Keeping Businesses in Business

Staying competitive in today’s 24/7 business world means staying up and running. Downtime, whether unexpected or for planned maintenance, is incredibly costly and can be potentially devastating.

For small businesses or large enterprises alike, success or failure depends on how well your infrastructure can handle crisis situations—situations that jeopardize customer or client access to critical applications and data. Dell™ high availability cluster solutions can help protect your business from the severe impact of downtime.

Dell High Availability Clusters Help Deliver Maximum Uptime

From around-the-clock E-commerce to high-volume financial trading, Dell’s customizable high availability cluster solutions address your specific business continuity needs simply and cost-effectively. Dell combines the efficiency and flexibility of our Direct Model with industry-standard technology and award-winning service and support to create reliable, easy-to-manage high availability cluster solutions. By eliminating single points of failure, Dell clusters help assure that end users have access to a system that has been optimized for maximum uptime.

Dell High Availability Cluster Benefits

➤ Avoid expensive, business-damaging disruptions
➤ Smooth deployment of upgrades
➤ Flexible solutions to cost-effectively meet your specific requirements
➤ No single points of failure
➤ Easy to deploy and manage
➤ Certified configurations
➤ Industry-standard components
➤ Award-winning service and support
Is a Cluster Solution Right for You?

If continuous data and application availability is crucial to your organization, a Dell cluster solution can be the answer. Dell high availability cluster solutions help enable your business to keep running even when a server goes down or offline for maintenance and upgrades. The solution consists of clustered systems, or nodes, linked by a private Local Area Network (LAN). The LAN serves as a heartbeat mechanism to communicate the health status of each node to its peers. When a system goes offline, services such as data and applications are automatically transferred to a functioning system resulting in optimum availability.

Dell Delivers the Right Cluster Solution for You

Dell offers two high availability options allowing you to customize and build the solution that will provide data and application protection to best match your environment:

Microsoft® High Availability Clustering

Dell SCSI and Fibre Channel cluster configurations are approved and certified by Microsoft. You can trust that your high availability solution is backed by industry-leading expertise to keep your business up and running.

SCSI Clusters


What’s more, PowerEdge™ S-Series clusters utilize PowerVault™ storage systems with PERC RAID controllers specifically designed with clustering in mind. This gives you exceptional high availability capabilities optimized for your clustered environment.
Fibre Channel Clusters

Dell Fibre Channel Clusters can be implemented in direct-attach deployments or Storage Area Network (SAN). Cluster consolidations with Fibre Channel switches enable more flexibility and expandability for delivering configurations to meet your needs.

Fibre Channel is capable of supporting two-node configurations with Windows 2000 Advanced Server and is ideal for enterprise-class servers handling robust environments. With Windows Server 2003, Enterprise Edition, eight-node clustering is supported. These larger configurations help organizations to survive double or triple server failures and balance workloads in consolidated server deployments.

Application/Data Clustering

Dell also provides clustering solutions delivered by the application. For instance, the Oracle10g™ Real Application Clusters (RAC) provide a powerful, reliable way to implement an Oracle® database application designed for high availability. It allows clusters of up to eight PowerEdge servers along with four Dell/EMC storage systems. The configuration allows for seamless software integration, incorporates scalability for future expansion and ensures failover capabilities to help provide continuous availability.

To ensure high levels of database availability, Dell, EMC and Oracle have performed rigorous testing, including failover testing, database stress testing and storage certification of Oracle’s clustering technology with Dell servers.

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Dell High Availability Products

Visit www.dell.com/clusters to view validated configurations, special offers, technical white papers, case studies and more.

PowerEdge™ Servers
- PowerEdge Expandable RAID Controller (PERC)
- Redundant, hot swap drives, power supplies, cooling fans and PCI Express™ slots for high availability
- Error Correction Code (ECC) memory for advanced data protection
- Scalable Intel® processing power

Dell/EMC and PowerVault Storage
- Dell/EMC fibre channel storage arrays provide highly available storage for a variety of workgroup, midrange and enterprise applications
- Multi-platform access, snapshot copy and remote mirroring capability with optional Access Logix, SnapView™ and MirrorView™ software for data protection
- Solutions for direct attached and storage area network (SAN) deployments

Oracle RAC
- Supports up to eight PowerEdge servers
- Provides scalability and high availability
- Dell deployment CD helps reduce the time to deploy Oracle RAC and helps automate best practices
- Visit www.dell.com/oracle for best practices and the software deliverables list (SDL)

Call your Dell sales representative to build a high availability clustering solution that will keep your organization running smoothly. Visit www.dell.com/clusters or call 1-800-www-dell for more information.