NetBackup 8.2 Application Guide

For Flex Appliance 2.0

VERITAS™

Contents

Chapter 1

Product overview

This chapter includes the following topics:

Introduction to NetBackup applications for Flex Appliance

Veritas Flex Appliance is a customizable data management solution that lets you consolidate multiple applications on a single hardware platform. An application is a Veritas software program that can be installed on Flex Appliance. You can use these applications to create multiple, concurrent application instances, or single deployments of applications that were historically standalone servers.

The following applications are available for NetBackup release 8.2:

- NetBackup master server
  You can also configure a BMR master server with this application. However, the BMR boot server cannot be configured on the appliance.
- NetBackup media server with the following storage options:
  - Media Server Deduplication Pool (MSDP)
  - AdvancedDisk
  - Cloud Catalyst

Note: You cannot use both MSDP and Cloud Catalyst storage in the same application instance.

For a full list of supported applications and versions, see the following article on the Veritas Support website:

Flex Appliance supported applications and usage information

About the Flex Appliance documentation

The following documents contain information about the Flex Appliance and application software:

- The *Flex Appliance Getting Started and Administration Guide*
  Refer to this guide to configure and manage the Flex Appliance software, as well as for general information about creating and managing application instances.
- The *NetBackup Application Guides*
  Refer to these guides for more specific information about the NetBackup applications, including detailed instructions on how to create application instances of each supported version.

The following documents contain information about the appliance hardware:

- The *Veritas 5340 Appliance Hardware Installation Guide*
- The *Veritas 5340 Appliance Product Description*
- The *Veritas 5150 Appliance Hardware Installation Guide*
- The *Veritas 5150 Appliance Product Description*
- The *Veritas Appliance Safety and Maintenance Guide*

Flex Appliance also uses Veritas AutoSupport to monitor the appliance. You can find additional information about AutoSupport in the *Veritas Appliance AutoSupport Reference Guide*.

You can find the latest documentation on the Documentation page of the Veritas Support website. Navigate to the **Documentation** tab, then select **Flex Appliance OS** on the left-hand side.

API documentation is also available from the **Knowledge Base** page on Veritas SORT.

Operational notes

This topic explains important aspects of the NetBackup 8.2 application that may not be documented elsewhere in the documentation.

The following list contains the notes and the known issues that apply for this release:

- When you create a new application instance, the **Application instances** section of the **System topology** page may show the instance status as **Partially Deleted** while the creation is in progress. The **Partially Deleted** status displays in error and can be safely ignored. You can track the instance creation progress from the Activity Monitor, and the instance status changes to **Online** when the instance creation has completed successfully.
- When you create a NetBackup media server instance, the Flex Appliance Console does not prevent entering the same hostname in both the **Hostname for NetBackup Media Server** and the **Master server hostname** fields, but that configuration is not supported. You must have a preexisting master server with a different hostname.
- When you create an instance, if you enter the IP address before you select a network interface, the **IP address** field displays the following error message: "IP address does not belong to the selected network's netmask."
  This message still displays after you select the network interface that corresponds to the IP address. To clear the message, click inside the **IP address** field and then click or tab outside of it.

Chapter 2

Geting started

This chapter includes the following topics:

Prerequisites before you can create NetBackup application instances

Before you begin working with NetBackup application instances, make sure that you have fully reviewed the *Flex Appliance Getting Started Guide* and have performed all of the following tasks:

- Completed the initial configuration
- Verified that you can access the Flex Appliance Console
- Configured at least one network interface
- Added at least one tenant
- Added the application that you want to use to the repository

You also need access to the NetBackup Administration Console or the NetBackup Remote Administration Console, and the NetBackup client software. See "Installing the NetBackup Administration Console and client packages" on page 6.

Installing the NetBackup Administration Console and client packages

To create and manage NetBackup instances, you need access to the NetBackup Administration Console or the NetBackup Remote Administration Console. Use the

NetBackup Remote Administration Console if you want to manage your instances from a computer that does not have NetBackup software installed.

You also need access to the NetBackup client software so that you can install it on the computers that you want to back up.

The NetBackup Administration Console and the NetBackup client packages are included with the Electronic Software Distribution (ESD) images for NetBackup product installation. You can download the NetBackup ESD images from the **Downloads** page on the Veritas Support website.

For more information about the interfaces or installing the client software, refer to the *NetBackup Installation Guide*, which is accessible from the NetBackup page on the Support website.

Chapter 3

Creating NetBackup application instances

This chapter includes the following topics:

Creating application instances

You can create application instances from the **System topology** page of the Flex Appliance Console. Navigate to the **Application instances** section and click **Create instance** to open a new page that lets you create instances of the following applications for NetBackup release 8.2:

- NetBackup master server
  You can also configure a BMR master server with this application. However, the BMR boot server cannot be configured on the appliance.
- NetBackup media server with the following storage options:
  - Media Server Deduplication Pool (MSDP)
  - AdvancedDisk
  - Cloud Catalyst

Note: You cannot use both MSDP and Cloud Catalyst storage in the same application instance.

For a full list of supported applications and versions, see the following article on the Veritas Support website:

Flex Appliance supported applications and usage information

When you create a NetBackup instance, you need to complete additional configuration steps from within NetBackup. Use the following procedures as a guide and refer to the NetBackup documentation for additional details.

See "Creating a NetBackup master server instance" on page 9.

See "Creating a NetBackup media server instance" on page 11.

Creating a NetBackup master server instance

Use the following procedure to create a NetBackup master server instance in Flex Appliance.

To create a NetBackup master server instance

1. Make sure that the NetBackup master server application you want to use is located in the repository on the Flex Appliance Console.
2. Perform the following tasks if you have not already:
   - Configure at least one network interface. You can configure a physical interface, add a VLAN tag, or create a bond.
   - Add at least one tenant.
3. Gather the following information for the new instance:

   Note: The hostname and IP address must not be in use anywhere else in your domain.

   - Tenant that you want to assign it to
   - Hostname (maximum of 63 characters including the domain name)
   - IP address
   - Network interface
   - Domain name
   - Name servers
   - Search domains
   - Smart Meter customer registration key
     Veritas Smart Meter helps you manage your NetBackup deployment more efficiently, spot trends, and plan for the future. To obtain a key, log in to the Veritas Smart Meter site with your VEMS credentials and go to the **Registration Keys** page to download the key.
   - (Optional) NetBackup license key

NetBackup applications come with an evaluation license key. You must add a permanent NetBackup license key before the evaluation key expires. You can add your permanent key when you create the instance to avoid future issues.

Note: If the evaluation key expires before you create the instance, the instance creation fails. Make sure that you have a valid license key before you create an instance.

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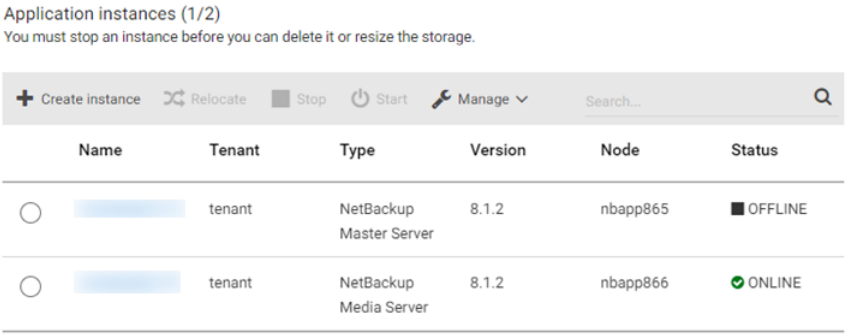
4 From the **System topology** page of the Flex Appliance Console, navigate to the **Application instances** section.



5 Click **Create instance**.

6 Select the appropriate master server application from the repository list that appears, making sure to verify the version number. Click **Next**.

7 Follow the prompts to create the instance. When you are done, you can view the progress in the Activity Monitor, which is accessible from the left pane of the Flex Appliance Console.

Note: If you do not want to use DNS or want to bypass DNS for certain hosts, verify that the hostname resolution information is included in the **Hosts file entries** field. You must include entries for the media servers and any other NetBackup hosts that you want to communicate with the instance.

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8 Once the instance has been created successfully, you must change the password from the known default password.

Warning: You cannot access the NetBackup web UI to manage the instance until you have changed the password.

To change the password, open an SSH session to the instance and log in with the following credentials:

- Username: **appadmin**
- Password: **P@ssw0rd**

Follow the prompt to enter a new password. When the password change is complete, you are logged out. You can log back in with the new password.

Note: Do not configure AdvancedDisk storage on a NetBackup master server instance. The NetBackup Administration Console lets you create an AdvancedDisk storage server on a master server instance, but Flex Appliance does not support storage configuration on master server instances. Create a separate NetBackup media server instance if you want to use AdvancedDisk storage.

Creating a NetBackup media server instance

Use the following procedure to create a NetBackup media server instance in Flex Appliance.

To create a NetBackup media server instance

1. Make sure that the NetBackup media server application you want to use is located in the repository on the Flex Appliance Console.
2. Perform the following tasks if you have not already:
   - Configure at least one network interface. You can configure a physical interface, add a VLAN tag, or create a bond.
   - Add at least one tenant.
3. Gather the following information for the new instance:

   Note: The hostname and IP address must not be in use anywhere else in your domain.

   - Tenant that you want to assign it to
   - Hostname (maximum of 63 characters including the domain name)
   - IP address
   - Network interface

- Domain name
- Name servers
- Search domains
- Master server hostname
- Certificate Authority (CA) information for one of the following:

  For a NetBackup CA:

  - CA certificate fingerprint
    If the master server is a Flex instance, you can locate this information from the instance details page of the master server instance. Click on the instance name under **Application instances** on the **System topology** page.
    If the master server is not a Flex instance, see the *NetBackup Security and Encryption Guide* for the steps to locate this information from NetBackup.
  - (Optional) Token for host ID-based certificate
    Depending on the master server security level, the host may require an authorization or a reissue token. If you do not specify a token when you create the instance, the wizard attempts to automatically obtain the certificate.

  For an external CA:

  - Trust store, in PEM format
  - Host certificate, in PEM format
  - Private key, in PEM format
  - (Optional) Passphrase of the private key
    A passphrase is required if the key is encrypted.
  - (Optional) Custom CRL files
- (Optional) Password for host name-based certificate
  A host name-based certificate is mandatory for Cloud Catalyst storage or if Enhanced Auditing is enabled on the master server. You can specify the password when you create the instance, or you can deploy the certificate from the master server later.
- (Optional) NetBackup license key
  NetBackup applications come with an evaluation license key. You must add a permanent NetBackup license key before the evaluation key expires. You can add your permanent key when you create the instance to avoid future issues.

Note: If the evaluation key expires before you create the instance, the instance creation fails. Make sure that you have a valid license key before you create an instance.

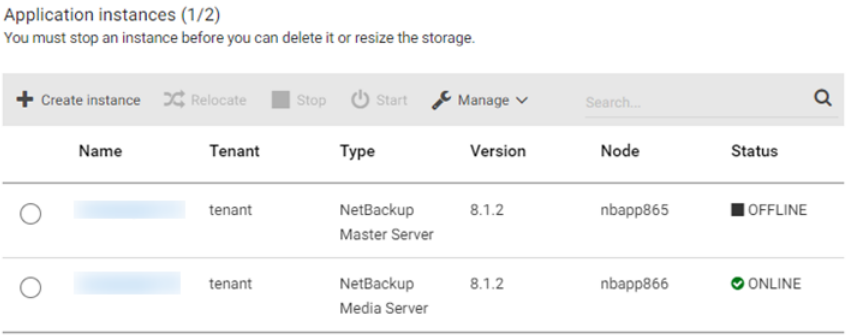
4 Add the hostname for the new instance to the **Media Servers** list or the **Additional Servers** list on the master server, as follows:

- Log on to the NetBackup Administration Console as the administrator.
- In the main console window, in the left pane, click **NetBackup Management** > **Host Properties** > **Master Servers**.
- In the right pane, double click on the master server hostname.
- In the **Master Server Properties** window, click one of the following:
  - If you want MSDP or Cloud Catalyst storage on the instance, click **Servers** > **Additional Servers**.
  - If you do not want MSDP or Cloud Catalyst storage on the instance, click **Servers** > **Media Servers**.
- Click **Add** and enter the hostname for the new instance. The hostname should appear in the list.
- Click **OK**.

5 If a firewall exists between the master server and the new instance, open the following ports on the master server to allow communication:

- `vnetd: 13724`
- `bprd: 13720`
- `PBX: 1556`
- If the master server is a NetBackup appliance that uses TCP, open the following ports:
  443, 5900, and 7578.

6 From the **System topology** page of the Flex Appliance Console, navigate to the **Application instances** section.



7 Click **Create instance**.

8 Select the appropriate media server application from the repository list that appears, making sure to verify the version number. Click **Next**.

9 Follow the prompts to create the instance. When you are done, you can view the progress in the Activity Monitor, which is accessible from the left pane of the Flex Appliance Console.

Note: If you do not want to use DNS or want to bypass DNS for certain hosts, verify that the hostname resolution information is included in the **Hosts file entries** field. You must include entries for the master server and any other NetBackup hosts that you want to communicate with the instance.

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10 Once the instance has been created successfully, you must change the password from the known default password. To change the password, open an SSH session to the instance and log in with the following credentials:

- Username: **appadmin**
- Password: **P@ssw0rd**

Follow the prompt to enter a new password. When the password change is complete, you are logged out. You can log back in with the new password.

11 Create the storage servers for your selected storage, as follows:

- Log on to the NetBackup Administration Console and select either **NetBackup Management** or **Media and Device Management**.

- If you selected AdvancedDisk or Media Server Deduplication Pool (MSDP) storage for the instance, click **Configure Disk Storage Servers** and follow the prompts to create the storage servers. Enter the following storage information for AdvancedDisk and MSDP:
  - AdvancedDisk storage volume: `/mnt/advanceddisk/vol*`
  - MSDP storage path: `/mnt/msdp/vol0`

  Note: If the MSDP disk pool spans multiple volumes, only select vol0. Also note that the wizard shows only a portion of the storage, but the remaining storage displays after the storage server is configured.

- If you selected a Cloud Catalyst cache for the instance, click **Configure Cloud Storage Servers** and follow the prompts to create the storage servers. Enter the following local cache directory for Cloud Catalyst:
  `/mnt/cloudcatalyst`

See the following guides for more information on NetBackup storage configuration:

- The *NetBackup AdvancedDisk Storage Solutions Guide*
- The *NetBackup Deduplication Guide*

12 (Optional) If you need to upload custom CRL files for an external CA, perform the following steps:

- Use an SCP tool to copy the files to the `/mnt/nbdata/hostcert/crl/` directory on the instance.
- Run the following commands on the instance to enable the CRL check using the custom files:

```
sudo nbsetconfig ECA_CRL_CHECK = CHAIN
sudo nbsetconfig ECA_CRL_PATH = /mnt/nbdata/hostcert/crl/
```

See the *NetBackup Security and Encryption Guide* for more information on the CRL configuration options.

13 If you plan to or have created multiple instances with MSDP or Cloud Catalyst storage, Veritas recommends that you tune the `MaxCacheSize` according to the following guidelines:

- Allocate .75 to 1 GB of RAM for each TiB of storage that is allocated to MSDP or Cloud Catalyst on the instance. For example, if the storage pool has 80 TiB allocated, the `MaxCacheSize` should be 60 to 80 GB of RAM.

- The sum of the `MaxCacheSize` for all instances with MSDP or Cloud Catalyst storage should not exceed 70% of the physical RAM on the appliance.

To tune the `MaxCacheSize`:

- Run one of the the following commands on the instance:
  - For MSDP:

    ```
    sudo /usr/openv/pdde/pdag/bin/pdcfg --write
    /mnt/msdp/vol0/etc/puredisk/contentrouter.cfg --section
    CACHE --option MaxCacheSize --value <percent%>
    ```

  - For Cloud Catalyst:

    ```
    sudo /usr/openv/pdde/pdag/bin/pdcfg --write
    /mnt/cloudcatalyst/storage/etc/puredisk/contentrouter.cfg
    --section CACHE --option MaxCacheSize --value <percent%>
    ```

    Where *<percent%>* is the percentage of the appliance RAM to use for the cache on the instance.

- Restart the `pdde-storage` process with the following commands:

  ```
  sudo /etc/init.d/pdde-storage force-stop
  sudo /etc/init.d/pdde-storage start
  ```

14 If you selected MSDP storage for the instance, log in to the instance. Run the following command to create a backup policy to protect the MSDP catalog:

```
sudo /usr/openv/pdde/pdcr/bin/drcontrol --new_policy --residence
<storage unit> [--policy <policy name>] [--client<instance
hostname>]
```

Where *<storage unit>* is the name of the storage unit on which to store the MSDP catalog backups, and [--policy *<policy name>*] and [--client *<instance hostname>*] are optional.

See the *NetBackup Deduplication Guide* for the other options that are available with the `drcontrol` utility.

Chapter 4

Managing NetBackup application instances

This chapter includes the following topics:

Managing application instances from Flex Appliance and NetBackup

After you have created your instances, the instance management is divided between Flex Appliance and NetBackup, depending on the type of operation. In general, use Flex Appliance for any tasks that are related to the appliance or the application files. Use NetBackup for any tasks that are related to your backups. Refer to the following information for more details.

Instance operations that you can perform from Flex Appliance

Use Flex Appliance to do the following:

- Resize instance storage
- Edit instance network settings
- Assign or unassign Fibre Channel ports
- View instance performance metrics
- Upgrade application instances
- Manage application add-ons, including NetBackup EEBs

Refer to the *Flex Appliance Getting Started and Administration Guide* for these procedures.

Instance operations that you can perform from NetBackup

All other management tasks happen from NetBackup. This guide covers the information that is specific to the NetBackup application. For all other tasks, refer to the regular NetBackup documentation as you would for any other environment.

Note that the following NetBackup features are not supported on application instances:

- Bare Metal Restore boot servers
- IPv6

Accessing NetBackup master and media server instances for management tasks

To perform some management tasks on a master or a media server instance, you must open an SSH session to the instance. When you log in to the instance for the first time, use the following default credentials:

- Username: **appadmin**
- Password: **P@ssw0rd**

You are required to change your password the first time you log in.

From the SSH session, you can run commands to manage the instance. Some commands are specific to the NetBackup application, but you can also run NetBackup commands. To run NetBackup commands, specify `sudo` and enter the absolute or the relative path. See "Running NetBackup commands on a master or media server application instance" on page 21.

Managing users on a master or media server instance

After you create a NetBackup master or media server application instance, you can log in to the instance with the **appadmin** user account to add and manage additional users.

The following types of users are supported:

- Local users
  See "Adding and removing local users on a master or media server instance" on page 19.
  See "Changing a user password on a master or media server instance" on page 20.

- Active Directory (AD) and Lightweight Directory Access Protocol (LDAP) users
  See "Connecting a remote user domain to a master or media server instance" on page 19.

Adding and removing local users on a master or media server instance

Use the following procedures to add or remove local users on a NetBackup master or media server instance.

Adding local users

To add a local user

1. Open an SSH session to the instance as the **appadmin** user.
2. Run the following command:

   ```
   sudo useradd <username>
   ```

   Where *<username>* is the username of the user that you want to add.
3. Run the following command to set a password for the new user:

   ```
   sudo passwd <username>
   ```

   Where *<username>* is the username that you added in the previous step.

Removing local users

To remove a local user

1. Open an SSH session to the instance as the **appadmin** user.
2. Run the following command:

   ```
   sudo userdel <username>
   ```

   Where *<username>* is the username of the user that you want to remove.

Connecting a remote user domain to a master or media server instance

NetBackup master and media server application instances support Active Directory (AD) and Lightweight Directory Access Protocol (LDAP) users. Use the following procedure to connect a remote user domain to a master or media server instance.

To connect a remote user domain

1. From the Flex Appliance Console, verify that the instance is on the same network as the AD or the LDAP domain. If it is not, edit the settings so that the instance can reach the domain.
2. Open the following ports if they are not already open:
   - 139
   - 145
3. Open an SSH session to the instance as the **appadmin** user and run the following command:

   ```
   sudo realm join <domain name> -v
   ```

   Where <*domain name*> is the AD or the LDAP domain that you want to connect.

   Enter the **appadmin** user password when prompted.
4. When the following prompts appear, enter the password for the AD or the LDAP domain:

   ```
   Password for Administrator:

   Enter Administrator's password:
   ```
5. Wait for the process to complete. The following message should appear:

   ```
   Successfully enrolled machine in realm
   ```
6. When the connection is complete, sign in to the instance as the **appadmin** user from the NetBackup web UI. Add and configure the remote users that you want to have access to the instance. See the *NetBackup Web UI Security Administrator's Guide* for details.

Changing a user password on a master or media server instance

Follow these steps to change the password of a local user or the default **appadmin** user on a NetBackup master or media server application instance.

Note: Active Directory user passwords cannot be changed from an instance. They must be changed from the server on which they reside.

To change a user password from that user's account

1. Open an SSH session to the instance as the user that you want to change the password for and run the following command:

   ```
   passwd
   ```

2. Follow the prompt to change the password.

To change another user's password from the appadmin account

1. Open an SSH session to the instance as the **appadmin** user and run the following command:

   ```
   sudo passwd <username>
   ```

   Where *<username>* is the username of the user whose password you want to change.

2. Follow the prompt to change the password.

Running NetBackup commands on a master or media server application instance

Flex Appliance provides the capability for the **appadmin** user to run NetBackup commands on all NetBackup master and media server instances.

Note: Flex Appliance does not support adding local directories or manually editing any of the files on application instances. If you create a local directory or manually edit a file and the instance is relocated or stopped for any reason, the changes are not maintained when the instance restarts.

To run NetBackup commands on an instance, open an SSH session to the instance and log in as the **appadmin** user. For each command that you want to run, specify `sudo` and enter the absolute or the relative path. For example:

```
sudo /opt/veritas/vxapp-manage/tune -s
```

You can run commands for the following directories and executables on master and media server instances:

- `/opt/veritas/vxapp-manage/cp-nbu-config`
  See "Creating a NetBackup touch file on a master or media server application instance" on page 22.
- `/usr/openv/netbackup/bin`
- `/usr/openv/netbackup/bin/admincmd`
- `/usr/openv/netbackup/bin/goodies`

- `/usr/openv/netbackup/bin/support`
- `/usr/openv/volmgr/bin`
- `/usr/openv/volmgr/bin/goodies`

Note: The NetBackup 8.2 application does not support NetBackup notify scripts and therefore does not support the `cp-nbu-notify` utility. If an existing instance uses these scripts and you upgrade it to 8.2, the scripts no longer work.

You can run commands for the following directories and executables on media server instances only:

- `/opt/veritas/vxapp-manage/tune`
- `/usr/openv/pdde/pdag/bin/mtstrmd`
- `/usr/openv/pdde/pdag/bin/pdcfg`
- `/usr/openv/pdde/pdag/bin/pdusercfg`
- `/usr/openv/pdde/pdconfigure/pdde`
- `/usr/openv/pdde/pdcr/bin`
- `/usr/sbin/mount.nfs`
- `/usr/sbin/mount.nfs4`
- `/usr/sbin/umount.nfs`
- `/usr/sbin/umount.nfs4`

Note: The `df` command may show incorrect usage information for application instances. However, the total storage and the available storage are correct. To determine the correct usage information, subtract the available storage from the total storage.

For more information on NetBackup commands, refer to the *NetBackup Commands Reference Guide*.

Creating a NetBackup touch file on a master or media server application instance

The `cp-nbu-config` command copies the NetBackup configuration file from the user's home space to the specified NetBackup configuration destination directory. A NetBackup administrator can use the `cp-nbu-config` command to create and edit a NetBackup touch configuration file in any of the following directories:

- /usr/openv/netbackup
- /usr/openv/netbackup/bin
- /usr/openv/java
- /usr/openv/lib/ost-plugins
- /usr/openv/netbackup/bin/snapcfg
- /usr/openv/netbackup/db/cloudSnap/credential
- /usr/openv/netbackup/db/cloudSnap/proxy
- /usr/openv/netbackup/db/config
- /usr/openv/netbackup/db/event
- /usr/openv/netbackup/db/images
- /usr/openv/netbackup/db/media
- /usr/openv/netbackup/ext/db_ext
- /usr/openv/netbackup/ext/db_ext/db2
- /usr/openv/var
- /usr/openv/volmgr
- /usr/openv/volmgr/database

To create or edit a touch configuration file

1. Log in to the NetBackup application instance.
2. Create a new configuration file in the NetBackup administrator home directory, or use the `cp` command to copy an existing configuration file from its original location to the home directory.

   For example:

   ```
   cp /usr/openv/lib/ost-plugins/pd.conf ~/
   ```

3. Make changes to the file in the home directory.
4. Run the following command to install the file in its original directory or a supported destination directory:

   `sudo /opt/veritas/vxapp-manage/cp-nbu-config <configuration-file> <destination>`

   Where *<configuration-file>* is the file that you created or edited, and *<destination>* is the directory where it needs to be installed.

   For example:

   `sudo /opt/veritas/vxapp-manage/cp-nbu-config ~/pd.conf /usr/openv/lib/ost-plugins`

Setting environment variables on master and media server instances

Use the following procedure to set environment variables on master and media server application instances.

To add an environment variable

1. Log in to the instance as the **appadmin** user.
2. Navigate to one of the following locations:
   - If you want to set a variable for both interactive and non-interactive user sessions, navigate to `/etc/profile.d/custom.sh`.
   - If you want to set a variable for interactive user sessions only, navigate to `/etc/profile.d/sh.local`.
3. Edit the file to add the new variable.

Storing custom data on a master or media server instance

Flex Appliance does not generally support adding or editing directories and files on application instances. If you create or edit a directory or file and the instance is relocated or stopped for any reason, the changes are not maintained when the instance restarts.

However, if you have critical data that you must store on a NetBackup master or media server application instance, use the following procedure to add it to the `/mnt/nblogs` directory.

Warning: The `/mnt/nblogs` directory is used for NetBackup logs and has 250GB of storage space that cannot be resized. The data that you add to this directory must be critical and small in size. If you use too much storage space, the instance may be affected.

To store custom data on a NetBackup master or media server instance

1. Log in to the instance as the **appadmin** user.
2. Run the following command to create a directory under `/mnt/nblogs`:

   `sudo mkdir /mnt/nblogs/<directory>`, where <*directory*> is the name of the new directory.

   For example, if you need to store SSH `authorized_key` files on the instance, you can make the following directory:

   ```
   sudo mkdir /mnt/nblogs/authorized_keys
   ```
3. If required, run the following command to create a subdirectory:

   `sudo mkdir /mnt/nblogs/<directory>/<subdirectory>`, where <*directory*> is the name of the directory that you created in the previous step and <*subdirectory*> is the name of the subdirectory.

   In the `authorized_keys` example, you can create the following subdirectory to store a specific user's `authorized_key` file:

   ```
   sudo mkdir /mnt/nblogs/authorized_keys/example_user
   ```
4. Add the required information to the new directory.

Modifying or disabling the nbdeployutil utility on a master server instance

The `nbdeployutil` utility may adversely affect performance of NetBackup application instances on a Veritas 5150 Appliance. If you do not need this feature or if you determine that it causes performance issues due to high CPU usage, you can modify the configuration or disable it as follows:

- Log in to the master server instance and create the following **nbdeployutil** configuration file if it is not present:
  `/usr/openv/var/global/nbdeployutilconfig.txt`
- Refer to the topic "Scheduling capacity licensing reports" in the *NetBackup Administrator's Guide, Volume II* for the procedure to use custom values for the capacity licensing report.

Establishing trust with a NetBackup 7.7.3 master server instance

To establish a trust relationship between a later version master server instance and a NetBackup 7.7.3 master server instance, you must perform the following steps.

To establish trust with a NetBackup 7.7.3 master server instance

1. Log in to the instance as the **appadmin** user and use the following command to enable the **root** account and set the password:

   ```
   sudo passwd
   ```

   Warning: The **root** account is a restricted user account that can put the system at risk. It should only be enabled during configuration procedures or under the direct supervision of Veritas Technical Support.

2. Establish trust between the source and the target domains. Use the **root** account to add the 7.7.3 instance as a trusted master server. Refer to the NetBackup documentation for specific instructions.
3. Run the following command on the instance to disable the **root** account:

   ```
   sudo passwd -l root
   ```