



# **Recover from Archive Node failures**

## **StorageGRID**

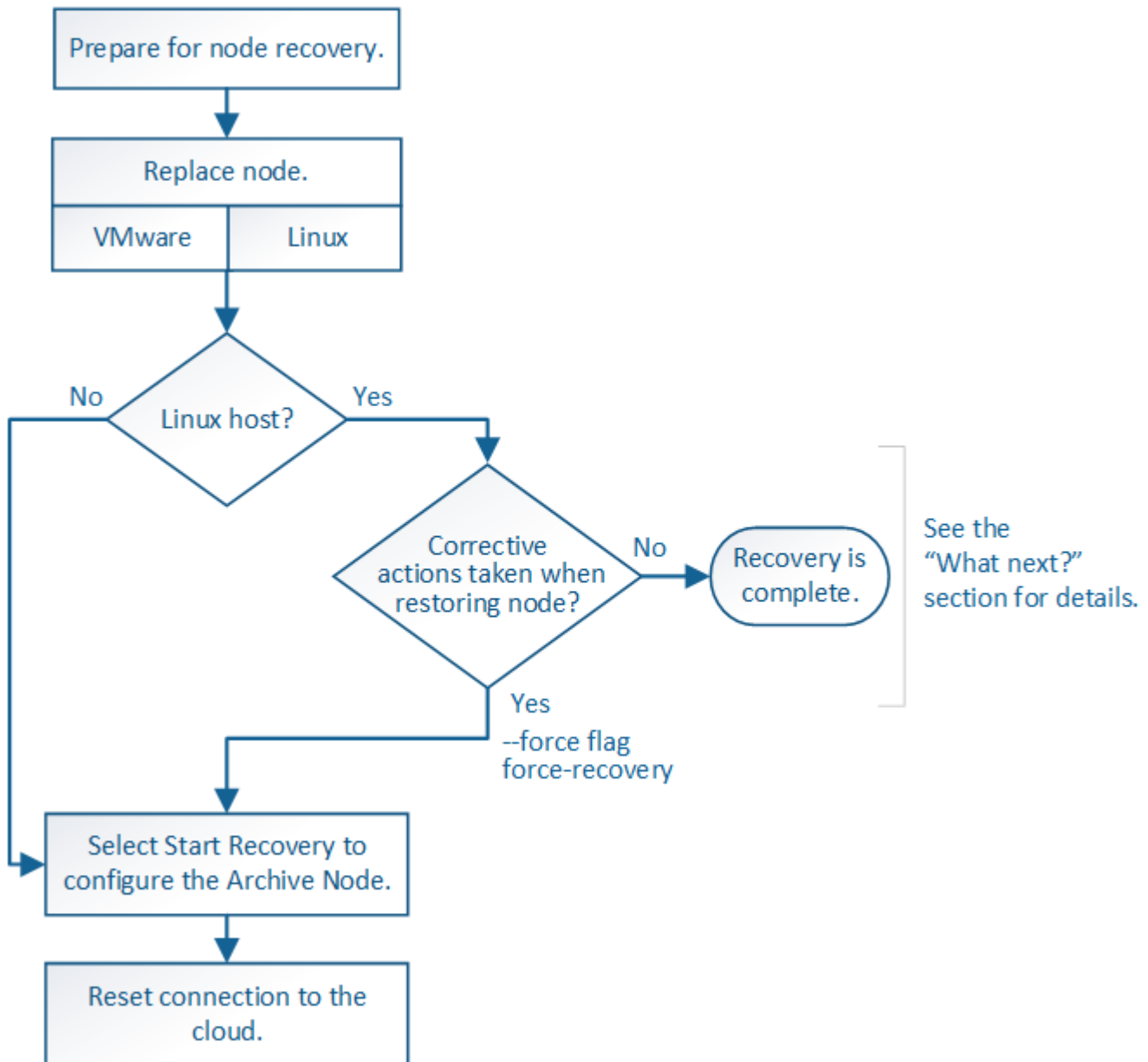
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# Table of Contents

- Recover from Archive Node failures . . . . . 1
  - Replace Archive Node . . . . . 2
  - Select Start Recovery to configure Archive Node . . . . . 2
  - Reset Archive Node connection to the cloud . . . . . 4

# Recover from Archive Node failures

You must complete a sequence of tasks in exact order to recover from an Archive Node failure.



## About this task

Archive Node recovery is affected by the following issues:

- If the ILM policy is configured to replicate a single copy.

In a StorageGRID system that is configured to make a single copy of objects, an Archive Node failure might result in an unrecoverable loss of data. If there is a failure, all such objects are lost; however, you must still perform recovery procedures to “clean up” your StorageGRID system and purge lost object information from the database.

- If an Archive Node failure occurs during Storage Node recovery.

If the Archive Node fails while processing bulk retrievals as part of a Storage Node recovery, you must repeat the procedure to recover copies of object data to the Storage Node from the beginning to ensure that all object data retrieved from the Archive Node is restored to the Storage Node.

# Replace Archive Node

To recover an Archive Node, you must first replace the node.

You must select the node replacement procedure for your platform. The steps to replace a node are the same for all types of grid nodes.

Platform	Procedure
VMware	<a href="#">Replace a VMware node</a>
Linux	<a href="#">Replace a Linux node</a>
OpenStack	NetApp-provided virtual machine disk files and scripts for OpenStack are no longer supported for recovery operations. If you need to recover a node running in an OpenStack deployment, download the files for your Linux operating system. Then, follow the procedure for replacing a Linux node.

# Select Start Recovery to configure Archive Node

After replacing an Archive Node, you must select Start Recovery in the Grid Manager to configure the new node as a replacement for the failed node.

### What you'll need

- You must be signed in to the Grid Manager using a [supported web browser](#).
- You must have the Maintenance or Root Access permission.
- You must have the provisioning passphrase.
- You must have deployed and configured the replacement node.

### Steps

1. From the Grid Manager, select **MAINTENANCE > Tasks > Recovery**.
2. Select the grid node you want to recover in the Pending Nodes list.

Nodes appear in the list after they fail, but you cannot select a node until it has been reinstalled and is ready for recovery.

3. Enter the **Provisioning Passphrase**.
4. Click **Start Recovery**.

## Recovery

Select the failed grid node to recover, enter your provisioning passphrase, and then click Start Recovery to begin the recovery procedure.

### Pending Nodes

<div>Search </div>				
	Name	IPv4 Address	State	Recoverable
<input checked="" type="radio"/>	104-217-S1	10.96.104.217	Unknown	

### Passphrase

Provisioning Passphrase

Start Recovery

5. Monitor the progress of the recovery in the Recovering Grid Node table.



While the recovery procedure is running, you can click **Reset** to start a new recovery. An Info dialog box appears, indicating that the node will be left in an indeterminate state if you reset the procedure.

### Info

#### Reset Recovery

Resetting the recovery procedure leaves the deployed grid node in an indeterminate state. To retry a recovery after resetting the procedure, you must restore the node to a pre-installed state:

- For VMware nodes, delete the deployed VM and then redeploy it.
- For StorageGRID appliance nodes, run "sgareinstall" on the node.
- For Linux nodes, run "storagegrid node force-recovery *node-name*" on the Linux host.

Do you want to reset recovery?

Cancel

OK

If you want to retry the recovery after resetting the procedure, you must restore the node to a pre-installed state, as follows:

- **VMware:** Delete the deployed virtual grid node. Then, when you are ready to restart the recovery, redeploy the node.
- **Linux:** Restart the node by running this command on the Linux host: `storagegrid node force-recovery node-name`

# Reset Archive Node connection to the cloud

After you recover an Archive Node that targets the cloud through the S3 API, you need to modify configuration settings to reset connections. An Outbound Replication Status (ORSU) alarm is triggered if the Archive Node is unable to retrieve object data.



If your Archive Node connects to external storage through TSM middleware, then the node resets itself automatically and you do not need to reconfigure.

## What you'll need

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

## Steps

1. Select **SUPPORT > Tools > Grid topology**.
2. Select **Archive Node > ARC > Target**.
3. Edit the **Access Key** field by entering an incorrect value and click **Apply Changes**.
4. Edit the **Access Key** field by entering the correct value and click **Apply Changes**.

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