Data Sheet
FUJITSU ETERNUS SF MA V8.5 Storage Management Software

Performance measurement and analysis solution for large scale data center environments.



ETERNUS SF MA - Measure and Analyse

Capturing real-time performance data from ETERNUS DX S3 storage arrays, ETERNUS All-Flash arrays, NetApp FAS series, NetApp AFF series, Hitachi storage arrays, servers, FC-Switches, IP-Switches and virtual machines ETERNUS SF MA provides a user friendly interface which enables data center operators to continuously supervise the infrastructure performance with detailed metrics from a single pane of glass.

The dashboard view offers multiple levels of depth and can be easily customized to administrator's needs. This enables administrators to clearly identify performance dependencies helping to identify bottlenecks in an easy and convenient way.

For measurement and gathering necessary data virtual probes are used. These probes have been designed to have minimal impact on the production resources. ETERNUS SF MA collects minute level data from the virtual machine down to the individual LUN and thus obtains reports of long-term spanning performance data with historical accuracy, composed from both servers and storage. The big amount of such performance data collected over time is handled in a very lean way using special algorithms without the need to utilize external databases. This facilitates very detailed performance reports - spanning days, weeks, months or even years – without the need of having a large performance data warehouse in place.

Providing actionable information ETERNUS SF MA in particular supports decision making processes for teams whose responsibilities span entire IT environments comprising up to thousands of servers and virtual machines and petabytes of storage.



Features & Benefits

Main Features	Benefits
Real-time performance data capture from storage, network, servers and virtual machines	■ Rapid recognition of misbehaving IT systems and underperforming storage systems
Comprehensive visualization of resources	■ Easy determination of the performance of CPU, Memory, Swap Times, I/O of servers and VM's, and of the connection relationship between a storage resource and a server. ■ Easy determination if storage is delivering the IOPS, throughput and latency required by the existing server and virtualized environment ■ Helps to increase and maintain service levels ■ Easy performance evaluation through direct comparison with historical data
Dashboard graphical display	■ Real-time analysis of bottlenecks during backups, boot storms or virus scans ■ Single pane-of-glass view reduces labor cost and working hours ■ Customizable to individual needs
Reporting	■ Extensive evaluation over hours, days and months to see if there are bottlenecks, when they occur and which servers, virtual machines or I/O paths are affected ■ Ensures that services and production can cope with diversifying businesses

Licenses and functions overview

ETERNUS SF MA Software

ETERNUS SF Media Pack: Media for installation of the management server and server probes. Includes the software for installation of the ETERNUS SF MA Server and the installation of probes for ETERNUS DX S3 storage systems, ETERNUS All-Flash arrays, NetApp FAS series, NetApp AFF series,Hitachi storage arrays, VMware vCenter, Windows/Linux Servers, FC/IP-Switches.

ETERNUS SF MA Licenses

ETERNUS SF MA for Tier X: License enabling the probe for the collection of data from and supervision of a single ETERNUS DX S3 or ETERNUS All-Flash system, a NetApp FAS, NetApp AFF or Hitachi storage system. Information collected from the storage system includes
for ETERNUS DX S3 systems:
- Port: Throughput
- CM (Controller Module): Busy rate
- Disk: Busy Rate
- RAID, Volume, Thin Pools: Response Time, IOPS, Throughput
- System: Power consumption, Temperature

for NetApp FAS/AFF systems:
- Aggregate, Qtree, NFS, CIFS : Performance
- Volume, Disk, VMs : Performance

for Hitachi storage systems:
- MPB, Port, Volume, VM, Pool : Performance

ETERNUS SF MA for VMware 2 CPU: License enabling the probe for the collection of data from and supervision of VMware Virtual Machines (VM). Information per VM collected from the ESXi Server includes
- Disk Read Latency vs VM Reads
- Disk Write Latency vs VM Writes
- Host vs VM Disk Usage
- VM Disk Usage vs Disk Latency
- VM Read Write IOPS
- VM Disk Read Write Transfers
- VM Read Write IOPS vs Disk Latency

Bundle license for 10 x 2 CPU is also available

ETERNUS SF MA for Windows: License enabling the probe for the collection of data from and supervision of a single Windows Server. Information collected from the server system includes
- Memory, CPU: Usage, Performance
- Processor: CPU Idle Time, Performance
- Physical /Logical Disk: Used Space, Performance
- Network Adapter: Network Utilization, Performance

Bundle license for 10 Windows Servers is also available

ETERNUS SF MA for Hyper-V 2 CPU with Windows: License enabling the probe for the collection of data from and supervision of Hyper-V
- Host, VM: CPU/Network Utilization, Performance
- Virtual Storage Device: Performance
- Virtual Processor: Performance
- Virtual Network Adapter, Network Swtich: Performance
- Physical /Logical Disk: Performance

Bundle license for 10 x 2 CPU is also available

ETERNUS SF MA for Linux: License enabling the probe for the collection of data from and supervision of a single Linux Server. Information collected from the server system includes
- Memory, CPU: Usage, Performance
- Disk: Performance
- Network Adapter: Network Utilization, Performance

Bundle license for 10 Linux Servers is also available

ETERNUS SF MA for FC-Switch: License enabling the probe for the collection of data from and supervision of a single FC-Switch. Information collected from the FC-Switch includes
- Memory, CPU: Utilization
- IPort, Zone: Utilization, Performance

Bundle license for 10 FC-Switches is also available

ETERNUS SF MA for IP-Switch: License enabling the probe for the collection of data from and supervision of a single IP-Swtich. Information collected from the IP-Switch includes
- Interface performance
- Interface utilization

Bundle license for 10 IP-Switches is also available

(For managing an ETERNUS DX S3 system, the ETERNUS SF Storage Cruiser V16 Standard License mandatory.)

Technical details

ETERNUS SF Whitepapers and Details for Features

ETERNUS SF MA	http://www.fujitsu.com/global/products/computing/storage/software/sf-ma/

Supported Devices

Monitored Server Platform	Microsoft Windows Server 2012, 2012 R2 Microsoft Windows Server 2008, 2008 R2 Microsoft Windows 8 Microsoft Windows 7 Red Hat Enterprise Linux 7 Red Hat Enterprise Linux 6 Red Hat Enterprise Linux 5 SUSE Linux Enterprise Server 11 VMware® vSphere 6.0 VMware® vSphere 5 Microsoft Windows Server 2012 Hyper-V, 2012 R2 Hyper-V Microsoft Windows Server 2008 Hyper-V, 2008 R2 Hyper-V
Hybrid Storage Systems/Disk Storage Systems	ETERNUS DX100 S3, DX200 S3, DX500 S3, DX600 S3 ETERNUS DX8700 S3, DX8900 S3 NetApp FAS series Hitachi Data Systems G200, G400, G600, G800, G1000, HUS VM
All Flash Arrays	ETERNUS AF250, AF650 ETERNUS DX200F
FC-Switches	Brocade FC-Switches (managed by Brocade Network Advisor Professional / Enterprise v12.3.0 or later)
IP-Switches	Cisco and Brocade IP-Switches (with SNMP v1, v2c and v3 support) SR-X324T2, SR-X526R1

Installation specification

MA Server Platforms	VMware® vSphere 6.0 VMware® vSphere 5 Microsoft Windows Server 2012 Hyper-V, 2012 R2 Hyper-V Microsoft Windows Server 2008 Hyper-V, 2008 R2 Hyper-V
MA Probe Platforms	VMware® vSphere 6.0 VMware® vSphere 5 Microsoft Windows Server 2012 Hyper-V, 2012 R2 Hyper-V Microsoft Windows Server 2008 Hyper-V, 2008 R2 Hyper-V
Windows Probe Platforms	Microsoft Windows Server 2012, 2012 R2 Microsoft Windows Server 2008, 2008 R2 Microsoft Windows 8 Microsoft Windows 7

Fujitsu products, solutions & services

In addition to FUJITSU ETERNUS SF MA V8.5 Storage Management Software, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

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 offerings. This allows customers to select 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/products/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu ETERNUS SF MA V8.5 Storage Management Software, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/eternus

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 http://www.fujitsu.com/global/about/environment



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