

VERITAS™ Cluster Server

POWERFUL PROTECTION AGAINST APPLICATION AND SERVER DOWNTIME

KEY BENEFITS

- Maximize uptime of applications, databases and servers
- Reduce planned or unplanned downtime
- Enable high availability for local, metropolitan or global clustering from within a single product
- Test your disaster recovery solution without impacting production applications or resources
- Optimize and plan cluster configuration and policies through a portable modeling and simulation tool
- Ensure investment protection by using the same clustering tool across all open systems and improve hardware utilization by intelligently moving applications to available servers

Data and application downtime can be attributed to the unavailability, or failure, of a resource that is trying to run a service. If a service becomes unavailable and an organization is not running clustering and storage management software the users would lose access to the resource until the problem can be manually fixed. This downtime may result in lost revenue, productivity and user satisfaction.

Clustering services can protect against server, application and database downtime by eliminating the single point of failure found within a single server. A cluster is a group of computers that work together to run a set of applications and provide the image of a single system to the client and application. The computers are physically connected by cables and programmatically connected by cluster software. The servers within the cluster remain in constant communication. If one of the servers or resources running on the server in a cluster becomes unavailable as a result of failure or maintenance, another server begins providing service, a process known as failover. Users can continue to access the service now being provided from a different physical server.

VERITAS™ Cluster Server is the industry's leading open systems clustering solution to protect your critical applications and databases against downtime, whether planned or unplanned, within the local, metropolitan or wide area network. VERITAS Cluster Server provides high availability to applications, databases and servers by monitoring the health and performance of the resource and automatically restarting the resource on another available server in order to avoid a complete failure.

KEY BENEFITS

Reduce Training and Hardware Costs:

VERITAS Cluster Server is architecture-independent, supporting UNIX, Windows and Linux platforms, as well as

the industry's widest range of heterogeneous hardware configurations. Organizations can mix and match the servers and storage within a single cluster and shared storage infrastructure. VERITAS Cluster Server utilizes a common, cross-platform console for managing multiple clusters. This unique ability allows IT personnel to manage data and application availability without requiring additional training that may be required for point platform clustering solutions.

Broad Application Support:

VERITAS Cluster Server provides off-the-shelf support for a wide range of applications, including, but not limited to, applications such as SAP, BEA, Siebel, Oracle Applications, Exchange and Peoplesoft as well as enterprise class databases such as Oracle, DB2, SQL and Sybase. In addition, there are many infrastructure and replication agents available with new agents being developed continuously. For custom-built applications, custom agents can be created to ensure that virtually any application is highly available.

Reduce Planned Downtime:

Organizations can utilize VERITAS Cluster Server for planned downtime by keeping applications available while migrating users from one available server to another within the server maintenance window. When the maintenance is finished the application can be easily moved back to the original server. By using VERITAS Cluster Server, organizations may no longer need idle standby servers to be online and available immediately, thereby reducing the costs associated with expensive hardware maintenance contracts.

Single Solution for Any Architecture:

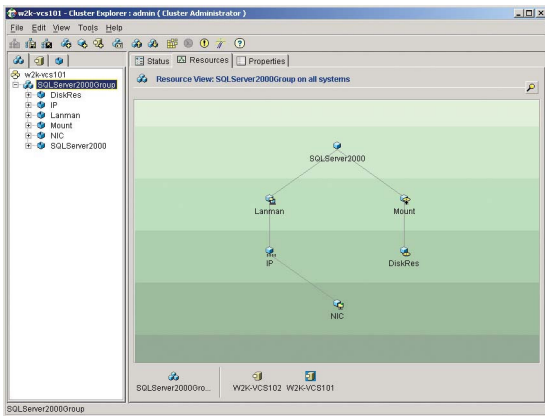
VERITAS ensures that achieving local, metropolitan and wide area high availability and disaster recovery can be done using a single solution. With VERITAS Cluster Server and available options, all clustering and replication can be performed and managed from a single product while allowing organizations to achieve local as well as wide-area application and data availability.

Prepare, Plan and Test Before Disaster Strikes:

VERITAS Cluster Server provides the ability to configure, implement and test your high availability and disaster recovery environment without disrupting users. The cluster simulator tool allows cluster configurations to be configured and tested without requiring a cluster testing environment or impacting the production environment. VERITAS Cluster Server's Fire Drill capabilities allow organizations to clone their production environment, in a space optimized manner, and allow the disaster recovery solution to be fully tested. These new features reduce the need to invest in additional hardware for testing and configuration, while ensuring resources will remain available in the production environment.

Simplified Management and Installation:

VERITAS Cluster Server provides administrators with easy to use configuration wizards for simplified storage management and cluster implementation. The product provides intuitive Web and Java-based consoles to monitor data and application availability across multiple operating systems and across an entire organization.



As seen here through the Java-based graphical user interface, VERITAS Cluster Server provides flexible configuration of a wide variety of application-dependent resources.

VERITAS CommandCentral™ Availability complements VERITAS Cluster Server by increasing administrator efficiency by providing a consolidated view of all clusters within the organization and offering the ability to view historical availability reports.

Maximize Hardware Utilization:

VERITAS Cluster Server provides the flexibility for adding or removing servers as needed without bringing the applications offline. Support for up to 32 servers in a single cluster allows organizations to achieve availability of applications while achieving maximum hardware utilization by automating the process of making intelligent decisions to ensure applications are hosted on the best server available within the cluster. In addition there is no longer a need for a dedicated standby server within the environment.

Part of a Comprehensive Disaster Recovery Plan:

VERITAS Cluster Server and the Global Cluster Option are tightly integrated with the Volume Replicator option, or with third-party replication technologies, to provide a comprehensive disaster recovery solution across any distance. VERITAS Cluster Server

handles local availability issues. VERITAS Volume Replicator replicates critical data to a remote site, and the Global Cluster Option monitors and manages the replication jobs and clusters at each site. In the event of a site outage, the Global Cluster Option will control the shift of replication roles to the secondary site, bring up the critical applications and redirect client traffic with a single command or mouse click, from one cluster to the other.

Replication Integration:

VERITAS Cluster Server protects your current investment by integrating with a number of replication solutions including VERITAS Storage Foundation, VERITAS Volume Replicator, EMC SRDF, Hitachi TrueCopy, HP ContinuousAccess and IBM PPRC to provide a complete application and data availability solution.

World Class High Availability and Disaster Recovery Consulting Services:

A solution for high availability and disaster recovery doesn't stop with the technology. Disaster Recovery and Business Continuity requires recovery objective analysis, plan recovery and strategies to name a few. VERITAS not only provides a proven solution for high availability and disaster recovery, but also offers world-class services to help you define requirements and procedures while ensuring that current investments are utilized and available.

SUPPORTED PLATFORMS

Solaris, AIX, HP-UX, Linux (Red Hat, SUSE), Windows



HARDWARE REQUIREMENTS

- One CD-ROM drive on each system
- Shared data disks, with 180 MB free space per system
- Two Ethernet controllers per system, three recommended
- One SCSI HBA per system, plus SCSI/FC HBA for shared disks
- 256 MB RAM

RELATED INFORMATION

VERITAS Storage Foundation *for Windows* Datasheet
 VERITAS Services Datasheet
 VERITAS Volume Replicator Datasheet
 VERITAS CommandCentral™ Availability Datasheet
 VERITAS Supported Clustering Architectures Datasheet
 HCL: <http://support.veritas.com/>

For more information visit: <http://www.veritas.com/vcs>

AVAILABLE OPTIONS AND AGENTS

VERITAS CLUSTER SERVER OPTIONS

Global Cluster Option:

The Global Cluster Option monitors and manages the replication jobs and clusters at each site. In the event of a site outage, the Global Cluster Option will control the shift of replication roles to the secondary site, bring up the critical applications and redirect client traffic with a single mouse click, from one cluster to the other.

VERITAS CLUSTER SERVER AGENTS

VCS Agents are small applets that allow VCS to monitor system and application resources. Some agents come bundled with the base VCS product and other agents are separately available for databases and other applications.

Bundled Agents

Bundled agents are VCS processes that manage resources of predefined resource types according to commands received from the VCS engine. These agents are available as part of the VCS packages. Typical bundle agents include agents for networking, basic storage, application control and VCS infrastructure and support functions.

Database Agents

Database agents are available for all enterprise class databases and communicate with VCS on the resources that need to be monitored within the database to ensure maximum availability. Typical database agents that are available include DB2, Informix, Microsoft SQL Server, MySQL, Oracle and Sybase.

Application Agents

Application agents are built to ensure applications remain highly available. Typical application agents include, but are not limited to, BEA Tuxedo, BEA WebLogic, Hyperion Essbase, IBM WebSphere, Microsoft Exchange, Oracle Applications, Peoplesoft, SAP, Siebel, SunOne and VERITAS NetBackup. If an application needs to remain highly available and an agent is not currently available, VERITAS Consulting can build a custom agent.

Replication Agents

Organizations invest heavily in ensuring their critical data is replicated and now with the VERITAS Replication Agents, organizations can be assured their replication is running and managed from a single console. Several replication agents are available including VERITAS Volume Replicator, EMC SRDF, Hitachi TrueCopy, HP ContinuousAccess and IBM PPRC.