



V
E
R
I
T
A
S

W
H
I
T
E

P
A
P
E
R

VERITAS Cluster Server™

QuickStart

Product Overview



Table of Contents

VERITAS Cluster Server™ QuickStart Key Points	1
Extending High Availability	1
Users Who Will Benefit from Cluster Server QuickStart:	1
VERITAS Cluster Server QuickStart Functionality	1
Implementing VERITAS Cluster Server QuickStart	2
Using VERITAS Cluster Server QuickStart	3
Unified Availability Management	4
Integration with Other VERITAS Products	4
VERITAS Cluster Server™	4
VERITAS Global Cluster Manager™	4
VERITAS Volume Manager™ and VERITAS File System™	5
Supported Applications and Hardware	5
Hardware and Storage	5
Applications	5

VERITAS Cluster Server™ QuickStart Key Points

- 2-node high-availability clustering solution
- Easy to implement and use
- Extends high availability to applications outside the core data center
- Supports all storage and SAN devices supported by VERITAS Cluster Server™
- Upgradable to the VERITAS Cluster Server™ 32-node clustering solution

Extending High Availability

High availability for applications and services is increasing in importance, with a growing need to manage mission-critical applications within the corporate data center environment and also mission- and business-critical applications that exist outside the data center. However, not all organizations are able to invest the time and money to install today's high-end clustering solutions—especially for their business-critical applications running on small- to mid-range servers. VERITAS Cluster Server Quickstart is a new product from VERITAS Software that provides users with a high-availability clustering solution that is easy to install, implement and use. Cluster Server QuickStart is an ideal solution for increasing application availability without requiring a huge investment in training, installation and configuration time.

Users who will benefit from Cluster Server QuickStart include:

- First-time users interested in providing high availability for applications and services
- Organizations (including existing VERITAS Cluster Server and VERITAS Global Cluster Manager™ users) that need to manage availability of applications at remote sites, but do not have IT staff in those locations who are trained on HA products
- VERITAS users who want to standardize on one set of application availability products to reduce training and support costs across the organization
- Application Service Providers (ASPs) and similar organizations that want to provide customers with the extra security of highly available applications
- Existing VERITAS FirstWatch™ users.

VERITAS Cluster Server QuickStart is built on the same reliable clustering technology as the standard VERITAS Cluster Server product. With Cluster Server QuickStart, new configuration wizards are provided to make implementation easy, and a reduced feature set limits complexity without limiting availability. An upgrade path to the standard VERITAS Cluster Server product is available for customers who want to migrate their Cluster Server QuickStart clusters to the additional functionality and scalability provided with VERITAS Cluster Server.

VERITAS Cluster Server QuickStart Functionality

In a VERITAS Cluster Server QuickStart cluster, two servers (or nodes) are connected together with a shared storage device—either direct attached storage or to a storage area network (SAN). One application or service (called a Service Group in Cluster Server terminology) can run on each of the two nodes, or a user can configure Cluster Server QuickStart to run only one application on one node and have the other node available as a standby server. If an unexpected outage occurs on one of the nodes in the cluster, Cluster Server QuickStart will cause the application or service running on the node that has the problem to fail over to the other node. After a brief moment needed for the failover itself, users of the applications will be able to reconnect and continue using the application, ensuring the highest possible application availability.

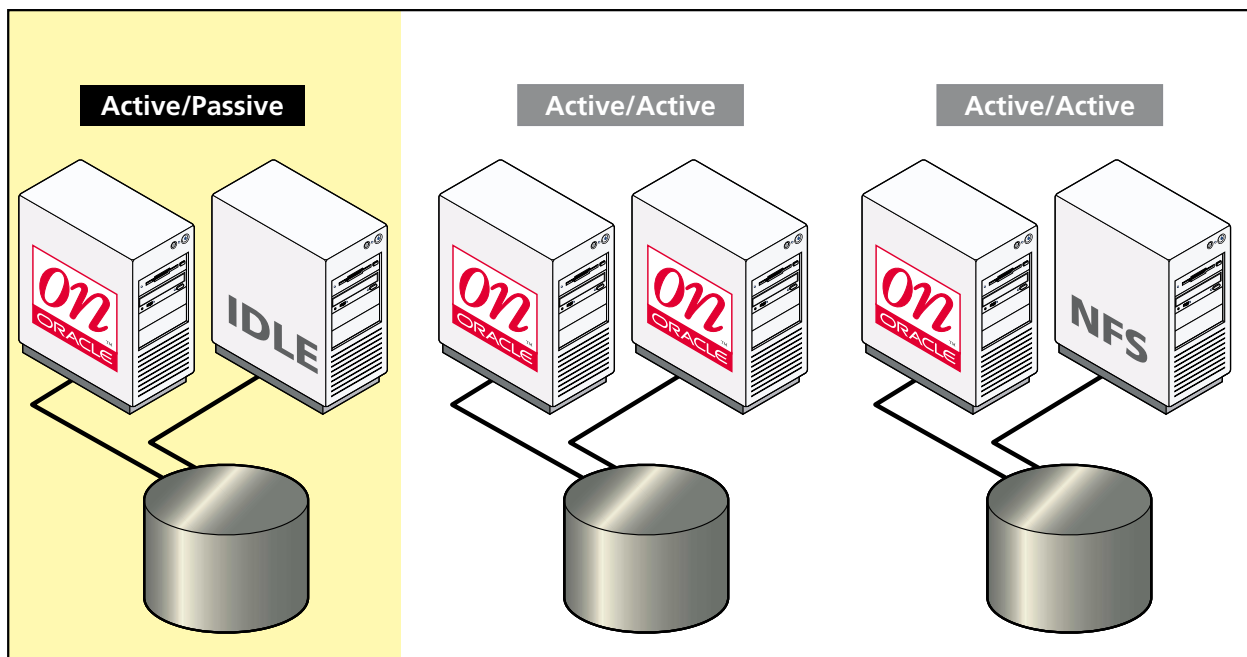


Figure 1: VERITAS Cluster Server QuickStart provides high availability for applications in both active/active and active/passive two-node cluster configurations.

Two Cluster Server QuickStart versions will be offered at the first release—one specifically for Oracle and another version that customers can use to make virtually any application highly available. The Cluster Server QuickStart version for Oracle will provide an Oracle configuration wizard and specific Cluster Server agents to monitor Oracle and Sqlnet to ensure high availability of Oracle services. The version of Cluster Server QuickStart for custom applications uses a custom agent configuration wizard for creating custom agents. This enables Cluster Server QuickStart to monitor, fail over and restart virtually any application. Both the Oracle and the custom application versions of Cluster Server QuickStart also allow the implementation of an NFS group on each node in the Cluster Server QuickStart cluster.

Implementing VERITAS Cluster Server QuickStart

To configure a VERITAS Cluster Server QuickStart cluster, configuration wizards are provided to guide the user through the process of setting up or modifying Cluster Server QuickStart and the clustered applications. The configuration wizards do the following:

- Prompt the user with questions for any additional information to configure Cluster Server QuickStart for Oracle, NFS or a generic application
- Use discovery to predetermine configuration items and present these to the user. (For example, if the user is setting up a network resource, Cluster Server QuickStart will query for the IP address, Network Interface Card (NIC) and other options to create IP and NIC or IPMultiNIC and MultiNICA resources within the cluster)
- Verify that the information provided is valid (e.g., fields that should be numeric have numeric values).

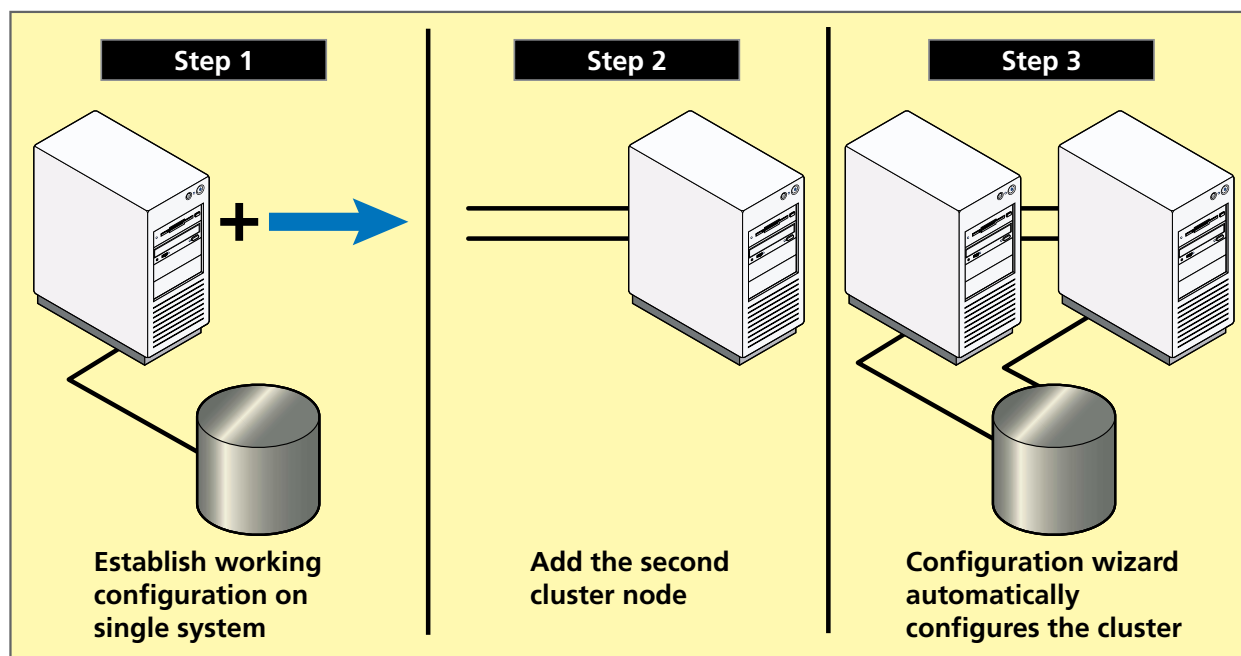


Figure 2: Configuring applications for the VERITAS Cluster Server QuickStart cluster environment is easy, using the configuration wizards provided with the product.

Through the configuration wizards, the user performs all the basic administration functions needed to set up a cluster—adding, modifying, or deleting groups or resources. Using the configuration wizard reduces the complexity usually associated with administering the cluster. Once applications are configured to run within a Cluster Server QuickStart cluster, they will be able to fail over between nodes in the cluster, either automatically if an unplanned outage occurs or manually if the Cluster Server QuickStart administrator chooses to fail over an application from one node to the other in the cluster.

To further simplify cluster administration, QuickStart supports a fixed set of Service Groups in a cluster (one Service Group per node) and supports three simple resource types:

- Storage Resources (e.g., DiskGroup, Disk, Mount, Share, NFS)
- Network Resources (e.g., IP, NIC)
- Application Resources (e.g., Oracle, NFS)

QuickStart users who want to create their own resources or customize resources can upgrade to the standard VERITAS Cluster Server product.

Using VERITAS Cluster Server QuickStart

Once configured, the primary interface for VERITAS Cluster Server QuickStart is a Web GUI that enables a user to access Cluster Server QuickStart clusters from anywhere on the Internet (though a user name and password are needed to access clusters, so security in the cluster is maintained). The Web GUI provides information on all critical cluster state information, including details about systems, heartbeats, resources, resource group status and event logging. Status and fault conditions are readily accessible from the GUI.

A command line interface (CLI) is also provided for Cluster Server QuickStart. It can be used to gather configuration status information—for example to get group state or resource state information.

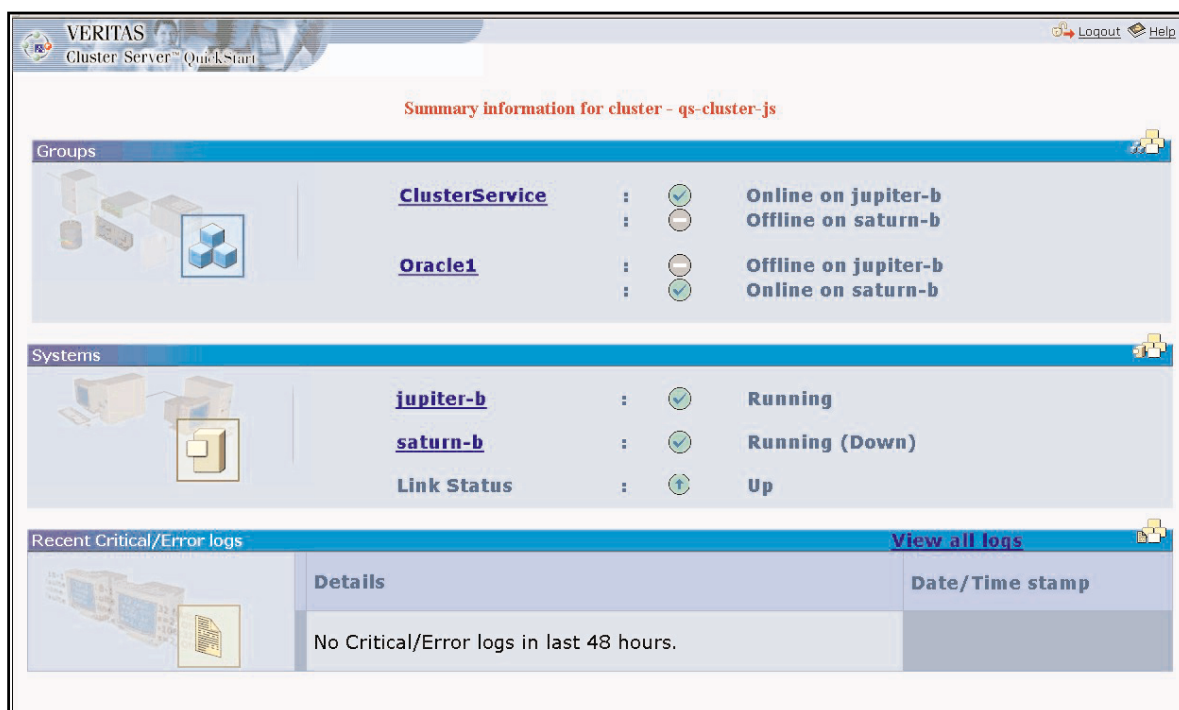


Figure 3: The VERITAS Cluster Server QuickStart GUI enables users to monitor and manage clusters from anywhere on the Internet.

Unified Availability Management

An important part of ensuring overall availability is in being able to manage multiple clusters and clustered applications from a unified console. To provide for unified management of a high availability environment, Cluster Server QuickStart is integrated with VERITAS Global Cluster Manager v1.1 to allow for the consolidated management of Cluster Server QuickStart and enterprise VERITAS Cluster Server clusters from a single, unified console.

Integration with Other VERITAS Products

VERITAS Cluster Server

- VERITAS Cluster Server QuickStart users can easily upgrade to the enterprise VERITAS Cluster Server product with a simple upgrade license key. The upgraded license “unlocks” the additional VERITAS Cluster Server functionality.

VERITAS Global Cluster Manager

- VERITAS Cluster Server QuickStart is integrated with VERITAS Global Cluster Manager v1.1 to allow for the consolidated management of Cluster Server QuickStart and enterprise Cluster Server clusters from a single, unified console. When used with a standard VERITAS Cluster Server product and a data replication solution like VERITAS Volume Manager™, Global Cluster Manager provides wide-area failover for applications and data. Users requiring wide-area failover for clusters should upgrade to the standard VERITAS Cluster Server product.

VERITAS Volume Manager and VERITAS File System™

- VERITAS Cluster Server QuickStart does not require the presence of either a logical volume manager or file system. However, performance and manageability will be improved with the presence of VERITAS Volume Manager™ and VERITAS File System™. If you choose to install VERITAS Volume Manager and File System, they must be installed on each node of the cluster. VERITAS Cluster Server QuickStart will also support third party logical volume managers and file systems.

Supported Applications and Hardware

Hardware and Storage

- Supports two nodes in a cluster
- Supports Solaris (support for additional platforms is planned for future releases of Cluster Server QuickStart)
- Supports tier 1 and tier 2 servers
- Supports single domain clustering
- Supports all storage devices that are supported by the standard Cluster Server product (because it is based on the same product and therefore leverages all the testing and certification done with the standard VCS)

Applications

- Supports Oracle, NFS and custom applications (an application agent is provided that users can customize for basic failover for any application)
- Future application agents are planned



V
E
R
I
T
A
S

W
H
I
T
E

P
A
P
E
R

VERITAS Software Corporation
Corporate Headquarters
350 Ellis Street
Mountain View, CA 94043
650-527-8000 or 800-327-2232

For additional information about VERITAS
Software, its products, or the location of an
office near you, please call our corporate
headquarters or visit our Web site at
www.veritas.com
e-mail us at sales@veritas.com

Copyright © 2001 VERITAS Software Corporation. All Rights Reserved. VERITAS, VERITAS SOFTWARE, the VERITAS logo, *Business Without Interruption*, VERITAS The Data Availability Company, VERITAS Cluster Server, VERITAS Global Cluster Manager, VERITAS Volume Manager, and VERITAS File System are trademarks or registered trademarks of VERITAS Software Corporation in the U.S. and/or other countries. Other product names mentioned herein may be trademarks or registered trademarks of their respective companies. Specifications and product offerings subject to change without notice. Printed in USA. August 2001.

VER05-CSQSWP-000 • 90-01297-399