Symantec System Recovery 2011: Cluster and SAN Environments

Symantec™ System Recovery 2011

To sustain your operations, your business, and even your brand, you need to recover from a system failure as quickly as possible. However, manual system recovery processes prolong system downtime – and potential losses.

Symantec System Recovery 2011 offers a superior solution by delivering fast and reliable system recovery that helps minimize downtime and meet recovery time objectives with confidence. In just four simple steps, quickly restore physical and virtual systems to bare metal in minutes, even to dissimilar hardware, virtual environments, or remote locations with Symantec's patented Restore Anyware technology.

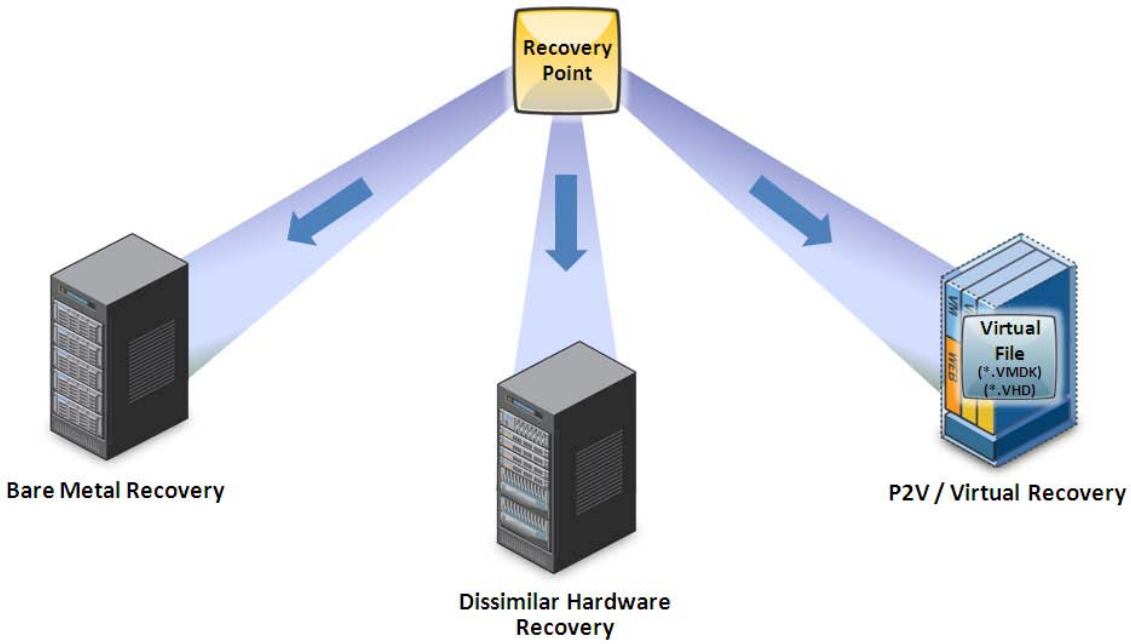
Built on 10 years of research and development and with more than 787,000 protected systems, Symantec System Recovery (formerly Backup Exec System Recovery) is one of the most proven, trusted, and reliable system recovery solutions.

Windows Cluster and SAN Configurations

Symantec System Recovery 2011 (SSR) supports backing up and restoring Windows Server 2003 and 2008 volumes in cluster and SAN environments. Both Microsoft and Veritas cluster configurations are supported.

Backups created by Symantec System Recovery 2011 are referred to as recovery points. Key supported recovery operations for servers in cluster and SAN environments include the following:

- Bare metal recovery of protected volumes back to their original hardware configuration
- Recovery of protected volumes to hardware configurations that differ from the original server's hardware
- Conversion of recovery points to both VMware and Microsoft Hyper-V virtual format



Symantec System Recovery 2011: Cluster and SAN Environments

This document will outline best practices and known limitations when using SSR to protect and recover servers in cluster and SAN shared storage environments.

Note: For detailed information on the specific Microsoft server platforms supported by Symantec System Recovery, please consult the Symantec System Recovery Software Compatibility List (SCL) available for download here: http://entsupport.symantec.com/umi/V-306-38.

Creating Recovery Points

Best practices for capturing recovery points with Symantec System Recovery 2011 in a Windows server cluster environment include the following:

- Install Symantec System Recovery 2011 on all nodes within the server cluster.
- Label all local and shared storage volumes for easy identification from within the Symantec Recovery Disk (SRD). Note that drive letter assignments and volume order may be different from within the SRD than from within Windows.
- Ensure that any location to which recovery points will be stored can be accessed from a system that has been booted using the Symantec Recovery Disk (SRD). Take the necessary time to test the SRD and make sure your selected destination is accessible either locally or via the network.
  Note: If a device is not visible from the SRD environment, create a custom version of the SRD and add additional drivers for the device to the SRD driver database. Test the new SRD to ensure the device is visible.
- If you store a recovery point of a cluster node system volume to a SAN shared storage volume, after a failover you will only be able to access those recovery points via the network. Consider the implications of this when deciding whether to store images of cluster node system volumes to SAN shared storage.

Restoring Recovery Points

Restoring a Single Node in a Cluster

Before beginning, please refer to your specific cluster software documentation for application specific rules that govern the process of restoring cluster nodes.

- Boot the cluster node that will be restored using the Symantec Recovery Disk (SRD).
  Note: It can be difficult to determine which physical volume to restore to since volume order and drive letter assignments may be different within the SRD than within Windows. If you cannot tell which volume is local to the node you are restoring, shut down the machine, temporarily disconnect any external storage, and then boot into the SRD to restore the volume.
- Restore the recovery point of the operating system volume. Be sure to select the option to recover the original disk signature so that original Windows drive letter mappings will be preserved. If the option is available, select the option to preserve the domain trust token.
- Boot the server into Windows (if applicable, reconnect any external storage first).
- Verify that connections to shared storage are present.
- Verify the cluster is functioning correctly. Remember to check your specific cluster documentation as needed.

Restoring an Entire Cluster

- Before beginning, please refer to your specific cluster documentation for application specific rules that govern the process of restoring cluster nodes.

- Take all cluster nodes offline.
- Restore one cluster node from the SRD as per the above steps.
- Boot the cluster node into Windows, and restore the quorum volume to its original location on the shared storage (note that a Microsoft quorum volume can only exist on a basic disk).
- From either the SRD or from within Windows, restore any shared storage volumes (note that this may be easier to do from Windows).
  From within Windows, reestablish shared storage connections.
- Restore the remaining cluster nodes using the Symantec Recovery Disk.
- Verify that the cluster is running properly. Remember to check your specific cluster documentation as needed.

Support Information

Supported Operations

In a server cluster environment for Microsoft Windows 2003 and Windows 2008, Symantec System Recovery 2011 provides support for the following operations:

- Creation and restoration of an active node OS recovery point in a multi-node cluster.
- Creation and restoration of passive node OS recovery point in a multi-node cluster.
- Creation and restoration of quorum disk volume recovery points. Restoration of quorum disk volume recovery points should be done within Windows, due to volume order and driver letter assignments being unpredictable when booting to the SRD.

The creation and restoration of shared-storage volume recovery points (Note: Proper presentation of the shared-storage volume must be available in Windows Disk Management prior to restore). To achieve this you must perform shared-storage volume recovery within Windows on the active node.

Unsupported Operations

Symantec System Recovery 2011 does not support the following operations in M Windows 2003 and Windows 2008 server cluster environments:

- Restoring a quorum volume from the Symantec Recovery Disk (SRD).
- Job failover. Currently, scheduled jobs do not automatically activate and run on the new active node after a failover. They must be manually re-enabled (or recreated) on the new active node.

Summary

Symantec System Recovery 2011 (SSR) supports backing up and restoring Windows Server 2003 and 2008 volumes in cluster and SAN environments. This includes the ability to restore a single cluster node or an entire cluster.

Please take note of the best practices contained within this document, as well as information contained within the documentation specific to your cluster environment to ensure a successful recovery experience.

For More Information

Link	Description
www.symantecsystemrecovery.com	Product Website
http://www.symantec.com/business/support/index?page=home&locale=en_us	Symantec Support Portal
http://entsupport.symantec.com/umi/V-306-38	Symantec System Recovery Software Compatibility List