FUJITSU

FUJITSU Software BS2000 AVAS

AVAS (BS2000) Version 8.5A AVAS-SV-BS2 (BS2000) Version 8.5A June 2017

Release Notice

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This product includes software developed by the OpenSSL Project for Use in the OpenSSL Toolkit. (http://www.openssl.org/)

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

*02

Release Notice AVAS V8.5A

| 1 | General | | 1 |
|---|----------------------------------|--|---|
| | 1.1 Orde | ring | 1 |
| | 1.2 Delivery | | 2 3 |
| | 1.3 Docu | imentation | 3 |
| 2 | Software e | xtensions | 4 |
| | | vare product AVAS | 4 |
| | 2.1.1 | New function: Calendar editing | 4 |
| | 2.1.2 | | 4 |
| | 2.1.3 | ISAM log of the journal file | 4 |
| | 2.1.4 | Colored presentation of hypernetworks | 4 4 |
| | 2.2 Software product AVAS-SV-BS2 | | |
| | 2.2.1 | Corrections | 4 |
| 3 | Technical i | | 4 5 5 5 5 5 5 6 |
| | | purce requirements | 5 |
| | | vare configurations | 5 |
| | | AVAS and AVAS-SV-BS2 | 5 |
| | 3.2.2 | | 5 |
| | | uct installation | 6 |
| | 3.3.1 | | 6 |
| | | AVSSURF | 6 |
| | 3.4 Product use | | 6 |
| | | AVAS example | 6 |
| | 3.4.2 | DPAGE utility routine for version changes | 6 6 7 |
| | 3.4.3 | Jobs for BS2000 servers Notes on AVAS-QUER | |
| | | | 7 |
| | | Notes on AVAS | 7 |
| | | blete functions (and those to be discontinued) | 8 |
| | 3.6 Incor | npatibilities | 8 |
| | 3.7 Restrictions | | 8 |
| | | edure in the event of errors | 8 |
| | 3.8.1 | | 8 |
| | | Procedure in the event of AVAS-QUER errors | 9 9 |
| 1 | 3.8.3 | Procedure in the event of AVAS-SV-BS2 errors | 9 11 |
| 4 | Hardware s | δαμροιτ | 11 |

1 General

AVAS (Auftragsverwaltungs- und Abwicklungssystem) is used for automating job processing in the computer center.

AVAS helps to achieve clear structuring, high transparency and flexibility and increase productivity of job processing in the computer center.

AVAS-SV-BS2 V8.5A is an add-on product to AVAS V8.5A that receives and executes the AVAS system jobs of another BS2000 (*) server on a remote BS2000 server. AVAS-SV-BS2 monitors the job process, reports its completion to AVAS then signals and transfers the relevant job logs to AVAS.

*02 AVAS-SV is no longer supported from 09.2017 onwards.

*02 This Release Notice is a summary of the major extensions, requirements and operating information with regard to AVAS V8.5A and AVAS-SV-BS2 V8.5A which run under BS2000 systems.

- *03 The release level is that of: June 2017
- *03Changes to release level March 2017 are marked with *03.*02Changes to release level February 2016 are marked with *02.*01Changes to release level April 2011 are marked with *01.

This and other current release notices are shipped on the SoftBooks DVD and are available online at http://manuals.ts.fujitsu.com/.

If one or more previous versions are skipped when this product version is used, the information from the Release Notices (and README files) of the previous versions must be noted.

1.1 Ordering

*02 The delivery units AVAS V8.5A and AVAS-SV-BS2 V8.5A can be ordered from your local distributors.

> These software products are supplied to the customer against once-only / ongoing payment subject to the general terms and conditions of the software product use and service agreement.

(*) BS2000 (R) is a trademark of Fujitsu Technology Solutions GmbH.

1.2 Delivery

The AVAS V8.5A and AVAS-SV-BS2 V8.5A files are supplied via SOLIS. The current file and volume characteristics are listed in the SOLIS2 delivery cover letter.

The AVAS V8.5A delivery unit comprises the delivery groups AVAS and AVAS-GEN.

The AVAS-SV-BS2 V8.5A delivery unit comprises the delivery groups AVAS-SV-BS2 and AVAS-GEN.

Overview of delivery components:

AVAS delivery group: SIPLIB.AVAS.085 Optional customizing for AVAS SYSDAT.AVAS.085 AVAS example system Library of batch procedures SYSENT.AVAS.085 Library of AVAS masks SYSFHS.AVAS.085 SYSLIB.AVAS.085 Library of macros SYSLNK.AVAS.085 Library of AVAS modules SYSMSH.AVAS.085 Help file SYSPRG.AVAS.085.DIALOG Library of dialog phases Library of phases for linking SYSPRG.AVAS.085.SVCOMM AVAS-SV-BS2 SYSSDF.AVAS.085 System syntax for AVAS-QUER Structure and installation SYSSII.AVAS.085 information for IMON SYSSRC.AVAS.085 Library with assembler source program AV03EXTV and COBOL copy elements SYSSDF.AVAS.085.GROUP Group syntax file for command authorizations

AVAS-GEN delivery group: SYSFGM.AVAS.085.D SYSFGM.AVAS.085.E SYSMES.AVAS.085 SYSPRC.AVAS.085 SYSPRG.AVAS.085.SYSTEM SYSSII.AVAS-GEN.085

Release Notice (German) Release Notice (English) Message file Library of dialog procedures Library of system phases Structure and installation information for IMON

AVAS-SV-BS2 delivery group: SYSPRG.AVAS-SV-BS2.085 SYSSII.AVAS-SV-BS2.085 Structure

Library for program avsrecv Structure and installation information for IMON

The standard installation ID for AVAS is AVAS.

In the SYSPRG.AVAS.085.SVCOMM library, the following programs are supplied for communication with AVAS-SV-BS2.

AVAS.SYS.LOAD.SINCMProgram for server jobs distributionAVAS.SYS.LOAD.SURFProgram for server job monitoringAVAS.SYS.LOAD.SVDOGProgram for server monitoring

*02

1.3 Documentation

The BS2000 documentation is available in German and English on DVD with the title BS2000 SoftBooks.

The documentation is also available in the form of online manuals at http://manuals.ts.fujitsu.com or can be ordered at extra cost at http://manualshop.ts.fujitsu.com. In the manual shop only manuals are available for products which are still orderable.

The manuals may be supplemented with README files. These contain changes and extensions to the manual of the product concerned. The file names are made up as follows:

SYSRME.<product>.<version>.D(file with German text)SYSRME.<product>.<version>.E(file with English text)

When printing the files, you should specify the CONTR-CHAR=EBCDIC operand in the PRINT-FILE command.

The "AVAS Ready Reference" is no longer published. The tables and overviews previously contained therein have been transferred to the "AVAS Functions" manual. AVAS system messages can now be found via a HTML application of the manual server (URL: <u>http://manuals.ts.fujitsu.com</u> and on the "BS2000 SoftBooks" DVD.

2 Software extensions

2.1 Software product AVAS

The extensions and enhancements compared to the previous AVAS version 8.0A are described below.

2.1.1 New function: Calendar editing

The entries of SPECIAL NWRK OR FREE DATES in the AVC001 mask of the CREATE-/MODIFY-CALENDAR command can be specified periodically for all the years of the calendar with WILDCARD syntax.

The NWRK type has been extended to include WKND (weekend) and HLDY (holiday).

The AVC001 mask can now also be called from MODIFY-CALENDAR; all the entries can be modified.

The PRINT function is provided for SHOW-CALENDAR.

2.1.2 Support of IPv6 for coupling with server computers

AVAS also supports the specification of IPv6 addresses for coupling with server computers.

2.1.3 ISAM log of the journal file

All journal entries can also be logged in an ISAM file, thus making the data for any starting evaluation programs, especially via database interfaces, available.

2.1.4 Colored presentation of hypernetworks

Depending on the setting during generation, hypernetworks can be presented in color for active networks in the overview lists of commands.

- This affects the following commands:
 - MODIFY-SUBMIT-NET
 - NET-CONTROL / SHOW-NET-STATUS
 - START-NET / HOLD-NET / RESUME-NET
 - CANCEL-NET / RESTART-NET

*0.3 2.2 Software product AVAS-SV-BS2

- *03 **2.2.1 Corrections**
- *03 Integration of required corrections for Y2018 problem

3 Technical information

3.1 Resource requirements

AVAS V8.5A:

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*01

*01

Virtual address space: approx. 8 MB static static disk storage space: approx. 20 MB

3.2 Software configurations

3.2.1 AVAS and AVAS-SV-BS2

The following software products are required for running AVAS V8.5A and AVAS-SV-BS2 V8.5A:

BS2000/OSD-BC as of V7.0 (S series Business Servers), OSD/XC as of V4.0 (SQ series Business Servers) or OSD/XC as of V8.5 (SE Server) with

| TIAM | as of V13.1 |
|----------------|-------------|
| JV | as of V14.0 |
| EDT | as of V16.6 |
| OpenNet Server | as of V3.3 |

Optional software to be used with AVAS V8.5A:

| HIPLEX-MSCF | as of V5.0 (for the multiple computer network and the 'Batch load distribution in | |
|-------------|---|--|
| | HIPLEX' function (HOST=*ANY) | |
| MAREN | as of V11.0 (for the AVAS-MAREN link) | |
| openFT | as of V9.0 for the support of file transfer tasks | |
| | in AVAS job nets | |
| openFT | as of V10.0 for the transfer of compressed log | |
| | files | |

*02 Version V8.5A of AVAS can be coupled with AVAS-SV-BS2 V7.0A and higher. The communication interfaces are compatible.

3.2.2 AVAS-QUER

Running AVAS-QUER requires the following software products:

Program used to transfer files from BS2000 to the target system (e.g. openFT(BS2000)).

The target system must have a file transfer program and a database system (e.g. MS-ACCESS or INFORMIX).

3.3 Product installation

Installation of the product AVAS with the IMON installation monitor is mandatory. You must follow the information concerning installation in the delivery cover letter and in the product documentation as well as the information in this Release Notice.

Before calling IMON, you must carry out the actions listed in the delivery cover letter as installation requirements.

The necessary inputs and the sequence of the installation are described in the IMON documentation.

3.3.1 AVAS

During activation in ongoing operation the following messages may appear if the IMON tools are not available under the ID \$SYSSAG or \$TSOS:

//ACTIVATE-UNITS then fails with IMO3024, the tools are not found:

| | | : |
|---|-------|-------|
| : IMO3024 File SOLLIB.IMON.020 does not exist | **** | : |
| : IMO3024 File IMON.SYSREP.SSCM does not exist | ***** | : |
| : IMO3024 File IMON.SYSSDF.SSCM.USER does not exist | ***** | : |
| : IMO3024 File IMON.SYSMES.SSCM does not exist | **** | : |
| : | | : |
| : F12=Remove | | : |
| | | |

Activation takes place automatically when BS2000 is restarted.

Another possibility of bypassing this without restarting the system is as follows:

/UNLOCK-PRODUCT-VERSION PRODUCT-NAME=AVAS,VERSION=08.5A00 /UNLOCK-PRODUCT-VERSION PRODUCT-NAME=AVAS-GEN,VERSION=08.5A00 /UNLOCK-PRODUCT-VERSION PRODUCT-NAME=AVAS-SV-BS2,VERSION=08.5A00

/MOD-MIP-PAR SCOPE=*TEMP,ADD-MSG-FILE=\$AVAS.SYSMES.AVAS.085 (message file)

/MOD-SDF-PAR SCOPE=*TEMP,SYNTAX-FILE-TYPE=*SUBSYSTEM(NAME=\$AVAS. SYSSDF.AVAS.085,SUBSYSTEM-NAME=AVAS) (SDF syntax file).

3.3.2 AVSSURF

Under BS2000, the program is installed by SOLIS, together with AVAS, the program launch is effected with AVS.SURF in the LMS library SYSPRC.AVAS.085. The required configuration settings can also be performed by AVS.SURF.

3.4 Product use

3.4.1 AVAS example

Library SYSDAT.AVAS.085 contains an example to simplify getting started with AVAS.

3.4.2 DPAGE utility routine for version changes

The AVS.UPDATE.VERSION routine from library SYSPRC.AVAS.085 lets you change the name of the AVAS-SYSTEM-ID identifying the AVAS configuration, and the RUN-CONTROL-SYSTEM names identifying the run controls.

A description in the form of a guided dialog appears while the routine is executing.

3.4.3 Jobs for BS2000 servers

When migrating from AVAS V6.0A:

Jobs for BS2000 servers may be planned and released only when all nets released in AVAS V6.0 have been completed. Otherwise jobs for the local BS2000 will unintentionally be sent to the BS2000 server.

3.4.4 Notes on AVAS-QUER

Please observe the following:

- The program is either called with the AVS.QUER procedure from within SYSPRC.AVAS.085 or as program AVAS.SYS.LOAD.QUER from within SYSPRG.AVAS.085.SYSTEM.

The following requirements must be satisfied when the program is started:

- For creating SQL statements (INSERT-FORMAT): The program requires an output file (SAM file) that is assigned with the link name \$AVSQUER. Any existing output file will be overwritten.
- For creating the LOAD format:

The program requires an assigned output file (SAM file) for each table to be created . Any existing output file will be overwritten. The following link names must be used for the output files:

| Table | Link name |
|---------------|-----------|
| | |
| Caltab | \$AVSCAL |
| Caldaytab | \$AVSCALD |
| Caldaysymtab | \$AVSCDAY |
| Nettab | \$AVSNET |
| netdoktab | \$AVSNETD |
| netformtab | \$AVSNETF |
| netpartab | \$AVSNETP |
| netsymtab | \$AVSNETS |
| nettexttab | \$AVSNETT |
| ordertab | \$AVSORD |
| orderdoktab | \$AVSORDD |
| orderpartab | \$AVSORDP |
| ordersymtab | \$AVSORDS |
| ordersturntab | \$AVSORDT |
| ordertexttab | \$AVSORDX |

- An SDF syntax file that contains the statements for AVAS-QUER must be active. The supplied system syntax file SYSSDF.AVAS.085 must be merged into the current system syntax file with the SDF-I utility (see also the SDF Administrator Manual).
- In the system parameters of the AVAS system that is being used, the user must have the COPY-ELEMENT right for objects he or she may access.
- The AVAS access processes (ZDD, ZDL) must have been started.
- The file SYSLNK.AVAS.085 must be assigned with the link name SYSLNK.
- The message file SYSMES.AVAS.085 must be assigned.
- The database on the target system must have been created.

3.4.5 Notes on AVAS

You are recommended to set up the ADDRESS-SPACE-LIMIT for the BS2000 ID, under which AVAS is to run, with at least 256 MB.

3.5 Obsolete functions (and those to be discontinued)

*02 AVAS-SV is no longer supported from 09.2017 onwards.

FHS-DOORS V3.1 was delivered until October 2008 as an integral part of DESK2000 as of V4.0 as a (free-of-charge) component of the BS2000/OSD operating systems as of BS2000/OSD-BC V2.0 and OSD-SVP V2.0.

Desk2000 has no longer been a part of the scope of delivery of BS2000/OSD-BC since November 2008. Thus, the tools of the Desk2000 CD are no longer available for any new deployment.

AVAS-DOORS is therefore also no longer available for new deployment and is no longer described in the manual.

Existing customers, who previously received the Desk2000 CD, can of course continue to use the tools. However, the tools are no longer actively maintained. For example, Windows-XP is the last Microsoft platform, for which the Desk2000 CD was qualified. No further qualification has taken place as of Windows Vista.

*01 To use the graphical interface AVAS-DOORS on the PC Windows XP and FHS-DOORS
*01 V3.1 is required.
*01
*01
*01 FHS-DOORS V3.1 was delivered as an integral part of DESK2000 as of V4.0 as a com-

01FHS-DOORS V3.1 was delivered as an integral part of DESK2000 as of V4.0 as a com-*01ponent of the BS2000/OSD operating systems as of BS2000/OSD-BC V2.0 to*01BS2000/OSD-BC V7.0.

AVAS-DOORS is therefore no longer available for new deployment and is no longer described in the manual.

*01Existing customers, who have FHS-DOORS in use, can continue to use the AVAS-*01DOORS resource files. However, the tools are no longer actively maintained and were*01last qualified for Windows XP.

3.6 Incompatibilities

The exits to AVAS are to be recompiled (extension of journal records).

The structure description of the HISTORY-H4 records is refined in the AVASJRN macro without the distances of the previous entries moving as a result. Programs that use this macro to edit IP addresses from the monitoring job variables of server jobs, must where necessary be adjusted and re-compiled.

The structure of the entries for host name and server name in the monitoring job variables of server jobs have been extended for the use of IPv6.

This also indirectly affects the content of the corresponding field in the journal file (S52JVTXT : TEXT FROM MONJV) and the corresponding entries in the H4 record of the HISTORY file.

3.7 Restrictions

Not applicable

3.8 Procedure in the event of errors

3.8.1 Procedure in the event of AVAS errors (BS2000)

If AVAS errors occur, the following documents will be needed:

- System parameter file (SYSPAR)
- Runtime file (ABLDAT)
- Log file (JRNDAT)
- User dump
- System dump

If problems occur with processes, the following will also be needed:

- Process log (SYSOUT/SYSLST) (see also the Administrator Manual 'Outputting diagnostic documentation via SYSLST')
- Contents of the job variable monitoring the process

If problems occur with nets, the following will also be needed:

- The relevant elements from NETLIB and/or NPRLIB

Note:

To ensure correct diagnosis, do not suppress any log records when creating the diagnostic documentation.

3.8.2 Procedure in the event of AVAS-QUER errors

If errors occur with AVAS-QUER, provide the following documents, if possible:

- System parameter file (SYSPAR)
- Created output file
- User dump
- System dump
- The relevant elements from NETLIB and/or CALLIB

3.8.3 Procedure in the event of AVAS-SV-BS2 errors

If errors occur, try to provide the following documents:

- Log of AVSSINCM's messages
- Log of AVSRECV's messages
- An exact description of the steps you performed
- Trace documents of the error situation

Traces in AVAS-SV-BS2

Various trace levels (from 0 to 11) can be set for all programs. The following values are useful:

0: No trace

- 4: The trace contains the most important subroutine calls incl. parameters
- 8: The trace contains (almost) all subroutine calls incl. parameters
- 10: The trace contains also the network traffic
- 11: The trace contains also the memory assignment

From level 8 the data may be very extensive; we advise not to perform long-term traces.

From level 10 the trace may include security-relevant data - e.g. as contents of scripts or log files.

The traces can be controlled as follows:

AVSSINCM

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When starting the program AVSSINCM, you may specify the start parameter AVAS-TRACE.

AVAS-TRACE = n

With n=[0..1]. The trace is written to SYSOUT.

AVSRECV, AVSSERV, AVSSURF, AVSSVDOG

- Create a file named 'AVS.LEV' under the execution ID of the program in question.
- Enter the first line of the trace levels in the file.
- The trace is entered in file ,#AVSRECV.LOG', #AVSSURF.LOG' or #AVSSVDOG.LOG'

The trace level can be changed during operation. The change becomes effective as follows:

- AVSRECV: At the next received task
- AVSSURF: At the next received http request
- AVSSVDOG: At the next server cycle

4 Hardware support

*01AVAS V8.5A will run on all central units supported by BS2000/OSD-BC as described in*01section 3.2.1.