'16' = ERROR
 - X'3E' = SKIPPED
 - X'3F' = IGNORED
 - X'40' = MISSING
 - X'7C' = NO-PLAN
 - X'7D' = DELETED
 - X'85' = NO-SUBMIT
- SELECT-RESTART-VARIANT
Valid values for SELECT-RESTART-VARIANT are 1, 2 or 3.
- TYPE=RES
 - OCCURE-VALUE
The OCCURE-VALUE parameter must be specified.
There must be no duplicates present. The following codes represent valid values:
 - X'6B' = FREE
 - X'76' = SHAREValid values for the USING parameter in case of SHARE: 1 ... 99
 - ERROR-VALUE
The following codes represent valid values:
 - X'0B' = CREATED
 - X'16' = ERROR
 - X'40' = MISSING
 - X'6B' = FREE
 - X'76' = SHAREValid values for the USING parameter in case of SHARE: 1 ... 99
 - X'77' = EXCLUSIVE
 - SELECT-RESTART-VARIANT
Valid values for SELECT-RESTART-VARIANT are 1, 2 or 3.
- TYPE=VAL
 - OCCURE-VALUE
The OCCURE-VALUE parameter must be specified.
For valid values, see the description of CREATE-NET-DESCRIPTION on [page 228](#).
 - ERROR-VALUE
For valid values, see the description of CREATE-NET-DESCRIPTION on [page 228](#).
 - SELECT-RESTART-VARIANT
Valid values for SELECT-RESTART-VARIANT are 1, 2 or 3.

A3 record

● TYPE=RES

– COND-VALUE

The COND-VALUE parameter must be specified.

The following codes represent valid values:

X'0B' = CREATED

X'16' = ERROR

X'6B' = FREE

X'76' = SHARE

Valid values for the USING parameter in case of SHARE: 1 ... 99

X'77' = EXCLUSIVE

Valid values for MAX-USING-SHARE: 2 ... 100 (The USING value must be smaller than the MAX.USING-SHARE value)

● TYPE=VAL

– COND-VALUE

The COND-VALUE parameter must be specified.

For valid values, see the description of CREATE-NET-DESCRIPTION on [page 228](#).

M3 record

● TYPE=RES

– COND-VALUE

The COND-VALUE parameter must be specified.

The following codes represent valid values:

X'0B' = CREATED

X'16' = ERROR

X'6B' = FREE

● TYPE=VAL

– COND-VALUE

The COND-VALUE parameter must be specified.

For valid values, see the description of CREATE-NET-DESCRIPTION on [page 228](#).

F3 record

- The LOCAL-FILE-NAME, REMOTE-FILE-NAME and FT-PARAMETER parameters are not checked.

4.2 Checking the structure

Checking the structure (index and SYNC index)

When checking the structure, the INDEX (the index of the structure element), NAME (name of the structure element) and SYNC-INDEX of the net are checked.

A valid net description must consist at least of a normal processing structure element (index 001–899) and the maximum permitted number must not be exceeded.

The structure elements must be sorted in ascending index order and their names must be unique within an index level. It is not permissible to use structure elements with the functions J (job) and P (procedure) in the net structure with the same structure name.

For structure elements with TYPE=MOD and the same names, either the same user group (ugnet or ugsys) or no user group must always be specified (see the CREATE-PROD-NET statement on [page 380](#)).

If structure elements for index levels 900–999 are present, only one structure element may be defined at any one index level. For all structure elements at index levels 900–999, SYNC-INDEX=NXT and a valid restart variant 1 must be specified. For restart elements, restart variant 1 is used to specify the processing sequence (SYNC-INDEX=RESTART-INDEX) and processing mode (MODUS=RESTART-TYPE). The RESTART-NAME parameter will also be taken into account when returning to normal processing.

- Number of structure elements
The maximum number of structure elements (256) must not be exceeded, otherwise a message will be output.

If the net structure only consists of structure elements at index level 9nn, a message will be output and the checking process canceled. If the net consists solely of net records (no structure control records are defined), no further checks will be performed.

Use of the index and structure element name to check the structure

- Index levels 001–899
INDEX (structure element) must be greater than or equal to the previous index.
The structure must be sorted in ascending index order. Checking is canceled if an incorrect index value is found. A structure element name may only be used once on an index level.
- Index levels 900–999
INDEX (structure element) must be greater than the previous index.
The structure must be sorted in ascending index order. Checking is canceled if an incorrect index value is found.

Checking the structure via SYNC-INDEX

- Index levels 001–899

A message will be entered if no numerical SYNC-INDEX value exists as an index level in the structure.

SUBMIT-NET replaces the SYNC-INDEX value by the next highest JOB/COND. INDEX (see example (1)).

If no JOB/COND.-INDEX with a value greater than the SYNC-INDEX value is found in the structure, SUBMIT-NET sets the SYNC-INDEX to END (2).

If NXT is entered in the last JOB/COND. record of the structure (index 001–899) in the SYNC-INDEX, SUBMIT-NET will change it to END (3).

All other SYNC-INDEX entries with a value of NXT will be replaced by the next highest JOB/COND. index level (4).

The SUBMIT-NET procedure used when changing the SYNC-INDEX will be repeated when checking the SYNC-INDEX. If a change takes place as shown in examples (1) and (2), a message is entered as a warning.

Example (changed values are underlined thus ===):

	before SUBMIT-NET		after SUBMIT-NET	
	INDEX	SYNC-IND	INDEX	SYNC-IND
(1)	050	070 ===	050	080 ===
	060	080	060	080
	080	END	080	END
(2)	050	100 ===	050	END ===
	060	080	060	080
	080	END	080	END
(3)	050	060	050	060
	060	080	060	080
	080	NXT ===	080	END ===
(4)	050	NXT ===	050	060 ===
	060	080	060	080
	080	END	080	END

- Index levels 900–999
As the RESTART-INDEX from restart variant 1 is used as a SYNC-INDEX, RESTART-VARIANT 1 must be specified.
The SYNC-INDEX (RESTART-INDEX of restart variant 1) must be greater than the assigned JOB-INDEX or less than INDEX 900.

4.3 Restart check

Each of the specified restart variants for a structure element is checked to see whether it can be executed.

If a structure error is detected among the restart structure elements at index levels 900–999 (restart variant 1 missing or the specified restart index is invalid), the restart variants of the restart structure elements are not checked to test whether they can be executed. The same applies in this instance to all restart variants of structure elements for normal processing (index levels 001–899) which have a restart index greater than 899.

If a message concerning a restart variant is output, an identification record for the restart variant that was checked is also output.

If a restart variant is specified for a structure element, the structure element is assigned the status ERROR (ERROR-INDEX is set to INDEX) and the executability of the restart variant therefore tested.

A restart using the specified variant can be performed if

- the parameters RESTART-INDEX, RESTART-NAME and RESTART-TYPE are formally correct,
- the structure element at the POINT-OF-ERROR is executed at the restart (the status ERROR must be set to WAITING or SKIPPED). The status will only be changed when the structure element at the POINT-OF-ERROR is linked to the POINT-OF-RESTART via the synchronization index (both points must form the start and end of a processing sequence defined by SYNC-INDEX) and
- the required changes in status of the structure elements are permitted. These checks take the system parameter settings into account. The “worst case” combination of status settings for structure elements is assumed when checking nets in the NETLIB (structure elements have no real status).
- RESTART-INDEX
Valid values are a numerical value or END. RESTART-INDEX=END may only be used for structure elements in the normal processing range.

The RESTART-INDEX must be in the structure. The structure element at the POINT-OF-ERROR must be linked to the restart index level via the SYNC-INDEX sequence. If the RESTART-INDEX > 899, the return index level (SYNC-INDEX < 900) must be linked to the structure element at the POINT-OF-ERROR via the SYNC-INDEX sequence.

The following applies to the restart variants 2 and 3 of index level 9nn:
 The restart index level must be in the processing sequence used for a restart with a RESTART-INDEX greater than index 899. The first index level of the net and the index for the return to normal processing are also valid (RESTART-VARIANT 1 of the structure element at index level 9nn with a RESTART-INDEX < 900).

Example

INDEX	STATUS	SYNC-IND	V1	
010	ENDED	020		← first index level of the net
020	ENDED	030		
030	ERROR	040	910	
040	WAIT	050		
050	WAIT	END		
910	WAIT	920	920	← index level 9nn
920	WAIT	930	930	Valid values for the restart variants 2 and 3 at the index levels 910 to 940 are index levels 910, 920, 930, 940, 030 and 010.
930	WAIT	940	940	
940	WAIT	030	030	

- RESTART-INDEX=END

If other branches in the net need to be processed in addition to the SYNC-INDEX sequence of the structure element at the POINT-OF-ERROR, the following events may be encountered:

- Structure elements (FUNCTION=J/P/F/C/W/A/M/D) with the status ERROR (not POINT-OF-ERROR)
- Structure elements (FUNCTION=J/P/F) with the status RUNNING, WAITING, ENDED, IGNORED
- Structure elements (FUNCTION=C/W) with the status WAITING, NO-OCCURE, OCCURRED, IGNORED
- Structure elements (FUNCTION=A/M/D) with the status WAITING, EXECUTED

As there is a possibility in this case that a status of RUNNING will be encountered, a warning is output.

If a job is executing on one of the adjacent branches then, because of the possibility that a status of RUNNING will be encountered, a warning is output. A warning is also output if RESTART-SKIP-ERROR is set to NO.

A warning is also output if a condition (status NO-OCCURE, WAITING) is being processed and RESTART-SKIP-CONDITION is set to NO.

- RESTART-NAME
Valid values are *ALL, *ERROR, *NAME, *DATE or name.
 - *ALL
The complete restart index level (all structure elements) will be processed.
 - *ERROR
All the structure elements at the restart index level with the status ERROR should be set to the status WAITING.
 - *NAME
Only the structure element at the POINT-OF-ERROR is executed again.
The specification RESTART-NAME=*ERROR or *NAME is only processed if the index level specified in the RESTART-INDEX is equal to the index of the structure element at the POINT-OF-ERROR (POINT-OF-RESTART is equal to POINT-OF-ERROR).

If the RESTART-INDEX specified in RESTART-VARIANT is greater than 899, then the entry of *ERROR or *NAME for the RESTART-NAME in restart variant 1 of the restart structure element (index 900 to 999) must have a SYNC-INDEX < index 900 (i.e. an index for return to normal processing).
However, this is only permissible if the return index is equal to the index of the structure element at the POINT-OF-ERROR.
 - name
RESTART-NAME 'name' must be present at the specified restart index level. If no structure element with the specified name is found at the restart index level, the restart is rejected. The choice of RESTART-NAME must not exclude the structure element at the POINT-OF-ERROR or its SYNC-INDEX sequence from being processed.
 - *DATE
All the structure elements with FUNCTION=W (Wait) at the restart index level are to be processed.

Verifying changes in status

Invalid status changes can occur when

- several structure elements are defined on an index level,
- the net consists of several independent branches whose jobs run in parallel. Jobs with a status of RUNNING may also be encountered.

There can be no status conflicts in the case of a linear net with only one job at each index level. The same is true when these conditions apply to the part of the net between the POINT-OF-ERROR and POINT-OF-RESTART that is affected by the restart.

The following status changes are always valid:

Jobs:

all jobs	from ENDED	to WAITING
	from WAITING	to SKIPPED
POINT-OF-ERROR	from ERROR	to WAITING
	from ERROR	to SKIPPED

Conditions: from OCCURRED to WAITING

When jobs with a status of RUNNING are encountered during a restart, a warning message for the restart variant is always output.

Any other changes in status that may be required should be defined in the system generation parameters.

The control fields defined for the RESTART-NET are taken into account during the checking process.

Changes in status for structure elements with a status of ERROR (not POINT-OF-ERROR)

The control fields defined for the RESTART-NET are taken into account when changing a status.

RESTART-SKIP-ERROR={YES / NO}

YES Structure elements with a status of ERROR can be changed to have a status of SKIPPED.

NO The restart is rejected if the status of a structure element has to change from ERROR to SKIPPED.
The structure element at the POINT-OF-ERROR is an exception.

RESTART-WAIT-ERROR={YES / NO}

YES Structure elements with a status of ERROR can be changed to have a status of WAITING.

NO The restart is rejected if the status of a structure element has to change from ERROR to WAITING.
The structure element at the POINT-OF-ERROR is an exception.

Status changes for conditions

The change in status from OCCURRED to WAITING is controlled by the system generation parameter RESTART-WAIT-CONDITION. This parameter only controls how conditions with a status of OCCURRED are handled during a restart; the restart itself is always permitted.

RESTART-SKIP-CONDITION={YES / NO}

YES Conditions with a status of NO-OCCURE or WAITING can be changed to have a status of SKIPPED.

NO The restart is rejected if the status of a condition has to change from NO-OCCURE or WAITING to the status SKIPPED.

RESTART-WAIT-CONDITION={YES / NO}

YES Conditions with a status of OCCURRED should be changed to have a status of WAITING. They are checked again following a restart to see whether they are satisfied.

NO Conditions with a status of OCCURRED are not processed during a restart. They retain their OCCURRED status and are not checked again after the restart.

Conditions whose status has changed from NO-OCCURE to SKIPPED as a result of the RESTART-NET statement are deemed to be satisfied and are treated by RESTART-NET as conditions with a status of OCCURRED.

Structure elements with the status EXECUTED (FU=A/M/D) are not processed at the restart. They remain in the EXECUTED status and are no longer executed after the restart. The structure element FU=M with TYPE=RES is an exception. Here the EXECUTED status is converted by RESTART-WAIT-CONDITION=YES and the structure element is executed again after the restart.

- POINT-OF-RESTART < POINT-OF-ERROR
If other branches need to be processed in addition to the SYNC-INDEX sequence of the structure element at the POINT-OF-ERROR, the following events may be encountered:
 - Structure elements (FUNCTION=J/P/F/C/W/A/M/D) with the status ERROR (not POINT-OF-ERROR)
 - Structure elements (FUNCTION=J/P/F) with the status RUNNING, WAITING, ENDED, IGNORED
 - Structure elements (FUNCTION=C/W) with the status WAITING, NO-OCCURE, OCCURRED, IGNORED
 - Structure elements (FUNCTION=A/M/D) with the status WAITING, EXECUTED

The following changes in status may therefore be necessary:

```
from ENDED      to WAITING
from ERROR      to WAITING
from OCCURRED  to WAITING
```

As there is a possibility in this case that tasks (FU=J/P/F) with a status of RUNNING or ERROR will be encountered, a warning is output for these tasks.

In addition, a warning is output for all the structure elements (FU=J/P/F/C/W/A/M/D) which can be in the ERROR status.

- POINT-OF-RESTART = POINT-OF-ERROR
If the structure element with the status of ERROR is specified as the RESTART-NAME, the restart can always be initiated.

If a number of structure elements are defined at the index level, and if *ALL is specified for RESTART-NAME, similar warnings will be output as for POINT-OF-RESTART > POINT-OF-ERROR, because it is possible for there to be structure elements with the status ERROR, RUNNING or NO-OCCURE.

- POINT-OF-RESTART > POINT-OF-ERROR

If several index levels are synchronized with the RESTART-INDEX (SYNC-INDEX=RESTART-INDEX), the only part of the net that will be processed is that part linked to the POINT-OF-ERROR via the SYNC-INDEX. The POINT-OF-RESTART is not free of all constraints. The structure elements in the SYNC-INDEX sequence between POINT-OF-ERROR and POINT-OF-RESTART will have a status of WAITING in all cases.

However, if another branch is synchronized with an index of the SYNC-INDEX sequence lying between the POINT-OF-ERROR and POINT-OF-RESTART, the following events may be encountered:

- Structure elements (FUNCTION=J/P/F/C/W/A/M/D) with the status ERROR (not POINT-OF-ERROR)
- Structure elements (FUNCTION=J/P/F) with the status RUNNING, WAITING, ENDED, IGNORED
- Structure elements (FUNCTION=C/W) with the status WAITING, NO-OCCURE, OCCURRED, IGNORED
- Structure elements (FUNCTION=A/M/D) with the status WAITING, EXECUTED

The following changes in status may therefore be necessary:

```
from WAITING    to SKIPPED
from ERROR      to SKIPPED
from NO-OCCURE  to SKIPPED
```

A warning is output for all the structure elements (FU=J/P/F/C/W/A/M/D) which can be in the ERROR status.

As there is a possibility in this case that tasks (FU=J/P/F) with a status of RUNNING or ERROR will be encountered, a warning is output.

If a structure element which waits for a condition to be satisfied (FU=C/W) has to be processed, a warning will also be output, because the status can be NO-OCCURE or WAITING.

4.4 Error analysis and error messages

Errors are grouped into 5 classes. Each error class is allocated a special return code (RTC) for weighting purposes. The return code that the CHECK function returns to the calling statement is stored as a check character in the net description when the net is saved. In addition to the return code, the CMD code of the calling statement is also stored in the net description.

As COPY-ELEMENT does not copy nets containing level 5 errors (CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION does not save them either), the most serious error that can be recorded under the check character in the net description is just a level 4 error.

Nets containing level 4 errors are not processed (transferred to the NPRLIB) by CREATE-PLAN-NET.

Error level (RTC)		
Level 5	(X'80')	Nets are not copied by COPY-ELEMENT. CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION will not save the nets.
Level 4	(X'20')	CREATE-PLAN-NET does not transfer the nets to NPRLIB.
Level 3	(X'10')	Numeric SYNC-INDEX values are not in the net structure as index levels. They are converted by SUBMIT-NET. Formally invalid passwords are specified in the net.
	(X'14')	The net contains restart jobs with no SYNC-INDEX values or incorrect ones (restart index RESTART-VARIANT 1). All restart variants with index ≥ 900 are not checked any more.
Level 2	(X'04')	The net contains restart variants that RESTART-NET cannot process.
Level 1	(X'02')	The net contains restart variants that RESTART-NET cannot execute owing to an illegal change of status (detected through the restart control fields) or because some jobs have a status of RUNNING.
Level 0	(X'01')	Net has been checked and contains no errors.
---	(X'00')	Net has not been checked.

Checking parameters (net, structure elements)

The check is only performed when COPY-ELEMENT, CREATE-NET-DESCRIPTION or MODIFY-NET-DESCRIPTION is called. If a level 5 error as described is detected in the net description, the net is not copied (or saved).

```

- Level 5 errors - - - - -
AVS6001 'INDEX' impermissible in record type (n).
  'NAME'      "      "
  'FUNCTION'  "      "
  'TYPE'     "      "
AVS6002 Error in data structure, record type (n) does not exist
AVS6004 Invalid value (n) for parameter 'SELECT-TURNUS'
        Invalid value (n) for parameter 'SELECT-PLAN-TYPE'
        Invalid value (n) for parameter 'SYMDAT-NAME'
        Invalid value (n) for parameter 'PLAN-START'
        Invalid value (n) for parameter 'REAL-START-TIME'
        Invalid value (n) for parameter 'LATEST-START'
        Invalid value (n) for parameter 'LIFE-TIME'
        Invalid value (n) for parameter 'NET-DELAY-SOLUTION'
        Invalid value (n) for parameter 'DELAY-SOLUTION'
        Invalid value (n) for parameter 'NET-TYPE'
        Invalid value (n) for parameter 'RUN-CONTROL-SYSTEM'
        Invalid value (n) for parameter 'FORMAT-NAME'
        Invalid value (n) for parameter 'ENTER-PARAM'
        Invalid value (n) for parameter 'SYNC-INDEX'
        Invalid value (n) for parameter 'COND-VALUE'
        Invalid value (n) for parameter 'OCCURE-VALUE'
        Invalid value (n) for parameter 'ERROR-VALUE'
        Invalid value (n) for parameter 'JVA-POSITION'
        Invalid value (n) for parameter 'JVA-LENGTH'
        Invalid value (n) for parameter 'CREATED-BY NET-NAME'
        Invalid value (n) for parameter 'CREATED-BY INDEX'
        Invalid value (n) for parameter 'SELECT-RESTART-VAR'
        Invalid value (n) for parameter 'DIRECTION'
        Invalid value (n) for parameter 'REMOTE'
AVS6005 'SYMDAT-NAME' (n) with 'START-TIME' already exists.
        'PLAN-START' (n) with 'START-TIME' already exists.
AVS6006 Maximum number (n) of 'SYMDAT-NAME' exceeded.
        Maximum number (n) of 'FORMAT-NAME' exceeded.
AVS6007 FORMAT-NAME (n) already exists.
        'SYMDAT-NAME'(n) already exists.
        'OCCURE-VALUE'(n) already exists.
        'ERROR-VALUE'(n) already exists.

```

AVS6008 'START-TIME' does not exist.
 'LATEST-START' does not exist.
 'LIFE-TIME' does not exist.
 'NET-DELAY-SOLUTION' does not exist.
 'DELAY-SOLUTION' does not exist.
 'PARTNER-NAME' does not exist.

AVS6009 JV total length of 256 bytes exceeded.

AVS6014 RESTART VARIANT (n): 'RESTART-INDEX' does not exist.
 RESTART VARIANT (n): 'RESTART-TYPE' does not exist.
 RESTART VARIANT (n): 'RESTART-NAME' does not exist.

AVS6015 'START-TIME' only permitted with SYMDAT-NAME.
 'LATEST-START' only permitted with SYMDAT-NAME.
 'NET-DELAY-SOLUTION' only permitted with SYMDAT-NAME.
 'DELAY-SOLUTION' only permitted with SYMDAT-NAME.
 'LIFE-TIME' only permitted with SYMDAT-NAME.
 'START-TIME' only permitted with PLAN-START.
 'LATEST-START' only permitted with PLAN-START.
 'NET-DELAY-SOLUTION' only permitted with PLAN-START.
 'LIFE-TIME' only permitted with PLAN-START.

AVS6016 RESTART VARIANT (n):
 Invalid value (n) for parameter 'RESTART-INDEX'
 Invalid value (n) for parameter 'RESTART-TYPE'

AVS6032 Record length in record type (n) invalid.

AVS6033 Incompatible values for the parameters
 'FUNCTION' and 'TYPE'
 'FUNCTION' and 'ENTER-PARAM'
 'TYPE' and 'ENTER-PARAM'

- Level 4 errors - - - - -

AVS6001 'NAME' impermissible in record type (n).

AVS6003 Maximum number (n) of JOBS/CONDITIONS exceeded.

AVS6004 Invalid value (n) for parameter 'CREATED-BY NET-NAME'.
 Invalid value (n) for parameter 'CREATED-BY INDEX'
 Invalid value (n) for parameter 'DOCUMENT-NAME'
 Invalid value (n) for parameter 'SERVER-NAME'.

AVS6008 'COND-JVA-NAME' does not exist.
 'JVA-POSITION' does not exist.
 'JVA-LENGTH' does not exist.
 'CREATED-BY NET-NAME' does not exist.
 'ENTER-FILE' does not exist.
 'COND-VALUE' does not exist.
 'OCCURE-VALUE' does not exist.
 'FILENAME' does not exist.
 'SERVER-NAME' does not exist.

AVS6016 RESTART-VARIANTE (n):
 Invalid value (n) for parameter 'RESTART-NAME'

- Level 3 errors - - - - -
- AVS6001 'USER-GROUP' impermissible in record type (n).
 AVS6004 Invalid value (n) for parameter 'NET-PASSWORD'.
 Invalid value (n) for parameter 'JVA-PASSWORD'.
 Invalid value (n) for parameter 'FILE-PASSWORD'.
 Invalid value (n) for parameter 'PASSWORD'.
 Invalid value (n) for parameter 'SERVER-PASSWORD'.
 Note: The first character of the incorrect keyword is output in
 place of (n).

Structure checking (index and SYNC index)

- Level 4 errors - - - - -
- AVS6003 Maximum number (n) of JOBS/CONDITIONS exceeded.
 AVS6010 Structure not sorted in ascending index order <ind1,ind2>.
 - In index levels 001-899, the INDEX of the structure
 element must be greater than/equal to the previous index.
 - In index levels 900-999, the INDEX of the structure
 element must be greater than the previous index.
 AVS6011 Element already exists in index level.
 AVS6028 Element exists with index < 900.
 AVS6035 Name (n) is not unique in the net.
 - The same structure element name may not be
 used simultaneously for a job and a procedure.
- Level 3 errors - - - - -
- AVS6013 Index does not exist in the net; will be changed to <ind>.
 - The specified INDEX does not exist in the net structure.
 It will be changed by SUBMIT-NET.
 AVS6018 Restart variant 1 missing for index (n)
 - The restart index from restart variant 1 will be used
 as the SYNC-INDEX in index level 9nn.
 If the net was created using COPY-ELEMENT, a restart
 using this variant will result in an error.
 AVS6029 RESTART VARIANT 1:
 RESTART-INDEX must be > INDEX or < 900.
 - The restart index from restart variant 1 will be used
 as the SYNC-INDEX in index level 9nn.

Checking restart

- Level 2 errors - - - - -
- AVS6017 Index '(index)' does not exist in the net.
 AVS6018 Restart variant 1 missing in index '(index)'.
 AVS6019 (INDEX) '(index)' invalid; 'POINT OF ERROR' will
 not be processed.
 (RESTART-NAME) '(name)' invalid; 'POINT OF ERROR'
 will not be processed.
 AVS6020 Restart index '(index)' is not in the processing sequence.

AVS6021 Element '(name)' does not exist/is not unique in index '(index)'.
 AVS6022 '(*ERROR)' invalid; 'POINT OF RESTART' must be equal to
 'POINT OF ERROR'.
 '(*JOB)' invalid; 'POINT OF RESTART' must be equal to
 'POINT OF ERROR'.
 AVS6024 No restart, because '(name)' at index level '(index)'
 has a status of '(RUNNING)'.
 No restart, because '(name)' at index level '(index)'
 has a status of '(ERROR)'.
 AVS6025 No restart when there are several elements at index level
 '(index)' with a status of 'ERROR'.
 AVS6027 No restart, because condition '(conditionname)' at index
 level '(index)' has a status of '(WAITING)'.
 No restart, because condition '(conditionname)' at index
 level '(index)' has a status of '(NO-OCCURE)'.
 AVS6030 Invalid value '(jobname)' for restart job name.

- Level 1 errors - - - - -

AVS6023 No restart, because '(name)' at index level '(index)'
 has a status of '(RUNNING)'.
 No restart, because '(name)' at index level '(index)'
 has a status of '(ERROR)'.
 AVS6026 No restart, because condition '(conditionname)' at index
 level '(index)' has a status of '(OCCURRED)'.

Handling of check character by CREATE-PLAN-NET and COPY-NET-DESCRIPTION

- **CREATE-PLAN-NET**

- Overview processing with Y mark
Nets in which errors (level 4) are detected are not planned. They are output in the AVP011 mask with a result of ERROR.
- Overview processing with S mark
Nets in which errors (level 4) are detected are not planned. A message is output in the AVS030 mask and the operator must return to the overview using CMD: RETURN.
- One-off processing with complete net names
Nets in which errors (level 4) are detected are not planned. A message is output in the AVS030 mask.

- **COPY-NET-DESCRIPTION**

If a net description is copied in its entirety using COPY-NET-DESCRIPTION, the check characters is also copied and stored with the net. If only parts of a net description are copied, the check character of the net specified in COPY-NET-NAME will be deleted.

5 AVAS statements

This chapter describes all the AVAS statements in alphabetical order. To improve readability, each statement starts on a new page and is described using the following structure:

- Name of the statement and its function
- Description of the function of the statement
- Description of the format of the statement
- Description of the statement parameters
- Name and function of the corresponding mask(s)
- Explanation of the mask
- Picture of the mask
- Description of the operands in the mask

ADD-COND-DESCRIPTION – Add condition description

The ADD-COND-DESCRIPTION statement is used to define condition descriptions of the types RES and VAL, and save them in the run control file. Condition descriptions of types RES and VAL can also be created by nets which are being executed.

Condition descriptions of types NET and JOB are created by AVAS in the case of the functions SUBMIT-NET and REPEAT-NET, but they cannot be defined using ADD-COND-DESCRIPTION.

Mask AVD030 is displayed, to enable all the necessary entries to be made. It is not possible to swap to another mask (the OBJECT operand is not permitted here).

Input fields into which no value is put will be given the default values.

A condition description is saved by performing the SAVE operation. After a condition description has been saved with SAVE, it can then only be modified in a dialog by using the MODIFY-COND-DESCRIPTION statement.

When ADD-COND-DESCRIPTION is used, no journal record is output.

ADD-COND-DESCRIPTION
COND-NAME=[\$ug_]condname [,TYPE=RES / VAL]

COND-NAME=

Name of the condition description

COND-NAME=\$ug_

Name of the user group

If no user group is specified, the condition description is supplemented internally by the user group of the user exercising the function.

COND-NAME=condname

Name of the condition description, which must be unique within the user group.
From 1–24 characters are permitted.

TYPE=

Type of the condition description

The type of the condition must be specified when the statement is called. The input parameters depend on the type and thus, after it is selected, the type cannot be changed within the dialog.

TYPE=RES

A condition description with the type RESOURCE is to be created.

TYPE=VAL

A condition description with the type VALUE is to be created.

AVD030 – Specification of a condition description

```

AVAS-Vnn.yxm/AVD030          CONDITION-DESCRIPTION          tt.mm.jjjj/hh:mm:ss

COND-TYPE    =...          COND-STATUS =.....
COND-NAME    =.....
CREATED BY   =.....          INDEX=...
CREATION DATE=...../.....

COND-TEXT    =.....
COND-DOC     =.....

LIFE-TIME    =...../.....
LAST-UPDATE  =...../.....

VALUE-FORMAT =...
COND-VALUE   =.....
.....
.....
.....

CMD:.....          OPR:.....
MSG:.....
    
```

- COND-TYPE** Output parameter
 The condition type, as given by the TYPE operand
 {RES / VAL}
- COND-STATUS** Output parameter
 Status of the condition description
 For the ADD-COND-DESCRIPTION statement, this field is initially empty. The status is given a value when the SAVE operation is performed.

 - For COND-TYPE=RES
 Status of the COND-VALUE specified in this mask.
 - For COND-TYPE=VAL
 Status CREATED
- COND-NAME** Output parameter
 Name of the condition description.
- CREATED BY** Output parameter
 ID of the user who created the entry.
 avas-user-id
- INDEX** This parameter has no meaning here, and is locked against input.

CREATION-DATE	Output parameter Date when the condition description was created; this corresponds to the current date at the time of the SAVE, in the form dd.mm.yy hh:mm:ss
COND-TEXT	Input/output parameter Brief text, not exceeding 120 characters, describing the condition.
COND-DOC	Input/output parameter Create user documentation. {*STD / element / *NONE}
*STD	The documentation is created or sought in the DOCLIB under the default name \$ug_condname.
element	Element name for the documentation in the DOCLIB or DOCSYS: \$ug_docname \$ugsys_docname docname
*NONE	No documentation is saved for the condition description.
LIFE-TIME	This parameter has no meaning here, and is locked against input.
LAST-UPDATE	This parameter has no meaning here, and is locked against input.
VALUE-FORMAT	Input/output parameter Selects the display format for COND-VALUE This parameter is only evaluated for COND-TYPE=VAL.
CHAR	The value COND-VALUE is output in alphanumeric form.
HEXA	The value COND-VALUE is output in hexadecimal form.
COND-VALUE	Input/output parameter Status of the condition.

For COND-TYPE=RES

Value and status of the condition

mmm,CREATED | mmm,ERROR | mmm,EXCLUSIVE |

mmm,FREE | mmm,SHARE(uu)

mmm,CREATED The resource is set up mmm times as a shareable resource and is not yet available.

mmm,ERROR The resource is set up mmm times as a shareable resource and is not yet available.

mmm,EXCLUSIVE The resource is set up mmm times as a shareable resource and is allocated in the EXCLUSIVE mode.

mmm,FREE The resource is set up mmm times as a shareable resource and is available.

mmm,SHARE(uu) The resource is set up mmm times as a shareable resource and is allocated uu times in the SHARE mode.

The values mmm and uu are defined as follows:

mmm MAX-USING-SHARE: 2..100
Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100.

uu Number of quotas of a resource allocated in the SHARE mode. If the value <uu> is not specified, then it is set to the value 1. The value uu must be smaller than the value mmm for MAX-USING-SHARE.

For COND-TYPE=VAL

Value of the condition

string Depending on the VALUE-FORMAT parameter, the value is displayed in alphanumeric (c-string) or hexadecimal (x-string) format.

ADD-JOB-LOG – Add log data

The ADD-JOB-LOG statement adds log data to the AVAS pool. The logs must be accessible to the function.

There must be an entry for the logs in the AVAS pool (link name LOGSYS).

Log entries can be edited if they

- have the CREATED, ASSIGNED, ADDED or ERROR status in the AVAS pool, and
- the associated job is no longer running.

When the statement is called either an overview of the nets is displayed in mask AVI016 or, if a fully qualified net name has been specified, an overview of the job runs of the net in mask AVI017.

Items for editing are marked in mask AVI016. Nets marked with Y are edited by the EXECUTE operation in such a way that all the log entries with the status ASSIGNED or ERROR are collected. The result of editing is displayed in the RESULT field. No further mask is output and no parameters can be changed.

An S mark in connection with the EXECUTE operation leads to output of mask AVI017 with the overview of job runs for the net.

In mask AVI017, mark Y is used to initiate editing for a job run, as described above at net level for mask AVI016.

Mark S in mask AVI017 leads to selection of a job run. If more than one log entry is signaled for the job run the overview of log entries is displayed in mask AVI018. The entries must be selected there by means of another S mark.

If there is only one log entry, the signaled information is displayed in mask AVI019 immediately after mask AVI017.

In mask AVI019 all the log entries with status CREATED, ASSIGNED, ERROR or ADDED can be edited.

The input file for a log is not deleted.

If the statement is issued without parameters, all the nets with the same user group as the person executing the function are displayed.

Notes

- Editing is not logged in the journal.
- With ADD-JOB-LOG and in the TRANSFER program, the data of the logs is read via SYSDTA. Possible file formats are described under the /ASSIGN-SYSDTA command (see the “Commands” manual [5]).

M	Input parameter
S (Select)	The net is selected for editing and an overview of job runs is displayed via mask AVI017. The job runs considered are those with log entries which have the status CREATED, ASSIGNED, ERROR or ADDED.
Y (Yes)	The net is selected for editing. Only log entries with the status ASSIGNED or ERROR are edited. Any other marks in this mask are illegal. Editing is initiated with the EXECUTE operation. If no nets are marked, the EXECUTE operation is rejected with a message.
NET-NAME	Output parameter Name of the net in the AVAS pool \$ug_netname_yymmdd_hhmmss
RESULT	Output parameter Acknowledgment for the execution of the action.
UPDATED	Log data added.
NO-UPDATE	No log data added. The RESULT field is only set if the net was selected for editing with the mark Y.

JOB-NAME	Output parameter Name of the AVAS job
CATID	Output parameter Catalog ID of the computer on which the job has run. <i>Note</i> When a server job runs without a signal, by default the job control system enters JOBLOG-NAME=*NONE for it in the log file LOGSYS. In this case CATID contains the catalog ID under which the substitute job AVSSINCM ran.
STATUS	Output parameter Status of the element in the AVAS pool
ADDED	Log data for the job run was collected via the ADD-JOB-LOG function.
ASSIGNED	No log data for the job run. A log was signaled in the job run, but no log data was transferred.
CREATED	No log data for the job. The log entry was created by the run control system.
ERROR	An error occurred during transfer of the log data in the job run.
IGNORE	The signaled log(s) are to be ignored.
RESULT	Output parameter Acknowledgment for the execution of the action.
UPDATED	Log data added.
NO-UPDATE	No log data added.

M	Input parameter
S (Select)	The log entry of the job run is selected for editing. Only entries with the status ADDED, ASSIGNED, CREATED or ERROR can be marked. The EXECUTE operation initiates editing and presents mask AVI019. Other marks are illegal. If no nets are marked, the EXECUTE operation is rejected with a message.
JOBLOG-NAME	Output parameter {filename / *NONE}
filename	Name of the log that was signaled.
*NONE	No log name was signaled.
STATUS	Output parameter Status of the logs
ADDED	Log data of the job run was collected via the ADD-JOB-LOG function.
ASSIGNED	No log data for the job run. A log was signaled in the job run, but no log data was transferred.
ERROR	An error occurred during transfer of the log data in the job run.
IGNORE	The signaled log is to be ignored.
RESULT	Output parameter Acknowledgment for the execution of the action.
UPDATED	Log data added
NO-UPDATE	No log data added

Note

The RETURN operation terminates net editing. Log data may have been added, however.

AVI019 – Add log data

Log data is added with the CONTINUE operation, and adding of log data is ignored with the IGNORE operation. In both cases the next entry of mask AVI018 marked with S is presented or the operation is terminated.

```

AVAS-Vnn.yxmn/AVI019                ADD - JOBL0G                tt.mm.jjjj/hh:mm:ss

NET-NAME=.....
DATE   =..... CATID=.... TSN=....
INDEX  =... JOB-NAME=.....

STATUS   =.....

JOBLOG-NAME=.....
INPUT-FILE =.....
EXTEND   =...

CMD:..... OPR:.....
MSG:.....

```

NET-NAME	Output parameter Name of the net in the AVAS pool \$ug_netname_yymmdd_hhmmss
DATE	Output parameter Date of log entry
CATID	Output parameter Catalog ID of the computer on which the job has run. <i>Note</i> When a server job runs without a signal, by default the job control system enters JOBLOG-NAME=*NONE for it in the log file LOGSYS. In this case CATID contains the catalog ID under which the substitute job AVSSINCM ran.
TSN	Output parameter BS2000 task sequence number of the job run.
INDEX	Output parameter Index level of the job in the net

JOB-NAME	Output parameter Name of the AVAS job
STATUS	Output parameter Status of the log
ADDED	Log data for the entry was collected via the ADD-JOB-LOG function.
ASSIGNED	No log data for the entry. A log name was signaled in the job run, but no log data was transferred.
CREATED	No log data for the entry. The log entry was created by the run control system if *ALL was specified for the start parameter GENERATE-JOB-LOG.
ERROR	An error occurred during transfer of the log data in the job run.
JOBLOG-NAME	Output parameter Name of the signaled file with the log data {filename / *NONE}
filename	Name of the log that was signaled.
*NONE	No log name was signaled.
INPUT-FILE	Input parameter Name of the log file {filename / *NONE}
filename	Name of the file with the log data
	This parameter is set to the parameter value of JOBLOG-NAME when the mask is first displayed. The parameter may be overwritten.
*NONE	No log is to be added for the signaled log name. The log entry is assigned the status IGNORE. A log entry with the status IGNORE can no longer be edited.
EXTEND	Input parameter {NO / YES / NEW}
NO	The log data is to be entered. If log records already exist they are overwritten (OVERWRITE=YES).
YES	An existing log is to be extended.
NEW	The log data is to be entered for a log file with the *NONE entry and CREATED status (behavior as for the NO entry). For a log file with the *NONE entry and ADDED status a further *NONE entry is generated and the log file is entered there. NEW provides the option of subsequently entering multiple log files for a JOBLOG-NAME=*NONE entry.

CANCEL-NET – Interrupt or abort net due to error

The CANCEL-NET statement aborts processing of a net. The severity with which it does this can be defined via the CANCEL-TYPE operand. Once the statement has been successfully executed, the net is in the ABENDED or ERROR state, depending on the value of CANCEL-TYPE. Jobs which are in the RUNNING state when CANCEL-NET is called are aborted in the active system when the KILL-JOBS=YES operand is specified. The KILL-JOBS operand does not apply for subnets (structure element FU=S).

If there are still subnets executing when CANCEL-NET is executed on a hypernet, then processing of the subnets is also to be terminated via CANCEL-NET (otherwise the subnets will be disconnected from the hypernet). The ERROR or ABENDED state of a subnet is taken over in the hypernet. The ABENDED state of a subnet leads to the ERROR state in the associated structure element used to start the subnet.

Structure elements with CANCEL for LATEST-START or LATEST-OCCURE also lead to the ERROR state.

Hypernets are only be processed with CANCEL-NET when there are no subnets running (for CANCEL-TYPE=SOFT) or all subnets are placed in the ENDED or ABENDED state (for CANCEL-TYPE=HARD). If an attempt is made to process a hypernet with CANCEL-NET, then message AVS5244 is output as a warning and processing can still be cancelled with RETURN.

The task job variables set up for the jobs by the run control system are deleted once the jobs have terminated. The ERROR status is set for all jobs that had the status RUNNING. It is left to the user's discretion whether to terminate the running jobs via the BS2000 command /CANCEL-JOB or to wait for the jobs to terminate normally.

Depending on CANCEL-TYPE, this statement can only be applied to statements which have the following statuses:

CANCEL-TYPE=	Status prior to statement	Status after statement	Result
SOFT	RUNNING CONDWAIT HOSTWAIT	ERROR CONDWAIT HOSTWAIT	CANCELLED NO-CANCEL NO-CANCEL
HARD	RUNNING WAITING OPWAIT CONDWAIT HOSTWAIT ERROR RESTARTED	ABENDED ABENDED ABENDED ABENDED ABENDED ABENDED ABENDED	CANCELLED CANCELLED CANCELLED CANCELLED CANCELLED CANCELLED CANCELLED
	START HOLD RESUMED	ABENDED ABENDED ABENDED	CANCELLED CANCELLED CANCELLED
	NETWAIT	ABENDED	CANCELLED

Execution of this statement is logged in the journal.

Nets aborted with CANCEL-TYPE=HARD cannot be restarted. They are deleted from the run control file during the next reorganization. If nets with a status of RUNNING are being processed, the most recent task will be given a status of ABENDED.

If a net receives the ABENDED status through CANCEL-NET and CANCEL-TYPE=HARD so that it is subsequently removed from the AVAS files (NPRLIB, ABLDAT and JRNDAT) in the reorganization and then replanned with the same PLAN-START, the LIFE-TIME must be reset in the condition descriptions created by the net with TYPE=NET/JOB before the reorganization, so that these condition descriptions are also deleted. Otherwise, the net can be planned but not released.

Nets aborted with CANCEL-TYPE=SOFT can be restarted by means of the RESTART-NET statement. All tasks in the net which were running at the time the CANCEL statement was issued are given the ERROR status.

The processed nets remain in the overview until the status ABENDED or ERROR has been reached, or until a change of statement or operand triggers creation of a new net. The status ABENDED or ERROR indicates to the user that these nets have already been processed. Further processing is not possible and will produce RESULT: NO-CANCEL or NO-UPDATE if the generated status has not yet been reached.

The KILL-JOBS=YES operand also enables the started jobs to be aborted in the relevant system.

Interactive prompting

In mask AVD015, the CANCEL-NET statement can be initiated using the Y or N mark. In this case, the following rule applies:

- If processing is rejected with Result ERROR, this statement must be initiated using the mask AVD008 (S mark). Messages reporting the cause of errors are output via this mask.

In mask AVD008, processing can be initiated with the EXECUTE operation. The entire net structure is displayed including any structure elements not processed (e.g. structure elements with the status NO-PLAN). In this case, the following rules apply:

- If a value is predefined in the parameter fields MODIFY-LATEST and NEW-START in the mask AVD015, the corresponding parameter fields on the mask are set to these values.
- Processing is initiated with the EXECUTE operation.

CANCEL-NET
[NET-NAME=[<u>\$ug_</u>]netname] [.CANCEL-TYPE= <u>SOFT</u> / HARD] [.PERIOD-NAME=period / (dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)] [.RUN-CONTROL-SYSTEM=*STD / avak] [.KILL-JOBS= <u>NO</u> / YES]

NET-NAME=

Name of a net in the run control file

NET-NAME=\$ug_

Name of the user group

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of the net whose processing is to be aborted.

With fully qualified net names, the PERIOD operand is not permitted.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the specified user group are displayed.

CANCEL-TYPE=

Description of how the CANCEL-NET statement is executed.

If the CANCEL-TYPE operand is not specified, the default value defined via the generation parameters is set.

CANCEL-TYPE=SOFT

Soft abortion

Net processing is interrupted (see table on [page 171](#)).

CANCEL-TYPE=HARD

Hard abortion

Net processing is aborted (see table on [page 171](#)).

If nets are processed in the RUNNING state, the last task executed is given the status ABENDED. All previously executed tasks retain the status ENDED.

PERIOD-NAME=

Specifies a period (time span)

The nets whose processing is to be aborted are those with a start time, EARLIEST-START, which falls within this period. The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period

PERIOD-NAME=(dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)

Specification of the real date and time, which determine the start and end date and time for the period.

If the "right" period limit is missing, the end date is set to the start date and the end time to 23:59. The default value for the start time is 00:00.

RUN-CONTROL-SYSTEM=

Specification of the run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- BATCH processing
If a user group is specified in the NET-NAME operand, its standard run control system is used. Otherwise the standard run control system of the user group which is assigned to the user at SIGNON is employed.
- DIALOG processing
 - The standard run control system of the user group is used immediately after SIGNON.
 - If the user may employ all run control systems defined in the system (see avak-use parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
 - If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of a run control system.

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for the run control system, the standard run control system of his/her user group is used (again).

KILL-JOBS=

Specifies whether jobs or FT requests which are in the RUNNING state are also to be aborted in the relevant system.

The operand applies equally for all jobs in a net, i.e. for BS2000 jobs and for FT requests. The operand has no effect for structure element FU=S (subnet).

KILL-JOBS=NO

Jobs/FT requests are not interrupted and are completed without AVAS control.

KILL-JOBS=YES

Jobs/FT requests are aborted in the relevant system. This is done with a standard command.

Notes

- If the statement is issued without the NET-NAME operand, an overview is displayed of all nets from the associated user group with the status
 - RUNNING, CONDWAIT or HOSTWAIT with CANCEL-TYPE=SOFT
 - WAITING, HOLD, CONDWAIT, HOSTWAIT, NETWAIT, OPWAIT, RESTARTED, START, RUNNING or ERROR with CANCEL-TYPE=HARD.
- Following CANCEL-NET with CANCEL-TYPE=SOFT, the net can only be restarted if at least one restart variant is described for the task which is given the ERROR status.
- Depending on the setting of the generation parameter HYPERNET-COLOUR, hyper-nets are color-highlighted in the overview.

EARLIEST-START	Output parameter Scheduled start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP
NET-STATUS/CALLED FOR	Output parameter Processing state of the net.
NETWAIT	The net is a subnet and is waiting for the start by a hypernet.
WAITING	The net is waiting for the start conditions to be satisfied.
RUNNING	The net is currently being processed.
CONDDWAIT	The net is waiting for conditions to be satisfied.
HOSTWAIT	The net is waiting for a host in a HIPLEX MSCF network or is waiting for a server.
ERROR	The net was interrupted because a structure element was terminated abnormally.
HOLD	Net processing was aborted.
OPWAIT	The net is waiting for input of the START-NET statement.
RESTARTED	A restart was initiated for the net. The start has not been initiated yet, as the run control system was not active.
START	The START-NET statement was issued for the net. The start has not been initiated yet, as the run control system was not active. <i>After the statement is executed:</i>
ABENDED	Net processing was terminated with an error.

MODIFY-LATEST	<p>Input/output parameter</p> <p>Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters specified for the structure elements.</p> <p>{nnn.hh.mm / <u>000.00.00</u>}</p>
nnn.hh.mm	<p>Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/C/W) of the net.</p> <p>The modified LATEST-START of the net must come after EARLIEST-START.</p>
<u>000.00.00</u>	<p>This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified.</p>
NEW-START	<p>Input/output parameter</p> <p>Start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet.</p> <p>dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP</p> <p>By default, the parameter is assigned the value of EARLIEST-START of the net.</p> <p>The start time of the net can be modified using the NEW-START parameter.</p> <p>This parameter is only processed for CANCEL-TYPE=SOFT.</p>
RESULT	<p>Output parameter</p> <p>Acknowledgment for the completed action.</p>
CANCELLED	<p>Net processing was aborted.</p>
NO-CANCEL	<p>Net processing is not aborted because, after the display, the net attained a status in which the CANCEL-NET statement is prohibited.</p>

FROM-DATE	<p>Input/output parameter Start value of a period. dd.mm.yyyy[/hh:mm:ss]</p> <p>The default values are PERIOD-START-DATE and PERIOD-START-TIME if a net group was selected via PERIOD-NAME, or the EARLIEST-START of the first selected net. The period boundary may be modified, but it must lie within the values specified by PERIOD-NAME.</p> <p>If no PERIOD-NAME is specified, FROM-DATE is given the value of the EARLIEST-START of the first net.</p> <p>If FROM-DATE is deleted by the input, the default assignment described above applies.</p>
TO-DATE	<p>Input/output parameter End value of a period. The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise same as FROM-DATE).</p> <p>If no PERIOD-NAME is specified, TO-DATE is given the value of the EARLIEST-START of the last net.</p> <p>If TO-DATE is deleted by the input, the default assignment described above applies.</p>

Note

With CANCEL-TYPE=SOFT, only those nets are displayed which are in the RUNNING, CONDWAIT or HOSTWAIT state. However, the processing of nets in the CONDWAIT or HOSTWAIT state cannot be interrupted using CANCEL-NET with CANCEL-TYPE=SOFT but only by means of the HOLD-NET statement.

If there is a structure element used to start subnets (FU=S, TYPE=NET) in the RUNNING state, then the ERROR state is set for the structure element, but the subnet itself keeps running and cannot be controlled any more via the hypernet. It is up to the user to place the subnet in the ENDED or ABENDED state.

If the subnet reaches the ENDED state in this manner, the status can be taken over in the hypernet via RESTART-INDEX=ERROR-INDEX. Otherwise the only restart variants left are those in which the status is set to SKIPPED.

NEW-START	<p>Input/output parameter</p> <p>Start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet.</p> <p>dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP</p> <p>By default, the parameter is assigned the value of EARLIEST-START of the net.</p> <p>The start time of the net can be modified using the NEW-START parameter.</p> <p>This parameter is only processed for CANCEL-TYPE=SOFT.</p>
MODIFY-LATEST	<p>Input/output parameter</p> <p>Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters for the structure elements. The parameter is only processed for CANCEL-TYPE=SOFT.</p> <p>{nnn.hh.mm / 000.00.00}</p>
nnn.hh.mm	<p>Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/F/C/W) of the net.</p> <p>The modified LATEST-START of the net must come after EARLIEST-START.</p>
000.00.00	<p>This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified.</p>
M	<p>Input parameter</p> <p>Only the marks for paging are permitted here.</p> <p><i>Note</i></p> <p>Processing is started with the EXECUTE operation.</p>
IND	<p>Output parameter</p> <p>Index of the structure element.</p>
FU	<p>Output parameter</p> <p>Function of the structure element.</p>
TYPE	<p>Output parameter</p> <p>Type of the structure element.</p>
NAME	<p>Output parameter</p> <p>Name of the structure element.</p>

SYN-IND	Output parameter Index level, on which the structure element is to be synchronized.
STATUS	Output parameter Processing status of the structure element.
RESULT	Output parameter The parameter RESULT is irrelevant in this context.

CANCEL-USER – Forcibly sign off users

The CANCEL-USER statement forcibly signs off a user from the central access tasks (ZD-PLAM and ZD-UPAM). If the canceling user has a different ID from the canceled user, the canceled AVAS user ID is also prevented from signing on again, i.e. the SIGNON mask is no longer displayed. The signon lock also remains in place for subsequent AVAS sessions, unless it is released with MODIFY-SYSTEM-PARAMS.

Depending on his authorization, the user can forcibly sign off the users in his own user group who are currently signed on or all signed-on users, and can prevent them from signing on again.

No signon lock is set for all users who are authorized to use the MODIFY-SYSTEM-PARAMS statement. These users can sign on again after being forcibly signed off.

The AVAS system tasks run control system, reorganization, CENTRAL and report cannot be signed off. Like the user entry of the person performing the function, they are not displayed and cannot therefore be edited.

A user selected with a mark is forcibly signed off after CMD:EXECUTE is entered. The IGNORE operation displays the updated list of users in the AVS035 mask. The overview is recreated with the current parameter values of the users, and the user table is displayed from the beginning.

The value of the CANCEL-TYPE operand determines the time of the forced signoff.

If CANCEL-TYPE=SOFT is set, the central tasks wait until the user has terminated the statement before signing him off.

If CANCEL-TYPE=HARD is set, the user is signed off either before or immediately after the current element has been modified.

The dialog program recognizes the signoff at the earliest at the next dialog step via AVAS (ENTER or function key) and at the latest the next time the command is changed. If the user is processing an element via EDT or in an exit routine, his data can no longer be saved after CANCEL-USER with CANCEL-TYPE=HARD.

Users of the statements EDIT-JOB, EDIT-PROD-JOB, EDIT-DOCUMENT and EDT should therefore be forcibly signed off with CANCEL-TYPE=SOFT.

CANCEL-TYPE=SOFT is intended as the “normal” way of forcibly signing off users. CANCEL-TYPE=HARD is designed to be applied to users who do not react to a CANCEL-TYPE=SOFT during element processing.

If the statement is entered without operands, an overview of all signed-on users of the assigned user group is displayed.

If a user is signed on more than once under the same user name, the corresponding number of user entries are displayed.

CANCEL-USER

```
[USER-NAME=name]
[,USER-GROUP=$ug / *ALL]
[,CANCEL-TYPE=SOFT / HARD]
```

USER-NAME=

Name of a user who is signed on

USER-NAME=name

Name of a user who is to be forcibly signed off.

If the name is specified in partially qualified form (last character *), an overview of the signed-on users whose names begin with the specification is displayed.

A user who has no privileged authorization is shown all signed-on users of the user group assigned to him if its name begins with the partial qualification.

Note

Even if the operand is specified in fully qualified form, execution of the function must be initiated via the AVS035 mask with mark selection.

USER-GROUP=

Selects the signed-on users of a user group.

If USER-GROUP is not specified, it is taken from the assignment of the person using the function if this person is working without privileged authorization. USER-GROUP=*ALL is used for users with privileged authorization.

USER-GROUP=\$ug

Name of a user group

A user who has no privileged authorization can only specify his own user group. In this case, the specification of the user group can be omitted.

A user with privileged authorization can access signed-on users of the desired user group by specifying the user group.

USER-GROUP=*ALL

This specification is only for users with privileged authorization.
The user is shown all users who are signed on.

Note

If none of the users is authorized to use MODIFY-SYSTEM-PARAMS, a signon lock can still be set for all users.

CANCEL-TYPE=

Describes how the CANCEL-USER statement is to be applied.

CANCEL-TYPE=SOFT

The user is forcibly signed off at the end of the current statement and is prevented from signing on to AVAS again.

CANCEL-TYPE=HARD

The user is forcibly signed off at the next dialog step via AVAS (not with EDT).

For statements without dialog steps, the following applies:

The user is forcibly signed off before the active statement modifies the current element or immediately after the modification is completed. Thereafter the user cannot sign on to AVAS again.

PLAM/UPAM	Output parameter
PLAM	Number of open access sequences via the ZD-PLAM
UPAM	Number of open access sequences via the ZD-UPAM
	<i>Note</i>
	The values displayed are temporary information. At the time of their display they could already be out of date.
STA	Output parameter Status of the user entry.
C (Cancel)	CANCEL-USER was issued for the user.
R (Running)	The user is signed on and can work.
T (Terminated)	CANCEL-USER was issued for the user. The signoff is completed.
W (Waiting)	The user is signed on and is waiting for the end of a serialization.
	<i>Note</i>
	After the CANCEL-USER statement has been executed, as well as the acknowledgment, RESULT also shows the current status of the user entry.
	The status TERMINATED is only displayed immediately after the user is signed off with CANCEL-USER. If the overview is recreated, this user is no longer displayed.
	The recreation can be performed via the IGNORE operation.
TSN	Output parameter BS2000 task sequence number of the signed-on user.
COMMAND	Output parameter Current statement of the AVAS user.
MES	Output parameter
Y (Yes)	There is a message for the user.
	If there is no message, a blank is displayed.

RESULT	Output parameter Acknowledges whether the action was performed.
CANCELLED	The statement was executed. The user is signed off in accordance with the CANCEL-TYPE operand. Additional information can be taken from the updated STA parameter.
NOT-FOUND	The statement was not executed. The user was no longer signed on at the time the statement was executed.
NO-CANCEL	The statement was not executed. CANCEL-USER had already been issued for the user. Additional information can be taken from the updated STA parameter.

CHANGE-NET-DESCRIPTION – Global changes to nets

The CHANGE-NET-DESCRIPTION statement can be used to make global changes to nets in the user library NETLIB. In addition, changes to USER, ACCOUNT and PASSWORD can be passed to the run control system so that the new signon information can also be assigned to the nets that have already been planned and released for processing.

The following BS2000 parameters can be changed using CHANGE-NET-DESCRIPTION:

USER, PASSWORD, LOG, ACCOUNT, CLASS, CAT

Both the old and new values for the parameters to be modified have to be entered. The following functions are available:

- modify parameter: OLD-para=value NEW-para=value
- delete parameter: OLD-para=value NEW-para=*DEL
- insert parameter: OLD-para=*INS NEW-para=value

Parameters will only be modified if all the “OLD” values specified correspond exactly with their existing values held in the net description (AND operation on all parameters specified).

If a parameter is not to be modified, its new value must be identical to its old.

The modifications are performed in all selected net descriptions and all job descriptions.

A net overview is displayed in the AVN011 mask when the statement is executed.

Nets to be included in this process can be selected using the Y and N marks.

Any BS2000 parameters that are to be changed in net descriptions must be marked.

The AVN007 mask for entering the change data is displayed following the EXECUTE operation.

Processing is started or canceled using the CONTINUE or RETURN operation on AVN007.

The outcome of the operation on each net is displayed in the RESULT field of the AVN011 mask.

If the statement is issued without an operand, NET-NAME=\$ug_* and the operator’s user group will be assumed.

A net overview will always be displayed in the mask AVN011, irrespective of which operands and values are entered.

User-specific version control for the individual nets can be set up via the CC exit AVEX0101 when saving the net description.

CHANGE-NET-DESCRIPTION

[NET-NAME=[\$ug_]netname]

NET-NAME=

Name of a net in the NPRLIB whose parameters are to be modified.

NET-NAME=\$ug_

Name of user group

The only users permitted to specify a different user group to the one to which they belong are privileged users.

If no user group is specified, the operator's user group will be used.

NET-NAME=netname

Element name in the NETLIB

If the net name includes a wildcard symbol (final character is a *), all elements whose names match the specified part of the name will be displayed.

RESULT	Output parameter Confirmation of the action performed.
CHANGED	At least one parameter in the net was modified.
NO-CHANGE	Net not modified. The data in the net is not identical with that in the OLD-... parameter.
ERROR	The net cannot be processed. The structure of the net is invalid.
NOT-FOUND	The net no longer exists.
LOCKED	The net is locked.

AVN007 – Entry of parameters to be changed

```

AVAS-Vnn.yxmn/AVN007          CHANGE-NET-DESCRIPTION          tt.mm.jjjj/hh:mm:ss

OLD-USER =..... OLD-ACCOUNT=..... OLD-PASSWORD=.....
NEW-USER =..... NEW-ACCOUNT=..... NEW-PASSWORD=.....
(RETENTION-PERIOD=..... OF CHANGE-NET-DESCRIPTION USER/ACCOUNT/PASSWORD)

OLD-CLASS=..... OLD-LOG =.....
NEW-CLASS=..... NEW-LOG =.....

OLD-CAT =.....
NEW-CAT =.....

CMD: ..... OPR: .....
MSG: .....
    
```

- OLD-USER=**
 value User ID that is to be changed in the net description.
 *INS If there is no user ID in the net description, *INS must be specified.
- OLD-ACCOUNT=**
 value Account number that is to be changed in the net description.
 *INS If there is no account number in the net description, *INS must be specified.
- OLD-PASSWORD=**
 value Password that is to be changed in the net description.
 To change the password, the existing one must be entered in full.
 *INS If there is no password in the net description, *INS must be specified.

NEW-USER=	
value	New user ID
*DEL	The user ID in the net description will be deleted (replaced with blanks). The USER parameter will only be changed if the PASSWORD parameter is also specified.
NEW-ACCOUNT=	
value	New account number
*DEL	The account number in the net description will be deleted (replaced with blanks).
NEW-PASSWORD=	
value	New password
*DEL	The password in the net description will be deleted (replaced with blanks). The PASSWORD parameter will only be changed if the USER parameter is also specified.
RETENTION-PERIOD=	
	The RETENTION-PERIOD operand is only available on the batch interface.
*NONE	Changes to USER, ACCOUNT and PASSWORD should only be entered in the net description for NETLIB.
nnn.hh.mm	In addition to the changes in the NETLIB (see *NONE), the data for the run control system is stored with a retention period as a relative date and a relative time span based on the processing date displayed in the mask. nnn (000 to 999) is the number of calendar days in the retention period.

*nn.hh.mm
 In addition to the changes in the NETLIB (see *NONE), the data for the run control system is stored with a retention period as a relative date span and an absolute time based on the processing date displayed in the mask.
 nn (00 to 99) is the number of calendar days in the retention period.

Changes for the run control system only come into effect when these changes are made known to the run control system by an /INFORM-PROGRAM command with RESUME from the AVAS administrator.

Note

RETENTION-PERIOD defines

- the length of time for which this OLD/NEW conversion of the run control system will be performed
- how long the transition time (retention period) lasts until the OLD data can again be entered with other NEW data in the case of CHANGE-NET-DESCRIPTION
- how long the transition time (retention period) lasts until the NEW data can again be specified as OLD data for the next CHANGE-NET-DESCRIPTION.

If the values specified for OLD-USER and NEW-USER, OLD-ACCOUNT and NEW-ACCOUNT, OLD-PASSWORD and NEW-PASSWORD are the same as the values that already exist for the run control system, the RETENTION-PERIOD can be changed.

Example

Nets are planned for no longer than one day in advance. The old password should therefore remain valid until 06:00 hours on the following day (take the runtime of the nets into consideration):

```
RETENTION-PERIOD=*02.06.00
```

OLD-CLASS=
value

Job class that is to be changed in the net description.

*INS

If there is no job class in the net description, *INS must be specified.

OLD-LOG=
value

Parameter value that is to be changed in the net description.

*INS

If there is no LOG value in the net description, *INS must be specified.

NEW-CLASS=	
value	New job class
*DEL	The job class in the net description will be deleted (replaced with blanks).
NEW-LOG=	
value	YES or NO can be specified as the new value.
*DEL	The parameter in the net description will be deleted (replaced with blanks).
OLD-CAT=	
value	Parameter value that is to be changed in the net description.
*INS	If there is no CAT value in the net description, *INS must be specified.
NEW-CAT=	
value	catid or jvname can be specified as the new value.
*DEL	The parameter in the net description will be deleted (replaced with blanks).

Notes

- By default the OLD-PASSWORD and NEW-PASSWORD are blanked out in mask AVN007. The AVAS user can make them visible using the VISIBLE operation (see [page 33](#)) or #71 provided he/she has the authorization for this operation.
- The values are stored when CONTINUE is executed. They can then no longer be discarded.

COLLECT-NET-PARAMS – Collect parameters for modifying all tasks in net

The COLLECT-NET-PARAMS statement makes it possible to enter and modify AVAS parameters net-wide by means of net masks. The user masks specified in the net description for entering parameter values are presented. Once entered, the parameters are stored for the net with their codes and values. If AVAS parameters were already entered via a preceding COLLECT-NET-PARAMS statement, they are displayed for modification via the net masks.

With no operation specified, the entered data is again displayed for modification; with CONTINUE, the next user mask, if any, is presented for parameter input. No data is stored until SAVE is entered in the AVM011 mask. Only those nets can be processed which have the TOCREATE status.

Processing at the time of statement execution can be influenced via the AVEX6601 and AVEX6602 computer center exits.

To modify net parameters of nets with the CREATED or PARTIALLY status, all jobs created previously must be deleted using the DEL-PROD-NET statement (this resets the net status to TOCREATE).

Deleting individually created jobs by means of the MOD-PROD-NET statement does not lead to the net status TOCREATE.

If the statement is issued without operands, an overview of all nets of the associated user group is displayed.

COLLECT-NET-PARAMS
[NET-NAME=[\$ug_]netname] / \$ug_ [.FORMAT-NAME=format]

NET-NAME=

Name of a planned net in the NPRLIB

NET-NAME=[\$ug_]netname

Specifies the net name with the following name components:

\$ug_ Name of the user group. This entry is optional. If no user group is specified, all elements of the user's own user group are displayed.

netname Element name of the net in the production library.
If a fully qualified net name is specified, a mask for processing net parameters can be called directly for this net by means of FORMAT-NAME.
If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

NET-NAME=\$ug_

Specifies the net name only via the user group. All nets belonging to the specified user group are displayed.

FORMAT-NAME=format

Name of a mask created by the user.

When a fully qualified net name is entered, the user mask is presented.

When a partially qualified net name is entered, the name of the user mask with the S mark is presented on mask AVM011 for all nets selected via the S mark.

Only those masks can be presented which are defined in the net description. In addition, the mask must satisfy the rules for AVAS modification masks.

If the FORMAT-NAME operand is omitted, an overview is displayed of all mask names assigned to the net.

RESULT	Output parameter Acknowledgment for the completed action.
CREATED	New net parameters were entered for this mask.
UPDATED	Modified net parameters were entered for this mask.

Note

The entered net parameters must be saved by means of SAVE.

COPY-CALENDAR – Copy calendar with symbolic dates

The COPY-CALENDAR statement makes a copy of an existing calendar. This statement can only be executed by a privileged user.

The name under which the copy is to be stored is left to the user's discretion. If a calendar with the name specified under COPY-CALENDAR-NAME already exists, it can be overwritten by entering YES in the OVERWRITE column.

All dates are stored with century specifications in the copied calendar.

COPY-CALENDAR
[CALENDAR-NAME=calendar]

CALENDAR-NAME=calendar

Name of a calendar contained in the calendar library.

This causes an immediate display of the specified calendar (AVC012 mask).

If the calendar name is specified via a partial qualification (final character *), this produces an overview of all calendars from the calendar library whose names begin with the partial qualification (AVC012 mask).

Note

If no calendar name is specified, the calendar assigned to the user is displayed in the AVC012 mask.

RESULT	Output parameter Acknowledgment for the completed action.
COPIED	The marked calendar was copied.
NO-COPY	The calendar was not copied since there already exists a calendar under COPY-CALENDAR-NAME and overwriting was not requested.

COPY-ELEMENT – Copy library elements from/to external file or library

The COPY-ELEMENT statement can be used to copy

- elements from an external SAM file or PLAM library to an AVAS library or
- elements from an AVAS library to individual external SAM files or to a PLAM library.

The following AVAS libraries can be processed:

- NETLIB (net descriptions)
- JCLLIB (jobs and JCL elements)
- DOCLIB (documentation elements)
- CALLIB (AVAS calendar)

The processing mode is selected by means of the MODE operand. It is not possible to enter or modify this operand in the parameter fields within the mask.

AVAS outputs to external libraries have no user group. Conversely, the input libraries must not contain user groups. AVAS does not check the element names.

MODE	Parameters		Parameters		Number of elements processed
	USER-GROUP	EXTERNAL-FILE	ELEMENT/GROUP		
LIBOUT	–	libname	element	n	
LIBIN	[\$ug]	libname	“	n	
SAMOUT	–	prefix	“	n	
SAMIN	–	samfile	[\$ug_]element	1	

COPY-ELEMENT
MODE=LIBOUT / LIBIN [,USER-GROUP=\$ug] / SAMOUT / SAMIN

MODE=LIBOUT

Output from an AVAS library to an external PLAM library. The selected elements are copied to the external library with their element names unchanged.

MODE=LIBIN

Read from an external PLAM library to an AVAS library. Privileged users may use the USER-GROUP operand to specify which user group is to be employed as a name prefix when the selected elements are entered in the AVAS library.

If USER-GROUP is omitted, the user group of the person executing the function is assumed by default.

Notes

- Wildcards cannot be specified for selecting elements in the external library.
- If the external file is a library, the elements are either sought in section J of the JCLLIB and section S of the NETLIB, DOCLIB and CALLIB or output to the corresponding sections.
- AVAS elements cannot be renamed outside of AVAS. COPY-NET-DESCRIPTION can be used to create a copy with a freely selectable name. Specifying COPY-ELEMENT MODE=LIBOUT / SAMOUT causes the copy to be transferred to another AVAS system, where it is read into an AVAS library by means of COPY-ELEMENT MODE=LIBIN / SAMIN.

MODE=SAMOUT

Outputs selected elements from an AVAS library to individual external SAM files.

Each SAM file name is composed of an optional prefix and the element name **without** a user group.

MODE=SAMIN

Reads the element from an external SAM file to an AVAS library.

The element name is specified in the ELEMENT/GROUP parameter.

Privileged users may enter the element under a foreign user group.

Notes

- If an S procedure is to be copied with MODE=LIBIN / SAMIN and AVAS-USER-LIBRARY=JCLLIB, the separator string assigned to the function (FU=P) must be used in the element. This separator string is defined by the AVAS administrator using the generation parameters. If parameters are being used, the relevant separator string must be present as a record in the element, between the procedure part (job part) and the procedure parameters (job parameters). If no parameters are present, the separator string must be stored as the last record in the element.

If the element does not contain a separator string, it is interpreted as a BS2000 job (FU=J), and is entered as such in the JCLLIB directory.

If a separator string is recognized during copying, the element will be recorded in the JCLLIB directory as an S procedure.

All the records in the element which are read in after the separator string are interpreted by AVAS as records containing parameters.

- In the case of a COPY-ELEMENT with MODE=LIBIN / SAMIN, the following rules apply to the overwriting of elements:
 - an element with the same name and type can be overwritten
 - an element of type JOB can be overwritten with an S procedureAny attempt to overwrite an S procedure with a job of the same name is impermissible, and is rejected with an appropriate error message.
- In the case of a COPY-ELEMENT with MODE=LIBOUT / SAMOUT, AVAS does not have the necessary information. Correspondingly, if OVERWRITE=YES is specified, the overwriting will be carried out with no checks.
- If a user copies a net with MODE=LIBIN / SAMIN and changes the net's user group, the value of the RUN-CONTROL-SYSTEM parameter is set to *STD in the net description if the user does not have the appropriate authorization.

USER-GROUP=\$ug

User group under which the elements are to be entered in the AVAS library. This operand is only permitted in conjunction with MODE=LIBIN.

User-specific version control for the individual nets can be set up via the CC exits AVEX0101 and AVEX0102 when saving the net or job elements.

ELEMENT/GROUP	<p>Input parameter Selects the elements to be processed, with regard to the input library.</p> <p>element Element name.</p> <pre> AVAS-USER-LIB=NETLIB: [\$ug_]netname =JCLLIB: [\$ug_]jobname =DOCLIB: [\$ug_]elementname =CALLIB: calendar </pre> <p>\$ug_ User group.</p> <pre> AVAS-USER-LIB=NETLIB: \$ug_ =JCLLIB: \$ug_ =DOCLIB: \$ug_ </pre> <p><i>Exception</i></p> <p>MODE=SAMIN is used to specify what the element in the AVAS-USER-LIBRARY is to be called.</p>
M	<p>Input parameter Mark column.</p>
Y (Yes)	The element is to be copied.
N (No)	The element is not to be copied. All elements not marked with N will be copied.
ELEMENT-NAME	<p>Output parameter List of fully qualified element names presented for selection by specifying ELEMENT/GROUP, relative to the AVAS-USER-LIBRARY.</p> <pre> AVAS-USER-LIBRARY=NETLIB: \$ug_netname =JCLLIB: \$ug_jobname =DOCLIB: \$ug_elementname =CALLIB: calendar </pre>
MODE=LIBIN:	The user group of the elements is identical to the USER-GROUP specification.
MODE=SAMIN:	Same contents as ELEMENT/GROUP.
DATE	<p>Output parameter Date of last modification.</p>

RESULT	Output parameter Confirmation of the action performed.
COPIED	The element was copied.
OVERWRITE	The element was copied and an existing element was overwritten.
NO-COPY	The element could not be copied.
WARNING	The element has been copied. CHECK discovered errors in the element. A report has been produced.
ERROR	The element has not been copied. An error occurred or CHECK discovered serious errors in the element.

Note

With COPY-ELEMENT MODE=SAMOUT the length of the optionally specified prefix must be chosen such that, together with the AVAS element name, the maximum permitted total length for BS2000 file names is not exceeded. When the full name length allowed for documents (43 characters) is used up, then depending on the length of the catalog ID and user ID, only a single-character prefix may be possible.

COPY-NET-DESCRIPTION – Copy net description

The COPY-NET-DESCRIPTION statement supports copying of an individual net or subnet within the net library NETLIB.

If a net is to be copied to a foreign NETLIB, this can be done with the COPY-ELEMENT statement via an external file/library (see [page 205](#)).

The net to be copied is selected either directly by specifying the net name or by marking it with S or Y in the net overview.

A net for which no structure has been defined can only be copied by marking it with Y.

The COPY-NET-NAME entry is mandatory; under this name the new net is stored in the net library. If the net specified under COPY-NET-NAME already exists, the net or parts of the net will be overwritten, provided OVERWRITE=YES is specified. With OVERWRITE=NO the net will not be copied.

If FROM-INDEX and TO-INDEX are omitted, the entire net will be copied; otherwise, only the subnet delimited by these two parameters is copied. The records are inserted in the net located under COPY-NET-NAME according to their index. If the target net already has a record with JOB-INDEX and NAME or COND-INDEX and NAME, this record will be overwritten.

If FROM-INDEX, TO-INDEX and AFTER-INDEX are specified, it is still possible for net structures to be created that have to be modified by means of MODIFY-NET-DESCRIPTION before they can be processed.

If the net does not yet exist, the net parameters of the net to be copied will be included in the new net. With copying, new nets are created only with the user group of the person executing the function. It is not possible to create nets with a foreign user group.

If a user who does not have the necessary authorization copies nets of a foreign user group, the value of the RUN-CONTROL-SYSTEM parameter is set to *STD in the net description.

Note that the names of documentation elements in a net cannot be modified. Thus, when specifying user groups after the copying process, modifications must be carried out by means of MODIFY-NET-DESCRIPTION.

If the statement is issued without operands, an overview of all nets of the associated user group is displayed.

User-specific version control for the individual nets can be set up via the CC exit AVEX0101 when saving the net description.

COPY-NET-DESCRIPTION

[NET-NAME=[\$ug_]netname]

NET-NAME=

Name of a net whose description is to be copied.

NET-NAME=\$ug_

Name of a user group.

Causes an overview of nets belonging to the user group to be displayed.

If no user group is specified, the user group of the person executing the function is assumed by default.

NET-NAME=netname

Element name in the NETLIB

This leads directly to the net description selection.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

COPY-NET-NAME	Input parameter netname New name of the copied net description. The net name is prefixed with the user group of the person executing the function.
OVERWRITE	Input parameter
YES	An existing net with the same name will be overwritten.
NO	An existing net with the same name will not be overwritten.
RESULT	Output parameter Confirmation of the action performed.
COPIED	The net description was copied.
NO-COPY	The net description was not copied although it was marked. Either there is no new name or the net already exists and OVERWRITE=YES was not specified.
ERROR	An illegal name was specified under COPY-NET-NAME.

FU	Output parameter Function of the structure element.
TYPE	Output parameter Type of the structure element.
NAME	Output parameter Name of the structure element.
SYN-IND	Output parameter Index level on which the job or the condition are to be synchronized.
RESTART-IND	Output parameter Specifies a restart variant
V1 V2 V3	Output parameter Index level on which the restart is to take place.
RESULT	The copied structure elements are identified with an acknowledgment. COPIED
FROM-INDEX	Input/output parameter Index level as of which the net description is to be copied.
TO-INDEX	Input/output parameter Index level up to which the net description is to be copied.
AFTER-INDEX	Input/output parameter Target index The marked structure elements are copied behind the specified index.
COPY-NET-NAME	Input/output parameter Name of the net description copy
OVERWRITE	Input/output parameter This specifies whether or not the net description is to be overwritten if it already exists in the net library. {YES / NO}

COPY-SYSTEM-ELEMENT – Copy library elements to central library

The COPY-SYSTEM-ELEMENT statement enables the user to copy elements from his AVAS user library to the corresponding AVAS system library. The elements in system libraries then become available to all users throughout the system.

The COPY-SYSTEM-ELEMENT statement is permitted only for users with * authorization.

Elements can be copied from the following user libraries:

from the NETLIB	(net descriptions)	to the NETSYS
from the JCLLIB	(jobs and JCL elements)	to the JCLSYS
from the JMDLIB	(executable jobs)	to the JMDSYS
from the DOCLIB	(documentation elements)	to the DOCSYS

The user can specify what the elements in the AVAS system library should be called, with the exception of the name of the user group.

COPY-SYSTEM-ELEMENT

```
AVAS-USER-LIBRARY=NETLIB / JCLLIB / JMDLIB / DOCLIB
[,ELEMENT-NAME=[$ug_ ]element]
```

AVAS-USER-LIBRARY=

Symbolic names of the AVAS user libraries:

AVAS-USER-LIBRARY=NETLIB

Net descriptions.

AVAS-USER-LIBRARY=JCLLIB

Jobs, S procedures and JCL elements.

AVAS-USER-LIBRARY=JMDLIB

Executable jobs and S procedures.

AVAS-USER-LIBRARY=DOCLIB

Documentation elements.

AVAS-USER-LIBRARY

Output parameter
 Symbolic name of the user library from which copying is to take place: NETLIB, JCLLIB, JMDLIB or DOCLIB.

AVAS-SYSTEM-LIBRARY

Output parameter
 Symbolic name of the user library to which copying is to take place: NETSYS, JCLSYS, JMDSYS or DOCSYS.
 The symbolic name of the system library corresponds to the specified name of the user library.

M

Input parameter

Y (Yes)

The element is to be copied.

N (No)

The element is not to be copied. All elements not marked with N are to be copied.

ELEMENT-NAME

Output parameter
 Names of the elements in the user library which are to be copied.

DATE

Output parameter
 Date of last modification.

NEW-ELEMENT-NAME

Input/output parameter
 New name of the copied elements in the AVAS system library.

AVAS-SYSTEM-LIBRARY=

NETSYS

netname

JCLSYS

jobname

JMDSYS

jobname[_netname]

DOCSYS

elementname

The element name is prefixed by \$ugsys_.

If no NEW-ELEMENT-NAME is specified, the element is entered in the AVAS system library under its old name, in which only the user group has been changed.

With elements in the JMDSYS, _yymmdd, _hhmmss and _index no longer apply if these name components exist for the job in the JMDLIB.

OVERWRITE	Input parameter
NO	The element is to be copied, provided it does not yet exist in the AVAS system library under the name NEW-ELEMENT-NAME. If it does exist there, the copy operation for this element will be rejected.
YES	The element is copied even if it already exists in the AVAS system library under the new name. The existing element is overwritten if the element type allows it.
RESULT	Output parameter Acknowledgment for the completed action:
COPIED	The element was copied.
OVERWRITE	An element with the same name was overwritten.
NOCOPY	The element was not copied because an element with the specified name already exists.

CREATE-CALENDAR – Set up a new calendar

The CREATE-CALENDAR statement sets up a new calendar in the calendar library.

The privileged user can set up new calendars with any names and enter calendar dates in them.

The normal user can enter his dates only in the calendar assigned to his user group.

Data required for the calendar includes its start and end dates and the production-free days that fall within this range.

The user can define which days of the week are to be generated as planned as production-free days.

In the case of symbolic start dates, a distinction is made between the start dates defined by the user with MODIFY-CALENDAR (USER symbolic date) and the start dates generated using CREATE-CALENDAR (SYSTEM symbolic date).

When the calendar is set up, the days of the week are generated as symbolic dates.

The SYMDAT-NAME parameter (AVC001 mask) can be used to control whether and with which additional SYSTEM symbolic dates the calendar is to be generated.

The names of the SYSTEM symbolic dates can be defined in the AVC001 mask.

The user cannot modify the SYSTEM symbolic dates generated for the calendar.

USER symbolic dates are not processed with this statement. These can be defined and edited using the MODIFY-CALENDAR statement.

The calendar integrated in AVAS covers up to 31.12.2080.

CREATE-CALENDAR
CALENDAR-NAME=calendar

CALENDAR-NAME=calendar

Name of a calendar to be entered in the calendar library.

This causes the AVC001 mask to be displayed.

No operand has to be specified to set up a calendar assigned to the user via the system parameters.

*ALL

The names of the following SYSTEM symbolic dates, derived from the defined default names, are generated for the SYSTEM symbolic dates described under *STD:

nnth working day of the month mm	(AnnMmm)
nnth day of the month mm	(KnnMmm)
nnth day of the month, which is also a working day	(KnnWT)
nnth day of the month, which should also be a working day If this day is not a working day, the symbolic date is entered for the previous working day.	(KnnVWT)
nnth. day of the month, which should also be a working day If this day is not a working day, the symdat is entered for the next working day.	(KnnNWT)
Last working day in the month	(ULTIMO)
Last working day in the month mm	(ULTIMOmm)
n working days before the last working day of the month (n = 1 ... 5)	(ULTIMOMn)

In addition, the following SYSTEM symbolic dates, together with the corresponding names, are generated for all the days of the week (MON, TUE, WED, THU, FRI, SAT and SUN):

Example for Monday (MON)

Monday, which is a working day	(WTMON)
Monday, which should also be a working day If this day is not a working day, the symbolic date is entered for the previous working day.	(WTVMON)
Monday, which should also be a working day If this day is not a working day, the symbolic date is entered for the next working day.	(WTNMON)
nth Monday of m in this month	(MONnm)
nth Monday of m of a month in month mm	(MONnmMmm)

Note

Only days with TYPE=WORK are interpreted as working days. The names of the SYSTEM symbolic dates defined or formed for CREATE-CALENDAR are preceded by an asterisk (*) when the symbolic date is stored on the calendar day.

In the net, the symbolic date must be entered without the *.

Examples

Input mask: AVC001 Field: DAY OF THE MONTH = EVDM

- 1) SYSTEM symdat "Current day of the month" for the 11.5.2005
SYSTEM symdat in the calendar day record = *EVDM11
- 2) SYSTEM symdat "nth. day of the month" mm for the 11.5.2005
SYSTEM symdat in the calendar day record = *EVDM11M05

FIRST-CALENDAR-DATE

Input/output parameter

First day in the calendar (dd.mm.yy).

If the calendar is to be created using SYMDAT-NAME=*STD/*ALL, the calendar must begin with the first day of the month.

LAST-CALENDAR-DATE

Input/output parameter

Last day in the calendar (dd.mm.yy).

If the calendar is to be created using SYMDAT-NAME=*STD/*ALL, the calendar must end with the last day of the month.

Notes

- The calendar may not cover more than three years (interval between FIRST-CALENDAR-DATE and LAST-CALENDAR-DATE).
- By default, missing entries are assigned the values of FIRST-/LAST-CALENDAR-DATE.

If both are missing:

FIRST-CALENDAR-DATE = 01.01.<current year>
LAST-CALENDAR-DATE = 31.12.<current year+2>

Otherwise:

FIRST-CALENDAR-DATE =
01.01.<LAST.CAL.DATE.year-2>
LAST-CALENDAR-DATE =
31.12.<FIRST-CAL-DATE.year+2>

TYPE OF THE DAY

MON TUE WED THU FRI SAT SUN

Input/output parameter

Type of the day of the week

Defines whether or not a processing operation is to be performed for the day of the week.

If a calendar is to be set up using SYSTEM symbolic dates, the type WORK must be specified for at least two days of the week.

{WORK / NWRK / WKND / HLDY / FREE}

If nothing is specified, WORK is used.

WORK

Day on which processing is performed.

The day is taken into consideration during planning using relative symbolic start dates (symdat ±n).

The symbolic dates for the calendar day are used during planning.

Note

The type WORK for a day of the week is displayed using blank (not FREE, NWRK, WKND or HLDY) for the MODIFY-CALENDAR and SHOW-CALENDAR statements.

NWRK

Day on which processing is performed.

Whether the day is taken into consideration during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE (parameter for net description). The day is taken into consideration for SELECT-PLAN-TYPE=NWRK and is not taken into consideration (i.e. skipped) for SELECT-PLAN-TYPE=WORK. Therefore, processing using relative SYMDAT is planned or not planned for this day accordingly.

The symbolic dates for the calendar day are used during planning.

WKND

Day on which processing is performed.

Whether the day is taken into consideration during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE (parameter for net description). The day is taken into consideration for SELECT-PLAN-TYPE=NWRK / WKND and is not taken into consideration (i.e. skipped) for SELECT-PLAN-TYPE=WORK. Therefore, processing using relative SYMDAT is planned or not planned for this day accordingly.

The symbolic dates for the calendar day are used during planning.

HLDY Day on which processing is performed.
 Whether the day is taken into consideration during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE (parameter for net description). The day is taken into consideration for SELECT-PLAN-TYPE=NWRK / HLDY and is not taken into consideration (i.e. skipped) for SELECT-PLAN-TYPE=WORK. Therefore, processing using relative SYMDAT is planned or not planned for this day accordingly.
 The symbolic dates for the calendar day are used during planning.

FREE Day on which no processing is performed.
 The day is not taken into consideration (i.e. is skipped) during planning using relative symbolic start dates (symdat ±n).
 The symbolic dates for the calendar day are only taken into consideration during planning using relative symbolic start dates (symdat ±W / symdat ±n).

Note

The type of a calendar day (WORK, NWRK, WKND, HLDY, FREE) can be changed using MODIFY-CALENDAR (AVC002 mask) (setting NEXT=T).

SPECIAL NWRK OR FREE DATES

Input/output parameter

Calendar days to which another type is to be assigned, which is different from the default assignment for the day of the week.

Input form:

(dd.mm.yy) = {NWRK / WKND / HLDY / FREE}

(dd.mm.*) = {NWRK / WKND / HLDY / FREE}

The specified date must be within the calendar limit dates.

Notes

- If the number of SPECIAL NWRK OR FREE DATES to be specified is greater than the number of fields in the mask, the input fields can be released for further input by means of the paging function +.
 By entering +n or –n, it is possible to page forward or backward by n SPECIAL NWRK OR FREE DATES respectively.
- If a calendar is to be set up using SYSTEM symbolic dates, at least two working days (type WORK) must be defined within 14 days.
- Free days which occur on the same date each year can be entered in the form dd.m.*: "Cyclical date". They are then entered each year within the calendar boundaries and presented in the

form dd.mm.**yy. They can be deleted by overwriting the asterisks '*' with minus signs '--'. They can be changed back to ordinary free days by overwriting the asterisks with plus signs '++'.

- All days of a cycle must have the same type. When changes occur, the type of the first date is taken automatically.

SYSTEM-SYMDAT-NAMES:

If SYSTEM symbolic dates are to be generated for the calendar (see SYMDAT-NAME parameter on [page 222](#)), the names of the SYSTEM symbolic dates can be defined.

If the statement is called using the SYMDAT-NAME=*NONE parameter, the input fields for the names of the SYSTEM symbolic dates are set to protected.

EVERY DAY Input/output parameter
Name for “every day”
{name 1..8 / TGL}

EVERY WORKING DAY Input/output parameter
Name for “working day”
{name 1..4 / WT}

DAY OF THE MONTH Input/output parameter
Name for “current day of the month”
{name 1..4 / K}

WORKING DAY OF THE MONTH Input/output parameter
Name for “current working day of the month”
{name 1..4 / A}

LAST WORKING DAY OF THE MONTH Input/output parameter
Name for “last working day of the month”
{name 1..8 / ULTIMO}

Notes

- The names of the SYSTEM symbolic dates can be defined by the user. Otherwise, the specified default names are used. The names must be different.
- The names of the SYSTEM symbolic dates that are to be generated additionally are derived from the defined names. Special characters cannot be used in the names of the SYSTEM symbolic dates.

CREATE-NET-DESCRIPTION – Create net description

All the parameters in the description of a net, and of the associated structure elements, can be defined using the CREATE-NET-DESCRIPTION statement and created in the net library NETLIB.

Depending on the OBJECT operand, appropriate masks are selected for entering the data. If the OBJECT operand is omitted, first the AVN001 mask for net parameter input is presented, followed by the AVN020 mask for entering the net plan data, then the AVN006 mask for entering the net mask table and finally by the AVN004 mask for entering the net structure. Switching from mask AVN001 to AVN020 and AVN004 and back to AVN001 is always effected by means of the CONTINUE operation.

Switching masks in the reverse direction only becomes possible after the operand value for OBJECT has been changed.

Structure elements which do not yet have a complete set of parameters are logged using CHECK, as are further errors (see the [chapter “CHECK function” on page 125](#)). CHECK can be directly called in the CMD input field in masks AVN001, AVN004, AVN006 and AVN020, and is automatically called when a SAVE is executed. If the CHECK function generates an error log, the log is displayed via EDT:

If the CHECK function is called internally by the SAVE operation, processing of the net can be controlled by how EDT is terminated:

- If EDT is terminated with RETURN, AVAS branches back to the display (the SAVE operation is not performed).
- If EDT is terminated with HALT, net processing is terminated (the SAVE operation is executed).

Depending on the message, the network will not be saved, or will be saved as non-executable or executable.

User-specific version control for the individual nets can be set up via the CC exit AVEX0101 when saving the net description.

In the AVN004 mask, the net structure descriptions can be marked with S if the corresponding parameters are to be supplied.

Depending on the values of the FU and TYPE parameters, the NEXT parameter can be used to select parameter masks (NEXT=DES), masks for plan data (NEXT=SYM) or elements from the JCLLIB or JMDLIB for processing via EDT (NEXT=JCL). After an EXECUTE, the appropriate masks are presented or EDT processing started, as appropriate.

The following parameters in the AVN001 mask are provided with valid default values:

```
NET-DOC=*NONE
NET-TYPE=1
RUN-CONTROL-SYSTEM=*STD
USER-PAR-FILE=*NONE
```

The following parameters in the AVN020 mask are provided with valid default values even if the mask is not called up:

```
SELECT-TURNUS=1
SELECT-PLAN-TYPE=WORK
```

and the first mandatory PLAN-START line:

```
PLAN-START DATE / SYMDAT=*NONE
LATEST-START=*NONE
DELAY-SOLUTION=WAIT
LIFE-TIME=*STD
```

The following structure element parameters, which are specified using mask AVN004, are supplied with valid default values even if the continuation masks are not called up:

FUNCTION=C, TYPE=JVA:

```
JVA-POSITION=001
JVA-LENGTH=001
COND-VALUE= ''
COND-JVA-NAME=NAME – name of the structure element
```

FUNCTION=C , TYPE=NET:

```
CREATED-BY=NAME – name of the structure element
```

FUNCTION=J / P , TYPE=EXT:

```
ENTER-FILE=NAME – name of the structure element with no user group
```

FUNCTION=P , TYPE=EXX:

```
ENTER-FILE=NAME – name of the structure element with no user group
```

FUNCTION=F, TYPE=TRA:

```
DIRECTION=*TO
REMOTE=*BS2000
```

The following apply for any of the masks selected via AVN004:

- CONTINUE saves the entries
- IGNORE ignores the entries
- the next marked record for mask AVN004 is presented, or mask AVN004 is re-presented.

SAVE is used to store the net description from any of the masks AVN001, AVN020, AVN006 or AVN004.

If a net description is stored by means of SAVE, it can only be modified using MODIFY-NET-DESCRIPTION or CHANGE-NET-DESCRIPTION.

Nets in which other nets (subnets) are started and monitored are called hypernets. No additional nets can be called in subnets. Subnets are connected to a hypernet. Subnets are set up as normal nets. They are first designated as subnets during net planning by setting the NET-TYPE parameter to a value > 4.

CREATE-NET-DESCRIPTION
NET-NAME=[\$ug_]netname [OBJECT= <u>NET</u> / PST / MAP / STR]

NET-NAME=[\$ug_]netname

Name of the net under which the net description is to be entered as an element in the net library.

The user group need not be specified. The user group of the person carrying out the function is added internally to the net name by AVAS.

Even privileged users are only allowed to create nets for their own user groups.

OBJECT=

Selects the mask for entering net description data. If OBJECT is not specified, mask AVN001 is displayed.

OBJECT=NET

The AVN001 mask for net parameter input is presented.

OBJECT=PST

The AVN020 mask for entering the net plan data is presented.

OBJECT=MAP

The AVN006 mask for entering the net mask table is presented.

OBJECT=STR

The AVN004 mask for entering the structure elements is presented.

AVN001 – Display net parameters for input

Mask AVN001 is used to specify the general parameters the net.

The parameter fields NET-DOC, NET-TYPE, RUN-CONTROL-SYSTEM and USER-PAR-FILE are preset to default values. However, these values can be replaced by current values.

The parameters NET-ACCOUNT, NET-CAT, NET-CLASS, NET-LOG, NET-PARAMETER, NET-PASSWORD and NET-USER can be used to specify ENTER parameters globally for the tasks in the net. They are employed whenever AVAS has no presettings for the ENTER call in the corresponding parameters of a job structure description and the parameter ENTER-PARAMS=NET is set in mask AVN002/AVN042/AVN052.

In the case of S procedures with TYPE=EXX, the value of NET-PARAMETER is not taken into account. Parameters for the external procedure can only be defined via JOB-PARAMETER.

If no ENTER parameters have been set in the net or job description, they are taken from the /SET-LOGON-PARAMETERS or /LOGON command of the job in the case of /ENTER-JOB (see the appropriate volume of the “Commands” [5] manual) if ENTER-PARAMS=LOGON is specified.

In the case of S procedures (FU=P), ENTER-PARAMS=NET must be specified.

All BS2000 parameters for the ENTER call must be entered in the manner expected by BS2000 (e.g. passwords enclosed in single quotes or as C'value').

```

AVAS-Vnn.yxmn/AVN001          N E T - P A R A M S          tt.mm.jjjj/hh:mm:ss

NET-NAME=.....
NET-TEXT=.....
NET-DOC =.....

NET-TYPE      =.

RUN-CONTROL-SYSTEM=.....

USER-PAR-FILE=.....

NET-CAT      =.....

NET-USER     =..... NET-ACCOUNT =..... NET-PASSWORD=.....
NET-CLASS    =..... NET-LOG      =.....
NET-PARAMETER=.....

CMD:..... OPR:.....
MSG:.....
    
```

NET-NAME	<p>Output parameter</p> <p>Name of the net to be created.</p> <p>The user group is prefixed to the net name, even if it is not specified in the operand.</p>
NET-TEXT	<p>Input parameter</p> <p>Brief description of the net, up to 120 characters long.</p> <p>If a text is specified, it is displayed in all net creation masks.</p>
NET-DOC	<p>Input/output parameter</p> <p>{*STD / element / *NONE}</p>
*STD	<p>The documentation is sought or stored under the standard name \$ugnet_netname in the DOCLIB.</p>
element	<p>Element name for the documentation of the net in the DOCLIB or DOCSYS.</p> <p>\$ug_docname</p> <p>\$ugsys_docname</p> <p>docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net.</p> <p>If \$ugsys is specified, the documentation is sought in the DOCSYS.</p>

	<p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the net, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
NET-TYPE	<p>Input/output parameter Specifies whether nets with the same name but different start times are to be started. {1 / 2 / 3}</p>
1	<p>The net is started regardless of whether a net with the same name is or was running.</p>
2	<p>The net is not started as long as a net with the same name is running. A net is deemed to be running if it has the status ERROR, CONDWAIT, HOSTWAIT or HOLD following RUNNING (at least one job of the net has been started or a condition has been checked).</p> <p>If two or more nets with the same name and not of type 1 are waiting to start, the net with the earliest PLAN-START time will be started first.</p>
3	<p>The net will only be started if no net with the same name has been brought to execution since the last time the run control file was reorganized (see the manual "AVAS for the Administrator" [2]).</p> <p>The restrictions specified by NET-TYPE=2 or 3 apply only to those nets which are brought to execution within one RUN-CONTROL-SYSTEM.</p> <p>If the net is planned as a subnet (with CREATE-PLAN-NET), then it receives an appropriate value > 4 (5/6/7) for NET-TYPE that corresponds to the values 1 - 3. With a value > 4 the net is marked as a subnet connected to a hypernet.</p>

RUN-CONTROL-SYSTEM

Input/output parameter
{avak / *STD}

avak Name of the run control system (German abbreviation) that is to control net processing.

Note

A run control system other than the one defined for the user group in the system parameters can only be specified if the user has the appropriate authorization.

*STD By default, this is assigned the name of the run control system defined for the user group in the system parameters.

USER-PAR-FILE

Input/output parameter
File containing parameters for the modification.
{*NONE / *STD / *BY-HYPERNET / filename /
libname(element[,type])}

*NONE No USER-PARAM-FILE is used or the name of the file is specified via the AVM012 mask in the case of CREATE-PROD-NET.

*STD The name of the USER-PARAM-FILE is sought with PARAM.\$ug.netname[.yymmdd[.hhmmss]] and descending classification in the case of CREATE-PROD-NET.

*BY-HYPERNET The USER-PARAM-FILE of the hypernet is used if the net is planned as a subnet, otherwise the same procedure applies as for *NONE.

filename The parameters contained in this file are used during the modification process.

libname(element[,type])

The parameters are sought in the specified element of the defined library.

If the type is not specified, the element is expected as type S. Valid entries for type are S, J, P and D.

Note

*STD is output as the default value unless *NONE is defined as the default value via the system parameters (only in the case of CREATE-NET-DESCRIPTION). The standard setting is made using the DEFAULT-USER-PARFILE parameter in the AVAS.USER.GENPAR file. With MODIFY-NET-DESCRIPTION, the value saved by the user under CREATE-NET-DESCRIPTION applies.

NET-CAT	<p>Input parameter {'catid' / '*ANY' / (bs2000-servername) / jvname} Parameter for job distribution within a HIPLEX MSCF network (Multi System Control Facility); see the manual "AVAS Functions and Tables" [1] or on a remote BS2000 system.</p>
'catid'	<p>For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified.</p> <p>The target processor is addressed by directly or indirectly specifying a catalog ID.</p>
'*ANY'	<p>If *ANY is specified the catid is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.</p>
(bs2000-servername)	<p>For a job on a remote BS2000 system a BS2000 server name must be specified which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).</p>
jvname	<p>Name of a job variable containing a catalog ID, the value *ANY, or a BS2000 server name.</p>
NET-USER	<p>Input parameter (BS2000 ENTER parameter). User identification under which all jobs in the net are to run (with server jobs the BS2000 user ID under which AVSSINCM is to run). It is used as the default value for the USER parameter of all jobs in the net (see the AVN002/AVN042/AVN052 masks on page 258, USER parameter).</p>
NET-ACCOUNT	<p>Input parameter (BS2000 ENTER parameter). Account number under which all jobs in the net are billed. It is used as the default value for the JOB-ACCOUNT parameter of all jobs in the net (see the AVN002/AVN042/AVN052 masks on page 258, JOB-ACCOUNT parameter).</p>

NET-PASSWORD	<p>Input parameter (BS2000 ENTER parameter). LOGON password.</p> <p>C'.....' or '.....': 1–8 alphanumeric characters.</p> <p>X'.....': 1–16 hexadecimal characters.</p> <p>This is used as the default value for the PASSWORD parameter of all jobs in the net (see the AVN002/AVN042/AVN052 masks on page 258, PASSWORD parameter).</p> <p>AVAS handles the password specifications C'.....' and '.....' in the same way.</p> <p>By default the NET-PASSWORD field is blanked out in the AVN001 mask. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p> <p>*NONE or blank must be specified for IDs without a password.</p>
NET-CLASS	<p>Input parameter (BS2000 ENTER parameter).</p> <p>Job class in which all jobs in the net are classified. It is used as the default value for the JOB-CLASS parameter of all jobs in the net (see the AVN002/AVN042/AVN052 masks on page 258, JOB-CLASS parameter).</p>
NET-LOG	<p>Input parameter (BS2000 ENTER parameter).</p> <p>Indicates whether (YES) or not (NO) the SYSOUT log of jobs in the net is to be printed out.</p> <p>The value specified here is used as the default value for the LOG parameter of all jobs in the net (see the AVN002/AVN042/AVN052 masks on page 258, LOG parameter).</p>

NET-PARAMETER Input parameter
(BS2000 ENTER parameter).
Specifies additional attributes for the selected job class in the ENTER call. The entry is regarded as the default value for the JOB-PARAMETER parameter of all tasks in the net
(see the AVN002/AVN042/AVN052 masks on [page 258](#), JOB-PARAMETER parameter).

If parameters which cannot be defined directly are to be specified for the BS2000 ENTER call, they have to be entered in the form
`,NAME1=value1,NAME2=value2,...`

The parameters are then passed upon the ENTER call but not validated by AVAS.

Note

In the case of structure elements with FUNCTION=P and TYPE=EXX, the value of NET-PARAMETER is not taken into account.

Parameters for the external task can only be defined via JOB-PARAMETER.

If CONTINUE is entered in the AVN001 mask, the AVN020 mask will be displayed to permit the net plan data to be entered.

If net masks (mask AVN006) or structure elements (mask AVN004) are to be defined immediately, OBJECT=MAP or OBJECT=STR respectively must be entered in the operand field.

AVN020 – Display the net plan data to be entered

Mask AVN020 allows start dates/times to be defined, deleted or modified.

PLAN-START is processed when the CREATE-PLAN-NET statement is processed.

Specification of CALENDAR-NAME enables planning to take place using a particular calendar.

The first record is created with the start date/time *NONE, even if the mask is not called up. This record will be used if the calendar is not used to plan the net. It cannot be deleted. Only the parameters DELAY-SOLUTION, LATEST-START and LIFE-TIME can be modified.

Symdats of subnets must be preceded by a "!" character. A symbolic date !symdat is not used for CREATE-PLAN-NET/CREATE-ORDER to plan a standard net. The !symdat supplies the start time and start parameters for subnets planned via the hypernet. Subnet symdats can be assigned the start time *BY-HYP. The subnet is then started when its index level is reached in the hypernet. Its start time consequently remains linked to the hypernet's processing procedure, in particular when the hypernet's start time is modified later. The name suffix of the planned net, which comprises the date and time, is supplied with the values of the hypernet.

So that the net can later be planned by using the calendar to specify a period, at least one more start date/time should be entered.

If a number of start times are specified in the PLAN-START parameter, a value must be specified in TIME corresponding to each value in SYMDAT/DATE.

A maximum of 130 start dates/times are permitted for use in planning with the calendar.

The parameters LATEST-START, LIFE-TIME and DELAY-SOLUTION are permitted for each start date/time.

In the case of subnet symdats with the start time *BY-HYP, these parameters are also assigned the value *BY-HYP; during planning they are supplied with values from the hypernet.

```

AVAS-Vnn.yxmn/AVN020          N E T - P A R A M S          tt.mm.jjjj/hh:mm:ss

NET-NAME=.....
NET-TEXT=.....

CALENDAR-NAME=
SELECT-TURNUS= .          SELECT-PLAN-TYPE= . . . .
M  PLAN-START          LATEST-          DELAY-          LIFE-TIME
  SYMDAT / DATE          TIME          START          SOLUTION
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....
.  .....          .....          .....          .....

CMD:.....  OPR:NET-NAME=.....
MSG:.....
    
```

- NET-NAME** Output parameter
 Name of the net.
 This net name is prefixed by the user group, even if the latter was not specified in the operand.
- NET-TEXT** Output parameter
 Brief description of the net, which may be a maximum of 120 characters long. This text is displayed in all the net creation masks.
- CALENDAR-NAME** Input parameter
 Name of the calendar with which the net is to be planned
 {*STD / calname}

 - *STD The net is planned using the calendar which is assigned to the user group.
 - calname Name of the calendar with which the net is to be planned. The calendar calname must be entered in the calendar library.
- SELECT-TURNUS** Input/output parameter
 Characteristic for forming net run variants.
 {1 / 2 / .. 9}

If this value matches the value for SELECT-TURNUS in the structure element, the structure element is planned for processing in CREATE-PLAN-NET.

SELECT-PLAN-TYPE	Input/output parameter Indicates which days are to be taken into consideration when planning the net using a relative SMYDAT specification {WORK / NWRK / WKND / HLDY}
<u>WORK</u>	Only working days (WORK) are to be taken into consideration during planning.
NWRK	All working days (WORK) and non-working days (NWRK / WKND / HLDY) are to be taken into consideration during planning.
WKND	All working days (WORK) and weekend days (WKND) are to be taken into consideration during planning.
HLDY	All working days (WORK) and public holidays (HLDY) are to be taken into consideration during planning.
	The value assigned to the DEFAULT-PLAN-TYPE parameter in the AVAS.USER.GENPAR file is displayed (see the manual "AVAS for the Administrator" [2]). If the parameter is not specified there, WORK is assumed.
M	Input parameter Mark column, for selecting the start date/time to be edited.
D (Delete)	The marked record is to be deleted.
Y (Yes)	The values displayed in the mask can be modified.
N (No)	All unmarked records can be modified.
	If no marks are entered, then after EXECUTE the data for any of the displayed records can be modified.
	<i>Note</i>
	When the D, Y and N marks are used, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the records in the repositioned work window are presented for modification.
PLAN-START	Start time/date for the net. PLAN-START is defined by either of the two parameters DATE/SYMDAT, with which a date is specified, together with TIME for specifying the time of day. PLAN-START is evaluated in the CREATE-PLAN-NET statement.

SYMDAT/DATE	<p>Input/output parameter Start date for the net. {*NONE / symdat / symdat ±n / symdat ±W / *dd.mm.yy[±Dnn[±W] / [±]symdat[±symdat]...}</p> <p>The date may be specified either in real form (as DATE) or symbolic form (as SYMDAT).</p>
*NONE	<p>is the first entry in the list of Symdats. The TIME parameter is prefilled with blanks. The only other permissible value is *BY-HYP. LATEST_START, DELAY-SOLUTION and LIFE-TIME can be specified or are assigned the default value.</p> <p>If only *NONE is specified, then the net cannot be planned using the calendar and can only be specified with the net name specification. The start time is also assigned at this time (at the time of planning).</p>
dd.mm.yy	<p>A real date is specified with a leading asterisk (). The net is provided for planning on those days which are explicitly specified. It can be planned either by specifying a period or by specifying the net name.</p> <p>If two or more start times are specified in the PLAN-START parameter, a corresponding value must be specified in LATEST-START for each value in PLAN-START. A maximum of 130 symbolic or real start dates/times are permitted.</p> <p>PLAN-START is processed within the framework of the CREATE-PLAN-NET statement.</p>
*tt.mm.jj±Dnn	<p>Real start date for a net cycle This specification defines cyclical planning of a net. Dnn defines the cycle.</p>
*ttmmjj	Start time for cyclical net planning
D	Identifier for days
nn	<p>Number of days until the next net planning.</p> <p>Cyclical planning is performed by CREATE-PLAN-NET and is possible only if a period is specified.</p> <p>With CREATE-PLAN-NET all nets whose planned start occurs in the specified period are offered for planning. Here the start date *ttmmjj is used for the calculation. SELECT-PLAN-TYPE is taken into account, i.e. production-free days are omitted. If the start date is a calendar day of the type FREE, no cycle is determined.</p>

*tt.mm.jj±Dnn±W	<p>Real start date for a net cycle</p> <p>This specification causes all days to be taken into account for planning. If a date is a production-free day, the previous work day (-W) or the next work day (+W) is selected. If the start day is a calendar day of the type FREE, no cycle is determined.</p>
symdat	<p>Execution of CREATE-PLAN-NET replaces the symbolic date with real dates if the calendar is being used for planning the net (PERIOD specified).</p> <p>!symdat does not lead to the planning of a standard net. It supplies, when present, the start time and start parameters for a subnet.</p>
symdat±n	<p>The symbolic date can also be specified in the form symdat ±n. This results in planning of the net n days before or after the date defined by SYMDAT in the calendar. When the planned day is determined calendar days of the type WORK are included in the count while days on which no production takes place (FREE) are not included. Days of the types NWRK, WKND und HLDY are included in the count if the value specified for the parameter SELECT-PLAN-TYPE is NWRK. When SELECT-PLAN-TYPE = WKND or HLDY, only days of the specified type are included in the count.</p> <p>The values 1..99 are permitted for ±n.</p> <p>In this case the maximum length of the SYMDAT name is 17 and 18 characters, respectively.</p> <p>The "!" character must prefix symdat for a subnet.</p>
symdat ±W	<p>The symbolic date can also be specified in the form symdat ±W. This results in planning of the net on the previous or next working day (calendar day of the type WORK) relative to the day defined by SYMDAT in the calendar. If the calendar day defined as SYMDAT is of the type WORK, planning is performed for this day.</p> <p>In this case, the maximum length of the SYMDAT name is 18 characters.</p> <p>The "!" character must prefix symdat for a subnet.</p>
[±]symdat[±symdat]...	<p>In the definition of a start date for the net symdats can be prefixed with the sign "+" or "-" and linked together. Links may be up to 20 characters long (corresponds to the maximum length of the SYMDAT name).</p> <p>When SYM1+SYM2 is specified, the net for planning is selected if both symdats are entered on the relevant day in the calendar. When TGL-FRI is entered, for example, the net is selected every day except Friday.</p>

TIME	<p>hh:mm:ss</p> <p>Time of day at which the net is to be started (PLANSTART/EARLIEST-START) or *BY-HYP (the start is triggered by the hypernet; only permitted with !symdat and with symdat *NONE).</p> <p>AVAS ignores any seconds specification.</p>
LATEST-START	<p>Input/output parameter</p> <p>Latest point in time, relative to the planned start time in the net name (PLAN-START), at which the net can be started.</p> <p>{nnn.hh.mm / *nn.hh.mm / *BY-HYP / *NONE}</p>
nnn.hh.mm	<p>Date and time span relative to PLAN-START</p> <p>nnn is the number of calendar days, in the range 000 to 999.</p>
*nn.hh.mm	<p>Relative date span and absolute time relative to PLAN-START.</p> <p>nn is the number of calendar days, in the range 00 to 99</p>
*BY-HYP	<p>*BY-HYP is the predefined and only permissible value in the case of subnet symdats (!symdat) with TIME=*BY-HYP. During planning LATEST-START is supplied from the hypernet.</p>
*NONE	<p>If no entry is made, *NONE is assumed. The value used for *NONE is the value specified for DEFAULT-LATEST-NET-START via the parameter generation.</p>
DELAY-SOLUTION	<p>Input/output parameter</p> <p>Action to be taken in case of an untimely net start (LATEST-START has expired).</p> <p>{<u>WAIT</u> / START / IGNORE / CANCEL / *BY-HYP}</p> <p>If nothing is specified, the value defined for DEFAULT-NET-DELAY via the generation parameters is used.</p>
<u>WAIT</u>	<p>The net should continue to wait.</p>
START	<p>The net should be started.</p>
IGNORE	<p>The net is not started. If other nets or jobs are dependent on this net, these dependencies are regarded as resolved if their OCCURE-VALUE is used to test for the IGNORED status.</p>
CANCEL	<p>The net is not started and is regarded as having terminated abnormally.</p> <p>This parameter takes effect when</p> <ul style="list-style-type: none"> – nets are released after LATEST-START has expired (SUBMIT-NET)

- nets are in the HOLD state during the interval between EARLIEST-START and LATEST-START
- the run control system is inactive during the interval between EARLIEST-START and LATEST-START
- two or more nets of the same name are released with NET-TYPE=2 or 3, but they cannot be started in the interval between PLAN-START and LATEST-START.

*BY-HYP

*BY-HYP is the predefined and only permissible value in the case of subnet symdats (!symdat) with TIME=*BY-HYP. During planning DELAY-SOLUTION is supplied from the hypernet.

Once LATEST-START has expired, the net status is dependent on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	NET-STATUS
WAIT	WAITING
START	RUNNING or CONDITION-WAIT
IGNORE	IGNORED
CANCEL	ABENDED

LIFE-TIME

Input/output parameter

Lifetime of the 'end-of-net' event for this net. When the run control file is reorganized, the event entry is not deleted until this time span has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it.

The life time is relative to the value of PLAN-START.

{nnn.hh.mm / *STD / *NONE / *BY-HYP}

nnn.hh.mm

When the net is released by SUBMIT-NET and REPEAT-NET, a condition description for the net is recorded in the run control file. The time span is relative to PLAN-START, and is equal to nnn calendar days, hh hours and mm minutes.

*STD

Default value for LIFE-TIME defined in the system parameters (DEFAULT-LIFE-TIME).

When the net is released by SUBMIT-NET and REPEAT-NET, a condition description for the net is recorded in the run control file.

*NONE

When the net is released by SUBMIT-NET and REPEAT-NET, no condition description for the net is recorded in the run control file.

N (No)	<p>All unmarked net masks can be modified.</p> <p>If there are no marks, following EXECUTE the data in all displayed net masks can be modified.</p> <p><i>Note</i></p> <p>In connection with the D, Y and N marks, the work window cannot be repositioned.</p> <p>If the EXECUTE operation is entered together with a + or – mark, the net masks of the repositioned work window are presented for modification.</p>
FORMAT-NAME	<p>Input parameter</p> <p>Name of a net mask, up to 8 characters long.</p> <p>This user mask is to be presented with the COLLECT-NET-PARAMS statement in order to define run parameters that are valid throughout the net.</p> <p>A maximum of 32 net masks are permitted for each net.</p>
FORMAT-TEXT	<p>Input parameter</p> <p>Remarks describing the net mask in greater detail. The text may be up to 40 characters long.</p>

Entering CONTINUE causes the AVN004 mask to be displayed.

Entering OBJECT=STR/NET in the operand field enables a branch to be made to mask AVN004 or AVN001.

Depending on the values of the FU and TYPE parameters, the NEXT parameter can be used to select parameter masks (NEXT=DES), plan data masks (NEXT=SYM) or elements from the JCLLIB or JMDLIB for processing via EDT (NEXT=JCL). After an EXECUTE, the appropriate masks are presented or EDT processing started, as appropriate.

for NEXT=DES

FU	TYPE	Mask
J	MOD	AVN002
J	EXT	AVN042
J	STD	AVN052
P	MOD	AVN002
P	EXT	AVN042
P	STD	AVN052
C	JVA	AVN003
C	NET/JOB/RES/VAL	AVN008
A/M/D	RES/VAL	AVN030
D	NET/JOB	AVN031
S	NET	AVN015
F	TRA	AVN016
W	TIM	AVN032

bei NEXT=SYM

J	STD/MOD/EXT	AVN021
P	STD/MOD/EXT/EXX	AVN021
C	JVA	AVN022
C	NET/JOB/RES/VAL	AVN022
A/M/D	RES/VAL	AVN024
D	NET/JOB	AVN024
S	NET	AVN025
F	TRA	AVN026
W	TIM	AVN023

bei NEXT=JCL

J/P	STD	JMDLIB
J/P	MOD	JCLLIB

The following apply for any of the masks selected via AVN004:

- CONTINUE saves the entries

- IGNORE ignores the entries
- the next marked record for mask AVN004 is displayed, or mask AVN004 is displayed again.

The following apply to processing the JCLLIB or JMDLIB elements that were selected using mask AVN004:

- The user must be authorized to use the EDIT-JOB and EDIT-PROD-JOB statements.
- Only structure elements of the function J (BS2000 job) or P (procedure) of type STD or MOD can be selected.
- The element is searched for in the JCLLIB or JMDLIB using the name specified in mask AVN004.
- The elements are searched for in the JCLLIB or JMDLIB according to the search algorithm for CREATE-PRODNET (structure elements of type MOD) and SUBMIT-NET (structure elements of type STD).
- Structure elements with the system user group cannot be processed via EDT. Processing is rejected with a message.
- The type of display and the processing options correspond to the functional scope defined for the EDIT-JOB and EDIT-PROD-JOB statements.
- If a new element is created in the JCLLIB or JMDLIB, by default the function (J or P) is taken over from the structure element description.
- If an element from the JCLLIB or JMDLIB is written back under a new name (NEW-ELEMENT-NAME parameter in mask AVE011) or with a modified function (FUNCTION parameter in mask AVE011), this does not result in a new name or a new function in the structure element of the net. The name and the function of the structure element can only be changed using mask AVN004.

Note

An entry for a condition is created in the run control file

- by a net structure element using the ADD function, if the index level is processed by the run control system (only for COND-TYPE=VALUE and =RESOURCE)
- by the release of a net, if a LIFE-TIME parameter (other than *NONE) is specified for the net (only for COND-TYPE=NET)
- by the release of a net, if a LIFE-TIME parameter (other than *NONE) is specified for a job or FT request (only for COND-TYPE=JOB)

The ERROR status will be set in the following cases:

- A =ADD Creation of a condition description of type RESOURCE, VALUE
If a condition description with the specified name already exists.
- M =MODIFY Modification of a condition description
If the condition description does not exist, or if a resource is to be released but it is not in use.
- D =DELETE Deletion of a condition description
If there is no condition description with the specified name, or if a resource is in use.
- W =WAIT Wait for a time
For a CANCEL-NET statement with CANCEL-TYPE=SOFT

Even for elements with the named functions, three restart variants may be defined.

The assignment of a condition test (FU=C) to a condition description takes place at execution time:

- in the case of RESOURCE and VALUE conditions via the unique name of the condition
- in the case of NET and JOB conditions, via the (condition) description which has the smallest time difference (relative to PLAN-START) from the planned start of the net performing the test.

If, when a condition description with the function FU=C is tested, no entry of the right type is found with the specified name, the status will be set to MISSING.

For conditions which test the status of a condition description (NET, JOB, RES), the status MISSING is permitted as a testable status.

All the conditions are retested in the next cycle of the run control system.

If structure elements are to be inserted in or appended to the net structure which is to be created, their parameter values must be entered in a blank line in mask AVN004. The new line will be placed in the net structure at a position corresponding to its index.

Modifying:

After any defined structure element has been marked with a Y, its individual parameter values can be modified by overwriting them.

Note

For defined structure elements, modifying the function, FU, results in the deletion of all the assigned parameter values. New default values will be assigned, depending on the function and type.

Exception

When a change is made from J to P or vice versa, the defined parameter values are retained.

Deleting:

By marking them with a D, structure elements can be deleted.

FU	Input/output parameter The function of the structure element
A (Add)	This element of the net description is a structure element which creates a condition description.
C (Compare)	This element of the net description is a condition description which waits until a condition is satisfied.
D (Delete)	This element of the net description is a structure element which deletes a condition description.
F (File Transfer)	This element of the net description is a structure element which executes an FT request.
J (Job)	This element of the net description is a structure element which executes BS2000 jobs.
M (Modify)	This element of the net description is a structure element which modifies a condition description.
P (Procedure)	This element of the net description is a structure element which executes procedures.
S (Subnet)	This element of the net description is a structure element which starts subnets.
W (Wait)	This element of the net description is a structure element which causes a timed wait.

IND	<p>Input/output parameter 3-digit index (001, ..., 999) of the structure element. This is either a JOB-INDEX or a COND-INDEX, depending on how the FU parameters are defined. New structure elements are defined in a blank line in the mask.</p> <p>When the index is modified, the element is inserted at the position in the net structure corresponding to the new index. If there is already a defined element at the specified index level, the modified structure element will be positioned after the existing one.</p>
M	<p>Input parameter Mark column, for selecting structure elements.</p>
S (Select)	<p>With NEXT=DES/SYM Selects the structure element which is to be defined by further parameters, or the parameters of which are to be modified. Depending on the parameters FU, TYPE and NEXT, the appropriate continuation mask is output after EXECUTE.</p> <p>With NEXT=JCL Selects the structure element with whose name the corresponding element is to be sought in the JCLLIB or JMDLIB and displayed via EDT. Only structure elements with FU=J/P and TYPE=STD/MOD can be selected. Processing is started with EXECUTE.</p> <p>If structure elements with invalid functions or invalid types are selected, AVAS branches to the parameter mask assigned to these structure elements instead of to the EDT display; processing is rejected with a message. The operation IGNORE or CONTINUE can then be used to resume the processing initiated with EXECUTE.</p>
D (Delete)	The marked structure element is deleted from the net description.
Y (Yes)	The values of the structure element which are displayed in mask AVN004 can be modified.
N (No)	<p>All unmarked structure elements can be modified.</p> <p>If there are no marks, then the data for all the displayed structure elements can be modified after EXECUTE is entered.</p>
	<p><i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.</p>

NAME	<p>Input/output parameter</p> <p>Name of the structure element. This depends on the FU and TYPE parameters.</p> <p>Within each AVAS system, the name of each condition description must be unique across all the types of condition. The JVA condition is excepted from this.</p>
For FU=J/P,	<p>the user group for the net, or the system user group, may be specified.</p> <p>The specified user group is only used here in addressing the LIB for the CREATE-PROD-NET (JCLLIB/JCLSYS) and SUBMIT-NET (JMDLIB/JMDSYS) statements.</p> <p>If a USER-PARAM-FILE is to be assigned to the task (AVN002 mask), the name of the structure element can be up to 20 characters long (without the user group).</p> <p>If LIFE-TIME≠*NONE, a condition description is always created with the user group of the net.</p> <p>If the functions FU=J and FU=P are used with the same name in a net, this will be identified and logged by the CHECK function as an error.</p> <p>The net cannot be planned.</p>
For FU=S,	<p>the user group for the net or the system user group can be specified. The user group specified is only used here to address the LIB for the CREATE-PLAN-NET (NETLIB/NETSYS) statement.</p>
For FU=F,	<p>only the user group for the net may be specified.</p>
For FU=A/D,	<p>only the user group for the net may be specified.</p>
For FU=C and TYPE=NET/JOB/RES/VAL and FU=M with TYPE=RES/VAL,	<p>it is also possible to specify a foreign user group.</p> <p>If a NET or JOB condition refers to another user group (i.e. not the user group of the net), this foreign user group must be specified.</p> <p>If no user group is specified, the user group of the net is assumed.</p> <p>When the name is specified in abbreviated form, the condition test is assigned to the description for which the PLAN-START is before the PLAN-START of the net making the reference by the smallest time.</p>
For FU=W	<p>either *DATE or a name may be specified.</p>

	For FU=C with TYPE=JVA, the name of the job variable The name of the job variable can be modified in the COND-JVA-NAME parameter of mask AVN003. *NONE is no longer copied into the name of the structure element. In a NET condition, *NONE is no longer permitted as the name of the structure element, and may only be specified under the CREATED-BY NET-NAME parameter. The condition is always satisfied if all possible status values are specified under OCCURE-VALUE, or under ERROR-VALUE with a restart in the SYNC-INDEX.
NET-NAME	Output parameter Name of the net
NET-TEXT	Output parameter Brief description of the net
NEXT	Input/output parameter { <u>DES</u> / SYM / JCL} Controls the presentation of masks and the processing of JCLLIB or JMDLIB elements via EDT for structure elements marked with an S.
	<u>DES</u> (DESCRIPTION) The appropriate mask for entry of the parameters is presented.
	SYM (SYMDAT) The appropriate mask for entry of the plan data is presented. Depending on the values of the FU and TYPE parameters, the continuation masks will then be presented after EXECUTE (see page 248).
	JCL (JCL) The corresponding element from the JCLLIB/JMDLIB is displayed in the EDT for processing.
RESTART-IND V1 V2 V3	Input/output parameter {index / END} The restart index can be defined for the three possible restart variants. Without this index, no restart variant is possible.
index	The index level to be used for any restart (of the net). A restart is permissible in all index ranges (001–999) for all structure elements, irrespective of their function and type.
END	In the event of a restart (of the net), there should be no further processing of the structure element and its dependents. It is not permissible to specify END for restart jobs (index 900–999). The SYNC-INDEX of this element or a successor must be synchronized to END, or else the CHECK operation will output a warning.

SYNC-INDEX Input/output parameter
 Index level at which the job or condition is to be synchronized.
 {index / NXT / END }

index The value of SYNC-INDEX must be greater than the value defined for IND. It is not permitted to specify the index level of a restart job. The system waits at this index level for the job to terminate or for the condition to be met.

NXT Synchronization takes place at the next higher index level.

END Normal job termination or the satisfaction of the condition is the prerequisite for normal termination of the net, i.e. net termination forms the basis for synchronization.

Note

Only NXT is permissible for the restart index levels (index > 899). For the restart index levels, SYNC-INDEX is replaced by the index specified for restart variant 1.

TYPE Input/output parameter
 Type of the structure elements
 {MOD / STD / EXT / EXX / JVA / NET / JOB / RES / VAL / TIM / TRA}

Depending on the function FU, the following are possible entries:

FU	TYPE
J/P	MOD
J/P	STD
J/P	EXT
P	EXX
S	NET
F	TRA
C	JVA
C/D	NET
C/D	JOB
C/A/M/D	RES
C/A/M/D	VAL
W	TIM

MOD	<p>The job is saved in the AVAS system and is subject to net modification. It must be created as a temporary production task by a CREATE-PROD-NET statement.</p> <p><i>Notes</i></p> <ul style="list-style-type: none">– If a structure element with TYPE=MOD is used more than once in a net (same name), either the same user group (user group of the net or system user group) or no user group must always be specified.– If a USER-PARAM-FILE is to be assigned to the task (AVN002 mask), the name of the structure element can be up to 20 characters long (without the user group). Any violation of this rule will be identified and logged by the CHECK function as an error. The net cannot be planned.
STD	<p>The job is saved in the AVAS system and is not subject to net modification. It must be created by a CREATE-PROD-JOB statement.</p>
EXT	<p>The job is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE or FILENAME (see the AVN042 mask on page 258).</p>
EXX	<p>The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.</p>
JVA	<p>For FU=C, net processing waits for a condition to be satisfied by a defined value in a job variable.</p>
NET	<p>For FU=C, net processing waits for a condition in another net to be satisfied. The LIFE-TIME parameter determines how long the condition description remains available for testing.</p> <p>For FU=D, the condition description for a predefined net is deleted.</p> <p>For FU=S, a subnet is started and the system waits for the normal termination of the subnet.</p>
JOB	<p>For FU=C, net processing waits for a condition on a job or FT request to be satisfied. The LIFE-TIME parameter determines how long the condition description remains available for testing.</p> <p>For FU=D, the condition description for a prescribed job or FT request is deleted.</p>

RES	<p>For FU=C, net processing waits for a condition on a resource to be satisfied. The status of the resource is modified by the satisfaction of the condition.</p> <p>For FU=A, a condition description for a resource is created.</p> <p>For FU=M, a condition description for a resource is modified.</p> <p>For FU=D, a condition description for a resource is deleted.</p> <p><i>Note</i></p> <p>The condition entry for the resource can only be deleted if it is not allocated by any other user any more.</p>
VAL	<p>For FU=C, net processing waits for a condition to be satisfied by a defined value.</p> <p>For FU=A, a condition description with a defined value is created.</p> <p>For FU=M, a condition description with a defined value is modified.</p> <p>For FU=D, a condition description with a defined value is deleted.</p>
TIM	<p>Net processing is subject to a timed wait. The time interval is specified by OCCURE-DATE SYMDAT in mask AVN023.</p>
TRA	<p>An FT request is started and normal termination of this request is waited for.</p>
RESULT	<p>Output parameter</p> <p>Confirmation of the action performed.</p>
UPDATED	<p>The marked structure element has been modified. (Return to mask AVN004 by a CONTINUE operation).</p>
INSERTED	<p>The defined structure element has been inserted.</p>
MOVED	<p>The structure element whose index (IND) was modified has been moved.</p>
NO-UPDATE	<p>The marked structure element has not been changed. (Return to mask AVN004 by an IGNORE operation).</p>

AVN002, AVN042, AVN052 – Display and input parameters for structure elements with FU=J/P and TYPE=STD/MOD/EXT/EXX

In these masks, the structure elements for executing BS2000 jobs and S procedures (tasks) are specified. The masks displayed differ slightly depending on the type of structure element defined:

- If TYPE=MOD mask AVN002 with the USER-PAR-FILE input field.
- If TYPE=EXT/EXX mask AVN042 with the ENTER-FILE and FILE-PASSWORD input fields.
- If TYPE=STD mask AVN052.

Otherwise, the structure of the mask is identical in all formats.

```

AVAS-Vnn.yxm/AVN002      JOB-DESCRIPTION FOR NET-STRUCTURE      tt.mm.jjjj/hh:mm:ss
JOB-NAME                = ..... NET-NAME=.....
JOB-TEXT                = .....
JOB-DOC                 = .....
JOB-INDEX               = ... FU=... JOB-TYPE=...
SYNC-INDEX              = ...
RESTART                -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1            ...
                    2 ...
                    3 ...
ENTER-PARAMS           = .....
JOB-CAT                 = .....
USER                    = ..... JOB-ACCOUNT = ..... PASSWORD=.....
JOB-CLASS               = ..... LOG = .....
JOB-PARAMETER=.....
USER-PAR-FILE=.....

CMD: ..... OPR: .....
MSG: .....
```

```

AVAS-Vnn.yxmn/AVN042   JOB-DESCRIPTION FOR NET-STRUCTURE   tt.mm.jjjj/hh:mm:ss
JOB-NAME               = ..... NET-NAME=.....
JOB-TEXT               = .....
                       = .....
JOB-DOC                = .....
JOB-INDEX              = .... FU=..... JOB-TYPE=....
SYNC-INDEX             = ....
RESTART                -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1           .....
  2                   .....
  3                   .....
ENTER-PARAMS          = .....
JOB-CAT                = .....
USER                   = ..... JOB-ACCOUNT =..... PASSWORD=.....
JOB-CLASS              = ..... LOG =.....
JOB-PARAMETER         = .....
                       = .....
ENTER-FILE             = .....
FILE-PASSWORD         = .....

CMD: ..... OPR: .....
.....
MSG: .....

```

```

AVAS-Vnn.yxmn/AVN052   JOB-DESCRIPTION FOR NET-STRUCTURE   tt.mm.jjjj/hh:mm:ss
JOB-NAME               = ..... NET-NAME=.....
JOB-TEXT               = .....
                       = .....
JOB-DOC                = .....
JOB-INDEX              = .... FU=..... JOB-TYPE=....
SYNC-INDEX             = ....
RESTART                -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1           .....
  2                   .....
  3                   .....
ENTER-PARAMS          = .....
JOB-CAT                = .....
USER                   = ..... JOB-ACCOUNT =..... PASSWORD=.....
JOB-CLASS              = ..... LOG =.....
JOB-PARAMETER         = .....
                       = .....

CMD: ..... OPR: .....
.....
MSG: .....

```

JOB-NAME	Output parameter
jobname	Name of the task.
NET-NAME	Output parameter Name of the net description, to which the structure element for executing BS2000 jobs and S procedures is assigned.
JOB-TEXT	Input parameter Brief text (up to 120 characters) describing the task in greater detail.
JOB-DOC	Input/output parameter {*STD / element / *NONE}
*STD	Documentation of the task. The documentation is sought or stored under the standard name \$ugnet_netname.jobname in the DOCLIB.
element	Element name for the documentation of the task in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the task, the following message is output: AVS4090 THE DOCUMENT FUNCTION IS NOT AVAILABLE
JOB-INDEX	Output parameter Index level of the net at which the task is to run. index

FU	Output parameter The function of the structure element
J (Job)	The function of this structure element in the net description is to execute BS2000 jobs.
P (Procedure)	The function of this structure element in the net description is to execute S procedures.
JOB-TYPE	Output parameter Type of the structure element. Shows the value for TYPE as entered into mask AVN004, indicating whether, and if so in what form, the task is subject to net modification. (FU=J/P with TYPE=MOD/STD/EXT, FU=P with TYPE=EXX)
MOD	The task is subject to net modification. It was created with CREATE-PROD-NET.
STD	The task is not subject to net modification. It must be created with the CREATE-PROD-NET statement.
EXT	The task is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE.
EXX	The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
SYNC-INDEX	Input/output parameter Index level at which the task is to be synchronized. {index / <u>NXT</u> / END}
index	This value must be greater than the value for JOB-INDEX and must not contain an index level from the restart index levels. The system waits at this index level for the task to terminate.
<u>NXT</u>	The task is synchronized at the next higher index level.
END	The task is synchronized at normal end of net (freestanding task).

RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Input parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) in all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p> <p>END must not be specified with restart tasks.</p>
RESTART-NAME	<p>Input parameter</p> <p>Name for selecting structure elements at the specified restart index level.</p> <p>{name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p> <p>“name” must be unique at the specified index level.</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>Any structure elements at the restart index level that have the status ERROR are only to be executed again if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>

*NAME Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- With the functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET the default value of the RESTART-NAME parameter depends on RESTART-INDEX:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE Input parameter
Type of restart processing involved.
{RESTART / NORMAL}

RESTART Restart with execution of restart statements #RA, #RI and #RU.

NORMAL Restart without execution of restart statements #RA, #RI and #RU.

Note

Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.

AUTOMATIC	<p>Input parameter Type of restart processing {YES / <u>NO</u>}</p>
YES	<p>Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task.</p> <p>If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).</p> <p>If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3.</p> <p>If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).</p>
<u>NO</u>	<p>Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>
ENTER-PARAMS	<p>Input/output parameter Source of the parameters for the ENTER call used to start this task. {<u>NET</u> / LOGON}</p>
<u>NET</u>	<p>The ENTER parameters are taken from the net description, with specifications for the task being given precedence over specifications for the net.</p>
LOGON	<p>The ENTER parameters are taken from the SET-LOGON-PARAMETERS (or LOGON) command of the task. This data is accepted by the run control system without validation. The catalog ID from the net description is not evaluated. The LOGON entry is not permissible if JOB-TYPE=EXT and/or a job description record for S procedures is processed.</p>

JOB-CAT	<p>Input/output parameter {'catid' / '*ANY' / (bs2000-servername) / jvname} Parameter for task distribution within a HIPLEX MSCF network (Multi System Control Facility; see the manual "AVAS Functions and Tables" [1]) or on a remote BS2000 system.</p>
'catid'	<p>For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.</p>
'*ANY'	<p>When *ANY is specified, the catid is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network. {'catid' / '*ANY' / jvname}</p>
(bs2000-servername)	<p>For a job on a remote BS2000 system a BS2000 server name must be specified which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).</p>
jvname	<p>Name of a job variable containing a catalog ID, the value *ANY, or a BS2000 server name.</p>
USER	<p>Input/output parameter Identifier under which the task (job or S procedure) is to run</p> <p>If a USER is specified, then the JOB-ACCOUNT and PASSWORD parameters will also be used. All three parameters are taken from the net definitions or from the job specification.</p>
JOB-ACCOUNT	<p>Input/output parameter (BS2000 ENTER parameter). Account number under which the job is billed, see also the USER parameter.</p>
PASSWORD	<p>Input parameter Parameter for the ENTER call of the task, see also the USER parameter. LOGON password for USER (for permissible entries see the AVN001 mask on page 231, NET-PASSWORD parameter). The PASSWORD field is blanked out in the AVN002/AVN042/AVN052 mask. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p>

JOB-CLASS	Input/output parameter (BS2000 ENTER parameter). Job class in which the task is classified.
LOG	Input/output parameter Indicates whether the SYSOUT log of the tasks in the net is to be printed out (“_”, “YES”) or not (“NO”), where “_” is the blank character.
JOB-PARAMETER	Input parameter (BS2000 ENTER parameter). Specifies additional attributes for the selected job class. If parameters which cannot be defined directly are to be specified for the BS2000 ENTER call, they have to be entered in the form _NAME1=value1,NAME2=value2,... The parameters are then passed upon the ENTER call but not validated by AVAS.

For TYPE=EXT/EXX (mask AVN042):

ENTER-FILE	Input/output parameter Name of the BS2000 job or of an S procedure that is to be started for TYPE=EXT/EXX under the BS2000 user ID. The file must exist under this user ID. The default value is the name without bk_ from the structure.
FILE-PASSWORD	Input/output parameter Password of the file specified under ENTER-FILE (only for TYPE=EXT/EXX) {*NONE / password} By default the FILE-PASSWORD field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.

For TYPE=MOD (mask AVN002):

USER-PAR-FILE	Input/output parameter Name of a file with parameters for the modification of the job or the procedure with TYPE=MOD. {*NONE/*STD/filename/libname(element,type)}
*NONE	No job-specific USER-PARAM-FILE is used.
*STD	The name of the USER-PARAM-FILE is sought using PARAM.\$ug.jobname.index in the case of CREATE-PROD-NET.

- *filename The parameters in this file are used to modify the job or procedure.
- *libname(element,type)
 The parameters are sought in the specified element of the defined library with the specified type of library department. If the type of library department is not specified, type S is used.
 The maximum input length is 54 characters.

Note

If specification of a user ID is mandatory (see the manual "AVAS for the Administrator" [2]), specification of ENTER-PARAMS=NET (mask AVN002/AVN042/AVN052) must be accompanied by the entry of either a value for USER (mask AVN002/AVN042/AVN052) or a value for NET-USER (mask AVN001). If this is not the case, the task will not subsequently be started by the run control system and will be given the ERROR status.

The same applies if ENTER-PARAMS=LOGON is specified without a user ID in the /SET-LOGON-PARAMETERS (or /LOGON) statement of the task.

AVN003 – Display and input parameters for structure elements with FU=C and TYPE=JVA

This mask is used to specify the structure elements for condition control via job variables.

```

AVAS-Vnn.yxmn/AVN003  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=...  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1          ...  *ALL.....
                   2    ...  *ALL.....
                   3    ...  .....

COND-JVA-NAME=.....
JVA-POSITION =...  JVA-LENGTH=...  JVA-PASSWORD=.....
COND-VALUE      =.....
.....
.....

CMD:.....  OPR:.....
MSG:.....
    
```

- COND-NAME Output parameter
Name of the condition description, as specified in mask AVN004.
- NET-NAME Output parameter
Name of the net
- COND-TEXT Input/output parameter
Brief text (up to 120 characters) describing the condition.
- COND-DOC Input/output parameter
{*STD / element / *NONE}
Documentation of the condition.
- *STD The documentation is sought or stored under the standard name
\$ugnet_netname.condname in the DOCLIB.

element	<p>Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
COND-INDEX	<p>Output parameter Index level of the net at which the job variable is to be monitored.</p>
FU	<p>Output parameter Function of the structure element</p>
C (Compare)	<p>This element in the net description is a condition, for satisfaction of which the system will wait.</p>
COND-TYPE	<p>Output parameter Shows the value for TYPE, as entered via AVN004</p>
JVA	<p>The net identified via NET-NAME is meant to wait at the index level specified under COND-INDEX until the specified job variable contains the value specified under COND-VALUE from the specified position and in the defined length.</p>
SYNC-INDEX	<p>Input/output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 258, SYNC-INDEX parameter).</p>

RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Input parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart.</p> <p>END must not be specified with restart tasks.</p>
RESTART-NAME	<p>Input parameter</p> <p>Name for selecting structure elements at the specified restart index level.</p> <p>{name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>

*NAME Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- With the functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET the default value of the RESTART-NAME parameter depends on RESTART-INDEX:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE Input parameter
Type of restart processing involved.
{RESTART / NORMAL}

RESTART Restart with execution of restart statements #RA, #RI and #RU.

NORMAL Restart without execution of restart statements #RA, #RI and #RU.

Note

Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.

AUTOMATIC	Input parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
COND-JVA-NAME	Input/output parameter {jvname / *NONE}
jvname	Name of the job variable whose value is to be checked from the specified position in the specified length. The name must be specified with both catalog ID and user ID. The job variable must be shareable.
*NONE	The condition is regarded as satisfied.
JVA-POSITION	Input/output parameter
jvpos	Position within the value range of the job variable as of which the value is to be checked. Default value: 001
JVA-LENGTH	Input/output parameter
jvlen	Length of the value of the job variable to be checked. Default value: 001

JVA-PASSWORD	<p>Input parameter</p> <p>If the job variable is password-protected, the password must be specified here.</p> <p>{*NONE / password}</p>
*NONE	The job variable is read without a password.
password	<p>C'....' or '....': 1–4 alphanumeric characters</p> <p>X'....': 1–8 hexadecimal characters</p> <p>AVAS handles the password specifications C'....' and '....' in the same way.</p> <p>By default the JVA-PASSWORD field in the mask is blanked out. AVAS users can make it visible using the <code>VISIBLE</code> operation (see page 33) or #71 provided they are authorized to use this operation.</p> <p>If the field contents are cleared, *NONE is set.</p>
COND-VALUE	<p>Input/output parameter</p> <p>{= jvvalue / > jvvalue / < jvvalue / >= jvvalue / <= jvvalue / <> jvvalue}</p>
jvvalue	jvvalue is the value with which the job variable is compared. jvvalue is specified without quotes and only as a C string. The length of the value must match the specification in the JVA-LENGTH parameter.
= jvvalue	The condition is met if the job variable is equal to jvvalue.
> jvvalue	The condition is met if the value of the job variable is greater than jvvalue.
< jvvalue	The condition is met if the value of the job variable is less than jvvalue.
>= jvvalue	The condition is met if the value of the job variable is greater than or equal to jvvalue.
<= jvvalue	The condition is met if the value of the job variable is less than or equal to jvvalue.
<> jvvalue	The condition is met if the value of the job variable is not equal to jvvalue.

AVN008 – Display and input parameters for structure elements with FU=C and TYPE=NET/JOB/RES/VAL

This mask is used to specify structure elements which depend on nets, jobs (including FT requests), resources and defined values, for use in condition control.

```

AVAS-Vnn.yxm/AVN008  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME           =..... NET-NAME=.....
COND-TEXT           =.....
COND-DOC            =.....
COND-INDEX          =...  FU=...  COND-TYPE=...
SYNC-INDEX          =...
RESTART             -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1         ...
                   2  ...
                   3  ...

CONDITION CREATED BY: NET-NAME=..... INDEX=...

OCCURE-VALUE = .....
ERROR-VALUE  = .....
              SELECT-RESTART-VARIANT=..

CMD:..... OPR:.....
MSG:.....
    
```

COND-NAME

Output parameter
Name of a condition

\$ug_jobname1-24 (TYPE=JOB)

Name of the structure element, the status of which is to be tested. If a user group is specified when a condition is tested, it must always be the user group of the net under which the structure element is executed. This applies even if the system user group was specified in the condition.
FT requests are also handled under TYPE=JOB.

\$ug_netname1-12 (TYPE=NET)

Name of the net, the status of which is to be tested.

\$ug_resname1-24 (TYPE=RES)

Name of the condition for a resource

\$ug_valname1-24 (TYPE=VAL)

Name of the condition for a defined value

Note

The name of a condition within an AVAS system must be unique across all condition types.

NET-NAME	Output parameter Name of the net.
COND-TEXT	Input/output parameter Brief text (up to 120 characters) describing the condition.
COND-DOC	Input/output parameter {*STD / element / *NONE} Documentation of the condition.
*STD	The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.
element	Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE
COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.

FU	Output parameter Function of the structure element
C (Compare)	This element in the net description is a condition, for satisfaction of which the system will wait.
COND-TYPE	Output parameter Shows the value for TYPE, as entered via AVN004 Type of the structure element
NET	The net processing waits for a condition of another net to be satisfied.
JOB	The net processing waits for a condition of another job or FT request to be satisfied.
RES	The net processing waits for a condition for a resource to be satisfied (RESSOURCE).
VAL	The net processing waits for a condition to be satisfied with a defined value (VALUE).
SYNC-INDEX	Input/output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 258 , SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Input parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.
END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END must not be specified with restart tasks.

RESTART-NAME	Input parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- With the functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET the default value of the RESTART-NAME parameter depends on RESTART-INDEX:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input parameter Type of restart processing involved. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Input parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

CONDITION CREATED BY

Input/output parameter

Name and index of the net which created the condition description.
If COND-TYPE=RES and VAL, no input is permitted.

NET-NAME

{ $\$$ ug_netname1-12[_date[_time]] / *NONE}

The full name of the net with PLAN-START need only be specified if the condition description with the smallest positive time difference with respect to PLAN-START is not to be evaluated, but the one with the specified PLAN-START is. *NONE may only be specified in conjunction with COND-TYPE=NET.

COND-TYPE=JOB

The user group for the NET-NAME parameter is always the same as the user group for the COND-NAME parameter.

COND-TYPE=NET

The specified net name ($\$$ ug_netname) must always match the specified structure element name (COND-NAME). The parameter is preset to the parameter value NAME from the AVN004 mask.

If *NONE is specified, the comparison with the name of the structure element is omitted and the condition is taken to be satisfied without a check being performed.

INDEX

An index only needs to be specified for a JOB condition if there are several descriptions with the same job name and net name.

If COND-TYPE=NET is specified, no input is allowed.

OCCURE-VALUE

Input/output parameter

{status / status, ... / c-string / x-string}

Event for dependency control

For TYPE=NET

If no entry is made, the parameter is preset with the value ENDED.
The valid entries are:

ENDED MISSING ABENDED IGNORED

For TYPE=JOB

If no entry is made, the parameter is preset with the value ENDED.
The valid entries are:

NO-PLAN ABENDED DELETED IGNORED MISSING
ENDED ERROR SKIPPED NO-SUBMIT

For TYPE=RES If no entry is made, the parameter is preset with the value FREE. If the condition is satisfied, the resource is occupied according to the query.
The valid entries are:

FREE	SHARE(uu) SHARE(uu), FREE
FREE	If the condition description has the status FREE, the condition is satisfied and the resource is given the status EXCLUSIVE.
SHARE(uu)	If the condition entry is in the SHARE or FREE state and the resource can be used at least uu times still, then the condition is satisfied. The resource is allocated uu times in the SHARE mode.
SHARE(uu), FREE	If the condition entry is in the SHARE or FREE state and the resource can be used at least uu times still, then the condition is satisfied. The resource is allocated uu times in the SHARE mode.

If uu is not specified, then uu is set to 1.

For TYPE=VAL The parameter does not have a preset value, but instead an entry is requested.
The parameter can be used to enter values linked by operators.
For condition testing, the following operators are permitted:

.EQ. .LT. .GT. .LE. .GE. .NE. .OR.

Input format:

OP,pos,value
(OP,pos,value)
(OP,pos,value),(OP,pos,value),...

– OP – comparison operation

= / EQ - equal to

< / LT - less than

> / GT - greater than

≤ / LE - less than or equal to

≥ / GE - greater than or equal to

≠ / NE - not equal to

If no comparison operation is specified, OP=EQ is assumed. The parameter and the comma are both omitted (pos,value).

– pos – start position for a value specification

nnn

If pos is not specified, pos=1 is assumed.

Comparison values with neither OP nor pos are specified directly (value).

If a comparison operation is specified without a start position, the corresponding comma must nevertheless be inserted (OP,,value).

– value – comparison value

'c-string'

C'c-string'

X'x-string'

Current value of the condition description in the run control file. The area comprises 128 bytes.

Note

When a condition description is created, positions for which no value is assigned are set up with X'40'.

–),(– logical OR operation

If there are multiple condition tests, their specifications must be enclosed in parentheses, which links them by ORs.

Permissible input formats are:

value
 (value)
 (value),(value),...
 pos,value
 (pos,value),(pos,value),...
 OP,pos,value
 (OP,pos,value)
 (OP,pos,value),(OP,pos,value),...
 OP,,value
 (OP,,value)
 (OP,,value),(OP,,value),...

These may be combined in any required way, e.g.:

(value),(OP,,value),(pos,value),...

The length of the comparison value is determined by the length of c-string or x-string, as appropriate.

pos + length -1 may not exceed 128.

Apostrophes within a c-string must be repeated a second time.

ERROR-VALUE

Input/output parameter

{status / status, ... / c-string / x-string / *NONE}

Event for dependency control

For TYPE=NET

The parameter does not have a preset value.

The valid entries are:

ENDED MISSING ABENDED IGNORED

For TYPE=JOB

The parameter does not have a preset value.

The valid entries are:

NO-PLAN ABENDED DELETED IGNORED MISSING
 ENDED ERROR SKIPPED NO-SUBMIT

For TYPE=RES

The parameter does not have a preset value.

The valid entries are:

MISSING CREATED FREE SHARE ERROR
 EXCLUSIVE

For TYPE=VAL The format of the entries is subject to the rules described for OCCURE-VALUE.
Otherwise, *NONE can be specified from column 1 on. If the input field is blank, ERROR-VALUE is given the value *NONE.

SELECT-RESTART-VARIANT

Input/output parameter
{1 / 2 / 3}

This parameter is assigned to the ERROR-VALUE parameter. It presets a restart variant to be used in the event of an error. Processing takes place in accordance with the restart variant set for the jobs by means of the monitor job variable.

If no entry is made here, the restart variants for the condition are searched for AUTOMATIC=YES, as in the case of jobs, and if a restart variant is found this is used to automatically initiate a restart. If no restart variant with AUTOMATIC=YES is found, the restart must be initiated by the RESTART-NET statement.

AVN015 - Display and input parameters for structure elements with FU=S and TYPE=NET

The structure elements to start and control subnets via a hypernet are described in this mask.

The subnet is started and monitored by the AVAS run control system when the corresponding structure element with FU=S and TYPE=NET starts. A job variable called AVAS-SUBNET-JV is used for control purposes.

```

AVAS-Vnn.yxmn/AVN015      SUBNET-DESCRIPTION FOR NET-STRUC      tt.mm.jjjj/hh:mm:ss
SUBNET-NAME =..... NET-NAME=.....
SUBNET-TEXT =.....
SUBNET-DOC =.....
SUBNET-INDEX =... FU=. SUBNET-TYPE=...
SYNC-INDEX =...
RESTART      -INDEX  -NAME                                -TYPE      AUTOMATIC
  VARIANT=1    ...    .....                                .....
              2    ...    .....                                .....
              3    ...    .....                                .....

CMD:..... OPR:.....
MSG:.....
    
```

- SUBNET-NAME Output parameter
Name of the subnet

- NET-NAME Output parameter
Name of the hypernet to which the structure element to start and control the subnet is assigned.

- SUBNET-TEXT Input parameter
Brief text (up to 120 characters) describing the subnet in greater detail.

SUBNET-DOC	<p>Input/output parameter {*STD / element / *NONE} Documentation of the subnet.</p>
*STD	<p>The documentation is sought or stored under the standard name \$bknet_netname.subnetname in the DOCLIB.</p>
element	<p>Element name for the documentation of the task in the DOCLIB or DOCSYS: \$bk_docname \$bksys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$bksys is specified, the documentation is sought in the DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used. If the DOCUMENT operation is entered for the task, the following message is output: AVS4090 THE DOCUMENT FUNCTION IS NOT AVAILABLE</p>
SUBNET-INDEX	<p>Output parameter Index level of the subnet index</p>
FU	<p>Output parameter The function of the structure element</p>
S (Subnet)	<p>The function of this structure element in the net description is to start and control subnets.</p>

SUBNET-TYPE	<p>Output parameter Type of the structure element Shows the value for TYPE as entered into mask AVN004, indicating whether, and if so in what form, the subnet is to be executed by the hypernet.</p>
NET	<p>The subnet is planned (CREATE-PLAN-NET), modified (CREATE-PROD-NET) and released for processing (SUBMIT-NET) with the hypernet. The status of the subnet is shown for the structure element in the hypernet.</p>
SYNC-INDEX	<p>Input/output parameter Index level at which the subnet is to be synchronized. {index / NXT /END}</p>
index	<p>This value of the SYNC-INDEX must be greater than the value for SUBNET-INDEX. An index level of a restart task may not be specified. The system waits at this index level for the subnet to terminate.</p>
NXT	<p>The subnet is synchronized at the next higher index level.</p>
END	<p>The subnet is synchronized at normal end of net (freestanding subnet).</p>
RESTART-VARIANT	<p>Output parameter Three restart variants are permitted for each subnet. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out for subnets using the default values RESTART-TYPE=NORMAL and AUTOMATIC=NO.</p> <p><i>Note</i></p> <p>RESTART-TYPE=RESTART and AUTOMATIC=YES can be specified for the structure element of the subnet in the ERROR state.</p> <p>Structure elements of subnets cannot be placed in the WAITING status any more after the ENDED or SKIPPED state is reached and cannot be restarted and controlled via the hypernet for this reason.</p>

RESTART-INDEX	<p>Input parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the 3 restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of the net). A restart is permissible for all index ranges (001-999) in all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart, the structure element (and all other tasks that are dependent on it) should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p>
RESTART-NAME	<p>Input parameter</p> <p>Name for selecting structure elements at the specified restart index level.</p> <p>{name /*ALL/*NAME/*ERROR}</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>All structure elements at the restart index level that have the status ERROR are to be executed again. The *ERROR specification is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.</p>
*NAME	<p>Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.</p>

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.

- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX has the same value as the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value. If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	<p>Input parameter Type of restart processing involved. { RESTART | NORMAL }</p> <p>It is only reasonable to specify NORMAL for structure elements to start subnets. If restart statements are to be processed, then RESTART can be specified for structure elements of the subnet in the ERROR state.</p>
RESTART	Restart with execution of restart statements #RA, #RI and #RU
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<p><i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.</p>
AUTOMATIC	<p>Input parameter Type of restart processing. Only NO is permitted for structure elements to start subnets. YES can be specified for a structure element of the subnet in the ERROR state.</p>
NO	<p>Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net regarding the jobs in the subnet can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>

AVN016 – Display and input of the parameters for structure elements with FU=F and TYPE=TRA

The structure elements for executing FT requests are specified in this mask.

The request is started and monitored by the AVAS run control system using the BS2000 command TRANSFER-FILE when the corresponding structure element with FU=F and TYPE=TRA starts. A job variable is used for control purposes.

File transfer with openFT, the TRANSFER-FILE command and the operands used by AVAS are described in detail in the "openFT User Guide" [11].

```

AVAS-Vnn.yxmn/AVN016 FILE-TRANSFER-DESCR. FOR NET-STRUC tt.mm.jjjj/hh:mm:ss
FT-NAME =..... NET-NAME=.....
FT-TEXT =.....

FT-DOC =.....
FT-INDEX =... FU=. FT-TYPE=...
SYNC-INDEX =...
RESTART -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1 ...
          2 ...
          3 ...
DIRECTION =... PARTNER-NAME=... REMOTE=...
LOCAL-FILE =.....
REMOTE-FILE =.....
REMOTE-TRANSFER-ADMISSION=.....

FT-PARAMETER =.....

CMD:..... OPR:.....
MSG:.....
    
```

FT-NAME	Output parameter
ftname	Name of the request
NET-NAME	Output parameter
	Name of the net description to which the structure element for executing FT requests is assigned.
FT-TEXT	Input parameter
	Brief text (up to 120 characters) describing the request in greater detail.

FT-DOC	<p>Input/output parameter {*STD / element / *NONE}</p> <p>Documentation of the request</p>
*STD	<p>The documentation is searched for or stored in DOCLIB under the standard name \$ugnet_netname.jftname.</p>
element	<p>Element name for the documentation of the request in DOCLIB or DOCSYS:</p> <p>\$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>When no user group is specified, the documentation is searched for under the net's user group in DOCLIB. If \$ugsys is specified, the documentation is searched for in DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via mask AVS016.</p>
*NONE	<p>No documentation is used. If the DOCUMENT operation was entered for the request, the following message is issued: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
FT-INDEX	<p>Output parameter Index level of the net at which the request is to execute. index</p>
FU	<p>Output parameter Function of the structure element</p>
F (File Transfer)	<p>This structure element of the net description executes FT requests.</p>
FT-TYPE	<p>Output parameter Type of structure element</p>
TRA	<p>File transfer is started.</p>

SYNC-INDEX	<p>Input/output parameter Index level of the net at which the request is to be synchronized. {index / <u>NXT</u> / END}</p>
index	This value must be greater than the value for FT-INDEX and may not contain an index level from the restart index levels. The system waits at this index level for the request to terminate.
<u>NXT</u>	The request is synchronized at the next highest index level.
END	The request is synchronized at normal end of net (freestanding request).
RESTART-VARIANT	<p>Output parameter Three restart variants are permitted for each request. At least one index must be specified for a restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified using the system parameters.</p>
RESTART-INDEX	<p>Input parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this restart index.</p>
index	Index level to be used in the event of a restart (restart of the net). A restart is permissible for all index ranges (001–999) in all structure elements, regardless of function and type.
END	<p>In the event of a restart (restart of the net), the structure element and all requests that are dependent on it should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END may not be specified with restart requests.</p>
RESTART-NAME	<p>Input parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}</p>
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again. name must be unique at the specified index level.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be executed again.

*ERROR	<p>All structure elements at the restart index level that have the ERROR status are to be executed again. The *ERROR parameter is only processed if RESTART-INDEX is the same as ERROR-INDEX.</p> <p>In all other cases the restart will be rejected.</p>
*NAME	<p>Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if RESTART-INDEX is the same as ERROR-INDEX.</p> <p>In all other cases the restart will be rejected.</p>
	<p><i>Notes</i></p> <ul style="list-style-type: none"> – In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases the restart will be rejected. – With the functions CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET the default value of the RESTART-NAME parameter depends on RESTART-INDEX: If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value. If RESTART-INDEX is greater or less than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.
RESTART-TYPE	<p>Input parameter Type of restart processing. {<u>RESTART</u> / NORMAL}</p>
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.

Note

This distinction is irrelevant for FT requests because no job description (JCL) exists with RSTART statements.

AUTOMATIC	<p>Input parameter Type of restart processing. {YES / <u>NO</u>}</p>
YES	<p>Automatic restart</p> <p>The restart is initiated automatically without user input.</p> <p>If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).</p> <p>The restart variants are checked for AUTOMATIC=YES in the order RESTART-VARIANT 1, 2, 3.</p>
<u>NO</u>	<p>Manual restart</p> <p>The restart must be initiated using the RESTART-NET statement. Modifications to the net can be performed using the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>
DIRECTION	<p>Input/output parameter</p> <p>Direction of file transfer (corresponds to the TRANSFER-DIRECTION operand of the TRANSFER-FILE command).</p> <p>{<u>TO</u> / FROM}</p>
<u>TO</u>	<p>The local system is the sending system; the files are sent to the remote system.</p>
FROM	<p>The local system is the receiving system; the files are fetched from the remote system.</p>
PARTNER-NAME	<p>Input parameter</p> <p>Symbolic name of the remote host, defined by the FT administrator. Corresponds to the PARTNER-NAME operand of the TRANSFER-FILE command.</p> <p>This is a mandatory parameter.</p>

REMOTE	<p>Input/output parameter</p> <p>Defines the type of the remote system (corresponds to the REMOTE-PARAMETER operand of the TRANSFER-FILE command).</p> <p><u>{*BS2000}</u></p> <p><u>*BS2000</u> The remote system is a BS2000 system.</p>
LOCAL-FILE	<p>Input parameter</p> <p>Specifies the name of the file in the local system (corresponds to the FILE-NAME operand in the LOCAL-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-FILE	<p>Input parameter</p> <p>Specifies the name of the file in the remote system (corresponds to the FILE-NAME operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-TRANSFER-ADMISSION	<p>Input parameter</p> <p>Access authorization on the remote system (corresponds to the TRANSFER-ADMISSION operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p> <p>By default the REMOTE-TRANSFER-ADMISSION field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p>
FT-PARAMETER	<p>Input parameter</p> <p>Specifies further operands of the TRANSFER-FILE command for which no AVAS parameters are available.</p> <p>In particular follow-up processing for the local or remote system can be defined here.</p> <p>The syntax of the TRANSFER-FILE command must be complied with. AVAS does not check the syntax.</p>

Example

```
REM-PAR=*BS2(SUCC-P=' /MDUSW ON=23;DEL-FILE F-NAME=AAAAA')
```

Notes

- The AVAS run control system creates the following TRANSFER-FILE command from the parameters:

```
/TRANSFER-FILE TRANS-DIR=*direction,PARTNER=partner-name
,LOC=*PAR(MONJV=<jv-name in avas-standard-syntax>,FILE=local-file
,TRANS-ADM=*PAR(net-user,net-acc,net-pass))
,REM=remote(FILE=remote-file
,TRANS-ADM=remote-transfer-admission)
,ft-parameter
```

The specifications for the TRANSFER-ADMISSION of the local system are compiled from the NET-USER, NET-ACCOUNT and NET-PASSWORD entries in the net definition. The request then runs for this ID, and the local file is by default searched for or created there. If NET-USER is not specified, the local TRANSFER-ADMISSION is omitted and the FT request is started for the ID under which the run control system runs.

Because of the authorization concept of openFT, only the ID under which the request was started, i.e. the ID of the run control system, has access to this request (SHOW-FILE-TRANSFER, CANCEL-FILE-TRANSFER).

- The command is called using the CMD macro, and execution is monitored using the MONJV.
- Depending on the LIFE-TIME, the request may be assigned a condition description of the type JOB.

AVN025 - Display and input of the plan data for structure elements with FU=S and TYPE=NET

The structure elements to start and control subnets are described in this mask.

The subnet is started and monitored by the AVAS run control system. A job variable called AVAS-SUBNET-JV is used for control purposes

The following is to be taken into account when planning a subnet:

Whether or not a subnet within a hypernet comes to the planning stage depends solely on the settings for the structure element with FU=S and TYPE=NET. When forming the processing of the net, a structure element with FU=S is added to the execution if a corresponding symdat (without the "!" prefix) or *STD is entered (like for standard nets) in the plan data (SYMDAT parameter in mask AVN025).

If there is no symdat entered in the net plan data in the subnet, then the start parameters LATEST-START, DELAY-SOLUTION and LIFETIME are added for the structure element with FU=S and TYPE=NET to the net parameters of the subnet. DELAY-SOLUTION is supplied with the value START for the structure element. This ensures that the subnet will be started. The handling of DELAY-SOLUTION occurs in the subnet when the subnet is to be started.

If there is a symdat with a "!" prefix entered in the net plan data in the subnet (mask AVN020), the start parameters from there are used if the hypernet with this symdat is planned via the calendar. The LIFE-TIME parameter on the structure element has no meaning in this case. A condition entry for the subnet is only created if a corresponding value is specified for the subnet.

The checks for PLAN-START and the start parameters in the subnet are performed against the calendar with which the hypernet was planned.


```

AVAS-Vnn.yxmn/AVN025   SUBNET-DESCRIPTION FOR NET-STRUC   tt.mm.jjjj/hh:mm:ss

SUBNET-NAME =..... NET-NAME=.....
SUBNET-TEXT =.....

SUBNET-INDEX =... FU= SUBNET-TYPE=...
SELECT-TURNUS=.....

M SYMDAT                                LATEST-  DELAY-  LIFE-TIME
      . START      SOLUTION
      . .....
      . .....
      . .....
      . .....
      . .....
      . .....
      . .....
      . .....
      . .....
      . .....
      . .....
      . .....
      . .....

CMD:..... OPR:.....
MSG:.....
    
```

- SUBNET-NAME** Output parameter
Name of the subnet
- NET-NAME** Output parameter
Name of the net description to which the structure element to start and control the subnet is assigned.
- SUBNET-TEXT** Input parameter
Brief text (up to 120 characters) describing the subnet in greater detail.
- SUBNET-INDEX** Output parameter
Index level of the subnet
{index}
- FU** Output parameter
The function of the structure element
- S (Subnet)** The function of this structure element in the net description is to start and control subnets.

SUBNET-TYPE	Output parameter Type of the structure element
NET	The subnet is planned (CREATE-PLAN-NET), modified (CREATE-PROD-NET) and released for processing (SUBMIT-NET) with the hypernet. The status of the subnet is shown for the structure element in the hypernet.
SELECT-TURNUS	Input parameter Characteristic used in selecting the condition when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the task will always be executed. The task will be executed if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan dates.
D (Delete)	The marked plan date is deleted.
Y (Yes)	The value shown in mask AVN021 for the plan date can be modified.
N (No)	All unmarked plan dates can be modified. <i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the plan data in the repositioned work window are presented for modification.

SYMDAT	<p>Input/output parameter</p> <p>Characteristic used in selecting the task or subnet when planning the processing of the net or hypernet.</p> <p>{*NONE / *STD / symdat / [\pm]symdat[\pmsymdat]...}</p>
*NONE	<p>If the net is planned without a symbolic start time (planning without calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are copied from the *NONE entry.</p> <p>The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.</p> <p>The second entry may be either *STD or symdat. For the third to 51st entries, only symdat is permitted.</p>
*STD	<p>The structure element is always selected during planning. The associated start parameters are copied from this entry.</p> <p>*STD is only permitted as the second entry.</p> <p>Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p> <p>The start time of the subnet is that of the hypernet.</p>
symdat	<p>When a symbolic start time, SYMDAT-NAME, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START and DELAY-SOLUTION are then used.</p> <p>This entry is only used if the second entry is not *STD.</p> <p>The start time of the subnet is the time specified in the subnet as !symdat. If no !symdat is specified in the subnet the start time of the hypernet is used.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>

[±]symdat[±symdat]...	When the net is planned using a symbolic start date, symdat's of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.
LATEST-START	Input/output parameter The latest start time for the subnet relative to the planned start time in the net name (PLAN-START). {nnn.hh.mm / *nn.hh.mm / *NONE} If the subnet is planned with the parameters of the structure element (the corresponding symdat is not entered in the plan data of the subnet), then LATEST-START is added to the start parameters of the subnet.
nnn.hh.mm	Date and time span relative to PLAN-START. nnn is the number of calendar days, from 000 to 999.
*nn.hh.mm	Date span relative to PLAN-START, and absolute time. nn is the number of calendar days, from 00 to 99.
*NONE	Any delay in the starting the task is be accepted. If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.
DELAY-SOLUTION	Input/output parameter Measure to be taken if the test is not timely (LATEST-START is passed). {START / IGNORE / CANCEL} If nothing is specified, the value defined for DEFAULT-JOB-DELAY via the generation parameters is used.
START	The subnet is to be started.
IGNORE	The subnet is not to be started.

CANCEL	<p>The subnet is not started and is considered to have terminated abnormally.</p> <p><i>Note</i></p> <p>If the subnet was selected with the parameters of the structure element FU=S and TYPE=NET using a symdat and this symdat (as !Symdat) is not found in the subnet, the subnet is assigned the start parameters LATEST-START, DELAY-SOLUTION and LIFE-TIME from FU=S.</p> <p>DELAY-SOLUTION=START is set for the structure element.</p> <p>If the subnet is to be processed independently from the hypernet, then the use must change NET-TYPE > 4 to NET-TYPE < 4 via MODIFY-SUBMIT-NET. This converts the NET-WAIT status to the WAITING status and the subnet is controlled according to the run control system start parameters.</p> <p>If the subnet is not to execute, then it must be placed in the ABENDED state by the user via CANCEL-NET with CANCEL-TYPE=HARD.</p>
LIFE-TIME	<p>Input/output parameter</p> <p>LIFE-TIME specifies the 'end-of-net' event for this subnet when the subnet is planned with the parameters of the associated structure element.</p> <p>When the run control file is reorganized, the event entry is not deleted until this time span has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it.</p> <p>The life time is relative to the value of PLAN-START. {nnn.hh.mm / *STD / *NONE}</p>
nnn.hh.mm	<p>When the net is released by SUBMIT-NET, a condition description for the subnet is recorded in the run control file.</p> <p>The time span is relative to PLAN-START and is equal to nnn calendar days, hh hours and mm minutes.</p>
*STD	<p>Default value for LIFE-TIME defined in the system parameter DEFAULT-LIFE-TIME.</p> <p>When the net is released by SUBMIT-NET, a condition description for the subnet is recorded in the run control file.</p>
*NONE	<p>When the net is released by SUBMIT-NET, no condition description for the subnet is recorded in the run control file.</p>

AVN030 – Display and input parameters for structure elements with FU=A/M/D and TYPE=RES/VAL

This mask is used to specify structure elements for creating, modifying and deleting resources and defined values.

```

AVAS-Vnn.yxmn/AVN030  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=.  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1  ...  .....
              2  ...  .....
              3  ...  .....

COND-VALUE            =.....

CMD:..... OPR:.....
MSG:.....
    
```

- COND-NAME Output parameter
Name of a condition

\$resname1-24 (TYPE=RES)
Name of the condition for a resource

\$valname1-24 (TYPE=VAL)
Name of the condition for a defined value

\$ug_valname1-24 (TYPE=VAL)
Name of the condition for a defined value

Note

The name of a condition within an AVAS system must be unique across all condition types.
- NET-NAME Output parameter
Name of the net.
- COND-TEXT Input/output parameter
Brief text (up to 120 characters) describing the condition.

COND-DOC	<p>Input/output parameter {*STD / element / *NONE}</p> <p>Documentation of the condition.</p>
*STD	<p>The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.</p>
element	<p>Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
COND-INDEX	<p>Output parameter Index level of the net at which the job variable is to be monitored.</p>

FU	Output parameter Function of the structure element
A (Add)	This element of the net description generates a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).
M (Modify)	This element of the net description modifies a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).
D (Delete)	This element of the net description deletes a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).
COND-TYPE	Output parameter Shows the value for TYPE, as entered via AVN004
RES	Condition description for a resource.
VAL	Condition description for a defined value
SYNC-INDEX	Input/output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 258 , SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Input parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.

END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END must not be specified with restart tasks.
RESTART-NAME	Input parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Note

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- With the functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET the default value of the RESTART-NAME parameter depends on RESTART-INDEX:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input parameter Type of restart processing involved. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Input parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

COND-VALUE Input/output parameter
 Status (for TYPE=RES) or value (for TYPE=VAL) of the condition description. For FU=D, no status or value can be defined.
 The condition description in the run control file is modified by the predefined status.

For TYPE=RES Permitted entry for the status to be predefined:

FU	TYPE	Input	Meaning
A	RES	mmm, CREATED	The resource is set up mmm times as a shareable resource and is not yet available.
		mmm,FREE	The resource is set up mmm times as a shareable resource and is available.
		mmm,ERROR	The resource is set up mmm times as a shareable resource and is not yet available.
		mmm, SHARE[(uu)]	The resource is set up mmm times as a shareable resource and is allocated uu times in SHARE mode by the net. If uu is not specified, it is set to 1.
		mmm, EXCLUSIVE	The resource is set up mmm times as a shareable resource and is allocated by the net in EXCLUSIVE mode.
D	RES		A resource can only be deleted (FU=D,TYPE=RES), if it has the status FREE (no net has allocated the resource) , CREATED or ERROR and no net is waiting to allocate the resource.
M	RES	FREE	The resource is released when it is allocated by the net or when the status is changed from CREATED or ERROR to FREE.
		CREATED	The resource can no longer or cannot yet be used.
		ERROR	The resource can no longer be used because an error has occurred.

The values mmm and uu are defined as follows:

mmm	MAX-USING-SHARE: 2..100 Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100.
uu	Number of quotas of a resource allocated in the SHARE mode. If the value <uu> is not specified, then it is set to the value 1. The value uu must be smaller than the value mmm for MAX-USING-SHARE.

Note

If an allocated resource is released with SHARE[(uu)] for FU=M, TYPE=RES with COND-VALUS=FREE, then the USING record for the net is searched for and deleted. The USING counter for the resource is decremented by the value uu. If a net has allocated a resource with SHARE[(uu)] via several structure elements where FU=C with TYPE=RES, then the entry with the oldest date in the time stamp is searched for and deleted. This is also true when the resource was allocated via COND-VALUE=SHARE[(uu)] for FU=A with TYPE=RES. Partial release of an allocated resource via FREE[(uu)] is not permitted.

For TYPE=VAL value
 pos,value
 (value)
 (pos,value)
 (pos,value),(pos,value),...

or in combinations, e.g.:

(value),(pos,value),...

A corresponding entry is made in the condition description in the run control file.

For the function A (Add), any positions which are not defined are given the value X'40'.

Note

When condition descriptions are created, no check is made on overlaps.

AVN031 – Display and input parameters for structure elements with FU=D and TYPE=NET/JOB

This mask is used to specify structure elements for deleting NET and JOB type condition descriptions.

```

AVAS-Vnn.yxmn/AVN031  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=.  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1          ...
                   2 ...
                   3 ...

CONDITION CREATED BY: NET-NAME=..... INDEX=...

CMD: ..... OPR: .....
MSG: .....
    
```

COND-NAME

Output parameter
Name of the condition

\$ug_jobname1-24 (TYPE=JOB)

Name of the structure element, the status of which is to be tested. If a user group is specified when a condition is tested, it must always be the user group of the net under which the structure element is executed. This applies even if the system user group was specified in the condition.

\$ug_netname1-12 (TYPE=NET)

Name of the net, the status of which is to be tested.

Note

The name of a condition within an AVAS system must be unique across all condition types.

NET-NAME

Output parameter
Name of the net.

COND-TEXT	Input/output parameter Brief text (up to 120 characters) describing the condition.
COND-DOC	Input/output parameter {*STD / element / *NONE} Documentation of the condition.
*STD	The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.
element	Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE
COND-INDEX	Output parameter Index level of the net at which the job variable is to be monitored.
FU	Output parameter Function of the structure element
D (Delete)	This element of the net description deletes a condition description for a net or a job.
COND-TYPE	Output parameter Type of the structure element Shows the value for TYPE, as entered via AVN004
NET	Condition description for a net.
JOB	Condition description for a job or FT request.

SYNC-INDEX	<p>Input/output parameter</p> <p>Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 258, SYNC-INDEX parameter).</p>
RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Input parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p> <p>END must not be specified with restart tasks.</p>
RESTART-NAME	<p>Input parameter</p> <p>Name for selecting structure elements at the specified restart index level.</p> <p>{name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>

*NAME Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE Input parameter
Type of restart processing involved.
{RESTART / NORMAL}

RESTART Restart with execution of restart statements #RA, #RI and #RU.

NORMAL Restart without execution of restart statements #RA, #RI and #RU.

Note

Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.

AUTOMATIC	<p>Input parameter Type of restart processing {YES / <u>NO</u>}</p>
YES	<p>Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task.</p> <p>If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).</p> <p>If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).</p>
<u>NO</u>	<p>Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>
CONDITION CREATED BY	<p>Input/output parameter Name and index of the net which created the condition description.</p>
NET-NAME	<p><code>\$ug_netname1-12[_date[_time]]</code> The full name of the net with PLAN-START need only be specified if the condition description with the smallest positive time difference with respect to PLAN-START is not to be deleted, but the one with the specified PLAN-START is.</p>
COND-TYPE=JOB	<p>The user group for the NET-NAME parameter is always the same as the user group for the COND-NAME parameter.</p>
COND-TYPE=NET	<p>The specified net name (<code>\$ug_netname</code>) must always match the specified structure element name (COND-NAME). The parameter is preset to the parameter value NAME from the AVN004 mask.</p>
INDEX	<p>An index only needs to be specified for a JOB condition if there are several descriptions with the same job name and net name. If COND-TYPE=NET is specified, no input is allowed.</p>

AVN032 – Display and input parameters for structure elements with FU=W and TYPE=TIM

This mask is used to specify structure elements for timed waits.

The wait time is defined by display and entry of the plan data (see mask AVN023 on [page 328](#)).

```

AVAS-Vnn.yxmn/AVN032  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=...  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME              -TYPE      AUTOMATIC
  VARIANT=1           ...      .....            .....      ...
                   2           .....            .....      ...
                   3           .....            .....      ...

CMD:..... OPR:.....
MSG:.....
    
```

- COND-NAME** Output parameter
 Name of the condition

Note

The name of a condition within an AVAS system must be unique across all condition types.
- NET-NAME** Output parameter
 Name of the net.
- COND-TEXT** Input/output parameter
 Brief text (up to 120 characters) describing the condition.

COND-DOC	<p>Input/output parameter {*STD / element / *NONE}</p> <p>Documentation of the condition.</p>
*STD	<p>The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.</p>
element	<p>Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
COND-INDEX	<p>Output parameter Index level of the net at which the job variable is to be monitored.</p>
FU	<p>Output parameter Function of the structure element</p>
W (Wait)	<p>This element of the net description waits for the termination of a time interval.</p>
COND-TYPE	<p>Output parameter Shows the value for TYPE, as entered via AVN004</p>
TIM	<p>The net identified via NET-NAME is meant to wait at the index level specified under COND-INDEX until the specified time interval is elapsed.</p>

SYNC-INDEX	<p>Input/output parameter</p> <p>Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 258, SYNC-INDEX parameter).</p>
RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Input parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p> <p>END must not be specified with restart tasks.</p>
RESTART-NAME	<p>Input parameter</p> <p>Name for selecting structure elements at the specified restart index level.</p> <p>{name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>

*NAME Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE Input parameter
Type of restart processing involved.
{RESTART / NORMAL}

RESTART Restart with execution of restart statements #RA, #RI and #RU.

NORMAL Restart without execution of restart statements #RA, #RI and #RU.

Note

Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.

AUTOMATIC	Input parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

FU	Output parameter Function of the structure element
J (BS2000 job)	This element of the net description is a structure element for executing BS2000 jobs.
P (Procedure)	This element of the net description is a structure element for executing S procedures.
JOB-TYPE	Output parameter Type of the structure element. Shows the value for TYPE as entered into mask AVN004, indicating whether the task is subject to net modification, and if so in what form. (FU=J/P with TYPE=MOD/STD/EXT, FU=P with TYPE=EXX)
MOD	The task is subject to net modification. It is created with CREATE-PROD-NET.
STD	The task is not subject to net modification. It was not created with CREATE-PROD-NET.
EXT	The task is not managed via AVAS. It is assigned using the file name specified under ENTER-FILE or FILENAME.
EXX	The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
SELECT-TURNUS	Input parameter Characteristic used in selecting the task when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the job will always be brought to execution. The task will be brought to execution if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.

M	<p>Input parameter Mark column for selecting plan data.</p>
D (Delete)	The marked plan data items are deleted.
Y (Yes)	The value shown in mask AVN021 for the plan date can be modified.
N (No)	All unmarked items of plan data can be modified.
	<p><i>Note</i></p> <p>In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.</p>
SYMDAT	<p>Input/output parameter Characteristic used in selecting the task when planning the processing of the net. {*NONE / *STD / symdat / [±]symdat[±symdat]...} Up to 51 entries are possible.</p>
*NONE	<p>If the net is planned without a symbolic start time (planning without calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are set by this entry. The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning. The associated start parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT name , is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START, DELAY-SOLUTION and LIFE-TIME are then used. This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>

[±]symdat[±symdat]...

When the net is planned using a symbolic start date, symdat's of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.

LATEST-START

Input/output parameter

Latest start time for the task, relative to the planned start time in the net name (PLAN-START).

{nnn.hh.mm / *nn.hh.mm / *NONE}

nnn.hh.mm

Date and time span relative to PLAN-START.

nnn is the number of calendar days, in the range 000 to 999.

*nn.hh.mm

Date span relative to PLAN-START, and absolute time.

nn is the number of calendar days, from 00 to 99

*NONE

The task can be started with any required delay.

If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.

DELAY-SOLUTION

Input/output parameter

Measure to be taken if the start is not timely (LATEST-START is passed).

{START / IGNORE / CANCEL}

If nothing is specified, the value defined for DEFAULT-JOB-DELAY via the generation parameters is used.

START

The task should be started.

IGNORE

The task should not be started.

CANCEL

The task will not be started, and is considered to have terminated abnormally.

The job status and net status after the LATEST-START time has been passed depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	JOB-STATUS	NET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

LIFE-TIME	<p>Input/output parameter</p> <p>The lifetime of the "job end" event for this job. When the run control file is reorganized, this event entry will not be deleted until this interval of time has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it.</p> <p>The lifetime is relative to the value of PLAN-START.</p> <p>{nnn.hh.mm / <u>*NONE</u>}</p>
nnn.hh.mm	<p>When the net is released by a SUBMIT-NET or REPEAT-NET, a condition description for the task is entered into the run control file. The time interval is relative to PLAN-START, and is equal to nnn calendar days, hh hours and mm minutes.</p>
<u>*NONE</u>	<p>When the net is released by a SUBMIT-NET or REPEAT-NET, no condition description for the task is entered into the run control file.</p>

FU	Output parameter Function of the structure element
C (Compare)	This element of the net description is a condition which performs a test.
COND-TYPE	Output parameter Shows the value for TYPE, as entered via AVN004. {NET / JOB / RES / VAL / JVA}
SELECT-TURNUS	Input/output parameter Characteristic used in selecting the condition when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected. The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan dates.
D (Delete)	The marked plan date is deleted. The first entry with SYMDAT=*NONE cannot be deleted.
Y (Yes)	The value shown in mask AVN022 for the plan date can be modified.
N (No)	All unmarked plan dates can be modified. <i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.

SYMDAT	<p>Input/output parameter</p> <p>Characteristic used in selecting the condition when planning the processing of the net.</p> <p>{*NONE / *STD / symdat / [±]symdat[±symdat]...}</p>
*NONE	<p>If the net is planned without a symbolic start time (Planung ohne SYMDAT name), then LATEST-OCCURE and DELAY-SOLUTION are set by this entry.</p> <p>The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning.</p> <p>The associated planning parameters are copied from this entry.</p> <p>*STD is only permitted as the second entry.</p> <p>Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT-NAME, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned plan parameters LATEST-OCCURE and DELAY-SOLUTION are then used.</p> <p>This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>

- LATEST-OCCURE** Input/output parameter
 The latest point in time for the satisfaction of the condition, relative to the planned start time in the net name (PLAN-START).
 {nnn.hh.mm / *nn.hh.mm / *NONE}
- nnn.hh.mm Date and time span relative to PLAN-START.
 nnn is the number of calendar days, from 000 to 999.
- *nn.hh.mm Date span relative to PLAN-START, and absolute time.
 nn is the number of calendar days, from 00 to 99
- *NONE The value for DEFAULT-LATEST-OCCURE which is defined via the generation parameters is used for *NONE.
- DELAY-SOLUTION** Input/output parameter
 Measure to be taken if the condition has not been fulfilled at the time of the LATEST-OCCURE.
 {START / IGNORE / CANCEL}
- If nothing is specified, the value defined for DEFAULT-CONDITION-DELAY via the generation parameters is used.
- START** The condition is satisfied.
- IGNORE** The condition is ignored and net processing is continued.
- CANCEL** The ERROR status is set for the condition.
 Net processing must be continued by a restart.

After LATEST-OCCURE has been passed, the condition status and the net status depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	COND-STATUS	NET-STATUS
START	OCCURRED	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

FU	Output parameter Function of the structure element
W (Wait)	This element of the net description is a structure element for timed waits.
COND-TYPE	Output parameter Shows the value for TYPE, as entered via AVN004. {NET / JOB / RES / VAL / JVA}
SELECT-TURNUS	Input/output parameter Characteristic used in selecting the condition when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected. The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan dates.
D (Delete)	The marked plan date is deleted. The first entry with SYMDAT=*NONE cannot be deleted.
Y (Yes)	The value shown in mask AVN022 for the plan date can be modified.
N (No)	All unmarked plan dates can be modified. <i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.
OCCURE-DATE	This is defined by the SYMDAT parameter when the net is planned.

SYMDAT	<p>Input/output parameter</p> <p>Characteristic used in selecting the condition when planning the processing of the net.</p> <p>{*NONE / *STD / symdat / [±]symdat[±symdat]...}</p> <p>Up to 51 entries are possible. }</p>
*NONE	<p>If the net is planned without a symbolic start time (Planung ohne SYMDAT name), then OCCURE-TIME is set by this entry.</p> <p>The parameter *NONE is a default value which cannot be deleted.</p> <p>*NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning.</p> <p>The associated planning parameters are copied from this entry.</p> <p>*STD is only permitted as the second entry.</p> <p>Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element.</p> <p>In producing the plan, the assigned OCCURE-TIME plan parameters are then used.</p> <p>This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>

OCCURE-TIME	Input/output parameter Specifies how long the structure element should wait. {nnn.hh.mm / *nn.hh.mm / **n.hh.mm / *NONE}
nnn.hh.mm	Time, specified relative to PLAN-START-DATE and PLAN-START-TIME The system waits until PLAN-START-DATE + nnn days (000 - 999) and PLAN-START-TIME + hh.mm hours and minutes.
*nn.hh.mm	Absolute time specification The system waits until PLAN-START-DATE + nn days (00 - 99) and until the time is hh.mm. In the case of *nn, OCCURE-DATE and OCCURE-TIME are converted to the real date by CREATE-PLAN-NET.
**n.hh.mm	Absolute time specification The system waits until the current time of the active structure element Condition TIM + n.hh.mm is reached (n= 0 ... 9 days). OCCURE-DATE and OCCURE-TIME are converted to the real date by the run control system when Condition TIM is checked for the first time. After the wait time has been reached the original absolute wait time **n.hh.mm is entered again. This ensures that in the event of a restart with return before Condition TIM the system can wait again.
<u>*NONE</u>	The system waits for a random amount of time. If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-OCCURE-TIME via the generation parameters.

AVN024 – Display and input plan data for structure elements with FU=A/M/D and TYPE=RES/VAL or with FU=D and TYPE=NET/JOB

Mask AVN024 enables plan data to be defined, deleted or modified for a description (for a condition description in the run control file). A maximum of 50 descriptions can be defined.

```

AVAS-Vnn.yxmn/AVN024  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-INDEX            =... FU=... COND-TYPE=...
SELECT-TURNUS=.....

M SYMDAT

. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....

CMD:..... OPR:.....
MSG:.....
    
```

COND-NAME	Output parameter Name of the condition description, as specified in mask AVN004.
NET-NAME	Output parameter Name of the net.
COND-TEXT	Output parameter Brief text (up to 120 characters) describing the condition.
COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.
FU	Output parameter Function of the structure element
A (Add)	This element of the net description generates a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).
M (Modify)	This element of the net description modifies a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).

D (Delete)	<p>This element of the net description deletes a condition description for</p> <ul style="list-style-type: none"> – a resource (COND-TYPE=RES) or – a defined value (COND-TYPE=VAL) or – a net (COND-TYPE=NET) or – a job (COND-TYPE=JOB)
COND-TYPE	<p>Output parameter Shows the value for TYPE {NET / JOB / RES / VAL / JVA}</p>
SELECT-TURNUS	<p>Input/output parameter Characteristic used in selecting the condition when planning the processing of the net.</p> <p>Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected.</p> <p>The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task.</p> <p><i>Note</i></p> <p>If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.</p>
M	<p>Input parameter Mark column for selecting plan dates.</p>
D (Delete)	<p>The marked plan date is deleted. The first entry with SYMDAT=*NONE cannot be deleted.</p>
Y (Yes)	<p>The value shown in mask AVN022 for the plan date can be modified.</p>
N (No)	<p>All unmarked plan dates can be modified.</p> <p><i>Note</i></p> <p>In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.</p>

SYMDAT	<p>Input/output parameter Symbolic date for selecting the task. {*NONE / *STD / symdat / [±]symdat[±symdat]...}</p>
*NONE	<p>If the net is planned without a symbolic start date (planning without calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are copied from the *NONE entry.</p> <p>The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry. The second entry may be either *STD or symdat. For the third to 51st entries, only symdat is permitted.</p>
*STD	<p>The structure element is always selected during planning. The associated start parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p> <p>The start time of the subnet is that of the hypernet .</p>
symdat	<p>When a symbolic start time, SYMDAT-NAME, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START and DELAY-SOLUTION are then used. This entry is only used if the second entry is not *STD.</p> <p>The start time of the subnet is the time specified in the subnet as !symdat. If no !symdat is specified in the subnet the start time of the hypernet is used.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>

FT-INDEX	Output parameter Index level of the net at which the request is to run. index
FU	Output parameter Function of the structure element
F (File Transfer)	This structure element of the net description is a structure element for executing FT requests.
FT-TYPE	Output parameter Type of structure element
TRA	File transfer is started.
SELECT-TURNUS	Input parameter Characteristic used in selecting the request when planning net processing. Permissible values are the digit 0 or a subset of the digits 1–9. If 0 is specified, the request is always executed. The request is executed if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the request. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan data.
D (Delete)	The marked plan data item is deleted.
Y (Yes)	The values shown in mask AVN021 for the plan data item can be modified.
N (No)	All unmarked plan data can be modified. <i>Note</i> The work window cannot be repositioned in conjunction with the D, Y and N marks. If the EXECUTE operation is entered together with a + or – sign, the plan data of the repositioned work window is presented for modification.

SYMDAT	<p>Input/output parameter Characteristic used in selecting the request when planning net processing. {*NONE / *STD / symdat / [±]symdat[±symdat]...} Up to 51 entries are possible.</p>
*NONE	<p>If the net is planned without a symbolic start date (planning without calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are copied from this entry. The *NONE parameter is a default value and cannot be deleted. *NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning. The associated start parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start date (SYMDAT name) is used in planning, the structure element is selected if the symbolic start date predefined for the net plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START, DELAY-SOLUTION and LIFE-TIME are then used. This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with a symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected every Monday.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, the symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified, the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, the structure element is selected for each Friday.</p>

LATEST-START Input/output parameter
 Latest start time for the request relative to the planned start time in the net name (PLAN-START).
 {nnn.hh.mm / *nn.hh.mm / *NONE}

nnn.hh.mm Date and time span relative to PLAN-START.
 nnn is the number of calendar days 000–999.

*nn.hh.mm Date span relative to PLAN-START and absolute time.
 nn is the number of calendar days 00–99.

*NONE The request can be started with any delay.
 If no entry is made, *NONE is assumed. The value which is used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.

DELAY-SOLUTION Input/output parameter
 Measure to be taken if the start is not on time (LATEST-START is exceeded)
 {START / IGNORE / CANCEL}

If nothing is specified, the value defined for DEFAULT-JOB-DELAY via the generation parameters is used.

START The request should be started.

IGNORE The request should not be started.

CANCEL The request will not be started and is considered to have terminated abnormally.

The request status and net status after the LATEST-START time has been exceeded depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	FT-STATUS	NET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

LIFE-TIME	Input/output parameter Lifetime of the "job end" event for this request. When the run control file is reorganized, this event entry will not be deleted until this time interval has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent query will be unable to find it. The lifetime is relative to the value of PLAN-START. {nnn.hh.mm / <u>*NONE</u> }
nnn.hh.mm	When the net is released by means of SUBMIT-NET or REPEAT-NET, a condition description for the request is entered in the run control file. The time interval is relative to PLAN-START and is equal to nnn calendar days, hh hours and mm minutes.
<u>*NONE</u>	When the net is released by means of SUBMIT-NET or REPEAT-NET, no condition description for the request is entered in the run control file.

CREATE-ORDER – Add nets to the production plan

The CREATE-ORDER statement is used to add nets to the production plan and release these nets for production execution in the same way as can be done using the statements CREATE-PLAN-NET, CREATE-PROD-NET and SUBMIT-NET.

The nets from the user's net library (NETLIB) or the central net library (NETSYS) are added to the library of planned nets (NPRLIB). The necessary jobs are produced. Then the executable nets and jobs are added to the run control file.

When this statement is called, planning of the nets is performed regardless of the calendar.

If one of the functions to be performed (CREATE-PLAN-NET, CREATE-PROD-NET or SUBMIT-NET) cannot be terminated without errors, the CREATE-ORDER function for the selected net is aborted, the result is communicated via RESULT, and the current net status is reported via STATUS. The result corresponds to that of the individual functions and provides information about the status of processing. In this case, the net involved can only be further processed using the appropriate individual statements.

If the statement is issued without parameters, all the nets with the same user group as the user executing the function are displayed.

If a hypernet is selected to be added to production, then subnets defined via the structure element with FU=S and TYPE=NET are automatically planned, produced and released with the hypernet.

If the processing of CREATE-ORDER aborts with errors when subnets have already been planned or produced, then these subnets are added to the hypernet then next time this statement is called. A hypernet is only released in the run control file once all affected subnets have been planned and modified without error.

Entering # operations

The operations for starting an AVAS statement under the CREATE-ORDER statement must be entered in the form #AVAS statement (e.g. #SHOW-HISTORY). To make things easier, the operations have been assigned a 2-digit number, which means that an operation can also be entered in the form #nn (e.g. #52 for #SHOW-HISTORY).

The following table shows the assignment of the operation numbers to the AVAS statements possible for CREATE-ORDER:

Group	FU / TYP	OPC	Operation	AVAS statement
#5=JOURNAL / JOB-LOG	---	#51	#SHOW-JOURNAL	SHOW-JOURNAL
	---	#52	#SHOW-HISTORY	SHOW-HISTORY
#6=planning / release	---	#61	#CREATE-PLAN-NET	CREATE-PLAN-NET
	---	#62	#CREATE-PROD-NET	CREATE-PROD-NET
	---	#63	#SUBMIT-NET	SUBMIT-NET

The HISTORY data for a net is displayed if a net is marked with S on mask AVP012 and operation #52 is entered in the CMD: field. The value in the SYMDAT-NAME field of mask AVP012 is used here for selecting the HISTORY data.

AVAS branches to the functions CREATE-PLAN-NET, CREATE-PROD-NET and SUBMIT-NET if a net with a valid status is marked with S on mask AVP012, and the appropriate # operation is entered in the CMD: field.

Journal output

If net planning is initiated via CREATE-ORDER, CREATE-ORDER always outputs a start record with the record key 01-00.

If a net is marked with S or Y or is not marked with N and processing is initiated with an EXECUTE operation, CREATE-ORDER outputs a journal record with the record key 01-07 or 01-08 at the end of every subfunction.

If a subfunction is started by means of the corresponding # operation, CREATE-ORDER does not output a journal record at the end of every subfunction.

CREATE-ORDER
[NET-NAME=[\$ug_]netname]

NET-NAME=

Name of a net in the net library. This net is to be included in the production plan, its jobs produced and released for execution.

NET-NAME=\$bk_

Name of the user group.

If the system user group \$ugsys is specified, the NETSYS library is accessed.

If no user group is specified, all the elements of the user's own user group are output.

NET-NAME=netname

Element name of the net in the net library

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no net name is specified, all the nets are displayed.

Notes

- Privileged users can select nets belonging to a different user group by specifying the user group.
- Nets with error level 4 (CHECK) cannot be planned.
- The statement is only permitted for the planning of nets **without** a calendar (without the PERIOD-NAME parameter).

Notes

- If the subfunction is aborted due to an error or because RETURN is entered, the display of the CREATE-ORDER parameters is retained.
- If the subfunction is terminated normally (with SAVE), the display of the CREATE-ORDER parameters is modified according to the input made in the subfunctions.
- The RESULT parameter is redisplayed each time a subfunction is executed.

NET-NAME(-PLAN-START)

Output parameter

Name under which the net is entered in the NETLIB /NETSYS. After execution of the CREATE-ORDER function, the date of the PLAN-START is added to the net name, and the net is entered in the NPRLIB with the name \$ug_netname_yymmdd_hhmmss and displayed here.

When planning a net from the central net library NETSYS, the net is entered in the NPRLIB with the user group of the user executing the function.

EARLIEST-START

Input/output parameter

Prospective start time of the net
dd.mm.yy/hh:mm:ss

The value of EARLIEST-START matches the date of PLAN-START which is added to the net name with CREATE-PLAN-NET. If no start time is specified, CREATE-PLAN-NET uses the time of the planning.

LATEST-START

Input/output parameter

Latest start time of the net, relative to the planned start time in the net name (PLAN-START).

{nnn.hh.mm / *nn.hh.mm / *NONE}

nnn.hh.mm

Time span relative to PLAN-START.

*nn.hh.mm

Date relative to PLAN-START and absolute time.

*NONE

Time span relative to PLAN-START.

The value defined through the generation parameters is used for DEFAULT-LATEST-NETSTART.

LIFE-TIME	<p>Input/output parameter Lifespan of the event 'end of net', relative to the planned start time in the net name (PLAN-START). This time span specifies how long the net event is to remain in ABLDAT. {nnn.hh.mm / *STD / *<u>NONE</u>}</p>
nnn.hh.mm	<p>Time span relative to PLAN-START. Its length is nnn calendar days, hh hours and mm minutes. When the net is released by SUBMIT-NET or REPEAT-NET, a condition description is entered into the run control file for the net.</p>
*STD	<p>Default value for LIFE-TIME, which is defined in the system parameters (DEFAULT-LIFE-TIME). When the net is released by SUBMIT-NET or REPEAT-NET, a condition description is entered in the run control file for the net.</p>
* <u>NONE</u>	<p>When the net is released by SUBMIT-NET or REPEAT-NET, no condition description is entered in the run control file for the net.</p>
SYMDAT-NAME	<p>Input/output parameter Selection criterion for structure elements in the net symdat Those structure elements are executed or processed whose SYMDAT-NAME parameter in their description has the corresponding value or *STD, and for which the selection criterion SELECT-TURNUS is satisfied.</p> <p>Entering or modifying SYMDAT-NAME here does not affect the calculation of PLAN-START and EARLIEST-START but does affect the display of the HISTORY data for the operation #SHOW-HISTORY. EARLIEST-START can be modified via MODIFY-PLAN-NET.</p> <p>A value for SYMDAT-NAME is entered in the journal (journal record CREATE-PLAN-NET OUTPUT-KEY 11-00). If the journal contains no value for SYMDAT-NAME, planning was performed without a symbolic date selection.</p>
S-T	<p>Input/output parameter SELECT-TURNUS {1 / 2 / ... / 9} The value assigned during planning takes precedence over the value for SELECT-TURNUS in the net descriptions.</p>
R-C-S-NAME	<p>Input/output parameter RUN-CONTROL-SYSTEM Name of the planned run control system</p>

O-S	Input/output parameter OPERATOR-START Indicates whether the net is to be started by means of an input made by the operator {NO / YES}
NO	The net is started automatically by the run control system as soon as the start conditions are satisfied. The net is placed in the WAITING state.
YES	The net is not started automatically. Start must be initiated by the operator input START-NET or the START-NET statement. The net is placed in the OPWAIT state.
RESULT	Output parameter Acknowledgment for the completed action:
ERROR	<ul style="list-style-type: none">– CREATE-PLAN-NET processing was aborted for this net because an error occurred during serialization.– The net was processed with the Y mark and an error occurred during the function CREATE-PROD-NET (see SHOW-JOURNAL statement).
PLANNED	The net was selected with the S mark and planned using mask AVP001.
UPDATED	The net was selected with the S mark and processed using mask AVN001.
NO-PLAN	CREATE-PLAN-NET processing was rejected for this net because the net already exists in the production plan under the same name (including PLAN-START).
NO-UPDATE	CREATE-PROD-NET process was aborted.
SUBMITTED	The net was planned, produced and released.
NO-SUBMIT	Release of the net via SUBMIT-NET was rejected by a user check.
LOCKED	The net or a task of the net was being processed by a different dialog process and was locked at the time of processing by SUBMIT-NET.

USER-PAR-FILE	<p>Output parameter {filename / *NONE / libname(element[,type])}</p> <p>After the CREATE-PROD-NET function has been executed, the name of a file containing values to be assigned to the AVAS variables F# is output here if applicable (see section “AVAS variables” on page 93).</p> <p>The parameters in this file were included in the modification operation.</p>
USER-PAR-FILE (*NONE)	<p>Input/output parameter File containing parameters for modification by means of the CREATE-PROD-NET function {filename / libname(element[,type])}</p>
filename	<p>The parameters in this file are taken into account by the modification operation if USER-PARAM-FILE is assigned the value *NONE in the net.</p> <p>If filename is omitted, USER-PARAM-FILE is not supplied with values if *NONE is specified and is ignored during modification.</p>
libname(element[,type])	<p>The parameters are sought in the specified element of the defined library if USER-PARAM-FILE=*NONE is specified in the net.</p> <p>If the type is not specified, the element is expected to be type S. Valid specifications for type are S, J, P and D.</p> <p>If no value (file, element) is specified and USER-PARAM-FILE=*NONE is specified in the net, no parameters from a USER-PARAM-FILE are used.</p>
NET-STATUS	<p>Output parameter Processing status of the net</p> <p>The following processing statuses exist:</p>
NOTTOCREATE	The net is not subject to modification and can be released.
TOCREATE	The net must be modified.
PARTIALLY	The net is subject to modification and has been partially modified.
CREATED	The net has been completely modified and can be released.
SUBMITTED	The net has already been released.

Operation #52 (SHOW-HISTORY)

Operation #52 (SHOW-HISTORY) displays the compressed record of the marked net from the HISTORY file.

The compressed data for a net is displayed in mask AVI035.

Operation #52 (SHOW-HISTORY) is not currently available as an independent command.

AVI035 – Display the compressed data of a net

```

AVAS-Vnn.yxmn/AVI035                                SHOW-HISTORY          tt.mm.jjjj/hh:mm:ss
              HISTORY-PARAMETER

RECORD-KEY =.. /...
USER-GROUP =..... NET-NAME=.....
SYMDAT-NAME=.....
FUNCTION   =.      INDEX   =...   JOB-NAME=.....

LAST-START-TIME =.....
LAST-END-TIME   =.....

LAST-RUN-TIME   =.....
MEAN-RUN-TIME   =.....      NUMBER-OF-RUN       =....
MIN.-RUN-TIME   =.....      MEAN-NUMBER-OF-ERROR=.....
MAX.-RUN-TIME   =.....
RANGE           =.....      STANDARD-DEVIATION  =.....

MEAN-ERROR-TIME =.....      MAX.-ERROR-TIME     =.....
MEAN-RUN-TIME(JOB) =.....    MAX.-RUN-TIME(JOB)  =.....
MEAN-WAIT-TIME(COND)=.....    MAX.-WAIT-TIME(COND)=.....

CMD:.....      OPR:.....
MSG:.....
    
```

RECORD-KEY	Output parameter Record key of the compressed record
01/SUM	Compressed record of the execution of a net taking the symbolic start date into consideration.
USER-GROUP	Output parameter User group of the net
NET-NAME	Output parameter Name of the net without the user group
SYMDAT-NAME	Output parameter Symbolic start date of the net

FUNCTION	Output parameter Function
N (net)	Data relating to the execution of a net
INDEX	Output parameter No output
JOB-NAME	Output parameter No output
LAST-START-TIME	Output parameter dd.mm.yyyy-hh:mm:ss Last start time of a run with the same name, symbolic start date, function and index
LAST-END-TIME	Output parameter dd.mm.yyyy-hh:mm:ss Last end time of a run with the same name, symbolic start date, function and index
LAST-RUN-TIME	Output parameter hh:mm:ss Last runtime of a run with the same name, symbolic start date, function and index
MEAN-RUN-TIME	Output parameter hh:mm:ss Mean runtime (t_{mean}) of the run with the same name, symbolic start date, function and index. The mean runtime is calculated using, at most, the last 64 runs according to the following formula:
	$t_{mean} = \frac{1}{n} \sum_{i=1, n} t_i$
NUMBER-OF-RUN	Output parameter nnnn Number of runs stored
MIN-RUN-TIME	Output parameter hh:mm:ss Shortest runtime of a run with the same name, symbolic start date, function and index within, at most, the last 64 runs.

MEAN-NUMBER OF ERROR

Output parameter

nnn,nn

Mean number of errors (E_{mean}) during, at most, the last 64 runs.

The mean number of errors is calculated using, at most, the last 64 runs according to the following formula:

$$E_{mean} = \frac{1}{n} \sum_{i=1, n} E_i$$

MAX-RUN-TIME

Output parameter

hhh:mm:ss

Longest runtime of a run with the same name, symbolic start date, function and index within, at most, the last 64 runs.

RANGE

Output parameter

hhh:mm:ss

Range of the runtime of a run with the same name, symbolic start date, function and index within, at most, the last 64 run. The range is calculated using the following formula:

$$r = t_{max} - t_{min}$$

STANDARD-DEVIATION

Output parameter

hhh:mm:ss

Standard deviation(s) of the runtime of a run with the same name, symbolic start date, function and index. The standard deviation is calculated using, at most, the last 64 runs according to the following formula:

$$s = \sqrt{\frac{1}{n} \sum_{i=1, n} (t_i - t_{mean})^2}$$

MEAN-ERROR-TIME

Output parameter

hhh:mm:ss

Mean wait time with the status ERROR (tE_{mean}) after errors during, at most, the last 64 runs. The mean wait time is calculated using, at most, the last 64 runs according to the following formula:

$$tE_{mean} = \frac{1}{n} \sum_{i=1, n} \frac{tE_i}{mE_i}$$

MAX-ERROR-TIME Output parameter
 hhh:mm:ss
 Maximum wait time with the status ERROR after errors during, at most, the last 64 runs.

MEAN-RUN-TIME(JOB)

Output parameter
 hhh:mm:ss
 Mean runtime of all the jobs (tR_{mean}) in a run with the same name, symbolic start date, function and index. The mean runtime is calculated using, at most, the last 64 runs according to the following formula:

$$tR_{\text{mittel}} = \frac{1}{n} \sum_{i=1, n} tR_i$$

MAX-RUN-TIME(JOB)

Output parameter
 hhh:mm:ss
 Longest runtime of all jobs of a run with the same name, symbolic start date, function and index during, at most, the last 64 runs.

MEAN-WAIT-TIME(COND)

Output parameter
 hhh:mm:ss
 Mean wait time with the status CONDWAIT (tW_{mean}) during, at most, the last 64 runs. The mean wait time is calculated using, at most, the last 64 runs according to the following formula:

$$tW_{\text{mean}} = \frac{1}{n} \sum_{i=1, n} tW_i$$

MAX-WAIT-TIME(COND)

Output parameter
 hhh:mm:ss
 Maximum wait time with the status CONDWAIT after errors during, at most, the last 64 runs

Notes

All times (runtimes, wait times, etc.) are calculated using the timestamps of the journal records. The AVAS run control system issues these timestamps for:

- the start and end of nets and jobs,
- the time involved in waiting for a condition to be satisfied and
- the time at which a condition is satisfied.

At present only the values from BS2000 are collected for the job variables.

CREATE-PERIOD – Create period

The CREATE-PERIOD statement is used to set up a new period in the period file. During follow-up processing, the period can be referenced under the predefined name during

- calendar processing
- production planning and
- release for production.

The statement cannot be processed without knowing the start and end dates of the period.

CREATE-PERIOD
PERIOD-NAME=period

PERIOD-NAME=period

Name of the period to be set up

This name must not yet exist in the period file.

This causes a display of the AVC020 mask, in which the boundary times of the period are defined.

The CREATE-PERIOD statement is used to create periods with fixed date specifications. In AVAS standard periods with variable specifications for start and end date can also be used. In this case the values which are to be used are ascertained from the current date. Standard periods can be created only using the batch statement CREATE-PERIOD (see the manual "AVAS for the Administrator" [2]).

AVC020 – Set up a period

```

AVAS-Vnn.yxmn/AVC020      P E R I O D - H A N D L I N G      tt.mm.jjjj/hh:mm:ss

PERIOD-NAME= .....      TYPE= ...

                                DD.MM.YY                      HH:MM
PERIOD-START-DATE=.....      PERIOD-START-TIME=.....
PERIOD-END-DATE  =.....      PERIOD-END-TIME  =.....

CMD: ..... OPR: .....
MSG: .....

```

- PERIOD-NAME** Output parameter
Name of the period to be set up.
- TYPE** The TYPE parameter is not relevant here since the AVC020 mask was called using the CREATE-PERIOD statement.
- PERIOD-START-DATE**
Input/output parameter
DD.MM.YY
Start date of the period
- PERIOD-START-TIME**
Input/output parameter
HH:MM
Start time (hh:mm or 00:00) of the period
- PERIOD-END-DATE** Input/output parameter
End date (dd.mm.yy) of the period.
- PERIOD-END-TIME** Input/output parameter
End time (hh:mm or 23:59) of the period.

CREATE-PLAN-NET – Plan net processing

The CREATE-PLAN-NET statement allows the user to include nets in the production process. Nets from the user's net library (NETLIB) or from the central net library (NETSYS) are added to the library of planned nets (NPRLIB).

Depending on how the statement is called, there are two different kinds of processing which can be initiated:

- planning of nets via the calendar
- planning of nets independently of the calendar.

Planning nets via the calendar

Nets can be planned via the calendar whenever a period is specified by means of the PERIOD-NAME operand.

A net is planned when a symbolic date (symdat) or real start time that lies within the predefined period is entered in its net description. The start time (resolved start time) of the planned net is the time assigned to this symbolic date in the net description.

During net planning the symbolic dates specified in the net are first matched with the SYSTEM symbolic dates. If the net symbolic date is found in the SYSTEM symbolic dates, a search is no longer performed in the USER symbolic dates of the calendar day. The net symbolic dates are matched with the generated SYSTEM symbolic dates without the leading asterisk in the SYSTEM symbolic dates.

If a number of symbolic dates are defined for a net in the PLAN-START parameter, the net will be planned a corresponding number of times, when these symbolic dates occur within the period.

The symbolic date can also be specified in the form symdat[±n]hh:mm:ss. This results in planning of the net n days before or after the day defined in the calendar using symbolic date.

The symbolic date can also be specified in the form symdat[±0]hh:mm:ss. This results in planning of the net on the working day (calendar day of the type WORK) preceding or following the day defined in the calendar using symbolic date. If the calendar day defined using symbolic date is itself of the type WORK, planning is performed for this day.

The net is planned using the calendar which is entered in the net description. This can be a calendar which is assigned to the user group by default or specially to the net. Alternately planning can also be handled using a different calendar. This is freely selectable with CREATE-PLAN-NET.

A net's start date can also be defined by linking symdats. The links are represented by the sign "+" or "-" in front of the symdat names. They can be at most 20 characters long (corresponds to the maximum length for SYMDAT name). When SYM1+SYM2 is specified, the

net in which both symdats are entered on the relevant day in the calendar is selected for planning. When TGL-FRI is entered, for example, the net is selected every day except Friday.

The type of calendar day (WORK/FREE/NWRK/WKND/HLDY) is taken into consideration:

- **WORK**
 Production day; planning for this day
 The day is taken into consideration during planning using relative symbolic start dates (symdat ±n). The symbolic dates of the calendar day are taken into consideration during planning.
- **FREE**
 Production-free calendar day; no planning for this day
 The day is not taken into consideration (i.e. skipped) during planning using relative symbolic start dates.
 The symbolic dates of the calendar day are only taken into consideration during planning using symbolic start dates (symdat ±w / symdat ±n).
 No processing using relative symbolic dates is planned for this day.
- **NWRK, WKND, HLDY**
 Planning for this day
 Whether or not the day is taken into consideration during planning using relative symbolic start dates depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly.
 The symbolic dates of the calendar day are taken into consideration during planning. SELECT-PLAN-TYPE = NWRK selects days of the type NWRK, WKND and HLDY, SELECT-PLAN-TYPE = WKND or HLDY only precisely the specific type.
 The values 1..99 are valid for ±n.
 The maximum length of the symbolic date name is 17 or 18 characters in this case.

Notes

- If nets are planned using relative symbolic start dates, these are only run on days for which WORK is specified (days with NWRK, WKND, HLDY and FREE are skipped).
- If nets are planned using absolute symbolic start dates, these are only run on days for which WORK, NWRK, WKND and HLDY are specified (symbolic dates on days for which FREE is specified are not evaluated).

Planning for Type	WORK	NWRK/WKND/HLDY	FREE
using an absolute symbolic date	yes	yes	no
using a relative symbolic date	yes	no	no

The following points must be borne in mind if the processing of nets is planned using the calendar and relative symbolic start dates (symdat±nn):

- The net is planned even if the symbolic date is found outside the calendar section delimited by PERIOD-NAME as a result of the relative specification symdat±nn.
- All nets, whose PLAN-START falls in the calendar section delimited by PERIOD-NAME, are planned.

FROM-DATE and TO-DATE can also lie outside of the period limit dates PERIOD-START-DATE and PERIOD-END-DATE when CREATE-PLAN-NET is used.

- The net is not planned if the relative specification of symdat±nn lies outside of the calendar boundaries for the net. For this reason, the calendar must be predefined for a sufficiently long period of time (including all production-free days) when working with relative symbolic dates.

The net run variant is determined by comparing the symdats of the structure elements with SELECT-SYMDAT. SELECT-SYMDAT is supplied with values in accordance with the value of PLAN-START-SYMDAT as follows:

- With the value of PLAN-START-SYMDAT if the net was planned using the calendar and contains no symdat linking.

For the formation of the net run variant this means that the symdats of the structure elements are checked against the specified SELECT-SYMDAT.

In addition, the symdats with a sign (+/-) are also recorded, e.g. +FRI. These are checked directly against the calendar. In the case of +FRI the element is selected only for Friday.

- With *CAL if the net was planned using the calendar and contains a symdat linking.

For the formation of the net run variant this means that the symdats of the structure elements are checked against the calendar, e.g. MON, +SYM1 or SYM2+SYM3. With *CAL linking is allowed. In the examples elements are selected on Monday, and for the day on which the SYM1 or both SYM2 and SYM3 are entered in the calendar.

- *NONE in the case of planning without calendar.

In the dialog the SELECT-SYMDAT in the AVP001 mask is displayed.

Modifying the SELECT-SYMDAT enables you to switch to a different selection method.

To form variants, the SELECT-TURNUS defined in the net description is also used.

If a net is planned using a symbolic date, only the structure elements of the net which have a corresponding symbolic date or *STD in their plan dates (SYMDAT parameter in mask AVN021, AVN022, AVN023 and AVN024) are added to the net control variant.

Note the following when planning subnets via structure elements with FU=S/NET:

- If a net (hypernet) is planned via symdat, then the defined plan symdat with the "!" prefix including the relative specification is searched for in the plan data of the subnet. If no entry is found in which the PLAN-START of the subnet is later than that of the hypernet, then the subnet is planned using the PLAN-START of the hypernet. The LATEST-START, DELAY-SOLUTION and LIFE-TIME parameters of the subnet are copied from the *STD entry or the symdat of the structure element used to start the subnet (mask AVN025).
- When a suitable subnet symdat with PLAN-START-TIME *BY-HYP ("by hypernet") is found, this entry is used for planning. LATEST-START, DELAY-SOLUTION and LIFE-TIME (in which also only the *BY-HYP values are then permitted in the net description) are copied from the *STD entry or the symdat of the structure element in the hypernet. The subnet is planned with the PLAN-START of the hypernet. However, the start time is determined solely by the execution of the hypernet, i.e. the reaching of the index level of the structure element. Modifying the hypernet start time after planning (for example by means of MODIFY-SUBMIT-NET or START-NET) has no effect on this. This ensures above all that when the hypernet start is brought forward, the start time for the subnet is also brought forward. Specifications which are relative to the symdat are ignored.
- If the symdat with which the hypernet is planned is not found (i.e. in particular when no symdats are entered in the subnet), the subnet is only planned with the data of the hypernet. When planning takes place via the calendar, the subnet is not selected and displayed with the CREATE-PLAN-NET statement. The PLAN-START of the subnet is then the same as that of the hypernet; the subnet is therefore started at the earliest when its structure element is activated in the hypernet. The start of the subnet does not, however, take place before the PLAN-START time. If the start of the hypernet is brought forward after planning has taken place, the subnet can consequently still remain in the wait state after its structure element has been activated (in contrast to the *BY-HYP behavior described above).
- If an entry is found in the plan data of the subnet in which the PLAN-START of the subnet is later than that of the hypernet, then the subnet is planned using the start date and start time values specified there, and the associated values for LATEST-START, DELAY-SOLUTION and LIFE-TIME are used (mask AVN020). The LIFE-TIME parameter for the structure element has no meaning then.

If a subnet is to be started at a later time after activating the structure element with FU=S/NET, then the PLAN-START symdat of the hypernet must be entered for the subnet with a "!" prefix and the required start time.
- If several entries with the specified symdat including the relative specification are found, then the entry with *BY-HYP may be used, and otherwise the entry with the smallest positive time difference with respect to the PLAN-START of the hypernet.

- If the hypernet is planned via a real start date, then the subnet with the start date of the hypernet and the parameters of the entry with SYMDAT=*NONE are planned for the structure element (mask AVN025).
- If an error occurs when planning a hypernet, then the error may have been caused due to the fact that not all associated subnets have been planned or have been planned correctly. If a subnet to be planned is already present as a subnet of a hypernet and has the status TOCREATE or NOTTOCREATE, then it is assigned to the hypernet as a subnet. The subnet is not planned again in this case. If the subnet is to be replanned, then the user must delete the existing net first via DELETE-PLAN-NET.

Nets are planned cyclically using the symdat *tmmjj±Dnn[±W]. Cyclical planning is performed using CREATE-PLAN-NET. There is no need to enter a symdat in the calendar. The following applies for cyclical planning.

- tmmjj is the calendar date for the start of the cycle. The nets can be planned forward or also backward from this date.
- nn is the increment in days (00 - 99).
- Cyclical net planning is only possible when planning takes place using a calendar and a period is specified.
- With CREATE-PLAN-NET the nets offered for planning are those which occur in the specified period within the cycle and have not yet been planned.
- If the start time is on a calendar day of the type FREE, AVAS does not start planning.
- The following applies if ±W is not specified:
In accordance with SELECT-PLAN-TYPE, the following is counted for the increment:
 - Only the WORK days (SELECT-PLAN-TYPE=WORK)
 - The WORK and NWRK/WKND/HLDY days (SELECT-PLAN-TYPE=NWRK/WKND/HLDY, where SELECT-PLAN-TYPE=NWRK also selects WKND and HLDY)
 Consequently no start time will occur on a production-free day.
- The following applies if ±W is specified:
All days are counted for the increment. If a start time would be on a production-free day (TYPE=FREE and, in SELECT-PLAN-TYPE=WORK, also TYPE=NWRK/WKND/HLDY), it is moved to the previous work day (-W) or to the next work day (+W).
- A relative date specification is not possible with cyclical planning.

In the overview mask AVP011, those nets which were determined by the period are displayed, as are the real boundary dates of the period (start time and end time in the FROM-DATE and TO-DATE parameters). The boundary dates can be modified, in which case they cause a display of a new overview delimited by the boundary dates.

Note that in the case of a modification to FROM-DATE or TO-DATE the unmodified date is reset to the period boundary date for the planning.

Particular nets can be selected for planning from the displayed overview via the mark Y, or excluded from planning via the mark N.

Subnets are planned for processing regardless of an N or Y mark if the associated structure element with FUNCTION=S and TYPE=NET also needs to be planned for processing in the hypernet via symdat or *STD.

Marking one or more nets with S causes the net structure and the net parameters of each individual net to be displayed (mask AVP001), with the option of modifying the parameters for the net or net variant. Furthermore, the D mark in mask AVP001 can be used to exclude individual structure elements from processing. Once excluded, a structure element cannot be reactivated after CMD:SAVE.

Prior to SAVE, an excluded structure element (DELETED result) can be activated again via the A mark.

Planning nets independently of the calendar

Nets can be planned independently of the calendar whenever no period is specified in CREATE-PLAN-NET. In this case, the net must be assigned a start date and start time.

When this is done, subnets are planned with the start date and start time of the hypernet. The LATEST-START, DELAY-SOLUTION and LIFE-TIME parameters for the subnet are copied from the SYMDAT=*NONE entry of the structure element with FU=S and TYPE=NET. DELAY-SOLUTION=START is set for the structure element with FU=S and TYPE=NET.

The net control variant is formed by specifying SELECT-TURNUS and SYMDAT-NAME. The defined value for SYMDAT (in the AVP001 mask) is also used to select the structure element in the subnets.

The SELECT-TURNUS of the hypernet has no effect on the subnets. The variants of the subnet are formed with the SELECT-TURNUS of the subnet.

The symbolic dates contained in the net description under PLAN-START are of no relevance. Planning of the net structure can be performed via a symbolic date, even without a calendar (SELECT-SYMDAT specification in the AVP001 mask). This simply means that only those structure elements in the net can be planned which are defined explicitly with this symbolic date and which have this symbolic date or *STD entered in their net descriptions (SYMDAT name in mask AVN021, AVN022, AVN023 or AVN024).

The CREATE-PLAN-NET statement initializes the status of the net and the associated jobs (tasks) in the NPRLIB.

If at least one task in the planned net is subject to net modification, the net is given the status TOCREATE. If the net was planned with external and/or static tasks only, the net status is set to NOTTOCREATE. The structure element receives one of the following statuses, depending on the task's TYPE parameter:

TYPE	STATUS
MOD	TOCREATE
EXT	EXTERNAL
EXX	EXTERNAL
STD	NOTTOCREATE

For TYPE=NET the status is set depending on the status of the planned subnet.

All other planned structure elements (FU=C, A, M, D, W, F) are entered in the NPRLIB with the status PLANNED. All structure elements that have been excluded from processing (via symbolic date, SELECT-TURNUS or D mark) are given the status NO-PLAN in the NPRLIB.

Starting with CREATE-PLAN-NET, all actions involving the net are logged in the journal.

For planning, nets can be assigned new, job-related net names under which they can then be traced until reorganization takes place. The original net names are retained in the NETLIB.

If the net name is modified during planning, the original name still applies for the document files when the DOCUMENT function is used with the *STD specification.

When the jobs are modified with CREATE-PROD-NET, the original name still applies for the user parameter file when *STD is specified.

Reorganization takes place using the job-related net name. The new net name is defined by the ALTERN-NET-NAME operand.

If the statement is issued without operands, an overview of all nets of the associated user group is displayed.

Planning via the calendar

CREATE-PLAN-NET
PERIOD-NAME=period / (dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]]) [,CALENDAR-NAME=calendar / *STD] [,NET-NAME=[\$ug_]netname] [,DISPLAY=YES / NO] [,ALTERN-NET-NAME=[\$bk_]netname]

Planning independently of the calendar

CREATE-PLAN-NET
[,NET-NAME=[\$ug_]netname] [,DISPLAY=YES / NO] [,ALTERN-NET-NAME=[\$bk_]netname]

PERIOD-NAME=

Specifies a period (time span).

The nets to be planned are those whose symbolic start dates fall within this period.

PERIOD NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]])

Real date and time specifications indicating the start and end dates/times of the period.

If only the end date is to be specified, it must be preceded by a comma.

If the "right" period limit is missing, the end date is set to the start date and the end time to 23.59.

CALENDAR-NAME=

Name of the calendar with which the nets are to be planned.

CALENDAR-NAME=calname

Name of the calendar in the calendar library. The calname member must exist in the calendar library.

The CALENDAR-NAME specification is only permitted for users with * authorization for CREATE-PLAN-NET.

NET-NAME=

Name of a net in the net library. This net is to be included in the production plan.

NET-NAME=\$ug_

Name of the user group.

If the system user group \$ugsys is specified, the NETSYS library is accessed.

If no user group is specified, all elements of the user's own user group are displayed.

NET-NAME=netname

Element name of the net in the net library.

If the net name is partially qualified (final character *), an overview of the elements whose names begin with the partial qualification is displayed.

If no net name is specified, all elements are displayed.

DISPLAY=

Selection of structure elements from the net description, to be displayed in mask AVP001. This operand permits the display of structure elements which have the status NO-PLAN to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand.

DISPLAY=YES

Structure elements with the status NO-PLAN are displayed.

DISPLAY=NO

Structure elements with the status NO-PLAN are not displayed.

ALTERN-NET-NAME=[\$bk_]netname]

Job-related net name under which the net is planned and produced and can be monitored when it runs.

Notes

- Privileged users can select nets of another user group by specifying the relevant user group.
- A maximum of 2273 nets can be planned.
- Nets with error level 4 (CHECK) cannot be planned.

NET-NAME	<p>Output parameter</p> <p>Name under which the net is entered in the NPRLIB. The date of the PLAN-START is added to the net name.</p> <p>\$ug_netname_yymmdd_hhmmss</p> <p>When a net from the central net library NETSYS is planned, it is entered in the NPRLIB with the user group of the user executing the function.</p>
EARLIEST-START	<p>Output parameter</p> <p>Prospective start time of the net. Either the time is shown in the format hh:mm:ss or the *BY-HYP value if the start time of the subnet is linked to execution of the hypernet.</p> <p>dd.mm.yy/hh:mm:ss / dd.mm.yyyy/*BY-HYP</p> <p>This output is displayed when planning takes place via the calendar. Depending on the PERIOD-NAME operand, the start times of the nets were determined either via the calendar and symbolic date or by means of direct specification.</p> <p>dd.mm.yyyy/hh:mm:ss The value of EARLIEST-START matches the date of PLAN-START which is added to the net name with CREATE-PLAN-NET.</p> <p>dd.mm.yyyy/*BY-HYP The net name is supplemented by the PLAN-START date of the hypernet.</p>
CALENDAR-NAME	<p>Output parameter</p> <p>Name of the calendar with which the net is to be planned</p> <p>{*STD / calname}</p>
*STD	<p>The net is planned using the calendar which is assigned to the user group.</p>
calname	<p>Name of the calendar with which the net is to be planned. The calendar calname must be entered in the calendar library.</p>
RUN-CONT-SYSTEM	<p>Output parameter</p> <p>Name of the planned run control system.</p> <p>{*STD / avak}</p> <p>Another run control system can be assigned to nets about to be processed by specifying ALTERN-RUN-CONT-SYS with RUN-CONT-SYSTEM=*STD.</p>

ST (SELECT-TURNUS)	Input/output parameter {1 / 2 / ... / 9}
	The value assigned during planning takes precedence over the value for SELECT-TURNUS in the net descriptions.
RESULT	Output parameter Acknowledgment for the completed action.
PLANNED	The net has been included in the production plan.
NO-PLAN	Processing was rejected for this net, either because the net or a subnet to be planned already exists in the production plan under the same name (including PLAN-START), or because planning was not performed following the S mark with CMD:RETURN.
ERROR	Processing was aborted for this net because an error occurred during serialization or because a net to be planned as a subnet does not exist and therefore cannot be planned.

Notes

- If a subnet to be planned already exists as a subnet of the hypernet or as a normal net with the status TOCREATE or NOTTOCREATE, then it is assigned to the hypernet as a subnet. The subnet is not planned again.
- If RESULT = NO-PLAN is displayed because a subnet to be planned with the corresponding PLAN-START has already been assigned as a subnet to another hypernet, then the existing net cannot be assigned to the new hypernet as a subnet.
If RESULT = NO-PLAN is displayed because a subnet to be planned with the corresponding PLAN-START has already been planned as a normal net and does not have the status TOCREATE or NOTTOCREATE, then the existing net is not assigned to the hypernet as a subnet.
- The net already planned must be deleted with DELETE-PLAN-NET and then planned with the hypernet as a subnet. If planning is done with symbolic start dates, then the associated start time in the SYMDAT can be changed in the subnet.

ALTERN-RUN-CONT-SYS

Input/output parameter
Name of the run control system.
{*STD / avak}

When planning takes place via the calendar, nets for which RUN-CONT-SYSTEM=*STD has been entered can be assigned a run control system other than the one defined for the user group.

If a user edits nets of a foreign user group, the only name he can specify for the ALTERN-RUN-CONT-SYS parameter is that of the run control system assigned to his own user group. Specifying any other run control system requires the appropriate authorization.

A run control system defined by RUN-CONT-SYSTEM=avak can only be modified if a single net is planned (S mark).
“avak” (German abbreviation) is the name of an AVAS run control system (up to 8 characters long).

FROM-DATE

Input/output parameter
Start time of the period:
dd.mm.yyyy[/hh:mm:ss]

The planning period can be restricted by modifying FROM-DATE.

TO-DATE

Input/output parameter
End time of the period:
dd.mm.yyyy[/hh:mm:ss]
(For further details, see FROM-DATE.)

Note

- A list of the nets selected and displayed can be produced using the PRINT operation in mask AVP011.
- The list will be output using the list format AVL014. The PRINT operation can be executed (using EXECUTE) both before and/or after a planning session.
- Note that some parameters in the list are only specified when the PRINT operation is performed after the planning session, or when planning takes place via the calendar.

M	Input parameter
D (Delete)	<p>The marked structure element is to be excluded from processing. After ENTER, the element contains DELETED as the result, in which case the mark is deleted. In the case of all elements not marked with D, the RESULT field remains empty.</p> <p>As soon as the modified net structure has been stored using SAVE, structure elements which have been deleted cannot be reactivated. Deletion of a structure element from the net structure is logged in the journal.</p> <p>The D mark is rejected in the case of elements with the result DELETED.</p>
A (Add)	<p>Structure elements previously excluded from processing by the D mark (result DELETED) can be reactivated using the A mark, provided that the net structure has not yet been stored using SAVE. The DELETED result is cleared when activation is successful.</p> <p>The A mark is rejected in the case of elements without the result DELETED.</p> <p>A mixture of marks is not permitted.</p> <p>Structure elements which have been deleted are displayed with the NO-PLAN status if the net is subsequently displayed by means of a statement (e.g. SHOW-PLAN-NET, SUBMIT-NET).</p>
IND	<p>Output parameter</p> <p>Index of the structure element</p>
FU	<p>Output parameter</p> <p>Function of the structure element</p>
TYPE	<p>Output parameter</p> <p>Type of the structure element</p>
NAME	<p>Output parameter</p> <p>Name of the structure element</p>
SYN-IND	<p>Output parameter</p> <p>Index level at which the structure element is to be synchronized.</p>
RESTART-IND V1 V2 V3	<p>Output parameter</p> <p>Index levels, to be used for the restart in the event of an error.</p>

RESULT	Output parameter Acknowledgment for the completed action.
DELETED	The structure element was deleted using the D mark (excluding it from processing). All structure elements without the result DELETED are processed after SAVE.
EARLIEST-START	Input/output parameter Prospective start time of the net: dd.mm.yyyy[/hh:mm:ss] / dd.mm.yyyy/*BY-HYP (the default value for time is 0). <i>Planning via the calendar:</i> If the time is specified in the format hh:mm:ss, this entry is made part of the net name under which the net is entered in the NPRLIB, and it determines when the net is started. Otherwise (*BY-HYP) the net name is supplemented by the start time of the hypernet, and the time when the net starts is derived from the execution of the hypernet. \$ug_netname_yymmdd_hhmmss In addition, even though the net name contains the start time taken from PLAN-START, this entry can be used to assign the net a modified start time differing from that given in the net name. <i>Planning independently of the calendar</i> If a net is to be planned for a freely selectable deadline, the start time must be entered here, and the latest start time must be specified in the LATEST-START parameter. The current date and the current time are set in the field as the default values.
LATEST-START	Input/output parameter Latest start time of the net, relative to the planned start time in the net name (PLAN-START). {nnn.hh.mm / *nn.hh.mm / *NONE}
nnn.hh.mm	Time span relative to PLAN-START.
*nn.hh.mm	Date relative to PLAN-START, and absolute time.
*NONE	The net can be started with any delay. The value defined through the generation parameters is used for DEFAULT-LATEST-NETSTART.

LIFE-TIME	<p>Input/output parameter</p> <p>Lifespan of the event 'end of net', relative to the planned start time in the net name (PLAN-START).</p> <p>This time span specifies how long the net event is to remain in ABLDAT.</p> <p>{nnn.hh.mm / *STD / *NONE}</p>
nnn.hh.mm	<p>Time span relative to PLAN-START.</p> <p>Its length is nnn calendar days, hh hours and mm minutes.</p> <p>When the net is released by SUBMIT-NET or REPEAT-NET, a condition description is entered into the run control file for the net.</p>
*STD	<p>Default value for LIFE-TIME, which is defined in the system parameters (DEFAULT-LIFE-TIME).</p> <p>When the net is released by SUBMIT-NET or REPEAT-NET, a condition description is entered into the run control file for the net.</p>
*NONE	<p>When the net is released by SUBMIT-NET or REPEAT-NET, no condition description is entered into the run control file for the net.</p>
SELECT-SYMDAT	<p>Input/output parameter</p> <p>Selection criterion for structure elements in the net:</p> <p>{symdat / *CAL / *NONE}</p>
symdat	<p>Selection takes place via the calendar without symdat linking.</p>
*CAL	<p>Selection takes place via the calendar with symdat linking.</p>
*NONE	<p>Selection takes place without a calendar .</p> <p>Structure elements are selected if the value of the PLAN-START parameter in their description</p> <ul style="list-style-type: none"> – is the same as the value of SELECT-SYMDAT, – is *STD, – symdats are linked (\pmsymdat\pmsymdat) and a check in the calendar corresponds to the linking (with *CAL). <p>The selection criterion SELECT-TURNUS must also be satisfied.</p> <p>Entering or modifying the symdat here does not affect the calculation of PLAN-START and EARLIEST-START. EARLIEST-START can be modified via MODIFY-PLAN-NET.</p> <p>A value for SYMDAT name is entered in the journal (journal record CREATE-PLAN-NET OUTPUT-KEY 11–00). If the journal contains no value for SYMDAT name, planning was performed without a symbolic date selection.</p>

RUN-CONT-SYS	<p data-bbox="490 164 866 253">Input/output parameter Name of the run control system: avak (German abbreviation)</p> <p data-bbox="490 275 1264 332">Here the net can be assigned another run control system differing from that defined in the net description.</p> <p data-bbox="490 354 541 376"><i>Note</i></p> <p data-bbox="490 398 1264 493">A user who does not have the appropriate authorization can only change the RUN-CONT-SYS parameter to the run control system assigned to his own user group.</p>
SELECT-TURNUS	<p data-bbox="490 515 1089 604">Input/output parameter Selection criterion for structure elements in the net. {1 / 2 ... / 9}</p> <p data-bbox="490 626 1264 715">The default value is the value for SELECT-TURNUS which was set down net-wide in the net description. This value can be modified here.</p> <p data-bbox="490 722 1264 813">Those elements are executed whose SELECT-TURNUS parameter in the net description has the specified value, and for which the selection criterion SELECT-SYMDAT is satisfied.</p>

Notes

- The SAVE operation is not processed until the fields EARLIEST-START, RUN-CONTROL-SYSTEM, SELECT-TURNUS and SELECT-SYMDAT have been supplied with valid values. Modifying the SELECT-TURNUS and/or SYMDAT-NAME parameter leads to a revision and renewed display of the net structure to be planned.
- All the structure elements not included in the plan are given the status NO-PLAN.
- Specifying the PRINT operation in mask AVP001 causes a list of the planned net structure to be generated. The list is output in the format of list AVL013, which corresponds to the format displayed with SHOW-NET-DESCRIPTION. PRINT must be entered before SAVE, i.e. before the planning is carried out. Job or condition control records which have been deleted are not included in the output.

CREATE-PROD-JOB – Create static jobs

The CREATE-PROD-JOB statement is used to create executable static jobs (static tasks). In this case, they are processed from the JCLLIB and JCLSYS and moved to the JMDLIB. This also applies to any job or procedure parameters that might exist for S procedures. The tasks in the JMDLIB can be assigned to more than one net (static jobs). Tasks from the JCLSYS must be prefixed by the system user group.

The statement results in the output of an overview, for which a USER-PARAM-FILE value can also be specified. Unless otherwise specified, the name of the task for the JMDLIB is the same as for the INPUT-NAME. Tasks already in the JMDLIB can be overwritten using the OVERWRITE parameter (mask AVM013). If tasks selected for production are modified, the appropriate user masks are presented one after the other.

Processing of job masks at the time of statement execution can be influenced via the AVEX6801 and AVEX6802 computer center exits.

The following information is incorporated in the BS2000 jobs to be created:

- parameters entered from the user masks with job-wide validity
- the parameters in USER-PARAM-FILE
- called JCL elements (the element must have been entered in the JCLLIB or JCLSYS with FUNCTION=J; an element with any other function will not be found)
- called external elements
- AVAS system variables.

The following information is incorporated in the parameter section of the S procedures to be created:

- parameters entered from the user masks with job-wide validity
- the parameters in USER-PARAM-FILE
- AVAS system variables.

In addition, it is possible in the S procedure section (not the parameter section) to call JCL elements and external elements.

Only JCL elements with FUNCTION=J or P can be used for S procedures.

Since the statement does not process temporary tasks (i.e. jobs which can be assigned to exactly one net), it also has no effect on the net or the status of jobs.

Tasks created via CREATE-PROD-JOB must be called in the nets with TYPE=STD if they are to be selected with SUBMIT-NET.

The action CREATE-PROD-JOB is not logged in the journal since it cannot be assigned to a net of the NPRLIB. (Only net-related activities are logged in the journal.)

The rules for searching for jobs in the JMDLIB and JMDSYS are described under the SUBMIT-NET statement (see [page 1155](#)).

Static jobs can be moved to the JMDSYS by means of the COPY-SYSTEM-ELEMENT statement.

CREATE-PROD-JOB
[INPUT-NAME=[\$ug_]jobname] [,OUTPUT-NAME=jobname] [,FORMAT-NAME=format]

INPUT-NAME=

Name of a job in the JCLLIB or JCLSYS.

INPUT-NAME=\$ug_

Name of the user group.

If the system user group \$ugsys_ is specified, the JCLSYS library is accessed.

If no user group is specified, the elements of the user's own user library are output.

INPUT-NAME=jobname

Element name of the job in the JCLLIB.

If a fully qualified element name is specified for INPUT-NAME, the OUTPUT-NAME operand can also be specified.

If a partially qualified element name is specified (* as the last character), this results in an overview of the elements whose names begin with the partial qualification.

If INPUT-NAME is omitted, all jobs of the user's own user group are output.

OUTPUT-NAME=jobname

Name of the job in the JMDLIB \$ug_jobname[_netname].

“netname” can be used to specify that the static task is only valid for a specific net.

Only privileged users (* authorization) may specify a user group other than their own.

The OUTPUT-NAME operand is permitted only in conjunction with a fully qualified element name for INPUT-NAME.

FORMAT-NAME=format

Name of the user mask.

This causes the specified user mask from the JOBMAP to be presented for input of the run parameters. FORMAT-NAME need be specified only if the mask is not assigned via an AVAS statement in the task itself.

The overview of the tasks is displayed first (mask AVM013) and then the specified user mask (after EXECUTE and before any element is created).

If further user masks are assigned via AVAS statements in the task, these are presented after the mask specified via the FORMAT-NAME operand.

If no user mask can be assigned, an error message is displayed via the AVS030 mask.

If FORMAT-NAME is not specified, the masks specified in the task are presented one after the other.

OUTPUT-NAME	<p>Input parameter Name of the job in the JMDLIB [\$ug_jobname[_netname]]</p> <p>The default is the value of the INPUT-NAME parameter. If \$ugsys_ is specified for INPUT-NAME, the output element is created under the user's own user group.</p> <p><i>Note</i></p> <p>If the OUTPUT-NAME operand is specified (only permitted with a fully-qualified INPUT-NAME operand), the OUTPUT-NAME parameter takes the value of the OUTPUT-NAME operand as standard.</p>
OVERWRITE	<p>Input parameter Specifies whether an existing element (job) in the JMDLIB is (YES) or is not (NO) to be overwritten. NO is the default value.</p> <p>If YES is specified, the element is always overwritten in the JCLLIB. The function J or P stored in the JCLLIB for the element determines the outcome.</p>
RESULT	<p>Output parameter Acknowledgment for the completed action.</p>
CREATED	The task has been modified and transferred to the JMDLIB.
CANCELLED	A user mask has been presented for the task. RETURN or IGNORE was entered in the user mask.
ERROR	<p>An error occurred while the task was being processed. The element was not transferred to the JMDLIB.</p> <p>The batch statement CREATE-PROD-JOB logs the result of the processing (including any error messages that were output) via the SYSOUT system file.</p>
LOCKED	The input element in the JCLLIB/JCLSYS or the output element in the JMDLIB is locked.
NO-CREATE	The output element already exists in the JMDLIB and NO has been specified for OVERWRITE.
NOT-FOUND	The input element no longer exists in the JCLLIB/JCLSYS.

USER-PAR-FILE	Input/output parameter File containing parameters for the modification. {*NONE / filename / libname(element[,type])}
*NONE	No USER-PARAM-FILE is used.
filename	The parameters in this file are included in the modification operation. The file contains records with parameter keys and values defined by the user. The parameter keys F#nnn in the BS2000 jobs (or the key defined by the user) are replaced by the values assigned in the USER-PARAM-FILE operand. The parameters defined in the parameter section of the S procedures (F#nnn or the parameter name defined by the user) are assigned the values stored in the USER-PARAM-FILE.
libname(element[,type])	The parameters are sought in the specified element of the defined library. If the type is not specified, the element is expected to be type S. Valid specifications for type are S, J, P and D.

CREATE-PROD-NET – Create temporary jobs of a net

The CREATE-PROD-NET statement is used to create executable jobs in a net. Nets from the NPRLIB with net status TOCREATE or PARTIALLY can be processed.

If the PERIOD-NAME operand is specified, only nets whose EARLIEST-START lies within the period dates are selected. The selected nets are displayed in the AVM012 mask, sorted by EARLIEST-START.

The PERIOD-NAME operand may only be specified in conjunction with a partially qualified net name (NET-NAME operand) since otherwise PERIOD-NAME will be rejected with a message.

Errors on accessing the periods files are reported with a message.

Jobs from the JCLLIB and the JCLSYS are processed and moved to the JMDLIB in order to create temporary tasks. The same applies to any job or procedure parameters that may exist for S procedures.

The JCLLIB is searched for an element with the function prescribed in the net structure (FU=J or FU=P). Any element which has a different function will not be 'found'. In this case, the element in the JMDLIB is overwritten.

Jobs from the JCLSYS are prefixed by the system user group. These tasks are kept in the JMDLIB under the user group of the net. The tasks are assigned uniquely to a net via the date and time of day in their names (temporary jobs). Tasks with the status TOCREATE are processed. A successfully modified task then has the status CREATED.

Once all the tasks to be processed have been modified, the net is given the status CREATED. All those tasks in a net which are subject to modification are modified in the order in which they appear in the net. The user masks specified in the tasks for modification purposes are presented for parameter value input.

The tasks in subnets (structure elements with FU=S and TYPE=NET) are created with the hypernet. All subnets with the status TOCREATE are executed. A completely modified subnet is assigned the CREATED status, and a partially modified subnet is assigned the PARTIALLY status.

The temporary jobs of a subnet created are only assigned to the hypernet if the modifications to the hypernet are completed with the SAVE operation.

If the modification of the hypernet is ended with RETURN, then the temporary jobs of the subnet must be recreated.

The processing of job masks at the time of statement execution can be influenced via the AVEX6801 and AVEX6802 computer center exits (see the manual "AVAS for the Administrator" [2]).

If aborted following a job mask, the net is given the status PARTIALLY. This status is also set if individual tasks are modified (selected via the AVM001 mask).

The following sets of information are incorporated in the BS2000 jobs to be created:

- parameters entered from user masks which are valid job-wide
- parameters in the USER-PARAM-FILE (net/job)
- called JCL elements (the element must have been entered with FUNCTION=J in the JCLLIB or JCLSYS; elements with any other function are not found)
- called external elements
- parameters from the NPRLIB which are valid net-wide (COL-NET-PAR)
- AVAS system variables.

The following sets of information are incorporated in the parameter sections of the S procedures to be created:

- parameters entered from user masks which are valid job-wide
- parameters in the USER-PARAM-FILE (net/job)
- parameters from the NPRLIB which are valid net-wide (COL-NET-PAR)
- AVAS system variables.

In addition, it is possible to call JCL elements and external elements in the job section or the procedure section (not the parameter section).

Only JCL elements with FUNCTION=J or P can be used for S procedures.

The name of the USER-PARAM-FILE for the net is taken from the net description. Valid values are filename, libname(element[,type]), *STD and *NONE.

It is thus possible to store the name of the parameter file with the modification values permanently in the net description, or to use a default mechanism for the assignment.

***STD**

The name of the USER-PARAM-FILE is sought with PARAM.\$ug.netname[.yymmdd[.hhmmss]] and descending classification in the case of CREATE-PROD-NET.

AVAS first searches for the fully qualified file name (with date and time). If no fully qualified file is cataloged, it searches for the partial qualification with date and then only additionally for the net name.

If no cataloged file is found, AVAS issues a message.

***NONE**

The name of the USER-PARAM-FILE is not sought via the default mechanism. Using the parameter USER-PAR-FILE (*NONE) in the AVM012 mask, the user can assign a file name for the modification to each net if the value *NONE was stored in the net description for USER-PARAM-FILE.

After processing has taken place, AVAS outputs the name of the USER-PARAM-FILE used in the parameter field USER-PAR-FILE (mask AVM012).

Accessing the USER-PARAM-FILE (net)

By means of the Y or S mark in the AVM012 mask, the user can select nets and thus access the USER-PARAM-FILE.

Four different values can be entered in the net description for the name of the USER-PARAM-FILE (see above). Depending on the value and the mark used, the name is ascertained as follows.

Y mark

Value in the net description: filename or libname(element[,type])

The specified file name is used by AVAS.

Value in the net description: *STD

The default file name that was searched for via the default mechanism is used.

Value in the net description: *NONE

There is no processing of a USER-PARAM-FILE.

Exception: In the AVM012 mask a file name is entered under USER-PAR-FILE (*NONE), which is to be used.

No value in the net description:

If the net description contains no specifications, then *NONE is assumed.

If no USER-PARAM-FILE is cataloged even though a file name or *STD is entered, ERROR is displayed as the result in the AVM012 mask.

S mark

Value in the net description: filename or libname(element[,type])

The specified file name is used by AVAS.

Value in the net description: *STD

The default file name that was searched for via the default mechanism is entered by AVAS in the parameter field USER-PAR-FILE of the AVM001 mask.

If no valid file name is found via the default mechanism, the last search key is entered in the field USER-PAR-FILE (AVM001).

Value in the net description: *NONE

If a file name is entered in parameter field USER-PAR-FILE (*NONE) in the AVM012 mask, it will be output in the AVM001 mask. If nothing is entered in the parameter field, *NONE is output.

No value in the net description:

If the net description contains no specifications, then *NONE is assumed.

In the AVM001 mask the user can enter a file name for the net concerned or temporarily modify the specified file name. Access is effected by way of this name. In the case of any following nets, the file name is again ascertained from the corresponding net description for the presetting. An entry of *STD in USER-PAR-FILE (AVM001) does not result in any renewed defaulting via AVAS.

Entries in the parameter fields USER-PAR-FILE (*NONE) in the AVM012 mask or USER-PAR-FILE in the AVM001 mask are taken over unchecked and used as file names.

Accessing the USER-PARAM-FILE (job)

The name of the USER-PAR-FILE for a job is taken from the net description (CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION in mask AVN002).

Valid values are filename, libname(element[,type]), *STD and *NONE.

The name of the parameter file with the modification values is defined directly, or a default name is used.

*NONE

No USER-PAR-FILE has been assigned to the job.

*STD

The name of the USER-PAR-FILE is sought with PARAM.\$ug.jobname.index in the case of CREATE-PROD-NET.

filename

The parameters contained in this file are taken into consideration when the job is modified.

libname(element[,type])

The parameters are sought in the specified element of the defined library with the specified type of library department.

If the type of library department is not specified, type S is used.

Notes

- If the USER-PAR-FILE for the job does not exist, the modification of the job is not aborted. The error is logged in the journal. The modification is only aborted if a parameter cannot be found.
If the modification can be completed successfully, the job is stored in JMDLIB with \$ug_jobname_netname_date_time_index, even if the USER-PARAM-FILE was not found.
- The parameters that are read in for a job from a USER-PARAM-FILE are deleted following modification of the job.
- During modification, the parameters are first sought in the USER-PARAM-FILE of the job and then in the USER-PARAM-FILE of the net.
- The USER-PAR-AMFILE of the job is logged in the journal, depending on the generation parameter PARAM-JOURNAL-OUTPUT.

If the statement is issued without operands, an overview is displayed containing all nets of the associated user group.

CREATE-PROD-NET
[,NET-NAME=[\$ug_]netname]
[,PERIOD-NAME=period / (dd.mm.yy [/hh:mm:ss][,dd.mm.yy [/hh:mm:ss]])]
[,DISPLAY=YES / <u>NO</u>]

NET-NAME=

Name of a net in the net library.

NET-NAME=\$ug_

Name of the user group.

Privileged users can select nets belonging to another user group.

If no user group is specified, the nets belonging to the user's own user group are displayed.

NET-NAME=netname

Element name of the net in the net library.

If a fully qualified net name is entered, an overview of jobs in this net is displayed.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no net name is entered, all nets of the specified user group are displayed.

PERIOD-NAME=

Specifies a period (time span).

All nets whose start times EARLIEST-START falls in this period are to be displayed.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]])

Real date and time specifications indicating the start and end dates/times of the period.

If only the end date is to be specified, it must be preceded by a comma.

If the "right" period limit is missing, the end date is set to the start date and the end time to 23:59. The default value for the start time is 00:00.

Note

The PERIOD-NAME operand may only be specified in conjunction with a partially qualified net name. If the file name is fully qualified, PERIOD-NAME will be rejected with a message.

DISPLAY=

Displays the name of the USER-PARAM-FILE stored in the net description.

DISPLAY=YES

The file name is to be displayed in the AVM012 mask.

DISPLAY=NO

The file name is not to be displayed.

Notes

- The DISPLAY operand may only be specified in conjunction with a partially qualified net name since only then will the AVM012 mask be output. If the file name is fully qualified, the AVM001 mask is output immediately.
- DISPLAY is a temporary operand for the display only. It will not be output again as an operand.

IND	Input parameter index Together with S in the mark column, it is possible to specify the level index as of which the elements are to be displayed. If this entry is omitted, the display will begin at the first index. Entry of the index has no effect on the processing. With IND it is possible only to position the first display.
NET-STATUS	Output parameter Processing status of the net. The following processing statuses exist:
TOCREATE	The net must be modified.
PARTIALLY	The net is subject to modification and has been partially modified.
CREATED	The net has been completely modified and cannot be processed again by means of the CREATE-PROD-NET statement.
RESULT	Output parameter Acknowledgment for the completed action.
CREATED	The net was modified.
PARTIALLY	The net was partially modified.
ERROR	The net was processed with the mark Y or N and an error occurred (see SHOW-JOURNAL).
UPDATED	The net was selected by an S mark and edited via mask AVM001.
NO-UPDATE	Processing was aborted by means of RETURN.
LOCKED	The net is locked.
USER-PAR-FILE	Output parameter {filename / *NONE / libname(element[,type])} Depending on the value of the DISPLAY operand, the name of the USER-PARAM-FILE stored in the net description is output. After execution of the CREATE-PROD-NET statement, the name of a file containing value assignments for the AVAS variables F# is output here, if applicable (see the section "AVAS variables" on page 93). The run parameters contained in this file were included in the processing for the modification. When working with the S mark, the value entered for USER-PAR-FILE is output in the AVM001 mask (see also page 382).

USER-PAR-FILE (*NONE)

Input/output parameter

File containing parameters for the modification.

{filename / libname(element[,type])}

filename

The parameters contained in this file are used during modification if *NONE is specified for USER-PARAM-FILE in the net (see also [page 382](#)).

If filename is not specified, USER-PAR-FILE with *NONE is not supplied with a value and not included in the modification operation.

libname(element[,type])

The parameters are sought in the specified element of the defined library if *NONE is specified for USER-PARAM-FILE in the net.

If the type is not specified, the element is expected to be type S.

Valid specifications for type are S, J, P and D.

If no value (file, element) is specified, no parameters from a USER-PARAM-FILE are taken into consideration when USER-PARAM-FILE=*NONE is specified in the net.

M	Input parameter
S (Select)	<p>If a subnet is marked with S, the overview of the job in the subnet to be modified is displayed. The jobs of the subnet can then be selected for modification in the same way as the jobs of a standard net. The SAVE or RETURN operation returns the user to the overview of the jobs and subnets of the hypernet.</p> <p>The temporary jobs of a subnet are only assigned to the hypernet if the modifications to the hypernet are completed with the SAVE operation. If the modification of the hypernet is ended with RETURN, then the temporary jobs of the subnet must be recreated.</p>
N (No)	The marked tasks are excluded from net modification.
Y (Yes)	<p>The job or the subnet is selected for modification. The user masks defined in the task for parameter input are presented one after the other.</p> <p>Control returns to the overview after modifying a single task.</p> <p>If a subnet is marked with Y, then all temporary jobs of the subnet are created. The subnet is placed in the CREATED state. The temporary jobs of a subnet are only assigned to the hypernet if the modifications to the hypernet are completed with the SAVE operation. If the modification of the hypernet is ended with RETURN, then the temporary jobs of the subnet must be recreated.</p> <p>If no task is marked, then all tasks to be modified are executed one after the other with the EXECUTE operation.</p>
IND	<p>Output parameter</p> <p>Index level at which the subsequently specified task is to run (001, ..., 999).</p>
FU	<p>Output parameter</p> <p>Function of the structure element</p>
J (BS2000 job)	This element in the net description is set up as a BS2000 job.
P (Procedure)	This element in the net description is set up as an S procedure.
S (Subnet)	This element in the net description is a subnet.

TYPE	Output parameter Type of the structure element
MOD	The job is subject to net modification.
NET	The subnet is subject to the net modification when the TOCREATE, PARTIALLY or CREATED status is displayed.
NAME	<p>Output parameter Name of the job. {[\$ug_]jobname / \$ugsys_jobname}</p> <p>In accordance with the displayed user group, the task is sought in the JCLLIB or in the JCLSYS. If no user group exists, it is sought first in the JCLLIB of the user groups of the net and, should it not be found there, in the system library JCLSYS. Subnets (FU=S) are only searched for in the NPRLIB production plan.</p> <p>If the net structure contains several tasks with the same name part "jobname", only one temporary task can be created in the JMDLIB for these (possibly different, see above) input tasks, since the output element is created under the user group of the net.</p> <p>If one of these tasks is marked with Y or S and is successfully modified, all like-named tasks are set to the STATUS:CREATED.</p> <p>The tasks that are assigned a USER-PARAM-FILE by the CREATE-NET-DESCRIPTION or MODIFY-NET-DESCRIPTION statement in the AVN002 mask are not affected by this rule.</p> <p>In the case of these tasks, <code>_index</code> (index of the structure element) is added to the name of the temporary job when the output element is created.</p> <p><i>Note for journal output</i></p> <p>At the time when the first journal record of a task is output, it is not yet clear which library contains the task. In the journal record with ACT/RES=TOCREATE (see the table of <i>Journal records</i> on page 909), the task name (NAME) is output exactly as it is stored in the net structure.</p> <p>If an error occurs during modification, it must be possible to identify the library in which the errored task was read. For this reason, the user group of the task is always output in the journal record with ACT/RES=ERROR.</p>

STATUS	Output parameter Processing status of the task. The following processing statuses are displayed:
TOCREATE	The task still has to be modified.
CREATED	The task has been successfully modified. An S or Y mark for tasks with STATUS:CREATED is ignored.
PARTIALLY	The subnet is subject to the modification and is partially modified.
SYN-IND	Output parameter Synchronization index {index / NXT / END}
RESULT	Output parameter Acknowledgment for the completed action.
CREATED	The modification was completed without errors.
ERROR	An error occurred during modification (see journal).
IGNORE	IGNORE was entered in the user mask for the task.
LOCKED	The input element in the JCLLIB/JCLSYS or the temporary task to be created in the JMDLIB is locked or the subnet in NPRLIB is locked.
NOT-FOUND	The input element (job) could not be found.
USER-PAR-FILE	Input/output parameter File containing parameters for the modification. {*NONE / *BY-HYPERNET / filename / libname(element[,type])}
*NONE	No USER-PARAM-FILE is used.
*BY-HYPERNET	The USER-PARAM-FILE of the hypernet is used provided the net is planned as a subnet. This value is only permissible for subnets.
filename	The parameters in this file are included in the modification operation. The file contains records with parameter keys and values of the user. The F#nnn parameter keys present in the BS2000 jobs (or the key defined by the user) are replaced by the values assigned in the USER-PARAM-FILE. The parameters defined in the parameter section of the S procedures (F#nnn or the parameter name defined by the user) are assigned the values stored in the USER-PARAM-FILE. If this entry is omitted, the file will not be processed.

libname(element[,type])

The parameters are sought in the specified element of the defined library.

If the type is not specified, the element is expected to be type S.
Valid specifications for type are S, J, P and D.

DELETE-CALENDAR – Delete calendar

The DELETE-CALENDAR statement deletes calendars from the calendar library.

If the function is executed by a privileged user, the assignments to the user groups are not checked.

Normal users can only delete the calendar of their own user group.

Deleting a calendar has no effect on nets which have already been planned.

DELETE-CALENDAR
[CALENDAR-NAME=calendar]

CALENDAR-NAME=calendar

Name of a calendar contained in the calendar library. This causes an immediate display of the specified calendar (AVC010 mask).

If the calendar name is specified via a partial qualification (final character *), this produces an overview of all calendars from the calendar library whose names begin with the partial qualification (AVC010 mask).

Note

If the operand is not specified, the users are only shown the calendar assigned to them.

DELETE-COND-DESCRIPTION – Delete condition description

The DELETE-COND-DESCRIPTION statement deletes condition descriptions. Condition descriptions can also be deleted by nets which are running or by the end of the LIFE-TIME being reached.

A prerequisite for a condition description being deleted is that no net is waiting for the condition to be satisfied. If this is doubtful, one of the statements SHOW-COND-DESCRIPTION or MODIFY-COND-DESCRIPTION should be used to call up mask AVD031. In the event of an error, these condition descriptions in the net can be deleted.

After all the necessary entries have been made, the condition description to be deleted is displayed in mask AVD040.

It is not permissible to swap masks to obtain an individual display or a display of the nets using the condition. This can be done beforehand, using either the MODIFY-COND-DESCRIPTION or SHOW-COND-DESCRIPTION statement.

If no operand is specified with the call, or only a partially qualified one, mask AVD040 will present all the condition descriptions which correspond to the partial qualification. For condition descriptions with COND-TYPE=NET or COND-TYPE=JOB, when there is multiple use unique identification is only possible via CREATED BY and NET-NAME or INDEX. In this case, specifying the operands COND-NAME and TYPE is still not enough to ensure an unambiguous selection. The selection of condition descriptions can be further restricted by specifying the STATUS operand.

The status value defined via the STATUS operand is not checked for legitimacy with regard to the TYPE operand which may have been predefined.

If the system cannot make an unambiguous identification, then the condition descriptions selected by applying the specified operand values will be presented to the user in the overview mask AVD040.

The entries to be deleted should then be selected by marking with a Y.

The deletion of condition descriptions takes effect when the EXECUTE operation is performed.

When DELETE-COND-DESCRIPTION is used, no journal record is output.

DELETE-COND-DESCRIPTION

[COND-NAME=[\$ug_]condname]

[,TYPE=NET=JOB / RES / VAL]

[,STATUS=ABENDED / CREATED / DELETED / ENDED / ERROR / EXCLUSIVE / FREE / IGNORED / NO-PLAN / NO-SUBMIT / SHARE / SKIPPED]

COND-NAME=

Name of the condition description which is to be deleted.

COND-NAME=\$ug_

Name of the user group

If no user group is specified, the condition descriptions for the own user group will be output.

COND-NAME=condname

Name of the condition description; from 1–24 characters are permitted.

If the condition description is specified in partially qualified form (last character *), the result will be an overview of the existing entries which have names beginning with the partial qualification.

If condname is not specified, all the descriptions for the specified user group will be output.

If the COND-NAME operand is not specified, all the descriptions for the own user group will be output.

TYPE=

Type of the condition description

It is helpful to specify the type of the condition to limit the number of descriptions displayed for a partially qualified condition name, or if a fully qualified condition name is not unique.

TYPE=NET

Condition descriptions of the type NET should be displayed.

TYPE=JOB

Condition descriptions of the type JOB should be displayed.

TYPE=RES

Condition descriptions of the type RES (resource) should be displayed.

TYPE=VAL

Condition descriptions of the type VAL should be displayed.

STATUS=

Status of the condition descriptions to be displayed.

Only the condition descriptions with the specified status are displayed.

The status which a condition description may assume depends on the type of the condition.

The permissible status values are described under the MODIFY-COND-DESCRIPTION statement.

STATUS=ABENDED

DELAY-SOLUTION=CANCEL or CANCEL-NET

STATUS=CREATED

An entry was created.

STATUS=DELETED

The job was deleted using the D mark for MODIFY-SUBMIT-NET.

STATUS=ENDED

Net/job processing has ended.

STATUS=ERROR

An error has occurred.

STATUS=EXCLUSIVE

The resource is being used exclusively.

STATUS=FREE

The resource is again freely available.

STATUS=IGNORED

DELAY-SOLUTION=IGNORE

STATUS=NO-PLAN

The task has not been planned (SYMDAT or the D mark for CREATE-PLAN-NET).

STATUS=NO-SUBMIT

The task was deleted using the D mark for SUBMIT-NET or REPEAT-NET.

STATUS=SHARE

The resource is shareable and is currently in use.

STATUS=SKIPPED

The task was skipped during restart (RESTART-NET).

OBJ	Input/output parameter Specifies t which condition object to be displayed. The preset value of this parameter is DES.
DES	The condition description itself is presented.
STATUS	Output parameter Status of the condition description.
RESULT	Output parameter Confirmation of the action performed.
DELETED	The condition description has been deleted.
LOCKED	The condition description is locked as it is being edited by other users.
NO-DELETE	The condition description has not been deleted, because there are still nets waiting for events from the condition description or do not have the correct status (e.g. a condition entry with TYPE=RES must be in the FREE state).
NOT-FOUND	The condition description has already been deleted by another user or net.
CREATED BY NET-NAME / USER	Output parameter Name of the net, or ID of the user, which created the description.
IND	Output parameter Index of the structure element, if the description was created via a net.

DELETE-DOCUMENT – Delete documentation elements

The DELETE-DOCUMENT statement is used to delete documentation elements from the DOCLIB.

The deletion of documentation elements via mask AVS019 has no effect on the assignment of the documentation elements in the net.

Elements in the system documentation library DOCSYS can be deleted by means of the DELETE-SYSTEM-ELEMENT statement, operand AVAS-SYSTEM-LIB=DOCSYS.

If the statement is issued without operands, all documentation elements with the user group of the user executing the function are displayed (mask AVS019).

DELETE-DOCUMENT
[ELEMENT-NAME=[\$ug_]element]

ELEMENT-NAME=

Name of a documentation element in the DOCLIB, that is to be deleted.

ELEMENT-NAME=\$ug_

Name of the user group

Only a privileged user may specify a foreign user group.

If no user group is specified, the elements from the user's own user group are output.

ELEMENT-NAME=element

Name of the documentation element in the DOCLIB.

Results in display of the element name in the overview mask AVS019.

If the element name is specified in partially qualified form (last character *), this produces an overview of all documentation elements whose names begin with the partial qualification (mask AVS019).

DELETE-JOB – Delete jobs and JCL elements

The DELETE-JOB statement enables the user to delete jobs and JCL elements from the AVAS user library JCLLIB.

If the statement is issued without operands, all the elements belonging to the user's own user group are presented for deletion.

DELETE-JOB
[ELEMENT-NAME=[\$ug_]element]

ELEMENT-NAME=

Name of a job or a JCL element in the JCLLIB.

ELEMENT-NAME=\$ug_

Name of the user group.

Only privileged users are allowed to specify a foreign user group.

If no user group is specified, the elements belonging to the user's own user group are displayed.

ELEMENT-NAME=element

Element name in the JCLLIB.

This entry causes the element to be displayed in the overview mask.

If the element name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no element name is entered, all elements belonging to the specified user group are displayed.

Note

Jobs and JCL elements from the JCLSYS can only be deleted by the AVAS administrator (see the manual "AVAS for the Administrator" [2]).

DATE	Output parameter Date of last modification.
RESULT	Output parameter
DELETED	The element was deleted from the JCLLIB.
LOCKED	The element could not be deleted because it is currently being edited by another user.

DELETE-JOB-LOG – Delete logs

The DELETE-JOB-LOG statement is used to delete logs from the AVAS pool. All the logs of a net or all the logs of a job run can be deleted. The status of the log entry is not relevant to this function.

When the statement is called, an overview of the net is displayed in mask AVI016. If a net is marked with Y in mask AVI016, all the logs of the net are deleted when the EXECUTE operation is performed.

The EXECUTE operation in conjunction with the S mark displays mask AVI017 with an overview of the existing job runs of a net. You can delete all the logs of a job run by means of the Y mark in mask AVI017.

If the statement is issued without operands, all the nets with the user group of the function user will be displayed.

Notes

- The DELETE-JOB-LOG statement can only be used for a job run if this job run is no longer being monitored by the AVAS job control system.
- Individual logs of a job run cannot be deleted.
- Editing is not logged in the journal.

DELETE-JOB-LOG
[NET-NAME=[\$ug_]netname]

NET-NAME=

Name of a net in the AVAS pool, the logs of which are to be deleted.

NET-NAME=\$ug_

Name of the user group

Only the privileged user may specify a foreign user group.

If the user group is omitted, the user group of the function user is assumed.

NET-NAME=netname

Name of the net in the AVAS pool.

If the net name is entered as a partially qualified name (last character *), an overview of all the nets with names beginning with the partial qualification will be displayed.

CATID	Output parameter Catalog ID of the computer on which the job has run. <i>Note</i> When a server job runs without a signal, by default the job control system enters JOBLOG-NAME=*NONE for it in the log file LOGSYS. In this case CATID contains the catalog ID under which the substitute job AVSSINCM ran.
STATUS	Output parameter Status of the element in the AVAS pool
ADDED	Log data for the job run was collected via the ADD-JOB-LOG function.
ASSIGNED	No log data for the job run. A log was signaled in the job run, but no log data was transferred.
CREATED	No log data for the job. The log entry was created by the run control system.
ERROR	An error occurred during transfer of the log data in the job run.
IGNORE	The log or the signaled log(s) are to be ignored.
SAVED	The log(s) were saved as part of reorganization.
TRANSFERRED	All log data was collected error-free in the job run.
RESULT	Output parameter Acknowledgment for the execution of the action.
DELETED	All the logs of this job run have been deleted.
LOCKED	The job with the specified CATID and TSN is still under the control of the run control system. The data for the job (IND and JOB-NAME) therefore cannot be determined.

Note

The RETURN operation terminates net editing. Logs may have been deleted in the AVAS pool, however.

DELETE-NET-DESCRIPTION – Delete net description

The DELETE-NET-DESCRIPTION statement enables the user to delete net descriptions from the net library NETLIB assigned to him via his user group.

- Either a single description can be deleted by specifying the statement with a unique net name, or
- one or more descriptions can be deleted by making appropriate entries in the mark column of the overview mask.

If the statement is issued with no operands specified, this causes an overview to be displayed containing all nets belonging to the associated user group.

DELETE-NET-DESCRIPTION
[NET-NAME=[\$ug_]netname]

NET-NAME=

Name of a net whose description is to be deleted.

NET-NAME=\$ug_

Name of the user group.

If no user group is specified, all element of the user's own user group are displayed.

NET-NAME=netname

Element name in the NETLIB.

This entry directly causes the net description to be displayed in the overview.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no net name is entered, all elements of the specified user group are displayed.

Note

Net descriptions in the NETSYS net library can only be deleted by the AVAS administrator (see the manual "AVAS for the Administrator" [2]).

DELETE-PERIOD – Delete period

The DELETE-PERIOD statement is used to delete periods from the period file.

Standard periods with TYPE=VAR cannot be deleted using the dialog function. These periods must be deleted using the batch function DELETE-PERIOD.

If the statement is entered without operands, this causes all existing periods to be displayed.

DELETE-PERIOD
[PERIOD-NAME=period]

PERIOD-NAME=period

Name of the period to be deleted.

This causes the specified period to be displayed (AVC021 mask).

If the period name is specified via a partial qualification (final character *), this produces an overview of all periods from the period file whose names begin with the partial qualification (AVC021 mask).

P-E-TIME	Output parameter
RESULT	Output parameter Acknowledgment for the completed action:
DELETED	The marked period was deleted.

Note

The parameters defined by CREATE-PERIOD are the default values.

DELETE-PLAN-NET – Delete planned nets from production plan

The DELETE-PLAN-NET statement enables the user to delete planned nets from the NPRLIB assigned to him via his user group.

The net can only be deleted from the NPRLIB if it is not yet contained in the run control file (prior to release for production by means of SUBMIT-NET) or if it has already been deleted from the run control file in the course of reorganization.

Subnets are deleted with the hypernet they are assigned to and are therefore not shown with them in the overview of the nets.

A single subnet must be deleted if it was not released for processing with the hypernet (D mark for SUBMIT-NET) or the associated hypernet is not present (planning cancelled). Subnets are shown when DELETE-PLAN-NET is called if the DISPLAY=ALL operand is specified.

Nets which are still registered in the run control file as events cannot be deleted. A single net can be deleted by entering the statement with a unique net name. One or more nets can be deleted by marking them accordingly in overview mask AVP010.

The following are deleted:

- the complete net in the NPRLIB, including the net parameters already collected using COLLECT-NET-PARAMS
- the associated temporary jobs in the JMDLIB.
- all subnets of a hypernet including the associated parameters and the temporary jobs.

Privileged users can also delete nets of a different user group.

If the statement is issued without operands, an overview of all nets of the associated user group is displayed.

Privileged users can select nets of another user group via the user group entry.

DELETE-PLAN-NET

[PERIOD-NAME=period / (dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]])]

[,NET-NAME=[\$ug_]netname]

[,NET-STATUS=TOCREATE / PARTIALLY / CREATED / NOTTOCREATE / SUBMITTED / REPEATED]

[DISPLAY=ALL]

PERIOD-NAME=

Specifies a period (time span).

Those nets are to be presented for deletion whose start time EARLIEST-START falls within this period.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=dd.mm.yy/hh:mm:ss

Real date and time specifications determining the start and end dates/times of the period.

If the "right" period delimiter is missing, the end date is set to the start date and the end time to 23:59.

NET-NAME=

Name of a planned net to be deleted in the NPRLIB.

NET-NAME=\$ug_

Name of the user group.

If no user group is specified, the elements of the user's own user group from the NPRLIB are displayed.

NET-NAME=netname

Element name of the net in the production library.

If the net name is specified via a partial qualification (final character *), this causes an overview to be displayed containing those elements whose names begin with the partial qualification.

If the net name is specified via a full qualification, this causes the net to be displayed via the AVP003 mask (see the statement MODIFY-PLAN-NET on [page 638](#)). The net can be deleted by means of EXECUTE.

If no net name is specified, all nets of the user group are displayed.

NET-STATUS=

All nets of a selected processing status are to be presented for deletion.

NET-STATUS=TOCREATE

The nets still have to be modified.

NET-STATUS=PARTIALLY

The nets have been partially modified.

NET-STATUS=CREATED

The nets have been completely modified.

NET-STATUS=NOTTOCREATE

The nets are not subject to modification.

NET-STATUS=SUBMITTED

The nets have already been released.

NET-STATUS=REPEATED

The nets have been released for processing by means of the REPEAT-NET statement. This processing status is generated in the production plan.

DISPLAY=ALL

Subnets are also shown in the overview of nets. The operand is deleted after the overview is obtained and is not automatically taken into account the next time an overview is obtained.

Notes

- The processing of nets with NET-STATUS=SUBMITTED cannot be influenced by the DELETE-PLAN-NET statement. Processing can, however, be terminated by means of the CANCEL-NET statement.
- For nets which terminated normally, DELETE-PLAN-NET forms part of reorganization, i.e. to clean up the NPRLIB and JMDLIB (see the manual “AVAS for the Administrator” [2]).

NOTTOCREATE	The nets is not subject to modification.
SUBMITTED	The nets are released yet.
REPEATED	The nets are released for processingby the REPEAT-NET statement. This processing status is created in the production plan.
RESULT	Output parameter Acknowledgment for the completed action.
DELETED	The net was deleted from the production plan.
NO-DELETE	The net was not deleted from the production plan.
FROM-DATE	Input/output parameter Start value of a period: dd.mm.yyyy[/hh:mm:ss] The default values are PERIOD-START-DATE and PERIOD-START-TIME, provided a net group was selected via PERIOD-NAME, or EARLIEST-START of the first selected net. The period limit can be modified, but must lie within the values of PERIOD-NAME. If no PERIOD-NAME is specified, FROM-DATE is assigned the value EARLIEST-START from the first net. If FROM-DATE is deleted by the entry, the default assignment described above is used again.
TO-DATE	Input/output parameter Final value of a period. dd.mm.yyyy[/hh:mm:ss] The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise, as for FROM-DATE). If no PERIOD-NAME is specified, TO-DATE is assigned the value EARLIEST-START from the last net. If TO-DATE is deleted by the entry, the default assignment described above is used again.

DELETE-PROD-JOB – Delete static tasks

The DELETE-PROD-JOB statement can only be used to delete static jobs from the AVAS user library JMDLIB. Since there is no relation to a particular net, the statement has no effect on the net status, and therefore nothing is logged in the journal.

Temporary jobs can be deleted using the MODIFY-PROD-NET or DELETE-PROD-NET statement.

If the statement is issued without operands, an overview containing all elements created by CREATE-PROD-JOB and belonging to the associated user group is displayed.

DELETE-PROD-JOB
[ELEMENT-NAME=[\$ug_]element]

ELEMENT-NAME=

Name of a static job in the JMDLIB.

ELEMENT-NAME=\$ug_

Name of the user group.

Only privileged users are permitted to specify a foreign user group.

If no user group is specified, the elements belonging to the user's own user group are displayed.

ELEMENT-NAME=element

Element name in the JMDLIB.

This causes the specified element to be displayed in the overview mask.

If the element name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no element name is entered, all production jobs of the specified user group are displayed.

Note

Executable jobs from the JMDSYS can only be deleted by the AVAS administrator (see the manual "AVAS for the Administrator" [2]).

ELEMENT-NAME	Output parameter Names of the elements presented for modification. \$ug_jobname[_netname[_ymmdd_hhmmss[_index]]]
DATE	Output parameter Date of last modification.
RESULT	Output parameter
DELETED	The element has been deleted.
NO-DELETE	The element could not be deleted.

DELETE-PROD-NET – Delete all temporary tasks of net

The DELETE-PROD-NET statement enables the user to delete from the JMDLIB all temporary jobs (temporary tasks) of a net which were created up to that time. The statement can only delete tasks of nets with the net status PARTIALLY or CREATED.

Following successful execution of the statement, the net status is set to TOCREATE in the NPRLIB and the status of each deleted task is reset from CREATED to TOCREATE.

Subnets are not shown in the overview of planned nets (AVM020). The temporary jobs already created for subnets (structure elements with FU=S and TYPE=NET) are deleted together with the temporary jobs of the hypernet.

If just the temporary jobs of the hypernet or just the temporary jobs of a subnet are deleted, use the MODIFY-PROD-NET statement (see [page 646](#)).

All those tasks assigned to the net which is to be processed are physically deleted from the JMDLIB. The operation is logged in the journal. Net parameters entered via COL-NET-PAR are retained, and may be reused or remodified as desired.

If the statement is issued without operands, an overview containing all the nets of the associated user group is displayed.

DELETE-PROD-NET

```
[NET-NAME=[$ug_ ]netname
[,NET-STATUS=PARTIALLY / CREATED]
```

NET-NAME=

Name of a planned net

NET-NAME=\$ug_

Name of the user group

Privileged users may select nets belonging to a foreign user group.

If no user group is specified, the elements of the user's own user group are displayed.

NET-NAME=netname

Element name of the net in the NPRLIB

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no net name is entered, all nets of the specified user group are displayed.

NET-STATUS	Output parameter Nets with the following processing statuses in the production plan are presented for processing:
PARTIALLY	The net is already partially modified.
CREATED	The net has been completely modified. Once the statement has been executed, the net has the processing status TOCREATE.
RESULT	Output parameter Acknowledgment for the completed action.
UPDATED	The temporary tasks of the net were deleted, and the net status and status of the tasks were modified.
NO-UPDATE	The temporary tasks of the net were not deleted, and the net status and status of the tasks were not modified. The operation was aborted.

TYPE	Output parameter Type of the structure element
MOD	The job is subject to net modification.
NET	The subnet is subject to the net modification if the TOCREATE, PARTIALLY or CREATED status is shown.
NAME	Output parameter Name of the job. {[\$ug_]jobname / \$ugsys_jobname} In accordance with the displayed user group, the task is sought in the JCLLIB or in the JCLSYS. If no user group exists, it is sought first in the JCLLIB of the user groups of the net and, should it not be found there, in the system library JCLSYS. Subnets (FU=S) are only looked for in the NPRLIB production plan. If the net structure contains several tasks with the same name part "jobname", only one temporary task can be created in the JMDLIB for these (possibly different, see above) input tasks, since the output element is created under the user group of the net.
STATUS	Output parameter Processing status of the task. Only temporary tasks already in the JMDLIB are offered for deletion.
CREATED	The task has been modified. After the statement has been executed, the status is reset to TOCREATE.
SYN-IND	Output parameter Synchronization index {index / NXT / END}
RESULT	Output parameter Acknowledgment for the completed action.
LOCKED	The input element in the JCLLIB/JCLSYS or the temporary task to be created in the JMDLIB is locked.
NOT-FOUND	The input element (job) could not be found.
USER-PAR-FILE	This field is not supplied with data here.

Note

In the case of EXECUTE, D marks are processed and temporary tasks are deleted. An implicit SAVE is subsequently performed. RETURN is no longer possible since the tasks are physically deleted.

DELETE-SYSTEM-ELEMENT – Delete elements from central AVAS system library

The DELETE-SYSTEM-ELEMENT statement enables the user to delete elements from an AVAS system library.

The DELETE-SYSTEM-ELEMENT statement is permitted only for users with * authorization.

Elements may be deleted from the following AVAS system libraries:

- NETSYS
Net descriptions.
- JCLSYS
Jobs and JCL elements.
- JMDSYS
Executable jobs.
- DOCSYS
Documentation elements.

DELETE-SYSTEM-ELEMENT
AVAS-SYSTEM-LIBRARY=NETSYS / JCLSYS / JMDSYS / DOCSYS [,ELEMENT-NAME=[\$ugsys_]element]

AVAS-SYSTEM-LIBRARY=

Symbolic names of the AVAS system libraries:

AVAS-SYSTEM-LIBRARY=NETSYS

Net descriptions.

AVAS-SYSTEM-LIBRARY=JCLSYS

Jobs and JCL elements.

AVAS-SYSTEM-LIBRARY=JMDSYS

Executable jobs.

AVAS-SYSTEM-LIBRARY=DOCSYS

Documentation elements.

ELEMENT-NAME=

Specifies which elements are to be deleted.

ELEMENT-NAME=\$ugsys_

Name of the system user group.

If no system user group is specified, all elements of the system user group specified via the AVAS-SYSTEM-LIBRARY operand are displayed.

ELEMENT-NAME=element

Element name in the AVAS system library

If the element name is entered via a partial qualification (final character *), this causes an overview to be displayed containing those elements whose name begins with this partial qualification.

If no element name is specified, all elements of the specified system user group will be displayed.

EDIT-DOCUMENT – Edit documentation elements

The EDIT-DOCUMENT statement is used to select documentation elements from the DOCLIB and display them by way of masks for editing. Depending on the operand and operand value entered, the following masks are output:

ELEMENT-NAME= partially qualified	AVS019 – Overview of documentation files
ELEMENT-NAME= fully qualified	Displays the data records of the documentation elements through EDT
no operand specified	AVS019 – Overview of documentation files for own user group

If the statement is issued without operands, all documentation elements with the user group of the user executing the function are displayed (mask AVS019).

EDIT-DOCUMENT
[ELEMENT-NAME=[\$ug_]element]

ELEMENT-NAME=

Name of a documentation element in the DOCLIB whose records are to be displayed for editing by EDT.

ELEMENT-NAME=\$ug_

Name of the user group

Only a privileged user may specify a foreign user group.

If no user group is specified, the elements from the user's own user group are output.

ELEMENT-NAME=element

Name of the documentation element in the DOCLIB

Results directly in editing of the documentation element by EDT. Mask AVS016 is subsequently output.

If the element name is specified in partially qualified form (last character *), this produces an overview of all documentation elements whose names begin with the partial qualification (mask AVS019).

RESULT	Output parameter Confirmation of the action performed.
UPDATED	The documentation element has been modified in the DOCLIB.
NO-UPDATE	The documentation element has not been modified in the DOCLIB (RETURN operation).
NEWGEN	The documentation element has been entered in the DOCLIB under a new name. The element indicated by RESULT has not been modified. The element with the new element name will be displayed only in a subsequent output of the overview mask.

AVS016 – Output on termination of EDT

```

AVAS-Vnn.yxmn/AVS016          E D I T - D O C U M E N T          tt.mm.jjjj/hh:mm:ss

DOCUMENT-NAME=.....

NEW-DOCUMENT-NAME=.....

OVERWRITE=...

CMD: ..... OPR: .....
MSG: .....
    
```

- DOCUMENT-NAME Output parameter
Name of the edited documentation element.

- NEW-DOCUMENT-NAME
Input parameter
Name of the new documentation element under which it is to be entered in the DOCLIB.
\$ug_elementname

- OVERWRITE Input parameter
 - YES An existing element having the same name is to be overwritten.
 - NO An existing element having the same name is not to be overwritten.
 - {YES/NO} By default, the value NO will be output, unless the system parameters have been used to set YES as the default value.

EDIT-JOB – Edit jobs and JCL elements

As an element in the JCLLIB, a job or a JCL element can either be addressed directly via the ELEMENT-NAME operand, or be selected by marking the element name in the AVE010 mask. This mask presents an overview of existing elements, and is displayed when the statement is specified without operands or when a selection is made via a partially qualified element name.

The overview only contains elements belonging to the specified user group or to the user's own user group; only privileged users are allowed to edit elements belonging to a foreign user group.

The selected element is displayed on the screen in EDT, and can be edited with EDT statements.

The EDT display differs for a BS2000 job and an S procedure.

The BS200 job, JCL element or S procedure is output using workfile (0) in EDT. The parameters of an S procedure are output using workfile (1) in EDT, which is the only place where they can be created or prepared.

If an element which already exists is being edited, a message informs the user whether it is a BS2000 job or an S procedure (only if this has previously been specified by the user via the parameter field FUNCTION= in mask AVE011).

Once the user has terminated EDT processing, the AVE011 mask is displayed. The user can now decide whether to

- write the modified element back to the JCLLIB or
- write the element back not as a job, but as an S procedure (or a procedure element)
- enter it in the JCLLIB under a new name as a BS2000 job or an S procedure, i.e. copy it.

An attempt to overwrite an S procedure with a BS2000 job of the same name or vice versa is not permitted, and will be rejected with a corresponding message.

Exception:

When EDIT-JOB is called from the NET-STRUCTURE mask AVN004, the FUNCTION of the job depends on the FUNCTION of the structure element. If a job with the same name already exists, its FUNCTION may possibly be modified.

If the modified element is to be written back, OVERWRITE=YES and the SAVE operation must be specified.

If the modified element is to be entered with a new name, the new element name, the SAVE operation and OVERWRITE=YES (if the new element name already exists) must be specified in the AVE011 mask.

Depending on whether the element is to be saved as a BS2000 job or an S procedure, either the parameter FUNCTION=J or FUNCTION=P must be specified, respectively. Only if FUNCTION=P is specified will the procedure parameters (EDT display, workfile (1)) be written back.

User-specific version control for the individual nets can be set up via the CC exit AVEX0101 when saving the net description.

If two or more elements were selected in the element overview (AVE010) prior to EDT processing, these elements are displayed consecutively in EDT for editing and subsequent "saving" (SAVE).

If an edited element is not to be written back to the JCLLIB, element editing can be aborted by entering the RETURN operation in mask AVE011. The next marked element is then displayed for editing in EDT, or, alternatively, the AVE010 overview mask is displayed.

EDIT-JOB
[ELEMENT-NAME=[\$ug_]element]

ELEMENT-NAME=

Name of a job or a JCL element in the JCLLIB.

ELEMENT-NAME=\$ug_

Name of the user group.

Only privileged users are allowed to specify a "foreign" user group.

If no user group is specified, the elements belonging to the user's own user group are displayed.

ELEMENT-NAME=element

Element name in the JCLLIB.

This entry directly causes the element to be edited in EDT.

If the element name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no element name is entered, all elements of the specified user group are displayed.

ELEMENT-NAME	Output parameter Names of the jobs and JCL elements.
DATE	Output parameter Date of last modification.
RESULT	Output parameter
NEWGEN	The element was entered in the JCLLIB with a new name. The edited element is retained in the JCLLIB in its original state and under its original name. The element with the new element name does not appear in the overview mask until a later display.
UPDATED	The element was written back.
NO-UPDATE	The element was not saved (e.g. element editing was aborted with RETURN).

AVE011 – Display after terminating the EDT

```

AVAS-Vnn.yxmn/AVE011          EDIT- / SHOW- (PROD) JOB          tt.mm.jjjj/hh:mm:ss
                               AVAS-USER-LIBRARY=.....

                               .....
ELEMENT-NAME   =.....
NEW-ELEMENT-NAME=.....
OVERWRITE=...
FUNCTION =.      J - JOB
                  P - PROCEDURE
                  X - SERVER-JOB

CMD:..... OPR:.....
MSG:.....
    
```

AVAS-USER-LIBRARY

Output parameter
Abbreviated name of the processed AVAS library: JCLLIB

ELEMENT-NAME

Output parameter
Name of the edited job or JCL element.

NEW-ELEMENT-NAME

Input/output parameter

Name of the new element, with which it is to be entered in the JCLLIB.

OVERWRITE

Input/output parameter

{YES / NO}

By default, the value NO will be output, unless the system parameters have been used to set YES as the default value.

The preset value NO must be overwritten by YES and the SAVE operation specified if:

- an edited element is to be written back to the JCLLIB;
- the edited element is to be transferred to the JCLLIB with a new name and the name specified for NEW-ELEMENT-NAME already exists in the JCLLIB. The contents of the existing element are overwritten in the process.

FUNCTION

Input/output parameter

The function of the element.

Attribute which distinguishes between a BS2000 job and an S procedure.

J (BS2000 job)

The element is to be recorded as a BS2000 job or as a JCL element for jobs.

P (Procedure)

The element is to be recorded as an S procedure or as a JCL element for S procedures.

Note

The value assigned to the element which is being edited will be displayed. If no value has yet been assigned for the element which is being edited, the value J will by default be inserted in the parameter field. This predefined value can be overwritten.

Notes

- Empty elements cannot be saved. In EDT, the workfile (0) must contain entries for BS2000 jobs and S procedures, or else the SAVE operation will be rejected with a message.
- If an element is to be written back as an S procedure, a separator string is also saved in the element. If parameters are being used, the separator string is inserted into the element as a record between the procedure part (workfile(0)) and the procedure parameters (workfile(1)). If there are no parameters (workfile (1) empty), the separator string will be stored as the last record in the element.
The separator string is not included in the output when editing with EDT.
- When EDIT-JOB is called from the NET-STRUCTURE mask AVN004, the element function is supplied with the function from the net structure definition. If an element with the same name (but possibly with a different function) already exists in the JCLLIB, it is read in. Its function will be adjusted accordingly. If it is processed as a BS2000 job and was previously an S procedure, the separator string and possibly the parameters in EDT screen 0 are displayed and must be removed manually.

EDIT-PROD-JOB – Edit executable jobs

With AVAS, executable jobs stored in the AVAS user library JMDLIB can be edited by means of EDT.

The overview contains only jobs belonging to the user's own user group or the specified user group, with only privileged users being able to edit elements belonging to a foreign user group. The transition to EDT is activated by marking an element and entering EXECUTE, or by specifying a fully qualified element name.

The selected element is output to the screen in EDT, and can be edited with EDT statements. The EDT display depends on whether a BS2000 job or an S procedure is concerned. BS2000 jobs and S procedures are all output in the EDT workfile (0). The parameters of an S procedure are output in the EDT workfile (1), which is the only place where they can be created or edited.

If an element which already exists is being edited, a message indicates whether the element is a BS2000 job, an S procedure or a server job (only when this has already been defined by the user by the FUNCTION parameter in mask AVE011).

As soon as the user terminates the use of EDT for editing mask AVE011 is displayed, enabling the user to decide whether

- the modified element is to be written back
- the element is to be written back not as a job but as an S procedure (only permissible for static jobs)
- the element is to be entered in the JMDLIB under a new name as a BS2000 job or an S procedure job, and hence is to be copied.

Any attempt to overwrite an S procedure with a BS2000 job of the same name or vice versa is impermissible, and is rejected with a corresponding error message.

Exception:

When EDIT-JOB is called from the NET-STRUCTURE mask AVN004, the FUNCTION of the job depends on the FUNCTION of the structure element. If a job with the same name already exists, its FUNCTION may possibly be modified.

If a modified element is to be written back, OVERWRITE=YES should be specified.

If the modified element is to be entered under a new name, then mask AVE011 should be used to specify the new element name and, if this already exists, OVERWRITE=YES.

Depending on whether the element is to be saved as a BS2000 job or an S procedure, the function should be specified as J or P respectively. Only if P is specified will the S procedure parameters (displayed in EDT in workfile (1)) be written back.

Writing to the JMDLIB is effected by SAVE. RETURN aborts element processing; no data is written back.

Modifications to temporary jobs are logged in the journal file. The journal is not output until SAVE is specified. Records which have been added, updated or deleted are logged (the same as for MODIFY-SUBMIT-JOB). The records are output to the net name contained in the element name. The status of the net in the journal file remains unchanged.

Modifications to static jobs are not logged in the journal. The statement has no effect on the processing status of any assignable net, nor does it affect the status of the job.

User-specific version control for the individual nets can be set up via the CC exit AVEX0101 when saving the net description.

If the statement is issued without operands, an overview of all jobs belonging to the associated user group is displayed.

EDIT-PROD-JOB
[ELEMENT-NAME=[\$ug_]element]

ELEMENT-NAME=

Element name of a job

ELEMENT-NAME=\$ug_

Name of the user group.

Only privileged users are allowed to specify a foreign user group.

If no user group is specified, the elements of the user's own user group are displayed.

ELEMENT-NAME=element

Element name in the JMDLIB.

This directly causes the element to be processed in EDT.

If the element name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no element name is entered, all the jobs of the specified user group are displayed.

DATE	Output parameter Date of last modification.
RESULT	Output parameter
UPDATED	The element has been stored.
NO-UPDATE	The element has not been stored.
NEWGEN	A new element was created.

AVE011 – Output following termination of EDT

```

AVAS-Vnn.yxmn/AVE011          EDIT- / SHOW- (PROD) JOB          tt.mm.jjjj/hh:mm:ss
                               AVAS-USER-LIBRARY=.....

ELEMENT-NAME      =.....
NEW-ELEMENT-NAME=.....
OVERWRITE=...
FUNCTION =.        J - JOB
                   P - PROCEDURE
                   X - SERVER-JOB

CMD:.....          OPR:.....
MSG:.....
    
```

AVAS-USER-LIBRARY

Output parameter
 Abbreviated name of the edited AVAS library: JMDLIB.

ELEMENT-NAME

Output parameter
 Name of the processed element.
 \$ug_jobname[_netname[_yymmdd_hhmmss[_index]]]

NEW-ELEMENT-NAME

Input/output parameter
 Name of the element as it is to be output to the JMDLIB.
 [\$ug_jobname[_netname]

“netname” can be used to specify that the static job, server job or S procedure is only valid for a specific net.

For NEW-ELEMENT-NAME, the name of a temporary job or an S procedure must not be specified. New temporary tasks cannot be created.

OVERWRITE	<p>Input/output parameter {YES / NO}</p> <p>If the element (NEW-ELEMENT-NAME) already exists, the user can decide whether or not to overwrite it.</p> <p>The value output by default is NO, unless the system parameters have been used to set YES as the default value.</p> <p>The SAVE operation must be performed with OVERWRITE=YES if</p> <ul style="list-style-type: none"> – an edited element is to be written back into the JMDLIB, – the edited element is to be transferred into the JMDLIB with a new name and the name specified as the NEW-ELEMENT-NAME already exists in the JMDLIB. This overwrites the contents of the existing element.
FUNCTION	<p>Input/output parameter Function of the element Distinguishes between BS2000 job and S procedure</p>
J (BS2000 job)	This element is to be set up as a BS2000 job.
P (Procedure)	This element is to be set up as an S procedure.

Notes

- The value assigned to the element which is being edited is displayed.
If no value has yet been assigned to this element, the parameter field is given the value J by default.
The preset value can be overwritten.
- In the case of temporary jobs and S procedures, the value displayed cannot be modified unless the element is to be assigned a new name (NEW-ELEMENT-NAME) before being written back.
- Static S procedures cannot be overwritten with a job of the same name.

Notes

- Empty elements cannot be saved (CMD: SAVE). In the EDT workfile (0), there must be entries for BS2000 jobs and S procedures, or else the SAVE operation is rejected with a message.
- When an element is to be written back as an S procedure, a separator string is saved with the element. This separator string is inserted as a record between the S procedure section (workfile(0)) and the S procedure parameters (workfile (1)) when parameters are being used.
If there are no parameters (workfile (1) is empty), the separator string is stored as the last record in the element.

When EDT is used for editing, the separator string is not included in the output.

- When EDIT-PROD-JOB is called from the NET-STRUCTURE mask AVN004, the element function is supplied with the function from the net structure definition. If an element with the same name (but possibly with a different function) already exists in the JCLLIB, it is read in. Its function will be adjusted accordingly. If it is processed as a BS2000 job and was previously an S procedure, the separator string and possibly the parameters in EDT screen 0 are displayed and must be removed manually.

EDT – Edit external SAM/ISAM user files

In order to make it easier for the user to edit user files outside the AVAS environment, it is possible to call EDT under AVAS.

This statement is not allowed to have any operands. This means that any entries in the OPR field from a preceding statement must be deleted. Once EDT has been called, it is not possible to edit elements in the AVAS libraries.

EDT

Once EDT has been terminated by means of HALT, control automatically returns to AVAS and the empty system mask AVS030 is displayed.

If the edited files are not saved, a corresponding message is output when EDT is terminated. AVAS branches back into EDT for the user to perform the save. If EDT is terminated again at this point, there will be an unconditional return to AVAS.

HOLD-NET – Suspend nets currently being processed

The HOLD-NET statement puts a net into the HOLD state. Only nets that currently have a status of RUNNING, CONDWAIT, WAITING, OPWAIT, RESUMED, RESTARTED, ERROR or START can be suspended.

Even nets which have already been put into the HOLD or 'CALLED FOR' HOLD status by the HOLD-NET statement can be processed.

An individual net can be processed either by specifying its fully qualified net name, or by displaying a net group and selecting it by marking.

The index level in the net structure at which processing should be suspended can be prescribed or selected. The net can be suspended at any index level of the net structure that has not yet been processed by the run control system. This also includes index levels on which structure elements that have been excluded from processing are defined (e.g. structure elements with the NO-PLAN status).

If the user does not specify an index level, the HOLD status is set for the lowest possible index levels. For example, in the case of jobs in the RUNNING status this is the structure elements of the index levels specified in SYN-IND.

If the net has a status of RUNNING, its status will generally be set to 'CALLED FOR' HOLD after the statement has been executed.

If the net has a status of CONDWAIT, HOSTWAIT, WAITING, OPWAIT, RESTARTED, ERROR or START, execution of the statement will set the net status to a value which depends on the type of processing.

The HOLD status should always be set via the associated hypernet for subnets in the NETWAIT status so that the HOLD status is also set for the structure element used to start the subnet in the hypernet. This should generally be done via the NET-CONTROL statement (see [page 750](#) ff.) since hypernets are displayed in the net list without the subnets when this statement is used.

When HOLD-NET is executed on a subnet in the NETWAIT state, the status is set to HOLD. When starting the subnet the structure element is placed in the RUNNING//HOLD state.

If the HOLD-NET statement is executed with a prescribed index, or with a selection made in the structure mask, the status of the net is set to 'CALLED FOR' HOLD; in other cases it is set to HOLD.

The net status 'CALLED FOR' HOLD is converted to the HOLD status by the run control system when

- it reaches the index level for which the hold was requested,
- no more tasks are being executed (status \neq RUNNING) and
- there are no more structure elements to be processed.

Execution of the statement is logged in the journal. Nets placed in the HOLD state may be made available for processing again by means of the RESUME-NET statement. The RESUME-NET statement may also be used to cancel a requested interruption ('CALLED FOR' HOLD).

A requested interruption ('CALLED FOR' HOLD) is canceled by RESTART-NET if all the index levels which have a HOLD status are set to a SKIPPED status as part of the RESTART-NET statement processing.

If it is required to delay the start of nets which are in the WAITING state and whose EARLIEST-START time is imminent, this can be done by changing EARLIEST-START by means of the MODIFY-SUBMIT-NET statement.

Dialog

In mask AVD015, the HOLD-NET statement can be initiated by the Y or N marks. This is subject to the following rules:

- The IND parameter field in mask AVD015 can be used to prescribe an index level at which the net is to be suspended.
- If an index level is specified it must also exist in the net, and at least one structure element with a permissible status must be assigned to it. Otherwise the processing will be rejected with the result ERROR.
- Only structure elements with the status WAITING, NO-OCCURE or ERROR can be set to a status of HOLD. A structure element with FU = S and TYPE = NET in the RUN/ERR state is not processed by the HOLD-NET statement since the structure element is still in the RUNNING state.

The HOLD state must be set in the subnet via the NET-CONTROL statement (see [page 750](#)) and via the associated hypernet.

- If no index level is specified, the net will be suspended as soon as possible. In any parallel processing, the lowest possible index level will be determined.
- If the processing is rejected with the result ERROR, it should be initiated via mask AVD008 (with an S mark). This is the mask in which messages about the reasons for errors are output.

Mask AVD008 can be used to initiate processing using the Y mark followed by an EXECUTE operation. The entire net structure is displayed, including the structure elements which do not get processed (e.g. those with the NO-PLAN status).

This is subject to the following rules:

- If an index level is prescribed in the IND parameter field in mask AVD015, the display is positioned at this index level and the structure elements which have a permissible status are preset with a Y mark.
If the specified index level does not exist in the net, a message is output.
- If a value was defined in the parameter fields MODIFY-LATEST and NEW-START in mask AVD015, The corresponding parameter fields in the mask are automatically assigned these values.
- It is possible to mark several index levels in the structure with Y. This enables a number of specific independent branches in the net structure to be suspended at one index level.
- Processing is initiated by the EXECUTE operation. If no marks are used to make a selection, the net is suspended at the lowest possible index levels. (This is equivalent to processing with Y marks and with no index specification in mask AVD015).
- If an error occurs during processing, an error message is output and the structure element at which the error occurred has the result ERROR.

If the statement is issued without operands, an overview containing all the nets of the associated user group is displayed.

HOLD-NET
[NET-NAME=[\$ug_]netname]
[,PERIOD-NAME=period / (dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)]
[,RUN-CONTROL-SYSTEM=*STD / avak]

NET-NAME=

Name of a net in the run control file

NET-NAME=\$ug_

Name of the user group

Privileged users are allowed to select nets belonging to another user group.

If no user group is specified, the user group of the user executing the function is assumed by default.

NET-NAME=netname

Name of the net to be suspended

If a fully qualified net name is specified, this net will be displayed.

The PERIOD-NAME operand may not be used with fully qualified net names

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the specified user group are displayed.

PERIOD-NAME=

Specifies a period (time span)

The nets to be suspended are those with a start time, EARLIEST-START, which falls within this period. The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period

PERIOD-NAME=(dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)

Specification of the real date and time, which determine the start and end date and time for the period.

If the "right" period limit is missing, the end date is set to the start date and the end time to 23:59. The default value for the start time is 00:00.

RUN-CONTROL-SYSTEM=

Specification of the run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- BATCH processing
If a user group is specified in the NET-NAME operand, its standard run control system is used. Otherwise the standard run control system of the user group which is assigned to the user at SIGNON is employed.
- DIALOG processing
 - The standard run control system of the user group is used immediately after SIGNON.
 - If the user may employ all run control systems defined in the system (see avak-use parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
 - If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of a run control system

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

Note

Depending on the setting of the generation parameter HYPERNET-COLOUR, hypernets are color-highlighted in the overview.

IND	<p>Input/output parameter index</p> <p>Index level at which the net is to be suspended. If S marks are being used, this will produce an overview of the structure elements starting from the index level which is input (mask AVD008). All the structure elements at the selected index level which have a permissible status are by default marked with a Y. After the HOLD-NET statement has been executed the display shows, beside the message under RESULT, the index level at which the net has been suspended. If a number of index levels were processed by execution of the HOLD-NET statement, the display shows the lowest index level at which the net was suspended.</p>
EARLIEST-START	<p>Output parameter Scheduled start time of the net. Either the time is shown in the format hh:mm:ss or the *BY-HYP value if the start time of the subnet is linked to execution of the hypernet. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP</p>
NET-STATUS/CALLED FOR	<p>Output parameter Processing status of the net.</p> <p><i>Before the statement is executed:</i></p>
RUNNING	The net is currently being processed.
CONDWAIT	The net is waiting for conditions to be satisfied. No task is running at the moment.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or a server. No task is running at the moment.
WAITING	The net is waiting for the start.
OPWAIT	The net is waiting for input of the START-NET statement.
NETWAIT	The net is a subnet and waits for the start via the hypernet.
RESTARTED	<p>A restart was initiated for the net. The start has not been initiated yet, as the run control system was not active.</p>
ERROR	The net was suspended because a job terminated abnormally or CANCEL-NET with CANCEL-TYPE=SOFT was entered.

START	The START-NET statement was issued for the net. The start has not been initiated yet, as the run control system was not active.
...../HOLD	The net has the status CONDWAIT, HOSTWAIT, WAITING, OPWAIT, RESTARTED, ERROR or START and the HOLD-NET statement had already been executed. The HOLD status is set when the run control system reaches the index level for which a suspension was requested.
HOLD	The net was suspended. <i>After execution of the statement:</i>
...../HOLD	The HOLD status is set if the run control system has reached the index level for which a suspension was requested.
HOLD	The net was suspended.
MODIFY-LATEST	Input/output parameter Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters specified for the structure elements. {nnn.hh.mm / <u>000.00.00</u> }
nnn.hh.mm	Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/C/W) of the net. The modified LATEST-START of the net must come after EARLIEST-START.
<u>000.00.00</u>	This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified. If the S mark is used, the value entered here also applies to the parameter with the same name in the AVD008 mask.
NEW-START	Input/output parameter Start time of the net. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP By default, the parameter is assigned the value of EARLIEST-START of the net. The start time of the net can be modified using the NEW-START parameter. *BY-HYP is only permissible for subnets. If the S mark is used, the value entered here also applies to the parameter with the same name in the AVD008 mask.

RESULT	Output parameter Acknowledgment for the completed action.
HOLD	The net was suspended.
LOCKED	The net is currently locked by another function (other user). The HOLD-NET statement is to be repeated when the net is free again.
NO-UPDATE	Net processing was terminated with RETURN.
ERROR	An error has occurred during net processing. Messages relating to the error cause are output via mask AVD008. Net processing should be initiated via mask AVD008 (S mark).
FROM-DATE	Input/output parameter Start value of a period. dd.mm.yyyy[/hh:mm:ss] The default values are PERIOD-START-DATE and PERIOD-START-TIME if a net group was selected via PERIOD-NAME, or the EARLIEST-START of the first selected net. The period boundary may be modified, but it must lie within the values specified by PERIOD-NAME. If no PERIOD-NAME is specified, FROM-DATE is given the value of the EARLIEST-START of the first net. If FROM-DATE is deleted by the input, the default assignment described above applies.
TO-DATE	Input/output parameter End value of a period. The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise same as FROM-DATE). If no PERIOD-NAME is specified, TO-DATE is given the value of the EARLIEST-START of the last net. If TO-DATE is deleted by the input, the default assignment described above applies.

NEW-START	<p>Input/output parameter</p> <p>Start time of the net. Either the time is shown in the format hh:mm:ss or the *BY-HYP value if the start time of the subnet is linked to execution of the hypernet.</p> <p>dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP</p> <p>By default, the parameter is assigned the value of EARLIEST-START of the net.</p> <p>The start time of the net can be modified using the NEW-START parameter. *BY-HYP is only permissible for subnets.</p>
MODIFY-LATEST	<p>Input/output parameter</p> <p>Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters specified for the structure elements.</p> <p>{nnn.hh.mm / <u>000.00.00</u>}</p>
nnn.hh.mm	<p>Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/C/W) of the net.</p> <p>The modified LATEST-START of the net must come after EARLIEST-START.</p>
<u>000.00.00</u>	<p>This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified.</p>
M	<p>Input parameter</p>
Y (Yes)	<p>Processing should be suspended before execution of the structure element.</p> <p>The only structure elements which may be selected are those with the status WAITING, NO-OCCURE or ERROR.</p>
IND	<p>Output parameter</p> <p>Index of the structure element</p>
FU	<p>Output parameter</p> <p>Function of the structure element</p>
TYPE	<p>Output parameter</p> <p>Type of the structure element</p>
NAME	<p>Output parameter</p> <p>Name of the structure element</p>
SYN-IND	<p>Output parameter</p> <p>Index</p> <p>Index level at which the structure element is to be synchronized.</p>

STATUS	Output parameter Processing status of the structure element.
HOLD	A suspension is requested for this structure element. <i>Note</i> Only in the case of the HOLD-NET and RESUME-NET statements is the HOLD status of the structure element always displayed. For all other statements, the descriptions indicate the priority ranking which determines status display.
RESULT	Output parameter Acknowledgment for the completed action.
ERROR	The structure element has an impermissible status, and may not be marked.

/INFORM-PROGRAM command with CANCEL – Abort run control and monitoring system

The command call with CANCEL aborts the activities of a run control system without regard for running nets and jobs.

Any nets or jobs running at the time the command call is issued retain the RUNNING status. Termination of these jobs is no longer monitored.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='CANCEL' ,JOB-ID=<tsn></pre>	

CANCEL

Abort the run control and monitoring system

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

The run control and monitoring system can also be aborted by means of the command
/MODIFY-JV JV=jvavak,SET-VALUE=C'CANCEL'

The nets involved retain the RUNNING status.

Job variables of any jobs still running in the nets are evaluated once the run control system has been restarted.

Depending on the value of the task job variables of the jobs involved, the nets are given the following processing status:

- Normal processing was suspended (HOLD status).
This is the case when all jobs which have been started in the net have terminated normally (\$T in the monitoring job variable of all jobs).
- Net processing aborted due to an error (ERROR status).
This is the case when the monitoring job variable of a started job no longer exists or has a value other than \$T (i.e. \$A, \$R or \$S in the MONJV).

/INFORM-PROGRAM command with CANCEL-NET – Terminate running net abnormally

The command call with CANCEL-NET operand aborts processing of a net. The CANCEL-TYPE operand can be used to determine the severity with which this is done. Once the command has been executed, the net has the status ABENDED or ERROR, depending on the value of CANCEL-TYPE.

Termination of all jobs running in the net at the time of the abortion is no longer monitored. The task job variables set up for the job by the run control system are deleted. ERROR or ABENDED status is set for the jobs.

Depending on the value of CANCEL-TYPE, the command can only be applied to nets which have the following statuses:

CANCEL-TYPE=	Status prior to command	Status after command	CALLED FOR status
SOFT	RUNNING	RUNNING	CANCEL
HARD	RUNNING WAITING OPWAIT CONDWAIT HOSTWAIT ERROR RESTARTED START HOLD RESUMED	RUNNING ABENDED ABENDED ABENDED ABENDED ABENDED ABENDED ABENDED ABENDED ABENDED	ABENDED

Execution of the command is logged in the journal.

Nets aborted with CANCEL-TYPE=HARD cannot be restarted.

Nets aborted with CANCEL-TYPE=SOFT may be restarted via the RESTART-NET statement. All jobs in the net which were running at the time the CANCEL-NET called using /INFORM-PROGRAM was issued are given the ERROR status.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='CANCEL-NET ,NET-NAME=netname [,CANCEL-TYPE=<u>SOFT</u> / HARD] [,KILL-JOBS=<u>NO</u> / YES]' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

CANCEL-NET

Interrupt or abort the net due to an error.

NET-NAME=

Name of the net whose processing is to be aborted.

NET-NAME=netname

Fully qualified name of the net in the form
\$ug_netname_yymmdd_hhmmss

CANCEL-TYPE=

Specifies the type of abortion involved.

CANCEL-TYPE=SOFT

“Soft” interrupt.

Running jobs or FT requests are set to errored. Net processing can be resumed by means of the RESTART-NET statement. The net is given the net status ERROR.

CANCEL-TYPE=HARD

“Hard” interrupt.

Running jobs/FT requests are set to errored. The net is given the net status ABENDED. Net processing cannot be resumed.

KILL-JOBS=

Specifies whether jobs/FT requests which are in the RUNNING state are also to be aborted in the relevant system.

KILL-JOBS=NO

Jobs/FT requests are not interrupted and are completed without AVAS control.

KILL-JOBS=YES

Jobs/FT requests are aborted in the relevant system. This is done with a standard command.

Notes

- The KILL-JOBS operand applies equally for all jobs in a net, i.e. for both BS2000 jobs and for FT requests.
- If the KILL-JOBS operand is not specified, CANCEL-NET behaves like KILL-JOBS=NO.
- The operand is not effective for structure elements FU=S (subnet).

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

Note

As a message with up to 64 characters can be specified in the MSG operand, it is in most cases necessary to abbreviate the AVAS statement CANCEL-NET or its operands. An abbreviated statement or operand name must be unambiguous within the possible operands. The keywords SOFT/HARD/NO/YES may not be abbreviated.

Example

```
/INFORM-PROG
MSG='CAN-N,NET-NA=$bkr_netname_jjmmtt_hhmmss,CA-T=HARD,KIL=YES'
,JOB-ID=*TSN(<tsn>)
```


/INFORM-PROGRAM command with COPYLST – Copy the current SYSLST file of an AVAS system task

The command call with COPYLST copies the SYSLST file of an active AVAS system task.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG = 'COPYLST' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

COPYLST

Copies the SYSLST file of the specified AVAS system task.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the AVAS system task in the operating system.

The SYSLST file of an AVAS system task can be copied using the following command:

```
/MODIFY-JV JV=jva,SET-VALUE=C'COPYLST'
```

The following command must be used to prevent a command which has not yet been processed by the AVAS system task from being overwritten:

```
/MODIFY-JV-CONDITIONALLY JV=(jva,POSITION=1,LENGTH=1),
  IF-VALUE=C' ',SET-VALUE='COPYLST',LABEL=<error>
```

Notes

- The INFORM-PROGRAM command is only effective for the run control system of the AVAS tasks and for the CENTRAL primary task.
All AVAS system tasks can be accessed using the MODIFY-JV command.
As the CENTRAL tasks (primary task and one or more secondary tasks) are monitored by just **one** job variable, copying of the SYSLST file is initiated for **all** CENTRAL tasks together.
- The SYSLST file can be copied only if it is currently assigned to a file (i.e. no primary allocation or allocation of a PLAM library member).

- The copy of the SYSLST file is assigned the name

`$<uid>.AVAS.LST.<tsn>.<yymmdd>.<hhmmss>`

<code><uid></code>	Execution ID of the AVAS task
<code><tsn></code>	TSN of the carrier task of the AVAS task
<code><yymmdd></code>	Date at the time the command is processed
<code><hhmmss></code>	Time of day at the time the command is processed

/INFORM-PROGRAM command with COPYOUT – Copy the current SYSOUT file of an AVAS system task

The command call with COPYOUT copies the SYSOUT file of an active AVAS system task.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='COPYOUT' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

COPYOUT

Copies the SYSOUT file of the AVAS system task.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the AVAS system task in the operating system.

The SYSOUT file of an AVAS system task can be copied using the following command:

```
/MODIFY-JV JV=jva,SET-VALUE=C'COPYOUT'
```

The following command must be used to prevent a command which has not yet been processed by the AVAS system task from being overwritten:

```
/MODIFY-JV-CONDITIONALLY JV=(jva,POSITION=1,LENGTH=1),
  IF-VALUE=C' ',SET-VALUE='COPYOUT',LABEL=<error>
```

Notes

- The INFORM-PROGRAM command is only effective for the run control system of the AVAS tasks and for the CENTRAL primary task.
All AVAS system tasks can be accessed using the MODIFY-JV command.
As the CENTRAL tasks (primary task and one or more secondary tasks) are monitored by just **one** job variable, copying of the SYSOUT file is initiated for **all** CENTRAL tasks together.
- The SYSOUT file can be copied only if it is currently assigned to a file (i.e. no primary allocation or allocation of a PLAM library member).

- The copy of the SYSOUT file is assigned the name

\$<uid>.AVAS.OUT.<tsn>.<yymmdd>.<hhmmss>

<uid>	Execution ID of the AVAS task
<tsn>	TSN of the carrier task of the AVAS task
<yymmdd>	Date at the time the command is processed
<hhmmss>	Time of day at the time the command is processed

/INFORM-PROGRAM command with HOLD – Suspend run control and monitoring system

The command call with HOLD interrupts the activities of a run control system. The type of interrupt involved can be controlled by specifying termination operands.

The task of the run control system is retained once processing has come to a stop.

Processing can be resumed by entering /INTFORM-PROG or

/MODIFY-JV JV=jvavak,SET-VALUE=C'RESUME'

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='HOLD [,LEVEL=<u>NET</u> / JOB]' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

HOLD

Suspend the run control and monitoring system

LEVEL=

Object level for the termination.

If LEVEL is omitted, LEVEL=NET is assumed.

LEVEL=NET

Net level

No new nets are started. Running nets are allowed to terminate normally (except in the case of CANCEL).

LEVEL=JOB

Job level

No new jobs (index) are started. Running jobs are monitored until they terminate.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

The run control and monitoring system can also be suspended by means of the command
`/MODIFY-JV JV=jvavak,SET-VALUE=C'HOLD[,LEVEL={NET/JOB}]'`
where `jvavak` is the name of the job variable monitoring the run control system.

Note

A command like the one below causes the activities of a run control system to be interrupted:

```
/INFORM-PROGRAM MSG='HOLD,LEVEL=JOB',JOB-ID=*TSN(<tsn>)
```

A running net is assigned the net status HOLD. Net processing can be resumed by means of the following two commands:

1. To resume the activities of the run control system

```
/INFORM-PROGRAM MSG='RESUME',JOB-ID=*TSN(<tsn>)
```

2. To cancel the net status HOLD

```
/INFORM-PROGRAM MSG='RESUME-NET',JOB-ID=*TSN(<tsn>)
```

/INFORM-PROGRAM command with HOLD-NET – Suspend running net

The command call with HOLD-NET suspends processing of a net. The RESUME-NET statement can be used to resume processing.

Jobs still active in the BS2000 job management system are monitored until the run control system is terminated.

Only those nets may be suspended which have the net status RUNNING, OPWAIT, CONDWAIT HOSTWAIT, ERROR or WAITING. Once the command has been executed, the nets are given HOLD status.

Execution of the command is acknowledged at the console. If the command is illegal for a net, it will be rejected.

Execution of the command is logged in the journal.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='HOLD-NET ,NET-NAME=netname' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

HOLD-NET

Suspend running nets.

NET-NAME=

Name of the net whose processing is to be suspended.

NET-NAME=netname

Fully qualified name of the net in the form
\$ug_netname_yymmdd_hhmmss

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

/INFORM-PROGRAM command with NETC – Perform net start check

The command call with NETC checks nets in the run control file to see if any have started. This check is supplementary to the check cycle specified via the system parameter “control-time” at generation.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='NETC' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

NETC

Perform the net start check.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

The run control system can also be initiated to perform a net start check by means of the following command:

```
/MODIFY-JV JV=jvavak,SET-VALUE=C'NETC'
```

Use the following command if you want to prevent the overwriting of a command that has not yet been processed by the run control system:

```
/MODIFY-JV-CONDITIONALLY JV=(jvavak,POSITION=1,LENGTH=1),
  IF-VALUE=C' ',SET-VALUE='NETC',LABEL=<error>
```

Notes

- If the AVAK administration job variable is not available for write access, no statement for a net start check can be entered.
- The NETC string is also not set by the statements from AVAS; instead it must be set by the user in the job variable if required. This can occur
 - with batch functions from the procedure via the MODIFY-JV-CONDITIONALLY command
 - on the program interface via the CSWJV macro and
 - in the dialog statements via the journal exit AVEX0001 or AVEX0002 with the CSWJV or SETJV macro.

/INFORM-PROGRAM command with NEWLST – Assign a new SYSLST file for an AVAS system task

The command call with NEWLST assigns a new SYSLST file for an active AVAS system task.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='NEWLST' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

NEWLST

Assigns the SYSLST file for the specified AVAS system task.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the AVAS system task in the operating system.

A new SYSLST file can be assigned to an AVAS system task using the following command:

```
/MODIFY-JV JV=jva,SET-VALUE=C'NEWLST'
```

The following command must be used to prevent a command which has not yet been processed by the AVAS system task from being overwritten:

```
/MODIFY-JV-CONDITIONALLY JV=(jva,POSITION=1,LENGTH=1),
  IF-VALUE=C' ',SET-VALUE='NEWLST',LABEL=<error>
```

Notes

- The INFORM-PROGRAM command is only effective for the run control system of the AVAS tasks and for the CENTRAL primary task.
All AVAS system tasks can be accessed using the MODIFY-JV command.
As the CENTRAL tasks (primary task and one or more secondary tasks) are monitored by just **one** job variable, copying of the SYSOUT file is initiated for **all** CENTRAL tasks together.

- The copy of the SYSLST file is assigned the name
\$<uid>.AVAS.LST.<tsn>.<yymmdd>.<hhmmss>
<uid> Execution ID of the AVAS task
<tsn> TSN of the carrier task of the AVAS task
<yymmdd> Date at the time the command is processed
<hhmmss> Time of day at the time the command is processed

/INFORM-PROGRAM command with NEWOUT – Assign a new SYSOUT file for an AVAS system task

The command call with NEWOUT assigns a new SYSOUT file for an active AVAS system task.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='NEWOUT' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

NEWOUT

Assigns the SYSOUT file for the specified AVAS system task.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the AVAS system task in the operating system.

A new SYSOUT file can be assigned to an AVAS system task using the following command:

```
/MODIFY-JV JV=jva,SET-VALUE=C'NEWOUT'
```

The following command must be used to prevent a command which has not yet been processed by the AVAS system task from being overwritten:

```
/MODIFY-JV-CONDITIONALLY JV=(jva,POSITION=1,LENGTH=1),
  IF-VALUE=C' ',SET-VALUE='NEWOUT',LABEL=<error>
```

Notes

- The INFORM-PROGRAM command is only effective for the run control system of the AVAS tasks and for the CENTRAL primary task.
All AVAS system tasks can be accessed using the MODIFY-JV command.
As the CENTRAL tasks (primary task and one or more secondary tasks) are monitored by just **one** job variable, copying of the SYSOUT file is initiated for **all** CENTRAL tasks together.

- The copy of the SYSOUT file is assigned the name

\$<uid>.AVAS.OUT.<tsn>.<yymmdd>.<hhmmss>

<uid>	Execution ID of the AVAS task
<tsn>	TSN of the carrier task of the AVAS task
<yymmdd>	Date at the time the command is processed
<hhmmss>	Time of day at the time the command is processed

/INFORM-PROGRAM command with RESTART-NET – Restart abnormally terminated net

The command call with RESTART-NET starts the processing of a net on which the processing has been interrupted (the net has the ERROR status) or in which at least one job has terminated with an error (the net status is CALLED FOR ERROR).

The net status ERROR was set following an error during processing of a structure element or via a CANCEL-NET call (with the statement or using the /INFORM-PROGRAM command). In the case of a CANCEL-NET call, CANCEL-TYPE=SOFT must be specified.

For restart purposes, you can choose one of the three restart variants provided for this structure element.

Unlike the RESTART-NET statement, the jobs and conditions cannot be selected at the restart index level. The restart information described in the net comes into effect.

Execution of the command is acknowledged at the console. If the command is illegal for a net, it will be rejected.

Execution of the command is logged in the journal.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='RESTART-NET ,NET-NAME=netname [,RESTART-VARIANT=1 / 2 / 3] [,ERROR-INDEX=index] [,ERROR-NAME=name]' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

RESTART-NET

Restart a net following an error.

NET-NAME=

Name of the net to be restarted following an abortion.

NET-NAME=netname

Fully qualified name of the net in the form
\$ug_netname_yymmdd_hhmmss

RESTART-VARIANT={1 / 2 / 3}

Selects one of the three optional restart variants.

If the operand is not specified, the value defined in the task job variable via RV=n is applicable for the restart variant.

If no value was defined for the restart variant in the task job variable, the restart is aborted with a message.

The RESTART-VARIANT operand is not defaulted.

ERROR-INDEX=index

Index of the structure element in POINT-OF-ERROR.

ERROR-NAME=name

Name of the structure element in POINT-OF-ERROR.

,JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

Notes

- The ERROR-INDEX operand must be specified if more than one structure element with the ERROR status exists in the net. If there is more than one structure element with the ERROR status on the index level specified in the ERROR-INDEX operand, the ERROR-NAME operand must be given as well.
- The structure element with the ERROR status that is to be processed must be uniquely identifiable, otherwise restart will be rejected.
- If a structure element within the restart range (indices 900–999) has the ERROR status, it must be processed before any other structure elements with the ERROR status.
- This function can also be started with the call `INTR <tsn>,<message>`.

/INFORM-PROGRAM command with RESUME – Reactivate run control and monitoring system

The command call with RESUME reactivates the AVAS component needed to control and monitor the tasks is activated. This means that the task is checked and the net is started if the predefined conditions and dependencies are satisfied.

If the run control system was terminated beforehand by means of

`/INFORM-PROGRAM MSG='HOLD, LEVEL=JOB', JOB-ID=*TSN(<tsn>)` or of the statement `HOLD LEVEL=JOB`, processing of any nets which had not terminated by this time will be resumed from the interrupt point, provided a command `/INFORM-PROGRAM MSG='RESUME-NET', JOB-ID=*TSN(<tsn>)` was issued for them.

Irrespective of whether or not the run control system was previously interrupted by specifying the `HOLD, LEVEL=...` statement, the modification information is updated using the signon data in the nets when RESUME is used.

New signon data can also be made available to the run control system using the `CHANGE-NET-DESCRIPTION` statement (see [page 189](#)).

When modifying the signon data it is important to ensure that active nets are not processed using a combination of old and new signon data. If necessary, active nets should first be stopped locally using the `HOLD-NET` statement or globally using a `HOLD` via the `/INFORM-PROGRAM` command on the run control system.

Following an operating system or AVAS crash or a `CANCEL` command, restart operations for the nets must be initiated either automatically or manually.

/INFORM-PROGRAM	Alias: IFPG
MSG='RESUME'	
,JOB-ID=*TSN(TSN=<tsn>)	

RESUME

Reactivate the run control and monitoring system.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

When all dependencies have been resolved, released or interrupted nets can be restarted using the following command:

```
/MODIFY-JV JV=jvavak,SET-VALUE=C'RESUME'
```

where `jvavak` der Name der JV, is the name of the job variable monitoring the run control system.

/INFORM-PROGRAM command with RESUME-NET – Restart suspended net

The command call with RESUME-NET resumes processing of nets which were suspended by a HOLD call (with the statement or using the /INFORM-PROGRAM command). The required net status must be HOLD.

Execution of the command is acknowledged at the console. If the command is illegal for a net, it will be rejected.

Execution of the command is logged in the journal.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='RESUME-NET ,NET-NAME=netname' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

RESUME-NET

Cancel the HOLD status.

NET-NAME=

Name of the net whose processing is to be resumed.

NET-NAME=netname

Fully qualified name of the net in the form
\$ug_netname_yymmdd_hhmmss

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

/INFORM-PROGRAM command with RUNC – Activate net processing

The command call with RUNC activates the run control system, which checks whether jobs can be started in the nets (e.g. after a RESTART-NET) and, if required, starts a job immediately.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='RUNC' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

RUNC

Check the nets for jobs to be started

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

Checking by the run control system can also be initiated with the following command:

```
/MODIFY-JV JV=jvavak,SET-VALUE=C'RUNC'
```

If you wish to prevent a command which has not yet been processed by the run control system from being overwritten, you must use the following command:

```
/MODIFY-JV-CONDITIONALLY JV=(jvavak,POSITION=1,LENGTH=1),
  IF-VALUE=C' ',SET-VALUE='RUNC',LABEL=<error>
```

Note

The string RUNC is not set by AVAS statements but, if required, must be set in the job variable by the user.

/INFORM-PROGRAM command with SHOW-NET-STATUS – Display status of running nets

The command call with SHOW-NET-STATUS displays the processing status of nets at the console. The processing status of a net or group of nets can be displayed whenever the net status of these nets is RUNNING, OPWAIT, START, CONDWAIT or HOSTWAIT.

Together with the net status, a list of all running jobs and unsatisfied conditions is also displayed.

If the processing status of a group of nets is displayed, the net status of all the nets involved is also included in the display.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='SHOW-NET-STATUS [,NET-NAME=\$bk_[netname]]' ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

SHOW-NET-STATUS

Display the net status of the running nets.

NET-NAME=

Names of nets in the run control file, for which the net statuses are to be displayed.

If the operand is not specified, all nets of the run control system are displayed.

NET-NAME=\$ug_

Name of a user group.

If the NET-NAME operand is specified, a user group must also be specified.

If the user group is specified as partially qualified (final character *), an overview is displayed of all those nets whose user group begins with the partial qualification.

NET-NAME=netname

Name of a net.

A fully qualified net name in the form

\$ug_netname_yymmdd_hhmmss causes the processing status of this net to be displayed.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

Display the processing status of a net

For each running job and each unsatisfied condition, a record is displayed in the form:

msg-id/netname/index/jobname/RUNNING or HOSTWAIT or

msg-id/netname/index/cond-name/NO-OCCURE

msg-id Number of the AVAS message in the form AVS8nnn

netname Fully qualified net name.

index Index level of the job or condition.

jobname Name of the running job.

cond-name Name of the condition.

RUNNING or
HOSTWAIT Status of the job.

NO-OCCURE Status of the condition.

NO-OCC/DEL Status of the condition.

When an overview of active nets is displayed, a record in the form

msg-id/netname/index/status is output for each net, where "index" stands for the highest index level processed at that time.

No index level is displayed for partially qualified net names.

/INFORM-PROGRAM command with START-NET – Start nets with OPWAIT status

The command call with START-NET starts processing of a net with the OPWAIT status.

Execution of the command is acknowledged at the console. If the command is not permitted for a net, it will be rejected.

Execution of the command is logged in the journal.

/INFORM-PROGRAM	Alias: IFPG
MSG='START-NET ,NET-NAME=netname' ,JOB-ID=*TSN(TSN=<tsn>)	

START-NET

This starts nets having the status OPWAIT.

NET-NAME=

Name of the net whose processing is to be continued.

NET-NAME=netname

Fully qualified name of the net in the form
\$ug_netname_yymmdd_hhmmss

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

/INFORM-PROGRAM command with STOP – Terminate run control and monitoring system

The command call with STOP interrupts the activities of a run control system. The type of interrupt involved can be controlled by specifying termination operands.

The task of the run control system is not retained once processing has come to a stop. Following the interrupt, the run control system must be reloaded.

/INFORM-PROGRAM	Alias: IFPG
<pre>MSG='STOP [,LEVEL=<u>NET</u> / JOB] ,JOB-ID=*TSN(TSN=<tsn>)</pre>	

STOP

Terminate the run control and monitoring system.

LEVEL=

Object levels for termination.

If LEVEL is omitted, LEVEL=NET is assumed.

LEVEL=NET

Net level

No new nets are started. Running nets are retained until an interrupt occurs or until normal termination.

LEVEL=JOB

Job level

No new jobs (index) are started. Running jobs are monitored until they terminate.

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

Note

The run control and monitoring system can also be terminated by means of the following command:

```
/MODIFY-JV-CONDITIONALLY JV=(jvavak,POSITION=1,LENGTH=1),
  IF-VALUE=C' ',SET-VALUE='STOP[,LEVEL={NET/JOB}]',LABEL=<error>
```

/INFORM-PROGRAM command with UHOST – Update the AVAS table of the MSCF hosts

The command call with UHOST uses the job variables which monitor hosts to ascertain the partner hosts contained in the MSCF network and enters them in the host table. This enables changes in the MSCF network to become effective in the run control system.

/INFORM-PROGRAM	Alias: IFPG
MSG='UHOST' ,JOB-ID=*TSN(TSN=<tsn>)	

UHOST

Update the host table

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

Notes

- The string UHOST is not set by AVAS statements but, if required, must be set in the job variable by the user. Details of this are provided under the NETC call via /INFORM-PROGRAM on [page 472](#).
- After the new host entries have been ascertained they are displayed with the message AVS8205 (as when the run control system starts).
- The run control system can also be prompted to update the host table using the following command:

```
/MODIFY-JV JV=jvavak,SET-VALUE=C'UHOST'
```

- If you wish to prevent a command which has not yet been processed by the run control system from being overwritten, you must use the following command:

```
/MODIFY-JV-CONDITIONALLY JV=(jvavak,POSITION=1,LENGTH=1),  
IF-VALUE=C' ',SET-VALUE='UHOST',LABEL=<error>
```

/INFORM-PROGRAM command with USERVER – Update the AVAS table of the servers

The command call with USERVER uses the server job variables to ascertain the current servers and transfers them into the relevant table of the run control system. This enables changes in server environment to become effective in the run control system.

/INFORM-PROGRAM	Alias: IFPG
MSG='USERVER' ,JOB-ID=*TSN(TSN=<tsn>)	

USERVER

Update the server table

JOB-ID=*TSN(TSN=<tsn>)

Task Sequence Number of the run control system in the operating system

Notes

- The string USERVER is not set by AVAS statements but, if required, must be set in the job variable by the user. Details of this are provided under the /NETC call via /INFORM-PROGRAM on [page 472](#).
- After the new server entries have been ascertained they are displayed with the message AVS8205 (as when the run control system starts).
- The run control system can also be prompted to update the server table using the following command:

```
/MODIFY-JV JV=jvavak,SET-VALUE=C'USERVER'
```

- If you wish to prevent a command which has not yet been processed by the run control system from being overwritten, you must use the following command:

```
/MODIFY-JV-CONDITIONALLY JV=(jvavak,POSITION=1,LENGTH=1),  
IF-VALUE=C' ',SET-VALUE='USERVER',LABEL=<error>
```


MODIFY-CALENDAR – Modify calendar

The MODIFY-CALENDAR statement is used to edit a calendar already contained in the calendar library. The start and end dates of the calendar, the free days and the symbolic dates contained in the calendar can be edited, or new symbolic dates can be entered in the calendar. Calendar sections can be copied within the calendar or from a different calendar.

The processing of a calendar is controlled using the NEXT parameter (AVC002 mask). USER symbolic dates can be edited and copied, while calendar limit dates and the type of a calendar day can be modified.

In the case of symbolic start dates, a distinction is made between the start dates defined by the user with MODIFY-CALENDAR (USER symbolic dates) and the start dates generated using CREATE-CALENDAR (SYSTEM symbolic dates).

The USER symbolic dates of a calendar day can be edited using the marks A (Add) and D (Delete) and the SYMDAT-NAME operand, or using the mark S (Select) with EDT.

The SYSTEM symbolic dates are updated automatically when the type of calendar day is changed.

The generation mode of the SYSTEM symbolic dates can be modified. All SYSTEM symbolic dates are then regenerated.

MODIFY-CALENDAR
<pre>[CALENDAR-NAME=calendar] [,SYMDAT-NAME=symdat] [,PERIOD-NAME=period / (dd.mm.yy [,dd.mm.yy])]</pre>

CALENDAR-NAME=calendar

Name of a calendar contained in the calendar library.

This causes immediate display of the specified calendar (AVC002 mask).

If the calendar name is specified via a partial qualification by a privileged user (final character is *), this produces an overview of all calendars from the calendar library whose names begin with the partial qualification (AVC010 mask).

Notes

- Privileged users can access any calendars by specifying the calendar name.
- Normal users can only modify the calendar assigned to them. Thus, it is superfluous for them to specify the calendar name.

SYMDAT-NAME=symdat

Name of a symbolic date to be entered in or removed from the calendar on freely selectable days.

Special characters are prohibited in symbolic date names.

Only the name of a USER symbolic date can be specified.

The user cannot edit SYSTEM symbolic dates that were generated for the calendar.

The names of the days of the week and the attribute "FREE, NWRK, WKND, HLDY or WORK" are permanently assigned symbolic date entries or reserved names.

The maximum length of "symdat" is 20 characters.

If relative symbolic start dates in the form $\text{symdat} \pm nn$ are used in the net planning phase, the maximum length of "symdat" is 17 characters.

When a calendar with no SYSTEM symbolic dates is processed, up to 98 symbolic date names can be used for each calendar day.

When a calendar with SYSTEM symbolic dates is processed, up to 48 symbolic date names are permitted for each calendar day.

If SYMDAT-NAME is specified when copying a calendar section, only the specified name is copied.

PERIOD-NAME=

Specifies a period (time span).

This operand serves to display a single calendar and not to select calendars. It is not interpreted unless specified together with a fully qualified calendar name.

The period determines which section of the calendar is to be edited. It must be created beforehand by means of CREATE-PERIOD.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy[,dd.mm.yy])

Real time limits defining the start and end dates of the period (boundary dates). They must lie within the absolute limits of the calendar.

M	<p>Input parameter</p> <p>Mark column for selecting the calendar day to be processed.</p>
A (Add)	<p>The SYMDAT-NAME specified as an operand is to be added to the list of USER symbolic dates.</p>
D (Delete)	<p>The SYMDAT-NAME specified as an operand is to be deleted from the list of USER symbolic dates.</p>
S (Select)	<p>Selects a calendar day to be processed using EDT. Only USER symbolic dates can be created or edited.</p> <p>The S marks are saved and processed with EXECUTE. Only calendar days whose dates fall within the limited time span (FROM-DATE/TO-DATE) are edited.</p>
DD.MM.YY	<p>Output parameter</p> <p>Date of the calendar days from FIRST-CAL-DATE to LAST-CAL-DATE.</p> <p>Each display encompasses the calendar section selected via the operation code, the PERIOD-NAME operand or the FROM-DATE or TO-DATE parameter.</p> <p>The date is output in the form dd.mm.yy.</p>
DAY	<p>Output parameter</p> <p>Day of the week to be assigned to the date.</p> <p>The displayed names of the days of the week are valid symbolic dates. The following abbreviations are used: MON, TUE, WED, THU, FRI, SA, SUN</p> <p>DAY is not included when a calendar section is copied.</p>
TYPE	<p>Input/output parameter</p> <p>Type of the calendar day</p>
WORK	<p>Production day; planning for this day</p> <p>The day is taken into consideration during planning using relative symbolic start dates (symdat ±nn).</p> <p>The symdats of the calendar day are taken into consideration during planning.</p> <p><i>Note</i></p> <p>The type WORK for a calendar day is indicated in the statements as blank (not FREE, NWRK, WKND or HLDY). The type FREE, NWRK, WKND and HLDY for a calendar day can be reset by entering WORK.</p>

FREE	<p>Production-free calendar day; no planning for this day The day is not taken into consideration (i.e. skipped) during planning using relative symbolic start dates (symdat $\pm n$). No processing using relative symbolic dates is planned for this day. The symbolic dates of the calendar day are only taken into consideration during planning using symbolic start dates (symdat ± 0 / symdat $\pm n$).</p>
NWRK	<p>Planning for this day Whether or not the day is taken into consideration during planning using relative symbolic start dates (symdat $\pm n$) depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly. The symbolic dates of the calendar day are taken into consideration during planning.</p>
WKND	<p>Planning for this day Whether or not the day is taken into consideration during planning using relative symbolic start dates (symdat $\pm n$) depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly. The symbolic dates of the calendar day are taken into consideration during planning.</p>
HLDY	<p>Planning for this day Whether or not the day is taken into consideration during planning using relative symbolic start dates (symdat $\pm n$) depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly. The symbolic dates of the calendar day are taken into consideration during planning.</p>
*DEL	<p>FREE/NWRK/WKND/HLDY is reset.</p>

Notes

- If the type of a calendar day is changed, the SYSTEM symbolic dates of the relevant calendar section are deleted and are regenerated for all the calendar days in the section.
- At least two working days (TYPE=WORK) must be defined within 14 calendar days (two days without TYPE=NWRK/WKND/HLDY or TYPE=FREE).

SYMDATE	<p>Output parameter</p> <p>The SYMDAT names (symdats) assigned to the date are displayed in the form of a list, separated by commas. If one line is not enough, two or more lines are used for the display, depending on the LINES/DAY parameter.</p> <p>The SYSTEM symdats generated for the calendar day are marked with an asterisk (*) as the first character.</p> <p><i>Notes</i></p> <ul style="list-style-type: none"> – Only the name of a USER symbolic date (first character is not *) can be specified for the SYMDAT-NAME operand (mark A and D). This is not matched with the generated SYSTEM symbolic dates (name of the SYSTEM symdat with no *). – If a calendar with no SYSTEM symbolic dates is processed, up to 98 USER symbolic dates are permitted for each calendar day. – If a calendar with SYSTEM symbolic dates is processed, up to 48 USER symbolic dates are permitted for each calendar day. The name of a SYSTEM symbolic date with no * must be specified in the net. – During net planning (CREATE-PLAN-NET) the symbolic dates specified in the net are first matched with the SYSTEM symbolic dates. If the net symbolic date is found in the SYSTEM symbolic dates, a search is no longer performed in the USER symbolic dates of the calendar day.
LINES/DAY	<p>Input/output parameter</p> <p>Maximum number of mask lines to be displayed for each calendar day.</p> <p>{1 / 2 / .. 9}</p>
FROM-DATE	<p>Input/output parameter</p> <p>The calendar section beginning with FROM-DATE (dd.mm.yyyy) is to be displayed (see the notes for TO-DATE).</p> <p>The calendar section starts with the current date if the PERIOD-NAME operand has not been specified or if the date is in the calendar.</p> <p>If the PERIOD-NAME operand has been specified, the calendar section begins with the start date of the period (for PERIOD-START-DATE see the manual “AVAS Functions and Tables” [1]).</p> <p>When a calendar section is copied, the start date is determined by FROM-DATE.</p>

Note

The calendar days are displayed as and from the current date. The current date is not set in the FROM-DATE field if PERIOD-NAME is not specified. FIRST-CAL-DATE is then assigned to FROM-DATE so that it is possible to page back to the beginning of the calendar without changing FROM-DATE.

TO-DATE

Input/output parameter

The calendar section up to TO-DATE (dd.mm.yyyy) is to be displayed.

When a calendar section is copied, the end date is determined by TO-DATE.

Notes

- FROM-DATE and TO-DATE must lie within the period specified in the operand field. This makes it possible to shift the processing window without having to page through all the days.
- If the start and end dates of the calendar (FIRST-CALENDAR-DATE/LAST-CALENDAR-DATE) are modified, the calendar is displayed from the start date after the modification has been made.
- If the start and end dates of the calendar section delimited by FROM-DATE and TO-DATE are modified, the calendar section on display remains intact, provided the days it displays lie between FROM-DATE and TO-DATE. In order to display the calendar section as of a new, earlier FROM-DATE, CMD:FIRST has to be specified.

NEXT

Input/output parameter

The processing of a calendar is controlled, depending on the value of the NEXT parameter.

S (Symdat)

Process USER symbolic dates

The following entries are possible in the mark column:

A and D with the operand SYMDAT-NAME

S for EDT processing

C (Copy)

Copy USER symbolic dates of a calendar section

Entries can be made in the following parameter fields:

COPY-TO-CAL-DATE, COPY-FROM-CALENDAR, FROM-DATE and TO-DATE

T (Type)

Change the type of the calendar day

Entries can be made in the TYPE parameter field.

- E (Expand) Change the calendar limit dates
Entries can be made in the FIRST-CALENDAR-DATE/LAST-CALENDAR-DATE parameter fields.
- The NEXT parameter can only be changed if no entries were defined for the processing operation using the input fields, or if the selected operation has been performed. If the operation does not have to be performed, the entries must be canceled or deleted.
- It is possible at all times to position the display using the + or – marks and to control the display using the LINES/DAY, FROM-DATE and TO-DATE parameters.
- F(Free-Dates) Modify all parameters which can be set for CREATE-CALENDAR.
Call the AVC001 mask.
- COPY-TO-CAL-DATE Input/output parameter
Start date of the calendar section (dd.mm.yyyy) to which the USER symbolic dates are to be copied.
- Either all USER symbolic dates of the calendar section delimited by FROM-DATE and TO-DATE are copied, or the symbolic date specified as an operand is copied.
- If a calendar was not defined using the COPY-FROM-CALENDAR parameter, the original section and the target section must not overlap.
- When a calendar section is copied to COPY-TO-CAL-DATE, the calendar must first be extended to such an extent using LAST-CAL-DATE that all days lie within the limits of the calendar.
- When a calendar section is copied, the SYSTEM symbolic dates that may have been defined for the calendar days and the type of the day are not automatically copied at the same time.
- COPY-FROM-CALENDAR Input/output parameter
Name of a calendar from which the USER symdats of a calendar section are to be copied.
- Either all USER symbolic dates of the calendar section delimited by FROM-DATE and TO-DATE are copied, or the symbolic date specified as an operand is copied.
- When a calendar section is copied, the SYSTEM symbolic dates that may have been defined for the calendar days and the type of the day are not automatically copied at the same time.

CALENDAR-NAME	Output parameter Name of the calendar to be set up.																				
SYMDAT-NAME	Input/output parameter The parameter can be used to define which SYSTEM symbolic dates are to be generated when the calendar is set up. {*NONE / *STD / *ALL}																				
<u>*NONE</u>	AVAS does not add any additional SYSTEM symbolic dates to the calendar days when the calendar is set up.																				
*STD	AVAS generates the following SYSTEM symbolic dates and adds them to the calendar days: <table border="0" style="margin-left: 20px; width: 100%;"> <tr> <td>Symbolic date for every day</td> <td style="text-align: right;">(TGL)</td> </tr> <tr> <td>Symbolic date for working day</td> <td style="text-align: right;">(WT)</td> </tr> <tr> <td>Current day of the month</td> <td style="text-align: right;">(K)</td> </tr> <tr> <td>Current working day of the month</td> <td style="text-align: right;">(A)</td> </tr> <tr> <td>Last working day of the month</td> <td style="text-align: right;">(ULTIMO)</td> </tr> </table> <p>The user can define the names of the SYSTEM symbolic dates in the AVC001 mask. Otherwise, the default names that appear in brackets () are used.</p>	Symbolic date for every day	(TGL)	Symbolic date for working day	(WT)	Current day of the month	(K)	Current working day of the month	(A)	Last working day of the month	(ULTIMO)										
Symbolic date for every day	(TGL)																				
Symbolic date for working day	(WT)																				
Current day of the month	(K)																				
Current working day of the month	(A)																				
Last working day of the month	(ULTIMO)																				
*ALL	The names of the following SYSTEM symbolic dates, derived from the defined default names, are generated for the SYSTEM symbolic dates described under *STD: <table border="0" style="margin-left: 20px; width: 100%;"> <tr> <td>nth working day of the month mm</td> <td style="text-align: right;">(AnnMmm)</td> </tr> <tr> <td>nth day of the month mm</td> <td style="text-align: right;">(KnnMmm)</td> </tr> <tr> <td>nth day of the month, which is also a working day</td> <td style="text-align: right;">(KnnWT)</td> </tr> <tr> <td>nth day of the month, which should also be a working day</td> <td style="text-align: right;">(KnnVWT)</td> </tr> <tr> <td colspan="2">If this day is not a working day, the symbolic date is entered for the previous working day.</td> </tr> <tr> <td>nth day of the month, which should also be a working day</td> <td style="text-align: right;">(KnnNWT)</td> </tr> <tr> <td colspan="2">If this day is not a working day, the symbolic date is entered for the next working day.</td> </tr> <tr> <td>Last working day in the month</td> <td style="text-align: right;">(ULTIMO)</td> </tr> <tr> <td>Last working day in the month mm</td> <td style="text-align: right;">(ULTIMOmm)</td> </tr> <tr> <td>n working days before the last working day of the month(n = 1 ... 5)</td> <td style="text-align: right;">(ULTIMOMn)</td> </tr> </table>	n th working day of the month mm	(AnnMmm)	n th day of the month mm	(KnnMmm)	n th day of the month, which is also a working day	(KnnWT)	n th day of the month, which should also be a working day	(KnnVWT)	If this day is not a working day, the symbolic date is entered for the previous working day.		n th day of the month, which should also be a working day	(KnnNWT)	If this day is not a working day, the symbolic date is entered for the next working day.		Last working day in the month	(ULTIMO)	Last working day in the month mm	(ULTIMOmm)	n working days before the last working day of the month(n = 1 ... 5)	(ULTIMOMn)
n th working day of the month mm	(AnnMmm)																				
n th day of the month mm	(KnnMmm)																				
n th day of the month, which is also a working day	(KnnWT)																				
n th day of the month, which should also be a working day	(KnnVWT)																				
If this day is not a working day, the symbolic date is entered for the previous working day.																					
n th day of the month, which should also be a working day	(KnnNWT)																				
If this day is not a working day, the symbolic date is entered for the next working day.																					
Last working day in the month	(ULTIMO)																				
Last working day in the month mm	(ULTIMOmm)																				
n working days before the last working day of the month(n = 1 ... 5)	(ULTIMOMn)																				

In addition, the following SYSTEM symbolic dates, together with the corresponding names, are generated for all the days of the week (MON, TUE, WED, THU, FRI, SAT and SUN):

Example for Monday (MON)

Monday, which is a working day	(WTMON)
Monday, which should also be a working day If this day is not a working day, the symbolic date is entered for the previous working day.	(WTVMON)
Monday, which should also be a working day If this day is not a working day, the symbolic date is entered for the next working day.	(WTNMON)
nth Monday of m in this month	(MONnm)
nth Monday of m of a month in month mm	(MONnmMmm)

Note

Only days with TYPE=WORK are interpreted as working days. The names of the SYSTEM symbolic dates defined or formed for CREATE-CALENDAR are preceded by an asterisk (*) when the symbolic date is stored on the calendar day.

In the net, the symbolic date must be entered without the *.

Examples

Input mask: AVC001 Field: DAY OF THE MONTH = EVDM

- 1) SYSTEM symdat "Current day of the month" for the 11.5.2005
SYSTEM symdat in the calendar day record = *EVDM11
- 2) SYSTEM symdat "nth day of the month" mm for the 11.5.2005
SYSTEM symdat in the calendar day record = *EVDM11M05

FIRST-CALENDAR-DATE

Input/output parameter
First day in the calendar (dd.mm.yy).

If the calendar is to be created using SYMDAT-NAME=*STD/*ALL, the calendar must begin with the first day of the month.

LAST-CALENDAR-DATE

Input/output parameter
 Last day in the calendar (dd.mm.yy).

If the calendar is to be created using SYMDAT-NAME=*STD/*ALL, the calendar must end with the last day of the month.

Notes

- The calendar may not cover more than three years (interval between FIRST-CALENDAR-DATE and LAST-CALENDAR-DATE).
- By default, missing entries are assigned the values of FIRST-/LAST-CALENDAR-DATE.

If both are missing:

FIRST-CALENDAR-DATE = 01.01.<current year>
 LAST-CALENDAR-DATE = 31.12.<current year+2>

Otherwise:

FIRST-CALENDAR-DATE =
 01.01.<LAST.CAL.DATE.year-2>
 LAST-CALENDAR-DATE =
 31.12.<FIRST-CAL-DATE.year+2>

TYPE OF THE DAY

MON TUE WED THU FRI SAT SUN

Input/output parameter
 Type of the day of the week.

Defines whether or not a processing operation is to be performed for the day of the week.

If a calendar is to be set up using SYSTEM symbolic dates, the type WORK must be specified for at least two days of the week.

{WORK / NWRK / WKND / HLDY / FREE}

If nothing is specified, WORK is used.

WORK

Day on which processing is performed.
 The day is taken into consideration during planning using relative symbolic start dates (symdat ±n).
 The symbolic dates for the calendar day are used during planning.

Note

The type WORK for a day of the week is displayed using blanks (not FREE, NWRK, WKND or HLDY) for the MODIFY-CALENDAR and SHOW-CALENDAR statements.

NWRK	<p>Day on which processing is performed.</p> <p>Whether the day is taken into consideration during planning using relative symbolic start dates (symdat $\pm n$) depends on SELECT-PLAN-TYPE (parameter for net description). The day is taken into consideration for SELECT-PLAN-TYPE=NWRK and is not taken into consideration (i.e. skipped) for SELECT-PLAN-TYPE=WORK. Therefore, processing using relative SYMDAT is planned or not planned for this day accordingly.</p> <p>The symbolic dates for the calendar day are used during planning.</p>
WKND	<p>Day on which processing is performed.</p> <p>Whether the day is taken into consideration during planning using relative symbolic start dates (symdat $\pm n$) depends on SELECT-PLAN-TYPE (parameter for net description). The day is taken into consideration for SELECT-PLAN-TYPE=NWRK / WKND and is not taken into consideration (i.e. skipped) for SELECT-PLAN-TYPE=WORK. Therefore, processing using relative SYMDAT is planned or not planned for this day accordingly.</p> <p>The symbolic dates for the calendar day are used during planning.</p>
HLDY	<p>Day on which processing is performed.</p> <p>Whether the day is taken into consideration during planning using relative symbolic start dates (symdat $\pm n$) depends on SELECT-PLAN-TYPE (parameter for net description). The day is taken into consideration for SELECT-PLAN-TYPE=NWRK / HLDY and is not taken into consideration (i.e. skipped) for SELECT-PLAN-TYPE=WORK. Therefore, processing using relative SYMDAT is planned or not planned for this day accordingly.</p> <p>The symbolic dates for the calendar day are used during planning.</p>
FREE	<p>Day on which no processing is performed.</p> <p>The day is not taken into consideration (i.e. skipped) during planning using relative symbolic start dates (symdat $\pm n$).</p> <p>The symbolic dates for the calendar day are only taken into consideration during planning using relative symbolic start dates (symdat $\pm W$ / symdat $\pm n$).</p>

Note

The type of a calendar day (WORK, NWRK, WKND, HLDY, FREE) can be changed using MODIFY-CALENDAR (AVC002 mask) (setting NEXT=T).

If the new type is not WORK, the calendar day is added to the list of the SPECIAL NWRK OR FREE DATES.

SPECIAL NWRK OR FREE DATES

Input/output parameter

Calendar days to which another type is to be assigned, which is different from the default assignment for the day of the week.

Output form:

(dd.mm.yy) = {NWRK / WKND / HLDY / FREE}

(dd.mm.*) = {NWRK / WKND / HLDY / FREE}

The specified date must be within the calendar limit dates.

Notes

- If the number of SPECIAL NWRK OR FREE DATES to be specified is greater than the number of fields in the mask, the input fields can be released for further input by means of the paging function +.
By entering +n or –n, it is possible to page forward or backward by n SPECIAL NWRK OR FREE DATES respectively.
- If a calendar is to be set up using SYSTEM symbolic dates, at least two working days (type WORK) must be defined within 14 days.
- Free days which occur on the same date each year can be entered in the form dd.m.*: "Cyclical date". They are then entered each year within the calendar boundaries and presented in the form dd.mm.**yy. They can be deleted by overwriting the asterisks '**' with minus signs '--'. They can be changed back to ordinary free days by overwriting the asterisks with plus signs '++'.
- All days of a cycle must have the same type. When changes occur, the type of the first date is taken automatically.

SYSTEM-SYMDAT-NAMES

If SYSTEM symbolic dates are to be generated for the calendar (see SYMDAT-NAME parameter on [page 498](#)), the names of the SYSTEM symbolic dates can be defined.

If the statement is called using the SYMDAT-NAME=*NONE parameter, the input fields for the names of the SYSTEM symbolic dates are set to protected.

EVERY DAY

Input/output parameter

Name for "every day"

{name 1..8 / TGL}

EVERY WORKING DAY

Input/output parameter
Name for “working day”
{name 1..4 / WT}

DAY OF THE MONTH

Input/output parameter
Name for “current day of the month”
{name 1..4 / K}

WORKING DAY OF THE MONTH

Input/output parameter
Name for “current working day of the month”
{name 1..4 / A}

LAST WORKING DAY OF THE MONTH

Input/output parameter
Name for “last working day of the month”
{name 1..8 / ULTIMO}

Notes

- The names of the SYSTEM symbolic dates can be defined by the user. Otherwise, the specified default names are used. The names must be different.
- The names of the SYSTEM symbolic dates that are to be generated additionally are derived from the defined names. Special characters cannot be used in the names of the SYSTEM symbolic dates.

LAST-CAL-DATE	<p>Input/output parameter Last day of the calendar (dd.mm.yyyy).</p> <p><i>Notes</i></p> <ul style="list-style-type: none"> – If a calendar with SYSTEM symbolic dates was created (CREATE-CALENDAR with SYMDAT-NAME=*STD/*ALL), the calendar must begin at the first of a month (FIRST-CALENDAR-DATE) and end at the last day of the month (LAST-CALENDAR-DATE). This must be taken into consideration when changing the boundary dates of such a calendar. – The type of day of the week defined by the user (CREATE-CALENDAR, mask AVC001, TYPE OF THE DAY parameter) is used for defaulting if the size of the calendar is increased by changing the calendar limit dates.
DATE	<p>Output parameter Date of the calendar days from FIRST-CAL-DATE to LAST-CAL-DATE. Each display encompasses the calendar section selected via the operation code, the PERIOD-NAME operand or the FROM-DATE or TO-DATE parameter. The date is output in the form dd.mm.yyyy.</p>
DAY	<p>Output parameter Day of the week to be assigned to the date. The displayed names of the days of the week are valid symbolic dates. The following abbreviations are used: MON, TUE, WED, THU, FRI, SA, SUN DAY is not included when a calendar section is copied.</p>
TYPE	<p>Input/output parameter Type of the calendar day</p>
WORK	<p>Production day; planning for this day The day is taken into consideration during planning using relative symbolic start dates (symdat ±nn). The symdat of the calendar day are taken into consideration during planning.</p> <p><i>Note</i></p> <p>The type WORK for a calendar day is indicated in the statements as blank (not FREE, NWRK, WKND or HLDY). The type FREE, NWRK, WKND or HLDY for a calendar day can be reset by entering WORK.</p>

FREE	<p>Production-free calendar day; no planning for this day The day is not taken into consideration (i.e. skipped) during planning using relative symbolic start dates (symdat $\pm n$). No processing using relative symbolic dates is planned for this day. The symbolic dates of the calendar day are only taken into consideration during planning using symbolic start dates (symdat ± 0 / symdat $\pm n$).</p>
NWRK	<p>Planning for this day Whether or not the day is taken into consideration during planning using relative symbolic start dates (symdat $\pm n$) depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly. The symbolic dates of the calendar day are taken into consideration during planning.</p>
WKND	<p>Planning for this day Whether or not the day is taken into consideration during planning using relative symbolic start dates (symdat $\pm n$) depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly. The symbolic dates of the calendar day are taken into consideration during planning.</p>
HLDY	<p>Planning for this day Whether or not the day is taken into consideration during planning using relative symbolic start (symdat $\pm n$) dates depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly. The symbolic dates of the calendar day are taken into consideration during planning.</p>
*DEL	<p>FREE/NWRK/WKND/HLDY is reset.</p>

Notes

- If the type of a calendar day is changed, the SYSTEM symbolic dates of the relevant calendar section are deleted and are regenerated for all the calendar days in the section.
- At least two working days (TYPE=WORK) must be defined within 14 calendar days (two days without TYPE=NWRK, WKND, HLDY or FREE).

SYMDATE

Output parameter

The SYMDAT names (symdats) assigned to the date are displayed in the form of a list, separated by commas. If one line is not enough, two or more lines are used for the display, depending on the LINES/DAY parameter.

The SYSTEM symdats generated for the calendar day are marked with an asterisk (*) as the first character.

Notes

- Only the name of a USER symbolic date (first character is not *) can be specified for the SYMDAT-NAME operand (mark A and D). This is not matched with the generated SYSTEM symbolic dates (name of the SYSTEM symdat with no *).
- If a calendar with no SYSTEM symbolic dates is processed, up to 98 USER symbolic dates are permitted for each calendar day.
- If a calendar with SYSTEM symbolic dates is processed, up to 48 USER symbolic dates are permitted for each calendar day. The name of a SYSTEM symbolic date with no * must be specified in the net.
- During net planning (CREATE-PLAN-NET) the symbolic dates specified in the net are first matched with the SYSTEM symbolic dates. If the net symbolic date is found in the SYSTEM symbolic dates, a search is no longer performed in the USER symbolic dates of the calendar day.

Notes

- Of all the data relating to the calendar day displayed in the EDT, only the USER symbolic dates can be changed. Any other changes that are made are lost.
- The USER symbolic dates of a calendar day are displayed after the comment line '*9....' in the EDT.
The SYSTEM symbolic dates of a calendar day (comment line '*3.>') cannot be changed.
- One USER symbolic date is displayed per line (starting with position 1).
- Following HALT in the EDT, the USER symbolic dates are read in and checked. Only lines that do not begin with * (comment) in the first position are interpreted as symbolic date lines.
Only one symbolic date per line can be copied (starting with position 1).

- If a number of symbolic dates exist, the copy operation is rejected and a corresponding message is displayed. The same applies for formally invalid symbolic dates, or if the maximum number of symbolic dates is exceeded.

SYSTEM symbolic dates cannot be transferred. Their names have been defined and reserved for the calendar using the CREATE-CALENDAR statement.

EDT is not terminated in the event of an error. The error message is displayed in workfile 0 and the user must correct the error before EDT can be terminated. (If the error is not corrected, the workfile 0 must be deleted and OPC:IGNORE must be entered in mask AVC004.)

- If only comment lines (* in first position) exist, the statement assumes that all USER symbolic dates are to be deleted. If an empty file is transferred using EDT, all USER symbolic dates of a calendar day are deleted using the CONTINUE operation. SYSTEM symbolic dates of a calendar day are not affected by the deletion.

MODIFY-COND-DESCRIPTION – Modify condition description

The MODIFY-COND-DESCRIPTION statement allows existing condition descriptions of the types NET, JOB, RES and VAL to be amended.

Condition descriptions of these types can also be modified (and deleted) by nets which are being executed.

The condition description which is to be modified will be directly displayed by the mask AVD030 if the required condition description can be uniquely selected using the prescribed operand values. This requires at least the fully-qualified COND-NAME and, if this is not unique, the TYPE operand in addition.

For condition descriptions with COND-TYPE=NET or COND-TYPE=JOB, when there is multiple use unique identification is only possible via CREATED BY and NET-NAME or INDEX. In this case, specifying the operands COND-NAME and TYPE is also inadequate for an unambiguous selection to be made. If the system cannot make an unambiguous identification, then the condition descriptions selected by applying the specified operand values will be presented to the user in the overview mask AVD040.

The selection of condition descriptions can be further restricted by specifying the STATUS operand.

The STATUS operand is not displayed in the individual processing (masks AVD030 and AVD031) and can also not be specified there. Any attempt to specify it will be rejected with a message. The condition status displayed in masks AVD030/AVD031 can differ from the value defined in the STATUS operand if the status is modified (by the run control system or through statements) between the time the conditions are selected via the predefined operands and the time of the individual display (masks AVD030/AVD031).

The status value defined via the STATUS operand is not checked for legitimacy with regard to a TYPE operand which may have been predefined.

Condition descriptions can be selected in mask AVD040 (S mark); EXECUTE causes these to be displayed individually in mask AVD030 (depending on OBJECT). It is unnecessary to specify the OBJECT operand (default).

By entering the operand OBJECT=USR, or by using the CONTINUE operation, it is possible to swap from mask AVD030 to a display of the condition testing nets in the condition description (AVD031).

Modifications to a condition description (AVD030) become effective when SAVE is performed. The deletion of a condition testing net from a condition description (AVD031) is effected by an EXECUTE statement.

When MODIFY-COND-DESCRIPTION is used, no journal record is output.

MODIFY-COND-DESCRIPTION

[COND-NAME=[\$ug_]condname]

[,TYPE=NET / JOB / RES / VAL]

,OBJECT=DES / USR]

[,STATUS=ABENDED / CREATED / DELETED / ENDED / ERROR / EXCLUSIVE / FREE / IGNORED /
NO-PLAN / NO-SUBMIT / SHARE / SKIPPED]

COND-NAME=

Name of the condition description, the values in which are to be modified.

COND-NAME=\$ug_

Name of the user group

If no user group is specified, the condition descriptions for the own user group will be output.

COND-NAME=condname

Name of the condition description; from 1–24 characters are permitted.

If the condition description is specified in partially qualified form (last character *), the result will be an overview of the existing entries which have names beginning with the partial qualification.

If condname is not specified, all the descriptions for the specified user group will be output.

If the COND-NAME operand is not specified, all the descriptions for the own user group will be output.

TYPE=

Type of the condition description

It is helpful to specify the type of the condition to limit the number of descriptions displayed for a partially qualified condition name.

TYPE=NET

Condition descriptions of the type NET should be displayed.

TYPE=JOB

Condition descriptions of the type JOB (these also include conditions generated by FT requests) should be displayed.

TYPE=RES

Condition descriptions of the type RES (resource) should be displayed.

TYPE=VAL

Condition descriptions of the type VAL should be displayed.

OBJECT=

Selects the mask to be used in modifying the condition descriptions.

For overview processing (display of mask AVD040), the specified value is copied into the mask parameter OBJ.

OBJECT=DES

Mask AVD030, for modifying the values in the condition descriptions, is presented.

OBJECT=USR

Mask AVD031, in which the users of the condition descriptions can be displayed and deleted, is presented.

STATUS=

Status of the condition descriptions to be displayed.

The status which a condition description may take on depends on the type of the condition.

STATUS=ABENDED

DELAY-SOLUTION=CANCEL or CANCEL-NET

STATUS=CREATED

A description has been created.

STATUS=DELETED

The task was deleted with the D mark in MODIFY-SUBMIT-NET.

STATUS=ENDED

Net/job processing has ended.

STATUS=ERROR

An error has occurred.

STATUS=EXCLUSIVE

The resource is being used exclusively.

STATUS=FREE

The resource is freely available.

STATUS=IGNORED

DELAY-SOLUTION=IGNORE

STATUS=NO-PLAN

The task has not been planned (SYMDAT or D mark with CREATE-PLAN-NET).

STATUS=NO-SUBMIT

The task was deleted with mark D in SUBMIT-NET or REPEAT-NET.

STATUS=SHARE

The shareable resource is currently in use.

STATUS=SKIPPED

The task was skipped during restart (RESTART-NET).

OBJ	Input/output parameter Specifies the mask for which the parameters are to be displayed or modified. The preset value of this parameter is DES.
DES	Mask AVD030, for modifying the values of the condition descriptions, is presented.
USR	Mask AVD031, in which the users of the condition descriptions can be displayed and deleted, is presented.
STATUS	Output parameter Status of the condition description. The status which a condition description may take on depends on the type of the condition.
ABENDED	DELAY-SOLUTION=CANCEL, or CANCEL-NET dialog
CREATED	A description has been created.
mmm,CREATED	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is not available yet.
DELETED	D mark in MODIFY-SUBMIT-NET
ENDED	End
ERROR	Error
mmm,ERROR	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is subject to an error yet.
mmm,FREE	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is available.
FREE	The resource is freely available.
IGNORED	DELAY-SOLUTION=IGNORE
NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET
SKIPPED	Skipped during a restart (RESTART-NET)
mmm, SHARE(uu)	The resource with TYPE=RES can be allocated mmm times and is used uu times.
mmm, EXCLUSIVE	The resource with TYPE=RES can be allocated mmm times and is used in the EXCLUSIVE mode.

RESULT	Output parameter Confirmation of the action performed.
UPDATED	The condition description has been modified.
NO-UPDATE	The condition description has not been modified.
ERROR	An error occurred during the modification.
LOCKED	The condition description is locked as it is being edited by other users.
NOT-FOUND	The condition description has now been deleted by another user or net.
CREATED BY NET-NAME / USER	Output parameter Name of the net, or ID of the user, which created the description.
IND	Output parameter Index of the structure element, if the description was created via a net.

AVD030 – Display a condition description to be modified

Modifications made in the mask are saved by using the SAVE operation.
 It is possible to switch from mask AVD030 to mask AVD031 with the CONTINUE operation.

```

AVAS-Vnn.yxmn/AVD030          CONDITION-DESCRIPTION          tt.mm.jjjj/hh:mm:ss

COND-TYPE      =...          COND-STATUS =.....
COND-NAME      =.....
CREATED BY     =.....          INDEX=...
CREATION DATE  =...../.....

COND-TEXT      =.....
COND-DOC       =.....

LIFE-TIME      =...../.....
LAST-UPDATE    =...../.....

VALUE-FORMAT   =...
COND-VALUE     =.....
                .....
                .....
                .....

CMD:.....          OPR:.....
MSG:.....
    
```

- COND-TYPE Output parameter
 Condition type as specified by the TYPE operand
 {RES / VAL}

- COND-STATUS Output parameter
 Status of the condition description
 The status which a condition description may take on depends on
 the type of the condition.

- ABENDED DELAY-SOLUTION=CANCEL or CANCEL-NET dialog
- CREATED A description has been created.
- mmm,CREATED The resource with TYPE=RES can be allocated mmm times in the
 SHARE mode and is not available yet.
- DELETED D mark in MODIFY-SUBMIT-NET
- ENDED End
- ERROR Error

mmm,ERROR	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is subject to an error yet.
mmm,FREE	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is available.
IGNORED	DELAY-SOLUTION=IGNORE
NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET
SKIPPED	Skipped during a restart (RESTART-NET)
mmm, SHARE(uu)	The resource with TYPE=RES can be allocated mmm times and is used uu times.
mmm, EXCLUSIVE	The resource with TYPE=RES can be allocated mmm times and is being used exclusively.
COND-NAME	Output parameter Name of the condition description
CREATED BY	Output parameter Name of the net, or ID of the user, which created the description. { $\$$ ug_netname / avas-user-id}
INDEX	Output parameter Index of the structure element Only output if the description was created via a net.
CREATION-DATE	Output parameter Date when the condition description was created, in the form dd.mm.yy hh:mm:ss
COND-TEXT	Input/output parameter Brief text, not exceeding 120 characters, describing the condition.

COND-DOC	Input/output parameter Create user documentation. {*STD / element / *NONE}								
*STD	The documentation is created or sought in the DOCLIB under the default name \$ug_condname.								
element	Element name for the documentation in the DOCLIB or DOCSYS: \$ug_docname \$ugsys_docname docname								
*NONE	No documentation is saved for the condition description.								
LIFE-TIME	Input/output parameter Life of the condition description (only in conjunction with TYPE=NET and TYPE=JOB) The real time (date and hour) up to which the condition description is to remain valid. Format: dd.mm.yy hh:mm:ss								
LAST-UPDATE	Output parameter Date of the last modification to the condition description, in the form dd.mm.yy hh:mm:ss								
VALUE-FORMAT	Input/output parameter Selects the display and input format for COND-VALUE.								
CHAR	The value COND-VALUE is output in alphanumeric form.								
HEXA	The value COND-VALUE is output in hexadecimal form. HEXA is only permitted if COND-TYPE=VAL.								
COND-VALUE	Input/output parameter For COND-TYPE=NET Status of the net <table border="0" style="margin-left: 40px;"> <tr> <td>CREATED</td> <td>A description has been created.</td> </tr> <tr> <td>ENDED</td> <td>Net processing has ended.</td> </tr> <tr> <td>ABENDED</td> <td>DELAY-SOLUTION=CANCEL or CANCEL-NET</td> </tr> <tr> <td>IGNORED</td> <td>DELAY-SOLUTION=IGNORE</td> </tr> </table>	CREATED	A description has been created.	ENDED	Net processing has ended.	ABENDED	DELAY-SOLUTION=CANCEL or CANCEL-NET	IGNORED	DELAY-SOLUTION=IGNORE
CREATED	A description has been created.								
ENDED	Net processing has ended.								
ABENDED	DELAY-SOLUTION=CANCEL or CANCEL-NET								
IGNORED	DELAY-SOLUTION=IGNORE								

For COND-TYPE=JOB

Status of the job or FT request

CREATED	A description has been created.
NO-PLAN	The job/FT request has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET
DELETED	D mark in MODIFY-SUBMIT-NET
IGNORED	DELAY-SOLUTION=IGNORE
ENDED	Job/FT request terminated.
ERROR	Error or CANCEL-NET with CAN-TYPE=SOFT
SKIPPED	Skipped during a restart (RESTART-NET)
ABENDED	CANCEL-NET with CANCEL-TYPE=HARD

For COND-TYPE=RES

Value and status of the condition

mmm,CREATED | mmm,ERROR |mmm,EXCLUSIVE |
 mmm,FREE | mmm,SHARE(uu)

mmm,CREATED	The resource is set up mmm times as a shareable resource and is not yet available.
mmm,ERROR	The resource is set up mmm times as a shareable resource and is not yet available.
mmm,EXCLUSIVE	The resource is set up mmm times as a shareable resource and is allocated in the EXCLUSIVE mode.
mmm,FREE	The resource is set up mmm times as a shareable resource and is available.
mmm,SHARE(uu)	The resource is set up mmm times as a shareable resource and is allocated uu times in the SHARE mode.

The values mmm and uu are defined as follows:

mmm	MAX-USING-SHARE: 2..100 Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100.
uu	Number of quotas of a resource allocated in the SHARE mode. If the value <uu> is not specified, then it is set to the value 1. The value uu must be smaller than the value mmm for MAX-USING-SHARE.

Notes

- The inputs SHARE and EXCLUSIVE cause the resource to be occupied by the user.
- You cannot release a resource by modifying COND-VALUE. You can only release a resource by deleting the entry via mask AVD031.
- The USING value cannot be changed when allocated with SHARE.
- Resources with the status ERROR or CREATED cannot be allocated. Any attempt to do so will be rejected with a message.

For COND-TYPE=VAL

Value of the condition

string	Depending on the parameter VALUE-FORMAT, the value is displayed in alphanumeric (c-string) or hexadecimal (x-string) format; the value can be modified by overwriting it.
--------	---

AVD031 – Display the users of a condition description

Mask AVD031 displays the condition tests of nets which make reference to the specified condition description. They can be deleted using the D mark and the EXECUTE operation.

```

VAS-Vnn.yxmn/AVD031                CONDITION-USER                tt.mm.jjjj/hh:mm:ss
COND-TYPE      =...                COND-STATUS=.....
COND-NAME      =.....
CREATED BY    =.....                INDEX=...

M  NET-NAME/USER                INDEX        DATE/TIME        WAITING/USING
   OCCURE-VALUE
.  .....                .....        .....        .....
.  .....                .....        .....        .....
.  .....                .....        .....        .....
.  .....                .....        .....        .....

CMD:.....                OPR:.....
MSG:.....
    
```

COND-TYPE	Output parameter Condition type {NET / JOB / RES / VAL}
NET	Net
JOB	Job/FT request
RES	Resource
VAL	Defined value

COND-STATUS	Output parameter Status of the condition description The status which a condition description may take on depends on the type of the condition.
ABENDED	DELAY-SOLUTION=CANCEL or CANCEL-NET dialog
CREATED	A description has been created.
mmm,CREATED	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is not available yet.
DELETED	D mark in MODIFY-SUBMIT-NET
ENDED	End
ERROR	Error
mmm,ERROR	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is subject to an error yet.
mmm,FREE	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is available.
FREE	The resource is freely available.
IGNORED	DELAY-SOLUTION=IGNORE
NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET
SKIPPED	Skipped during a restart (RESTART-NET)
mmm, SHARE(uu)	The resource with TYPE=RES can be allocated mmm times and is used uu times.
mmm, EXCLUSIVE	The resource with TYPE=RES can be allocated mmm times and is being used exclusively.
SHARE	The resource is shareable and is currently in use.
EXCLUSIVE	The resource is being used exclusively.
COND-NAME	Output parameter Name of the condition description \$ug_condname

CREATED BY	Output parameter Name of the net, or ID of the user, which created the description. {\$ug_netname / avas-user-id}
INDEX	Output parameter Index of the structure element Only output if the description was created via a net.
M	Input/output parameter Mark column
D (Delete)	The marked condition description for a net is to be deleted. The deletion takes effect when the EXECUTE operation is performed.
NET-NAME/USER	Output parameter Name of the net which is waiting for the condition to be satisfied, or which is using the resource. \$ug_netname
INDEX	Index in the net, showing where the condition is used in the form specified by OCCURE-VALUE.
DATE/TIME	Output parameter Date and time since the user has been waiting for the condition to be satisfied.
WAITING/USING	Output parameter In the case of NET, JOB and VAL conditions, function C is always used to wait for a status or value. For a RES condition, the use of a resource can be specified.
WAITING	The net waits for the status or value specified under OCCURE-VALUE.
SHARE(uu)	The net has allocated the resource uu times in the SHARE mode (only for COND-TYPE=RES).
EXCLUSIVE	The net is using the resource in EXCLUSIVE mode (only for COND-TYPE=RES).
USING	The net is using the resource in either SHARE or EXCLUSIVE mode (only for COND-TYPE=RES).

OCCURE-VALUE	<p>Output parameter</p> <p>Value of the condition, as recorded in the net at the appropriate index point with FU=C (wait for a condition). {status / status,status,... / (OP,pos,value) / (OP,pos,value),(OP,pos,value),...}</p>
For TYPE=RES	<p>Status and value the net waits for:</p> <p>mmm,CREATED The resource is set up mmm times as a shareable resource and is not yet available.</p> <p>mmm,FREE The resource is set up mmm times as a shareable resource and is available.</p> <p>mmm,ERROR The resource is set up mmm times as a shareable resource and is not yet available.</p> <p>mmm,SHARE(uu) The resource is set up mmm times as a shareable resource and is allocated uu times in the SHARE mode.</p> <p>mmm,EXCLUSIVE The resource is set up mmm times as a shareable resource and is allocated in the EXCLUSIVE mode.</p> <p>The values mmm and uu are defined as follows:</p> <p>mmm MAX-USING-SHARE: 2..100 Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100.</p> <p>uu Number of quotas of a resource allocated in the SHARE mode. If the value <uu> is not specified, then it is set to the value 1. The value uu must be smaller than the value mmm for MAX-USING-SHARE.</p>

For COND-TYPE=VAL

Value(s) of the condition, linked with operators.
(OP,pos,value)

OP – comparison operation

= / EQ – equal to

< / LT – less than

> / GT – greater than

≤ / LE – less than or equal to

≥ / GE – greater than or equal to

≠ / NE – not equal to

If no comparison operation is specified, OP=EQ is assumed. The parameter and the comma are then omitted (pos,value).

pos – start position for the value specification

nnn

If no value is specified for pos, pos=1 is assumed.

Comparison values with neither OP nor pos are specified directly (value).

If a comparison operation is specified with no start position, the corresponding comma must nevertheless appear (OP,,value).

value – comparison value

'c-string'

C'c-string'

X'x-string'

Current value of the condition description in the run control file. The range extends to 128 bytes.

),(– logical OR operation

Where there are a number of condition tests, these are specified in parentheses, which links them by an OR operation.

For COND-TYPE=RES

Status or status list

FREE The resource is freely available.

SHARE The resource is shareable and is currently in use.

For COND-TYPE=NET

Status or status list

ENDED Terminated

ABENDED DELAY-SOLUTION=CANCEL or CANCEL-NET

IGNORED DELAY-SOLUTION=IGNORE

For COND-TYPE=JOB

Status or status list

NO-PLAN The job/FT request has not been planned
(SYMDAT or D mark in CREATE-PLAN-NET).

NO-SUBMIT D mark in SUBMIT-NET or REPEAT-NET

DELETED D mark in MODIFY-SUBMIT-NET

IGNORED DELAY-SOLUTION=IGNORE

ENDED Terminated

ERROR Error or CANCEL-NET with CAN-TYPE=SOFT

SKIPPED Skipped during a restart (RESTART-NET)

ABENDED CANCEL-NET with CANCEL-TYPE=HARD

MODIFY-NET-DESCRIPTION – Modify net description

The MODIFY-NET-DESCRIPTION statement can be used to modify existing net descriptions in the NETLIB. It can be used to

- modify net parameters
- modify net plan data
- add, modify or delete net masks
- add, modify or delete structure elements.

Using the overview masks, the user selects individual objects or has them displayed directly by specifying “OBJ”.

The MODIFY-NET-DESCRIPTION statement can call the CHECK function through the CHECK operation in the masks AVN001, AVN004, AVN006 and AVN020. It is executed automatically for the SAVE operation.

If the CHECK function generates an error log, the log is displayed via EDT. If the CHECK function is called internally by the SAVE operation, processing of the net can be controlled by how the EDT is terminated:

- If the EDT is terminated with RETURN, AVAS branches back to the display (the SAVE operation is not performed).
- If the EDT is terminated with HALT, net processing is terminated (the SAVE operation is executed).

Depending on the message, the network will not be saved, or will be saved as non-executable or executable.

User-specific version control for the individual nets can be set up via the CC exit AVEX0101 when saving the net description.

The checks that the CHECK function performs are described in the section dealing with the CHECK function in the manual “AVAS for the Administrator” [2].

MODIFY-NET-DESCRIPTION
[NET-NAME=[\$ug_]netname] [OBJECT= <u>NET</u> / PST / MAP / STR]

NET-NAME=

Name of a net whose net description is to be modified.

NET-NAME=\$ug_

Name of the user group.

If no user group is specified, all elements of the user's own user group are displayed.

NET-NAME=netname

Element name in the NETLIB.

Depending on the OBJECT operand, this input directly causes the net description to be processed.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no net name is entered, all elements of the specified user group are displayed.

OBJECT=

Selection of the mask for modifying data in net descriptions

If OBJECT is not specified, OBJECT=NET is used as the default setting, and mask AVN001 is presented.

OBJECT= NET

Mask AVN001 is to be presented for modifying the net parameters.

OBJECT=PST

Mask AVN020 is to be presented for modifying the net plan data.

OBJECT= MAP

Mask AVN006 is to be presented for modifying the net mask table.

OBJECT= STR

Mask AVN004 is to be displayed for modifying the structure elements.

MAP	Mask AVN006 is presented with the overview of net parameter input masks for modification.
STR	Mask AVN004 is presented with the overview of the structure elements.
RESULT	Output parameter Confirmation of the action performed.
UPDATED	The net description was modified.
WARNING	The net description was modified. CHECK discovered errors in the net description. A log was generated. Display of the error log via EDT was terminated with HALT.

AVN001 – Display net parameters for modification

```

AVAS-Vnn.yxmn/AVN001          N E T - P A R A M S          tt.mm.jjjj/hh:mm:ss

NET-NAME=.....
NET-TEXT=.....
NET-DOC =.....

NET-TYPE      =.

RUN-CONTROL-SYSTEM=.....

USER-PAR-FILE=.....

NET-CAT      =.....

NET-USER     =..... NET-ACCOUNT =..... NET-PASSWORD=.....
NET-CLASS   =..... NET-LOG      =.....
NET-PARAMETER=.....

CMD:..... OPR:.....
MSG:.....
    
```

NET-NAME	<p>Output parameter</p> <p>Name of the net whose net description is to be modified.</p> <p>The user group is prefixed to the net name, even if it is not specified in the operand.</p>
NET-TEXT	<p>Input parameter</p> <p>Brief description of the net, up to 120 characters long.</p> <p>If a text is specified, it is displayed in all net creation masks.</p>
NET-DOC	<p>Input/output parameter</p> <p>{*STD / element / *NONE}</p>
*STD	<p>The documentation is sought or stored under the standard name \$ugnet_netname in the DOCLIB.</p>
element	<p>Element name for the documentation of the net in the DOCLIB or DOCSYS.</p> <p>\$ug_docname</p> <p>\$ugsys_docname</p> <p>docname</p> <p>The maximum length of docname is 37 characters.</p>

	<p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the net, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
NET-TYPE	<p>Input/output parameter Specifies whether nets with the same name but different start times are to be started. {1 / 2 / 3}</p>
1	<p>The net is started regardless of whether a net with the same name is or was running.</p>
2	<p>The net is not started as long as a net with the same name is running. A net is deemed to be running if it has the status ERROR, CONDWAIT, HOSTWAIT or HOLD following RUNNING (at least one job of the net has been started or a condition has been checked).</p> <p>If two or more nets with the same name and not of type 1 are waiting to start, the net with the earliest PLAN-START time will be started first.</p>
3	<p>The net will only be started if no net with the same name has been brought to execution since the last time the run control file was reorganized (see the manual "AVAS for the Administrator" [2]).</p> <p>The restrictions specified by NET-TYPE=2 or 3 apply only to those nets which are brought to execution within one RUN-CONTROL-SYSTEM.</p> <p>If the net is planned as a subnet (with CREATE-PLAN-NET), then it receives an appropriate value > 4 (5/6/7) for NET-TYPE that corresponds to the values 1 - 3. With a value > 4 the net is marked as a subnet connected to a hypernet.</p>

RUN-CONTROL-SYSTEM	
	Input/output parameter {avak / *STD}
avak	Name of the run control system (German abbreviation) that is to control net processing. <i>Note</i> A run control system other than the one defined for the user group in the system parameters can only be specified if the user has the appropriate authorization.
*STD	By default, this is assigned the name of the run control system defined for the user group in the system parameters.
USER-PAR-FILE	
	Input/output parameter File containing parameters for the modification. {*NONE / *STD / *BY-HYPERNET / filename / libname(element[,type])}
*NONE	No USER-PARAM-FILE is used or the name of the file is specified via the AVM012 mask in the case of CREATE-PROD-NET.
*STD	The name of the USER-PARAM-FILE is sought with PARAM.\$ug.netname[.yymmdd[.hhmmss]] and descending classification in the case of CREATE-PROD-NET.
*BY-HYPERNET	The USER-PARAM-FILE of the hypernet is used provided the net is planned as a subnet. Otherwise the same procedure applies as for *NONE.
filename	The parameters contained in this file are used during the modification process.
libname(element[,type])	The parameters are sought in the specified element of the defined library. If the type is not specified, the element is expected as type S. Valid entries for type are S, J, P and D. <i>Note</i> *STD is output as the default value unless *NONE is defined as the default value via the system parameters (only in the case of CREATE-NET-DESCRIPTION). With MODIFY-NET-DESCRIPTION, the value saved by the user under CREATE-NET-DESCRIPTION applies.

NET-CAT	<p>Input/output parameter (BS2000 ENTER parameter) {'catid' / '*ANY' / (bs2000-servername) / jvname} Parameter for job distribution within a HIPLEX MSCF network (Multi System Control Facility; see the manual "AVAS Functions and Tables" [2]) or on a remote BS2000 system.</p>
'catid'	For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.
'*ANY'	If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.
(bs2000-servername)	For a job on a remote BS2000 system a BS2000 server name must be specified which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).
jvname	Name of a job variable containing a catalog ID, the value *ANY, or a BS2000 server name.
NET-USER	<p>Input/output parameter (BS2000 ENTER parameter). User identification under which all jobs in the net are to run (with server jobs the BS2000 user ID under which AVSSINCM is to run). It is used as the default value for the USER parameter of all jobs in the net (see the AVN002 mask on page 553, USER parameter).</p>
NET-ACCOUNT	<p>Input/output parameter (BS2000 ENTER parameter). Account number under which all jobs in the net are billed. It is used as the default value for the JOB-ACCOUNT parameter of all jobs in the net (see the AVN002 mask on page 553, JOB-ACCOUNT parameter).</p>
NET-PASSWORD	<p>Input/output parameter (BS2000 ENTER parameter). LOGON password.</p> <p>C'.....' or '.....': 1–8 alphanumeric characters. X'.....': 1–16 hexadecimal characters.</p> <p>This is used as the default value for the PASSWORD parameter of all jobs in the net (see the AVN002mask on page 553, PASSWORD parameter).</p>

AVAS handles the password specifications C'.....' and '.....' in the same way.

By default the NET-PASSWORD field is blanked out in the AVN001 mask. AVAS users can make it visible using the VISIBLE operation (see [page 33](#)) or #71 provided they are authorized to use this operation.

NET-CLASS

Input/output parameter

(BS2000 ENTER parameter).

Job class in which all jobs in the net are classified. It is used as the default value for the JOB-CLASS parameter of all jobs in the net (see the AVN002 mask on [page 553](#), JOB-CLASS parameter).

NET-LOG

Input/output parameter

(BS2000 ENTER parameter).

Indicates whether (YES) or not (NO) the SYSOUT log of jobs in the net is to be printed out.

The value specified here is used as the default value for the LOG parameter of all jobs in the net (see the AVN002 mask on [page 553](#), LOG parameter).

NET-PARAMETER

Input/output parameter

(BS2000 ENTER parameter).

Specifies additional attributes for the selected job class in the ENTER call. The entry is regarded as the default value for the JOB-PARAMETER parameter of all tasks in the net (see the AVN002 mask on [page 553](#), JOB-PARAMETER).

If parameters which cannot be defined directly are to be specified for the BS2000 ENTER call, they have to be entered in the form
,NAME1=value1,NAME2=value2,...

The parameters are then passed upon the ENTER call but not validated by AVAS.

Note

In the case of structure elements with FUNCTION=P and TYPE=EXX, the value of NET-PARAMETER is not taken into account.

Parameters for the external task can only be defined via JOB-PARAMETER.

Note

When processing nets of a foreign user group, a user can only change the RUN-CONTROL-SYSTEM parameter to the run control system assigned to his own user group. Any other modification of this parameter requires the appropriate authorization.

The other masks can be accessed one after the other via CONTINUE. They can also be addressed directly by CONTINUE by specifying OBJ=.

- Mask AVN020: OBJ=PST
- Mask AVN006: OBJ=MAP
- Mask AVN004: OBJ=STR

SELECT-TURNUS	<p>Input/output parameter Characteristic for forming net run variants. {1 / 2 / .. 9}</p> <p>If this value matches the value for SELECT-TURNUS in the structure element, the structure element is planned for processing in CREATE-PLAN-NET.</p>
SELECT-PLAN-TYPE	<p>Input/output parameter Indicates which days are to be taken into consideration when planning the net using a relative SMYDAT specification {<u>WORK</u> / NWRK / WKND / HLDY}</p>
<u>WORK</u>	Only working days (WORK) are to be taken into consideration during planning.
NWRK	All working days (WORK) and non-working days (NWRK / WKND / HLDY) are to be taken into consideration during planning.
WKND	All working days (WORK) and weekend days (WKND) are to be taken into consideration during planning.
HLDY	All working days (WORK) and public holidays (HLDY) are to be taken into consideration during planning.
M	<p>Input parameter Mark column, for selecting the start date/time to be edited.</p>
D (Delete)	The marked record is to be deleted.
Y (Yes)	The values displayed in the mask can be modified.
N (No)	<p>All unmarked records can be modified.</p> <p>If no marks are entered, then after EXECUTE the data for any of the displayed records can be modified.</p> <p><i>Note</i></p> <p>When the D, Y and N marks are used, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the records in the repositioned work window are presented for modification.</p>
PLAN-START	<p>Start time/date for the net PLAN-START is defined by either of the two parameters DATE/SYMDAT, with which a date is specified, together with TIME for specifying the time of day.</p> <p>PLAN-START is processed in the CREATE-PLAN-NET statement.</p>

SYMDAT/DATE	<p>Input/output parameter Start date for the net. {*NONE / symdat / symdat ±n / symdat ±W / *dd.mm.yy[±Dnn[±W] / [±]symdat[±symdat]...}</p> <p>The date may be specified either in real form (as DATE) or symbolic form (as SYMDAT).</p>
*NONE	<p>is the first entry in the list of Symdats. The TIME parameter is prefilled with blanks. The only other permissible value is *BY-HYP. LATEST_START, DELAY-SOLUTION and LIFE-TIME can be specified or are assigned the default value. If only *NONE is specified, then the net cannot be planned using the calendar and can only be specified with the net name specification. The start time is also assigned when CREATE-PLAN-NET is executed.</p>
*tt.mm.jj±Dnn	<p>Real start date for a net cycle This specification defines cyclical planning of a net. Dnn defines the cycle.</p>
*ttmmjj	Start time for cyclical net planning
D	Identifier for days
nn	<p>Number of days until the next net planning.</p> <p>Cyclical planning is performed by CREATE-PLAN-NET and is possible only if a period is specified. With CREATE-PLAN-NET all nets whose planned start occurs in the specified period are offered for planning. Here the start date *ttmmjj is used for the calculation. SELECT-PLAN-TYPE is taken into account, i.e. production-free days are omitted. If the start date is a calendar day of the type FREE, no cycle is determined.</p>
*tt.mm.jj±Dnn±W	<p>Real start date for a net cycle This specification causes all days to be taken into account for planning. If a date is a production-free day, the previous work day (-W) or the next work day (+W) is selected. If the start day is a calendar day of the type FREE, no cycle is determined.</p>
symdat	<p>Execution of CREATE-PLAN-NET replaces the symbolic date with real dates if the calendar is being used for planning the net (PERIOD specified).</p> <p>!symdat does not lead to the planning of a standard net. It supplies, when present, the start time and start parameters for a subnet.</p>

symdat ±n	<p>The symbolic date can also be specified in the form symdat [±n]. This results in planning of the net n days before or after the date defined by SYMDAT in the calendar. Beim Ermitteln des Plantages calendar days of the type WORK are included in the count while days on which no production takes place (FREE) are not included.</p> <p>Days of the type NWRK are included in the count if the value specified for the parameter SELECT-PLAN-TYPE is NWRK. The values 1..99 are permitted for ±n.</p> <p>In this case the maximum length of the SYMDAT name is 17 and 18 characters, respectively.</p> <p>The "!" character must prefix symdat for a subnet.</p>
symdat ±W	<p>The symbolic date can also be specified in the form symdat [±W]. This results in planning of the net on the previous or next working day (calendar day of the type WORK) relative to the day defined by SYMDAT in the calendar. If the calendar day defined as SYMDAT is of the type WORK, planning is performed for this day.</p> <p>In this case, the maximum length of the SYMDAT name is 18 characters.</p> <p>The "!" character must prefix symdat for a subnet.</p>
[±]symdat[±symdat]...	<p>In the definition of a start date for the net symdats can be prefixed with the sign "+" or "-" and linked together. Links may be up to 20 characters long (corresponds to the maximum length of the SYMDAT name).</p> <p>When SYM1+SYM2 is specified, the net for planning is selected if both symdats are entered on the relevant day in the calendar. When TGL-FRI is entered, for example, the net is planned every day except Friday.</p>
TIME	<p>Input/output parameter</p> <p>Time of day in hh:mm:ss at which the net is to be started (PLANSTART/EARLIEST-START) or *BY-HYP (the start is triggered by the hypernet; only permitted with !symdat and with symdat *NONE).</p> <p>AVAS ignores any seconds specification.</p>

LATEST-START Input/output parameter
 Latest point in time, relative to the planned start time in the net name (PLAN-START), at which the net can be started.
 {nnn.hh.mm / *nn.hh.mm / *BY-HYP / *NONE}

nnn.hh.mm Date and time span relative to PLAN-START
 nnn is the number of calendar days, in the range 000 to 999.

*nn.hh.mm Relative date span and absolute time relative to PLAN-START.
 nn is the number of calendar days, in the range 00 to 99

*BY-HYP For planning, the LATEST-START parameter is supplied from the hypernet.

 For subnet symdats (!symdat) with TIME=*BY-HYP this is the only permissible (and also preset) value.

*NONE Time span relative to PLAN-START.

 If no entry is made, *NONE is assumed. The value used for *NONE is the value specified for DEFAULT-LATEST-NET-START via the parameter generation.

DELAY-SOLUTION Input/output parameter
 Action to be taken in case of an untimely net start (LATEST-START has expired).
 {WAIT / START / IGNORE / CANCEL / *BY-HYP}

If nothing is specified, the value defined for DEFAULT-NET-DELAY via the generation parameters is used.

Once LATEST-START has expired, the net status is dependent on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	NET-STATUS
WAIT	WAITING
START	RUNNING or CONDITION-WAIT
IGNORE	IGNORED
CANCEL	ABENDED

WAIT The net should continue to wait.

START The net should be started.

IGNORE The net is not started. If other nets or jobs are dependent on this net, these dependencies are regarded as resolved if their OCCURE-VALUE is used to test for the IGNORED status.

CANCEL	<p>The net is not started and is regarded as having terminated abnormally.</p> <p>This parameter takes effect when</p> <ul style="list-style-type: none"> – nets are released after LATEST-START has expired (SUBMIT-NET) – nets are in the HOLD state during the interval between EARLIEST-START and LATEST-START – the run control system is inactive during the interval between EARLIEST-START and LATEST-START – two or more nets of the same name are released with NET-TYPE=2 or 3, but they cannot be started in the interval between PLAN-START and LATEST-START.
*BY-HYP	<p>The DELAY-SOLUTION parameter is taken over from the hypernet.</p> <p>For subnet symdats (!symdat) with TIME=*BY-HYP this is the only permissible (and also preset) value.</p>
LIFE-TIME	<p>Input/output parameter</p> <p>Lifetime of the 'end-of-net' event for this net.</p> <p>When the run control file is reorganized, the event entry is not deleted until this time span has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it.</p> <p>The life time is relative to the value of PLAN-START.</p> <p>{nnn.hh.mm / *STD / *NONE / *BY-HYP}</p>
nnn.hh.mm	<p>When the net is released by SUBMIT-NET and REPEAT-NET, a condition description for the net is recorded in the run control file. The time span is relative to PLAN-START, and is equal to nnn calendar days, hh hours and mm minutes.</p>
*STD	<p>Default value for LIFE-TIME defined in the system parameters (DEFAULT-LIFE-TIME).</p> <p>When the net is released by SUBMIT-NET and REPEAT-NET, a condition description for the net is recorded in the run control file.</p>
*NONE	<p>When the net is released by SUBMIT-NET and REPEAT-NET, no condition description for the net is recorded in the run control file.</p>
*BY-HYP	<p>For planning, the LIFE-TIME parameter is supplied from the hypernet.</p> <p>For subnet symdats (!symdat) with TIME=*BY-HYP this is the only permissible (and also preset) value.</p>

N (No)	<p>All unmarked net masks can be modified.</p> <p>If there are no marks, following EXECUTE the data in all displayed net masks can be modified.</p> <p><i>Note</i></p> <p>In connection with the D, Y and N marks, the work window cannot be repositioned.</p> <p>If the EXECUTE operation is entered together with a + or – mark, the net masks of the repositioned work window are presented for modification.</p>
FORMAT-NAME	<p>Input parameter</p> <p>Name of a net mask, up to 8 characters long.</p> <p>This user mask is to be presented with the COLLECT-NET-PARAMS statement in order to define run parameters that are valid throughout the net.</p> <p>A maximum of 32 net masks are permitted for each net.</p>
FORMAT-TEXT	<p>Input parameter</p> <p>Remarks describing the net mask in greater detail.</p> <p>The text may be up to 40 characters long.</p>

Entering CONTINUE causes the AVN004 to be displayed.

A branch to masks AVN004, AVN001 or AVN020 can be effected by specifying OBJECT=STR/NET/PST in the operand field.

AVN004 – Display net structure for modification of structure elements

Mask AVN004 can be used to modify, delete and add structure elements.

Modifying:

After selection by marking with Y, all displayed parameters of the selected elements can be modified. To modify element parameters not shown in the display, the element must be marked with S, after which the remaining parameters of the structure element may be modified via the assigned masks. To enable the descriptions of the structure elements to be modified NEXT=DES should be specified, and NEXT=SYM for the plan data in the structure elements.

Note that it is not permitted to enter different markings. If the mask is sent off with EXECUTE but without markings, all the lines may be modified.

Note

For defined structure elements, a modification of the function FU will result in all the assigned parameter values being deleted. New default values will be assigned, these depending on the function and type.

Exception

When the function is modified from J to P or vice versa, the defined parameter values are retained.

Deleting:

Structure elements are deleted by marking them with D.

Adding:

Structure elements are inserted or appended by entering the displayed parameters in a blank line of the mask. To define a new element, at least the parameters IND (index), FU (function), TYPE and NAME of the structure element must be entered. The descriptions of the net structure can be marked with S if it is required to complete additional parameters.

	rejected with a message. The operation IGNORE or CONTINUE can then be used to resume the processing initiated with EXECUTE.
D (Delete)	The marked structure element is deleted from the net description.
Y (Yes)	The structure element values displayed via mask AVN004 can be modified.
N (No)	All unmarked structure elements can be modified. The data in all the displayed structure elements can be modified after entering EXECUTE, without having to enter any marks.
	<i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements of the repositioned work window are presented for modification.
IND	Input/output parameter 3-digit index (001, ..., 999) of the structure element. This is either a JOB-INDEX or a COND-INDEX, depending on how the FU parameters are defined. New structure elements are defined in a blank line in the mask. When the index is modified, the element is inserted at the position in the net structure corresponding to the new index. If there is already a defined element at the specified index level, the modified structure element will be positioned after the existing one.
FU	Input/output parameter The function of the structure element
A (Add)	This element of the net description is a structure element which creates a condition description.
C (Compare)	This element of the net description is a condition description which waits until a condition is satisfied.
D (Delete)	This element of the net description is a structure element which deletes a condition description.
F (File Transfer)	This element of the net description is a structure element which executes an FT request.
J (BS2000 job)	This element of the net description is a structure element which executes BS2000 jobs.

- M (Modify) This element of the net description is a structure element which modifies a condition description.
- P (Procedure) This element of the net description is a structure element which executes procedures.
- S (Subnet) This element of the net description is a structure element for starting a subnet.
- W (Wait) This element of the net description is a structure element which causes a timed wait.

TYPE

Input/output parameter
 Type of the structure elements
 {MOD / STD / EXT / EXX / JVA / NET / JOB / RES / VAL / TIM / TRA}
 Depending on the function FU, the following are possible entries:

FU	TYPE
J/P	MOD
J/P	STD
J/P	EXT
F	TRA
P	EXX
S	NET
C	JVA
C/D	NET
C/D	JOB
C/A/M/D	RES
C/A/M/D	VAL
W	TIM

MOD

The job is saved in the AVAS system and is subject to net modification. It must be created as a temporary production task by a CREATE-PROD-NET statement.

Notes

- If a structure element with TYPE=MOD is used more than once in a net (same name), either the same user group (user group of the net or system user group) or no user group must always be specified.

	<ul style="list-style-type: none"> – If a USER-PARAM-FILE is to be assigned to the task (AVN002 mask), the name of the structure element can be up to 20 characters long (without the user group). Any violation of this rule will be identified and logged by the CHECK function as an error. The net cannot be planned.
STD	The job is saved in the AVAS system and is not subject to net modification. It must be created by a CREATE-PROD-JOB statement.
EXT	The job is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE or FILENAME (see the AVN042 mask on page 553).
EXX	The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
JVA	For FU=C, net processing waits for a condition to be satisfied by a defined value in a job variable.
NET	<p>For FU=C, net processing waits for a condition in another net to be satisfied. The LIFE-TIME parameter determines how long the condition description remains available for testing.</p> <p>For FU=D, the condition description for a predefined net is deleted.</p> <p>For FU=S, a subnet is started and the system waits for the normal termination of the subnet.</p>
JOB	<p>For FU=C, net processing waits for a condition on a job or FT request to be satisfied. The LIFE-TIME parameter determines how long the condition description remains available for testing.</p> <p>For FU=D, the condition description for a prescribed job or FT request is deleted.</p>
RES	<p>For FU=C, net processing waits for a condition on a resource to be satisfied.</p> <p>The status of the resource is modified by the satisfaction of the condition.</p> <p>For FU=A, a condition description for a resource is created.</p> <p>For FU=M, a condition description for a resource is modified.</p> <p>For FU=D, a condition description for a resource is deleted.</p> <p>The condition entry for a resource can only be deleted if it is not allocated any more.</p>

VAL	<p>For FU=C, net processing waits for a condition to be satisfied by a defined value.</p> <p>For FU=A, a condition description with a defined value is created.</p> <p>For FU=M, a condition description with a defined value is modified.</p> <p>For FU=D, a condition description with a defined value is deleted.</p>
TIM	<p>Net processing is subject to a timed wait. The time interval is specified by OCCURE-DATE SYMDAT in mask AVN023.</p>
TRA	<p>An FT request is started and the system waits for it to terminate normally.</p>
NAME	<p>Input/output parameter Name of the structure element. This depends on the FU and TYPE parameters.</p> <p>Within each AVAS system, the name of each condition description must be unique across all the types of condition. The JVA condition is excepted from this.</p>
For FU=J/P,	<p>the user group for the net, or the system user group, may be specified. The specified user group is only used here in addressing the LIB for the CREATE-PROD-NET (JCLLIB/JCLSYS) and SUBMIT-NET (JMDLIB/JMDSYS) statements.</p> <p>If a USER-PARAM-FILE is to be assigned to the task (AVN002 mask), the name of the structure element can be up to 20 characters long (without the user group). If LIFE-TIME≠*NONE, a condition description is always created with the user group of the net.</p> <p>If the functions FU=J and FU=P are used with the same name in a net, this will be identified and logged by the CHECK function as an error. The net cannot be planned.</p>
For FU=S,	<p>the user group for the net or the system user group can be specified. The user group specified is only used here to address the LIB for the CREATE-PLAN-NET (NETLIB/NETSYS) statements.</p>
For FU=F,	<p>only the user group for the net may be specified.</p>
For FU=A/D,	<p>only the user group for the net may be specified.</p>

For FU=C and TYPE=NET/JOB/RES/VAL
and FU=M with TYPE=RES/VAL,

it is also possible to specify a foreign user group.

If a NET or JOB condition refers to another user group (i.e. not the user group of the net), this foreign user group must be specified.

If no user group is specified, the user group of the net is assumed.

When the name is specified in abbreviated form, the condition test is assigned to the description for which the PLAN-START is before the PLAN-START of the net making the reference by the smallest time.

For FU=W, either *DATE or a name may be specified.

For FU=C with TYPE=JVA,

the name of the job variable

The name of the job variable can be modified in the COND-JVA-NAME parameter of mask AVN003.

*NONE is no longer copied into the name of the structure element. In a NET condition, *NONE is no longer permitted as the name of the structure element, and may only be specified under the CREATED-BY NET-NAME parameter.

The condition is always satisfied if all possible status values are specified under OCCURE-VALUE, or under ERROR-VALUE with a restart in the SYNC-INDEX.

SYNC-INDEX

Input/output parameter

Index level at which the job or condition is to be synchronized.

{index / NXT / END }

index

The value of SYNC-INDEX must be greater than the value defined for IND. It is not permitted to specify the index level of a restart job. The system waits at this index level for the job to terminate or for the condition to be met.

NXT

Synchronization takes place at the next higher index level.

END

Normal job termination or the satisfaction of the condition is the prerequisite for normal termination of the net, i.e. net termination forms the basis for synchronization.

Note

Only NXT is permissible for the restart index levels (index > 899). For the restart index levels, SYNC-INDEX is replaced by the index specified for restart variant 1.

RESTART-IND V1 V2 V3	Input/output parameter {index / END} The restart index can be defined for the three possible restart variants. Without this index, no restart variant is possible.
index	The index level to be used for any restart (of the net). A restart is permissible in all index ranges (001–999) for all structure elements, irrespective of their function and type.
END	In the event of a restart (of the net), there should be no further processing of the structure element and its dependents. It is not permissible to specify END for restart jobs (index 900–999). The SYNC-INDEX of this element or a successor must be synchronized to END, or else the CHECK operation will output a warning.
RESULT	Output parameter Confirmation of the action performed.
UPDATED	The marked structure element has been modified. (Return to mask AVN004 by a CONTINUE operation).
INSERTED	The defined structure element has been inserted.
MOVED	The structure element whose index (IND) was modified has been moved.
NO-UPDATE	The marked structure element has not been changed. (Return to mask AVN004 by an IGNORE operation).
NEXT	Input/output parameter { <u>DES</u> / SYM / JCL} Controls the presentation of masks and the processing of the JCLLIB and JMDLIB elements via EDT for structure elements marked with an S.
<u>DES</u> (DESCRIPTION)	The appropriate mask for entry of the parameters is presented.
SYM (SYMDAT)	The appropriate mask for entry of the plan data is presented. Depending on the values of the FU and TYPE parameters, the continuation masks will then be presented after EXECUTE.
JCL (JCL)	The corresponding element from the JCLLIB/JMDLIB is displayed in the EDT for processing.

AVN002, AVN042, AVN052 – Display and input parameters for structure elements with FU=J/P and TYPE=STD/MOD/EXT/EXX

The structure elements for executing BS2000 jobs and S procedures (tasks) are specified in these masks. The masks displayed differ slightly depending on the type of structure element defined:

- If TYPE=MOD mask AVN002 with the USER-PAR-FILE input field.
- If TYPE=EXT/EXX mask AVN042 with the ENTER-FILE and FILE-PASSWORD input fields.
- If TYPE=STD mask AVN052.

Otherwise, the structure of the mask is identical in all formats.

Mask AVN002 (TYPE=MOD)

```

AVAS-Vnn.yxmn/AVN002      JOB-DESCRIPTION FOR NET-STRUCTURE   tt.mm.jjjj/hh:mm:ss
JOB-NAME      =..... NET-NAME=.....
JOB-TEXT      =.....
JOB-DOC       =.....
JOB-INDEX     =... FU=... JOB-TYPE=...
SYNC-INDEX   =...
RESTART      -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1   ... ..
              2   ..
              3   ..
ENTER-PARAMS =.....
JOB-CAT       =.....
USER          =..... JOB-ACCOUNT =..... PASSWORD=.....
JOB-CLASS    =..... LOG          =.....
JOB-PARAMETER=.....
USER-PAR-FILE=.....

CMD:..... OPR:.....
MSG:.....
    
```

AVN042 (TYPE=EXT/EXX)

```

AVAS-Vnn.yxmn/AVN042    JOB-DESCRIPTION FOR NET-STRUCTURE    tt.mm.jjjj/hh:mm:ss
JOB-NAME                = ..... NET-NAME=.....
JOB-TEXT                = .....
                        .....
JOB-DOC                 = .....
JOB-INDEX               = ... FU=... JOB-TYPE=...
SYNC-INDEX              = ...
RESTART                 -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1            ... .....
  2                    ... .....
  3                    ... .....
ENTER-PARAMS           = .....
JOB-CAT                 = .....
USER                   = ..... JOB-ACCOUNT = ..... PASSWORD=.....
JOB-CLASS               = ..... LOG = .....
JOB-PARAMETER          = .....
                        .....
ENTER-FILE              = .....
FILE-PASSWORD          = .....

CMD: ..... OPR: .....
MSG: .....
    
```

AVN052 (TYPE=STD)

```

AVAS-Vnn.yxmn/AVN052    JOB-DESCRIPTION FOR NET-STRUCTURE    tt.mm.jjjj/hh:mm:ss
JOB-NAME                = ..... NET-NAME=.....
JOB-TEXT                = .....
                        .....
JOB-DOC                 = .....
JOB-INDEX               = ... FU=... JOB-TYPE=...
SYNC-INDEX              = ...
RESTART                 -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1            ... .....
  2                    ... .....
  3                    ... .....
ENTER-PARAMS           = .....
JOB-CAT                 = .....
USER                   = ..... JOB-ACCOUNT = ..... PASSWORD=.....
JOB-CLASS               = ..... LOG = .....
JOB-PARAMETER          = .....
                        .....

CMD: ..... OPR: .....
MSG: .....
    
```

JOB-NAME	Output parameter
jobname	Name of the task.
NET-NAME	Output parameter Name of the net description, to which the structure element for executing BS2000 jobs and S procedures is assigned.
JOB-TEXT	Input/output parameter Brief text (up to 120 characters) describing the task in greater detail.
JOB-DOC	Input/output parameter {*STD / element / *NONE}
*STD	Documentation of the task. The documentation is sought or stored under the standard name \$ugnet_netname.jobname in the DOCLIB.
element	Element name for the documentation of the task in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the task, the following message is output: AVS4090 THE DOCUMENT FUNCTION IS NOT AVAILABLE
JOB-INDEX	Output parameter Index level of the net at which the task is to run. index

FU	Output parameter Function of the structure element
J (Job)	The function of this structure element in the net description is to execute BS2000 jobs.
P (Procedure)	The function of this structure element in the net description is to execute S procedures.
JOB-TYPE	Output parameter Type of the structure element. Shows the value for TYPE as entered into mask AVN004, indicating whether, and if so in what form, the task is subject to net modification. (FU=J/P with TYPE=MOD/STD/EXT, FU=P with TYPE=EXX)
MOD	The task is subject to net modification. It was created with CREATE-PROD-NET.
STD	The task is not subject to net modification. It must be created with the CREATE-PROD-NET statement.
EXT	The task is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE.
EXX	The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
SYNC-INDEX	Input/output parameter Index level at which the task is to be synchronized. {index / <u>NXT</u> / END}
index	This value must be greater than the value for JOB-INDEX and must not contain an index level from the restart index levels. The system waits at this index level for the task to terminate.
<u>NXT</u>	The task is synchronized at the next higher index level.
END	The task is synchronized at normal end of net (freestanding task).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for a restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.

RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) in all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p> <p>END must not be specified with restart tasks.</p>
RESTART-NAME	<p>Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p> <p>“name” must be unique at the specified index level.</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>Any structure elements at the restart index level that have the status ERROR are only to be executed again if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>
*NAME	<p>Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.

- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
 If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
 If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing involved. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.

Note

Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.

AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).

<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
ENTER-PARAMS	Input/output parameter Source of the parameters for the ENTER call used to start this task. { <u>NET</u> / LOGON}
<u>NET</u>	The ENTER parameters are taken from the net description, with specifications for the task being given precedence over specifications for the net.
LOGON	The ENTER parameters are taken from the SET-LOGON-PARAMETERS (or LOGON) command of the task. This data in the LOGON statement is accepted by the run control system without validation. The catalog ID from the net description is not evaluated. The LOGON entry is not permissible if JOB-TYPE=EXT and/or a job description record for S procedures is processed.
JOB-CAT	Input/output parameter {'catid' / '*ANY' / (bs2000-servername) / jvname} Parameter for task distribution within a HIPLX MSCF network (Multi System Control Facility); see the manual "AVAS Functions and Tables" [1].
'catid'	For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.
'*ANY'	If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.
(bs2000-servername)	For a job on a remote BS2000 system a BS2000 server name must be specified which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).
jvname	Name of a job variable containing a catalog ID, the value *ANY, or a BS2000 server name.

USER	<p>Input/output parameter Identifier if the task (job or S procedure) is not to run under the net ID.</p> <p>If a USER is specified, then the JOB-ACCOUNT and PASSWORD parameters must also be used. All three parameters are taken from the net definitions or from the job specification.</p>
JOB-ACCOUNT	<p>Input/output parameter (BS2000 ENTER parameter). Account number under which the job is billed, see also the USER parameter.</p>
PASSWORD	<p>Input/output parameter Parameter for the ENTER call of the task, see also the USER parameter. LOGON password for USER (for permissible entries see the AVN001 mask on page 531, NET-PASSWORD parameter). The PASSWORD field is blanked out in the AVN002/AVN042/AVN052 mask. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p>
JOB-CLASS	<p>Input/output parameter (BS2000 ENTER parameter). Job class in which the task is classified.</p>
LOG	<p>Input/output parameter Indicates whether the SYSOUT log of the tasks in the net is to be printed out (“_”, “YES”) or not (“NO”), where “_” is the blank character.</p>
JOB-PARAMETER	<p>Input/output parameter (BS2000 ENTER parameter). Specifies additional attributes for the selected job class.</p> <p>If parameters which cannot be defined directly are to be specified for the BS2000 ENTER call, they have to be entered in the form .NAME1=value1,NAME2=value2,... The parameters are then passed upon the ENTER call but not validated by AVAS.</p>

For TYPE=EXT/EXX (mask AVN042):

ENTER-FILE	Input/output parameter Name of the BS2000 job or of an S procedure that is to be started for TYPE=EXT/EXX under the BS2000 user ID. The file must exist under this user ID. The default value is the name without bk_ from the structure.
FILE-PASSWORD	Input/output parameter Password of the file specified under ENTER-FILE (only for TYPE=EXT/EXX) {*NONE / password} By default the FILE-PASSWORD field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.

For TYPE=MOD (mask AVN002):

USER-PAR-FILE	Input/output parameter Name of a file with parameters for the modification of the job or the procedure with TYPE=MOD. {*NONE/*STD/filename/libname(element,type)}
*NONE	No USER-PARAM-FILE is used.
*STD	The name of the USER-PARAM-FILE is sought using PARAM.\$ug.jobname.index in the case of CREATE-PROD-NET.
*filename	The parameters in this file are used to modify the job or procedure.
*libname(element,type)	The parameters are sought in the specified element of the defined library with the specified type of library department. If the type of library department is not specified, type S is used. The maximum input length is 54 characters.

Note

If specification of a user ID is mandatory (see the manual “AVAS for the Administrator” [2]), specification of ENTER-PARAMS=NET (mask AVN002/AVN042/AVN052) must be accompanied by the entry of either a value for USER (mask AVN002/AVN042/AVN052) or a value for NET-USER (mask AVN001). If this is not the case, the task will not subsequently be started by the run control system and will be given the ERROR status.

The same applies if ENTER-PARAMS=LOGON is specified without a user ID in the /SET-LOGON-PARAMETERS (or /LOGON) of the task.

AVN003 – Display and input parameters for structure elements with FU=C and TYPE=JVA

This mask is used to specify the structure elements for condition control via job variables.

```

AVAS-Vnn.yxmn/AVN003  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=...  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1          ...  *ALL.....
                   2    ...  *ALL.....
                   3    ...  .....

COND-JVA-NAME=.....
JVA-POSITION =...  JVA-LENGTH=...  JVA-PASSWORD=.....
COND-VALUE      =.....

CMD:.....  OPR:.....
MSG:.....
    
```

- COND-NAME Output parameter
Name of the condition description, as specified in mask AVN004.
- NET-NAME Output parameter
Name of the net
- COND-TEXT Input/output parameter
Brief text (up to 120 characters) describing the condition.
- COND-DOC Input/output parameter
{*STD / element / *NONE}
Documentation of the condition.
 - *STD The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.

element	<p>Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
COND-INDEX	<p>Output parameter Index level of the net at which the job variable is to be monitored.</p>
FU	<p>Output parameter Function of the structure element</p>
C (Compare)	<p>This element in the net description is a condition, for satisfaction of which the system will wait.</p>
COND-TYPE	<p>Output parameter Value for TYPE.</p>
JVA	<p>The net identified via NET-NAME is meant to wait at the index level specified under COND-INDEX until the specified job variable contains the value specified under COND-VALUE from the specified position and in the defined length.</p>
SYNC-INDEX	<p>Input/output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 553, SYNC-INDEX parameter).</p>

RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each task. At least one index must be specified for a restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart.</p> <p>END must not be specified with restart tasks.</p>
RESTART-NAME	<p>Input/output parameter</p> <p>Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>

*NAME Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE Input/output parameter
Type of restart processing involved.
{RESTART / NORMAL}

RESTART Restart with execution of restart statements #RA, #RI and #RU.

NORMAL Restart without execution of restart statements #RA, #RI and #RU.

Note

Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.

AUTOMATIC	<p>Input/output parameter Type of restart processing {YES / <u>NO</u>}</p>
YES	<p>Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task.</p> <p>If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).</p> <p>If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).</p>
<u>NO</u>	<p>Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>
COND-JVA-NAME	<p>Input/output parameter {jvname / *NONE}</p>
jvname	<p>Name of the job variable whose value is to be checked from the specified position in the specified length. The name must be specified with both catalog ID and user ID. The job variable must be shareable.</p>
*NONE	<p>The condition is regarded as satisfied.</p>
JVA-POSITION	<p>Input/output parameter</p>
jvpos	<p>Position within the value range of the job variable as of which the value is to be checked. Default value: 001</p>
JVA-LENGTH	<p>Input/output parameter</p>
jvlen	<p>Length of the value of the job variable to be checked. Default value: 001</p>

JVA-PASSWORD	<p>Input/output parameter</p> <p>If the job variable is password-protected, the password must be specified here.</p> <p>{*NONE / password}</p>
*NONE	The job variable is read without a password.
password	<p>C'....' or '....': 1–4 alphanumeric characters</p> <p>X'....': 1–8 hexadecimal characters</p> <p>AVAS handles the password specifications C'....' and '....' in the same way.</p> <p>The field JVA-PASSWORD is blanked on the mask. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p> <p>If the field contents are cleared, *NONE is set.</p>
COND-VALUE	<p>Input/output parameter</p> <p>{= jvvalue / > jvvalue / < jvvalue / >= jvvalue / <= jvvalue / <> jvvalue}</p>
jvvalue	jvvalue is the value with which the job variable is compared. jvvalue is specified without quotes and only as a C string. The length of the value must match the entry in JVA-LENGTH.
= jvvalue	The condition is met if the job variable is equal to jvvalue.
> jvvalue	The condition is met if the value of the job variable is greater than jvvalue.
< jvvalue	The condition is met if the value of the job variable is less than jvvalue.
>= jvvalue	The condition is met if the value of the job variable is greater than or equal to jvvalue.
<= jvvalue	The condition is met if the value of the job variable is less than or equal to jvvalue.
<> jvvalue	The condition is met if the value of the job variable is not equal to jvvalue.

AVN008 – Display and input parameters for structure elements with FU=C and TYPE=NET/JOB/RES/VAL

This mask is used to specify structure elements which depend on nets, jobs (including FT requests), resources and defined values, for use in condition control.

```

AVAS-Vnn.yxm/AVN008  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME           =..... NET-NAME=.....
COND-TEXT           =.....
COND-DOC            =.....
COND-INDEX          =...  FU=...  COND-TYPE=...
SYNC-INDEX          =...
RESTART             -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1        ...
                   2  ...
                   3  ...

CONDITION CREATED BY: NET-NAME=..... INDEX=...

OCCURE-VALUE = .....
ERROR-VALUE  = .....
              SELECT-RESTART-VARIANT=

CMD:..... OPR:.....
MSG:.....
    
```

COND-NAME

Output parameter
Name of a condition

\$ug_jobname1-24 (TYPE=JOB)

Name of the structure element, the status of which is to be tested. If a user group is specified when a condition is tested, it must always be the user group of the net under which the structure element is executed. This applies even if the system user group was specified in the condition.
FT requests are also handled under TYPE=JOB.

\$ug_netname1-12 (TYPE=NET)

Name of the net, the status of which is to be tested.

\$ug_resname1-24 (TYPE=RES)

Name of the condition for a resource

\$ug_valname1-24 (TYPE=VAL)

Name of the condition for a defined value

Note

The name of a condition within an AVAS system must be unique across all condition types.

NET-NAME	Output parameter Name of the net.
COND-TEXT	Input/output parameter Brief text (up to 120 characters) describing the condition.
COND-DOC	Input/output parameter {*STD / element / *NONE} Documentation of the condition.
*STD	The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.
element	Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE
COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.

FU	Output parameter Function of the structure element
C (Compare)	This element in the net description is a condition, for satisfaction of which the system will wait.
COND-TYPE	Output parameter Value for TYPE Type of the structure element
NET	The net processing waits for a condition of another net to be satisfied.
JOB	The net processing waits for a condition of another job or FT request to be satisfied.
RES	The net processing waits for a condition for a resource to be satisfied (RESSOURCE).
VAL	The net processing waits for a condition to be satisfied with a defined value (VALUE).
SYNC-INDEX	Input/output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 553 , SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for a restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Input/output parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.

END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END must not be specified with restart tasks.
RESTART-NAME	Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing involved. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed—the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

CONDITION CREATED BY

Input/output parameter

Name and index of the net which created the condition description.
If COND-TYPE=RES and VAL, no input is permitted.

NET-NAME

{\$ug_netname1-12[_date[_time]] / *NONE}

The full name of the net with PLAN-START need only be specified if the condition description with the smallest positive time difference with respect to PLAN-START is not to be evaluated, but the one with the specified PLAN-START is. *NONE may only be specified in conjunction with COND-TYPE=NET.

COND-TYPE=JOB

The user group for the NET-NAME parameter is always the same as the user group for the COND-NAME parameter.

COND-TYPE=NET

The specified net name (\$ug_netname) must always match the specified structure element name (COND-NAME). The parameter is preset to the parameter value NAME from the AVN004 mask.

If *NONE is specified, the comparison with the name of the structure element is omitted and the condition is taken to be satisfied without a check being performed.

INDEX

An index only needs to be specified for a JOB condition if there are several descriptions with the same job name and net name.

If COND-TYPE=NET is specified, no input is allowed.

OCCURE-VALUE

Input/output parameter

{status / status, ... / c-string / x-string}

Event for dependency control

For TYPE=NET

If no entry is made, the parameter is preset with the value ENDED.
The valid entries are::

ENDED MISSING ABENDED IGNORED

For TYPE=JOB

If no entry is made, the parameter is preset with the value ENDED.
The valid entries are:

NO-PLAN ABENDED DELETED IGNORED MISSING
ENDED ERROR SKIPPED NO-SUBMIT

For TYPE=RES If no entry is made, the parameter is preset with the value FREE. If the condition is satisfied, the resource is occupied according to the query. The valid entries are:

FREE SHARE[(uu)] SHARE[(uu)], FREE

FREE If the condition description has the status FREE, the condition is satisfied and the resource is given the status EXCLUSIVE.

SHARE(uu) If the condition entry is in the SHARE or FREE state and the resource can be used at least uu times still, then the condition is satisfied. The resource is allocated uu times in the SHARE mode.

SHARE(uu), FREE If the condition entry is in the SHARE or FREE state and the resource can be used at least uu times still, then the condition is satisfied. The resource is allocated uu times in the SHARE mode.

If uu is not specified, then uu is set to 1.

For TYPE=VAL The parameter does not have a preset value, but instead an entry is requested. The parameter can be used to enter values linked by operators. For condition testing, the following operators are permitted:

.EQ. .LT. .GT. .LE. .GE. .NE. .OR.

Input format:

OP,pos,value
(OP,pos,value)
(OP,pos,value),(OP,pos,value),...

– OP – comparison operation

= / EQ – equal to

< / LT – less than

> / GT – greater than

≤ / LE – less than or equal to

≥ / GE – greater than or equal to

≠ / NE – not equal to

If no comparison operation is specified, OP=EQ is assumed. The parameter and the comma are both omitted (pos,value).

– pos – start position for a value specification

nnn

If pos is not specified, pos=1 is assumed.

Comparison values with neither OP nor pos are specified directly (value).

If a comparison operation is specified without a start position, the corresponding comma must nevertheless be inserted (OP,,value).

– value – comparison value

'c-string'

C'c-string'

X'x-string'

Current value of the condition description in the run control file. The area comprises 128 bytes.

Note

When a condition description is created, positions for which no value is assigned are set up with X'40'.

–),(– logical OR operation

If there are multiple condition tests, their specifications must be enclosed in parentheses, which links them by ORs.

Permissible input formats are:

value
 (value)
 (value),(value),...
 pos,value
 (pos,value),(pos,value),...
 OP,pos,value
 (OP,pos,value)
 (OP,pos,value),(OP,pos,value),...
 OP,,value
 (OP,,value)
 (OP,,value),(OP,,value),...

These may be combined in any required way, e.g.:

(value),(OP,,value),(pos,value),...

The length of the comparison value is determined by the length of c-string or x-string, as appropriate.

pos + length -1 may not exceed 128.

Apostrophes within a c-string must be repeated a second time.

ERROR-VALUE

Input/output parameter
 {status / status, ... / c-string / x-string / *NONE}

Event for dependency control

For TYPE=NET

The parameter does not have a preset value.
 The valid entries are:

ENDED MISSING ABENDED IGNORED

For TYPE=JOB

The parameter does not have a preset value.
 The valid entries are:

NO-PLAN ABENDED DELETED IGNORED MISSING
 ENDED ERROR SKIPPED NO-SUBMIT

For TYPE=RES

The parameter does not have a preset value.
 The valid entries are:

MISSING CREATED FREE SHARE[(uu)] ERROR
 EXCLUSIVE

For TYPE=VAL The format of the entries is subject to the rules described for OCCURE-VALUE.
Otherwise, *NONE can be specified from column 1 on. If the input field is blank, ERROR-VALUE is given the value *NONE.

SELECT-RESTART-VARIANT

Input/output parameter
{1 / 2 / 3}

This parameter is assigned to the ERROR-VALUE parameter. It presets a restart variant to be used in the event of an error. Processing takes place in accordance with the restart variant set for the jobs by means of the monitor job variable.

If no entry is made here, the restart variants for the condition are searched for AUTOMATIC=YES, as in the case of jobs, and if a restart variant is found this is used to automatically initiate a restart. If no restart variant with AUTOMATIC=YES is found, the restart must be initiated by the RESTART-NET statement.

AVN015 – Display and input parameters for structure elements with FU=S and TYPE=NET

The structure elements to start and control subnets via a hypernet are described in this mask.

The subnet is started and monitored by the AVAS run control system on the BS2000 computer. A job variable called AVAS-SUBNET-JV is used for control purposes.

```

AVAS-Vnn.yxmn/AVN015      SUBNET-DESCRIPTION FOR NET-STRUC      tt.mm.jjjj/hh:mm:ss
SUBNET-NAME =..... NET-NAME=.....
SUBNET-TEXT =.....
SUBNET-DOC =.....
SUBNET-INDEX =... FU=. SUBNET-TYPE=...
SYNC-INDEX =...
RESTART -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1 ... ..
           2 ... ..
           3 ... ..
CMD:..... OPR:.....
MSG:.....
    
```

SUBNET-NAME Output parameter
 Name of the subnet

NET-NAME Output parameter
 Name of the hypernet to which the structure element to start and control the subnet is assigned.

SUBNET-TEXT	Input parameter Brief text (up to 120 characters) describing the subnet in greater detail.
SUBNET-DOC	Input/output parameter {*STD / element / *NONE} Documentation of the subnet.
*STD	The documentation is sought or stored under the standard name \$bknet_netname.subnetname in the DOCLIB.
element	Element name for the documentation of the task in the DOCLIB or DOCSYS: \$bk_docname \$bksys_docname {docname} The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$bksys is specified, the documentation is sought in the DOCSYS. Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the task, the following message is output: AVS4090 THE DOCUMENT FUNCTION IS NOT AVAILABLE
SUBNET-INDEX	Output parameter Index level of the subnet {index}
FU	Output parameter The function of the structure element
S (Subnet)	The function of this structure element in the net description is to start and control subnets.

SUBNET-TYPE	<p>Output parameter Type of the structure element Shows the value for TYPE as entered into mask AVN004, indicating whether, and if so in what form, the subnet is to be executed by the hypernet.</p>
NET	<p>The subnet is planned (CREATE-PLAN-NET), modified (CREATE-PROD-NET) and released for processing (SUBMIT-NET) with the hypernet. The status of the subnet is shown for the structure element in the hypernet.</p>
SYNC-INDEX	<p>Input/output parameter Index level at which the subnet is to be synchronized. {index / NXT /END}</p>
index	<p>This value of the SYNC-INDEX must be greater than the value for SUBNET-INDEX. An index level of a restart task may not be specified. The system waits at this index level for the subnet to terminate.</p>
NXT	<p>The subnet is synchronized at the next higher index level.</p>
END	<p>The subnet is synchronized at normal end of net (freestanding subnet).</p>
RESTART-VARIANT	<p>Output parameter Three restart variants are permitted for each subnet. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out for subnets using the default values RESTART-TYPE=NORMAL and AUTOMATIC=NO.</p> <p><i>Note</i></p> <p>RESTART-TYPE=RESTART and AUTOMATIC=YES can be specified for the structure element of the subnet in the ERROR state.</p> <p>If RESTART-INDEX>SUBNET-INDEX or END is specified for a structure element for starting a subnet, the structure element is set to the status SKIPPED and processing of the subnet is no longer monitored by the hypernet. No restart is initiated for the subnet and the subnet is not given the status ABENDED by CANCEL-NET. Structure elements of subnets will not be placed in the WAITING status any more after the ENDED or SKIPPED state is reached and subnets cannot be restarted and monitored via the hypernet for this reason.</p>

RESTART-INDEX	<p>Input parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the 3 restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of the net). A restart is permissible for all index ranges (001-999) in all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart, the structure element (and all other tasks that are dependent on it) should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p>
RESTART-NAME	<p>Input parameter</p> <p>Name for selecting structure elements at the specified restart index level.</p> <p>{name /*ALL/*NAME/*ERROR}</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>All structure elements at the restart index level that have the status ERROR are to be executed again. The *ERROR specification is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.</p>
*NAME	<p>Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.</p>

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.

- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX has the same value as the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value. If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	<p>Input parameter Type of restart processing involved. { RESTART | NORMAL }</p> <p>It is only reasonable to specify NORMAL for structure elements to start subnets. If restart statements are to be processed, then RESTART can be specified for structure elements of the subnet in the ERROR state.</p>
RESTART	Restart with execution of restart statements #RA, #RI and #RU
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<p><i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.</p>
AUTOMATIC	<p>Input parameter Type of restart processing. Only NO is permitted for structure elements to start subnets. YES can be specified for a structure element of the subnet in the ERROR state.</p>
NO	<p>Manual restart The restart must be initiated by the RESTART-NET statement.</p> <p>Modifications to the net regarding the jobs in the subnet can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>

AVN016 – Display and input parameters for structure elements with FU=F and TYPE=TRA

This mask is used to specify the structure elements for executing FT requests.

The FT request is started and monitored by the AVAS run control system using the BS2000 command TRANSFER-FILE when the corresponding structure element with FU=F and TYPE=TRA starts. A job variable is used for control purposes.

File transfer with openFT, the TRANSFER-FILE command and the operands used by AVAS are described in detail in the "openFT User Guide" [11].

```

AVAS-Vnn.yxmn/AVN016 FILE-TRANSFER-DESCR. FOR NET-STRUC tt.mm.jjjj/hh:mm:ss
FT-NAME =..... NET-NAME=.....
FT-TEXT =.....
FT-DOC =.....
FT-INDEX =... FU=. FT-TYPE=...
SYNC-INDEX =...
RESTART -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1 ...
          2 ...
          3 ...
DIRECTION =... PARTNER-NAME=... REMOTE=...
LOCAL-FILE =.....
REMOTE-FILE =.....
REMOTE-TRANSFER-ADMISSION=
FT-PARAMETER =.....
CMD:..... OPR:.....
MSG:.....
    
```

FT-NAME	Output parameter
fname	Name of the FT request
NET-NAME	Output parameter
	Name of the net description to which the structure element for executing FT requests is assigned.
FT-TEXT	Input parameter
	Brief text (up to 120 characters) describing the request in greater detail.

FT-DOC	<p>Input/output parameter {*STD / element / *NONE}</p> <p>Documentation of the request</p>
*STD	<p>The documentation is searched for or stored in DOCLIB under the standard name \$ugnet_netname.jftname.</p>
element	<p>Element name for the documentation of the request in DOCLIB or DOCSYS:</p> <p>\$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>When the user group is specified, the documentation is searched for under the net's user group in DOCLIB. If \$ugsys is specified, the documentation is searched for in DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via mask AVS016.</p>
*NONE	<p>No documentation is used. If the DOCUMENT operation was entered for the request, the following message is issued: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
FT-INDEX	<p>Output parameter Index level of the net at which the request is to execute. index</p>
FU	<p>Output parameter Function of the structure element</p>
F (File Transfer)	<p>This structure element of the net description executes FT requests.</p>
FT-TYPE	<p>Output parameter Type of the structure element</p>
TRA	<p>File transfer is started.</p>

SYNC-INDEX	<p>Input/output parameter Index level at which the request is to be synchronized. {index / <u>NXT</u> / END}</p>
index	<p>This value must be greater than the value for FT-INDEX and may not contain an index level from the restart index levels. The system waits at this index level for this request to terminate.</p>
<u>NXT</u>	<p>The request is synchronized at the next highest index level.</p>
END	<p>The request is synchronized at normal end of net (freestanding request).</p>
RESTART-VARIANT	<p>Output parameter Three restart variants are permitted for each request. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified using the system parameters.</p>
RESTART-INDEX	<p>Input parameter {index / END} The restart index can be defined for the three possible restart variants. A restart variant is not possible without this restart index.</p>
index	<p>Index level to be used in the event of a restart (restart of the net). A restart is permissible for all index ranges (001–999) in all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of the net), the structure element and all requests that are dependent on it should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END may not be specified with restart requests.</p>

RESTART-NAME	Input parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again. name must be unique at the specified index level.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be executed again.
*ERROR	All structure elements at the restart index level that have the status ERROR are to be executed again. The *ERROR parameter is only processed if RESTART-INDEX is the same as ERROR-INDEX. In all other cases the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if RESTART-INDEX is the same as ERROR-INDEX. In all other cases the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or less than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input parameter Type of restart processing. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> This distinction is irrelevant for FT requests because no job description (JCL) exists with RSTART statements.
AUTOMATIC	Input parameter Type of restart processing. {YES / <u>NO</u> }
YES	Automatic restart The restart is initiated automatically without user input. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). The restart variants are checked for AUTOMATIC=YES in the order RESTART-VARIANT 1, 2, 3.
<u>NO</u>	Manual restart The restart must be initiated using the RESTART-NET statement. Modifications to the net can be performed using the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
DIRECTION	Input/output parameter Direction of file transfer (corresponds to the TRANSFER-DIRECTION operand of the TRANSFER-FILE command). { <u>TO</u> / FROM}
<u>TO</u>	The local system is the sending system; the files are sent to the remote system.
FROM	The local system is the receiving system; the files are fetched from the remote system.
PARTNER-NAME	Input parameter Symbolic name of the remote host, defined by the FT administrator (corresponds to the PARTNER-NAME operand of the TRANSFER-FILE command). This is a mandatory parameter.

REMOTE	<p>Input/output parameter Defines the type of the remote system (corresponds to the REMOTE-PARAMETER operand of the TRANSFER-FILE command).</p> <p><u>*BS2000</u></p> <p><u>*BS2000</u> The remote system is a BS2000 system.</p>
LOCAL-FILE	<p>Input parameter Specifies the name of the file in the local system (corresponds to the FILE-NAME operand in the LOCAL-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-FILE	<p>Input parameter Specifies the name of the file in the remote system (corresponds to the FILE-NAME operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-TRANSFER-ADMISSION	<p>Input parameter Access authorization on the remote system (corresponds to the TRANSFER-ADMISSION operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p> <p>By default the REMOTE-TRANSFER-ADMISSION field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p>
FT-PARAMETER	<p>Input parameter Specifies further operands of the TRANSFER-FILE command for which no AVAS parameters are available. In particular follow-up processing for the local or remote system can be defined here. The syntax of the TRANSFER-FILE command must be complied with. AVAS does not check the syntax.</p>

Example

```
REM-PAR=*BS2(SUCC-P=' /MDUSW ON=23;DEL-FILE F-NAME=AAAAA')
```

Notes

- The AVAS run control system creates the following TRANSFER-FILE command from the parameters:

```
/TRANSFER-FILE TRANS-DIR=*direction ,PARTNER=partner-name  
  ,LOC=*PAR(FILE=local-file  
    ,TRANS-ADM=*PAR(net-user ,net-acc ,net-pass)  
    ,MONJV=<jv-name in avas-standard-syntax>,)  
  ,REM=remote(FILE=remote-file  
    ,TRANS-ADM=remote-transfer-admission)  
  ,ft-parameter
```

The TRANSFER-ADMISSION of the local system comprises the NET-USER, NET-ACCOUNT and NET-PASSWORD entries in the net definition. The request then runs for this ID, and the local file is by default searched for or created there. If NET-USER is not specified, the local TRANSFER-ADMISSION is omitted and the FT request is started for the ID under which the run control system runs.

Because of the authorization concept of openFT, only the ID under which the request was started, i.e. the ID of the run control system, has access to this request (SHOW-FILE-TRANSFER or CANCEL-FILE-TRANSFER command).

- The command is called using the CMD macro, and execution is monitored using the MONJV.
- Depending on the LIFE-TIME, the request may be assigned a condition entry of the type JOB.

SUBNET-TEXT	Input parameter Brief text (up to 120 characters) describing the subnet in greater detail.
SUBNET-INDEX	Output parameter Index level of the subnet index
FU	Output parameter The function of the structure element
S (START)	The function of this structure element in the net description is to start and control subnets.
SUBNET-TYPE	Output parameter Type of the structure element Shows the value entered for TYPE in the mask AVN004.
NET	A subnet is started and the net waits for this to terminate.
SELECT-TURNUS	Input parameter Characteristic used in selecting the condition when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the task will always be executed. The task will be executed if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan dates.
D (Delete)	The marked plan date is deleted.
Y (Yes)	The value shown in mask AVN021 for the plan date can be modified.
N (No)	All unmarked plan dates can be modified. <i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the plan data in the repositioned work window are presented for modification.

SYMDAT	<p>Input/output parameter</p> <p>Characteristic used in selecting the task or subnet when planning the processing of the net or hypernet.</p> <p>{*NONE / *STD / symdat / [±]symdat[±symdat]...}</p>
*NONE	<p>If the net is planned without a symbolic start time (plan with no calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are copied from the *NONE entry.</p> <p>The parameter *NONE is a default value which cannot be deleted.</p> <p>*NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning. The associated start parameters are copied from this entry.</p> <p>*STD is only permitted as the second entry.</p> <p>Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p> <p>The start time of the subnet is that of the hypernet.</p>
symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element.</p> <p>In producing the plan, the assigned start parameters LATEST-START and DELAY-SOLUTION are then used.</p> <p>This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>

LATEST-START	<p>Input/output parameter The latest start time for the subnet relative to the planned start time in the net name (PLAN-START). {nnn.hh.mm / *nn.hh.mm / *NONE}</p>
nnn.hh.mm	<p>Date and time span relative to PLAN-START. nnn is the number of calendar days, from 000 to 999.</p>
*nn.hh.mm	<p>Date span relative to PLAN-START, and absolute time. nn is the number of calendar days, from 00 to 99.</p>
*NONE	<p>Any delay in the starting the task is be accepted. If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.</p>
DELAY-SOLUTION	<p>Input/output parameter Measure to be taken if the test is not timely (LATEST-START is passed). {START / IGNORE / CANCEL} If nothing is specified, the value defined for DEFAULT-JOB-DELAY via the generation parameters is used.</p>
START	<p>The subnet is to be started.</p>
IGNORE	<p>The subnet is not to be started.</p>
CANCEL	<p>The subnet is not started and is considered to have terminated abnormally.</p> <p>If the subnet is to be processed independently from the hypernet, then the use must change NET-TYPE > 4 to NET-TYPE < 4 via MODIFY-SUBMIT-NET. This converts the NET-WAIT status to the WAITING status and the subnet is controlled according to the run control system start parameters.</p> <p>If the subnet is not to execute, then it must be placed in the ABENDED state by the user via CANCEL-NET with CANCEL-TYPE=HARD.</p>

LIFE-TIME	<p>Input/output parameter</p> <p>LIFE-TIME specifies the 'end-of-net' event for this subnet when the subnet is planned with the parameters of the associated structure element.</p> <p>When the run control file is reorganized, the event entry is not deleted until this time span has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it.</p> <p>The life time is relative to the value of PLAN-START. {nnn.hh.mm / *STD / *NONE}</p>
nnn.hh.mm	<p>When the net is released by SUBMIT-NET, a condition description for the subnet is recorded in the run control file.</p> <p>The time span is relative to PLAN-START and is equal to nnn calendar days, hh hours and mm minutes.</p>
*STD	<p>Default value for LIFE-TIME defined in the system parameter DEFAULT-LIFE-TIME.</p> <p>When the net is released by SUBMIT-NET, a condition description for the subnet is recorded in the run control file.</p>
*NONE	<p>When the net is released by SUBMIT-NET, no condition description for the subnet is recorded in the run control file.</p>

Note

The start time of the subnet is the time specified in the subnet as !symdat. If no !symdat is specified in the subnet, the start time of the hypernet is used.

AVN030 – Display and input parameters for structure elements with FU=A/M/D and TYPE=RES/VAL

This mask is used to specify structure elements for creating, modifying and deleting resources and defined values.

```

AVAS-Vnn.yxmn/AVN030  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=...  COND-TYPE=...
SYNC-INDEX           =...
RESTART              -INDEX  -NAME              -TYPE      AUTOMATIC
  VARIANT=1          ...
                   2 ...
                   3 ...

COND-VALUE            =.....

CMD:..... OPR:.....
MSG:.....
    
```

COND-NAME

Output parameter
Name of a condition

\$ug_jobname1-24 (TYPE=JOB)

Name of the structure element, the status of which is to be tested. If a user group is specified when a condition is tested, it must always be the user group of the net under which the structure element is executed. This applies even if the system user group was specified in the condition.

\$ug_netname1-12 (TYPE=NET)

Name of the net, the status of which is to be tested.

\$ug_resname1-24 (TYPE=RES)

Name of the condition for a resource

\$ug_valname1-24 (TYPE=VAL)

Name of the condition for a defined value

Note

The name of a condition within an AVAS system must be unique across all condition types.

NET-NAME	Output parameter Name of the net.
COND-TEXT	Input/output parameter Brief text (up to 120 characters) describing the condition.
COND-DOC	Input/output parameter {*STD / element / *NONE} Documentation of the condition.
*STD	The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.
element	Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE
COND-INDEX	Output parameter Index level of the net at which the condition description is to be processed.

FU	Output parameter Function of the structure element
A (Add)	This element of the net description generates a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).
M (Modify)	This element of the net description modifies a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).
D (Delete)	This element of the net description deletes a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).
COND-TYPE	Output parameter Shows the value for TYPE
RES	Condition description for a resource.
VAL	Condition description with a defined value
SYNC-INDEX	Input/output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 553 , SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for a restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Input/output parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.
END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END must not be specified with restart tasks.

RESTART-NAME	Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Note

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing involved. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

COND-VALUE Input/output parameter
 Status (for TYPE=RES) or value (for TYPE=VAL) of the condition description. For FU=D, no status or value can be defined.
 The condition description in the run control file is modified by the predefined status.

For TYPE=RES Permitted entry:

mmm MAX-USING-SHARE: 2..100
 Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100.

uu Number of quotas of a resource allocated in the SHARE mode. If the value <uu> is not specified, then it is set to the value 1. The value uu must be smaller than the value mmm for MAX-USING-SHARE.

FU	TYPE	Input	Meaning
A	RES	mmm, CREATED	The resource is set up mmm times as a shareable resource and is not yet available.
		mmm,FREE	The resource is set up mmm times as a shareable resource and is available.
		mmm,ERROR	The resource is set up mmm times as a shareable resource and is not yet available.
		mmm, SHARE[(uu)]	The resource is set up mmm times as a shareable resource and is allocated uu times in SHARE mode by the net. If uu is not specified, it is set to 1.
		mmm, EXCLUSIVE	The resource is set up mmm times as a shareable resource and is allocated by the net in EXCLUSIVE mode.
D	RES		A resource can only be deleted (FU=D,TYPE=RES), if it has the status FREE (no net has allocated the resource) , CREATED or ERROR and no net is waiting to allocate the resource.

FU	TYPE	Input	Meaning
M	RES	CREATED	The resource can no longer or cannot yet be used.
		ERROR	The resource can no longer be used because an error has occurred.
		FREE	The resource is released when it is allocated by the net or when the status is changed from CREATED or ERROR to FREE.

Note

If an allocated resource is released with SHARE[(uu)] for FU=M, TYPE=RES with COND-VALUS=FREE, then the USING record for the net is searched for and deleted. The USING counter for the resource is decremented by the value uu.

If a net has allocated a resource with SHARE[(uu)] via several structure elements where FU=C with TYPE=RES, then the entry with the oldest date in the time stamp is searched for and deleted. This is also true when the resource was allocated via COND-VALUE=SHARE[(uu)] for FU=A with TYPE=RES.

Partial release of an allocated resource via FREE[(uu)] is not permitted.

For TYPE=VAL

value
pos,value
(value)
(pos,value)
(pos,value),(pos,value),...

or in combinations, e.g.:

(value),(pos,value),...

A corresponding entry is made in the condition description in the run control file.

For the function A (Add), any positions which are not defined are given the value X'40'.

Note

When condition descriptions are created, no check is made on overlaps.

AVN031 – Display and input parameters for structure elements with FU=D and TYPE=NET/JOB

This mask is used to specify structure elements for deleting NET and JOB type condition descriptions.

```

AVAS-Vnn.yxmn/AVN031  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=...  COND-TYPE=...
SYNC-INDEX            =...
RESTART              -INDEX  -NAME              -TYPE      AUTOMATIC
  VARIANT=1          ...
                   2 ...
                   3 ...

CONDITION CREATED BY: NET-NAME=..... INDEX=...

CMD:..... OPR:.....
MSG:.....
    
```

COND-NAME

Output parameter

Name of the condition

\$ug_jobname1-24 (TYPE=JOB)

Name of the structure element, the status of which is to be tested. If a user group is specified when a condition is tested, it must always be the user group of the net under which the structure element is executed. This applies even if the system user group was specified in the condition.

\$ug_netname1-12 (TYPE=NET)

Name of the net, the status of which is to be tested.

\$ug_resname1-24 (TYPE=RES)

Name of the condition for a resource

\$ug_valname1-24 (TYPE=VAL)

Name of the condition for a defined value

Note

The name of a condition within an AVAS system must be unique across all condition types.

NET-NAME	Output parameter Name of the net.
COND-TEXT	Input/output parameter Brief text (up to 120 characters) describing the condition.
COND-DOC	Input/output parameter {*STD / element / *NONE} Documentation of the condition.
*STD	The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.
element	Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname The maximum length of docname is 37 characters. If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE

COND-INDEX	Output parameter Index level of the net at which the condition description is to be deleted.
FU	Output parameter Function of the structure element
D (Delete)	This element of the net description deletes a condition description for a net or a job.
COND-TYPE	Output parameter Type of the structure element Shows the TYPE of the condition description
NET	Condition description for a net.
JOB	Condition description for a job or FT request.
SYNC-INDEX	Input/output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 553 , SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for a restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Input/output parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.
END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END must not be specified with restart tasks.

RESTART-NAME	Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing involved. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

CONDITION CREATED BY

Input/output parameter

Name and index of the net which created the condition description.

NET-NAME

\$ug_netname1-12[_date[_time]]

The full name of the net with PLAN-START need only be specified if the condition description with the smallest positive time difference with respect to PLAN-START is not to be deleted, but the one with the specified PLAN-START is.

COND-TYPE=JOB

The user group for the NET-NAME parameter is always the same as the user group for the COND-NAME parameter.

COND-TYPE=NET

The specified net name (\$ug_netname) must always match the specified structure element name (COND-NAME). The parameter is preset to the parameter value NAME from the AVN004 mask.

INDEX

An index only needs to be specified for a JOB condition if there are several descriptions with the same job name and net name. If COND-TYPE=NET is specified, no input is allowed.

AVN032 – Display and input parameters for structure elements with FU=W and TYPE=TIM

This mask is used to specify structure elements for timed waits.

The wait time is defined by display and entry of the plan data (mask AVM023).

```

AVAS-Vnn.yxmn/AVN032  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=.  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1          ...  ...  ...  ...
                   2  ...  ...  ...  ...
                   3  ...  ...  ...  ...

CMD:..... OPR:.....
MSG:.....
    
```

- COND-NAME** Output parameter
 Name of the condition

Note

The name of a condition within an AVAS system must be unique across all condition types.
- NET-NAME** Output parameter
 Name of the net.
- COND-TEXT** Input/output parameter
 Brief text (up to 120 characters) describing the condition.

COND-DOC	<p>Input/output parameter {*STD / element / *NONE}</p> <p>Documentation of the condition.</p>
*STD	<p>The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.</p>
element	<p>Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
COND-INDEX	<p>Output parameter Index level of the net at which expiration of the specified period of time is awaited.</p>

FU	Output parameter Function of the structure element
W (Wait)	This element of the net description waits for the termination of a time interval.
COND-TYPE	Output parameter Shows the value for TYPE, as entered via AVN004
TIM	The net identified via NET-NAME is meant to wait at the index level specified under COND-INDEX until the specified time interval is elapsed.
SYNC-INDEX	Input/output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 553 , SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for a restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Input/output parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.
END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END must not be specified with restart tasks.

RESTART-NAME	Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing involved. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

FU	Output parameter Function of the structure element
J (BS2000 job)	This element of the net description is a structure element for executing BS2000 jobs.
P (Procedure)	This element of the net description is a structure element for executing S procedures.
JOB-TYPE	Output parameter Type of the structure element. Shows the value for TYPE as entered into mask AVN004, indicating whether the task is subject to net modification, and if so in what form. (FU=J/P with TYPE=MOD/STD/EXT, FU=P with TYPE=EXX)
MOD	The task is subject to net modification. It is created with CREATE-PROD-NET.
STD	The task is not subject to net modification. It was not created with CREATE-PROD-NET.
EXT	The task is not managed via AVAS. It is assigned using the file name specified under ENTER-FILE or FILENAME.
EXX	The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
SELECT-TURNUS	Input/output parameter Characteristic used in selecting the task when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the job will always be brought to execution. The task will be brought to execution if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.

M	Input parameter Mark column for selecting plan data.
D (Delete)	The marked plan data items are deleted.
Y (Yes)	The value shown in mask AVN021 for the plan date can be modified.
N (No)	All unmarked items of plan data can be modified.
	<i>Note</i>
	In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.
SYMDAT	Input/output parameter Characteristic used in selecting the task when planning the processing of the net. {*NONE / *STD / symdat / [\pm]symdat[\pm symdat]...}
*NONE	If the net is planned without a symbolic start time (plan with no calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are set by this entry. The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.
*STD	The structure element is always selected during planning. The associated start parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.
symdat	When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START, DELAY-SOLUTION and LIFE-TIME are then used. This entry is only used if the second entry is not *STD. If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.

[±]symdat[±symdat]...

When the net is planned using a symbolic start date, symdat's of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.

LATEST-START

Input/output parameter
 Latest start time for the task, relative to the planned start time in the net name (PLAN-START).
 {nnn.hh.mm / *nn.hh.mm / *NONE}

nnn.hh.mm

Date and time span relative to PLAN-START.
 nnn is the number of calendar days, in the range 000 to 999.

*nn.hh.mm

Date span relative to PLAN-START, and absolute time.
 nn is the number of calendar days, from 00 to 99

*NONE

The task can be started with any required delay.
 If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.

DELAY-SOLUTION

Input/output parameter
 Measure to be taken if the start is not timely (LATEST-START is passed).
 {START / IGNORE / CANCEL}

If nothing is specified, the value defined for DEFAULT-JOB-DELAY via the generation parameters is used.

START

The task should be started.

IGNORE

The task should not be started.

CANCEL

The task will not be started, and is considered to have terminated abnormally.

The job status and net status after the LATEST-START time has been passed depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	JOB-STATUS	NET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

LIFE-TIME	<p>Input/output parameter</p> <p>The lifetime of the “job end” event for this job.</p> <p>When the run control file is reorganized, this event entry will not be deleted until this interval of time has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it.</p> <p>The lifetime is relative to the value of PLAN-START.</p> <p>{nnn.hh.mm / <u>*NONE</u>}</p>
nnn.hh.mm	<p>When the net is released by a SUBMIT-NET or REPEAT-NET, a condition description for the task is entered into the run control file. The time interval is relative to PLAN-START, and is equal to nnn calendar days, hh hours and mm minutes.</p>
<u>*NONE</u>	<p>When the net is released by a SUBMIT-NET or REPEAT-NET, no condition description for the task is entered into the run control file.</p>

COND-TYPE	Output parameter Shows the value for TYPE, as entered via AVN004. {NET / JOB / RES / VAL / JVA}
SELECT-TURNUS	Input/output parameter Characteristic used in selecting the condition when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected. The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan dates.
D (Delete)	The marked plan date is deleted. The first entry with SYMDAT=*NONE cannot be deleted.
Y (Yes)	The value shown in mask AVN022 for the plan date can be modified.
N (No)	All unmarked plan dates can be modified. <i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.
SYMDAT	Input/output parameter Characteristic used in selecting the condition when planning the processing of the net. {*NONE / *STD / symdat / [±]symdat[±symdat]...}
*NONE	If the net is planned without a symbolic start time (plan with no SYMDAT name), then LATEST-OCCURE and DELAY-SOLUTION are set by this entry. The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.

*STD	<p>The structure element is always selected during planning. The associated planning parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned plan parameters LATEST-OCCURE and DELAY-SOLUTION are then used. This entry is only used if the second entry is not *STD. *STD ist.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>
LATEST-OCCURE	<p>Input/output parameter The latest point in time for the satisfaction of the condition, relative to the planned start time in the net name (PLAN-START). {nnn.hh.mm / *nn.hh.mm / *NONE}</p>
nnn.hh.mm	<p>Date and time span relative to PLAN-START. nnn is the number of calendar days, from 000 to 999.</p>
*nn.hh.mm	<p>Date span relative to PLAN-START, and absolute time. nn is the number of calendar days, from 00 to 99</p>
*NONE	<p>Any delay in the satisfaction of the condition can be accepted.</p> <p>If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-LATEST-START via the generation parameters.</p>

- DELAY-SOLUTION** Input/output parameter
 Action to be taken in the event that the condition is not satisfied by the time LATEST-OCCURE has been reached.
 {START / IGNORE / CANCEL}
- If nothing is specified, the value defined for DEFAULT-CONDITION-DELAY via the generation parameters is used.
- START** The condition is satisfied.
- IGNORE** The condition is ignored and net processing is continued.
- CANCEL** The ERROR status is set for the condition.
 Net processing must be continued by a restart.
- After LATEST-OCCURE has been passed, the condition status and the net status depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	COND-STATUS	NET-STATUS
START	OCCURRED	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

FU	Output parameter Function of the structure element
W (Wait)	This element of the net description is a structure element for timed waits.
COND-TYPE	Output parameter Shows the value for TYPE, as entered via AVN004. {NET / JOB / RES / VAL / JVA}
SELECT-TURNUS	Input/output parameter Characteristic used in selecting the condition when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected. The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan dates.
D (Delete)	The marked plan date is deleted. The first entry with SYMDAT=*NONE cannot be deleted.
Y (Yes)	The value shown in mask AVN022 for the plan date can be modified.
N (No)	All unmarked plan dates can be modified. <i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.
OCCURE-DATE	This is defined by the SYMDAT parameter when the net is planned.
SYMDAT	Input/output parameter Characteristic used in selecting the condition when planning the processing of the net. {*NONE / *STD / symdat / [±]symdat[±symdat]...}

*NONE	<p>If the net is planned without a symbolic start time (plan with no SYMDAT name), then OCCURE-TIME is set by this entry. The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning. The associated planning parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned OCCURE-TIME plan parameters are then used. This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>
OCCURE-TIME	<p>Input/output parameter Specifies how long the structure element should wait. {nnn.hh.mm / *nn.hh.mm / <u>*NONE</u>}</p>
nnn.hh.mm	<p>Time, specified relative to PLAN-START-DATE and PLAN-START-TIME The system waits until PLAN-START-DATE + nnn days and PLAN-START-TIME + hh.mm hours and minutes.</p>
*nn.hh.mm	<p>Absolute time specification The system waits until PLAN-START-DATE + nn days and until the time is hh.mm. In the case of *nn, OCCURE-DATE and OCCURE-TIME are converted to the real date by CREATE-PLAN-NET.</p>

**n.hh.mm	<p>Absolute time specification</p> <p>The system waits until the current time of the active structure element Condition TIM + n.hh.mm is reached (n= 0 ... 9 days). In the case of **n werden OCCURE-DATE and OCCURE-TIME are converted to the real date by the run control system when Condition TIM is checked for the first time.</p> <p>After the wait time has been reached the original absolute wait time **n.hh.mm is entered again. This ensures that in the event of a restart with return before Condition TIM the system can wait again.</p>
<u>*NONE</u>	<p>The system waits for a random amount of time. If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-OCCURE-TIME via the generation parameters.</p>

AVN024 – Display and input plan data for structure elements with FU=A/M/D and TYPE=RES/VAL or with FU=D and TYPE=NET/JOB

Mask AVN024 enables plan data to be defined, deleted or modified for a description (for a condition description in the run control file). A maximum of 50 descriptions can be defined.

```

AVAS-Vnn.yxmn/AVN024  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-INDEX            =... FU=... COND-TYPE=...
SELECT-TURNUS=.....

M SYMDAT

. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....

CMD:..... OPR:.....
MSG:.....
    
```

COND-NAME	Output parameter Name of the condition description, as specified in mask AVN004.
NET-NAME	Output parameter Name of the net.
COND-TEXT	Output parameter Brief text (up to 120 characters) describing the condition.
COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.
FU	Output parameter Function of the structure element
A (Add)	This element of the net description generates a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).
M (Modify)	This element of the net description modifies a condition description for a resource (COND-TYPE=RES) or for a defined value (COND-TYPE=VAL).

D (Delete)	<p>This element of the net description deletes a condition description for</p> <ul style="list-style-type: none"> – a resource (COND-TYPE=RES) or – a defined value (COND-TYPE=VAL) or – a net (COND-TYPE=NET) or – a job/FT request (COND-TYPE=JOB)
COND-TYPE	<p>Output parameter Shows the value for TYPE {NET / JOB / RES / VAL / JVA}</p>
SELECT-TURNUS	<p>Input/output parameter Characteristic used in selecting the condition when planning the processing of the net.</p> <p>Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected.</p> <p>The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task.</p> <p><i>Note</i></p> <p>If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.</p>
M	<p>Input parameter Mark column for selecting plan dates.</p>
D (Delete)	<p>The marked plan date is deleted. The first entry with SYMDAT=*NONE cannot be deleted.</p>
Y (Yes)	<p>The value shown in mask AVN022 for the plan date can be modified.</p>
N (No)	<p>All unmarked plan dates can be modified.</p> <p><i>Note</i></p> <p>In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – mark, the structure elements in the repositioned work window are presented for modification.</p>

SYMDAT	<p>Input/output parameter Symbolic date for selecting the task. {*NONE / *STD / symdat / [\pm]symdat[\pmsymdat]...}</p> <p><i>Note</i></p> <p>For the structure elements, the first entry of a SYMDAT is generated with *NONE. This ensures that the structure element is executable when the net is started without a symbolic start date. This entry cannot be deleted.</p> <p>Either *STD or symdat is permitted as the second entry. In the case of *STD, the structure element is always selected.</p> <p>For the third to 51st entries, only symdat is permitted.</p>
*NONE	<p>If the net is planned without a symbolic start time (plan with no SYMDAT name), then OCCURE-TIME is set by this entry. The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning. The associated planning parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned OCCURE-TIME parameters are then used. This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
$[\pm]$ symdat[\pm symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>

FT-INDEX	Output parameter Index level of the net at which the request is to run. index
FU	Output parameter Function of the structure element
F (File)	This structure element of the net description is a structure element for executing FT requests.
FT-TYPE	Output parameter Type of structure element
TRA	File transfer is started.
SELECT-TURNUS	Input parameter Characteristic used in selecting the request when planning net processing. Permissible values are the digit 0 or a subset of the digits 1–9. If 0 is specified, the request is always executed. The request is executed if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the request. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan data.
D (Delete)	The marked plan data item is deleted.
Y (Yes)	The values shown in mask AVN021 for the plan data item can be modified.
N (No)	All unmarked plan data can be modified. <i>Note</i> In connection with the D, Y and N marks, the work window cannot be repositioned. If the EXECUTE operation is entered together with a + or – sign, the plan data of the repositioned work window is presented for modification.

SYMDAT	<p>Input/output parameter Characteristic used in selecting the request when planning net processing. {*NONE / *STD / symdat / [±]symdat[±symdat]...} Up to 51 entries are possible.</p>
*NONE	<p>If the net is planned without a symbolic start date (planning without calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are copied from this entry. The parameter *NONE is a default value and cannot be deleted. *NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning. The associated start parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start date (SYMDAT name) is used in planning, the structure element is selected if the symbolic start date predefined for the net plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START, DELAY-SOLUTION and LIFE-TIME are then used. This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with a symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected every Monday.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, the symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified, the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, the structure element is selected every Friday.</p>

LATEST-START Input/output parameter
 Latest start time for the request relative to the planned start time in the net name (PLAN-START).
 {nnn.hh.mm / *nn.hh.mm / *NONE}

nnn.hh.mm Date and time span relative to PLAN-START.
 nnn is the number of calendar days 000–999.

*nn.hh.mm Date span relative to PLAN-START and absolute time.
 nn is the number of calendar days 00–99.

*NONE The request can be started with any delay.

If no entry is made, *NONE is assumed. The value which is used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.

DELAY-SOLUTION Input/output parameter
 Measure to be taken if the start is not on time (LATEST-START is exceeded)
 {START / IGNORE / CANCEL}

If nothing is specified, the value defined for DEFAULT-JOB-DELAY via the generation parameters is used.

START The request should be started.

IGNORE The request should not be started.

CANCEL The request will not be started and is considered to have terminated abnormally.

The request status and net status after the LATEST-START time has been exceeded depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	FT-STATUS	NET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

LIFE-TIME	Input/output parameter Lifetime of the "job end" event for this request. When the run control file is reorganized, this event entry will not be deleted until this time interval has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent query will be unable to find it. The lifetime is relative to the value of PLAN-START. {nnn.hh.mm / <u>*NONE</u> }
nnn.hh.mm	When the net is released by means of SUBMIT-NET or REPEAT-NET, no condition description for the request is entered in the run control file. The time interval is relative to PLAN-START and is equal to nnn calendar days, hh hours and mm minutes.
<u>*NONE</u>	When the net is released by means of SUBMIT-NET or REPEAT-NET, no condition description for the request is entered in the run control file.

MODIFY-PERIOD – Modify period

The MODIFY-PERIOD statement is used to change the boundary times of a period in the period file.

Standard periods for which TYPE=VAR is specified cannot be modified using MODIFY-PERIOD.

If the statement is entered without operands, this always leads in the first stage to the overview mask AVC021.

MODIFY-PERIOD
[PERIOD-NAME=period]

PERIOD-NAME=period

Unique name of the period to be modified.

This causes an immediate display of the specified period (AVC020 mask).

If the period name is specified via a partial qualification (final character *), this produces an overview of all periods from the period file whose names begin with the partial qualification (AVC021 mask).

Note

If an element is marked and the statement remains the same, the selected (marked) periods are displayed. The parameters may now be changed.

P-E-DATE	Input/output parameter End date (dd.mm.yy) of the period.
P-E-TIME	Input/output parameter End time (hh:mm) of the period.
RESULT	Output parameter Acknowledgment for the completed action:
UPDATED	The parameters of the period were modified.
NO-UPDATE	The parameters of the period were not modified.

Note

The default values are those parameters already initialized by means of CREATE-PERIOD.

AVC020 – Set up a period

```

AVAS-Vnn.yxmn/AVC020      P E R I O D - H A N D L I N G      tt.mm.jjjj/hh:mm:ss

      PERIOD-NAME= .....      TYPE= ...

                                DD.MM.YY                        HH:MM
      PERIOD-START-DATE=.....      PERIOD-START-TIME=.....
      PERIOD-END-DATE  =.....      PERIOD-END-TIME  =.....

      CMD: .....      OPR: .....
      MSG: .....
    
```

- PERIOD-NAME** Output parameter
 Name of the period to be set up
- TYPE** The TYPE parameter is not relevant here since the AVC020 mask
 was called using the CREATE-PERIOD statement.
- PERIOD-START-DATE**
 Input /output parameter
 DD.MM.YY
 Start date of the period
- PERIOD-START-TIME**
 Input /output parameter
 HH:MM
 Start time (hh:mm or 00:00) of the period
- PERIOD-END-DATE** Input /output parameter
 End date of the period
- PERIOD-END-TIME** Input /output parameter
 End time (hh:mm oder 23:59) of the period

MODIFY-PLAN-NET – Modify planned nets in production plan

The MODIFY-PLAN-NET statement enables users to modify planned nets in the NPRLIB assigned to them via their user group. A single net can be modified by specifying the statement with a unique net name. One or more nets can be selected for modification by marking them in overview mask AVP010.

The parameters EARLIEST-START, LATEST-START, LIFE-TIME, NET-DELAY-SOLUTION, NET-TYPE and RUN-CONTROL-SYSTEM (see the AVP003 mask on [page 642](#)) can be modified.

Subnets are also displayed in the overview of planned networks (see mask AVP010 on [page 640](#)). It is not possible to change the specification NET-TYPE>4 to NET-TYPE<4 for subnets, thus redefining them as standard nets.

If the statement is issued without parameters, this causes an overview of all nets of the associated user group to be displayed. Privileged users can select nets of another user group via the user group entry.

MODIFY-PLAN-NET

```
[PERIOD-NAME=period / (dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]])]
[.NET-NAME=[$ug_ ]netname]
```

PERIOD-NAME=

Specifies a period (time span).

Those nets are presented for modification whose start time EARLIEST-START falls within this period.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=dd.mm.yy/hh:mm:ss

Real date and time specification delimiting the start and end dates/times of the period.

If the “right” period delimiter is omitted, the end date is set to the start date and the end time to 23.59.

NET-NAME=

Name of a planned net to be modified in the NPRLIB.

NET-NAME=\$ug_

Name of the user group.

If no user group is specified, the elements of the user's own user group are displayed.

NET_NAME=netname

Name of the net in the production library.

If the net name is specified via a partial qualification (final character *), this causes an overview to be displayed containing those elements whose names begin with the partial qualification.

If no net name is specified, all elements of the specified user group are displayed.

NET-STATUS	Output parameter Nets with the following processing statuses in the production plan are to be presented for modification:
TOCREATE	The net still has to be modified.
PARTIALLY	The net is already partially modified.
CREATED	The net has been completely modified.
NOTTOCREATE	The net is not subject to modification. Executing the statement has no effect on the status.
RESULT	Output parameter Acknowledgment for the completed action.
UPDATED	Parameters of the net were modified in the production plan.
NO-UPDATE	The modification operation was aborted.
FROM-DATE	Input/output parameter Start value of a period: dd.mm.yyyy[/hh:mm:ss] The default values are PERIOD-START-DATE and PERIOD-START-TIME, provided a net group was selected via PERIOD-NAME, or EARLIEST-START of the first selected net. The period limit can be modified, but must lie within the values of PERIOD-NAME. If no PERIOD-NAME is specified, FROM-DATE is assigned the value EARLIEST-START from the first net. If FROM-DATE is deleted by the entry, the default assignment described above is used again.
TO-DATE	Input/output parameter Final value of a period. dd.mm.yyyy[/hh:mm:ss] The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise, as for FROM-DATE). If no PERIOD-NAME is specified, TO-DATE is assigned the value EARLIEST-START from the last net. If TO-DATE is deleted by the entry, the default assignment described above is used again.

AVP003 – Modifying a planned net

```

AVAS-Vnn.yxmn/AVP003  P L A N - N E T - H A N D L I N G  tt.mm.jjjj/hh:mm:ss
NET-NAME =.....
NET-TEXT=.....
.....
NET-STATUS      =.....
PLAN-START      =...../.....
EARLIEST-START  =...../.....
LATEST-START    =.....
NET-DELAY-SOLUTION=.....
LIFE-TIME       =.....
RUN-CONTROL-SYSTEM=.....
NET-TYPE        =.

CMD:..... OPR:.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net to be modified. \$ug_netname_yymmdd_hhmmss
NET-TEXT	Output parameter Short text describing the net in greater detail.
NET-STATUS	Output parameter Processing status of the net in the production plan.
TOCREATE	The net still has to be modified.
PARTIALLY	The net is already partially modified.
CREATED	The net has been completely modified.
NOTTOCREATE	The net is not subject to modification.
PLAN-START	Output parameter Planned start time of the net as taken from the net name.

EARLIEST-START	<p>Input/output parameter dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP</p> <p>Unless otherwise specified, this field contains either the real start time (consisting of date and time or date and *BY-HYP), which was either specified directly or determined via the calendar by means of CREATE-PLAN-NET, or the previously modified start time.</p> <p>The net can be assigned a new start time. The modified start time does not become part of the net name. *BY-HYP is only permissible in subnets.</p>
LATEST-START	<p>Input/output parameter Latest specified start time relative to PLAN-START in the net name. This time can be modified here. {nnn.hh.mm}</p> <p>nnn.hh.mm Time span relative to PLAN-START.</p>
NET-DELAY-SOLUTION	<p>Input/output parameter Actions for an untimely net start:</p>
WAIT	The net should continue to wait.
START	The net should be started.
IGNORE	The net is not started. If other nets or jobs are dependent on this net, these dependencies are regarded as resolved.
CANCEL	<p>The net is not started and is considered to have terminated abnormally.</p> <p>The parameter takes effect when</p> <ul style="list-style-type: none"> – nets are released following expiration of LATEST-START (SUBMIT-NET) – nets are in the HOLD state during the period between EARLIEST-START and LATEST-START, or – the run control system is inactive during the period between EARLIEST-START and LATEST-START. <p>For nets with NET-TYPE=2 or 3, the parameter also takes effect when two or more nets with the same name are released and they cannot be started within the period delimited by LATEST-START and PLAN-START (see the NET-TYPE parameter).</p>

Note

A structure element with FU=S and TYPE=NET is given the value START for NET-DELAY-SOLUTION during planning if the planned start parameters in the subnet do not come from a separate symdat, but from the structure element with FU=S and TYPE=NET.

This has the effect that subnets are always started and that the actions taken if the start of the net is delayed can be set in the subnet itself.

If NET-DELAY-SOLUTION is changed to IGNORE or CANCEL, the subnet is disconnected from the hypernet and remains in the status NETWAIT in the job file if a delay occurs for the structure element with FU=S and TYPE=NET. To allow a subnet of this type to be reorganized, the user must place it in the status ENDED or ABENDED.

LIFE-TIME

Input/output parameter

This indicates how long normal net termination is to remain valid and detectable for dependent nets. This entry is relative to PLAN-START in the net name.

{nnn.hh.mm / *STD / *NONE}

nnn.hh.mm

Time span relative to PLAN-START.

*STD

Default value for LIFE-TIME as defined in the system parameters (DEFAULT-LIFE-TIME).

*NONE

When the net is released by SUBMIT-NET or REPEAT-NET, no condition description is entered into the run control file for the net.

RUN-CONTROL-SYSTEM

Input/output parameter

Here the previously defined name of the run control system appears. The net can be assigned the name of another run control system.

Note

A user who does not have the appropriate authorization can only change the RUN-CONTROL-SYSTEM parameter to the run control system assigned to his own user group.

NET-TYPE	Input/output parameter This entry serializes the processing of nets whose names are identical apart from the start time. It is still possible to modify the entry here. The parameter value is incremented by 4 in the case of subnets. {1 / 2 / 3 or 5 / 6 / 7 for subnets}
1 / 5	The net is started, regardless of whether a net of the same name is or was being processed.
2 / 6	The net is not started so long as a net of the same name is being processed. If two or more nets of the same name and type $\neq 1$ are waiting to start, the net with the earliest PLAN-START time is started first.
3 / 7	The net is started only if no like-named net has been brought to execution since the most recent reorganization.

MODIFY-PROD-NET – Delete individual temporary tasks

The MODIFY-PROD-NET statement enables the user to delete individual temporary jobs, (temporary tasks) of a net. The net status in the NPRLIB must be PARTIALLY or CREATED. If at least one task was deleted, the net status is reset from CREATED to PARTIALLY, but not from CREATED or PARTIALLY to TOCREATE, i.e. no check is performed to see whether at least one temporary task still exists for the net.

For each task which is deleted, the status is reset from CREATED to TOCREATE. This operation is logged in the journal.

Subnets are not displayed in the overview of planned nets (AVM020).

Any temporary jobs of subnets which have already been created (structure elements with FU=S and TYPE=NET) are deleted via the hypernet.

If a structure element for starting a subnet is marked with S, the temporary jobs of the subnet are displayed after the EXECUTE operation has completed and can be deleted by marking them with D.

If a structure element for starting a subnet is marked with D, all temporary jobs of the subnet are deleted after the EXECUTE operation has completed.

If the statement is issued without operands, an overview is displayed containing all the nets of the associated user group. Subnets are not displayed in the overview of planned nets.

MODIFY-PROD-NET
[NET-NAME=[\$ug_]netname]

NET-NAME=

Name of a planned net.

NET-NAME=\$ug_

Name of the user group.

If no user group is specified, the elements of the user's own user group are displayed.

NET-NAME=netname

Element name of the net in the net library.

If a fully qualified net name is specified, an overview of all temporary tasks in this net is displayed.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no net name is entered, all nets of the specified user group are displayed.

FU	Output parameter Function of the structure element
J (BS2000 job)	This element in the net description is set up as a BS2000 job.
P (Procedure)	This element in the net description is set up as an S procedure.
S (Subnet)	This element in the net description is a subnet.
TYPE	Output parameter Type of the structure element
MOD	The job is subject to net modification.
NET	The subnet is subject to net modification.
NAME	Output parameter Name of the job. {[\$ug_]jobname / \$ugsys_jobname/ \$bk_netname}
STATUS	Output parameter Processing status of the task. Only those temporary tasks which are already in the JMDLIB are presented for deletion:
CREATED	The task has been modified. Once the statement has been executed, the status is reset to TOCREATE.
PARTIALLY	Not all jobs of the subnet have been modified or at least one job has been deleted.
SYN-IND	Output parameter Synchronization index {index / NXT / END}
RESULT	This parameter is not used in this statement.
USER-PAR-FILE	This parameter is not used in this statement.

Note

If EXECUTE is specified, the D marks are processed and the temporary tasks are deleted. Then an implicit SAVE is performed and the user is returned to the mask AVM020. RETURN would be impossible, since the tasks have been physically deleted.

MODIFY-SUBMIT-JOB – Modify tasks of released net

The MODIFY-SUBMIT-JOB statement can be used to modify the JCL of a job (task) in a net which has already been released. The net status must be WAITING, HOLD or ERROR.

Subnets are also displayed in the overview of the nets of a RUN-CONTROL-SYSTEM (see mask AVD011 on [page 652](#)).

Nets with a status of RUNNING can only be processed if a task has already terminated abnormally (status CALLED FOR ERROR). Only the JCL of tasks with a status of ERROR can be modified in these nets.

Before modification, the net must be removed from the control of the current run control system by means of the HOLD-NET statement. Following modification, control must be reinstated by means of the RESUME-NET statement.

The tasks to be modified may be selected in the net structure display by means of marking. The JCL of the job can be edited with EDT in workfile (0).

If the selected element is an S procedure, then any procedure or job parameters which are available are presented in workfile (1) for modification. Parameters can only be created and edited for S procedures.

After leaving EDT, editing can be concluded by saving the JCL (SAVE) or by the “forget changes” option (RETURN).

JCL modifications only take effect if they are performed before a task is started or restarted.

MODIFY-SUBMIT-JOB

```
[NET-NAME=[$ug_ ]netname]
[.OBJECT=STR]
[.RUN-CONTROL-SYSTEM=*STD / avak]
[.DISPLAY=YES / NO]
```

NET-NAME=

Name of a net in the run control file.

NET-NAME=\$ug_

Name of the user group.

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of the net for which the JCL in the structure element is to be modified.

If a fully qualified net name is specified, the net structure will be displayed.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the specified user group are displayed.

OBJECT=STR

Selects the object to be displayed for modification.

The net structure is displayed.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- The standard run control system of the user group is used immediately after SIGNON.
- If the user may employ all run control systems defined in the system (see avak-use parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
- If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of the run control system.

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

DISPLAY=

Selects structure elements from the net description, to be displayed in mask AVD004. This operand permits the display of structure elements which have the status NO-PLAN, NO-SUBMIT, DELETED and IGNORED to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand.

DISPLAY=YES

Structure elements with the status NO-PLAN, NO-SUBMIT, DELETED and IGNORED are displayed.

NET-STATUS/CALLED FOR	Output parameter Status of net processing.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
WAITING//HOLD	The net has not been started yet. At least one structure element or one subnet was placed in the HOLD state.
OPWAIT	The net is waiting for entry of the START-NET statement.
ERROR	The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
HOLD	Net processing was suspended. The net was removed from the control of the run control system.
NETWAIT	The subnet waits to be started by the hypernet.
RESULT	Output parameter Acknowledgment for the completed action.
UPDATED	At least one structure element was modified.
NO-UPDATE	No structure element was modified.
ERROR	The net could not be edited due to an error reported in the MSG field.
LOCKED	The net is being edited by another interactive task or by the run control system.

NET-TEXT	Output parameter Brief description of the net.
M	Input/output parameter Mark column for selecting the JCL of a job, which is to be edited. Marks for conditions or for tasks with TYPE=EXT/EXX will be rejected.
S (Select)	The JCL of the marked element is selected for modification. The JCL is passed to EDT, where it is presented for modification, in workfile (0). If the selected element is an S procedure (FU=P), then the procedure/job parameters are also presented for modification, in workfile (1). The parameters can only be created and edited for S procedures.
IND	Output parameter Index level (001 to 999) of the structure element.
F	Output parameter Function of the structure element
A (Add)	This element of the net description is a structure element which creates a condition description.
C (Compare)	This element of the net description is a condition description which waits until a condition is satisfied.
D (Delete)	This element of the net description is a structure element which deletes a condition description.
F (File Transfer)	This element of the net description is a structure element which executes FT requests.
J (BS2000 job)	This element of the net description is a structure element which executes BS2000 jobs.
M (Modify)	This element of the net description is a structure element which modifies a condition description.
P (Procedure)	This element of the net description is a structure element which executes S procedures.
S (Subnet)	This element of the net description is a structure element which starts a subnet.
W (Wait)	This element of the net description is a structure element which causes a timed wait.

TYPE	Output parameter Type of the structure element For a task, indicates whether it is subject to modification, and in what form; for a condition, indicates its type. {MOD / STD / EXT / EXX / NET / TRA}
MOD	The job is subject to net modification. It was created by means of the CREATE-PROD-NET statement.
STD	The job is not subject to net modification. It was created using the CREATE-PROD-JOB statement.
EXT	The job is not stored in the AVAS system. It is started by AVAS when the net is executed. The task is assigned using the file name specified under ENTER-FILE or FILENAME.
EXX	The S procedure is not stored in the AVAS system, and when the net is executed it is started by AVAS with an /ENTER-PROCEDURE command. The S procedure is assigned using the file name specified under ENTER-FILE (see mask AVD002 on page 680). The S procedure run is monitored via an external job variable.
NET	For FU=S a subnet is started and the system waits for the end of the net.
TRA	For FU=F an FT request is started and monitored like a job by means of a job variable.
NAME	Output parameter Name of the structure element in the run control file. This depends on the parameters F and TYPE.
STATUS	Output parameter Processing status of the structure element
ENDED	The task terminated normally.
ERROR	The task terminated abnormally.
WAITING	The task is waiting to be processed.
DELETED	The task was deleted by a MODIFY-SUBMIT-NET statement.
NO-PLAN	The structure element has not been planned for the current processing.
NO-SUBMIT	The structure element was excluded from processing at release time.

SYN-IND	Output parameter Index level at which the structure element is to be synchronized.
RESTART-IND V1 V2 V3	Output parameter Index level to be used for a restart if this is required.
RESULT	Output parameter Acknowledgment for the completed action.
UPDATED	The JCL of the task has been modified.
NO-UPDATE	Processing of the element was terminated by a RETURN.
ERROR	Processing of the element was terminated due to an error.

AVD006 – Display the parameters for structure elements with FU=J/P and TYPE=STD/MOD

All the parameters displayed are output parameters. They serve exclusively as a guide to the user and offer assistance in deciding:

- whether the modified structure element is to be written back to the run control file (SAVE) or
- whether the modifications made via EDT are to be “forgotten” (RETURN).

If SAVE is entered, any modifications made will be logged in the journal file.

If no modifications were made via EDT, NO-UPDATE is set as the result in mask AVD004.

If an empty file was passed via EDT, the RETURN operation must be entered.

```

AVAS-Vnn.yxmn/AVD006      M O D I F Y - S U B M I T - J O B      tt.mm.jjjj/hh:mm:ss
                          JOB-PARAMETER
NET-NAME      =..... NET-STATUS=.....
JOB-NAME      =..... JOB-STATUS=.....
JOB-INDEX     =...      FU=.      JOB-TYPE =...
SYNC-INDEX    =...
RESTART      -INDEX  -NAME      -TYPE      AUTOMATIC
  VARIANT=1   ...
             2   ...
             3   ...
LATEST-START =...../..... DELAY-SOLUTION=.....
ENTER-PARAMS =.....

ENTER OPERATION:SAVE FOR UPDATE OR OPERATION:RETURN FOR NO-UPDATE

CMD:..... OPR:.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net description to which the structure element for executing jobs (tasks) is assigned.
NET-STATUS	Output parameter Status of net processing.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.

ERROR	The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
NETWAIT	The subnet is waiting for the start by the hypernet.
HOLD	Net processing was suspended. The net was removed from the control of the processing system.
JOB-NAME	Output parameter Name of the task.
JOB-STATUS	Output parameter Processing status of the task.
WAITING	The task is waiting to be started by the run control system.
ERROR	Processing of the task terminated with an error.
ENDED	The task has already been processed normally. Changes take effect only when it is again brought to execution during a restart.
JOB-INDEX	Output parameter Index level of the task.
FU	Output parameter Function of the structure element
J (BS2000 job)	This structure element in the net description has the function of executing jobs.
P (Procedure)	This structure element in the net description has the function of executing S procedures.
JOB-TYPE	Output parameter Shows the value specified in mask AVN004 for TYPE, indicating whether the net is subject to net modification, and in what form.
MOD	The task is subject to net modification. It was created by means of the CREATE-PROD-NET statement (temporary task).
STD	The task is not subject to net modification. It was created using the CREATE-PROD-JOB statement (static task).

SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized.
RESTART-VARIANT	Output parameter A restart variant
RESTART-INDEX	Output parameter Index level from which processing is to resume in the event of a restart.
RESTART-NAME	Output parameter Name for selecting structure elements from the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element on the index level specified in RESTART-INDEX will be processed again. The structure element must be uniquely identifiable from the specified RESTART-NAME.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be processed again.
*NAME	Only the structure element at the POINT-OF-ERROR will be processed again. The *NAME parameter will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.
*ERROR	All structure elements of the index level specified by RESTART-INDEX, which terminated abnormally (STATUS=ERROR), are to be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.
RESTART-TYPE	Output parameter Type of restart processing involved. {RESTART / NORMAL}
RESTART	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.

AUTOMATIC	<p>Output parameter Type of restart processing {YES / NO}</p>
YES	<p>Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task.</p> <p>If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).</p> <p>If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).</p>
NO	<p>Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>
LATEST-START	<p>Output parameter Latest time at which the task will be started. dd.mm.yy/hh:mm:ss</p>
DELAY-SOLUTION	<p>Output parameter Actions to be taken in case of an untimely net start (LATEST-START is passed). {START / IGNORE / CANCEL}</p>
START	The task should be started.
IGNORE	The task should to be started.
CANCEL	The task is not started and is regarded as having terminated abnormally.

The job status and net status after the LATEST-START time has been passed depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	JOB-STATUS	NET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

ENTER-PARAMS	Output parameter Source of the parameters for the ENTER call of the task. {NET / LOGON}
NET	The ENTER parameters from the net description are adopted. When this is done, the entries for the task take precedence over those specified for the net.
LOGON	The ENTER parameters from the SET-LOGON-PARAMETERS (or LOGON) command for the task are adopted.

MODIFY-SUBMIT-NET – Modify released net

The MODIFY-SUBMIT-NET statement permits changes to be made to a net which has already been released. The status of the net must be WAITING, OPWAIT, HOLD or ERROR.

Subnets are also displayed in the overview of the nets of a RUN-CONTROL-SYSTEM (see mask AVD011 on [page 666](#)).

Nets with a status of RUNNING can only be processed if a structure element has already terminated abnormally (status CALLED FOR ERROR). Only the parameters of the structure element with a status of ERROR can be modified in these nets.

In the case of jobs, modifications take effect only if they are made before a structure element is started or restarted.

In the case of condition descriptions, modifications are effective only if they are made before the conditions are satisfied (status OCCURRED) or before the restart (with the default value RESTART-WAIT-CONDITION=YES).

In the case of structure elements, modifications for processing condition descriptions are effective only if they are made before the structure element is executed.

The only items which can be modified are particular

- net parameters,
- parameters of structure elements for executing jobs, or
- condition description parameters,

with a different format being required for the statement in each case.

Either individual subnets can be selected for display via the overview masks, or the modification masks can be called directly by issuing the appropriately-formatted statement with all valid operands.

The CHECK function may be called in masks AVD001 and AVD004.

Before changes can be made, the net must be removed from the control of the run control system. Following the changes, it is restored to production control for purposes of monitoring. The HOLD-NET and RESUME-NET statements are used for this purpose.

MODIFY-SUBMIT-NET

```
[NET-NAME=[$ug_ ]netname]
[,OBJECT=NET / STR]
[,RUN-CONTROL-SYSTEM=*STD / avak]
[,DISPLAY=YES / NO]
```

NET-NAME=

Name of a released net that is to be modified.

NET-NAME=\$ug_

Name of the user group.

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of the net in the run control file.

This entry causes the net parameters to be displayed. Using CONTINUE, it is then possible to page through the overview of structure elements.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the user group of the user executing the function are displayed.

OBJECT=

Selects the object to be displayed for modification.

This object is specified by an input in the net overview mask. Nets which have the status RUNNING can only be selected with OBJECT=STR.

OBJECT=NET

The net data is presented.

OBJECT=STR

The net structure is displayed.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- The standard run control system of the user group is used immediately after SIGNON.
- If the user may employ all run control systems defined in the system (see `avak-use` parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
- If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of the run control system.

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

DISPLAY=

Selects structure elements from the net description, to be displayed in mask AVI013. This operand permits the display of structure elements which have the status NO-PLAN, NO-SUBMIT, DELETED and IGNORED to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand.

DISPLAY=YES

Structure elements with the status NO-PLAN, NO-SUBMIT, DELETED and IGNORED are displayed.

DISPLAY=NO

Structure elements with the status NO-PLAN, NO-SUBMIT, DELETED and IGNORED are not displayed.

Note

Depending on the setting of the generation parameter HYPERNET-COLOUR, hypernets are color-highlighted in the overview.

NET-STATUS/CALLED FOR

Output parameter
Status of net processing.

- WAITING The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
- OPWAIT The net is waiting for entry of the START-NET statement.
- ERROR The net was interrupted because a job terminated abnormally. It is waiting to restart.

RUNNING/ERROR

At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET.

- HOLD Net processing was suspended. The net was removed from the control of the run control system.

- NETWAIT The subnet is waiting for the start by the hypernet.

- RESULT Output parameter
Acknowledgment for the completed action.

- UPDATED The modified net data is stored in the run control file after entering SAVE.

- NO-UPDATE Net processing was aborted by entering RETURN.

- ERROR The net could not be processed due to an error reported in the MSG field.

- LOCKED The net is being processed by another interactive task or by the run control system.

- WARNING The net description has been modified. CHECK has discovered errors in the net description. A report has been produced.

AVD001 – Display net parameters for modification

```

AVAS-Vnn.yxm/AVD001  M O D I F Y - S U B M I T T E D -NET tt.mm.jjjj/hh:mm:ss
                        NET-PARAMETER
NET-NAME=..... NET-STATUS=.....
NET-TEXT=.....
.....

EARLIEST-START=...../..... PLAN-START =...../.....
LATEST-START =...../.....
NET-DELAY-SOLUTION =.....

RUN-CONTROL-SYSTEM =..... OPERATOR-START =...

NET-TYPE =.
NET-CAT =.....
NET-USER =..... NET-ACCOUNT =..... NET-PASSWORD=.....
NET-CLASS =..... NET-LOG =.....

NET-PARAMETER=.....
.....

CMD:..... OPR:.....
.....
MSG:.....
    
```

NET-NAME	<p>Output parameter Name of the net to be modified. The specified or marked net name is displayed. \$ug_netname_yymmdd_hhmmss</p>
NET-STATUS	<p>Output parameter Status of net processing.</p>
WAITING	<p>The net is waiting to start, i.e. for EARLIEST-START to be reached or for a net of the same name to terminate.</p>
OPWAIT	<p>The net is waiting for entry of the START-NET statement.</p>
ERROR	<p>The net was interrupted because a structure element terminated abnormally. It is waiting to restart.</p>
RUNNING/ERROR	<p>At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET</p>
HOLD	<p>Net processing was suspended. The net was removed from the control of the run control system.</p>
NETWAIT	<p>The subnet is waiting for the start by the hypernet.</p>

NET-TEXT	Output parameter Brief description of the net.
EARLIEST-START	Input/output parameter Start time of the net. dd.mm.yy[/hh:mm:ss] / dd.mm.yy/*BY-HYP If the EARLIEST-START parameter is modified, the name extension caused by the CREATE-PLAN-NET statement is retained. In this case, the name extension deviates from the actual start time. *BY-HYP is only permissible for subnets. dd.mm.yy The net is started on the day explicitly specified. hh:mm:ss The net is started at the time specified. *BY-HYP The subnet is started via the structure element of the hypernet. EARLIEST-START must come before LATEST-START.
PLAN-START	Output parameter Scheduled start time of the net as defined during production planning (CREATE-PLAN-NET). dd.mm.yy/hh:mm:ss (The value of this parameter is part of the net name.)
LATEST-START	Input/output parameter Latest point in time at which the net is started (relative to EARLIEST-START). dd.mm.yy[/hh:mm:ss] The point in time must be after EARLIEST-START. Changing LATEST-START has no effect if the time it specifies has already elapsed. If DELAY-SOLUTION=WAIT is specified, the start can be initiated by changing it to DELAY-SOLUTION=START. LATEST-START must not lie in the past.

NET-DELAY-SOLUTION

Input/output parameter
 Actions to be taken in case of an untimely net start (expiration of LATEST-START).
 {WAIT / START / IGNORE / CANCEL}

WAIT The net is to continue to wait.

START The net is to be started.

IGNORE The net is not started. If other nets or tasks are dependent on this net, these dependencies are regarded as resolved if the status specified is IGNORED or OCCURE-VALUE.

CANCEL The net is not started and is regarded as having terminated abnormally.

This parameter takes effect if

- nets are released after LATEST-START has elapsed (SUBMIT-NET),
- nets are in the HOLD state during the time span between EARLIEST-START and LATEST-START,
- the run control system is inactive during the time span between EARLIEST-START and LATEST-START,
- two or more nets of the same name are released with NET-TYPE=2 or 3 but cannot be started during the time span between PLAN-START and LATEST-START (see the NET-TYPE parameter).

After LATEST-START has elapsed, the net status is dependent on the value of the NET-DELAY-SOLUTION parameter:

NET-DELAY-SOLUTION	NET-STATUS
WAIT	WAITING
START	RUNNING
IGNORE	IGNORED
CANCEL	ABENDED

After LATEST-START has passed, NET-DELAY-SOLUTION can be modified from WAIT to START if it is required to start the processing.

RUN-CONTROL-SYSTEM

Input/output parameter

avak

If the name of the run control system is changed, this causes the net to be shifted. In other words, the net is entered in the table of the newly assigned run control system and deleted from the previously assigned one.

The net is given the status SHIFTED under the old run control system.

Note

A user who does not have the appropriate authorization can only change the RUN-CONTROL-SYSTEM parameter to the run control system assigned to his own user group.

The RUN-CONTROL-SYSTEM of hypernets cannot be changed. If a subnet was started via the hypernet, then the RUN-CONTROL-SYSTEM of the subnet cannot be changed either.

OPERATOR-START

Input/output parameter

Specifies whether the start of the net is to be initiated via operator input (only for the net status WAITING or OPWAIT).

{NO / YES}

NO

The net is started automatically.

YES

The net must be started by means of the START-NET statement.

NET-TYPE

Input/output parameter

Specifies how to serialize the processing of nets with the same name but different start times. Can still be changed here.

{1 / 2 / 3 respectively 5 / 6 / 7 for subnets}

1/5

The net is started, regardless of whether a net of the same name is or was being processed.

2/6

The net is not started as long as a net of the same name is running. If two or more like-named nets of a type other than 1 are waiting to start, the net with the earliest PLAN-START time is started first.

3/7

The net is started only if no net of the same name has been brought to execution since the last reorganization.

Note

Changing from a NET-TYPE>4 to a NET-TYPE<4 is only possible when the subnet is in the NETWAIT state, meaning it has not been started yet via the hypernet.

When this is done, the status is changed from NETWAIT to WAITING and the net is processed as the standard net independently from the hypernet once the start time is reached.

Changing the NET-TYPE to a value <4 causes the subnet to be displayed directly in the overview of nets for the NET-CONTROL statement. It can be executed then as the standard net.

When starting a structure element with FU=S and TYPE=NET for a subnet that has already been started manually, the following status is assigned:

- | | |
|-------|---|
| ENDED | The manually started subnet terminated without errors and has the status ENDED. |
| ERROR | The manually started subnet was cancelled and has the status ABENDED. In this case the structure element FU=S must be skipped when restarting in the hypernet.

In special cases, the ERROR status can also be set when manually starting the subnet when this is not done yet. In this case, the result of the subnet can be added to the hypernet after it has been terminated by restarting the structure element with FU=S. |

After releasing hypernets, the name of the associated RUN-CONTROL-SYSTEM cannot be changed any more. The name of the associated hypernet is stored in the subnet.

Changing from a NET-TYPE<4 back to a NET-TYPE>4 is only possible if the subnet is in the WAITING state and has not been started yet.

NET-CAT	<p>Input/output parameter {'catid' / '*ANY' / (bs2000-servername)}</p> <p>Parameter for job distribution within a HIPLEX MSCF network (see the manual "AVAS Functions and Tables" [1]) or on a remote BS2000 system.</p>
'catid'	For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.
'*ANY'	If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.
(bs2000-servername)	For a job on a remote BS2000 system a BS2000 server name must be specified which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).
NET-USER	<p>Input/output parameter</p> <p>User identification under which all tasks in the net are run; default value for all USER parameters of all tasks in the net.</p>
NET-ACCOUNT	<p>Input/output parameter</p> <p>Account number; default value for the JOB-ACCOUNT parameter of all jobs in the net.</p>
NET-PASSWORD	<p>Input parameter</p> <p>LOGON password; default value for the PASSWORD parameter of all tasks in the net). The field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p>
NET-CLASS	<p>Input/output parameter</p> <p>Job class; default value for the JOB-CLASS parameter of all jobs in the net.</p>
NET-LOG	<p>Input/output parameter</p> <p>The parameter specified here is taken as a default value for the LOG parameter of all tasks in the net. {YES / NO / _ }</p>

NET-TEXT	Output parameter Brief description of the net.
M	Output parameter Mark column for selecting the job or condition control records to be processed. Positioning of the work window by means of + or – is possible with all marks.
S (Select)	A structure element in the net description is selected for modification. The corresponding mask is displayed with the parameters presented for modification. Structure elements with a status of NO-PLAN, NO-SUBMIT and DELETED cannot be modified.
D (Delete)	The marked structure element is to be excluded from processing. After ENTER the element has the result DELETED, in which case the mark is deleted. The RESULT field remains unoccupied for all elements not marked with D. Marking with D is possible for the following structure elements: – for elements with the WAITING or CREATED status, – for elements with FUNCTION=C and the NO-OCCURE status. Once the structure has been stored by means of SAVE, deleted control records cannot be reactivated. Deletion of a control record is logged in the journal. The D and S marks are rejected in the case of elements with the DELETED result.
A (Add)	If a structure element is excluded from the processing, the associated condition description is given the status DELETED. This mark can be used to reactivate structure elements previously excluded from processing by a D mark (DELETED result). The A mark must be entered before SAVE, thereby deleting the DELETED result. The A mark is rejected for records without the DELETED result. A mixture of marks is not permitted. Deleted structure elements are no longer displayed in any subsequent display of the net (e.g. via a new call of MODIFY-SUBMIT-NET/MODIFY-SUBMIT-JOB, SHOW-NET-STATUS).

IND	Output parameter Index level of the structure element (001–999)
F	Output parameter Function of the structure element
A (Add)	This element of the net description is a structure element which creates a condition description.
C (Compare)	This element of the net description is a condition test which waits until a condition is satisfied.
D (Delete)	This element of the net description is a structure element which deletes a condition description.
F (File Transfer)	This element of the net description is a structure element which executes an FT request.
J (BS2000 job)	This element of the net description is a structure element which executes BS2000 jobs.
M (Modify)	This element of the net description is a structure element which modifies a condition description.
S (Subnet)	This element of the net description is a structure element which starts a subnet.
P (Procedure)	This element of the net description is a structure element which executes S procedures.
W (Wait)	This element of the net description is a structure element which causes a timed wait.

TYPE	<p>Output parameter Type of the structure element, which depends on the function F. {MOD / STD / EXT / EXX / JVA / NET / JOB / RES / VAL / TIM / TRA}</p>																										
	<table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;">FU</th> <th style="text-align: left;">TYPE</th> </tr> </thead> <tbody> <tr><td>J/P</td><td>MOD</td></tr> <tr><td>J/P</td><td>STD</td></tr> <tr><td>J/P</td><td>EXT</td></tr> <tr><td>P</td><td>EXX</td></tr> <tr><td>S</td><td>NET</td></tr> <tr><td>F</td><td>TRA</td></tr> <tr><td>C</td><td>JVA</td></tr> <tr><td>C/D</td><td>NET</td></tr> <tr><td>C/D</td><td>JOB</td></tr> <tr><td>C/A/M/D</td><td>RES</td></tr> <tr><td>C/A/M/D</td><td>VAL</td></tr> <tr><td>W</td><td>TIM</td></tr> </tbody> </table>	FU	TYPE	J/P	MOD	J/P	STD	J/P	EXT	P	EXX	S	NET	F	TRA	C	JVA	C/D	NET	C/D	JOB	C/A/M/D	RES	C/A/M/D	VAL	W	TIM
FU	TYPE																										
J/P	MOD																										
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F	TRA																										
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C/D	JOB																										
C/A/M/D	RES																										
C/A/M/D	VAL																										
W	TIM																										
MOD	<p>The task is subject to net modification, and was created using the CREATE-PROD-NET statement.</p>																										
STD	<p>The task is not subject to net modification. It was created by a CREATE-PROD-JOB statement.</p>																										
EXT	<p>This task is not stored in the AVAS system. It is started by AVAS/the AVAS agent when the net is executed. The task is assigned using the file name specified under ENTER-FILE or FILENAME (see the AVD002 mask on page 680).</p>																										
EXX	<p>The S procedure is not stored in the AVAS system. When the net is executed it is started by AVAS with an /ENTER-PROCEDURE command. The S procedure is assigned using the file name specified under ENTER-FILE (see the AVD002 mask on page 680). The S procedure run is monitored via an external job variable.</p>																										
JVA	<p>For F=C, net processing waits for a condition to be satisfied by a defined value in a job variable.</p>																										

NET	<p>For F=C, net processing waits for a condition in another net to be satisfied.</p> <p>For F=D, the condition description for a predefined net is deleted.</p> <p>For F=S, a subnet is started and the system waits for the normal termination of the subnet.</p>
JOB	<p>For F=C, net processing waits for a condition in a job or FT request to be satisfied.</p> <p>For F=D, the condition description for a predefined job is deleted.</p>
RES	<p>For F=C, net processing waits for a condition on a resource to be satisfied.</p> <p>The status of the resource is modified by the satisfaction of the condition.</p> <p>For F=A, a condition description for a resource is created.</p> <p>For F=M, a condition description for a resource is modified.</p> <p>For F=D, a condition description for a resource is deleted.</p>
VAL	<p>For F=C, net processing waits for a condition to be satisfied by a defined value.</p> <p>For F=A, a condition description with a defined value is created.</p> <p>For F=M, a condition description with a defined value is modified.</p> <p>For F=D, a condition description with a defined value is deleted.</p>
TIM	<p>Net processing waits for a specified time.</p>
TRA	<p>An FT request is started and the system waits for it to terminate normally.</p>
NAME	<p>Output parameter</p> <p>Name of the structure element in the run control file. This depends on the FU and TYPE parameters.</p> <p>Within each AVAS system, the name of a condition is unique across all the types of condition.</p> <p>The JVA condition is excepted from this.</p>

STATUS	Output parameter Processing status of the structure element
ERROR	The structure element has the status ERROR.
WAITING	The structure element is waiting to be processed.
ENDED	The task terminated normally.
NO-OCCURE	The condition was checked and was not satisfied.
NO-OCC/DEL	The condition was checked and was not satisfied. Furthermore, the structure element was deleted and was excluded from processing by the run control system.
OCCURRED	The condition was checked and was satisfied.
EXECUTED	The condition task has been executed.
DELETED	The structure element was deleted and therefore excluded from processing.
NO-PLAN	The structure element has not been planned for the current processing.
NO-SUBMIT	The structure element was excluded from processing at release time.
SYN-IND	Output parameter Index level at which the job or condition is to be synchronized.
RESTART-IND V1 V2 V3	Output parameter Index level to be used for a restart if this is required.
RESULT	Output parameter Acknowledgment for the completed action.
NO-UPDATE	The specified structure element has not been updated.
UPDATED	The specified structure element has been updated.
DELETED	The structure element was deleted (excluded from processing) using the D mark. All structure elements without the result DELETED are forwarded for processing following SAVE.

Note

Nets with an empty structure cannot be saved by a SAVE.

AVD002 – Display the parameters for structure elements with FU=J/P and TYPE=STD/MOD/EXT/EXX for modification

```

AVAS-Vnn.yxmn/AVD002  M O D I F Y - S U B M I T T E D -NET  tt.mm.jjjj/hh:mm:ss
                        JOB-PARAMETER
NET-NAME      =..... NET-STATUS=.....
JOB-NAME     =..... JOB-STATUS=.....
JOB-INDEX    =...      FU=.      JOB-TYPE  =...
SYNC-INDEX   =...
RESTART      -INDEX   -NAME                                     -TYPE      AUTOMATIC
  VARIANT=1  ...      .....
           2  ...      .....
           3  ...      .....
LATEST-START =...../..... DELAY-SOLUTION=.....
ENTER-PARAMS =.....

JOB-CAT      =.....
USER         =..... JOB-ACCOUNT =..... PASSWORD=.....
JOB-CLASS    =..... LOG          =.....
JOB-PARAMETER=.....
ENTER-FILE   =.....
FILE-PASSWORD=.....

CMD:..... OPR:.....
MSG:.....
    
```

- NET-NAME Output parameter
Name of the net description to which the structure element for executing jobs and S procedures is assigned.

- NET-STATUS Output parameter
Status of net processing.
 - WAITING The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
 - OPWAIT The net is waiting for entry of the START-NET statement.
 - ERROR The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
 - RUNNING/ERROR At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
 - HOLD Net processing was suspended. The net was removed from the control of the run control system.
 - NETWAIT The subnet is waiting for the start by the hypernet.

JOB-NAME	Output parameter Name of the task.
JOB-STATUS	Output parameter Processing status of the task.
WAITING	The task is waiting to be started by the run control system.
ENDED	The task terminated normally.
ERROR	The task terminated abnormally.
JOB-INDEX	Output parameter Index level of the task.
FU	Output parameter Function of the structure element
J (BS2000 job)	This structure element in the net description has the function of executing BS2000 jobs.
P (Procedure)	This structure element in the net description has the function of executing S procedures.
JOB-TYPE	Output parameter Shows the value specified in mask AVD004 for TYP, indicating whether the net is subject to net modification, and in what form.
MOD	The job or S procedure is subject to net modification. It was created using the CREATE-PROD-NET statement.
STD	The job or S procedure is not subject to net modification. It was created using the CREATE-PROD-JOB statement.
EXT	The job or S procedure is not stored in the AVAS system, and when the net is executed it is started by AVAS. The task is assigned using the file name specified under ENTER-FILE.
EXX	The S procedure is not stored in the AVAS system, and when the net is executed it is started by AVAS with an /ENTER-PROC command. The S procedure is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized. It is set to RESTART-IND V1 if the element is on an index level in the range 900–999.

RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each task. At least the index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). The index level must be in the net structure. An index level must be specified that ensures that the structure element is processed by the RESTART-NET statement in the event of a restart (see page 827).</p> <p>For structure elements at the restart index levels (index 900–999), the RESTART-INDEX cannot be modified in the case of restart variant 1. Restart variant 1 here contains the synchronization index. In the case of structure elements, the value of the RESTART-INDEX in the restart variant 1 must be greater than the defined JOB-INDEX or less than index 900.</p> <p>The RESTART-INDEX of restart variants 2 and 3 of the structure elements must be in the processing sequence defined in the range of restart index levels. The index at which normal processing resumes and the first index level of normal processing are still valid (net repetition with RESTART-NAME=*ALL).</p>
END	<p>The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart. The RESTART-JOB-NAME parameter is not evaluated. END may not be specified for the structure elements in the range of restart index levels (index 900–999).</p>

RESTART-NAME	<p>Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *JOB / *ERROR}</p>
name	<p>Only this structure element on the index level specified in RESTART-INDEX will be processed again. name must be entered without a user group.</p> <p>If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be processed again.</p>
*ERROR	<p>All structure elements at the index level specified by RESTART-INDEX, which terminated abnormally (STATUS=ERROR), are to be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>
*NAME	<p>Only the structure element in the POINT-OF-ERROR is to be processed again. *NAME will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>

Notes

- When a restart takes place at index levels 900 to 999, normal processing must resume at the index of the POINT-OF-ERROR if RESTART-NAME=*NAME or *ERROR is specified for restart variant 1.
Otherwise, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements.
	<i>Note</i>
	In the restart jobs area (index levels 900 to 999), the switchover from RESTART to NORMAL mode can be controlled via the RESTART-TYPE parameter of restart variant 1. RESTART mode is exited if RESTART-TYPE = NORMAL is specified for restart variant 1. RESTART mode is exited automatically when the first index level of regular processing (index levels 001 to 899) has been processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
LATEST-START	Input/output parameter Latest point in time at which the net is started. dd.mm.yy/hh:mm:ss

DELAY-SOLUTION Input/output parameter
 Actions to be taken in case of an untimely net start (expiration of LATEST-START).
 {START / IGNORE / CANCEL}

START The task is to be started.

IGNORE The task is not to be started.
 Processing of the net should be continued.
 The status of the task is set to IGNORED.

CANCEL The task is not started and is regarded as having terminated abnormally.
 The status of the task is set to ERROR.
 Net processing must be continued by a restart.

The job status and net status after the LATEST-START time has been passed depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	JOB-STATUS	NET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

ENTER-PARAMS Input/output parameter
 Source of the parameters for the ENTER call of the task.
 {NET / LOGON}

NET The ENTER parameters are taken from the net description, with task specifications being given precedence over net specifications.

LOGON The ENTER parameters are taken from the SET-LOGON-PARAMETERS (or LOGON) command of the task.

JOB-CAT Input/output parameter
 {'catid' / '*ANY' / (bs2000-servername)}
 Parameter for job distribution within a HIPLEX MSCF network (see the manual "AVAS Functions and Tables" [1]) or on a remote BS2000 system.

'catid' For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.

***ANY'** If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.

(bs2000-servername)	<p>For a job on a remote BS2000 system a BS2000 server name must be specified which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).</p> <p>Addressing of the target processors is achieved through direct specification of a catalog ID.</p> <p>catid</p>
USER	<p>Input/output parameter</p> <p>Parameter for the ENTER call of the task.</p> <p>ID under which the task (job or S procedure) is to run.</p>
JOB-ACCOUNT	<p>Input/output parameter</p> <p>Account number for the ENTER call of the task.</p>
PASSWORD	<p>Input/output parameter</p> <p>Parameter for the ENTER call of the task.</p> <p>LOGON password for USER. The field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p> <p>The password can be deleted with *NONE.</p>
JOB-CLASS	<p>Input/output parameter</p> <p>Job class for the ENTER call of the task.</p>
LOG	<p>Input/output parameter</p> <p>SYSOUT log for the ENTER call of the task.</p> <p>{YES / NO / _ }</p>
JOB-PARAMETER	<p>Input/output parameter</p> <p>This specifies additional parameters for the ENTER call of the task.</p>
ENTER-FILE	<p>Input/output parameter</p> <p>Name of the file for which the ENTER call is to be issued with JOB-TYPE=EXT/EXX.</p>
FILE-PASSWORD	<p>Input parameter</p> <p>Password for the file specified under ENTER-FILE. The field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p> <p>The password can be deleted with *NONE.</p>

AVD025 – Display of the parameters for structure elements with FU=S and TYPE=NET for modification

```

AVAS-Vnn.yxmn/AVD025  M O D I F Y - S U B M I T T E D -NET  tt.mm.jjjj/hh:mm:ss
                        SUBNET-PARAMETER
NET-NAME   =..... NET-STATUS=.....
SUBNET-NAME =..... SUBNET-STATUS=.....
SUBNET-INDEX=... FU=. SUBNET-TYPE =...
SYNC-INDEX =...

RESTART   -INDEX  -NAME                                -TYPE    AUTOMATIC
VARIANT=1  ...    .....                                .....    ...
           2  ...    .....                                .....    ...
           3  ...    .....                                .....    ...

LATEST-START =...../..... DELAY-SOLUTION=.....

CMD:..... OPR:.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net description assigned to the structure element with FU=S.
NET-STATUS	Output parameter Status of net processing.
SUBNET-NAME	Output parameter Name of the task displayed.
SUBNET-STATUS	Output parameter Processing status of the task. {ERROR / HOLD / NETWAIT / WAITING }
ERROR	The subnet was terminated abnormally.
WAITING	The subnet has not been started yet since the start time has not been reached yet. The corresponding structure element with FU=S has the status RUNNING/\$S.

HOLD	The structure element has the status HOLD. The HOLD state is only shown when no processing status other than the WAITING status was entered for the structure element. The HOLD status on the structure element with FU=S can only be reached if this element has not been started yet (i.e. only when it is in the WAITING state).
NETWAIT	The subnet was released, but the corresponding structure element with FU=S has not been started yet.
SUBNET-INDEX	Output parameter Index level of the task.
FU	Output parameter Function of the structure element
S (Start)	The function of this structure element of the net description is to start a subnet.
SUBNET-TYPE	Output parameter Designates the availability of the task. {NET}
NET	The task describes how to start and monitor a subnet. This task was created with the CREATE-PLAN-NET, CREATE-PROD-NET and SUBMIT-NET statements for the subnet.
SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized. It is set to RESTART-IND V1 if the element is on an index level in the range 900–999.
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL unless other default values were specified via the system parameters.

RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the 3 restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). The index level must be in the net structure. An index level must be specified that ensures that the structure element is processed by the RESTART-NET statement in the event of a restart (see page 827).</p> <p>For structure elements at the restart index levels (index 900–999), the RESTART-INDEX cannot be modified in the case of restart variant 1. Restart variant 1 here contains the synchronization index. In the case of structure elements, the value of the RESTART-INDEX in the restart variant 1 must be greater than the defined JOB-INDEX or less than index 900.</p> <p>The RESTART-INDEX of restart variants 2 and 3 of the structure elements must be in the processing sequence defined in the range of restart index levels. The index at which normal processing resumes and the first index level of normal processing are still valid (net repetition with RESTART-NAME=*ALL).</p>
END	<p>The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart. The RESTART-NAME parameter is not evaluated. END may not be specified for the structure elements in the range of restart index levels (index 900–999).</p>
RESTART-NAME	<p>Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element on the index level specified in RESTART-INDEX is to be processed again. name must be entered without a user group.</p> <p>If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be processed again.</p>

*ERROR	All structure elements selected at the index level specified by RESTART-INDEX that terminated abnormally (STATUS=ERROR) are to be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.
*NAME	Only the structure element in the POINT-OF-ERROR is to be processed again. *NAME will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.

Notes

- When a restart takes place at index levels 900 to 999, normal processing must resume at the index of the POINT-OF-ERROR if RESTART-NAME=*NAME or *ERROR is specified for restart variant 1. Otherwise, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter: If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value. If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing. { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements.

Note

In the restart jobs area (index 900–999), the switchover from the RESTART to the NORMAL mode can be controlled via the RESTART-TYPE parameter of restart variant 1. RESTART mode is exited if RESTART-TYPE=NORMAL is specified for restart variant 1. RESTART mode is exited automatically when the first index level of regular processing (Index 001–899) has been processed.

AUTOMATIC	<p>Input/output parameter Type of restart processing. {YES / <u>NO</u>}</p>
YES	<p>Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task.</p> <p>If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).</p> <p>If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).</p>
<u>NO</u>	<p>Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p> <p><i>Notes on the restart variants for structure elements to start subnets</i></p> <p>A structure element with FU=S and TYPE=NET receives the status ERROR if one of the following situations arises when it is started:</p> <ul style="list-style-type: none"> – the subnet is not in the NETWAIT or ENDED/ABENDED state – NET-TYPE>4 is not set for the subnet – the subnet is not present in the run control file – the subnet cannot be read because it is locked, for example (RESULT=LOCKED) <p>In these cases the subnet will also not be started.</p> <p>If when starting a structure element with FU=S and TYPE=NET the corresponding subnet is in the ERROR state after a manual start (for NET-TYPE < 4), then this means the following:</p> <ul style="list-style-type: none"> – The subnet cannot be started and executed via the hypernet. – No AVAS-SUBNET job variable is set up for the subnet. – The subnet must be placed in the ENDED or ABENDED state by the user. <p>If the subnet subsequently reaches the ENDED state, then it can be added to the hypernet via RESTART-NET with RESTART-INDEX=ERROR-INDEX. In all other cases the hypernet must be</p>

restarted via RESTART-NET with RESTART-INDEX > ERROR-INDEX so that the structure element FU=S and TYPE=NET is placed in the SKIPPED state.

If the processing of the subnet is to continue being controlled via the hypernet, then RESTART-INDEX = ERROR-INDEX, RESTART-NAME= *NAME and AUTOMATIC = NO must be specified for the restart variant.

If RESTART-INDEX > ERROR-INDEX is specified for a restart variant, then the structure element in the hypernet is placed in the SKIPPED state and processing of the subnet is not controlled via the hypernet any more. No restart is initiated in this case for the subnet. It must be placed explicitly in the ENDED or ABENDED state so that this subnet can be deleted from the run control file and journal file during reorganization.

LATEST-START	Input/output parameter The latest start time for the task. dd.mm.yy/hh:mm:ss
DELAY-SOLUTION	Input/output parameter Measure to be taken if the start is not timely (LATEST-START is passed) {START / IGNORE / CANCEL}
START	The subnet is to be started.
IGNORE	The subnet is not to be started. Net processing is to be resumed. The IGNORED status is set for the task.
CANCEL	The subnet is not started and is considered to have terminated abnormally. The ERROR status is set for a task with FU=S. The processing of the hypernet must be resumed with a restart.

Note

If the subnet is to be processed independently from the hypernet, then the user must change NET-TYPE>4 to NET-TYPE<4 via MODIFY-SUBMIT-NET (mask AVD001). The status is changed from NETWAIT to WAITING and the (sub)net can be processed independently from the hypernet.

If the subnet is not to be run in this case, then it must be placed in the ABENDED state by the user via CANCEL-NET with CANCEL-TYPE=HARD.

AVD026 – Display the parameters for structure elements with FU=F and TYPE=TRA for modification

```

AVAS-Vnn.yxmn/AVD026  M O D I F Y - S U B M I T T E D -NET  tt.mm.jjjj/hh:mm:ss
                        FILE-TRANSFER-PARAMETER
NET-NAME               =..... NET-STATUS=.....
FT-NAME               =..... FT-STATUS=.....
FT-INDEX              =...    FU=.    FT-TYPE =...
SYNC-INDEX            =...
RESTART -INDEX        -NAME          -TYPE      AUTOMATIC
  VARIANT=1          ...              ...
           2          ...              ...
           3          ...              ...
LATEST-START          =...../..... DELAY-SOLUTION=.....
DIRECTION             =...    PARTNER-NAME=..... REMOTE=.....
LOCAL-FILE            =.....
REMOTE-FILE           =.....
REMOTE-TRANSFER-ADMISSION=.....
FT-PARAMETER         =.....
                        .....
                        .....

CMD:..... OPR:.....
MSG:.....
    
```

- NET-NAME Output parameter
Name of the net description to which the structure element for executing jobs and S procedures is assigned.

- NET-STATUS Output parameter
Status of net processing.
 - WAITING The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
 - OPWAIT The net is waiting for entry of the START-NET statement.
 - ERROR The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
 - RUNNING/ERROR At least one structure element in the net has the RUNNING status and at least one element has terminated abnormally (ERROR status). The error status can be canceled using RESTART-NET.
 - HOLD Net processing was suspended. The net was removed from the control of the run control system.
 - NETWAIT The subnet is waiting to be started by the hypernet.

FT-NAME	Output parameter Name of the request
FT-STATUS	Output parameter Processing status of the request
WAITING	The request is waiting to be started by the run control system.
ENDED	The request was terminated normally.
ERROR	The request was terminated abnormally.
FT-INDEX	Output parameter Index level of the request
FU	Output parameter Function of the structure element
F (File Transfer)	This structure element in the net description executes FT requests.
FT-TYPE	Output parameter Designates the availability of the request.
TRA	File transfer is started.
SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized. It is set to RESTART-IND V1 if the element is on an index level in the range 900–999.
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least the index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified using the system parameters.

RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the three possible restart variants. A restart variant is not possible without this restart index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). The index level must exist in the net structure. An index level must be specified that ensures the structure element is processed by the RESTART-NET statement (see page 827).</p> <p>For structure elements at the restart levels (index 900–999), the RESTART-INDEX cannot be modified in the case of restart variant 1. Restart variant 1 here contains the synchronization index. In the case of structure elements, the value of the RESTART-INDEX in restart variant 1 must be greater than the defined JOB-INDEX or less than index 900.</p> <p>The RESTART-INDEX of restart variants 2 and 3 of the structure elements must be in the processing sequence defined in the range of restart index levels. The index at which normal processing resumes and the first index level of normal processing are still valid (net repetition with RESTART-NAME=*ALL).</p>
END	<p>The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart. The RESTART-NAME parameter is not evaluated. END may not be specified for the structure elements in the range of restart index levels (index 900–999).</p>

RESTART-NAME	Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element on the index level specified in RESTART-INDEX will be processed again. name must be entered without a user group. If it is required to select a structure element with FU=W and TYPE=TIM , the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be processed again.
*ERROR	All structure elements at the index level specified by RESTART-INDEX which terminated abnormally (STATUS=ERROR) are to be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. In all other cases the restart will be rejected.
*NAME	Only the structure element in the POINT-OF-ERROR is to be processed again. *NAME will only be processed if RESTART-INDEX is identical to ERROR-INDEX. In all other cases the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME: If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value. If RESTART-INDEX is greater or less than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with processing of restart statements #RA, #RI and #RU
NORMAL	Restart without processing of restart statements #RA, #RI and #RU.
	<i>Note</i> This distinction is irrelevant here.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart The restart is initiated automatically without user input. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant is set by means of the task job variable, the check takes place in the order RESTART-VARIANT 1, 2, 3.
<u>NO</u>	Manual restart The restart must be initiated using the RESTART-NET statement. Modifications to the net can be performed using MODIFY-SUBMIT-NET.
LATEST-START	Input/output parameter Latest time at which the request is started. tt.mm.jj/hh:mm:ss

- DELAY-SOLUTION** Input/output parameter
 Measure to be taken if the start is not on time (LATEST-START is exceeded)
 {START / IGNORE / CANCEL}
- START** The request should be started.
- IGNORE** The request should not be started.
 Net processing should be continued.
 The IGNORED status is set for the request.
- CANCEL** The request will not be started and is considered to have terminated abnormally.
 The ERROR status is set for the request.
 Net processing must be resumed with a restart.

The job status and net status after the LATEST-START time has been exceeded depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	FT-STATUS	NET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

- DIRECTION** Input/output parameter
 Direction of file transfer (corresponds to the TRANSFER-DIRECTION operand of the TRANSFER-FILE command).
 {TO / FROM}
- TO** The local system is the sending system; the files are sent to the remote system.
- FROM** The local system is the receiving system; the files are fetched from the remote system.
- PARTNER-NAME** Input/output parameter
 Symbolic name of the remote host (corresponds to the PARTNER-NAME operand of the TRANSFER-FILE command).

REMOTE	<p>Input/output parameter Defines the type of the remote system (corresponds to the REMOTE-PARAMETER operand of the TRANSFER-FILE command).</p> <p><u>{*BS2000}</u></p>
<u>*BS2000</u>	<p>The remote system is a BS2000 system.</p>
LOCAL-FILE	<p>Input/output parameter Specifies the name of the file in the local system (corresponds to the FILE-NAME operand in the LOCAL-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-FILE	<p>Input/output parameter Specifies the name of the file in the remote system (corresponds to the FILE-NAME operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-TRANSFER-ADMISSION	<p>Input/output parameter Access authorization on the remote system (corresponds to the TRANSFER-ADMISSION operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p> <p>By default the REMOTE-TRANSFER-ADMISSION field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p> <p>The field can be deleted with *NONE.</p>
FT-PARAMETER	<p>Input/output parameter Specifies further operands of the TRANSFER-FILE command for which no AVAS parameters are available. In particular follow-up processing for the local or remote system can be defined here. The syntax of the TRANSFER-FILE command must be complied with. AVAS does not check the syntax.</p>

AVD003 – Display the parameters of the condition description with FU=C and TYPE=JVA for modification

```

AVAS-Vnn.yxmn/AVD003  M O D I F Y - S U B M I T T E D -NET  tt.mm.jjjj/hh:mm:ss
                        CONDITION-PARAMETER
NET-NAME      = ..... NET-STATUS=.....

COND-NAME     = ..... COND-STATUS=.....
COND-INDEX    = ...   FU=..   COND-TYPE  =...
SYNC-INDEX    = ...

RESTART      -INDEX  -NAME                                -TYPE    AUTOMATIC
VARIANT=1    ...    .....                                .....    ...
             2    ...    .....                                .....    ...
             3    ...    .....                                .....    ...

LATEST-OCCURE=...../.....   DELAY-SOLUTION=.....

COND-JVA-NAME=.....
JVA-POSITION =...   JVA-LENGTH=...   JVA-PASSWORD=.....
COND-VALUE   = .....
             .....
             .....
             .....
CMD:.....   OPR:.....
MSG:.....
    
```

- NET-NAME** Output parameter
Name of the net description to which the structure element for executing jobs and S procedures is assigned.
- NET-STATUS** Output parameter
Status of net processing.
 - WAITING** The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
 - OPWAIT** The net is waiting for entry of the START-NET statement.
 - ERROR** The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
 - RUNNING/ERROR** At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
 - HOLD** Net processing was suspended. The net was removed from the control of the run control system.
 - NETWAIT** The subnet is waiting for the start by the hypernet.

COND-NAME	Output parameter Name of the condition description
COND-STATUS	Output parameter Processing status of the condition.
WAITING	The condition has not yet been checked.
NO-OCCURE	The condition was checked and was not satisfied.
NO-OCC/DEL	The condition was checked and was not satisfied. Furthermore, the structure element was deleted and was excluded from processing by the run control system.
OCCURRED	The condition has been satisfied.
COND-INDEX	Output parameter Index level of the net on which the condition description is to be monitored.
FU	Output parameter Function of the structure element
C (Compare)	This structure element in the net description is a condition which waits to be satisfied.
COND-TYPE	Output parameter Type of the structure element
JVA	The net identified by NET-NAME is to wait at the index level specified under COND-INDEX until the specified job variable contains the value specified under COND-VALUE from the specified position and in the predefined length.
SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized.
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least the index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.

RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). The index level must be in the net structure. An index level must be specified that ensures that the structure element is processed by the RESTART-NET statement in the event of a restart (see page 827).</p> <p>For structure elements at the restart index levels (index 900–999), the RESTART-INDEX cannot be modified in the case of restart variant 1. Restart variant 1 here contains the synchronization index. In the case of structure elements, the value of the RESTART-INDEX in the restart variant 1 must be greater than the defined JOB-INDEX or less than index 900. The RESTART-INDEX of restart variants 2 and 3 of the structure elements must be in the processing sequence defined in the range of restart index levels. The index at which normal processing resumes and the first index level of normal processing are still valid (net repetition with RESTART-NAME=*ALL).</p>
END	<p>The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart. The RESTART-JOB-NAME parameter is not evaluated. END may not be specified for the structure elements in the range of restart index levels (index 900–999).</p>
RESTART-NAME	<p>Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *JOB / *ERROR}</p>
name	<p>Only this structure element on the index level specified in RESTART-INDEX will be processed again. name must be entered without a user group.</p> <p>If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be processed again.</p>

- *ERROR All structure elements at the index level specified by RESTART-INDEX, which terminated abnormally (STATUS=ERROR), are to be processed again.
*ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX.
Otherwise, the restart will be rejected.
- *NAME Only the structure element in the POINT-OF-ERROR is to be processed again. *NAME will only be processed if RESTART-INDEX is identical to ERROR-INDEX.
Otherwise, the restart will be rejected.

Notes

- When a restart takes place at index levels 900 to 999, normal processing must resume at the index of the POINT-OF-ERROR if RESTART-NAME=*NAME or *ERROR is specified for restart variant 1.
Otherwise, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

- RESTART-TYPE Input/output parameter
Type of restart processing
{RESTART / NORMAL}
- RESTART Restart with execution of restart statements #RA, #RI and #RU.
- NORMAL Restart without execution of restart statements.

Note

In the restart jobs area (index levels 900 to 999), the switchover from RESTART to NORMAL mode can be controlled via the RESTART-TYPE parameter of restart variant 1.
RESTART mode is exited if RESTART-TYPE = NORMAL is specified for restart variant 1.

RESTART mode is exited automatically when the first index level of regular processing (index levels 001 to 899) has been processed.

AUTOMATIC Input/output parameter
 Type of restart processing
 {YES / NO}

YES Automatic restart.
 Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task.
 If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).
 If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3.
 If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).

NO Manual restart.
 The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

LATEST-OCCURE Input/output parameter
 dd.mm.yy/hh:mm:ss
 Latest time by which the condition must be satisfied.

DELAY-SOLUTION Input/output parameter
 Actions to be taken in case of untimely condition checking (after LATEST-OCCURE).
 {START / IGNORE / CANCEL}

START The condition is satisfied.

IGNORE The condition is to be ignored.
 Processing of the net is continued.

CANCEL The status of the condition is set to ERROR.
 Net must be continued by a restart.

The condition status and net status after the LATEST-OCCURE time has been passed depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	COND-STATUS	NET-STATUS
START	OCCURRED	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

COND-JVA-NAME	<p>Input/output parameter {jvname / *NONE}</p> <p>If COND-TYPE=JVA: Name of the job variable whose value is to be checked from the specified position and in the specified length. If the COND-JVA-NAME is set to *NONE, the condition is considered satisfied without checking the job variable. The value *NONE cannot be changed back to a valid JVA name. Overwriting the name with blanks is not permitted.</p>
JVA-POSITION	<p>Input/output parameter Position within the value range of the job variable as of which the value is to be checked. jvpos</p>
JVA-LENGTH	<p>Input/output parameter Length of the value of the job variable. jvlen</p>
JVA-PASSWORD	<p>Input parameter {jvpass / *NONE}</p> <p>If the job variable is password-protected, it must be specified here. The field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p>
COND-VALUE	<p>Input/output parameter {= jvvalue / > jvvalue / < jvvalue / >= jvvalue / <= jvvalue / <> jvvalue}</p>
jvvalue	<p>jvvalue is the value with which the job variable is compared. jvvalue is specified without quotes and only as a C string.</p>
= jvvalue	<p>The condition is met if the job variable is equal to jvvalue.</p>
> jvvalue	<p>The condition is met if the value of the job variable is greater than jvvalue.</p>
< jvvalue	<p>The condition is met if the value of the job variable is less than jvvalue.</p>
>= jvvalue	<p>The condition is met if the value of the job variable is greater than or equal to jvvalue.</p>
<= jvvalue	<p>The condition is met if the value of the job variable is less than or equal to jvvalue.</p>
<> jvvalue	<p>The condition is met if the value of the job variable is not equal to jvvalue.</p>

AVD009 – Display the parameters of the condition description with FU=C and TYPE=NET/JOB/RES/VAL for modification

```

AVAS-Vnn.yxmn/AVD009  M O D I F Y - S U B M I T T E D -N E T  tt.mm.jjjj/hh:mm:ss
                        C O N D I T I O N - P A R A M E T E R
NET-NAME      =..... NET-STATUS=.....

COND-NAME     =..... COND-STATUS=.....
COND-INDEX    =...   FU=...   COND-TYPE =...
SYNC-INDEX    =...

RESTART      -INDEX  -NAME                                -TYPE    AUTOMATIC
VARIANT=1    ...    .....                                .....    ...
             2    ...    .....                                .....    ...
             3    ...    .....                                .....    ...

LATEST-OCCURE=...../..... DELAY-SOLUTION=.....

CONDITION CREATED BY: NET-NAME=..... INDEX=...
OCCURE-VALUE =.....
ERROR-VALUE  =.....
              SELECT-RESTART-VARIANT=.
CMD:..... OPR:.....
MSG:.....
    
```

- NET-NAME** Output parameter
Name of the net description to which the structure element is assigned.
- NET-STATUS** Output parameter
Status of net processing.
 - WAITING** The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
 - OPWAIT** The net is waiting for entry of the START-NET statement.
 - ERROR** The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
 - RUNNING/ERROR** At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
 - HOLD** Net processing was suspended. The net was removed from the control of the run control system.
 - NETWAIT** The subnet is waiting for the start by the hypernet.

COND-NAME	<p>Output parameter Name of a condition description</p> <p>\$ug_jobname1-24 (TYPE=JOB) Name of the structure element, the status of which is to be tested.</p> <p>\$ug_netname1-12 (TYPE=NET) Name of the net, the status of which is to be tested.</p> <p>\$ug_resname1-24 (TYPE=RES) Name of the condition for a resource.</p> <p>\$ug_valname1-24 (TYPE=VAL) Name of the condition for a defined value</p>
COND-STATUS	<p>Output parameter Processing status of the condition.</p>
WAITING	The condition has not yet been checked.
NO-OCCURE	The condition was checked and was not satisfied.
NO-OCC/DEL	The condition was checked and was not satisfied. Furthermore, the structure element was deleted and was excluded from processing by the run control system.
OCCURRED	The condition has been satisfied.
COND-INDEX	<p>Output parameter Index level of the net on which the condition description is to be monitored.</p>
FU	<p>Output parameter Function of the structure element</p>
C (Compare)	This structure element in the net description is a condition which waits to be satisfied.
COND-TYPE	<p>Output parameter Shows the type of the structure element. {NET / JOB / RES / VAL}</p>
NET	Net processing waits for a net condition to be satisfied.
JOB	Net processing waits for a job or FT request condition to be satisfied.
RES	Net processing waits for a condition on a resource to be satisfied.
VAL	Net processing waits for a condition to be satisfied by a defined value.

SYNC-INDEX	<p>Output parameter</p> <p>Index level at which the structure element is to be synchronized.</p>
RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each task. At least the index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Input/output parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the three restart variants.</p> <p>A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). The index level must be in the net structure. An index level must be specified that ensures that the structure element is processed by the RESTART-NET statement in the event of a restart (see page 827).</p> <p>For structure elements at the restart index levels (index 900–999), the RESTART-INDEX cannot be modified in the case of restart variant 1. Restart variant 1 here contains the synchronization index. In the case of structure elements, the value of the RESTART-INDEX in the restart variant 1 must be greater than the defined JOB-INDEX or less than index 900.</p> <p>The RESTART-INDEX of restart variants 2 and 3 of the structure elements must be in the processing sequence defined in the range of restart index levels. The index at which normal processing resumes and the first index level of normal processing are still valid (net repetition with RESTART-NAME=*ALL).</p>
END	<p>The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart.</p> <p>The RESTART-JOB-NAME parameter is not evaluated.</p> <p>END may not be specified for the structure elements in the range of restart index levels (index 900–999).</p>

RESTART-NAME	<p>Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *JOB / *ERROR}</p>
name	<p>Only this structure element on the index level specified in RESTART-INDEX will be processed again. name must be entered without a user group.</p> <p>If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be processed again.</p>
*ERROR	<p>All structure elements at the index level specified by RESTART-INDEX, which terminated abnormally (STATUS=ERROR), are to be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>
*NAME	<p>Only the structure element in the POINT-OF-ERROR is to be processed again. *NAME will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>

Notes

- When a restart takes place at index levels 900 to 999, normal processing must resume at the index of the POINT-OF-ERROR if RESTART-NAME=*NAME or *ERROR is specified for restart variant 1.
Otherwise, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements.
	<i>Note</i>
	In the restart jobs area (index levels 900 to 999), the switchover from RESTART to NORMAL mode can be controlled via the RESTART-TYPE parameter of restart variant 1. RESTART mode is exited if RESTART-TYPE = NORMAL is specified for restart variant 1. RESTART mode is exited automatically when the first index level of regular processing (index levels 001 to 899) has been processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
LATEST-OCCURE	Input/output parameter dd.mm.yy/hh:mm:ss Latest time by which the condition must be satisfied.

- DELAY-SOLUTION** Input/output parameter
 Actions to be taken in case of untimely condition checking (after LATEST-OCCURE).
 {START / IGNORE / CANCEL}
- START** The condition is satisfied.
- IGNORE** The condition is to be ignored.
 Processing of the net is continued.
- CANCEL** The status of the condition is set to ERROR.
 Net must be continued by a restart.

The condition status and net status after the LATEST-OCCURE time has been passed depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	COND-STATUS	NET-STATUS
START	OCCURRED	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

CONDITION CREATED BY

Input/output parameter
 Name and index of the net which created the condition description
 If the structure element has the NO-OCCURE status, the parameters cannot be modified. If COND-TYPE=RES or VAL is set, no input is allowed.

- NET-NAME** {\$ug_netname1-12[_date[_time]] / *NONE}
 The full name of the net with PLAN-START need only be specified if the condition description with the smallest positive time difference with respect to PLAN-START is not to be evaluated, but the one with the specified PLAN-START is. *NONE is only permitted if COND-TYPE=NET is specified.

COND-TYPE=JOB

The user group for the NET-NAME parameter is always the same as the user group for the COND-NAME parameter.

COND-TYPE=NET

In the NET-NAME parameter, only the date and time can be modified. If the query has already been assigned to a condition description (status NO-OCCURE), the date and time can also no longer be modified.

If *NONE is specified, NET-NAME can also be specified and the query can thus be assigned to a condition description.

If under the NET-NAME parameter the name of a net is specified or the predefined net name is modified, the net name (\$ug_netname) is adopted as the structure element name (COND-NAME). If, as a result of this change, the structure element name on the index level is no longer unique, CHECK rejects the attempt to write to the net (CMD:SAVE) with a message.

INDEX

An index need only be specified for the JOB condition if there are several entries with the same job name and net name. If COND-TYPE=NET is specified, no input is allowed.

OCCURE-VALUE

Input/output parameter
{status / status, ... / c-string / x-string}

Event for dependency control.

For TYPE=NET

If nothing is specified, this parameter is set to ENDED. The valid entries are:

ENDED MISSING ABENDED IGNORED

For TYPE=JOB

If nothing is specified, this parameter is set to ENDED. The valid entries are:

NO-PLAN ABENDED DELETED IGNORED MISSING
ENDED ERROR SKIPPED NO-SUBMIT

For TYPE=RES The valid entries are:

FREE SHARE(uu) SHARE(uu), FREE

FREE If the condition entry is in the FREE state, then the condition is satisfied. The resource is allocated in the EXCLUSIVE mode.

SHARE (uu) If the condition entry is in the SHARE or FREE state and the resource can be used at least uu times still, then the condition is satisfied. The resource is allocated uu times in the SHARE mode.

SHARE(uu), FREE If the condition entry is in the SHARE or FREE state and the resource can be used at least uu times still, then the condition is satisfied. The resource is allocated uu times in the SHARE mode.

For TYPE=VAL An entry must be specified here, as there is no default value. This parameter allows values linked with operators to be entered.

The following operators are permitted for querying the condition:

.EQ. .LT. .GT. .LE. .GE. .NE. .OR.

Input format:

OP,pos,value
 (OP,pos,value)
 (OP,pos,value),(OP,pos,value),...

– OP – comparison operation

= / EQ – equal to

< / LT – less than

> / GT – greater than

≤ / LE – less than or equal to

≥ / GE – greater than or equal to

≠ / NE – not equal to

If no comparison operation is specified, OP=EQ is assumed. The parameter and the comma are omitted (pos,value).

- pos – starting position for value specification

nnn

If pos is not specified, pos=1 is assumed.

Comparison values without OP and without pos are specified directly (value).

If a comparison operation is specified with no start position, the corresponding comma must nevertheless appear (OP,,value).

- value – comparison value

'c-string'

C'c-string'

X'x-string'

Current value of the condition description in the run control file. The range extends to 128 bytes.

Note

When a condition description is created, positions which have no value assigned are set up with X'40'.

-),(– logical OR operation

Where there are a number of condition tests, these are specified in parentheses, which links them by an OR operation.

Permissible input formats:

value

(value)

(value),(value),...

pos,value

(pos,value),(pos,value),...

OP,pos,value

(OP,pos,value)

(OP,pos,value),(OP,pos,value),...

OP,,value

(OP,,value)

(OP,,value),(OP,,value),...

plus any mixture, e.g.:

(value),(OP,,value),(pos,value),...

The length of the comparison value is determined from the length of c-string or x-string. pos + length -1 must not exceed 128.

Quotes in the c-string must be double.

ERROR-VALUE	Input/output parameter {status / status, ... / c-string / x-string / *NONE} Event for dependency control.
For TYPE=NET	The valid entries are:: ENDED MISSING ABENDED IGNORED
For TYPE=JOB	The valid entries are: NO-PLAN ABENDED DELETED IGNORED MISSING ENDED ERROR SKIPPED NO-SUBMIT
For TYPE=RES	The valid entries are: MISSING CREATED FREE SHARE ERROR EXCLUSIVE
For TYPE=VAL	The format of the entries is subject to the rules described for OCCURE-VALUE. Otherwise, *NONE can be specified from column 1 on. If the input field is blank, ERROR-VALUE is given the value *NONE.
SELECT-RESTART-VARIANT	Input/output parameter {1 / 2 / 3} This parameter is assigned to the ERROR-VALUE parameter. It presets a restart variant to be used in the event of an error. Processing takes place in accordance with the restart variant set for the jobs by means of the monitor job variable. If no entry is made here, the restart variants for the condition are searched for AUTOMATIC=YES, as in the case of jobs, and if a restart variant is found this is used to automatically initiate a restart. If no restart variant with AUTOMATIC=YES is found, the restart must be initiated by the RESTART-NET statement.

AVD010 – Display the parameters of the condition description with FU=A/M/D and TYPE=RES/VAL for modification

```

AVAS-Vnn.yxmn/AVD010 M O D I F Y - S U B M I T T E D -NET tt.mm.jjjj/hh:mm:ss
                        C O N D I T I O N - P A R A M E T E R
NET-NAME      = ..... NET-STATUS=.....
COND-NAME     = ..... COND-STATUS=.....
COND-INDEX    = ... FU=... COND-TYPE =...
SYNC-INDEX    = ...

RESTART      -INDEX  -NAME                                -TYPE    AUTOMATIC
VARIANT=1    ...    .....                                .....    ...
              2    ...    .....                                .....    ...
              3    ...    .....                                .....    ...

COND-VALUE    = .....
              .....

CMD: ..... OPR: .....
MSG: .....
    
```

NET-NAME	Output parameter Name of the net description to which the structure element for executing jobs and S procedures is assigned.
NET-STATUS	Output parameter Status of net processing.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
NETWAIT	The subnet is waiting for the start by the hypernet.
ERROR	The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
HOLD	Net processing was suspended. The net was removed from the control of the run control system.

COND-NAME	Output parameter Name of the condition description
COND-STATUS	Output parameter Processing status of the structure element
WAITING	The structure element had not yet been processed.
EXECUTED	The structure element had been processed.
ERROR	Processing of the structure element resulted in the ERROR status.
COND-INDEX	Output parameter Index level of the net on which the condition description is to be monitored.
FU	Output parameter Function of the structure element {A / M / D}
A (Add)	Creates a condition description.
M (Modify)	Modifies a condition description.
D (Delete)	Deletes a condition description.
COND-TYPE	Output parameter Shows the type of the structure element. {RES / VAL}
For FU=A	RES Creates a condition description for a resource.
For FU=A	VAL Creates a condition description with a defined value.
For FU=M	RES Modifies a condition description for a resource.
For FU=M	VAL Modifies a condition description with a defined value.
For FU=D	RES Deletes a condition description for a resource.
For FU=D	VAL Deletes a condition description with a defined value.
SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized.

RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each task. At least the index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). The index level must be in the net structure. An index level must be specified that ensures that the structure element is processed by the RESTART-NET statement in the event of a restart (see page 827).</p> <p>For structure elements at the restart index levels (index 900–999), the RESTART-INDEX cannot be modified in the case of restart variant 1. Restart variant 1 here contains the synchronization index. In the case of structure elements, the value of the RESTART-INDEX in the restart variant 1 must be greater than the defined JOB-INDEX or less than index 900.</p> <p>The RESTART-INDEX of restart variants 2 and 3 of the structure elements must be in the processing sequence defined in the range of restart index levels. The index at which normal processing resumes and the first index level of normal processing are still valid (net repetition with RESTART-NAME=*ALL).</p>
END	<p>The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart. The RESTART-JOB-NAME parameter is not evaluated. END may not be specified for the structure elements in the range of restart index levels (index 900–999).</p>

RESTART-NAME	<p>Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *JOB / *ERROR}</p>
name	<p>Only this structure element on the index level specified in RESTART-INDEX will be processed again. name must be entered without a user group.</p> <p>If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be processed again.</p>
*ERROR	<p>All structure elements at the index level specified by RESTART-INDEX, which terminated abnormally (STATUS=ERROR), are to be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>
*NAME	<p>Only the structure element in the POINT-OF-ERROR is to be processed again. *NAME will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>

Notes

- When a restart takes place at index levels 900 to 999, normal processing must resume at the index of the POINT-OF-ERROR if RESTART-NAME=*NAME or *ERROR is specified for restart variant 1.
Otherwise, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements.
	<i>Note</i>
	In the restart jobs area (index levels 900 to 999), the switchover from RESTART to NORMAL mode can be controlled via the RESTART-TYPE parameter of restart variant 1. RESTART mode is exited if RESTART-TYPE = NORMAL is specified for restart variant 1. RESTART mode is exited automatically when the first index level of regular processing (index levels 001 to 899) has been processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

COND-VALUE Input/output parameter status

The condition description does not apply for FU=D.
 The condition description in the run control file is changed by the preset state.

For TYPE=RES Permitted entry:

mmm MAX-USING-SHARE: 2..100
 Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100.

uu Number of quotas of a resource allocated in the SHARE mode. If the value <uu> is not specified, then it is set to the value 1. The value uu must be smaller than the value mmm for MAX-USING-SHARE.

		FU	TYPE	Input	Meaning
A	RES			mmm, CREATED	The resource is set up mmm times as a shareable resource and is not yet available.
				mmm,FREE	The resource is set up mmm times as a shareable resource and is available.
				mmm,ERROR	The resource is set up mmm times as a shareable resource and is not yet available.
				mmm, SHARE(uu)	The resource is set up mmm times as a shareable resource and is allocated uu times in SHARE mode by the net. If uu is not specified, it is set to 1.
				mmm, EXCLUSIVE	The resource is set up mmm times as a shareable resource and is allocated by the net in EXCLUSIVE mode.
D	RES				A resource can only be deleted (FU=D,TYPE=RES), if it has the status FREE (no net has allocated the resource) , CREATED or ERROR and no net is waiting to allocate the resource.

FU TYPE Input	Meaning
M RES FREE	The resource is released when it is allocated by the net or when the status is changed from CREATED or ERROR to FREE.
CREATED	The resource can no longer or cannot yet be used.
ERROR	The resource can no longer be used because an error has occurred.

Note

If an allocated resource is released with SHARE(uu) for FU=M, TYPE=RES with COND-VALUE=FREE, then the USING counter for the resource is decremented by the value uu. If a net has allocated a resource with SHARE(uu) via several structure elements where FU=C with TYPE=RES, then the entry with the oldest date in the time stamp is searched for and deleted. This is also true when the resource was allocated via COND-VALUE=SHARE(uu) for FU=A with TYPE=RES.

Partial release of an allocated resource via FREE(uu) is not permitted.

For TYPE=VAL

value
 pos,value
 (value)
 (pos,value)
 (pos,value),(pos,value),...

or in combinations, e.g.:

(value),(pos,value),...

A corresponding entry is made for the value in the condition description in the run control file.

For the function A (Add), any positions which are not defined are given the value X'40'.

Note

When condition descriptions are created, no check is made on overlaps.

AVD016 – Display the parameters of the condition description with FU=D and TYPE=NET/JOB for modification

```

AVAS-Vnn.yxmn/AVD016  M O D I F Y - S U B M I T T E D -NET tt.mm.jjjj/hh:mm:ss
                        C O N D I T I O N - P A R A M E T E R
NET-NAME      =..... NET-STATUS=.....
COND-NAME     =..... COND-STATUS=.....
COND-INDEX    =...   FU=.   COND-TYPE =...
SYNC-INDEX    =...

RESTART      -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1   ...    .....                               .....    ...
             2   ...    .....                               .....    ...
             3   ...    .....                               .....    ...

CONDITION CREATED BY: NET-NAME=..... INDEX=...

CMD:..... OPR:.....
MSG:.....
    
```

- NET-NAME** Output parameter
Name of the net description to which the structure element for executing jobs and S procedures is assigned.
- NET-STATUS** Output parameter
Status of net processing.
 - WAITING** The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
 - OPWAIT** The net is waiting for entry of the START-NET statement.
 - ERROR** The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
 - RUNNING/ERROR** At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
 - HOLD** Net processing was suspended. The net was removed from the control of the run control system.

COND-NAME	Output parameter Name of the condition \$ug_jobname1-24 Name of the structure element which is to be deleted.
COND-STATUS	Output parameter Processing status of the condition.
WAITING	The condition has not yet been checked.
NO-OCCURE	The condition was checked and was not satisfied.
NO-OCC/DEL	The condition was checked and was not satisfied. Furthermore, the structure element was deleted and was excluded from processing by the run control system.
OCCURRED	The condition has been satisfied.
COND-INDEX	Output parameter Index level of the net on which the condition description is to be monitored.
FU	Output parameter Function of the structure element.
D (Delete)	Deletes a condition description.
COND-TYPE	Output parameter Shows the type of the structure element. {NET / JOB}
NET	Deletes a condition description for a predefined net.
JOB	Deletes a condition description for a predefined job or FT request.
SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized.
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least the index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.

RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). The index level must be in the net structure. An index level must be specified that ensures that the structure element is processed by the RESTART-NET statement in the event of a restart (see page 827).</p> <p>For structure elements at the restart index levels (index 900–999), the RESTART-INDEX cannot be modified in the case of restart variant 1. Restart variant 1 here contains the synchronization index. In the case of structure elements, the value of the RESTART-INDEX in the restart variant 1 must be greater than the defined JOB-INDEX or less than index 900.</p> <p>The RESTART-INDEX of restart variants 2 and 3 of the structure elements must be in the processing sequence defined in the range of restart index levels. The index at which normal processing resumes and the first index level of normal processing are still valid (net repetition with RESTART-NAME=*ALL).</p>
END	<p>The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart. The RESTART-JOB-NAME parameter is not evaluated. END may not be specified for the structure elements in the range of restart index levels (index 900–999).</p>

RESTART-NAME	<p>Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *JOB / *ERROR}</p>
name	<p>Only this structure element on the index level specified in RESTART-INDEX will be processed again. name must be entered without a user group.</p> <p>If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be processed again.</p>
*ERROR	<p>All structure elements at the index level specified by RESTART-INDEX, which terminated abnormally (STATUS=ERROR), are to be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>
*NAME	<p>Only the structure element in the POINT-OF-ERROR is to be processed again. *NAME will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>

Notes

- When a restart takes place at index levels 900 to 999, normal processing must resume at the index of the POINT-OF-ERROR if RESTART-NAME=*NAME or *ERROR is specified for restart variant 1.
Otherwise, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements.
	<i>Note</i>
	In the restart jobs area (index levels 900 to 999), the switchover from RESTART to NORMAL mode can be controlled via the RESTART-TYPE parameter of restart variant 1. RESTART mode is exited if RESTART-TYPE = NORMAL is specified for restart variant 1. RESTART mode is exited automatically when the first index level of regular processing (index levels 001 to 899) has been processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

CONDITION CREATED BY

Input/output parameter

Name and index of the net which created the condition description.

NET-NAME \$ug_netname1-12[_date[_time]]

INDEX index

The user group for the NET-NAME parameter always corresponds to the user group for the COND-NAME parameter.

The full name of the net with PLAN-START need only be specified if the condition description with the smallest positive time difference with respect to PLAN-START is not to be evaluated, but the one with the specified PLAN-START is.

If TYPE=NET is specified, only the date/time may be changed. If the name of the structure element (COND-NAME) and CREATED-BY NET-NAME (ug or netname) do not match, they are rejected with a message.

For TYPE=RES or VAL, no input is permitted.

AVD017 – Display the parameters of the condition description with FU=W and TYPE=TIM for modification

```

AVAS-Vnn.yxmn/AVD017  M O D I F Y - S U B M I T T E D -NET tt.mm.jjjj/hh:mm:ss
                        C O N D I T I O N - P A R A M E T E R
NET-NAME      =..... NET-STATUS=.....
COND-NAME     =..... COND-STATUS=.....
COND-INDEX    =...   FU=...   COND-TYPE =...
SYNC-INDEX    =...

RESTART      -INDEX  -NAME                                -TYPE    AUTOMATIC
VARIANT=1    ...    .....                                .....    ...
             2    ...    .....                                .....    ...
             3    ...    .....                                .....    ...

DATE         =.....   TIME   =.....
             DD.MM.YY
             **D

CMD:..... OPR:.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net description to which the structure element for executing jobs and S procedures is assigned.
NET-STATUS	Output parameter Status of net processing.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
NETWAIT	The subnet is waiting for the start by the hypernet.
ERROR	The net was interrupted because a structure element terminated abnormally. It is waiting to restart.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET.
HOLD	Net processing was suspended. The net was removed from the control of the run control system.

COND-NAME	Output parameter Name of the condition description
COND-STATUS	Output parameter Processing status of the condition.
WAITING	The condition has not yet been checked.
NO-OCCURE	The condition was checked and was not satisfied.
NO-OCC/DEL	The condition was checked and was not satisfied. Furthermore, the structure element was deleted and was excluded from processing by the run control system.
OCCURRED	The condition has been satisfied.
COND-INDEX	Output parameter Index level of the net on which the condition description is to be monitored.
FU	Output parameter Function of the structure element.
W (Wait)	Wait for a specified time.
COND-TYPE	Output parameter Type of the structure element
TIM	Net processing waits until the specified point in time. Shows the value specified in mask AVN004 for TYPE.
SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized.
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least the index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.

RESTART-INDEX	<p>Input/output parameter {index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). The index level must be in the net structure. An index level must be specified that ensures that the structure element is processed by the RESTART-NET statement in the event of a restart (see page 827).</p> <p>For structure elements at the restart index levels (index 900–999), the RESTART-INDEX cannot be modified in the case of restart variant 1. Restart variant 1 here contains the synchronization index. In the case of structure elements, the value of the RESTART-INDEX in the restart variant 1 must be greater than the defined JOB-INDEX or less than index 900.</p> <p>The RESTART-INDEX of restart variants 2 and 3 of the structure elements must be in the processing sequence defined in the range of restart index levels. The index at which normal processing resumes and the first index level of normal processing are still valid (net repetition with RESTART-NAME=*ALL).</p>
END	<p>The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart.</p> <p>The RESTART-JOB-NAME parameter is not evaluated.</p> <p>END may not be specified for the structure elements in the range of restart index levels (index 900–999).</p>

RESTART-NAME	<p>Input/output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *JOB / *ERROR}</p>
name	<p>Only this structure element on the index level specified in RESTART-INDEX will be processed again. name must be entered without a user group.</p> <p>If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be processed again.</p>
*ERROR	<p>All structure elements at the index level specified by RESTART-INDEX, which terminated abnormally (STATUS=ERROR), are to be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>
*NAME	<p>Only the structure element in the POINT-OF-ERROR is to be processed again. *NAME will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise, the restart will be rejected.</p>

Notes

- When a restart takes place at index levels 900 to 999, normal processing must resume at the index of the POINT-OF-ERROR if RESTART-NAME=*NAME or *ERROR is specified for restart variant 1.
Otherwise, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Input/output parameter Type of restart processing { <u>RESTART</u> / NORMAL}
<u>RESTART</u>	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements.
	<i>Note</i>
	In the restart jobs area (index levels 900 to 999), the switchover from RESTART to NORMAL mode can be controlled via the RESTART-TYPE parameter of restart variant 1. RESTART mode is exited if RESTART-TYPE = NORMAL is specified for restart variant 1. RESTART mode is exited automatically when the first index level of regular processing (index levels 001 to 899) has been processed.
AUTOMATIC	Input/output parameter Type of restart processing {YES / <u>NO</u> }
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
<u>NO</u>	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

DATE

Input/output parameter

tt.mm.jj or **d

Entering **d for an absolute wait time is not permissible if the run control system is already processing the structure element, i.e. if:

- the structure elements is in NO-OCCURE state and
- DATE and TIME contain the end of the wait time

Entering **d is then rejected with AVS5042.

As long as DATE has the value **d (i.e. the structure element is not active) the value for TIME can be changed.

TIME

Input/output parameter

hh:mm

Wait until date and time is reached.

MODIFY-SYSTEM-PARAMS – Display and modify defined system parameters

The only person allowed to have authorization for this statement is the AVAS administrator. The MODIFY-SYSTEM-PARAMS statement displays the system parameters of the users. Marking the displayed data revokes “write protection”. The displayed data can now be modified.

The modified system parameter data does not take effect immediately, but with various delays, contingent on the type of system parameter involved (see the notes accompanying the following descriptions of the individual parameter records).

MODIFY-SYSTEM-PARAMS
[RECORD=keyword]

RECORD=keyword

Name of a particular parameter record.

This directly causes the object selected via “keyword” to be displayed in the corresponding mask. The following entries are permitted for “keyword”:

RECORD=FILENAMES

Display the files defined in the AVAS system (AVS002 mask).

RECORD=USER

Display the generated user data (AVS003 mask).

RECORD=USERGROUP

Display the user groups and user group data (AVS004 mask).

RECORD=FUNCTION

Display an overview of function authorization tables (AVS005 mask).

RECORD=LIBASSIGN

Display an overview of the defined LIB-to-LIB assignments (AVS006 mask).

RECORD=RUNCONSYS

Display the generated run control systems with the modified parameters (AVS007 mask).

RECORD=SYSVAR

Display the user-defined system variables that can be modified (AVS008 mask).

Note

If the RECORD operand is omitted, an overview of parameters is displayed in the AVS001 mask.

PASSWORD	Input parameter The old user password is not displayed and not checked. New user password comprising a maximum of 8 characters. The new password is stored by the SAVE operation. It is not displayed when the SHOW-SYSTEM-PARAMS function is used.
FUNCTION	Input/output parameter After being marked, the number of the associated function authorization table can be overwritten with the number of another defined function authorization table.
HOLD	Input/output parameter Flag for signon lock. Once the user has been marked, a signon lock can be set or a signon lock already set for the user can be canceled.
NO	No signon lock has been set for the user, or when NO is entered an existing lock is canceled.
YES	A signon lock has been / is to be set for the user.
RESULT	Output parameter Acknowledgment for the completed action:
UPDATED	The parameters of the user were modified.

Notes

- The modified parameters of a user do not take effect until the user involved has again signed on to AVAS via SIGNON.
- If the user's password has been changed to blanks, this user can no longer sign on.
- Data for a maximum of 440 users can be set up.
- All users can modify their own password using the SIGNON mask, regardless of whether or not they have administration authorization.

CALENDAR-NAME	Input/output parameter After being marked, the name of the associated calendar can be modified by means of overwriting. The new calendar name must be contained in the CALLIB library.
RUN-CONT-SYSTEM	Input/output parameter The name of the associated run control system can be overwritten by another defined name of a run control system.
RESULT	Output parameter Acknowledgment for the completed action:
UPDATED	The parameters of the user group were modified.

Note

The modified parameters for a user group do not take effect until the users of the group have again signed on to the AVAS system via SIGNON.

COMMAND	Output parameter Name of the statement. In the case of the statements END and "?", modifying the authorization has no effect, as these statements must be available to all users.
COMMAND ALLOWED	Input/output parameter This displays the authorization:
NO	No authorization.
YES	Authorization for all users of the user group in the assigned library.
ALL	Authorization for all elements in the assigned library. After being marked, any of the above-named authorizations can be modified by means of overwriting.
RESULT	Output parameter Acknowledgment for the completed action:
UPDATED	The function authorization was modified.

Note

Modified authorizations do not take effect for the user until he has again signed on to the AVAS system via SIGNON.

If a particular LIB-LIB connection group from the overview has been marked with S, the selected connection group is displayed in format 2 of the AVS006 mask.

Format 2:

M	Input parameter
Y (Yes)	Marks the LIB-LIB connection group to be modified.
...LIB TO ...LIB	Input/output parameter This displays a LIB-LIB connection group; six characters with numbers. After being marked, the second number can be overwritten by another number defined in the system. In this way, the first-named library can be assigned another library.
RESULT	Output parameter Acknowledgment for the completed action:
UPDATED	The library assignment was modified.

Note

The modified library assignment does not take effect for the users involved until they have again signed on to the AVAS system via SIGNON.

M	Input parameter Mark column for selecting system variables.
D (Delete)	The marked system variable is deleted. The result DELETED is shown for the system variable following ENTER.
A (Add)	System variables that were previously deleted using the D mark (result: DELETED) can be reactivated using this mark. The DELETED result is thereby removed. The A mark is rejected for variables that do not have the result DELETED.
Y (Yes)	Marks the system variable to be modified (S#nnn) in order to assign a new value to it.
N (No)	A new value can be assigned to all unmarked system variables. Different marks cannot be used. System variables with the result DELETED cannot be selected for modification. If no marks are specified, a new value can be assigned to all the displayed system variables following EXECUTE.
	<i>Note</i> The marks A, D, Y and N cannot be used to change the position of the work window. If the EXECUTE operation is entered together with a + or – mark, the system variables of the repositioned work window are displayed for modification.
NAME	Input/output parameter Name of the system variable. S#nnn
S#	Only the symbolic name defined during the generation phase (default character string: S#) can be used.
nnn	A 3-digit number between 201 and 999. The values 000–200 are reserved for AVAS.
	<i>Note</i> Names that contain syntax errors or names that are specified more than once are rejected and a corresponding error message is displayed. The name of an existing system variable cannot be modified. It may have to be deleted and a new system variable created. Up to 400 user system variables can be defined.

VALUE	<p>Input/output parameter Value of the system variable.</p> <p>Any character string containing between 1 and 48 characters. If 'value' is specified in single quotation marks, the character string can contain blanks. Two quotation marks must be entered for every quotation mark specified within 'value'. If no quotation marks are specified, the character string begins at the first position and ends at the first blank or at the end of the field.</p> <p><i>Note</i></p> <p>S#nnn values with syntax errors are rejected and a corresponding error message is displayed.</p>
RESULT	<p>Output parameter Acknowledgment for the completed action.</p>
NO-UPDATE	<p>The value of the system variable was not updated.</p>
UPDATED	<p>The value of the system variable was updated.</p>
DELETED	<p>The system variable was deleted using the D mark.</p>
INSERTED	<p>A new system variable was defined.</p>

Note

The modified parameters do not take effect until processing is concluded using the SAVE operation.

NET-CONTROL – Display and process released nets

The NET-CONTROL statement is used to display the processing states of released nets. A branch to the processing of the nets and of the data assigned to the structure elements can be effected. The relevant AVAS statements are called for display and processing purposes.

All net parameters, the parameters of the structure elements and the data assigned to the structure elements from the run control file can be displayed and processed. The data from the journal and log files can also be displayed. To do this, the operation assigned to an AVAS statement must be executed.

Entering operations

The operations for starting an AVAS statement under the NET-CONTROL statement must be entered in the form #AVAS statement (e.g. #HOLD-NET). To make things easier, the operations have been assigned a 2-digit number, which means that an operation can also be entered in the form #nn (e.g. #21 = HOLD-NET).

The first digit of the operation number identifies the object (element) to be processed. A distinction is made between the following groups of operations:

- #1n = general operations
- #2n = NET operations
- #3n = JOB operations
- #4n = CONDITION operations
- #5n = JOURNAL/LOG operations
- #6n = Planning/release operations
- #7n = Operations on BS2000 objects

The table below shows the assignment of the operation numbers to the operations and AVAS statements.

Operation numbers, operations and AVAS statements

	FU / TYP	OPC	Operation	AVAS statement
#1 = GENERAL	–	#11	EXECUTE	–
	–	#12	SAVE	–
	–	#13	CONTINUE	–
	–	#14	RETURN	–
	–	#15	IGNORE	–
	–	#16	CHECK	–
	–	#17	DOCUMENT	–
	–	#18	PRINT	–
	–	#19	JOBLOG	–
#2 = NET	–	#21	#HOLD-NET	HOLD-NET
	–	#22	#RESUME-NET	RESUME-NET
	–	#23	#CANCEL-NET	CANCEL-NET
	–	#24	#RESTART-NET	RESTART-NET
	–	#25	#START-NET	START-NET
	–	#26	#MODIFY-SUBMIT-NET	MODIFY-SUBMIT-NET
#3 = JOB/SUBNET	J, P / STD MOD	#31	#MOD-SUBMIT-JOB	MODIFY-SUBMIT-JOB
	J, P / STD MOD	#32	#SHOW-SUBMIT-JOB	
	S/NET	#33	#NET-CONTROL	NET-CONTROL
#4 = COND	C/RES, VAL	#41	#ADD-COND-DESCR	ADD-COND-DESCR
	C/RES, VAL	#42	#MODIFY-COND-DESCR	MODIFY-COND-DESCR
	C	#43	#SHOW-COND-DESCR	SHOW-COND-DESCR
	C / NET	#44	#SHOW-NET-STATUS	SHOW-NET-STATUS
#5 = JRN	–	#51	#SHOW-JOURNAL	SHOW-JOURNAL
	–	#52	#SHOW-HISTORY	
	J, P	#53	#ADD-JOB-LOG	ADD-JOB-LOG
	J, P	#54	#SHOW-J-LOG	SHOW-JOB-LOG
	–	#55	#START-EXIT	START-EXIT

	FU / TYP	OPC	Operation	AVAS statement
#6 = planning/ release		#61	#CREATE-PLAN-NET	CREATE-PLAN-NET
		#62	#CREATE-PROD-NET	CREATE-PROD-NET
		#63	#SUBMIT-NET	SUBMIT-NET
#7 = BS2000 objects	J, P	#71	#VISIBLE	CREATE-NET-DESC MOD-NET-DESC SHOW-NET-DESC MOD-SUBM-NET
	J, P	#72	#BS2INFO	NET-CONTROL
	J, P	#73	#CANCEL	NET-CONTROL
	C/JVA	#74	#WRITEJV	NET-CONTROL
	J/P	#75	XINFJOB	NET-CONTROL
	J/P	#76	YINFPROG	NET-CONTROL
	J/P	#77	THOLD	NET-CONTROL
	J/P	#78	URESUME	NET-CONTROL
	J/P	#79	OUTSYS	NET-CONTROL

With regard to the operations for starting an AVAS statement under NET-CONTROL, a distinction is made between the following operations:

- Operations (AVAS statements) that can be executed via the net or the net structure (e.g. #HOLD-NET)
- Operations (AVAS statements) that are executed via a structure element (e.g. MODIFY-CONDITION-DESCR).
- Operations which are performed on particular objects within a command (e.g. on passwords of BS2000 user IDs or BS2000 jobs).

The figure below indicates the correlation between the two when switching from NET-CONTROL to another AVAS statement.

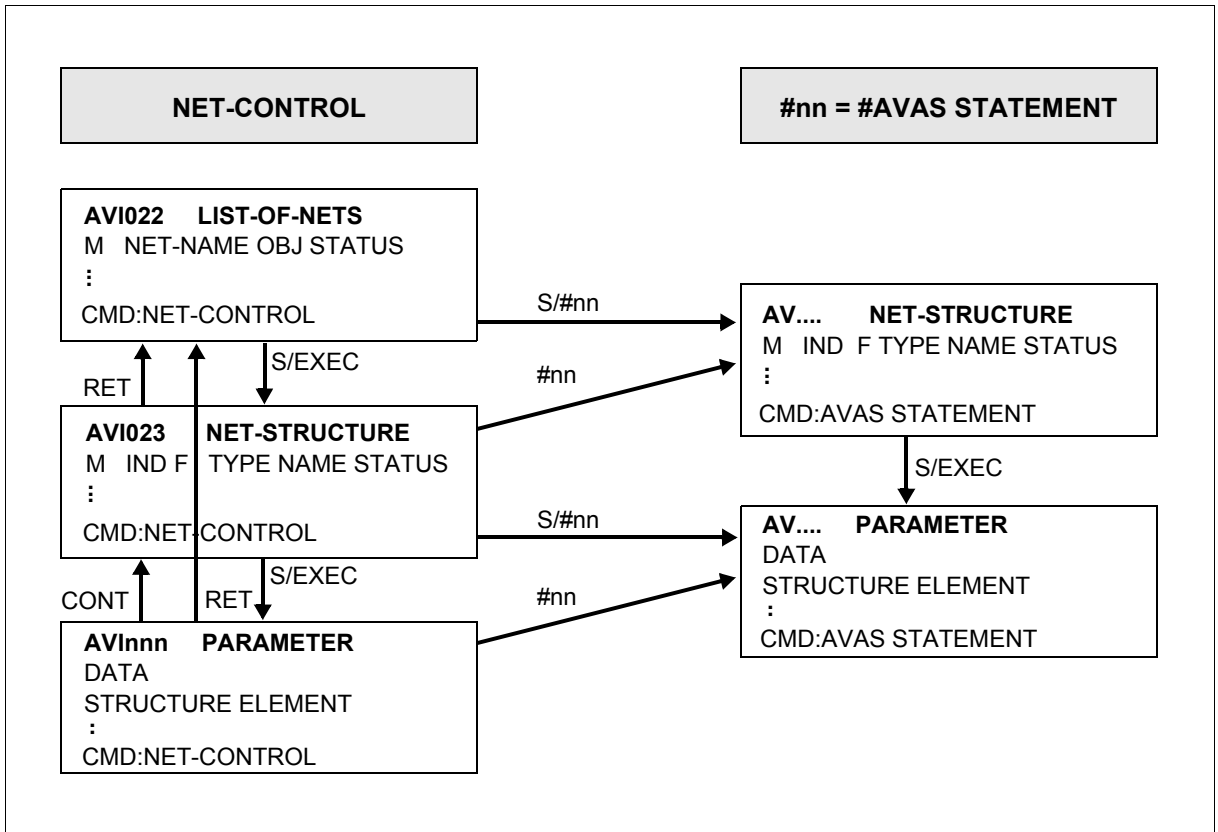


Figure 1: Control using NET-CONTROL for net and structure

Note on AVInnn

Depending on the structure element selected in mask AVI023, the structure elements are displayed in one of the following masks:

AVI003, AVI004, AVI007, AVI008, AVI009 or AVI010

Execution via the net

The operation can be entered on the overview of the nets (mask AVI022) if a net was selected with the S mark or on the display of the net structure (mask AVI023) without marks.

The operation leads to the assigned AVAS statement and to display of the net structure or display of the data assigned to the net using the relevant mask of the AVAS statement entered.

The Y mark (Yes) can be used to select a net if the desired function is to be executed without changing the parameters. This mark can be used together with the following operations:

- #21 (#HOLD-NET),
- #22 (#RESUME-NET),
- #23 (#CANCEL-NET),
- #24 (#RESTART-NET) or
- #25 (#START-NET) .

Execution via a structure element

The operation can be entered on the display of the net structure (mask AVI023) if a structure element was selected with the S mark or on the display of the parameters of the structure element (different masks) without marks.

The operation leads to the assigned AVAS statement and to display of the parameters or the data of the structure element.

After the AVAS statement has been executed or aborted, AVAS returns to the NET-CONTROL mask in which the operation was entered.

The [figure 2 on page 756](#) shows which operations are permitted on the masks AVI022 (overview of the nets) and AVI023 (net structure) with the S mark and without marks.

Note on #55 / START-EXIT

- If the EXIT is called from NET-CONTROL with operation code #55 and a net/nets or structure element/elements are marked, all the parameters are supplied with values (see the manual “AVAS for the Administrator” [2], RZ-EXIT AVEX2001).
- When called from mask AVI022 (LIST-OF-NETS), only the pfixNNAM and pfixCMDA fields are supplied with values. No meaningful values are defined for the other fields.

Processing hypernets and subnets via NET-CONTROL

Subnets are not displayed in the overview of nets (mask AVI022) for the NET-CONTROL statement. They can be processed with the permitted operations by marking the structure element (FU=S) with S in the structure of the hypernet in mask AVI023 and by branching to the subnet with operation #33 (#NET-CONTROL). In this subnet the permitted operations can be applied to the data of this subnet .

The net structure of the associated subnet is displayed with operation #33.

The subnet and the structure elements of the subnet can then be processed using all permitted # operations.

You return to the display of the hypernets via the RETURN operation.

Status changes in the subnet are taken over in the hypernet when the subnet was started via the hypernet. The status of the subnet is then stored and displayed for the structure element (FU=S).

A subnet can be processed by an AVAS statement that is defined via a # operation. To do this, the structure element (with FU=S and TYPE=NET) to start these associated subnets must be marked with an S, and a # operation must be entered.

The subnet must be brought into the display via NET-CONTROL for operations that are executed via a structure element.

The figure below indicates the correlation between the two when switching from NET-CONTROL to another AVAS statement within hypernets/subnets.

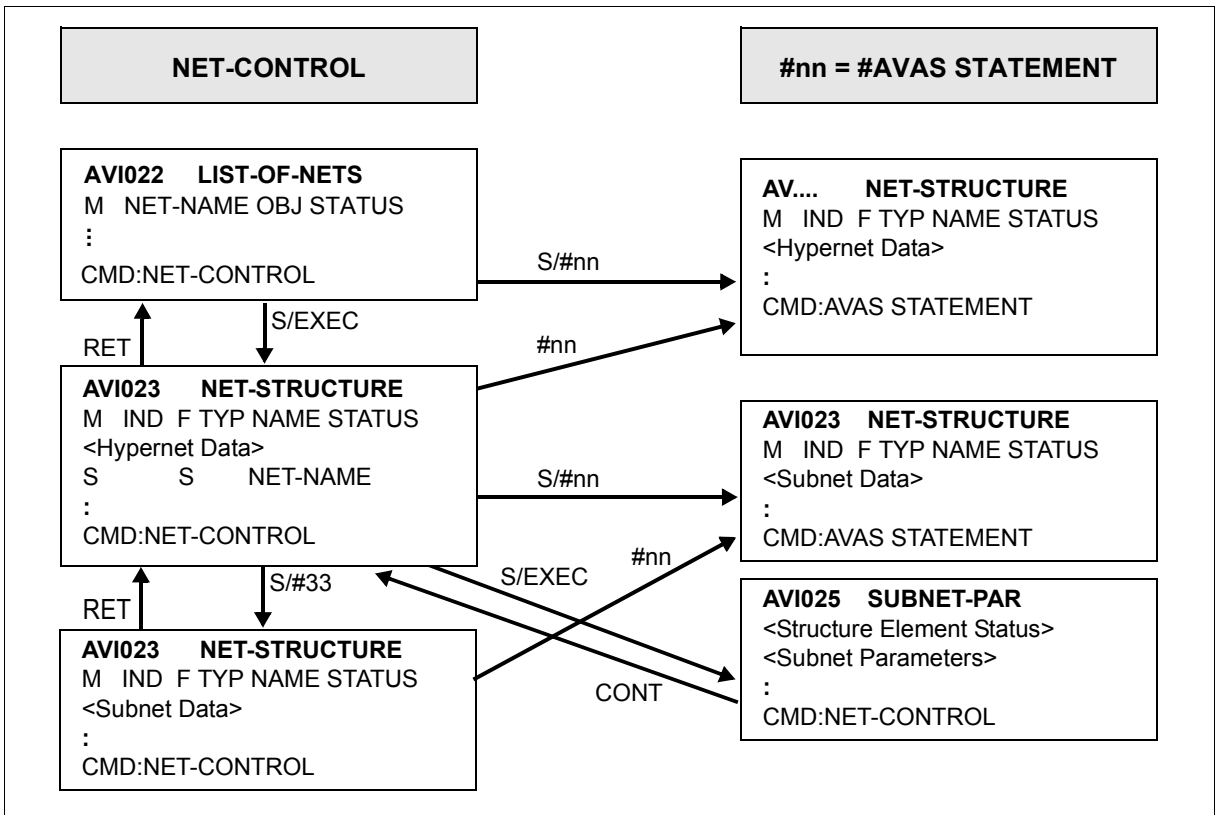


Figure 2: Control using NET-CONTROL for hypernets/subnets and the structure

Depending on the structure element selected in mask AVI023 (see [page 784](#)), the structure elements are displayed in one of the following masks:

AVI003, AVI004, AVI007, AVI008, AVI009, AVI010 or AVI026

Notes on operations for subnet processing

The following must be noted for the # operations in which the status of the structure element to start the subnet in the hypernet is changed, therefore also changing the status of the subnet:

#HOLD-NET

HOLD-NET can only be executed on a structure element FU=S if this structure element is in the WAITING state.

This leads to the following statuses:

Element	Status
Hypernet	RUNNING/ /HOLD or HOLD/ /RUNNING
Structure element with FU=S	HOLD
Subnet	NETWAIT

If you want to stop a subnet before it is started, then you should execute HOLD-NET for the structure element with FU=S and TYPE=NET (HOLD-NET can also be executed for the subnet, but executing it for the structure element is the simpler solution).

If the subnet has already been started, then the subnet must be processed with the #HOLD-NET operation. The HOLD status of the subnet is stored in the hypernet for the structure element with FU=S and TYPE=NET and is displayed via RUN/HOLD.

The structure element FU=S/NET is marked below NET-CONTROL with S and the #HOLD-NET operation is entered. HOLD is set for the subnet via EXECUTE (without a mark), which then places the subnet in the HOLD state. This leads to the following statuses

Element	Status
Hypernet	RUNNING
Structure element with FU=S and TYPE=NET	RUN/HOLD
Subnet	HOLD/ /RUNNING

#RESUME-NET

If the HOLD status is set for a structure element in the subnet, then the subnet must be processed with the #RESUME-NET operation. The RUN/HOLD state for the structure element with FU=S and TYPE=NET in the hypernet is automatically removed if the subnet was started via the hypernet.

#CANCEL-NET

A warning is output for CANCEL-NET with CANCEL-TYPE=HARD when applied to a hypernet. The warning informs you that the associated subnet must be handled separately since it is not automatically placed in the ABENDED state with the hypernet.

In order for subnets to be deleted from the run control file and the journal file during reorganization, they must be in the ENDED or ABENDED state.

To reach the ENDED state the NET-TYPE must be set to a value < 4 for the subnet if it was not started yet via the hypernet. After that, the subnet must be started. To reach the ABENDED state, the subnet must be cancelled with CANCEL-NET.

It is possible to modify the subnets with NET-CONTROL via # commands even when the hypernet is already in the ABENDED state.

If a subnet reaches the ABENDED state via CANCEL-NET with CANCEL-TYPE=HARD, then the structure element in the hypernet is placed in the ERROR state.

If a structure element for starting a subnet reaches the ERROR state via CANCEL-NET with CANCEL-TYPE=SOFT, then the execution of the subnet is not controlled by the hypernet. AVAS responds in this case in the same way as jobs already started that were cancelled by the user or execute until they are done while not under the control of the run control system when CANCEL-TYPE=SOFT. The user is also allowed to determine if subnets are to execute until they are done (with status ENDED) or to cancel them (with status ABENDED).

#RESTART-NET

A structure element with FU=S/NET in the hypernet has the status RUN/ERR

- when the subnet was started via the hypernet and is in the ERROR state after an error has occurred.
In this case the subnet must be processed via the hypernet with the #RESTART-NET operation. The ERROR status for the structure element FU=S/NET in the hypernet is automatically set to RUNNING again.
- when the subnet was started via the hypernet and was cancelled with CANCEL TYPE=SOFT.
In this case the subnet must be processed via the hypernet with the #RESTART-NET operation. The RUN/ERR status for the structure element FU=S/NET in the hypernet is automatically set to RUNNING again.

A structure element FU=S/NET is in the ERROR state

- when the hypernet was cancelled with CANCEL-TYPE=SOFT.
In this case the system must wait for the end of the subnet. The result (ENDED/ ABENDED) is taken over in the hypernet with RESTART-NET applied to the structure element FU=S/NET in the hypernet.
- when the subnet was cancelled with CANCEL-TYPE=HARD.
In this case the system must skip the structure element FU=S/NET for RESTART-NET on the hypernet. The status of the structure element FU=S/NET in the hypernet is set to SKIPPED.
- when the structure element FU=S/NET is started, the associated subnet has already been started independently and is not in the NETWAIT state.
In this case the system must wait for the end of the subnet. The result (ENDED/ ABENDED) is taken over in the hypernet with RESTART-NET applied to the structure element FU=S/NET in the hypernet.
Subnets that have already been terminated once (with the ENDED or ABENDED status) cannot be started again using RESTART-NET variants on the hypernet.

#START-NET

The #START-NET operation is not permitted for subnets in the NETWAIT state.

If the subnet is to be started independently from the hypernet, then the NET-TYPE parameter must first be set to a value <4 via MODIFY-SUBMIT-NET. This places the subnet in the WAITING state.

#MODIFY-SUBMIT-NET

Parameters in subnets can be processed when these nets have the net status NETWAIT, WAITING, HOLD or ERROR. A subnet is usually started within a hypernet when executing the structure element with FU=S and TYPE=NET. If necessary, it can also run separately from the hypernet as a normal net. To do this, the NET-TYPE for the subnet must be set to a value < 4.

A NET-TYPE>4 can only be changed to a NET-TYPE<4 via the #MODIFY-SUBMIT-NET operation when the subnet is in the NETWAIT state. The change causes the subnet to be placed in the WAITING state.

If the associated structure element FU=S, TYPE=NET is started later on in the hypernet, then the change will lead to the ERROR state for the structure element since the subnet will not be in the NETWAIT state. The subnet is not controlled by the hypernet.

Notes

- If the subnet is placed in the ENDED (or ABENDED) state separately from the hypernet, then the status can be transported into the hypernet via #RESTART-NET with RESTART-INDEX=ERROR-INDEX.
- If a restart is initiated for the hypernet with RESTART-INDEX>ERROR-INDEX, the SKIPPED status is assigned to the structure element FU=S, TYPE=NET regardless of which status the subnet has or has reached.
- It is only possible to change from a NET-TYPE<4 to a NET-TYPE>4 if the net was planned as a subnet with a hypernet (and is therefore uniquely associated with a hypernet) and if the net is in the WAITING state. The value of NET-TYPE is set to a value > 4 again for the net and the status is set to NETWAIT. This connects the net to the hypernet again and therefore will run under its control.
- The name of the RUN-CONTROL-SYSTEM cannot be changed for hypernets.

Operations in the masks of the NET-CONTROL statement

Mask		CMD	Operation	Follow-up mask	
AVI022	Net list		Marking S / ENTER	AVI023	
		#18	PRINT		
		#21	HOLD-NET	AVnnnn	a
		#22	RESUME-NET		
		#23	CANCEL-NET		
		#24	RESTART-NET		
		#25	START-NET		
		#26	MODIFY-SUBMIT-NET		
		#51	SHOW-JOURNAL		
		#52	SHOW-HISTORY		
		#53	ADD-JOB-LOG		
		#54	SHOW-JOB-LOG		
		#55	START-EXIT		
		#71	VISIBLE			c
AVI023	Net structure	#13	CONTINUE	AVI002	
		#14	RETURN	AVI022	
		#17	DOCUMENT		
		#18	PRINT		
		#19	JOBLOG		e
		#2n	NET operations	AVnnnn	b
		#3n	JOB/subnet operations		
		#4n	CONDITION operations		
		#5n	JOURNAL /LOG operations		
		#7n	BS2000 operations	AVI027 AVI028 AVI029 AVI037 AVI079	

Mask		CMD	Operation	Follow-up mask	
AVI023	FU=J,P/STD,MOD,EXT		Marking S / ENTER	AVI003	f
	FU=F/TRA			AVI026	
	FU=C/JVA			AVI004	
	FU=C/NET,JOB,RES,VAL			AVI007	
	FU=A,M,D,RES,VAL			AVI008	
	FU=D/NET,JOB			AVI009	
	FU=W/TIM			AVI010	
	FU=S/NET			AVI023	
AVI003	FU=J,P/STD,MOD,EXT	#19	JOBLOG		e
		#31	MODIFY-SUBMIT-JOB		d
		#32	SHOW-SUBMIT-JOB		
		#52	SHOW-HISTORY		
		#72	BS2INFO	AVI027	g
		#73	CANCEL		
		#77	THOLD		
		#78	URESUME		
		#75	XINFJOB	AVI029	
		#76	YINFPROG		
AVI026	FU=F/TRA	#52	SHOW-HISTORY		
		#72	BS2INFO	AVI037	
		#73	CANCEL		
AVI004	FU=C/JVA	#72	BS2INFO	AVI028	
		#74	WRITEJV	AVI028	

Mask		CMD	Operation	Follow-up mask	
AVI007	FU=C/NET,JOB,RES,VAL	#41	ADD-CONDITION-DESC		h
		#42	MODIFY-CONDITION-DESC		
		#43	SHOW-CONDITION-DESC		
		#44	SHOW-NET-STATUS		i
AVI008	FU=A,M,D/RES,VAL	#26	MODIFY-SUBMIT-NET		
AVI009	FU=D/NET,JOB	#26	MODIFY-SUBMIT-NET		
AVI010	FU=W/TIM	#26	MODIFY-SUBMIT-NET		
AVI027	FU=J,P/STD,MOD	#72	BS2INFO		
AVI029		#73	CANCEL		
AVI079		#75	XINFJOB		
		#76	YINFPROG		
		#77	THOLD		
		#78	URESUME		
		#79	OUTSYS		
AVI037	FU=F/TRA	#72	BS2INFO		
		#73	CANCEL		
AVI028	FU=C/JVA	#72	BS2INFO		
		#74	WRITEJV		

Where:

- a) Marking with Y if operations #2n can be performed without changing the parameters.
Otherwise: Marking with S; AVAS branches to the mask which is assigned to the operation.
- b) Marking with S; AVAS branches to the mask which is assigned to the operation.
- c) On all masks under NET-CONTROL
- d) Not when TYPE=EXT
- e) For executed jobs with the status: ENDED, ERROR, ABENDED

- f) Branch to the masks of the relevant structure element. The following operations are possible on these masks:
 - #13 / CONTINUE
 - #14 / RETURN
 - #17 / DOCUMENT
 - #18 / PRINT
 - #26 / MODIFY-SUBMIT-NET
 - #55 / START-EXIT
- g) When FU=J,P/STD,MOD, C/JVA and F/TRA
- h) When FU=C / RES, VAL
- i) When FU=C / NET in CONDWAIT status

For information on the operations, please also refer to the [section “Working with masks” on page 31](#).

If an operation (AVAS statement) is not permitted for a net or a structure element, an error message is output via the relevant mask of the NET-CONTROL statement.

Additional S marks are processed after entry of a permissible operation for the net or structure element marked with S.

A line containing the assignment of the operation numbers to the operations is displayed on the masks AVI022 (selected nets) and AVI023 (net structure). A number group or an overview of the number groups is displayed.

Selection is performed by entering the number group (1, 2, 3, 4, 5, 6 or 7) in the field below the mark column. + and – can be used to page through the number groups. Entering 0 and any other input causes the overview of the number groups to be displayed.

Displaying the net overview mask AVI022

The marks + and – are not processed for CMD:IGNORE. A new overview of the current status values of the nets is obtained, and the net table is displayed from the beginning.

Displaying the structure overview mask AVI023

The marks + and – are not processed for CMD:IGNORE. The overview of the structure elements with the current status values is obtained and, depending on the processing status of the structure element JOB-STATUS or COND-STATUS, positioning performed (display of the processing situation).

Paging operations can not be used to obtain the current status of the nets.

Obtaining current status of the nets

IGNORE or ENTER enables the current status of the nets or of all structure elements in a net to be obtained again at all levels.

At structure level (mask AVI023), IGNORE displays the section of the net which is being processed.

Functions on active BS2000 jobs and FT requests

The following functions are offered for active BS2000 jobs and FT requests in mask AVI023 and the parameter masks of the structure elements with FU=J/P/F (AVI003 and AVI026):

- Displaying information about active BS2000 jobs using the SHOW-JOB-STATUS command or about FT requests using the SHOW-FILE-TRANSFER command
- Aborting an active BS2000 job directly in the system using the CANCEL-JOB or CANCEL-FILE-TRANSFER command

To do this a structure element FU=J/P in the RUNNING state is marked and mask AVI003 is branched to using the ENTER key. Here the functions are called using #CMD:

#72 BS2INFO (SHOW-JOB-STATUS or SHOW-FILE-TRANSFER command)
#73 CANCEL (CANCEL-JOB or CANCEL-FILE-TRANSFER command)
#74 WRITEJV (MODIFY-JV command)
#75 XINFJOB (INFORM-JOB command)
#76 YINFPROG (INFORM-PROG command)
#77 THOLD (HOLD-TASK command)
#78 RESUME (RESUME-TASK command)
#79 OUTSYS (display SYSOUT file)

In the case of FU=F structure elements, mask AVI026 is branched to; operations #72 and #73 are possible from this mask.

With #72 the BS2000 job information is output in mask AVI027 or AVI037.

Operations #73, #75, #76, #77, #78 and #79 can then be called directly in mask AVI027 or AVI037 (only #73).

Authorization for the CANCEL operation is coupled with the break authorization which is assigned in generation file AVAS.USER.GENPAR when the users are defined (see the manual "AVAS for the Administrator" [2]).

Operations #72, #73 (for jobs and FT requests) and #75, #76, #77, #78 and #79 (for jobs) can be executed only if the following conditions are satisfied at the same time:

- The job or FT request is in the RUNNING status and is active from the BS2000 viewpoint.
- From the BS2000 viewpoint, the BS2000 task or FT request concerned can be accessed from the AVAS dialog process. The ID of the run control system (as caller of the ENTER-JOB/PROC command) and the ID under which the task runs have access to BS2000 tasks. Only the ID of the run control system (as caller of the TRANSFER-FILE command) has access to FT requests.

The conditions apply for the local host and for working with the MSCF network. In the case of #79, access to BS2000 servers is also possible.

Authorization for executing commands #75, #76, #77 and #78

The jobs started by the run control file generally do not run under the user ID of an AVAS dialog task. Consequently a dialog task has no authorization to issue the BS2000 commands /INFORM-JOB, /INFORM-PROGRAM, /HOLD-TASK and /RESUME-TASK for the jobs (or the corresponding tasks).

The group syntax file SYSSDF.AVAS.085.GROUP supplied enables selected users to be assigned the right to issue the BS2000 commands /INFORM-JOB, /INFORM-PROGRAM, /HOLD-TASK and /RESUME-TASK via the AVAS command NET-CONTROL.

To do this, proceed as follows:

1. Assign the group syntax file to selected user IDs:

```
/MODIFY-USER-ATTRIBUTES USER-IDENTIFICATION=AVAS,PROFILE-ID=AVAS
```

The profile ID is freely selectable. The command must be entered for all required user IDs.

2. Set the file attributes of the syntax file to MODE SPECIAL:

```
/MOD-FILE-ATTR FILE-NAME=SYSSDF.AVAS.085.GROUP,
PROTECTION=*PARAMETERS(USER-ACCESS=*SPECIAL)
```

3. Activate the group syntax file:

```
/MOD-SDF-PAR SYNTAX-FILE-TYPE=*GROUP(NAME=SYSSDF.AVAS.085.GROUP,
PROFILE-ID=AVAS)
```

Displaying the SYSOUT files of the jobs of a net

The OUTSYS operation (#79) can be used in masks AVI023, AVI003, AVI027 and AVI029 to display the SYSOUT file for a job in EDT. The operation is only permitted for structure elements (function J or P) with the status RUN.

The OUTSYS operation calls mask AVI079. In this mask you can specify how many pages of the SYSOUT file (from the start of the file) are to be loaded into the EDT work area.

After the mask has been sent (ENTER) or the EXECUTE operation, the selected part of the SYSOUT file is read into EDT and displayed.

Displaying the job logs of a net

The JOBLLOG operation can be used in masks AVI023 and AVI003 to display the log data for a job via EDT. The operation is only permitted for structure elements (function J or P) with the status ENDED or ERROR.

If the job was executed more than once by means of RESTART, the log for the last run is always displayed.

If AVAS processed several logs in one job, all the logs are displayed.

The operation #SHOW-JOB-LOG (#54) must be used to display other logs or a specific job log.

Displaying the HISTORY data for nets and jobs

Operation #52 (SHOW-HISTORY) is permitted for all nets and jobs.

The HISTORY data for one *net* is displayed

- if a net is marked with S on mask AVI022 and operation #52 is entered, or
- if operation #52 is entered in the CMD field on mask AVI023 without marks.

The HISTORY data of a *job* is displayed

- if a job is marked with S on mask AVI023 and operation #52 is entered, or
- if operation #52 is entered in the CMD field on mask AVI003 (FU=J,P) without marks.

Generating lists

The PRINT operation can be used to generate the following list for NET-CONTROL:

- an overview of all the nets obtained via the parameters with the net status (list AVL020 for PRINT on mask AVI022)
- a list of the net parameters of a net (list AVL021 for PRINT on mask AVI002)
- a list of the parameters of a job or S procedure (list AVL022 for PRINT on mask AVI003)
- a list of the parameters of an FT request (list AVL026 for PRINT on mask AVI026)
- a list of the parameters of a condition (list AVL023 for PRINT on masks AVI004, AVI007, AVI008, AVI009 and AVI010)
- a list of the parameters of a subnet start (list AVL025 for PRINT on mask AVI025) and
- a list of the net structure with the status of the structure elements (list AVL024 for PRINT on mask AVI023)

If a branch to an AVAS statement for which the PRINT operation is permitted is effected by means of the operation assigned to this statement, the lists described there can also be generated.

All lists are output in the SAM file specified via mask AVS015.

Displaying the documentation

The following documentation on released nets can be displayed for the NET-CONTROL statement with the DOCUMENT operation. The relevant current documentation element is displayed in the masks.

- Net documentation
 - Mask AVI002 (net parameters)
 - Mask AVI023 (net structure)
 - Mask AVI025 (parameter for starting a subnet)
- Job documentation
 - Mask AVI003 (job and S procedure parameters)
- FT request documentation
 - Mask AVI026 (FT parameter)

- Condition documentation
 - Mask AVI004 (condition parameter)
 - Mask AVI007 (condition parameter)
 - Mask AVI008 (condition parameter)
 - Mask AVI009 (condition parameter)
 - Mask AVI010 (condition parameter)

If the AVAS administrator has predefined an EDT procedure, the user can start this procedure with the statement @do n (n = number of the working file which can be obtained from the AVAS administrator).

If a net is selected with NET-CONTROL and the net is being processed by the run control system at exactly the same time as display takes place, an obsolete value may be displayed as the net status (example: a structure element has the status RUNNING, the net, however, still has the status WAITING).

NET-CONTROL

```
[NET-NAME=[$ug_ ]netname]
[.OBJECT=NET / STR]
[.PERIOD-NAME=period / (dd.mm.yy [/hh:mm:ss][,dd.mm.yy [/hh:mm:ss]])]
[.NET-STATUS=ABENDED / ENDED / ERROR / HOLD / RUNNING / WAITING / CONDWAIT /
  RESTARTED / RESUMED / OPWAIT / START / SHIFTED / MODIFIED / IGNORED / HOSTWAIT]
[.RUN-CONTROL-SYSTEM=*STD / avak]
[.DISPLAY=YES / NO]
```

NET-NAME=

Name of a net in the run control file

NET-NAME=\$ug_

Name of the user group

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of the net

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the specified user group are displayed.

OBJECT=

Selects the net to be displayed

The parameter is only permitted with a fully qualified net name.

OBJECT=NET

The net parameters are to be displayed.

The mask AVI022 is presented.

OBJECT=STR

The net structure is to be displayed.

The mask AVI023 is presented.

PERIOD-NAME=

Specifies a period (time span)

All the nets whose start time EARLIEST-START falls within this period are to be displayed.

The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period

PERIOD-NAME=(dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)

Specification of the real date and time, which determine the start and end date and time for the period.

If the "right" period limit is missing, the end date is set to the start date and the end time to 23:59. The default value for the start time is 00:00.

NET-STATUS=

Status of the nets to be displayed

NET-STATUS=ABENDED

The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.

NET-STATUS=ENDED

The net was terminated normally.

NET-STATUS=ERROR

The net was interrupted because a structure element terminated abnormally or CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.

NET-STATUS=HOLD

Net processing was interrupted. The net may resume processing via RESUME-NET.

NET-STATUS=RUNNING

The net is currently being processed.

NET-STATUS=WAITING

The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).

NET-STATUS=CONDWAIT

The net is waiting for a condition to be satisfied. No task is running at present.

NET-STATUS=RESTARTED

A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.

NET-STATUS=RESUMED

The HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.

NET-STATUS=OPWAIT

The net is waiting to be started by the operator.

NET-STATUS=START

The net was started by the operator.

NET-STATUS=SHIFTED

The net was moved to another run control system.

NET-STATUS=MODIFIED

- Structure elements were deleted when the net was released, or
- the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or
- a restart was initiated for the net, or
- the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

NET-STATUS=IGNORED

During processing of the net, the value of LATEST-START was reached, and the NET-DELAY-SOLUTION parameter had the value IGNORE.

If a NET-STATUS operand is specified, those nets will also be displayed whose next expected status (CALLED FOR) corresponds to the value specified in NET-STATUS operand.

If NET-STATUS is left unspecified, all nets selected via the other operands will be displayed.

NET-STATUS=HOSTWAIT

The net is waiting for a host in the HIPLEX MSCF network or for a server. No task is running at present.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- The standard run control system of the user group is used immediately after SIGNON.
- If the user may employ all run control systems defined in the system (see `avak-use` parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
- If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of the run control system.

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

DISPLAY=

Selects structure elements from the net description to be displayed in mask AVI023.

This operand permits the display of structure elements which have the status NO-PLAN, NO-SUBMIT and DELETED to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand. The operand has no effect on the display in mask AVD005.

DISPLAY=YES

Structure elements with the status NO-PLAN, NO-SUBMIT and DELETED are displayed.

DISPLAY=NO

Structure elements with the status NO-PLAN, NO-SUBMIT and DELETED are not displayed.

Note

Depending on the setting of the generation parameter HYPERNET-COLOUR, hypernets are color-highlighted in the overview.

IND/OBJ	Input parameter This is only processed in conjunction with the S mark {index / NET / <u>STR</u> }
index	Causes an overview of structure elements to be displayed as of the specified index level.
NET	Causes the net parameters to be displayed.
<u>STR</u>	Causes the display of an overview of the structure elements from the first index level upwards.
NET-STATUS/CALLED FOR	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.
RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.

RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.
RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or for a server. No jobs are running at present.
RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system.
Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it.
The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network or for a server.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, or – the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

FROM-DATE	<p>Input/output parameter Start value of a period</p> <p>The default values are PERIOD-START-DATE and PERIOD-START-TIME if a net group was selected via PERIOD-NAME. Entries can also be made in the FROM-DATE and TO-DATE fields even if the PERIOD-NAME operand was not used. The period boundary may be modified, but it must lie within the period together with TO-DATE. This causes the processing window to be shifted. dd.mm.yyyy[/hh:mm:ss]</p>
-----------	--

TO-DATE Input/output parameter
 End value of a period
 The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise same as FROM-DATE).

The next line provides information about the assignment of the operations to the two-digit numbers.

The element to be processed can be selected in the first field (input/output); the assignments are shown after this field:

- 1 General operations
 11=EXEC, 12=SAVE, 13=CONT, 14=RET, 15=IGN, 16=CHECK, 17=DOC, 18=PRINT, 19=JOBLOG
- 2 NET operations
 21=HOLD-NET, 22=RESUME-NET, 23=CANCEL-NET, 24=RESTART-NET, 25=START-NET, 26=MODIFY-SUBMIT-NET
- 3 JOB operations
 31=MODIFY-SUBMIT-JOB, 32=SHOW-SUBMIT-JOB
- 4 CONDITION operations
 41=ADD-COND, 42=MODIFY-COND, 43=SHOW-COND, 44=SHOW-NET-STATUS
- 5 JOURNAL/LOG operations
 51=SHOW-JOURNAL, 52=SHOW-HISTORY, 53=ADD-JOB-LOG, 54=SHOW-JOB-LOG, 55=START-EXIT
- 7 Operations on BS2000 objects
 71=VISIBLE, 72=BS2INFO (SHOW-JOB-STATUS/SHOW-FILE-TRANSFER), 73=CANCEL (CANCEL-JOB/CANCEL-FILE-TRANSFER), 74=WRITEJV (MODIFY-JV), 75=XINFJOB (INFORM-JOB), 76=YINFPROG (INFORM-75), 77=THOLD (HOLD-TASK), 78=URESUME (RESUME-TASK), 79=OUTSYS (display SYSOUT file)
- 0 Display of the element groups
 1=GENERAL, 2=NET, 3=JOB, 4=CONDITION, 5=JOURNAL/JOB-LOG

Notes

- If IGNORE is entered in the AVI022 mask, the current status of net processing is displayed under NET-STATUS.
- If IND/OBJ=NET is entered, mask AVI002 is presented when a net is marked and EXECUTE entered.
- If IND/OBJ=STR is entered, AVAS branches to mask AVI023 when a net is marked and EXECUTE entered.

The PRINT operation can be used to output a list of the selected nets. The list is output in the format of list AVL020.

AVI002 – Display the net parameters

```

AVAS-Vnn.yxm/AVI002      S H O W - N E T - S T A T U S      tt.mm.jjjj/hh:mm:ss
                          NET-PARAMETER
NET-NAME=.....          NET-STATUS=.....
NET-TEXT=.....
.....

EARLIEST-START=...../.....  SUBMIT-TIME =...../.....
LATEST-START =...../.....  NET-START =...../.....
NET-DELAY-SOLUTION =START  STARTED-INDEX=...

RUN-CONTROL-SYSTEM =.....

NET-TYPE      =
NET-CAT      =.....
NET-USER     =.....
NET-CLASS    =.....          NET-ACCOUNT =.....
                                NET-LOG      =.....

NET-PARAMETER=.....
.....

CMD:..... OPR:RUN-CONTROL-SYSTEM=.....
MSG:.....

```

NET-NAME	Output parameter Name of the net The specified or marked net name is displayed. \$ug_netname_yymmdd_hhmmss
NET-STATUS	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.

ENDED	The net was terminated normally.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network. No jobs are running at present.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution.
NETWAIT	The subnet is waiting for the start by the hypernet.
OPWAIT	The net is waiting for entry of the START-NET statement.
RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
RUNNING	The net is currently being processed.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.

RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it.
The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.

HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network or for a server.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, or – the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.
If three status information items are displayed for a net, the status display may be truncated.	
NET-TEXT	Output parameter Brief description of the net.
EARLIEST-START	Output parameter Prospective start time of the net. Either the time is shown in the format hh:mm:ss or the *BY-HYP value if the start time of the subnet is linked to execution of the hypernet. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP
SUBMIT-TIME	Output parameter Point in time at which the net was released for production (SUBMIT-NET).
LATEST-START	Output parameter Latest point in time at which the net may be started. dd.mm.yy/hh:mm:ss
NET-START	Output parameter Real start time of the net if processing has already begun. dd.mm.yy[/hh:mm:ss]
NET-DELAY-SOLUTION	Output parameter Actions to be taken in case of an untimely net start. {WAIT | START | IGNORE | CANCEL}
WAIT	The net is to continue waiting.
START	The net is to be started.
IGNORE	The net is not started. If other nets or tasks are dependent on this net, these dependencies are regarded as resolved.
CANCEL	The net is not started and is regarded as having terminated abnormally.

STARTED-INDEX	Output parameter Lowest index started, if the net is currently being processed.
RUN-CONTROL-SYSTEM	Output parameter Name of the run control system which is to control processing of the net.
NET-TYPE	Output parameter This specifies how to serialize the processing of nets with the same name but different start times. {1 | 2 | 3}
1	The net is started, regardless of whether a net of the same name is or was being processed.
2	The net is not started as long as a net of the same name is running. If two or more like-named nets of a type other than 1 are waiting to start, the net with the earliest PLAN-START time is started first.
3	The net is started only if no net of the same name has been brought to execution since the last reorganization.
NET-CAT	Output parameter {'catid' / '*ANY' / (bs2000-servername)} Parameter for job distribution within a HIPLEX MSCF network (Multi System Control Facility) or on a remote BS2000 system
'catid'	For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.
'*ANY'	If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.
(bs2000-servername)	For a job on a remote BS2000 system a BS2000 server name must be specified which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).
NET-USER	Output parameter Default value for all USER parameters of all the tasks in the net.

NET-ACCOUNT	Output parameter Default value for the JOB-ACCOUNT parameter of all the tasks in the net.
NET-CLASS	Output parameter Default value for the JOB-CLASS parameter of all the tasks in the net.
NET-LOG	Output parameter Default value for the LOG parameter of all the tasks in the net.
NET-PARAMETER	Output parameter Default value for the JOB-PARAMETER parameter of all the tasks in the net.

CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
ENDED	The net was terminated normally.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or for a server. No jobs are running at present.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution.
NETWAIT	The subnet is waiting for the start by the hypernet.
OPWAIT	The net is waiting for entry of the START-NET statement.
RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
RUNNING	The net is currently being processed.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.

RUNNING/CANCEL

Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.

RUNNING/CONDWAIT

At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.

RUNNING/ERROR

At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET

RUNNING/HOLD Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.

RUNNING/RESTARTED

At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.

SHIFTED

The net was moved to another RUN-CONTROL-SYSTEM.

START

An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.

WAITING

The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.

3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it.

The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network or for a server.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, or – the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

NET-TEXT	Output parameter Brief description of the net, which can be up to 120 characters long
M	Input parameter
S (Select)	<p>A structure element of the net description is selected for display. The corresponding mask is presented with the parameters to be displayed (EXECUTE operation).</p> <p>The JOBLLOG operation displays the log for the selected structure element via EDT. In this case, the S mark may only be used for structure elements with the function J or P and a status of ENDED or ERROR.</p> <p>If an incorrect element is marked or no log can be displayed, the appropriate mask for the marked structure element is output with a message. Processing can be continued through the CONTINUE operation.</p>
IND	Output parameter Index of the structure element

FU	Output parameter Function of the structure element
TYPE	Output parameter Type of the structure element
NAME	Output parameter Name of the structure element
STATUS	Output parameter Processing status of the structure element.

Processing statuses of jobs (FU=J, P):

ENDED	The task terminated normally.
ERROR	The task terminated abnormally.
ERROR-CAT	The task terminated abnormally because access to the other processor is disrupted.
ERROR-COM	The task terminated abnormally because communication with the server system failed during processing.
IGNORED	The task was not submitted for execution, due to its LATEST-START being passed.
RUNNING	The task is being processed. From the point of view of BS2000 it is considered to have the status RUNNING (\$R).
RUNNING/\$S	The task is being processed. However, from the point of view of BS2000 it is still in the task queue, and has not yet been started.
SKIPPED	The task has not been processed. It was skipped during the restart.
WAITING	The task has not yet been started.

Processing statuses of FT requests (FU=F):

ENDED	The request terminated normally.
ERROR	The request terminated abnormally.
IGNORED	The request was not executed due to a timeout (LATEST-START).
RUNNING	The request is currently being processed. From the point of view of BS2000 it has the status RUNNING (\$R).
RUNNING/\$S	The request is currently being processed. However, from the point of view of BS2000 it is still in the task queue and has not been started yet.
SKIPPED	The request has not been processed. It was skipped during the restart.
WAITING	The request has not been started yet.

Processing statuses of conditions (FU=C, W):

ERROR	The event has been given an error status.
IGNORED	The event was not checked, due to its LATEST-OCCURE time having been passed. This status is not used for FU=W.
NO-OCC/DEL	The event has not occurred and the structure element was deleted.
NO-OCCURE	The event has not occurred.
OCCURRED	The event has occurred.
SKIPPED	The event has not occurred. It was skipped during the restart.
WAITING	The condition description has not yet been processed.

Processing statuses of start tasks(FU=S):

ENDED	The subnet was terminated normally.
ERROR	The task was terminated abnormally, the subnet was not in the NETWAIT state at the time of the start or the subnet was not started due to DELAY-SOLUTION=CANCEL for the structure element FU=S with TYPE=NET. A restart must be initiated for the hypernet.
HOLD	An interruption of processed was requested for the structure element to start a subnet. If processing is to be resumed, then the hypernet must be processed with the #RESUME-NET operation.
IGNORED	The subnet was not started because a time limit was exceeded (LATEST-START for the subnet).
RUNNING	The task is being processed. The subnet was started via the hypernet and runs under the control of the hypernet until the ENDED or ABENDED state is reached.
RUN/ERR	The subnet is in the ERROR state. A restart must be initiated for this subnet.
RUN/HOLD	The subnet is in the HOLD state. It must be started with the #RESUME-NET operation.
RUN/HOSTW	The subnet is in the HOSTWAIT state. The subnet will be started as soon as the server is available again.
RUN/NO-OCC	The subnet is in the CONDWAIT state. There is a structure element in the NO-OCCURE state in this subnet.
RUNNING/\$S	The task is being processed. The subnet is still in the WAITING state and has not been started yet. Possible causes: <ul style="list-style-type: none"> – The EARLIEST-START start time has not been reached yet. – The run control system that controls the execution of the subnet is not loaded yet or was not active yet.
SKIPPED	The task has not been processed yet since it was skipped during the restart. The status of the subnet is indeterminate since the subnet may have been started already. The subnet must be placed in the ENDED or ABENDED state independently from the hypernet by the user.
WAITING	The task has not been started yet.

Processing statuses of structure elements for processing condition descriptions (FU=A, M, D):

ERROR	An error occurred while the condition description was being processed.
EXECUTED	The condition description has been processed.
SKIPPED	Processing of the condition description was skipped during the restart.
WAITING	The condition description was not processed.

Processing statuses of structure elements, general

CREATED	The structure element is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.
DELETED	The structure element has been deleted by a MODIFY-SUBMIT-NET statement.
HOLD	A suspension of processing has been requested for this structure element. <i>Note</i> The HOLD status is only displayed if no status other than WAITING is yet recorded for the processing status of the structure element. The WAITING status is the only status preempted in the display by a HOLD status.
NO-PLAN	The structure element has not been planned with the CREATE-PLAN-NET statement.
NO-SUBMIT	The structure element has been deleted by a SUBMIT-NET or REPEAT-NET statement.
SYN-IND	Output parameter Index level with which the structure element is to be synchronized.
RESTART-IND V1 V2 V3	Output parameter Index levels where processing can restart in the event of an error.

The next line provides information about the assignment of the operations to the two-digit numbers.

The element to be processed can be selected in the first field (input/output); the assignments are shown after this field:

- 1 General operations
11=EXEC, 12=SAVE, 13=CONT, 14=RET, 15=IGN, 16=CHECK, 17=DOC, 18=PRINT, 19=JOBLOG
- 2 NET operations
21=HOLD-NET, 22=RESUME-NET, 23=CANCEL-NET, 24=RESTART-NET, 25=START-NET, 26=MODIFY-SUBMIT-NET
- 3 JOB operations
31=MODIFY-SUBMIT-JOB, 32=SHOW-SUBMIT-JOB
- 4 CONDITION operations
41=ADD-COND, 42=MODIFY-COND, 43=SHOW-COND, 44=SHOW-NET-STATUS
- 5 JOURNAL/LOG operations
51=SHOW-JOURNAL, 52=SHOW-HISTORY, 53=ADD-JOB-LOG, 54=SHOW-JOB-LOG, 55=START-EXIT
- 7 Operations on BS2000 objects
71=VISIBLE, 72=BS2INFO (SHOW-JOB-STATUS/SHOW-FILE-TRANSFER), 73=CANCEL (CANCEL-JOB/CANCEL-FILE-TRANSFER), 74=WRITEJV (MODIFY-JV), 75=XINFJOB (INFORM-JOB), 76=YINFPROG (INFORM-PROGRAM), 77=THOLD (HOLD-TASK), 78=URESUME (RESUME-TASK), 79=OUTSYS (display SYSOUT file)
- 0 Display of the element groups
1=GENERAL, 2=NET, 3=JOB, 4=CONDITION, 5=JOURNAL/JOB-LOG

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL024.

Operation #52 (SHOW-HISTORY)

Operation #52 (SHOW-HISTORY) displays the compressed record of the currently displayed or marked element (net or job) from the HISTORY file.

The compressed data for a net or job is displayed in mask AVI035.

Operation #52 (SHOW-HISTORY) is not currently available as an independent command.

AVI035 – Display the compressed data of a job

```

AVAS-Vnn.yxmn/AVI035                SHOW-HISTORY                tt.mm.jjjj/hh:mm:ss
                                     HISTORY-PARAMETER

RECORD-KEY =./...
USER-GROUP =..... NET-NAME=.....
SYMDAT-NAME=.....
FUNCTION =.      INDEX =...      JOB-NAME=.....

LAST-START-TIME =.....
LAST-END-TIME   =.....

LAST-RUN-TIME   =.....
MEAN-RUN-TIME   =.....      NUMBER-OF-RUN           =.....
MIN.-RUN-TIME   =.....      MEAN-NUMBER-OF-ERROR=.....
MAX.-RUN-TIME   =.....
RANGE           =.....      STANDARD-DEVIATION  =.....

MEAN-ERROR-TIME =.....      MAX.-ERROR-TIME     =.....
MEAN-RUN-TIME (JOB) =.....    MAX.-RUN-TIME (JOB) =.....
MEAN-WAIT-TIME (COND)=.....    MAX.-WAIT-TIME (COND)=.....

CMD: .....      OPR: .....
.....
MSG: .....
    
```

RECORD-KEY	Output parameter Record key of the compressed record
01/SUM	Compressed record of the execution of a net taking the symbolic start date into consideration.
02/SUM	Compressed record of the execution of a job under a net taking the symbolic start date into consideration.
USER-GROUP	Output parameter User group of the net
NET-NAME	Output parameter Name of the net without the user group
SYMDAT-NAME	Output parameter Symbolic start date of the net

FUNCTION	Output parameter Function
N (Net)	Data relating to the execution of a net
J (BS2000 job)	Data relating to the execution of a BS2000 job
P (Procedure)	Data relating to the execution of a S procedure
F (File Transfer)	Data relating to the execution of an FT request
INDEX	Output parameter Index of the job (only for FUNCTION J, P, F)
JOB-NAME	Output parameter Name of the job (only for FUNCTION J, P, F)
LAST-START-TIME	Output parameter dd.mm.yyyy-hh:mm:ss Last start time of a job with the same name, symbolic start date, function and index
LAST-END-TIME	Output parameter dd.mm.yyyy-hh:mm:ss Last end time of a job with the same name, symbolic start date, function and index
LAST-RUN-TIME	Output parameter hh:mm:ss Last runtime of a job with the same name, symbolic start date, function and index
MEAN-RUN-TIME	Output parameter hh:mm:ss Mean runtime (t_{mean}) of the job with the same name, symbolic start date, function and index. The mean runtime is calculated using, at most, the last 64 runs according to the following formula:
	$t_{mean} = \frac{1}{n} \sum_{i=1, n} t_i$
NUMBER-OF-RUN	Output parameter nnnn Number of runs stored

MIN-RUN-TIME Output parameter
 hhh:mm:ss
 Shortest runtime of a job with the same name, symbolic start date, function and index within, at most, the last 64 runs.

MEAN-NUMBER OF ERROR

Output parameter
 nnn,nn
 Mean number of errors (E_{mean}) during, at most, the last 64 runs. The mean number of errors is calculated using, at most, the last 64 runs according to the following formula:

$$E_{mean} = \frac{1}{n} \sum_{i=1, n} E_i$$

MAX-RUN-TIME Output parameter
 hhh:mm:ss
 Longest runtime of a job with the same name, symbolic start date, function and index within, at most, the last 64 runs.

RANGE Output parameter
 hhh:mm:ss
 Range of the runtime of a job with the same name, symbolic start date, function and index within, at most, the last 64 runs. The range is calculated using the following formula:

$$r = t_{max} - t_{min}$$

STANDARD-DEVIATION

Output parameter
 hhh:mm:ss
 Standard deviation(s) of the runtime of the job with the same name, symbolic start date, function and index. The standard deviation is calculated using, at most, the last 64 runs according to the following formula:

$$s = \sqrt{\frac{1}{n} \sum_{i=1, n} (t_i - t_{mean})^2}$$

MEAN-ERROR-TIME Output parameter
 hhh:mm:ss
 Mean wait time with the status ERROR (tE_{mean}) after errors during, at most, the last 64 runs. The mean wait time is calculated using, at most, the last 64 runs according to the following formula:

$$tE_{mean} = \frac{1}{n} \sum_{i=1, n} \frac{tE_i}{mE_i}$$

MAX-ERROR-TIME Output parameter
 hhh:mm:ss
 Maximum wait time with the status ERROR after errors during, at most, the last 64 runs

MEAN-RUN-TIME(JOB)
 Output parameter
 hhh:mm:ss
 Mean runtime of all jobs (tR_{mean}) of the run with the same name, symbolic start date, function and index. The mean runtime is calculated using, at most, the last 64 runs according to the following formula:

$$tR_{mittel} = \frac{1}{n} \sum_{i=1, n} tR_i$$

MAX-RUN-TIME(JOB)
 Output parameter
 hhh:mm:ss
 Longest runtime of all jobs of a run with the same name, symbolic start date, function and index during, at most, the last 64 runs.

MEAN-WAIT-TIME(COND)
 Output parameter
 hhh:mm:ss
 Mean wait time with the status COND-WAIT (tW_{mean}) during, at most, the last 64 runs. The mean wait time is calculated using, at most, the last 64 runs according to the following formula:

$$tW_{mean} = \frac{1}{n} \sum_{i=1, n} tW_i$$

MAX-WAIT-TIME(COND)

Output parameter

hhh:mm:ss

Maximum wait time with the status COND-WAIT after errors during, at most, the last 64 runs

Notes

- All times (runtimes, wait times, etc.) are calculated using the timestamps of the journal records. The AVAS run control system issues these timestamps for:
 - the start and end of nets and jobs,
 - the time involved in waiting for a condition to be satisfied and
 - the time at which a condition is satisfied.
- At present only the values from BS2000 are collected for the job variables.

Operation #72 (BS2INFO) for structure element FU=J, P

With structure element FU=J, P the status information from BS2000 can be called in mask AVI023 if the structure element is in the RUNNING state. To do this the structure element is marked with S and operation #72 is then called. The operation is mapped onto the BS2000 command SHOW-JOB-STATUS.

The job's status information is then displayed in AVI027.

Operation #72 can also be called from masks AVI003, AVI028, AVI029 and AVI079.

Further operations on a started job

- Operation #73 (CANCEL) enables the job in BS2000 to be aborted.
- Operation #75 (XINFJOB) enables a message to be sent to the job's SYSOUT.
- Operation #76 (YINFPROG) enables a message to be sent to the job's STXIT routine.
- Operation #77 (THOLD) enables the job in BS2000 to be placed in the wait state.
- Operation #78 (URESUME) enables the wait state for a job in BS2000 to be canceled.
- Operation #79 (OUTSYS) enables the SYSOUT file of the BS2000 job to be displayed in EDT.

The MONJV of the started job is required to display the status information. If the job has already terminated before the call or if the MONJV cannot be accessed, a corresponding return code of the job variable system is displayed.

Specific authorizations are required to execute the BS2000 commands, see [“Authorization for executing commands #75, #76, #77 and #78” on page 765](#).

SYSTEM-INFORMATION

Output parameter

Output information of the BS2000 command SHOW-JOB-STATUS

Operation #72 (BS2INFO) for structure element FU=F

In the case of a structure element FU=F, the status information can be called from BS2000 in mask AVI023 if the structure element has the status RUNNING. To do this the structure element is marked with S and operation #72 is then called. The operation is mapped onto the BS2000 command SHOW-FILE-TRANSFER (see [page 589](#)).

The status information of the job can be displayed in mask AVI037.

Operation #72 can also be called from mask AVI0026.

The ID of the FT request is required to display the status information (TRANSFER-ID). If the ID is not (or no longer) available, a corresponding return code of the openFT system is displayed.

The same authorization is required to execute the BS2000 command as for structure elements FU=J, P.

Further operations on an active FT request

Operation #73 (CANCEL) enables the FT request to be aborted in BS2000 (corresponds to the CANCEL-FILE-TRANSFER command).

SYSTEM-INFORMATION

Output parameter

Output information of the BS2000 command SHOW-FILE-TRANSFER

Operation #72 (BS2INFO) for structure element FU=C/JVA

In mask AVI023 a structure element with FU=C/JVA enables the value of the required job variable to be called from BS2000. To do this the structure element is marked with S and operation #72 is then called. The operation is mapped onto the BS2000 command SHOW-JV.

The value of the job variable is then displayed in mask AVI028.

Operation #72 can also be called from mask AVI004.

The value of the job variable can be modified with operation #74 (WRITEJV).

If the job variable does not exist or the dialog process cannot access it, a corresponding return code of the job variable system is displayed.

The entry in the DISPLAY field controls whether the job variable value is displayed in character or hexadecimal format.

JVA-POSITION	Output parameter Position within the value range of job variables from which the value is to be checked
JVA-LENGTH	Output parameter Length of the job variable value
COND-VALUE	Output parameter Required value in the job variable data area
JVA-VALUE	Input/output parameter Values of the job variable
DISPLAY	Output/input parameter { <u>CHAR</u> / HEXA} Format of the job variables display

Operation #73 (CANCEL)

Structure element FU=J, P, F

In mask AVI023 structure element FU=J, P enables the job started in BS2000 to be aborted. To do this the structure element is marked with S and operation #73 is then called. The operation is mapped onto the BS2000 command CANCEL-JOB.

The job's current status information is displayed in mask AVI027. At the same time the message "AVS5255 CONFIRM CANCEL REQUIREMENT WITH EXECUTE" requests the user to confirm the CANCEL call. EXECUTE is used to start the CANCEL call. The aborted job is assigned the job status ERROR.

Operation #73 can also be called from masks AVI003, AVI029 and AVI079.

AVAS authorization for the CANCEL operation is coupled with the break authorization which is assigned in generation file AVAS.USER.GENPAR when the users are defined (see the manual "AVAS for the Administrator" [2]).

The MONJV of the started job is required to display the status information. If the job has already terminated before the call or if the MONJV cannot be accessed, a corresponding return code of the job variable system is displayed.

Structure elements FU=F are handled in a similar way. The user dialog is conducted via mask AVI037. The CANCEL-FILE-TRANSFER command is issued instead of CANCEL-JOB. The FT request is accessed via the FT request's ID (TRANSFER-ID). If it is not (or no longer) available, a corresponding return code of the openFT system is displayed.

#73 can also be called from mask AVI026 here.

Operation #74 (WRITEJV)

In mask AVI023 the value of the relevant job variable in BS2000 can be modified by a structure element with FU=C/JVA. To do this the structure element is marked with S and operation #74 is then called. The operation is mapped onto the BS2000 command /MODIFY-JV.

The current value of the job variable is then displayed and can be overwritten in mask AVI028. The modified values are written to the job variable with CMD:EXECUTE in BS2000.

Operation #74 can also be called from mask AVI004.

Operation #74 cannot be executed if the dialog task for writing the job variable has no authorization. A corresponding messages is issued in mask AVI028.

The entry in the DISPLAY field controls whether the job variable value is displayed in character or hexadecimal format.

Note

The job variable for COND-JVA is read by the run control system and by the dialog task from which the NET-CONTROL command was called. If the name of the job variable is specified without user ID, reading takes place under the user ID of the run control system or of the dialog task of NET-CONTROL.

To ensure that the run control system and NET-CONTROL do mean the same job variable with #74, either both their user IDs must be identical or the job variable name must be specified with a user ID.

Operation #77 (THOLD)

In mask AVI023 a structure element FU=J, P and the RUNNING state enable the task to be placed in the wait state .

To do this the structure element is marked with S and operation #77 (THOLD) is then called. AVAS maps operation #77 onto the BS2000 command /HOLD-TASK ab.

Operation #76 can also be called from masks AVI003, AVI029 and AVI079 or mask AVI027 itself.

The MONJV of the started job is required to call the command. If the job has already terminated before the call or if the MONJV cannot be accessed, a corresponding return code of the job variable system is displayed.

To permit #77 to be issued successfully in BS2000, the dialog task requires the privilege TSOS or OPERATING.

If the program has in the meantime finished, the message about the rejected command is displayed in mask AVI027.

Operation #78 (URESUME)

In mask AVI023 a structure element FU=J, P and the RUNNING state (state in AVAS) enable the task's wait state to be canceled in BS2000 .

To do this the structure element is marked with S and operation #78 (URESUME) is then called. AVAS maps operation #78 onto the BS2000 command /RESUME-TASK.

Operation #78 can also be called from masks AVI003, AVI029 and AVI079 or mask AVI027 itself.

The MONJV of the started job is required to call the command. If the job has already terminated before the call or if the MONJV cannot be accessed, a corresponding return code of the job variable system is displayed.

To permit #78 to be issued successfully in BS2000, the dialog task requires the privilege TSOS or OPERATING.

If the program has in the meantime finished, the message about the rejected command is displayed in mask AVI027.

Note

Specific authorizations are required to execute the BS2000 commands, see [“Authorization for executing commands #75, #76, #77 and #78” on page 765](#).

Operation #75 (XINFJOB)

In mask AVI023 a structure element FU=J, P in the status RUNNING enables a message to be sent to the started job. The message is written to SYSOUT.

To do this the structure element is marked with S and operation #75 (XINFJOB) is then called. Operation #75 is mapped onto the BS2000 command /INFORM-JOB.

Mask AVI029 is displayed with an input field. After the message text has been entered, CMD:EXECUTE is used to start the call in BS2000.

Operation #75 can also be called from masks AVI003, AVI027 and AVI079 or mask AVI029 itself.

The MONJV of the started job is required to display the status information. If the job has already terminated before the call or if the MONJV cannot be accessed, a corresponding return code of the job variable system is displayed.

To permit #75 to be issued successfully in BS2000, the dialog task requires the privilege TSOS or OPERATING.

If the program has in the meantime finished, the message about the rejected command is displayed in mask AVI029.

Operation #76 (YINFPROG)

In mask AVI023 a structure element FU=J, P in the status RUNNING enables a message to be sent to an STXIT routine of the started program. To do this the structure element is marked with S and operation #76 (YINFPROG) is then called. Operation #76 is mapped onto the BS2000 command /INFORM-PROGRAM.

Mask AVI029 is displayed with an input field. After the message text has been entered, CMD:EXECUTE is used to start the call in BS2000.

Operation #76 can also be called from masks AVI003, AVI027 and AVI079 or mask AVI029 itself.

The MONJV of the started job is required to display the status information. If the job has already terminated before the call or if the MONJV cannot be accessed, a corresponding return code of the job variable system is displayed.

To permit #76 to be issued successfully in BS2000, the dialog task requires one of the privileges STD-PROCESSING, OPERATING, TSOS, HARDWARE-MAINTENANCE, SAT-FILE-EVALUATION, SAT-FILE-MANAGEMENT or SECURITY-ADMINISTRATION.

The command is rejected if the program contains no STXIT routine for this event. If the program has in the meantime finished, the message about the rejected command is displayed in mask AVI027.

AVI029 – Send a message to a started job/program

```

AVAS-Vnn.yxmn/AVI029          N E T - C O N T R O L          tt.mm.jjjj/hh:mm:ss
                                INFORM-JOB

NET-NAME      =.....          NET-STATUS=.....
  NAME        =.....          STATUS=.....
  INDEX       =...           FU=.          TYPE =...

SYSTEM-INFORMATION:
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-----
.....
.....
.....

CMD:.....          OPR:.....
MSG:.....
    
```

INFORM-JOB / INFORM-PROG

- Output parameter
Command issued by AVAS in the system
(/INFORM-JOB or /INFORM-PROGRAM)
- NET-NAME Output parameter
Name of the net to which the job belongs
- NET-STATUS Output parameter
Status of net processing
- NAME Output parameter
Name of the structure element
- STATUS Output parameter
Processing status of the structure element
- INDEX Output parameter
Index of the structure element
- FU Output parameter
Function of the structure element
- TYPE Output parameter
Type of structure element

SYSTEM-INFORMATION

Input/output parameter

Message text for the started job or started program

Output information of the BS2000 command concerned

Operation #79 (OUTSYS)

In mask AVI023 a structure element FU=J, P in the status RUNNING enables the current SYSOUT file to be displayed. To do this the structure element is marked with S and operation #79 (OUTSYS) is then called. Operation #79 initially presents mask AVI079.

In two input fields mask AVI079 offers the option of selecting two subareas of the SYSOUT file. It is possible to specify how many PAM pages are to be displayed from the start of the file and how many from the end of the file.

If the specified sum of these two values is at least as great as the file or at least once the value of the value *ALL (or *AL), all the contents are displayed. In all other cases a separator which displays the number of omitted pages (nnnnnn) is displayed between the two subareas:

```

,
,
'<*AV_> nnnnnn PAGES OMITTED '
,
,
```

When this mask is called, default values which may need to be modified are offered in these fields. The modified values are stored and reused when the mask is called again.

The transfer of the SYSOUT file to AVAS-DIALOG and the call of EDT with the data which is to be displayed are started after ENTER has been entered or by means of CMD:EXECUTE.

Operation #79 can also be called from masks AVI003, AVI027 and AVI029 or mask AVI079 itself.

The MONJV of the started SINCM job is required to display the SYSOUT file of BS2000 server jobs. If the job has already terminated before the call or if the MONJV cannot be accessed, a corresponding return code of the job variable system is displayed.

SYSOUT can be displayed only if a file is assigned. An assigned PLAM library member cannot be displayed.

AVI079 – Display the SYSOUT file of started jobs

```

AVAS-Vnn.yxmn/AVI079          N E T - C O N T R O L          tt.mm.jjjj/hh:mm:ss
                               SHOW-SYSOUT

NET-NAME      =.....          NET-STATUS=.....
NAME          =.....          STATUS=.....
INDEX        =...           FU=.           TYPE =...

SPECIFICATION OF DATA TO BE DISPLAYED

NUMBER OF PAGES FROM TOP OF FILE :    0000
NUMBER OF PAGES UNTIL END OF FILE :    0001

CMD:.....          OPR:.....
MSG:.....
    
```

SHOW-SYSOUT	Output parameter Function requested by AVAS
NET-NAME	Output parameter Name of the net to which the job belongs
NET-STATUS	Output parameter Status of net processing
NAME	Output parameter Name of the structure element
STATUS	Output parameter Processing status of the structure element
INDEX	Output parameter Index of the structure element
FU	Output parameter Function of the structure element
TYPE	Output parameter Type of structure element

NUMBER OF PAGES FROM TOP OF FILE

Input parameter

nnnn/*ALL

Number of PAM pages which are to be displayed from the start of the file. The default value displayed can be modified. The new value is stored and reused.

If the value entered contains blanks, it is filled on the left with 0. The maximum value is 9999.

NUMBER OF PAGES UNTIL END OF FILE

Input parameter

nnnn/*ALL

Number of pages which are to be displayed up to the end of the file. The default value displayed can be modified. The new value is stored and reused.

If the value entered contains blanks, it is filled on the left with 0. The maximum value is 9999.

Notes on the page range displayed

- If both fields contain the value 0 or are deleted, the last page of the SYSOUT file is transferred.
- If *ALL (or *AL) is entered in one of the two fields, the entire file is displayed.

REPEAT-NET – Repeat release of planned net

The REPEAT-NET statement duplicates a planned and already released net (input net) and releases the duplicate for processing. Hypernets cannot be released for processing with REPEAT-NET.

A new scheduled start time is required for the release; this is defined by the input of parameters in the display of the net parameters or the net structure.

The net name of the duplicate intended for processing is derived from the new start time as soon as the function has been completed by specifying SAVE.

In the production plan (NPRLIB), the duplicate is stored under its new name, with the net parameters, thus ensuring there are no gaps in the documentation.

The input net remains unchanged in the production plan. It retains the status SUBMITTED and can be re-used as the input net for REPEAT-NET.

Before REPEAT-NET is called, all the jobs (tasks) required for the first release of the net must be available.

When searching the JMDLIB and JMDSYS for jobs, the same rules apply as for the SUBMIT-NET statement, depending on the TYPE parameter in the net description.

When the SAVE operation is entered, the executable net is transferred from the production plan together with the tasks from the first release and added to the run control file.

Before the new net is saved, individual structure elements can be excluded from processing via the display of the net structure.

All structure elements used to start subnets (FU=S/NET) must be excluded from processing for a hypernet. Nets that were planned as subnets and were released for processing can be processed as normal nets via REPEAT-NET. They are assigned a value < 4 for NET-TYPE.

Only nets with the processing status SUBMITTED in the production plan can be repeatedly released. The newly released net is then given the status REPEATED in the production plan (NPRLIB) and can be displayed only. This release is logged in the journal.

If a catalog (processor) is defined via specification of the name of a job variable with the NET-CAT and/or JOB-CAT parameters, the job variable is read at the time of the net release (AVAS-internal call of the macro GETJV) and the current contents are used as the catalog ID.

Processing at the time of statement execution can be influenced via the AVEX7101 and AVEX7102 computer center exits (see the manual “AVAS for the Administrator” [2]).

If the release is rejected via the AVEX7102 computer center exit, the net is entered in the journal with status NONE.

New release of a net

An individual net can be selected for release by specifying a fully qualified net name or by using the S (Select) mark in the display of a net group.

To release a net again, the NEW-PLAN-START parameter must be specified. The EARLIEST-START, LATEST-START, LIFE-TIME, RUN-CONTROL-SYSTEM, DELAY-SOLUTION and NET-TYPE parameters can be modified.

Unless otherwise specified, NEW-PLAN-START and EARLIEST-START are provided with the current date and time.

With the aid of the OPERATOR-START parameter, it is possible to define whether the net is to be started automatically when the start prerequisites are satisfied, or whether it is to be started explicitly in response to an operator input.

If, when the net is released, individual structure elements are to be excluded from processing, the net structure must be displayed (operand OBJECT=STR) and the individual structure elements must be deleted by means of the D mark.

Nets with missing jobs cannot be released. The structure of the net is displayed to identify the missing tasks (result NOT-FOUND).

The missing tasks must be excluded from processing by means of the D mark, or processing must be aborted via the RETURN operation.

Missing jobs of the net structure are not logged in the journal file, as the net has already been released once.

If the function is completed by SAVE, AVAS checks whether the net name is already in the NPRLIB and, if it is, rejects the input and issues an error message. The NEW-PLAN-START parameter can then be updated in order to release the net by means of SAVE.

If the statement is executed without operands, this will result in an overview of all nets of the assigned user group.

REPEAT-NET

[NET-NAME=[\$ug_]netname]

[,OBJECT=NET / STR]

[,PERIOD-NAME=period / (dd.mm.yy [/hh:mm:ss][,dd.mm.yy [/hh:mm:ss]])]

[,DISPLAY=YES / NO]

NET-NAME=

Name of a net that is to be released again.

NET-NAME=\$ug_

Name of the user group.

Privileged users may specify nets of a foreign user group, also in combination with PERIOD-NAME.

If no user group is specified, the elements of the assigned (own) user group are output.

NET-NAME=netname

Element name of the net in the NPRLIB.

If a fully qualified net name is specified, this net is displayed.

If the net name is fully qualified, the PERIOD-NAME operand is not possible.

If a partially qualified net name is specified (last character *), this results in an overview of the elements whose name begins with the partial qualification.

If no net name is specified, all nets of the specified user group are output.

OBJECT=

Selects the object to be displayed for purposes of updating.

OBJECT=NET

The net data is displayed.

OBJECT=STR

The net structure is displayed.

PERIOD-NAME=

Specifies a period (time span).

Those nets are to be released whose start time EARLIEST-START falls within this period.

The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]])

Specification of the real date and time, which determine the start and end date and time.

If the "right" period limit is missing, the end date is set to the start date and the end time to 23:59.

DISPLAY=

Selection of structure elements from the net description, to be displayed in mask AVF014. This operand permits the display of structure elements which have the status NO-PLAN to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand.

DISPLAY=YES

Structure elements with the status NO-PLAN are displayed.

DISPLAY=NO

Structure elements with the status NO-PLAN are not displayed.

IND/OBJ	Input parameter {index / NET / STR}
index	This is only processed in conjunction with the S mark and results in an overview of the structure elements starting at the specified index level.
NET	The net parameters are to be modified (default value). The default NET is changed to OBJ=STR in the individual display if the function finds, while creating the display, that a task is not present in the corresponding JMDLIBs (result NOT-FOUND in the structure mask).
STR	This is only processed in conjunction with the S mark and results in an overview of the structure elements.
RESULT	Output parameter Acknowledgment of the completed action.
REPEATED	The net has been released.
NO-REPEAT	Release of the net has been rejected.
FROM-DATE	Input parameter Start value of a period dd.mm.yyyy[/hh:mm:ss] The default values are PERIOD-START-DATE and PERIOD-START-TIME, if a net group was selected using PERIOD-NAME, or the EARLIEST-START value of the first net to be selected. The period limit can be modified, but it must lie within the range specified for PERIOD-NAME. If PERIOD-NAME is omitted, FROM-DATE receives the value specified for EARLIEST-START of the first net. If FROM-DATE is deleted by the entry, the default value described above is assumed again.
TO-DATE	Input parameter End value of a period. The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise as for FROM-DATE). If PERIOD-NAME is omitted, TO-DATE is supplied with the EARLIEST-START value from the last net. If TO-DATE is deleted by the entry, the default assignment mentioned above applies again.

AVF012 – Net information for the new net release

```

AVAS-Vnn.yxmln/AVF012          R E P E A T - N E T          tt.mm.jjjj/hh:mm:ss
NET-NAME=.....
NET-TEXT=.....
.....
NET-STATUS          =.....
PLAN-START          =...../.....
NEW-PLAN-START     =...../.....
LATEST-START       =.....
LIFE-TIME          =.....
EARLIEST-START     =...../.....
RUN-CONTROL-SYSTEM=.....          OPERATOR-START=...
NET-DELAY-SOLUTION=.....
NET-TYPE           =.
CMD:.....          OPR:.....
MSG:.....
    
```

- NET-NAME** Output parameter
 Name of the net which is to be released again.
 \$ug_netname_yymmdd_hhmmss
- NET-TEXT** Output parameter
 Brief text describing the net in more detail.
- NET-STATUS** Output parameter
 Processing status of the net in the NPRLIB prior to execution of the function.

SUBMITTED The net has been released.
- PLAN-START** Output parameter
 Start time scheduled for execution of the net.
 dd.mm.yy/hh:mm:ss

NEW-PLAN-START	<p>Input parameter Start time at which the net is to be executed again. dd.mm.yy[/hh:mm:ss]</p> <p>The extent of the net is determined by the net plan for the net specified by the NET-NAME operand. The new net name for subsequent processing is derived from the start time. A net released with this start time cannot be released again. The current date and the current time are set in the parameter field as the default values.</p>
LATEST-START	<p>Input parameter Latest specified start time relative to NEW-PLAN-START {nnn.hh.mm / *nn.hh.mm}</p> <p>nnn.hh.mm Time span, relative to NEW-PLAN-START.</p> <p>*nn.hh.mm Time span relative to NEW-PLAN-START, and absolute time of day.</p>
LIFE-TIME	<p>Input/output parameter This specifies how long the normal termination of the net is to remain valid and detectable. {nnn.hh.mm / *NONE}</p> <p>nnn.hh.mm Time span, relative to NEW-PLAN-START. REPEAT-NET creates a condition description in the run control file.</p> <p>*NONE No condition description is created.</p>
EARLIEST-START	<p>Input parameter A modified start time can be assigned to the net. This modified start time is not part of the net name. dd.mm.yyyy[/hh:mm:ss]</p> <p>If blanks are entered for the start time, the parameter is supplied with the value of NEW-PLAN-START by default. The current date and current time are set in the parameter field as the default values.</p>
RUN-CONTROL-SYSTEM	<p>Input/output parameter The previously defined name of the run control system appears. The name of another run control system can then be assigned to the net.</p> <p><i>Note</i></p> <p>A user who does not have the appropriate authorization can only change the RUN-CONTROL-SYSTEM parameter to the run control system that is assigned to his own user group.</p>

- OPERATOR-START** Input parameter
 This entry determines whether the net can only be started by the operator entering START-NET. Specification of the start time by the net parameters is not checked.
- NO** The net is started using the start times specified in the net parameters. The net has the status WAITING.
- YES** The net must be started by means of the operator entry START-NET. The net has the status OPWAIT.

NET-DELAY-SOLUTION

- Input/output parameter
 This specifies the steps to be taken in the event of an untimely net start.
 {WAIT / START / IGNORE / CANCEL}
- WAIT** The net is to continue to wait.
- START** The net is to be started.
- IGNORE** The net is not to be started. If other nets or jobs are dependent on this net, these dependencies are regarded as resolved.
- CANCEL** The net is not started, and is regarded as having been terminated abnormally.

The parameter takes effect if

- nets are released after LATEST-START has expired (SUBMIT-NET, REPEAT-NET)
- nets are in the HOLD state during the period between EARLIEST-START and LATEST-START
- the run control system is not active during the period between EARLIEST-START and LATEST-START
- two or more nets with the same name and with NET-TYPE=2 or 3 are released, but cannot be started within the period delimited by LATEST-START and PLAN-START.

Once LATEST-START has expired, the net status is dependent on the value specified for the NET-DELAY-SOLUTION parameter:

NET-DELAY-SOLUTION	NET-STATUS
WAIT	WAITING
START	RUNNING or CONDITION-WAIT
IGNORE	IGNORED
CANCEL	ABENDED

NET-TYPE	Input/output parameter Specifies how to serialize processing of nets with the same name but different start times; modifications can still be made at this stage. Nets that were planned as subnets are released for processing as normal nets (NET-TYPE<4).
1	The net is started, regardless of whether a net with the same name is executing or has been executed.
2	The net is not started as long as a net with the same name is running. If two or more like-named nets of a type other than 1 are waiting to start, the net with the earliest PLAN-START time is started first.
3	The net is started only if no net with the same name has been executed since the last reorganization.

M	<p>Input parameter</p> <p>Using the mark column, structure elements can be excluded from processing.</p> <p>A mixture of marks is not permitted.</p>
D (Delete)	<p>The marked structure element is to be excluded from processing. Following ENTER the record has the result DELETED, thereby deleting the mark.</p> <p>The RESULT field remains empty in the case of all records not marked with D.</p> <p>After the structure has been stored by means of SAVE, structure elements which have been deleted cannot be reactivated. Deletion of a structure element is logged in the journal. The D mark is rejected in the case of records with the result DELETED.</p>
A (Add)	<p>This mark can be used to reactivate structure elements previously excluded from processing using the D mark (result DELETED). The A mark must be entered prior to SAVE, thereby canceling the DELETED result.</p> <p>The A mark is rejected in the case of structure elements which have the status NO-PLAN.</p> <p>Deleted structure elements are not displayed in any subsequent display of the net using other statements (e.g. MODIFY-SUBMIT-NET, MODIFY-SUBMIT-JOB, SHOW-NET-STATUS).</p>
IND	<p>Output parameter</p> <p>Index level of the structure element.</p>
F	<p>Output parameter</p> <p>Function of the structure element</p>
A (Add)	<p>This element of the net description is a structure element to create a condition description.</p>
C (Compare)	<p>This element of the net description is a condition description which waits for a condition to be satisfied.</p>
D (Delete)	<p>This element of the net description is a structure element to delete a condition description.</p>
F (File Transfer)	<p>This element of the net description is a structure element to execute an FT request.</p>
J (BS2000 job)	<p>This element of the net description is a structure element to execute BS2000 jobs.</p>

M (Modify)	This element of the net description is a structure element to modify a condition description.																										
P (Procedure)	This element of the net description is a structure element to execute S procedures.																										
W (Wait)	This element of the net description is a structure element which effects a timed wait.																										
S (Subnet)	This element of the net description is a structure element to start a subnet.																										
TYPE	<p>Output parameter The type of the structure element. {MOD / STD / EXT / EXX / JVA / NET / JOB / RES / VAL / TIM / TRA}</p> <p>The following values are possible, depending on the function F:</p> <table border="0"> <thead> <tr> <th>F</th> <th>TYPE</th> </tr> </thead> <tbody> <tr><td>J/P</td><td>MOD</td></tr> <tr><td>J/P</td><td>STD</td></tr> <tr><td>J/P</td><td>EXT</td></tr> <tr><td>S</td><td>NET</td></tr> <tr><td>P</td><td>EXX</td></tr> <tr><td>F</td><td>TRA</td></tr> <tr><td>C</td><td>JVA</td></tr> <tr><td>C/D</td><td>NET</td></tr> <tr><td>C/D</td><td>JOB</td></tr> <tr><td>C/A/M/D</td><td>RES</td></tr> <tr><td>C/A/M/D</td><td>VAL</td></tr> <tr><td>W</td><td>TIM</td></tr> </tbody> </table>	F	TYPE	J/P	MOD	J/P	STD	J/P	EXT	S	NET	P	EXX	F	TRA	C	JVA	C/D	NET	C/D	JOB	C/A/M/D	RES	C/A/M/D	VAL	W	TIM
F	TYPE																										
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P	EXX																										
F	TRA																										
C	JVA																										
C/D	NET																										
C/D	JOB																										
C/A/M/D	RES																										
C/A/M/D	VAL																										
W	TIM																										
MOD	The task is subject to net modification.																										
STD	The task is not subject to net modification.																										
EXT	The task is not managed in the AVAS system.																										
EXX	The S procedure is not managed in the AVAS system. It is monitored by an external job variable.																										
JVA	Processing of the net depends on the value of a job variable.																										
NET	<p>When F=C processing of the net waits for a condition on another net to be satisfied.</p> <p>When F=D the condition description for a prescribed net is deleted.</p>																										

JOB	When F=C processing of the net waits for a condition on another job to be satisfied. When F=D the condition description for a prescribed job is deleted.
RES	When F=C processing of the net waits for a condition on a resource to be satisfied. When the condition is satisfied the status of the resource is modified. When F=A, a condition description is created for a resource. When F=M a condition description is modified for a resource. When F=D a condition description is deleted for a resource.
VAL	When F=C processing of the net waits for a condition with a defined value to be satisfied. When F=A a condition description with a defined value is created. When F=M a condition description with a defined value is modified. When F=D a condition description with a defined value is deleted.
TIM	Processing of the net waits for a prescribed time.
TRA	An FT request is started.
NAME	Output parameter Name of the structure element in the run control file. This depends on the F and TYPE parameters. The name of a condition within an AVAS system must be unique across all condition types. The exception to this is the JVA condition.
For F=J/P	the user group of the net is specified.
For F=S	the user group of the net is specified.
For F=F	the user group of the net is specified.
For F=A/M/D	the user group of the net is specified.
For F=C and TYPE=NET/JOB/RES/VAL	a foreign user group may also be specified.

STATUS	Output parameter Processing status of the structure element
NO-PLAN	The structure element is not planned for this net release.
PLANNED	The structure element is planned for processing.
SYN-INDEX	Output parameter Index level on which the structure element is to be synchronized. index
RESTART-IND V1 V2 V3	Output parameter Index level at which processing resumes in the event of a restart.
RESULT	Output parameter Acknowledgment of the completed action.
DELETED	The structure element was deleted (excluded from processing) with the D mark.
NOT-FOUND	The job was not found in the JMDLIB or JMDSYS.
NEW-PLAN-START	Input parameter Start time at which the net is to be executed again. dd.mm.yy[/hh:mm:ss] The extent of the net is determined by the net planning phase for the net specified by the NET-NAME operand. The new net name for subsequent processing is derived from this start time. A net released with this start time cannot be released again. The current date and the current time are set in the parameter field as the default values.
EARLIEST-START	Input/output parameter A modified start time can be assigned to the net. This modified start time is not part of the net name. If blanks have been entered, the parameter is supplied with the value in NEW-PLAN-START by default. dd.mm.yyyy[/hh:mm:ss] The current date and the current time are set in the parameter field as the default values.

Notes

- Nets without a structure cannot be released.
- Nets with missing jobs cannot be released.
The structure of the net is displayed only to identify the missing jobs (result NOT-FOUND). The missing tasks must be excluded from processing by means of the D mark, or processing must be aborted via the RETURN operation.
- When a net is released by a SUBMIT-NET or REPEAT-NET statement, structure elements in the range of restart index levels (index 900–999) are now given the status CREATED.
In the range of restart index levels, the WAITING status is not set until a RESTART-NET statement is issued for a restart with an index over 9nn for the selected processing sequence.

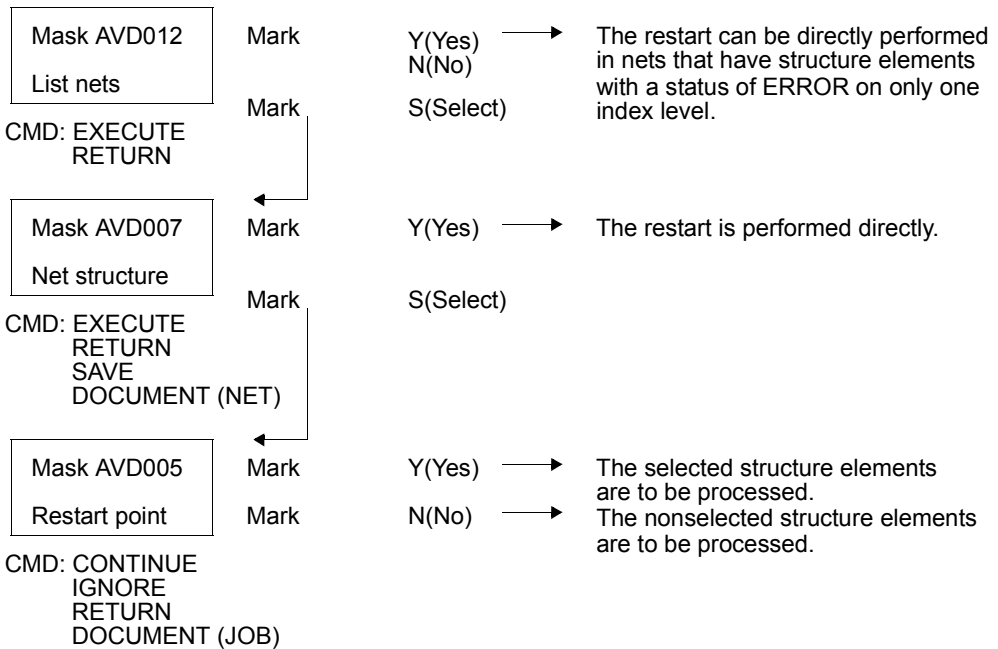
RESTART-NET – Restart net following error

The RESTART-NET statement is used to restart a net whose processing was interrupted due to an error or canceled by the CANCEL-NET statement with CANCEL-TYPE=SOFT (the net has a status of ERROR).

Subnets are also displayed in the overview of nets with structure elements in the ERROR state.

If a job or condition in a net has terminated abnormally without causing net processing to be canceled (the net has a status CALLED FOR ERROR), the error condition in the net can also be remedied through the RESTART-NET statement.

Dialog



The restart can be initiated using the marks Y or N in mask AVD012. The restart process is governed by the following rules:

- The restart will only be performed when the structure element at the POINT-OF-ERROR can be uniquely identified. All structure elements with the ERROR status must be at the same level. The structure element in the POINT-OF-ERROR is the first one at the index level with the ERROR status. If there are a number of elements with a status of ERROR at different index levels, the restart will be rejected with ERROR.

- If no restart variant is specified in the parameter field of mask AVD012, the restart is initiated using the variant set by the task job variable. The same applies for the variants set for structure elements in the net description. If no restart variant is set, the restart will be rejected with ERROR. A restart variant must be specified or the restart initiated via the AVD007 mask (mark S).
- If a restart variant is specified in the parameter field of mask AVD012, the restart is initiated using this variant. No check is performed to see whether a different restart variant is set by the task job variable or by the description of the condition.
- If there is no RESTART-INDEX with the specified (or set) restart variant, the restart will be rejected with ERROR.
- If the restart is rejected with ERROR, it should be initiated via mask AVD007 (mark S). Messages regarding the cause of the error are output in this mask and mask AVD005.

The restart can be initiated using the marks Y or S in mask AVD007. The restart process is governed by the following rules:

- Only those structure elements with a status of ERROR can be selected for a restart (partial restart).
- If the processing of a job or a subnet is cancelled using the CANCEL-NET statement with CANCEL-TYPE=SOFT (the structure element with FU=J/P/S/F has the status ERROR), then a restart with RESTART-INDEX=ERROR-INDEX can only be performed once the job has been terminated by BS2000 (the MONJV is assigned the value \$T or \$A) or once the subnet has been terminated by AVAS (ENDED or ABENDED net status has been reached).
The restart is rejected otherwise with MSG AVS8512 (FU=J/P/F) or MSG AVS5209 (FU=S). The structure element status is set to ERROR again.
A restart with RESTART-INDEX > ERROR-INDEX can be initiated without waiting.
- Structure elements in the range of restart jobs (index levels 900–999) which have the ERROR status must be processed before any other jobs with a status of ERROR.
- After a restart using the restart index levels (index 900–999), no further restarts can be performed for the net. Any other existing structure elements with a status of ERROR cannot be processed until the run control system has finished processing the restart index levels or processing of the restart index levels is resumed by the RESTART-NET statement.
- Mark Y (Yes)
Structure elements of the restart point are not displayed (mask AVD005). Mask AVD007 is displayed if an error occurs during processing. An error message will be displayed and the structure element in which the error occurred is assigned the result ERROR.

- **Mark S (Select)**
Structure elements of the restart point are displayed in mask AVD005. The choice of structure elements in the POINT-OF-RESTART (as specified by the RESTART-JOB-NAME parameter) can be amended if the structure element at the POINT-OF-ERROR is not one of the restart index levels (index levels 900–999).

If the statement is issued without operands, this results in an overview of all nets with a status of ERROR or CALLED FOR ERROR that are assigned to the user group of the user executing the function and that are running under the RUN-CONTROL-SYSTEM assigned to the user executing the function.

RESTART-NET

[NET-NAME=[\$ug_]netname]

[,PERIOD-NAME=period / (dd.mm.yy [/hh:mm:ss][,dd.mm.yy [/hh:mm:ss]])]

[,RUN-CONTROL-SYSTEM=*STD / avak]

[,DISPLAY=YES / NO]

NET-NAME=

Name of a net in the run control file.

NET-NAME=\$ug_

Name of the user group.

Privileged users are allowed to select nets belonging to another user group.

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of the net in which a structure element terminated with errors.

This input causes an overview of the structure elements to be displayed.

The PERIOD-NAME operand cannot be used for fully qualified net names.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets of the specified user group are displayed.

PERIOD-NAME=

Specifies a period (time span)

The nets to be processed are those with a start time, EARLIEST-START, which falls within this period.

The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)

Real date and time which determine the start and end date/time of the period.

If the 'right' period boundary is missing, the end date is set to the start date and the end time is set to 23:59. The default value for the start time is 00:00.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- BATCH processing
 - If a user group is specified in the NET-NAME operand, its standard run control system is used. Otherwise the standard run control system of the user group which is assigned to the user at SIGNON is employed.
- DIALOG processing
 - The standard run control system of the user group is used immediately after SIGNON.
 - If the user may employ all run control systems defined in the system (see avak-use parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
 - If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of a run control system.

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

DISPLAY=

Selects structure elements from the net description, to be displayed in mask AVF007. This operand permits the display of structure elements which have the status NO-PLAN, NO-SUBMIT, DELETED and IGNORED to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand. The operand has no effect on the display in mask AVD005.

DISPLAY=YES

Structure elements with the status NO-PLAN, NO-SUBMIT, DELETED and IGNORED are displayed.

DISPLAY=NO

Structure elements with the status NO-PLAN, NO-SUBMIT, DELETED and IGNORED are not displayed.

Note

Depending on the setting of the generation parameter HYPERNET-COLOUR, hypernets are color-highlighted in the overview.

ERR/IND	Output parameter Once the RESTART-NET statement has been executed, the index level of the structure element for which the restart has been initiated is displayed, in addition to the message under RESULT.
EARLIEST-START	Output parameter Start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP
NET-STATUS/CALLED FOR	Output parameter Processing status of the net
ERROR	The net has been interrupted because at least one structure element has terminated abnormally or CANCEL-NET has been entered with CANCEL-TYPE=SOFT.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR).
HOLD/ERROR	The net has been suspended by a HOLD operation. At least one structure element in the net has terminated abnormally and has a status of ERROR.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running. At least one structure element in the net has terminated abnormally and has a status of ERROR.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and a restart has been initiated. The net has not yet started because the run control system is not yet active. At least one structure element in the net still has a status of ERROR.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or for a server. No jobs are running at present.

RESTART-VAR	<p>Input/output parameter Number of the restart variant via which the restart is to be initiated. {1 / 2 / 3}</p> <p>After execution of the RESTART-NET statement, the restart variant via which the restart was initiated will be displayed.</p> <p>If no restart variant is specified and the Y or N mark was entered, the restart will be initiated via the variant that was set by way of the task job variable (see the AVAS statement #AVJ# on page 86) or by the description of the structure element.</p> <p>If the S mark was specified, the user can also select the restart variant by way of the corresponding parameter fields in masks AVD007 and AVD005.</p>
RESTART-IND	<p>Output parameter This shows the RESTART INDEX of the selected restart variant. The parameter is not displayed until the function has been executed.</p> <p><i>Note</i></p> <p>If several restarts for a net are performed as a result of using the AVD007 mask, the values for the most recent restart are displayed in the parameter fields ERR/IND, RESTART-VAR and RESTART-IND following execution of the RESTART-NET statement.</p>
MODIFY-LATEST	<p>Input/output parameter Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters specified for the structure elements. {nnn.hh.mm / <u>000.00.00</u>}</p>
nnn.hh.mm	<p>Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/C/W) of the net. The modified LATEST-START of the net must come after EARLIEST-START.</p>
<u>000.00.00</u>	<p>This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified.</p> <p>If the S mark is used, the value that is entered also applies to the parameter with the same name in the AVD007 mask.</p>

NEW-START	<p>Input/output parameter Start time of the net. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP</p> <p>By default, the parameter is assigned the value of EARLIEST-START of the net. The start time of the net can be modified using the NEW-START parameter. *BY-HYP is only permissible for subnets.</p> <p>If the S mark is used, the value that is entered also applies to the parameter with the same name in the AVD007 mask.</p>
RESULT	<p>Output parameter Acknowledgment for the completed action.</p>
RESTARTED	<p>The net is being restarted.</p>
NO-UPDATE	<p>Net processing was aborted by means of RETURN.</p>
LOCKED	<p>The net is being processed by another dialog task.</p>
ERROR	<p>An error has occurred during the restart. Possible causes: No restart variant is set via the task job variable, or the restart variant that has been set or specified is invalid and cannot be processed. The error cause can be ascertained from the journal of the net. Messages relating to the error cause are output via masks AVD007 and AVD005.</p> <p>The restart must be initiated using mask AVD007 (S mark).</p>
FROM-DATE	<p>Input/output parameter Start value of a period. dd.mm.yyyy[/hh:mm:ss]</p> <p>The default values are PERIOD-START-DATE and PERIOD-START-TIME if a net group was selected using PERIOD-NAME, or the EARLIEST-START of the first selected net. The period boundary can be modified, but it must lie within the values specified by PERIOD-NAME.</p> <p>If no PERIOD-NAME is specified, FROM-DATE is assigned the value of the EARLIEST-START of the first net.</p> <p>If FROM-DATE is deleted by the input, the default assignment described above applies.</p>

TO-DATE

Input/output parameter
End value of a period.
dd.mm.yyyy[/hh:mm:ss]

The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise same as FROM-DATE).

If no PERIOD-NAME is specified, TO-DATE is assigned the value of the EARLIEST-START of the last net.

If TO-DATE is deleted by the input, the default assignment described above applies.

NET-NAME	Output parameter Name of the displayed net.
NET-STATUS	Output parameter Processing status of the net
ERROR	The net has been interrupted because at least one structure element has terminated abnormally, or CANCEL-NET has been entered with CANCEL-TYPE=SOFT.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one has terminated abnormally (status ERROR).
HOLD/ERROR	The net has been suspended by a HOLD operation. At least one structure element in the net has terminated abnormally and has a status of ERROR.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running. At least one structure element in the net has terminated abnormally and has a status of ERROR.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and a restart has been initiated. The net has not yet started because the run control system is not yet active. At least one structure element in the net still has a status of ERROR.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or for a server. No jobs are running at present.
EARLIEST-START	Output parameter Start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP
NEW-START	Input/output parameter Start time of the net. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP By default, the parameter is assigned the value of EARLIEST-START of the net. The start time of the net can be modified using the NEW-START parameter. *BY-HYP is only permissible for subnets.

MODIFY-LATEST	Input/output parameter Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters specified for the structure elements. {nnn.hh.mm / <u>000.00.00</u> }
nnn.hh.mm	Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/C/W) of the net. The modified LATEST-START of the net must come after EARLIEST-START.
<u>000.00.00</u>	This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified.
M	Input parameter
S (Select)	So that the restart can be initiated, the structure elements at the restart point should be displayed (mask AVD005).
Y (Yes)	A restart should be performed for the marked structure element, without the structure elements at the restart point being displayed (mask AVD005). Only structure elements with the status ERROR can be selected. If there is a structure element within the range of restart index levels which has the status ERROR, this must be selected first for the restart. If a restart has been carried out via the restart index levels (index 900–999), then no further restart can be performed.
IND	Output parameter Index of the structure element.
F	Output parameter Function of the structure element.
NAME	Output parameter Name of the structure element.

STATUS	Output parameter Processing status of the structure element
<i>Processing statuses of jobs (FU=J, P):</i>	
ERROR	The task terminated abnormally.
ENDED	The task terminated normally.
RUNNING	The task is currently being processed.
WAITING	The task had not yet been started.
SKIPPED	The task had not been processed. It was skipped during the restart.
IGNORED	The task was not submitted for execution, due to its LATEST-START being passed.
<i>Processing statuses of FT requests (FU=F):</i>	
ENDED	The request terminated normally.
ERROR	The request terminated abnormally.
IGNORED	The request was not executed due to a timeout (LATEST-START).
RUNNING	The request is currently being processed. From the point of view of BS2000 it has the status RUNNING (\$R).
RUNNING/\$S	The request is currently being processed. However, from the point of view of BS2000 it is still in the task queue and has not been started yet.
SKIPPED	The request has not been processed. It was skipped during the restart.
WAITING	The request has not been started yet.
<i>Processing statuses of jobs start tasks (FU=S):</i>	
ERROR	The subnet could not be started or was cancelled with CANCEL-NET.
ENDED	The subnet was terminated normally. If the task to start a subnet has once reached the ENDED state, then the status is not set to WAITING when restarting in an earlier index level. The subnet cannot be started any more.
RUNNING	The task is currently being processed. The subnet was started.

RUNNING/\$S	The task is currently being processed. The subnet is in the WAITING state. The following can cause this: <ul style="list-style-type: none"> – The start time has not been reached yet – LATEST-START is exceeded, NET-DELAY-SOLUTION has the value WAIT. – The associated run control system is not active yet
RUN/NO-OCC	The subnet is in the CONDWAIT state. There is a structure element in this subnet in the NO-OCCURE state.
RUN/ERR	The subnet is in the ERROR state. A restart must be initiated for the subnet.
RUN/HOLD	The subnet is in the HOLD state. If processing is to be resumed in the subnet, then the subnet must be processed with the #RESUME-NET operation.
WAITING	The task has not been started yet.
SKIPPED	The task was not processed since it was skipped during the restart. If the task for starting a subnet has reached the SKIPPED state, then the status is not set any more to the WAITING state during a restart via an earlier index level. The subnet cannot be started any more.
IGNORED	The subnet was not started because a time limit was exceeded (LATEST-START was passed).

Processing statuses of conditions (FU=C, W):

OCCURRED	The event has occurred.
NO-OCCURE	The event has not occurred.
NO-OCC/DEL	The event has not occurred and the structure element was deleted.
WAITING	The event has not yet been checked.
ERROR	The event has been set to the error status.
SKIPPED	The event has not occurred. It was skipped during the restart.
IGNORED	The event was not checked because its LATEST-OCCURE time was passed.

Processing statuses of structure elements for processing condition descriptions (FU=A, M, D):

WAITING	The condition description has not yet been processed.
EXECUTED	The condition description has been processed.
SKIPPED	Processing of the condition description was skipped during the restart.
ERROR	The event has been set to the error status, or an error occurred: <ul style="list-style-type: none"> FU=A (Add) A condition description of the same name already exists. FU=M (Modify) The condition description does not exist, or the intended release refers to a resource which is in use. FU=D (Delete) The condition description does not exist, or the intended deletion refers to a resource which is in use.

Processing statuses of structure elements, general

NO-PLAN	The structure element was excluded from planning.
NO-SUBMIT	The structure element has been deleted by a SUBMIT-NET or REPEAT-NET statement.
DELETED	The structure element has been deleted by a MODIFY-SUBMIT-NET statement.
CREATED	The structure element is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.

R-V	<p>Output parameter Number of the restart variant set via the task job variable or via the description of the structure element. {1 / 2 |3}</p> <p>The restart variant which is set or specified is only to be used if no restart variant is entered by the user (input parameter SELECT-RESTART-VARIANT). If a restart is performed for a structure element with a status of ERROR, the number of the restart variant used for the restart is displayed afterwards.</p>
SYN-IND	<p>Output parameter Index level with which the structure element is to be synchronized.</p>
RESTART-IND V1 V2 V3	<p>Output parameter Index levels where processing can restart in the event of an error.</p>
RESULT	<p>Output parameter Acknowledgment for the result of the action.</p>
UPDATED	<p>The status of the structure element has been modified as a result of the restart.</p>
ERROR	<p>(Y marks only) An error occurred while restarting this structure element.</p>
SELECT-RESTART-VARIANT	<p>Input parameter If no restart variant is specified, the restart will be initiated via the variant that was set by way of the task job variable or the description of the structure element (output parameter R-V, mask AVD007). If no restart variant was specified (either via the task job variable or the description of the structure element, or by the user), it will be requested in the parameter field of mask AVD005 (S mark) or mask AVD007 (Y mark).</p>

AVD005 – Display restart point

This mask is used to output essential data on two points in the net structure.

POINT-OF-ERROR specifies the point within the net structure at which the error occurred.

POINT-OF-RESTART specifies the restart index defined within the net via the restart variant, together with all jobs and conditions assigned to the index and their most important parameters. From the structure elements displayed here, those which are to be brought to execution during a restart can be selected. Any unselected structure elements are not processed by the RESTART-NET statement.

The net structure and the synchronization index determine which structure elements are to be processed on subsequent index levels.

If the RESTART-INDEX lies within the range of the restart index levels (index 900–999), then all the structure elements linked via the SYNC-INDEX, from the index range 900 to 999 together with the structure elements on the first index level of normal processing (index 001–899), are displayed.

From the displayed jobs, FT requests and conditions on the first index level of normal processing, those which are to be brought to processing on restart can be selected.

If the structure element in the POINT-OF-RESTART has in the status WAITING, the selection can only be used to influence the processing mode (RESTART or NORMAL).

If the structure element at the POINT-OF-ERROR lies within the range of restart index levels, marks cannot be used to modify the selection in the POINT-OF-RESTART (RESTART-JOB-NAME parameter).

If END is specified as the selected restart variant in the RESTART-INDEX, no POINT-OF-RESTART can be displayed.

The selected restart variant for the structure element at the POINT-OF-ERROR can be executed with the CONTINUE operation. The IGNORE operation causes the restart for the structure element at the POINT-OF-ERROR to be canceled.

If several structure elements have been marked with a status of ERROR (mask AVD007) and the status at the POINT-OF-ERROR has already been changed following a partial restart (from status ERROR to WAITING or SKIPPED), processing of the structure element must be canceled through the IGNORE operation.

The documentation for the structure element stored in the POINT-OF-ERROR can be displayed by means of the DOCUMENT operation.

Processing of the net can be canceled through the RETURN operation.

RESTARTED/ERROR

Processing of the net was interrupted (status ERROR) and a restart has been initiated. The net has not yet started because the run control system is not yet active.

At least one structure element in the net still has a status of ERROR.

HOSTWAIT

The net is waiting for a host in the HIPLEX MSCF network or for a server. No jobs are running at present.

NET-TEXT

Output parameter

Short designation of the net for which a restart is to be initiated.

POINT-OF-ERROR parameters

ERROR-INDEX

Output parameter

Index of the structure element which is in ERROR status and via whose restart variant the restart is initiated.

ERROR-NAME

Output parameter

Name of the structure element which is in ERROR status and via whose restart variant the restart is initiated.

RESTART-VARIANT

Output parameter

Displays the possible restart variants.

RESTART-INDEX

Output parameter

{index / END}

index

Index level to be used in the event of a restart (restart of net).

END

The structure element and all other structure elements dependent on it will not be processed or checked any further in the event of a restart.

The RESTART-NAME parameter is not evaluated.

END may not be specified for the structure elements in the range of restart index levels (index 900–999).

Note

If RESTART-INDEX=END, no structure elements will be displayed in the POINT-OF-RESTART.

Processing can be initiated through the CONTINUE operation.

RESTART-NAME	<p>Output parameter</p> <p>Name of a structure element at the index level specified in the RESTART-INDEX parameter.</p> <p>{name / *ALL / *NAME / *ERROR}</p>
name	<p>This is the only structure element from the index level specified in the RESTART-INDEX which is to be processed again.</p> <p>If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The structure element must be uniquely identifiable from the specified RESTART-NAME.</p> <p>If the structure element in the POINT-OF-RESTART has the status WAITING, the selection can only be used to influence the processing mode (RESTART or NORMAL).</p>
*ALL	<p>All structure elements at the index level specified in the RESTART-INDEX are to be processed again.</p>
*ERROR	<p>All the structure elements, selected by the index level in RESTART-INDEX, which have terminated abnormally (STATUS=ERROR) are to be processed again.</p> <p>*ERROR is only processed if the RESTART-INDEX is equal to the ERROR-INDEX. Otherwise the restart is rejected.</p> <p>The structure elements in ERROR status have the Y mark preset in the POINT-OF-RESTART.</p>
*NAME	<p>Only the structure element at the POINT-OF-ERROR is to be processed again. *NAME is only processed if the RESTART-INDEX is equal to the ERROR-INDEX. Otherwise the restart is rejected.</p> <p>The structure element in the POINT-OF-ERROR has a default mark of Y.</p>

Notes

- When a restart takes place at index levels 900 to 999, normal processing must resume at the index of the POINT-OF-ERROR if the RESTART-JOB-NAME=*NAME or *ERROR parameter was specified for restart variant 1 of the structure element in which the return was defined. Otherwise the restart is rejected.
 - The marks in the POINT-OF-RESTART, which were set via the RESTART-NAME parameter of the selected restart variant of the structure element at the POINT-OF-ERROR, can be changed by the user executing the function before initiating the restart through the CONTINUE operation.
- If the POINT-OF-ERROR is within the range of restart index levels (index 900 to 999), the marks that have been set cannot be modified.

RESTART-TYPE	Output parameter Type of restart processing {RESTART / NORMAL}
RESTART	The restart takes place with processing of the AVAS restart statements contained in the job or S procedure (#RA, #RI and #RU).
NORMAL	Restart without using the AVAS restart statements. The job/ S procedure runs the same as under normal processing.
AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). The restart is initiated automatically by the run control system: <ul style="list-style-type: none"> – The net must be under the control of the run control system. – The run control system must set the status of the structure element to ERROR and NET-STATUS to ERROR or CALLED FOR ERROR. – The command /INFORM-PROGRAM MSG= ' STOP , LEVEL=JOB ' must not be issued to the run control system.
NO	Manual restart; the restart has to be initiated by the RESTART-NET statement. Amendments to the net can be performed using MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB.

POINT-OF-RESTART parameters

SELECT-RESTART-VARIANT	Input/output parameter Number of the restart variant via which the restart is to be initiated. {1 / 2 / 3}
	If no restart variant is specified, the restart variant set by way of the task job variable or in the structure elements (see the manual "AVAS Functions and Tables" [1]) will be used.
	If no restart variant is specified, either via the task job variable or the description of the structure element, or by the user, a message appears requesting it.

		If the displayed restart variant number is modified, the structure elements for the new POINT-OF RESTART assigned by the RESTART-INDEX are displayed. The CONTINUE operation is ignored in this case.
M		Input/output parameter
	Y (Yes)	The structure element is to be processed.
	N (No)	The structure element is not to be processed. In this case, the unmarked structure elements are processed. The mark column can be preset to Y in accordance with the RESTART-NAME parameter. This mark can be changed. Structure elements on index levels 900–999 cannot be excluded from processing. They cannot be marked. If the structure element at the POINT-OF-ERROR is within the range of index levels 900–999, marks generally cannot be modified.
IND		Output parameter Index levels of the POINT-OF-RESTART. If the RESTART-INDEX which was specified for the selected restart variant in the POINT-OF-ERROR lies within the range of the index levels 900–999, all the structure elements linked via the SYN-INDEX are displayed, including the structure elements on the first index level of normal processing (index 001–899).
FU		Output parameter Function of the structure element
TYPE		Output parameter Type of the structure element

NAME	Output parameter Name of the structure element
SYN-IND	Output parameter Index level at which the structure element is to be synchronized.
STATUS	Output parameter Processing status of the structure element

Note

Structure elements in the range of restart index levels (index 900–999) are given the status CREATED when a net is released with a SUBMIT-NET or REPEAT-NET statement.

For index levels in the restart range, the status WAITING is set only when a RESTART-NET statement is executed for the selected processing sequence for a restart with an index over 9nn.

RESUME-NET – Cancel HOLD state

Processing of nets suspended by means of HOLD-NET can be resumed by issuing the RESUME-NET statement.

The subnets are also displayed in the overview of nets of a RUN-CONTROL-SYSTEM.

An individual net can be processed either by specifying its fully qualified net name, or by displaying a net group and selecting it by marking.

The index level in the net structure at which processing should be resumed can be prescribed or selected. If the user does not specify an index level, all the processing suspensions in the net are canceled.

Processing of the net resumes at those positions where the hold status is canceled by RESUME-NET. All index levels are started for which all the dependencies have been resolved. Net processing takes place in the same way as for an uninterrupted net. It is not possible to start restart variants with HOLD-NET and RESUME-NET (the CANCEL-NET and RESTART-NET statements should be used instead).

The net status required before the statement is executed is HOLD or 'CALLED FOR' HOLD.

After the statement has been executed, the nets are in the RUNNING, CONDWAIT or HOSTWAIT state (if the run control system has already activated the net) or in the WAITING, OPWAIT, RESTART, ERROR, START or RESUMED state. If the hold states in the net have not all been canceled, the net has in addition the status 'CALLED FOR' HOLD.

The net status of 'CALLED FOR' HOLD is converted to the HOLD status by the run control system when no more index levels can be processed.

Execution of this statement is logged in the journal.

Dialog

In mask AVD015, the RESUME-NET statement can be initiated by the Y or N marks. This is subject to the following rules:

- The IND parameter field in mask AVD015 can be used to prescribe an index level at which the hold status is to be canceled.
- If the specified index level does not exist in the net or if there is no element at the index level with the status HOLD, processing will be rejected with the result ERROR.
- If no index level is specified, all the hold states in the net will be canceled. All the structure elements which are in the HOLD state will be reset to their original status. This is not true for structure elements of the S function and of type NET in the RUN/HOLD state since the HOLD state describes the status of the subnet.

- If the processing is rejected with the result ERROR, it should be initiated via mask AVD008 (with an S mark). This is the mask in which messages about the reasons for errors are output.

Mask AVD008 can be used to initiate processing using the Y mark followed by an EXECUTE operation. The entire net structure is displayed, including the structure elements which do not get processed (e.g. those with the NO-PLAN status).

This is subject to the following rules:

- If the an index level is prescribed in the IND parameter field in mask AVD015, the display is positioned at this index level and the structure elements which have the status HOLD are preset with a Y mark.
If the specified index level does not exist in the net, a message is output.
- If a value was defined in the parameter fields MODIFY-LATEST and NEW-START in mask AVD015, The corresponding parameter fields in the mask are automatically assigned these values.
- All the structure elements in the net structure which have the status HOLD can be selected (Y mark). This is not true for structure elements with FU=S and TYPE=NET in the RUN/HOLD state since the HOLD state describes the status of the subnet.
Processing is initiated with the EXECUTE operation. The hold status is canceled for the marked structure elements.
For structure elements with FU=S and TYPE=NET in the RUN/HOLD state, the HOLD state is to be cancelled by executing #RESUME-NET for the subnet.
- If an error occurs during processing, an error message is output and the structure element at which the error occurred has the result ERROR.
- If no Y marks are used to select structure elements, the EXECUTE operation causes all the hold states in the net to be canceled. (This is equivalent to processing with Y marks and with no index specification in mask AVD015.)

If the statement is issued without operands, an overview is displayed containing all the nets of the associated user group which are in the HOLD or 'CALLED FOR' HOLD status.

RESUME-NET

[NET-NAME=[\$ug_]netname]

[,PERIOD-NAME=period / (dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)]

[,RUN-CONTROL-SYSTEM=*STD / avak]

NET-NAME=

Name of a net in the run control file.

NET-NAME=\$ug_

Name of the user group.

Privileged users can select nets from a user group other than their own.

If no user group is specified, the user group of the user exercising the function is assumed.

NET-NAME=netname

Name of the net which was suspended and is to be resumed.

If a fully qualified net name is specified, this net will be displayed.

The PERIOD-NAME operand may not be used with fully qualified net names.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the specified user group are displayed.

If the PERIOD-NAME operand is specified, only nets which have a start time within this period will be displayed.

PERIOD-NAME=

Specifies a period (time span).

The nets to be processed are those with a start time, EARLIEST-START, which falls within this period.

The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)

Specification of the real date and time, which determine the start and end date and time for the period.

If the "right" period limit is missing, the end date is set to the start date and the end time to 23:59. The default value for the start time is 00:00.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- BATCH processing
If a user group is specified in the NET-NAME operand, its standard run control system is used. Otherwise the standard run control system of the user group which is assigned to the user at SIGNON is employed.
- DIALOG processing
 - The standard run control system of the user group is used immediately after SIGNON.
 - If the user may employ all run control systems defined in the system (see avak-use parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
 - If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of a run control system

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

Note

Depending on the setting of the generation parameter HYPERNET-COLOUR, hypernets are color-highlighted in the overview.

After the RESUME-NET statement has been executed the display shows, beside the message under RESULT, the index level at which processing of the net is being resumed.

If a number of index levels were processed by execution of the RESUME-NET statement, the display shows the lowest index level at which the net was suspended.

EARLIEST-START	Output parameter Scheduled start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP
NET-STATUS/CALLED FOR	Output parameter Processing status of the net. <i>Before the statement is executed:</i>
...../HOLD	The net has the status RUNNING, CONDWAIT, HOSTWAIT, WAITING, OPWAIT, RESTARTED, ERROR or START. The HOLD status is set when the run control system reaches the index level for which a suspension was requested.
HOLD	The net was suspended. <i>After the statement has been executed:</i>
RUNNING	Net processing is resumed. The run control system has processed the statement.
RESUMED	Net processing is resumed. The run control system has not yet processed the statement.
CONDWAIT	The net is waiting for conditions to be satisfied. No task is running at the moment.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or for server. No jobs are running at present.
WAITING	The net is waiting for the start.
OPWAIT	The net is waiting for input of the START-NET statement.
RESTARTED	A restart was initiated for the net. The start has not been initiated yet, as the run control system was not active.
ERROR	The net was suspended because a structure element terminated abnormally or CANCEL-NET with CANCEL-TYPE=SOFT was entered.

START	<p>The START-NET statement was issued for the net. The start has not been initiated yet, as the run control system was not active.</p>
...../HOLD	<p>The net has the status RUNNING, RESUMED, WAITING, OPWAIT, RESTARTED, ERROR, CONDWAIT, HOSTWAIT or START. The RESUME-NET statement has not canceled all the hold states in the net. The HOLD status is set when the run control system reaches the index level for which a suspension was requested.</p>
MODIFY-LATEST	<p>Input/output parameter Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters specified for the structure elements. {nnn.hh.mm / <u>000.00.00</u>}</p>
nnn.hh.mm	<p>Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/C/W) of the net. The modified LATEST-START of the net must come after EARLIEST-START.</p>
<u>000.00.00</u>	<p>This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified. If the S mark is used, the value entered here also applies to the parameter with the same name in the AVD008 mask.</p>
NEW-START	<p>Input/output parameter Start time of the net. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP By default, the parameter is assigned the value of EARLIEST-START of the net. The start time of the net can be modified using the NEW-START parameter. *BY-HYP is only permissible for subnets. If the S mark is used, the value entered here also applies to the parameter with the same name in the AVD008 mask.</p>

RESULT	Output parameter Acknowledgment for the completed action.
RESUMED	The HOLD state of the net was canceled, either completely or at least for one index level.
LOCKED	The net is locked by another function (user) at the moment. Retry the RESUME-NET statement when the net is free.
NO-UPDATE	Net processing was terminated with RETURN.
ERROR	An error has occurred during net processing. Messages relating to the error cause are output via mask AVD008. Net processing should be initiated via mask AVD008 (S mark).
FROM-DATE	Input/output parameter Start value of a period dd.mm.yy[/hh:mm:ss] The default values are PERIOD-START-DATE and PERIOD-START-TIME if a net group was selected via PERIOD-NAME, or the EARLIEST-START of the first selected net. The period boundary may be modified, but it must lie within the values specified by PERIOD-NAME. If no PERIOD-NAME is specified, FROM-DATE is given the value of the EARLIEST-START of the first net. If FROM-DATE is deleted by the input, the default assignment described above applies.
TO-DATE	Input/output parameter End value of a period The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise same as FROM-DATE). If no PERIOD-NAME is specified, TO-DATE is given the value of the EARLIEST-START of the last net. If TO-DATE is deleted by the input, the default assignment described above applies.

NEW-START	<p>Input/output parameter Start time of the net. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP</p> <p>By default, the parameter is assigned the value of EARLIEST-START of the net. The start time of the net can be modified using the NEW-START parameter. *BY-HYP is only permissible for subnets.</p>
MODIFY-LATEST	<p>Input/output parameter Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters specified for the structure elements. {nnn.hh.mm / <u>000.00.00</u>}</p> <p>nnn.hh.mm</p> <p>Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/F/C/W) of the net. The modified LATEST-START of the net must come after EARLIEST-START.</p> <p><u>000.00.00</u></p> <p>This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified.</p>
M	Input parameter
Y (Yes)	<p>Processing should be resumed for this structure element. The only structure elements which may be selected are those with the status HOLD.</p> <p><i>Note</i></p> <p>If no marks are used to select structure elements, the EXECUTE operation causes all the hold states in the net to be canceled (this is equivalent to processing with Y marks and with no index specification in mask AVD015).</p>
IND	<p>Output parameter Index of the structure element</p>
FU	<p>Output parameter Function of the structure element</p>
TYPE	<p>Output parameter Type of the structure element</p>
NAME	<p>Output parameter Name of the structure element</p>

SYN-IND	Output parameter Index Index level at which the structure element is to be synchronized.
STATUS	Output parameter Processing status of the structure element
HOLD	Processing of the structure element has been stopped. <i>Note</i> Only in the case of the HOLD-NET and RESUME-NET statements is the HOLD status of the structure element always displayed. For all other statements, the descriptions indicate the priority ranking which determines status display.
RESULT	Output parameter Acknowledgment for the completed action
ERROR	The structure element has an impermissible status, and may not be marked.

SEND-MESSAGE – Send message to users

The SEND-MESSAGE statement displays the users who are signed on to the central access tasks (ZD-PLAM and ZD-UPAM). Depending on the user's authorization, the displayed list shows either users of his own user group only, or all users who are signed on. Only users of the AVAS dialog are displayed. The user entry of the person performing the function is not displayed.

A message can be sent to the users displayed in the AVS035 mask. The message is shown to the recipient at the next dialog step (ENTER or function key) via AVAS.

The users to whom a message is to be sent can be selected by means of the Y, N or S marks. The processing is initiated with CMD:EXECUTE. The AVS036 mask is provided for the message to be entered.

The processing varies, depending on which mark is used:

Y The AVS036 mask for entering the message is displayed once only.

The entered message is sent to all m6arked users. If entry of the message in mask AVS036 is aborted with CMD:RETURN, this abortion applies to all user entries marked.

N As with Y, but the message is sent to all users *except* those marked.

S The AVS036 mask for sending a message is displayed for every user marked.

The message entered for the first marked user remains in the MESSAGE parameter field when mask AVS036 is displayed for further marked users.

The message to be sent remains in existence until a new processing cycle is started in mask AVS035 with CMD:EXECUTE.

If entry of the message in mask AVS036 is aborted with CMD:RETURN, this abortion applies only to the selected user entry.

Only one message can be sent to a user. A message which has not yet been received by the user (by pressing the ENTER key) is overwritten by the next message sent.

If the statement is entered without operands, an overview of all signed-on users of the assigned user group is displayed.

If a user is signed on more than once under the same user name, the corresponding number of user entries are displayed.

SEND-MESSAGE

[USER-NAME=name]

[,USER-GROUP=\$ug / *ALL]

USER-NAME=

Name of a user who is signed on

USER-NAME=name

Name of a user who is to receive a message.

If the name is specified in partially qualified form (last character *), an overview of the users whose names begin with the specification is displayed.

A user who has no privileged authorization is shown all signed-on users of the user group assigned to him if its name begins with the partial qualification.

USER-GROUP=

Selects the signed-on users of a user group.

If USER-GROUP is not specified, it is taken from the assignment of the person using the function if this person is working without privileged authorization. USER-GROUP=*ALL is used for users with privileged authorization.

USER-GROUP=\$ug

Name of a user group.

A user who has no privileged authorization can only specify his own user group. In this case, the specification of the user group can be omitted.

A user with privileged authorization can access signed-on users of the desired user group by specifying the user group.

USER-GROUP=*ALL

This specification is only for users with privileged authorization.

The user is shown all users who are signed on.

AVS	Output parameter System IDs of the AVAS task DIA DIALOG
PLAM/UPAM	Output parameter
PLAM	Number of open access sequences via the ZD-PLAM
UPAM	Number of open access sequences via the ZD-UPAM
	<i>Note</i> The values displayed are temporary information. At the time of their display they could already be out of date.
STA	Output parameter Status of the user entry
C (Cancel)	CANCEL-USER (with CANCEL-TYPE=SOFT) was issued for the user. The user is signed off as soon as he has no more access sequences open.
R (Running)	The user is signed on and can work.
W (Waiting)	The user is signed on and is waiting for the end of a serialization.
TSN	Output parameter BS2000 task sequence number of the signed-on user
COMMAND	Output parameter Current statement of the AVAS user
MES	Output parameter
Y (Yes)	There is a message for the user which could not yet be output. If there is no message, a blank is displayed.
RESULT	Output parameter Acknowledges whether the action was performed.
SEND	The message was sent. It will be shown to the user as soon as he presses the ENTER key.
NO-SEND	No message was sent. Entry of the message was aborted with CMD:RETURN.
NOT-FOUND	The message could not be sent because the user had signed off in the meantime.

AVS036 – Entry mask for message to be sent

```

AVAS-Vnn.yxmn/AVS036          SEND/RECEIVE-MESSAGE          tt.mm.jjjj/hh:mm:ss
.....
      USER-NAME =.....
      USER-GROUP=.....
      TSN       =....

MESSAGE =.....
.....
.....

CMD:..... OPR:.....
MSG:.....
    
```

USER-NAME	<p>Output parameter User name.</p> <p><i>Notes</i></p> <ul style="list-style-type: none"> – The data displayed in mask AVS036 (parameter fields) refers to the recipient of the message to be sent. – If in mask AVS035 the users were selected via the Y or N marks, the USER-NAME, USER-GROUP and TSN parameters are irrelevant. – CMD:EXECUTE sends off the message; CMD:RETURN aborts the sending of the message.
USER-GROUP	<p>Output parameter User group of the signed-on user</p>
TSN	<p>Output parameter BS2000 task sequence number of the signed-on user</p>
MESSAGE	<p>Input parameter Message to be sent. The text must not exceed 240 characters.</p>

AVS036 – Mask for displaying a message

The AVS036 mask shows the user a message addressed to him. The mask appears when the user presses the ENTER key. Pressing CMD:RETURN aborts the message display and returns the user to “normal” processing.

```

AVAS-Vnn.yxmn/AVS036          SEND/RECEIVE-MESSAGE          tt.mm.jjjj/hh:mm:ss
.....
      USER-NAME =.....
      USER-GROUP=.....
      TSN       =.....

MESSAGE =.....
.....
.....

CMD:..... OPR:.....
MSG:.....
    
```

- | | |
|------------|--|
| USER-NAME | Output parameter
Name of the user who sent the message. |
| | <i>Note</i> |
| | <ul style="list-style-type: none"> – The data displayed in mask AVS036 (parameter fields) refers to the sender of the message. – By entering CMD:RETURN, the user quits the message display and returns to the interrupted processing and the mask that was displayed before the interruption. |
| USER-GROUP | Output parameter
User group of the user who sent the message. |
| TSN | Output parameter
BS2000 task sequence number of the user who sent the message. |
| MESSAGE | Output parameter
Message that was sent |

SHOW-CALENDAR – Display calendar

The SHOW-CALENDAR statement enables the user to obtain a display of the entries in the calendar. If the function authorization table is limited to the user's own user group, only the calendar assigned to the user group can be displayed.

The range of days delimited by the boundary dates (preset via PERIOD-NAME) is displayed together with its associated symbolic dates.

The user can also display the data for a calendar day using EDT.

SHOW-CALENDAR

[CALENDAR-NAME=calendar]

[,PERIOD-NAME=period / (dd.mm.yy [,dd.mm.yy])]

CALENDAR-NAME=calendar

Name of a calendar contained in the calendar library.

This causes an immediate display of the specified calendar (AVC002 mask).

If the calendar name is specified via a partial qualification by a privileged user (final character *), this produces an overview of all calendars from the calendar library whose names begin with the partial qualification (AVC010 mask).

Notes

- The privileged user can access any calendars by specifying the calendar name.
- The normal user can only modify the calendar assigned to him. Thus, it is superfluous for him to specify the calendar name.

PERIOD-NAME=

Specifies a period (time span).

The period determines which calendar section is to be processed.

This operand is only permitted in conjunction with a fully qualified calendar name.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD_NAME=(dd.mm.yy[,dd.mm.yy])

Real time limits determining the start and end dates of a period. They must lie within the absolute limits of the calendar. If the "right" calendar limit is not specified, only one calendar day is displayed.

In the AVC010 mask the privileged user is given a list of all existing calendars.

DAY	<p>Output parameter Day of the week to be assigned to the date. The displayed names of the days of the week are valid symbolic dates. The following abbreviations are used: MON, TUE, WED, THU, FRI, SA, SUN</p> <p>DAY is not included when a calendar section is copied.</p>
TYPE	<p>Input/output parameter Type of the calendar day</p>
WORK	<p>Production day; planning for this day The day is taken into consideration during planning using relative symbolic start dates (symdat ±nn). The symdats of the calendar day are taken into consideration during planning.</p> <p><i>Note</i></p> <p>The type WORK for a calendar day is indicated in the statements as blank (not FREE, NWRK, WKND or HLDY).</p>
FREE	<p>Production-free calendar day; no planning for this day The day is not taken into consideration (i.e. skipped) during planning using relative symbolic start dates (symdat ±n). No processing using relative symbolic dates is planned for this day. The symbolic dates of the calendar day are only taken into consideration during planning using symbolic start dates (symdat ±W / symdat ±n).</p>
NWRK	<p>Planning for this day Whether or not the day is taken into consideration during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly. The symbolic dates of the calendar day are taken into consideration during planning.</p>
WKND	<p>Planning for this day Whether or not the day is taken into consideration during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly. The symbolic dates of the calendar day are taken into consideration during planning.</p>

HLDY	<p>Planning for this day</p> <p>Whether or not the day is taken into consideration during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE (parameter for net description). Therefore, processing using relative symbolic dates is planned or not planned for this day accordingly.</p> <p>The symbolic dates of the calendar day are taken into consideration during planning.</p>
SYMDATE	<p>Output parameter</p> <p>The SYMDAT namen (symdats) assigned to the date are displayed in the form of a list, separated by commas. If one line is not enough, two or more lines are used for the display, depending on the LINES/DAY parameter.</p> <p>The SYSTEM symdats generated for the calendar day are marked with an asterisk (*) as the first character.</p> <p><i>Note</i></p> <p>During net planning (CREATE-PLAN-NET) the symbolic dates specified in the net are first matched with the SYSTEM symbolic dates. If the net symbolic date is found in the SYSTEM symbolic dates, a search is no longer performed in the USER symbolic dates of the calendar day.</p>
LINES/DAY	<p>Input/output parameter</p> <p>Maximum number of mask lines to be displayed for each calendar day.</p> <p>{1 / 2 / .. 9}</p> <p>When the command is called for the first time, the field is preset to 9 and can be changed to the desired value. The modified value remains set until the user signs off of AVAS.</p>
FROM-DATE	<p>Input/output parameter</p> <p>The calendar section beginning with FROM-DATE (dd.mm.yyyy) is to be displayed (see the notes for TO-DATE).</p> <p>The calendar section starts with the current date if the PERIOD-NAME operand has not been specified or if the date is in the calendar.</p> <p>If the PERIOD-NAME operand has been specified, the calendar section begins with the start date of the period (for PERIOD-START-DATE see the manual "AVAS Functions and Tables" [1]).</p>

When a calendar section is copied, the start date is determined by FROM-DATE.

Note

The calendar days are displayed as and from the current date. The current date is not set in the FROM-DATE field if PERIOD-NAME is not specified. FIRST-CAL-DATE is then assigned to FROM-DATE so that it is possible to page back to the beginning of the calendar without changing FROM-DATE.

TO-DATE

Input/output parameter

The calendar section up to TO-DATE (dd.mm.yyyy) is to be displayed.

When a calendar section is copied, the end date is determined by TO-DATE.

Notes

- FROM-DATE and TO-DATE must lie within the period specified in the operand field. This makes it possible to shift the processing window without having to page through all the days.
- If the start and end dates of the calendar (FIRST-CALENDAR-DATE/LAST-CALENDAR-DATE) are modified, the calendar is displayed from the start date after the modification has been made.
- If the start and end dates of the calendar section delimited by FROM-DATE and TO-DATE are modified, the calendar section on display remains intact, provided the days it displays lie between FROM-DATE and TO-DATE. In order to display the calendar section as of a new, earlier FROM-DATE, CMD:FIRST has to be specified.

NEXT

Input/output parameter

The value of the NEXT parameter controls the calendar display.

S (Symdat)

Displays the USER symbolic date

F(FREE-DATE)

Displays the parameters which were set for CREATE-CALENDAR.

COPY-TO-CAL-DATE, COPY-FROM-CALENDAR

These parameters control the processing of a calendar for the MODIFY-CALENDAR statement. These parameters are irrelevant to SHOW-CALENDAR.

Notes

- After signing on to AVAS, the SHOW-CALENDAR function displays mask AVC002 with the field LINES/DAY=9 (maximum number of mask lines to be displayed for each calendar day). If the user modifies the default value in the field LINES/DAY, the new value only remains valid until the next time the user signs on to AVAS. This means that each user can work with his own individual setting during the time that he is signed on.
- The calendar section begins with the current date if the PERIOD-NAME operand has not been specified.
The current date is not set in the FROM-DATE field. FIRST-CAL-DATE is then assigned to FROM-DATE so that it is possible to page back to the beginning of the calendar without changing FROM-DATE.
- If the PERIOD-NAME operand has been specified, the calendar section begins with the start date of the period (for PERIOD-START-DATE see the manual “AVAS Functions and Tables” [1]).
- The parameters FROM-DATE and TO-DATE can be used to shift the section of the selected calendar.
- A calendar day (not a symdat line) always appears at the beginning of the work window in the AVC002 mask. The operation characters +n and -n can be used to page forwards and backwards by n calendar days.
- If a calendar day is marked with -, it becomes the last completely displayed day when a calendar day occupies more than one line of the work window on account of the number of symbolic dates present (see also maximum number of mask lines using the LINES/DAY parameter).
- If not all the symbolic dates can be displayed for a calendar day because of the defined maximum number of mask lines (LINES/DAY parameter), this is not indicated by a message.

AVC001 – Base data of a calendar

```

AVAS-Vnn.yxmn/AVC001   C A L E N D A R - H A N D L I N G   tt.mm.jjjj/hh:mm:ss

CALENDAR-NAME          =.....
SYMDAT-NAME            =.....
FIRST-CALENDAR-DATE    =..... DD.MM.YYYY
LAST-CALENDAR-DATE     =..... DD.MM.YYYY

TYPE OF THE DAY ( WORK/NWRK/WKND/HLDY/FREE ):
MON=.... TUE=.... WED=.... THU=.... FRI=.... SAT=.... SUN=....
SPECIAL NWRK OR FREE DATES:
.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....
.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....
.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....
.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....
.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....=.....
SYSTEM-SYMDAT-NAMES:          LAST WORKING DAY OF THE MONTH .....
EVERY DAY                     DAY OF THE MONTH .....
EVERY WORKING DAY             WORKING DAY OF THE MONTH .....

CMD:..... OPR:.....
MSG:.....
    
```

- CALENDAR-NAME** Output parameter
 Name of the calendar to be set up.
- SYMDAT-NAME** Input/output parameter
 The parameter was used to define which SYSTEM symbolic dates were generated when the calendar is set up.
 {*NONE / *STD / *ALL}
- FIRST-CALENDAR-DATE**
 Input/output parameter
 First day in the calendar (dd.mm.yy).
- LAST-CALENDAR-DATE**
 Input/output parameter
 Last day in the calendar (dd.mm.yy)
- TYPE OF THE DAY**
 MON TUE WED THU FRI SAT SUN
 Output parameter
 Type of the day of the week.
 Defines whether or not a processing operation is to be performed for the day of the week.
 {WORK / NWRK / WKND / HLDY / FREE}

<u>WORK</u>	<p>Day on which processing is performed. The day is taken into consideration during planning using relative symbolic start dates (symdat ±n). The symbolic dates for the calendar day are used during planning.</p> <p><i>Note</i></p> <p>The type WORK for a day of the week is displayed using blanks (not FREE, NWRK, WKND or HLDY) for the MODIFY-CALENDAR and SHOW-CALENDAR statements.</p>
NWRK	<p>Day on which processing is performed. Whether the day is taken into consideration or is not taken into consideration and skipped during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE. The symbolic dates for the calendar day are used during planning.</p>
WKND	<p>Day on which processing is performed. Whether the day is taken into consideration or is not taken into consideration and skipped during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE. The symbolic dates for the calendar day are used during planning.</p>
HLDY	<p>Day on which processing is performed. Whether the day is taken into consideration or is not taken into consideration and skipped during planning using relative symbolic start dates (symdat ±n) depends on SELECT-PLAN-TYPE. The symbolic dates for the calendar day are used during planning.</p>
FREE	<p>Day on which no processing is performed. The day is not taken into consideration (i.e. is skipped) during planning using relative symbolic start dates (symdat ±n). The symbolic dates for the calendar day are only taken into consideration during planning using relative symbolic start dates (symdat ±W / symdat ±n).</p>
SPECIAL NWRK OR FREE DATES	<p>Output parameter Calendar days to which another type is to be assigned, which is different from the default assignment for the day of the week. Output form: (dd.mm.yyyy) = {NWRK / WKND / HLDY / <u>FREE</u>} (dd.mm.**yy) = {NWRK / WKND / HLDY / <u>FREE</u>}</p>

SYSTEM-SYMDAT-NAMES

Specification for the names of the SYSTEM symbolic dates.

- EVERY DAY Output parameter
Name for “every day”
{name 1..8 / TGL}
- EVERY WORKING DAY Output parameter
Name for “working day”
{name 1..4 / WT}
- DAY OF THE MONTH Output parameter
Name for “current day of the month”
{name 1..4 / K}
- WORKING DAY OF THE MONTH Output parameter
Name for “current working day of the month”
{name 1..4 / A}
- LAST WORKING DAY OF THE MONTH Output parameter
Name for “last working day of the month”
{name 1..8 / ULTIMO}

SHOW-COND-DESCRIPTION – Display condition description

Using the SHOW-COND-DESCRIPTION statement, existing condition descriptions of type NET, JOB, RES and VAL can be displayed.

It is not necessary to specify the operand OBJECT=DES in order to display mask AVD030 (default).

Mask AVD031, which displays all the nets which use the condition description, is called up by entering the operand OBJECT=USR.

If no operand is specified with the call, or only a partially qualified one, mask AVD040 will be presented, from which a condition description can then be selected.

For condition descriptions with COND-TYPE=NET or COND-TYPE=JOB, when there is multiple use unique identification is only possible via CREATED BY and NET-NAME or INDEX. In this case, specifying the operands COND-NAME and TYPE is also inadequate for an unambiguous selection to be made. If the system cannot make an unambiguous identification, then the condition descriptions selected by applying the specified operand values will be presented to the user in the overview mask AVD040.

The selection of condition descriptions can be further restricted by specifying the STATUS operand.

The STATUS operand is not displayed in the individual processing (masks AVD030 and AVD031) and can also not be specified there. Any attempt to specify it will be rejected with a message. The condition status displayed in masks AVD030/AVD031 can differ from the value defined in the STATUS operand if the status is modified (by the run control system or through statements) between the time the conditions are selected via the predefined operands and the time of the individual display (masks AVD030/AVD031).

The status value defined via the STATUS operand is not checked for legitimacy with regard to the TYPE operand which may have been predefined.

SHOW-COND-DESCRIPTION

[COND-NAME=[\$ug_]condname]

[,TYPE=NET / JOB / RES / VAL]

[,OBJECT=DES / USR]

[,STATUS=ABENDED / CREATED / DELETED / ENDED / ERROR / EXCLUSIVE / FREE / IGNORED / NO-PLAN / NO-SUBMIT / SHARE / SKIPPED]

COND-NAME=

Name of the condition description, the values in which are to be displayed.

COND-NAME=\$ug_

Name of the user group

If no user group is specified, the condition descriptions for the own user group will be output.

COND-NAME=condname

Name of the condition description; from 1–24 characters are permitted.

If the condition description is specified in partially qualified form (last character *), the result will be an overview of the existing entries which have names beginning with the partial qualification.

If condname is not specified, all the descriptions for the specified user group will be output.

If the COND-NAME operand is not specified, all the descriptions for the own user group will be output.

TYPE=

Type of the condition description

It is helpful to specify the type of the condition to limit the number of descriptions displayed for a partially qualified condition name.

TYPE=NET

Condition descriptions of the type NET should be displayed.

TYPE=JOB

Condition descriptions of the type JOB should be displayed.

TYPE=RES

Condition descriptions of the type RES (resource) should be displayed.

TYPE=VAL

Condition descriptions of the type VAL (corresponding to JVA) should be displayed.

OBJECT=

Selects the mask to be used in modifying the condition descriptions.

For overview processing (display of mask AVD040), the specified value is copied into the mask parameter OBJ.

OBJECT=DES

Mask AVD030, containing the values in the condition descriptions, is presented (default).

OBJECT=USR

Mask AVD031, in which the users of the condition descriptions are displayed, is presented.

STATUS=

Status of the condition descriptions to be displayed.

Only the condition descriptions with the specified status are displayed.

The status which a condition description may assume depends on the type of the condition.

STATUS=ABENDED

DELAY-SOLUTION=CANCEL or CANCEL-NET

STATUS=CREATED

An entry was created.

STATUS=DELETED

The job was deleted using the D mark for MODIFY-SUBMIT-NET.

STATUS=ENDED

Net/job processing has ended.

STATUS=ERROR

An error has occurred.

STATUS=EXCLUSIVE

The resource is being used exclusively.

STATUS=FREE

The resource is again freely available.

STATUS=IGNORED

DELAY-SOLUTION=IGNORE

STATUS=NO-PLAN

The task has not been planned (SYMDAT or the D mark for CREATE-PLAN-NET).

STATUS=NO-SUBMIT

The task was deleted using the D mark for SUBMIT-NET or REPEAT-NET.

STATUS=SHARE

The resource is shareable and is currently being used.

STATUS=SKIPPED

The task was skipped during restart (RESTART-NET).

OBJ	Input/output parameter Specifies the mask for which the parameters are to be displayed or modified. The preset value of this parameter is DES.
DES	Mask AVD030, for modifying the values of the condition descriptions, is presented.
USR	Mask AVD031, in which the users of the condition descriptions can be displayed and deleted, is presented.
STATUS	Output parameter Status of the condition description The status which a condition description may take on depends on the type of the condition.
ABENDED	DELAY-SOLUTION=CANCEL, or CANCEL-NET dialog
CREATED	A description has been created.
mmm,CREATED	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is not available yet.
DELETED	D mark in MODIFY-SUBMIT-NET
ENDED	End
ERROR	Error
mmm, ERROR	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is subject to an error yet.
mmm, FREE	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is freely available.
IGNORED	DELAY-SOLUTION=IGNORE
NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET
SKIPPED	Skipped during a restart (RESTART-NET)
mmm, SHARE (uu)	The resource with TYPE=RES can be allocated mmm times and is being used uu times.
mmm, EXCLUSIVE	The resource with TYPE=RES can be allocated mmm times and is being used exclusively.

RESULT	Output parameter
NOT-FOUND	The condition description has already been deleted by another user or net.
CREATED BY NET-NAME / USER	Output parameter Name of the net, or ID of the user, which created the description.
IND	Output parameter Index of the structure element, if the description was created via a net.

AVD030 – Display of a condition description

```

AVAS-Vnn.yxmn/AVD030          CONDITION-DESCRIPTION          tt.mm.jjjj/hh:mm:ss

COND-TYPE      =...          COND-STATUS =.....
COND-NAME      =.....
CREATED BY     =.....          INDEX=...
CREATION DATE =...../.....

COND-TEXT      =.....
COND-DOC       =.....

LIFE-TIME      =...../.....
LAST-UPDATE    =...../.....

VALUE-FORMAT   =...
COND-VALUE     =.....
.....
.....
.....

CMD:.....          OPR:.....
MSG:.....

```

COND-TYPE	Output parameter Condition type as specified by the TYPE operand {NET / JOB / RES / VAL}
COND-STATUS	Output parameter Status of the condition description The status which a condition description may take on depends on the type of the condition.
ABENDED	DELAY-SOLUTION=CANCEL or CANCEL-NET
CREATED	A description has been created.
mmm, CREATED	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is not available yet.
DELETED	D mark in MODIFY-SUBMIT-NET
ENDED	Net/job processing has ended.
ERROR	An error has occurred.
mmm, ERROR	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is subject to an error.

mmm, FREE	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is freely available.
IGNORED	DELAY-SOLUTION=IGNORE
NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET
SKIPPED	The task was skipped during a restart (RESTART-NET)
mmm, SHARE (uu)	The resource with TYPE=RES can be allocated mmm times and is being used uu times.
mmm, EXCLUSIVE	The resource with TYPE=RES can be allocated mmm times and is being used exclusively.
COND-NAME	Output parameter Name of the condition description, as defined in the operand.
CREATED BY	Output parameter Name of the net, or ID of the user, which created the description. {\$ug_netname / avas-user-id}
INDEX	Output parameter Index of the structure element Only output if the description was created via a net.
CREATION-DATE	Output parameter Date when the condition description was created, in the form dd.mm.yy hh:mm:ss
COND-TEXT	Input/output parameter Brief text, not exceeding 120 characters, describing the condition.
COND-DOC	Input/output parameter Create user documentation {*STD / element / *NONE}
*STD	The documentation is created or sought in the DOCLIB under the default name \$ug_condname.
element	Element name for the documentation in the DOCLIB or DOCSYS: \$ug_docname \$ugsys_docname docname
*NONE	No documentation is saved for the condition description.

LIFE-TIME	Output parameter Lifetime of the condition description The real time (date and hour) up to which the condition description is to remain valid. Format: dd.mm.yy hh:mm:ss																										
LAST-UPDATE	Output parameter Date of the last modification to the condition description, in the form dd.mm.yy hh:mm:ss																										
VALUE-FORMAT	Input/output parameter Selects the display format for COND-VALUE This parameter is only evaluated for COND-TYPE=VAL.																										
CHAR	The value COND-VALUE is output in alphanumeric form.																										
HEXA	The value COND-VALUE is output in hexadecimal form.																										
COND-VALUE	Output parameter For COND-TYPE=NET: status of the net <table> <tr> <td>CREATED</td> <td>A description has been created.</td> </tr> <tr> <td>ENDED</td> <td>Net processing has ended.</td> </tr> <tr> <td>ABENDED</td> <td>DELAY-SOLUTION=CANCEL or CANCEL-NET</td> </tr> <tr> <td>IGNORED</td> <td>DELAY-SOLUTION=IGNORE</td> </tr> </table> For COND-TYPE=JOB: status of the job/FT request <table> <tr> <td>CREATED</td> <td>A description has been created.</td> </tr> <tr> <td>NO-PLAN</td> <td>The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).</td> </tr> <tr> <td>NO-SUBMIT</td> <td>D mark in SUBMIT-NET or REPEAT-NET</td> </tr> <tr> <td>DELETED</td> <td>D mark in MODIFY-SUBMIT-NET</td> </tr> <tr> <td>IGNORED</td> <td>DELAY-SOLUTION=IGNORE</td> </tr> <tr> <td>ENDED</td> <td>Job terminated.</td> </tr> <tr> <td>ERROR</td> <td>Error or CANCEL-NET with CAN-TYPE=SOFT</td> </tr> <tr> <td>SKIPPED</td> <td>Skipped during a restart (RESTART-NET)</td> </tr> <tr> <td>ABENDED</td> <td>CANCEL-NET with CANCEL-TYPE=HARD</td> </tr> </table>	CREATED	A description has been created.	ENDED	Net processing has ended.	ABENDED	DELAY-SOLUTION=CANCEL or CANCEL-NET	IGNORED	DELAY-SOLUTION=IGNORE	CREATED	A description has been created.	NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).	NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET	DELETED	D mark in MODIFY-SUBMIT-NET	IGNORED	DELAY-SOLUTION=IGNORE	ENDED	Job terminated.	ERROR	Error or CANCEL-NET with CAN-TYPE=SOFT	SKIPPED	Skipped during a restart (RESTART-NET)	ABENDED	CANCEL-NET with CANCEL-TYPE=HARD
CREATED	A description has been created.																										
ENDED	Net processing has ended.																										
ABENDED	DELAY-SOLUTION=CANCEL or CANCEL-NET																										
IGNORED	DELAY-SOLUTION=IGNORE																										
CREATED	A description has been created.																										
NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).																										
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET																										
DELETED	D mark in MODIFY-SUBMIT-NET																										
IGNORED	DELAY-SOLUTION=IGNORE																										
ENDED	Job terminated.																										
ERROR	Error or CANCEL-NET with CAN-TYPE=SOFT																										
SKIPPED	Skipped during a restart (RESTART-NET)																										
ABENDED	CANCEL-NET with CANCEL-TYPE=HARD																										

For COND-TYPE=RES:

Value and status of the condition

mmm,CREATED | mmm,ERROR | mmm,EXCLUSIVE |

mmm,FREE | mmm,SHARE(uu)

mmm,CREATED The resource is set up mmm times as a shareable resource and is not yet available.

mmm,ERROR The resource is set up mmm times as a shareable resource and is not yet available.

mmm,EXCLUSIVE The resource is set up mmm times as a shareable resource and is allocated in the EXCLUSIVE mode.

mmm,FREE The resource is set up mmm times as a shareable resource and is available.

mmm,SHARE(uu) The resource is set up mmm times as a shareable resource and is allocated uu times in the SHARE mode.

The values mmm and uu are defined as follows:

mmm MAX-USING-SHARE: 2..100
Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100.

uu Number of quotas of a resource allocated in the SHARE mode.

For COND-TYPE=VAL

value of the condition

string Value of the condition
Depending on the parameter VALUE-FORMAT, the value is displayed in alphanumeric (c-string) or hexadecimal (x-string) format.

AVD031 – Display the users of a condition description

Since mask AVD031 is called up by the SHOW-COND-DESCRIPTION statement, the D mark cannot be used here to delete condition descriptions.

```

AVAS-Vnn.yxmn/AVD031                CONDITION-USER                tt.mm.jjjj/hh:mm:ss
COND-TYPE =...                        COND-STATUS=.....
COND-NAME =.....
CREATED BY =..... INDEX=...

M  NET-NAME/USER                INDEX                DATE/TIME                WAITING/USING
   OCCURE-VALUE

.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....

CMD: ..... OPR: .....
MSG: .....
    
```

- COND-TYPE Output parameter
Condition type
{NET / JOB / RES / VAL}
- NET Net
- JOB Job/FT request
- RES Resource
- VAL Defined value
- COND-STATUS Output parameter
Status of the condition description
The status which a condition description may take on depends on the type of the condition.
- ABENDED DELAY-SOLUTION=CANCEL or CANCEL-NET dialog
- CREATED A description has been created.
- mmm,CREATED The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is not available yet.

DELETED	D mark in MODIFY-SUBMIT-NET
ENDED	End
ERROR	Error
mmm, ERROR	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is subject to an error.
mmm, FREE	The resource with TYPE=RES can be allocated mmm times in the SHARE mode and is freely available.
IGNORED	DELAY-SOLUTION=IGNORE
NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET
SKIPPED	Skipped during a restart (RESTART-NET)
mmm, SHARE (uu)	The resource with TYPE=RES can be allocated mmm times and is being used uu times.
mmm, EXCLUSIVE	The resource with TYPE=RES can be allocated mmm times and is being used exclusively.
COND-NAME	Output parameter Name of the condition description \$ug_condname
CREATED BY	Output parameter Name of the net, or ID of the user, which created the description. { \$ug_netname / avas-user-id }
INDEX	Output parameter Index of the structure element Only output if the description was created via a net.
M	Input/output parameter Mark column
NET-NAME	Output parameter Name of the net which is waiting for the condition to be satisfied, or which is using the resource. \$ug_netname
INDEX	Index in the net, showing where the condition is used in the form specified by OCCURE-VALUE.

DATE/TIME	Output parameter Date and time since the user has been waiting for the condition to be satisfied.
WAITING/USING	Output parameter In the case of NET, JOB and VAL conditions, function C is always used to wait for a status or value. For a RES condition, the use of a resource can be specified.
WAITING	The net waits for the status or value specified under OCCURE-VALUE.
USING	The net is using the resource in either SHARE or EXCLUSIVE mode (only for COND-TYPE=RES).
OCCURE-VALUE	Output parameter Value of the condition, as recorded in the net at the appropriate index point with FU=C (wait for a condition). {status / status,status,... / (OP,pos,value) / (OP,pos,value),(OP,pos,value),...}
For TYPE=RES	Value and status to be waited for
mmm,CREATED	The resource is set up mmm times as a shareable resource and is not yet available.
mmm,ERROR	The resource is set up mmm times as a shareable resource and is not yet available.
mmm,EXCLUSIVE	The resource is set up mmm times as a shareable resource and is allocated in the EXCLUSIVE mode.
mmm,FREE	The resource is set up mmm times as a shareable resource and is available.
mmm,SHARE(uu)	The resource is set up mmm times as a shareable resource and is allocated uu times in the SHARE mode.
	The values mmm and uu are
mmm	MAX-USING-SHARE: 2..100 Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100.
uu	Number of quotas of a resource allocated in the SHARE mode. If the value <uu> is not specified, then it is set to the value 1. The value uu must be smaller than the value mmm for MAX-USING-SHARE.

For COND-TYPE=VAL

Value(s) of the condition linked with operators.
(OP,pos,value)

OP – comparison operation

= / EQ – equal to

< / LT – less than

> / GT – greater than

≤ / LE – less than or equal to

≥ / GE – greater than or equal to

≠ / NE – not equal to

If no comparison operation is specified, OP=EQ is assumed. The parameter and the comma are then omitted (pos,value).

pos – start position for the value specification

nnn

If no value is specified for pos, pos=1 is assumed.

Comparison values with neither OP nor pos are specified directly (value).

If a comparison operation is specified with no start position, the corresponding comma must nevertheless appear (OP,,value).

value – comparison value

'c-string'

C'c-string'

X'x-string'

Current value of the condition description in the run control file. The range extends to 128 bytes.

),(– logical OR operation

Where there are a number of condition tests, these are specified in parentheses, which links them by an OR operation.

For COND-TYPE=RES

Status or status list

FREE The resource is freely available.

SHARE The resource is shareable and is currently in use.

For COND-TYPE=NET

Status or status list

ENDED	Terminated
ABENDED	DELAY-SOLUTION=CANCEL or CANCEL-NET
IGNORED	DELAY-SOLUTION=IGNORE

For COND-TYPE=JOB

Status or status list

NO-PLAN	The job has not been planned (SYMDAT or D mark in CREATE-PLAN-NET).
NO-SUBMIT	D mark in SUBMIT-NET or REPEAT-NET
DELETED	D mark in MODIFY-SUBMIT-NET
IGNORED	DELAY-SOLUTION=IGNORE
ENDED	Terminated
ERROR	Error or CANCEL-NET with CANCEL-TYPE=SOFT
SKIPPED	Skipped during a restart (RESTART-NET)
ABENDED	CANCEL-NET with CANCEL-TYPE=HARD

SHOW-DOCUMENT – Display documentation elements

The SHOW-DOCUMENT statement is used to display documentation elements by way of EDT. They can be output to a LIST file by means of the PRINT operation.

The elements are selected by the S mark for display and by the Y mark for output to a LIST file.

Depending on the operand and operand value entered, the same masks are output as with EDIT-DOCUMENT (see [page 431](#)).

If the statement is issued without operands, all documentation elements with the user group of the user executing the function are displayed (mask AVS019).

SHOW-DOCUMENT
[ELEMENT-NAME=[\$ug_]element]

ELEMENT-NAME=

Name of a documentation element in the DOCLIB or DOCSYS whose records are to be displayed for editing through EDT.

ELEMENT-NAME=\$ug_

Name of the user group

Only a privileged user may specify a foreign user group.

If a documentation element from the DOCSYS is to be displayed, \$ugsys_ must be specified.

If no user group is specified, the elements from the user's own user group are displayed.

ELEMENT-NAME=element

Name of the documentation element in the DOCLIB.

Results directly in display of the documentation element through EDT. On returning from EDT, system mask AVS030 is output.

If the element name is specified in partially qualified form (last character *), this produces an overview of all documentation elements whose names begin with the partial qualification (mask AVS019).

SHOW-FORMAT – Display user mask

The SHOW-FORMAT statement enables each user to display the user masks stored in a mask library (NETMAP or JOBMAP). The libraries must be of the type PLAM. This statement cannot be used to display AVAS system masks.

SHOW-FORMAT
[,FORMAT-NAME=format]
[,AVAS-USER-LIBRARY= <u>NETMAP</u> / JOBMAP]

FORMAT-NAME=

Name of the user mask to be displayed.

FORMAT-NAME=format

The name of the user mask can be up to 8 characters long, but it must not begin with "AVM\$".

A partially qualified name causes the overview of user masks to be displayed. If the operand is not specified, AVAS assumes FORMAT-NAME=*

AVAS-USER-LIBRARY=

Name of the mask library from which the user mask is to be read.

If the operand is not specified, the default value NETMAP applies.

AVAS-USER-LIBRARY=NETMAP

The net mask is read from the library of user masks for net modification.

AVAS-USER-LIBRARY=JOBMAP

The job mask is read from the library of user masks for job modification.

SHOW-JOB – Display jobs and JCL elements

This statement can be used to display jobs and JCL elements from the JCLLIB or JCLSYS. The contents of the individual elements are displayed on the screen by EDT. Although all EDT update functions are possible, the modified contents cannot be written back to the JCLLIB. If the edited files are not saved, a corresponding message is output when EDT is terminated. AVAS branches back into EDT for the user to perform the save. If EDT is terminated again at this point, there will be an unconditional return to AVAS.

Even changing from SHOW-JOB to EDIT-JOB causes the modifications to be lost, since in this case the element is reread from the library before the SAVE operation can be entered.

The PRINT operation enables the elements to be output in a LIST file.

Elements are selected for display or output to a LIST file by flagging them with S or Y marks respectively.

SHOW-JOB
[ELEMENT-NAME=[\$ug_]element]

ELEMENT-NAME=

Name of a job or a JCL element in the JCLLIB or JCLSYS.

ELEMENT-NAME=\$ug_

Name of the user group.

Only privileged users are allowed to specify a foreign user group.

If the system user group \$ugsys is specified, the JCLSYS is searched; otherwise the JCLLIB is searched.

If no user group is specified, all elements belonging to the user's own user group are displayed.

ELEMENT-NAME=element

Element name in the JCLLIB or JCLSYS.

This entry directly causes elements to be displayed in EDT.

If the element name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no element name is entered, all elements belonging to the specified user group are displayed.

ELEMENT-NAME	Output parameter Names of the jobs and JCL elements.
DATE	Output parameter Date of last modification
RESULT	This parameter is irrelevant here.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL041.

SHOW-JOB-LOG – Display logs

The SHOW-JOB-LOG statement is used to display logs via EDT. The PRINT operation can be used to output these logs to a LIST file.

The PRINT operation can also be used to output the following to a SAM file (print file):

- an overview of the selected nets
(no element marked in mask AVI016)
- an overview of the logs of a net
(nets marked in mask AVI016)
- an overview of completed jobs
(no element marked in mask AVI017)
- a listing of the data of all the logs of a job run
(job run marked in mask AVI017)
- an overview of the logs of a job run
(no log marked in mask AVI018)
- a listing of the data in a log
(log marked in mask AVI018)

When the statement is called, either an overview of the nets is displayed in mask AVI016 or, if a fully qualified net name has been specified, an overview of the job runs of this net in mask AVI017.

The nets are selected in mask AVI016

- with mark S and the EXECUTE operation to display the job runs of a net in mask AVI017,
- with mark Y and the PRINT operation to output an overview of the logs to a LIST file, or
- with mark Y and the EXECUTE operation to display all the logs for the net via EDT.

The EXECUTE operation displays mask AVI017, the PRINT operation creates the LIST file.

The job runs are selected in mask AVI017

- with mark S and the EXECUTE operation to display the log entries in mask AVI018,
- with mark Y and the PRINT operation to output a list of the log data to a LIST file, or
- with mark Y and the EXECUTE operation to display all the log data for a job run via EDT.

If there is only one log entry, an overview is not displayed in mask AVI018. Instead, the log data is displayed via EDT.

If there is more than one log entry, they must be marked for selection in mask AVI018.

If the statement is issued without operands, all the nets with the user group of the function user will be displayed.

SHOW-JOB-LOG
[NET-NAME=[\$ug_]netname]

NET-NAME=

Name of a net in the AVAS pool, the logs of which are to be displayed.

NET-NAME=\$ug_

Name of the user group

Only the privileged user may specify a foreign user group.

If the user group is omitted, the user group of the function user is assumed.

NET-NAME=netname

Name of the net in the AVAS pool.

If the net name is entered as a partially qualified name (last character *), an overview of all the nets with names beginning with the partial qualification will be displayed.

NET-NAME	Output parameter Name of the net in the AVAS pool \$ug_netname_yymmdd_hhmmss
RESULT	Output parameter
ERROR	An error occurred while displaying the data using EDT.

The PRINT operation can be used to output a list of the log files. The list is output in the format of list AVL036.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL038.

Notes

- If an EDT procedure was defined by the AVAS administrator, the user can start this procedure using the statement @do n (n = number of the work file to be queried with the AVAS administrator). Any other marks in this mask are illegal.
- If no entries are marked, the EXECUTE operation is rejected with a message.
- If there are no marks and the PRINT operation is executed, an overview of the job runs of a net is output in a listing.

IND	Output parameter Index level of the job in the net
DATE	Output parameter Date of job start
TSN	Output parameter BS2000 task sequence number of the job run
JOB-NAME	Output parameter Name of the job in the net without the user group
CATID	Output parameter Catalog ID of the computer on which the job has run. When a server job runs without a signal, by default the job control system enters JOBLOG-NAME=*NONE for it in the log file LOGSYS. In this case CATID contains the catalog ID under which the substitute job AVSSINCM ran.
STATUS	Output parameter Status of the element in the AVAS pool
ADDED	Log data for the job run was collected via the ADD-JOB-LOG function.
ASSIGNED	No log data for the job run. A log was signaled in the job run, but no log data was transferred.
CREATED	No log data for the job. The log entry was created by the run control system (start parameter GENERATE-JOB-LOG=*ALL).
ERROR	An error occurred during transfer of the log data in the job run.
IGNORE	The signaled log(s) are to be ignored.
SAVED	The log(s) of the job run were saved as part of reorganization.
TRANSFERRED	All log data was collected error-free in the job run.

RESULT	Output parameter Acknowledgment for performing the action.
LOCKED	The job with the specified CATID and TSN is still controlled by the run control system. Given this, it is not possible to determine the data for the job (IND and JOB-NAME).
ERROR	An error occurred while displaying the data via EDT.
NOT-FOUND	There are no logs for the display.

The PRINT operation can be used to output a list of the log files. The list is output in the format of list AVL037.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL039.

M	Input parameter
S (Select)	The log is selected for data display via EDT. The mark is processed with the EXECUTE operation.
Y (Yes)	The job run is selected for listing of the log data. The PRINT operation outputs the log data.
	Any other marks in this mask are illegal. Only logs with ADDED or TRANSFERRED status may be marked. If no entries are marked, the EXECUTE operation is rejected with a message. If there are no marks and the PRINT operation is executed, an overview of the logs of the job run is output in a listing.
JOBLOG-NAME	Output parameter {filename / *NONE}
filename	Name of the log that was signaled.
*NONE	No log name signaled
STATUS	Output parameter Status of the logs
ADDED	Log data for the job run was collected via the ADD-JOB-LOG function.
ASSIGNED	No log data for the job run. A log was signaled in the job run, but no log data was transferred.
CREATED	No log data for the job. The log entry was created by the run control system.
ERROR	An error occurred during transfer of the log data in the job run.
IGNORE	The signaled log is to be ignored.
TRANSFERRED	All log data was collected error-free in the job run.
RESULT	This parameter is irrelevant here.

The PRINT operation can be used to output a list of the log files. The list is output in the format of list AVL038.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL039.

SHOW-JOURNAL – Display journal records

The SHOW-JOURNAL statement is used to display the journal records which were output for a net and the log data relating to a job. The journal records are displayed in varying degrees of detail:

Display 1: Overview of journal records output by the statements without the data which was moved or modified within the framework of the statement.

Display 2: A journal record with all moved or modified data, plus messages output in the event of errors.

The moved or modified data is displayed via mask AVI006 below the OUTPUT-AREA parameter. Different parameters are shown, depending on the data record key OUTPUT-KEY.

The meaning of the record key and of the journal records output by the statements is described on [page 913](#) onwards.

The meaning of the parameters output below OUTPUT-AREA can be found in the record structure of the journal records.

For the definitions of the record keys, see the manual “AVAS for the Administrator” [2].

If journal records are selected for output to the LIST-FILE, each journal record is output in complete and edited form. The following journal records are output via the individual statements and by the AVAS run control system:

Statement	ACTION/RESULT	Number	Object	Record key
CREA-PLAN-NET	START/PLANNED	2	Net	11-
	PLANNED	1	Structure element	12-
	DELETED	1	Structure element	12-
MOD-PLAN-NET	START/UPDATED	2	Net	14-
DEL-PLAN-NET	START/DELETED	2	Net	01-
	START/NO-DELETE	2	Net	01-
	DELETED	1	Structure element with FU=J/P	16-
COL-NET-PAR	START/UPDATED	2	Net	01-
	CREATED/UPDATED	1	Mask	15-

Statement	ACTION/RESULT	Number	Object	Record key
CREA-PROD-NET	START/SAVED	2	Net	01-
		1	Data record U-P-FILE	21-
	TOCREATE/CREATED	1	System variable	21-
		2	Structure element with FU=J/P	16-
		1	Element call	23-
		1	Format call	22-
		2	JCL statement FU=J (old/new)	25-
		1	JCL statement FU=P (new)	25-
EDIT-PROD-JOB	START/UPDATED NO-CHANGE/CHANGED	2	Job	16-
		2	JCL statement (old/new)	65-
	DELETED	1	JCL statement	65-
	INSERTED	1	JCL statement	65-
MOD-PROD-NET/ DEL-PROD-NET	START/SAVED	2	Net	01-
	DELETED	1	Structure element with FU=J/P	16-
SUBMIT-NET	START/SUBMITTED	2	Net	31-
	SHIFTED	1	Net	31-
	SUBMITTED	1	Structure element with FU=J/P/F	32-
	SUBMITTED	1	Structure element with FU=C/A/M/D/W	54-
	DELETED	1	Structure element with FU=J/P/F	32-
	DELETED	1	Structure element with FU=C/A/M/D/W	54-
	DELETED	1	JCL statement	25-
REPEAT-NET	START/SUBMITTED	2	Net	31-
	SHIFTED	1	Net	31-
	SUBMITTED	1	Structure element with FU=J/P/F	32-
	SUBMITTED	1	Structure element with FU=C/A/M/D/W	54
	DELETED	1	Structure element with FU=J/P/F	32-
	DELETED	1	Structure element with FU=C/A/M/D/W	54-
	DELETED	1	JCL statement	25-

Statement	ACTION/RESULT	Number	Object	Record key
MOD-SUBM-NET	START/CHANGED	2	Net	55-
	SHIFTED	1	Net	55-
	NO-CHANGE/CHANGED	2	Structure element	54-
	NO-CHANGE/CHANGED	2	Structure element with FU=J/P	56-
	NO-CHANGE/CHANGED	2	Structure element with FU=F	60-
	NO-CHANGE/CHANGED	2	Structure element with FU=C/A/M/D/W	57-
	NO-CHANGE/CHANGED	2	Structure element with FU=C TYPE=JVA	53-
	DELETED	1	Structure element	54-
MOD-SUBM-JOB	START/CHANGED	2	Structure element with FU=J/P	52-
	NO-CHANGE/CHANGED	2	JCL statement	65-
	INSERTED	1	JCL statement	65-
	DELETED	1	JCL statement	65-
HOLD-NET	START/HOLD	2	Net	51-
	UPDATED	1	Structure element	52-
RESUME-NET	START/RESUMED	2	Net	51-
	UPDATED	1	Structure element	52-
CANCEL-NET	START/CANCELLED	2	Net	51-
START-NET	START/STARTED	2	Net	51-
RESTART-NET	START/RESTARTED	2	Net	51-
	UPDATED	1	Structure element	52-
	UPDATED	1	Net	58-

Statement	ACTION/RESULT	Number	Object	Record key
RUN-CONTROL	START/ENDED	2	Net	51-
	START/ENDED	2	Structure element with FU=J/P/F	52-
	START/ENDED	2	Structure element with FU=S	59-
	UPDATED	1	Structure element with FU=J/P	56-
	NO-OCCURE/OCCURRED	2	Structure element with FU=C/W	57-
	OCCURRED	1	Structure element with FU=C	54-
	EXECUTED	1	Structure element with FU=A/M/D	57-
	NO-OCCURE/OCCURRED	2	Structure element with FU=C TYPE=JVA	53-
	ERROR	1	Structure element with FU=J/P/F	52-
	ERROR	1	Structure element with FU=C TYPE=JVA	53-
	ERROR	1	Structure element with FU=C/J/P/F	54-
	ERROR	1	Structure element with FU=C/A/M/D	57-
	IGNORED	1	Structure element with FU=C/J/P/F	54-
	RESTARTED	1	Net	51-
	RESUMED	1	Net	51-
	HOLD	1	Net	51-
	CONDWAIT	1	Net	51-
	HOSTWAIT	1	Net	51-
	ERROR	1	Net	51-
	IGNORED	1	Net	51-

Meaning of the record keys and record sequence numbers

Record key

The record key (RK) determines which data is output in the data area, and defines its structure and scope.

RK	Output in data area	Macro call
01	No data	-----
09	MSG-7 error message	MSG7 text
11	Net data (CR-PL-NET)	S11 AVASJRN
12	Structure element data (CR-PL-NET)	S12 AVASJRN
14	Net data (MOD-PL-NET)	S14 AVASJRN
15	Format name, format text	S15 AVASJRN
16	Job name, library name	S16 AVASJRN
21	USER-PARAM-FILE/system variables data	S21 AVASJRN
22	Assign mask	JCLLIB statement
23	Call element	JCLLIB statement
25	Modify parameter	statement
31	Net data (SUBMIT-NET)	S31 AVASJRN
32	Job data (SUBMIT-NET)	S32 AVASJRN
51	Net data (E2 record in ABLDAT)	S51 AVASJRN
52	Structure element data (E3 record in ABLDAT)	S52 AVASJRN
53	Structure element data for FU=C and TYPE=JVA	S53 AVASJRN
54	Restart point data	S54 AVASJRN
55	Net data (MOD-SUBM-NET)	S55 AVASJRN
56	Job parameter	S56 AVASJRN
57	Structure element data for FU=C/A/M/D/W	S57 AVASJRN
58	Restart data (P-0-E, P-0-R)	S58 AVASJRN
60	Data structure element with FU=F	S60 AVASJRN
65	JCL statement	Statement

Record sequence number

The record sequence number (RSN) describes the status of the data output. It describes whether the data involved is input or output data, and whether or not it has been updated.

RSN

- 00 Start of action or execution
- 01 Existing data (INPUT)
- 02 Created (updated) data (OUTPUT)
- 03 Interrupt (CONDWAIT or HOSTWAIT)
- 04 Deletion of data
- 05 Error in existing data (INPUT)
- 06 Error in created (updated) data (OUTPUT)
- 07 End of action (C, S or E)
- 08 Abort action (I, R or error)
- 09 Error message regarding record key (text)

Note

The SHOW-JOURNAL statement only shows the journal records which were created in AVAS V4.0A or higher correctly.

Journal records of the statements

Below is a summary of those journal records which are output by the individual statements. Please note that, for each processing operation, only a subset of the journal records listed is actually output, and also that a journal record may be output more than once for different objects (e.g. jobs).

Note

Output of the journal records marked with an x can be suppressed in the AVEX0001 or AVEX0002 computer center exit.

RK-RSN	Statement	Output in data area	
	CREATE-PLAN-NET		
11-00	Start of planning	S11	AVASJRN
12-00	Output structure element	S12	AVASJRN x
12-04	Delete structure element	S12	AVASJRN x
11-07	End of planning	S11	AVASJRN
11-08	Abort planning	S11	AVASJRN
09-00	Error message	MSG7	text
	MODIFY-PLAN-NET		
14-01	Modification	S14	AVASJRN
14-07	Modification	S14	AVASJRN
14-08	Modification	S14	AVASJRN
09-00	Error message	MSG7	text
	DELETE-PLAN-NET		
01-00	Start of deletion	---	
16-04	Delete job	S16	AVASJRN
16-05	Error during deletion	S16	AVASJRN
01-07	End of function	---	
01-08	Abort function	---	
09-00	Error message	MSG7	text
	COLLECT-NET-PAR		
01-00	Start of function	---	
15-00	Execute mask	S15	AVASJRN
15-05	Error in mask	S15	AVASJRN
01-07	End of function	---	
01-08	Abort function	---	
09-00	Error message	MSG7	text

RK-RSN	Statement	Output	in data area
	CREATE-PROD-NET		
01-00	Start net modification	---	
21-01	USER-PAR-FILE data	S21	AVASJRN x
21-01	System variable	S21	AVASJRN x
21-05	Error USER-PAR-FILE	S21	AVASJRN
16-00	Start modification FU=J/P	S16	AVASJRN
21-01	USER-PAR-FILE data	S21	AVASJRN x
21-05	Error USER-PAR-FILE	S21	AVASJRN
22-00	Assign mask	JCLLIB	statement x
23-00	Call element	JCLLIB	statement x
25-01	Modify parameter	JCLLIB	statement x
25-02	Modify parameter	JCLLIB	statement x
25-04	Empty record	---	
16-07	End modification FU=J/P	S16	AVASJRN
16-08	Abort modific. FU=J/P	S16	AVASJRN
01-07	End of function	---	
01-08	Abort function	---	
09-08	Error message	MSG7	text
	EDIT-PROD-JOB		
16-00	Start of function	S16	AVASJRN
65-01	JCL statement (old)	JMDLIB	statement x
65-02	JCL statement (new)	JMDLIB	statement x
65-04	JCL statement (deleted)	JMDLIB	statement x
16-07	End of function	S16	AVASJRN
16-08	Abort function	S16	AVASJRN
09-00	Error message	MSG7	text
	MODIFY-PROD-NET		
01-00	Start of deletion	---	
16-04	Delete job	S16	AVASJRN
16-05	Error during deletion	S16	AVASJRN
01-07	End of function	---	
01-08	Abort function	---	
09-00	Error message	MSG7	text
	DELETE-PROD-NET		
01-00	Start of deletion	---	
16-00	Delete job	S16	AVASJRN
16-05	Error during deletion	S16	AVASJRN
01-07	End of function	---	
01-08	Abort function	---	
09-00	Error message	MSG7	text

RK-RSN	Statement	Output	in data area
	SUBMIT-NET		
31-00	Start net release	S31	AVASJRN
32-00	Output structure element with FU=J/P/F	S32	AVASJRN x
32-04	Delete structure element with FU=J/P/F	S32	AVASJRN x
32-05	Output structure element with FU=J/P/F ERROR	S32	AVASJRN x
25-01	JCL statement (old)	JMDLIB	statement x
25-02	JCL statement (new)	EX7102	statement x
25-04	JCL statement (delete)	JMDLIB	statement x
25-05	JCL statement ERROR	EX7102	statement x
25-09	JCL statement EXIT-ERROR	EX7102	statement x
54-00	Output structure element with FU=A/C/D/M/W	S54	AVASJRN x
54-04	Delete structure element with FU=A/C/D/M/W	S54	AVASJRN x
31-02	Switch RUN-CONTROL-SYSTEM	S31	AVASJRN
31-07	End net release	S31	AVASJRN
31-08	Abort function	S31	AVASJRN
09-05	Error message	MSG7	text
09-06	Error message	MSG7	text
	REPEAT-NET		
31-00	Start net release	S31	AVASJRN
32-00	Output structure element with FU=J/P/F	S32	AVASJRN x
32-05	Output structure element with FU=J/P/F ERROR	S32	AVASJRN x
25-01	JCL statement (old)	JMDLIB	statement x
25-02	JCL statement (new)	EX7102	statement x
25-04	JCL statement (delete)	JMDLIB	statement x
25-05	JCL statement (error)	EX7102	statement x
25-09	JCL statement ERROR-EXIT	EX7102	statement x
54-00	Output structure element with FU=A/C/D/M/W	S54	AVASJRN x
54-04	Delete structure element with FU=A/C/D/M/W	S54	AVASJRN x
31-02	Switch RUN-CONTROL-SYSTEM	S31	AVASJRN
31-07	End net release	S31	AVASJRN
31-08	Abort function	S31	AVASJRN
09-05	Error message	MSG7	text
09-06	Error message	MSG7	text

RK-RSN	Statement	Output in data area	
	CANCEL-NET		
51-00	Net status before function	S51	AVASJRN
51-07	Net status after function	S51	AVASJRN
51-08	Abort function	S51	AVASJRN
09-06	Error message	MSG7	text
	HOLD-NET		
51-00	Net status before function	S51	AVASJRN
52-02	Structure element status after function	S52	AVASJRN
52-09	Invalid str.element / status	S52	AVASJRN
51-07	Net status after function	S51	AVASJRN
51-08	Abort function	S51	AVASJRN
09-06	Error message	MSG7	text
	RESUME-NET		
51-00	Net status before function	S51	AVASJRN
52-02	Structure element status after function	S52	AVASJRN
52-09	Invalid str.element / status	S52	AVASJRN
51-07	Net status after function	S51	AVASJRN
51-08	Abort function	S51	AVASJRN
09-06	Error message	MSG7	text
	START-NET		
51-00	Net status before function	S51	AVASJRN
51-07	Net status after function	S51	AVASJRN
51-08	Abort function	S51	AVASJRN
09-06	Error message	MSG7	text
	RESTART-NET		
51-00	Net status before function	S51	AVASJRN
52-02	Structure element status after function	S52	AVASJRN
52-09	Invalid str.element / status	S52	AVASJRN
58-02	Restart point, restart name	S58	AVASJRN
51-07	Net status after function	S51	AVASJRN
51-08	Abort function	S51	AVASJRN
09-06	Error message	MSG7	text

RK-RSN	Statement	Output in data area	
	MODIFY-SUBMIT-NET		
55-00	Start modification	S55	AVASJRN
55-02	Switch RUN-CONTROL-SYSTEM	S55	AVASJRN
54-01	Restart variant (old)	S54	AVASJRN
54-02	Restart variant (new)	S54	AVASJRN
54-04	Delete structure element	S54	AVASJRN
56-01	Parameter FU=J/P old	S56	AVASJRN
56-02	Parameter FU=J/P new	S56	AVASJRN
53-01	Parameter FU=C TYPE=JVA(old)	S53	AVASJRN
53-02	Parameter FU=C TYPE=JVA(new)	S53	AVASJRN
57-01	Parameter FU=C/A/M/D/W (old)	S57	AVASJRN
57-02	Parameter FU=C/A/M/D/W (new)	S57	AVASJRN
60-01	Parameter FU=F (old)	S60	AVASJRN
60-02	Parameter FU=F (new)	S60	AVASJRN
55-07	End of function	S55	AVASJRN
55-08	Abort function	S55	AVASJRN
09-00	Error message	MSG7	text
	MODIFY-SUBMIT-JOB		
52-00	Start job modification	S52	AVASJRN
65-01	JCL statement (old)	ABLDAT	statement x
65-02	JCL statement (new)	ABLDAT	statement x
65-04	JCL statement (delete)	ABLDAT	statement x
52-07	End of function	S52	AVASJRN
52-08	Abort function	S52	AVASJRN
09-00	Error message	MSG7	text
	AVAK run control and monitoring system		
51-00	Start a net	S51	AVASJRN
51-02	End of a net while the run control system was not active	S51	AQVASJRN
51-03	Start after HOLD,CONDWAIT or HOSTWAIT	S51	AVASJRN
51-03	Restart a net	S51	AVASJRN
52-00	Start of FU=J/P/F	S52	AVASJRN
52-07	Normal term. of FU=J/P/F	S52	AVASJRN
52-08	Abnormal term. of FU=J/P/F	S52	AVASJRN
59-00	Start von FU=S	S59	AVASJRN
59-07	normales Ende von FU=S	S59	AVASJRN
59-08	abnormales Ende von FU=S	S59	AVASJRN
57-03	CONDWAIT due to FU=C/W	S57	AVASJRN
57-03	HOSTWAIT due to FU=C/P	S57	AVASJRN
57-07	Satisfaction of FU=C/W	S57	AVASJRN
57-07	Execution of FU=A/D/M	S57	AVASJRN
57-08	Error after FU=C/A/D/M/W	S57	AVASJRN
53-03	CONDWAIT due to FU=C TYPE=JVA	S53	AVASJRN
53-07	Satisfaction of FU=C TYPE=JVA	S53	AVASJRN

53-08	Error after FU=C TYPE=JVA	S53	AVASJRN
54-07	DELAY-SOLUTION=IGNORE FU=C/J/P/F	S54	AVASJRN
54-07	DELAY-SOLUTION=START FU=C	S54	AVASJRN
54-08	DELAY-SOLUTION=CANCEL FU=C/J/P/F	S54	AVASJRN
56-02	ENTER parameter after AVEX0401 or if corrections are made using CHANGE-NET- DESCRIPTION function	S56	AVASJRN
51-07	End of a net	S51	AVASJRN
51-02	End of a net while the run run control system was not active	S51	AQVASJRN
51-08	Abort net	S51	AVASJRN
09-00	Error message	MSG7	text
08-01	User information from #AVA#		text

The log data relating to a task can be displayed via EDT in masks AVI005 and AVI006, using the JOBLOG operation.

Logs can be displayed for a journal record that describes the completion of a job.

If a number of logs were processed by AVAS in a task, the data from all the logs is displayed. If an EDT procedure was predefined by the AVAS administrator, the user can start this procedure by entering the statement @do n (where n = number of the workfile to be queried with the AVAS administrator).

The SHOW-JOB-LOG statement can be used to display the other logs.

SHOW-JOURNAL

[NET-NAME=[\$ug_]netname]

[,PERIOD-NAME=period / (dd.mm.yy [/hh:mm:ss][,dd.mm.yy [/hh:mm:ss]])]

[,RUN-CONTROL-SYSTEM=*STD / avak]

NET-NAME=

Name of a net whose journal records are to be displayed.

NET-NAME=\$ug_

Name of the user group.

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of the net in the journal file.

This entry causes the overview of journal records in a net to be displayed.

The PERIOD-NAME operand cannot be used for fully qualified net names.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets in the journal file whose names begin with the partial qualification.

If no net name is specified, all nets with the user group of the user executing the function are displayed.

PERIOD-NAME=

Specifies a period (time span).

All nets whose PLAN-START falls within this period are displayed.

The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)

Specification of the real date and time, which determine the start and end date and time for the period.

If the "right" period limit is missing, the end date is set to the start date and the end time to 23:59. The default value for the start time is 00:00.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- The standard run control system of the user group is used immediately after SIGNON.
- If the user may employ all run control systems defined in the system (see avak-use parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
- If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of the run control system

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

NET-STATUS	Output parameter keyword1 / keyword2
keyword1	Status of net processing, relative to the run control file if the net has already been released, or relative to the library of production nets.
keyword2	Status of the net in the journal file.
SAVED	The journal records of the net are also stored in the last journal backup file.
blank	The journal records for this net have not yet been saved.
FROM-DATE	Input/output parameter Start value of a period dd.mm.yyyy[/hh:mm:ss] The default values are PERIOD-START-DATE and PERIOD-START-TIME if a net group was selected via PERIOD-NAME, or the PLAN-START of the first selected net. The period boundary may be modified, but it must lie within the values specified by PERIOD-NAME. If no PERIOD-NAME is specified, FROM-DATE is assigned the value of the PLAN-START of the first net. If FROM-DATE is deleted by the input, the default assignment described above applies.
TO-DATE	Input/output parameter End value of a period dd.mm.yyyy[/hh:mm:ss] The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise, as for FROM-DATE). If no PERIOD-NAME is specified, TO-DATE is assigned the value of PLAN-START from the last net. If TO-DATE is deleted by the input, the default assignment described above applies.

Note

The current status of the net is ascertained only when the overview is obtained (e.g. modification of the operands or DUE key following CMD:R).

If the net status changes after the overview is obtained a different status, the current status, can be displayed after a net has been selected by means of the S mark.

The same applies to the selection of a journal record via mask AVI005 and the display via mask AVI006.

Status changes should be monitored by means of the SHOW-NET-STATUS or NET-CONTROL statement.

The PRINT operation can be used to output a list of the selected nets. The list is output in the format of list AVL033.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL031.

M	Input parameter
S (Select)	<p>The marked journal record is to be displayed. (EXECUTE operation).</p> <p>The JOBLLOG operation displays the log for the selected journal record via EDT. In this case, the S mark may only be used for journal records with a status of ACT/RES ENDED or ERROR at the job level.</p> <p>If an incorrect journal record is marked or no log can be displayed, the marked journal record is output with a message. Processing can be continued with the CONTINUE or IGNORE operation.</p>
COMMAND	<p>Output parameter</p> <p>Statement or system function which output the journal record.</p>
ACT/RES	<p>Output parameter</p> <p>Specifies the action initiated via the statement.</p>
DATE	<p>Output parameter</p> <p>Date on which the journal record was output. dd.mm.yy</p>
TIME	<p>Output parameter</p> <p>Time of day when the journal record was output. hh:mm[:ss]</p>
IND	<p>Output parameter</p> <p>Index level of the net which was being processed when the journal record was output.</p>
F	<p>Output parameter</p> <p>Function for which the journal record was output. {N / J / P / S / F / C / W / A / M / D}</p>
N	The journal record was output during processing of net data. The net data output in the OUTPUT-AREA is defined by the record key.
J, P	The journal record was output during processing of a net job. The output format for the journal record is defined by the record key.
S	The journal record was output during processing of a task to start a subnet of the net. The data output for the subnet is defined by the record key.
F	The journal record was output during processing of an FT request. The data output is defined by the record key.
C or W	The journal record was output during testing of a net condition. The data output for the condition is defined by the record key.

A, M, D	The journal record was output during editing of condition descriptions. The data output is defined by the record key.
NAME	Output parameter Name of the object which was being processed when the journal record was output.
SEL-NAME	Input/output parameter Name of an object whose journal records are to be displayed (the name can be partially qualified).
SEL-INDEX	Input/output parameter This selects an index level as of which the journal records for the net are to be displayed. The selection can be restricted using SEL-NAME.
FROM-DATE	Input/output parameter Date and time of day as of which the journal records are to be displayed. dd.mm.yy[/hh:mm:ss] The default value is the output date of the first journal record for the net.

Notes

- Once the journal records of a net have been obtained, the last page of the records is displayed, since these records usually contain the desired information.
- If there are more journal records than can be displayed (message AVS5914), the remaining records can be obtained by modifying the date and time in the FROM-DATE parameter.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL031.

AVAS-USER	<p>Output parameter Name of the user who executed the statement.</p> <p>In the case of journal records output via the run control system, the name of the run control system is output under AVAS-USER.</p> <p>If a net is not released because release was prohibited by computer center exit 7102, constant AVEX7102 is output under AVAS-USER.</p> <p>If a job is not started because this is prevented by computer center exit 0401, constant AVEX0401 is output under AVAS-USER.</p>
DATE/TIME	<p>Output parameter Date and time of day at which the journal record was output. dd.mm.yy/hh:mm:ss</p>
OUTPUT-KEY	<p>Output parameter Record key The meaning of the record keys is explained on page 909. This is followed by an overview of all journal records output by AVAS.</p>
INDEX	<p>Output parameter Index level of the net which was processed when the journal record was output.</p>
FUNCTION	<p>Output parameter Function for which the journal record was output. {N / J / P / S / F / C / W / A / M / D}</p>
N	The journal record was output during processing of net data. The net data output in the OUTPUT-AREA is defined by the record key.
J, P	The journal record was output during processing of a net job. The data output for the job is defined by the record key.
S	The journal record was output during processing of a task to start a subnet of the net. The data output for the subnet is defined by the record key.
F	The journal record was output during processing of an FT request. The data output is defined by the record key.
C or W	The journal record was output during testing of a net condition. The data output for the condition is defined by the record key.
A, M, D	The journal record was output during editing of condition descriptions. The data output is defined by the record key.
NAME	<p>Output parameter Name of the object which was processed when the journal record was output.</p>

OUTPUT-AREA Output parameter
Record contents of the journal record output in connection with
FUNCTION.
The field is edited in accordance with the OUTPUT-KEY and is thus
supplied with different parameters.

Note

Records with OUTPUT-KEY=01 have no data in the OUTPUT-AREA.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL032.

SHOW-NET-DESCRIPTION – Display net description

The SHOW-NET-DESCRIPTION statement enables the user to display the net descriptions contained in the net library NETLIB or NETSYS and to create the list of a net description via the PRINT operation. The display is obtained either by specifying a statement with a unique net name or by selecting a net from an overview. The display covers three masks, with the possibility of paging sequentially through all the information (CONTINUE).

With the SHOW-NET-DESCRIPTION statement the following types of documentation can be displayed for the nets:

- net documentation
- job documentation
- FT request documentation
- condition documentation

The current documentation element is displayed by means of the DOCUMENT operation:

Net documentation

- Mask AVN001 (net parameters)
- Mask AVN004 (net structure)
- Mask AVN006 (net masks)
- Mask AVN015 (net parameters for subnet)
- Mask AVN020 (net plan data)
- Mask AVN025 (plan data for subnet)

Job documentation

- Mask AVN002/AVN042/AVN052 (BS2000 job/S procedure parameters)
- Mask AVN021 (plan data)

FT request documentation

- Mask AVN016 (FT request parameters)
- Mask AVN026 (FT request plan data)

Condition documentation

- Mask AVN003 (parameters)
- Mask AVN008 (parameters)
- Mask AVN030 (parameters)
- Mask AVN031 (parameters)
- Mask AVN032 (parameters)
- Mask AVN022 (plan data)
- Mask AVN023 (plan data)
- Mask AVN024 (plan data)

The PRINT operation can be used to output

- a list of selected nets (no element marked in the AVN011 mask), or
- a list of individual net descriptions (corresponding nets marked in the AVN011 mask) to a SAM file (print file).

With PRINT, the AVS015 mask is presented for entering the name of the print file.

If the print file is not to be output, the RETURN operation should be entered in the AVS015 mask (see PRINT operation on [page 41](#)).

SHOW-NET-DESCRIPTION
[NET-NAME=[\$ug_]netname]
[OBJECT= <u>NET</u> / PST / MAP / STR]

NET-NAME=

Name of a net whose description is to be displayed.

NET-NAME=\$ug_

Name of the user group.

If the system user group \$ugsys is specified, NETSYS is searched; otherwise NETLIB is searched.

If no user group is specified, all elements of the user's own user group are displayed.

NET-NAME=netname

Element name in the NETLIB or NETSYS.

Depending on the value specified for the OBJECT operand, this entry leads directly to a display of the net description.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no net name is entered, all elements of the specified user group are displayed.

OBJECT=

Selects the net description data to be displayed. This operand is only permissible in conjunction with a fully qualified net name.

OBJECT=NET

The net parameters are to be displayed.

OBJECT=PST

The net plan data items are to be displayed.

OBJECT=MAP

The net mask table is to be displayed.

OBJECT=STR

The overview of structure elements is to be displayed.

If OBJECT is omitted, the overview of net parameters is displayed.

IND;OBJ	Input/output parameter This is processed only in connection with the S mark. {index / <u>NET</u> / PST / MAP / STR}
index	The index entry causes an overview to be displayed containing the structure elements, starting at the desired index level.
<u>NET</u>	The AVN001 mask is displayed with the net data.
PST	The AVN020 mask is displayed with the net plan data.
MAP	The AVN006 mask is displayed with the table of net masks.
STR	Entering STR leads to the display of an overview containing the structure elements starting at the first index level. If OBJECT is omitted, this causes a display of the net parameters, with the possibility of paging further through the net description using CONTINUE.
RESULT	This parameter is irrelevant here.

The PRINT operation can be used to output a list of the selected nets. The list is output in the format of list AVL006.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL001.

AVN001 – Display the net parameters

```

AVAS-Vnn.yxmn/AVN001          N E T - P A R A M S          tt.mm.jjjj/hh:mm:ss

NET-NAME=.....
NET-TEXT=.....
NET-DOC =.....

NET-TYPE      =.

RUN-CONTROL-SYSTEM=.....

USER-PAR-FILE=.....

NET-CAT      =.....

NET-USER     =..... NET-ACCOUNT =..... NET-PASSWORD=.....
NET-CLASS    =..... NET-LOG      =.....
NET-PARAMETER=.....

CMD:..... OPR:.....
MSG:.....
    
```

- NET-NAME** Output parameter
 Name of the net whose description is to be displayed.
 The user group is prefixed to the net name, even if it is not specified in the SHOW-NET-DESCRIPTION statement.
- NET-TEXT** Output parameter
 Brief description of the net, up to 120 characters long.
- NET-DOC** Output parameter
 {*STD / element / *NONE}

 - *STD The documentation is sought under the standard name \$ugnet_netname in the DOCLIB.

element	<p>Element name for the documentation of the net in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>The DOCUMENT operation can be used to display the documentation elements.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the net, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
NET-TYPE	<p>Output parameter Specifies whether nets with the same name but different start times are to be started. {1 / 2 / 3}</p>
1	<p>The net is started regardless of whether a net with the same name is or was running.</p>
2	<p>The net is not started as long as a net with the same name is running. A net is deemed to be running if it has the status ERROR, CONDWAIT, HOSTWAIT or HOLD following RUNNING (at least one job of the net has been started or a condition has been checked).</p> <p>If two or more nets with the same name and not of type 1 are waiting to start, the net with the earliest PLAN-START time will be started first.</p>
3	<p>The net will only be started if no net with the same name has been brought to execution since the last time the run control file was reorganized (see the manual "AVAS for the Administrator" [2]).</p> <p>The restrictions specified by NET-TYPE=2 or 3 apply only to those nets which are brought to execution within one RUN-CONTROL-SYSTEM.</p>

RUN-CONTROL-SYSTEM	
	Output parameter {avak / *STD}
avak	Name of the run control system (German abbreviation) that is to control net processing.
*STD	By default, this is assigned the name of the run control system defined for the user group in the system parameters.
USER-PAR-FILE	
	Output parameter File containing parameters for the modification. {*NONE / *STD / *BY-HYPERNET / filename / libname(element[,type])}
*NONE	No USER-PARAM-FILE is used or the name of the file is specified via the AVM012 mask in the case of CREATE-PROD-NET.
*STD	The name of the USER-PARAM-FILE is sought with PARAM.\$ug.netname[.yymmdd[.hhmmss]] and descending classification in the case of CREATE-PROD-NET.
*BY-HYPERNET	The USER-PARAM-FILE of the hypernet is used if the net is planned as a subnet. When a hypernet is involved, the same procedure applies as for *NONE.
filename	The parameters contained in this file are used during the modification process.
libname(element[,type])	The parameters are sought in the specified element of the defined library. If the type is not specified, the element is expected as type S. Valid entries for type are S, J, P and D.
NET-CAT	
	Output parameter {'catid' / '*ANY' / jvname / (bs2000-servername) / jvname} Parameter for job distribution within a HIPLEX MSCF network (Multi System Control Facility; see the manual "AVAS Functions and Tables" [1]) or on a remote BS2000 system.
'catid'	For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.
*ANY	If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.

(bs2000-servername)	For a job on a remote BS2000 system a BS2000 server name is output which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).
jvname	Name of a job variable containing a catalog ID, the value *ANY, or a BS2000 server name.
NET-USER	Output parameter (BS2000 ENTER parameter) User identification under which all jobs in the net are to run (with server jobs the BS2000 user ID under which AVSSINCM is to run). It is used as the default value for the USER parameter of all jobs in the net (see the AVN002 mask, USER parameter).
NET-ACCOUNT	Output parameter (BS2000 ENTER parameter) Account number under which all jobs in the net are billed. It is used as the default value for the JOB-ACCOUNT parameter of all jobs in the net (see the AVN002 mask, JOB-ACCOUNT parameter).
NET-PASSWORD	The NET-PASSWORD field is blanked out in the AVN001 mask. The password is not displayed. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this option.
NET-CLASS	Output parameter (BS2000 ENTER parameter) Job class in which all jobs in the net are classified. It is used as the default value for the JOB-CLASS parameter of all jobs in the net (see the AVN002 mask, JOB-CLASS parameter).
NET-LOG	Output parameter (BS2000 ENTER parameter) Indicates whether (YES) or not (NO) the SYSOUT log of jobs in the net is to be printed out. The value specified here is used as the default value for the LOG parameter of all jobs in the net (see the AVN002 mask, LOG parameter).

NET-PARAMETER Output parameter
 (BS2000 ENTER parameter)

Specifies additional attributes for the selected job class in the ENTER call. The entry is regarded as the default value for the JOB-PARAMETER parameter of all tasks in the net (see mask AVN002 JOB-PARAMETER).

The parameters are then passed upon the ENTER call but not validated by AVAS.

Note

In the case of structure elements with FUNCTION=P and TYPE=EXX, the value of NET-PARAMETER is not taken into account.
Parameters for the external task can only be defined via JOB-PARAMETER.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL001.

SELECT-TURNUS	<p>Output parameter Characteristic for forming net run variants {1 / 2 / .. 9}</p> <p>If this value matches the value for SELECT-TURNUS in the structure element, the structure element is planned for processing in CREATE-PLAN-NET.</p>
SELECT-PLAN-TYPE	<p>Output parameter Indicates which days are to be taken into consideration when planning the net using a relative SMYDAT specification {WORK / NWRK / WKND / HLDY}</p>
WORK	<p>Only working days (WORK) are to be taken into consideration during planning.</p>
NWRK	<p>All working days (WORK) and non-working days (NWRK/WKND/HLDY) are to be taken into consideration during planning.</p>
WKND	<p>All working days (WORK) and weekend days (WKND) are to be taken into consideration during planning.</p>
HLDY	<p>All working days (WORK) and public holidays HLDY) are to be taken into consideration during planning.</p>
M	<p>Input parameter Mark column.</p>
PLAN-START	<p>Output parameter Start time/date for the net. PLAN-START is defined by either of the two parameters DATE/SYMDAT, with which a date is specified, together with TIME for specifying the time of day.</p> <p>PLAN-START is processed in the CREATE-PLAN-NET statement.</p>
SYMDAT/DATE	<p>Output parameter Start date for the net. {*NONE / symdat / symdat ±n / symdat ±W / *tt.mm.jj[±Dnn[±W]] / [±]symdat[±symdat]... }</p> <p>It is possible to specify either a real date (as DATE) or symbolic date (as SYMDAT).</p>
*dd.mm.yy	<p>A real date. The net is provided for planning on those days which are explicitly specified. It can be planned either by specifying a period or by specifying the net name.</p> <p>PLAN-START is processed within the framework of the CREATE-PLAN-NET statement.</p>

*dd.mm.yy±Dnn	<p>Real start date for a net cycle</p> <p>This specification defines cyclical planning of a net. Dnn defines the cycle.</p>
*yymmyy	Starting point for cyclical net planning
D	Identifier for days
nn	<p>Number of days until the next net planning.</p> <p>Cyclical planning is performed by CREATE-PLAN-NET and is possible only if a period is specified.</p> <p>With CREATE-PLAN-NET all nets whose planned start occurs in the specified period are offered for planning. Here the start date *tmmjj is used for the calculation. SELECT-PLAN-TYPE is taken into account, i.e. production-free days are omitted. If the start day is a calendar date of the type FREE, no cycle is determined.</p>
*dd.mm.yy±Dnn±W	<p>Real start date for a net cycle</p> <p>This specification causes all days to be taken into account for planning. If a date is a production-free day, -W selects the previous work day and +W or the next work day. If the start day is a calendar day of the type FREE, no cycle is determined.</p>
symdat	<p>Symbolic date.</p> <p>Execution of CR-PLAN-NET replaces the symbolic date with real dates if the calendar is being used for planning the net (PERIOD specified).</p> <p>A symdat with a "!" prefix designates a symdat for a subnet.</p>
±n	<p>The symbolic date can also be specified in the form symdat [±n]. This results in planning of the net n days before or after the date defined by SYMDAT in the calendar. Calendar days on which no production takes place are not included in the count. Calendar days of the type NWRK/WKND/HLDY are either included in the count or skipped depending on the parameter SELECT-PLAN-TYPE.</p>
±W	<p>The symbolic date can also be specified in the form symdat ±W. This results in planning of the net on the previous or next working day (calendar day of the type WORK) relative to the day defined by SYMDAT in the calendar. If the calendar day defined as SYMDAT is of the type WORK, planning is performed for this day.</p>

±symdat±symdat...	In the definition of a start date for the net individual symdats can be linked together. The links are represented by the sign "+" or "-" in front of the symdat name. They may be up to 20 characters long (corresponds to the maximum length of the SYMDAT name). When SYM1+SYM2 is specified, the net for planning is selected in which both symdats are entered on the relevant day in the calendar. When TGL-FRI is entered, for example, the net is selected every day except Friday.
*NONE	If only *NONE is entered in the list the net cannot be planned via the calendar.
TIME	Output parameter Start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet.
LATEST-START	Output parameter Latest point in time, relative to the planned start time in the net name (PLAN-START), at which the net can be started. {nnn.hh.mm / *nn.hh.mm / *BY-HYP / *NONE}
nnn.hh.mm	Date and time span relative to PLAN-START nnn is the number of calendar days, in the range 000 to 999.
*nn.hh.mm	Relative date span and absolute time relative to PLAN-START. nn is the number of calendar days, in the range 00 to 99
*BY-HYP	The LATEST-START parameter is taken over from the hypernet.
*NONE	The net can be started with any required delay.

DELAY-SOLUTION Output parameter
 Action to be taken in case of an untimely net start (LATEST-START has expired).
 {WAIT / START / IGNORE / CANCEL / *BY-HYP}

Once LATEST-START has expired, the net status is dependent on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	NET-STATUS
WAIT	WAITING
START	RUNNING or CONDITION-WAIT
IGNORE	IGNORED
CANCEL	ABENDED

WAIT The net should continue to wait.

START The net should be started.

IGNORE The net is not started. If other nets or jobs are dependent on this net, these dependencies are regarded as resolved if their OCCURE-VALUE is used to test for the IGNORED status.

CANCEL The net is not started and is regarded as having terminated abnormally.

This parameter takes effect when

- nets are released after LATEST-START has expired (SUBMIT-NET)
- nets are in the HOLD state during the interval between EARLIEST-START and LATEST-START
- the run control system is inactive during the interval between EARLIEST-START and LATEST-START
- two or more nets of the same name are released with NET-TYPE=2 or 3, but they cannot be started in the interval between PLAN-START and LATEST-START.

***BY-HYP** The DELAY-SOLUTION parameter is taken over from the hypernet.

LIFE-TIME	Input/output parameter Lifetime of the 'end-of-net' event for this net. When the run control file is reorganized, the event entry is not deleted until this time span has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it. The life time is relative to the value of PLAN-START. {nnn.hh.mm / *STD / *NONE / *BY-HYP}
nnn.hh.mm	When the net is released by SUBMIT-NET and REPEAT-NET, a condition description for the net is recorded in the run control file. The time span is relative to PLAN-START, and is equal to nnn calendar days, hh hours and mm minutes.
*STD	Default value for LIFE-TIME defined in the system parameters (DEFAULT-LIFE-TIME). When the net is released by SUBMIT-NET and REPEAT-NET, a condition description for the net is recorded in the run control file.
*NONE	When the net is released by SUBMIT-NET and REPEAT-NET, no condition description for the net is recorded in the run control file.
*BY-HYP	The LIFE-TIME parameter is taken over from the hypernet.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL001.

M	Input parameter Mark column for selecting the structure elements.
S (Select)	With NEXT=DES/SYM Selects the structure element whose parameters are to be displayed. The corresponding mask, which depends on the parameters FU, TYPE and NEXT, is displayed after entering EXECUTE. With NEXT=JCL Selects the structure element with whose name the corresponding element is to be sought in the JCLLIB or JMDLIB and displayed via EDT. Only structure elements with FU=J/P and TYPE=STD/MOD can be selected. Processing is started with EXECUTE. If structure elements with invalid functions or invalid types are selected, AVAS branches to the operand mask assigned to these structure elements instead of to the EDT display; processing is rejected with a message. The operation IGNORE or CONTINUE can then be used to resume the processing initiated with EXECUTE.
IND	Output parameter 3-digit index (001, ..., 999) of the structure element. This is either a JOB-INDEX or a COND-INDEX, depending on how the FU parameters are defined.
FU	Output parameter The function of the structure element
A (Add)	This element of the net description is a structure element which creates a condition description.
C (Compare)	This element of the net description is a condition description which waits until a condition is satisfied.
D (Delete)	This element of the net description is a structure element which deletes a condition description.
F (File Transfer)	This element of the net description is a structure element which executes an FT request.
J (BS2000 job)	This element of the net description is a structure element which executes BS2000 jobs.
M (Modify)	This element of the net description is a structure element which modifies a condition description.
S (Subnet)	The function of this structure element in the net description is to start a subnet.

P (Procedure)	This element of the net description is a structure element which executes procedures.																										
W (Wait)	This element of the net description is a structure element which causes a timed wait.																										
TYPE	<p>Output parameter Type of the structure elements</p> <p>{MOD / STD / EXT / EXX / JVA / NET / JOB / RES / VAL / TIM / TRA}</p> <p>Depending on the function FU, the following are possible entries:</p> <table> <thead> <tr> <th>FU</th> <th>TYPE</th> </tr> </thead> <tbody> <tr> <td>J/P</td> <td>MOD</td> </tr> <tr> <td>J/P</td> <td>STD</td> </tr> <tr> <td>J/P</td> <td>EXT</td> </tr> <tr> <td>F</td> <td>TRA</td> </tr> <tr> <td>P</td> <td>EXX</td> </tr> <tr> <td>S</td> <td>NET</td> </tr> <tr> <td>C</td> <td>JVA</td> </tr> <tr> <td>C/D</td> <td>NET</td> </tr> <tr> <td>C/D</td> <td>JOB</td> </tr> <tr> <td>C/A/M/D</td> <td>RES</td> </tr> <tr> <td>C/A/M/D</td> <td>VAL</td> </tr> <tr> <td>W</td> <td>TIM</td> </tr> </tbody> </table>	FU	TYPE	J/P	MOD	J/P	STD	J/P	EXT	F	TRA	P	EXX	S	NET	C	JVA	C/D	NET	C/D	JOB	C/A/M/D	RES	C/A/M/D	VAL	W	TIM
FU	TYPE																										
J/P	MOD																										
J/P	STD																										
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F	TRA																										
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S	NET																										
C	JVA																										
C/D	NET																										
C/D	JOB																										
C/A/M/D	RES																										
C/A/M/D	VAL																										
W	TIM																										
MOD	The job is saved in the AVAS system and is subject to net modification. It must be created as a temporary production task by a CREATE-PROD-NET statement.																										
STD	The job is saved in the AVAS system and is not subject to net modification. It must be created by a CREATE-PROD-JOB statement.																										
EXT	The job is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE or FILENAME (see mask AVN042 on page 953).																										
EXX	The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.																										
JVA	For FU=C, net processing waits for a condition to be satisfied by a defined value in a job variable.																										

NET	<p>For FU=C, net processing waits for a condition in another net to be satisfied. The LIFE-TIME parameter determines how long the condition description remains available for testing.</p> <p>For FU=D, the condition description for a predefined net is deleted.</p> <p>For FU=S, a subnet is started and the system waits for the normal termination of the subnet.</p>
JOB	<p>For FU=C, net processing waits for a condition on a job or FT request to be satisfied. The LIFE-TIME parameter determines how long the condition description remains available for testing.</p> <p>For FU=D, the condition description for a prescribed job is deleted.</p>
RES	<p>For FU=C, net processing waits for a condition on a resource to be satisfied.</p> <p>The status of the resource is modified by the satisfaction of the condition.</p> <p>For FU=A, a condition description for a resource is created.</p> <p>For FU=M, a condition description for a resource is modified.</p> <p>For FU=D, a condition description for a resource is deleted.</p>
VAL	<p>For FU=C, net processing waits for a condition to be satisfied by a defined value.</p> <p>For FU=A, a condition description with a defined value is created.</p> <p>For FU=M, a condition description with a defined value is modified.</p> <p>For FU=D, a condition description with a defined value is deleted.</p>
TIM	<p>Net processing is subject to a timed wait. The time interval is specified by OCCURE-DATE SYMDAT in mask AVN023.</p>
TRA	<p>The structure element is an FT request which was started by AVAS and is monitored using a job variable.</p>
NAME	<p>Output parameter Name of the structure element.</p> <p>Within each AVAS system, the name of each condition description must be unique across all the types of condition. The JVA condition is excepted from this.</p>

SYNC-INDEX	Output parameter Index level at which the job or condition is to be synchronized. {index / <u>NXT</u> / END }
index	The system waits at this index level for the job to terminate or for the condition to be met.
NXT	Synchronization takes place at the next higher index level.
END	Normal job termination or the satisfaction of the condition is the prerequisite for normal termination of the net, i.e. net termination forms the basis for synchronization.
RESTART-IND V1 V2 V3	Output parameter {index / END} The restart index can be defined for the three possible restart variants. Without this index, no restart variant is possible.
index	The index level to be used for any restart (of the net). A restart is permissible in all index ranges (001–999) for all structure elements, irrespective of their function and type.
END	In the event of a restart (of the net), there should be no further processing of the structure element and its dependents.
RESULT	Output parameter This parameter is irrelevant here.
NEXT	Output parameter {DES / SYM / JCL} Controls the presentation of masks and the processing of the JCLLIB and JMDLIB elements via EDT for structure elements marked with an S.
DES (DESCRIPTION)	The appropriate mask for entry of the parameters is presented.
SYM (SYMDAT)	The appropriate mask for entry of the plan data is presented. Depending on the values of the FU and TYPE parameters, the continuation masks will then be presented after EXECUTE (see page 948).
JCL (JCL)	The corresponding element from the JCLLIB/JMDLIB is displayed in the EDT for processing.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL003.

AVN002, AVN042, AVN052 – Display and input the parameters for structure elements with FU=J/P and TYPE=STD/MOD/EXT/EXX

The structure elements for executing BS2000 jobs and S procedures (tasks) are specified in these masks. The masks displayed differ slightly depending on the type of structure element defined:

- If TYPE=MOD mask AVN002 with the USER-PAR-FILE input field.
- If TYPE=EXT/EXX mask AVN042 with the ENTER-FILE and FILE-PASSWORD input fields.
- If TYPE=STD mask AVN052.

In all other cases the structure of the mask is identical in all formats.

Mask AVN002 (TYPE=MOD)

```

AVAS-Vnn.yxmn/AVN002      JOB-DESCRIPTION FOR NET-STRUCTURE   tt.mm.jjjj/hh:mm:ss
JOB-NAME      =..... NET-NAME=.....
JOB-TEXT      =.....
JOB-DOC       =.....
JOB-INDEX     =... FU=... JOB-TYPE=...
SYNC-INDEX    =...
RESTART      -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1   ... ..
              2   ... ..
              3   ... ..
ENTER-PARAMS =.....
JOB-CAT       =.....
USER          =..... JOB-ACCOUNT =..... PASSWORD=.....
JOB-CLASS     =..... LOG      =.....
JOB-PARAMETER=.....
USER-PAR-FILE=.....

CMD:..... OPR:.....
MSG:.....
    
```

Mask AVN042 (TYPE=EXT/EXX)

```

AVAS-Vnn.yxmn/AVN042    JOB-DESCRIPTION FOR NET-STRUCTURE    tt.mm.jjjj/hh:mm:ss
JOB-NAME                = ..... NET-NAME=.....
JOB-TEXT                = .....
                        = .....
JOB-DOC                 = .....
JOB-INDEX               = ... FU=... JOB-TYPE=...
SYNC-INDEX              = ...
RESTART                 -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1            ...
  2                    ...
  3                    ...
ENTER-PARAMS           = .....
JOB-CAT                 = .....
USER                   = ..... JOB-ACCOUNT = ..... PASSWORD=.....
JOB-CLASS               = ..... LOG = .....
JOB-PARAMETER          = .....
                        = .....
ENTER-FILE              = .....
FILE-PASSWORD          = .....

CMD: ..... OPR: .....
MSG: .....

```

Mask AVN052 (TYPE=STD)

```

AVAS-Vnn.yxmn/AVN052    JOB-DESCRIPTION FOR NET-STRUCTURE    tt.mm.jjjj/hh:mm:ss
JOB-NAME                = ..... NET-NAME=.....
JOB-TEXT                = .....
                        = .....
JOB-DOC                 = .....
JOB-INDEX               = ... FU=... JOB-TYPE=...
SYNC-INDEX              = ...
RESTART                 -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1            ...
  2                    ...
  3                    ...
ENTER-PARAMS           = .....
JOB-CAT                 = .....
USER                   = ..... JOB-ACCOUNT = ..... PASSWORD=.....
JOB-CLASS               = ..... LOG = .....
JOB-PARAMETER          = .....
                        = .....

CMD: ..... OPR: .....
MSG: .....

```

JOB-NAME	Output parameter
jobname	Name of the task
NET-NAME	Output parameter Name of the net description, to which the structure element for executing BS2000 jobs and S procedures is assigned.
JOB-TEXT	Output parameter Brief text (up to 120 characters) describing the task in greater detail.
JOB-DOC	Output parameter {*STD / element / *NONE}
*STD	Documentation of the task The documentation is sought or stored under the standard name \$ugnet_netname.jobname in the DOCLIB.
element	Element name for the documentation of the task in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. The DOCUMENT operation can be used to display the documentation elements.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the task, the following message is output: AVS4090 THE DOCUMENT FUNCTION IS NOT AVAILABLE
JOB-INDEX	Output parameter index Index level of the net at which the task is to run.
FU	Output parameter The function of the structure element
J (BS2000 job)	The function of this structure element in the net description is to execute BS2000 jobs.
P (Procedure)	The function of this structure element in the net description is to execute S procedures.

JOB-TYPE	<p>Output parameter Type of the structure element Shows the value for TYPE as entered into mask AVN004, indicating whether, and if so in what form, the task is subject to net modification. (FU=J/P with TYPE=MOD/STD/EXT, FU=P with TYPE=EXX)</p>
MOD	The task is subject to net modification. It was created with CREATE-PROD-NET.
STD	The task is not subject to net modification. It must be created with the CREATE-PROD-NET statement.
EXT	The task is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE.
EXX	The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
SYNC-INDEX	<p>Output parameter Index level at which the task is to be synchronized. {index / NXT / END}</p>
index	The system waits at this index level for the task to terminate.
NXT	The task is synchronized at the next higher index level.
END	The task is synchronized at normal end of net (freestanding task).
RESTART-VARIANT	<p>Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Output parameter {index / END}</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) in all structure elements, regardless of function and type.</p>

END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart. END must not be specified with restart tasks.
RESTART-NAME	Output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again. "name" must be unique at the specified index level.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that have the status ERROR are only to be executed again if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Output parameter Type of restart processing involved {RESTART / NORMAL}
RESTART	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i>
	Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

ENTER-PARAMS	Output parameter Source of the parameters for the ENTER call used to start this task. {NET / LOGON}
NET	The ENTER parameters are taken from the net description, with specifications for the task being given precedence over specifications for the net.
LOGON	The ENTER parameters are taken from the SET-LOGON-PARAMETERS (or LOGON) command of the task. This data is accepted by the run control system without validation. The catalog ID from the net description is not evaluated.
JOB-CAT	Output parameter {'catid' / '*ANY' / (bs2000-servername) / jvname} Parameter for task distribution within a HIPLEX MSCF network (Multi System Control Facility; see the manual "AVAS Functions and Tables" [1]) or on a remote BS2000 system.
'catid'	For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.
'*ANY'	If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.
(bs2000-servername)	For a job on a remote BS2000 system a BS2000 server name must be specified which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).
jvname	Name of a job variable containing a catalog ID, the value *ANY, or a BS2000 server name.
USER	Output parameter Identifier under which the task BS2000 (job or S procedure) is to run. If a USER is specified, then the JOB-ACCOUNT and PASSWORD parameters will also be used. All three parameters are taken from the net definitions or from the job specification.
JOB-ACCOUNT	Output parameter (BS2000 ENTER parameter) Account number under which the job is billed, see also the USER parameter.

PASSWORD	Parameter for the ENTER call of the task. The PASSWORD field is blanked out in the AVN002/AVN042/AVN052 masks. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.
JOB-CLASS	Output parameter (BS2000 ENTER parameter) Job class in which the task is classified.
LOG	Output parameter Indicates whether the SYSOUT log of the tasks in the net is to be printed out (“_”, “YES”) or not (“NO”), where “_” is the blank character.
JOB-PARAMETER	Output parameter (BS2000 ENTER parameter) Specifies additional attributes for the selected job class. The parameters are then passed upon the ENTER call but not validated by AVAS.

For (JOB-)TYPE=EXT/EXX (mask AVN042):

ENTER-FILE	Output parameter Name of the BS2000 job or of an S procedure that is to be started for TYPE=EXT/EXX under the BS2000 user ID. The file must be present under this user ID.
FILE-PASSWORD	Output parameter Password of the file specified under ENTER-FILE (only for TYPE=EXT/EXX). {*NONE / password}
*NONE	The ENTER call is issued without a password.
password	File password: The FILE-PASSWORD field is blanked out in the mask. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation. In the case of ENTER-PROCEDURE (FU=P) the password is assigned to the PROCEDURE-PASSWORD parameter.

For (JOB-)TYPE=MOD (mask AVN002):

USER-PAR-FILE	Output parameter File containing parameters for the modification. {*NONE / *STD / filename / libname(element[,type])}
*NONE	No USER-PARAM-FILE is used.
*STD	The name of the USER-PARAM-FILE is sought using PARAM.\$ug.jobname.index in the case of CREATE-PROD-NET.
filename	The parameters in this file are used for modifying the job.
libname(element[,type])	The parameters are sought in the specified element of the defined library with the specified type of library department. If the type of library department is not specified, type S is used.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL004.

AVN003 – Display the parameters for structure elements with FU=C and TYPE=JVA

```

AVAS-Vnn.yxmn/AVN003  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=.  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1           ...  *ALL.....
                   2     ...  *ALL.....
                   3     ...  *ALL.....

COND-JVA-NAME=.....
JVA-POSITION =...  JVA-LENGTH=...  JVA-PASSWORD=.....
COND-VALUE       =.....
.....
.....

CMD:.....  OPR:.....
MSG:.....
    
```

COND-NAME	Output parameter Name of the condition description, as specified in mask AVN004.
NET-NAME	Output parameter Name of the net
COND-TEXT	Output parameter Brief text (up to 120 characters) describing the condition.
COND-DOC	Output parameter {*STD / element / *NONE} Documentation of the condition.
*STD	The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.
element	Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname

	<p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>The DOCUMENT operation can be used to display the documentation elements.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
COND-INDEX	<p>Output parameter Index level of the net at which the job variable is to be monitored.</p>
FU	<p>Output parameter Function of the structure element</p>
C (Compare)	<p>This element in the net description is a condition, for satisfaction of which the system will wait.</p>
COND-TYPE	<p>Output parameter Shows the value for TYPE, as entered via AVN004</p>
JVA	<p>The net identified via NET-NAME is meant to wait at the index level specified under COND-INDEX until the specified job variable contains the value specified under COND-VALUE from the specified position and in the defined length.</p>
SYNC-INDEX	<p>Output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask, SYNC-INDEX parameter).</p>
RESTART-VARIANT	<p>Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>
RESTART-INDEX	<p>Output parameter {index / END}</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.</p>

END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart.
RESTART-NAME	Output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Output parameter Type of restart processing involved {RESTART / NORMAL}
RESTART	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
COND-JVA-NAME	Output parameter {jvname / *NONE}
jvname	Name of the job variable whose value is to be checked from the specified position in the specified length. The name must be specified with both catalog ID and user ID. The job variable must be shareable.

*NONE	The condition is regarded as satisfied.
JVA-POSITION	Output parameter
jvpos	Position within the value range of the job variable as of which the value is to be checked.
JVA-LENGTH	Output parameter
jvlen	Length of the value of the job variable to be checked.
JVA-PASSWORD	Output parameter
	If the job variable is password-protected, the password must be specified here. {*NONE / password}
*NONE	The job variable is read without a password.
password	The field JVA-PASSWORD is blanked on the mask. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.
COND-VALUE	Output parameter
	{= jvvalue / > jvvalue / < jvvalue / >= jvvalue / <= jvvalue / <> jvvalue}
jvvalue	jvvalue is the value with which the job variable is compared. jvvalue is specified without quotes and only as a C string.
= jvvalue	The condition is met if the job variable is equal to jvvalue.
> jvvalue	The condition is met if the value of the job variable is greater than jvvalue.
< jvvalue	The condition is met if the value of the job variable is less than jvvalue.
>= jvvalue	The condition is met if the value of the job variable is greater than or equal to jvvalue.
<= jvvalue	The condition is met if the value of the job variable is less than or equal to jvvalue.
<> jvvalue	The condition is met if the value of the job variable is not equal to jvvalue.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL005.

AVN008 – Display the parameters for structure elements with FU=C and TYPE=NET/JOB/RES/VAL

```

AVAS-Vnn.yxmn/AVN008  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=.  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1          ...  .....
                   2  ...  .....
                   3  ...  .....

CONDITION CREATED BY: NET-NAME=.....  INDEX=...

OCCURE-VALUE = .....
ERROR-VALUE  = .....
              SELECT-RESTART-VARIANT=.

CMD:.....  OPR:.....
MSG:.....
    
```

COND-NAME

Output parameter
Name of a condition

\$ug_jobname1-24 (TYPE=JOB)

Name of the structure element, the status of which is to be tested. If a user group is specified when a condition is tested, it must always be the user group of the net under which the structure element is executed. This applies even if the system user group was specified in the condition. FT requests are also handled under TYPE=JOB.

\$ug_netname1-12 (TYPE=NET)

Name of the net, the status of which is to be tested.

\$ug_resname1-24 (TYPE=RES)

Name of the condition for a resource.

\$ug_valname1-24 (TYPE=VAL)

Name of the condition for a defined value.

Note

The name of a condition within an AVAS system must be unique across all condition types.

NET-NAME	Output parameter Name of the net
COND-TEXT	Output parameter Brief text (up to 120 characters) describing the condition.
COND-DOC	Input/output parameter {*STD / element / *NONE} Documentation of the condition.
*STD	The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.
element	Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. The DOCUMENT operation can be used to display the documen- tation elements.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE
COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.
FU	Output parameter Function of the structure element
C (Compare)	This element in the net description is a condition, for satisfaction of which the system will wait.

COND-TYPE	Output parameter Type of the structure element.
NET	The net processing waits for a condition of another net to be satisfied.
JOB	The net processing waits for a condition of another job or FT request to be satisfied.
RES	The net processing waits for a condition for a resource to be satisfied (RESSOURCE).
VAL	The net processing waits for a condition for a resource (RESOURCE) to be satisfied with a defined value (VALUE).
SYNC-INDEX	Output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask, SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Output parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.
END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart.

RESTART-NAME	Output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Output parameter Type of restart processing involved {RESTART / NORMAL}
RESTART	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

CONDITION CREATED BY

Output parameter

Name and index of the net which created the condition description.

NET-NAME

`{$ug_netname1-12[_date[_time]] / *NONE}`

If the full name of the net is specified with PLAN-START, the condition description is to be evaluated with the specified PLAN-START.

If no full name of the net is specified with PLAN-START, the condition description with the smallest positive time difference with respect to PLAN-START is to be evaluated.

COND-TYPE=JOB

The user group for the NET-NAME parameter is always the same as the user group for the COND-NAME parameter.

COND-TYPE=NET

The specified net name (`$ug_netname`) always matches the specified structure element name (COND-NAME).

If *NONE is specified, the condition is taken to be satisfied without a check being performed.

INDEX

Index

Output for a JOB condition if several entries with the same job name and net name exist.

OCCURE-VALUE

Output parameter

`{status / status, ... / c-string / x-string}`

Event for dependency control

For TYPE=NET

Possible values are::

ENDED MISSING ABENDED IGNORED

For TYPE=JOB

Possible values are:

NO-PLAN ABENDED DELETED IGNORED MISSING
 ENDED ERROR SKIPPED NO-SUBMIT

For TYPE=RES If the condition is satisfied, the resource is occupied according to the query. Possible values are:

FREE SHARE(uu) SHARE (uu), FREE

FREE If the condition description has the status FREE, the condition is satisfied and the resource is given the status EXCLUSIVE.

SHARE (uu) If the condition description has the status SHARE and the resource can be used up to uu times, the condition is satisfied. The resource is given uu times the status SHARE.

SHARE (uu),
FREE If the condition description has the status SHARE or FREE and the resource can be used up to uu times, the condition is satisfied. The resource is given uu times the status SHARE.

For TYPE=VAL The parameter can be used to enter values linked by operators.

For condition testing, the following operators are permitted:

.EQ. .LT. .GT. .LE. .GE. .NE. .OR.

Output format:

OP,pos,value

(OP,pos,value)

(OP,pos,value),(OP,pos,value),...

– OP – comparison operation

= / EQ – equal to

< / LT – less than

> / GT – greater than

≤ / LE – less than or equal to

≥ / GE – greater than or equal to

≠ / NE – not equal to

If no comparison operation is specified, OP=EQ is assumed. The parameter and the comma are both omitted (pos,value).

- pos – start position for a value specification

nnn

If pos is not specified, pos=1 is assumed.

Comparison values with neither OP nor pos are specified directly (value).

If a comparison operation is specified without a start position, the corresponding comma must nevertheless be inserted (OP,,value).

- value – comparison value

'c-string'

C'c-string'

X'x-string'

Current value of the condition description in the run control file. The area comprises 128 bytes.

Note

When a condition description is created, positions for which no value is assigned are set up with X'40'.

-),(– logical OR operation

If there are multiple condition tests, their specifications must be enclosed in parentheses, which links them by ORs.

Permissible input formats are:

value

(value)

(value),(value),...

pos,value

(pos,value),(pos,value),...

OP,pos,value

(OP,pos,value)

(OP,pos,value),(OP,pos,value),...

OP,,value

(OP,,value)

(OP,,value),(OP,,value),...

These may be combined in any required way, e.g.:

(value),(OP,,value),(pos,value),...

The length of the comparison value is determined by the length of c-string or x-string, as appropriate.

	pos + length -1 may not exceed 128. Apostrophes within a c-string must be repeated a second time.
ERROR-VALUE	Output parameter {status / status, ... / c-string / x-string / *NONE} Event for dependency control
For TYPE=NET	Possible values are: ENDED MISSING ABENDED IGNORED
For TYPE=JOB	Possible values are: NO-PLAN ABENDED DELETED IGNORED MISSING ENDED ERROR SKIPPED NO-SUBMIT
For TYPE=RES	Possible values are: MISSING CREATED FREE SHARE ERROR EXCLUSIVE
For TYPE=VAL	The format of the entries is subject to the rules described for OCCURE-VALUE. Otherwise, *NONE can be specified from column 1 on.
SELECT-RESTART-VARIANT	Output parameter {1 / 2 / 3} This parameter is assigned to the ERROR-VALUE parameter. It presets a restart variant to be used in the event of an error. Processing takes place in accordance with the restart variant set for the jobs by means of the monitor job variable. If no entry is made here, the restart variants for the condition are searched for AUTOMATIC=YES, as in the case of jobs, and if a restart variant is found this is used to automatically initiate a restart. If no restart variant with AUTOMATIC=YES is found, the restart must be initiated by the RESTART-NET statement.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL005.

AVN015 – Display the parameters for structure elements with FU=S and TYPE=NET

The subnets to start and control subnets via a hypernet are shown in the mask.

```

AVAS-Vnn.yxmn/AVN015      SUBNET-DESCRIPTION FOR NET-STRUC      tt.mm.jjjj/hh:mm:ss
SUBNET-NAME =..... NET-NAME=.....
SUBNET-TEXT =.....
SUBNET-DOC  =.....
SUBNET-INDEX =... FU=. SUBNET-TYPE=...
SYNC-INDEX  =...
RESTART     -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1  ... ..
           2  ... ..
           3  ... ..
CMD:..... OPR:.....
MSG:.....

```

- SUBNET-NAME Output parameter
Name of the subnet

- NET-NAME Output parameter
Name of the hypernet to which the structure element to start and control the subnet is assigned.

- SUBNET-TEXT Output parameter
Brief text (up to 120 characters) describing the subnet in greater detail.

SUBNET-DOC	<p>Output parameter {*STD / element / *NONE} Documentation of the subnet.</p>
*STD	<p>The documentation is sought or stored under the standard name \$bknet_netname.subnetname in the DOCLIB.</p>
element	<p>Element name for the documentation of the task in the DOCLIB or DOCSYS: \$bk_docname \$bksys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$bksys is specified, the documentation is sought in the DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via the AVS016 mask.</p>
*NONE	<p>No documentation is used. If the DOCUMENT operation is entered for the task, the following message is output: AVS4090 THE DOCUMENT FUNCTION IS NOT AVAILABLE</p>
SUBNET-INDEX	<p>Output parameter Index level of the subnet index</p>
FU	<p>Output parameter The function of the structure element</p>
S (Subnet)	<p>The function of this structure element in the net description is to start and control subnets.</p>
SUBNET-TYPE	<p>Output parameter Type of the structure element Shows the value for TYPE as entered into mask AVN004, indicating whether, and if so in what form, the subnet is to be executed by the hypernet.</p>

NET	The subnet is planned (CREATE-PLAN-NET), modified (CREATE-PROD-NET) and released for processing (SUBMIT-NET) with the hypernet. The status of the subnet is shown for the structure element in the hypernet.
SYNC-INDEX	Output parameter Index level at which the subnet is to be synchronized. {index / NXT /END}
index	This value of the SYNC-INDEX must be greater than the value for SUBNET-INDEX. An index level of a restart task may not be specified. The system waits at this index level for the subnet to terminate.
NXT	The subnet is synchronized at the next higher index level.
END	The subnet is synchronized at normal end of net (freestanding subnet).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each subnet. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out for subnets using the default values RESTART-TYPE=NORMAL and AUTOMATIC=NO. <i>Note</i> RESTART-TYPE=RESTART and AUTOMATIC=YES can be specified for the structure element of the subnet in the ERROR state. If RESTART-INDEX>SUBNET-INDEX or END is specified for a structure element to start a subnet, then the structure element status is set to SKIPPED and processing of the subnet is not controlled by the hypernet anymore. No restart is initiated for the subnet and the the subnet is not placed in the ABENDED state via CANCEL-NET. Structure elements of subnets are not placed in the WAITING status any more after the ENDED or SKIPPED state is reached and cannot be restarted and controlled via the hypernet for this reason.

RESTART-INDEX	<p>Output parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the 3 restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of the net). A restart is permissible for all index ranges (001-999) in all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart, the structure element (and all other tasks that are dependent on it) should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p>
RESTART-NAME	<p>Output parameter</p> <p>Name for selecting structure elements at the specified restart index level.</p> <p>{name /*ALL/*NAME/*ERROR}</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>All structure elements at the restart index level that have the status ERROR are to be executed again. The *ERROR specification is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.</p>
*NAME	<p>Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.</p>

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.

- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX has the same value as the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value. If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	<p>Output parameter Type of restart processing involved { RESTART | NORMAL }</p> <p>It is only reasonable to specify NORMAL for structure elements to start subnets. If restart statements are to be processed, then RESTART can be specified for structure elements of the subnet in the ERROR state.</p>
RESTART	Restart with execution of restart statements #RA, #RI and #RU
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<p><i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.</p>
AUTOMATIC	<p>Output parameter Type of restart processing. Only NO is permitted for structure elements to start subnets. YES can be specified for a structure element of the subnet in the ERROR state.</p>
NO	<p>Manual restart The restart must be initiated by the RESTART-NET statement.</p>

AVN016 – Display the parameters for structure elements with FU=F and TYPE=TRA

The structure elements for executing FT requests are specified in this mask.

```

AVAS-Vnn.yxmn/AVN016 FILE-TRANSFER-DESCR. FOR NET-STRUC tt.mm.jjjj/hh:mm:ss
FT-NAME =..... NET-NAME=.....
FT-TEXT =.....

FT-DOC =.....
FT-INDEX =... FU=... FT-TYPE=...
SYNC-INDEX =...
RESTART -INDEX -NAME -TYPE AUTOMATIC
  VARIANT=1 ...
          2 ...
          3 ...
DIRECTION =... PARTNER-NAME=... REMOTE=...
LOCAL-FILE =.....
REMOTE-FILE =.....
REMOTE-TRANSFER-ADMISSION=.....

FT-PARAMETER =.....

CMD:..... OPR:.....
MSG:.....
    
```

FT-NAME	Output parameter
fname	Name of the FT request
NET-NAME	Output parameter
	Name of the net description to which the structure element for executing FT requests is assigned.
FT-TEXT	Output parameter
	Brief text (up to 120 characters) describing the request in greater detail.
FT-DOC	Output parameter
	Documentation of the FT request
	{*STD / element / *NONE}
*STD	The documentation is searched for or stored in DOCLIB under the standard name \$ugnet_netname.fname.

element	<p>Element name for the documentation of the request in DOCLIB or DOCSYS: \$ug_docname \$ugsys_docname docname</p> <p>The maximum length of docname is 37 characters.</p> <p>When no user group is specified, the documentation is searched for under the net's user group in DOCLIB. If \$ugsys is specified, the documentation is searched for in DOCSYS.</p> <p>Only those elements for which the user group of the documentation element is the same as the user group of the net can be edited using the DOCUMENT operation. Elements from other user groups can be read but not written back. The entry of NEW-DOCUMENT-NAME is expected via mask AVS016.</p>
*NONE	<p>No documentation is used. If the DOCUMENT operation was entered for the request, the following message is issued: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
FT-INDEX	<p>Output parameter Index level of the net at which the request is to execute. index</p>
FU	<p>Output parameter Function of the structure element</p>
F (File Transfer)	<p>This structure element of the net description executes FT requests.</p>
FT-TYPE	<p>Output parameter Type of structure element</p>
TRA	<p>File transfer is started.</p>
SYNC-INDEX	<p>Output parameter Index level at which the request is to be synchronized. {index / <u>NXT</u> / END}</p>
index	<p>This value must be greater than the value for FT-INDEX and may not contain an index level from the restart index levels. The system waits at this index level for the request to terminate.</p>
<u>NXT</u>	<p>The request is synchronized at the next highest index level.</p>
END	<p>The request is synchronized at normal end of net (freestanding request).</p>

RESTART-VARIANT	<p>Output parameter</p> <p>Three restart variants are permitted for each request. At least one index must be specified for a restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified using the system parameters.</p>
RESTART-INDEX	<p>Output parameter</p> <p>{index / END}</p> <p>The restart index can be defined for each of the three possible restart variants. A restart variant is not possible without this restart index.</p>
index	<p>Index level to be used in the event of a restart (restart of the net). A restart is permissible for all index ranges (001–999) in all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of the net), the structure element and all other requests that are dependent on it should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p> <p>END may not be specified with restart requests.</p>
RESTART-NAME	<p>Output parameter</p> <p>Name for selecting structure elements at the specified index level.</p> <p>{name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p> <p>name must be unique at the specified index level.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be executed again.</p>
*ERROR	<p>All structure elements at the restart index level that have the status ERROR are to be executed again. The *ERROR parameter is only processed if RESTART-INDEX is the same as ERROR-INDEX.</p> <p>In all other cases the restart will be rejected.</p>

*NAME Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if RESTART-INDEX is the same as ERROR-INDEX. In all other cases the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION/MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or less than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE

Output parameter
Type of restart processing.
{RESTART / NORMAL}

RESTART

Restart with execution of restart statements #RA, #RI and #RU.

NORMAL

Restart without processing of restart statements #RA, #RI and #RU.

Note

This distinction is irrelevant for FT requests because no job description (JCL) exists with RSTART statements.

AUTOMATIC	Output parameter Type of restart processing. {YES / <u>NO</u> }
YES	Automatic restart The restart is initiated automatically without user input. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). The restart variants are checked for AUTOMATIC=YES in the order RESTART-VARIANT 1, 2, 3.
<u>NO</u>	Manual Restart The restart must be initiated using the RESTART-NET statement. Modifications to the net can be performed using the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
DIRECTION	Output parameter Direction of file transfer (corresponds to the TRANSFER-DIRECTION operand of the TRANSFER-FILE command). { <u>TO</u> / FROM}
<u>TO</u>	The local system is the sending system; the files are sent to the remote system.
FROM	The local system is the receiving system; the files are fetched from the remote system.
PARTNER-NAME	Output parameter Symbolic name of the remote host, defined by the FT administrator (corresponds to the PARTNER-NAME operand of the TRANSFER-FILE command).
REMOTE	Output parameter Defines the type of the remote system (corresponds to the REMOTE-PARAMETER operand of the TRANSFER-FILE command). { <u>*BS2000</u> }
<u>*BS2000</u>	The remote system is a BS2000 system.

LOCAL-FILE	<p>Output parameter</p> <p>Specifies the name of the file in the local system (corresponds to the FILE-NAME operand in the LOCAL-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-FILE	<p>Output parameter</p> <p>Specifies the name of the file in the remote system (corresponds to the FILE-NAME operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-TRANSFER-ADMISSION	<p>Output parameter</p> <p>Access authorization on the remote system (corresponds to the TRANSFER-ADMISSION operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p> <p>By default the REMOTE-TRANSFER-ADMISSION field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p>
FT-PARAMETER	<p>Output parameter</p> <p>Specifies further operands of the TRANSFER-FILE command for which no AVAS parameters are available.</p> <p>In particular follow-up processing for the local or remote system can be defined here.</p>

Note

For further information see [section “AVN016 – Display and input parameters for structure elements with FU=F and TYPE=TRA” on page 589](#).

AVN030 – Display the parameters for structure elements with FU=A/M/D and TYPE=RES/VAL

```

AVAS-Vnn.yxm/AVN030  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME            =..... NET-NAME=.....
COND-TEXT            =.....
COND-DOC              =.....
COND-INDEX            =...  FU=.  COND-TYPE=...
SYNC-INDEX            =...
RESTART              -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1  ...  .....
              2  ...  .....
              3  ...  .....

COND-VALUE            =.....

CMD:.....  OPR:.....
MSG:.....
    
```

- COND-NAME** Output parameter
 Name of the condition

 \$ug_resname1-24 (TYPE=RES)
 Name of the condition for a resource.

 \$ug_valname1-24 (TYPE=VAL)
 Name of the condition for a defined value.

Note

 The name of a condition within an AVAS system must be unique across all condition types.
- NET-NAME** Output parameter
 Name of the net.
- COND-TEXT** Output parameter
 Brief text (up to 120 characters) describing the condition.

COND-DOC	<p>Output parameter {*STD / element / *NONE}</p> <p>Documentation of the condition.</p>
*STD	<p>The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.</p>
element	<p>Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>The DOCUMENT operation allows to display the documentation elements.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
COND-INDEX	<p>Output parameter Index level of the net at which the job variable is to be monitored.</p>
FU	<p>Output parameter Function of the structure element.</p>
A (Add)	<p>This structure element of the net description creates a condition description.</p>
M (Modify)	<p>This structure element of the net description modifies a condition description.</p>
D (Delete)	<p>This structure element of the net description deletes a condition description.</p>

COND-TYPE	Output parameter Type of the structure element.
RES	Condition description for a resource.
JVA	Condition description with a defined value.
SYNC-INDEX	Output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 953 , SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Output parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.
END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart.
RESTART-NAME	Output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *NAME / *ERROR}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.

*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Output parameter Type of restart processing involved {RESTART / NORMAL}
RESTART	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.

Note

Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1.
RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.

AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
COND-VALUE	Output parameter Status (for TYPE=RES) or value (for TYPE=VAL) of the condition description. For FU=D, no status or value can be defined. The condition description in the run control file is modified by the predefined status.
For TYPE=RES	The values mmm and uu are defined as follows: mmm MAX-USING-SHARE: 2..100 Maximum number of allocations in the SHARE mode of the resource. If the value is not specified, then it is set to 100. uu Number of quotas of a resource allocated in the SHARE mode. If the value <uu> is not specified, then it is set to the value 1. The value uu must be smaller than the value mmm for MAX-USING-SHARE.

Possible values:

FU	TYPE	Status	Meaning
A	RES	mmm,CREATED	The resource is set up mmm times as a shareable resource and is not yet available.
		mmm,ERROR	The resource is set up mmm times as a shareable resource and is not yet available.
		mmm,EXCLUSIVE	The resource is set up mmm times as a shareable resource and is allocated in the EXCLUSIVE mode.
		mmm,FREE	The resource is set up mmm times as a shareable resource and is available.
		mmm,SHARE(uu)	The resource is set up mmm times as a shareable resource and is allocated uu times in the SHARE mode.
D	RES		A resource can only be deleted (FU=D,TYPE=RES) if it has the status FREE (no net is using the resource) or CREATED or ERROR and no net is waiting for the resource to be allocated.
M	RES	FREE	If the resource is being used by the net it is released or its status is reset from CREATED or ERROR to FREE.
		CREATED	The resource can no longer be used, or cannot yet be used.
		ERROR	The resource can no longer be used, because an error has occurred.

Note

If an allocated resource is released with SHARE(uu) for FU=M, TYPE=RES with COND-VALUS=FREE, then the USING record for the net is searched for and deleted. The USING counter for the resource is decremented by the value uu.

If a net has allocated a resource several times with SHARE(uu) via several structure elements where FU=C with TYPE=RES, then the entry with the oldest date in the time stamp is searched for and deleted. This is also true when the resource was allocated via COND-VALUE=SHARE(uu) for FU=A with TYPE=RES.

Partial release of an allocated resource via FREE(uu) is not permitted.

For TYPE=VAL value
 pos,value
 (value)
 (pos,value)
 (pos,value),(pos,value),...

or in combinations, e.g.:

(value),(pos,value),...

A corresponding entry is made in the condition description in the run control file.

For the function A (Add), any positions which are not defined are given the value X'40'.

Note

When condition descriptions are created, no check is made on overlaps.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL005.

AVN031 – Display the parameters for structure elements with FU=D and TYPE=NET/JOB

```

AVAS-Vnn.yxmn/AVN031  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=.  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1           ...
                   2 ...
                   3 ...

CONDITION CREATED BY: NET-NAME=..... INDEX=...

CMD:..... OPR:.....
MSG:.....
    
```

COND-NAME

Output parameter
Name of the condition.

\$ug_jobname1-24 (TYPE=JOB)

Name of the structure element, the status of which is to be tested. If a user group is specified when a condition is tested, it must always be the user group of the net under which the structure element is executed. This applies even if the system user group was specified in the condition.

\$ug_netname1-12 (TYPE=NET)

Name of the net, the status of which is to be tested.

Note

The name of a condition within an AVAS system must be unique across all condition types.

NET-NAME	Output parameter Name of the net.
COND-TEXT	Output parameter Brief text (up to 120 characters) describing the condition.
COND-DOC	Input/output parameter {*STD / element / *NONE} Documentation of the condition.
*STD	The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.
element	Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS. The DOCUMENT operation allows to display the documentation elements.
*NONE	No documentation is used. If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE
COND-INDEX	Output parameter Index level of the net at which the condition description is to be deleted.
FU	Output parameter Function of the structure element
D(Delete)	This element in the net description deletes a condition description for nets or jobs.

COND-TYPE	Output parameter Type of the structure element.
NET	Condition description for a net.
JOB	Condition description for a job or FT request.
SYNC-INDEX	Output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 953 , SYNC-INDEX parameter).
RESTART-VARIANT	Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.
RESTART-INDEX	Output parameter {index / END} The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.
index	Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.
END	In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked. The RESTART-NAME parameter is not evaluated in the case of a restart.

RESTART-NAME	Output parameter Name for selecting structure elements at the specified restart index level. {name / *ALL / *ERROR / *NAME}
name	Only this structure element of the index level specified in RESTART-INDEX will be executed again.
*ALL	All structure elements at the index level specified by RESTART-INDEX are to be executed again.
*ERROR	Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.
*NAME	Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.
- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Output parameter Type of restart processing involved {RESTART / NORMAL}
RESTART	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
	<i>Note</i> Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.
AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

CONDITION CREATED BY

Output parameter

Name and index of the net which created the condition description.

NET-NAME

\$ug_netname1-12[_date[_time]]

If the full name of the net is specified with PLAN-START, the condition description is to be evaluated with the specified PLAN-START.

If no full name of the net is specified with PLAN-START, the condition description with the smallest positive time difference with respect to PLAN-START is to be evaluated.

INDEX

An index only needs to be specified for a JOB condition if there are several descriptions with the same job name and net name.

If COND-TYPE=NET is specified, no input is allowed.

The PRINT operation can be used to output a list of the selected nets. The list is output in the format of list AVL005.

AVN032 – Display the parameters for structure elements with FU=W and TYPE=TIM

```

AVAS-Vnn.yxmn/AVN032  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-DOC              =.....
COND-INDEX            =...  FU=.  COND-TYPE=...
SYNC-INDEX            =...
RESTART               -INDEX  -NAME  -TYPE  AUTOMATIC
  VARIANT=1          ...
                   2  ...
                   3  ...
CMD:..... OPR:.....
MSG:.....
    
```

- COND-NAME Output parameter
Name of the condition.

- Note*
- The name of a condition within an AVAS system must be unique across all condition types.

- NET-NAME Output parameter
Name of the net.

- COND-TEXT Output parameter
Brief text (up to 120 characters) describing the condition.

- COND-DOC Output parameter
{*STD / element / *NONE}
- Documentation of the condition.

- *STD The documentation is sought or stored under the standard name \$ugnet_netname.condname in the DOCLIB.

element	<p>Element name for the documentation of the condition in the DOCLIB or DOCSYS. \$ug_docname \$ugsys_docname docname</p> <p>If no user group is specified, the documentation is sought in the DOCLIB under the user group of the net. If \$ugsys is specified, the documentation is sought in the DOCSYS.</p> <p>The DOCUMENT operation allows to display the documentation elements.</p>
*NONE	<p>No documentation is used.</p> <p>If the DOCUMENT operation is entered for the condition, the following message is output: AVS4090 THE DOCUMENT-FUNCTION IS NOT AVAILABLE</p>
COND-INDEX	<p>Output parameter Index level of the net at which expiration of the specified period of time is awaited.</p>
FU	<p>Output parameter Function of the structure element</p>
W (Wait)	<p>This element in the net description is waiting for a time period to elapse.</p>
COND-TYPE	<p>Output parameter</p>
TIM	<p>The net specified with NET-NAME is to wait at the index level specified for COND-INDEX until the specified period of time has elapsed.</p>
SYNC-INDEX	<p>Output parameter Index level at which the system is to wait for the condition to be satisfied (see the AVN002 mask on page 953, SYNC-INDEX parameter).</p>
RESTART-VARIANT	<p>Output parameter Three restart variants are permitted for each task. At least one index must be specified for each restart variant if the variant is to be permitted. The restart is then carried out using the default values RESTART-TYPE=RESTART, AUTOMATIC=NO and RESTART-NAME=*ALL, unless other default values have been specified through the system parameters.</p>

RESTART-INDEX	<p>Output parameter {index / END}</p> <p>The restart index can be defined for each of the three restart variants. A restart variant is not possible without this index.</p>
index	<p>Index level to be used in the event of a restart (restart of net). A restart is permissible for all index ranges (001–999) on all structure elements, regardless of function and type.</p>
END	<p>In the event of a restart (restart of net), the structure element (and all other tasks that are dependent on it) should not be further processed or checked.</p> <p>The RESTART-NAME parameter is not evaluated in the case of a restart.</p>
RESTART-NAME	<p>Output parameter Name for selecting structure elements at the specified restart index level. {name / <u>*ALL</u> / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p>
*ALL	<p>All structure elements at the index level specified by RESTART-INDEX are to be executed again.</p>
*ERROR	<p>Any structure elements at the restart index level that terminated abnormally (JOB-STATUS=ERROR) are to be executed again. The *ERROR parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>
*NAME	<p>Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if the RESTART-INDEX is the same as the ERROR-INDEX.</p> <p>In all other cases, the restart will be rejected.</p>

Notes

- In the event of a restart via index levels 900–999, normal processing should resume at the index of the POINT-OF-ERROR if the parameter RESTART-NAME=*NAME or *ERROR is specified under restart variant 1. In all other cases, the restart will be rejected.

- The functions CREATE-NET-DESCRIPTION, MODIFY-NET-DESCRIPTION and MODIFY-SUBMIT-NET assign different default values to the RESTART-NAME parameter:
If RESTART-INDEX is identical to the index of the structure element, RESTART-NAME is always assigned the value specified by the generation parameter DEFAULT-RESTART-JOB as the default value.
If RESTART-INDEX is greater or smaller than the index of the structure element, the value *ALL is assigned as the default value for RESTART-NAME.

RESTART-TYPE	Output parameter Type of restart processing involved {RESTART / NORMAL}
RESTART	Restart with execution of restart statements #RA, #RI and #RU.
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.

Note

Within the range of restart index levels (index 900–999), the changeover from RESTART mode to NORMAL mode can be controlled by the RESTART-TYPE parameter of restart variant 1. RESTART mode is quit when RESTART-TYPE=NORMAL is specified under restart variant 1. RESTART mode is quit automatically when the first index level of normal processing (index 001–899) is processed.

AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).

NO

Manual restart.

The restart must be initiated by the RESTART-NET statement.
Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL005.

JOB-TYPE	<p>Output parameter Type of the structure element Shows the value for TYPE as entered into mask AVN004, indicating whether the task is subject to net modification, and if so in what form. (FU=J/P with TYPE=MOD/STD/EXT, FU=P with TYPE=EXX)</p>
MOD	The task is subject to net modification. It is created with CREATE-PROD-NET.
STD	The task is not subject to net modification. It was not created with CREATE-PROD-NET.
EXT	The task is not managed via AVAS. It is assigned using the file name specified under ENTER-FILE or FILENAME.
EXX	The S procedure is not saved in the AVAS system. It is assigned using the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
SELECT-TURNUS	<p>Output parameter Characteristic used in selecting the task when planning the processing of the net.</p> <p>Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the job will always be brought to execution.</p> <p>The task will be brought to execution if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task.</p> <p><i>Note</i></p> <p>If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.</p>
M	Mark column

SYMDAT	<p>Output parameter</p> <p>Characteristic used in selecting the task when planning the processing of the net.</p> <p>{*NONE / symdat / [\pm]symdat[\pmsymdat]...}</p>
*NONE	<p>If the net is planned without a symbolic start time (plan with no SYMDAT name), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are set by this entry.</p>
*STD	<p>The structure element is always selected during planning.</p> <p>The associated start parameters are copied from this entry.</p> <p>*STD is only permitted as the second entry.</p> <p>Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START, DELAY-SOLUTION and LIFE-TIME are then used. This entry is only used if the second entry is not *STD.</p> <p>The start time of the subnet is the time specified in the subnet as !symdat. If no !symdat is specified in the subnet the start time of the hypernet is used.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
[\pm]symdat[\pm symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>
LATEST-START	<p>Output parameter</p> <p>Latest start time for the task, relative to the planned start time in the net name (PLAN-START).</p> <p>{nnn.hh.mm / *nn.hh.mm / *NONE}</p>
nnn.hh.mm	<p>Date and time span relative to PLAN-START.</p> <p>nnn is the number of calendar days, in the range 000 to 999.</p>

*nn.hh.mm	Date span relative to PLAN-START, and absolute time. nn is the number of calendar days, from 00 to 99												
*NONE	The task can be started with any required delay. If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.												
DELAY-SOLUTION	Output parameter Measure to be taken if the start is not timely (LATEST-START is passed). {START / IGNORE / CANCEL} The job status and net status after the LATEST-START time has been passed depend on the DELAY-SOLUTION parameter:												
	<table border="1"> <thead> <tr> <th>DELAY-SOLUTION</th> <th>JOB-STATUS</th> <th>NET-STATUS</th> </tr> </thead> <tbody> <tr> <td>START</td> <td>RUNNING</td> <td>RUNNING</td> </tr> <tr> <td>IGNORE</td> <td>IGNORED</td> <td>RUNNING</td> </tr> <tr> <td>CANCEL</td> <td>ERROR</td> <td>ERROR</td> </tr> </tbody> </table>	DELAY-SOLUTION	JOB-STATUS	NET-STATUS	START	RUNNING	RUNNING	IGNORE	IGNORED	RUNNING	CANCEL	ERROR	ERROR
DELAY-SOLUTION	JOB-STATUS	NET-STATUS											
START	RUNNING	RUNNING											
IGNORE	IGNORED	RUNNING											
CANCEL	ERROR	ERROR											
START	The task should be started.												
IGNORE	The task should not be started.												
CANCEL	The task will not be started, and is considered to have terminated abnormally.												
LIFE-TIME	Output parameter The lifetime of the "job end" event for this job. When the run control file is reorganized, this event entry will not be deleted until this interval of time has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it. The lifetime is relative to the value of PLAN-START. {nnn.hh.mm / *NONE}												
nnn.hh.mm	When the net is released by a SUBMIT-NET or REPEAT-NET, a condition description for the task is entered into the run control file. The time interval is relative to PLAN-START, and is equal to nnn calendar days, hh hours and mm minutes.												
*NONE	When the net is released by a SUBMIT-NET or REPEAT-NET, no condition description for the task is entered into the run control file.												

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL004.

SELECT-TURNUS	<p>Output parameter Characteristic used in selecting the condition when planning the processing of the net.</p> <p>Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected.</p> <p>The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task.</p> <p><i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.</p>
M	Mark column
SYMDAT	<p>Output parameter Characteristic used in selecting the condition when planning the processing of the net. {*NONE / *STD / symdat / [\pm]symdat[\pmsymdat]...}</p>
*NONE	<p>If the net is planned without a symbolic start time (plan with no SYMDAT name), then LATEST-OCCURE and DELAY-SOLUTION are set by this entry. *NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning. The associated planning parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned plan parameters LATEST-OCCURE and DELAY-SOLUTION are then used. This entry is only used if the second entry is not *STD.</p> <p>The start time of the subnet is the time specified in the subnet as !symdat. If no !symdat is specified in the subnet the start time of the hypernet is used.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>

[±]symdat[±symdat]...

When the net is planned using a symbolic start date, symdat's of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.

LATEST-OCCURE

Output parameter

The latest point in time for the satisfaction of the condition, relative to the planned start time in the net name (PLAN-START).

{nnn.hh.mm / *nn.hh.mm / *NONE}

nnn.hh.mm

Date and time span relative to PLAN-START.

nnn is the number of calendar days, from 000 to 999.

*nn.hh.mm

Date span relative to PLAN-START, and absolute time.

nn is the number of calendar days, from 00 to 99

*NONE

Any delay in the satisfaction of the condition can be accepted.

If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-LATEST-START via the generation parameters.

DELAY-SOLUTION

Output parameter

Measure to be taken if the test is not timely (LATEST-OCCURE is passed).

{START / IGNORE / CANCEL}

START

The condition is satisfied.

IGNORE

The condition is ignored and net processing is continued.

CANCEL

The ERROR status is set for the condition.

Net processing must be continued by a restart.

After LATEST-OCCURE has been passed, the condition status and the net status depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	COND-STATUS	NET-STATUS
START	OCCURRED	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL005.

SELECT-TURNUS	<p>Output parameter Characteristic used in selecting the condition when planning the processing of the net.</p> <p>Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected.</p> <p>The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task.</p> <p><i>Note</i></p> <p>If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.</p>
M	Mark column
OCCURE-DATE	This is defined by the SYMDAT parameter when the net is planned.
SYMDAT	<p>Output parameter Characteristic used in selecting the condition when planning the processing of the net. {*NONE / *STD / symdat / [\pm]symdat[\pmsymdat]...}</p>
*NONE	<p>If the net is planned without a symbolic start time (plan with no SYMDAT name), then OCCURE-TIME is set by this entry. The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.</p>
*STD	<p>The structure element is always selected during planning. The associated planning parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p>
symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned OCCURE-TIME plan parameters are then used. This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>

[±]symdat[±symdat]...	When the net is planned using a symbolic start date, symdat's of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.
OCCURE-TIME	Output parameter {nnn.hh.mm / *nn.hh.mm / *NONE}
nnn.hh.mm	Time, specified relative to PLAN-START-DATE and PLAN-START-TIME The system waits until PLAN-START-DATE + nnn days and PLAN-START-TIME + hh.mm hours and minutes.
*nn.hh.mm	Absolute time specification The system waits until PLAN-START-DATE + nn days and until the time is hh.mm.
*NONE	The value which will be used for *NONE is that specified for DEFAULT-OCCURE-TIME via the generation parameters.

Note

CREATE-PLAN-NET copies OCCURE-DATE and OCCURE-TIME into the name of the condition if the latter was specified with *DATE.
Conversion: plan start of the net + *nn.hh.mm, or nnn.hh.mm

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL005.

AVN024 – Display the plan data for structure elements with FU=D and TYPE=NET/JOB

```

AVAS-Vnn.yxmn/AVN024  CONDITION-DESCR. FOR NET-STRUCTURE  tt.mm.jjjj/hh:mm:ss
COND-NAME             =..... NET-NAME=.....
COND-TEXT             =.....
COND-INDEX            =... FU=... COND-TYPE=...
SELECT-TURNUS=.....

M SYMDAT

. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....
. ....

CMD:..... OPR:.....
MSG:.....
    
```

COND-NAME	Output parameter Name of the condition description, as specified in mask AVN004.
NET-NAME	Output parameter Name of the net.
COND-TEXT	Output parameter Brief text (up to 120 characters) describing the condition.
COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.
FU	Output parameter Function of the structure element
D (Delete)	This element of the net description deletes a condition.
COND-TYPE	Output parameter Shows the value for TYPE, as entered via AVN004. {NET / JOB}

SELECT-TURNUS	<p>Output parameter Characteristic used in selecting the condition when planning the processing of the net.</p> <p>Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the condition will always be selected.</p> <p>The condition will be selected if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task.</p> <p><i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.</p>
M	Mark column
SYMDAT	<p>Output parameter {*NONE / *STD / symdat / [±]symdat[±symdat]...} Symbolic date for selecting the task.</p> <p><i>Note</i> For the structure elements, the first entry of a SYMDAT is generated with *NONE. This ensures that the structure element is executable when the net is started without a symbolic start date. Either *STD or symdat is permitted as the second entry. In the case of *STD, the structure element is always selected. For the third to 51st entries, only symdat is permitted.</p>
*NONE	<p>If the net is planned without a symbolic start time (plan with no calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are set by this entry.</p> <p>The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry. The second entry may be either *STD or symdat. For the third to 51st entries, only symdat is permitted.</p>
*STD	<p>The structure element is always selected during planning. The associated start parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.</p> <p>The start time of the subnet is that of the hypernet.</p>

symdat When a symbolic start time, SYMDAT-NAME, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START and DELAY-SOLUTION are then used. This entry is only used if the second entry is **not** *STD.

If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.

[±]symdat[±symdat]...

When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL005.

SUBNET-TYPE	Output parameter Type of the structure element
NET	The subnet is to be started.
SELECT-TURNUS	Output parameter Characteristic used in selecting the condition when planning the processing of the net. Permissible values are the digit 0 or a subset of the digits 1 to 9. If 0 is specified, the task will always be executed. The task will be executed if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the task. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Input parameter Mark column for selecting plan dates.
SYMDAT	Output parameter Characteristic used in selecting the task or subnet when planning the processing of the net or hypernet. {*NONE / *STD / symdat / [\pm]symdat[\pm symdat]...}
*NONE	If the net is planned without a symbolic start time (plan with no SYMDAT name), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are set by this entry. The parameter *NONE is a default value which cannot be deleted. *NONE is only permitted as the first entry.
*STD	The structure element is always selected during planning. The associated start parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.

symdat	<p>When a symbolic start time, SYMDAT name, is used in planning the net, the structure element is selected if the symbolic start time prescribed for the plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START and DELAY-SOLUTION are then used.</p> <p>This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected on Mondays.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, for example, the structure element is selected for every Friday.</p>
LATEST-START	<p>Output parameter</p> <p>The latest start time for the subnet relative to the planned start time in the net name (PLAN-START).</p> <p>{nnn.hh.mm / *nn.hh.mm / *NONE}</p>
nnn.hh.mm	<p>Date and time span relative to PLAN-START.</p> <p>nnn is the number of calendar days, from 000 to 999.</p>
*nn.hh.mm	<p>Date span relative to PLAN-START, and absolute time.</p> <p>nn is the number of calendar days, from 00 to 99.</p>
*NONE	<p>Any delay in the starting the task is be accepted. If no entry is made, *NONE is assumed. The value which will be used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.</p>
DELAY-SOLUTION	<p>Output parameter</p> <p>Measure to be taken if the test is not timely (LATEST-START is passed).</p> <p>{START / IGNORE / CANCEL}</p> <p>If nothing is specified, the value defined for DEFAULT-JOB-DELAY via the generation parameters is used.</p>
START	<p>The subnet is to be started.</p>
IGNORE	<p>The subnet is not to be started.</p>

CANCEL

The subnet is not started and is considered to have terminated abnormally.

After passing LATEST-START, the status of the structure element (SE) of the subnet and the net status of the hypernet depend on the DELAY-SOLUTION parameter:

DELAY-SOLUTION	SE with FU=S	HYPERNET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

If there is no symdat entered in the net plan data in the subnet, then the LATEST-START, DELAY-SOLUTION and LIFETIME start parameters are added for the structure element with FU=S and TYPE=NET to the net parameters of the subnet. DELAY-SOLUTION is supplied with the value START for the structure element. This ensures that the subnet will be started. The handling of DELAY-SOLUTION occurs in the subnet when the subnet is to be started.

If there is a symdat with a "!" prefix entered in the net plan data in the subnet (mask AVN020), then the start parameters there are not used if the hypernet with this symdat is planned via the calendar. The LIFE-TIME parameter on the structure element has no meaning in this case. A condition entry for the subnet is only created if a corresponding value is specified for the subnet.

LIFE-TIME

Input/output parameter

Lifetime of the 'end-of-net' event for this subnet.

When the run control file is reorganized, the event entry is not deleted until this time span has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent test will be unable to find it.

The life time is relative to the value of PLAN-START.

{nnn.hh.mm / *STD / *NONE}

nnn.hh.mm

When the net is released by SUBMIT-NET, a condition description for the subnet is recorded in the run control file.

The time span is relative to PLAN-START and is equal to nnn calendar days, hh hours and mm minutes.

- *STD Default value for LIFE-TIME defined in the system parameter
DEFAULT-LIFE-TIME.
When the net is released by SUBMIT-NET, a condition description
for the subnet is recorded in the run control file.
- *NONE When the net is released by SUBMIT-NET, no condition description
for the subnet is recorded in the run control file.

FT-TYPE	Output parameter Type of structure element
TRA	File transfer is started.
SELECT-TURNUS	Output parameter Characteristic used in selecting the request when planning net processing. Permissible values are the digit 0 or a subset of the digits 1–9. If 0 is specified, the request is always executed. The request is executed if the value assigned at the planning stage is identical to one of the SELECT-TURNUS values for the request. <i>Note</i> If SELECT-TURNUS and SYMDAT are used for selecting structure elements when planning nets, a structure element will only be selected if both selection criteria are satisfied.
M	Mark column
SYMDAT	Output parameter Characteristic used in selecting the request when planning net processing. {*NONE / *STD / symdat / [±]symdat[±symdat]...} Up to 51 entries are possible.
*NONE	If the net is planned without a symbolic start date (planning without calendar), then LATEST-START, DELAY-SOLUTION and LIFE-TIME are copied from this entry. The *NONE parameter is a default value and cannot be deleted. *NONE is only permitted as the first entry.
*STD	The structure element is always selected during planning. The associated start parameters are copied from this entry. *STD is only permitted as the second entry. Subsequent entries may contain symbolic start dates, but these are not used in planning if the second entry is *STD.

symdat	<p>When a symbolic start date (SYMDAT name) is used in planning, the structure element is selected if the symbolic start date predefined for the net plan is specified for the structure element. In producing the plan, the assigned start parameters LATEST-START, DELAY-SOLUTION and LIFE-TIME are then used. This entry is only used if the second entry is not *STD.</p> <p>If the net was planned using a symbolic start date with a symdat link, the structure elements are always selected by comparing the symdats against the calendar. If MON is specified, for example, the structure element is always selected every Monday.</p>
[±]symdat[±symdat]...	<p>When the net is planned using a symbolic start date, the symdats of the structure elements with a sign or with a link are always checked against the calendar. When SYM1+SYM2 is specified, the structure element selected is that in which both SYM1 and SYM2 are entered on the relevant day in the calendar. If +FRI is specified, the structure element is selected for each Friday.</p>
LATEST-START	<p>Output parameter</p> <p>Latest start time for the request relative to the planned start time in the net name (PLAN-START).</p> <p>{nnn.hh.mm / *nn.hh.mm / <u>*NONE</u>}</p>
nnn.hh.mm	<p>Date and time span relative to PLAN-START.</p> <p>nnn is the number of calendar days 000–999.</p>
*nn.hh.mm	<p>Date span relative to PLAN-START and absolute time.</p> <p>nn is the number of calendar days 00–99.</p>
<u>*NONE</u>	<p>The request can be started with any delay.</p> <p>If no entry is made, *NONE is assumed. The value which is used for *NONE is that specified for DEFAULT-LATEST-JOBSTART via the generation parameters.</p>

DELAY-SOLUTION	<p>Output parameter Measure to be taken if the start is not on time (LATEST-START is exceeded) {START / IGNORE / CANCEL}</p> <p>If nothing is specified, the value defined for DEFAULT-JOB-DELAY via the generation parameters is used.</p>
START	The request should be started.
IGNORE	The request should not be started.
CANCEL	<p>The request will not be started and is considered to have terminated abnormally.</p> <p>The request status and net status after the LATEST-START time has been exceeded depend on the DELAY-SOLUTION parameter:</p>

DELAY-SOLUTION	FT-STATUS	NET-STATUS
START	RUNNING	RUNNING
IGNORE	IGNORED	RUNNING
CANCEL	ERROR	ERROR

LIFE-TIME	<p>Output parameter Lifetime of the "job end" event for this request. When the run control file is reorganized, this event entry will not be deleted until this time interval has elapsed. If the time has elapsed and the event entry has still not been deleted, any subsequent query will be unable to find it. The lifetime is relative to the value of PLAN-START. {nnn.hh.mm / *NONE}</p>
nnn.hh.mm	<p>When the net is released by means of SUBMIT-NET or REPEAT-NET, no condition description for the request is entered in the run control file.</p> <p>The time interval is relative to PLAN-START and is equal to nnn calendar days, hh hours and mm minutes.</p>
<u>*NONE</u>	<p>When the net is released by means of SUBMIT-NET or REPEAT-NET, no condition description for the request is entered in the run control file.</p>

SHOW-NET-STATUS – Display status of released or running nets

The SHOW-NET-STATUS statement is used to display the processing statuses of released nets. The display may include all net parameters and parameters of structure elements, with a different format being required for the statement in each case.

Either individual subnets can be selected for display via the overview masks, or the display masks can be called directly by issuing the appropriately formatted statement with all valid operands.

Entering IGNORE enables the current status of the nets or of all structure elements in a net to be redisplayed at all levels. This can also be done by pressing the ENTER key.

On the structure level (mask AVI013), IGNORE results in display of that section of the net which is currently being processed.

Display of net overview mask AVI012

The + or – mark is not processed in the case of CMD:IGNORE. A new overview is produced here with the current status values of the nets; the net table is displayed from the beginning. The subnets are also displayed in this overview of the nets of a RUN-CONTROL-SYSTEM.

Display of structure overview mask AVI013

The + or – mark is not processed in the case of CMD:IGNORE. The overview of structure elements is produced with the current status values, and is positioned depending on the processing status of the structure element (JOB-STATUS or COND-STATUS) (display of the processing situation).

Paging operations cannot be used to obtain the current status of the nets.

A log relating to a task can be displayed via EDT in the masks AVI013 and AVI003 using the JOBLOG operation. The operation is only permitted on structure elements (function J or P) with a status of ENDED or ERROR.

In situations where a task was started several times though RESTART, the log associated with the most recent instance of the task is displayed.

If a number of logs were processed by AVAS in a task, all the logs are displayed.

If an EDT procedure was predefined by the AVAS administrator, the user can start this procedure by entering the statement @do n (where n = number of the workfile to be queried with the AVAS administrator).

The following lists can be created via the PRINT operation:

- an overview of all nets obtained via the operands, together with their net status (AVL020 list with PRINT in mask AVI012);
- a list of the net parameters of a net (AVL021 list with PRINT in mask AVI002);

- a list of the parameters of a job or S procedure (AVL022 list with PRINT in mask AVI003);
- a list of the parameters of an FT request (AVL026 list with PRINT in mask AVI026)
- a list of the parameters of a condition (AVL023 list with PRINT in masks AVI004, AVI007, AVI008, AVI009 and AVI010)
- a list of the parameters of a subnet start (AVL025 list with PRINT in mask AVI025) and
- a list of the net structure with the status of the structure elements (AVL024 list with PRINT in mask AVI013).

The lists are output to the SAM file specified via the AVS015 mask.

With the SHOW-NET-STATUS statement the following types of documentation for released nets can be displayed:

- net documentation
- job documentation
- FT request documentation
- condition documentation

The DOCUMENT operation is used to display the current documentation element in each case.

Net documentation:

Mask AVI002 (net parameters)

Mask AVI013 (net structure)

Mask AVI025 (parameters for starting a subnet)

Job documentation

Mask AVI003 (job and S procedure parameters)

FT request documentation

Mask AVI026 (FT request parameters)

Condition documentation

Mask AVI004 (condition parameters)

Mask AVI007 (condition parameters)

Mask AVI008 (condition parameters)

Mask AVI009 (condition parameters)

Mask AVI010 (condition parameters)

For purposes of net selection, a partially qualified net name and the processing status of the nets to be displayed may be entered, in addition to the run control system.

Nets with the following processing statuses may be selected:

ABENDED

Nets for which processing terminated abnormally (CANCEL-NET).

ENDED

Nets which were executed normally.

ERROR

Nets for which processing was interrupted due to an error.

HOLD

Nets for which processing was suspended.

RUNNING

Nets which are currently being processed.

WAITING

Nets which are waiting for processing to start.

CONDWAIT

Nets which are waiting for a condition to be satisfied.

HOSTWAIT

The net is waiting for a host in the HIPLEX MSCF network or for a server.

NETWAIT

The net waits for the start via another net.

RESTARTED

Nets for which restart was initiated.

RESUMED

Nets for which the HOLD status was canceled.

OPWAIT

Nets waiting for an operator start.

START

Nets started by the operator.

SHIFTED

Nets which were moved to another run control system.

MODIFIED

Nets which were modified, by a D mark at net release time or subsequently, or for which a restart was initiated.

IGNORED

Nets which are not brought to execution through the value of LATEST-START and NET-DELAY-SOLUTION.

Nets consisting exclusively of condition descriptions cannot have the status RUNNING. This status is set only if at least one structure element (job) is currently being executed.

If SHOW-NET-STATUS is used to select a net which, at the time it is to be displayed, is being processed by the run control system, the value shown for the net status may be out of date (for example: a structure element may have the status RUNNING, while the net still has the status WAITING).

SHOW-NET-STATUS

[NET-NAME=[\$ug_]netname]

[,OBJECT=NET / STR]

[,PERIOD-NAME=period / (dd.mm.yy [/hh:mm:ss][,dd.mm.yy [/hh:mm:ss]])]

[,NET-STATUS=ABENDED / ENDED / ERROR / HOLD / RUNNING / WAITING / CONDWAIT / HOSTWAIT / RESTARTED / RESUMED / OPWAIT / START / SHIFTED / MODIFIED / IGNORED]

[,RUN-CONTROL-SYSTEM=*STD / avak]

[,DISPLAY=YES / NO]

NET-NAME=

Name of a net in the run control file

NET-NAME=\$ug_

Name of the user group

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of the net

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the specified user group are displayed.

OBJECT=

Selects the net display

This operand is permitted only with a fully qualified net name.

OBJECT=NET

The net parameters are to be displayed.

This causes mask AVI002 to be displayed.

OBJECT=STR

The net structure is to be displayed.

This causes mask AVI013 to be displayed.

PERIOD-NAME

Specifies a period.

All nets are to be displayed whose start time EARLIEST-START falls within this period.

The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period

PERIOD-NAME=(dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)

Specification of the real date and time, which determine the start and end date and time for the period.

If the "right" period boundary is omitted, the end date is set to the start date and the end time to 23:59.

The default value for the start time is 00:00.

NET-STATUS=

Status of the nets to be displayed.

NET-STATUS=ABENDED

The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.

NET-STATUS=ENDED

The net was terminated normally.

NET-STATUS=ERROR

The net was interrupted because a structure element terminated abnormally or CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.

NET-STATUS=HOLD

Net processing was interrupted. The net may resume processing via RESUME-NET.

NET-STATUS=RUNNING

The net is currently being processed.

NET-STATUS=WAITING

The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).

NET-STATUS=CONDWAIT

The net is waiting for a condition to be satisfied.

NET-STATUS=HOSTWAIT

The net is waiting for a host in the HIPLEX MSCF network or for a server.

NET-STATUS=NETWAIT

The net waits for the start via another net.

NET-STATUS=RESTARTED

A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.

NET-STATUS=RESUMED

The HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.

NET-STATUS=OPWAIT

The net is waiting to be started by the operator.

NET-STATUS=START

The net was started by the operator.

NET-STATUS=SHIFTED

The net was moved to another run control system.

NET-STATUS=MODIFIED

- Structure elements were deleted when the net was released, or
- the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or
- a restart was initiated for the net, or
- the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

NET-STATUS=IGNORED

During processing of the net, the value of LATEST-START was reached, and the NET-DELAY-SOLUTION parameter had the value IGNORE.

If a NET-STATUS operand is specified, those nets will also be displayed whose next expected status (CALLED FOR) corresponds to the value specified in NET-STATUS operand.

If NET-STATUS is left unspecified, all nets selected via the other operands will be displayed.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- The standard run control system of the user group is used immediately after SIGNON.
- If the user may employ all run control systems defined in the system (see `avak-use` parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
- If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of a run control system

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

DISPLAY=

Selects structure elements from the net description, to be displayed in mask AVI013. This operand permits the display of structure elements which have the status NO-PLAN, NO-SUBMIT and DELETED to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand. The operand has no effect on the display in mask AVD005.

DISPLAY=YES

Structure elements with the status NO-PLAN, NO-SUBMIT and DELETED are displayed.

DISPLAY=NO

Structure elements with the status NO-PLAN, NO-SUBMIT and DELETED are not displayed.

Note

Depending on the setting of the generation parameter HYPERNET-COLOUR, hypernets are color-highlighted in the overview.

NET-STATUS/CALLED FOR

Output parameter
Status of net processing

ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.
RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.

RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or a server. No tasks are running at present.
NETWAIT	The net waits for the start via another net. No tasks are running at present.
RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system.
Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it.
The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network or for a server.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, or – the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

FROM-DATE	<p>Input/output parameter Start value of a period The default values are PERIOD-START-DATE and PERIOD-START-TIME if a net group was selected via PERIOD-NAME. Entries can also be made in the FROM-DATE and TO-DATE fields if the PERIOD-NAME operand was not used. The period boundary may be modified, but it must lie within the period together with TO-DATE. This causes the processing window to be shifted. dd.mm.yyyy[/hh:mm:ss]</p>
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NET-STATUS	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.
RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.

RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
EXECUTED	A RESOURCE or VALUE structure element was processed with A(ADD), M (MODIFY) or D (DELETE).
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or a server. No tasks are running at present.
NETWAIT	The net waits for the start via another net. No tasks are running at present.
RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system.
Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it.
The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network or for a server.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, or – the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

NET-TEXT	Output parameter Brief description of the net.
EARLIEST-START	Output parameter Prospective start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP
SUBMIT-TIME	Output parameter Point in time at which the net was released for production (SUBMIT-NET).
LATEST-START	Output parameter

	Latest point in time at which the net may be started. dd.mm.yy/hh:mm:ss
NET-START	Output parameter Real start time of the net if processing has already begun. dd.mm.yy[/hh:mm:ss]
NET-DELAY-SOLUTION	Output parameter Actions to be taken in case of an untimely net start. {WAIT / START / IGNORE / CANCEL}
WAIT	The net is to continue waiting.
START	The net is to be started.
IGNORE	The net is not started. If other nets or tasks are dependent on this net, these dependencies are regarded as resolved.
CANCEL	The net is not started and is regarded as having terminated abnormally.
STARTED-INDEX	Output parameter Lowest index started, if the net is currently being processed.
RUN-CONTROL-SYSTEM	Output parameter Name of the run control system which is to control processing of the net.
NET-TYPE	Output parameter This specifies how to serialize the processing of nets with the same name but different start times. {1 / 2 / 3 for standard nets and 5 / 6 / 7 for subnets}
1/5	The net is started, regardless of whether a net of the same name is or was being processed.
2/6	The net is not started as long as a net of the same name is running. If two or more like-named nets of a type other than 1 are waiting to start, the net with the earliest PLAN-START time is started first.
3/7	The net is started only if no net of the same name has been brought to execution since the last reorganization.
NET-CAT	Output parameter {'catid' / '*ANY' / (bs2000-servername)} Parameter for job distribution within a HIPLEX MSCF network (Multi System Control Facility) or on a remote BS2000 system.

'catid'	For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.
'*ANY'	If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network.
(bs2000-servername)	For a job on a remote BS2000 system a BS2000 server name is output which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).
NET-USER	Output parameter Default value for all USER parameters of all the tasks in the net.
NET-ACCOUNT	Output parameter Default value for the JOB-ACCOUNT parameter of all the tasks in the net.
NET-CLASS	Output parameter Default value for the JOB-CLASS parameter of all the tasks in the net.
NET-LOG	Output parameter Default value for the LOG parameter of all the tasks in the net.
NET-PARAMETER	Output parameter Default value for the JOB-PARAMETER parameter of all the tasks in the net.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL021.

RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.
RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network or a server. No tasks are running at present.
NETWAIT	The net waits for the start via another net. No tasks are running at present.

RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution
EXECUTED	A RESOURCE or VALUE structure element was processed with A(ADD), M (MODIFY) or D (DELETE).

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it.
The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network.

- MODIFIED
- If structure elements were deleted when the net was released, or
 - the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or
 - a restart was initiated for the net, or
 - the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

NET-TEXT	Output parameter Brief description of the net, which may be a maximum of 120 characters long.
M	Input parameter
S (Select)	A structure element of the net description is selected for display. The corresponding mask is presented with the parameters to be displayed (EXECUTE operation). The JOBLIST operation displays the log for the selected structure element via EDT. In this case, the S mark may only be used for structure elements with the function J or P and a status of ENDED or ERROR. If an incorrect element is marked or no log can be displayed, the appropriate mask for the marked structure element is output with a message. Processing can be continued through the CONTINUE operation.
IND	Output parameter Index of the structure element
FU	Output parameter Function of the structure element
TYPE	Output parameter Type of the structure element.
NAME	Output parameter Name of the structure element
STATUS	Output parameter Processing status of the structure element.

Processing statuses of jobs (FU=J, P):

- | | |
|-------|---------------------------------|
| ENDED | The task terminated normally. |
| ERROR | The task terminated abnormally. |

ERROR CAT	The task terminated abnormally because access to the other processor is disrupted.
ERROR-COM	The task terminated abnormally because communication with the server system failed during processing.
IGNORED	The task was not submitted for execution, due to its LATEST-START being passed.
RUNNING	The task is being processed. From the point of view of BS2000 it is considered to have the status RUNNING (\$R).
RUNNING/\$S	The task is being processed. However, from the point of view of BS2000 it is still in the task queue, and has not yet been started.
SKIPPED	The task has not been processed. It was skipped during the restart.
WAITING	The task has not yet been started.

Processing statuses of FT requests (FU=F):

ENDED	The request terminated normally.
ERROR	The request terminated abnormally.
IGNORED	The request was not executed due to a timeout (LATEST-START).
RUNNING	The request is currently being processed. From the point of view of BS2000 it has the status RUNNING (\$R).
RUNNING/\$S	The request is currently being processed. However, from the point of view of BS2000 it is still in the task queue and has not been started yet.
SKIPPED	The request has not been processed. It was skipped during the restart.
WAITING	The request has not been started yet.

Processing statuses of conditions (FU=C, W):

ERROR	The event has been given an error status.
IGNORED	The event was not checked, due to its LATEST-OCCURE time having been passed. This status is not used for FU=W.
NO-OCCURE	The event has not occurred.
NO-OCC/DEL	The event has not occurred and the structure element was deleted.

OCCURRED	The event has occurred.
SKIPPED	The event has not occurred. It was skipped during the restart.
WAITING	The event has not yet been checked.

Processing statuses of start tasks (FU=S):

ENDED	The subnet was terminated normally.
ERROR	The task was terminated abnormally, the subnet was not in the NETWAIT state at the time of the start or the subnet was not started due to DELAY-SOLUTION=CANCEL for the structure element FU=S with TYPE=NET. A restart must be initiated for the hypernet.
HOLD	An interruption of processing was requested for the structure element to start a subnet. If processing is to be resumed, then the hypernet must be processed with the #RESUME-NET operation.
IGNORED	The subnet was not started because a time limit was exceeded (LATEST-START for the subnet).
RUNNING	The task is being processed. The subnet was started via the hypernet and runs under the control of the hypernet until the ENDED or ABENDED state is reached.
RUN/ERR	The subnet is in the ERROR state. A restart must be initiated for this subnet.
RUN/HOLD	The subnet is in the HOLD state. It must be started with the #RESUME-NET operation.
RUN/HOSTW	The subnet is in the HOSTWAIT state. The subnet will be started as soon as the server is available again.
RUN/NO-OCC	The subnet is in the CONDWAIT state. There is a structure element in the NO-OCCURE state in this subnet.
RUNNING/\$S	The task is being processed. The subnet is still in the WAITING state and has not been started yet. Possible causes: <ul style="list-style-type: none"> – The EARLIEST-START start time has not been reached yet. – The run control system that controls the execution of the subnet is not loaded yet or was not active yet. – LATEST-START has been exceeded, WAIT is set for NET-DELAY-SOLUTION.

SKIPPED The task has not been processed yet since it was skipped during the restart.
The status of the subnet is indeterminate since the subnet may have been started already. The subnet must be placed in the ENDED or ABENDED state independently from the hypernet by the user.

WAITING The task has not been started yet.

Processing statuses of structure elements for processing condition descriptions (FU=A, M, D):

ERROR An error occurred while the condition description was being processed.

EXECUTED The condition description has been processed.

SKIPPED Processing of the condition description was skipped during the restart.

WAITING The condition description has not yet been processed.

Processing statuses of structure elements, general

CREATED The structure element is within the range of restart index levels (index 900–999).
For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released.
For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.

DELETED The structure element has been deleted by a MODIFY-SUBMIT-NET statement.

HOLD A suspension of processing has been requested for this structure element.

Note

The HOLD status is only displayed if no status other than WAITING is yet recorded for the processing status of the structure element. The WAITING status is the only status preempted in the display by a HOLD status.

NO-PLAN The structure element has not been planned with the CREATE-PLAN-NET statement.

NO-SUBMIT The structure element has been deleted by a SUBMIT-NET or REPEAT-NET statement.

SYN-IND	Output parameter Index level with which the structure element is to be synchronized.
RESTART-IND V1 V2 V3	Output parameter Index levels where processing can restart in the event of an error.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL024.

AVI003 – Display the parameters of a structure element with FU=J/P

```

AVAS-Vnn.yxmn/AVI003      S H O W - N E T - S T A T U S      tt.mm.jjjj/hh:mm:ss
                          J O B - P A R A M E T E R
NET-NAME      = ..... NET-STATUS=.....
JOB-NAME      = ..... JOB-STATUS=.....
JOB-INDEX     = ...      FU=,      JOB-TYPE =...
SYNC-INDEX    = .....
RESTART       -INDEX     -NAME           -TYPE      AUTOMATIC
  VARIANT=1    ...      *ALL.....
              2    ...      *ALL.....
              3    .....
LATEST-START  = ..... / ..... DELAY-SOLUTION=START
MONJV(.....)  = .....
VALUE(.....)  = .....
ENTER-PARAMS  = .....
JOB-CAT       = '.....'
USER          = ..... JOB-ACCOUNT = .....
JOB-CLASS     = ..... LOG      = .....
JOB-PARAMETER = .....
ENTER-FILE    = .....

CMD: ..... OPR: .....
MSG: .....
    
```

NET-NAME	Output parameter Name of the net
NET-STATUS	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.
RUNNING	The net is currently being processed.

RUNNING/ERROR

At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET

RUNNING/CONDWAIT

At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.

RUNNING/RESTARTED

At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.

RUNNING/CANCEL

Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.

RUNNING/ABENDED

Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.

RUNNING/HOLD Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.

WAITING The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).

OPWAIT The net is waiting for entry of the START-NET statement.

CONDWAIT The net is waiting for a condition to be satisfied. No task is running at present.

CONDWAIT/ERROR

The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.

HOSTWAIT The net is waiting for a host in the HIPLEX MSCF network or a server. No tasks are running at present.

NETWAIT The net waits for the start via another net. No tasks are running at present.

RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it. The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network or for a server.

- MODIFIED
- If structure elements were deleted when the net was released, or
 - the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or
 - a restart was initiated for the net, or
 - the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

JOB-NAME	Output parameter Name of the task which is displayed.
JOB-STATUS	Output parameter Processing status of the task (BS2000 job or S procedure). {ERROR / ERROR CAT / ENDED / RUNNING / WAITING / SKIPPED / IGNORED / NO-PLAN / NO-SUBMIT / DELETED / CREATED / HOLD}
ERROR	The task terminated abnormally.
ERROR CAT	The task terminated abnormally because access to the other processor is disrupted.
ENDED	The task terminated normally.
RUNNING	The task is being processed.
WAITING	The task has not yet been started.
SKIPPED	The task has not been processed. It was skipped during the restart.
IGNORED	The task was not submitted for execution, due to its LATEST-START being passed.
NO-PLAN	The task has not been planned with the CREATE-PLAN-NET statement.
NO-SUBMIT	The task has been deleted by a SUBMIT-NET or REPEAT-NET statement.
DELETED	The task has been deleted by a MODIFY-SUBMIT-NET statement.
CREATED	The task is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.

HOLD	A suspension of processing has been requested for this task. The HOLD status is only displayed if no status other than WAITING has yet been recorded for the processing status of the structure element. The WAITING status is the only status preempted in the display by a HOLD status.
JOB-INDEX	Output parameter Index level of the task
FU	Output parameter Function of the structure element
J (Job)	This structure element in the net description has the function of executing jobs.
P (Procedure)	This structure element in the net description has the function of executing S procedures.
JOB-TYPE	Output parameter This indicates how the task was made available. {MOD / STD / EXT / EXX}
MOD	The task is subject to net modification. It was created by a CREATE-PROD-NET statement.
STD	The task is not subject to net modification. It was created by a CREATE-PROD-JOB statement.
EXT	This task is not stored in the AVAS system. The task is started under the AVAS net control system by an /ENTER-JOB- or /ENTER-PROC command, with the file name specified for ENTER-FILE.
EXX	This S procedure is not stored in the AVAS system. The S procedure is started under the AVAS net control system by an /ENTER-PROC command, with the file name specified under ENTER-FILE. The S procedure run is monitored via an external job variable.
SYNC-INDEX	Output parameter Index level for synchronizing the structure element.
RESTART-VARIANT	Output parameter Number of the restart variant, as set by the task job variable or by the description of the structure element. {1 / 2 / 3}

RESTART-INDEX	Output parameter Index level at which processing is to resume in the event of a restart.
RESTART-NAME	Output parameter Name of a structure element for selecting structure elements at the index level specified in the RESTART-INDEX parameter. {name / *ALL / *NAME / *ERROR}
name	Only this structure element on the index level specified in RESTART-INDEX will be processed again. If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The element must be uniquely identifiable from the specified RESTART-NAME.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be processed again.
*NAME	Only the structure element in the POINT-OF-ERROR will be processed again. The *NAME specification will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.
*ERROR	All structure elements of the index level, selected by RESTART-INDEX, that terminated abnormally (JOB-STATUS=ERROR) will be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.
RESTART-TYPE	Output parameter Type of restart processing {RESTART / NORMAL}
RESTART	Restart with processing of restart statements #RA, #RI and #RU.
NORMAL	Restart without processing of restart statements #RA, #RI and #RU.

AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
LATEST-START	Output parameter dd.mm.yy/hh:mm:ss Latest time at which the task will be started.
DELAY-SOLUTION	Output parameter Actions to be taken in case of an untimely start (LATEST-START is passed). {START / IGNORE / CANCEL}
START	The task is to be started.
IGNORE	The task is not to be started.
CANCEL	The task is not started and is regarded as having terminated abnormally.

MONJV(.....) and VALUE(.....)	<p>Output parameter Partial contents of the task job variables for the job, which can be set by the AVAS statement #AVJ#. The display depends on the job status:</p> <p><i>Job status RUNNING</i></p> <p>MONJV(001,16) Contents of the system area VALUE(129,55) Contents of the AVAS user area</p> <p><i>Job status ENDED or ERROR (Start parameters for the run control system, RESTORE-MONJV-VALUE=YES specified)</i></p> <p>MONJV(129,64) Contents of the user area VALUE(193,64) Contents of the user area</p> <p><i>Job status ENDED or ERROR (Start parameters for the run control system, RESTORE-MONJV-VALUE=NO specified)</i></p> <p>MONJV(000,00) None of the contents of the task job variables VALUE(000,00) saved</p> <p><i>Other job statuses</i></p> <p>MONJV(____,__) None of the contents of the task job variables VALUE(____,__) available</p>
ENTER-PARAMS	<p>Output parameter Origin of the parameters for the ENTER call for this task (job or S procedure). {NET / LOGON}</p>
NET	<p>The ENTER parameters from the net description are adopted. When this is done, the entries for the task take precedence over those specified for the net.</p>
LOGON	<p>The ENTER parameters from the SET-LOGON-PARAMETERS (or LOGON) command for the task are adopted.</p>
JOB-CAT	<p>Output parameter {'catid' / '*ANY' / (bs2000-servername)}</p> <p>Parameter for task distribution within an HIPLEX MSCF network (see the manual "AVAS Functions and Tables" [1]) or on a remote BS2000 system.</p>
'catid'	<p>For a local BS2000 job the catalog ID of the processor on which the batch task is to run must be specified. The target processors are addressed by specifying a catalog ID.</p>

'*ANY'	If *ANY is specified the catalog ID is determined according to the HOST=*ANY operand. This operand is an operand of the BS2000 command ENTER-JOB/ENTER-PROCEDURE in an XCS network. (bs2000-servername) For a job on a remote BS2000 system a BS2000 server name is output which is entered in the configuration file (see the description of the configuration file in the manual "AVAS for the Administrator" [2]).
USER	Output parameter Parameter for the ENTER call of the task. ID under which the task is to run.
JOB-ACCOUNT	Output parameter Account number for the ENTER call of the task.
JOB-CLASS	Output parameter Parameter for the ENTER call of the task.
LOG	Output parameter Parameter for the task's ENTER call.
JOB-PARAMETER	Output parameter Parameter for the ENTER call of the task.
ENTER-FILE	Output parameter Name of the file to which the ENTER call is to be issued for JOB-TYPE=EXT/EXX.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL022.

AVI025 – Display the parameters of a structure element with FU=S

```

AVAS-Vnn.yxmn/AVI025      S H O W - N E T - S T A T U S      tt.mm.jjjj/hh:mm:ss
                          SUBNET-PARAMETER
NET-NAME      =..... NET-STATUS=.....
SUBNET-NAME   =..... SUBNET-STATUS=.....
SUBNET-INDEX =...   FU=.   SUBNET-TYPE =...
SYNC-INDEX   =...

RESTART      -INDEX   -NAME                                     -TYPE      AUTOMATIC
  VARIANT=1   ...     .....                                     .....     ...
            2   ...     .....                                     .....     ...
            3   ...     .....                                     .....     ...

LATEST-START =...../..... DELAY-SOLUTION=.....

SUBNET
-JVA(.....)=.....
VALUE(.....)=.....

CMD:..... OPR:.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net.
NET-STATUS	Output parameter Processing status of the net.
SUBNET-NAME	Output parameter Name of the displayed task.
SUBNET-STATUS	Output parameter Processing status of the task. {ERROR / ENDED / RUNNING / WAITING / SKIPPED / IGNORED / NO-PLAN / NO-SUBMIT / DELETED / CREATED / HOLD}
ERROR	The task was terminated abnormally, the subnet was not in the NETWAIT state at the time of the start or the subnet was not started due to DELAY-SOLUTION=CANCEL for the structure element FU=S with TYPE=NET. A restart must be initiated for the hypernet.
ENDED	The subnet terminated normally.

HOLD	An interruption of processed was requested for the structure element to start a subnet. If processing is to be resumed, then the hypernet must be processed with the #RESUME-NET operation.
RUNNING	The task is being processed. The subnet was started via the hypernet and runs under the control of the hypernet until the ENDED or ABENDED state is reached.
RUNNING/\$S	The task is being processed. The subnet is still in the WAITING state and has not been started yet. Possible causes: <ul style="list-style-type: none"> – The EARLIEST-START start time has not been reached yet. – The run control system that controls the execution of the subnet is not loaded yet or was not active yet. – LATEST-START has been exceeded, WAIT is set for NET-DELAY-SOLUTION.
RUN/NO-OCC	The subnet is in the CONDWAIT state. There is a structure element in the NO-OCCURE state in this subnet.
RUN/ERR	The subnet is in the ERROR state. A restart must be initiated for this subnet.
RUN/HOLD	The subnet is in the HOLD state. A structure element of this subnet is also in the HOLD state. If processing is to be resumed, then the subnet must be started with the #RESUME-NET operation.
WAITING	The task has not been started yet.
SKIPPED	The task has not been processed yet since it was skipped during the restart. The status of the subnet is indeterminate since the subnet may have been started already. The subnet must be placed in the ENDED or ABENDED state independently from the hypernet by the user.
IGNORED	The subnet was not started because a time limit was exceeded (LATEST-START for the subnet).
NO-PLAN	The task was excluded from planning.
NO-SUBMIT	The task was deleted with the SUBMIT-NET or REPEAT-NET statement.
DELETED	The task was deleted with the MODIFY-SUBMIT-NET statement.
SUBNET-INDEX	Output parameter Index level of the task

FU	Output parameter The function of the structure element
S (Start)	The function of this structure element in the net description is to "start a subnet".
SUBNET-TYPE	Output parameter Designates the availability of the task. {NET}
NET	The task describes a subnet. The subnet was created with the CREATE-PLAN-NET, CREATE-PROD-NET and SUBMIT-NET statements.
SYNC-INDEX	Output parameter Index level at which the structure element is to be synchronized
RESTART-VARIANT	Output parameter Number of the restart variant set via the task job variable or defined via the description of the structure element. {1 / 2 / 3}
RESTART-INDEX	Output parameter Index level to be used in the event of a restart.
RESTART-NAME	Output parameter Name of a structure element for selecting the structure element at the restart index level specified in the RESTART-INDEX parameter. {name / *ALL / *NAME / *ERROR}
name	Only this structure element on the index level specified in RESTART-INDEX will be processed again. If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The element must be uniquely identifiable from the specified RESTART-NAME.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be processed again.
*NAME	Only the structure element in the POINT-OF-ERROR will be processed again. The *NAME specification will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.

*ERROR	<p>All structure elements at the restart index level selected via RESTART-INDEX that have terminated abnormally (STATUS=ERROR) are to be executed again.</p> <p>The *ERROR specification is only processed if the RESTART-INDEX is the same as the ERROR-INDEX. In all other cases, the restart will be rejected.</p>
RESTART-TYPE	<p>Output parameter Type of restart processing involved. {RESTART / NORMAL}</p>
RESTART	Restart with execution of restart statements #RA, #RI and #RU
NORMAL	Restart without execution of restart statements #RA, #RI and #RU.
AUTOMATIC	<p>Output parameter Type of restart processing. {YES / NO}</p>
YES	<p>Automatic restart Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task.</p> <p>If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).</p> <p>If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).</p>
NO	<p>Manual restart The restart must be initiated by the RESTART-NET statement. Modifications to the net regarding the jobs in the subnet can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>
LATEST-START	<p>Output parameter dd.mm.yy/hh:mm:ss Latest time at which the task will be started.</p>

DELAY-SOLUTION	Output parameter Actions to be taken in case of an untimely start (LATEST-START is passed). {START / IGNORE / CANCEL}
START	The task is to be started.
IGNORE	The task is not to be started.
CANCEL	The task is not started and is regarded as having terminated abnormally.
SUBNET-JVA(.....)	Output parameter
VALUE(.....)	Partial contents of the task job variable of the subnet (AVS-SUBNET-JVA) that is set up by AVAS to monitor the subnet. The information displayed depends on the status of the subnet: RUNNING task status SUBNET-JVA(001,12): Contents of the AVAS system area. Possible values for the AVAS system area: \$S = Subnet status WAITING \$R = Subnet status RUNNING \$A = Subnet status change SUBNET-JVA(013,20): Free SUBNET-JVA(033,32): Name of the subnet VALUE(129,55) Contents of the net status area (currently only spaces since it is not used yet) other task status SUBNET-JVA(.....): No AVAS task job variable contents present. VALUE(.....) No AVAS task job variable contents present.

The data of the selected object can be output with the PRINT operation. The list is output via list format AVL025.

AVI004 – Display the parameters of a structure element with FU=C,TYPE=JVA

```

AVAS-Vnn.yxmn/AVI004          S H O W - N E T - S T A T U S          tt.mm.jjjj/hh:mm:ss
                                C O N D I T I O N - P A R A M E T E R
NET-NAME      = ..... NET-STATUS=.....
COND-NAME     = ..... COND-STATUS=.....
COND-INDEX    = ...      FU=.      COND-TYPE =...
SYNC-INDEX    = ...

RESTART      -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1    ...      .....                          .....    ...
              2    ...      .....                          .....    ...
              3    ...      .....                          .....    ...

LATEST-OCCURE=...../.....      DELAY-SOLUTION=.....

COND-JVA-NAME=.....
JVA-POSITION =...      JVA-LENGTH=...
COND-VALUE   = .....
              .....
              .....
              .....
CMD:.....      OPR:.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net
NET-STATUS	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.

RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.
RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network. No tasks are running at present.
NETWAIT	The subnet is waiting for the start by the hypernet.

RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system.
Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it.
The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, – or the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

COND-NAME	Output parameter Name of the structure element
COND-STATUS	Output parameter Processing status of the condition
OCCURRED	The event has occurred.
NO-OCCURE	The event has not occurred.
NO-OCC/DEL	The event has not occurred and the structure element was deleted.
WAITING	The event has not been checked yet.
ERROR	The event has been given an error status.
SKIPPED	The event has not occurred. It was skipped during restart.
IGNORED	The event was not checked, due to its LATEST-OCCURE time having been passed.
NO-PLAN	The structure element has not been planned with the CREATE-PLAN-NET statement.
NO-SUBMIT	The structure element has been deleted by a SUBMIT-NET or REPEAT-NET statement.
DELETED	The structure element has been deleted by a MODIFY-SUBMIT-NET statement.
CREATED	The structure element is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.
HOLD	A suspension of processing has been requested for this structure element. The HOLD status is only displayed if no status other than WAITING has yet been recorded for the processing status of the structure element. The WAITING status is the only status preempted in the display by a HOLD status.
COND-INDEX	Output parameter Index level of the net on which the condition is monitored.

FU	Output parameter Function of the structure element
C (Compare)	This structure element in the net description is a test, which waits for a condition to be satisfied.
COND-TYPE	Output parameter Type of the structure element
JVA	The net identified by NET-NAME is to wait at the index level specified under COND-INDEX until the specified job variable contains the value specified under COND-VALUE from the specified position and in the predefined length.
SYNC-INDEX	Output parameter Index level for synchronizing the structure element.
RESTART-VARIANT	Output parameter Number of the restart variant, as set by the task job variable or by the description of the structure element. {1 / 2 / 3}
RESTART-INDEX	Output parameter Index level at which processing is to resume in the event of a restart.
RESTART-NAME	Output parameter Name of a structure element for selecting structure elements at the index level specified in the RESTART-INDEX parameter. {name / *ALL / *NAME / *ERROR}
name	Only this structure element on the index level specified in RESTART-INDEX will be processed again. If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The element must be uniquely identifiable from the specified RESTART-NAME.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be processed again.
*NAME	Only the structure element in the POINT-OF-ERROR will be processed again. The *NAME specification will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.

*ERROR	<p>All structure elements of the index level, selected by RESTART-INDEX, that terminated abnormally (JOB-STATUS=ERROR) will be processed again.</p> <p>*ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.</p>
RESTART-TYPE	<p>Output parameter Type of restart processing {RESTART / NORMAL}</p>
RESTART	Restart with processing of restart statements #RA, #RI and #RU.
NORMAL	Restart without processing of restart statements #RA, #RI and #RU.
AUTOMATIC	<p>Output parameter Type of restart processing {YES / NO}</p>
YES	<p>Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task.</p> <p>If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant).</p> <p>If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).</p>
NO	<p>Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.</p>
LATEST-OCCURE	<p>Output parameter dd.mm.yy/hh:mm:ss Latest time by which the condition must be satisfied.</p>

DELAY-SOLUTION	Output parameter Actions to be taken in case of an untimely start (LATEST-OCCURE is passed). {START / IGNORE / CANCEL}
START	The condition is satisfied.
IGNORE	The condition is ignored.
CANCEL	The condition produces an error.
COND-JVA-NAME	Output parameter {jvname / *NONE} Name of the job variable whose value is to be checked from the specified position in the specified length. If *NONE is specified, the condition is regarded as satisfied.
JVA-POSITION	Output parameter Position within the value range of the job variable as of which the value is to be checked. jvpos
JVA-LENGTH	Output parameter Length of the value of the job variable. jvlen
COND-VALUE	Output parameter {= jvvalue / > jvvalue / < jvvalue / >= jvvalue / <= jvvalue / <> jvvalue}
jvvalue	jvvalue is the value with which the job variable is compared. jvvalue is specified without quotes and only as a C string.
= jvvalue	The condition is met if the job variable is equal to jvvalue.
> jvvalue	The condition is met if the value of the job variable is greater than jvvalue.
< jvvalue	The condition is met if the value of the job variable is less than jvvalue.
>= jvvalue	The condition is met if the value of the job variable is greater than or equal to jvvalue.
<= jvvalue	The condition is met if the value of the job variable is less than or equal to jvvalue.
<> jvvalue	The condition is met if the value of the job variable is not equal to jvvalue.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL023.

AVI007 – Display the parameters of a structure element with FU=C, TYPE=NET/JOB/RES/VAL

```

AVAS-Vnn.yxmn/AVI007          S H O W - N E T - S T A T U S          tt.mm.jjjj/hh:mm:ss
                               C O N D I T I O N - P A R A M E T E R
NET-NAME      = ..... NET-STATUS=.....
COND-NAME     = ..... COND-STATUS=.....
COND-INDEX    = ...      FU=.      COND-TYPE =...
SYNC-INDEX    = ...

RESTART      -INDEX  -NAME                                -TYPE      AUTOMATIC
  VARIANT=1    ...      .....                          .....      ...
              2    ...      .....                          .....      ...
              3    ...      .....                          .....      ...

LATEST-OCCURE=...../.....      DELAY-SOLUTION=.....

CONDITION CREATED BY: NET-NAME=.....      INDEX=...
OCCURE-VALUE  = .....
ERROR-VALUE   = .....
              SELECT-RESTART-VARIANT=.
CMD:.....      OPR:.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net
NET-STATUS	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.

RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.
RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network. No tasks are running at present.
NETWAIT	The subnet is waiting for the start by the hypernet.

RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it. The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, – or the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

COND-NAME	Output parameter Name of a condition \$ug_jobname1-24 (TYPE=JOB) Name of the structure element, the status of which is to be tested. \$ug_netname1-12 (TYPE=NET) Name of the net, the status of which is to be tested. \$ug_resname1-24 (TYPE=RES) Name of the condition for a resource. \$ug_valname1-24 (TYPE=VAL) Name of the condition for a defined value.
COND-STATUS	Output parameter Processing status of the condition
OCCURRED	The event has occurred.
NO-OCCURE	The event has not occurred.
NO-OCC/DEL	The event has not occurred and the structure element was deleted.
WAITING	The event has not been checked yet.
ERROR	The event has been given an error status.
SKIPPED	The event has not occurred. It was skipped during restart.
IGNORED	The event was not checked, due to its LATEST-OCCURE time having been passed.
NO-PLAN	The structure element has not been planned with the CREATE-PLAN-NET statement.
NO-SUBMIT	The structure element has been deleted by a SUBMIT-NET or REPEAT-NET statement.
DELETED	The structure element has been deleted by a MODIFY-SUBMIT-NET statement.
CREATED	The structure element is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.

HOLD	<p>A suspension of processing has been requested for this structure element.</p> <p>The HOLD status is only displayed if no status other than WAITING has yet been recorded for the processing status of the structure element. The WAITING status is the only status preempted in the display by a HOLD status.</p>
COND-INDEX	<p>Output parameter</p> <p>Index level of the net on which the condition is monitored.</p>
FU	<p>Output parameter</p> <p>Function of the structure element</p>
C (Compare)	<p>This structure element in the net description is a test, which waits for a condition to be satisfied.</p>
COND-TYPE	<p>Output parameter</p> <p>Shows the type of the structure element.</p> <p>{NET / JOB / RES / VAL}</p>
NET	<p>Net processing waits for a net condition to be satisfied.</p>
JOB	<p>Net processing waits for a job or FT request condition to be satisfied.</p>
RES	<p>Net processing waits for a condition on a resource to be satisfied.</p>
VAL	<p>Net processing waits for a condition to be satisfied by a defined value.</p>
SYNC-INDEX	<p>Output parameter</p> <p>Index level for synchronizing the structure element.</p>
RESTART-VARIANT	<p>Output parameter</p> <p>Number of the restart variant, as set by the task job variable or by the description of the structure element.</p> <p>{1 / 2 / 3}</p>
RESTART-INDEX	<p>Output parameter</p> <p>Index level at which processing is to resume in the event of a restart.</p>

RESTART-NAME	<p>Output parameter Name of a structure element for selecting structure elements at the index level specified in the RESTART-INDEX parameter. {name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element on the index level specified in RESTART-INDEX will be processed again. If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The element must be uniquely identifiable from the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be processed again.</p>
*NAME	<p>Only the structure element in the POINT-OF-ERROR will be processed again. The *NAME specification will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.</p>
*ERROR	<p>All structure elements of the index level, selected by RESTART-INDEX, that terminated abnormally (JOB-STATUS=ERROR) will be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.</p>
RESTART-TYPE	<p>Output parameter Type of restart processing {RESTART / NORMAL}</p>
RESTART	<p>Restart with processing of restart statements #RA, #RI and #RU.</p>
NORMAL	<p>Restart without processing of restart statements #RA, #RI and #RU.</p>

AUTOMATIC	Output parameter Type of restart processing. {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
LATEST-OCCURE	Output parameter dd.mm.yy/hh:mm:ss Latest time by which the condition must be satisfied.
DELAY-SOLUTION	Output parameter Actions to be taken in case of an untimely start (LATEST-OCCURE is passed). {START / IGNORE / CANCEL}
START	The condition is satisfied.
IGNORE	The condition is ignored.
CANCEL	The condition produces an error.

CONDITION CREATED BY

Output parameter

Name and index of the net which created the condition description (only if COND-TYPE=NET/JOB).

NET-NAME

{\$ug_netname1-12[_date[_time]] / *NONE}

The full name of the net with PLAN-START need only be specified if the condition description with the smallest positive time difference with respect to PLAN-START is not to be evaluated, but the one with the specified PLAN-START is. If *NONE is specified for COND-TYPE=NET, the condition is assumed to be satisfied and no check is performed.

INDEX

index

The user group for the NET-NAME parameter always corresponds to the user group for the CONDITION-NAME parameter.

OCCURE-VALUE

Output parameter

Normal event for dependency control

{status / status,status, ... / (OP,pos,value) / (OP,pos,value),(OP,pos,value), ... }

ERROR-VALUE

Output parameter

Abnormal event for dependency control

{status / status,status, ... / (OP,pos,value) / (OP,pos,value),(OP,pos,value), ... / *NONE}

SELECT-RESTART-VARIANT

Output parameter

{1 / 2 / 3}

This parameter is assigned to the ERROR-VALUE parameter.

It presets a restart variant to be used in the event of an error.

Processing takes place in accordance with the restart variant set for the jobs by means of the monitor job variable.

If no entry is made here, the restart variants for the condition are searched for AUTOMATIC=YES, as in the case of jobs, and if a restart variant is found this is used to automatically initiate a restart.

If no restart variant with AUTOMATIC=YES is found, the restart must be initiated by the RESTART-NET statement.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL023.

AVI008 – Display the parameters of a structure element with FU=A/M/D, TYPE=RES/VAL

```

AVAS-Vnn.yxmn/AVI008          S H O W - N E T - S T A T U S          tt.mm.jjjj/hh:mm:ss
                               C O N D I T I O N - P A R A M E T E R
NET-NAME      = ..... NET-STATUS=.....
COND-NAME     = ..... COND-STATUS=.....
COND-INDEX    = ... FU=... COND-TYPE =...
SYNC-INDEX    = ...

RESTART       -INDEX  -NAME                                -TYPE    AUTOMATIC
  VARIANT=1    ...    .....                                .....    ...
              2    ...    .....                                .....    ...
              3    ...    .....                                .....    ...

COND-VALUE    = .....
              .....

CMD: ..... OPR: .....
MSG: .....
    
```

NET-NAME	Output parameter Name of the net
NET-STATUS	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.

RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET.
RUNNING/CONDDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.
RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
CONDDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network. No tasks are running at present.
NETWAIT	The subnet is waiting for the start by the hypernet.

RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution.

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it. The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network.

- MODIFIED
- If structure elements were deleted when the net was released, or
 - the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or
 - a restart was initiated for the net, or
 - the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

COND-NAME	Output parameter Name of the structure element
COND-STATUS	Output parameter Processing status of the structure elements which process condition descriptions
WAITING	The condition description has not yet been processed.
EXECUTED	The condition description has been processed.
ERROR	An error occurred while the condition description was being processed.
SKIPPED	Processing of the condition description was skipped during the restart.
NO-PLAN	The structure element has not been planned with the CREATE-PLAN-NET statement.
NO-SUBMIT	The structure element has been deleted by a SUBMIT-NET or REPEAT-NET statement.
DELETED	The structure element has been deleted by a MODIFY-SUBMIT-NET statement.
CREATED	The structure element is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.
HOLD	A suspension of processing has been requested for this structure element.

COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.
FU	Output parameter Function of the structure element {A / M / D}
A (Add)	Creates a condition description.
M (Modify)	Modifies a condition description.
D (Delete)	Deletes a condition description.
COND-TYPE	Output parameter Type of the structure element {RES / VAL}
For FU=A	RES Creates a condition description for a resource.
For FU=A	VAL Creates a condition description with a defined value.
For FU=M	RES Modifies a condition description for a resource.
For FU=M	VAL Modifies a condition description with a defined value.
For FU=D	RES Deletes a condition description for a resource.
For FU=D	VAL Deletes a condition description with a defined value.
SYNC-INDEX	Output parameter Index level for synchronizing the structure element.
RESTART-VARIANT	Output parameter Number of the restart variant, as set by the task job variable or by the description of the structure element. {1 / 2 / 3}
RESTART-INDEX	Output parameter Index level at which processing is to resume in the event of a restart.

RESTART-NAME	Output parameter Name of a structure element for selecting structure elements at the index level specified in the RESTART-INDEX parameter. {name / *ALL / *NAME / *ERROR}
name	Only this structure element on the index level specified in RESTART-INDEX will be processed again. If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The element must be uniquely identifiable from the specified RESTART-NAME.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be processed again.
*NAME	Only the structure element in the POINT-OF-ERROR will be processed again. The *NAME specification will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.
*ERROR	All structure elements of the index level, selected by RESTART-INDEX, that terminated abnormally (JOB-STATUS=ERROR) will be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.
RESTART-TYPE	Output parameter Type of restart processing {RESTART / NORMAL}
RESTART	Restart with processing of restart statements #RA, #RI and #RU.
NORMAL	Restart without processing of restart statements #RA, #RI and #RU.

AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
COND-VALUE	Output parameter Required status (TYPE=RES) or value (TYPE=VAL).

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL023.

AVI009 – Display the parameters of a structure element with FU=D,TYPE=NET/JOB

```

AVAS-Vnn.yxmn/AVI009          S H O W - N E T - S T A T U S          tt.mm.jjjj/hh:mm:ss
                               C O N D I T I O N - P A R A M E T E R
NET-NAME      = ..... NET-STATUS=.....
COND-NAME     = ..... COND-STATUS=.....
COND-INDEX    = ...      FU=.      COND-TYPE =...
SYNC-INDEX    = ...

RESTART      -INDEX  -NAME                                -TYPE      AUTOMATIC
  VARIANT=1    ...      .....                          .....      ...
              2    ...      .....                          .....      ...
              3    ...      .....                          .....      ...

CONDITION CREATED BY: NET-NAME=..... INDEX=...

CMD: ..... OPR: .....
MSG: .....
    
```

NET-NAME	Output parameter Name of the net
NET-STATUS	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.

RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.
RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network. No tasks are running at present.
NETWAIT	The subnet is waiting for the start by the hypernet.

RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it. The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, – or the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

COND-NAME	Output parameter Name of a condition \$ug_jobname1-24 Name of the structure element which is deleted.
COND-STATUS	Output parameter Processing status of the structure elements which process condition descriptions
WAITING	The condition description has not yet been processed.
EXECUTED	The condition description has been processed.
ERROR	An error occurred while the condition description was being processed.
SKIPPED	Processing of the condition description was skipped during the restart.
NO-PLAN	The structure element has not been planned with the CREATE- PLAN-NET statement.
NO-SUBMIT	The structure element has been deleted by a SUBMIT-NET or REPEAT-NET statement.
DELETED	The structure element has been deleted by a MODIFY-SUBMIT- NET statement.
CREATED	The structure element is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.
HOLD	A suspension of processing has been requested for this structure element.
COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.

FU	Output parameter Function of the structure element
D (Delete)	Deletes a condition description.
COND-TYPE	Output parameter Shows the type of the structure element. {NET / JOB}
NET	Deletes a condition description for a predefined net.
JOB	Deletes a condition description for a predefined job or FT request.
SYNC-INDEX	Output parameter Index level for synchronizing the structure element.
RESTART-VARIANT	Output parameter Number of the restart variant, as set by the task job variable or by the description of the structure element. {1 / 2 / 3}
RESTART-INDEX	Output parameter Index level at which processing is to resume in the event of a restart.
RESTART-NAME	Output parameter Name of a structure element for selecting structure elements at the index level specified in the RESTART-INDEX parameter. {name / *ALL / *NAME / *ERROR}
name	Only this structure element on the index level specified in RESTART-INDEX will be processed again. If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The element must be uniquely identifiable from the specified RESTART-NAME.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be processed again.
*NAME	Only the structure element in the POINT-OF-ERROR will be processed again. The *NAME specification will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.
*ERROR	All structure elements of the index level, selected by RESTART-INDEX, that terminated abnormally (JOB-STATUS=ERROR) will be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.

RESTART-TYPE	Output parameter Type of restart processing {RESTART / NORMAL}
RESTART	Restart with processing of restart statements #RA, #RI and #RU.
NORMAL	Restart without processing of restart statements #RA, #RI and #RU.
AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
CONDITION CREATED BY	Output parameter Name and index of the net which created the condition description.
NET-NAME	\$ug_netname1-12[_date[_time]]
INDEX	index The user group for the NET-NAME parameter always corresponds to the user group for the CONDITION-NAME parameter.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL023.

AVI010 – Display the parameters of a structure element with FU=W,TYPE=TIM

```

AVAS-Vnn.yxmn/AVI010      S H O W - N E T - S T A T U S      tt.mm.jjjj/hh:mm:ss
                          C O N D I T I O N - P A R A M E T E R
NET-NAME      = ..... NET-STATUS=.....
COND-NAME     = ..... COND-STATUS=.....
COND-INDEX    = ...      FU=.      COND-TYPE =...
SYNC-INDEX    = ...

RESTART      -INDEX  -NAME      -TYPE      AUTOMATIC
VARIANT=1    ...      .....      .....      ...
            2    ...      .....      .....      ...
            3    ...      .....      .....      ...

DATE         = .....      TIME      =.....

CMD: .....      OPR: .....
MSG: .....
    
```

NET-NAME	Output parameter Name of the net
NET-STATUS	Output parameter Status of net processing
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed via RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed via RESUME-NET. The error status can be reset using RESTART-NET.
ERROR	The net was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. The net may resume processing following RESTART-NET.

RUNNING	The net is currently being processed.
RUNNING/ERROR	At least one structure element in the net has a status of RUNNING and at least one element has terminated abnormally (status ERROR). The error status can be reset using RESTART-NET
RUNNING/CONDWAIT	At least one structure element in the net has a status of RUNNING and the net is waiting for a condition to be satisfied.
RUNNING/RESTARTED	At least one structure element in the net has a status of RUNNING. A restart was initiated for the net. The structure element affected were not started because the AVAS run control system is inactive.
RUNNING/CANCEL	Processing of the net was canceled via CANCEL-NET with CANCEL-TYPE=SOFT. The net will be given a status of ERROR when the run control system has completed the end of net processing.
RUNNING/ABENDED	Net processing was aborted via CANCEL-NET with CANCEL-TYPE=HARD. ABENDED status is set if the AVAS run control system has performed end-of-net processing.
RUNNING/HOLD	Net processing was interrupted via HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.
WAITING	The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (NET-TYPE=2 or 3).
OPWAIT	The net is waiting for entry of the START-NET statement.
CONDWAIT	The net is waiting for a condition to be satisfied. No task is running at present.
CONDWAIT/ERROR	The net is waiting for a condition to be satisfied. No task is running at present. At least one structure element in the net terminated abnormally and has a status of ERROR. The error state can be reset using RESTART-NET.
HOSTWAIT	The net is waiting for a host in the HIPLEX MSCF network. No tasks are running at present.
NETWAIT	The subnet is waiting for the start by the hypernet.

RESTARTED	A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.
RESTARTED/ERROR	Processing of the net was interrupted (status ERROR) and the RESTART-NET operation performed. At least one structure element in the net still has a status of ERROR.
START	An operator start was initiated for the net. The start has not yet been carried out because the run control system is inactive.
RESUMED	HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.
SHIFTED	The net was moved to another RUN-CONTROL-SYSTEM.
IGNORED	As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not brought to execution

Note

Display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR=HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL and ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING//ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it. The display may show:

ERROR	If at least one structure element of the net was assigned the ERROR status.
RESTARTED	If a restart was performed for the net but has not yet been processed by the run control system.
CONDWAIT	If the net is waiting for a condition to be met.
HOSTWAIT	If the net is waiting for a host in the HIPLEX MSCF network.
MODIFIED	<ul style="list-style-type: none"> – If structure elements were deleted when the net was released, – or the net was modified following release using MODIFY-SUBMIT-NET or MODIFY-SUBMIT-JOB, or – a restart was initiated for the net, or – the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

COND-NAME	Output parameter Name of the structure element
COND-STATUS	Output parameter Processing status of the condition
OCCURRED	The event has occurred.
NO-OCCURE	The event has not occurred.
WAITING	The event has not been checked yet.
SKIPPED	The event has not occurred. It was skipped during restart.
ERROR	The event has not occurred. The net was processed with the CANCEL-NET (CANCEL- TYPE=SOFT) statement.
NO-PLAN	The structure element has not been planned with the CREATE- PLAN-NET statement.
NO-SUBMIT	The structure element has been deleted by a SUBMIT-NET or REPEAT-NET statement.
DELETED	The structure element has been deleted by a MODIFY-SUBMIT- NET statement.
CREATED	The structure element is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out via the restart index levels, by a RESTART-NET.
HOLD	A suspension of processing has been requested for this structure element.
COND-INDEX	Output parameter Index level of the net at which the condition is to be monitored.
FU	Output parameter Function of the structure element
W (Wait)	Wait for a specified time.

COND-TYPE	Output parameter Type of the structure element
TIM	Net processing waits until the specified point in time.
SYNC-INDEX	Output parameter Index level for synchronizing the structure element.
RESTART-VARIANT	Output parameter Number of the restart variant, as set by the task job variable or by the description of the structure element. {1 / 2 / 3}
RESTART-INDEX	Output parameter Index level at which processing is to resume in the event of a restart.
RESTART-NAME	Output parameter Name of a structure element for selecting structure elements at the index level specified in the RESTART-INDEX parameter. {name / *ALL / *NAME / *ERROR}
name	Only this structure element on the index level specified in RESTART-INDEX will be processed again. If it is required to select a structure element with FU=W and TYPE=TIM, the name must be specified as *DATE. The element must be uniquely identifiable from the specified RESTART-NAME.
*ALL	All structure elements at the index level specified in RESTART-INDEX are to be processed again.
*NAME	Only the structure element in the POINT-OF-ERROR will be processed again. The *NAME specification will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.
*ERROR	All structure elements of the index level, selected by RESTART-INDEX, that terminated abnormally (JOB-STATUS=ERROR) will be processed again. *ERROR will only be processed if RESTART-INDEX is identical to ERROR-INDEX. Otherwise the restart will be rejected.
RESTART-TYPE	Output parameter Type of restart processing {RESTART / NORMAL}
RESTART	Restart with processing of restart statements #RA, #RI and #RU.
NORMAL	Restart without processing of restart statements #RA, #RI and #RU.

AUTOMATIC	Output parameter Type of restart processing {YES / NO}
YES	Automatic restart. Restart is initiated automatically, without user input. Due account is taken of the restart variant selected via #AVJ#RV=n in the errored task. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant has been set via the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3. If AUTOMATIC=YES is not specified in the restart variant selected via #AVJ#RV=n, the restart will not be initiated automatically (the other variants are not searched for the specification AUTOMATIC=YES).
NO	Manual restart. The restart must be initiated by the RESTART-NET statement. Modifications to the net can be performed through the MODIFY-SUBMIT-NET and/or MODIFY-SUBMIT-JOB statements.
DATE	Output parameter Wait until date is reached. The absolute wait time is presented in the form **d provided the structure element is not being processed by the run control system. If the structure element COND TIM was activated and the system is waiting for the time to be reached (NO-OCCURE status), the calculated target date is displayed. After the wait time has been reached the original absolute wait time is entered again. This ensures that in the event of a restart with return before COND TIM the system can wait again.
TIME	Output parameter Wait until date and time is reached.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL023.

AVI026 – Display the parameters of a structure element with FU=F

```

AVAS-Vnn.yxmn/AVI003      S H O W - N E T - S T A T U S      tt.mm.jjjj/hh:mm:ss
                          FT-PARAMETER
NET-NAME      =..... NET-STATUS=.....
FT-NAME      =..... FT-STATUS =.....
FT-INDEX     =...      FU=.      FT-TYPE  =...
SYNC-INDEX   =...
RESTART      -INDEX   -NAME                                     -TYPE      AUTOMATIC
  VARIANT=1  ...      *ALL.....
           2  ...      *ALL.....
           3  ...
LATEST-START =...../..... DELAY-SOLUTION=START
MONJV(.....)=.....
VALUE(.....)=.....
DIRECTION    =...      PARTNER-NAME=..... REMOTE=.....
LOCAL-FILE   =.....
REMOTE-FILE  =.....
REMOTE-TRANSFER-ADMISSION=
FT-PARAMETER =.....
CMD:..... OPR:.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net
NET-STATUS	Output parameter Processing status of the net
ABENDED	The net was terminated abnormally using CANCEL-NET with CANCEL-TYPE=HARD.
ENDED	The net was terminated normally.
HOLD	Net processing was interrupted. Processing of the net can be resumed using RESUME-NET.
HOLD/ERROR	Net processing was interrupted. The net contains a structure element that terminated abnormally. Processing of the net can be resumed using RESUME-NET. The error status can be corrected using RESTART-NET.
ERROR	Net processing was interrupted because at least one structure element terminated abnormally or because CANCEL-NET was entered with CANCEL-TYPE=SOFT. Net processing may resume following RESTART-NET.
RUNNING	The net is currently being processed.

RUNNING/ERROR

At least one structure element in the net has the status RUNNING and at least one element has terminated abnormally (ERROR status). The error status can be corrected using RESTART-NET.

RUNNING/CONDWAIT

At least one structure element in the net has the status RUNNING and the net is waiting for a condition to be satisfied.

RUNNING/RESTARTED

At least one structure element in the net has the status RUNNING. A restart was initiated for the net. The structure elements affected were not started because the AVAS run control system is inactive.

RUNNING/CANCEL

Processing of the net was canceled using CANCEL-NET with CANCEL-TYPE=SOFT. The net will be placed in the ERROR status when the run control system has completed the end-of-net processing.

RUNNING/ABENDED

Processing of the net was canceled using CANCEL-NET with CANCEL-TYPE=HARD. The ABENDED status is set if the AVAS run control system has performed end-of-net processing.

RUNNING/HOLD

Net processing was interrupted using HOLD-NET. Some tasks of the net are still running. The HOLD status is set as soon as these tasks have terminated.

WAITING

The net is waiting for EARLIEST-START to be reached or for a net with the same name to terminate (with NET-TYPE=2 or 3).

OPWAIT

The net is waiting for entry of the START-NET statement.

CONDWAIT

The net is waiting for a condition to be satisfied. No task is running.

CONDWAIT/ERROR

The net is waiting for a condition to be satisfied. No task is running. At least one structure element in the net terminated abnormally and has the status ERROR. The error status can be corrected using RESTART-NET.

HOSTWAIT

The net is waiting for a host in the HIPLEX MSCF network or a server. No tasks are running.

NETWAIT

The subnet is waiting to be started by the hypernet.

RESTARTED

A restart was initiated for the net. The restart has not yet been carried out because the run control system is inactive.

RESTARTED/ERROR

Processing of the net was interrupted (ERROR status) and the RESTART-NET operation performed. At least one structure element in the net terminated abnormally and has the status ERROR.

START

An operator start was initiated for the net. However, the start has not yet been carried out because the run control system is inactive.

RESUMED

HOLD status was canceled for the net. The start has not yet been initiated because the run control system is inactive.

SHIFTED

The net was moved to another RUN-CONTROL-SYSTEM.

IGNORED

As a result of the value for LATEST-START combined with NET-DELAY-SOLUTION=IGNORE the net was not executed.

Note

The display of the status for a given net may consist of up to three status information items (e.g. NET-STATUS=RUNNING/HOLD/ERROR):

1. The current status of the net (NET-STATUS=RUNNING)
2. Any requested status conversion of a dialog function (CALLED FOR= HOLD) if this conversion has not yet been executed by the run control system. Possible values are HOLD, CANCEL or ABENDED. If no status conversion of a function has been requested, NET-STATUS=RUNNING/ERROR is output.
3. In addition, the processing status of the net is displayed if the net's current status (e.g. RUNNING) deviates from it.

The display may show:

ERROR

If at least one structure element of the net was assigned ERROR status.

RESTARTED

If a restart was performed for the net but has not yet been processed by the run control system.

CONDWAIT

If the net is waiting for a condition to be met.

HOSTWAIT

If the net is waiting for a host in the HIPLEX MSCF network or for a server.

MODIFIED

- If structure elements were deleted when the net was released or
- the net was modified following release using MODIFY-SUBMIT-NET, or
- a restart was initiated for the net, or
- the start parameters of the net were modified using HOLD-NET, RESUME-NET, CANCEL-NET or START-NET.

If three status information items are displayed for a net, the status display may be truncated.

FT-NAME	Output parameter Name of the request which is displayed
FT-STATUS	Output parameter Processing status of the FT request. {ERROR / ERROR CAT / ENDED / RUNNING / WAITING / SKIPPED / IGNORED / NO-PLAN / NO-SUBMIT / DELETED / CREATED / HOLD}
ERROR	The request terminated abnormally.
ERROR CAT	The request terminated abnormally because access to the other host is disrupted.
ENDED	The request terminated normally.
RUNNING	The request is currently being processed.
WAITING	The request has not yet been started.
SKIPPED	The request has not been processed. It was skipped during the restart.
IGNORED	The request was not submitted for execution due to a timeout (LATEST-START).
NO-PLAN	The request was not planned with the CREATE-PLAN-NET statement.
NO-SUBMIT	The request has been deleted using a SUBMIT-NET or REPEAT-NET statement.
DELETED	The request has been deleted using the MODIFY-SUBMIT-NET statement.

CREATED	<p>The request is within the range of restart index levels (index 900–999). For all the active structure elements within the range of restart index levels, this status is set by SUBMIT-NET/REPEAT-NET when the net is released. For the active structure elements, this status is not updated until a restart is carried out by RESTART-NET via the restart index levels.</p>
HOLD	<p>A suspension of processing has been requested for this request. The HOLD status is only displayed if no status other than WAITING has been entered for the processing status of the structure element. The HOLD status only overlays the WAITING status in the display.</p>
FT-INDEX	<p>Output parameter Index level of the request</p>
FU	<p>Output parameter Function of the structure element</p>
F (File Transfer)	<p>This structure element of the net description executes FT requests.</p>
FT-TYPE	<p>Output parameter This indicates how the task was made available</p>
TRA	<p>File transfer is started.</p>
SYNC-INDEX	<p>Output parameter Index level for synchronizing the structure element.</p>
RESTART-VARIANT	<p>Output parameter Number of the restart variant which can be set using the task job variable or which was defined via the description of the structure element. {1 / 2 / 3}</p>
RESTART-INDEX	<p>Output parameter Index level to be used in the event of a restart.</p>

RESTART-NAME	<p>Output parameter</p> <p>Name of a structure element for selecting structure elements at the specified index level. This name is specified in the RESTART-INDEX parameter</p> <p>{name / *ALL / *NAME / *ERROR}</p>
name	<p>Only this structure element of the index level specified in RESTART-INDEX will be executed again.</p> <p>If a structure element with FU=W and TYPE=TIM is to be selected, *DATE must be specified as the name. It must be possible to identify the element unambiguously using the specified RESTART-NAME.</p>
*ALL	<p>All structure elements at the index level specified in RESTART-INDEX are to be executed again.</p>
*NAME	<p>Only the structure element at the POINT-OF-ERROR is to be executed again. The *NAME parameter is only processed if RESTART-INDEX is the same as ERROR-INDEX.</p> <p>In all other cases the restart will be rejected.</p>
*ERROR	<p>All structure elements at the restart index level selected using RESTART-INDEX which have terminated abnormally (STATUS=ERROR) are to be executed again.</p> <p>*ERROR is only processed if RESTART-INDEX is the same as ERROR-INDEX. In all other cases the restart will be rejected.</p>
RESTART-TYPE	<p>Output parameter</p> <p>Type of restart processing.</p> <p>{RESTART / NORMAL}</p>
RESTART	<p>Restart with processing of restart statements #RA, #RI and #RU.</p>
NORMAL	<p>Restart without processing of restart statements #RA, #RI and #RU.</p>

AUTOMATIC	Output parameter Type of restart processing. {YES / NO}
YES	Automatic restart The restart is initiated automatically without user input. If a restart variant with AUTOMATIC=YES is used to initiate a restart, AUTOMATIC is reset to NO (as only an automatic restart can be performed using a restart variant). If no restart variant is set using the task job variable, the check is made in the order RESTART-VARIANT 1, 2, 3.
NO	Manual restart The restart must be initiated using the RESTART-NET statement. Modifications to the net can be performed using the MODIFY-SUBMIT-NET statement.
LATEST-START	Output parameter dd.mm.yy/hh:mm:ss Latest time at which the request is started.
DELAY-SOLUTION	Output parameter Measure to be taken if the start is not on time (LATEST-START is exceeded) {START / IGNORE / CANCEL}
START	The request should be started.
IGNORE	The request should not be started.
CANCEL	The request will not be started and is considered to have terminated abnormally.

MONJV(.....) and VALUE(.....)	Output parameter Partial contents of the task job variables for the FT request. The display depends on the FT status:
	<i>FT status RUNNING</i>
	MONJV(001,15) Status and file transfer ID
	VALUE(248,09) Return code/error code of openFT "FT-BS2000" means OK
	<i>FT status ENDED or ERROR</i>
	(Start parameter for the run control system, RESTORE-MONJV-VALUE=YES specified)
	MONJV(000,00) empty
	VALUE(128,64) Message key of openFT
	<i>FT status ENDED or ERROR</i>
	(Start parameter for the run control system, RESTORE-MONJV-VALUE=NO specified)
	MONJV(000,00) None of the contents of the task job variables
	VALUE(000,00) saved
	<i>other FT status</i>
	MONJV(____,__) None of the contents of the task job variables
	VALUE(____,__) available
DIRECTION	Output parameter Direction of file transfer (corresponds to the TRANSFER-DIRECTION operand of the TRANSFER-FILE command). { <u>TO</u> / FROM}
<u>TO</u>	The local system is the sending system; the files are sent to the remote system.
FROM	The local system is the receiving system; the files are fetched from the remote system.
PARTNER-NAME	Output parameter Symbolic name of the remote host defined by the FT administrator (corresponds to the PARTNER-NAME operand of the TRANSFER-FILE command).

REMOTE	<p>Output parameter Defines the type of the remote system (corresponds to the REMOTE-PARAMETER operand of the TRANSFER-FILE command). {*BS2000}</p>
<u>*BS2000</u>	<p>The remote system is a BS2000 system.</p>
LOCAL-FILE	<p>Output parameter Specifies the name of the file in the local system (corresponds to the FILE-NAME operand in the LOCAL-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-FILE	<p>Output parameter Specifies the name of the file in the remote system (corresponds to the FILE-NAME operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p>
REMOTE-TRANSFER-ADMISSION	<p>Output parameter Access authorization on the remote system (corresponds to the TRANSFER-ADMISSION operand in the REMOTE-PARAMETER specification of the TRANSFER-FILE command).</p> <p>By default the REMOTE-TRANSFER-ADMISSION field is blanked out. AVAS users can make it visible using the VISIBLE operation (see page 33) or #71 provided they are authorized to use this operation.</p>
FT-PARAMETER	<p>Output parameter Specifies further operands of the TRANSFER-FILE command for which no AVAS parameters are available. In particular follow-up processing for the local or remote system can be defined here.</p>

The PRINT operation can be used to output the data of the selected object using the list format AVL026.

SHOW-PERIOD – Display period

The SHOW-PERIOD statement outputs a list of the periods contained in the period file.

SHOW-PERIOD
[PERIOD-NAME=period]

PERIOD-NAME=period

Unique name of a period contained in the period file.

This causes the specified period to be displayed (AVC020 mask).

If the period name is specified via a partial qualification (final character *), this produces an overview of all periods from the period file whose names begin with the partial qualification (AVC021 mask).

Note

If the PERIOD-NAME operand is not specified, this causes all existing periods to be displayed (AVC021 mask).

AVC020 – Value of a period

The period marked in **mask AVC021** is displayed in mask AVC020. In the case of variable periods (TYPE=VAR), the current values are displayed in mask AVC020.

```

AVAS-Vnn.yxm/AVC020  P E R I O D - H A N D L I N G  tt.mm.jjjj/hh:mm:ss

PERIOD-NAME= .....          TYPE= ...

                                DD.MM.YY                HH:MM
PERIOD-START-DATE=.....      PERIOD-START-TIME=.....
PERIOD-END-DATE  =.....      PERIOD-END-TIME  =.....

CMD:..... OPR:.....
MSG:.....
    
```

- PERIOD-NAME Output parameter
Name of the period.

- TYPE Output parameter
Code for variable periods that cannot be modified using MODIFY-PERIOD.

- VAR The parameters for this period change according to the current date and the day of the week.

- PERIOD-START-DATE Output parameter
Start date (dd.mm.yy) of the period.

- PERIOD-START-TIME Output parameter
Start time (hh:mm) of the period.

- PERIOD-END-DATE Output parameter
End date (dd.mm.yy) of the period.

- PERIOD-END-TIME Output parameter
End time (hh:mm) of the period.

P-E-DATE	Output parameter End date (dd.mm.yy) of the period
P-E-TIME	Output parameter End time (hh:mm) of the period
RESULT	This parameter is irrelevant here.

SHOW-PLAN-NET – Display processing status of planned nets

Net processing is controlled via the production plan (NPRLIB) up to the release for production. In particular, a check must be made to see how far modification of the nets or the jobs (tasks) assigned to the nets has progressed. For nets in the production plan, a distinction is made between the following processing statuses:

- **NOTTOCREATE**
The net has been planned and is not subject to modification (no task in the net needs to be modified). The net can be released for production.
- **TOCREATE**
The net has been planned and must still be modified (at least one task in the net is subject to modification).
- **PARTIALLY**
The net is subject to modification and has been partially modified (at least one task has been modified, and at least one task still has to be modified).
- **CREATED**
The net has been completely modified and can be released for production.
- **SUBMITTED**
The net was released for production. It can no longer be processed by means of production preparation statements.
- **REPEATED**
The net was released for production by means of the REPEAT-NET statement. The net was not planned using the CREATE-PLAN-NET statement, but is a copy of a planned net that has already been released. It cannot be processed with the production preparation statements. A structure of this net has not been stored.

The processing statuses of nets which have already been modified can be controlled at the task level via the JOB-STATUS. In this case, a distinction is made between the following statuses:

- the task is not subject to modification = NOTTOCREATE
- the task still has to be modified = TOCREATE
- the task has been successfully modified = CREATED
- the JCL of the task is not managed via AVAS = EXTERNAL
- the task has not been planned = NO-PLAN

For structure elements used for dependency control, the status PLANNED or NO-PLAN is displayed.

The PRINT operation can be used to create

- a list of all nets in the specified status (no net marked in the AVI011 mask), or
- a list of all the structure elements of a net (appropriate net marked in the AVI011 mask).

If the statement is entered without parameters, an overview of all nets of the user group is displayed.

Subnets are also displayed in the overview of planned nets (see mask AVI011 on [page 1117](#)).

SHOW-PLAN-NET

```
[PERIOD-NAME=period / (dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]])
[,NET-NAME=[$ug_ ]netname]
[,NET-STATUS=TOCREATE / PARTIALLY / CREATED / NOTTOCREATE / READYFORSUBM /
SUBMITTED / REPEATED]
[,DISPLAY=YES / NO]
```

PERIOD-NAME=

Specifies a period (time span).

All nets are to be displayed whose start time EARLIEST-START falls within this period.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]])

Real date and time specifications determining the start and end times/dates of the period. If the "right" period delimiter is omitted, the end date is set to the start date and the end time to 23.59. The default value for the start time is 00:00.

NET-NAME=

Name of a net in the production plan (NPRLIB).

NET-NAME=\$ug_

Name of the user group.

Privileged users can select nets of a foreign user group, even in combination with PERIOD-NAME.

If no user group is specified, the nets of the user's own user group are displayed.

NET-NAME=netname

Element name of the net in the production library.

If the net name is specified via a partial qualification (final character *), this causes an overview to be displayed containing those nets whose names begin with the partial qualification.

If no net name is specified, all nets of the specified user group are displayed.

NET-STATUS=

Status of the nets to be displayed.

Only those nets are displayed which have the specified status.

NET-STATUS=TOCREATE

All nets are displayed which have to be modified but whose modification has not yet started.

NET-STATUS=PARTIALLY (=PARTIALLY CREATED)

All nets are displayed which have to be modified, and parts of which have already been modified.

NET-STATUS=CREATED

All nets are displayed which are subject to modification and which have been completely modified (the display forms a subset of READY FOR SUBMISSION).

NET-STATUS=NOTTOCREATE

All nets are displayed which do not have to be modified and can therefore be released for production (a subset of READY FOR SUBMISSION is displayed).

NET-STATUS=READYFORSUBM (=READY FOR SUBMISSION)

Those nets are displayed which have been planned and are not subject to modification, together with those which have been completely modified. The net status is NOTTOCREATE or CREATED.

NET-STATUS=SUBMITTED

All nets which have already been released are displayed.

NET-STATUS=REPEATED

All nets which have been created by means of the REPEAT-NET statement are displayed.

DISPLAY=

Selection of structure elements from the net description, to be displayed in mask AVP001. This operand permits the display of structure elements which have the status NO-PLAN to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand.

DISPLAY=YES

Structure elements with the status NO-PLAN are displayed.

DISPLAY=NO

Structure elements with the status NO-PLAN are not displayed.

NET-STATUS	<p>Output parameter Processing status of the net.</p> <p>The following processing statuses may occur:</p>
NOTTOCREATE	The net is not subject to modification and can be released.
TOCREATE	The net must be modified.
PARTIALLY	The net is subject to modification and is partially modified.
CREATED	The net has been completely modified and can be released.
SUBMITTED	The net has already been released.
REPEATED	The net has been released for processing by means of the REPEAT-NET statement. This processing status is generated in the production plan.
FROM-DATE	<p>Input/output parameter Start delimiter of a period. dd.mm.yyyy[/hh:mm:ss]</p> <p>The default values are PERIOD-START-DATE and PERIOD-START-TIME, if a net group was selected using PERIOD-NAME, or EARLIEST-START of the first selected net. The period limit can be modified, but must lie within the values of PERIOD-NAME. If no PERIOD-NAME is specified, FROM-DATE is assigned the value EARLIEST-START from the first net. If FROM-DATE is deleted by the entry, the default assignment described above is used again.</p>
TO-DATE	<p>Input/output parameter End delimiter of a period. dd.mm.yyyy[/hh:mm:ss]</p> <p>The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise, as for FROM-DATE). If no PERIOD-NAME is specified, TO-DATE is assigned the value EARLIEST-START from the last net. If TO-DATE is deleted by the entry, the default assignment described above is used again.</p>

The PRINT operation can be used to output a list of the selected nets. The list is output in the format of list AVL011.

EARLIEST-START	Output parameter Prospective real start time of the net. Either the time in the format hh:mm:ss or the *BY-HYP value is displayed if the start time of the subnet is linked to execution of the hypernet. It may have been changed from the start time given in the net name. dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP
RUN-CONTROL-SYSTEM	Output parameter Name of the run control system under whose control the net is scheduled to run.
M	Input parameter Only the marks to effect scrolling are permitted here.
IND	Output parameter Index of the structure element
FU	Output parameter Function of the structure element.
TYPE	Output parameter Type of the structure element.
NAME	Output parameter Name of the structure element.
STATUS	Output parameter Processing status of the task.
TOCREATE	The job still has to be modified.
CREATED	The job has been successfully modified.
NOTTOCREATE	The job is not subject to modification.
EXTERNAL	The JCL of the task is not managed via AVAS.
NO-PLAN	The task has not been planned.
	<i>Status of structure elements for dependency control:</i>
PLANNED	The structure element has been planned.
NO-PLAN	The structure element has not been planned.

SYN-IND Output parameter
 Synchronization index of the structure element.
 {index / NXT / END}

RESTART-IND Output parameter
 Displays the index of the three restart variants.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL012.

SHOW-PROD-JOB – Display executable tasks

SHOW-PROD-JOB can be used to display jobs from the JMDLIB or JMDSYS which are executable under AVAS. The display is controlled by EDT.

The PRINT operation enables the elements to be output to a LIST file.

The marks S and Y are used to select the elements to be displayed and output to a LIST file respectively.

Note that all modifying functions of EDT, though permissible, are irrelevant, i.e. the element is not entered in the AVAS user library following the return from EDT. If the edited files are not saved, a corresponding message is output when EDT is terminated. AVAS branches back into EDT for the user to perform the save. If EDT is terminated again at this point, there will be an unconditional return to AVAS.

If the statement is issued without operands, an overview containing all production jobs belonging to the associated user group is displayed.

SHOW-PROD-JOB
[ELEMENT-NAME={\$ug_ }element]

ELEMENT-NAME=

Name of a job in the JMDLIB or JMDSYS.

ELEMENT-NAME=\$ug_

Name of the user group.

Only privileged users are permitted to specify a foreign user group.

If the system user group \$ugsys has been specified, the JMDSYS is searched, otherwise the JMDLIB.

If no user group is specified, the elements of the user's own user group are output.

ELEMENT-NAME=element

Element name in the JMDLIB or JMDSYS.

This directly causes the element to be displayed in EDT.

If the element name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no element name is entered, all the production jobs of the specified user group are displayed.

ELEMENT-NAME	Output parameter Names of the elements presented for modification. \$ug_jobname[_netname[_yymmdd_hhmmss[_index]]]
DATE	Output parameter Date of last modification
RESULT	The RESULT parameter is irrelevant here.

The PRINT operation can be used to output the data of the selected object. The list is output in the format of list AVL041.

SHOW-SYSTEM-PARAMS – Display system parameters

The SHOW-SYSTEM-PARAMS statement displays the system parameters. Only the AVAS administrator may be authorized to use this statement.

If the RECORD operand is omitted, an overview of the parameter records is displayed in the AVS001 mask.

SHOW-SYSTEM-PARAMS

[RECORD=keyword]

RECORD=keyword

Name of a particular parameter record.

This directly causes the object selected via “keyword” to be displayed in the corresponding mask.

The following entries are permitted for “keyword”:

RECORD=FILENAMES

Display the files defined in the AVAS system (AVS002 mask).

RECORD=USER

Display the generated users (AVS003 mask).

RECORD=USERGROUP

Display the user groups and user group data (AVS004 mask).

RECORD=FUNCTION

Display an overview of function authorization tables (AVS005 mask).

RECORD=LIBASSIGN

Display an overview of the defined LIB-to-LIB assignments (AVS006 mask).

RECORD=RUNCONSYS

Display the generated run control systems with the variable parameters (AVS007 mask).

RECORD=SYSVAR

Display the user-defined system variables (AVS008 mask).

In format 1, only the M and ...LIB TO ...LIB parameters are relevant.

M	Input parameter
S (Select)	Selects a particular LIB-LIB connection group
...LIB TO ...LIB	Output parameter Overview of defined LIB-LIB connection groups Three characters without numbers, e.g.: NPR... TO JMD... NET... TO MAP... JCL... TO MAP...

If the user has marked a particular LIB-LIB connection group from the overview (format 1) with S, the selected connection group will be displayed in format 2 of the AVS006 mask.

In format 2, only the ...LIB TO ...LIB parameter is relevant.

...LIB TO ...LIB	Output parameter Displays a LIB-LIB connection group Six characters with numbers
------------------	--

SHOW-USER – Display signed-on users

The SHOW-USER statement displays the users who are currently signed on to the central access tasks (ZD-PLAM and ZD-UPAM). Depending on the authorization of the user, the displayed list either contains only members of the user's own user group, or all users who are signed on, including the AVAS system tasks (run control system, CENTRAL, reorganization and report).

The list is sorted according to: user type, user group, user name, TSN of the user task

The IGNORE operation displays the updated list of users in the AVS035 mask. The overview is recreated with the current parameter values of the users, and the user table is displayed from the beginning.

If the statement is entered without operands, an overview of all signed-on users of the assigned user group is displayed.

If a user is signed on more than once under the same user name, the corresponding number of user entries are displayed.

SHOW-USER
[USER-NAME=name]
[,USER-GROUP=\$ug / *ALL]

USER-NAME=

Name of a user who is signed on.

USER-NAME=name

Name of a user who is signed on to the central tasks.

If the name is specified in partially qualified form (last character *), an overview of the users whose names begin with this specification is displayed.

A user who has no privileged authorization is shown all signed-on users of the user group assigned to him if its name begins with the partial qualification.

USER-GROUP=

Selects the signed-on users of a user group.

If USER-GROUP is not specified, it is taken from the assignment of the person using the function if this person is working without privileged authorization. USER-GROUP=*ALL is used for users with privileged authorization.

USER-GROUP=\$ug

Name of a user group.

A user who has no privileged authorization can only specify his own user group. In this case, the specification of the user group can be omitted.

A user with privileged authorization can access signed-on users of the desired user group by specifying the user group.

USER-GROUP=*ALL

This specification is only for users with privileged authorization.

The user is shown all tasks currently signed on (including the AVAS system tasks).

PLAM/UPAM	Output parameter
PLAM	Number of open access sequences via the ZD-PLAM.
UPAM	Number of open access sequences via the ZD-UPAM
	<i>Note</i>
	The values displayed are temporary information. At the time of their display they could already be out of date.
STA	Output parameter Status of the user entry
C (Cancel)	CANCEL-USER has been issued for the user. The user is signed off as soon as he has finished processing the current element (SAVE or RETURN operation).
R (Running)	The user is signed on and can work.
W (Waiting)	The user is signed on and is waiting for the end of a serialization. The status is only set for users with the system ID AVS=BAT/DIA/BPS.
TSN	Output parameter BS2000 task sequence number of the signed-on user or system task.
COMMAND	Output parameter Current statement of the AVAS user or the system function.
MES	Output parameter
Y (Yes)	There is a message for the user which could not yet be output. If there is no message, a blank is displayed.
	<i>Note</i>
	There can only be one message at a time. Each message will be overwritten by the next one sent, even if it has not yet been read.
RESULT	The RESULT parameter is irrelevant in this context.

START-EXIT – Activate CC exit AVEX2001

The START-EXIT statement invokes user programs that were implemented at the CC exit AVEX2001.

If the START-EXIT statement is specified in the CMD field, the data in the two lines of the OPR field are made available to the user program called with START-EXIT via the communication area.

In accordance with mask definition (IFG), operands and values entered in lowercase are converted to uppercase and are passed on by AVAS without any further checks being performed. This gives the user a free hand regarding the names and/or values of the operands.

START-EXIT activates the CC exit AVEX2001.

AVAS supplies the fields in the communication area with the following values when it calls the CC routine:

prefixOPR	Input/output parameter Information from the field OPR, which was entered in the AVAS mask when START-EXIT was called and which is to be output in the OPR field of mask AVS030 after the CC exit has been terminated.
prefixOPR1	Input/output parameter, positions 1– 49 of prefixOPR. Corresponds to the field OPR in line 22 of the AVAS masks.
prefixOPR2	Input/output parameter, positions 50–129 of prefixOPR. Corresponds to the field in line 23 of the AVAS masks.
prefixMSG	unchanged as before – input parameter A message can be passed to AVAS in the field prefixMSG. AVAS displays the message in the MSG field of the mask AVS030 with the message key AVS5225.
prefixNNAM	Output parameter Name of the marked net
prefixJIND	Output parameter Structure index
prefixFUNC	Output parameter FUNCTION type
prefixFNAM	Output parameter FUNCTION name
prefixCMDA	Output parameter CMD address

Notes

- The parameters from pfixNNAM on are supplied with values only if the CC exit with operation code #55 from NET-CONTROL (see [page 750ff](#)) is called and a net/nets or structure element/elements are marked.
If it is called from mask AVI022 (see [page 773](#), LIST-OF-NETSff) only the pfixNNAM and pfixCMDA fields are supplied with values. No meaningful values are defined for the other fields.
- The CC routine determines what information is displayed in the OPR field of mask AVS030 after termination. Please note that any information remaining in the OPR field may result in an error message for any statement other than START-EXIT.
- If no CC routine is available, the START-EXIT statement is rejected with a message.

START-MONITOR – Call the AVAS status monitor

The START-MONITOR statement is used to call the AVAS status monitor for the free-running display of selected processing statuses for released nets. Authorizations can be used to make access to the function user specific.

The NET-NAME and RUN-CONTROL-SYSTEM operands can be used to define the scope of the nets displayed.

Mask AVI031 is used to select the event information to be displayed for the net. The following can be selected:

- Attaining the net status ABENDED, CONDWAIT, ENDED, ERROR or HOLD.
- Attaining the job/condition status ERROR, NO-OCCURE, OCCURED, RESTARTED or SKIPPED.

This selection is stored for the period of time during which a user is signed on to AVAS; the same selection takes effect again the next time the START-MONITOR function is called.

If the statement is issued without parameters, an overview of all the nets belonging to the assigned user group is displayed.

START-MONITOR
[NET-NAME=[\$ug_]netname] [,RUN-CONTROL-SYSTEM=*STD / avak]

NET-NAME=

Name of a released net that is to be monitored.

NET-NAME=\$ug_

Name of the user group

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of a net in the run control file

This entry causes the net parameters to be displayed. CONTINUE can be used for paging via the overview of the structure elements.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those nets from the run control file whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the user group of the user executing the function are displayed.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- The standard run control system of the user group is used immediately after SIGNON.
- If the user may employ all run control systems defined in the system (see `avak-use` parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
- If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of a run control system

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

AVI031 - Select the event information of the nets to be displayed

Selection of the event information of the nets to be displayed.

The free-running display is terminated using either the K2 interrupt or with the transmit key.

Mask AVI031 is subsequently displayed for a new selection or a change of statement.

```

AVAS-Vnn.yxmn/AVI031      S T A T U S - M O N I T O R      tt.mm.jjjj/hh:mm:ss
                          SELECT-EVENT

NET-GROUP=.....          RUN-CONTROL-SYSTEM=.....

M NET-STATE      M NET-STATE      M NET-STATE      M NET-STATE      M NET-STATE
. ABENDED        . CONDWAIT        . ENDED          . ERROR          . HOLD
. HOSTWAIT

M ORDER-STATE    M ORDER-STATE    M ORDER-STATE    M ORDER-STATE    M ORDER-STATE
. ERROR          . NO-OCCURE      . OCCURED        . RESTARTED     . SKIPPED
. HOSTWAIT

CMD:.....          OPR:.....
.....
MSG:.....
    
```

NET-GROUP Output parameter
 User group from which nets are to be displayed.

RUN-CONTROL-SYSTEM
 Output parameter
 Run control system

M Input parameter
 Selection of the event information to be displayed

S The event is selected

blank The event is not selected

NET-STATE	Event that can be selected for a net
ABENDED	The net was terminated abnormally via CANCEL-NET with CANCEL-TYPE=HARD.
CONDWAIT	The net waits for a condition to be fulfilled.
ENDED	The net was terminated normally.
ERROR	The net was interrupted because at least one structure element was terminated abnormally.
HOLD	Net processing was interrupted.
HOSTWAIT	The net waits for a host in the HIPLX MSCF network or for a server.
ORDER-STATE	Event that can be selected for a structure element.
ERROR	The task was terminated abnormally.
NO-OCCURE	The event did not occur.
OCCURED	The event occurred.
RESTARTED	A RESTART was initiated for the structure element.
SKIPPED	The structure element was skipped during the RESTART.
HOSTWAIT	The net waits for a host in the HIPLX MSCF network or for a server.

Free-running display

Layout of the displays

```

.....1.....2.....3.....4.....5.....6.....7.....8
AVAS-<version> STATUS - MONITOR      RUN-CONTROL-SYSTEM=<r-c-s> DATE:dd.mm.yyyy
hh:mm <=====net-name===== ><=====status===== > ER RS CW HD RD HW
      <status=> ind/f/typ <=====job-name===== > R1=nnn R2=nnn R3=nnn
      NO-OCCURE ind/C/typ <=====cond-name===== > LO=dd.mm.yy/hh:mm:ss
      NO-OCCURE ind/W/typ <=====cond-name===== > LS=dd.mm.yy/hh:mm:ss
    
```

Layout of the first line, which is repeated after at least 23 information lines:

- AVAS- – Header line which is repeated at least every 23 lines
- <version> – Version of the running AVAS system
- <r-c-s> – Name of the run control system
- dd.mm.yyyy – Date of the output line

Layout of the information lines:

- hh:mm – Time of the output line
- net-name – Name of a net
- status – Status of a net or structure element
- ER – Structure elements with the status ERROR exist
- RS – Structure elements with the status RESTARTED exist
- CW – Structure elements with the status NO-OCCURE exist
- HD – Structure elements with the status HOLD exist
- RD – Structure elements with the status RESUMED exist
- HW – Structure elements with the status HOSTWAIT exist
- ind – Index level of the structure element
- f – Function of the structure element (e.g. A,D,J,M,P,W)
- typ – Type of the structure element
- job-name – Structure name of a job/procedure
- cond-name – Structure name of a CONDITION element
- R1= – R3= – Restart index 1 to 3 (A instead of R if AUTOMATIC=YES)
- LO= – Date of LATEST-OCCURE
- LS= – Date of LATEST-START

Examples

1. Free-running display when the status monitor is started

When the monitor was started (at 16:00 hours) two nets were running; two conditions were not satisfied for one of the nets.

```

.....1.....2.....3.....4.....5.....6.....7.....8
AVAS-V08.0A10 STATUS - MONITOR RUN-CONTROL-SYSTEM=RCSTEST1 DATE:20.05.2007
16:00 $USR1_TEST.NETZ.01_070520_150000 RUNNING/-----
16:00 $USR1_TEST.NETZ.02_070520_143000 RUNNING/CONDWAIT --- CW ---
      NO-OCCURE 020/C/VAL $USR1_TEST.VAL.02 LO=20.05.07/16:40:00
      NO-OCCURE 030/C/RES $USR1_TEST.RES.02 LO=20.05.07/17:00:00
---:-- ----- 5. Ausgabezeile -----

```

2. Free-running display for signaled events

A job for one of the nets was terminated abnormally; the status ERROR initiates an automatic restart.

A header line is output after 23 lines.

A net running when the monitor was started terminates.

A condition reaches the time specified for LATEST-OCCURE and assumes the status ERROR.

A net is started and terminated without delays.

```

.....1.....2.....3.....4.....5.....6.....7.....8
---:-- ----- 19. Ausgabezeile -----
16:15 $USR1_TEST.NETZ.02_070520_143000 RUNNING/CONDWAIT ER --- CW ---
      ERROR 010/J/MOD $USR1_TEST.JOB.MOD.02 R1=010 R2=050 R3=
16:17 $USR1_TEST.NETZ.02_070520_143000 RUNNING/CONDWAIT --- RS CW ---
      RESTARTED 010/J/MOD $USR1_TEST.JOB.MOD.02 R1=010 R2=050 R3=
AVAS-V08.0A10 STATUS - MONITOR RUN-CONTROL-SYSTEM=RCSTEST1 DATE:20.05.2007
      16:22 $USR1_TEST.NETZ.01_070520_150000 ENDED/
16:41 $USR1_TEST.NETZ.02_070520_143000 CONWAIT/ERROR ER --- CW ---
      ERROR 020/C/VAL $USR1_TEST.VAL.02 R1=040 R2= R3=
16:45 $USR1_TEST.NETZ.03_070520_164500 RUNNING/ --- --- ---
17:38 $USR1_TEST.NETZ.03_070520_164500 ENDED/ --- --- ---
---:-- ----- 30. Ausgabezeile -----

```

The free-running display is terminated using either the K2 interrupt key or with the transmit key. Mask AVI031 is subsequently displayed for a new mask or a change of statement.

START-NET – Start processing of net regardless of start conditions

The START-NET statement can be used to initiate the start of a net without having to take the start conditions for the net into account. The nets must, however, have the status OPWAIT or WAITING prior to the start.

When releasing the net by means of SUBMIT-NET, the status of the net is defined via the parameter OPERATOR-START (NO/YES), where NO is the default value. If the net is released with NO, it has WAITING status; if released with YES, it has OPWAIT status. The same applies to net release via REPEAT-NET.

Via the MODIFY-SUBMIT-NET statement, the status of the net can be changed from WAITING to OPWAIT (and vice versa). The START-NET statement can be used to process all nets with the OPWAIT or WAITING status. The overview of the corresponding nets is output via mask AVD015.

If START-NET was specified for a net, it is given the status START. Nets with START status are started without taking any other net parameter (e.g. EARLIEST-START, LATEST-START, etc.) into account the next time the run control system is activated. Acknowledgment of a successful operator start is kept within the net and is used to supply the OPERATOR-START parameter in the MODIFY-SUBMIT-NET statement. This is the case when no run control system has been activated and, for this reason, a net is not executed (net status RUNNING is not achieved).

Execution of START-NET for a given net is logged in the journal.

Interactive prompting

In the mask AVD015, the START-NET statement can be initiated using the Y or N mark. In this case, the following rule applies:

- If processing is rejected with Result ERROR, this statement must be initiated using the mask AVD008 (S mark). Messages reporting the cause of errors are output via this mask.

In the mask AVD008, processing can be initiated with the EXECUTE operation. The entire net structure is displayed including any structure elements not processed (e.g. structure elements with the status NO-PLAN). In this case, the following rules apply:

- If a value is predefined in the parameter fields MODIFY-LATEST and NEW-START in the mask AVD015, the corresponding parameter fields on the mask are set to these values.
- Processing is initiated with the EXECUTE operation

If the statement is issued without operands, this leads to an overview of the nets with OPWAIT or WAITING status which belong to the user executing the function.

START-NET
[NET-NAME=[$\$$ ug_]netname]
[,PERIOD-NAME=period / (dd.mm.yy [/hh:mm:ss][,dd.mm.yy [/hh:mm:ss]])]
[,NET-STATUS= <u>OPWAIT</u> / WAITING / ALL]
[,RUN-CONTROL-SYSTEM=*STD / avak]

NET-NAME=

Name of a net in the run control file.

NET-NAME= $\$$ ug_

Name of the user group.

Privileged users can select nets of another user group.

If no user group is specified, the user group of the user executing the function is assumed.

NET-NAME=netname

Name of the net to be started by means of an operator entry.

The PERIOD-NAME operand cannot be used for fully qualified net names.

If a partially qualified name is specified for "netname" (last character *), this results in an overview of the nets from the run control file whose name begins with the partial qualification.

If no net name is specified, all nets belonging to the specified user group are displayed.

PERIOD-NAME=

Specifies a period (time span)

The nets to be processed are those with a start time, EARLIEST-START, which falls within this period.

The set of nets can be restricted even further by means of the NET-NAME operand.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy/hh:mm:ss,dd.mm.yy/hh:mm:ss)

Real date and time which determine the start and end date/time of the period.

If the 'right' period boundary is missing, the end date is set to the start date and the end time is set to 23:59. The default value for the start time is 00:00.

NET-STATUS=

Nets are selected by way of the net status.

NET-STATUS=OPWAIT

Nets with OPWAIT status are to be displayed.

NET-STATUS=WAITING

Nets with WAITING status are to be displayed.

NET-STATUS=ALL

Nets with WAITING and OPWAIT status are to be displayed.

If no net status is specified, nets with the status OPWAIT are displayed.

RUN-CONTROL-SYSTEM=

Run control system under which the net executes under control or for which it is released.

If there is no RUN-CONTROL-SYSTEM specification the following applies:

- The standard run control system of the user group is used immediately after SIGNON.
- If the user may employ all run control systems defined in the system (see `avak-use` parameter in the user group definition in the manual "AVAS for the Administrator" [2]), the value from the last command with the RUN-CONTROL-SYSTEM operand is used.
- If the user may only use the standard run control system of his/her user group, this is used.

RUN-CONTROL-SYSTEM=avak

Name of a run control system

RUN-CONTROL-SYSTEM=*STD

If the user enters the keyword *STD in the dialog for avak, the standard run control system of his/her user group is used (again).

Note

Depending on the setting of the generation parameter HYPERNET-COLOUR, hypernets are color-highlighted in the overview.

NET-STATUS/CALLED FOR	Output parameter Processing status of the displayed net
OPWAIT	The net is waiting for input of the START-NET statement.
WAITING	The net is waiting for the start.
MODIFY-LATEST	Input/output parameter Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters specified for the structure elements. {nnn.hh.mm / <u>000.00.00</u> }
nnn.hh.mm	Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/C/W) of the net. The modified LATEST-START of the net must come after EARLIEST-START.
<u>000.00.00</u>	This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified.
NEW-START	Input/output parameter Start time of the net dd.mm.yy/hh:mm:ss / dd.mm.yy/*BY-HYP By default, the parameter is assigned the value of EARLIEST-START of the net. The start time of the net can be modified using the NEW-START parameter. *BY-HYP is only permissible for subnets.
RESULT	Output parameter Acknowledgment for the completed action.
STARTED	The net was started without taking the start parameters into account.
NO-START	The start of the net was not initiated, since the net no longer has the required status (e.g. the net was already started by the run control system because the EARLIEST-START value had been reached).

FROM-DATE

Input/output parameter
Start value of a period
dd.mm.yyyy[/hh:mm:ss]

The default values are PERIOD-START-DATE and PERIOD-START-TIME if a net group was selected using PERIOD-NAME, or the EARLIEST-START of the first selected net. The period boundary can be modified, but it must lie within the values specified by PERIOD-NAME.

If no PERIOD-NAME is specified, FROM-DATE is assigned the value of the EARLIEST-START of the first net.

If FROM-DATE is deleted by the input, the default assignment described above applies.

TO-DATE

Input/output parameter
End value of a period
dd.mm.yyyy[/hh:mm:ss]

The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise same as FROM-DATE).

If no PERIOD-NAME is specified, TO-DATE is assigned the value of the EARLIEST-START of the last net.

If TO-DATE is deleted by the input, the default assignment described above applies.

MODIFY-LATEST	<p>Input/output parameter</p> <p>Time span based on the LATEST-START parameter specified for the net and the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters for the structure elements.</p> <p>The parameter is only processed for CANCEL-TYPE=SOFT.</p> <p>{nnn.hh.mm / 000.00.00}</p>
nnn.hh.mm	<p>Entering MODIFY-LATEST results in the modification of LATEST-START for the net and the modification of LATEST-START, LATEST-OCCURE and OCCURE-TIME for all structure elements (FU=J/P/C/W) of the net.</p> <p>The modified LATEST-START of the net must come after EARLIEST-START.</p>
000.00.00	<p>This entry does not cause the LATEST-START, LATEST-OCCURE and OCCURE-TIME parameters to be modified.</p>
M	<p>Input parameter</p> <p>Only the marks for paging are permitted here.</p> <p><i>Note</i></p> <p>Processing is started with the EXECUTE operation.</p>
IND	<p>Output parameter</p> <p>Index of the structure element.</p>
FU	<p>Output parameter</p> <p>Function of the structure element.</p>
TYPE	<p>Output parameter</p> <p>Type of the structure element.</p>
NAME	<p>Output parameter</p> <p>Name of the structure element.</p>
SYN-IND	<p>Output parameter</p> <p>Index level, on which the structure element is to be synchronized.</p>
STATUS	<p>Output parameter</p> <p>Processing status of the structure element.</p>
RESULT	<p>Output parameter</p> <p>The parameter RESULT is irrelevant in this context.</p>

SUBMIT-NET – Release planned nets

The SUBMIT-NET statement is used to release one or more nets for production. This causes the executable nets and jobs to be included in the run control file. Before SUBMIT-NET is called, all necessary jobs (tasks in the nets and subnets) must have been made available in their final modified status.

Subnets are automatically released with the hypernet.

The search for jobs in the JMDLIB and JMDSYS is governed by the following rules, depending on the value of the TYPE parameter in the net description:

TYPE=MOD The task is sought in the JMDLIB under the fully qualified name
\$ug_jobname_netname_yymmdd_hhmmss[_index]

TYPE=STD If the user group is not specified, the search takes place in the following sequence:

\$ug_jobname_netname (JMDLIB)

\$ug_jobname (JMDLIB)

\$ugsys_jobname_netname (JMDSYS)

\$ugsys_jobname (JMDSYS)

If the user group is specified, the search takes place with \$ug_ or \$ugsys_ only.

TYPE=EXT The task is not sought.

TYPE=EXX The S procedure is not sought.

The following rule applies for the effect of the parameter FU:

The JMDLIB is searched for an element with the function prescribed in the net structure (FU=J or FU=P). Any element which has a different function will not be 'found'.

Only those nets can be released which have the processing status CREATED or NOTTOCREATE in the production plan. Once the statement has been executed, the status is set to SUBMITTED. This also applies to subnets released with a hypernet.

The "release for production" operation is logged in the journal. The journal records of the subnet are stored under the name of the subnet. A journal record is output for the structure element with FU=S and TYPE=NET below the hypernet.

If a catalog (processor) is defined via specification of the name of a job variable with the NET-CAT and/or JOB-CAT parameters, the job variable is read at the time of the net release (AVAS-internal GETJV) and the current contents are used as the catalog ID.

Processing at the time of statement execution can be influenced via the AVEX7101 and AVEX7102 computer center exits.

Releasing a net

An individual net can be released by specifying a fully qualified net name or by having a net group displayed and using the mark S (Select).

The parameters RUN-CONTROL-SYSTEM, EARLIEST-START, LIFE-TIME, DELAY-SOLUTION, LATEST-START and NET-TYPE (NET-TYPE not for subnets) can be modified. In this case the OPERATOR-START parameter can be specified, stipulating whether the net is to be started automatically once the start specifications have been satisfied, or whether the start is to be initiated by means of operator input. The OPERATOR-START parameter may not be specified for subnets.

If individual structure elements are to be excluded from processing when the net is released, the net structure must be displayed (operand OBJECT=STR) and the individual structure elements must be deleted using the D mark. If a structure element for starting a subnet is deleted via the D mark, then the corresponding subnet is not released.

If a subnet of the hypernet has already been released for processing (for example when an error occurs during the SUBMIT-NET command when releasing a hypernet after releasing this subnet) and this subnet has the status NETWAIT in the runtime file, then the subnet is assigned to the hypernet and is not released again. Subnets already released but with a different status lead to an error when releasing the hypernet. This also applies, for example, to released subnets that have already started themselves.

Subnets are only found in the NPRLIB production plan if NET-TYPE>4 is set. For this reason, processing of the subnets must be planned via the hypernets.

Releasing a net group

A group of nets can be released either by specifying a period or by specifying a partially qualified net name. In both cases, an overview of the nets involved is displayed.

When a period is specified, those nets are selected whose start time EARLIEST-START falls within the period designated by PERIOD-NAME. In addition to the nets, the overview mask also includes the real boundary dates which delimit the period. These boundary dates may be further limited, in which case they cause a new overview mask to be displayed. Those nets which are marked in the displayed overview are released. If no nets are marked, all the nets are released when EXECUTE is entered.

If the statement is issued without operands, an overview containing all nets of the associated user group is displayed.

SUBMIT-NET
[PERIOD-NAME=period / (dd.mm.yy [hh:mm:ss][,dd.mm.yy [hh:mm:ss]])
[,NET-NAME=[\$ug_]netname]
[,OBJECT= <u>NET</u> / STR]
[,DISPLAY=YES / NO]

PERIOD-NAME=

Specifies a period (time span).

Those nets are to be released whose start time EARLIEST-START falls within this period. This operand is only permissible in conjunction with a partially qualified net name.

PERIOD-NAME=period

Symbolic name of the period.

PERIOD-NAME=(dd.mm.yy[/hh:mm:ss][,dd.mm.yy[/hh:mm:ss]])

Real date and time specifications, determining the start and end dates/times of the period. If the "right" period delimiter is omitted, the end date is set to the start date and the end time to 23:59.

NET-NAME=

Name of a net to be released.

NET-NAME=\$ug_

Name of the user group.

Privileged users are allowed to release nets belonging to a foreign user group, even in combination with PERIOD-NAME.

If no user group is specified, the elements of the associated user group, i.e. of the user's own user group, are displayed.

NET-NAME=netname

Element name of the net in the NPRLIB.

If a fully qualified net name is specified, this net will be displayed.

If the net name is entered via a partial qualification (final character *), an overview is displayed of those elements whose names begin with the partial qualification.

If no net name is specified, all nets belonging to the specified user group are displayed.

OBJECT=

Selects the object to be displayed for modification purposes.

This operand is only permissible in conjunction with a fully qualified net name.

OBJECT=NET

Presents the net information.

OBJECT=STR

Displays the net structure.

DISPLAY=

Selection of structure elements from the net description, to be displayed in mask AVF004. This operand permits the display of structure elements which have the status NO-PLAN to be different from that defined by the default values set via the generation parameters.

DISPLAY is a temporary operand, for display purposes only. It is not output again as an operand.

DISPLAY=YES

Structure elements with the status NO-PLAN are displayed.

DISPLAY=NO

Structure elements with the status NO-PLAN are not displayed.

AVF001 – Overview of a net group for release

```

AVAS-Vnn.yxmn/AVF001  S U B M I T / R E P E A T - N E T  tt.mm.jjjj/hh:mm:ss
M  NET-NAME                EARLIEST-START      IND  RESULT
                           /                               OBJ
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
.  ...../.....
FROM-DATE=...../.....  TO-DATE=...../.....
CMD:.....  OPR:.....
MSG:.....
    
```

- M Input parameter
 - S (Select) A net is selected for release and presented for parameter input.
 - Y (Yes) the net is selected for release. It is no longer possible to modify the parameters.
 - N (No) The net is excluded from release. All unmarked nets are released.
- A mixture of marks is not permitted. The marks are saved, and are processed when EXECUTE is specified. Only those nets are released for production whose start times fall within the (possibly limited) period.
- NET-NAME Output parameter
Name list of nets selected by specifying a partially qualified net name or a period.
\$ug_netname_yymmdd_hhmmss
 - EARLIEST-START Output parameter
Prospective start time of the net
dd.mm.yy/hh:mm:ss

IND/OBJ	<p>Input parameter index</p> <p>This is only processed in conjunction with the S mark and results in an overview of the structure elements starting at the specified index level.</p>
NET	<p>The net parameters are to be updated (default value).</p> <p>The default NET is changed to OBJ=STR in the individual display if the function finds, while creating the display, that a task is not present in the corresponding JMDLIBs (RESULT field contains NOT-FOUND in the structure mask).</p>
STR	<p>This is only processed in conjunction with the S mark and results in an overview of the structure elements.</p>
RESULT	<p>Output parameter Acknowledgment for the completed action.</p>
SUBMITTED	<p>The net was released.</p>
NO-SUBMIT	<p>The net release was rejected.</p>
LOCKED	<p>The net, or a task in the net, is currently being processed by another interactive task and is therefore locked.</p>
ERROR	<p>An error occurred while releasing the net (e.g. no job defined in the net could be found in the JMDLIB, a subnet was not found or a subnet does not have the CREATED or NOTTOCREATE status, or the job variable specified via the NET-CAT or JOB-CAT parameter could not be read).</p> <p>An error message will be output if the release was activated via the AVF002 mask (marked with an S).</p>
FROM-DATE	<p>Input/output parameter Start value of a period dd.mm.yyyy[/hh:mm:ss]</p> <p>The default values are PERIOD-START-DATE and PERIOD-START-TIME when a net group is selected via PERIOD-NAME. The period boundary can be modified, but it must lie within the values of PERIOD-NAME.</p> <p>If PERIOD-NAME is omitted, FROM-DATE is given the EARLIEST-START value of the first net.</p> <p>If FROM-DATE is deleted by the input, the default assignment described above takes effect.</p>

TO-DATE

Input/output parameter

End value of a period

The default values are PERIOD-END-DATE and PERIOD-END-TIME (otherwise same as FROM-DATE).

If PERIOD-NAME is omitted, TO-DATE is given the EARLIEST-START value of the last net.

If TO-DATE is deleted by the input, the default assignment described above takes effect.

AVF002 – Net information for release of a net

```

AVAS-Vnn.yxm/AVF002          S U B M I T - N E T          tt.mm.jjjj/hh:mm:ss
NET-NAME=.....
NET-TEXT=.....
.....
NET-STATUS          =.....
PLAN-START          =...../.....
LATEST-START       =.....
LIFE-TIME           =.....
EARLIEST-START     =...../.....
RUN-CONTROL-SYSTEM=.....          OPERATOR-START=...
NET-DELAY-SOLUTION=.....
NET-TYPE            =.

CMD:.....          OPR:.....
.....
MSG:.....
    
```

NET-NAME	Output parameter Name of the net to be released \$ug_netname_yymmdd_hhmmss
NET-TEXT	Output parameter Brief text describing the net in greater detail
NET-STATUS	Output parameter Processing status of the net in the NPRLIB before the function is executed.
PLAN-START	Output parameter Start time for scheduled execution of the net dd.mm.yy/hh:mm:ss
LATEST-START	Input/output parameter Latest prospective start time relative to PLAN-START {nnn.hh.mm | *nn.hh.mm}
*nn.hh.mm	Time span relative to PLAN-START, and absolute time of day.
nnn.hh.mm	Time span relative to PLAN-START.

LIFE-TIME	Input/output parameter Indicates how long the normal end-of-net is to remain valid and detectable. {nnn.hh.mm / *NONE}
nnn.hh.mm	Time span relative to PLAN-START. SUBMIT-NET creates a condition entry in the run control file.
*NONE	No condition entry is created.
EARLIEST-START	Input/output parameter The net can be assigned a modified start time. This modified start time is not made part of the net name. dd.mm.yyyy[/hh:mm:ss] / dd.mm.yyyy/*BY-HYP (the default value for hh:mm:ss is 00:00:00, *BY-HYP is only permissible for subnets).
RUN-CONTROL-SYSTEM	Input/output parameter The name defined till now for the run control system is displayed. The net can be assigned the name of another run control system. <i>Note</i> A user who does not have the appropriate authorization can only change the RUN-CONTROL-SYSTEM parameter to the run control system that is assigned to his own user group.
OPERATOR-START	Input/output parameter Specifies whether or not the start of the net is to be initiated by way of operator input. { <u>NO</u> / YES}
<u>NO</u>	The net is automatically started by the run control system as soon as the start conditions are satisfied. The net is given the status WAITING.
YES	The net is not started automatically. The start must be initiated by means of operator input (START-NET statement) The net is given the status OPWAIT.
NET-DELAY-SOLUTION	Input/output parameter Actions to be taken in the event of an untimely net start. {WAIT / START / IGNORE / CANCEL}
WAIT	The net is to continue waiting.
START	The net is to be started.

- IGNORE** The net is not started. If other nets or jobs are dependent on this net, these dependencies are regarded as resolved.
- CANCEL** The net is not started and is regarded as having terminated abnormally.
This parameter takes effect when
- nets are released after LATEST-START has expired (SUBMIT-NET),
 - nets are in the HOLD state during the period between EARLIEST-START and LATEST-START,
 - the run control system is inactive during the period between EARLIEST-START and LATEST-START,
 - two or more nets of the same name with NET-TYPE=2 or 3 are released but could not be started within the period delimited by LATEST-START and PLAN-START.

If LATEST-START has expired, the net status is dependent on the NET-DELAY-SOLUTION parameter:

NET-DELAY-SOLUTION	NET-STATUS
WAIT	WAITING
START	RUNNING or CONDITION-WAIT
IGNORE	IGNORED
CANCEL	ABENDED

- NET-TYPE** Input/output parameter
Specifies how to serialize processing of nets with the same name but different start times; modifications can still be made at this stage.
{1 / 2 / 3 for standard nets or 5 / 6 / 7 for subnets}
- 1/5** The net is started, regardless of whether a net of the same name is or was being processed.
- 2/6** The net is not started as long as a net of the same name is running. If two or more like-named nets of a type other than 1 are waiting to start, the net with the earliest PLAN-START time is started first.
- 3/7** The net is started only if no net of the same name has been brought to execution since the last reorganization.
- NET-TYPE can only be changed to a value from 1 to 3 (standard net or hypernet) or to a value from 5 to 7 (subnet).

Note

If release of a net is initiated via mask AVF002 (SAVE) and the release of the net is rejected through computer center exit AVEX7102, message AVS5232 is issued and all the fields in the mask are cleared.

Any further attempt to release the net after updating the data will be pointless.

Processing of the net must be aborted by specifying RETURN. To eliminate the cause of the error, the jobs of the net must be modified or the computer center exit must be changed.

M	<p>Input parameter</p> <p>With the aid of the mark column, structure elements can be excluded from processing.</p> <p>A mixture of marks is not permitted.</p>
D (Delete)	<p>The marked structure element is to be excluded from processing. After entering ENTER, DELETED is in the RESULT column of the marked structure element. The mark is deleted.</p> <p>In the case of all records not marked with D, the RESULT field remains unoccupied.</p> <p>After the structure has been stored by means of SAVE, structure elements which have been deleted cannot be reactivated. Deletion of a structure element is logged in the journal. The D mark is rejected in the case of records where DELETED is in the RESULT column.</p>
A (Add)	<p>This mark can be used to reactivate structure elements which were previously excluded from processing using the D mark (RESULT DELETED).</p> <p>The A mark must be entered before SAVE. The DELETED result is thereby deleted.</p> <p>The A mark is rejected for records without the DELETED result. If structure elements for starting a subnet are deleted via the D mark, then the associated subnets must also be deleted by the user in the NPRLIB production plan via DELETE-PLAN-NET with DISPLAY=ALL.</p> <p>Deleted structure elements are displayed with the NO-SUBMIT status when the net is subsequently displayed with the aid of another statement (e.g. MODIFY-SUBMIT-NET, MODIFY-SUBMIT-JOB).</p>
IND	<p>Output parameter</p> <p>Index level of the structure element</p> <p>Depending on what is specified for the F parameter, this is either a JOB-INDEX or a COND-INDEX.</p>
F	<p>Output parameter</p> <p>Function of the structure element</p>
A (Add)	<p>This element of the net description is a structure element to create a condition description.</p>
C (Compare)	<p>This element of the net description is a condition description which waits for a condition to be satisfied.</p>

D (Delete)	This element of the net description is a structure element to delete a condition description.
F (File Transfer)	This element of the net description is a structure element to execute an FT request.
J (BS2000 job)	This element of the net description is a structure element to execute jobs.
M (Modify)	This element of the net description is a structure element to modify a condition description.
S (Subnet)	This element of the net description is a structure element to start a subnet.
P (Procedure)	This element of the net description is a structure element to execute S procedures.
W (Wait)	This element of the net description is a structure element which effects a timed wait.
TYPE	Output parameter The type of the structure element {MOD / STD / EXT / EXX / JVA / NET / JOB / RES / VAL / TIM / TRA} The following values are possible, depending on the function F:
	F TYPE
	J/P MOD
	J/P STD
	J/P EXT
	P EXX
	S NET
	F TRA
	C JVA
	C/D NET
	C/D JOB
	C/A/M/D RES
	C/A/M/D VAL
	W TIM
MOD	The task is subject to net modification.
STD	The task is not subject to net modification.
EXT	The task is not managed in the AVAS system.

EXX	The S procedure is not managed in the AVAS system. It is monitored by an external job variable.
JVA	Processing of the net depends on the value of a job variable.
NET	When F=C processing of the net waits for a condition on another net to be satisfied. When F=D the condition description for a prescribed net is deleted. When F=S a subnet is started and the system waits for the normal termination of the subnet.
JOB	When F=C processing of the net waits for a condition on another job to be satisfied. When F=D the condition description for a prescribed job is deleted.
RES	When F=C processing of the net waits for a condition on a resource to be satisfied. When the condition is satisfied the status of the resource is modified. When F=A, a condition description is created for a resource. When F=M a condition description is modified for a resource. When F=D a condition description is deleted for a resource.
VAL	When F=C processing of the net waits for a condition with a defined value to be satisfied. When F=A a condition description with a defined value is created. When F=M a condition description with a defined value is modified. When F=D a condition description with a defined value is deleted.
TIM	Processing of the net waits for a prescribed time.
TRA	An FT request is started.

NAME	Output parameter Name of the structure element in the run control file. This depends on the F and TYPE parameters.
For F=J/P/S/F	the user group of the net is specified.
For F=A/M/D	the user group of the net is specified.
For F=C and TYPE=NET/JOB/RES/VAL	a foreign user group may also be specified. The name of a condition within an AVAS system must be unique across all condition types. The exception to this is the JVA condition. If a NET or JOB condition refers to another user group (not the user group of the net), this foreign user group must be specified. If no user group is specified, the user group is assumed to be that of the net. If a condition is specified with an abbreviated name, its test is applied to the entry for which the PLAN-START is closest in time to and before the PLAN-START of the net making the reference.
STATUS	Output parameter Processing status of the structure element
NO-PLAN	The structure element is not planned for this net release.
PLANNED	The structure element is planned for processing.
SYN-IND	Output parameter Index level on which the structure element is to be synchronized. index
RESTART-IND V1 V2 V3	Output parameter Index level at which processing resumes in the event of a restart.
RESULT	Output parameter Acknowledgment of the completed action.
DELETED	The structure element has been deleted (i.e. excluded from processing) via mark D. All structure elements without the DELETED result are returned for processing after SAVE.
NOT-FOUND	The job was not found in the JMDLIB or JMDSYS.

Notes

- Nets without a structure cannot be released.
- Nets with missing jobs cannot be processed.
The structure of the net is only displayed to identify the missing jobs (result NOT-FOUND).
The missing tasks must be excluded from processing by means of the D mark, or processing must be aborted via the RETURN operation.
- When a net is released by a SUBMIT-NET or REPEAT-NET statement, structure elements in the range of restart index levels (index 900–999) are now given the status CREATED.
In the range of restart index levels, the WAITING status is not set until a RESTART-NET statement is issued for a restart with an index over 9nn for the selected processing sequence.

Glossary

ABLDAT

Link name for the run control file.

ABLDUP

Link name for the copy of the run control file.

automatic restart

AVAS automatically restarts an errored net at the relevant restart point.

AVAS report

Evaluation of the AVAS production plan and the AVAS journal file according to predefined criteria.

AVAS-JV interface

Executing jobs are generally monitored using a task job variable.

In the case of the AVAS-JV interface monitoring takes place using the same job variable, but this is not supplied with values as the task job variable by BS2000, but appropriate values must be supplied by the user.

AVAS-SYSTEM-LIBRARY

Name of a central AVAS library.

AVAS-USER-LIBRARY

Name of an AVAS user library.

BATCH statements

BATCH statements are selected statements which can be entered in procedures.

calendar

List of days, delimited by a start date and an end date. Each day is assigned a day of the week. Each day can also be assigned one or more symbolic start dates. Each user group is assigned a standard calendar. Nets can also be assigned to a specific calendar. Calendars are stored and managed under unique names in the CALLIB library.

CALLIB

Link name for the calendar library.

condition

Prerequisite for starting a net or an index level of a net; see also **CONDITION-TYPE**.

condition description

Part of the **ABLDAT** for conditions of type **NET/JOB/RES/VAL**; a record contains all the necessary information for the **CONDITION-TYPE** concerned.

CONDITION-JVA-NAME

Name of the job variable which has to assume a desired value at a certain position in order to satisfy the structure variable's condition.

CONDITION-TEXT

Brief description of the structure element.

CONDITION-TYPE

The type of a structure element which specifies a condition (**NET/JOB/RES/VAL/JVA/TIM/TRA**). Accordingly the following terms are used: Condition **NET**, Condition **JOB** (also includes conditions of the type **TYP=TRA**), Condition **RES(OURCE)**, Condition **VAL(UE)**, Condition **JVA**, Condition **TIM**

CONDITION-VALUE

Value of a condition description of a job variable.

configuration file

The configuration file is used to assign a real connection between the **BS2000** system and a server system to the symbolic name of a connection to a server system (**SERVER-NAME**).

dependency

Situation where a net or an index level of a net is waiting for an event to occur before the start can take place.

DELAY-SOLUTION

Measures to be taken if a net is not started at the appropriate time.

DOCLIB

Link name for the library containing the documentation elements.

DOCSYS

Link name for the central library of documentation elements.

DUE key

Same as ENTER key (qv).

EARLIEST-START

Resolved start time provided for the net. It is formed with CREATE-PLAN-NET and can be modified by means of MODIFY-PLAN-NET and SUBMIT-NET. It is a search criterion when nets are selected via the operand PERIOD-NAME, but it is **not** part of a name.

ENTER-FILE

This file is used to store the JCL of jobs not managed by AVAS (jobs with JOB-TYPE=EXT).

ENTER-PARAMS

Specifies whether values should be assigned for the ENTER parameters from the net description or from the jobs.

ENTER key

Triggers transfer of the data in a mask to AVAS.

EXTERNAL-FILE

Name of an external PLAM library or SAM file as an input or output file for transferring AVAS library elements.

FILE-PASSWORD

Password for the ENTER-FILE.

FORMAT-NAME

Name of a user mask.

FT control record

Part of the net description. It describes the position of an FT request within the net as well as its parameters.

FT request

File transfer which was requested using openFT (TRANSFER-FILE command, see the “openFT User Guide” [11]).

The request is defined fully by the entries in the AVAS structure element and handled using openFT. Runtime monitoring and CONDITION handling takes place in the same way as for jobs.

FT-STATUS

Status indicator of an FT request.

FT-TEXT

Brief description of the FT request.

FUNCTION (also FU or F)

The function which a structure element performs within the net description. FUNCTION can take on the following values:

J (Job)	The specification required to execute a job
F (File Transfer)	The specification required to execute an FT request
P (Procedure)	The specification required to execute an S procedure
S (Start)	Description for starting a subnet
A (Add)	Create a condition description
M (Modify)	Amend a condition description
D (Delete)	Delete a condition description
C (Compare)	Test a condition descriptions
W (Wait)	Wait until a date and time

hypernet

A hypernet is a net with structural elements of type FU=S. Subnets can be run and monitored in it.

index level

Hierarchy level of the net structure. The structure elements of one index level are processed or brought to execution simultaneously. The index levels are processed consecutively in ascending order if the index level was terminated normally. If errors occur, processing is interrupted at the end of the index level involved. The sequence in which an index level is processed (or waited for) can be broken by specifying a synchronization index (SYNC-INDEX).

JCL element

Externally stored JCL of one or more jobs or S procedures. It is reincorporated in the job or S procedure via an AVAS statement within the framework of parameter modification.

JCLLIB

Link name for the library of jobs, S procedures, server jobs and JCL elements.

JCLSYS

Link name for the central library of jobs, S procedures, server jobs and JCL elements.

JMDLIB

Link name for the library of modified jobs, S procedures and server jobs.

JMDSYS

Link name for the central library of modified jobs, S procedures and server jobs.

Job

BS2000 job, FT request (without JCL), S procedure or server job

JOB

BS2000 command sequence beginning with '/SET-LOGON-PARAMETERS' and ending with '/EXIT-JOB' or '/LOGOFF'. It is also possible to incorporate special AVAS statements in the command sequence.

JOB-ACCOUNT

Parameter for the ENTER call of the job, S procedure or server representative.

JOB-CAT

Catalog ID of a SLAVE processor or server name of a remote processor.

JOB-CLASS

Parameter for the ENTER call of the job, S procedure or server representative.

job control record

Part of the net description. It describes the position of the job or S procedure within the net as well as its parameters.

JOB-DOC

Name of the documentation element for a job, an S procedure or a server job.

JOB-INDEX

Index level of a job, an S procedure or a server job in the net.

JOB-LOG

Job execution logs stored under AVAS.

JOBMAP

Link name for the library of user masks related to individual jobs or S procedures.

JOB-PARAMETER

Parameter for the ENTER call of a job, an S procedure or a server representative.

JOB-STATUS

Status indicator of a job, an S procedure or a server job.

JOB-TEXT

Brief description of the job, S procedure or server job.

JOB-TYPE

Indicates how the JCL of a task (job, S procedure) is managed in the AVAS system and how the task is monitored via a job variable (STD/MOD/EXT/ EXX).

journal file

Output medium for logging the actions of the user on the AVAS system as well as the run control system activities.

JRLDAT

Link name for the emergency journal file.

JRNDAT

Link name for the journal file.

JVA-LENGTH

Length of the value of a job variable.

JVA-NAME

Name of a job variable.

JVA-PASSWORD

Password for a job variable.

JVA-POSITION

Start position of the value in the job variable.

LATEST-START

Latest start time for the net or a task in the net.

LIFE-TIME

Time span relative to PLAN-START; indicates how long the event 'end of net' or 'end of job' is to remain valid and recognizable.

LOG

Parameter for the ENTER call of the job, S procedure or AVAS agent AVSSINCM.

LOGSYS

Link name for the central job log library (AVAS pool).

M

Column in the AVAS system masks where marks are entered to select elements.

net

Set of consecutive jobs, S procedures or server jobs whose execution is structured and defined in accordance with their logical and temporal interdependencies.

NET-ACCOUNT

Default value for JOB-ACCOUNT.

NET-CAT

Catalog identifier of a slave processor or server name of a remote processor.

NET-CLASS

Default value for JOB-CLASS.

net control record

Part of the net description. It contains parameters valid throughout the net.

NET-DELAY-SOLUTION

Action for untimely net start.

net description

Structure description of the net and information on the contents and sequence of processing steps within a net. It is created by production planning.

NET-DOC

Name of the documentation element for a net.

NETLIB

Link name for the net description library.

NET-LOG

Default value for LOG.

NETMAP

Link name for the library of user masks related to nets.

NET-NAME

Name of the net.

NET-PARAMETER

Default value for JOB-PARAMETER.

net processing

Processing of the net description (create, modify, copy, delete, display).

NET-STATUS

Status indicator for the net.

NETSYS

Link name for the central net description library.

NET-TEXT

Brief description of the net.

NET-TYPE

Control variable for serializing the processing of two or more like-named nets (but with different start times).

NET-USER

Default value for USER.

NPRLIB

Link name for the library of planned nets.

operation

Short string used to control the dialog in masks. It is entered via the CMD: field in the mask.

OUT-OF-PLAN report

This report lists nets which have exceeded a defined delay and/or which have a selected status.

PERDAT

Link name for the period file.

period

Interval delimited by start and end times. Periods are stored and managed under unique names in a separate collection of data.

PLANNED-NET-MODIFICATION report

This report lists nets which have been modified after production planning.

planning period

Time span for which selected nets are scheduled to run. It is specified via PERIOD-NAME. Those nets are processed whose symbolic start dates are entered in the calendar section corresponding to the planning period.

PLAN-START

Start time envisaged for the net during the planning operation. It is made part of the name of the nets in the NPRLIB during the planning operation and cannot be modified thereafter. The envisaged start time is modified after the planning operation using EARLIEST-START.

production plan

“Directory” for the library of planned nets, i.e. a list of the planned nets with individual resolved start times and production status.

release period

Time span during which two or more nets can be released together. It is set by the PERIOD-NAME operand. Those nets are processed whose resolved start times lie in the release period.

REPORT generator

Process for creating AVAS reports.

REPORT statements

Instructions to the REPORT generator.

resolved dependency

The event on which the start of a net or an index level depends has occurred. The condition of a waiting net has been satisfied.

resolved start time

This always consists of a date and a time of day and means that the symbolic start date of a net has been replaced by a real date. This operation takes place at the “production planning” stage.

RESTART-INDEX

Index level at which restart is to take place.

restart job

Additional job that must be performed following an interrupt before normal processing can resume.

RESTART-NAME

Name of the structure element at which any required restart is to take place.

RESTART-NET

Restart of a previously interrupted net.

restart statement

Facilities incorporated in the JCL for restart following an error.

RESTART-TYPE

This indicates whether restart statements are to be processed in a restart situation.

RESTART-VARIANT

This indicates which of the three possible restart variants is to be processed. Description of the three restart variants, consisting of RESTART-TYPE, RESTART-INDEX, RESTART-NAME.

run control file

File containing all the information needed to control execution of linked run control systems. At the "release for production" stage, the structure description of the planned net and the corresponding JCL are added to the run control file.

run control system (RCS)

This consists of an AVAS run control and monitoring routine with the name defined at generation time (RUN-CONTROL-SYSTEM), as well as all nets assigned via the run control file and the jobs brought to execution within the nets.

RUN-CONTROL-SYSTEM

Name of the run control system.

SELECT-TURNUS

Processing cycle (monthly, weekly, daily, etc.), which is always assigned a numeric value. All jobs and conditions whose SELECT-TURNUS is 0 or equal to the SELECT-TURNUS of the net control record are taken into account for processing. SELECT-TURNUS is also used as a selection criterion when defining net run variants within the framework of net planning.

SERVER-NAME

SERVER-NAME is a symbolic name for the host on which and the user ID under which a server job is to run.

standard net

Net description generated by production planning, including all job descriptions assigned to the net.

start parameter

Start parameter of a net: LATEST-START, DELAY-SOLUTION, LIFE-TIME.
Start parameter of a structure element: LATEST-START, DELAY-SOLUTION

static jobs/server jobs

Jobs/server jobs in the JMDLIB which may be assigned to two or more nets.

structure element

Individual element of a net structure for starting a task, editing a condition task or querying a condition.

subnet

A subnet is a net that is started as a structural element of a hypernet. A subnet cannot start other subnets.

symbolic start dates

Dates for the net start time, assigned when standard nets are generated and processed. They are entered in the net parameter PLAN-START. The AVAS administrator enters the symbolic start dates in the calendar and also takes charge of their further management with regard to the calendar. Symbolic start dates are also selection criteria for defining net run variants during net planning.

SYMDAT-NAME

Name of a symbolic start date.

SYNC-INDEX

Synchronization index in the net description.

task

BS2000 job or SDF-P S procedure

temporary jobs/server jobs

Jobs with the name <netname_jobname> in the JMDLIB which can be assigned uniquely to a net.

USER

Parameter for the ENTER call of the job, the S procedure or the AVAS agent AVSSINCM.

user group

Group of users who access public AVAS libraries.

USER-PARAM-FILE

User file with current values of the net run parameters supplied to the jobs of a net during production for the planned process.

Related publications

You will find the manuals on the internet at <http://manuals.ts.fujitsu.com>. You can order printed versions of manuals which are displayed with the order number.

- [1] **AVAS (BS2000)**
AVAS Functions and Tables
User Guide
- [2] **AVAS / AVAS-SV-BS2**
AVAS for the Administrator
System Administrator Guide
- [3] **FHS (BS2000)**
Format Handling System for openUTM, TIAM, DCAM
User Guide
- [4] **IFG (BS2000)**
IFG for FHS
User Guide
- [5] **BS2000 OSD/BC**
Commands
User Guide
- [6] **MAREN (BS2000)**
Volume 1: Basics of MTC Management
User Guide
- [7] **MAREN (BS2000)**
Volume 2: User Interfaces
User Guide
- [8] **SDF-P (BS2000)**
Programming in the Command Language
User Guide

Related publications

- [9] **SDF (BS2000)**
SDF Dialog Interface
User Guide
- [10] **BS2000 OSD/BC**
Utility Routines
User Guide
- [11] **openFT for BS2000**
Enterprise File Transfer in the Open World
User Guide
- [12] **openFT for BS2000**
Installation and Administration
System Administrator Guide

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