Linux: Migrate grid node to new host

StorageGRID

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Table of Contents

Linux: Migrate grid node to new host 1
Linux: Export node from source host 1
Linux: Import node on target host 2
Linux: Start migrated node 3

Linux: Migrate grid node to new host

You can migrate StorageGRID nodes from one Linux host to another to perform host maintenance (such as OS patching and reboot) without impacting the functionality or availability of your grid.

You migrate one or more nodes from one Linux host (the “source host”) to another Linux host (the “target host”). The target host must have previously been prepared for StorageGRID use.

> You can use this procedure only if you planned your StorageGRID deployment to include migration support.

To migrate a grid node to a new host, both of the following conditions must be true:

- Shared storage is used for all per-node storage volumes
- Network interfaces have consistent names across hosts

> In a production deployment, do not run more than one Storage Node on a single host. Using a dedicated host for each Storage Node provides an isolated failure domain.

Other types of nodes, such as Admin Nodes or Gateway Nodes, can be deployed on the same host. However, if you have multiple nodes of the same type (two Gateway Nodes, for example), do not install all instances on the same host.

For more information, see “Node migration requirements” in the StorageGRID installation instructions for your Linux operating system.

Related information

Deploy new Linux hosts

Install Red Hat Enterprise Linux or CentOS

Install Ubuntu or Debian

Linux: Export node from source host

Shut down the grid node and export it from the source Linux host.

Run the following command on the source Linux host.

1. Obtain the status of all nodes currently running on the source host.

```
sudo storagegrid node status all
```

```
Name Config-State Run-State

DC1-ADM1 Configured Running

DC1-ARC1 Configured Running
```

```
DC1-GW1 Configured Running

DC1-S1 Configured Running

DC1-S2 Configured Running

DC1-S3 Configured Running
```

2. Identify the name of the node you want to migrate, and stop it if its Run-State is `Running`.

```
sudo storagegrid node stop DC1-S3
```

```
Stopping node DC1-S3

Waiting up to 630 seconds for node shutdown
```

3. Export the node from the source host.

```
sudo storagegrid node export DC1-S3
```

```
Finished exporting node DC1-S3 to /dev/mapper/sgws-dc1-s3-var-local.

Use 'storagegrid node import /dev/mapper/sgws-dc1-s3-var-local' if you

want to import it again.
```

4. Take note of the `import command suggested in the output of the `export` command.

   You will run this command on the target host in the next step.

Linux: Import node on target host

After exporting the node from the source host, you import and validate the node on the target Linux host. Validation confirms that the node has access to the same block storage and network interface devices as it had on the source host.

Run the following command on the target Linux host.

1. Import the node on the target host.

```
sudo storagegrid node import /dev/mapper/sgws-dc1-s3-var-local
```

```
Finished importing node DC1-S3 from /dev/mapper/sgws-dc1-s3-var-local.

You should run 'storagegrid node validate DC1-S3'
```

2. Validate the node configuration on the new host.

```
sudo storagegrid node validate DC1-S3
```

```
Confirming existence of node DC1-S3... PASSED

Checking configuration file /etc/storagegrid/nodes/DC1-S3.conf for node DC1-
S3... PASSED

Checking for duplication of unique values... PASSED
```

3. If any validation errors occur, address them before starting the migrated node.

   For troubleshooting information, see the StorageGRID installation instructions for your Linux operating system.

Related information

Install Red Hat Enterprise Linux or CentOS

Install Ubuntu or Debian

Linux: Start migrated node

After you validate the migrated node, you start the node by running a command on the target Linux host.

Steps

1. Start the node on the new host.

```
sudo storagegrid node start DC1-S3
Starting node DC1-S3
```

2. In the Grid Manager, verify that the status of the node is green with no alarms raised against it.

   > Verifying that the status of the node is green ensures that the migrated node has fully restarted and rejoined the grid. If the status is not green, do not migrate any additional nodes so that you will not have more than one node out of service.

   If you are unable to access the Grid Manager, wait for 10 minutes, then run the following command:

   `sudo storagegrid node status` ***`node-name`***

   Confirm that the migrated node has a Run-State of `Running`.

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