Fujitsu Technology Solutions

SECOS (BS2000/OSD)
Version 5.4A
December 2012

Release Notice

1   General

This Release Notice is a summary of the major extensions, dependencies and operating information with respect to SECOS V5.4A under the BS2000/OSD[1] operating system.

The release level is that of: December 2012.

*1   Changes to SECOS V5.3B are marked with *1.

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 also be noted.

The SECOS (Security Control System) software product adds user operation security functions, thus allowing secure operation.

SRPM (System Resources and Privileges Management):
- Supports enhanced identification and authentication of users
- Combines individual users into user groups with shared access rights
- Decentralizes system administration over various user IDs (distribution of privileges)

GUARDS (Generally Usable Access contRol aDministration System):
- The GUARDS subsystem enables access protection for various BS2000/OSD objects. GUARDS provides special containers (guards) in which the desired protection mechanisms are entered.
  The following object administrations support GUARDS:
  DVS: for files, storage classes
  LMS: for library elements
  HSMS: for HSMS management classes
  JVS: for job variables
  FITC: for FITC ports
  SRPM: for group assignments, terminal sets, access classes
- Guards can be backed up and restored with the GUARDS-SAVE utility.

GUARDCOO (Co-owner Protection):
   User-specific definition of co-owners for files, libraries and job variables through rule containers. Access to objects by TSOS can be explicitly restricted through settings in the co-owner rules and the protection attributes of the catalogue entry. The GUARDCOO subsystem implements the co-owner protection.

GUARDDEF (Default Protection):
   Pubset-global and user-specific definition of the default values of protection attributes for files and job variables through rule containers. This component is implemented via the subsystem GUARDDEF.

SAT (Security Audit Trail):
- Logging security-relevant events and reporting particular situations via alarm messages on the console with the SATCP subsystem.
- Logged data is analyzed with the SATUT utility.

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[1] BS2000/OSD (R) is a trademark of Fujitsu Technology Solutions

SSO (Single Sign On)
   SECOS-KRB is the interface for handling Kerberos authentication in
   BS2000/OSD.

1.1   Ordering

SECOS V5.4A can be ordered from your local distributors.

1.2   Delivery

The SECOS files are supplied via SOLIS.

The following delivery components are part of the SECOS V5.4A:
*1	-	GUARDCOO	5.4A
*1	-	GURADDEF	5.4A
*1	-	GUARDS	5.4A
*1	-	GUARDS-SAVE	5.4A
*1	-	SATCP	5.4A
*1	-	SATUT	5.4A
*1	-	SECOS	5.4A
*1	-	SECOS-KRB	5.4A
*1	-	SRPMOPT	5.4A

1.2.1   GUARDCOO

The following delivery components are required regardless of the HSI:

SIPLIB.GUARDCOO.054	Library with privileged interfaces
SYSLIB.GUARDCOO.054	Macro library
SYSMES.GUARDCOO.054	Message file
SYSRMS.GUARDCOO.054	Loader delivery set
SYSSDF.GUARDCOO.054	System syntax
SYSSII.GUARDCOO.054	Structure information
SYSSSC.GUARDCOO.054	Subsystem declaration
SYSSSI.GUARDCOO.054	Information file

The following delivery components are only required on S-Servers:

SYSLNK.GUARDCOO.054	Dynamic load library

The following delivery components are only required on SQ-Servers:

SKMLNK.GUARDCOO.054	Dynamic load library

The following delivery components are only required on SX-Servers:

SPMLNK.GUARDCOO.054	Dynamic load library

1.2.2   GUARDDEF

The following delivery components are required regardless of the HSI:

SIPLIB.GUARDDEF.054	Library with privileged interfaces
SYSLIB.GUARDDEF.054	Macro library
SYSMES.GUARDDEF.054	Message file
SYSRMS.GUARDDEF.054	Loader delivery set
SYSSDF.GUARDDEF.054	System syntax
SYSSII.GUARDDEF.054	Structure information
SYSSSC.GUARDDEF.054	Subsystem declaration
SYSSSI.GUARDDEF.054	Information file

The following delivery components are only required on S-Servers:
SYSLNK.GUARDDEF.054   Dynamic load library

The following delivery components are only required on SQ-Servers:
SKMLNK.GUARDDEF.054   Dynamic load library

The following delivery components are only required on SX-Servers:
SPMLNK.GUARDDEF.054   Dynamic load library

1.2.3   GUARDS

The following delivery components are required regardless of the HSI:
SIPLIB.GUARDS.054   Library with privileged interfaces
SYSLIB.GUARDS.054   Macro library
SYSMES.GUARDS.054   Message file
SYSRMS.GUARDS.054   Loader delivery set
SYSSDF.GUARDS.054   System syntax
SYSSII.GUARDS.054   Structure information
SYSSSC.GUARDS.054   Subsystem declaration
SYSSSI.GUARDS.054   Information file

The following delivery components are only required on S-Servers:
SYSLNK.GUARDS.054   Dynamic load library

The following delivery components are only required on SQ-Servers:
SKMLNK.GUARDS.054   Dynamic load library

The following delivery components are only required on SX-Servers:
SPMLNK.GUARDS.054   Dynamic load library

1.2.4   GUARDS-SAVE

The following delivery components are required regardless of the HSI:
SYSLNK.GUARDS-SAVE.054   Dynamic load library
SYSPRG.GUARDS-SAVE.054   Program GUARDS-SAVE
SYSRMS.GUARDS-SAVE.054   Loader delivery set
SYSSDF.GUARDS-SAVE.054   System syntax
SYSSII.GUARDS-SAVE.054   Structure information

1.2.5   SATCP

The following delivery components are required regardless of the HSI:
SIPLIB.SATCP.054   Library with privileged interfaces
SYSENT.SATCP.054   Saving of audit attributes
SYSMES.SATCP.054   Message file
SYSRMS.SATCP.054   Loader delivery set
SYSSDF.SATCP.054   System syntax
SYSSII.SATCP.054   Structure information
SYSSSC.SATCP.054   Subsystem declaration

The following delivery components are only required on S-Servers:
SYSLNK.SATCP.054   Dynamic load library

The following delivery components are only required on SQ-Servers:
SKMLNK.SATCP.054   Dynamic load library

The following delivery components are only required on SX-Servers:
SPMLNK.SATCP.054   Dynamic load library

1.2.6   SATUT

The following delivery components are required regardless of the HSI:

SYSLNK.SATUT.054	Dynamic load library
SYSMES.SATUT.054	Message file
SYSRMS.SATUT.054	Loader delivery set
SYSSDF.SATUT.054	System syntax
SYSSII.SATUT.054	Structure information

1.2.7   SECOS

The following delivery components are required regardless of the HSI:

SYSFGM.SECOS.054.D	Release Notice German
SYSFGM.SECOS.054.E	Release Notice English
SYSPRC.SECOS.054	Library with sample procedures
SYSRME.SECOS.054.D	README German
SYSRME.SECOS.054.E	README English
SYSSII.SECOS.054	Structure information

1.2.8   SECOS-KRB

The following delivery components are required regardless of the HSI:

SIPLIB.SECOS-KRB.054	Library with privileged interfaces
SYSLNK.SECOS-KRB.054.CONVKTAB	Module to convert Keytab files
SYSMES.SECOS-KRB.054	Message file
SYSRMS.SECOS-KRB.054	Loader delivery set
SYSPRC.SECOS-KRB.054.CONVKTAB	Procedure CONVKTAB
SYSSDF.SECOS-KRB.054	System syntax
SYSSII.SECOS-KRB.054	Structure information
SYSSSC.SECOS-KRB.054	Subsystem declaration

The following delivery components are only required on S-Servers:

SYSLNK.SECOS-KRB.054	Dynamic load library

The following delivery components are only required on SQ-Servers:

SKMLNK.SECOS-KRB.054	Dynamic load library

The following delivery components are only required on SX-Servers:

SPMLNK.SECOS-KRB.054	Dynamic load library

1.2.9   SRPMOPT

The following delivery components are required regardless of the HSI:

SIPLIB.SRPMOPT.054	Library with privileged interfaces
SYSLIB.SRPMOPT.054	Macro library
SYSMES.SRPMOPT.054	Message file
SYSRMS.SRPMOPT.054	Loader delivery set
SYSSDF.SRPMOPT.054	System syntax
SYSSII.SRPMOPT.054	Structure information
SYSSSC.SRPMOPT.054	Subsystem declaration
SYSSSI.SRPMOPT.054	Information file

The following delivery components are only required on S-Servers:

SYSLNK.SRPMOPT.054	Dynamic load library

The following delivery components are only required on SQ-Servers:

SKMLNK.SRPMOPT.054	Dynamic load library

The following delivery components are only required on SX-Servers:
SPMLNK.SRPMOPT.054   Dynamic load library

The current file and volume characteristics are listed in the SOLIS2 delivery cover let-
ter.

1.3   Documentation

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

*1   The SECOS manuals are supplemented with README files. These contain changes
*1   and extensions to the manuals. The README files are available on the SoftBooks-
*1   DVD or online under http://manuals.ts.fujitsu.com

2 Software extensions

*1 ## 2.1 Extensions of SECOS V5.4A

*1 The extensions and improvements over the previous version SECOS V5.3 are
*1 described in the following section.

*1 ### 2.1.1 Extensions of SATUT V5.4A

*1 The number of input files in the statement SELECT-INPUT-FILES of the utility routine
*1 SATUT has been increased from 25 to 100.
*1 -   SELECT-INPUT-FILES   INPUT-FILES= list-pos(100)

*1 ### 2.1.2 Extensions of SRPMOPT V5.4A / SECOS-KRB V5.4A

*1 Support of additional user attributes in the user groups for the commands
*1 ADD-USER-GROUP and MODIFY-USER-GROUP.
*1 -   ADDRESS-SPACE-LIMIT
*1   The default value is provided in the Class-2 system parameter SYSGJASL
*1   (as of BS2000/OSD V9.0).
*1 -   NET-STORAGE-USAGE (new operand)

*1 Additional output layout for command SHOW-LOGON-PROTECTION
*1 -   SCOPE=*ALL (new keyword)

*1 Dialog logon fallback to access class DIALOG
*1 -   NET-DIALOG-REJECT-FALLBACK   (new option)
*1   The new option in the subsystem information file SYSSSI.SRPMOPT.054
*1   executes the dialog logon in the access class DIALOG, when the Kerberos
*1   authentication in the access class NET-DIALOG did not yield a result, i.e.
*1   1)   the ticket could not be decrypted or
*1   2)   the principal contained in the ticket does not have access permission.

3   Technical information

3.1   Resource requirements

The following system memory is required for running SECOS V5.4A:

Virtual address space:
- approx. 1 MB static
- less than 1 MB dynamic

The virtual address space is depending on the number of users and groups, the defined alarm and filter conditions and the selected buffer size.

Static disk storage space:
- less than 10 MB

Dynamic disk storage space:
- variable

The dynamic disk storage is depending on the number and length of guards, number of users and groups, number of pubsets and from the events and user IDs selected for logging.

3.2   Software configuration

You must note the following when using SECOS V5.4A:

*1
- SECOS V5.4A will run on BS2000/OSD-BC as of V7.0.

- For the complete function the correction A0568353 for BS2000-GA and SRPMNUC is required.
  A0568353 for BS2000/OSD-BC V7.0

- When downgrading to V5.2 or with an inhomogeneous computer network between the SECOS versions > V5.2B and V5.2, corrections A0578487 and A0578861 are required for V5.2B (V5.2A) (correction state V5.2B00 (V5.2A01)).

- The computers in a network must have matching environments. This means particularly that the same version of SECOS must be running on all computers. If this is not the case, this can result in differing behaviour for the objects of a shared pubset in terms of standard protection, co-ownership protection and TSOS restriction, and possibly access problems on guards (STDAC), depending on the SECOS version on the master computer.

- When simultaneously using different SECOS versions in the computer network, SECOS V5.4 can only exchange guard information with SECOS as of V5.2. This is why an upgrade at least to SECOS V5.2A is required as a prerequisite for the simultaneous operation of various SECOS versions in the computer network.

- Some SATUT functions require the functionality of SORT. The product SORT is not supplied with the SAT analysis program, but must be available to be able to execute such SATUT functions.

- SECOS V5.4A requires TIAM as of V13.1.

To use the following functions of SECOS V5.4A, there are specific version dependencies with the listed products:

- Using the co-ownership protection, default protection and TSOS restriction for the job variable object:
  JV V14.0

- Converts the Keytab output file of ktpass command:
  SDF-P

3.3   Product installation

The installation of the product SECOS with the installation monitor IMON is mandatory. You must follow the information concerning installation in the delivery cover letter and in the product documentation.

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

You will find further information on installation in the manuals System installation and Introduction to system support.

3.4   Product use

*1   Before the first use of SECOS V5.4A, the subsystem information files
*1   (SYSSSI.SRPMOPT.054 and SYSSSI.GUARDS.054) should be adapted if custom
*1   settings of the options have been made in a previous version.

Training courses for SECOS are offered by Fujitsu Technology Solutions.

3.5   Discontinued functions (and those to be discontinued)

*1   The access classes POSIX-SERVER-ACCESS and RBATCH-ACCESS
*1   are supported for the last time in this version.

The data-center-wide backup with eTrust Audit was withdrawn as of July 2010.

However, the connection of SECOS to more up-to-date products for the company-wide backup of security-relevant events can be done as part of projects.

3.6   Incompatibilities

*1   SECOS V5.4A is fully compatible with SECOS V5.3.

Guards catalog
- When using SECOS as of V5.3 the guards catalog (SYSCAT.GUARDS) is created and implemented in the format BUF-LEN = (STD,4) in order to enable the extended data area with guards.

- Incompatibility to SECOS V5.2
When importing a pubset, for which the guards catalog exists in the format (STD,4), to a system with V5.2, the guards catalog is converted to (STD,2) (correction A0578487 in use). In so doing, guards that use the extended data area become lost and the message PRO6026 appears on the console.

- Incompatibility to SECOS < V5.2A
A pubset, for which the guards catalog is created in the format (STD,4), **cannot** be

imported to systems with SECOS version < V5.2A. If required, migration must first be performed via SECOS V5.2.

MSCF network
- Problems can occur with guards (STDAC) in an MSCF connection between two processors, on which different SECOS versions are used on the master and the slave. Here an inhomogeneous network may only be made up from the SECOS Versions > V5.2 and V5.2 (see incompatibility to SECOS < V5.2A).

- 1) Master SECOS > V5.2B and Slave SECOS V5.2:
  If a guard, for which the data area is longer than the maximum size in SECOS < V5.3A, is setup on a shared pubset from the master, access to this guard is not possible from the slave (e.g. message: PRO1005 OUTPUT AREA TOO SMALL).

- 2) Master SECOS V5.2 and Slave SECOS > V5.2:
  It is not possible to set up a guard, for which the data area is larger than the maximum size in SECOS < V5.3A, on a shared pubset from the slave, i.e. the data area enlargement offered as of SECOS V5.3A cannot be used in this case from the slave.

GUARDS-SAVE
A backup file created with GUARDS-SAVE as of V5.3A cannot be restored or showed on a system with a SECOS version < V5.3A.

GUARDS-Macros
This can lead to the output of the return code Output area not large enough.
(X'1005' with SHWSAC and X'3317' with SHWCOO, SHWDEF, SHWUID)

3.7   Restrictions

3.8   Procedure in the event of errors

If an error occurs, the following error documentation will be required for diagnostic purposes:
- A detailed description of the error condition, indicating whether and how the error can be reproduced.
- The error must be reported to the appropriate service provider.
  A PERLE error report will be opened for Second Level Support.
- SYSLST of the session
- Conslog file
- SYSREP.BS2.xxx (160/170/180)
- SYSREP.SRPMNUC.xxx (160/170/180)
- SYSREP.<Secos delivery component>.054
- SYSSSI.SRPMOPT.054
- SYS.SATLOG.datum.sessionnr. file
- SYS.SERSLOG.datum.sessionnr. file
- SYSPAR.SAT file, if problems occurred with the SAT parameter file
- SAT logging settings
- Dump, if it occurred
- backup of the Guards catalogue
- backup of the user catalogue

4   Hardware requirements

SECOS V5.4A runs on all BS2000/OSD business server which fulfilling the software requirements.