

Fujitsu ETERNUS Storage Solutions

ETERNUS DX Primary Storage Systems

Economy

Scalable hybrid ETERNUS DX entry and midrange systems

Hybrid High-end



DX60 S3



DX100 S3



DX200 S3



DX500 S3



DX600 S3



DX8700 S2

ETERNUS SF V16 storage management software

- All S3 models base on proven performance architecture; entry and midrange models deliver unified block and file access, increasing utilization and consolidation capabilities
- The high-end segment offers peak loads up to 1 Mio. IOPS
- Outstanding management functions across the line for better business support

1. Choose from menu



2. Check status



3. Define action



... with simple and transparent licensing!

ETERNUS SF Express

- Bundled with ETERNUS DX entry systems for free
- Snapshot functionality included
- Simple upgrade by license key

ETERNUS SF

- Controller-based, capacity-independent licensing
- Grow data without growing costs
- Transparent license options
- No unplanned investments

Branch Offices

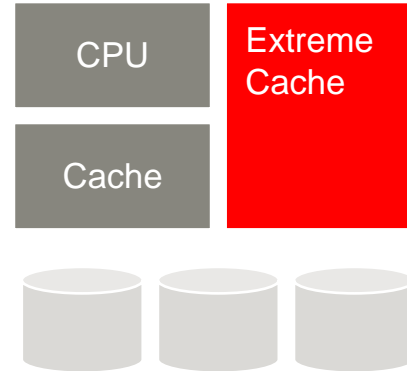
Headquarter



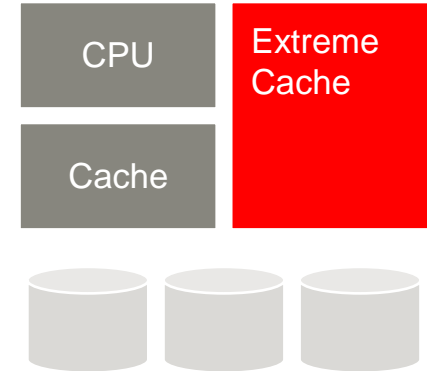
Benefits

- Midrange systems can extend the cache by using flash technology
- BI applications deliver results faster
- When loading a complete DB into the Flash Cache also random-read IO of OLTP applications will be accelerated
- Loading of golden image masters boosts virtual desktop environments

Controller 1

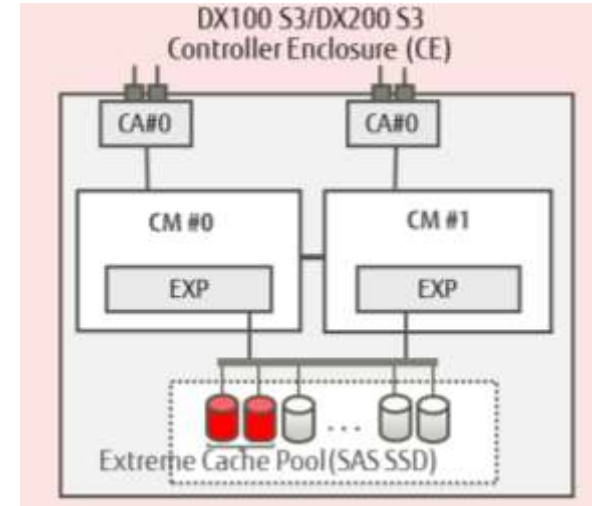


Controller 2



- ✓ Second Level Cache available for DX100 S3/DX200 S3/DX500 S3/DX600 S3
- ✓ Read caching
- ✓ Significant improvement of IOPS and latency
- ✓ Reduces spindles count to achieve high performance
 - Saves investment cost
 - Lowers power consumption

Note: for DX500 S3/600 S3 the use of faster, controller based Extreme Cache is recommended



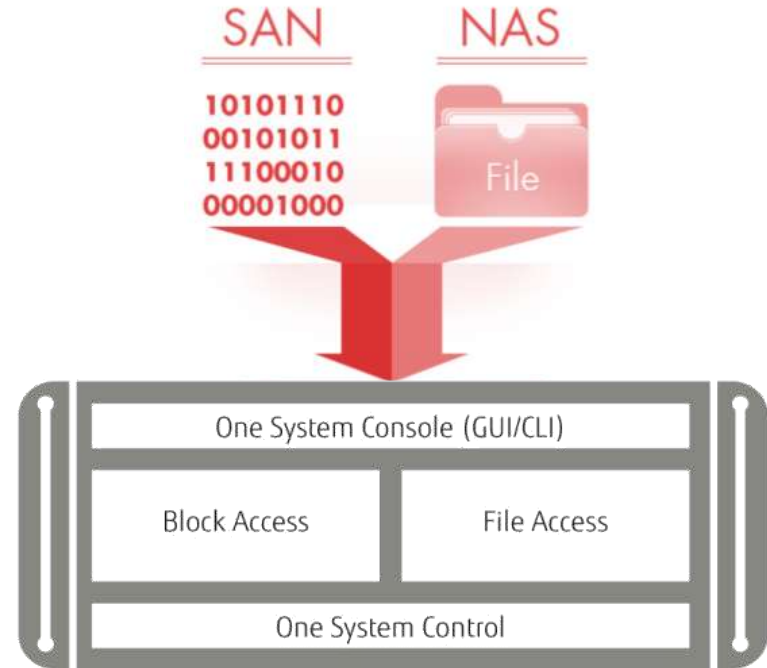
Maximum capacity

DX100 S3/DX200 S3:800GB

DX500 S3/DX600 S3:3.2TB

The right solution for every application scenario

- Block and file access run within the same storage controller
 - Enabling higher storage consolidation
 - Reducing operational complexity
- All ETERNUS DX entry-level and midrange models have the same unified functionality and management environment
- Any model can be ordered with unified functionality or as a pure block storage system with an upgrade possibility to unified
- NAS enhancements
 - Quota management and multiple file systems
 - Users can recover previous versions of files



Whether as a unified or purely block-based system, ETERNUS DX offers the right solutions for every application scenario.

Prio 1: Biz critical apps

- Online shop
- ERP
- CRM

Prio 2: Analytics

- DWH
- BI
- Mail

Prio 3: Internal services

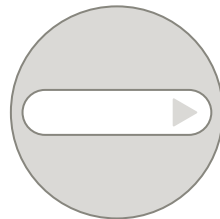
- HR
- Sharepoint
- File services

Response time

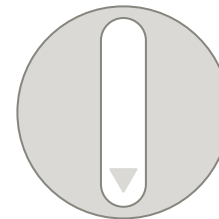
Prio 1



Prio 2

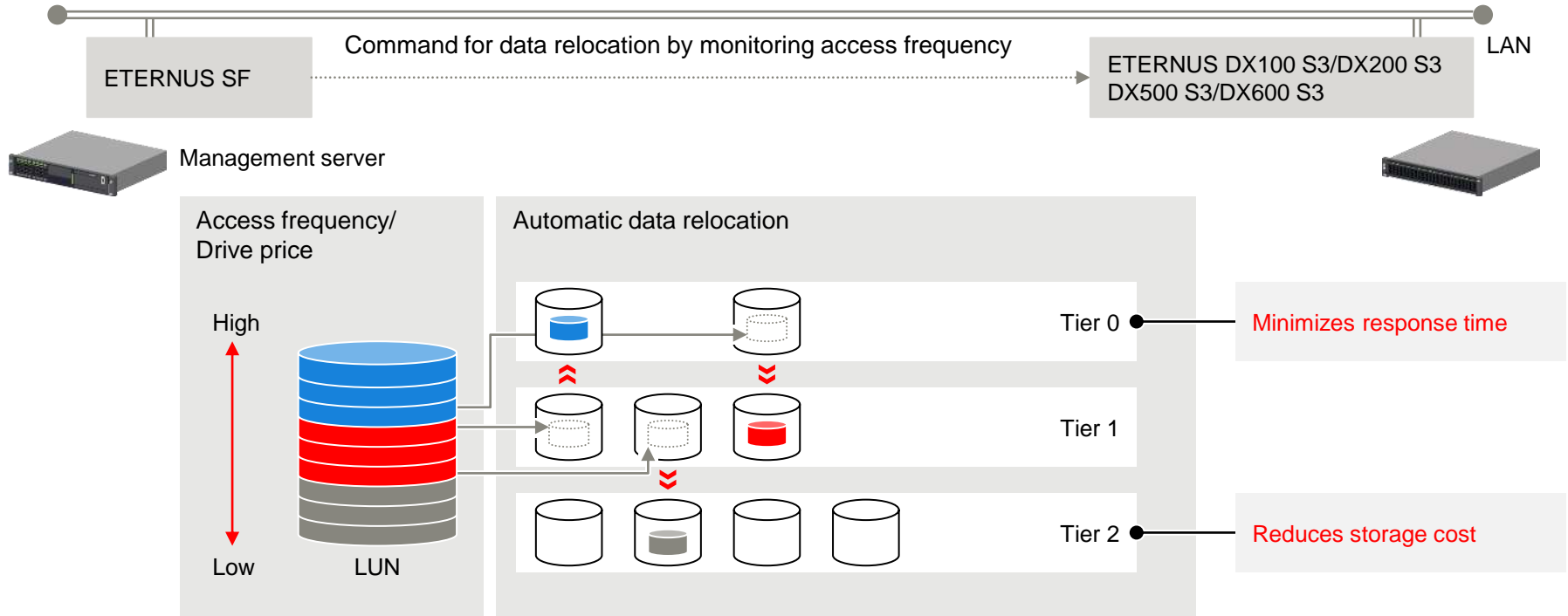


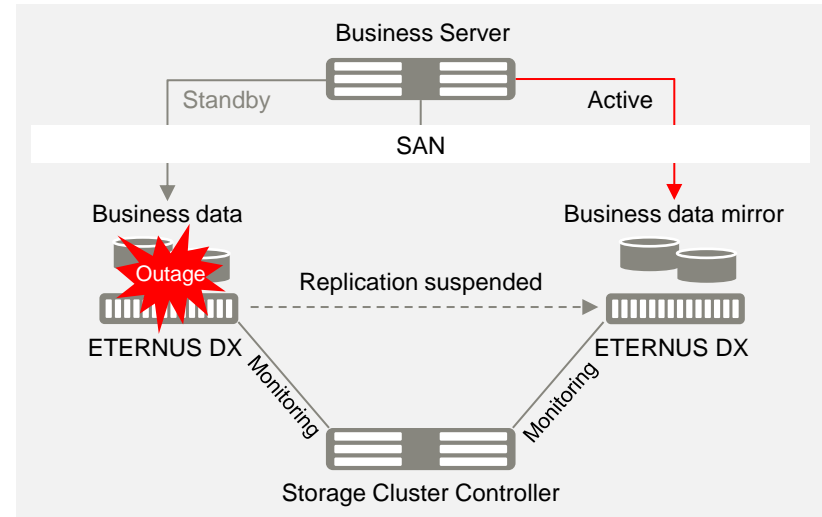
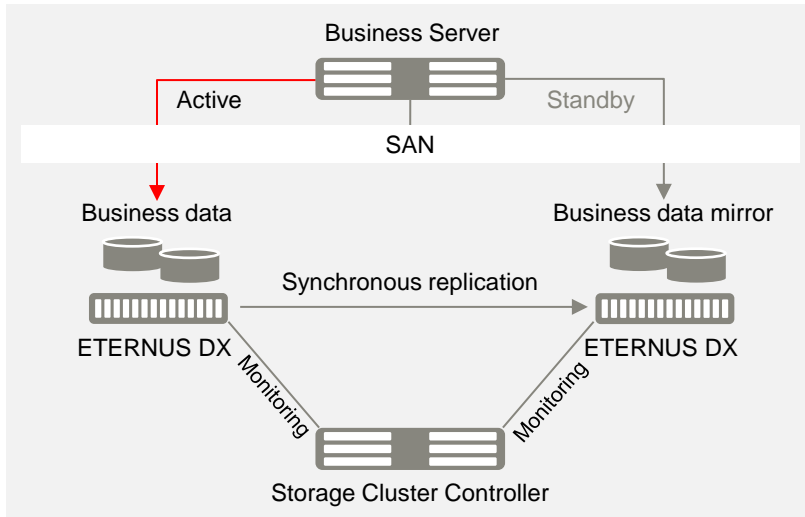
Prio 3



Define priorities, set response times, ETERNUS does the rest.

Optimal drive selection & automated data allocation improves performance and reduces cost





- In case of a primary storage or site failure, the secondary storage takes over identities (IDs)
- I/O is continued by the secondary ETERNUX DX system transparently
- Failover can be executed in both directions and between different ETERNUS DX S3 models
- Automatic or manual failover

ETERNUS CS Backup Appliances

ETERNUS CS Backup Appliances



Integrated
appliance incl.
backup SW

ETERNUS CS200c (start in EMEA)

- Includes CommVault Simpana software and licenses
- For disk backup and file archiving up to 96 TB
- Deduplication, replication functionality



Target
appliance
SW independent

ETERNUS CS8000

- Unified data protection platform for disk, tape and cloud
- Complete consolidation and virtualization of backup IT
- Unmatched scale-out scalability up to 22 PB
- Leading DR and HA technology

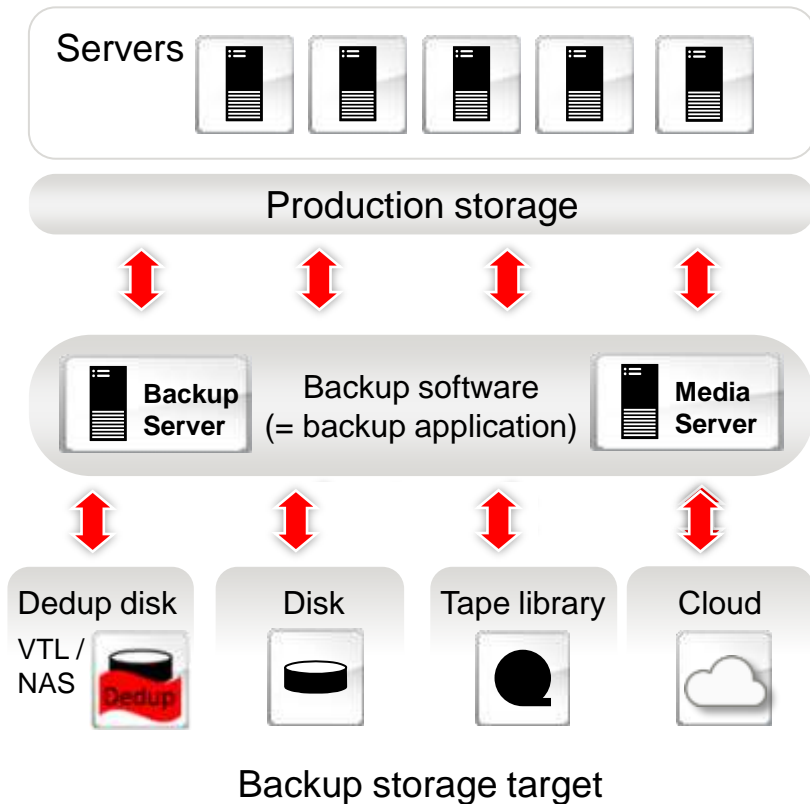


ETERNUS CS800

- Easy to use backup to disk appliances
- Deduplication, replication functionality
- Modular scalability up to 320 TB



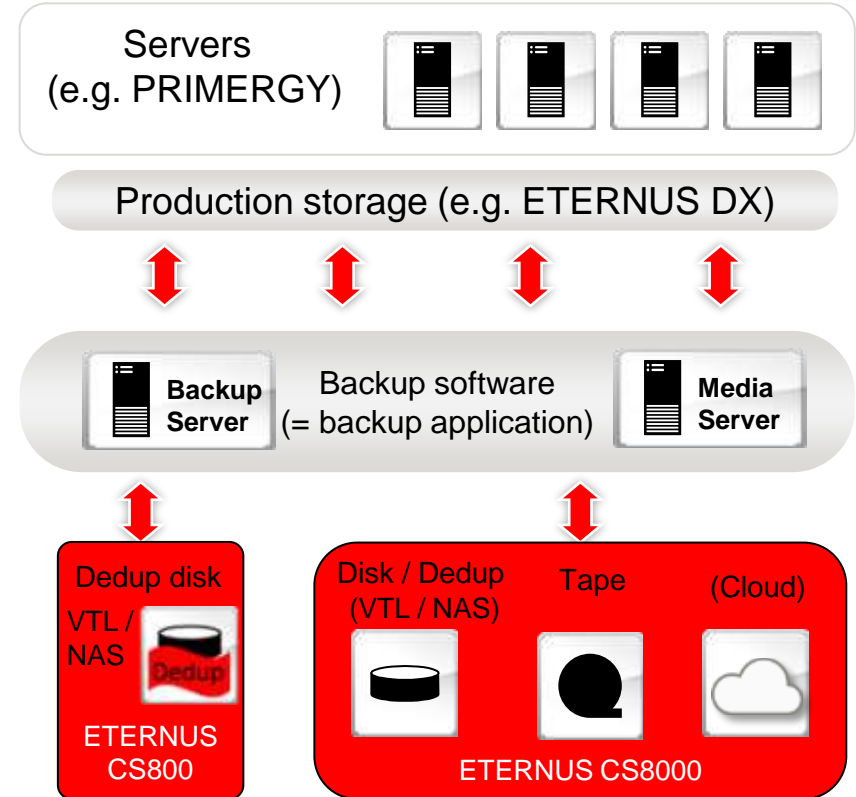
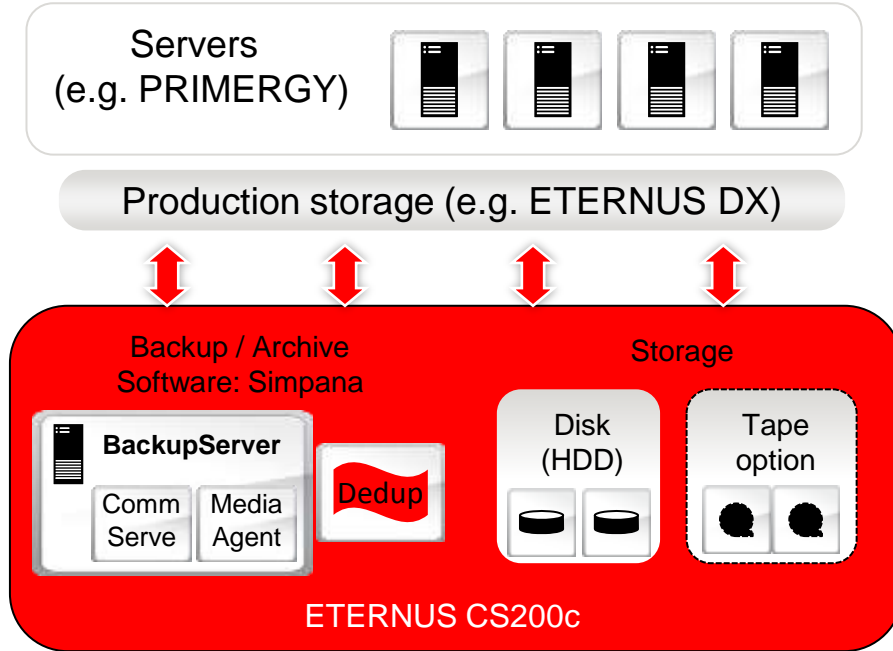
Structure of backup environments



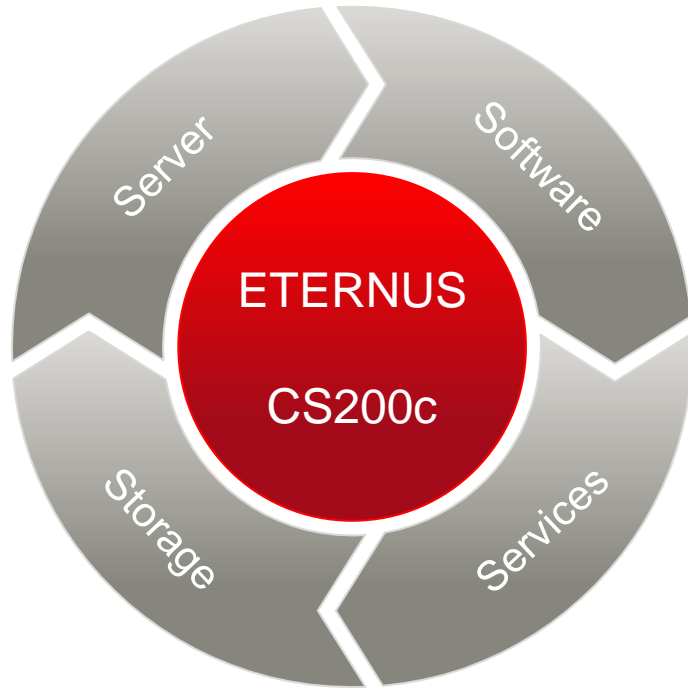
- Send a copy of data to backup targets
- Takes care for generation management
- Controls backup and recovery processes

- Provide storage capacity

ETERNUS CS Data Protection Appliances



ETERNUS CS200c: Customer Advantages



Simple



- Easy to order, deploy, administrate and maintain
- Seamless incorporation of validated components
- Supports faster planning processes

Flexible



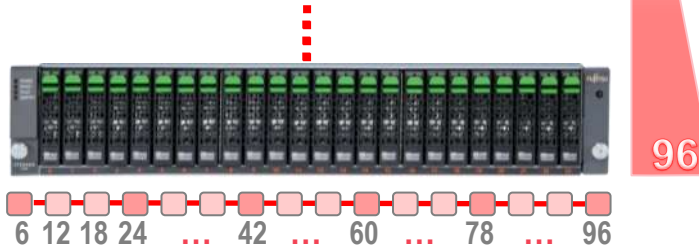
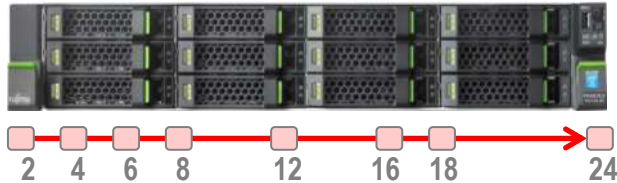
- Scalable in capacity and functionality, optimized in performance
- Multiple use cases and combinations of remote offices, data centers

Validated



- Reduce deployment efforts (time, skills, customer involvement)
- Short time to production
- Reduced risk

ETERNUS CS200c: Model overview



ETERNUS CS200c - Entry

- Appliance providing capacities 2 - 24TB (net)
 - Capacity licensed with CommVault Simpana Appliance Software incl. Deduplication
 - Lots of capacity points, no external disk array option
 - Fixed capacity models with Appliance Advanced Software

ETERNUS CS200c - Scale

- Appliance providing capacities 6 - 96TB (net)
 - Capacity licensed with CommVault Simpana Appliance Software incl. Deduplication
 - 6 TB plus (1-5) x 18TB capacity, 6TB granularity
 - High performance hardware, Deduplication on SSD

ETERNUS CS200c – Appliance Software



Simpana Appliance Features	Description	CS200c-Appliance Foundation SW	CS200c-Appliance Advanced SW
Backup & Recovery	File clients (incl. NAS, NDMP)	✓	✓
Deduplication	Source or target based	✓	✓
2nd tier backup	Copy to appliance disk storage, not to 3 rd party	✓	✓
Clients, virtual & physical systems	Unlimited quantity	✓	✓
Archiving	Archiving for files (OnePass)	✓	✓
Application support	Windows apps (Class 1) (Exch., Sharepoint ...)	option	✓
Application support	Linux/UNIX applications (Class 2)	option	✓
Application support	SAP applications (Class 3)	option	✓
Snapshot	FrontEndTB licensed (IntelliSnap)	option	option
Replication	Snapshot replication for NetApp	option	option
Tape drive attachment	Per tape drive	option	option

CommVault Simpana - Leader in Gartner MQ



Enterprise Backup Software Magic Quadrant

CommVault is positioned as a Leader in Gartner's Magic Quadrant for Enterprise Backup Software and Integrated Appliances for the fourth consecutive year



Source: Magic Quadrant for Enterprise Backup Software and Integrated Appliances; by David Russell, Pushan Rinnen; June 9, 2014



- CommVault positioned as a Leader in Gartner's Magic Quadrant

- [Download the full report](#)

- This Magic Quadrant graphic was published by Gartner, Inc. as part of a larger research note and should be evaluated in the context of the entire report.
- The Magic Quadrant is a graphical representation of a marketplace at and for a specific time period.
- It depicts Gartner's analysis of how certain vendors measure against criteria for that marketplace, as defined by Gartner.
- *This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from CommVault Systems.*
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Source: Gartner, Magic Quadrant for Enterprise Backup Software and Integrated Appliances;
By David Russell, Pushan Rinnen;
June 9, 2014

ETERNUS CS800 – Easy Backup to Disk

- ➔ Simplifying backup to disk
- ➔ Easy setup
- ➔ Reduce disk capacity requirements
- ➔ Basic disaster protection
- ➔ Tape connectivity for economical long term storage

ETERNUS
CS800



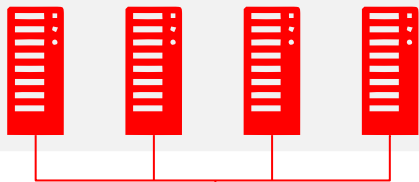
Backup to disk (NAS/VTL)

Deduplication

Replication

Consolidation of Backup Environments

Servers



Media Server

Backup SW



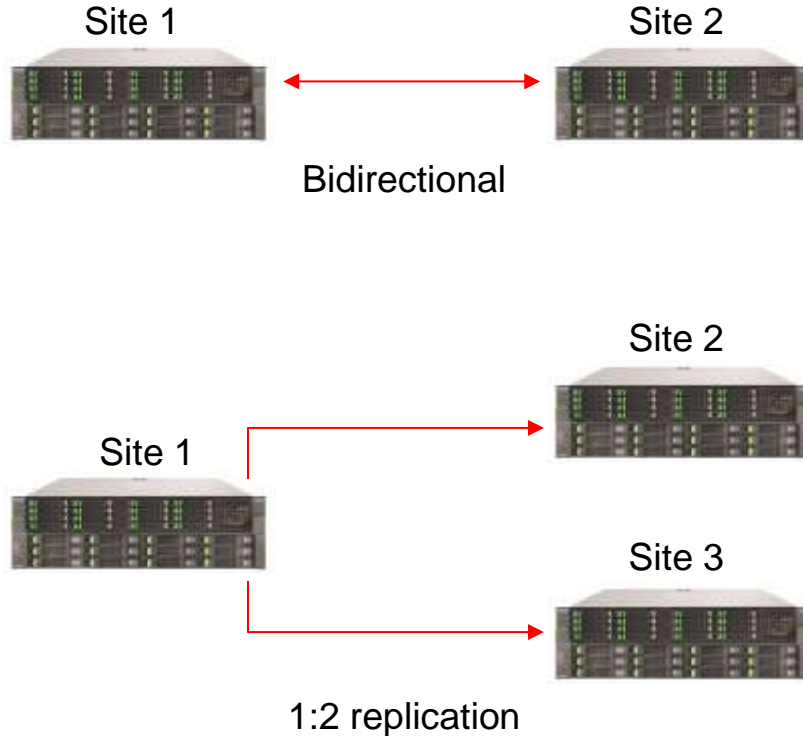
ETERNUS CS800



Benefits with ETERNUS CS800

- Avoid tape management
- VTL/NAS interface
- Global deduplication
- High flexibility in configuration and connectivity
- Additional copy to tape for long term retention

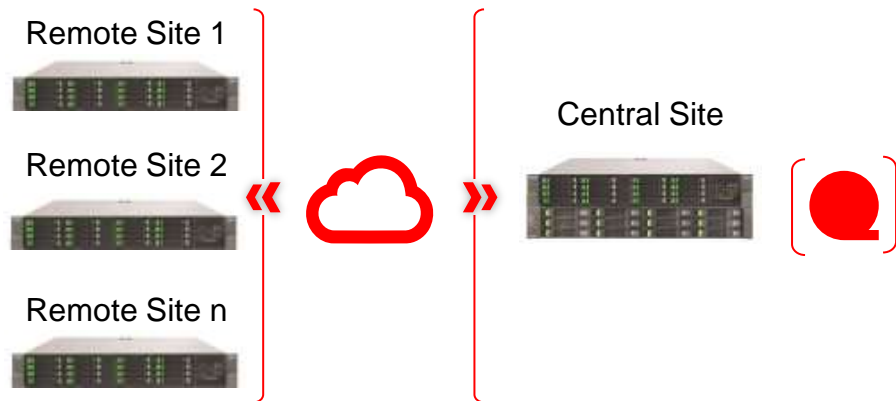
Proven disaster recovery



Benefits with ETERNUS CS800

- Integrated replication
 - Bidirectional
 - 1:2 replication
- Reduced network bandwidth
- 32 replication snapshots to recover any day of entire month

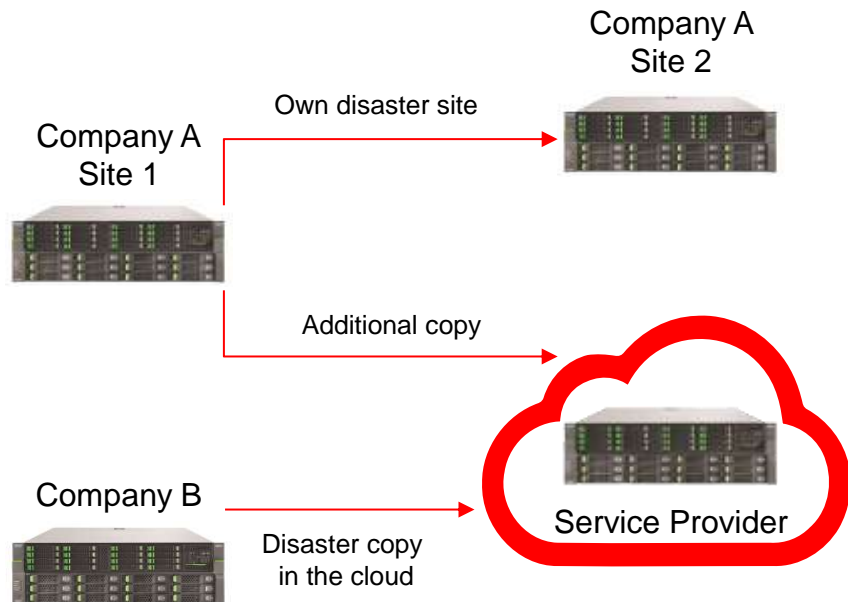
Distributed Sites/Branch Office Concept



Benefits with ETERNUS CS800

- Multi-site backup and disaster recovery strategy
- Local Backups with deduplication at branch offices
- Disaster recovery replication to central data center

Cloud Hosted Disaster Recovery

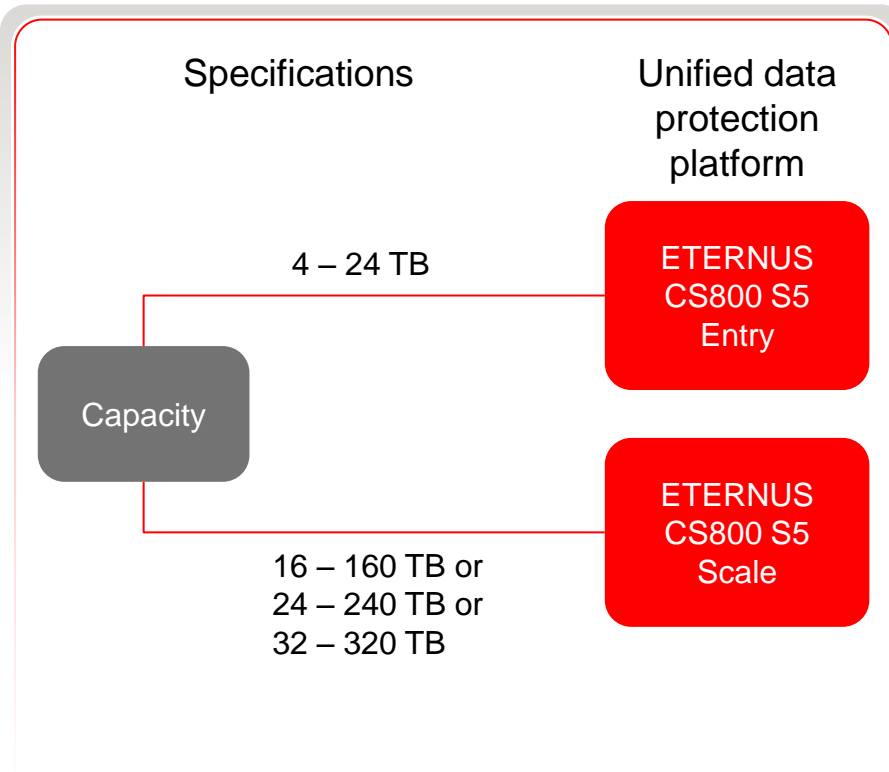


Benefits with ETERNUS CS800

- ETERNUS CS800 in data center of cloud service provider
- Multi Tenancy – user specific statistics enable charge back
- Replication of backup data for disaster protection

Flexibility with just two models: Entry & Scale

- ➔ Enhanced scalability
 - Entry model starts at as low as 4TB net capacity, scales up to 24 TB of net capacity
 - Scale model starts at 16 TB net capacity, scales up to 320 TB of net capacity
- ➔ Hot spare option for Scale model (→ max net capacity is then 144/216/288 TB respectively)
- ➔ NAS and VTL options for all models
- ➔ Path-to-Tape (PTT) for all models



Building complete backup and archiving solutions

Fujitsu builds complete data protection solutions based on own products, products from technology partners and comprehensive service offerings

- Tape libraries from Quantum and Oracle complement Fujitsu's tape library portfolio for large data center scenarios
- Data protection software from CommVault, Symantec and SEP manage backup and archiving processes in combination with ETERNUS DX, CS and LT systems
- ETERNUS products support all leading backup and archiving software suites

Data Protection Software



ETERNUS CS



Midrange and High-end Tape Libraries

Quantum



Oracle

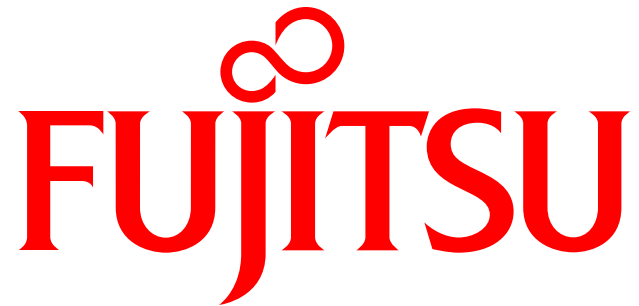


ETERNUS LT



Data Protection Appliances

Small and Midrange Tape Libraries



shaping tomorrow with you