# Veritas NetBackup™ Upgrade Quick Start Guide



### Veritas NetBackup™ Upgrade Quick Start Guide

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Veritas Services and Operations Readiness Tools (SORT) is a website that provides information and tools to automate and simplify certain time-consuming administrative tasks. Depending on the product, SORT helps you prepare for installations and upgrades, identify risks in your datacenters, and improve operational efficiency. To see what services and tools SORT provides for your product, see the data sheet:

https://sort.veritas.com/data/support/SORT Data Sheet.pdf

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Chapter

# About the NetBackup Quick-Start Upgrade Guide

This chapter includes the following topics:

About the NetBackup Quick-Start Upgrade Guide

### **About the NetBackup Quick-Start Upgrade Guide**

This manual is designed as a supplement to the *NetBackup Upgrade Guide* for the experienced user. Use of this manual by novice or inexperienced NetBackup administrators is not recommended. These administrators should use the *NetBackup Upgrade Guide*.

The information in this manual assumes that you have already read and understand the upgrade prerequisites. It assumes that you have already performed any of the necessary planning procedures and are aware how long upgrades take. It assumes that you are aware of all the changes that are outlined in the *NetBackup Release Notes*.

**Caution:** If at any time while using this manual, you are unsure of a step, a procedure, or have questions, refer to the *NetBackup Upgrade Guide* for additional information. The *NetBackup Upgrade Guide* has greater detail on all areas of the upgrade process.

http://www.veritas.com/docs/DOC5332

Chapter 2

# Windows Upgrade Quick Start Guide

This chapter includes the following topics:

- Preinstall procedure for upgrading to NetBackup 8.1
- Performing local, remote, or clustered server upgrades on Windows systems
- Post-install procedure for upgrading to NetBackup 8.1

# Preinstall procedure for upgrading to NetBackup 8.1

Use the following procedure to upgrade your environment to NetBackup 8.1.

Veritas has developed tools to help you perform the extra step that is required for the guided method. For more details, contact your Business Critical Services (BCS) representative.

Note: Remember to update NetBackup OpsCenter to version 8.1 before you update your NetBackup master servers to version 8.1. You must also disable OpsCenter data collection. See the NetBackup OpsCenter Administrator's Guide for complete information.

#### http://www.veritas.com/docs/DOC5332

Be aware there is a known issue for OpsCenter upgrades on 64-bit Windows platforms. If language packs or Maintenance Packs are installed, the upgrade can fail. More information about this issue is available.

#### http://www.veritas.com/docs/TECH211070

You can disable the OpsCenter data collection for a specific master server. If you disable data collection, you can upgrade your master server before your OpsCenter server. Disabling data collection results in known issues. More information about disabling data collection and the risks is available.

Note: For NetBackup installations that include globally clustered master servers using the Global Cluster Option (GCO), follow the upgrade planning guidelines in this guide. Then, refer to the following document for the specific steps to upgrade these servers: http://www.veritas.com/docs/HOWTO73064

#### Preinstall steps to upgrade to NetBackup 8.1 and complete the image metadata migration

- Perform environment checks with the SORT tool.
  - See the Veritas NetBackup Upgrade Guide.
- 2 Perform any pre-upgrade tasks that you would normally do in regard to your NetBackup environment. For example:
  - Stop all customized or third-party scripts.
  - Perform any cluster-specific tasks.
  - Run a hot catalog backup.
  - Disable OpsCenter data collection for this master server.
  - Disable all storage lifecycle policies (SLPs).
  - Deactivate all NetBackup policies.
  - Deactivate all disk staging storage units for all pre-NetBackup 7.5.x environments.
  - For clustered systems only, take the following NetBackup resources offline:

- Windows Server Failover Clusters (WSFC): Take all of the NetBackup group resources offline except for the disk, the virtual name, and the
- virtual IP address. Refer to the Microsoft Cluster Administration documentation to determine how to take the NetBackup group resources offline through the cluster administrator interface.
- Cluster Server (VCS) clusters: Take the NetBackup resource offline. Freeze the NetBackup group with the -persist option using the command shown:

```
hagrp -freeze NetBackup service group -persistent
```

Refer to the Veritas NetBackup Clustered Master Server Administrator's Guide for the commands to take these resources offline.

(Conditional) If you plan to change your NetApp cluster to Vserver mode from node scope mode, create a detailed image report for each filer. You can generate this report with the bpimagelist command. The example that is shown is one possible option. Use whatever options are necessary for your environment.

```
bpimagelist -client ndmp host name
```

Beginning with NetBackup 8.0, the NetBackup master server includes a configured Tomcat web server to support critical backup operations. This web server operates under user account elements with limited privileges. These user account elements must be available on each master server (or each node of a clustered master server). More information is available:

See the Veritas NetBackup Upgrade Guide.

Note: Veritas recommends that you save the details of the user account that you use for the NetBackup Web Services. A master server recovery requires the same NetBackup Web Services user account and credentials that were used when the NetBackup catalog was backed up.

Note: If the NetBackup PBX is running in secure mode, please add the web service user as authorized user in PBX. More information about determining PBX mode and how to correctly add users is available.

http://www.veritas.com/docs/000115774

Stop any applications on the system that interact with NetBackup. This step includes any databases or system components being backed up. Failure to stop these applications may result in unexpected behavior. Observed behavior includes aborted upgrades and application failures.

For Oracle users, you must take down your database and your listener processes before you upgrade.

If you cannot stop your Oracle database, a procedure is available that may let you install NetBackup with the Oracle database active. More information on this topic is available.

http://www.veritas.com/docs/TECH158276

- Stop all NetBackup services.
  - On UNIX systems: /usr/openv/netbackup/bin/bp.kill all
  - On Windows systems: install path\NetBackup\bin\bpdown -f

The preinstall procedure is completed. Proceed to upgrade the NetBackup binaries.

## Performing local, remote, or clustered server upgrades on Windows systems

Use the following procedure to upgrade to NetBackup 8.1 on a local, a remote, or a clustered computer.

#### To upgrade the NetBackup binaries for a local, remote, or clustered server on Windows

- Log on to the system where you want to initiate the NetBackup upgrade. Be sure to log on with administrator privileges.
  - To upgrade local Windows systems, log on to the computer directly at the console.
  - To upgrade remote Windows systems, log on to a system with network access to all of the hosts where you want to install NetBackup.
  - To upgrade clustered Windows systems, log on to the active node (the node with the shared disk).
- Start the NetBackup Installation Wizard with one of the following methods:
  - DVD media Insert the NetBackup for Windows DVD in the drive. If Autorun is disabled, navigate to the DVD drive and run Browser.exe.
  - ESD images (downloaded files)

Navigate to the directory where the images reside and run Browser.exe.

- 3 On the initial browser screen (Home), click Installation.
- On the Installation screen, click Server Software Installation. 4
- 5 On the **Welcome** screen, review the content and click **Next**.
- (Conditional) If you previously installed NetBackup 8.1 on this host, you see the Program Maintenance dialog.
  - Select Modify to change installation settings for the local host, or to use the local host as a platform to perform push installation to remote hosts.
  - Select Repair to restore NetBackup 8.1 to its original state on the local host.
  - Select Remove to remove NetBackup 8.1 from the local host.
- On the **License Agreement** screen, do the following:
  - I agree to and accept the terms of the license agreement. You must select this item to upgrade the software.
  - Click Next.
- On the Veritas NetBackup Installation Type screen, provide the following 8 information:

Where to install	For a local upgrade, select Install to this computer
	only.

For a remote upgrade, select Install to multiple computers on your network.

For a clustered upgrade, the only option is Install a

clustered master server.

Select this option to upgrade NetBackup with the default Typical

settings.

Custom Select this option to override the default NetBackup

settinas.

Click Next

- On the NetBackup License and Server Type screen, provide the following information:
  - Click Add License.
  - Browse to the folder where you have downloaded the new license files.
  - Select one or all of the licenses based on your requirement.

#### Click Open.

All the selected licenses are validated and listed in the table by the license validator tool. The table displays information such as License file path, State, License Type, Expiration Date, Product Name, and Reason for invalid license.

You can sort each column in the ascending or descending order as per your need.

Confirm all the required licenses are selected.

Note: You cannot select Invalid and Expired licenses. If you do not select the valid licenses, then these are not added during NetBackup installation.

Note: You must have at least one base product license installed for NetBackup installation to proceed.

#### License

For upgrades, the license for the existing installation type determines which components you can select.

Note: For remote upgrades, the license that you enter here gets pushed to the other nodes. Your license may enable add-on products. If you push NetBackup to nodes that have an add-on product already installed, your license works for the add-on product(s).

For remote or for clustered upgrades, the following occurs during the upgrade process to verify that you have the proper credentials to perform the upgrade:

- When you select a clustered system for upgrade, NetBackup determines if you have proper administrator credentials on all nodes in the cluster. If you do not have the proper credentials, the system is not added to the list.
- If you have the proper credentials, NetBackup performs a second check to determine if a license is needed. If a license is needed and one was not entered, the system cannot be added to the list. You must enter a valid license to upgrade on that node. If you enter an invalid license, this screen remains visible until a valid license is entered.
- Click **NetBackup Master Server** to proceed to upgrade the master server software.

- Click NetBackup Media Server to proceed to upgrade the media server software.
- 10 (Conditional) If there is a mismatch of feature count between the new licenses and the previous licenses, a list of missing and discontinued features is displayed.

In the **Missing Features** table, the features that are not present in the new licenses are listed at the top. Next you see the list of features where the new license count is less than the old license count. The count difference is displayed in parentheses.

The **Discontinued Features** table displays the list of features no longer available in NetBackup.

Click **Export** to save and export the list of missing and discontinued features for your reference.

Click **Close** to exit. Add the licenses that include the missing features from the previous upgrade attempt.

Click **Upgrade Now** if you want to continue the upgrade with the features missing in your new licenses.

11 On the NetBackup Web Services screen, enter the Web Services Password.

This password is the password for the NetBackup web services user account. You must create this account before you install the master server. More information is available.

On the **NetBackup Web Services** screen, specify the account type and the account details.

What types of acccounts should we use?

Select either Local or Domain (Active Directory).

Select **Local** if you want to associate the web server with a user and a group account that exist on the local host.

Select Domain (Active Directory) if you want to associate the web server with a user and a group account that exist on a trusted Windows domain.

#### What are the existing account details

Specify the information as shown:

- Domain If you chose the Domain (Active Directory) account type, specify the name of the domain to which the user and the group accounts belong.
- Group Specify the name of the group account to associate with the web server.
- User Specify the name of the user account to associate with the web server. For security reasons, do not specify a user account that has administrative privileges on the host.
- Password Specify the password of the user account in the User field.

More information is available.

See the Veritas NetBackup Upgrade Guide.

12 This step applies only to Custom upgrades. For Typical installations, skip to the next step.

This step describes how to select and configure the **NetBackup Features**. NetBackup Port Numbers, and the NetBackup Services.

#### NetBackup Port Numbers

On this screen, you can change port numbers, if it is necessary in your configuration.

You may need to change a port number if you encounter conflicts when NetBackup and another industry product try to share the same port. Another example is if a port conflict occurs with a firewall, which may cause security issues.

To change a port number, select the port number that you want to replace and type the new number.

Click Next.

#### NetBackup Services

On this screen, provide the following startup account and startup type information for NetBackup services:

#### Performing local, remote, or clustered server upgrades on Windows systems

#### Log On

Specify either Local System account or This account.

By default, the Local System account is selected, so that NetBackup uses the built-in system account. When this option is selected, the fields below it are disabled.

To specify a different system account:

- Select This account.
- Enter the account information in the following fields:

Domain Username

**Password** 

#### Startup Type

This option determines whether NetBackup services start automatically if you need to restart the NetBackup host. The default is Automatic.

To start NetBackup services manually after a restart, select Manual.

### services following installation

Start job-related NetBackup By default, job-related services are set to start automatically after the upgrade has completed.

> To prevent job-related services from starting automatically, click on the box to clear the check mark.

#### Safe Abort Option

This option determines how the upgrade proceeds if a restart is required as part of the upgrade.

If you select this option and the upgrade process determines that a restart is required, the upgrade stops. The system is then rolled back to its original state.

If you do not select this option, the upgrade proceeds even if the upgrade process determines that a restart is required.

Click Next.

#### 13 On the **NetBackup System Names** screen, provide the following information:

#### Master Server Name

For master server installations, enter the name of the local computer.

For media server installations, you must change the name to the master server name to which the media server is configured.

Note: For clustered servers, this field is NetBackup Virtual Host Name. Veritas strongly recommends that you not change this value.

#### Additional Servers

Enter the names of any additional NetBackup master servers and media servers that you want to communicate with this server. Include the names of computers where you plan to install NetBackup later.

To enter more than one name, separate each name with a comma or press **Enter** after each name.

#### **Media Server Name**

This field appears only for NetBackup Enterprise media server installations.

When you install media server software, this field defaults to the local server name.

#### **OpsCenter Server Name** (Optional)

OpsCenter is a web-based administration and management tool for NetBackup.

If you have an OpsCenter server or plan to install one, enter the server name or the IP address for that server here.

For a clustered server, do not use the virtual name. Instead, use the actual host name of the cluster node.

#### Click Next.

- 14 For remote upgrades only, on the Veritas NetBackup Remote Hosts screen, specify the hosts where you want NetBackup installed.
  - Windows Destination Systems Right-click Windows Destination Computers and select from the drop-down menu, or use the following methods:

#### **Browse**

Click here to search the network for the hosts where you want to upgrade NetBackup.

- On the Available Systems dialog box, select the computer to add and click Next.
- On the **Remote Computer Login Credentials** dialog box, enter the user name. the password, and the domain of the account for NetBackup to use on the remote computers.
- If you plan to upgrade multiple remote computers, click the box next to Remember User Name and Password. Selecting this option prevents the need to enter this information for each remote computer.

When you provide credentials, you select host nodes and add them to the Windows Destination Systems list. These are the nodes on which you remotely upgrade NetBackup. Make sure that you select your local host when you select systems to install.

Each time you choose a system, NetBackup performs system and license checks. For example, it verifies the system for a server upgrade that matches the type that vou selected, as follows:

- NetBackup not installed: Considers the remote to be verified.
- NetBackup already installed: Compares the upgrade type on that system to the upgrade type that you request.
- Invalid combination: Notifies you of the problem and disallows the choice. One example of an invalid combination is to try to install a Remote Administration Console on a remote system that is already a master server.
- Remote system not a supported platform or level: Notifies you of the problem and disallows the choice.

The upgrade procedure also verifies that you have proper administrator credentials on the remote system. If you do not have administrator credentials, the Enter Network Password screen appears, and prompts you to enter the administrator's user name and password.

Click **OK** and continue selecting destination systems.

This process repeats for each node that you select. You can elect to retain the user name and password. In that case, you are prompted only when the user name or password is not valid.

Note the following about the push-install process in a clustered environment:

- You can upgrade NetBackup on any number of nodes. However, the clustering service sets the limit for the number of nodes in a cluster, not NetBackup.
- Language packages and other NetBackup add-on products cannot be upgraded with the push method. Add-on products must be upgraded on each individual node in the cluster group. For instructions on how to upgrade these products, refer to the NetBackup documentation that supports each product.

#### Browse (cont.)

#### (continued)

- NetBackup pushes to the other nodes only the license you enter at the beginning of the upgrade. Your license may enable add-on products. If you push NetBackup to nodes that have an add-on product already installed, your license works for that product.
- Click OK.

Import

Click here to import a text file that contains a list of host names. When you create the text file, the host names must be defined in the following format:

Domain\ComputerName

Add

Click here to add a host manually.

- On the Manual Remote Computer Selection dialog box appears, enter the Domain and the Computer Name, then click OK.
- On the Remote Computer Login Credentials dialog box, enter the User Name and the **Password** of the account to be used to perform the upgrade on the remote computers.

If you plan to add and upgrade multiple remote computers, click the box next to Remember User Name and Password. Selecting this option prevents the need to enter this information for each remote computer.

Click OK.

Remove

To remove a host from the **Destination Systems** list, select the host and click here.

Change

Click here to change the destination for NetBackup file installation on the selected remote host.

Check box

Select For Upgrades only: I want to... if you want the upgrade to proceed even if the license or licenses do have missing features.

You can add the license file or files that include the missing features later. Use the nblicenseutil command to confirm if the newly added license file or files include all the reported missing features.

By default, this option is not selected. If the upgrade proceeds without selecting this option the upgrade fails if the license on the remote hosts has any feature or features missing. The upgrade reports an error on the Remote Installation Status screen after license validation process is complete. Review the installer logs on the remote hosts to identify the reasons for the errors reported. The installer logs show the list of missing features, feature count mismatch, and discontinued features is displayed.

Once you add the license file or files which includes the missing features, upgrade process is completed successfully.

Note: If your license file or files contains only discontinued features and no missing features, then the upgrade continues. The discontinued feature or features information is available in the installer logs for your reference.

Click Next.

15 For cluster upgrades only, on the Cluster Settings screen, review the information displayed. All information except the Public Network is displayed for informational purposes and cannot be changed. If you need to change the public network, select the correct public network from the drop-down.

Warning: You must not select a private network that is assigned to this cluster.

Click Cluster Configuration. When the successful cluster configuration message appears, click Next.

16 On the Ready to Install the Program screen, review the Installation Summary that shows your selections from the previous steps.

Then select one of the following options:

- Click Install to start the installation.
- Click **Back** to view the previous screens and make any changes, then return to this screen and click Install.
- Click Cancel to cancel the upgrade.

After you click **Install**, the upgrade process begins and a screen appears that shows you the upgrade progress. This process may take several minutes.

For remote or for cluster upgrades only, right-click on a system in the dialog box to see the upgrade status. Up to five upgrades occur simultaneously. When an upgrade is completed, another one begins so that a maximum of five upgrades are in progress.

- 17 For remote upgrades only, when all remote upgrades have completed, click Finish.
- **18** On the **Installation Complete** screen, select from the following options:

#### Add Licenses

Veritas recommends that you enter additional licenses now for any other NetBackup products you plan to install.

- Need info for SLIC license option
- Need info for SLIC license option
- Need info for SLIC license option

#### View installation log file

An upgrade log file provides detailed installation information and shows whether any errors occurred.

Examine the upgrade log at the following location:

%ALLUSERSPROFILE%\Symantec\NetBackup\InstallLogs\

**Note:** When you perform a remote upgrade to multiple computers, this option only lets you view the log for the local computer. Each computer that you selected for upgrade contains its own upgrade log file. To view the log file of a remote computer, open a Windows Explorer window and enter \\<COMPUTERNAME>.

Search the upgrade log for the following error indications:

- Strings that include Return Value 3.
- Important log messages that are color coded as follows: Yellow = warning.

Red = error.

**Finish** 

Select one of the following to complete the upgrade:

- If you are done upgrading software on all servers, click the box next to Launch NetBackup Administration Console now and click Finish.
  - The NetBackup Administration Console starts a Configuration Wizard so that you can configure your NetBackup environment.
- If you have more server software to upgrade, click Finish. You can move on to the next computer and upgrade the necessary server software.

After a successful upgrade, a file with the output of the command bpminlicense -nb features for the previous release is created. The naming convention for the file is nb features.pre.current version. For example, if you upgrade from 7.7.3 to 8.1, the file that is created is nb features.pre.8.1. The file is located in the directory shown.

Windows: install path\Veritas\NetBackup\var

- 19 If any NetBackup cluster configuration is modified manually or by any external script, make sure that the change is reflected correctly in NetBackup cluster registry. Contact Veritas Enterprise technical support if you have questions.
- **20** The binaries are successfully installed. Proceed to the post-installation procedure.

### Post-install procedure for upgrading to NetBackup 8.1

Post-installation steps to upgrade to NetBackup 8.1 describes the post-installation steps to upgrade NetBackup and complete the image metadata migration.

#### Post-installation steps to upgrade to NetBackup 8.1

Check for an available NetBackup 8.1 maintenance release. Maintenance releases include very important fixes that are released after NetBackup 8.1. Veritas encourages you to install the latest available maintenance release during upgrade activities.

To access the latest NetBackup 8.1 maintenance release:

- Go to the NetBackup SORT website. https://sort.veritas.com/netbackup
- In the Installation and Upgrade Checklist section:
  - Under Product, select the correct product (NetBackup Enterprise Server) or NetBackup Server)
  - Under Product version you are installing or upgrading to specify the latest version of NetBackup
  - Under Platform select the platform of the server you want to upgrade.
  - Under Processor specify the processor of your server.
  - Under Product version you are upgrading from (Optional) select the current version of NetBackup on the server you want to upgrade.
  - Click Generate Checklist.
- Under Upgrade Information, there is a version number Download Links hyperlink. Click that hyperlink for the latest maintenance release.
- If no maintenance release is available, restart bprd if you terminated it as part of step 12. Once bprd is restarted, proceed to step 21.

```
UNIX/Linux: /usr/openv/netbackup/bin/bprd
Windows: install path\NetBackup\bin\bprd
```

- If you find a maintenance release is available, download it now.
- Prepare for the install by stopping all NetBackup processes and services. Use the command shown:

```
UNIX/Linux: /usr/openv/netbackup/bin/bp.kill all
Windows: install path\NetBackup\bin\bpdown -f
```

- Install the maintenance release.
- Restart NetBackup with the commands shown: UNIX/Linux systems: /usr/openv/netbackup/bin/bp.start all

Windows systems: install path\NetBackup\bin\bpup -f

- 2 Set a passphrase for the disaster recovery package. If you do not set a passphrase, the catalog backups fail. More information is available. Please see the information about passphrases in the Veritas NetBackup Troubleshooting Guide.
- Start any applications on the system that interact with NetBackup. This step includes any databases or system components being backed up.
- If you have a clustered master server, generate a certificate on the inactive nodes for secure communications. More information is available.
  - See the Veritas NetBackup Upgrade Guide.
- 5 (Conditional) This step applies only to cluster installations. If this computer is not a clustered master server upgrade, proceed to the next step.
  - Update the other nodes in the cluster. You can update the other master servers nodes in the cluster to NetBackup 8.1 by following standard cluster upgrade process. For complete details, see the Veritas NetBackup Clustered Master Server Administrator's Guide.

If the NetBackup resource is not online, bring that resource online.

http://www.veritas.com/docs/DOC5332

If you have any media servers that you intend to upgrade to NetBackup 8.1, you may upgrade them now. If you start any media server upgrades, do not continue with this procedure until the media server upgrades are complete.

Note: NetBackup requires that media servers have a security certificate to function correctly in certain use cases. More information about this topic is available.

See the Veritas NetBackup Upgrade Guide.

More information about this topic is available.

See the Veritas NetBackup Upgrade Guide.

- 7 Reactivate the following in the order as shown:
  - All disk staging storage units.
  - All NetBackup policies.
  - All storage lifecycle policies (SLPs).
  - OpsCenter data collection for this master server.

- 8 (Conditional) If your environment uses cloud storage, you need to update the read and write buffer sizes. More information is available.
  - See the Veritas NetBackup Upgrade Guide.
- (Conditional) If you have a NetApp cluster, additional steps may be required. More information is available.
  - See the Veritas NetBackup Upgrade Guide.
- **10** (Conditional) If you use cloud storage in your NetBackup environment, you must update your cloud configuration file. More information is available.
- **11** Monitor your backup environment to verify that normal NetBackup operation has resumed.
- 12 Upgrade any media servers and clients not already upgraded as time and backup windows permit. Be sure to upgrade the media servers before you upgrade the clients. You cannot back up or restore a NetBackup 8.1 client to a pre-8.1 media server.

See the Veritas NetBackup Upgrade Guide.

A client upgrade is the same as a client installation. See the NetBackup Installation Guide - UNIX and Windows manual for help with the installation.

http://www.veritas.com/docs/DOC5332

Note: All scripts must be stored and run locally. One recommendation is that scripts should not be world-writable. Scripts are not allowed to be run from network or remote locations. Any script that is created and saved in the NetBackup db ext (UNIX) or dbext (Windows) location needs to be protected during a NetBackup uninstall.

For more information about registering authorized locations and scripts, review the knowledge base article:

http://www.veritas.com/docs/000126002

For more information about your specific database agent, review the documentation for that agent:

http://www.veritas.com/docs/DOC5332

**13** Perform any additional upgrade steps. More information about this topic is available.

See the Veritas NetBackup Upgrade Guide.

Chapter 3

# UNIX/Linux Upgrade Quick Start Guide

This chapter includes the following topics:

- Preinstall procedure for upgrading to NetBackup 8.1
- Upgrading UNIX/Linux server software to NetBackup 8.1
- Post-install procedure for upgrading to NetBackup 8.1

# Preinstall procedure for upgrading to NetBackup 8.1

Use the following procedure to upgrade your environment to NetBackup 8.1.

Veritas has developed tools to help you perform the extra step that is required for the guided method. For more details, contact your Business Critical Services (BCS) representative.

Note: Remember to update NetBackup OpsCenter to version 8.1 before you update your NetBackup master servers to version 8.1. You must also disable OpsCenter data collection. See the NetBackup OpsCenter Administrator's Guide for complete information.

#### http://www.veritas.com/docs/DOC5332

Be aware there is a known issue for OpsCenter upgrades on 64-bit Windows platforms. If language packs or Maintenance Packs are installed, the upgrade can fail. More information about this issue is available.

#### http://www.veritas.com/docs/TECH211070

You can disable the OpsCenter data collection for a specific master server. If you disable data collection, you can upgrade your master server before your OpsCenter server. Disabling data collection results in known issues. More information about disabling data collection and the risks is available.

Note: For NetBackup installations that include globally clustered master servers using the Global Cluster Option (GCO), follow the upgrade planning guidelines in this guide. Then, refer to the following document for the specific steps to upgrade these servers: http://www.veritas.com/docs/HOWTO73064

#### Preinstall steps to upgrade to NetBackup 8.1 and complete the image metadata migration

- Perform environment checks with the SORT tool.
  - See the Veritas NetBackup Upgrade Guide.
- 2 Perform any pre-upgrade tasks that you would normally do in regard to your NetBackup environment. For example:
  - Stop all customized or third-party scripts.
  - Perform any cluster-specific tasks.
  - Run a hot catalog backup.
  - Disable OpsCenter data collection for this master server.
  - Disable all storage lifecycle policies (SLPs).
  - Deactivate all NetBackup policies.
  - Deactivate all disk staging storage units for all pre-NetBackup 7.5.x environments.
  - For clustered systems only, take the following NetBackup resources offline:

- Windows Server Failover Clusters (WSFC): Take all of the NetBackup group resources offline except for the disk, the virtual name, and the virtual IP address. Refer to the Microsoft Cluster Administration documentation to determine how to take the NetBackup group resources offline through the cluster administrator interface.
- Cluster Server (VCS) clusters: Take the NetBackup resource offline. Freeze the NetBackup group with the -persist option using the command shown:

```
hagrp -freeze NetBackup service group -persistent
```

Refer to the Veritas NetBackup Clustered Master Server Administrator's Guide for the commands to take these resources offline.

(Conditional) If you plan to change your NetApp cluster to Vserver mode from node scope mode, create a detailed image report for each filer. You can generate this report with the bpimagelist command. The example that is shown is one possible option. Use whatever options are necessary for your environment.

```
bpimagelist -client ndmp host name
```

Beginning with NetBackup 8.0, the NetBackup master server includes a configured Tomcat web server to support critical backup operations. This web server operates under user account elements with limited privileges. These user account elements must be available on each master server (or each node of a clustered master server). More information is available:

See the Veritas NetBackup Upgrade Guide.

Note: Veritas recommends that you save the details of the user account that you use for the NetBackup Web Services. A master server recovery requires the same NetBackup Web Services user account and credentials that were used when the NetBackup catalog was backed up.

Note: If the NetBackup PBX is running in secure mode, please add the web service user as authorized user in PBX. More information about determining PBX mode and how to correctly add users is available.

http://www.veritas.com/docs/000115774

Stop any applications on the system that interact with NetBackup. This step includes any databases or system components being backed up. Failure to stop these applications may result in unexpected behavior. Observed behavior includes aborted upgrades and application failures.

For Oracle users, you must take down your database and your listener processes before you upgrade.

If you cannot stop your Oracle database, a procedure is available that may let you install NetBackup with the Oracle database active. More information on this topic is available.

http://www.veritas.com/docs/TECH158276

- Stop all NetBackup services.
  - On UNIX systems: /usr/openv/netbackup/bin/bp.kill all
  - On Windows systems: install path\NetBackup\bin\bpdown -f

The preinstall procedure is completed. Proceed to upgrade the NetBackup binaries.

## Upgrading UNIX/Linux server software to NetBackup 8.1

You should schedule your upgrade and reconfiguration for a time when backups do not run. However, the upgrade procedure instructs you to deactivate all policies to ensure that backups do not interfere with the upgrade. You can also temporarily modify policies so that backups do not run while you upgrade and reconfigure NetBackup.

#### To upgrade UNIX/Linux server software to 8.1

- Log on as the root user on the server.
- If the NetBackup Administration Console is open, you must close it now.
- 3 (Conditional) For clustered environments, perform the following tasks:
  - If necessary, edit the bp.conf and the vm.conf files as follows: If a REQUIRED INTERFACE entry exists, replace it with a CLUSTER NAME entry. Otherwise, add a new CLUSTER NAME entry. This entry should be defined as the virtual server name.
    - For a master server, make sure that the first SERVER entry matches the CLUSTER NAME entry for the bp.conf file.
  - Take the NetBackup Group offline. Use the command shown: /opt/VRTSvcs/bin/hares -offline

Freeze the NetBackup Group so that migrations do not occur while the inactive nodes are upgraded. Use the command shown:

```
/opt/VRTSvcs/bin/hagrp -freeze group -persistent
```

- If you have a VCS cluster configured, you can freeze the NetBackup Group by using the Cluster Manager interface or the command line.
- Before you proceed with a cluster upgrade, refer to the *NetBackup Clustered* Master Server Administrator's Guide for other cluster upgrade requirements. http://www.veritas.com/docs/DOC5332
- For Solaris systems, all of the NetBackup scripts that you may have modified are removed when you run the upgrade script.

For non-Solaris systems, NetBackup scripts that are not covered in Chapter 1 that you modified are removed when you run the upgrade script. More information about this topic is available.

See the Veritas NetBackup Upgrade Guide.

Save any files that you have modified and want to keep.

(Conditional) For AIX systems, this step deletes any robotic control paths. In an AIX clustered environment, you must perform this step on all nodes in the cluster.

For more information about the robotic control paths, see the NetBackup Device Configuration Guide.

http://www.veritas.com/docs/DOC5332

Remove the ovpass driver, as follows:

```
/usr/openv/volmgr/bin/driver/remove ovpass
```

Use one of the following methods to start the upgrade script:

DVD

- Insert the NetBackup Server DVD for the appropriate platform in the drive.
  - Check the DVD label to identify its contents.

See the Veritas NetBackup Upgrade Guide.

- If necessary, mount the DVD. See the Veritas NetBackup Upgrade Guide.
- Enter the following command:

```
dvd directory/install
```

The *dvd\_directory* is the path to the directory where you can access the DVD.

ESD images (downloaded files)

- Navigate to the location where the installation images
- Enter the following command:

./install

- 7 Follow the prompts in the installation script to install the NetBackup server binaries.
- When the script finishes, the binaries are successfully installed.

After a successful upgrade, a file with the output of the command bpminlicense -nb features for the previous release is created. The naming convention for the file is nb features.pre.current version. For example, if you upgrade from 7.7.3 to 8.1, the file that is created is nb features.pre.8.1. The file is located in the directory shown.

UNIX: /usr/openv/var

Proceed to the post-installation procedure.

### Post-install procedure for upgrading to NetBackup 8.1

Post-installation steps to upgrade to NetBackup 8.1 describes the post-installation steps to upgrade NetBackup and complete the image metadata migration.

#### Post-installation steps to upgrade to NetBackup 8.1

Check for an available NetBackup 8.1 maintenance release. Maintenance releases include very important fixes that are released after NetBackup 8.1. Veritas encourages you to install the latest available maintenance release during upgrade activities.

To access the latest NetBackup 8.1 maintenance release:

- Go to the NetBackup SORT website. https://sort.veritas.com/netbackup
- In the Installation and Upgrade Checklist section:
  - Under Product, select the correct product (NetBackup Enterprise Server) or NetBackup Server)
  - Under Product version you are installing or upgrading to specify the latest version of NetBackup

- Under Platform select the platform of the server you want to upgrade.
- Under Processor specify the processor of your server.
- Under Product version you are upgrading from (Optional) select the current version of NetBackup on the server you want to upgrade.
- Click Generate Checklist.
- Under Upgrade Information, there is a version number Download Links hyperlink. Click that hyperlink for the latest maintenance release.
- If no maintenance release is available, restart bprd if you terminated it as part of step 12. Once bprd is restarted, proceed to step 21.

```
UNIX/Linux: /usr/openy/netbackup/bin/bprd
Windows: install path\NetBackup\bin\bprd
```

- If you find a maintenance release is available, download it now.
- Prepare for the install by stopping all NetBackup processes and services. Use the command shown:

```
UNIX/Linux: /usr/openv/netbackup/bin/bp.kill all
Windows: install path\NetBackup\bin\bpdown -f
```

- Install the maintenance release.
- Restart NetBackup with the commands shown: UNIX/Linux systems: /usr/openv/netbackup/bin/bp.start all Windows systems: install path\NetBackup\bin\bpup -f
- Set a passphrase for the disaster recovery package. If you do not set a passphrase, the catalog backups fail. More information is available. Please see the information about passphrases in the Veritas NetBackup Troubleshooting Guide.
- Start any applications on the system that interact with NetBackup. This step includes any databases or system components being backed up.
- If you have a clustered master server, generate a certificate on the inactive 4 nodes for secure communications. More information is available.
  - See the Veritas NetBackup Upgrade Guide.

5 (Conditional) This step applies only to cluster installations. If this computer is not a clustered master server upgrade, proceed to the next step.

Update the other nodes in the cluster. You can update the other master servers nodes in the cluster to NetBackup 8.1 by following standard cluster upgrade process. For complete details, see the Veritas NetBackup Clustered Master Server Administrator's Guide.

If the NetBackup resource is not online, bring that resource online.

http://www.veritas.com/docs/DOC5332

6 If you have any media servers that you intend to upgrade to NetBackup 8.1, you may upgrade them now. If you start any media server upgrades, do not continue with this procedure until the media server upgrades are complete.

**Note:** NetBackup requires that media servers have a security certificate to function correctly in certain use cases. More information about this topic is available.

See the Veritas NetBackup Upgrade Guide.

More information about this topic is available.

See the Veritas NetBackup Upgrade Guide.

- 7 Reactivate the following in the order as shown:
  - All disk staging storage units.
  - All NetBackup policies.
  - All storage lifecycle policies (SLPs).
  - OpsCenter data collection for this master server.
- 8 (Conditional) If your environment uses cloud storage, you need to update the read and write buffer sizes. More information is available.
  - See the Veritas NetBackup Upgrade Guide.
- (Conditional) If you have a NetApp cluster, additional steps may be required. More information is available.
  - See the Veritas NetBackup Upgrade Guide.
- **10** (Conditional) If you use cloud storage in your NetBackup environment, you must update your cloud configuration file. More information is available.
- **11** Monitor your backup environment to verify that normal NetBackup operation has resumed.

12 Upgrade any media servers and clients not already upgraded as time and backup windows permit. Be sure to upgrade the media servers before you upgrade the clients. You cannot back up or restore a NetBackup 8.1 client to

a pre-8.1 media server.

See the Veritas NetBackup Upgrade Guide.

A client upgrade is the same as a client installation. See the *NetBackup* Installation Guide - UNIX and Windows manual for help with the installation.

http://www.veritas.com/docs/DOC5332

Note: All scripts must be stored and run locally. One recommendation is that scripts should not be world-writable. Scripts are not allowed to be run from network or remote locations. Any script that is created and saved in the NetBackup db ext (UNIX) or dbext (Windows) location needs to be protected during a NetBackup uninstall.

For more information about registering authorized locations and scripts, review the knowledge base article:

http://www.veritas.com/docs/000126002

For more information about your specific database agent, review the documentation for that agent:

http://www.veritas.com/docs/DOC5332

**13** Perform any additional upgrade steps. More information about this topic is available.

See the Veritas NetBackup Upgrade Guide.