[**https://github.com/minio/minio/issues/21579**](https://github.com/minio/minio/issues/21579)

**MinIO node repair failed**

**Case Study 1 – Question 6**

MinIO runs as a distributed object storage system — meaning data is stored across multiple nodes (servers or drives) using erasure coding for redundancy and reliability.

Each node holds a part of the data, and MinIO can rebuild or “heal” data if one node goes down or becomes corrupted.

This process is called node repair or healing.

When MinIO says node repair failed, it means that:

One or more drives or nodes were unreachable, corrupted, or missing,

And MinIO could not complete the healing process to restore data consistency.

**Essentially:**

The cluster tried to repair lost or inconsistent data, but couldn’t fetch all the required parts from other nodes.

**Common Causes**

Cause Description

Node Unreachable - The failed node or drive is still offline or disconnected from the cluster.

Disk Not Mounted / Missing - The drive path configured in MINIO\_VOLUMES is not available.

Permission Issues - MinIO process lacks permission to read/write the disk.

Data Corruption - Some shards or metadata are damaged beyond repair.

Network Issues - Network instability between nodes prevents synchronization.

Wrong Disk Layout - Replacing a node with different drive paths or number of drives confuses the cluster.

**How to Diagnose**

Check cluster health

mc admin info myminio

Check heal status

mc admin heal myminio

Check logs

mc admin logs myminio

Look for errors like “disk not found,” “corrupt part,” or “insufficient quorum.”

Step-by-Step Fix:

Ensure all nodes are online and reachable by hostname or IP.

Verify disk mounts — all drives listed in configuration should exist.

Run a manual heal after fixing the issue:

mc admin heal --recursive myminio

If a node was replaced:

Use the same drive structure and names.

Start MinIO again and run the heal command.

Check quorum — make sure more than half of the nodes are available; otherwise, healing won’t start.

**Conclusion**

“Node repair failed” means MinIO couldn’t restore data on a faulty node because it couldn’t reach all nodes or drives.

Fix network or disk issues, ensure all nodes are online, and rerun the healing command.