

Test, Plan and Prepare Before Disaster Strikes

Companies today are increasingly aware that preparing for datacenter outages is a necessity, not an option. Datacenters, which are the lifeblood of any business, are responsible for managing and protecting more data than ever. The effort to provide continuous access to this data and keep applications running is one of the top challenges of IT managers. The threat of disasters, whether man-made or natural, adds to that challenge, making disaster recovery planning (DRP) a critical need for every aspect of the IT infrastructure.

One large oversight that most companies have in common is the inadequate testing of disaster recovery plans.

Why? Because testing disaster recovery plans is not easy. IT managers responsible for protecting data cite the lack of time and hardware resources as reasons for not running DRP tests. They also fear that testing will have a negative impact on the production environment itself – in effect, creating an IT disaster in the effort to avoid one. As a result, testing is often left out of the process or kept to a minimum. To make matters worse, disaster recovery plans are not static. Frequent upgrades are made to the datacenter – including modifications to the infrastructure, upgrades to the software, and alterations to the storage, to name a few – and testing a disaster recovery strategy each and every time changes are made is cumbersome and unrealistic to most administrators.

Testing can have significant advantages. Companies who include DRP testing get a better picture of the plan's effectiveness and have the ability to make changes to the plan before disaster strikes. And that is exactly what must be done to be fully prepared for any event.

Because of these challenges and the great advantages to mitigating testing woes, **VERITAS Cluster Server** and **VERITAS Volume Replicator** are fortified with new features that allow you to test, plan and validate disaster recovery scenarios in production without disruption. The VERITAS Cluster Server Simulator, the VERITAS Cluster Server Fire Drill, and the VERITAS Volume Replicator Advisor are complementary features that are key components of an integrated solution for high availability and disaster recovery.

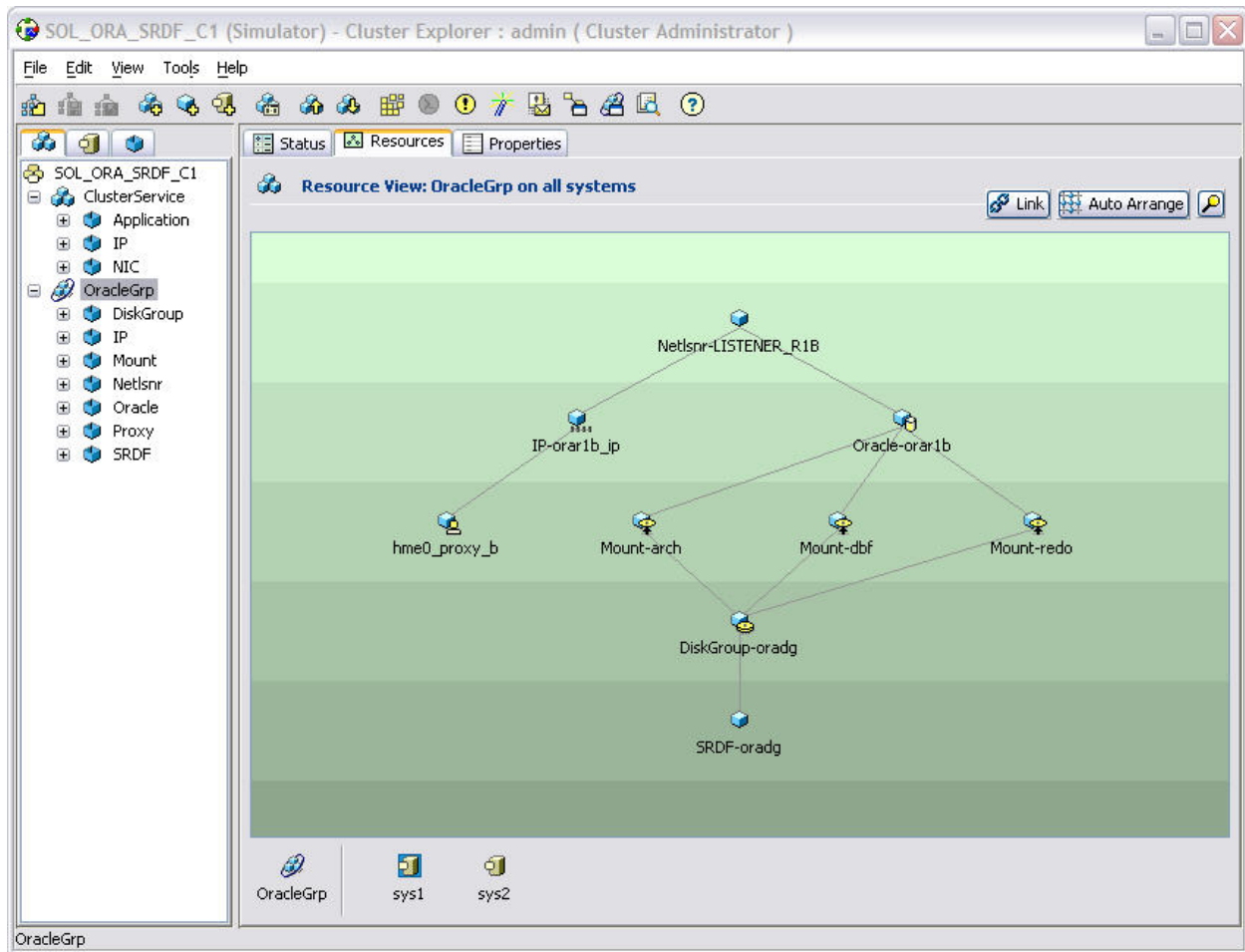
Two of the three features – the VERITAS Cluster Server Simulator and the VERITAS Volume Replicator Advisor – are easy-to-use software tools that are now available for free download on the VERITAS Architect Network. By downloading these tools you can experience the ease of use in planning ahead before disaster strikes. The third tool, VERITAS Cluster Server Fire Drill, is a complimentary feature of VERITAS Cluster Server.

VERITAS CLUSTER SERVER SIMULATOR

VERITAS Cluster Server Simulator is a stand-alone tool included with VERITAS Cluster Server. VERITAS Cluster Server Simulator, which can be installed and managed on any laptop or desktop, allows cluster administrators to simulate application failover scenarios for planned and predictable recovery, based on application priority and server capacity. The Cluster Server Simulator works identically to the award-winning VERITAS Cluster Server, allowing you to test out which configurations would be right for your existing or anticipated environment.

By using Cluster Server Simulator, administrators can ensure critical applications are running on the most optimal servers in the cluster configuration to best protect against local or site fault. Additionally, the Cluster Server Simulator can help ensure all pre-defined application dependencies are maintained in the event of a failure. This is particularly useful as multiple versions and complex application dependencies become more prevalent in datacenter configurations. Cluster administrators can now freely test multiple application failover scenarios on any laptop or desktop and incorporate the saved changes into the production cluster environment to take effect immediately. In this way, administrators can verify new changes before implementation. The advantages of Cluster Server Simulator assist administrators in three ways:

1. **Planning application failover scenarios** – The Cluster Server Simulator verifies that applications are migrated to the most appropriate server, based on planned failover strategy.
2. **Testing various failover strategies** – "What if" application failover strategies can be tested on any desktop/laptop computer.
3. **Maximizing server utilization** – The Cluster Server Simulator can help an administrator better understand where certain critical applications are running and ensure that these critical applications are hosted on the best hardware in the cluster environment.



VERITAS Cluster Server Simulator

The tool also provides an effective demonstration of the intuitive user interface of VERITAS Cluster Server, complete with wizards to guide you through setup of your first cluster. Since the Cluster Server Simulator takes advantage of the same graphical user interface that VERITAS Cluster Server uses, the administrator can gain a practical understanding of how Cluster Server handles application failover, either in a local area or over a wide area.

Note: The Cluster Server Simulator must be installed on a Windows 2000 or higher system. For a list of frequently asked questions, see the [Cluster Server Simulator](#) download page.

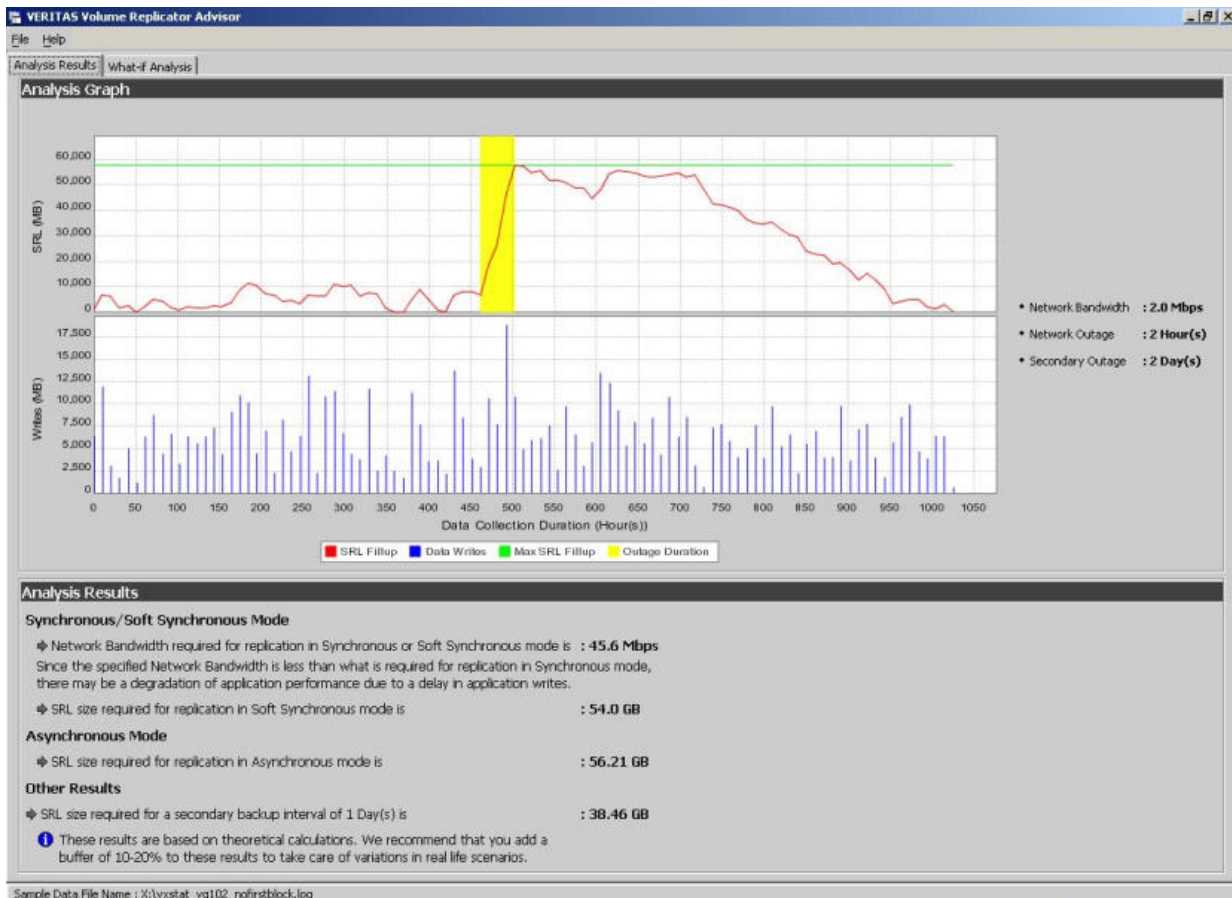
VERITAS VOLUME REPLICATOR ADVISOR

The VERITAS Volume Replicator Advisor is a software tool that helps an administrator plan for optimal bandwidth when replicating data between sites. Replicating critical data over IP to one or more disaster recovery sites can increase network bandwidth requirements. Analyzing your environment over a two-week period, the Volume Replicator Advisor collects information on how much data is being written within your environment and provides optimal bandwidth recommendations based on activity and specified parameters. It also helps you configure your Storage Replicator Log (SRL), a component of VERITAS Volume Replicator that is used to buffer peak write activity to further minimize bandwidth requirements.

The VERITAS Volume Replicator Advisor, which is now available with a free download, provides the following key features

- Performs both data collection and analysis for network planning
- Helps plan the SRL size after analyzing the sample data to appropriately handle peak write activity
- Provides the analyzed output in a graphical and text format for easy planning
- Allows "what if" analysis, which helps you to plan accurately and understand worst-case scenarios.

Note: The Volume Replicator Advisor is a complementary feature that is included with VERITAS Volume Replicator and is also available as a free [download](#) on the VERITAS Architect Network.

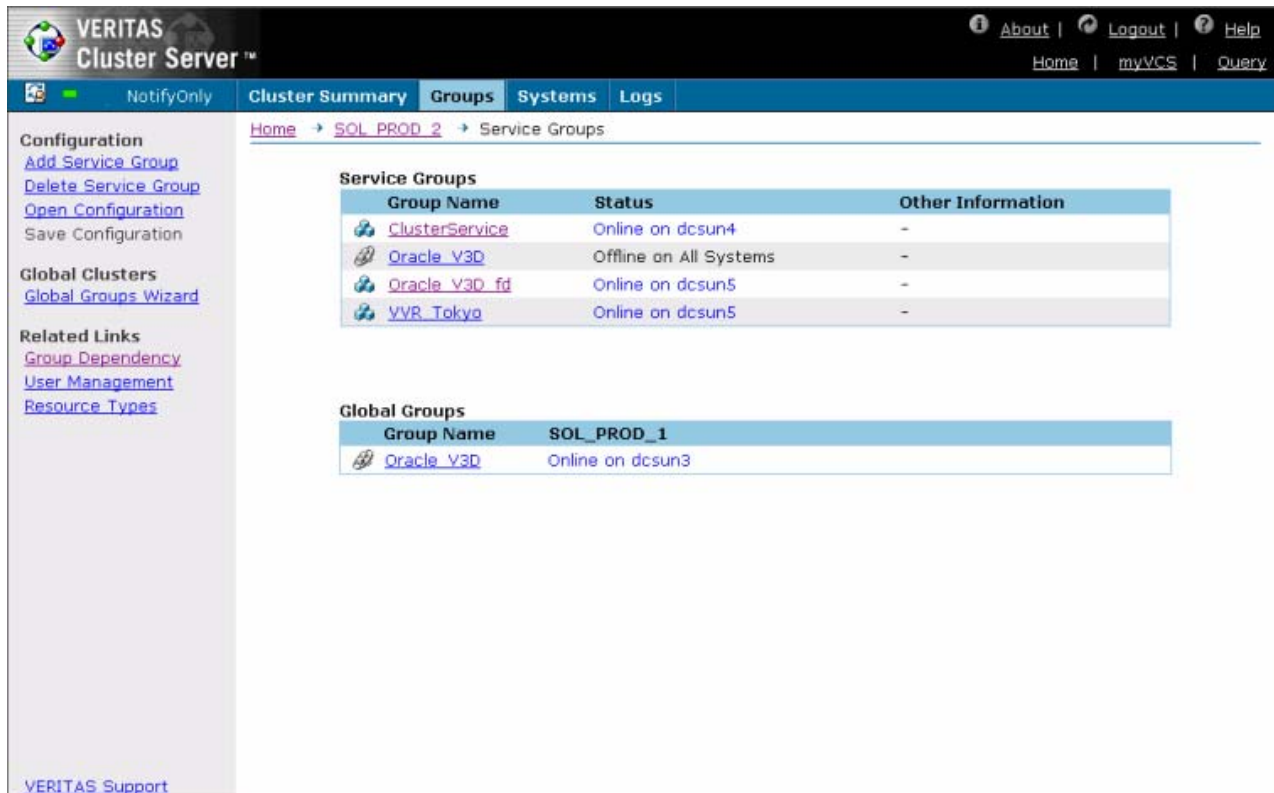


VERITAS Volume Replicator Advisor

VERITAS CLUSTER SERVER FIRE DRILL

The VERITAS Cluster Server Fire Drill is a tool used for testing a configuration's fault readiness by mimicking a failover without stopping the applications at the primary datacenter. A typical Fire Drill brings up a database or application (using a snapshot of data that has been replicated to a disaster recovery site) to make sure the application is capable of coming online on the secondary in case of a fault at the primary site. VERITAS Volume Replicator or third-party replication solutions can be used to replicate the data. In the event the disk groups and application/database cannot come back online, the administrator can review a log file that helps explain the issues so an administrator can take immediate corrective action. Fire Drill can be initiated anytime, without the need for extra hardware or storage. By using VERITAS space optimized snapshots for bringing applications online at the secondary site, you can test disaster recovery plans without the need for a full extra copy of the data (space optimized snapshots only use approximately 10 percent of what is currently utilized). Once Fire Drill has brought the necessary applications online, the service group is then immediately taken offline and verification of a successful failover is recorded in the log files.

The VERITAS Cluster Server Fire Drill is available as a complementary feature available within Cluster Server.



The screenshot shows the VERITAS Cluster Server web interface. The breadcrumb navigation is Home > SOL_PROD_2 > Service Groups. The main content area displays two tables:

Service Groups		
Group Name	Status	Other Information
ClusterService	Online on dcsun4	-
Oracle_V3D	Offline on All Systems	-
Oracle_V3D_fd	Online on dcsun5	-
VVR_Tokyo	Online on dcsun5	-

Global Groups	
Group Name	SOL_PROD_1
Oracle_V3D	Online on dcsun3

A Fire Drill Service Group is designated with a “_fd” following the name of the Service Group to be verified.

DOWNLOADS

[VERITAS Cluster Server Simulator Download](#)
[VERITAS Volume Replicator Advisor Download](#)

RELATED INFORMATION

[VERITAS Cluster Server Datasheet](#)
[VERITAS Volume Replicator Datasheet](#)

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