



Dell Technologies Services

Stretched Cluster Deployment for VxRail

Your business thrives on data

How do you protect it from loss due to catastrophic events or human error?

- Can your business survive a partial or complete loss of a datacenter?
- Hurricanes, floods, earthquakes or human error can result in catastrophic loss of data and critical business applications
- VxRail stretched clusters provide a redundant solution to ensure your business stays up and running 24/7



What are stretched clusters?

- Multiple virtualization hosts are part of the same logical cluster but housed in separate locations
- One copy of data resides in a primary site, and a second copy in a secondary site
- In this active/active configuration, if one site fails, a complete copy of data is available in the surviving site
- A witness appliance in a third site coordinates data placement and assists in the failover process

Benefits

Disaster Recovery

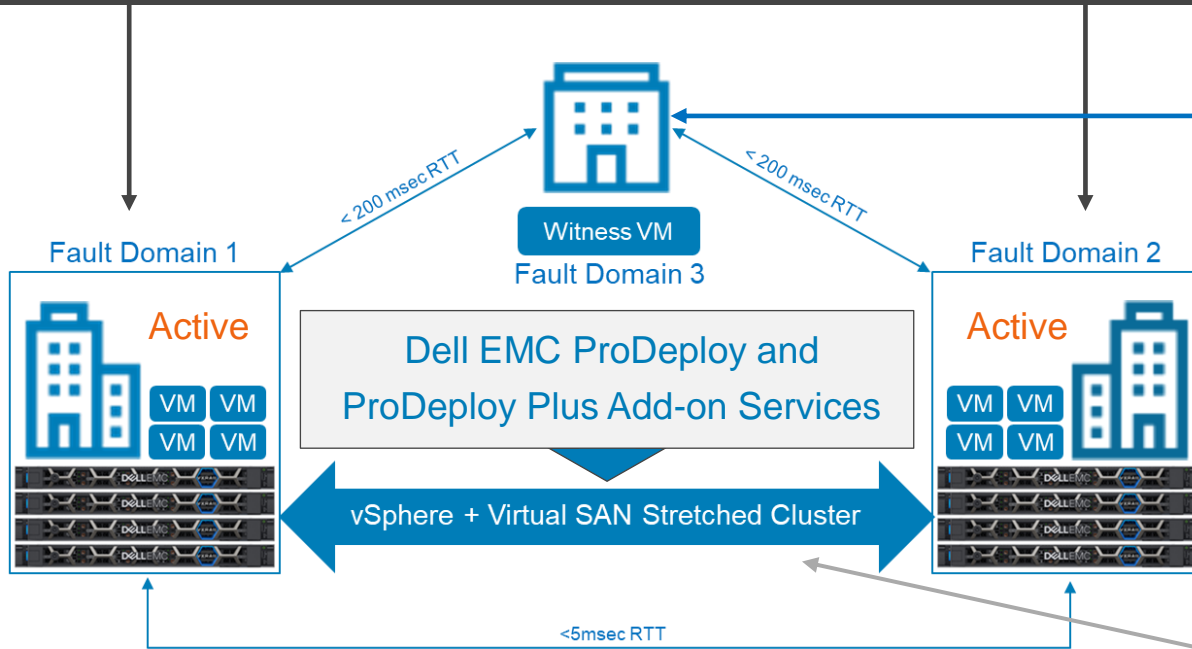
Critical business applications run on surviving site

No Data Loss

Data is mirrored on both sites so none is lost when one site fails

Elements of a stretched cluster

All virtualization hosts are part of the same logical cluster but housed in separate locations in an active/active configuration.



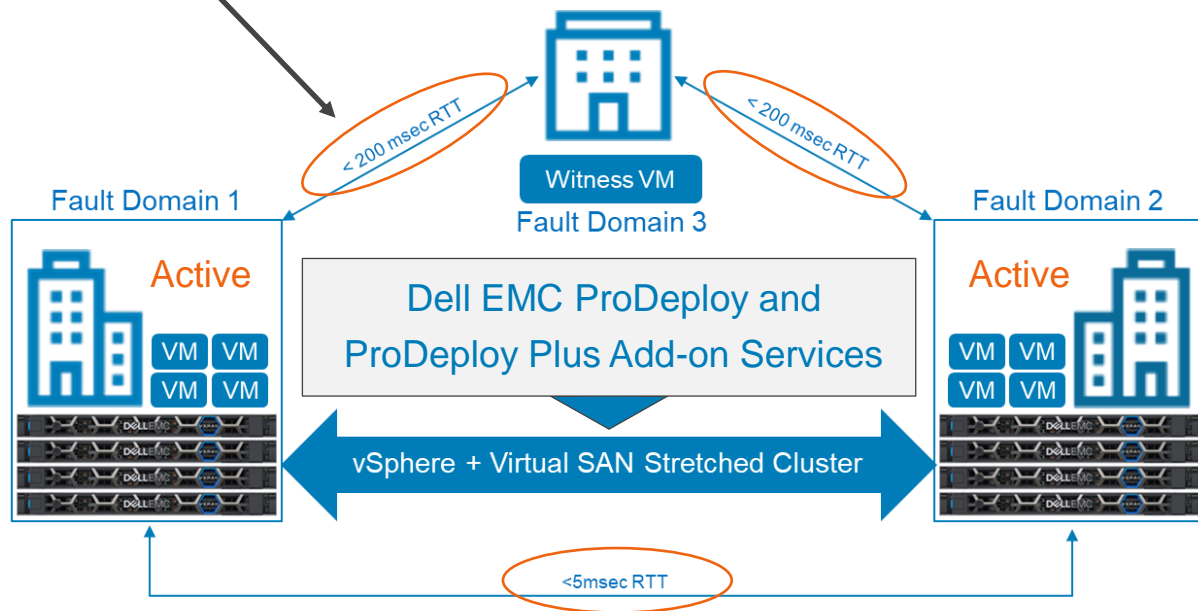
Latency = RTT (Round Trip Time)

A witness host housed in a third location coordinates data placement between sites and assists in the failover process in the event of a failure.

The vSAN stretched cluster feature ensures an entire site failure can be tolerated with no data loss and near zero downtime.

The importance of latency

The deployment of a stretched cluster requires a minimum latency between fault domains to ensure data is transferred fast enough.



Latency = RTT (Round Trip Time)

Latency, defined as Round Trip Time (RTT), is affected by distance and network bandwidth. This requirement must be validated before deployment.

Minimum latency requirements*:

- Data site to witness: < 200 msec RTT
- Data site to data site: < 5 msec RTT

Why Dell EMC Stretched Cluster Deployment Services?

- **Dell EMC experts in the full solution:** including server, software-defined storage and networking
- **Based on global best practices:** including planning, logistics and implementation
- **Knowledge Transfer:** post-deployment knowledge transfer, especially important for the secondary hosting facility

Benefits

- Fast, reliable deployment for improved ROI
- Allows your IT department to focus on innovation
- Provides the information you will require to monitor and manage your stretched cluster environment

Scope of work

VxRail stretched cluster deployment services are an added feature to the ProDeploy for Enterprise offers

ProDeploy Suite

- Rack, mount, position VxRail
- Review the VxRail survey questionnaire
- Validate customer's Top-of-Rack Switch configuration
- Initialize cluster and assign all IP addresses
- Perform VxRail Secure Remote Services (SRS) setup and verify activation is successful

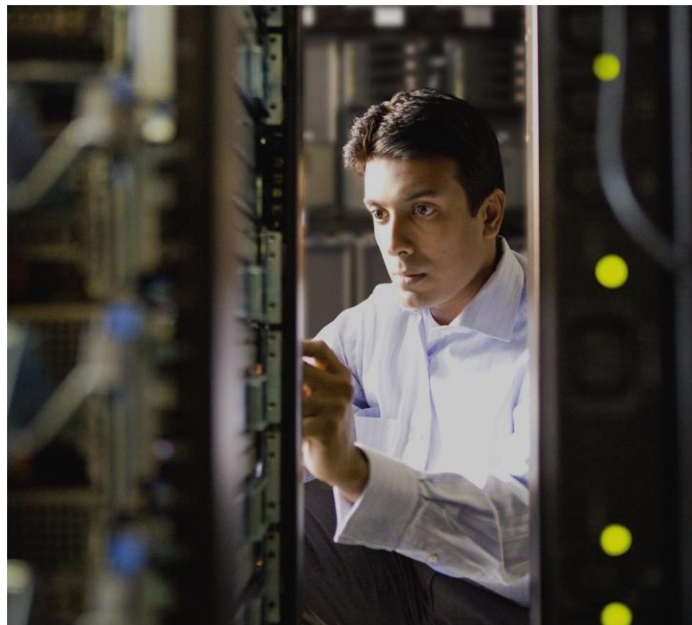


Stretched Cluster Deployment

- Validate specific network configuration for the stretched cluster
- Deploy and configure the vSAN virtual witness appliance or physical witness host
- Configure fault domains & stretched cluster
- Create and test Host Groups, VM Groups and VM/Host Rules
- Verify the VM and Host Rules function as expected
- Provide overview of the VM and Host Rule feature
- Configure routes between witness and data nodes
- Configure High Availability settings for stretched cluster

ProDeploy Plus recommended

- ProDeploy Plus is the recommended offer if you deploy stretched clusters
- Optimize system performance with full knowledge transfer, post-deployment assistance and flexible training credits
 - In-region, single point of contact for project management
 - 24x7 installation and onsite system software configuration*
 - 30-days of post-deployment remote configuration assistance
 - Training credits for Dell EMC Education Services



* Where geographically feasible

ProSupport Plus with Mission Critical option recommended

Your critical workloads require constant availability and proactive and predictive measures to get ahead of problems before they happen.

When you choose ProSupport Plus with Mission Critical option, you get:

- A designated Service Account Manager who knows your business and your environment
- Priority access to senior ProSupport Plus engineers for faster issue resolution
- Eligible 3rd party software support
- Proactive system maintenance
- Automated, proactive and predictive support
- 4-hour parts response



Why Dell Technologies Services?

PEOPLE

Both IT strategists and IT doers...not just business theorists

Teaming with the most reputable and dependable partners in every region

Hiring the industry best, investing in them, and nurturing their expertise

APPROACH

Uniquely positioned to provide consistent services from edge to core to cloud

An efficient-deployment culture beginning at the factory

Flexible SOWs – all the work or just what you need

OUTCOMES

30+ years of learning, innovating, building IP and helping 1000s transform

Preventing issues and improving design by harnessing system data, IoT and analytics

Business cases and justifications to enable multi-level decision making

DELLTechnologies