Dell PowerStore metro node

Synchronous active-active replication over metro distance

ESSENTIALS

- ✓ Achieve continuous availability and zero RTO and RPO with no performance impact and automatic site failover through true active-active metro synchronous replication

- ✓ Enable non-disruptive data mobility for agile storage management within and across datacenters

- ✓ Refresh storage technology without application downtime

Benefits to you

- Seamless integration with PowerStore

- 30-minute simple installation

- Built-in management server

- Metro node is delivered as a 2U cluster

- High performance with 32 Gb/s Fibre Channel

- Ansible module to fully support enterprise infrastructure automation

- Automatically initiate an instant site failover through virtual machine (VM) witness technology

PowerStore Architecture

The ground-breaking PowerStore achieves new levels of operational simplicity and agility utilizing a container-based architecture, advanced storage technologies, and intelligent automation to unlock the power of your data. Based on a scale-out architecture and hardware-accelerated advanced data reduction, PowerStore is designed to deliver enhanced resource utilization and performance that keeps pace with application and system growth. PowerStore provides organizations with all the benefits of an enterprise unified storage platform for block, file and vVol data, while enabling flexible growth with the intelligent scale-up AND scale-out capability of appliance clusters.

Within its data-centric architecture, PowerStore delivers a no-compromise approach to data-services, offering benefits such as leading data reduction, without impacting performance. PowerStore leverages Intel's Quick Assist Technology for accelerating compression without impacting the arrays maximum potential. In keeping with this "no compromise" focus for data services, PowerStore also delivers true metro active-active capabilities with zero performance impact on the storage controllers or data path with PowerStore metro node. Metro configurations are the next step in a truly disaster resilient architecture, enabling business continuity – without intervention.

PowerStore Metro Node Overview

Enable automated business continuity with zero RPO and RTO with PowerStore metro node. True active-active synchronous replication over metro distances with multi-site dual access gives organizations full confidence that their data will always be available and accessible and there is no time associated with recovery. Metro node provides greater flexibility through multi-platform support, workload granularity and replication to any array. There is zero performance overhead, no duplicate capacity on the array and no additional software required on the host. The VM witness technology provides the ability to automatically initiate an instant site failover. Metro node supports local configurations for continuous application availability, data mobility to non-disruptively relocate workloads and enables storage technology refresh without application downtime.

Metro Replication for Continuous Availability

Site A — PowerStore metro node cluster — Node 1 — Node 2
Active/Active
Metro Synchronous Distance
Site B — PowerStore metro node cluster — Node 1 — Node 2

Continuous dual site access

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
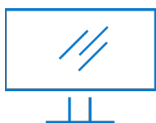DevOps Automation Enabled with Ansible

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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

PowerStore Metro Node Differentiators

- **Zero RPO and RTO -** Metro node is an active-active solution, which means it actively mirrors data across metro distance. Metro node provides a Recovery Point Objective (RPO) equal to zero, meaning there will be zero data loss. Metro node also provides a zero Recovery Time Objective (RTO), which means the time to recover is zero time or immediately.

- **Automatic Site Failover -** The witness virtual machine helps mitigate a site failure.

- **Active-Active Metro –** Metro node provides optimized data access from both sites for increased performance.

- **Avoid Degradation to Array Performance -** Metro node replication is built-in to the appliance without any array overhead increases.

- **No Additional Host Software -** Metro node is self-contained and does not require any software be deployed on the hosts or a host reboot.

- **Multi-Platform Support -** Metro node enables replication between different Dell arrays.

- **Volume/LUN Level Granularity -** Metro node allows the replication of specific LUNs for application-level granularity, significantly reducing TCO and improving flexibility by giving customers the choice of which workloads to replicate.

- **Non-disruptive Addition of Consistency Groups -** Metro node supports consistency group add/delete operations without disruption and provides operational flexibility with zero downtime.

Modernize Now with Metro Node

Building on the proven PowerStore storage array, which includes an intelligent and highly adaptable data-centric architecture, PowerStore metro node provides confidence that application data will be there when needed. Fuel innovation with "always available" data, brought to you by metro node from Dell Technologies.

[Learn More](#) about PowerStore metro node solutions

[Contact](#) a Dell Technologies Expert

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