Red Hat Hyperconverged Infrastructure for Virtualization 1.5

Managing Red Hat Gluster Storage using Cockpit

Perform common Red Hat Gluster Storage management tasks in Cockpit

Last Updated: 2018-11-12

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Perform common Red Hat Gluster Storage management tasks in Cockpit

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Abstract

After Red Hat Hyperconverged Infrastructure for Virtualization has been deployed, you can perform many operational and management tasks for Red Hat Gluster Storage using Cockpit. Read this book to understand how to manage storage using Cockpit. This document explains how to perform maintenance tasks specific to Red Hat Hyperconverged Infrastructure for Virtualization.

Table of Contents

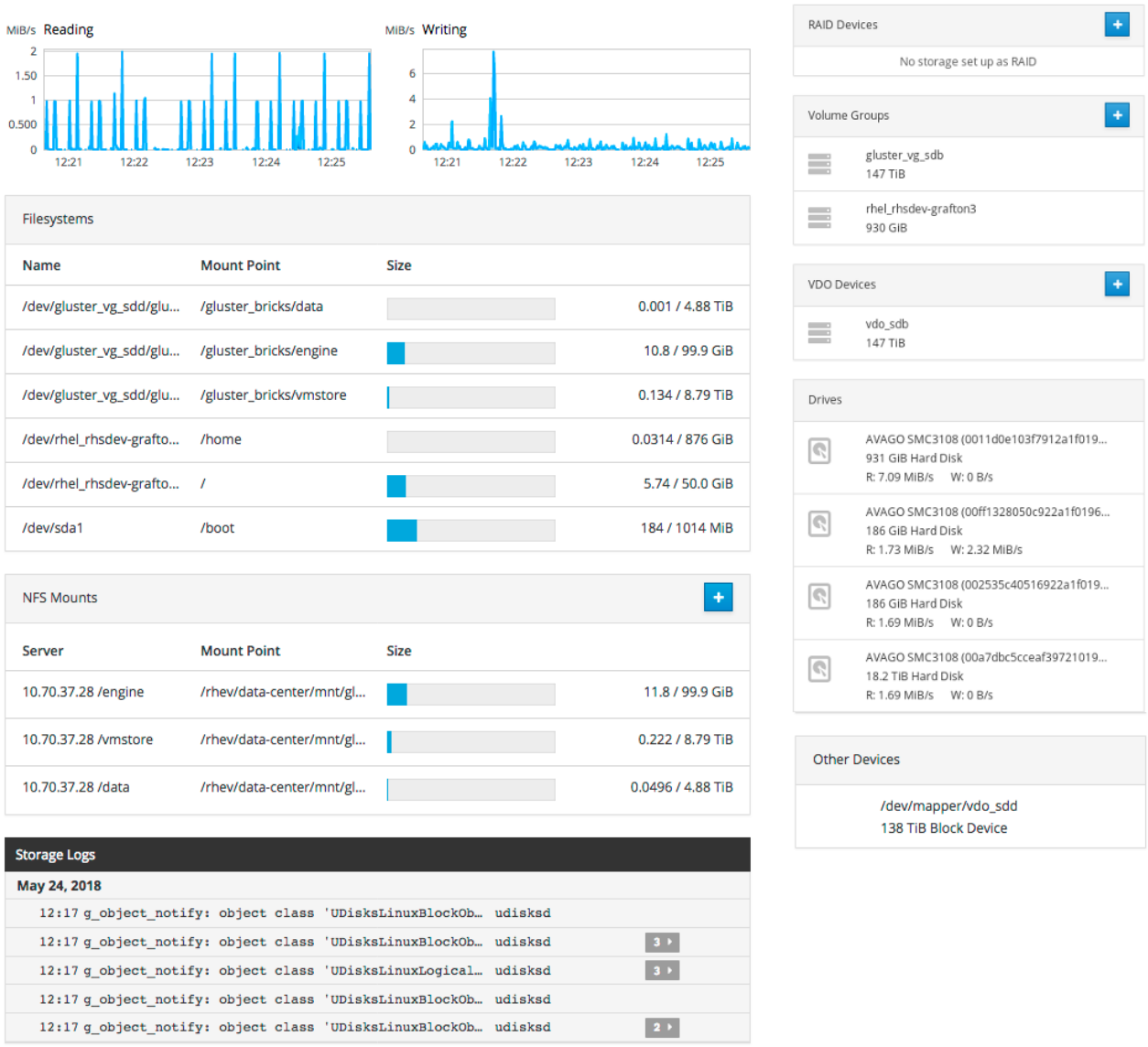
CHAPTER 1. UNDERSTANDING COCKPIT

1.1. UNDERSTANDING THE STORAGE DASHBOARD

The Storage Dashboard in Cockpit provides an overview of I/O operations, volumes, and devices available to the server.

Navigate to the Storage Dashboard by logging into Cockpit and clicking the hostname, followed by **Storage**.

Figure 1.1. Storage Dashboard

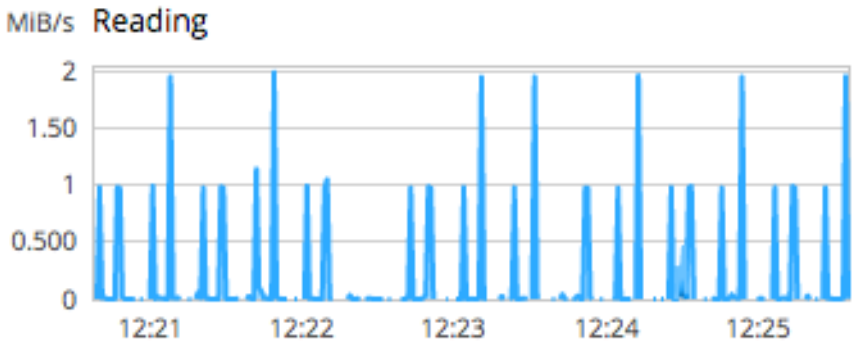


The Storage Dashboard is divided into a number of sections.

Reading

A graph of the amount of data read in the last five minutes. The scale of the graph adjusts automatically according to server load.

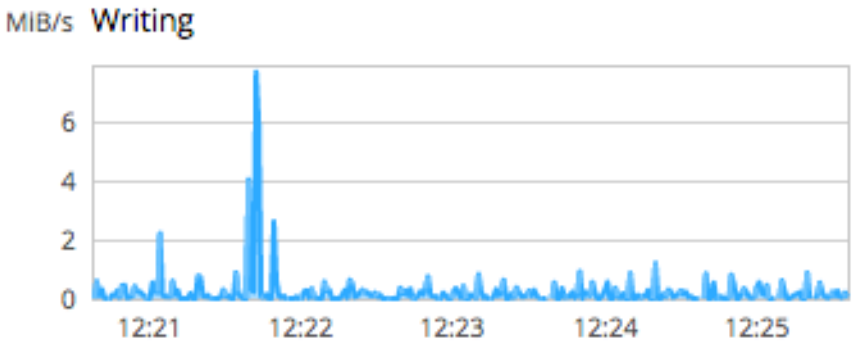
Figure 1.2. Reading graph



Writing

A graph of the amount of data written in the last five minutes. The scale of the graph adjusts automatically according to server load.

Figure 1.3. Writing graph



Filesystems

A list of file systems hosted on this server showing their name, mount point, size, and used versus total storage capacity. Clicking on a file system opens the *Volume Group Overview* page. See Section 1.2, “Understanding the Volume Group Overview page” for more information.

Figure 1.4. Filesystems

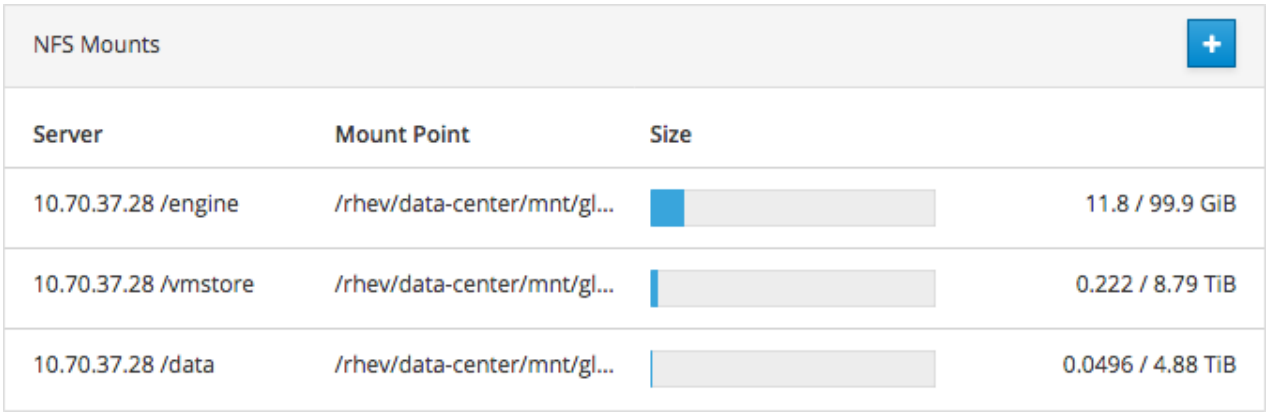
Filesystems

Name	Mount Point	Size	
/dev/gluster_vg_sdd/glu...	/gluster_bricks/data		0.001 / 4.88 TiB
/dev/gluster_vg_sdd/glu...	/gluster_bricks/engine		10.8 / 99.9 GiB
/dev/gluster_vg_sdd/glu...	/gluster_bricks/vmstore		0.134 / 8.79 TiB
/dev/rhel_rhsdev-grafto...	/home		0.0314 / 876 GiB
/dev/rhel_rhsdev-grafto...	/		5.74 / 50.0 GiB
/dev/sda1	/boot		184 / 1014 MiB

NFS Mounts

A list of exported file systems that have been mounted by client systems.

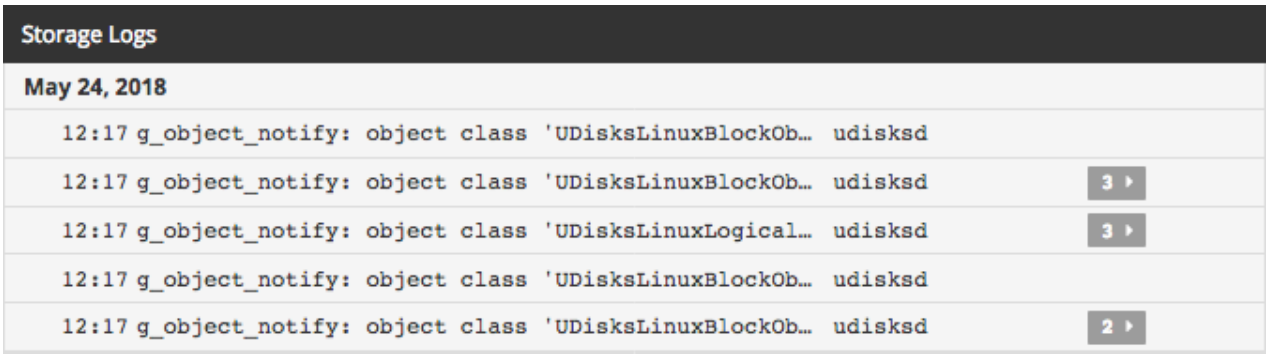
Figure 1.5. Mounts



Storage Logs

A list of recent events and log messages related to storage.

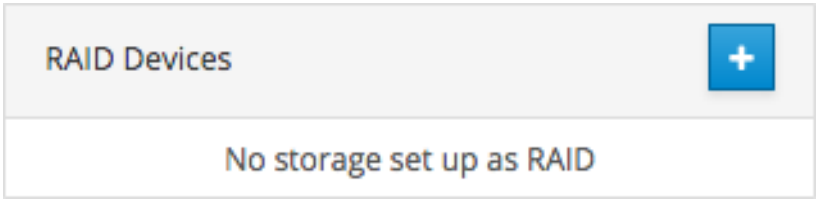
Figure 1.6. Logs



RAID Devices

A list of RAID devices configured on the server. Clicking a RAID device opens the *RAID Device Summary* page. Clicking **+** opens the *Create RAID Device* window. See Section 3.1, “Configuring a new RAID Device using Cockpit” for more information.

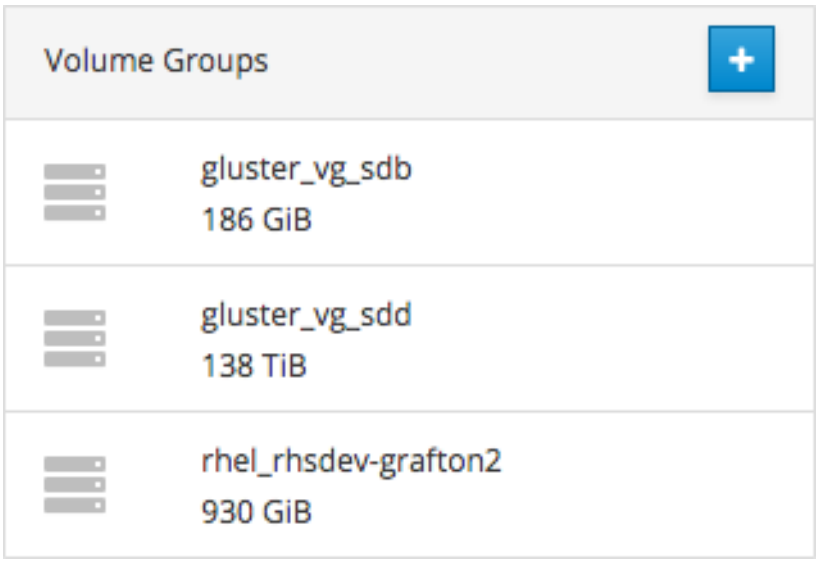
Figure 1.7. RAID Devices



Volume Groups

A list of volume groups configured on the server. Clicking a volume group opens the *Volume Group Overview* page. Clicking **+** opens the *Create Volume Group* window. See Section 5.1, “Creating a volume group using Cockpit” and Section 1.2, “Understanding the Volume Group Overview page” for more information.

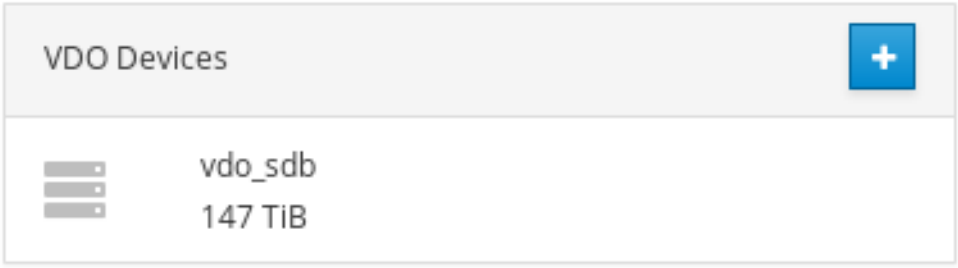
Figure 1.8. Volume Groups



VDO Devices

A list of Virtual Data Optimizer devices configured on the server. Clicking a VDO device opens the *VDO Device Summary* page. Clicking **+** opens the *Create VDO Device* window. See Section 4.1, "Creating a Virtual Data Optimizer using Cockpit" and Section 1.3, "Understanding the VDO Overview page" for more information.

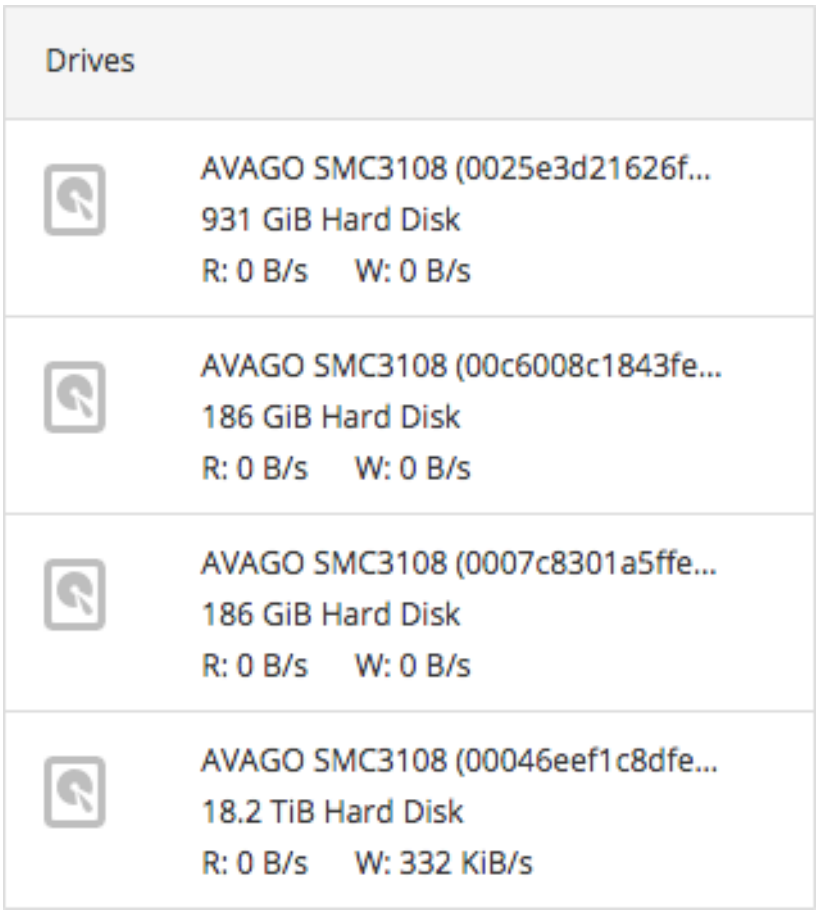
Figure 1.9. VDO Devices



Drives

A list of drives in use by the server. Clicking a drive opens the *Drive Summary* page. See Section 1.4, "Understanding the Drive Overview page" for more information.

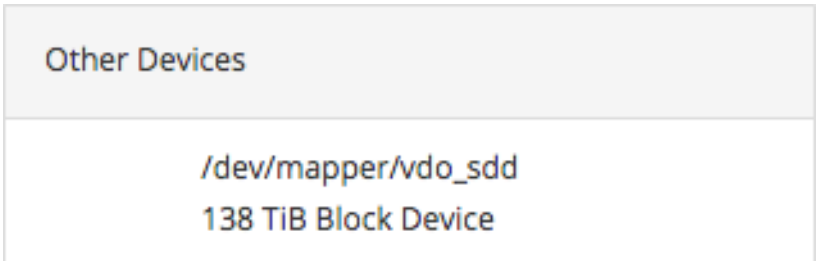
Figure 1.10. Drives



Other Devices

A list of other devices attached to the server, that are not yet used.

Figure 1.11. Other Devices

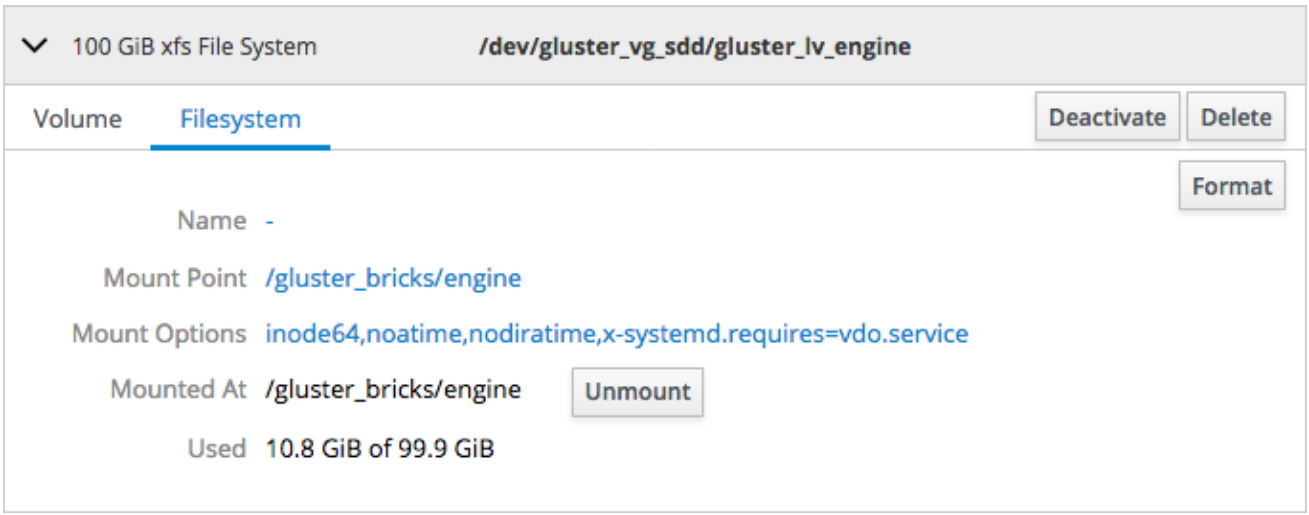


1.2. UNDERSTANDING THE VOLUME GROUP OVERVIEW PAGE

The Volume Group Overview page in Cockpit provides an overview of a volume group, the physical volume it resides on, and the logical volumes that are part of that volume group.

Navigate to the Volume Group Summary page for a file system or volume group by logging into Cockpit and clicking the hostname, followed by **Storage**, and clicking any file system or volume group.

Figure 1.12. Volume Group Overview page



The Volume Group Overview page is divided into several sections.

Volume Group summary

A summary of volume group details, showing name, UUID and capacity. You can also rename or delete the volume group from here.

Physical Volumes

A list of physical volumes underlying this volume group. Clicking **+** opens the *Add Disks* window, which lets you add more disks to the volume group.

Logical Volumes

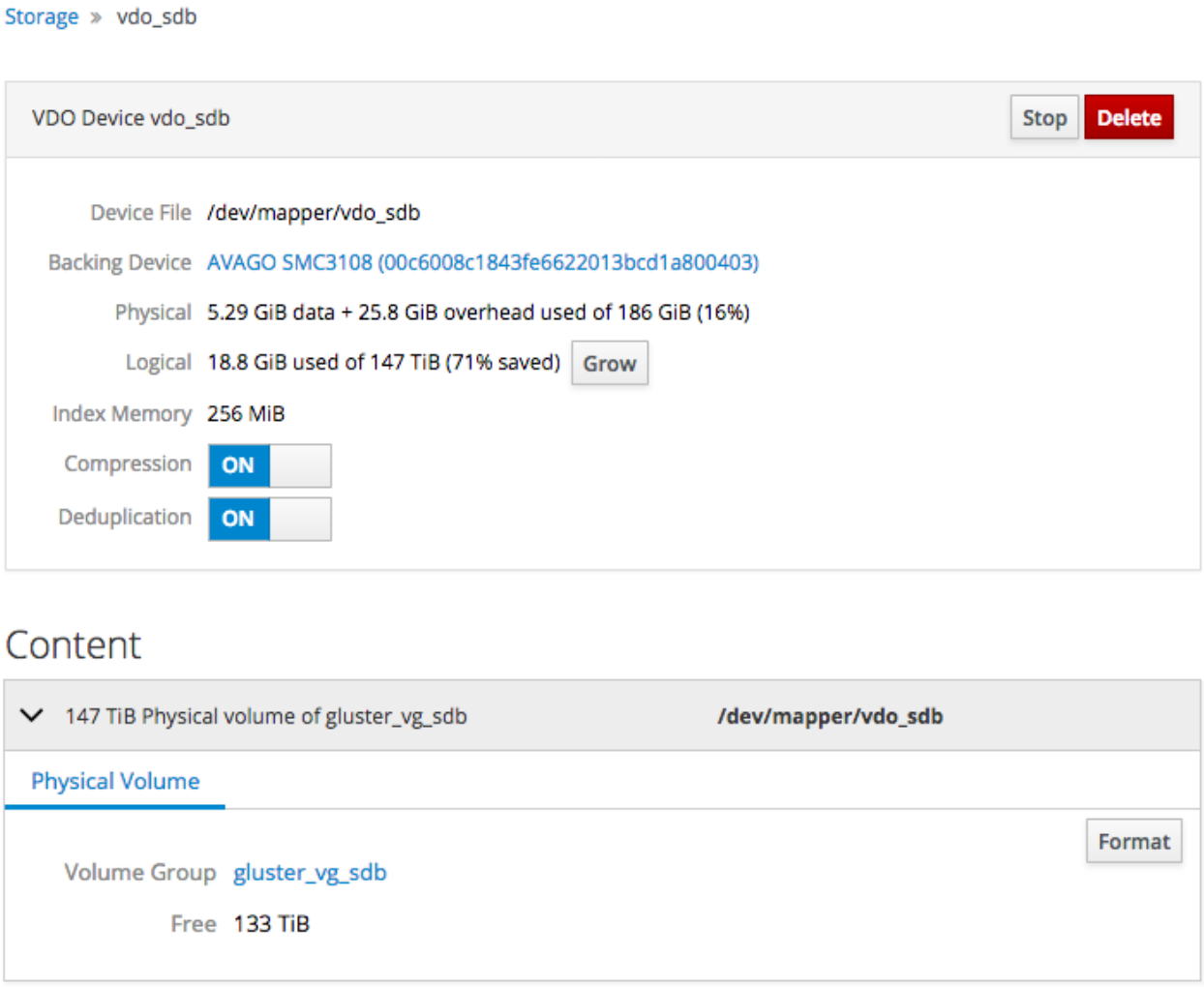
A list of logical volumes in this volume group, with volume management operations. Clicking a volume shows more details and operations for that volume. See Chapter 7, *Managing logical volumes using Cockpit* for more information.

1.3. UNDERSTANDING THE VDO OVERVIEW PAGE

The VDO Overview page provides an overview of Virtual Disk Optimizer devices and their contents.

Navigate to the VDO Overview page for a VDO device by logging into Cockpit and clicking the hostname, followed by **Storage**, and clicking any device listed under **VDO Devices**.

Figure 1.13. VDO Overview page



The VDO Overview page is divided into several sections.

VDO Device summary

A summary of the details of this VDO device, showing the device file location, the drive backing the VDO device, and the physical and logical space available. Several VDO management operations are also available.

Content

A summary of the volumes residing on this VDO device.

The VDO Overview page also provides access to a number of VDO management operations.

See the following sections for more information about each operation.

- Growing the logical size of a VDO device
- Disabling compression on a VDO device
- Disabling deduplication on a VDO device
- Stopping a VDO device
- Deleting a VDO device

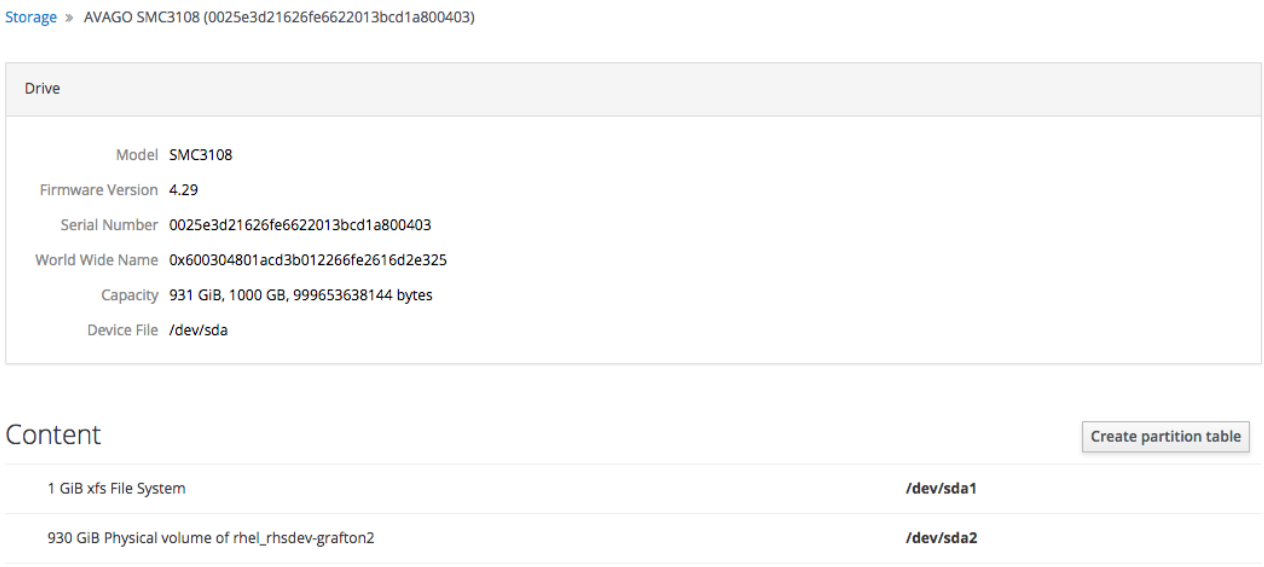
See Understanding VDO for more information about VDO devices.

1.4. UNDERSTANDING THE DRIVE OVERVIEW PAGE

The Drive Overview page provides an overview of any drives or disks attached to the server, and any partitions on those drives.

Navigate to the Drive Overview page for any drive by logging into Cockpit and clicking the hostname, followed by **Storage**, and clicking any drive listed under **Drives**.

Figure 1.14. Drive Overview page



The Drive Overview page is divided into several sections.

Drive

A summary of drive details, including the drive model, firmware version, serial number, capacity, and device location.

Content

A summary of partitions on this drive. You can modify the partition table on the drive, or format a partition here.

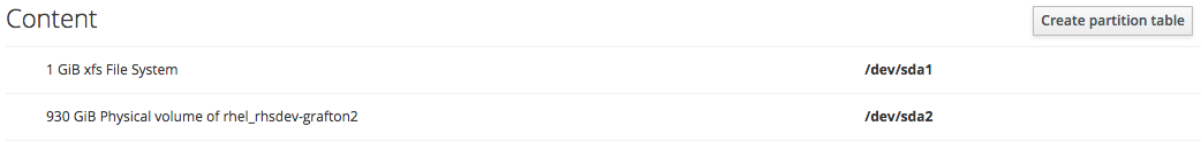
CHAPTER 2. MANAGING PHYSICAL DEVICE DRIVES USING COCKPIT

2.1. CREATING A PARTITION TABLE USING COCKPIT

Follow these steps to create a new partition table on a drive using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click any drive under **Drives**. The *Drive Overview* page opens.
4. Click **Create partition table**.

   Figure 2.1. Drive Content

   The *Format device* window opens.

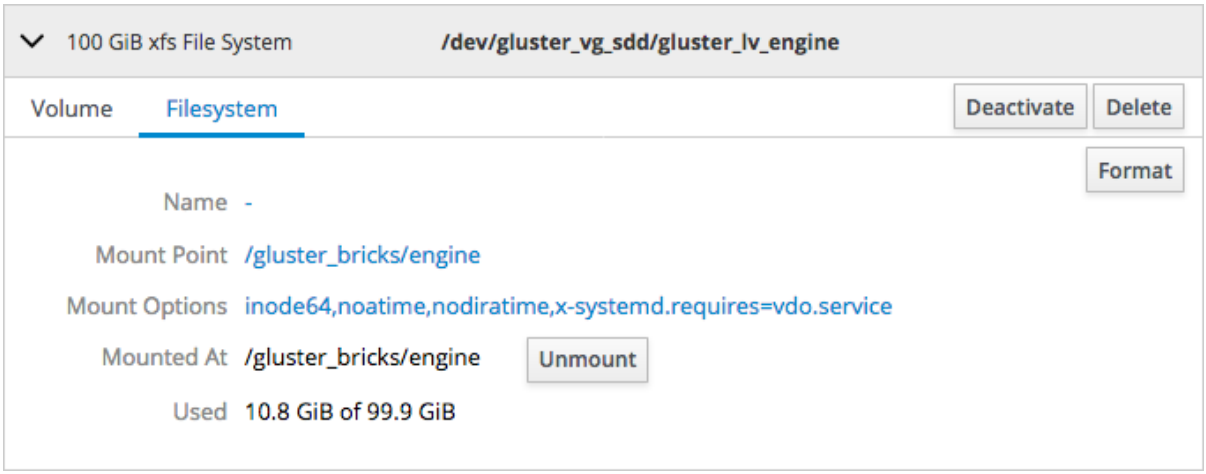
   a. Specify whether to **Erase** existing data completely by overwriting it with zeroes.
   b. Specify the **Partitioning** style to use.
   c. Click **Format**.

2.2. FORMATTING A DISK PARTITION USING COCKPIT

Follow these steps to format a partition with a file system using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click any drive under **Drives**. The *Drive Overview* page opens.
4. Click the device under **Content**.
5. In the **Filesystem** subtab, click **Format**.

   The Filesystem subtab



The *Format Device* window appears.

a. Specify whether to **Erase** existing data completely by overwriting it with zeroes.

b. Specify the file system **Type** to use.

c. Specify a **Name** for the file system.

d. Specify whether to use default or customized **Mounting** behavior.
If you selected **`Custom`**, specify a **Mount Point** and check any **Mount options** you want this file system to use.

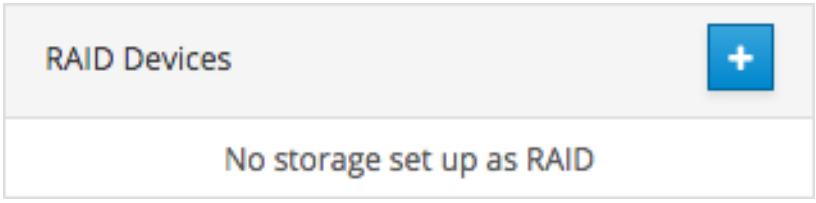
e. Click **Format**.

CHAPTER 3. MANAGING RAID DEVICES USING COCKPIT

3.1. CONFIGURING A NEW RAID DEVICE USING COCKPIT

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the **+** button beside **RAID Devices**.

Figure 3.1. RAID Devices



The *Create RAID Device* window opens.

Figure 3.2. Create Raid Device window

a. Specify a **Name** for your RAID device.

b. Specify the **RAID Level** to use.

NOTE

Only RAID5 and RAID6 are supported for RHHI for Virtualization.

c. Leave the **Chunk Size** as the default value.

d. Check the **Disks** to use in creating the RAID device.

e. Click **Create**.

CHAPTER 4. MANAGING VIRTUAL DATA OPTIMIZERS USING COCKPIT

4.1. CREATING A VIRTUAL DATA OPTIMIZER USING COCKPIT

Follow these steps to create a new VDO device.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the **+** button beside **VDO Devices**. The *Create VDO Device* window opens.

Figure 4.1. VDO Devices

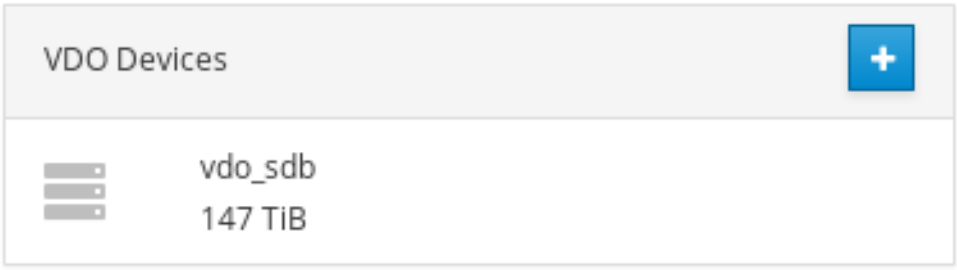
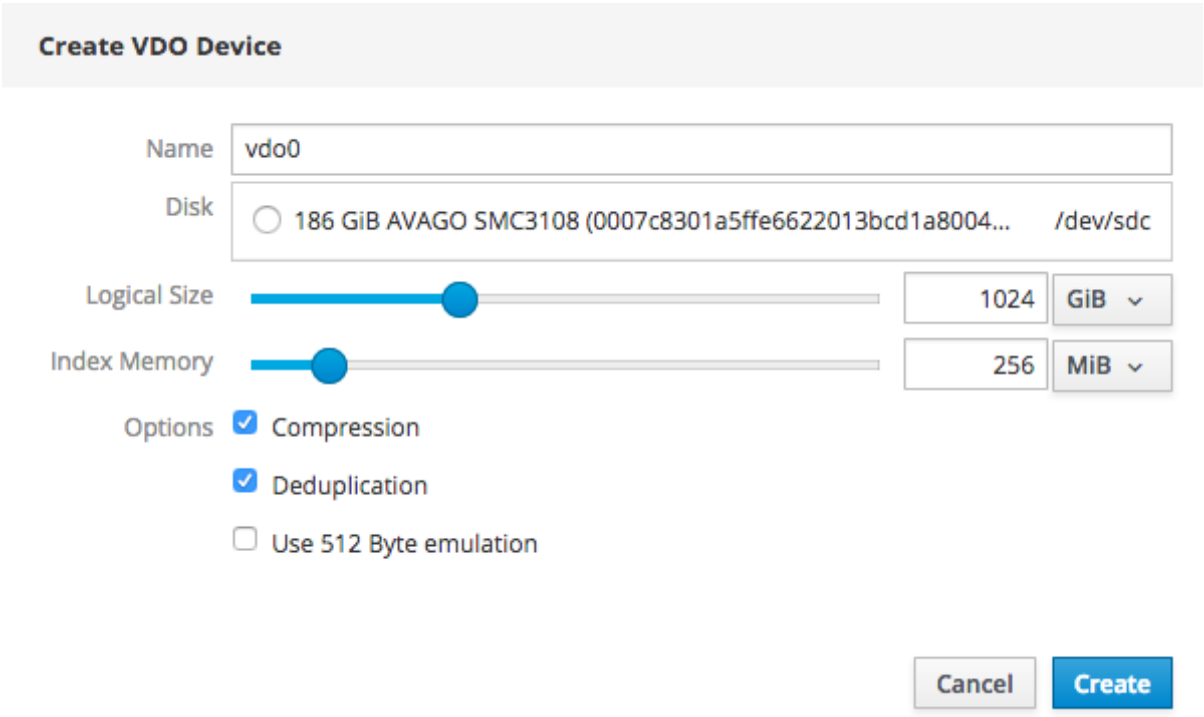


Figure 4.2. Create VDO Device window



a. Specify a **Name** for the new VDO device.

b. Specify the **Disk** to use for the new VDO device.

c. Specify the **Logical Size** for the new VDO device.

d. Specify the **Index Memory** size for the new VDO device.

e. Check any **Options** you want the new VDO device to use.

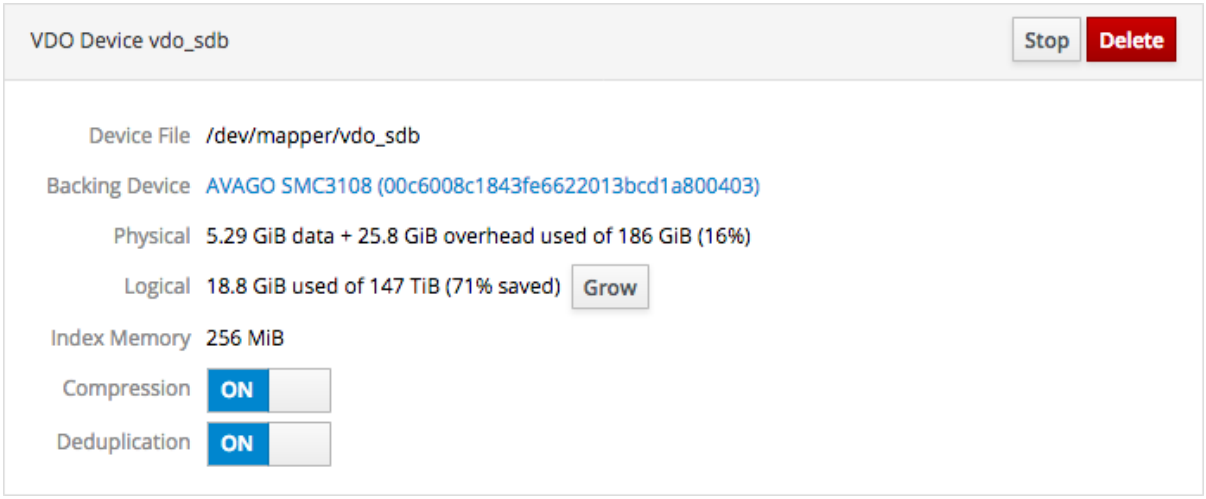
f. Click **Create**.

4.2. GROWING THE LOGICAL SIZE OF A VDO DEVICE USING COCKPIT

Follow these steps to increase the logical size (the amount of data it can store by using compression and deduplication) of a VDO device.

1. Log in to Cockpit.
2. Click the hostname → **Storage**. The *Storage Dashboard* page opens.
3. Under **VDO Devices**, click the VDO device. The *VDO Device Overview* page opens.
4. Click **Grow**.

Figure 4.3. VDO device summary



The *Grow logical size of device* window opens.

5. Drag the slider or enter a numeric value to set the new logical size of the VDO device, and click **Grow**.

4.3. DISABLING COMPRESSION ON A VDO DEVICE USING COCKPIT

Follow these steps to prevent future writes to the VDO device being compressed. This does not affect the compression of existing data on the VDO device.

1. Log in to Cockpit.
2. Click the hostname → **Storage**. The *Storage Dashboard* page opens.
3. Under **VDO Devices**, click the VDO device. The *VDO Device Overview* page opens.
4. Locate the **Compression** toggle.

Figure 4.4. The Compression toggle

5. Click the **Compression** toggle under the device summary so that **0FF** is displayed.

4.4. DISABLING DEDUPLICATION ON A VDO DEVICE USING COCKPIT

Follow these steps to prevent future writes to the VDO device being checked for duplication. This does not affect the deduplication of existing data on the VDO device.

1. Log in to Cockpit.
2. Click the hostname → **Storage**. The *Storage Dashboard* page opens.
3. Under **VDO Devices**, click the VDO device. The *VDO Device Overview* page opens.
4. Locate the **Deduplication** toggle.

   Figure 4.5. The Deduplication toggle

5. Click the **Deduplication** toggle under the device summary so that **0FF** is displayed.

4.5. STOPPING A VDO DEVICE USING COCKPIT

Follow these steps to stop a VDO device for maintenance operations or deletion.

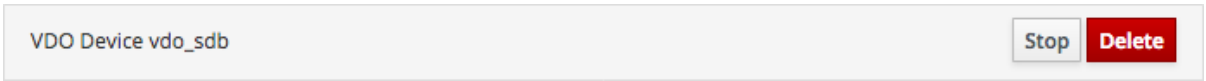
Prerequisites

- Stop any volumes running on the VDO device.

Procedure

1. Log in to Cockpit.
2. Click the hostname → **Storage**. The *Storage Dashboard* page opens.
3. Under **VDO Devices**, click the VDO device. The *VDO Device Overview* page opens.
4. Click **Stop**.

   Figure 4.6. The VDO device

4.6. DELETING A VDO DEVICE USING COCKPIT

Follow these steps to delete a VDO device.

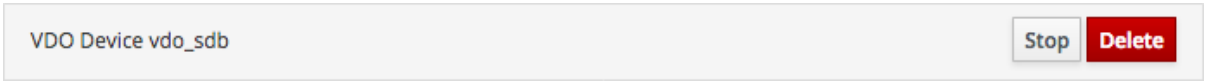
Prerequisites

- Stop any volumes running on the VDO device.
- Stop the VDO device.

Procedure

1. Log in to Cockpit.
2. Click the hostname → **Storage**. The *Storage Dashboard* page opens.
3. Under **VDO Devices**, click the VDO device. The *VDO Device Overview* page opens.
4. Click **Delete**.

Figure 4.7. The VDO device

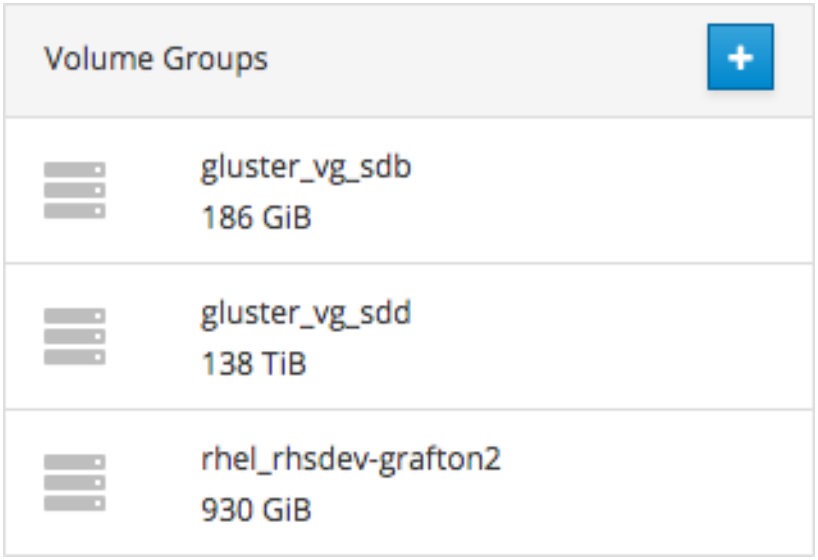


CHAPTER 5. MANAGING VOLUME GROUPS USING COCKPIT

5.1. CREATING A VOLUME GROUP USING COCKPIT

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the **+** button beside **Volume Groups**.

   Figure 5.1. Volume Groups section

   The *Create Volume Group* window opens.

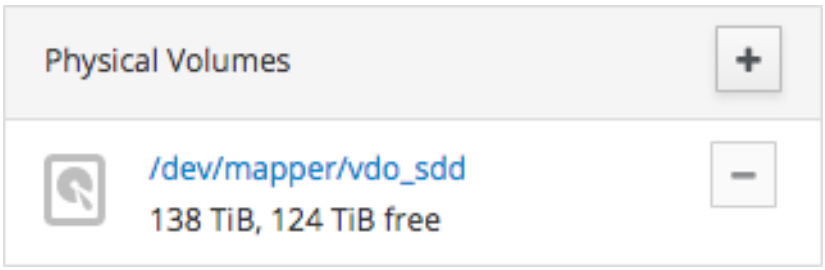
   a. Specify a **Name** for the volume group.
   b. Check the **Disks** to use for the volume group.
   c. Click **Create**.

5.2. ADDING PHYSICAL VOLUMES TO A VOLUME GROUP USING COCKPIT

Follow these instructions to expand a volume group using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click the **+** button beside **Physical Volumes**.

Figure 5.2. Physical Volumes



The *Add Disks* window opens.

a. Check the **Disks** you want to add to the volume group.

b. Click **Add**.

The capacity of the volume group is extended automatically.

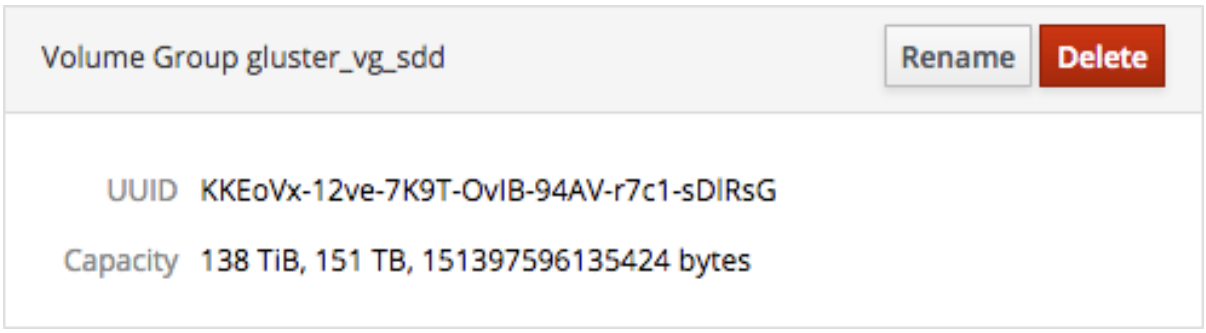
Now that you've added new storage to the volume group, you may want to grow your thin pool or grow your logical volume.

5.3. RENAMING A VOLUME GROUP USING COCKPIT

Follow these instructions to rename a volume group using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click **Rename**.

Figure 5.3. Volume group summary



The *Rename Volume Group* window opens. .. Specify a new **Name**. .. Click **Rename**.

The volume group is renamed, and the change is propagated to all logical volumes in the volume group. This does not affect the naming of thin pools.

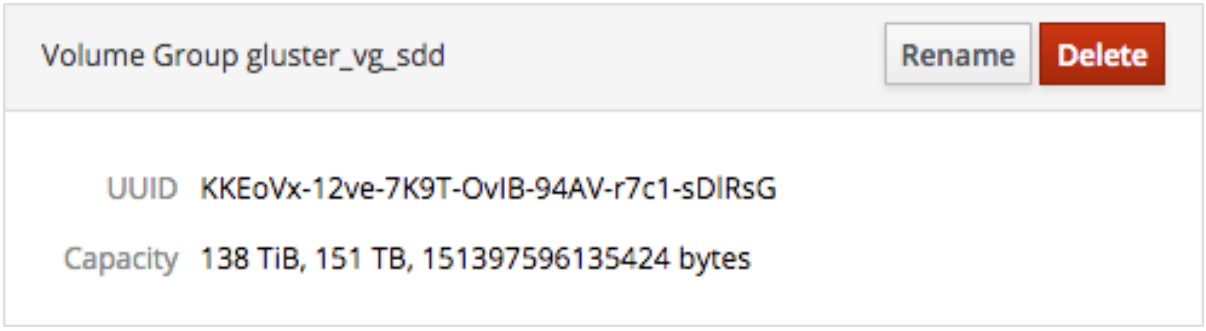
5.4. DELETING A VOLUME GROUP USING COCKPIT

Follow these instructions to delete a volume group using Cockpit.

1. Log in to Cockpit.

2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. In the Volume Group summary, click **Delete**.

   Figure 5.4. Volume group summary

   The confirmation window opens.
5. Click **Delete** to confirm deletion.

CHAPTER 6. MANAGING THIN POOLS USING COCKPIT

6.1. CREATING A THIN POOL USING COCKPIT

Follow these instructions to create a logical thin pool using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click **+ Create new Logical Volume**. The *Create Logical Volume* window opens.
    a. Specify a **Name** for your thin pool.
    b. Set **Purpose** to **`Pool for thinly provisioned volumes`**.
    c. Specify a **Size** for your thin pool.
    d. Click **Create**.

Your new thin pool appears in the list of logical volumes in this volume group.

6.2. GROWING A THIN POOL USING COCKPIT

Follow these instructions to increase the size of a logical thin pool using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click the thin pool.
5. On the **Pool** subtab, click **Grow**. The *Grow Logical Volume* window opens.
    a. Specify the new **Size** of the thin pool.
    b. Click **Grow**.

6.3. DEACTIVATING A THIN POOL USING COCKPIT

Follow these instructions to deactivate a logical thin pool using Cockpit. This deactivates all thinly provisioned logical volumes in the pool.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click the thin pool.
5. Click **Deactivate**.

The thin pool is deactivated.

6.4. ACTIVATING A THIN POOL USING COCKPIT

Follow these instructions to activate a logical thin pool using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click the thin pool.
5. Click **Activate**.

The thin pool is activated. This does not activate thin provisioned logical volumes in the pool.

CHAPTER 7. MANAGING LOGICAL VOLUMES USING COCKPIT

7.1. ACTIVATING A LOGICAL VOLUME USING COCKPIT

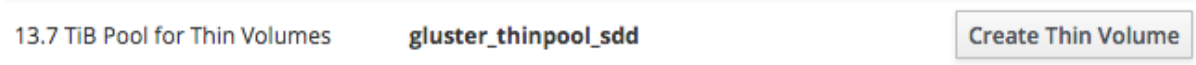
Follow these instructions to activate a logical volume using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click the logical volume.
5. Click **Activate**.

7.2. CREATING A THINLY PROVISIONED LOGICAL VOLUME USING COCKPIT

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click **Create Thin Volume** beside the thin pool that should host the volume.

   Figure 7.1. A thin pool

   The *Create Thin Volume* window opens.

   a. Specify a **Name** for the new volume.
   b. Specify a **Size** for the new volume.
   c. Click **Create**.

The new volume appears in the list of logical volumes.

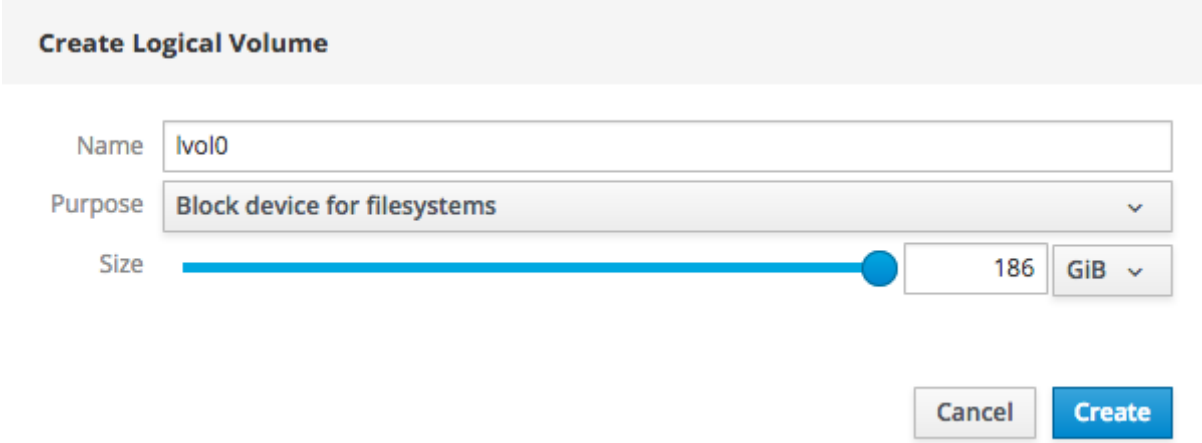
7.3. CREATING A THICKLY PROVISIONED LOGICAL VOLUME USING COCKPIT

Follow these instructions to create a logical thin pool using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.

4. Click **+ Create new Logical Volume**. The *Create Logical Volume* window opens.

Figure 7.2. The Create Logical Volume window



   a. Specify a **Name** for your logical volume.

   b. Set **Purpose** to **`Block device for file systems`**.

   c. Specify a **Size** for your logical volume.

   d. Click **Create**.

Your new logical volume appears in the list of logical volumes in this volume group.

7.4. DEACTIVATING A LOGICAL VOLUME USING COCKPIT

Follow these instructions to deactivate a logical volume using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click the logical volume.
5. Click **Deactivate**.

Figure 7.3. The logical volume summary

7.5. DELETING A LOGICAL VOLUME USING COCKPIT

Follow these instructions to delete a thinly- or thickly-provisioned logical volume.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click the logical volume.
5. Click **Delete** in the logical volume summary.
6. Click **Delete** to confirm deletion.

7.6. GROWING A LOGICAL VOLUME USING COCKPIT

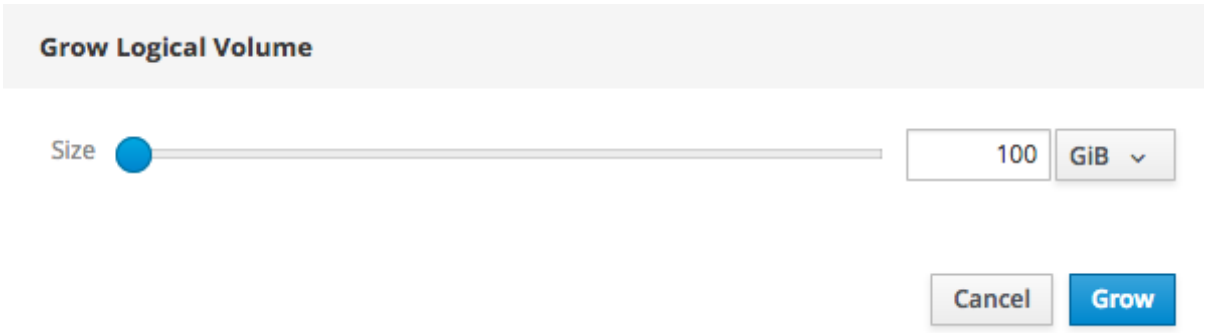
Follow these instructions to increase the size of a logical volume using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click the volume group. The *Volume Group Overview* page opens.
4. Click the logical volume.
5. On the **Volume** subtab, click **Grow**.

Figure 7.4. Logical Volume section expanded

The *Grow Logical Volume* window opens.

Figure 7.5. The Grow Logical Volume window



a. Specify the new **Size** of the logical volume.

b. Click **Grow**.

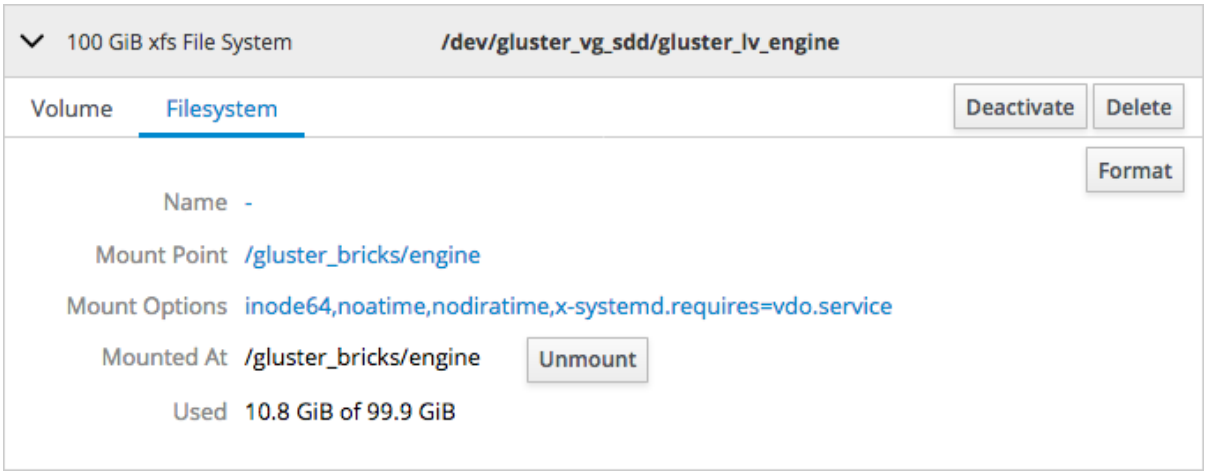
CHAPTER 8. MANAGING FILE SYSTEMS USING COCKPIT

8.1. FORMATTING A LOGICAL VOLUME USING COCKPIT

Follow these steps to format a logical volume with a file system using Cockpit.

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click any volume group under **Volume Group**. The *Volume Group Overview* page opens.
4. Click the logical volume.
5. On the **Filesystem** subtab, click **Format**.

Figure 8.1. The logical volume summary



NOTE

If this logical volume does not have an existing file system, this tab is labelled **`Unrecognised Data`**.

a. Specify whether to **Erase** existing data completely by overwriting it with zeroes.

b. Specify the file system **Type** to use.

c. Specify a **Name** for the file system.

d. Specify whether to use default or customized **Mounting** behavior.
If you selected **`Custom`**, specify a **Mount Point** and check any **Mount options** you want this file system to use.

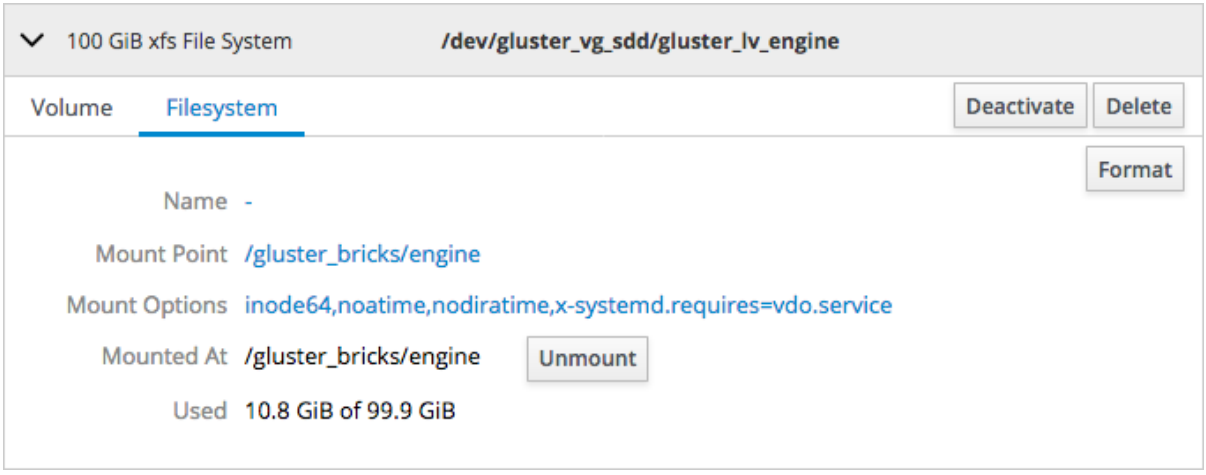
e. Click **Format**.

8.2. CONFIGURING A MOUNT POINT USING COCKPIT

1. Log in to Cockpit.
2. Click the hostname → **Storage**.

3. Click any volume group under **Volume Group**. The *Volume Group Overview* page opens.
4. Click the logical volume.
5. On the **Filesystem** subtab, click the value of **Mount Point**.

Figure 8.2. The logical volume summary



For this volume the mount point is `/gluster_bricks/engine`

The *Filesystem Mounting* window opens.

a. Specify a behaviour to use for **Mounting**.
If you select `Custom`, specify a **Mount Point** and check any **Mount Options** you want to use.

b. Click **Apply**.

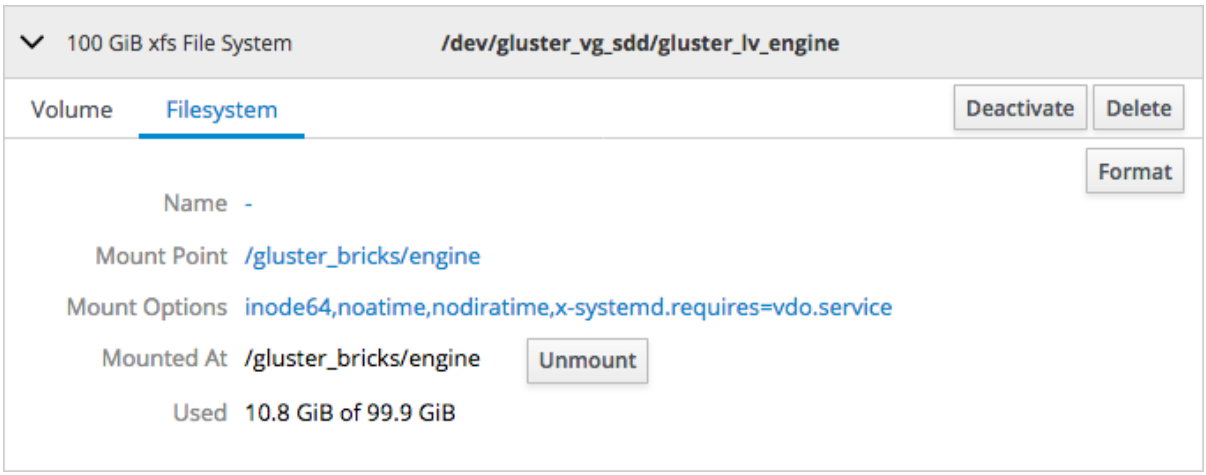
8.3. MOUNTING A FILE SYSTEM USING COCKPIT

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click any volume group under **Volume Group**. The *Volume Group Overview* page opens.
4. Click the logical volume.
5. On the **Filesystem** subtab, click **Mount**.

8.4. UNMOUNTING A FILE SYSTEM USING COCKPIT

1. Log in to Cockpit.
2. Click the hostname → **Storage**.
3. Click any volume group under **Volume Group**. The *Volume Group Overview* page opens.
4. Click the logical volume.
5. On the **Filesystem** subtab, click **Unmount**.

Figure 8.3. The logical volume summary



CHAPTER 9. MANAGING GLUSTER VOLUMES USING COCKPIT

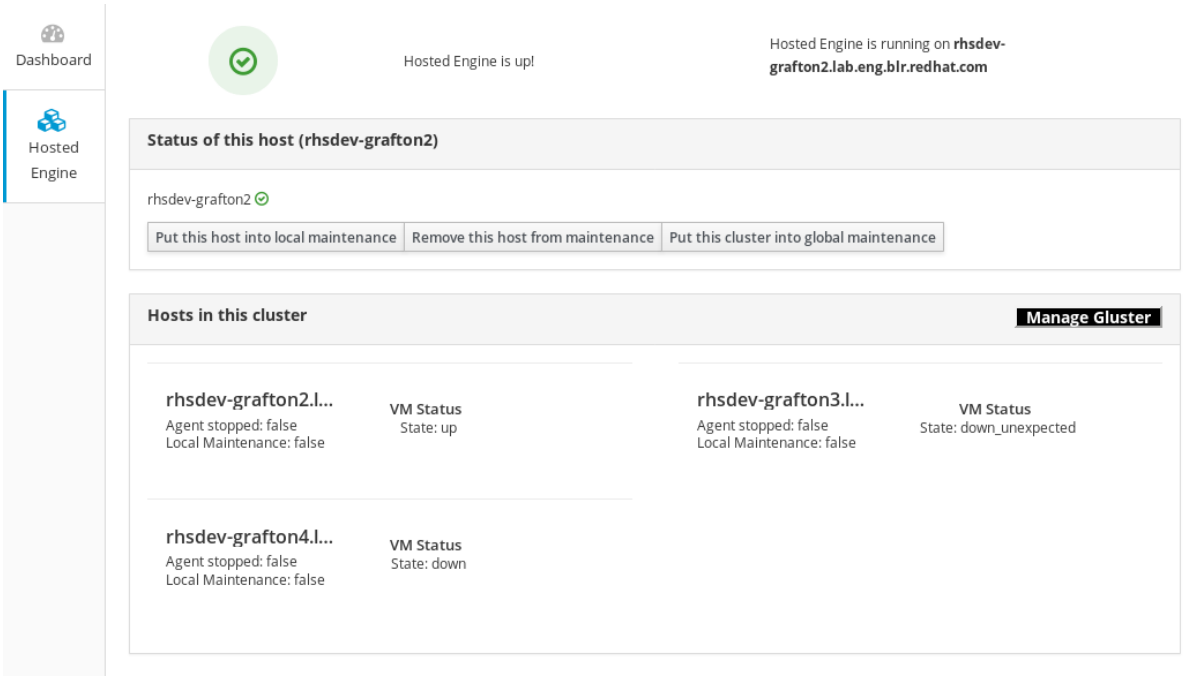
9.1. ACCESSING THE GLUSTER MANAGEMENT DASHBOARD

The *Gluster Management* dashboard lets you view information about the currently configured Gluster volumes in your hyperconverged cluster.

To access the *Gluster Management* dashboard:

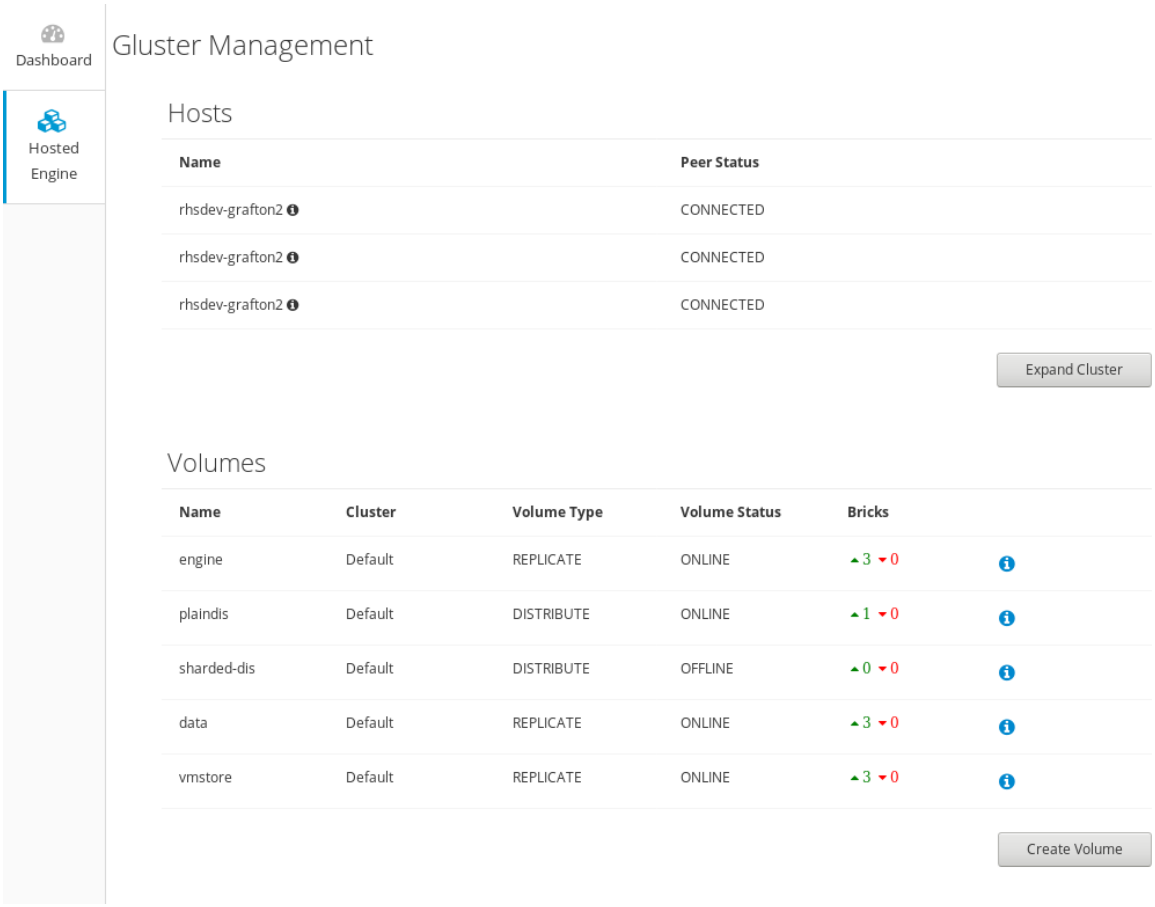
1. Click **Virtualization → Hosted Engine** to reach the *Hosted Engine* dashboard.

The Hosted Engine dashboard in Cockpit



2. Click **Manage Gluster** to reach the *Gluster Management* dashboard.

The Gluster Management dashboard in Cockpit



9.2. EXPANDING THE HYPERCONVERGED CLUSTER BY ADDING A NEW VOLUME ON NEW NODES USING COCKPIT

Follow these instructions to use the Cockpit UI to expand your hyperconverged cluster.

Prerequisites

- Verify that your scaling plans are supported.
- If your existing deployment uses certificates signed by a Certificate Authority for encryption, prepare the certificates that will be required for the new nodes.
- Install three physical machines to serve as the new hyperconverged nodes.
  Follow the instructions in Deploying Red Hat Hyperconverged Infrastructure for Virtualization.
- Configure key-based SSH authentication without a password.
  Configure this from the node that is running Cockpit to all new nodes, and from the first new node to all other new nodes.

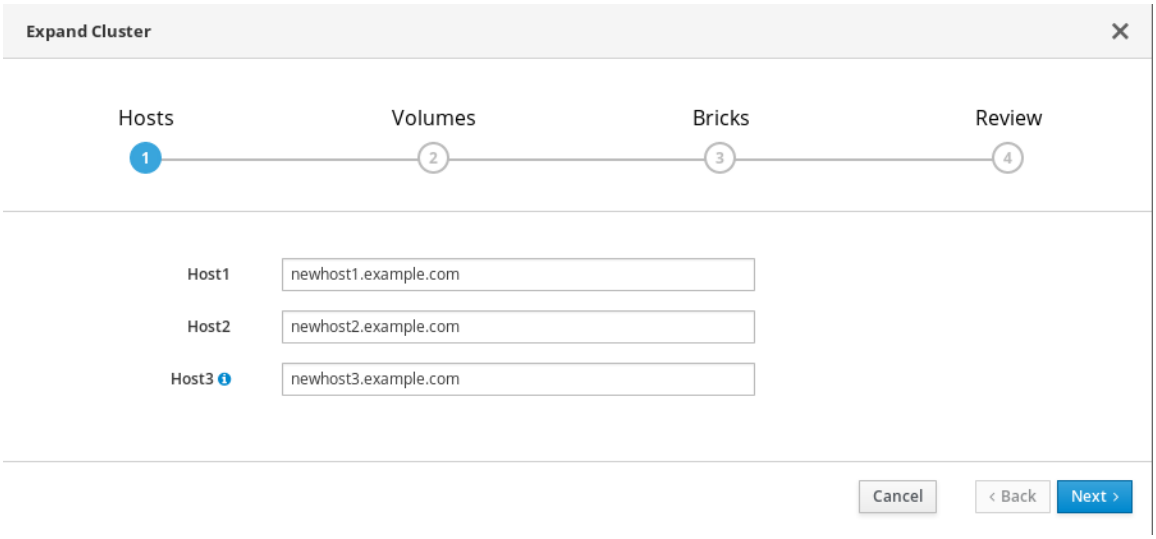
IMPORTANT

RHHI for Virtualization expects key-based SSH authentication without a password between these nodes for both IP addresses and FQDNs. Ensure that you configure key-based SSH authentication between these machines for the IP address and FQDN of all storage and management network interfaces.

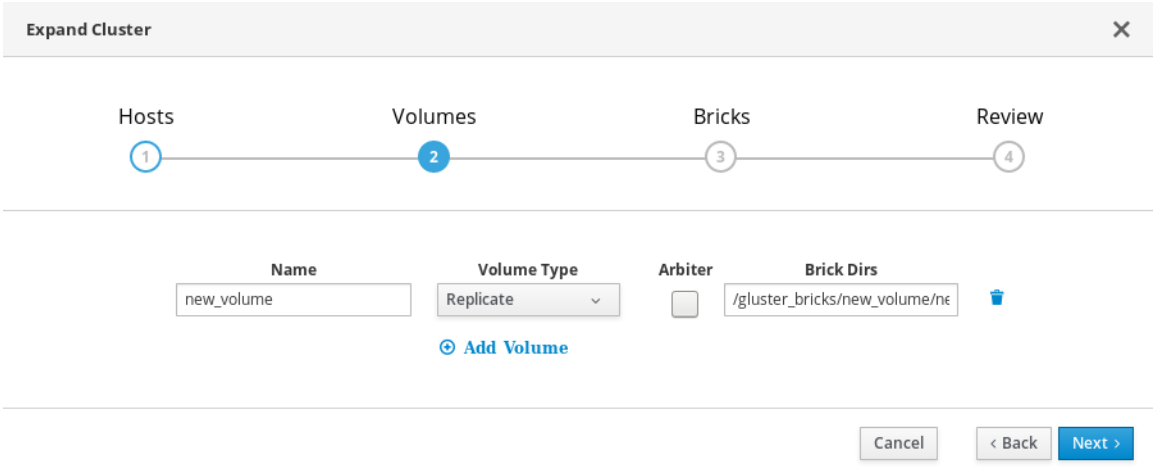
Follow the instructions in Using key-based authentication to configure key-based SSH authentication without a password.

Procedure

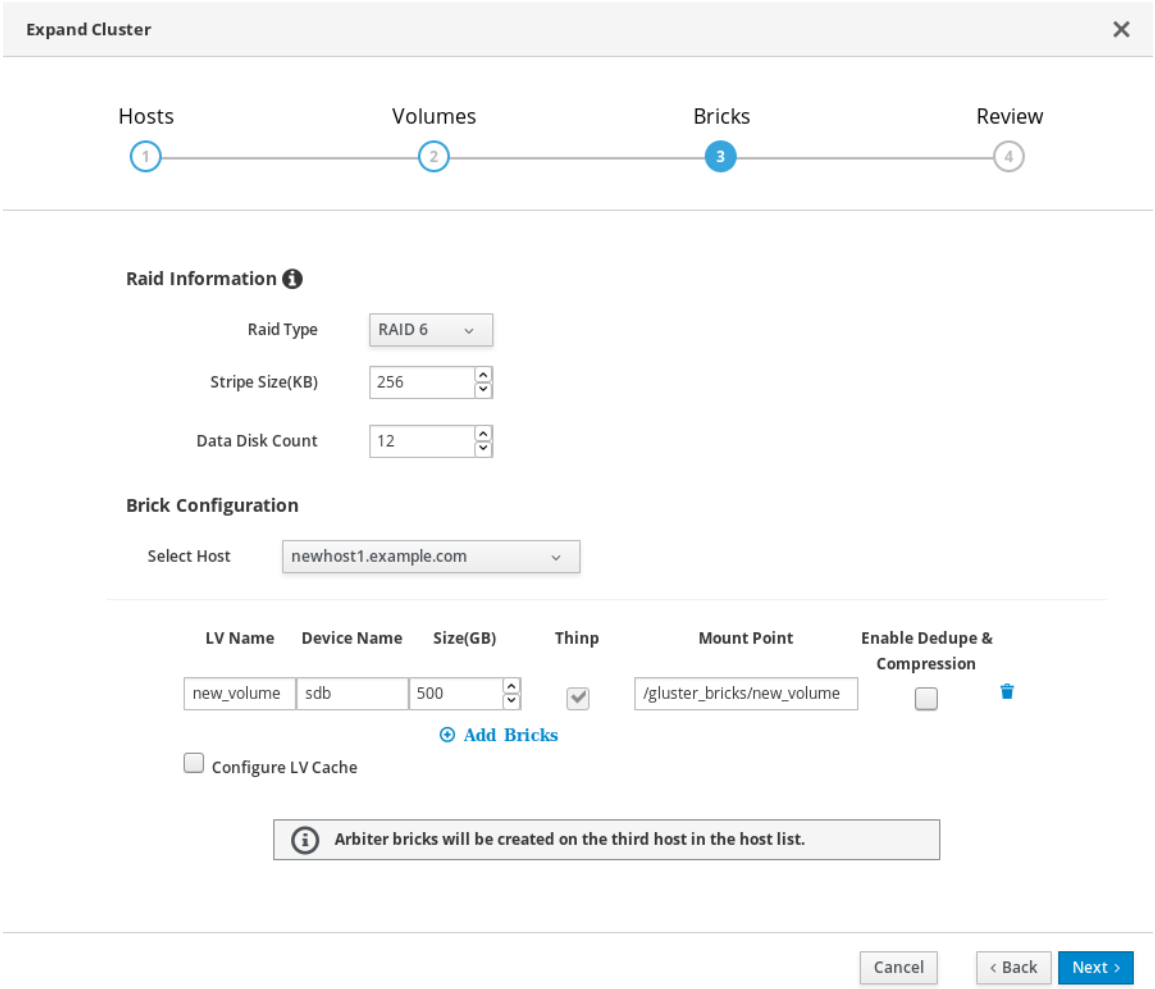
1. Log in to Cockpit.
2. Click **Virtualization → Hosted Engine** and then click **Manage Gluster**.
3. Click **Expand Cluster**. The *Gluster Deployment* window opens.
   a. On the *Hosts* tab, enter the FQDN or IP address of the new hyperconverged nodes and click **Next**.



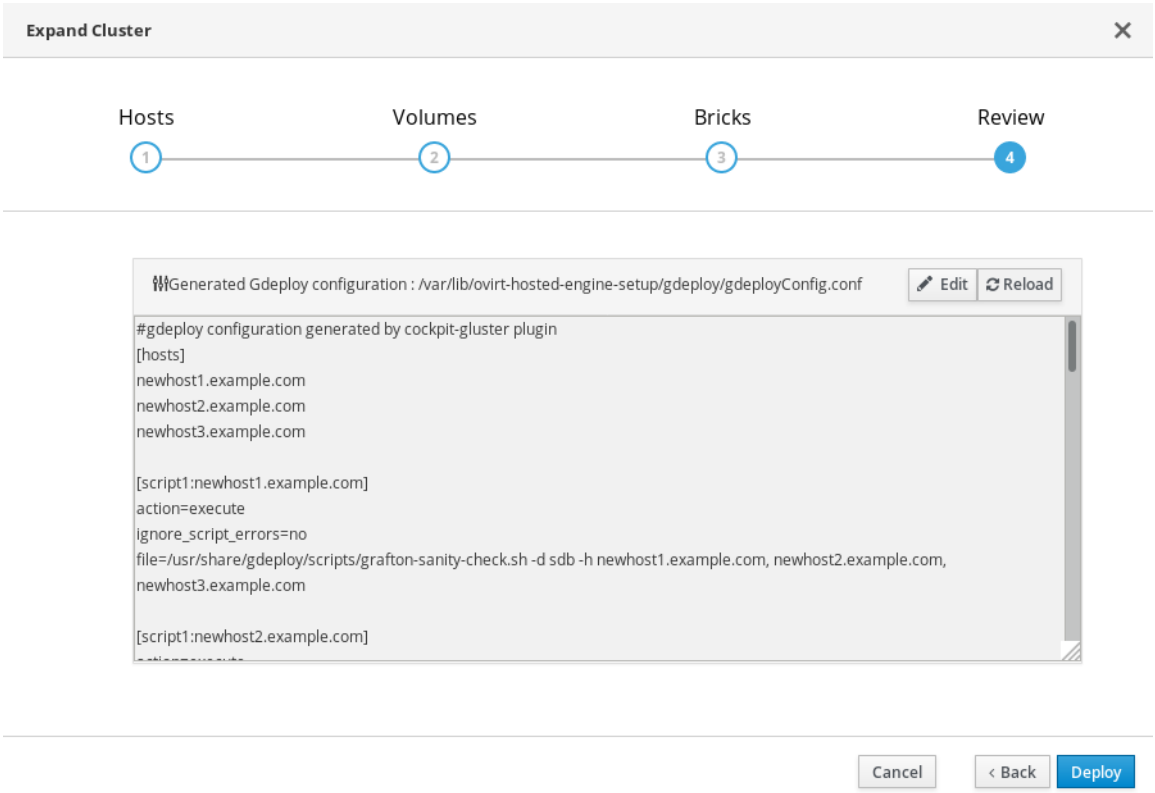
   b. On the *Volumes* tab, specify the details of the volume you want to create.



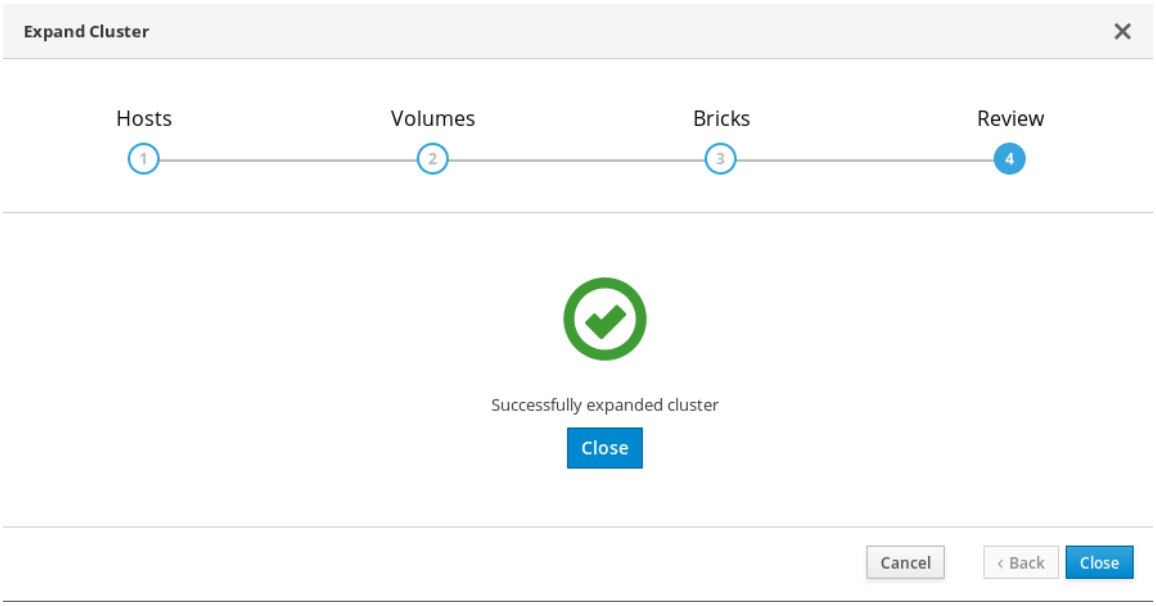
   c. On the *Bricks* tab, specify the details of the disks to be used to create the Gluster volume.



d. On the *Review* tab, check the generated gdeploy file for any problems. When you are satisfied, click **Deploy**.



Deployment takes some time to complete. The following screen appears when the cluster has been successfully expanded.



9.3. CREATING AN ADDITIONAL GLUSTER VOLUME USING COCKPIT

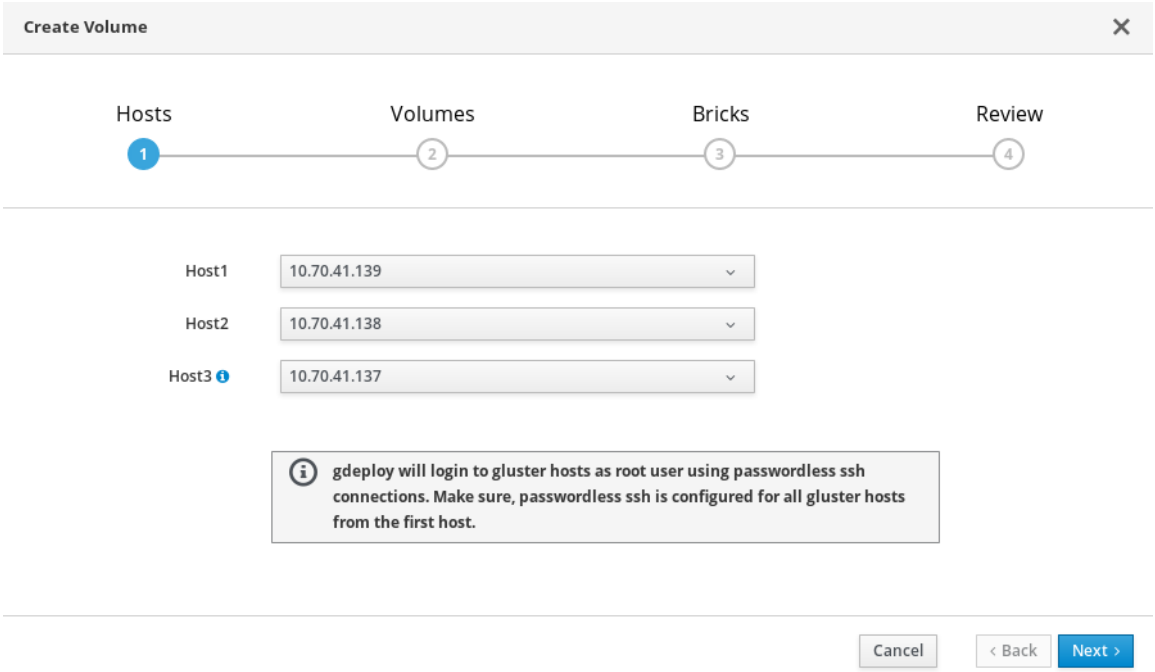
Follow these instructions to use the Cockpit UI to create a new Red Hat Gluster Storage volume using raw disks that are available on hyperconverged hosts in your cluster.

Prerequisites

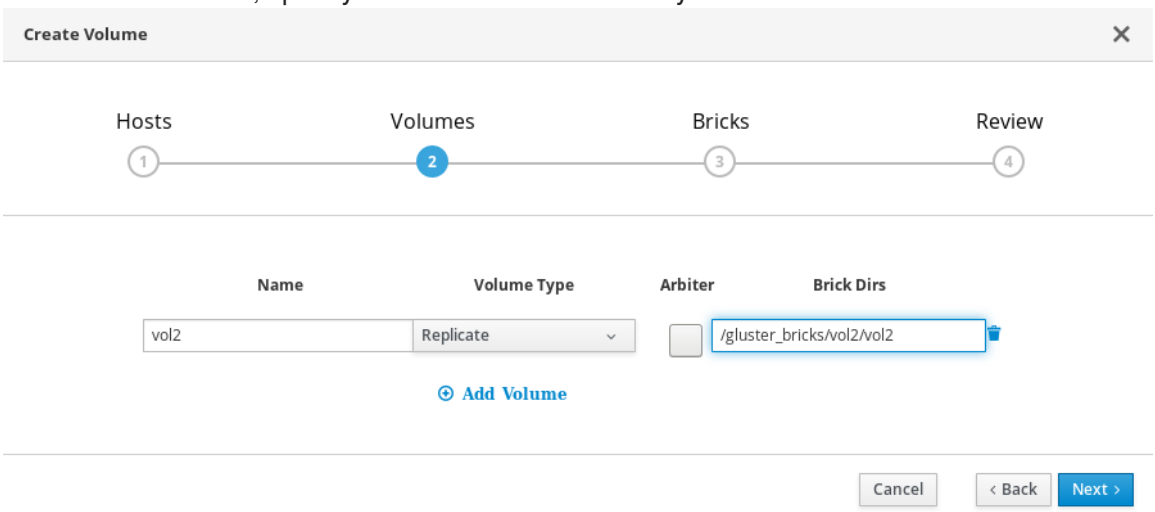
- Verify that the raw disk drives you plan to use for the new volume are visible under the *Drives* section of the *Storage Dashboard*, and do not have any file systems listed on their *Drive Overview* page.

Procedure

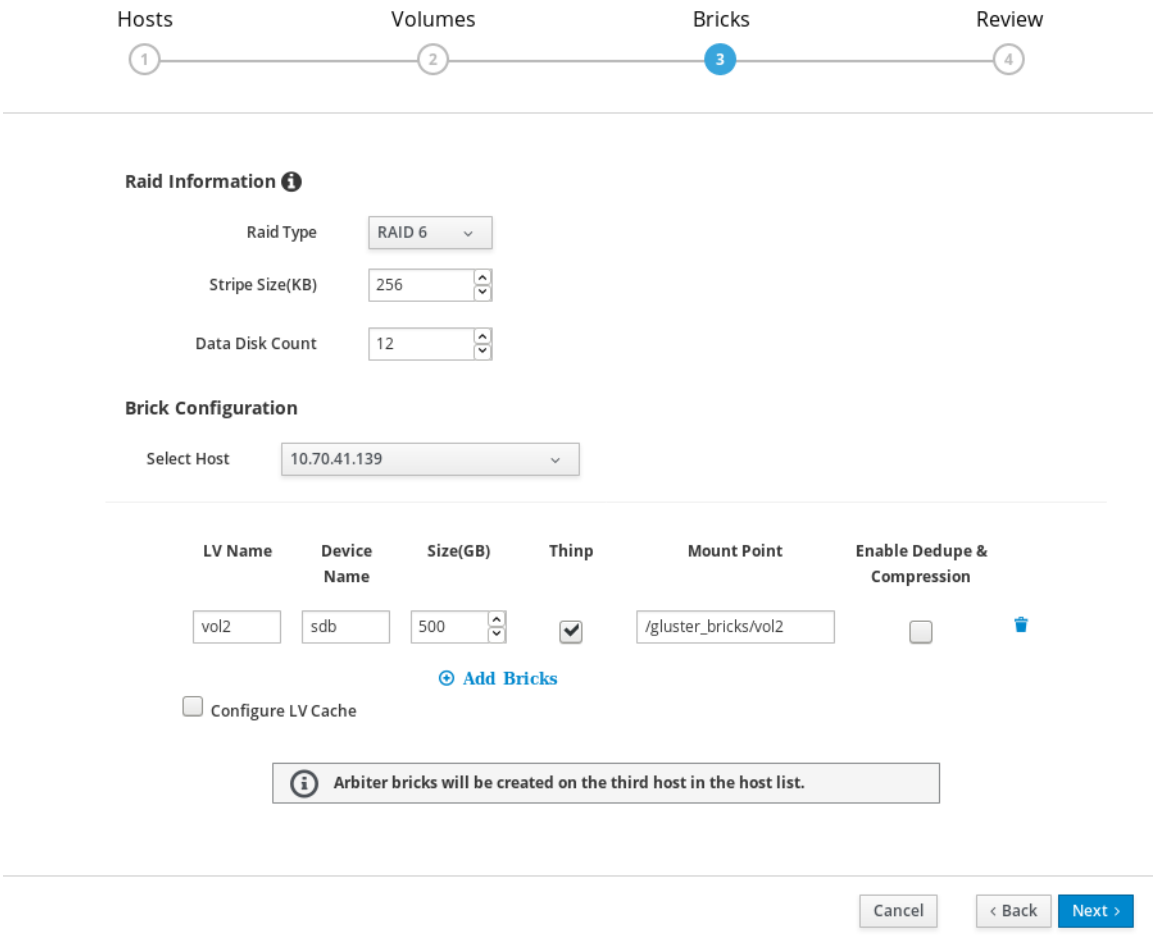
1. Log in to Cockpit.
2. Click **Virtualization → Hosted Engine** and then click **Manage Gluster**.
3. Click **Create Volume**. The *Create Volume* window opens.
    a. On the *Hosts* tab, select three different hyperconverged hosts with unused disks and click **Next**.



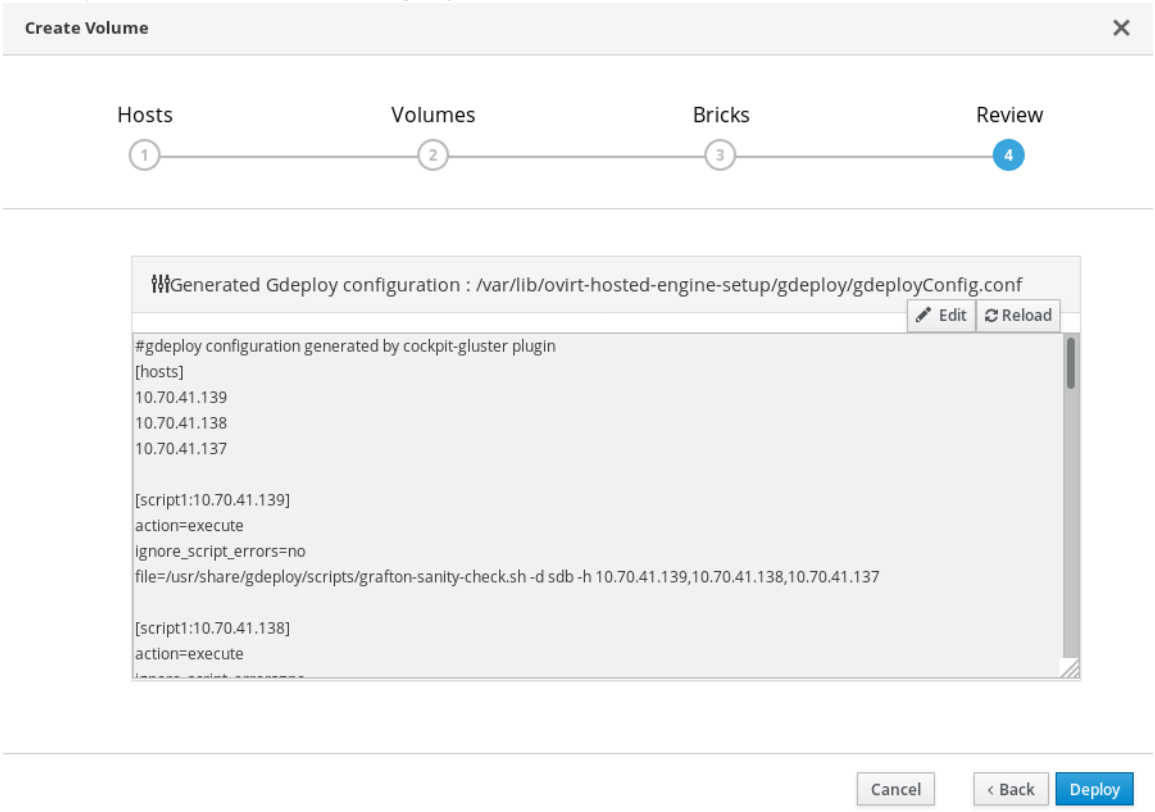
b. On the *Volumes* tab, specify the details of the volume you want to create and click **Next**.



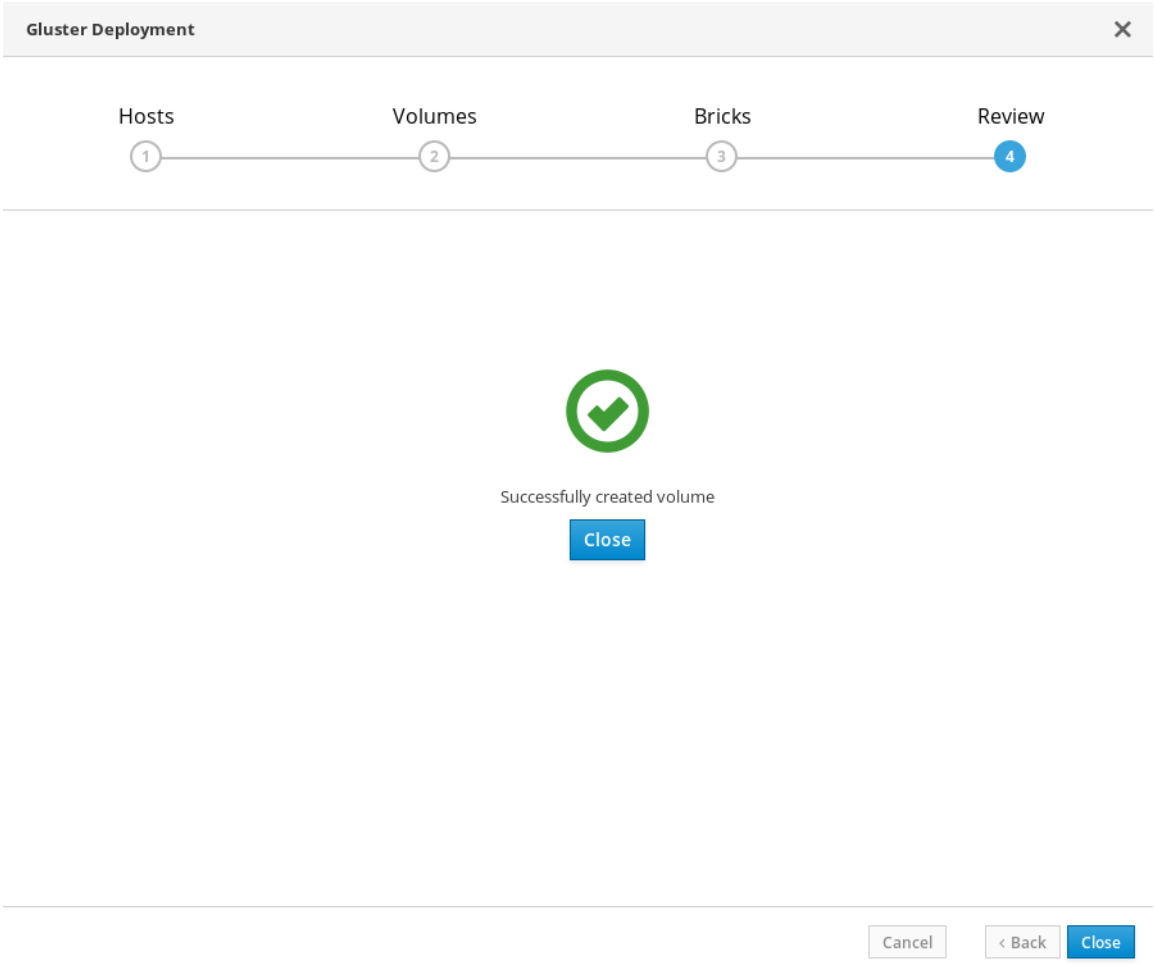
c. On the *Bricks* tab, specify the details of the disks to be used to create the volume and click **Next**.



d. On the *Review* tab, check the generated configuration file for any incorrect information. When you are satisfied, click **Deploy**.



The following screen is displayed when deployment completes successfully.


Gluster Deployment
Hosts
Volumes
Bricks
Review
1
2
3
4
Successfully created volume
Close
Cancel
Back
Close