Data Sheet
FUJITSU Software ServerView® Infrastructure Manager

Path to achieving software defined infrastructure

Need to eliminate complexities in a heterogeneous IT environment

Digital universe is growing at a rapid pace and hence the backbone to digitalization - IT infrastructure needs to be extremely agile and flexible. It has become critical for organizations to make quick decisions, ensure prompt and on-time service delivery to stay competitive in the market. But, this isn't an easy task considering the complexities involved in a multi-vendor, heterogeneous IT environment where managing pools of resources in compute, storage and networking devices in siloes resulting in delayed decisions and impacting competitiveness.

Gain agility and simplify IT operations

Enabling customers to drive towards achieving software defined datacenter; FUJITSU Software ServerView® Infrastructure Manager (ISM) provides a single converged management for both physical and virtual environment which encompasses of compute, storage and network devices.

ServerView® ISM saves significant time and OPEX by automating device configurations based on the company's operational policies, further tracking status of each device and monitoring resource usage patterns. With Fujitsu's growing partner eco-system, ISM also helps track and monitor heterogeneous IT environment through integration layers – by providing integration in to VMWare, Microsoft System center environment.

Accelerate growth and innovation

ISM helps simplify day-to-day IT operations. Obtain actionable insights & act using programmable APIs:

- Track compute resources and reassign workloads to reduce power
- Increase storage utility based on data usage patterns
- Re-direct network traffic in case of a congestion

Obtain an integrated view and centralized control over heterogeneous environment with ServerView® ISM components:

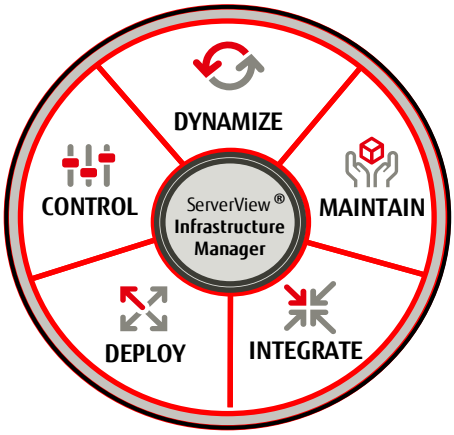
DEPLOY
- Mass OS installation
- Automate all device configuration

CONTROL
- Node Management
- Health status Monitoring
- Capacity Management
- Power Management

DYNAMIZE
- Converged Management
- Virtual-IO Management (VIOM)
- Auto Discovery
- Network topology Management

MAINTAIN
-Update Management
-Logging and auditing

INTEGRATE
- Integration in to heterogeneous IT landscapes



Improve agility and customer response time

90% reduction in firmware update time*
50% reduction in power consumption*

based on FUJITSU internal lab testing, in comparison to silo systems

Features and Benefits

Main features	Benefits
DEPLOY	
■ Swift and unattended mass OS installation	■ Significant reduction in OS installation time of up to **82%** and reduction of number of steps involved by **75%**
■ Easy, secure and swift deployment	■ Reduces administration costs and guarantees reliability and availability.
■ Create profiles and groups once, and then roll them out to as many enclosures, servers, and storage arrays to ensure compliance and consistency.	■ Automate the configuration and installation process of server, storage and network components and increase productivity.
CONTROL	
■ Comprehensive monitoring and analysis of converged IT infrastructure environment – single or group of nodes connected to the network	■ Centralized control over infrastructure enabling users to make faster decisions by gaining visibility in to bottlenecks and system errors.
■ Resource utilization and right allocation through threshold settings and power capping	■ Reduces administration costs and increases infrastructure availability.
■ Companywide control of assets while maintaining desired level of security	■ Automate routine administration and ensure data security
DYNAMIZE	
■ Centralized view of compute, storage and networking devices highlighting datacenter status and pin-pointing possible bottlenecks.	■ Reduces customer response time with less effort and time required to identify root cause of an issue across the devices registered to ISM
■ Integrated administration and identification of physical and virtual infrastructure devices connected to the network.	■ Optimizes infrastructure life-cycle management operations and provides high-availability.
■ Auto discovery of nodes when a device is added to the network	■ Accelerate the node setup process by automatically identifying any new PRIMERGY or PRIMEQUEST Server or PSWITCH addition to the network
MAINTAIN	
■ Visibility in to compute, storage and network resource utilization, performance of nodes and overall infrastructure	■ Meet service level agreements by having visibility into possible bottlenecks in the infrastructure and taking quick actions
■ Define the firmware version to be updated and execute secure firmware update required across devices or components. Execute manually or schedule the update in non-peak hours	■ **90%** reduction in firmware update time and **75%** reduction in number of steps involved for compute, storage and networking update, further reduces administration costs.
■ Collect and track event logs for analysis. Obtain user based event logs and access information for auditing	■ **23 times** faster trouble shooting or root cause identification.
■ Collect hardware status independently from OS condition by communicating with iRMC S5 directly	■ System hardware failure is reported immediately
INTEGRATE	
■ Seamless and easy integration in to widely-used enterprise management systems or vendor specific server management solutions.	■ Provides a single point of control and administration in heterogeneous environments.

DOCUMENTATION

For more information including technical details please refer to data sheets, user manuals and further documents provided on the websites

ServerView Infrastructure Manager Components Overview

DEPLOY

All items required for collective deployment of server, storage and network devices and possible automation of the same

DEPLOY AND AUTOMATE

- **Profile Management**
  Enables template based deployment with configuration for hardware components which includes administrator passwords, SNMP, NTP settings, RAID groups, and volumes saved as a profile, copied and applied as a batch to drive automated installation. This helps ensure compliance, consistency and increased productivity.

- **Mass OS installation**
  Easy, swift configuration and unattended installation of operating system on a scale of devices. Create and execute script which sets several configurations in the final phase of the installation sequence.

CONTROL

One comprehensive web-based tool consolidates all the management tasks for high levels of availability, flexibility and efficient IT operation.

MONITORING AND CONTROL

- **Node Management**
  Discover and register nodes with in your network, which consist of all infrastructure devices- server, storage and network switches. Manage and visualize rack locations on datacenter floors and node positions within the racks. Node information includes on model name, serial number, IP addresses of the node devices

- **Health status monitoring**
  Track and monitor health status of converged infrastructure which includes server, storage, network switch, and facility. This can be visualized by the function of physical configuration such as the rack location on the floor or datacenter, enabling nodes to be managed intuitively and efficiently. Reduce monitoring cost by consolidating all error reports to one server, by sending to system log.

- **Event Management**
  Monitor user operations based on events (SNMP traps) sent from converged IT infrastructure devices registered on ISM. Track parameters like intake air temperature, CPU utilization, power consumption for each node to ensure it is with in defined limits. Set actions such as execution of user scripts, emails alerts at user level based on company policy.

CAPACITY MANAGEMENT

- **Threshold Manager**
  Provides accurate warnings about the utilization limits of node resources being reached, thus helping to easily identify current performance issues and to ensure constant service delivery.

POWER MANAGEMENT

- **Power capping and monitoring functions**
  Provides power capping function from single device to group of devices. By setting the upper limit value of power consumption in a rack and also setting the priority of power capping for each node in the rack, automatic power consumption control can be performed.

INFRASTRUCTURE MANAGEMENT

- **Inventory Management**
  Collect information of monitored nodes such as serial number and firmware version. The solution provides the provision to export the gathered information to CSV format.

- **Multi- tenancy**
  Assign user access rights to each user or each node based on usage and associate user groups with node groups. Restrict the infrastructure that can be monitored user wise based on company policy to ensure security and meet customer SLAs.

DYNAMIZE

Accelerate, further simplify and dynamize life cycle operations. Become more flexible and make IT operation even more efficient.

CONVERGED MANAGEMENT

- **Analytics**
  Collects and analyses data to pinpoint the root cause of system outages and performance issues of the converged datacenter registered to ISM. The dashboard has a customizable design layout, which can be used to highlight priority to make quick and proactive decisions. Also obtain visibility in to multiple Infrastructure Management instance in the dashboard.
- **Auto Discovery**
  Speed up the node setup process by automatically identifying any new PRIMERGY or PRIMEQUEST Server or PSWITCH added to the network.

VIRTUAL-IO MANAGEMENT

- **Configure virtual MAC and WWN**
  Virtualize LAN, SAN network, fibre channel and IO parameters. This feature helps eliminate the layer of complexity in current network architectures through virtualization of physical network addresses and clear separation of server management from LAN and SAN management.
- **Resource pooling of MAC and WWN**
  ISM supports resource pool function of virtual MAC and WWN address. User can define address range and assign an ID when a new profile is created. When the profile is deleted, assigned MAC/WWN is released and can be further re-assigned.

NOTE: VIOM feature is not supported on BX Servers until April 2018.

NETWORK TOPOLOGY MANAGEMENT

- **Network Map**
  Obtain a consolidated view of the network topology displaying network connection between multiple nodes of both physical and virtual environment automatically. Track possible network congestions and detect network failure in advance.

MAINTAIN

Powerful tools and functions to prevent downtime, recover quickly and save costs.

UPDATE MANAGEMENT

- **Firmware Management**
  Confirm the firmware versions of each node on the ISM GUI, and execute firmware update to multiple nodes simultaneously. Increase infrastructure availability by ensuring systems run on latest firmware and avoids omission of update by managing firmware of each node batch wise. Schedule Firmware update in advance to run during non-peak hours and have a hassle free update without interfering business operations.
  Reduce user operations to prepare firmware data by downloading firmware from global flash

- **Repository Management**
  Manage repository of update modules that are imported from ServerView Update DVD.

PERFORMANCE MEASUREMENT

- **Performance Monitoring**
  Monitors the utilization of server, storage and network resources; enables long-term monitoring and utilization analysis for specific components; helps to detect resource bottlenecks and to guarantee service levels.

INVESTIGATION

- **Archive Management**
  Device system logs and OS event logs are collected from managed node automatically in scheduled time. Collected logs can be viewed and used for further analysis.

- **Logging and Auditing**
  ServerView ISM records user events which includes resources accessed by users, destination, source addresses, time stamp and user login information.

INTEGRATE

Manage heterogeneous environments with full investment protection.

- **Integration Packs**

  ServerView ISM integrates in the following management systems:
  - Microsoft SCOM
  - Microsoft SCVMM
  - VMware vCenter
  - Ansible

- **RESTful API**
  Manage nodes status and inventory information using REST API. Use programmable APIs or customized scripts to run operations and integrate in to the existing management system.

DOCUMENTATION

For more information including technical details please refer to user manuals, white paper and further documents provided on the websites listed below:
http://www.fujitsu.com/infrastructuremanagement
http://manuals.ts.fujitsu.com/ism

Technical Details System Requirements

ServerView ISM V2.2.0

System requirements for ISM-VA（Virtual Machines）	
Item	Description
Number of CPU cores	2 cores or more
Memory capacity	8 GB or more
Free disk space	35 GB or more
Network	1 Gbps or higher
Hypervisor	Windows Server 2012 / 2012R2 / 2016 Vmware ESXi 5.5 / 6.0 / 6.5 Red Hat Enterprise Linux 6.9 / 7.2 / 7.3

System requirements for management Terminals	
Item	Description
Device	PC, Server, iPad, Android tablet
Display	PC and server ： 1280 x 768 pixels or more Tablet ： Display mounted to devices stated above
Network	100 Mbps or more
Web browser	PC and server ： Internet Explorer Microsoft Edge Mozilla Firefox Google Chrome iPad ： Safari Android tablet ： Google Chrome
Related software	Acrobat Reader（for viewing manuals）

Supported Nodes	
Product name	
Servers	FUJITSU PRIMERGY RX,CX,BX Servers, FUJTISU PRIMEQUEST Servers
Storage	FUJITSU ETERNUS DX, AF, NetApp AFF, NetApp FAS
Network Switches	FUJITSU Ethernet ToR Switch (PSWITCH 2048), Brocade, Cisco
Facility	PSU, CDU
For more details and specifics of list of supported devices and functionality, read:	

Product license	
Product name	Product form
ServerView Infrastructure Manager Server License V2.x	License key
ServerView Infrastructure Manager 1 Node License V2.x	License key
ServerView Infrastructure Manager 5 Node License V2.x	License key
ServerView Infrastructure Manager 10 Node License V2.x	License key
ServerView Infrastructure Manager 20 Nodes License V2.x	License key
ServerView Infrastructure Manager 100 Nodes License V2.x	License key

NOTE:
Each server and node license includes a service pack
Server license applies to managed server, which hosts ISM software
Node license is required for each device which needs to be registered and managed by ISM
Support license is required in addition to server and node licenses

More Information

Fujitsu optimized services

Products
www.fujitsu.com/global/products/
In addition to the Fujitsu Software ServerView Infrastructure Management, Fujitsu offers a full portfolio of other computing products.

Fujitsu Portfolio
Built 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/

Learn more about FUJITSU,Software Infrastructure Management please contact your Fujitsu sales representative, Fujitsu business partner or visit our website.
www.fujitsu.com/infrastructuremanagement

Fujitsu green policy innovation

www.fujitsu.com/global/about/environment/
Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at:

Green Policy Innovation

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Contact
Fujitsu LIMITED

Website: www.fujitsu.com
2017-01-30 CE-EN