

# SPEC Sheet

## FUJITSU PRIMEFLEX vShape 200 with ETERNUS

PRIMEFLEX vShape is a reference architecture providing a reliable solution to address the complex challenges of virtualization such as performance, availability, security, flexibility and efficiency. The partnership between Fujitsu, VMware and Brocade removes the headaches associated with self-configuration and guarantees a tested and perfectly synchronized combination of technologies. By tailoring the solutions to the application's requirements, the purchase cost, time to deploy and provisioning time are all considerably lowered.



### Get ready to innovate!

The flexible and scalable PRIMEFLEX vShape solutions combine all aspects of a virtual environment, based on optimized technologies and best practice solutions, with simple implementation and operation. vShape is unique in bringing complete and validated virtual infrastructures, all supported under a single maintenance contract provided by Fujitsu.

Key customer benefits are:

- Validated IT infrastructure for virtualized environments
- Clear management and consolidation benefits
- Optimized to deliver against customer needs:
  - Capacity
  - Performance
  - Availability
- Highly scalable and flexible reference architectures
- Simple, fast and reduced risk implementation
- Improves operational efficiency by reducing costs
- Single point of contact for the maintenance of the complete solution

vShape consists of Fujitsu's ETERNUS storage, Brocade IP switches and VMware hypervisor technology, running on Fujitsu's PRIMERGY servers designed and optimized for virtualization.

The flexible and scalable vShape solutions combine all aspects of a virtual environment, based on optimized technologies and best practice solutions, with simple implementation and operation.

Customers receive a validated pre-designed, pre-integrated, pre-packaged set of infrastructure components delivered with a mandatory deployment service to provide a ready to use virtualization platform for virtual machine workloads.

vShape 200 is designed to support 200 standard virtual machines in a High Availability or Standard configuration.

A customer may have virtual machines of differing sizes to the standard used in defining the vShape platform and still be sure of performance so long as the aggregate specification of the virtual machines do not exceed the defined configuration parameters.

# vShape 200 Infrastructure Specifications

	<b>vShape 200 ECO</b>		<b>vShape 200 HA</b>	
	FTS:VSP200E-S-V-B-E		FTS:VSP200-S-V-B-E	
<b>Servers</b>				
Model	PRIMERGY RX2540 M2			
No. of Servers	4		5	
Processors	Intel Xeon E5-2680v4 14C/28T 2.40GHz35Mb			
CPU/Server	2		2	
RAM/Server	192 GB DDR4-2400 MHz			
10 Gb Ethernet/Server	4			
1 Gb Ethernet/Server	1 (iRMC)			
Further information	<a href="http://globalsp.ts.fujitsu.com/dmsp/Publications/public/ds-py-rx2540-m2.pdf">http://globalsp.ts.fujitsu.com/dmsp/Publications/public/ds-py-rx2540-m2.pdf</a>			
<b>Networking</b>				
Model	Brocade VDX 6740			
No. of Switches	1		2	
Total 10GbE Ports	24		48	
Further information	<a href="http://www.brocade.com/en/backend-content/pdf-page.html?content/dam/common/documents/content-types/datasheet/brocade-vdx-6740-switches-ds.pdf">http://www.brocade.com/en/backend-content/pdf-page.html?content/dam/common/documents/content-types/datasheet/brocade-vdx-6740-switches-ds.pdf</a>			
<b>Storage</b>				
Model	ETERNUS DX100 S4	ETERNUS AF250	ETERNUS DX100 S4	ETERNUS AF250
Disk Type	SAS 10K 600 GB	SSD 1.92 TB	SAS 10K 600 GB	SSD 1.92 TB
No. of Disks, (Data/Spare)	71, (68/3)	20, (19/1)	71, (68/3)	20, (19/1)
Usable Capacity (TB)	20			
Total IOPS	10000			
Host Interfaces 1GbE/10GbE	0/4			
Further information	<a href="https://sp.ts.fujitsu.com/dmsp/Publications/public/ds-eternus-dx100-s4-ww-en.pdf">https://sp.ts.fujitsu.com/dmsp/Publications/public/ds-eternus-dx100-s4-ww-en.pdf</a> <a href="https://sp.ts.fujitsu.com/dmsp/Publications/public/ds-eternus-af250-ww-en.pdf">https://sp.ts.fujitsu.com/dmsp/Publications/public/ds-eternus-af250-ww-en.pdf</a>			
<b>Rack Infrastructure</b>				
Model	PRIMECENTER M2 Rack 42U 1200x800			
Dimensions	1200x800			
Height Units	42			
Populated Height Units	15HU		18HU	
<b>Software</b>				
Fujitsu	ServerView Suite and iRMC S4 advanced pack ETERNUS SF Replication Bundle included in vShape configurations with ETERNUS DX comprises Storage Cruiser Standard, Advanced Copy Manger Local Copy, Remote Copy, for Exchange Server and for SQL Server licenses. All-in FlashPack included in vShape configurations with ETERNUS AF250 comprises Storage Cruiser Standard, Advanced Copy Manager local & Remote Copy and Storage Cruiser Quality of Service Management Option.			
VMware	Included: VMware vSphere 6 Standard Optional: VMware vSphere 6 Enterprise/Enterprise Plus are also available, please speak with your Fujitsu pre-sales representative regards upgrades and costs.			
Supported Operating Systems	As defined by the guest OS support matrix from VMware see: <a href="http://partnerweb.vmware.com/comp_guide2/pdf/VMware_GOS_Compatibility_Guide.pdf">http://partnerweb.vmware.com/comp_guide2/pdf/VMware_GOS_Compatibility_Guide.pdf</a>			
<b>Systems Management</b>				
Fujitsu	As part of the implementation services, Fujitsu Professional services will deploy two virtual management servers to support further configuration and daily administration/management of the vShape infrastructure. The management servers include the following services:			
Fujitsu	ServerView Operations Manager Storage Cruiser Standard			
VMware	VMware vCenter and relevant client for access			

# vShape 200 Environmental Information

	vShape 200 ECO		vShape 200 HA	
<b>Installation Specification</b>				
Dimensions (W x D x H)	800mm x 1,200mm x 2,000mm			
Transport Dimensions (W x D x H)	900mm x 1,400mm x 2,150mm (approx.)			
Service Area: Front	900 mm (35.43 inch) or more			
Service Area: Rear	900 mm (35.43 inch) or more			
Configured Weight	362.28Kg	280.54Kg	393.12Kg	311.38Kg
Maximum Possible Payload	840 Kg			
Power	Voltage: AC 200 – 240v Phase: Redundant House Connections Required: 2 x AC CEE 32AMP			
Active Power (According to construction)	3302.56W	2395.78W	3813.20W	2906.42W
Heat emission (According to construction)	11889.24 kj/h (11271.54 BTU/h)	8624.85 kj/h (8176.76 BTU/h)	13727.55 kj/h (13014.34 BTU/h)	10463.16 kj/h (9919.56 BTU/h)
Temperature (operating)	5 – 35°C (41 – 95°F)			
Humidity (operating)	20 – 80% RH			
Network Connections (House Connections Required)	2 x 10GbE FCLC		4 x 10GbE FCLC	
<b>Professional Services</b>				
Deployment Service	Optional (Mandatory in UK/Ireland)			
Integration Service	Optional			
<b>Maintenance &amp; Support Services</b>				
	Service Pack is Mandatory (excludes rack infrastructure)			
Service Period	3 years or 5 years			
Service Type	<b>Classic</b>	<b>Superior</b>	<b>Premium</b>	
Service Level	5x9 with 4 hour response	7 x 24 with 4 hour response	7 x 24 with 8 hour recovery (requires validation check)	
Proactive Services	Optional		Bi-Yearly	
	For details see separate solution contract datasheet			
<b>General Notes</b>				
Admin client (additionally required)	Server or PC with operating system, browser and java are required to access the management server hosted within the vShape.			
SQL Server Instance (additionally required)	For 50 and above Virtual machines vCenter requires an SQL database instance.			
Windows Server 2016 Standard License (required)	vShape deployments include two virtual management servers, as such two Windows Server (virtual use right) licenses are required.			
Installation	By consultants certified through Fujitsu in accordance with the installation guide and the related documents.			
Implementation	Installation, configuration and implementation require detailed knowledge of the whole vShape Infrastructures for VMware solution and the supporting software components and must be done by Fujitsu professional service or certified consultants.			
User Skills	Configuration and daily administration require a good working knowledge of: VMware vSphere and vCenter, Brocade VDX Switches, Storage Cruiser Standard, Fujitsu ServerView Suite			

## Contact

FUJITSU Technology Solutions GmbH  
E-mail: storage-pm@ts.fujitsu.com  
Website: www.fujitsu.com/fts/vshape  
2017-06-07 WW-EN

© 2015 - 2017 Fujitsu Technology Solutions GmbH, FUJITSU LIMITED. Fujitsu, the Fujitsu logo, vShape, ETERNUS and PRIMERGY are trademarks or registered trademarks of Fujitsu Limited in Japan and other countries. Other company, product and service names may be trademarks or registered trademarks of their respective owners. Technical data subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.