Using Cisco APIC to Deploy an EPG on a Specific Port

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New and Changed Information

The following table provides an overview of the significant changes to this guide up to this current release. The table does not provide an exhaustive list of all changes made to the guide or of the new features up to this release.

Table 1: New Features and Changed Behavior in Cisco APIC

<table>
<thead>
<tr>
<th>Cisco APIC Release Version</th>
<th>Feature</th>
<th>Description</th>
<th>What Changed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release 1.3(1g)</td>
<td>--</td>
<td>Removed object model CLI procedure and replaced with NX-OS-Style CLI procedure.</td>
<td>This content is available here: Deploying an EPG on a Specific Port with APIC Using the NX-OS-Style CLI, on page 3 and includes examples.</td>
</tr>
<tr>
<td>Release 1.2(1)</td>
<td>--</td>
<td>Procedure steps updated with the new Advanced and Basic GUI versions.</td>
<td></td>
</tr>
<tr>
<td>Release 1.0</td>
<td>--</td>
<td>This guide was released.</td>
<td></td>
</tr>
</tbody>
</table>

Statically Deploying an EPG on a Specific Port

This topic provides a typical example of how to statically deploy an EPG on a specific port when using Cisco APIC.

Deploying an EPG on a Specific Port with APIC Using the GUI

Before You Begin

The tenant where you deploy the EPG is already created.

Procedure

Step 1 On the menubar, click TENANTS.
Step 2 In the Navigation pane, expand the appropriate Tenant_name > Application Profiles.
Step 3 Right-click Application Profiles and click Create Application Profile.
Step 4 In the Create Application Profile dialog box, perform the following actions:
   a) In the Name field, enter a name for the application profile.
   b) Expand EPGs.
   c) In the Create Application EPG dialog box, in the Name field, enter an EPG name.
d) In the **Statically Link with Leaves/Paths** field, check the checkbox for **Statically Link with Leaves/Paths**. (this is selected to specify on which port the EPG is required to be deployed). Click Next.

e) In the **Leaves/Paths** area, expand **Paths**.

In this example we are deploying the EPG on the port of a node. Alternatively, you could choose to deploy the EPG on a node.

f) From the **Path** drop-down list, choose the appropriate node and port.
g) In the **Deployment Immediacy** field drop-down list, choose the preferred deployment time.
h) In the **Mode** field, choose the appropriate mode.
i) In the **Port Encap** field, enter the secondary VLAN to be deployed.
j) In the **Primary Encap** field, enter the primary VLAN to be deployed.
k) Click **Update**, and click **Finish**.

**Step 5** In the **Navigation** pane, expand **Application Profiles** to view the new application profile.

**Step 6** Expand **Application EPGs**, to view the new EPG.

**Step 7** Expand the EPG and click **Static Bindings (Paths)**, and in the **Properties** pane, view the details of the static binding paths that are established.

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**Deploying an EPG on a Specific Port with APIC Using the NX-OS Style CLI**

**Procedure**

**Step 1** Configure a VLAN domain:

**Example:**

```console
apic1(config)# vlan-domain dom1
apic1(config-vlan)# vlan 10-100
```

**Step 2** Create a tenant:

**Example:**

```console
apic1# configure
apic1(config)# tenant t1
```

**Step 3** Create a private network/VRF:

**Example:**

```console
apic1(config-tenant)# vrf context ctx1
apic1(config-tenant-vrf)# exit
```

**Step 4** Create a bridge domain:

**Example:**

```console
apic1(config-tenant)# bridge-domain bd1
apic1(config-tenant-bd)# vrf member ctx1
apic1(config-tenant-bd)# exit
```
Step 5  Create an application profile and an application EPG:

Example:

```
apic1(config-tenant)# application AP1
apic1(config-tenant-app)# epg EPG1
apic1(config-tenant-app-epg)# bridge-domain member bd1
apic1(config-tenant-app-epg)# exit
apic1(config-tenant-app)# exit
apic1(config-tenant)# exit
```

Step 6  Associate the EPG with a specific port:

Example:

```
apic1(config)# leaf 1017
apic1(config-leaf)# interface ethernet 1/13
apic1(config-leaf-if)# vlan-domain member dom1
apic1(config-leaf-if)# switchport trunk allowed vlan 20 tenant t1 application AP1 epg EPG1
```

Note  The vlan-domain and vlan-domain member commands mentioned in the above example are a pre-requisite for deploying an EPG on a port.

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**Deploying an EPG on a Specific Port with APIC Using the REST API**

**Before You Begin**

The tenant where you deploy the EPG is created.

**Procedure**

Deploy an EPG on a specific port.

Example:

```
<fvTenant name="<tenant_name>" dn="uni/tn-test1" >
  <fvCtx name="<network_name>" pcEnfPref="enforced" knwMcastAct="permit"/>
  <fvBD name="<bridge_domain_name>" unkMcastAct="flood" >
    <fvRsCtx tnFvCtxName="<network_name>"/>
  </fvBD>
  <fvAp name="<application_profile>" >
    <fvAEPg name="<epg_name>" >
      <fvRsPathAtt tDn="topology/pod-1/paths-1017/pathep-[eth1/13]" mode="regular" instrImedcy="immediate" encap="vlan-20"/>
    </fvAEPg>
  </fvAp>
</fvTenant>
```
<table>
<thead>
<tr>
<th>Region</th>
<th>Headquarters Name</th>
<th>Address</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas Headquarters</td>
<td>Cisco Systems, Inc.</td>
<td>San Jose, CA 95134-1706</td>
<td>USA</td>
</tr>
<tr>
<td>Asia Pacific Headquarters</td>
<td>Cisco Systems (USA) Pte. Ltd.</td>
<td>Singapore</td>
<td>Singapore</td>
</tr>
<tr>
<td>Europe Headquarters</td>
<td>Cisco Systems International BV</td>
<td>Amsterdam, The Netherlands</td>
<td>The Netherlands</td>
</tr>
</tbody>
</table>

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