Managing Slices

This chapter contains the following sections:

About Slice Manager

The Slice Manager provides a way for you, as a network administrator, to partition networks into many logical networks. This feature allows you to create multiple disjoint networks and assign different roles and access levels to each one. Each logical network can be assigned to departments, groups of individuals, or applications. Multiple disjoint networks can be managed using the Cisco Nexus Data Broker application.

The Slice Manager creates slices based on the following criteria:

- Network devices—The devices that can be used in the slice.

  Network devices can be shared between slices.

- Network device interfaces—The device interfaces that can be used in the slice.

  Network device interfaces can be shared between slices.

- Flow Specification—A combination of source and destination IP, protocol, and source and destination transport ports used to identify the traffic that belongs to the slice.

  Flow specifications can be assigned to different slices if the associated network devices and interfaces are disjointed.

Note You can also use VLAN IDs to segregate the slice traffic.

Slices must be created by a Cisco Extensible Network Controller (XNC) user with the Network Administrator role. After creation, the slices can be managed by a user with the Slice Administrator role.

Slices can overlap if each slice has at least one unique attribute. For example, a slice can share the same physical switches and ports, but be differentiated by the type of traffic it receives.

Adding a Slice

Step 1 From the **Admin** drop-down list, choose **Slices**.

Step 2 On the **Slices** tab, click **Add Slice**.

Step 3 In the **Add Slice** dialog box, complete the following fields:

Name	Description
Slice Name field	The name that you want to assign to the slice. The name may contain between 1 and 256 alphanumeric characters including the following special characters: underscore (_), hyphen (-), plus (+), equals (=), vertical bar (|), or at sign (@). **Note** The slice name cannot be changed once it is saved.
Static VLAN field	The static VLAN that you want to assign to the slice.

Step 4 Click **Add Slice**.

Adding Nodes and Ports to a Slice

Before You Begin

You must have created a slice before you can add nodes and ports.

Step 1 From the **Admin** drop-down list, choose **Slices**.

Step 2 On the **Slices** tab, choose the slice for which you want to add entries.
Enter a value in the **Search** combo box and click the search icon to limit the number of entries that appear.

Step 3 In the topology diagram, click a node that you want to add to the slice.

Step 4 In the **Add Slice Entry** dialog box, choose the port or ports that you want to add to the slice.

Step 5 Click **Add Entry**.

Step 6 Repeat Step 3 through Step 5 for each node and port that you want to add to the slice.

Adding a Flow Specification

Before You Begin

Create a slice before you add a flow specification.

Note Be default, a flow specification is bidirectional.

Step 1 From the **Admin** drop-down list, choose **Slices**.

Step 2 On the **Flow Spec** tab, choose the slice for which you want to add a flow specification.
Enter a value in the **Search** combo box and click the search icon to limit the number of entries that appear.

Step 3 On the **Detail** tab, click **Add Flow Spec**.

Step 4 In the **Add Flow Spec** dialog box, complete the following fields:

Name	Description
Name field	The name that you want to use for the flow specification. 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 ("@").
VLAN field	The VLAN ID or the range of VLAN IDs that you want to use for the flow specification.
Source IP field	The source IP address that you want to use for the flow specification.
Destination IP field	The destination IP address that you want to use for the flow specification.
Protocol field	The IP protocol number in decimal format that you want to use for the flow specification.
Source Port field	The source port that you want to use for the flow specification.
Destination Port field	The destination port that you want to use for the flow specification.

Step 5 Click **Add Flow Spec**.