Online Storage Systems

ETERNUS DX Series






Model	ETERNUS DX60	ETERNUS DX100 / DX200	ETERNUS DX500 / DX600	ETERNUS DX8700 S3 / DX8900
Type	The Economy Disk Storage System for SMBs	Unified disk storage system for small and mid-range enterprises		Enterprise Storage without Limits
Host Interfaces	8 / 16 Gbps FC, 1 / 10 Gbps iSCSI, 6 / 12 Gbps SAS	8 / 16 / 32 Gbps FC, 1 / 10 Gbps iSCSI, 6 / 12 Gbps SAS, 1 / 10 Gbps Ethernet	8 / 16 / 32 Gbps FC, 10 Gbps FCoE, 1 / 10 Gbps iSCSI, 1 / 10 Gbps Ethernet	16 Gbps FC, 10 Gbps FCoE, 1 / 10 Gbps iSCSI
Max. system memory	8 GB	32 GB / 64 GB	128 GB / 256 GB	1 TB / 6 TB
Max. Disk Drives	48 / 96 x Nearline SAS and SAS in mixed configuration (3.5" / 2.5") / incl. 8 SSD max.	144 / 264 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	528 / 1056 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	1,536 / 4,608 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")
Max. raw capacity SSD	31 TB	2,212 / 4,055 TB	8,110 / 16,220 TB	23.543 / 70,779 TB
Max. raw capacity HDD	480 TB	1.728 / 3.168 TB	6.336 / 12.672 TB	9.216 / 27.648 TB
Max. Host Interfaces	4	16	16 / 32	128 / 384
No. of connect. hosts	Max. 128	Max. 1,024	Max. 4,096	Max. 8,192
RAID Level	0, 1, 1+0, 5, 5+0, 6			
Thin Provisioning & AST	Thin Provisioning: ✓ AST: -	✓	✓	✓
Transparent Failover & Auto QoS	-	✓	✓	✓
Remote Replication	-	✓	✓	✓
Deduplication / compression	-	- / x	x / x	- / -
Storage Management	ETERNUS SF V16 Storage Management Software suite to achieve business continuity and to optimize storage resources.			
Optional Software	The Fujitsu ETERNUS Snapshot Manager is feature-rich software to manage and catalog application-consistent hardware snapshots of ETERNUS AF/DX arrays without scripting.			

ETERNUS AF Series




Model	ETERNUS AF250	ETERNUS AF650
CPU	6core, 2.2 GHz	10core, 3.0 GHz
Max. System Memory	64 GB	256 GB
Number of drives	2 - 48	2 - 192
Max. Capacity [1]	737 TB raw 3686 TB effective [2]	2949 TB raw 14745 TB effective [2]
Interface	8 x FC 32G / 8 x FC 16G / 8 x iSCSI 10G	16 x FC 32G / 32 x FC 16G / 16 x iSCSI 10G
Included Software	All-in FlashPack (Configuration, Management and Administration, Local and Remote Copy, Automated Quality of Service, Deduplication and Compression)	

ETERNUS CD10000

Model	ETERNUS CD10000	ETERNUS CD10000 Quick Start Edition
Type	Hyper-scale, software-defined storage (SDS)	Ceph storage evaluation platform
Host connectivity options	Block, File and Object [3]	
Software version	Opensource software: Ceph Enterprise	
Hardware platform	Integrated system based on PRIMERGY and ETERNUS	Flex Node
Storage Management	Fujitsu's GUI Management console	
Node Types	Various Storage Nodes and Infrastructure component options	1x Flex Node hosting multiple virtualized nodes
Basic Configuration	4x Storage node +1x Management node + Infrastructure included	1x Quick Start Edition
Max. no of nodes	Upgradableup to 500 nodes [4]	1x Flex Node
Max. usable capacity	100 PB [5]	44 TB
DR capabilities	Split-site and Geo-replication across clusters	Possible with two Quick Start Editions
Application interfaces	Ceph storage interfaces (Object, S3, Block, File), OpenStack interfaces (Swift, Cinder, Glance)	



CELVIN NAS Servers




Model	CELVIN NAS Server QE707 / Q807 / Q805 / Q905 / QR806 / QR1006
Host Interfaces	Ethernet(1GbE), 10GbE(QR-Models), USB3.0/USB2.0
Max. Storage Capacity	12 TB / 24 TB / 24 TB / 36 TB / 32 TB / 64 TB
VMware, Citrix, Hyper-V Virtualization	yes, for CELVIN QR and Q systems
Snapshots	QE: no / Q: yes w/4GB RAM / QR: yes
Backup / Replication / Restore	yes, all models
FTP, file, web, printer, SQL and multimedia server	QR806/QR1006 max Capacity: 32 / 64TB Q805 / Q905 max Capacity: 32 / 48 TB
Cloud Synchronization	yes

NetApp FAS Series (Hybrid / All Flash)







Model	FAS2620 / FAS2650	FAS8200 / FAS9000	AFF A300 / A700	AFF A700s Node	SF4805 / SF9605 / SF19210 / SF38410
Type	Unified, Hybrid, Scale-Out Storage		Unified, Flash, Scale-Out Storage	Unified, Flash, Scale-Out Storage	Block, Flash, Scale-Out Storage
Max. Capacity	1243 – 1440 TB	4.8 – 14.4 PB	5.9 – 7.3 PB	19,8 PB	38.4 TB (per node)
Effective Capacity [6]	Depends on usage of NetApp's efficiency features		24 – 30 PB	77,8 PB	160 TB (per node)
Protocols	FC, FCoE, iSCSI, NFS, pNFS, SMB			FC, iSCSI, NFS, pNFS, CIFS/SMB	FC, iSCSI
RAID Type	RAID TEC™, RAID DP®		RAID DP®	RAID DP®	Helix RAID-less

[1] Maximum raw capacity depends on available SSD types | [2] Calculation based on deduplication/compression factor of five | [3] planned | [4] Higher numbers of nodes on special release | [5] Higher capacities on special request
[6] Effective capacity is based on 5:1 storage efficiency ratios with the maximum number of SSDs installed. The actual ratio can be higher depending on workloads and use cases.

Data Protection and Services

ETERNUS CS800



Model	ETERNUS CS800	
	Entry	Scale
Type	Backup appliance	
Capacity (net usable)	8 - 24 TB, 8 - 120 TB	32 - 352 TB
Capacity (logical)	Up to 1.2 PB, up to 6 PB	Up to 17.6 PB
Hot Spare Option	No	Yes
NAS – supported protocols	CIFS, NFS	CIFS, NFS
NAS Shares (max.)	128	128
Partitions (max.)	64	64
Virtual Tape Cartridges (per partition)	9,000	9,000
Virtual Tape Drives (max.)	80	160
Performance	Up to 5.5 TB/h	Up to 10.6 TB/h
Performance (max. SPEED mode)	Up to 13.4 TB/h	Up to 22.0 TB/h
Standard software included	Deduplication, Replication, Path-to-Tape, OST	

ETERNUS CS8000



Model	ETERNUS CS8000			
	CS8050	CS8200	CS8400	CS8800
Type	Datacenter storage solution for backup and archive automation			
VTL Front-end Ports	4 FC 32 Gb	4 to 8 FC 32 Gb / FICON 32 Gb	4 to 84 FC 32 Gb / FICON 32 Gb	
Virtual Tape Drives	max. 32	32 to 64	32 to 5,208	
NAS Front-end Ports	-	4 to 8	4 to 84	
Sustained Performance (max.)	1.4 TB/h	30 TB/h	150 TB/h	
Internal RAID Capacity	14 TB	14 TB to 3,792 TB	14 TB to 60,672 TB	
Internal VTL Deduplication Store Option (raw)	7 TB / 14 TB	1 to 480 TB	1 to 4,800 TB	
Virtual Tape Volumes (max.)	20,000	300,000	3,000,000	
NAS Shares (max.)	-	2,048	2,048	
Number of Files (max.)	-	2 Billion	2 Billion	
Physical Tape Volumes (max.)	500	50,000	50,000	
Physical Tape Libraries (max.)	1	10	10	

ETERNUS CS200c



Model	ETERNUS CS200c	
	ECO	FLEX
Type	Integrated Backup Appliance Powered by Commvault®	
Usable Capacity	8 TB	16 / 24 / 32 / 48 TB
Software licensing	Various licensing options	
Ethernet Ports	3 x 1 Gbps + 2 x 10 Gbps	3 x 1 Gbps + 4 x 10 Gbps
FC Ports	-	Up to 2 x 16 Gbps
Tapeout	SAS 12 Gbps	SAS 12Gbps or FC 16Gbps
Scalability	Yes - capacity upgrades & parallel operation of appliances up to PBytes of capacity	
Database performance	SSD	
Data protection functions	Backup & recovery, deduplication, archiving, encryption, application support, snapshot, replication, tape attachment, cloud backup	
Supported environments	Physical, virtual and NAS / NDMP systems	

Tape Systems









Model	ETERNUS LT20 / LT40 / LT60	ETERNUS LT260	Quantum Scalar i3 / i500 / i6 / i6000	Oracle SL150 / SL4000* / SL8500*
Type	LTO-6 / LTO-7	LTO-6 / LTO-7	LTO-6 / LTO-7 / LTO-8	LTO-7 / LTO-8
Max. Capacity (native)	12 - 48 TB / 36 - 144 TB / 72 - 288 TB	3,360 TB	2.4 PB / 9.6 PB / 4.9 PB / 144 PB	5.4 PB / 108 PB / 1210.5 PB
Cartridges (max.)	8 / 24 / 48	560	200 / 409 / 800 / 12,006	450 / 9,000 / 100,880
Drives (max.)	1 / 2 / 4	42	12 / 18 / 24 / 192	30 / 120 / 640
Interfaces	SAS, FC	SAS, FC	SAS, FC / SAS, FC / FC / FC	SAS, FC / FC / FC
Note	-	-	-	*also available with enterprise drive type T10000

Commvault HyperScale™ Appliance



Model	Commvault HyperScale™ Appliance
Type	Integrated Backup Appliance
Usable Capacity	32, 48, 64, 80 TB
Ethernet Ports	6 x 10 Gbps, 6 x 1 Gbps, 3 x 1 Gbps iRMC
FC Ports	Up to 2 x 8 Gbps (optional)
Tapeout	FC, SAS (optional)
Scalability	Scale-out architecture, scalable up to PBytes of capacity
Data protection functions	Commvault HyperScale™ Software
Supported environments	Physical, virtual and NAS / NDMP systems

Veritas NetBackup appliance



Model	NetBackup 5240		NetBackup 5330 | 5340	
Type	Master or Media Server	Media Server with additional Storage	Media Server with additional Storage	
Usable Capacity	4 – 27 TB	53 – 294TB	229 – 1375 TB	240 – 1920 TB
Ethernet Ports	Up to 8 x 1 Gbps Up to 8 x 10 Gbps		4 x 1 Gbps 2 to 10 x 10 Gbps	4 to 20 x 10 Gbps
iSCSI ports	Up to 2 x 10 Gbps		-	-
FC Ports	Up to 10 x 8 Gbps		Up to 8 x 8 Gbps	Up to 16 x 8 Gbps
Tapeout	FC 8 Gbps		FC 8 Gbps	FC 8 Gbps
Scalability	Up to 100+ media server can be managed by one master server			
Database performance	Up to 192 concurrent backup jobs		Up to 600 concurrent backup job	
Data protection functions	Backup & recovery, application support, snapshot, replication, deduplication, tape attachment, cloud backup			
Supported environments	Physical, virtual and NAS/NDMP systems			

Note: NetBackup Virtual Appliance is available as Master/Media Server for Remote Offices and Branch Offices, capacity up to 2 TB.
The virtual appliance is deployable in existing VMware®Infrastructures

Storage Software

Commvault software:	By leveraging a single unified code base and platform, Commvault software simplifies an IT organizations ability to manage data across its lifecycle with integrated modules for Backup & Recovery, Archive, Replication, Resource Management and Search.
NetBackup:	Simplifies the protection of your information driven enterprise by automating advanced technologies and standardizing operations across applications, platforms, and virtual environments.
Enterprise Vault:	The industry's most widely-deployed archiving solution, is a platform that bridges the gap between legal and IT by adding intelligence to the way organizations store, manage, and discover information.

More information about our software portfolio is available on: www.fujitsu.com/fts/products/computing/storage/software

Services

FUJITSU hardware is marked by outstanding quality and paramount focus on business-centric design. To complete and ensure this over the entire lifecycle, Fujitsu offers a variety of Product Maintenance and Support Services safeguarding datacenter operations worldwide. Warranty comes standard with our products; Support Pack for Hardware or Software, our ServiceContract or SolutionPacks or SolutionContract are the perfect extension on top of the standard warranty.
To help you right from the start, our InstallationPack ensures smooth IT operation while internal IT specialists can concentrate on their core business.

For more information regarding services please visit: www.fujitsu.com/fts/products/product-support-services

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