



Selecting a Layer 4 to Layer 7 Device to Render a Graph

- [About Device Selection Policies, page 1](#)
- [Creating a Device Selection Policy Using the GUI, page 1](#)
- [Configuring a Device Selection Policy Using REST APIs, page 2](#)

About Device Selection Policies

A device can be selected based on a contract name, a graph name, or the function node name inside the graph. After you create a device, you can create a device context, which provides a selection criteria policy for a device.

A device selection policy (also known as a device context) specifies the policy for selecting a device for a service graph template. This allows an administrator to have multiple device and then be able to use them for different service graph templates. For example, an administrator can have a device that has high-performance ADC appliances and another device that has lower-performance ADC appliances. Using two different device selection policies, one for the high-performance ADC device and the other for the low-performance ADC device, the administrator can select the high-performance ADC device for the applications that require higher performance and select the low-performance ADC devices for the applications that require lower performance.

Creating a Device Selection Policy Using the GUI

If you did not use the **Apply L4-L7 Service Graph Template To EPGs** wizard to apply the service graph template, you might need to configure a device selection policy (also known as a logical device context). The device selection policy instructs Cisco Application Centric Infrastructure (ACI) about which firewall or load balancer device to use to render a graph.

If you used the **Apply L4-L7 Service Graph Template To EPGs** wizard to apply the service graph template, then a device selection policy was configured automatically and you do not need to configure one manually.

**Note**

When using the NX-OS-style CLI, the device selection policy is configured automatically; there are no equivalent NX-OS-style CLI commands.

If you add copy devices to a service graph template that is already deployed, you must create a device selection policy to use for copy services.

Step 1 On the menu bar, choose **Tenants > All Tenants**.

Step 2 In the Work pane, double click the tenant's name.

Step 3 In the Navigation pane, choose **Tenant *tenant_name* > L4-L7 Services > Devices Selection Policies**.

Step 4 In the Work pane, choose **Actions > Create Logical Device Context**.

Step 5 In the **Create Logical Device Context** dialog box, fill in the fields as required, except as specified below:

- a) In the **Service Type** drop-down list, choose the contract for the device selection policy. If you do not want to use the contract name as part of the criteria for using a device, choose **any**.
- b) In the **Graph Name** drop-down list, choose the graph for the device selection policy. If you do not want to use the graph name as part of the criteria for using a device, choose **any**.
- c) In the **Node Name** drop-down list, choose the node for the device selection policy. If you do not want to use the node name as part of the criteria for using a device, choose **any**.

Step 6 In the **Cluster Interface Contexts** section, click + to add a cluster interface context.

Name	Description
Connector Name	The connector name or label for the logical interface context. The default is Any .
Logical Interface	The logical interface identifier.
Bridge Domain	The private Layer 2 bridge domain consisting of a set of physical or virtual ports. For a copy device, do not choose a bridge domain; the bridge domain is created internally.
L3 Network	The Layer 3 context name. For a copy device, do not choose a Layer 3 network.
L4-L7 Policy based Routing	The policy-based redirect policy to use with logical device context. For a copy device, do not choose a policy-based redirect policy.
Subnets	The IP address space linked to the bridge domain associated with the logical interface. For a copy device, do not enter a subnet.

Step 7 Click **Submit**.

Configuring a Device Selection Policy Using REST APIs

You can use the REST APIs to configure a device selection policy.

Creating a Device Selection Policy Using the REST API

The following REST API creates a device selection policy:

```
<polUni>
  <fvTenant dn="uni/tn-acme" name="acme">
    <vnsLDevCtx ctrctNameOrLbl="webCtrct" graphNameOrLbl="G1" nodeNameOrLbl="Node1">
      <vnsRsLDevCtxToLDev tDn="uni/tn-acme/lDevVip-ADCCluster1"/>

      <!-- The connector name C4, C5, etc.. should match the
           Function connector name used in the service graph template -->

      <vnsLIfCtx connNameOrLbl="C4">
        <vnsRsLIfCtxToLIf tDn="uni/tn-acme/lDevVip-ADCCluster1/Lif-ext"/>
      </vnsLIfCtx>
      <vnsLIfCtx connNameOrLbl="C5">
        <vnsRsLIfCtxToLIf tDn="uni/tn-acme/lDevVip-ADCCluster1/Lif-int"/>
      </vnsLIfCtx>
    </vnsLDevCtx>
  </fvTenant>
</polUni>
```

Adding a Logical Interface in a Device Using the REST APIs

The following REST API adds a logical interface in a device:

```
<polUni>
  <fvTenant dn="uni/tn-acme" name="acme">
    <vnsLDevVip name="ADCCluster1">

      <!-- The LIF name defined here (such as e.g., ext, or int) should match the
           vnsRsLIfCtxToLIf 'tDn' defined in LifCtx -->

      <vnsLIf name="ext">

        <vnsRsMetaIf tDn="uni/infra/mDev-Acme-ADC-1.0/mIfLbl-outside"/>
        <vnsRsCIfAtt tDn="uni/tn-acme/lDevVip-ADCCluster1/cDev-ADC1/cIf-ext"/>
      </vnsLIf>
      <vnsLIf name="int">
        <vnsRsMetaIf tDn="uni/infra/mDev-Acme-ADC-1.0/mIfLbl-inside"/>
        <vnsRsCIfAtt tDn="uni/tn-acme/lDevVip-ADCCluster1/cDev-ADC1/cIf-int"/>
      </vnsLIf>
    </vnsLDevVip>
  </fvTenant>
</polUni>
```

