Restoring a Hyper-V Standard Backup

https://campus.barracuda.com/doc/93198271/

Restoring from a Hyper-V Standard backup will give you the virtual hard disk file(s) for the virtual machines you want to recover. These files are restored to a specific point in time and will be ready to be imported into Hyper-V. This article will show you how to perform a Hyper-V Standard restore.

In addition to the space needed to accommodate the restored (.vhd) or (.vhdx) files, expect to use a significant amount of space for the rebuilding of incremental changes. The base file and changes will be restored simultaneously then merged together.

Hyper-V Standard Restore

This chapter includes the following topics:

- Overview
- Restoring Hyper-V Standard Backups

Overview

This section includes the following topics:

- About Restoring to a Folder
- Hyper-V Manager Virtual Machines Import Options
- Backup States of Imported VMs
- Hyper-V Replication
- Managing an Active Recovery

About Restoring to a Folder

Each VM has its own folder created within the specified restore directory.

Within that folder, the VM files are created with the same folder structure as when they were backed up.

All VHD/VHDX files (associated with VM disks) and the XML configuration file are restored with a VM restore. If the VM was backed up in offline mode and the memory state needed to be saved, the VM restores the associated BIN and VSV files.

Hyper-V Manager Virtual Machines Import Options

Hyper-V lets you restore virtual machines to any system for import into Hyper-V or mount them as virtual disks.

After you have restored your selected virtual machines, you must Import them into Hyper-V to power on and access the VMs.

To access Hyper-V import options, launch Hyper-V Manager, select Import Virtual Machine, and then select the VM directory you have restored.

There are three virtual machines import options in Hyper-V Manager:

- Register
- Restore
- Copy

Register

Choose this option if the destination you selected for the recovered virtual machines are the destination you intend to run it from.

The original ID of the VM is used when registering the VM with hypervisor.

Restore

Choose this option if the destination you selected for the recovered virtual machines are a temporary location (for example, on a share or removable drive) and you want Hyper-V to move the restored files to the appropriate location and register the virtual machines for you.

The original ID of the VM is used when registering the VM with the hypervisor.

Copy

Choose this option if you intend to import the recovered virtual machines multiple times (for example, you are using the virtual machines as a template for a new virtual machine). Hyper-V copies the restored files to the appropriate location for you.

A new ID is generated and used to register the VM with the hypervisor.

Refer to the third-party Hyper-V Manager documentation for more information.

Backup States of Imported VMs

A VM is imported in a certain state depending on the state it was in when backed up. The following table provides the various backup states.

State at Time of Backup	Type of Backup	State after Restore
Running	Online	Off
Running	Offline	Saved
Saved	Offline	Saved
Paused	Offline	Saved
Off	Offline	Off

Hyper-V Replication

Hyper-V Replication is a feature of Hyper-V 2012 and greater versions that allows users to replicate their production VMs to a secondary host on a near-continuous schedule.

If you are using Hyper-V replication, it is recommended that the agent be installed on the recovery host and backs up the recovery VMs. This method puts less load on the production server. This method also provides more data protection.

Refer to the third-party Hyper-V Replication documentation for more information.

Managing an Active Recovery

To manage an active recovery, perform the following steps.

1. On the **Computer** page, click the **Active Recoveries** tab, and then click the **Manage Recovery** button, as shown in the example below.

The **End test recovery and delete changes** page is displayed.

End Active Recovery and Delete Changes?

Any changes made to the VM while in Recovery Mode will be lost and the VM, associated differencing disk, and config files will be removed from the host.

☐ Delete VM changes made during Recovery Mode and resume backup schedule.

No   Yes
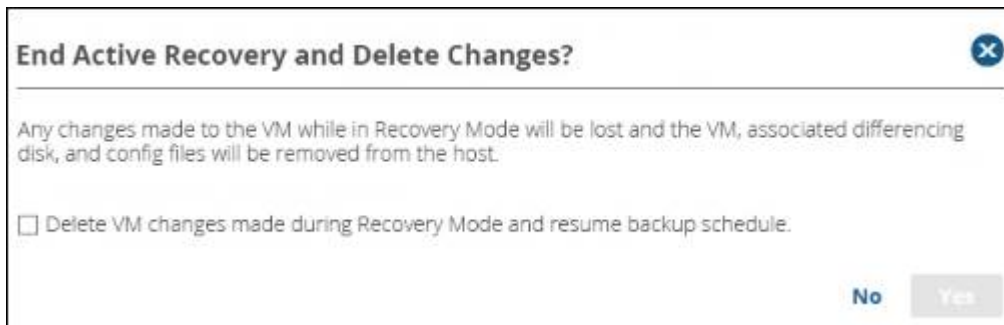
2. Ensure the differencing disks are not mounted or in use by any powered-on VM, or the delete operation fails.
   If you end the active recovery, the following occurs:
3. Select the **Delete VM changes made during recovery mode and resume backup schedule** check box.
   If enabled, the following occurs:
   ○ Any changes made to this VM or its disks while in recovery mode are lost.
   ○ The differencing disks created during recovery are deleted.
   ○ The recovery VM is powered off and deleted.
   ○ All files created as a part of the test restore are removed from the user-defined location.
   ○ The recovery VM is deleted from the selected host's inventory.

Restoring Hyper-V Standard Backups

To restore a Hyper-V Standard backup, perform the following steps.

1. Navigate to the **Computer** page.
   The **Computer** page is displayed.
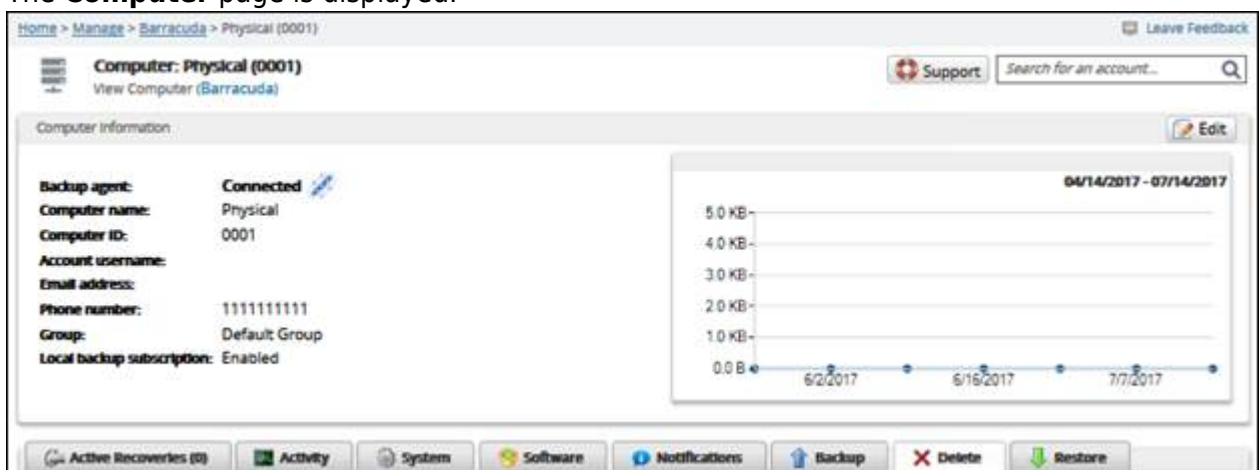
2. Click the **Restore** tab.
   The **Restore Selections** page is displayed.

3. Click the backup type you want to restore.
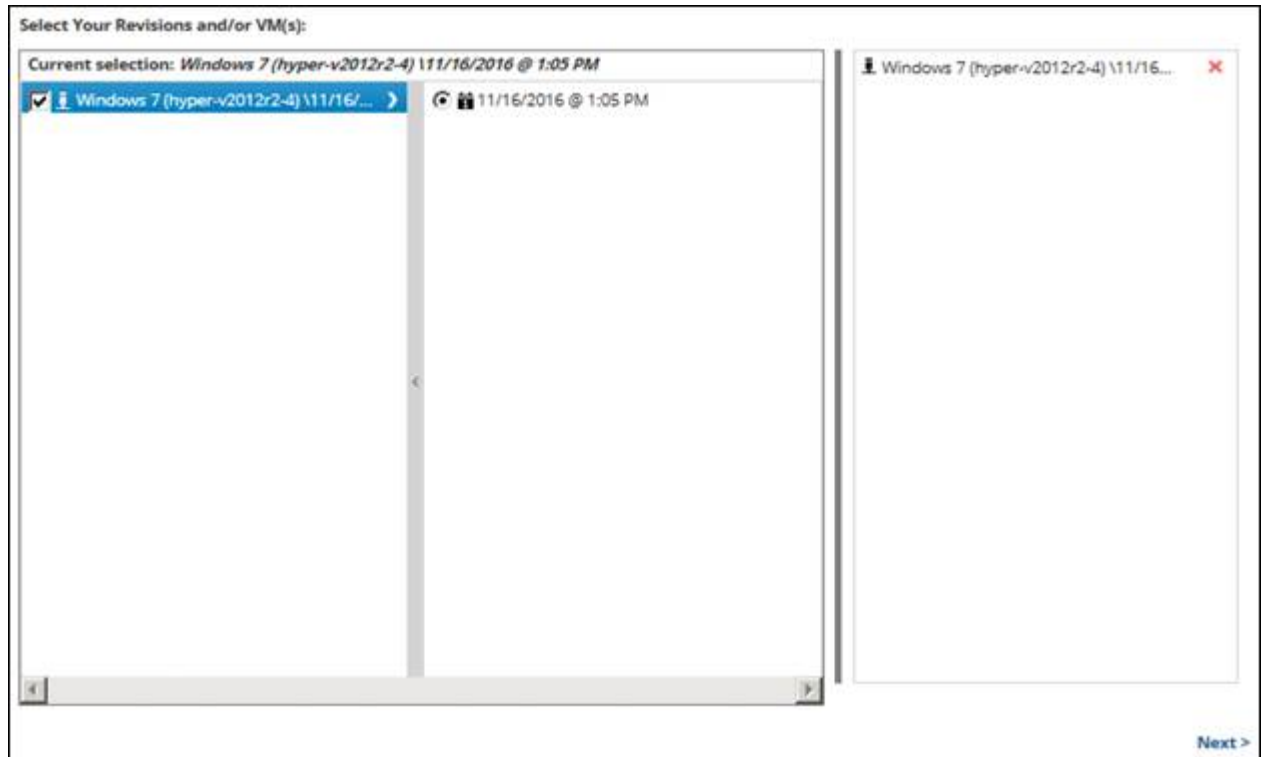   The **Select** page is displayed.
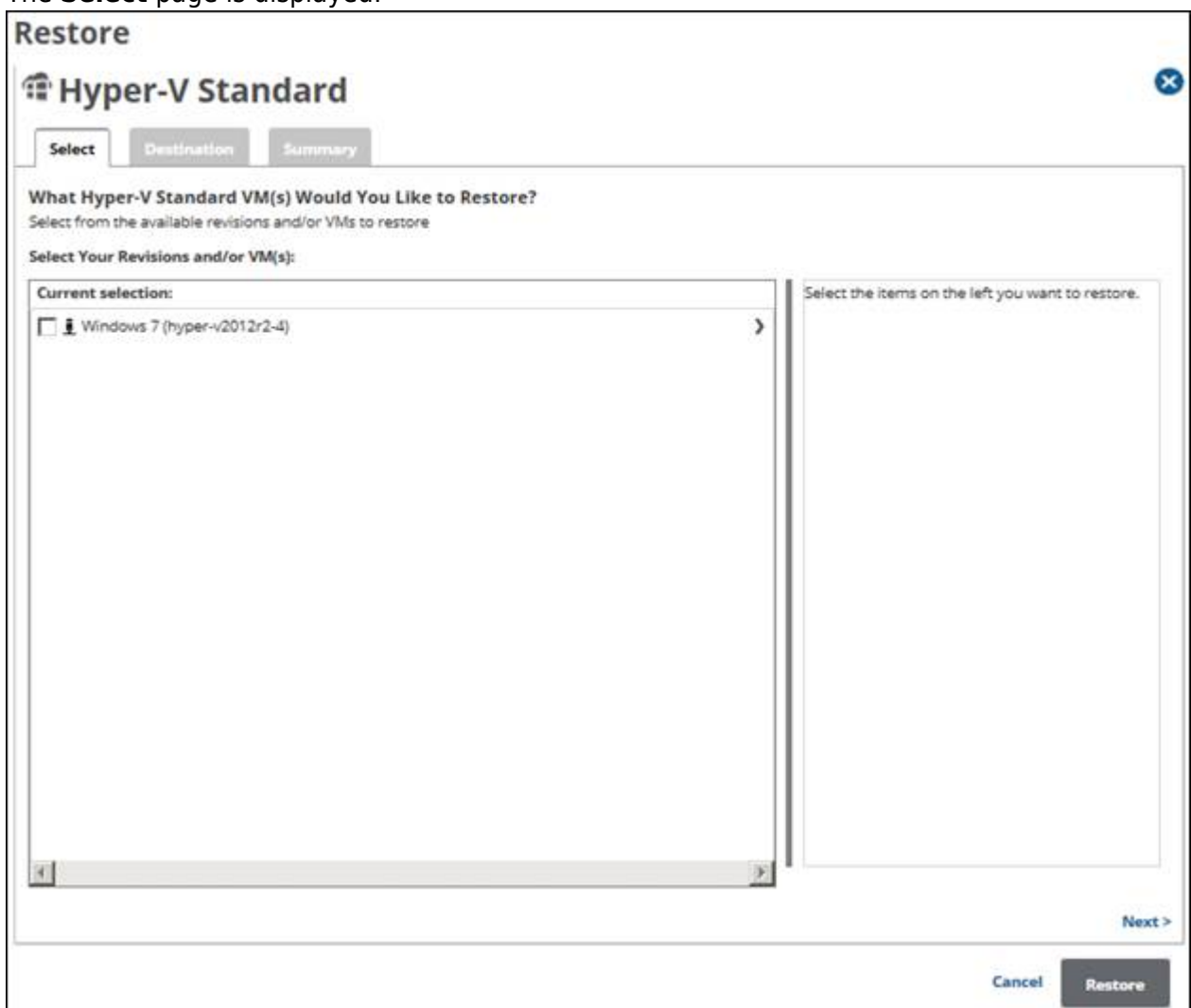
4. In the **Current Selection** pane, select the VMs and revisions you would like to restore.

   Notes
   - You can choose only one revision to restore per selected VM.
   - Multiple VMs can be restored simultaneously.

5. Clicking the arrow ❭ at the right of the items displays more revisions.

6. The selection is displayed in the far-right pane. Click the remove icon ❌ to remove any

selections or clear the item check box.

7. Click **Next**.
    The **Destination** page is displayed.
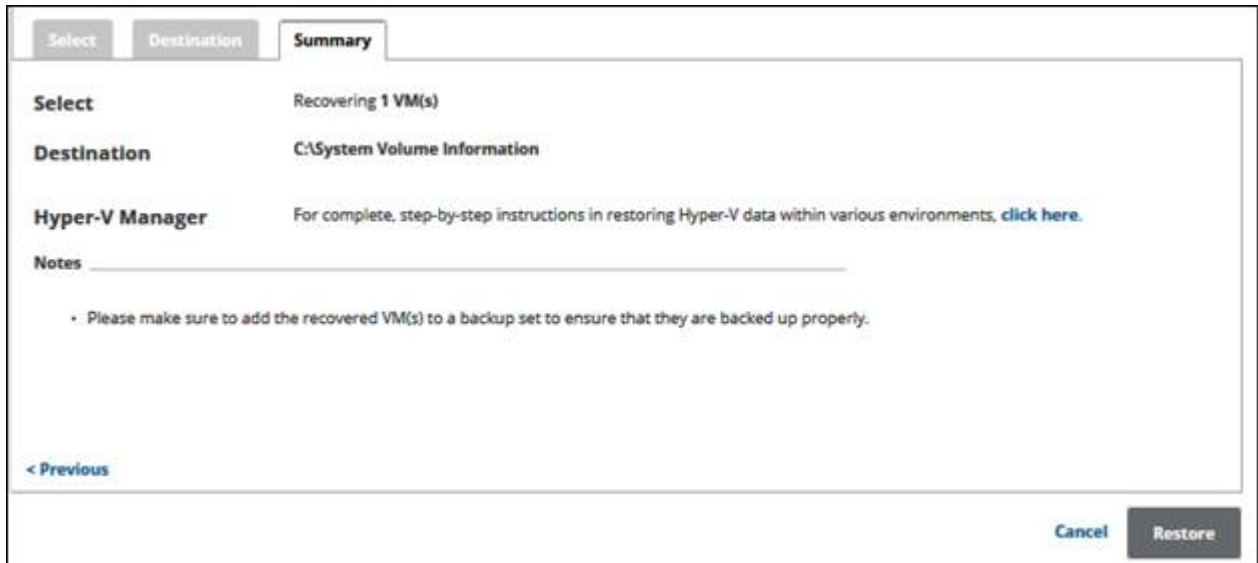
> **Notes**
>   - Upon the restore, a new directory for each selected VM is created in the storage location directory and each VM's associated files are restored into their respective, created directory.
>   - Once restored, the VM files can be imported into Hyper-V.

8. At the Path field, type a path, or click the **Browse** button to select the storage location of the restore.
9. After selecting the storage location of the restore, click **Next**.
    The **Summary** page is displayed.

Make sure to add the recovered VMs to a backup set so they are backed up properly.

10. Optionally, for more information about restoring Hyper-V data within various environments, click the click here link.

This option opens a new page in the Barracuda MSP Knowledge base that allows you to access additional information.

11. Verify your selections, and then click the **Restore** button.
The confirmation pop-up is displayed.

12. Click **Yes**.
The **Restore Selections** page is displayed showing the status of the restore.

Figures

1. image002 (1).jpg
2. image004.jpg
3. image006.jpg
4. image008.jpg
5. image010.jpg
6. image012.jpg
7. image014.jpg
8. image016.jpg
9. image018.jpg
10. image020.jpg
11. image022.jpg