

Adding a Node

As your application usage grows or your infrastructure requirements change, scaling your cluster becomes essential. In Elestio, you can scale horizontally by adding new nodes to an existing cluster. This operation allows you to expand your compute capacity, improve availability, and distribute workloads more effectively.

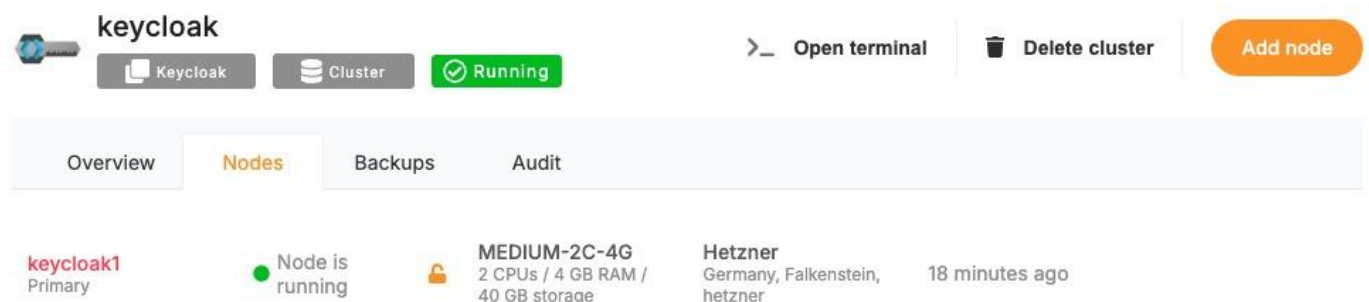
Need to Add a Node

There are several scenarios where adding a node becomes necessary. One of the most common cases is **resource saturation** when existing nodes are fully utilized in terms of CPU, memory, or disk. Adding another node helps distribute the workload and maintain performance under load.

In clusters that run **stateful services** or require **high availability**, having additional nodes ensures that workloads can fail over without downtime. Even in development environments, nodes can be added to isolate environments or test services under production-like load conditions. Scaling out also gives you flexibility when deploying services with different resource profiles or placement requirements.

Add a Node to Cluster

To begin, log in to the [Elestio dashboard](#) and navigate to the **Clusters** section from the sidebar. Select the cluster you want to scale. Once inside the cluster view, switch to the **Nodes** tab. This section provides an overview of all current nodes along with their health status and real-time resource usage.

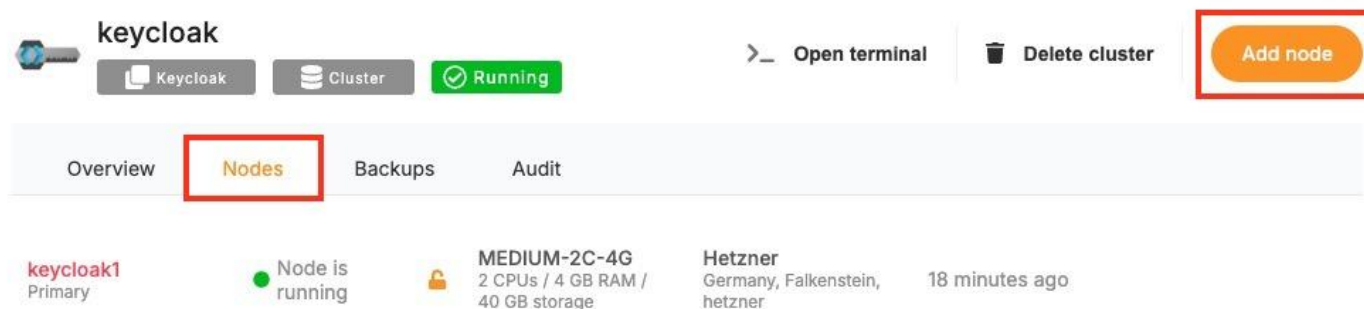


The screenshot displays the Elestio dashboard for a cluster named 'keycloak'. At the top, there are tabs for 'Keycloak', 'Cluster', and 'Running', with a green checkmark indicating the cluster is running. To the right, there are buttons for 'Open terminal', 'Delete cluster', and 'Add node'. Below the cluster header, there are tabs for 'Overview', 'Nodes', 'Backups', and 'Audit'. The 'Nodes' tab is selected, showing a table of nodes. The table has columns for node name, status, specifications, provider, and creation time. The first node is 'keycloak1', which is 'Primary' and 'Node is running'. Its specifications are 'MEDIUM-2C-4G' (2 CPUs / 4 GB RAM / 40 GB storage), and it is hosted on 'Hetzner' (Germany, Falkenstein). It was created '18 minutes ago'.

Node Name	Status	Specifications	Provider	Creation Time
keycloak1 Primary	Node is running	MEDIUM-2C-4G 2 CPUs / 4 GB RAM / 40 GB storage	Hetzner Germany, Falkenstein, hetzner	18 minutes ago

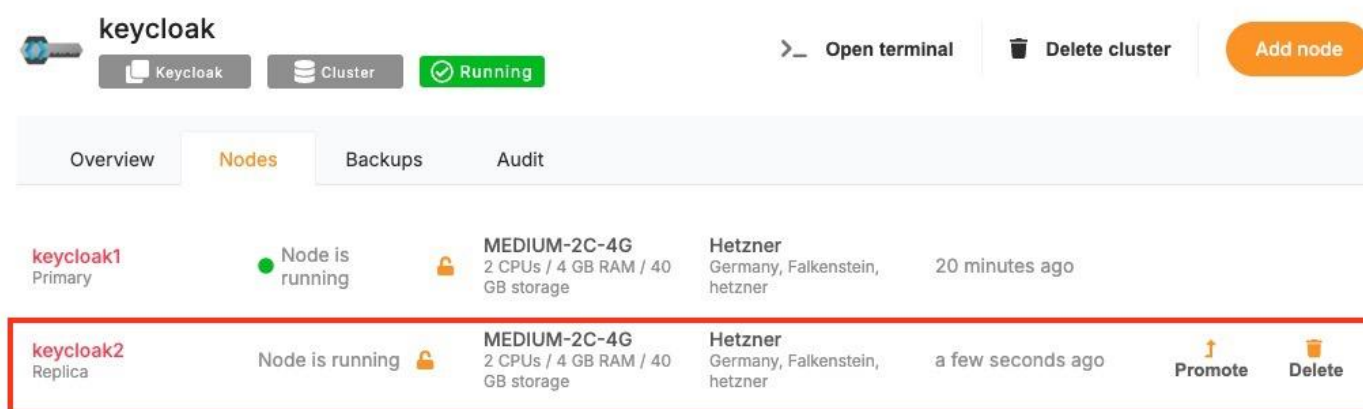
To add a new node, click the **“Add Node”** button. This opens a configuration panel where you can define the specifications for the new node. You’ll be asked to specify the amount of **CPU**, **memory**, and **disk** you want to allocate. If you’re using a bring-your-own-cloud setup, you may also need to

confirm or choose the cloud provider and deployment region.



The screenshot shows the Keycloak dashboard for a cluster named 'keycloak'. At the top, there are tabs for 'Keycloak', 'Cluster', and 'Running'. To the right, there are buttons for 'Open terminal', 'Delete cluster', and 'Add node' (highlighted with a red box). Below the tabs, there is a table of nodes. The first node, 'keycloak1', is the 'Primary' node, is 'Node is running', and has specifications 'MEDIUM-2C-4G' (2 CPUs / 4 GB RAM / 40 GB storage) on 'Hetzner' (Germany, Falkenstein, hetzner) cloud provider, added '18 minutes ago'.

After configuring the node, review the settings to ensure they meet your performance and cost requirements. Click **“Create”** to initiate provisioning. Elestio will begin setting up the new node, and once it’s ready, it will automatically join your cluster.



This screenshot shows the Keycloak dashboard after a second node has been added. The 'Nodes' tab is selected. The first node, 'keycloak1', remains the 'Primary' node. A second node, 'keycloak2', is now listed as a 'Replica'. It is also 'Node is running' with the same specifications and provider as the first node, but it was added 'a few seconds ago'. The 'keycloak2' row is highlighted with a red box, showing 'Promote' and 'Delete' actions available for it.

Once provisioned, the new node will appear in the node list with its own metrics and status indicators. You can monitor its activity, verify that workloads are being scheduled to it, and access its logs directly from the dashboard. From this point onward, the node behaves like any other in the cluster and can be managed using the same lifecycle actions such as rebooting or draining.

Post-Provisioning Considerations

After the node has been added, it becomes part of the active cluster and is available for scheduling workloads. Elestio’s orchestration layer will begin using it automatically, but you can further customize service placement through resource constraints or affinity rules if needed.

For performance monitoring, the dashboard provides per-node metrics, including CPU load, memory usage, and disk I/O. This visibility helps you confirm that the new node is functioning correctly and contributing to workload distribution as expected.

Maintenance actions such as draining or rebooting the node are also available from the same interface, making it easy to manage the node lifecycle after provisioning.

Revision #1

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