

Provisioning Nodes

Use the Orchestrator to provision nodes in your cluster. This topic covers the following node provisioning tasks:

- ▲ Restrictions and Remarks
- ▲ Assign a Node to a Role
- ▲ Assigning Nodes in Live Mode vs Edit Mode
- ▲ Supervisor Role
- ▲ Listener and Worker Roles
- ▲ Cluster Processes: Start, Stop or Restart your cluster

Restrictions And Remarks

When Using the Virtualization Orchestrator to administer node assignments, there are rules and restrictions which are enforced by AtScale.

- ▲ You must assign a supervisor node, and only one supervisor node can be assigned at a time.
- ▲ You must assign a listener node, and only one listener node can be assigned at a time.
- ▲ You must have at least one worker node assigned.
- ▲ The listener node can only be started after a supervisor and worker have been assigned.

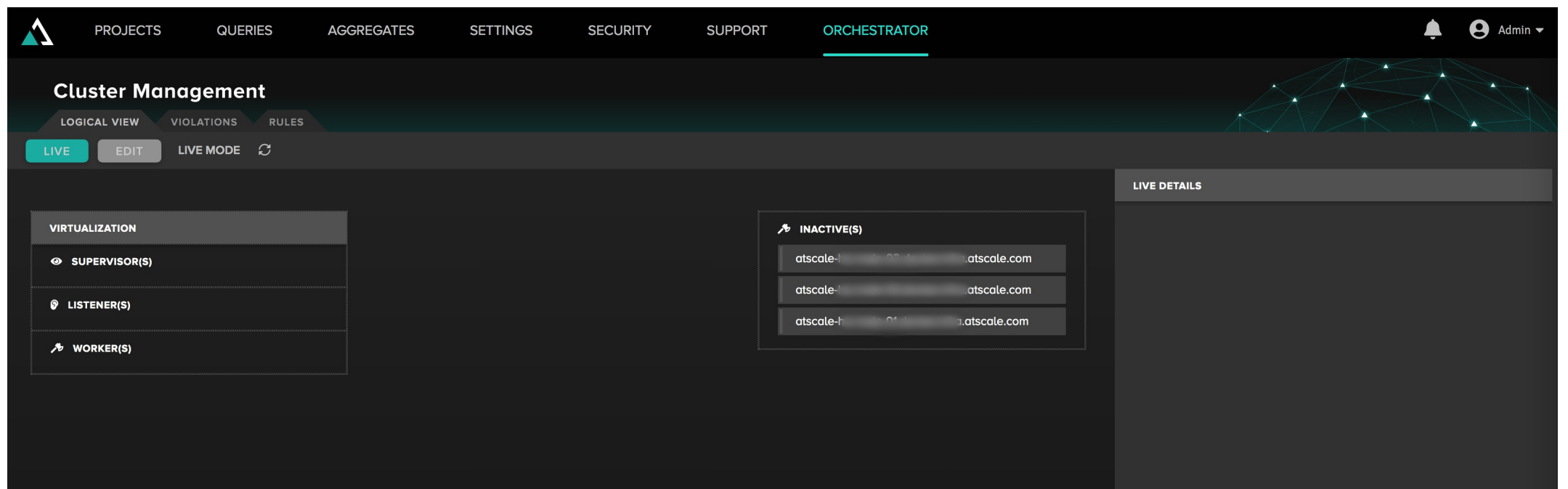
Assign A Node To A Role

Nodes present on the canvas remain inactive until you assign node roles to them. Once you have assigned a node to a role (either supervisor, listener or worker), AtScale can start using it as part of the virtualization layer.

1. In the Orchestrator, go to the **Logical View** tab.
2. On the Logical View canvas, locate the node you will assign a role from within the **Inactive(s)** dialog box and click its **ellipsis menu icon**. The node's menu appears.
3. There are three possible assignments for a node:
 - ▲ **Add to workers pool**
 - ▲ **Set as supervisor**
 - ▲ **Set as listener**

Once the node's role is assigned, AtScale displays it in its corresponding dialog box (either Supervisor, Listener, or Workers). It may take a few moments for your assignment to process.

Figure 1. The Orchestrator Live Mode view.



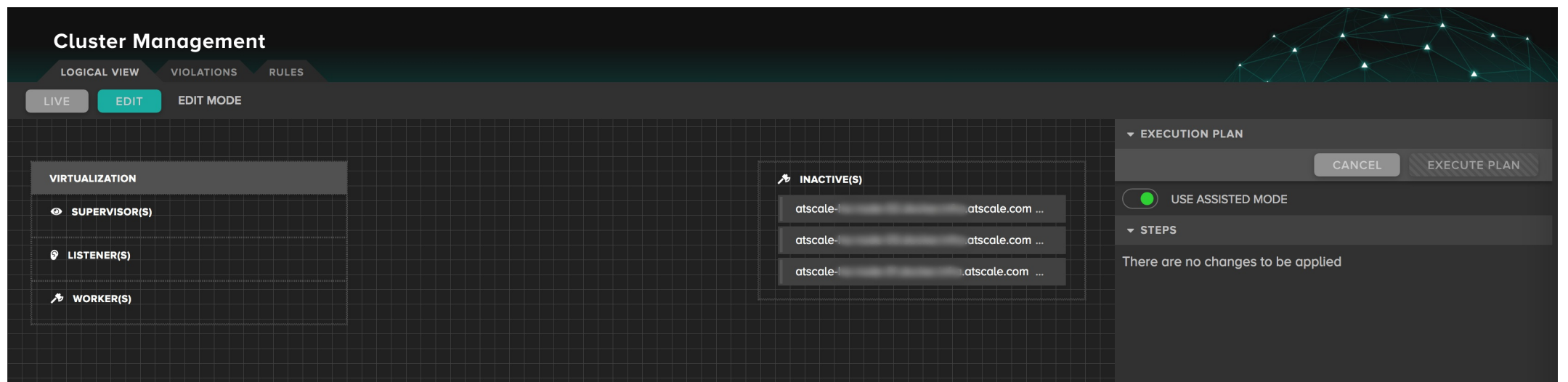
Assigning Nodes In Live Mode Vs Edit Mode

By default, the Orchestrator operates in Live Mode, which displays the current layout of nodes within your cluster. Edit Mode allows you to perform role assignments, for assignment, to assign a node as a Supervisor. Bulk node assignments can also be administered in Edit Mode. While in Edit Mode, enable **Assisted Mode** to alert the user to role assignments that need to be made to ensure a valid node configuration is set.

Follow the steps to enter **Edit Mode** to make bulk node assignments, or complete other **Edit Mode** only processes.

1. Select the **Edit** button adjacent to the refresh button, beneath the Nodes tab.
2. Select the ellipsis adjacent to the nodes you wish to assign.
3. Assign the multiple nodes as you desire. The assignments will be staged in the right hand dialog box beneath **Execution Plan**.
4. Select **Execute Plan** to execute the node assignments, or **Cancel** to remove the staged node assignments.
5. Wait for the changes to apply. Return to the **Live Mode** tab to view the changes made in **Edit Mode**.

Figure 2. The Orchestrator in Edit Mode. Select Apply Changes to execute your node assignments. Selecting Cancel restores the session to Live Mode.



Supervisor Role

Once a node is assigned as **Supervisor**, the status of the node, active or inactive, can be discerned by selecting the node from within the supervisor dialog box. Additionally, a green (active) or red (inactive) color code will appear to the left of the node name. When clicking the node name from within the **Supervisor** dialog box, the **host name** can be viewed by selecting the **DETAILS** drop-down. **Violations** can be viewed by selecting the violations drop-down. More information about violations can be found [here](#). Lastly, the statuses of the following **services** can be found by selecting the **ALL SERVICES** drop-down:

- ▲ **agent**
- ▲ **egress**
- ▲ **coordinator**
- ▲ **database**
- ▲ **directory**
- ▲ **engine**
- ▲ **health**
- ▲ **http**
- ▲ **modeler**
- ▲ **orchestrator**

The following actions can be performed by selecting the ellipsis adjacent to the supervisor node's name:

- ▲ **Stop** the node
- ▲ **Restart** the node
- ▲ **Remove** the node (as supervisor)
- ▲ **Add** the node to the workers pool
- ▲ **Set** the node as listener



Note: Stopping a supervisor will take the cluster offline. Stopping the supervisor node, removing a node from the supervisor role, or setting it from supervisor to listener can only be executed in **Edit Mode**.

Listener And Worker Roles

Once a node is assigned as a **Listener** or a **Worker**, the status of the node, active or inactive, can be discerned by selecting the node from within its respective dialog box. Additionally, a green (active) or red (inactive) color code will appear to the left of the node name. When clicking the node name from within the dialog box for the role it is assigned, the host name can be viewed by selecting the **DETAILS** drop-down. **Violations** can be viewed by selecting the violations drop-down. More information about violations can be found [here](#). Lastly, the statuses of the following services can be found by selecting the **ALL SERVICES** drop-down:

- ▲ **agent**

- ▲ **egress**
- ▲ **data_agent**
- ▲ **http**

The following actions can be performed by selecting the ellipsis adjacent to the **listener** node's name. Some actions can only be performed in Edit Mode, and have an information icon adjacent to the process which brings you to Edit Mode:

- ▲ **Stop** the node
- ▲ **Restart** the node
- ▲ **Add** to workers pool
- ▲ **Remove** the node as listener



Note: Setting the listener node as supervisor can only be executed in **Edit Mode**.

The following actions can be performed by selecting the ellipsis adjacent to a **worker** node's name. Some actions can only be performed in Edit Mode, and have an information icon adjacent to the process which brings you to Edit Mode:

- ▲ **Start** the node
- ▲ **Restart** the node
- ▲ **Remove** from workers pool



Note: Stopping a listener node will effectively take the cluster offline, as it won't be able to accept queries. Stopping a single worker will not take the cluster offline as long as there are other workers still assigned.

Cluster Processes

By selecting the ellipsis adjacent to the "Virtualization" in the top right of the Role dialog box, you can **Restart**, **Start**, or **Stop** the cluster. Selecting the refresh button adjacent to the **Live Mode** text will reload the cluster data.

Figure 3. Select the ellipsis in the top right of the Cluster dialog box to reveal the available cluster processes - Restart, Start and Stop.

