Dell EMC PowerStore metro node

Active-active synchronous replication over metro distance

Metro Replication for Continuous Availability

Site A

Site B

Metro node

Metro node

Active/Active

PowerStore

PowerStore

Metro Synchronous Distance

Continuous dual site access

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PowerStore metro node

Active-active synchronous replication over metro distance

True Active-active

Multi-site constant dual access
Immediate failback
Witness for automatic site recovery

Greater Flexibility

Multi-platform support
Workload granularity
Replicate to any array

No hidden costs

Zero performance overhead
No capacity on the array
No additional host software

32Gb FC | 2U Cluster | Built in Management Server
Simplistic installation
DevOps Automation Enabled with Ansible

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Active/Active v. Active/Passive

Not all Metro solutions are equal

Active/Active

Site A
Full Access

Site B
Full Access

Metro Synchronous Replication

Active/Passive

Site A
Full Access

Site B
Read Only

Metro Synchronous Replication

Active/Active setup

- Constant dual site access
- Both sites are available at the same time
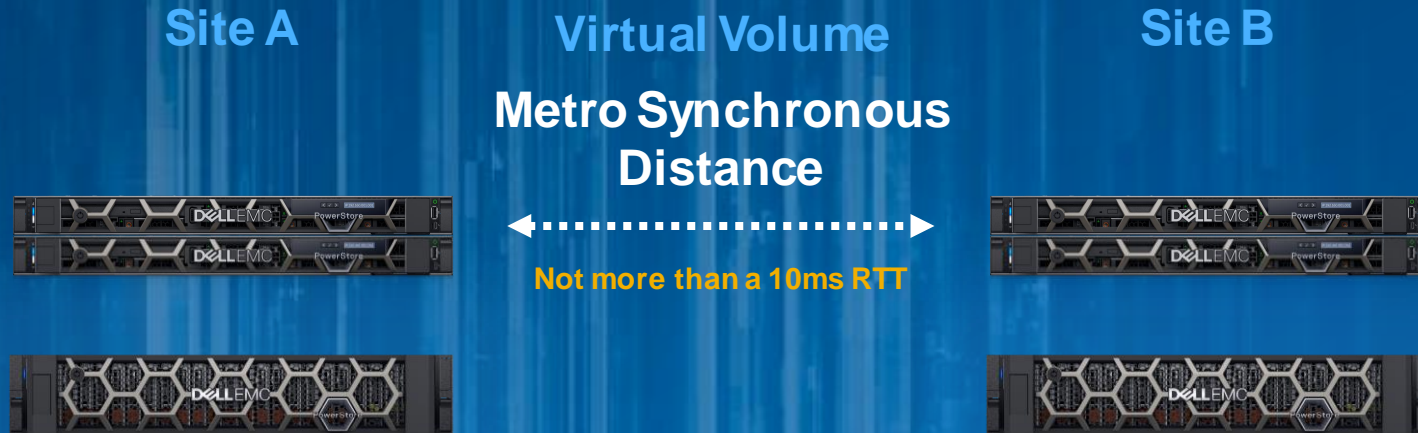- Delivers RTO and RPO of zero time

Active/Passive setup

- Only one site is accessible at any given time*
- RTO > zero time

* Unless hosts are cross-connected to arrays

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Metro node delivers continuous availability

Active/Active Technology

Constant Dual Site Access over Sync Distance with metro node

Site A　　　　　**Virtual Volume**　　　　　**Site B**

Metro Synchronous Distance

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Not more than a 10ms RTT

"We have our live data protected and being written and replicated between two arrays in two different sites. It's Realtime—sub five milliseconds across the two sites."
Steward Health

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Metro node cluster witness

Provides a heartbeat between sites

Initiates an Intelligent Response to a Site Failure

Site A

Site B

Virtual Volume

Stretched Volumes

Witness is installed as a VM in a separate failure domain
If a cluster loses contact or if one fails rules determine
which cluster continues operations automatically

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Determining tolerance for Business Continuity plans

Metro node delivers zero RTO and RPO and automated failover with witness

Continuous Availability

Multi-site or
local mirroring

**Ensures business
stay up with zero RTO and RPO**

Recovery Time Objective (RTO)
How long you want it to take to
recover from a failure?

Recovery Point Objective (RPO)
How far back in time will you
tolerate after a failure?

Decision Time Objective (DTO)
How much time is needed to
make the decision to failover?

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Replication methods

PowerStore provides metro synchronous replication with metro node

Asynchronous	Data sent periodically Recovery is point in time	RPO > 0 RTO > 0
Synchronous	Both systems fully mirrored Recovery not immediate	RPO = 0 RTO > 0
Metro Synchronous	Both systems are fully mirrored Data accessible on both sides	RPO = 0 RTO = 0

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