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FUJITSU

Fujitsu Technology Solutions

RSO (BS2000/OSD)
Version 3.6A
January 2009

Release Notice

Release Notice RSO V3.6A (BS2000 V/OSD)

1 General

This Release Notice contains outline descriptions of the major expansions, interdependencies and application notes pertaining to RSO V3.6 under the operating system BS2000/OSD-BC >= V6.0 (1).

The contents correspond to release status of January 2009.

The Release Notice is supplied as a text file. The typographical conventions for uppercase and lowercase are observed in the file. Updated versions of the file will be supplied as and when modifications to the product are registered.

The command for printing this file (English version) is

```
/PRINT-DOCUMENT SYSFGM.RSO.036.E, -
/ DOCUMENT-FORMAT=*TEXT(LINE-SPACING=*BY-EBCDIC-CONTROL)

  or

 /PRINT-FILE SYSFGM.RSO.036.E,CONTROL-CHARACTER=EBCDIC
```

If the use of this product version means that one or more predecessor versions are skipped, the notes in the Release Notices (or README files) of the predecessor version or versions must also be taken into account.

This release notice is, like all other release notices concerning BS2000 products, available on the Internet under the URL

http://manuals.ts.fujitsu.com/mainframes.html

1.1 Ordering

RSO V3.6 is available through your local sales organization.

The general conditions of the Contract for the Use and Maintenance of Software Products apply for RSO V3.6.

1.2 Delivery

The files for RSO V3.6 are distributed through the SOLIS system.

The current file and volume attributes are listed in the SOLIS2 delivery cover letter.

Delivery of RSO V3.6 includes the following files:

The following release items are needed independent of the HSI:

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(1) BS2000/OSD is a registered trademark of Fujitsu Technology Solutions.

Delivery components	Product description
RSOFILE	Contains the definitions of loops, translation tables, character image tables and code tables (band-ids)
RSOSERVE	Resources management tool for the SYSPAR.RSO.036.USER and for the system and user RSOFILEs as a prephase
SIPLIB.RSO.036	Restricted macro library
SYSENT.RSO.036	Enter file
SYSFGM.RSO.036.D	Release notice (German)
SYSFGM.RSO.036.E	Release notice (English)
SYSFHS.RSOSERVE.036	Library for RSOSERVE masks
SYSLIB.RSO.036	User macro library containing the macro RSOAP for 9645 printers
SYSLNK.RSO.036.TU	Load module library for SRAM
SYSLNK.RSOSERVE.036	Load module library for RSOSERVE
SYSMES.RSO.036	Complete message file
SYSNRF.RSO.036	No reference symbol file
SYSPAR.RSO.036.CORR	Correction file for the SYSPAR.RSO.036.SYSTEM
SYSPAR.RSO.036.SYSTEM	Control data for the RSO printers
SYSPAR.RSO.036.USER	Basic user parameter file
SYSPRC.RSO.036.NOTIF	RSO registration procedure for Notification Service
SYSPRG.RSO.036.RSOCONV	Migration tool
SYSRME.RSO.036.D	Readme file (German)
SYSRME.RSO.036.E	Readme file (English)

```
SYSRMS.RSO.036                  RMS delivery set

SYSRMS.RSOSERVE.036             RMS delivery set for RSOSERVE

SYSSSC.RSO.036                  Subsystem declarations

SYSSDF.RSO.036                  Syntax file for RSO

SYSSDF.RSOSERVE.036             Syntax file for RSOSERVE

SYSSII.RSO.036                  IMON installation information

SYSSII.RSOSERVE.036             IMON file for RSOSERVE

SYSSSI.RSO.036                  RSO information file
```

The following release items are only needed on /390 hardware

```
Delivery components        Product description
-------------------------------------------------------------

SYSLNK.RSO.036.TPR         Load module  library  for RSO
```

The following release items are only needed on SPARC64
hardware (SX product line):

```
Delivery components        Product description
-------------------------------------------------------------

SPMLNK.RSO.036.TPR         Load  module library for  RSO
```

The following release items are only needed on X86 hardware:

```
Release Item               Description
----------------------------------------------------------

SKMLNK.RSO.036.TPR         Load module library
```

1.3 Documentation

The following documents are part of the scope of RSO V3.6:

```
+--------------------------+---------------------+
| Title                    | Order no.           |
+--------------------------+---------------------+
| RSO (BS2000/OSD) V3.6    | U2864-J-Z125-17     |
| Benutzerhandbuch         |                     |
+--------------------------+---------------------+
| RSO (BS2000/OSD) V3.6    | U2864-J-Z125-17-76  |
| User guide               |                     |
+--------------------------+---------------------+
| RSOSERVE (BS2000/OSD) V3.0| U24376-J-Z125-1    |
| Benutzerhandbuch         |                     |
+--------------------------+---------------------+
| RSOSERVE (BS2000/OSD) V3.0| U24376-J-Z125-1-76 |
| User guide               |                     |
+--------------------------+---------------------+
```

These manuals may be supplemented by README files. These files contain changes and additions to the product manual. The name of these files are structured as follows:

- SYSRME.RSO.036.D
- SYSRME.RSO.036.E
- SYSRME.RSOSERVE.030.D
- SYSRME.RSOSERVE.030.E

The documentation of the BS2000 standard configuration is also necessary for the use of RSO.

The appropriate hardware documentation is required for use of the hardware peripherals.

The BS2000/OSD documentation is also available on CD-ROM in German and English under the title BS2000/OSD SoftBooks.

The documentation is available as online manuals under
http://manuals.ts.fujitsu.com/mainframes.html

The product Adobe Reader is required to read or print the manuals in PDF format.

2 Software extensions

The following sections describe the extensions and enhancements to the previous version (RSO V3.5)

1. Support of the Secure Printing.

   Thanks to the IPP V1.1 protocol support in RSO V3.5, the files to be printed can be encrypted before being sent on the network. IPP provides a transparent connection to SSL by calling the corresponding URL (a https URL connects by default to port 443). When the https method is specified in the IPP URL of the printer, either in the print job submission (Internet Café printing) or in the printer parameters file associated to the printer (static definition), RSO will encrypt the connection to the IPP printer immediately.

3 Technical information

3.1 Resource requirements

1. Virtual Address Space

   About 400.000 bytes in class 4 for subsystem loading.

   Additional memory depends on the number of waiting jobs
   , number of started devices...

2. Static Disc Space

   About 3000 pampages for the release items.

3. Dynamic Disc Space

   Depends on the definitions added by the user in the
   RSOFILE and the SYSPAR.RSO.036.USER files.

4. Special Hardware/Firmware/Processor/Real Memory

   Not applicable

3.2 Software configuration

1. Required Operating System environment

   BS2000/OSD-BC V6.0 or higher (/390 Platforms)

2. Required Software

   - SPOOL as of V4.6A; for using Unicode and Secure Printing:
     V4.8A
   - SPSERVE as of V2.7A; for using Unicode and Secure Printing:
     V2.9A
   - SNS as of V1.0A for the Notifications
   - openNet Server as of V3.0

3. Optional Software

   - openUTM from V04.0 (/390) or from V05.1A20 (SPARC64) for
     using the OLTP interface.
   - openUTM from V05.1A20 for using the printing-options selec-
     tion as well as the UTM Applications distinction support.
   - interNet Services as of V3.0 for OpenSSL (for using Secure
     printing)

3.3 Product installation

In all versions, installation of the product with the instal-
lation monitor IMON is mandatory, as the execution ofthe pro-
duct requires a consistent Software ConfigurationInventory
(SCI).

The information concerning installation in the delivery cover

letter and in the product documentation must be followed as
well as the information given below.

1. IMON installation

    The product has to be installed with IMON. The necessary
    inputs and the sequence of the installation are described
    in the IMON documentation.

2. After IMON installation

    After successful installation the following actions have
    to be performed:

    - Configuration for notification support

       If the SNS product (>= 1.0) is present and if SPOOL >=
       V4.4A is installed, you can be notified on the main
       events occurring during the print job life. In order
       to make the notification for RSO jobs and RSO printers
       available, it is necessary to define some Notification
       Resources that are specific for RSO. First, check if
       the SNRTP subsystem is ready. If not, start it. Then,
       run the SYSPRC.RSO.036.NOTIF procedure under TSOS in
       order to register the RSO objects and events in the
       Notification Service.

    - If you are installing RSO for the first time, the sup-
       plied SYSPAR.RSO.036.USER must be cataloged.

  2. Required Software

    - If you are upgrading from an earlier RSO version, you
       must use the conversion tool SYSPRG.RSO.036.RSOCONV to
       update your old user parameter file.

       If you are upgrading from RSO V2.x/V3.0/V3.1/V3.2 to
       RSO V3.6, please refer to the RSO manual and adapt the
       filename with the new version.

           ex: in case of RSO V3.1A manual,
               SYSPAR.RSO.031.USER becomes
               SYSPAR.RSO.036.USER.

       If you are moving from RSO V3.4 to RSO V3.6:

       The entries from the SYSPAR.RSO.034.USER file must be
       converted to a new format(only the header is changed).
       In this case, RSOCONV takes the SYSPAR.RSO.034.USER
       file and uses it to create a new SYSPAR.RSO.036.USER
       file. The SYSPAR.RSO.036.USER file supplied on the
       product tape must be ignored.

           /SET-FILE-LINK LINK-NAME=RSOIN, -
           / FILE-NAME=$SYSSPOOL.SYSPAR.RSO.034.USER
           /SET-FILE-LINK LINK-NAME=RSOOUT, -
           / FILE-NAME=$<userid>.SYSPAR.RSO.036.USER
           /START-PROGRAM FROM-FILE= -
           / $<userid>.SYSPRG.RSO.036.RSOCONV

You might have to reset passwords, especially the
EXPASS on the already existing user parameter file. If
so, do not forget to restore these passwords after the
conversion processing.

- The SYSPAR.RSO.036.USER comes preset to SHARE (USER-
  ACCESS=SPECIAL and ACCESS=READ). It is good policy to
  change it to ACCESS=WRITE to allow device and system
  administrators write access to this file.In this case,
  however, the system administrator should assign an
  EXPASS.

- When upgrading from an earlier RSO version, the old
  system RSOFILE must be merged with the new system
  RSOFILE with the aid of RSOSERVE. Please refer to the
  RSO manual for the complete description.

  Note that the overwrite field in ML1MERGE should be
  set to 'N'. However, if the user has already defined
  BAND-IDs whose names correspond to one of the new
  names (listed in the "New hardware support" chapter)
  or has modified old BAND-IDs and wants to keep them,
  it should set the OVERWRITE field to 'Y'.

  2. Required Software
  - If 9645 printer support is required, use the supplied
    SYSLIB.RSO.036 file to generate a new RSOAP macro and
    link it into the front-end processor's PDN.

- Make sure not to remove the /LOGOFF NOSPOOL command
  from the SYSENT.RSO.036 enter file. If it is removed,
  you will not be able to execute the /STOP-SUBSYSTEM
  SPOOL command, which also unloads RSO. Note that this
  behaviour depends on CLASS2 OP setting (SSMLGOF1 and
  SSMLGOF2).

- RSO, when starting up, looks for the SYSPAR.RSO.036
  and uses that file if it can be found.

  If no SYSPAR.RSO.036 is cataloged, then RSO creates a
  new SYSPAR.RSO.036 file from the contents of the
  SYSPAR.RSO.036.SYSTEM and the SYSPAR.RSO.036.CORR.

  If a new correction file (SYSPAR.RSO.036.CORR) must be
  applied, the SYSPAR.RSO.036 must be erased before
  starting RSO so that a new one including the correct-
  ions will be created.

  If a new release of RSO V3.6 must be installed, the
  SYSPAR.RSO.036 must be erased before starting RSO so
  that the new components of this release will be taken
  in account.

- The SIPLIB.RSO.036 contains all System- and Product-
  internal macroes which may be needed by the customer
  for System Exits.

- The dynamic update of the installation information
  (SYSSII definitions) is not allowed.

3.4 Product use

Complete description is to be found in the manual.

The program RSOSERVE must be started now with the new SDF
command /START-RSOSERVE.

Concerning the 9017 printer support, the printer functions
that are implicitly supported by RSO (through VTSU codes,
PRINT-DOCUMENT command, device definition, form definition
and character set definition) are listed in the RSO manual,
9000-PRO and 9000-EPLQ chapters.
The other printer functions are not supported by RSO.
They can, however, be used by users on their own responsibi-
lity by defining printer control character sequences within
the user file. Users may also define printer functions in
a prolog file.
The 9017 printer can be connected to the LAN via a SEH IC105

   2. Required Software
box/card and the RSO-SEH protocol selected. In case of
'paper end', 'paper jam' or 'power off' error, 'paper end'
error is reported by SEH. In case of 'offline' or 'cover
open' error, no error is reported. A timeout may occur when
the error remains too long.

3.5 Discontinued functions (and functions to be discontinued)

No more supported hardware.

   None.

No more supported user interface.

   None.

3.6 Incompatibilities

None

3.7 Restrictions

Special restriction :

- Hardware restriction on PRESCRIBE II support for 4830:
  When the line printer emulation is selected at the control
  panel, the following side effect occurs when the device
  is defined with POLLING=YES: after the job, the message
  'Waiting' followed by 'Form Feed Timeout' is displayed at
  the control panel and an additional page is printed out
  with the CTRL-T character.

- Printer Status Information is sent through serial port or
  network interface. There is no specification for parallel
  port. So, if your printer is connected to the LAN via the
  parallel port, don't use the POLLING=YES with PRESCRIBE II

   keyword in the printer parameters file.

- RSO uses the factory default !R! for the PRESCRIBE II start sequence. Any change of this value by the SCRC or FRPO P9 command will lead to the printing of the PRESCRIBE II commands introduced by RSO as usual text.

- A RSO trace containing PRESCRIBE II commands can not be correctly printed out on a Kyocera printer as the printer interprets these commands. Use another device or edit the trace to modify the !R! sequence by 'R' for example.

3.8 Procedure in the event of errors

2. Required Software

If RSO V3.6 error conditions occur, you should prepare the following documentation:

- /SHOW-SUBSYSTEM-STATUS RSO

- /SHOW-SPOOL-PARAMETERS

- SLED, system dump or user dump of the affected RSO task.

- Console log or CONSLOG file

- Listings of the print command and display of the device, form and character-set definitions used.

- RSOFILE or user RSOFILE for errors related to loop evaluation or translation tables

- For stuck printers or similar problems:
  IDIAS diagnostic dump of the RSO-ADM task with TSN ' RSO' , RSO controller task and SRAM task. The TSN or TID of the two latter tasks can be identified using the command /SHOW-SYSTEM-STATUS for the particular RSO device.

- For reproducible print error conditions, use the TRACE function that is available from the /START-PRINTER-OUTPUT and /MODIFY-PRINTER-OUTPUT-STATUS commands interface.

- For errors related to printer control character evaluation, for problems related to fonts linked to character-sets and for specific printer types 9025, 9026-RENO and 9645, you must submit the $SYSSPOOL.SYSPAR.RSO.036.USER file.

4 Hardware support

1. New hardware support

None

2. Hardware supported for the last time

None

3. Hardware no longer supported

None