

Fujitsu Technology Solutions

SM2-PA (BS2000/OSD)  
Version 2.0A  
May 2009

Release Notice

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# 1 GENERAL

As of Version 10.0A, the SM2 software monitor can be used to monitor not only the entire system but also specific individual tasks. In the process, the following data is collected and stored in a separate SM2 file:

- Number and type of SVC calls with the calling program/module and call address
- Statistical distribution of the program counter addresses in programs and modules in relation to the expired CPU time
- Task-related data (e.g. expired CPU time, amount of input/output, etc.)

Once the SM2 administrator has allowed task monitoring, you can activate it for your own - and under TSOS even other - tasks by using the "/START-TASK-MEASUREMENT" BS2000 \*) command (see the SM2 User Guide).

The SM2 program analyzer, SM2-PA, allows you to analyze SM2 files during task monitoring. The most important change in SM2-PA V2.0A compared to V1.0A is the introduction of a mask-oriented user interface. Some of the functions have also been improved (e.g. file assignment during SM2-PA analysis).

This release notice is a summary of the major extensions, requirements and operating information concerning the SM2 program analyzer (SM2-PA) V2.0A under the BS2000 operating system.

The release level is that of May 2009.

This release notice is also supplied as a file with uppercase and lowercase. Customers will receive an updated version of this file should any subsequent changes be made. To print the file, use:

```
/PRINT SYSFGM.SM2-PA.020.D,SPACE=E (German) or
```

```
/PRINT SYSFGM.SM2-PA.020.E,SPACE=E (English)
```

or

```
/PRINT-FILE SYSFGM.SM2-PA.020.D,CON-CHARACT=EBCDIC  
(German) or
```

```
/PRINT-FILE SYSFGM.SM2-PA.020.E,CON-CHARACT=EBCDIC  
(English)
```

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

## 1.1 Ordering

SM2-PA V2.0A can be ordered from your local distributors. This product is subject to the general terms and conditions of the software product use and service agreement.

## 1.2 Delivery

The files for SM2-PA V2.0A are supplied via SOLIS.

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

SOLIS delivery includes the following files:

SM2-PA	Program phase
SYSFGM.SM2-PA.020.D	Release notice (German)
SYSFGM.SM2-PA.020.E	Release notice (English)
SYSMSV.SM2-PA.020	Complete message file
SYSSDF.SM2-PA.020	Syntax file for the SDF statements
SYSMSP.SM2-PA.020.D	PLI1 text file (German)
SYSMSP.SM2-PA.020.E	PLI1 text file (English)

## 1.3 Documentation

The following documentation is available for SM2-PA V2.0A:

SM2-PA V2.0A User Guide  
(Order number German : U5643-J-Z125-2  
English: U5643-J-Z125-2-7600)

The documentation on current BS2000/OSD software products is also available under the following Internet address:

<http://manuals.ts.fujitsu.com>

## 2 SOFTWARE EXTENSIONS

This chapter only describes the extensions and enhancements compared to the previous version, SM2-PA V1.0A:

- Mask-oriented user interface

A user interface based on masks and menu bars replaces the input of SDF statements in dialog mode.

- Output of SVC names

In SM2-PA V1.0A, only the SVC numbers were output; in the current SM2-PA version, the SVC numbers and names are output. The assignment of SVC numbers to SVC names takes place via an internal SM2-PA list; however, you may also assign the numbers via your own externally created file.

- File assignment during an SM2-PA session

The assignment of SM2, output and (optionally) SVC files may be changed during an SM2-PA session (via the SET-FILES mask or the MODIFY-FILE-ASSIGNMENT statement).

- Indices for tasks having the same TSN

If a TSN appears several times in an SM2 file, the tasks having this TSN will be numbered.

- New ADDRESS operand in PREPARE-SVC-STATISTICS

If a program contains modules of the same name, you can use ADDRESS to reference one of these modules by its initial address.

## **3 TECHNICAL INFORMATION**

### **3.1 Resource requirements**

SM2-PA V2.0A requires the following amount of storage in order to execute:

- Static virtual address space: approximately 0.6 Mbytes
- Dynamic virtual address space: depends on SM2 file
- Static disk storage: less than 10 Mbytes
- Dynamic disk storage: less than 10 Mbytes

### **3.2 Software configuration**

To create task-specific SM2 files as analyzed by SM2-PA, you need SM2 V10.0A or higher. SM2-PA V2.0A itself runs under BS2000/OSD-BC and is independent from other products.

### **3.3 Product installation**

Installation is performed via the SOLIS procedure.

### **3.4 Product use**

If you call up SM2-PA V2.0A in a procedure, you have the option of branching to the mask or SDF interface.

If you issued the `"/ASSIGN-SYSDTA TO-FILE=*SYSCMD"` BS2000 command before calling up SM2-PA, SM2-PA will expect SDF statements. After `"/ASSIGN-SYSDTA TO-FILE=*PRIMARY"`, the mask interface appears.

### **3.5 Eliminated functions and functions to be eliminated**

In dialog mode, the SDF interface in SM2-PA V2.0A is replaced by the new mask interface; it is thus no longer possible to enter SM2-PA (SDF) statements in dialog.

If you use SDF statements (in batch and optionally also in procedure mode), the analysis results will not be output to SYSOUT as the OUTPUT operand has been eliminated from the PREPARE-PCOUNTER-STATISTICS, PREPARE-SVC-STATISTICS, PREPARE-TASK-STATISTICS and SHOW-MEASURED-OBJECTS statements.

The SHOW-EVALUATION-OBJECTS statement has been eliminated.

Moreover, the following operands have been eliminated from SM2-PA statements:

- SUPPRESS-ZERO-LINES in PREPARE-PCOUNTER-STATISTICS
- SVC in PREPARE-SVC-STATISTICS
- FROM and TO during MODULE selection in PREPARE-SVC-STATISTICS

The eliminated operands and the SHOW-EVALUATION-OBJECTS statement are still accepted but no longer carried out. As a result, procedures that have been written for SM2-PA V1.0A with these eliminated operands and statements can still run under SM2-PA V2.0A.

### **3.6 Incompatibilities**

The SDF statements of SM2-PA are no longer supported in dialog mode.

### **3.7 Restrictions**

The following changes have been made with respect to the manual:

- Chapter 3 mentions that on terminals with less than 20 function keys, the F key functions are mapped to the P keys. This does not apply to earlier types of terminals (e.g. the 9750).
- The installation steps described in chapter 5 of the manual do not apply if installation is performed via the SOLIS procedure. In this case, the
  - SYMSA.SM2-PA.020
  - SYMSR.SM2-PA.020

files mentioned in chapter 5 are not included in delivery.

### 3.8 Procedure in the event of errors

If errors occur, please supply developmental department with the following documentation:

- SM2 file in which the error occurred during analysis
- SM2-PA output file (if available)
- SVC table (if available)
- SYSLST listing.



## 4 HARDWARE SUPPORT

To use the masks of the user interface, you need a terminal with 20 function keys (on some terminals that have less than 20 function keys - e.g. the 97801 terminal - you can use the corresponding P keys in place of the missing F keys).