

FUJITSU Software BS2000 SM2

Version 20.0B
June 2019

Release Notice

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1 General

The delivery group SM2 20.0B is part of the delivery unit openSM2 (BS2000). openSM2 (BS2000) supplies the user with statistical data on the performance and utilization of a BS2000 system, that allow the performance of the system and the applications to be improved as required.

The core of SM2 V20.0B is the measurement monitor SM2. It collects measurement data for a number of measurement values. Some measurement data is always recorded (e.g. CPU memory and disk utilization) while others are recorded by special measurement programs that are switched in as needed. The measurement data is presented to a program interface for online monitoring and can also be stored into a measurement values file for later problem and trend analysis. In addition to the measurement monitor SM2, SM2 V20.0B also comprises the utility program SM2U1 for administering the measurement value files and the program SM2R1 for analyzing the measurement value files.

As performance monitor for SE Server the web based GUI openSM2 Manager is available.

openSM2 Manager can be ordered as add-on package for the SE Manager. It runs on the Management Unit of the SE Server and offers, among other things, the central online monitoring of systems running on /390 and x86 Server Units.

The delivery group COSMOS V20.0A is also a component of the delivery unit openSM2 (BS2000) V11.0A and can be used to record measurement values for targeted diagnosis of performance problems.

This Release Notice is a summary of the major extensions, dependencies and operating information with regard to the SM2 V20.0B software monitor (including SM2U1 and SM2R1).

The release level is that of June 2019.

This and other current Release Notices are shipped on the SoftBooks DVD and are available online at <https://bs2manuals.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.

1.1 Ordering

SM2 V20.0B is part of the delivery unit openSM2 (BS2000) V11.0B. openSM2 (BS2000) V10.0B can be ordered from your local distributors and is subject to the general terms and conditions of the software product use and service agreement.

1.2 Delivery

The SM2 V20.0B files are supplied via SOLIS.

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

SYSSII files (if included in the delivery package) are not installed.

Summary of delivery components:

Delivery unit SM2:

SIPLIB.SM2.200	Restricted macros of SM2
SKMLNK.SM2.200	Dynamically loadable TPR part of SM2 (x86)
SKULIB.SM2.200	Modul ISM2CALL (x86)
SYSDAT.SM2.200.MTFILE	Control file for SM2R1
SYSFGM.SM2.200.D	Release Notice (German)
SYSFGM.SM2.200.E	Release Notice (English)
SYSLIB.SM2.200	Include files for C program interface and procedures for the SM2 and COSMOS manual examples
SYSLNK.SM2.200	Dynamically loadable TPR part of SM2 (/390)
SYSLNK.SM2.200.SM2	Dynamically loadable TU part of SM2
SYSLNK.SM2.200.SM2R1	Dynamically loadable part of SM2R1
SYSLNK.SM2.200.SM2U1	Dynamically loadable part of SM2U1
SYSMES.SM2.200	Message file for SM2, SM2U1, SM2R1
SYSMSP.SM2.200.D	PLI1 text file for SM2R1 (German)
SYSMSP.SM2.200.E	PLI1 text file for SM2R1 (English)
SYSNRF.SM2.200	Help file for Rep processing
SYSPRG.SM2.200.SM2	Prephase for loading and starting SM2
SYSPRG.SM2.200.SM2U1	Prephase for loading and starting SM2U1
SYSPRG.SM2.200.SM2R1	Prephase for loading and starting SM2R1
SYSRMS.SM2.200	Loader delivery set for SM2
SYSSDF.SM2.200	Syntax file for all statements and commands of SM2, SM2U1 and SM2R1
SYSSII.SM2.200	Structure and installation information for IMON
SYSSPR.SM2.200.SM2R1	Procedure for START-SM2R1 command
SYSSSC.SM2.200	DSSM declarations of SM2

1.3 Documentation

The following documentation is available for SM2 V20.0B:

openSM2 (BS2000) V11.0 Software Monitor, User Guide

The following manual is recommended for interpreting the measurement values supplied by SM2 and for analyzing and optimizing system performance:

OSD/BC V11.0 Performance Guide

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

The documentation is also available on the internet at <http://bs2manuals.ts.fujitsu.com>.

2 Software extensions

SM2 V11.0B offers following innovations or extensions over the previous version SM2 V11.0A.

- Support of FastDPAV

3 Technical information

3.1 Resource requirements

There are no minimum system equipment restrictions for using SM2, only that required for running BS2000. The memory requirement for all SM2 components is approximately 3000 PAM pages. SM2 requires the following memory at runtime:

Memory class	CL3	CL4	CL5	CL6
Start of SM2 without additional measurement programs	40KB	200KB	300KB	450KB

Appreciably more memory (particularly in classes 3 and 4) may be required depending on the number of monitored devices, tasks and files as well as the number of active measurement programs.

3.2 Software configuration

The basic configuration of OSD/BC V110B is required to run SM2 and, if the RESPONSTIME or UTM programs are used, also BCAM or UTM. The BCAM-SM2 subsystem is supplied together with the BCAM subsystem, and the UTM-SM2 subsystem is supplied together with the BS2-GA subsystem. BCAM is required for the measurement program BCAM-CONNECTION. HSMS is required for the measurement program HSMS. openFT as of V11.0B is required for the measurement program openFT.

3.3 Product installation

Installation of the product SM2 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.

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

3.4 Product use

- The SM2 subsystem is loaded and started the first time it is called under a user ID with the SWMONADM privilege. Only the SM2 modules required for running the basic functions are loaded.
- However, the SM2 subsystem can also be loaded via the DSSM /START-SUBSYSTEM SUBSYSTEM-NAME=SM2 command. SM2 can then be started under any desired ID.
- The SM2 subsystem SM2 exists until it is unloaded via the DSSM command /STOP-SUBSYSTEM SUBSYSTEM-NAME=SM2.
- Unconditional unloading using /STOP-SUBSYSTEM SUBSYSTEM-NAME=SM2, FORCED=YES is possible but should only be used if problems are encountered.

The SUBSYSTEM-MANAGEMENT privilege is required for the DSSM /START-SUBSYSTEM and /STOP-SUBSYSTEM commands.

3.5 Discontinued functions (and those to be discontinued)

- none -

3.6 Incompatibilities

- In report DEVICE DISK the columns UTIL IO% and PG% are omitted.
- In report CHANNEL the column BUSY is omitted.

3.7 Restrictions

Connections of applications that use the SOCKETS(BS2000) or ICMX(BS2000) interfaces are only output globally by SM2 for the measurement program RESPONSTIME.

3.8 Procedure in the event of errors

If an error occurs, the following error documents are needed for diagnostics:

- The contents of the SM2 REP file are always required, as well as the following documentation, depending on the type of error:
- For DUMPs provided by BS2000, the usual diagnostic documents are to be generated:
 - for S.E.T.S. : SLED
 - for system dumps : system dump
 - for P1 errors : user dump

The error documents should always be provided in file form if possible, to facilitate analysis with diagnostic tools.

- For incorrect measurement data:
 - SM2 start and stop procedures
 - SM2 measurement values file
 - SM2R1 analysis procedure
 - Hardcopy printout of the SM2 report (only for errors in the online statistics)
- The following additional information simplifies error diagnosis:
 - Which NPSxxxx messages were output ?
 - Listing on the SM2 system task state (see the SM2 SHOW-SM2-STATUS statement)
 - Which measurement programs were active? (SM2 start procedure required)
 - Did the error occur during operation or while processing an SM2 statement?
 - Special conditions (e.g. new versions of programs whose data is recorded by SM2, such as DAB, PCS, etc.).

4 Hardware requirements

The SM2 V20.0B software monitor supports all hardware components served by OSD/BC V11.0B.