

SNMP-Subagent SM2 (BS2000/OSD) Version 5.0

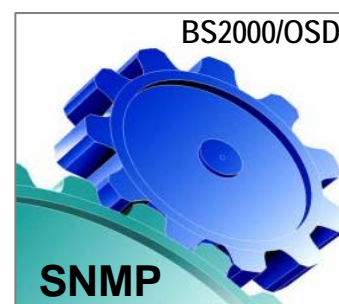
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SNMP subagent for performance management with *openSM2* in BS2000/OSD

For customers wanting to integrate BS2000 performance management with the software monitor *openSM2* with an SNMP management platform, Fujitsu Siemens Computers offers the product SNMP-Subagent SM2 (BS2000/OSD). The short name of the product is SSA-SM2-BS2. Using this product, the SNMP-Standard-Collection in BS2000 (and the basic functionality performance subagent it contains) is enhanced by a further subagent which offers considerably more functionality and a management application to display the information, for monitoring the performance values in BS2000/OSD. The management application PMBS2 improves handling and graphically displays the performance values.

In combination with the SNMP-Basic-Agent, the SNMP-Subagent for SM2 in BS2000 serves to connect BS2000/OSD systems directly to a central management system for heterogeneous networks on the basis of the de facto protocol standard SNMP. It enables customers with large multi-vendor networks comprising heterogeneous systems to use SNMP for monitoring and control of the BS2000/OSD systems in the network from a central management platform (control center). In combination with the basic product SNMP-Basic-Agent BS2000 and the other subagents, it provides comprehensive management functions, from traditional network management through system and application management to the management of middleware.



Functional Description

The product SNMP-Subagent SM2 (BS2000/OSD) consists of one SNMP subagent that runs in BS2000/OSD, and one independent management application which is used on a management platform. The subagent runs on top of the SNMP master agent for two reasons: to communicate with the management platform and to access the *openSM2* program interface. The management application is provided with the Reliant UNIX-based, Windows- or Solaris-package PMBS2 and prepares the performance values of the BS2000/OSD system partly in the form of tables, but predominantly in the form of various diagrams. For improved use of the product, the various types of diagram (bar chart, line graph or table) can be selected and defined by the individual customer.

The SNMP subagent for SM2 in BS2000/OSD offers the following possibilities:

- read and write access to performance MIB objects,
- querying the current performance values of the BS2000/OSD system on which the subagent runs,
- modifying the *openSM2* monitoring interval and monitoring cycle.

The SNMP subagent thus provides the following information:

- basic information on the product *openSM2* itself such as
 - status of the subsystem, version,
 - length of the monitoring interval (can be modified)
- and

random sampling cycle (can also be modified).

- the actual monitored values corresponding to the report groups of the product *openSM2*, including the performance values of the UTM applications which the UTM-*openSM2* subsystem provides. The individual report groups then provide the following information:
 - monitored values for CPU load,
 - monitored values for IO activity (inputs/outputs),
 - monitored values for main memory load and the virtual address space,
 - monitored values for main memory occupancy using the four standard task categories,
 - monitored values for input and output operations on peripheral devices during a monitoring interval,
 - monitored values for application-specific data from UTM applications,
 - monitored values for the consumption values of individual tasks.

The performance monitor serves to monitor all BS2000/OSD systems in a network and permits the following functions:

- clear graphical representation of the monitored values in curves, areas, columns or tables. The information can be shown as current values or over a period of time in the different diagrams.
- simultaneous monitoring of several systems and displaying the values in a diagram.

- option to compare by displaying several monitored values in one diagram and combination of monitored values.
- scale changes for clearer representation.
- setting poll times.
- determining threshold values and reactions if the values are exceeded. The threshold values can be set either using a scale or directly in the diagram using 'drag-and-drop'. The following are available as reactions: an entry in a log file, calling up a shell procedure and sending a trap.

The display functionality of the performance monitor (management application) is divided into three sections:

- basic information on the *openSM2* in the first section as they are described above,
- control information such as
 - name of the system,
 - Internet address and port,
 - community,
 - poll rate,
 - timeout time,
 - threshold values and reactions in the second section,
- display of the monitored values in different diagrams in the third section.

The performance monitor already contains its own SNMP stack and can therefore 'stand alone', i.e. run on Reliant UNIX-based, Windows-, Solaris- or LINUX-systems without a management platform. It can however also be integrated into and operated on an existing management station with Unicenter, TransView or OpenView. The management application interface is oriented towards the particular look-and-feel of the guest system. This permits intuitive operation which is supported by a comprehensive on-line help system.

In principle, the SNMP basic agent together with its SNMP subagents in BS2000/OSD can be connected to any management control center via the "open" SNMP protocol. The management platform recommended and supported as the first priority is the CA Unicenter on Windows or Solaris. This product offers all the options for integrating BS2000/OSD with its standardized private MIBs.

Integration in Unicenter has been verified by Computer Associates and has been certificated 'ca smart'.



Integration in other management platforms has been carried out on a project basis, and may be offered for other platforms as a service on request.

In order to make integration of BS2000/OSD into the different management platforms easier for the user, the software packages PMBS2, SMBS2, tclset and trpsrv are provided for the SNMP-Subagent SM2 (BS2000/OSD) product. These packages are supplied on CD-ROM as part of the SNMP-Basic-Agent BS2000 base product shipment. During the installation, the packages import the Performance Monitor management application including the necessary runtime environments, the SM2-MIB and the trap distributor and make the necessary entries in the menus, tables and network maps.

Technical data

Hardware

All systems of the Sxxx, SX1xx and SR2000 series supported by BS2000/OSD V2.0 or higher or OSD-SVP V2.0 or higher. Similarly, the Manager components (MIBs and procedures) must be compatible with all Windows and Solaris systems on which Unicenter runs.

A color monitor with a 21" (50 cm) screen diagonal is recommended for the graphical user interface.

For installation of the products on the BS2000/OSD system, a memory requirement of approximately 7,600 PAM pages (15 MB) applies.

Software

Agent component:

For SNMP-Subagent SM2 V5.0:

SNMP-Basic-Agent BS2000 V5.0 or V6.0 or 6.1
 BS2000/OSD-BC V2.0 or higher or OSD-SVP V2.0 or higher
 IMON-GPN V2.0 or higher

(already included in BS2000/OSD)

POSIX-BC V1.0 or higher

(already included in BS2000/OSD),

POSIX-Sockets V1.0 or higher

(already included in BS2000/OSD),

SM2 V11.2 or higher or *openSM2* V6.0 .

Manager component:

Version 5.0 of the product primarily supports the CA Unicenter management platform with the product

- Unicenter TNG Framework V2.0 or higher on Windows NT V4.0
- Unicenter TNG V2.2 on Windows NT V4.0 or Solaris 7 or higher and
- Unicenter V3.0 on Windows NT V4.0 or Solaris 7 or higher

For compatibility reasons, Version 5.0 of the product also last supports the management platforms

- TransView SNMP V3.1 and V4.0 with
- TransView Control Center V3.1 and V4.0 (optional, not a technical requirement)

and

- OpenView Network Node Manager V3.3 and V4.1 with
- TransView Control Center V3.1 and V4.0 (optional, not a technical requirement)

on Reliant UNIX V5.41 or higher with the SMBS2 installation package.

The management application for the "performance monitor" (PMBS2) can be integrated into the management platforms, but is also capable of running as a 'standalone' on Reliant UNIX-based, on Windows-, on Solaris- and also on LINUX-systems. As the tcl/tk interpreter is supplied in the tclset package for Reliant UNIX-based, Windows-, Solaris- or LINUX-systems, no version dependence needs to be taken into account for the application.

Operating mode

Dialog

Implementation language

C

User interface

German/English

Installation

By the user on the basis of the release notice and the user guide.

Documentation

User Guide

The documentation is available in the form of online manuals at <http://manuals.fujitsu-siemens.com> or can be ordered in the form of printed manuals for an additional payment at <http://FSC-manualshop.com> .

Demands on the user

Knowledge of the operation of SNMP management systems and product installation in BS2000/OSD.

Training

See course offer at:

<http://www.fujitsu-siemens.com/training>

Conditions

This software product is supplied to the customer under our conditions against a single payment or installments.

Warranty

Class: A

Delivery format: Machine language

Ordering and delivery

This software product may be obtained from your local Fujitsu Siemens Computers regional office.