

Oracle: What is a Voting Disk (Simple Explanation)

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https://www.youtube.com/channel/UCCGTnI9vvF_ETMhGUXGdFWw

The **Voting Disk** is a special file used by Oracle RAC to **decide which nodes are up and allowed to stay in the cluster**.

Imagine This:

- You have 3 friends (nodes) working on a group project (RAC). Every few seconds, they ask each other:
- “Hey, are you still there?”
- Each one writes their answer in a shared notepad — this **notepad is the Voting Disk**.
- If one friend stops responding (crashes, network down), the others notice because the notepad hasn’t been updated by them.

Voting disk is like a group chat where every team member sends "I'm online" messages. If someone stops replying, they are considered disconnected, and the rest of the team decides whether to continue without them.

Why is it Called “Voting”?

When a node loses contact with others, Oracle needs to **decide whether to keep it or kick it out of** the cluster.

This is called a **quorum** vote.

Oracle checks:

- How many nodes are responding?
- Do we have enough healthy nodes to continue?
 - If yes → Cluster survives
 - If no → Node is removed from cluster (to protect data integrity)

Used By: `ocssd.bin`

- A background process called **CSSD** (Cluster Synchronization Services Daemon) reads and writes to the voting disk.
- Every node writes a heartbeat (like: "I'm alive") to the voting disk every few seconds.

Where is it Stored?

- Typically stored in **ASM** (Automatic Storage Management)
- Can also be stored on:
 - Raw disk
 - NFS (not recommended)

Oracle recommends having **at least 3 voting disks**, especially in large clusters, for redundancy.

What Happens if Nodes Lose Connection?

Nodes	What Happens
Majority available	RAC continues to run
No quorum	Oracle fences (removes) the node
Node isolated	Node is rebooted and rejoined later