

Managing Devices

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Adding a Node Name

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

- Step 1 On the menu bar, choose Devices, and then click the Nodes Learned tab.
- **Step 2** Click the link for the node that you want to rename in the **Node Name** column.
- Step 3 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	The name that you want to assign to the node.
	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 ("@").
Tier drop-down list	Choose the tier property for the network element. This can be one of the following:
	• Unknown
	• Access
	• Distribution
	• Core
Operation Mode drop-down list	Choose how the traffic is handled based on the flows. This can be one of the following:
	• Allow reactive forwarding—No default flows are programmed. How traffic that does not match a flow is treated depends upon the switch implementation.
	 Proactive forwarding only—The following default flows are programmed on the switch:
	 Punt Address Resolution Protocol (ARP) packets to Cisco Extensible Network Controller (XNC).
	 Punt Link Layer Discovery Protocol (LLDP) packets to Cisco Extensible Network Controller (XNC).
	^o Drop all other traffic.

Step 4 Click Save.

Viewing Expanded Nodes Information

- **Step 1** On the menu bar, choose **Devices**, and then click the **Nodes Learned** tab.
- **Step 2** Click the icon in the top right corner.
- **Step 3** 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 4 Click the **X** in the upper right corner of the dialog box to close it.

Viewing the Ports List

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

Adding one PK Devices

- **Step 1** On the menu bar, choose **Devices**, and then click the **onePK** tab.
- Step 2 Click Add onePK Device.
- **Step 3** In the **Add onePK Device** dialog box, complete the following fields:

Name	Description	
Address field	The IP address assigned to the Cisco onePK device.	
Username field	The name of the user assigned to the device.	
	Note The username that the admin enters in order to connect to the Cisco onePK agent.	
Password field	The password of the user assigned to the device.	
	Note This is the password that the admin enters in order to connect to the Cisco onePK agent.	

Step 4 Click Add onePK Device.

The node configuration is added. When is 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 **onePK Devices** on the **onePK** 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 **onePK Devices** on the **onePK** tab.

Removing onePK Devices

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

Adding a Node Group

A node group allows you to visually group nodes in the Cisco Extensible Network Controller (XNC) topology diagram. Node groups do not create links between nodes.

- **Step 1** On the **Menu** bar, choose **Devices**, and then click the **Device Groups** tab.
- Step 2 Click Add Group.
- **Step 3** In the **Add Node Group** dialog box, complete the following field:

Name	Description
Name field	The name that you want to give the node group.
	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 ("@").

Step 4 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.

- **Step 1** On the **Menu** bar, choose **Devices**, and then click the **Device Groups** tab.
- Step 2 Click the name of the node group to which to want to add nodes in the Node Groups list.
- **Step 3** 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.

Removing Nodes from a Node Group

Before You Begin

Add nodes to a node group.

- **Step 1** On the menu bar, choose **Devices**, and then click the **Device Groups** tab.
- Step 2 Click the name of the node group from which to want to remove nodes in the Nodes Groups list.
- **Step 3** 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 4** 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.

- **Step 1** On the menu bar, choose **Devices**, and then click the **Device Groups** tab.
- Step 2 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 3 Click Remove Group.
- Step 4 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 Static Route

- Step 1 On the menu bar, choose Devices, and then click the Static Route Configuration tab.
- **Step 2** Click **Add Static Route**.
- **Step 3** In the **Add Static Route** dialog box, complete the following fields:

Name	Description
Name field	The name that you want to assign to the static route.
	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 ("@").
Static Route field	The IP address of the destination and subnet mask in the following format:
	Destination_IP_Address/Subnet_Mask
Next Hop field	The IP address of the next-hop device.

Step 4 Click Save.

Removing a Static Route

Before You Begin

Add one or more static routes.

- Step 1 On the menu bar, choose Devices and then click the Static Route Configuration tab.
- **Step 2** Check the check box next to the name of each static route that you want to remove, or check the top check box to select all static routes for removal.
- Step 3 Click Remove Static Route.
- Step 4 In the Remove Static Route confirmation dialog box, click Remove Static Route.

Adding a Gateway IP Address

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

Name	Description	
Name field	The name that you want to assign to the gateway IP address.	
	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 ("@").	
Gateway IP Address/Mask field	The IP address and subnet mask of the default gateway in the following formation	
	IP_Address/Subnet_Mask	
	Note • 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.	
	 If your deployment includes OpenFlow and non-OpenFlow traffic, the gateway IP address must be set to an unused IP address on that subnet. 	

Step 4 Click Save.

Removing a Gateway IP Address

Before You Begin

Add one or more gateway IP addresses.

- Step 1 On the menu bar, choose Devices, and then click the Subnet Gateway Configuration tab.
- Step 2 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 3** Click Remove Gateway IP Address.
- Step 4 In the Remove Gateway IP Address confirmation dialog box, click Remove Gateway IP Address.

Adding Ports

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

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

Step 4 Click Save.

Adding a SPAN Port

- Step 1 On the menu bar, choose Devices, then click the Span Port Configuration tab.
- Step 2 Click Add SPAN Port.
- **Step 3** In the Add SPAN Port dialog box, complete the following fields:

Name	Description
Node drop-down list	Choose the node where you want to create a SPAN port.
Input Port drop-down list	The input port to use for the SPAN port.

Step 4 Click Save.

Removing a SPAN Port

Before You Begin

Add one or more SPAN ports.

- Step 1 On the menu bar, choose **Devices**, and then click the **Span Port Configuration** tab.
- Step 2 Check the check box next to each entry in the **Node** and **SPAN Port** list that you want to remove, or check the check box at the top of the list to choose all SPAN ports for removal.
- Step 3 Click Remove SPAN Port.
- Step 4 In the Remove SPAN Port confirmation dialog box, click Remove SPAN Port.