Application Note

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Installing and Configuring a NetBackup 6.5 or 7.5 Client or Media Server

Summary

This application note describes how to install the Symantec NetBackup 6.5 or 7.5 backup Client or Media Server solution on an Overland SnapServer or SnapScale.

Overview

This application note describes how to install and use the NetBackup client or media server on a SnapServer or SnapScale:

- NetBackup 6.5 can be installed on a SnapServer DX1 or DX2 running GuardianOS 7.2.
- NetBackup 7.5 can be installed on a SnapServer DX1 or DX2 running GuardianOS 7.5 (or higher) or on a SnapScale X2 or X4 running RAINcloudOS 4.0 (or higher).

Required Information, Tools, and Files

Before performing the installation procedures on SnapServer or SnapScale, the following information, tools, and files are required.

Backup and Media Server IP Addresses

Most backup agents must know the IP addresses of the backup and media servers that will be used with the SnapServer or SnapScale. From the **Maintenance >Tools >Host File Editor** page in the Web Management Interface, provide a host-name to IP-address mapping that persists across system reboots.

Unix/Linux client

When you configure a backup server to see the agent running on the SnapServer or SnapScale assume that the server is a Unix or Linux client.

Secure Shell (SSH) client

To remotely install any backup solution on the server, you must have an SSH client installed on a remote workstation. The SSH implementation requires SSH v2. If you do not already have an SSH client application installed, you can download one from the Internet. The commands must be entered via SSH to install your backup agent are case-sensitive; therefore the commands must be entered exactly as shown.

Backup and Restore Path Location

Backup servers often request the path for backup and restore operations on the backup agent.

- For NetBackup 6.5, specify the path relative to share mount points on the server as */shares/sharename* (where *sharename* is the name of the share to be backed up). If you have accepted the default SnapServer configuration, the correct path is */shares/SHARE1*.
- For NetBackup 7.5 (which excludes bind mounts), select backup locations through the original file system mount point under **/hd**:
  - For GOS 7.2, use **/hd/vol_mntX/shares** (Traditional RAID) or **/hd/vol_mntX/shares/.projectX** (DynamicRAID)
  - For ROS 4.0, use **/hd/cfs/shares/.projectX**.
  - For GOS 7.5 (and higher) and later versions of ROS, use **/links/SHARE1**.

Password Expiration Policies

If the backup application uses a specific local user account to perform backups, ensure that the user is exempt from password expiration policies, if enabled (see the Online Help for procedures to set password policy for local users).

Linux Agent Installers - GSU file

Overland Storage provides the NetBackup client and server installers in the form of GSU files that can be installed through the standard OS upgrade procedure. You can get additional technical support on the Internet at http://support.overlandstorage.com, or by contacting Overland Storage using the information found on the Contact Us page on our website.

Preinstallation Tasks

Perform the following tasks prior to installing any solution:

1. In the Web Management Interface, navigate to the **Maintenance > Host File Editor** page and click **Add**.

2. Enter the **IP address** of the backup or media server and enter one or both of the following names (as required by your backup environment):

   • **Host name (long form)** – Enter the fully qualified address for the backup server using a *myserver.mydomain.com* format.

   • **Host name (short form)** – Enter an abbreviated address for the backup server using a *myserver* format.

3. Click **OK**. The entry appears on the **Host File Editor** page.

4. Repeat Steps 2–3 for **each** backup and media server with which the agent installed on the server needs to communicate.

5. Navigate to the **Server > SSH** page, make sure the **Enable SSH** box is checked, and then click **OK**.

SSH is immediately available.

> ⚠️ **CAUTION:** To maintain security, SSH should be disabled when not in use.

Assign a Utility IP Address to a SnapScale Node

For SnapScale clusters, select a node on which to install the agent or media server and assign a Utility IP address to it.

1. On the **Utility IP Address** page, in the empty field, enter a **static IP address** on the same subnet as the IP address pool on the Client network.

2. Using the drop-down list, select the **name of the node** to which the Utility IP address will be assigned.

3. Click **OK**.

4. At the confirmation page, click **Save Changes**.

The Utility IP address is displayed on the Network Information page (**Network > Information**) beneath the static address of the node on which it was configured. The Utility IP address remains with the node, even if the node is restarted or goes offline.

NetBackup Client and Server Installation

The NetBackup client backs up the SnapServer or SnapScale to another media server only. The NetBackup server configures the SnapServer or SnapScale as a NetBackup media server to backup the SnapServer or SnapScale (or other backup clients) to a tape drive or library attached to the SnapServer or SnapScale.

Installing the NetBackup Client

The GSU file for the NetBackup client is available for download from Overland Storage.

Upload the Client Installer GSU

To install on a SnapServer or SnapScale, follow these installation instructions:

1. Download and save the appropriate GSU version to the **client** used to log in to the Web Management Interface.

2. Log in to the Web Management Interface and go to **Maintenance > OS Update**.

3. Click **Choose File** and browse to the GSU file containing the agent to install it.

4. Click **OK** on the OS Update page.

5. Click **Update** on the confirmation page.

6. Click **Close**.

Connect to the Server over SSH

1. Launch your SSH client and connect to the server or cluster node to which you wish to install the agent (use the Utility IP to connect to the node).

2. Log in as **admin** (using the Admin password) to enter the CLI shell.

3. A standard **Linux shell** must be launched to install the agent. Type:

    `osshell`

4. Press **Enter**.

5. Change to the root by entering the following command:

    `su -`

6. Enter the **root password** (same as admin password).

Run the Client Installer

1. For NetBackup 6.5 only, change to the client installer **directory** by entering the following:

    `cd /usr/local/NBClients/catalog/anb`

2. To install the **client**:

    • For NetBackup 6.5, run:
       `./client.inst`.

    • For NetBackup 7.5, run:
       `/usr/local/NetBackup_7.5_CLIENTS/NBClients/catalog/anb/client.inst`

3. Enter the name or IP address of the **NetBackup server** when prompted by the installer, and accept the defaults otherwise.

4. To confirm successful installation, add the SnapServer or SnapScale client to the NetBackup **master server** and run a test backup job.

5. After installation completes:
   - On SnapServers:
     - For NetBackup 6.5, run:
       `rm -rf /usr/local/NBClients`
     - For NetBackup 7.5, run:
       `rm -rf /usr/local/NetBackup*`
   - On a SnapScale node running NetBackup 7.5, run:
     `rcmd -c "rm -rf /usr/local/NBClients"`

Installing the NetBackup Server

For NetBackup 6.5, there are two components that must be installed for the server: Symantec ICS (Infrastructure Core Services) used for NetBackup environment authentication and encryption, and the NetBackup Server itself for media server functionality. For NetBackup 7.5, the installer is divided into two GSU files (Part 1 and Part 2). The GSU files are available for download from the Overland Storage website.

Upload the ICS and Server Installer GSUs

1. Download and save the two GSUs on the **client** used to log in to the Web Management Interface.

2. Log in to the Web Management Interface and go to **Maintenance > OS Update**.

3. Click **Choose File** and browse to the appropriate Symantec ICS GSU file:
   - For GOS 7.2, browse to GuardianOS_7_2_NB_6.5_ICS.gsu (agent)
   - For ROS 4.0 or later **or** GOS 7.5 or later, browse to NetBackup_7.5_Server_ROS4.0_GOS7.5_Part1.gsu

4. Click **OK** on the **OS Update** page.

5. Click **Update** on the confirmation page.

6. Click **Close**.

7. Repeat Steps 2–6 using the NetBackup Server GSU:
   - For GOS 7.2, use GuardianOS_7_2_NB_6.5_Server.gsu
   - For ROS 4.0 or later **or** GOS 7.5 or later, use NetBackup_7.5_Server_ROS4.0_GOS7.5_Part2.gsu

Connect to the Server/Cluster over SSH

1. Launch your SSH client and connect to the server or cluster node to which you wish to install the agent (use the Utility IP to connect to the node).

2. Log in as **admin** (using the Admin password) to enter the CLI shell.

3. A standard **Linux shell** must be launched to install the agent. Type:
   `osshell`

4. Press **Enter**.

5. Change to the **root** by entering the following command:
   `su -`

6. Enter the root **password** (same as admin password).

Run the NetBackup 6.5 ICS Installer

NOTE: If NetBackup 7.5 is already installed, skip this section and proceed to "Run the Server Installer."

1. Change to the **ICS installer directory** by running the following command:

   `cd /usr/local/NB_65_ICS_1.4.37.0_LinuxX86`

2. To install **ICS**, run the following command:

   `./installics`

   a. When prompted to choose from the Task Menu, choose **I (Install / Upgrade)**.

   b. When prompted to choose Symantec Infrastructure Core Services Installer 5.0, choose **1 (Symantec Private Branch Exchange)**.

   c. When prompted for the PBX installation location, enter the **name or IP address** of the SnapServer or SnapScale.

Run the Server Installer

1. For NetBackup 6.5 only, change to the server installer directory by entering the following:

   `cd /usr/local/NB_65_LinuxR_x86_20070723/linuxR_x86/catalog/anb/`

2. To install the **server**:

   - For NetBackup 6.5, run:
     `./client.inst`.

   - For NetBackup 7.5, run:
     `/usr/local/NetBackup_7.5_LinuxS_x86_64/linuxS_x86/catalog/anb/NB.inst`

3. Run the following command to install the **NetBackup Server** software:

   `./NB.inst`

4. Accept **defaults** when prompted by the installer.

5. For NetBackup 7.5, after part 1 is installed, run the second installer:
   `/usr/openv/netbackup/bin/install_bp`

   Enter the media server license key when prompted. Enter the appropriate information for your NetBackup environment for the various other prompts.

6. After installation completes, delete the **installer directory**:

   - On SnapServers:

     - For NetBackup 6.5, run:
       `rm -rf /usr/local/NB*`

     - For NetBackup 7.5, run:
       `rm -rf /usr/local/NetBackup*`

   - On a SnapScale node running NetBackup 7.5, run:
     `rcmd -c "rm -rf /usr/local/NetBackup*"`

Complete Configuration

1. Add the server or node to the **master server**:

   - For NetBackup 6.5, you need to add the server or node only as a **media server**.

   - For NetBackup 7.5, you need to add the server or node as both a **client** and **media server**, and then you need to configure the media server to detect and initialize the tape or library attached to the server/node.

2. Run a **test backup job** to verify successful installation.