FUJITSU

Data Sheet FUJITSU Software ServerView® Suite ServerView® Operations Manager V9.0x; Agents & Providers V9.0x

Unified server management and monitoring

Server Management ServerView[®] Operations Manager

ServerView Operations Manager monitors and analyzes FUJITSU Server PRIMERGY systems and connected storage extension units in the network. Integrated components or those that can be integrated as an option enhance the Operations Manager with functions such as Update Management or Virtual I/O management (VIOM).

ServerView Operations Manager runs on Windows or Linux based servers and enables the management of servers with the operating systems Windows, Linux and VMware ESXi.

A Base Configuration Wizard supports the user with initial operation.

Using ServerView Operations Manager reduces administration costs and increases server availability. Service costs can be greatly reduced via preventive error recognition as well as various integrated diagnostics functions.

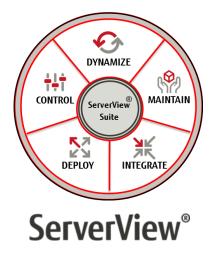
Architecture

ServerView Operations Manager is installed on the central management station (CMS). The optional components of the FUJITSU Software ServerView® Suite are also installed on the CMS and integrated in Operations Manager.

The data which ServerView creates and uses is stored in a SQL database, which is an integralpart part of the productr. However, separate external SQL databases can be used for the administration as well.

ServerView agents or CIM providers must be installed on the managed servers. SNMP agents are available for Windows and Linux. CIM providers are available for VMware ESXi, Linux and Microsoft Windows.

The tool is operated via a HTML5 graphical user interface.



Resourceful Server Management

FUJITSU Software ServerView® Suite provides all the necessary elements for professionally managing server systems during their lifecycle.

For further information please visit www.fujitsu.com/fts/serverview



Monitoring and Status Information

ServerView Operations Manager monitors and returns detailed status information about:

- FUJITSU Server PRIMERGY TX tower servers
- FUJITSU Server PRIMERGY RX rack servers
- FUJITSU Server PRIMERGY BX blade servers
- FUJITSU Server PRIMERGY CX scale-out servers
- Fujitsu PRIMEQUEST servers
- Storage subsystems

The systems are displayed in a structured server list; the integrated group and filter options offer improved transparency especially in larger networks.

The detection of servers in the network is SNMP and IPMI-based; including them in the server list is simple (from version 7.10 ServerView also supports SNMP V3). A blade system view in the console is dynamic, analog to its actual configuration.

ASR&R and PDA Functions

Automatic System Recovery

Automatic Server Reconfiguration und Restart (ASR&R) reduces downtimes by automatically removing a faulty processor or a faulty memory module from the configuration. A server can continue to operate even at reduced performance until it is repaired. ServerView Operations Manager is used to configure settings to cover the system behavior in the event of a fault.

Prefailure Detection and Analysis

Prefailure Detection and Analysis technology (PDA) in Fujitsu PRIMERGY servers detects and reports problems before they result in the downtime of the entire system.

Early error detection is possible for fans, CMOS batteries, memory modules and hard disk drives (S.M.A.R.T. Standard). Preventive replacement, e.g. as part of a maintenance contract increases the fail-safety of the servers.

Event Management

The configurable alarm system ensures fast and reliable information about the faults that occur. It enables specific reaction and error elimination. Messages are entered, assessed, filtered, forwarded and saved. Information about the cause of the error and possible error elimination is available for all critical system messages. Event management returns its messages, depending on the type of error and its urgency, to the correct addresses via the following: email (SMTP); SMS (Short Message Service) to a cell phone; numeric und alphanumeric pagers; forwarding to other management stations; call a program on CMS.

Update Management and Maintenance Functions Update Management

Update Management integrated in the ServerView Operations Manager can be used to update the BIOS, firmware, drivers and the ServerView agents.

Updates can be performed locally on the server and also on a remote basis via the network.

ServerView Update Management greatly facilitates the service process and is an important factor in reducing costs. More information is available in the Update Management data sheet.

Customer Self-Service

In the event of a fault, this function provides the user with an overview of all components which he can - and indeed may - order and replace himself (guarantee retained).

PrimeCollect

PrimeCollect is a tool used to collect information about the inventory, the operating system, sensor data (e.g. temperature values) and different log files (e.g. System Event Log). All the information is automatically saved in a .zip file which can be sent to a service provider.

PrimeCollect can thus help the service employee to analyze the customer's problems and find a fast solution for that problem. PrimeCollect is also integrated in ServerView Installation Manager and can thus be used offline but with some restrictions. The ServerView Agent is a prerequisite for using PrimeCollect.

RAID Management

The ServerView RAID Manager is used to monitor and manage the RAID controllers integrated in the Fujitsu PRIMERGY servers. Operation is via a graphic interface or Command Line Interface. The ServerView RAID Manager must be installed on each managed server. Management of VMware ESXi based servers is done via ServerView RAID installed on the CMS or another dedicated server. ServerView Operations Manager monitors all data gathered by SV-RAID

Storage Management

ServerView Operations Manager permits the management of different storage expansion units; they can either be connected to the server locally or be installed in the network. The prerequisite for managing locally connected systems is an installed ServerView Agent. The appropriate SMI-S clients are required for systems managed via SMI-S as well as the Storage Manager included in the delivery scope and which is to be installed on the CMS.

Asset Management

Inventory Manager

ServerView Operations Manager provides a clear list of inventory data for the systems in the network. The determined data can be viewed immediately on the console or saved in a .csv file or in a SQL database. Forwarding inventory data to externals is possible using an integrated email function.

Archive Manager

The Archive Manager is used to create snapshots of the hardware and system software configuration for a server. The integrated compare function means that these snapshots of a server or blade server can be easily analyzed and documented regarding changes within its configuration. This function is particularly useful regarding error analysis.

Security Functions

Single Sign-On (SSO)

The user logs in only once to the management system and, depending on his assigned rights, has access to the ServerView Suite components, such as ServerView Operations Manager and Update Manager.

Role-based Access Control and Active Directory Integration

The role-based access control is used to configure different types of system access for the various users. ServerView has pre-defined roles which the administrator can assign to the various users. The role-based access control permits a user to use all Server View components and functions or provide him with restricted access to certain data and functions. The SVOM comes with an own LDAP directory and can be integrated in Microsoft Active Directory.

Further information is provided in the ServerView Security white paper

ServerView System Monitor

The ServerView System Monitor is part of the ServerView Agent Package for Windows or Linux. It provides easy and inexpensive management of individual Fujitsu PRIMERGY servers via a local display or via mobile devices like smartphones and tablets, and enables to run selected tasks directly at the remote server for more efficient processing. ServerView System Monitor presents to the user detailed status information of the individual system clearly arranged in a single view and features update management functions and alarm forwarding. This makes it easy to use by non-IT experts, cutting administration costs while still delivering comprehensive management capabilities.

ServerView Agentless Management

Agentless Management with ServerView improves data security by separating the networks of productive and management data, offers flexibility by managing the server independent from its operating state and reduces load on system resources to a minimum while still providing almost all management data via out-of-band communication.

Management via the iRMC S5 without ServerView agents and CIM providers is referred to as "ServerView agentless management". There are two different modes of agentless management:

- Out-of-band management without installation of ServerView Agentless Service on the managed server is known as "agentless mode".
- Out-of-band management with additional installation of ServerView Agentless Service on the managed server is known as "agentless mode with Agentless Service".

ServerView Agentless Service ensures that, when the operating system is running, operating system-based administrative information is available via the iRMC S5.

Optional Components

Optional components that can be integrated

Products available as options, such as ServerView Virtual-IO Manager (VIOM), can be integrated.

Technical Prerequisites

Managed Nodes Supported

- ➤ Hardware
 - PRIMERGY BX, CX, RX, TX server
 - PRIMEQUEST 1400, 1800, 2400, 2800, 3400, 3800 server
 - Storage Nodes: PRIMERGY SX30, SX9xx S1, Eternus JX40, JX40 S2; JX60; CS800
 - NOTE: At least 10 GB free disk storage required.

> Software

- ServerView Agents v9.0x for:
 - Microsoft Windows Server® 2012
 Microsoft Windows Server® 2012 R2
 Microsoft Windows Server® 2016
 Microsoft Windows Server® 2019
- SUSE Linux SLES 11 / SP4
- SUSE Linux SLES 12 / SP3 / SP4
- Red Hat RHEL 6.7 / 6.8 / 6.9 // 7.4 / 7.5 /7.6
- Citrix XenServer / 6.5 / 7.4
- Oracle Enterprise Linux 6.9 / 6.10 (for projects only)
- Oracle Enterprise Linux / 7.4 / 7.5 / 7.6 (for projects only)
- Oracle OVM V3.3 / V3.4
- ServerView CIM Provider 9.0x for
 - VMware ESXi 5.5 / 6.0 / 6.5 (SV CIM Provider for VMware ESXi >V7.31)
 - Microsoft Windows Server[®] 2012 Microsoft Windows Server[®] 2012 R2 Microsoft Windows Server[®] 2016 Microsoft Windows Server[®] 2019
 - SUSE Linux SLES 11 / SP4
 - SUSE Linux SLES 12 / SP3 / SP4
 - SUSE Linux SLES 15
 - Red Hat RHEL 6.7 / 6.8 / 6.9 // 7.4 / 7.5 /7.6
 - Citrix XenServer / 6.5 / 7.4
 - Oracle Enterprise Linux 6.9 / 6.10 (for projects only)
 - Oracle Enterprise Linux / 7.4 / 7.5 / 7.6 (for projects only)
 - Oracle OVM V3.3 / V3.4

- ServerView Agentless Service 9.0x for

- Microsoft Windows Server[®] 2012
- Microsoft Windows Server® 2012 R2
- Microsoft Windows Server® 2016
- Microsoft Windows Server® 2019
- SUSE Linux SLES 12 / SP3 /SP4
- SUSE Linux SLES 15
- Red Hat RHEL / 6.7 / 6.8 / 6.9 // 7.4 / 7.5 /7.6

Delivery and Installation

The ServerView Operations Manager software is included in the delivery scope with each new Fujitsu PRIMERGY server. Installation is done via the ServerView Suite DVD set. The software is also available as download via the Internet; please check download options on webpage: www.fujitsu.com/fts/serverview

Information about ServerView Suite

The FUJITSU Software ServerView[®] Suite DVD set contains all the relevant ServerView Suite software products. Furthermore, a collection of links enables online access to all the manuals and download pages as well as user forums, Help Desks and much more.

Options (subject to charge)

- Certain option of the Integrated Remote Management Controllers (iRMC)
- ServerView Virtual-IO Manager (VIOM)

User Prerequisites

Knowledge about system administration and server operating systems in particular Windows und Linux.

Training Courses

Training courses for the FUJITSU Software ServerView[®] Suite are offered by the Fujitsu Training Academy. More information is available at www.fujitsu.com/fts/services/consulting/training/

Licenses

No licenses are required to use ServerView Operations Manager. On the CMS a Java runtime environment is needed. SVOM ships with a freely available JRE.

More information canbe found here:

<u>https://partners.ts.fujitsu.com/sites/dmsp/Publications/other/inf-fj-sv.p</u> <u>df</u>

Restrictions

Even though a system configuration is released, some functions of ServerView Operations Manager can be different or cannot be implemented depending on the server or operating system used:

- The support of controllers and storage subsystems depends on the operating system (see separate data sheets).
- High-availability (hot-plug, RAID, failover, cluster) depends on the operating system and controller (see separate data sheets).
- Not every Prefailure Detection and Analysis (PDA) function is available for all server models.
- Some functions (e.g. temperature display, fan monitoring) require a service processor in the server.
- The use of the Power Consumption Control and power monitoring functions is restricted to servers with iRMC.

Technical Prerequisites

Management Console (Client)

- Standard PC, LAN und http access
- Microsoft Windows with latest GoogleChrome
- Microsoft Windows with latest Mozilla Firefox
- Microsoft Windows with IE 11
- Red Hat RHEL with latest Mozilla Firefox
- SUSE SLES with latest Mozilla Firefox

Central Management Station (CMS) Hardware

- Recommended configuration
 - Fujitsu PRIMERGY server
 - Processor with 2 Cores
 - Main memory: 4GB RAM
 - 100 GB free disk storage
 - Graphics 1280x1024
 - GBit-LAN
- Minimum configuration
 - Fujitsu PRIMERGY server
 - Processor: >= 1GHz (minimum)
 - Main memory: >= 2GB (minimum)
 - 2GB free disk storage (minimum)
 - Graphics 1280x1024
 - 100MBit-LAN

Software

ServerView Operations Manager Windows

- Microsoft Windows Server[®] 2008 R2
- Microsoft Windows Server[®] 2012
- Microsoft Windows Server[®] 2012 R2
- Microsoft Windows Server[®] 2016
- Microsoft Windows Server[®] 2019

Linux

- SUSE Linux SLES 11 / SP4
- SUSE Linux SLES 12 / SP2/SP3
- SUSE Linux SLES 15
- Red Hat RHEL 6.7 / 6.10
- Red Hat RHEL 7.4 / 7.5 / 7.6

LDAP Directory support

- Local:
 - Apache OpenDS (included)
- Remote:
- Microsoft Active Directory

Supported Data Bases

- Local/remote for Windows:
 - SQL Server 2008
 - SQL Server 2008 R2 Express
 - SQL Server 2012 Express, Standard, Enterprise
 - SQL Server 2014 Standard, Workgroup, Enterprise
 - SQL Server 2014 Express SP2 (integrated in SVOM)
 - SQL Server 2016 Express, Standard, Enterprise

- Local / Remote for Linux:

• PostgreSQL 9.2 (Included in the ServerView package)

More Information

Fujitsu OPTIMIZATION Services

In addition to FUJITSU Software ServerView® Suite, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about FUJITSU Software ServerView[®] Suite, please contact your Fujitsu sales representative, Fujitsu business partner, or visit our website.

www.fujitsu.com/fts/serverview

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at www.fujitsu.com/global/about/environment/



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