



## Managing Devices

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## Adding a Node Name

Adding user-friendly node names helps you to identify nodes in the topology diagram.

### Procedure

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- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Nodes Learned** tab.
- Step 3** Click the link for the node that you want to rename in the **Node Name** column.
- Step 4** In the **Update Node Information** dialog box, complete the following fields:

Name	Description
Node ID field	The unique identifier for a network element, such as an OpenFlow switch.
Node Name field	<p>The name that you want to assign to the node.</p> <p>The name can contain between 1 and 256 alphanumeric characters including the following special characters: underscore ("_"), hyphen ("-"), plus ("+"), equals ("="), open parenthesis ("("), closed parenthesis (")"), vertical bar (" "), period ("."), or at sign ("@").</p>
Tier drop-down list	<p>Choose the tier property for the network element. This can be one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Unknown</b></li> <li>• <b>Access</b></li> <li>• <b>Distribution</b></li> <li>• <b>Core</b></li> </ul>
Operation Mode drop-down list	<p>Choose how the traffic is handled based on the flows. This can be one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Allow reactive forwarding</b>—No default flows are programmed. How traffic that does not match a flow is treated depends upon the switch implementation.</li> <li>• <b>Proactive forwarding only</b>—The following default flows are programmed on the switch: <ul style="list-style-type: none"> <li>◦ Punt Address Resolution Protocol (ARP) packets.</li> <li>◦ Punt Link Layer Discovery Protocol (LLDP) packets.</li> <li>◦ Drop all other traffic.</li> </ul> </li> </ul>

**Note** The Proactive forwarding only mode is not applicable to the NX-API devices.

**Step 5** Click **Save**.

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## Viewing Expanded Nodes Information

### Procedure

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- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Nodes Learned** tab.
- Step 3** Click the icon in the top right corner.
- Step 4** The **Nodes Learned** dialog box displays these nonconfigurable fields:

Name	Description
Node Name field	The name assigned to the node.
Node ID field	The ID of the node.
Tier Name field	The tier that you selected for the node.
MAC Address field	The MAC address of the node.
Ports field	The ports accessible on the node.

- Step 5** Click the **X** in the upper right corner of the dialog box to close it.
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## Viewing the Ports List

### Procedure

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- Step 1** From the **Admin** drop-down list, choose **Management**.
  - Step 2** On the menu bar, choose **Devices**, and then click the **Nodes Learned** tab.
  - Step 3** Click the **Ports** link for a node.
  - Step 4** The **Ports List** dialog box displays all of the ports for the specified node.
  - Step 5** Click the **X** in the upper right corner of the dialog box to close it.
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## Adding Devices

You can now add a NX-API device through GUI so that it is easier to administrate.

## Procedure

- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Device Connections** tab.
- Step 3** Click **Add Device**.
- Step 4** In the **Add Device** dialog box, complete the following fields:

Name	Description
Address Field	The IP address assigned to the device.
Username Field	The name of the user assigned to the device.
Password Field	The password of the user assigned to the device.
Connection Type Field	The connection method (for example, onePK/NX-API).
Port Type Field	The port number for the NX-API connection. For NX-API HTTPS connection, the port number is 443 by default. If the controller is running in the TLS mode, enter the HTTPS port number of the device.

- Step 5** Click **Add Device**.  
The node configuration is added. When a physical device is associated with the address that you entered, a success message is displayed. The address is displayed in blue in the **Network Element Address** list of the **Devices** on the **Device Connections** tab.
- When there is no physical device associated with the address that you entered, no connection is made, and a connection timed out error message is displayed. The address is grayed out in the **Network Element Address** list of the **Devices** on the **Device Connections** tab.

# Removing Devices

## Procedure

- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Device Connections** tab.
- Step 3** In the **Devices** list, check the check box next to each device that you want to remove, or check the top check box to remove all devices.
- Step 4** Click **Remove Device**.
- Step 5** In the **Remove Device** confirmation dialog box, click **Remove Device**.

**Note** Before removing any device, you have to make sure that the port definitions and the connections that are installed in that device are removed. If the port definitions and the connections are not removed, there might be an inconsistency between the device and the controller.

## Adding a Node Group

A node group allows you to visually group nodes in the Cisco Nexus Data Broker topology diagram. Node groups do not create links between nodes.

### Procedure

- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Device Groups** tab.
- Step 3** Click **Add Group**.
- Step 4** In the **Add Node Group** dialog box, complete the following field:

Name	Description
Name field	<p>The name that you want to give the node group.</p> <p>The name can contain between 1 and 256 alphanumeric characters including the following special characters: underscore ("_"), hyphen ("-"), plus ("+"), equals ("="), open parenthesis ("("), closed parenthesis (")"), vertical bar (" "), period ("."), or at sign ("@").</p>

- Step 5** Click **Add Group**.  
The name of the group displays in the list of node groups.

### What to Do Next

Add nodes to the node group.

## Adding Nodes to a Node Group

Adding nodes to a node group visually associates the nodes with the node group in the topology diagram. Node groups are highlighted in different colors in the diagram.



**Note** If you add a node that already belongs to a node group to a new node group, it is automatically removed from the first node group and added to the new node group.

**Before You Begin**

Add a node group.

**Procedure**

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- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Device Groups** tab.
- Step 3** Click the name of the node group to which to want to add nodes in the **Node Groups** list.
- Step 4** Add nodes to the group by doing one of the following:
- Click one or more nodes in the topology diagram, and then click **Add to group <group name>** in the topology diagram.
  - Click the **Nodes in Group** tab, and then do the following:
    - a) In the **Add Nodes to Group - <group name>** dialog box, choose one or more nodes from the drop-down list.
    - b) Click **Add to group**.The nodes display in the **Nodes in Group - <group name>** list on the **Nodes in Group** tab, and in the node group in the topology diagram.
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## Removing Nodes from a Node Group

**Before You Begin**

Add nodes to a node group.

**Procedure**

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- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Device Groups** tab.
- Step 3** Click the name of the node group from which to want to remove nodes in the **Nodes Groups** list.
- Step 4** To remove nodes from the group, do one of the following:
- Click a node group in the topology diagram, and then:
    - a) Click the node you want to remove from the group.
    - b) Click **Remove from group – <group-name>** in the topology diagram.
  - Click the **Nodes in Group** tab, and then:
    - a) Check the check box next to the node or nodes you want to remove in the list of **Nodes in Group <group name>**, or check the top check box in the list to select all nodes in the group for removal.

b) Click **Remove Nodes from <group-name>** .

**Step 5** In the **Remove Nodes** confirmation dialog box, click **Remove**.

## Removing a Node Group

Removing a node group disassociates the nodes added to it from the node group, and the node group is no longer displayed in the topology diagram.

### Procedure

- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Device Groups** tab.
- Step 3** In the **Node Groups** list, check the check box next to the name of the node group you want to remove, or check the top check box to select all node groups for removal.
- Step 4** Click **Remove Group**.
- Step 5** In the **Remove Group** confirmation dialog box, click **Remove Group**.  
The node group is removed and no longer displays in the topology diagram.

## Adding a Gateway IP Address

### Procedure

- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Subnet Gateway Configuration** tab.
- Step 3** Click **Add Gateway IP Address**.
- Step 4** In the **Add Gateway IP Address** dialog box, complete the following fields:

Name	Description
Name field	<p>The name that you want to assign to the gateway IP address.</p> <p>The name can contain between 1 and 256 alphanumeric characters including the following special characters: underscore (" _"), hyphen ("-"), plus ("+"), equals ("="), open parenthesis ("("), closed parenthesis (")"), vertical bar (" "), period ("."), or at sign ("@").</p>

Name	Description
Gateway IP Address/Mask field	<p>The IP address and subnet mask of the default gateway in the following format:</p> <p><i>IP_Address/Subnet_Mask</i></p> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>• If your deployment includes only OpenFlow traffic, the gateway IP address can be set to the same IP address used as the default gateway for the host systems on that subnet.</li> <li>• If your deployment includes OpenFlow and non-OpenFlow traffic, the gateway IP address must be set to an unused IP address on that subnet.</li> </ul>

**Step 5** Click **Save**.

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## Removing a Gateway IP Address

### Before You Begin

Add one or more gateway IP addresses.

### Procedure

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- Step 1** From the **Admin** drop-down list, choose **Management**.
  - Step 2** On the menu bar, choose **Devices**, and then click the **Subnet Gateway Configuration** tab.
  - Step 3** Check the check box next to the name of each gateway IP address you want to remove, or check the top check box to remove all gateway IP address entries.
  - Step 4** Click **Remove Gateway IP Address**.
  - Step 5** In the **Remove Gateway IP Address** confirmation dialog box, click **Remove Gateway IP Address**.
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## Adding Ports

### Procedure

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- Step 1** From the **Admin** drop-down list, choose **Management**.
- Step 2** On the menu bar, choose **Devices**, and then click the **Subnet Gateway Configuration** tab.
- Step 3** Click **Add Ports**.
- Step 4** In the **Add Ports** dialog box, complete the following fields:



Name	Description
<b>Gateway Name</b> drop-down list	The name of the gateway address to which you want to bind the port.
<b>Node ID</b> drop-down list	The node that contains the port that you want to bind to the gateway address.
<b>Select Port</b> drop-down list	The port that you want to bind to the gateway address.

**Step 5** Click Save.

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