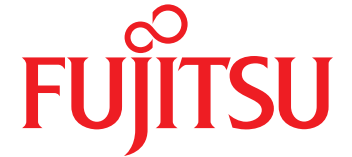


Online Storage Systems



ETERNUS DX Series



Model	ETERNUS DX60	ETERNUS DX100 / DX200	ETERNUS DX500 / DX600	ETERNUS DX900	ETERNUS 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	8 / 16 / 32 Gbps FC, 1 / 10 Gbps iSCSI	8 / 16 / 32 Gbps FC, 1 / 10 Gbps iSCSI
Max. system memory	16 GB	32 GB / 128 GB	512 GB / 768 GB	3 TB	18 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")	576 / 1,056 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	2304 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	6,912 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")
Max. raw capacity SSD	31 TB	4,424 / 8,110 TB	17,695 / 32,440 TB	70,779 TB	141,558 TB
Max. raw capacity HDD	576 TB	2,016 / 3,696 TB	7,786 / 14,506 TB	31,699 TB	93,312 TB
Max. Host Interfaces	4	16	16 / 32	64	384
No. of connect. hosts	Max. 128	Max. 1,024	Max. 4,096	Max. 8,192	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	- / x	- / x
Storage Management	ETERNUS SF V16 Storage Management Software suite to achieve business continuity and to optimize storage resources.				

ETERNUS AF Series



Model	ETERNUS AF150	ETERNUS AF250	ETERNUS AF650
CPU	4 core, 2.2 GHz	8 core, 2.2 GHz	12core, 2.6 GHz
Max. System Memory	32 GB	128 GB	1536 GB
Number of drives	2 - 24	2-264	2 - 1056
Max. Capacity ¹	92 TB raw	8,110 TB raw, 40,550TB effective ²	32,440 TB raw, 162,200 TB effective ²
Interface	8 x FC 16G / 8 x iSCSI 10G	8 x FC 32G / 16x FC 16 G / 8x iSCSI 10G	32 x FC 32G / 32 x FC 16G / 16 x iSCSI 10G
Included Software	ETERNUS SF Express	All-in FlashPack (Configuration, Management and Administration, Local and Remote Copy, Automated Quality of Service, Deduplication and Compression)	

ETERNUS CD10000 Reference Architecture

Model	ETERNUS CD10000 Reference Architecture
Type	Hyper-scale, software-defined storage (SDS)
Host connectivity options	Block, File and Object
Software version	Opensource software: Ceph Enterprise
Node Types	Various Storage Nodes and Infrastructure component options
Max. no. of nodes	Upgradable up to 500 nodes ³
Max. usable capacity	100 PB ⁴
DR capabilities	Split-site and Geo-replication across clusters
Application interfaces	Ceph storage interfaces (Object, S3, Block, File), OpenStack interfaces (Swift, Cinder, Glance)

CELVIN NAS



NetApp FAS, Solid Fire, Fire, AFF Series (Hybrid / All Flash)



Model	CELVIN NAS Server QE707 / QE807 / Q805 / Q905 / QR806 / QR1006
Host Interfaces	Ethernet(1GbE), 10GbE(QR-Models), USB3.0 / USB2.0
Max. Storage Capacity	12 TB / 24 TB / 32 TB / 48 TB / 32 TB / 64 TB
VMware, Citrix, Hyper-V Virtualization	yes, for CELVIN QR and Q systems
Snapshots	QE: no / Q: yes w/4 GB RAM / QR: yes
Backup / Replication / Restore	yes, all models
FTP, file, web, printer, SQL and multimedia server	QR806 / QR1006 max Capacity: 32 / 64 TB Q805 / Q905 max Capacity: 32 / 48 TB
Cloud Synchronization	yes

Model	FAS			Solid Fire		
	FAS2650 / FAS2620	FAS2750 / FAS2720	FAS8200 / FAS9000	H-610S-1 node	H-610S-2 node	H-610S-4 node
Type	Unified, Hybrid, Scale-Out Storage			Block, All Flash, Scale-Out Storage		
Max. Capacity	1,243 - 1,440 TB		4.8 - 14.4 PB	11.52 TB	23.04 TB	46.08 TB
Effective Capacity ⁶	Depends on usage of NetApp's efficiency features			19.64 TB	39.28 TB	78.57 TB
Protocols	FC, FCoE, iSCSI, NFS, pNFS, CIFS / SMB			iSCSI		
Data Protection	RAID TEC™, RAID DP®, Snapshot			Helix RAID-less		

Model	AFF			
	AFF A220	AFF A300 / A320/A700 / A800	AFF A700s Node	AFF C190
Type	Unified, All Flash, Scale-Out Storage			
Max. SSD	1,728	4,608 / 576 / 5,760 / 2,880	2,592	24
Max Effective Capacity ⁶	193.3 PB	562.2 PB / 35 PB / 702.7 PB / 316.3 PB	316.3 PB	50TiB ⁵
Protocols	FC, FCoE, iSCSI, NFS, pNFS, SMB		NVMe/FC, FC, iSCSI, NFS, pNFS, CIFS/SMB	
Data Protection	NetApp RAID DP®, RAID-TEC™ and Snapshot technology			

¹Maximum raw capacity depends on available SSD types | ²Calculation based on deduplication/compression factor of five | ³Higher numbers of nodes on special request | ⁴Higher capacities on special request | ⁵Effective capacity is based on 3:1 storage efficiency ratios

Data Protection and Services



ETERNUS CS800



Model	ETERNUS CS800	
	Entry / Scale	Enterprise
Type	Backup appliance	
Capacity (net usable)	11 - 23 TB / 27 - 315 TB	102 - 1020 TB
Capacity (logical)	- / Up to 3.4 PB	Up to 20 .4 PB
Hot Spare Option	No	Yes
NAS - supported protocols	CIFS, NFS	CIFS, NFS
NAS Shares (max.)	128	128
Partitions (max.)	- / 256	512
Virtual Tape Cartridges (per partition)	- / 61,000	61,000
Virtual Tape Drives (max.)	- / 80	160
Performance	Up to 12 TB/h	Up to 24 TB/h
Performance (max. SPEED mode)	Up to 34 TB/h	Up to 37 TB/h
Standard software included	Deduplication, Replication, Path-to-Tape, OST	

ETERNUS CS8000



Model	ETERNUS CS8000				
	CS8050 NAS	CS8050	CS8200	CS8400	CS8800
Type	Storage appliance for archiving	Branch-office backup	Central storage for backup, archive, second-tier and object data		
Capacity	28, 42, 56, 70 TB	14 TB	19 TB to 5.9 PB	19 TB to 96 PB / 38 TB to 96 PB	
VTL Front-end Ports	- (no VTL)	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	
Performance (max.)	-	1.4 TB/h	30 TB/h	150 TB/h	
Internal VTL Deduplication Store Option (usable)	-	7 TB, 14 TB	1 to 480 TB	1 TB to 4.8 PB	
NAS Front-end Ports	2 to 4	- (no NAS)	4 to 8	4 to 84	
NAS Shares (max.)	256	-	2,048	2,048	
Number of Inodes	200 Million	-	2 Billion	2 Billion	
Back-end Tape Libraries	-	1	10	10	

Commvault Appliance



Model	RO1100	HS1300	HS3300
Type	Integrated Backup Appliance		
Usable Capacity	5, 14.5 TB	29, 43, 58, 87 TB	174, 262 TB
Ethernet Ports	4 x 1 Gbps + 2 x 10 Gbps	6 x 10 Gbps, 6 x 1 Gbps, 3 x 1 Gbps iRMC	3 x 1 Gbps iRMC
FC Ports	2 x 16 Gbps (optional)	Up to 6 x 16 Gbps (optional)	6 x 16 Gbps
Tapeout	Optional SAS 12 Gbps, FC 16 Gbps		6 x 16 Gbps FC / 6 x 12 Gbps SAS
Scalability	Yes - parallel operation of appliances	Scale-out architecture, scalable up to Pbytes of capacity	
Database performance	SSD, NVMe		
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	ETERNUS LT140	ETERNUS LT260	Quantum Scalar i3 / i500 / i6 / i6000	Oracle SL150 / SL4000* / SL8500*
Type	LTO-6 / LTO-7 / LTO-8	LTO-6 / LTO-7 / LTO-8	LTO-6 / LTO-7 / LTO-8	LTO-6 / LTO-7 / LTO-8	LTO-7 / LTO-8
Max. Capacity (native)	20 - 96 TB	3,360 TB	6,720 TB	4.8 PB / 4.9 PB / 9.6 PB / 144 PB	5.4 PB / 108 PB / 1210.5 PB
Cartridges (max.)	8	280	560	400 / 409 / 800 / 12,006	450 / 9,000 / 100,880
Drives (max.)	1	21	42	24 / 18 / 24 / 192	30 / 120 / 640
Interfaces	SAS, FC	SAS, FC	SAS, FC	SAS, FC / SAS, FC / FC / FC	SAS, FC / FC / FC
Note	-	-	-	-	*also supported with enterprise drive type T10000

Commvault Reference Architecture



Model	Reference Architecture for Commvault HyperScale™ Software
Type	Reference Architecture
Usable Capacity	up to 288 TB per block
Ethernet Ports	6 x 10 Gbps, 6 x 1 Gbps, 3 x 1 Gbps iRMC
FC Ports	up to 2 x FC 8 Gbps (optional)
Tapeout	FC, SAS (optional)
Scalability	Scale-out architecture, scalable up to PBytes of capacity
Data protection functions	Commvault HyperScale™ Software, Commvault Complete™ Backup & Recovery
Supported environments	Physical, virtual and NAS / NDMP systems

Veritas NetBackup appliance



Model	NetBackup Virtual Appliance	NetBackup 5240		NetBackup 5340
Type	Master/Media Server for Remote Offices and Branch Offices	Master or Media Server	Media Server with additional Storage	Media Server with additional Storage
Usable Capacity	2 TB	4 - 27 TB	53 - 294 TB	120 - 1920 TB
Ethernet Ports	1 x 10 GbE (virtual interface on deployment)	Up to 8 x 1 Gbps / Up to 8 x 10 Gbps		4 x 1 Gbps
iSCSI ports	-	Up to 2 x 10 Gbps		2 to 10 x 10 Gbps / 4 to 20 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	Backup & recovery, application support, snapshot, replication, deduplication, tape attachment, cloud backup		
Supported environments	physical, virtual and NAS/NDMP systems	Physical, virtual and NAS/NDMP systems		

Storage Software

Commvault Software:	By leveraging a single unified code base and platform, Commvault software simplifies an IT organization's ability to manage data across its lifecycle for Backup & Recovery, Archive, Replication, and Analytics.
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/emeia/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/emeia/products/computing/product-support-services/	

Note: The virtual appliance is deployable in existing VMware® Infrastructures 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

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