



Configuration maintenance procedures

StorageGRID Appliances

NetApp
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Configuration maintenance procedures

Use the Manage drives tab

You can use the Manage drives tab in the Grid Manager to perform troubleshooting and maintenance tasks on the drives in the SGF6112 appliance.

Before you begin

- You are signed in to the Grid Manager using a [supported web browser](#).

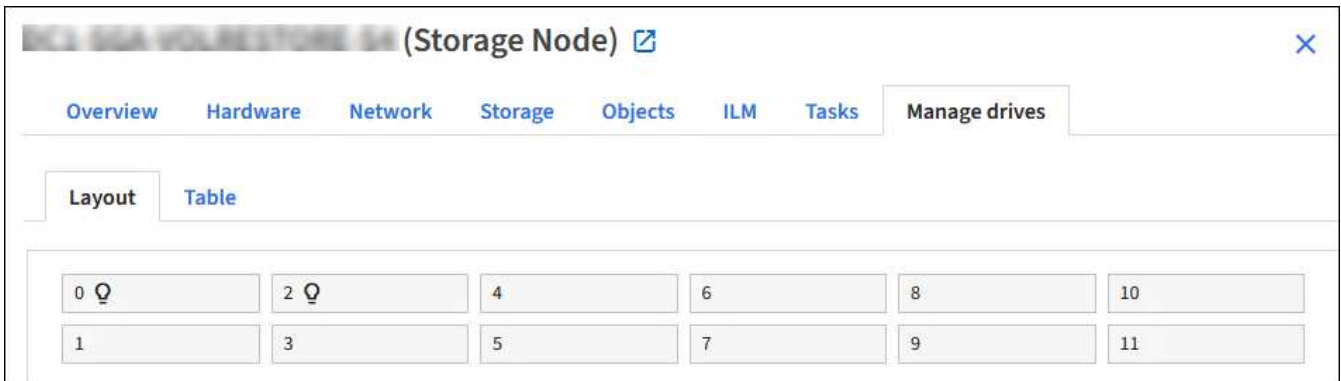
About this task

If you have an SGF6112 appliance and either the [Storage appliance administrator](#) or [Root access permission](#), a Manage drives tab appears on the appliance details page.

The Manage drives tab contains the following views:

Layout

Layout of data storage drives in the appliance. Select a drive to view drive details.



Table

Lists information for each drive. Select a drive to view drive details.

Drive location	Type	Status	Firmware	Serial number
HDD00	SSD	Nominal	NQ00	S6L8NE0T100116
HDD01	SSD	Nominal	NQ00	S6L8NE0T100176
HDD02	SSD	Nominal	NQ00	S6L8NE0T100175
HDD03	SSD	Nominal	NQ00	S6L8NE0T100114
HDD04	SSD	Nominal	NQ00	S6L8NE0T100100

Drive details

Summary for each drive. Select the appropriate task button, as described in the steps below.

Drive HDD05 information ✕

Assigned to	DriveGroup0
Capacity	-
Drive firmware version	GDC5802Q
Interface type	NVMe
Location	HDD05
Marketing part number	X4101A
Media type	SSD
Model name	SAMSUNG MZQL23T8HCLS-00A07
Name	nvme2n1
Serial number	S64HNE0R900132
Status	Offline

i It might take up to 5 minutes to start drive operations.

Turn locator light on

Logically replace


Fail drive

Turn locator light on or off

To physically locate a drive in the appliance:

1. From the Grid Manager, select **NODES > data center**.
2. Select **appliance storage node > Manage drives > Layout > drive**.

The drive details panel appears.

3. Select **Turn locator light on**.
 - A light bulb icon  appears for the drive.
 - An amber LED blinks on the physical drive.
4. When you want to turn off the locator light, select **Turn locator light off**.

Logically replace drive

If a drive in the storage appliance needs to be rebuilt or reinitialized:

1. From the Grid Manager, select **NODES > data center**.
2. Select **appliance storage node > Manage drives > Layout > drive**.

The drive details panel appears.

3. Select **Logically replace**.

On the drive details panel, the drive's status indicates *Rebuilding*. Rebuilding a drive could take up to 5 minutes.

Fail drive

For troubleshooting, you can manually "fail" a drive that you suspect is faulty. The system will then run without that drive.

1. From the Grid Manager, select **NODES > data center**.
2. Select **appliance storage node > Manage drives > Layout > drive**.

The drive details panel appears.

3. Select **Fail drive**.

After you fail a drive, you must either physically replace the drive or [logically replace the drive](#).

Turn SGF6112 appliance identify LED on and off

The blue identify LED on the front and back of the appliance can be turned on to help locate the appliance in a data center.

Before you begin

You have the BMC IP address of the appliance you want to identify.

Steps

1. [Access the appliance BMC interface](#).
2. Select **Server Identify**.

The current status of the identify LED is selected.

3. Select **ON** or **OFF**, and then select **Perform Action**.

When you select **ON**, the blue identify LEDs light on the front (typical shown) and rear of the appliance.



If a bezel is installed on the controller, it might be difficult to see the front identify LED.

The rear identify LED is at the center of the appliance below the Micro-SD slot.

4. Turn the identify LEDs on and off as needed.

Related information

[Locate appliance in data center](#)

Locate SGF6112 appliance in data center

Locate the appliance so that you can perform hardware maintenance or upgrades.

Before you begin

- You have determined which appliance requires maintenance.
- To help locate the appliance in your data center, [turn on the blue identify LED](#).

Steps

1. Find the appliance in the data center.
 - Look for a lit blue identify LED on the front or rear of the appliance.

The front identify LED is behind the front bezel and might be difficult to see if the bezel is installed.



The rear identify LED is at the center of the appliance below the Micro-SD slot.

- Check the tags attached to the front of the appliance for a matching part number to confirm you have found the correct appliance.

2. Remove the front bezel, if one is installed, to access the front panel controls and indicators.

After you finish

Turn off the blue identify LED if you used it to locate the appliance. Press the identify LED switch on the appliance front panel. Use the appliance BMC interface.

Power SGF6112 appliance off and on

You can shut down the SGF6112 appliance and power it back on to perform maintenance.

Shut down the SGF6112 appliance

Shut down the appliance to perform hardware maintenance.

Before you begin

- You have [physically located the appliance](#).

About this task

To prevent service interruptions, shut down the appliance during a scheduled maintenance window when periods of service disruption are acceptable.

Steps

1. Shut down the appliance:



You must perform a controlled shut down of the appliance by entering the commands specified below. It is a best practice to perform a controlled shutdown when possible to avoid unnecessary alerts, ensure full logs are available, and avoid service disruptions.

- a. If you have not already logged into the grid node, log in using PuTTY or another ssh client:
 - i. Enter the following command: `ssh admin@grid_node_IP`
 - ii. Enter the password listed in the `Passwords.txt` file.
 - iii. Enter the following command to switch to root: `su -`
 - iv. Enter the password listed in the `Passwords.txt` file.

When you are logged in as root, the prompt changes from `$` to `#`.

- b. Shut down the appliance:
`shutdown -h now`

This command might take up to 10 minutes to complete.

2. Use one of the following methods to verify that the appliance is powered off:
 - Look at the power LED on the front of the appliance and confirm that it is off.
 - Check the Power Control page of the BMC interface to confirm the appliance is off.

Power on SGF6112 and verify operation

Power on the controller after completing maintenance.

Before you begin

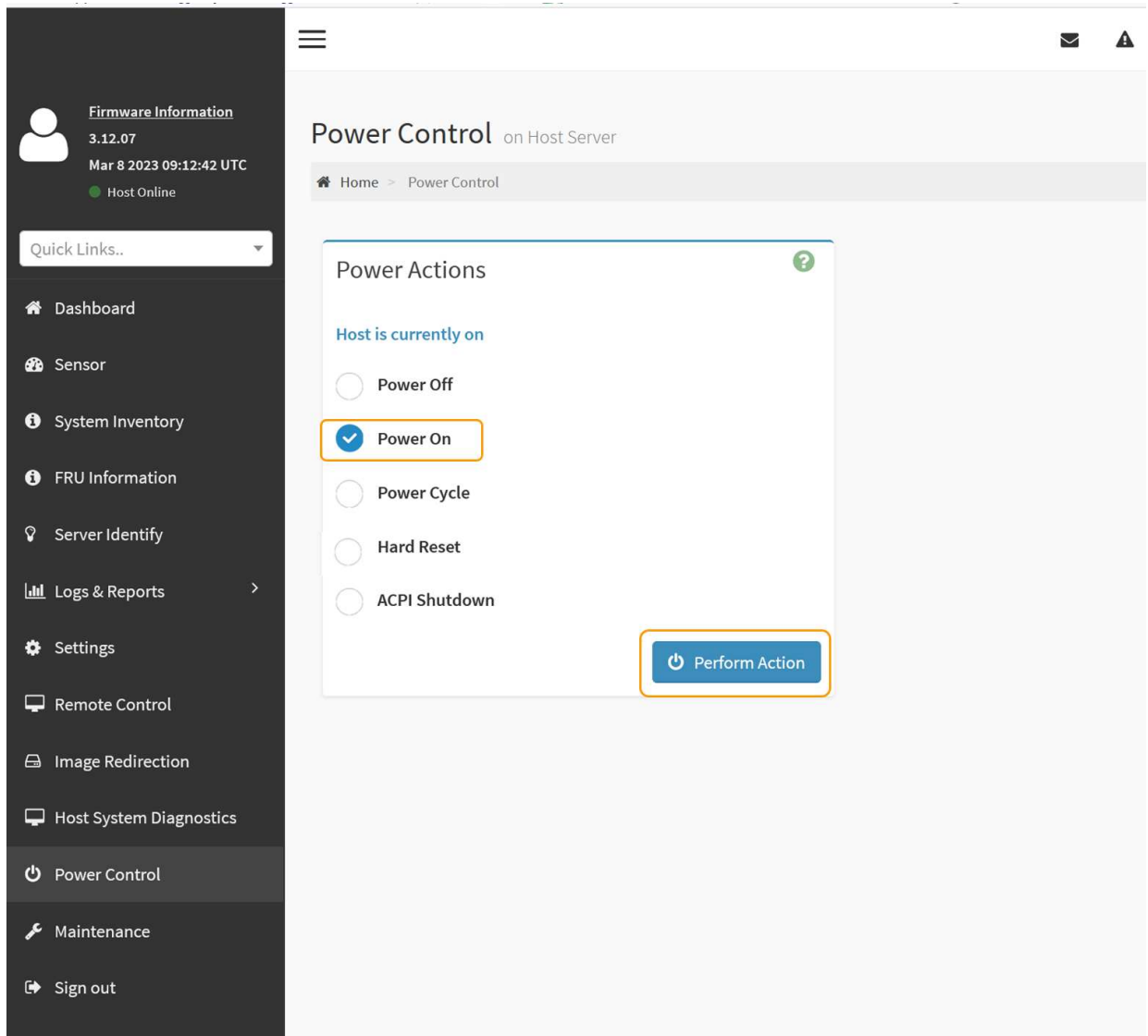
- You have [installed the controller in a cabinet or rack](#) and connected the data and power cables.
- You have [physically located the controller in the data center](#).

Steps

1. Power on the appliance.

You might have to remove the bezel to access the power switch; if so, remember to reinstall it afterwards.

2. Monitor the controller LEDs and boot-up codes using one of the following methods:
 - Press the power switch on the front of the controller.
 - Use the controller BMC interface:
 - i. [Access the controller BMC interface](#).
 - ii. Select **Power Control**.
 - iii. Select **Power On** and then select **Perform Action**.



Use the BMC interface to monitor start-up status.

3. Confirm that the appliance controller displays in the Grid Manager and with no alerts.

It might take up to 20 minutes for the controller to display in the Grid Manager.



Don't take another appliance node offline unless this appliance has a green icon.

4. Confirm that the new appliance is fully operational by logging in to the grid node using PuTTY or another ssh client:
 - a. Enter the following command: `ssh Appliance_IP`
 - b. Enter the password listed in the `Passwords.txt` file.
 - c. Enter the following command to switch to root: `su -`
 - d. Enter the password listed in the `Passwords.txt` file.

When you are logged in as root, the prompt changes from `$` to `#`.

Related information

Change link configuration of SGF6112 appliance

You can change the Ethernet link configuration of the appliance including the port bond mode, the network bond mode, and the link speed.

Before you begin

- You have [placed the appliance into maintenance mode](#).



In rare instances, placing a StorageGRID appliance into maintenance mode might make the appliance unavailable for remote access.

Steps

1. From the StorageGRID Appliance Installer, select **Configure Networking** > **Link Configuration**.
2. Make the desired changes to the link configuration.

For more information about the options, see [Configure network links](#).



IP configuration changes made while the appliance is in maintenance mode are not applied to the installed StorageGRID environment. Run the `change-ip` [command](#) after rebooting the appliance into StorageGRID.

3. When you are satisfied with your selections, click **Save**.



You might lose your connection if you made changes to the network or link you are connected through. If you aren't reconnected within 1 minute, re-enter the URL for the StorageGRID Appliance Installer using one of the other IP addresses assigned to the appliance: `https://appliance_IP:8443`

4. Make any necessary changes to the IP addresses for the appliance.

If you made changes to the VLAN settings, the subnet for the appliance might have changed. If you need to change the IP addresses for the appliance, see [Configure StorageGRID IP addresses](#).


5. Select **Configure Networking** > **Ping Test** from the menu.
6. Use the Ping Test tool to check connectivity to IP addresses on any networks that might have been affected by the link configuration changes you made when configuring the appliance.

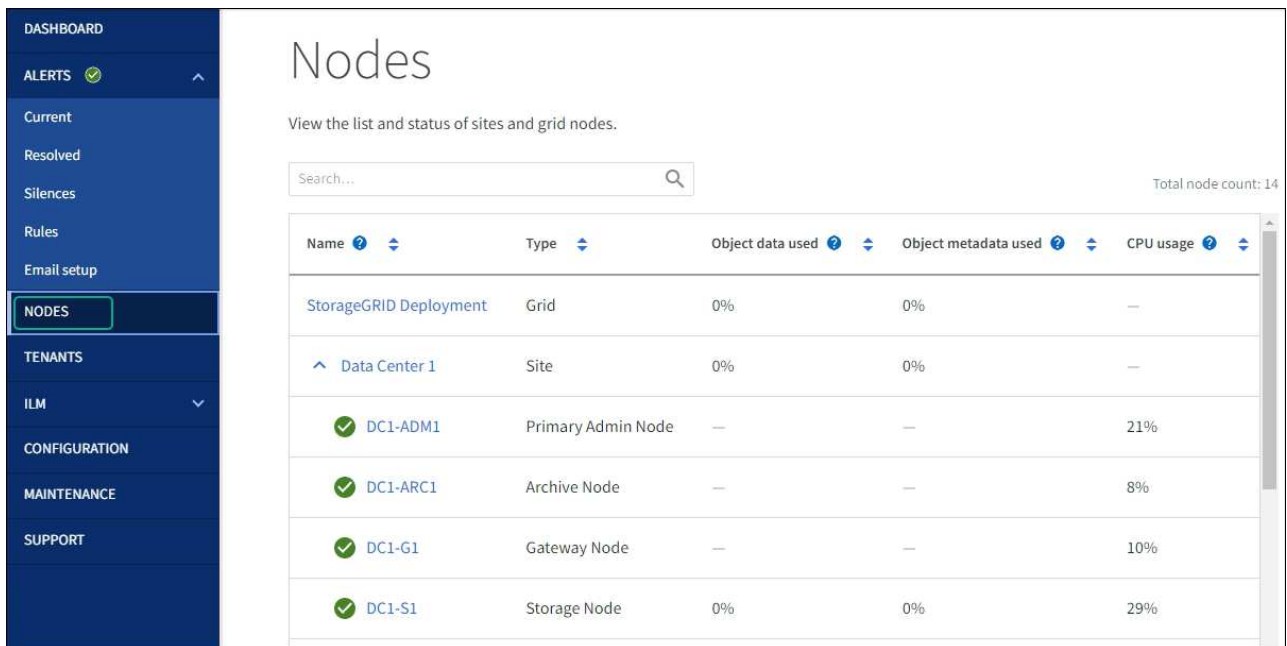
In addition to any other tests you choose to perform, confirm that you can ping the Grid Network IP address of the primary Admin Node, and the Grid Network IP address of at least one other node. If necessary, return to the instructions for configuring network links and correct any issues.

7. After you are satisfied that your link configuration changes are working, reboot the node. From the StorageGRID Appliance Installer, select **Advanced** > **Reboot Controller**, and then select one of these options:
 - Select **Reboot into StorageGRID** to reboot the compute controller with the node rejoining the grid. Select this option if you are done working in maintenance mode and are ready to return the node to normal operation.

- Select **Reboot into Maintenance Mode** to reboot the compute controller with the node remaining in maintenance mode. (This option is available only when the controller is in maintenance mode.) Select this option if there are additional maintenance operations you need to perform on the node before it rejoins the grid.



It can take up to 20 minutes for the appliance to reboot and rejoin the grid. To confirm that the reboot is complete and that the node has rejoined the grid, go back to the Grid Manager. The Nodes page should display a normal status (green check mark icon  to the left of the node name) for the appliance node, indicating that no alerts are active and the node is connected to the grid.



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