

Fujitsu Technology Solutions

openSM2 (Open Systems) V9.2A

May 2012

Release notice

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1 General

openSM2 (Open Systems) offers an efficient solution for the monitoring of heterogeneous IT environments.

openSM2 (Open Systems) consists of the components INSPECTOR for online monitoring and ANALYZER for the offline analysis of monitoring files.

With INSPECTOR a number of systems of different system types can be monitored simultaneously. Besides to the graphical presentation of the monitored data INSPECTOR offers a flexibly configurable alarm management which supports the automated monitoring with a rule-based check of the measurement data and automatically executable actions. The performance data can be saved to a monitoring file for later analysis.

With ANALYZER the monitoring files generated by INSPECTOR are analyzed. The output from ANALYZER permits accurate bottleneck and trend analyses and provides support in planning capacity and generating reports. Time-controlled analysis runs enable regular analyses to be fully automated.

In this release notice openSM2 is used synonymously for openSM2 (Open Systems).

This Release Notice is a summary of the major extensions, dependencies and operating information with regard to openSM2.

The release level is that of May 2012.

openSM2 may only be used for the monitoring of those systems for which it was purchased.

1.1 Documentation

The managers of INSPECTOR and ANALYZER are containing a comprehensive help functions.

2 Product use

The INSPECTOR and ANALYZER component each consist of a manager and system type-specific agents.

INSPECTOR agents periodically collect performance data relating to the current status of the monitored systems and send it to the manager which presents and monitors the data. An agent for each monitored system type is required. The agent running on any Windows PC or server collects the data of the monitored systems remotely so that no installation on these systems is necessary ("agent-less" monitoring). Solaris or Windows NT systems are the exception. Here, an agent must be installed locally.

With ANALYZER, multiple monitoring files - from the same or different systems - can be analyzed simultaneously in a single analysis run. In the manager, the user specifies the type and scope of the analysis. The analysis job thus defined is processed by agents and the result is then presented by the manager. The monitoring files to be analyzed can be stored on any server or PC where an agent is running. An ANALYZER agent is available for Windows and Solaris. Both agents can analyze monitoring files of all system types except BS2000/OSD.

2.1 Resource requirements

In relation to the agent part, there are no restrictions on the minimum system configuration; the only requirement is enough free hard disk memory for openSM2 monitoring files.

The following space is required to implement the manager:

- Min. 512 MB main memory and
- Min. 100 MB free hard disk memory

2.2 Software configuration

2.2.1 Managers

Microsoft Windows 2000 or higher or
Microsoft Windows Server 2000 or higher
Microsoft .NET Framework 2.0

2.2.2 Agents

For Solaris:

- Solaris 8 / Sparc and higher
- Solaris 10 / x86-64 and higher
- SMAWemanate (Solaris) V1.5 or later (only when using the
SNMP subagent)

For other system types:

- Microsoft Windows 2000 or higher or
- Microsoft Windows Server 2000 or higher
- Microsoft Windows NT 4.0 Server (Service Pack 6 required)
- Microsoft .NET Framework 2.0 (only for the INSPECTOR agent
for VMware ESX Server)
- StorManMonitor (only for the INSPECTOR agent for storage

systems; included in delivery)

2.2.3 Monitored systems

Linux:

- SuSE-Linux 8.0 or higher
- Red Hat Enterprise Linux 3 or higher
- SMAWemanate (Linux) V1.5 or higher (only x86-compatible server,
only when using the SNMP subagent)

Windows:

- Microsoft Windows Server 2000 or higher or
- Microsoft Windows NT 4.0 Server (Service Pack 6 required)

VMware ESX Server:

- VMware ESX 3.x, 4.x

Xen:

- Xen 3.x, 4.x (SuSE or Red Hat Linux)
- X2000 V5.x on SQ Server
- XenServer V5.x, V6.0

SNMP:

- SNMP v2

2.3 Product installation

All components except the agents for Solaris are installed on a Window system.

2.3.1 Installation of the managers and agents on Windows

If an earlier version of openSM2 is already installed the settings of this version can be applied automatically during the installation or the first time the Managers are started. If the version is V9.0 or higher it is uninstalled during the installation, but the settings are preserved; otherwise it must not be uninstalled.

The preset installation folder is

<ProgramFiles>\Fujitsu Technology Solutions\openSM2
where <ProgramFiles> is the standard folder for programs.

The installation can take place either dialogue-led or unattended, i.e. without user input.

Dialogue-led installation:

Insert the CD into the drive and execute the openSM2-Setup.exe program.

During the installation you can change the installation folder and select the components to be installed. You can also choose the language for the installation program. The selected language will also be used for the user interface of the managers.

After the installation the Configurator program is started, where you specify the systems to be monitored and the settings for the monitoring.

Unattended installation:

Insert the CD into the drive, open a Command Prompt window and navigate to the CD drive.

Start the installation with the following command:

```
[start /wait] openSM2-Setup.exe /q[<n>] [/install:<path>]
  [ProductLanguage=<language id>]
  [UI<component>=1]
  [UIAccountUserName=<user name> UIAccountDomain=<domain>
  UIAccountPassword=<password>]
```

Operands:

start /wait

This ensures that the command does not return until Setup has exited.

/q[<n>]

Specifies the kind of the installation:

```
/q0 normal installation
/q1 silent (quiet, unattended) installation;
    no user input is required, but the installation
    progress is shown
/q2 invisible installation
/q  corresponds to /q1
```

/install:<path>

Specifies the path of the installation folder.
If <path> contains spaces it must be quoted.

ProductLanguage=<language id>

Specifies the language of the user interface of the managers:
1031 german
1033 english

UI<component>=1

This installs the corresponding component:

UIInspector	INSPECTOR Manager
UIAnalyzer	ANALYZER Manager
UILinux	INSPECTOR Linux Agent
UIWindows	INSPECTOR Windows Agent
UIVMwareESXServer	INSPECTOR VMware ESX Server Agent
UIXen	INSPECTOR Xen Agent
UIStorage	INSPECTOR Storage Agent
UISNMP	INSPECTOR SNMP Agent

UIAccountUserName=<user name>

UIAccountDomain=<domain>

UIAccountPassword=<password>

Specifies the user account for the INSPECTOR Windows Agent;
This information is required, if UIWindows=1 is specified.

If the installation was successful, the exit code 0 is returned in the %ERRORLEVEL% variable.

During the installation default settings for the monitoring are set. You can specify the systems to be monitored after the installation with the Configurator program and adjust the settings.

Example:

With the following command you install the INSPECTOR Manager, the ANALYZER Manager and the INSPECTOR Windows Agent in the D:\My Programs\openSM2 folder and wait until Setup has exited.

```
start /wait openSM2-Setup.exe
  /q2 /install:"D:\My Programs\openSM2"
  UIAnalyzer=1 UIInspector=1 UIWindows=1
  UIAccountUserName=Administrator
  UIAccountDomain=.
  UIAccountPassword=myPassword
```

2.3.2 Installation of the agents on Windows NT

For the data collection on Windows NT systems an agent must be installed on each system.

Put the CD in an according device and execute the openSM2-WindowsNT-Agent-9.0-Setup.exe program in the WindowsNT-Agent folder.

The preset installation directory is

<ProgramFiles>\Fujitsu Technology Solutions\openSM2 where <ProgramFiles> is the standard directory for programs. You can change the installation directory during the installation.

After the installation the installation directory contains the files

- openSM2iawin.exe (agent)
- inspectoragt.config (configuration file for the agent)

The agent is installed as a local service and can be started and stopped manually under administrative tools/services.

Before the agent is started for the first time the configuration file inspectoragt.config must be eventually adapted. You can edit the configuration file with the Configurator program which is installed together with the managers.

2.3.3 Installation of the agents on Solaris

You have to install the agents on each system

- from which measurement data are to be collected,
- on which monitoring files are to be analyzed.

Installation must be carried out under the root or admin ID.

Put the CD in an according device.

Change into the mount directory (e.g.: cd /cdrom) and install with the

pkgadd -d `pwd`/Unix-Agenten/openSM2.sparc.sunos command on a SPARC server resp. with the pkgadd -d `pwd`/Unix-Agenten/openSM2.i386.sunos command on a x86-64-compatible server.

At the beginning of the installation you are asked for the user ID under which installation is to take place.

After installation the directory openSM2 with subdirectories INSPECTOR and ANALYZER is located in the home directory of the user ID you specified.

The directory openSM2/INSPECTOR contains the following files:

- inspectoragt (agent)
- inspectoragt.config (configuration file for the agent)
- start.inspectoragt (shell script for starting the agent)
- stop.inspectoragt (shell script for stopping the agent)
- opensm2agt (SNMP subagent)
- fscOpenSM2.mib (MIB of the SNMP subagent)

The directory openSM2/ANALYZER contains the following files:

- analyzeragt (agent)
- start.analyzeragt (shell script for starting the agent)
- stop.analyzeragt (shell script for stopping the agent)

For the INSPECTOR agent the inspectoragt.config configuration file with the standard settings for the monitoring is installed. You can modify these setting with the Configurator program started after the installation of the managers. The configuration file created on the Windows system is then to be transferred to every monitored Solaris system.

When you want to use the SNMP interface, refer to the section "The SNMP subagent" in the help of the INSPECTOR manager.

2.3.4 Installation of StorManMonitor

To monitor storage systems the agent must establish a connection to the StorManMonitor. The StorManMonitor can be installed on any Windows system.

For information to install and set up the StorManMonitor in order to support the gathering of statistical and performance data of storage arrays, please read the StorManMonitor ReadMe file.

For more information about StorManMonitor and ETERNUS storage systems refer to the section "The Storage agent" in the help of the INSPECTOR manager.

2.3.5 Installation of the Linux SNMP subagent

Please note that this feature is only available for x86 based linux systems.

You have to install the Linux SNMP subagent on each system

- from which measurement data are to be sent to an SNMP management station,
- from which you want to send SNMP traps.

Insert the CD-ROM into the drive. Start a console or a terminal. When your system doesn't support automatic mount, you must mount CD-ROM, for example type mount /cdrom or mount /mnt/cdrom (the command depends on your system). Change to CD-ROM-directory (for example cd /cdrom). Change to Linux-SNMP-Subagent.

Copy opensm2agt to the /usr/local/bin directory and set the execution rights.

Refer to the section "The SNMP subagent" in the help of the INSPECTOR manager for more information.

2.4 Product operation

When starting the programs for the first time you should read the section "Basics" in the help of the INSPECTOR and ANALYZER manager.

For problems in connection with agentless monitoring for Windows read please the chapter "Microsoft Hotfixes" and "Agentless Monitoring" in the online help of the INSPECTOR manager.

2.5 Obsolete functions and those to be discontinued

-

2.6 Incompatibilities

-

2.7 Behavior in the event of error

Additional information you can find in the chapter "Behavior in the event of error" in the help of the INSPECTOR resp. ANALYZER manager.

3 Software extensions

openSM2 (Open Systems) V9.2A contains the following main new features over the last version V9.1A.

3.1 General

- Monitoring of Citrix XenServer systems

3.2 INSPECTOR

-

3.3 ANALYZER

-

4 Hardware support

Please refer to the Product Information Sheet for the hardware supported by the products.

5 OpenSource use

OpenSource module OpenSSL

License:

<http://www.openssl.org/source/license.html>

OpenSource module libssh2

License:

<http://www.libssh2.org/license.html>

OpenSource module zlib

License:

http://www.gzip.org/zlib/zlib_license.html

OpenSource module libxml2

License:

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OpenSource module iconv

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