

Veritas CloudPoint & Pure Storage FlashArrays

How-to guide

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0. DISCLAIMER

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1. PURPOSE AND SCOPE

Veritas CloudPoint™ is backup and recovery enterprise software that uses Pure Storage FlashArray™ snapshot functionality for backup purposes. FlashArray's capabilities are exposed to CloudPoint through plug-ins contained in a Python module responsible for asset discovery and actions performed on discovered and configured assets. Using CloudPoint, you can easily deploy FlashArrays to create crash-consistent snapshots.

The goal of this how-to guide is to illustrate the steps to manually and automatically manage FlashArray snapshots.

2. INTERACTIVE DISK SNAPSHOT MANAGEMENT (MANUAL)

Identifying Disk for Snapshot

When there are multiple FlashArrays configured with CloudPoint with duplicate volume names (that is, a volume with the same name exists on two or more arrays), you need to properly identify the disks for snapshots by obtaining the disk's serial number and comparing it to the disk ID in the **Details** window of the selected asset (disk). The serial number of the FlashArray volume is embedded into the asset ID assigned by CloudPoint.

Obtaining Disk Serial Number on FlashArray

You can acquire the disk's serial number on FlashArray using the Command Line Interface, the Graphical User Interface or the REST API.

Command Line Interface

Execute `purevol list <volume_name>` command. See Figure 1.

```
pureuser@sn1-405-c12-13> purevol list vol01
Name  Size  Source  Created  Serial
vol01 16T   -       2017-08-16 03:24:57 PDT 38BEABEBECBB412400011010
```

Figure 1

Graphical User Interface

Select Storage → Volumes or Storage → Volumes → <volume_name>. See Figure 2.

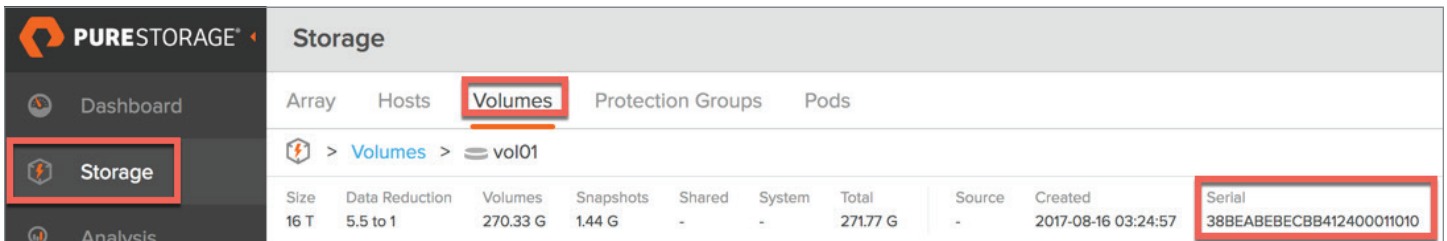


Figure 2

REST API

The GET volume/{volume} REST API returns the selected volume's serial number.

```
{
  "source": null,
  "serial": "38BEABEBECBB412400011010",
  "created": "2017-08-16T10:24:57Z",
  "name": "vol01",
  "size": 17592186044416
}
```

Locating Volume Serial Numbers in CloudPoint

The volume serial number corresponds to the ID field in CloudPoint. See Figure 3.

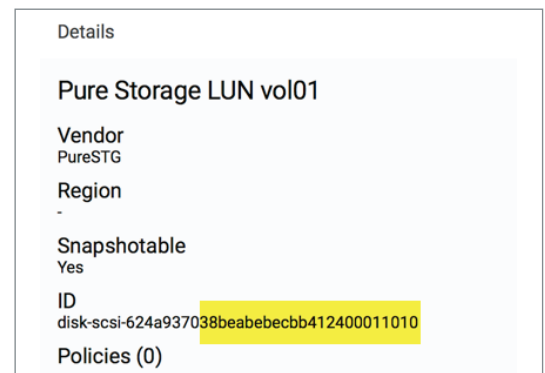


Figure 3

Creating Snapshots

From the CloudPoint Dashboard screen, in the Environment card, select Disks and click Manage. See Figure 4.

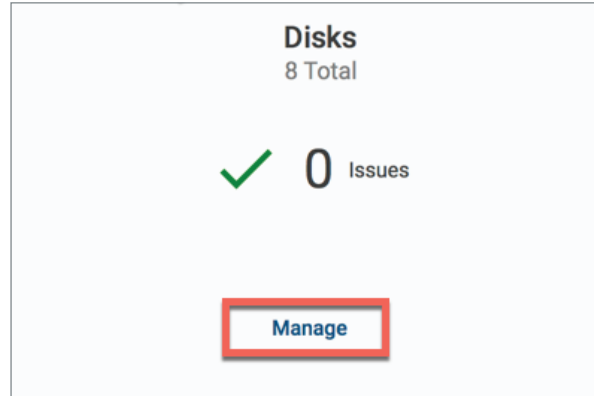


Figure 4

In the Asset Management screen, select the disk for snapshot and on the Details page, choose Create Snapshot. Provide the snapshot's name and optionally its description. See Figure 5.

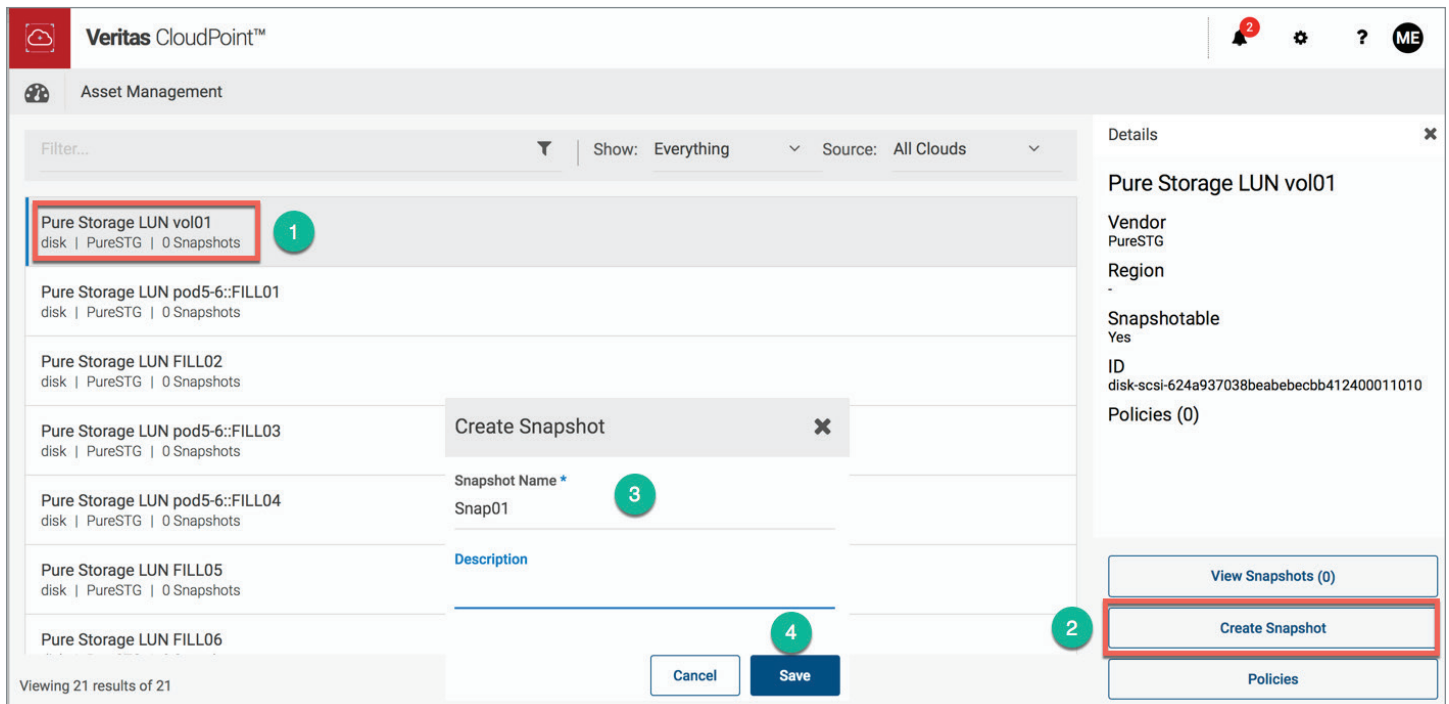


Figure 5

Verifying Snapshot Completion

You can verify successful FlashArray snapshot completion using CloudPoint as well as FlashArray. To examine a created snapshot, select Disks in the Environment card and click Manage (see Figure 1). In the Asset Management page, select the disk with snapshots and the View Snapshots option. The number in parenthesis following the View Snapshots option indicates the number of snapshots for a particular asset (FlashArray volume). Job information will also be available from the CloudPoint Dashboard in the Notification area (bell symbol). For more details, click Explore Job Log (see Figure 6). The CloudPoint-created snapshot will be named volume_name.snapshot_name; for example, a snapshot called Snap01 on vol01 will be called vol01.Snap01. A snapshot with the same name will also be created on FlashArray.

Restoring from Manual Snapshots

For FlashArray, CloudPoint supports a restore from snapshot that will overwrite the existing volume.

⚠ Before restoring from snapshot the target volume must be unmounted on the host operating system.

To restore the FlashArray volume from snapshot, select **Manage** in the **Snapshots** card to display assets that have been protected. See Figure 6.

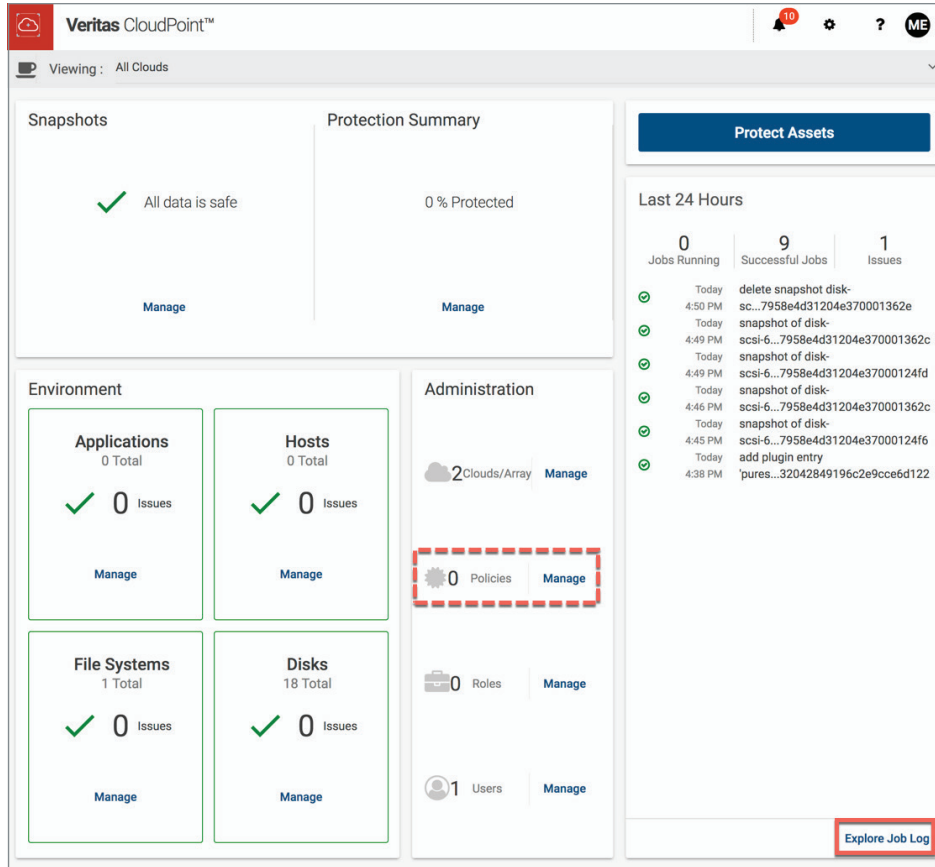
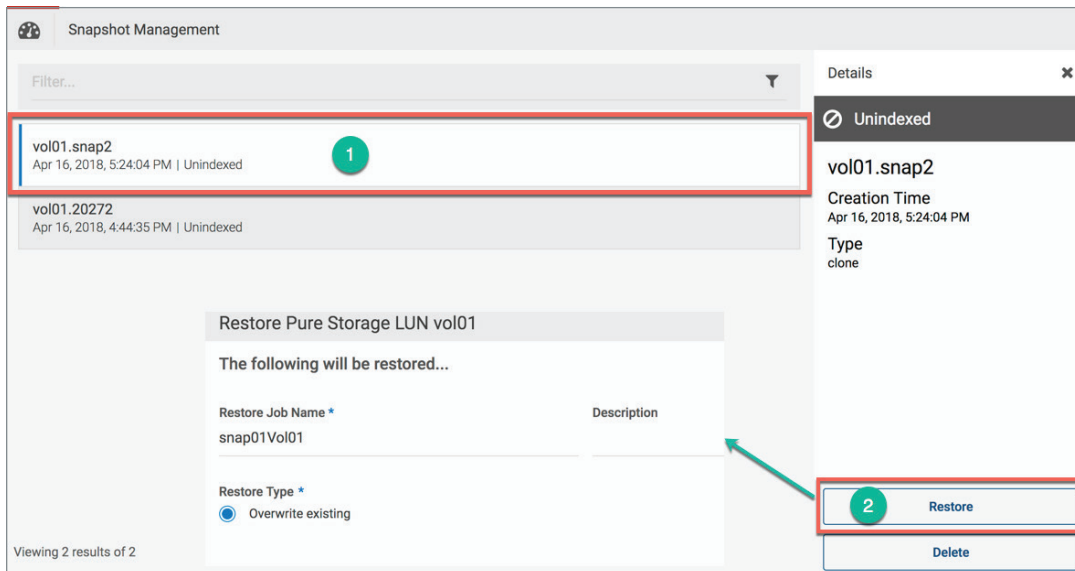


Figure 6

Choose the disk to be restored and in the **Details** pane, click **View Snapshots**, select the snapshot to be restored and click **Restore**. In the **Restore** dialog, provide the **Restore Job Name** and select the **Overwrite existing** radio button. See Figure 7.



You can monitor the job in the **Explore Jobs Log** or in the **Notification** area.

Deleting Manual Snapshots

To manually delete a CloudPoint-managed snapshot, select **Manage** in the **Snapshots** card to display assets that have been protected. See Figure 6. Choose the disk and in the **Details** pane, click **View Snapshots**, select the snapshot to be deleted and click **Delete**. See Figure 8.

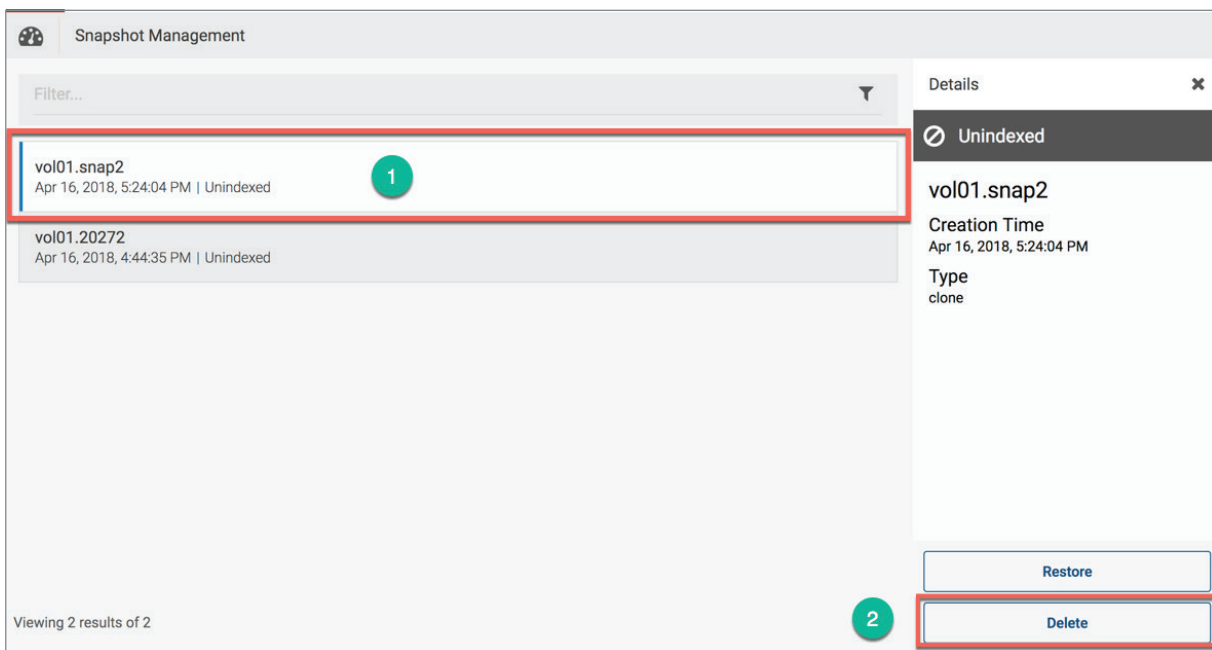


Figure 8

i Snapshots deleted by CloudPoint are not eradicated on FlashArray and may be recovered for 24 hours from the deletion time.

! Do not delete CloudPoint managed snapshots directly on FlashArray.

3. POLICY-MANAGED SNAPSHOTS (AUTOMATIC)

CloudPoint offers a convenient way to automate asset protection by creating policies. Policies define the asset protection level and simplify and reduce asset protection administrative tasks. You can create multiple policies and can assign more than one policy to a single asset.

Creating Policies

To create a new policy, click **Manage** in the **Administration** card and **New Policy**. See Figure 6. Select **New Policy** and in the **New Policy** page, provide the required information; you must select the **Storage Level** as **Disk** to enable FlashArray volume policy assignment. See Figure 9.

Figure 9

The policy shown in Figure 9 retains 24 snapshots, which are taken every hour.

Once you have created a policy, you can apply it to FlashArray volumes (assets) by selecting **Disks/Manage** in the **Environment** card, choosing the disk that will be subjected to the policy or policies and clicking **Assign Selected** or **Assign All** if you've checked more than one policy. See Figure 10. When there are multiple FlashArrays configured with CloudPoint with duplicate volume names (that is, a volume with the same name exists on two or more arrays), you need to properly identify the disk for snapshot by obtaining the disk's serial number and comparing it to the disk ID in the **Details** window of the selected asset (disk). See the [Identifying Disk for Snapshot](#) section.

Figure 10

You can monitor job status using the same methods used for manual (interactive) snapshot creation. CloudPoint automatically (policy-) created snapshots will be named `volume_name.policy_name.timestamp-nnnn`; for example, `vol01.Golden20180426160000-2048`.

Restoring from Automatic Snapshots

The process of restoring from snapshot is independent of the method used to create a snapshot (manual or automatic) and is described in the [Restoring from Manual Snapshots](#) section.

Deleting Automatic Snapshots

Automatically created snapshots will be removed (deleted) based on the retention period defined in the policy applied to an asset.

i Snapshots deleted by CloudPoint are not eradicated on FlashArray and may be recovered for 24 hours from the deletion time.

! Do not delete CloudPoint managed snapshots directly on FlashArray.

4. CONCLUSION

This how-to guide captures step-by-step instructions to manually and automatically manage FlashArray snapshots. This integration enables you to use Veritas CloudPoint and Pure Storage FlashArrays to create crash-consistent snapshots.

5. REFERENCES

- [Veritas CloudPoint Administrator's Guide](#)
- [Veritas CloudPoint Release Notes](#)

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