

Data Sheet

FUJITSU Software ServerView® Suite

ServerView® Operations Manager

V8.40; Agents & Providers V8.40

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.

The tool is operated via a graphical user interface. Certain components of the ServerView Operations Manager also have a Command Line Interface. 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.

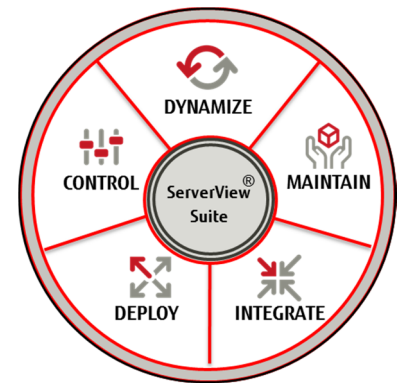
Architecture

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. An SQL database is part of ServerView Operation Manager. However, other 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, Linux and VMware ESX. CIM providers are available for VMware ESXi, Linux and Microsoft Windows Server® 2012.

A console using Java Web Start enables the administration and management of the servers locally on the client.



ServerView®

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



Features and Benefits

Main Features	Benefits
<ul style="list-style-type: none"> Starting from V8.00, ServerView OM is based on Java WebStart 	<ul style="list-style-type: none"> Java Web Start is a method for transferring Java applications over the Internet and starting with just one click. Unlike Java applets, Web Start applications run locally on the client and not on web browser.
<ul style="list-style-type: none"> Comprehensive monitoring and analysis of Fujitsu PRIMERGY servers and connected storage extension units in the network. 	<ul style="list-style-type: none"> Reduces administration costs and increases system availability.
<ul style="list-style-type: none"> Display of all systems in a structured server list with integrated group and filter options. 	<ul style="list-style-type: none"> Clearly designed presentation of all systems managed by a ServerView central management station (CMS).
<ul style="list-style-type: none"> Management of virtual servers under VMware ESX/ESXi, XEN (SUSE with Xen, Red Hat with XEN), Citrix XenServer as well as Microsoft Hyper-V and Hyper-V Server respectively. 	<ul style="list-style-type: none"> Support of all mainstream virtualization platforms.
<ul style="list-style-type: none"> Event management with configurable alarm system. 	<ul style="list-style-type: none"> Ensures fast and reliable information about events enabling specific reaction and error elimination
<ul style="list-style-type: none"> Performance Management registers the workload of processor, memory, file system and network. 	<ul style="list-style-type: none"> Enables a quick identification and analysis of resource bottlenecks.
<ul style="list-style-type: none"> Preventive error recognition as well as various integrated diagnostics functions. 	<ul style="list-style-type: none"> Increases the fail-safety of the servers combined with greatly reduced service costs
<ul style="list-style-type: none"> Clear listing of all inventory data for managed systems. 	<ul style="list-style-type: none"> Simplifies the documentation and analysis of inventory data.
<ul style="list-style-type: none"> Central and uniform management of RAID configurations. 	<ul style="list-style-type: none"> Reduces administration costs.
<ul style="list-style-type: none"> Power Management and Power Monitoring. 	<ul style="list-style-type: none"> Displays the power consumption of one or more servers and records power consumption data for a defined period.
<ul style="list-style-type: none"> Power Consumption Management. 	<ul style="list-style-type: none"> Allows limiting the power consumption of a server.
<ul style="list-style-type: none"> Full automated distribution and installation of updates (BIOS and firmware as well as drivers and ServerView agents). 	<ul style="list-style-type: none"> Greatly facilitates the service process and is an important factor in reducing service costs.
<ul style="list-style-type: none"> Online Diagnostic for preventive stress tests of components. 	<ul style="list-style-type: none"> Determines potential failures of components at early stage increases system availability.
<ul style="list-style-type: none"> Customer Self Service. 	<ul style="list-style-type: none"> Reduces service costs by allowing users to replace certain components by themselves.
<ul style="list-style-type: none"> Integration in Enterprise Management Systems. 	<ul style="list-style-type: none"> Provides a single point of control and administration for Fujitsu PRIMERGY servers operated in heterogeneous environments.
<ul style="list-style-type: none"> Single Sign-on (SSO) and role-based access control. 	<ul style="list-style-type: none"> Assures secure authentication of users and the administration of their permissions.
<ul style="list-style-type: none"> Enhanced consistency of the ServerView data base. 	<ul style="list-style-type: none"> Increases the reliability of ServerView Operations Manager when installed in a virtual machine of a Microsoft Hyper-V cluster.
<ul style="list-style-type: none"> ServerView status gadget for Microsoft Vista and Windows 7. 	<ul style="list-style-type: none"> Provides a quick overview of the status of all servers managed by a ServerView central management station (CMS).

ServerView® Operations Manager V8.40

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.

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 and alphanumeric pagers; forwarding to other management stations; call a program on CMS.

Threshold Management

The integrated threshold management allows the user to monitor certain parameters by setting threshold values. If a threshold value is undercut or exceeded, the user is informed by event management accordingly and on the ServerView console.

Sample templates for physical servers as well as for virtual hosts and virtual machines are included in the scope of delivery.

Performance Management

The integrated Performance Management registers the workload of processor, memory, file system and network. Reports can be created in user-defined formats and displayed in graphic form. Threshold management states when workload thresholds are reached.

Searching for peak values and the correlation of these values during running processes enable a quick identification and analysis of resource bottlenecks. The export function is used to transfer report data in .csv format.

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.

Power Management

Power Control Functions

The integrated power management can be used on a server selected from the server list. The offered functions (incl. power-on, power-off, shutdown) can be used both on physical servers as well as on virtual servers. The use of these functions is coupled with an integrated user management for security reasons.

Power Monitoring Functions

The ServerView Operations Manager Power Monitor is used to display the power consumption of one or more servers. Consumption data can be recorded for a defined period.

Power Consumption Management

This function limits the power consumption of the server.

UPS Management

Interrupt-free power supplies

ServerView Operations Manager integrates APC interrupt-free power supplies. The APC traps are integrated in Operations Manager and can be managed and forwarded by the ServerView Event Manager. The user interface of the management card integrated in the UPS can be started from ServerView Operations Manager.

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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.

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.

Virtualization

Support for Virtualization Solutions

ServerView Operations Manager enables the management of virtual servers under VMware ESX/ESXi, XEN (SUSE with Xen, Red Hat with XEN), Citrix XenServer as well as Microsoft Hyper-V and Hyper-V Server respectively.

All components of a virtual system (host and virtual server) are shown by ServerView as a group in the server list; the relationships between the host and virtual machines are also shown in ServerView. Citrix Server pools in ServerView are shown in a similar way as in XEN Center. Additional monitoring of performance data, combined with template-based threshold management, offers additional options for managing a virtual environment.

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.

Online Diagnostics

The integrated on-line diagnostics tools are used to subject certain hardware components of a server to a test and thus analyze their functioning. The server can remain in operation during the test.

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 as of V4.60 is a prerequisite for using PrimeCollect.

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.

Integrations

Integration in Management Systems

ServerView Operations Manager can be integrated into Enterprise management systems. Integration modules for the Enterprise Management systems Microsoft System Center and NAGIOS are shipped on the ServerView DVD.

Further integration modules for HP Systems Insight Manager or HP Operations Manager are also available as options; more information is in the data sheet about ServerView integration.

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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 S4 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 S4.

Optional Components

Optional components that can be integrated

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

ServerView Status Gadget for Vista and Windows 7

ServerView Status App for Windows 8

Displays the status of all servers managed by a Central Management Station (CMS).

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Technical Prerequisites

■ Management Console (Client)

- Standard PC, LAN und http access
- Microsoft Windows with Microsoft Explorer V10 / V11 [Optional]
- Microsoft Windows with latest Mozilla Firefox [Optional]
- Red Hat RHEL 6.6 / 6.7 / 7.1 / 7.2 with latest Mozilla Firefox [Optional]
- SUSE SLES 11 with included Mozilla Firefox [Optional]
- Java Runtime Environment (32-Bit) Oracle JRE 8 [

■ 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

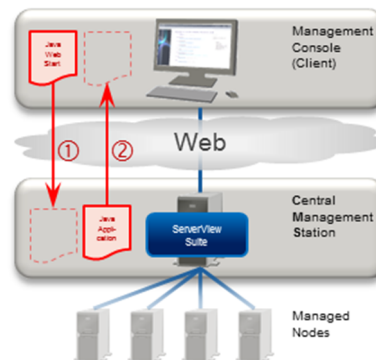
ServerView Operations Manager

Windows

- Microsoft Windows Server® 2008 R2
- Microsoft Windows Server® 2012
- Microsoft Windows Server® 2012 R2
- Microsoft Windows Server® 2016

Linux

- SUSE Linux SLES 11 / SP4
- SUSE Linux SLES 12 SP1 / SP2/SP3
- Red Hat RHEL / 6.7 / 6.8 / 7.2 / 7.3/ 7.4



Directory support

- Local:
 - OpenDJ
- Remote:
 - Microsoft Active Directory

Data Base

- Local under Windows:
Included in the ServerView package:
 - for Windows Server® 2008: SQL Server 2008 R2 Express SP4
 - for Windows Server® 2012: SQL Server 2008 R2 Express SP4Also supported:
 - SQL Server 2008 Express Standard, Workgroup, Enterprise
 - SQL Server 2008 Express R2 Standard, Workgroup, Enterpr.
 - SQL Server 2012 Express, Standard, Enterprise
- Remote under Windows
 - SQL Server 2012 Standard, Workgroup, Enterprise
 - SQL Server 2014 Standard, Workgroup, Enterprise

Java Runtime Environment

- Java Runtime Environment (32-Bit) Oracle JRE 8

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Technical Prerequisites

■ Managed Nodes Supported

➤ Hardware

- PRIMERGY BX, CX, RX, TX server
- PRIMEQUEST 1400, 1800, 2400, 2800, 3400E 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 available for:
 - Microsoft Windows Server® 2008 / 2008 R2 / 2008 R2 (HPC Edition) / 2008 core
 - Microsoft Windows Server® 2012 (SV Agents for Windows ≥V6.10)
 - Microsoft Windows Server® 2012 R2 (SV Agents for Windows ≥V6.21)
 - Microsoft Windows Server® 2016 (SV Agents for Windows ≥V7.3)
 - SUSE Linux SLES 11 / SP4
 - SUSE Linux SLES 12 SP1 / SP2/ SP3
 - Red Hat RHEL 6.7/6.8 / 6.9 // 7.2 / 7.3/7.4
 - Citrix XenServer / 6.5 / 7.0 / 7.1
 - Oracle Enterprise Linux (OEL) 6.7 / 6.8 / 7.2 / 7.3(for projects only)
 - Oracle OVM V3.2 / V3.3
- ServerView CIM Provider available for
 - VMware ESXi 5.5 / 6.0 / 6.5 (SV CIM Provider for VMware ESXi ≥V7.31)
 - Microsoft Windows Server® 2008 / 2008 R2 / 2008 core
 - Microsoft Windows Server® 2012 (SV Agents for Windows ≥V6.10)
 - Microsoft Windows Server® 2012 R2 (SV Agents for Windows ≥V6.21)
 - Microsoft Windows Server® 2016 (SV Agenten for Windows ≥V7.3)
 - SUSE Linux SLES 11 / SP4
 - SUSE Linux SLES 12 SP1 / SP2 (SV Agents for Linux V8.0)
 - Red Hat RHEL / 6.7 / 6.8 // 7.2 / 7.3 (SV-Agents for Linux V8.0)
- ServerView Agentless Service available for
 - Microsoft Windows Server® 2008 / 2008 R2 / 2008 core
 - Microsoft Windows Server® 2012 (SV Agentless service for Windows ≥V6.10)
 - Microsoft Windows Server® 2012 R2 (SV Agentless services for Windows ≥V6.21)
 - Microsoft Windows Server® 2016 (SV Agentless service for Windows ≥V7.3)
 - SUSE Linux SLES 11 / SP4
 - SUSE Linux SLES 12 SP1 / SP2/SP3
 - Red Hat RHEL / 6.7 / 6.8 / 7.2 / 7.3/7.4

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 DVD1 which is included in 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
The software is also available via a ServerView Suite DVD set subscription.

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.

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.
- ServerView Operations Manager does not support the ServerView CIM Providers for Windows.

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

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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/serveview

Fujitsu green policy innovation

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