

# Managing an L2VPN Service Request

This chapter covers the basic steps to provision an L2VPN service. It contains the following sections:

- Introducing L2VPN Service Requests, page 5-1
- Creating an L2VPN Service Request, page 5-2
- Creating an L2VPN Service Request with a CE, page 5-3
- Creating an EWS L2VPN Service Request with a CE, page 5-10
- Creating an L2VPN Service Request without a CE, page 5-13
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- Modifying the L2VPN Service Request, page 5-22
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# **Introducing L2VPN Service Requests**

An L2VPN service request consists of one or more end-to-end wires, connecting various sites in a point-to-point topology. When you create a service request, you enter several parameters, including the specific interfaces on the CE and PE routers.



If you are creating an L2TPv3 service request, see Chapter 7, "Introducing L2TPv3 Service Requests."

You can also integrate a Cisco IP Solution Center (ISC) template with a service request. You can associate one or more templates to the CE and the PE.

To create a service request, a Service Policy must already be defined, as described in Chapter 4, "Creating an L2VPN Policy".

Based on the predefined L2VPN policy, an operator creates an L2VPN service request, with or without modifications to the L2VPN policy, and deploys the service. Service creation and deployment are normally performed by regular network technicians for daily operation of network provisioning.

The following steps are involved in creating a service request for Layer 2 connectivity between customer sites:

- Choose a CE Topology for ERS/Frame Relay/ATM services.
- Select the endpoints (CE and PE) that must be connected. For each end-to-end Layer 2 connection, ISC creates an end-to-end wire object in the repository for the service request.
- Choose a CE or PE interface.

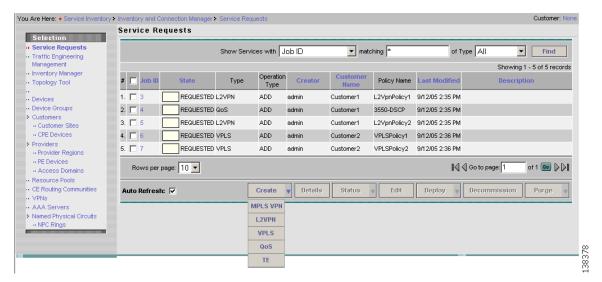
- Choose a Named Physical Circuit (NPC) for the CE or PE.
- Edit the end-to end connection.
- Edit the link attributes.

# **Creating an L2VPN Service Request**

Perform the following steps to create an L2VPN service request.

Step 1 Select Service Inventory > Inventory and Connection Manage > Service Requests. The Service Requests window appears as shown in Figure 5-1.

Figure 5-1 L2VPN Service Activation



- Step 2 Click Create.
- **Step 3** Choose **L2VPN** from the drop-down list.

L2VPN service requests must be associated with an L2VPN policy. You choose an L2VPN policy from the policies previously created (see Chapter 4, "Creating an L2VPN Policy").

Step 4 Select the L2VPN policy of choice. See Figure 5-2. If more than one L2VPN policy exists, a list of L2VPN policies appears.

Select L2VPN Policy Show L2VPN policies with Policy Name matching Showing 1-10 of 10 records Core Type Service Type 1. C AtmCe Global ATM MPLS 2. C AtmNoCe Global ATM\_NO\_CE MPLS 3. C FrameRelayCe FRAME\_RELAY MPLS 4. C FrameRelayNoCe FRAME\_RELAY\_NO\_CE MPLS 5. C L2vpnErsCe L2VPN\_ERS MPLS 6. C L2vpnErsNoCe L2VPN\_ERS\_NO\_CE MPLS 7. C L2vpnEwsCe L2VPN\_EWS\_NO\_CE 8. C L2vpnEwsNoCe MPLS C L2VpnPolicy1 L2VPN\_ERS\_NO\_CE

Figure 5-2 L2VPN Policy Choice

10. C L2VpnPolicy2

Rows per page: 10 ▼

### **Step 5** When you make the choice, click **OK**.

As soon as you make the choice, the new service request inherits all the properties of that L2VPN policy, such as all the editable and non-editable features and pre-set parameters.

L2VPN\_EWS\_NO\_CE

Go to page: 
☐

MPLS

of 1 6 D

To continue creating an L2VPN service request, go to one of the following sections:

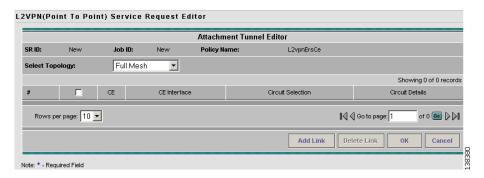
- Creating an L2VPN Service Request with a CE, page 5-3.
- Creating an EWS L2VPN Service Request with a CE, page 5-10.
- Creating an L2VPN Service Request without a CE, page 5-13.
- Creating an EWS L2VPN Service Request without a CE, page 5-17.

### Creating an L2VPN Service Request with a CE

This section includes detailed steps for creating an L2VPN service request with a CE present for ERS, ATM, and Frame Relay policies. If you are creating an L2VPN service request for an EWS policy, go to Creating an EWS L2VPN Service Request with a CE, page 5-10.

After you choose an L2VPN policy, the L2VPN Service Request Editor window appears (see Figure 5-3).

Figure 5-3 L2VPN Service Request Editor



Step 1 Choose a **Topology** from the drop-down list. If you choose **Full Mesh**, each CE will have direct connections to every other CE. If you choose **Hub and Spoke**, then only the Hub CE has connection to each Spoke CE and the Spoke CEs do not have direct connection to each other.

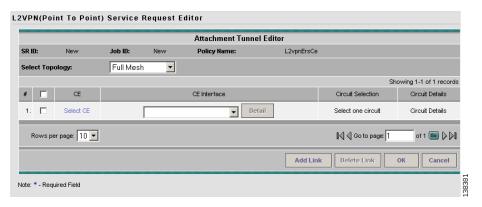


The full mesh and the hub and spoke topologies make a difference only when you choose more than two end points. For example, with four end points, ISC automatically creates six links with full mesh topology. With hub and spoke topology, however, ISC creates only three links.

#### Step 2 Click Add Link.

You specify the CE end points using the Attachment Tunnel Editor. You can create one or more CEs from a window like the one in Figure 5-4.

Figure 5-4 Select CE





All the services that deploy point-to-point connections (ERS, EWS, ATMoMPLS, and FRoMPLS) must have at least two CEs specified.

- Step 3 Click Select CE in the CE column. The CPE for Attachment Circuit window appears (see Figure 5-5). This window displays the list of currently defined CEs.
  - **a.** From the **Show CPEs with** drop-down list, you can display CEs by Customer Name, by Site, or by Device Name.
  - **b.** You can use the **Find** button to either search for a specific CE, or to refresh the display.
  - **c.** You can set the **Rows per page** to 5, 10, 20, 30, 40, or All.

Figure 5-5 Select CPE Device

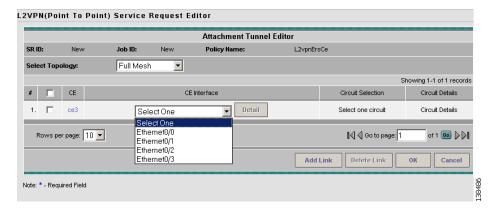


- **Step 4** In the Select column, choose a CE for the L2VPN link.
- Step 5 Click Select.

The Service Request Editor window appears displaying the name of the selected CE in the CE column.

**Step 6** Select the CE interface from the drop-down list (see Figure 5-6).

Figure 5-6 Select the CE Interface





When you provision an L2VPN ERS service, when you select a UNI for a particular device, ISC determines if there are other services using the same UNI. If so, a warning message is displayed. If you ignore the message and save the service request, all of the underlying service requests lying on the same UNI are synchronized with the modified shared attributes of the latest service request. In addition, the state of the existing service requests is changed to the Requested state.

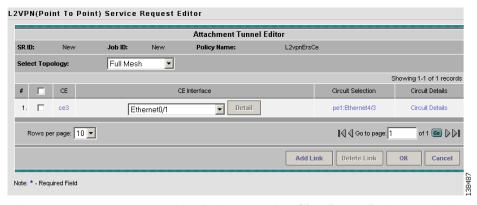


ISC only displays the available interfaces for the service, based on the configuration of the underlying interfaces, existing service requests that might be using the interface, and the customer associated with the service request. You can click the **Details** button to display a pop-up window with information on the available interfaces, such as interface name, customer name, VPN name and service request ID, service request type, VLAN translation type, and VLAN ID information.

- Step 7 If only one NPC exists for the Chosen CE and CE interface, that NPC is auto populated in the Circuit Selection column and you need not choose it explicitly. If more then one NPC is available, click Select one circuit in the Circuit Selection column. The NPC window appears, enabling you to select the appropriate NPC.
- Step 8 Click OK.

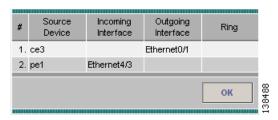
Each time you choose a CE and its interface, the NPC that was precreated from this CE and interface is automatically displayed under **Circuit Selection** as in Figure 5-7. This means that you do not have to further specify the PE to complete the link.

Figure 5-7 NPC Created



If you want to review the details of this NPC, click **Circuit Details** in the Circuit Details column. The NPC Details window appears and lists the circuit details for this NPC. In Figure 5-8, the CE and PE and their corresponding interfaces appear.

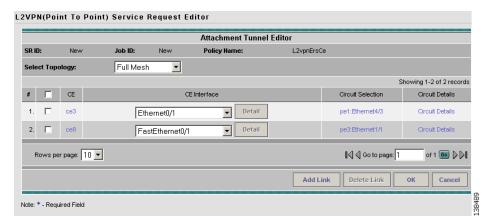
Figure 5-8 NPC Details



**Step 9** Continue to specify additional CEs, as in previous steps. ISC creates the links between CEs based on the Topology that you chose.

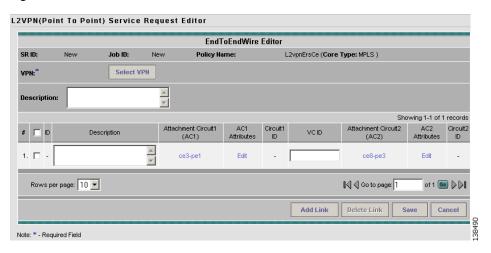
#### Step 10 Click OK in Figure 5-9.

Figure 5-9 NPCs Created



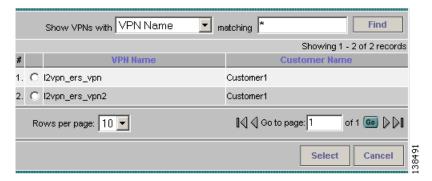
For ERS, ATM, and Frame Relay, the End-to-End Wire Editor window appears as shown in Figure 5-10.

Figure 5-10 End-to-End Wire Editor



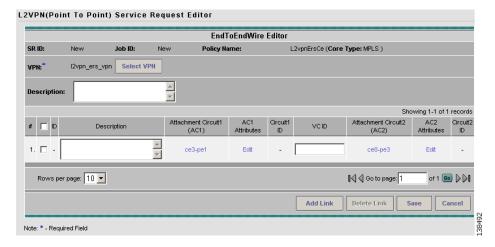
Step 11 The VPN for this service request appears in the VPN field. If there is more than one VPN, click Select VPN to choose a VPN. The VPN for L2VPN service request window appears as shown in Figure 5-11.

Figure 5-11 Select VPN for L2VPN Service Request



Step 12 Choose a VPN Name and click Select. The L2VPN Service Request Editor window appears with the VPN name displayed as shown in Figure 5-12.

Figure 5-12 Attachment Circuit Selection



- Step 13 Click Add AC in the Attachment Circuit AC2 column.
- **Step 14** Repeat Steps 3 to 10 for AC2.

The End-to-End Wire Editor window displays the complete end-to-end wire as shown in Figure 5-13.

L2VPN(Point To Point) Service Request Editor EndToEndWire Editor Policy Name: SR ID: Job ID: New L2vpnErsCe (Core Type: MPLS ) VPN: I2vpn\_ers\_vpn Select VPN Showing 1-1 of 1 records Circuit1 ID Attachment Circuit1 Attachment Circuit2 # 🗀 ID Description VC ID 1. 🗆 -\_ ce3-pe1 Edit ce8-ne3 Rows per page: 10 ▼ of 1 Go D Add Link Delete Link Note: \* - Required Field

Figure 5-13 End-to-End Wire Created

You can choose any of the blue highlighted values to edit the End-to-End Wire.

You can edit the AC link attributes to change the default policy settings. After you edit these fields, the blue link changes from Default to Changed.

You can enter a description for the service request in the first **Description** field. The description will show up in this window and also in the Description column of the Service Requests window. The maximum length for this field is 256 characters.

You can enter a description for each end-to-end wire in the **Description** field provided for each wire. The description shows up only in this window. The data in this field is not pushed to the device(s). The maximum length for this field is 256 characters.

The ID number is system-generated identification number for the circuit.

The Circuit ID is created automatically, based on the service. For example, for Ethernet, it is based on the VLAN number; for Frame Relay, it is based on the DLCI; for ATM, it is based on the VPI/VCI.

If the policy was set up for you to define a VC ID manually, enter it into the empty **VC ID** field. If policy was set to "auto pick" the VC ID, ISC will supply a VC ID, and this field will not be editable. In the case where you supply the VC ID manually, if the entered value is in the provider's range, ISC validates if the entered value is available or allocated. If the entered value has been already allocated, ISC generates an error message saying that the entered value is not available and prompts you to re-enter the value. If the entered value is in the provider's range, and if it is available, then it is allocated and is removed from the VC ID pool. If the entered value is outside the provider's range, ISC displays a warning saying that no validation could be performed to verify if it is available or allocated.

You can also click **Add Link** to add an end-to-end wire.

You can click **Delete Link** to delete an end-to-end wire.

**Step 15** When you are finished editing the end-to-end wires, click **Save**.

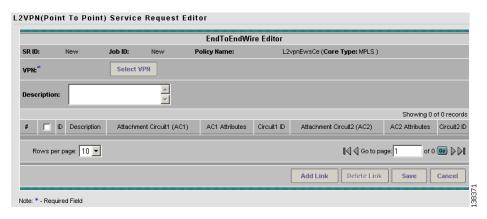
The service request is created and saved into ISC.

### Creating an EWS L2VPN Service Request with a CE

This section includes detailed steps for creating an L2VPN service request with a CE present for EWS. If you are creating an L2VPN service request for an ERS, ATM, or Frame Relay policy, go to Creating an L2VPN Service Request with a CE, page 5-3.

After you choose an L2VPN policy, the L2VPN Service Request Editor window appears (see Figure 5-14).

Figure 5-14 EWS Service Request Editor



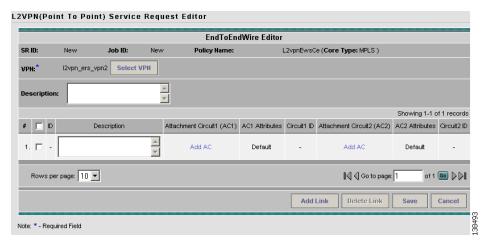
Step 1 Click Select VPN to select a VPN for use with this CE. The Select VPN window appears with the VPNs defined in the system. See Figure 5-15.

Figure 5-15 Select a VPN



- **Step 2** Choose a **VPN Name** in the Select column.
- **Step 3** Click **Select**. The L2VPN Service Request Editor window appears with the VPN name displayed.
- Step 4 Click Add Link. See Figure 5-16.

Figure 5-16 End-To-End Wire Editor



Step 5 Click Add AC in the Attachment Circuit (A1) column. The Attachment Tunnel Editor appears as shown in Figure 5-17.

You can enter a description for the service request in the first **Description** field. The description will show up in this window and also in the Description column of the Service Requests window. The maximum length for this field is 256 characters.

You can enter a description for each end-to-end wire in the **Description** field provided for each wire. The description shows up only in this window. The data in this field is not pushed to the device(s). The maximum length for this field is 256 characters.

The ID number is system-generated identification number for the circuit.

The Circuit ID is created automatically, based on the service. For example, for Ethernet, it is based on the VLAN number; for Frame Relay, it is based on the DLCI; for ATM, it is based on the VPI/VCI.

Figure 5-17 Select CE for Attachment Circuit



Step 6 Click Select CE. The CPE for Attachment Circuit window appears as shown in Figure 5-18.

This window displays the list of currently defined CEs.

- **a.** From the **Show CPEs with** drop-down list, you can display CEs by Customer Name, by Site, or by Device Name.
- b. You can use the **Find** button to either search for a specific CE, or to refresh the display.
- **c.** You can set the **Rows per page** to 5, 10, 20, 30, 40, or All.

Figure 5-18 CPE for Attachment Circuit

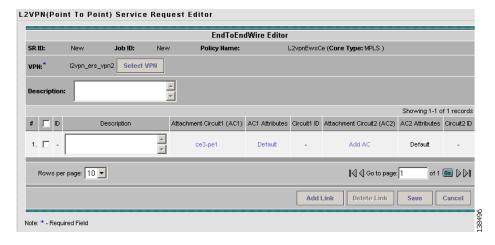


- **Step 7** In the Select column, choose a CE for the L2VPN link.
- Step 8 Click Select.
- **Step 9** Choose a CE interface from the drop-down list.
- Step 10 If only one NPC exists for the Chosen CE and CE interface, that NPC is auto populated in the Circuit Selection column and you need not choose it explicitly. If more then one NPC is available, click **Select one circuit** in the Circuit Selection column. The NPC window appears, enabling you to select the appropriate NPC.
- Step 11 Click OK.

Each time you choose a CE and its interface, the NPC that was precreated from this CE and interface is automatically displayed under **Circuit Selection** as in Figure 5-19. This means that you do not have to further specify the PE to complete the link.

Step 12 Click OK.

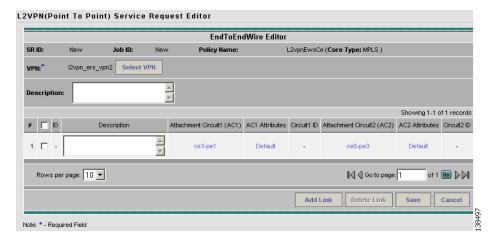
Figure 5-19 NPC Created



- **Step 13** The Service Request Editor window appears displaying the name of the selected CE in the AC1 column.
- Step 14 Click AC1 Link Attributes and edit the attributes if desired (see the Modifying the L2VPN Service Request, page 5-22). Click OK.
- **Step 15** Repeat Steps 5 through 14 for **AC2**.

**Step 16** Click **OK**. You see a screen like Figure 5-20.

Figure 5-20 Attachment Circuits Selected



**Step 17** Click **Save**. The EWS service request is created and saved in ISC.

### Creating an L2VPN Service Request without a CE

This section includes detailed steps for creating an L2VPN service request without a CE present for ERS, ATM, and Frame Relay policies. If you are creating an L2VPN service request for an EWS policy, go to the Creating an EWS L2VPN Service Request without a CE, page 5-17.

After you choose an L2VPN policy, the L2VPN Service Request Editor window appears (see Figure 5-21).

Figure 5-21 L2VPN Service Request Editor



Step 1 Choose a **Topology** from the drop-down list. If you choose **Full Mesh**, each CE will have direct connections to every other CE. If you choose **Hub and Spoke**, then only the Hub CE has connection to each Spoke CE and the Spoke CEs do not have direct connection to each other.

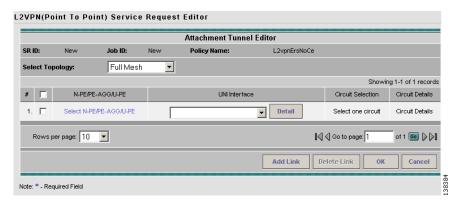


The full mesh and the hub and spoke topologies make a difference only when you choose more than two endpoints. For example, with four endpoints, ISC automatically creates six links with full mesh topology. With hub and spoke topology, however, ISC creates only three links.

### Step 2 Click Add Link.

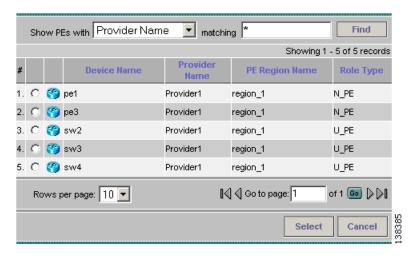
You specify the N-PE/PE-AGG/U-PE endpoints using the Attachment Tunnel Editor. You can create one or more PEs from a window like the one in Figure 5-22.

Figure 5-22 Select U-PE/PE-AGG/N-PE



- Step 3 Click Select U-PE/PE-AGG/N-PE in the U-PE/PE-AGG/N-PE column. The PE for Attachment Circuit window appears (see Figure 5-23). This window displays the list of currently defined PEs.
  - a. The Show PEs with drop-down list shows PEs by customer name, by site, or by device name.
  - **b.** The **Find** button allows a search for a specific PE or a refresh of the window.
  - c. The Rows per page drop-down list allows the page to be set to 5, 10, 20, 30, 40, or All.

Figure 5-23 Select PE Device



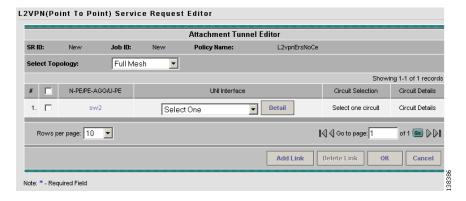
**Step 4** In the **Select** column, choose the PE device name for the L2VPN link.

#### Step 5 Click Select.

The Service Request Editor window appears displaying the name of the selected PE in the PE column.

**Step 6** Select the UNI interface from the drop-down list (see Figure 5-24).

Figure 5-24 Select the UNI Interface





When you provision an L2VPN ERS service, when you select a UNI for a particular device, ISC determines if there are other services using the same UNI. If so, a warning message is displayed. If you ignore the message and save the service request, all of the underlying service requests lying on the same UNI are synchronized with the modified shared attributes of the latest service request. In addition, the state of the existing service requests is changed to the Requested state.



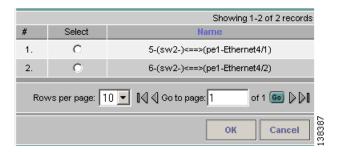
ISC only displays the available interfaces for the service, based on the configuration of the underlying interfaces, existing service requests that might be using the interface, and the customer associated with the service request. You can click the **Details** button to display a pop-up window with information on the available interfaces, such as interface name, customer name, VPN name and service request ID, service request type, VLAN translation type, and VLAN ID information.

**Step 7** If the PE role type is U-PE, click **Select one circuit** in the Circuit Selection column. The NPC window appears (see Figure 5-25). If only one NPC exists for the Chosen PE and PE interface, that NPC is auto populated in the Circuit Selection column and you need not choose it explicitly.



If the PE role type is N-PE, the columns Circuit Selection and Circuit Details are disabled.

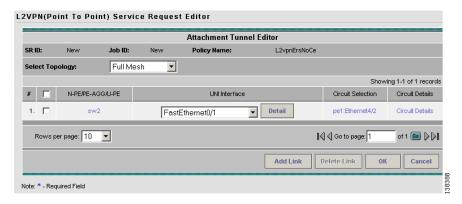
Figure 5-25 Select NPC



- Step 8 Choose the name of the NPC from the Select column.
- Step 9 Click OK.

Each time you choose a PE and its interface, the NPC that was precreated from this PE and interface is automatically displayed under **Circuit Selection** as in Figure 5-26. This means that you do not have to further specify the PE to complete the link.

Figure 5-26 NPC Created



**Step 10** If you want to review the details of this NPC, click **Circuit Details** in the Circuit Details column. The NPC Details window appears and lists the circuit details for this NPC. In Figure 5-27, the CE and PE and their corresponding interfaces appear.

Figure 5-27 NPC Details



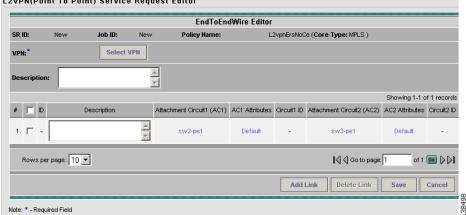
After you specify all the PEs, ISC creates the links between PEs based on the Topology that you chose.

- Step 11 Click OK. The Attachment Tunnel Editor window appears. See Figure 5-26.
- Step 12 Click OK.
- **Step 13** For ERS, ATM, and Frame Relay, the End-to-End-Wire Editor window appears as shown in Figure 5-28.

Figure 5-28

L2VPN(Point To Point) Service Request Editor EndToEndWire Editor

End-to-End Wire Editor



Step 14 The VPN for this service request appears in the Select VPN field. If there is more than one VPN, click Select VPN to choose a VPN.

You can choose any of the blue highlighted values to edit the End-to-End Wire.

You can edit the AC link attributes to change the default policy settings. After you edit these fields, the blue link changes from Default to Changed.

You can also click **Add Link** to add an end-to-end wire.

You can click **Delete Link** to delete an end-to-end wire.

You can enter a description for the service request in the first **Description** field. The description will show up in this window and also in the Description column of the Service Requests window. The maximum length for this field is 256 characters.

You can enter a description for each end-to-end wire in the **Description** field provided for each wire. The description shows up only in this window. The data in this field is not pushed to the device(s). The maximum length for this field is 256 characters.

The ID number is system-generated identification number for the circuit.

The Circuit ID is created automatically, based on the service. For example, for Ethernet, it is based on the VLAN number; for Frame Relay, it is based on the DLCI; for ATM, it is based on the VPI/VCI.

Step 15 When you are finished editing the end-to-end wires, click **Save**.

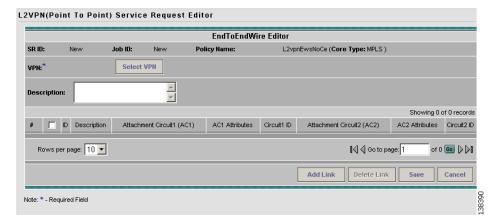
The service request is created and saved into ISC.

### Creating an EWS L2VPN Service Request without a CE

This section includes detailed steps for creating an L2VPN service request without a CE present for EWS. If you are creating an L2VPN service request for an ERS, ATM, or Frame Relay policy, see Creating an L2VPN Service Request without a CE, page 5-13.

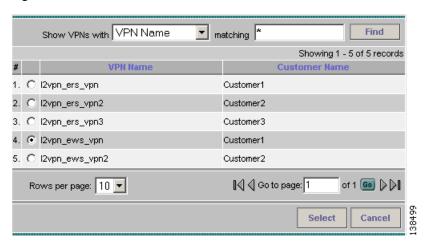
After you choose an L2VPN policy, the L2VPN Service Request Editor window appears (see Figure 5-29).

Figure 5-29 EWS Service Request Editor



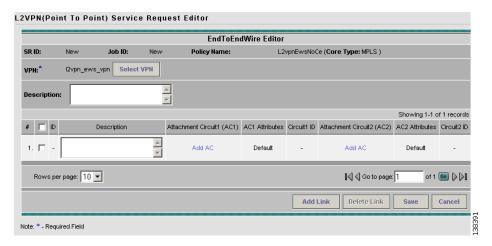
Step 1 Click Select VPN to select a VPN for use with this PE. The Select a VPN window appears with the VPNs defined in the system. See Figure 5-30.

Figure 5-30 Select a VPN



- Step 2 Choose a VPN Name in the Select column.
- **Step 3** Click **Select**. The L2VPN Service Request Editor window appears with the VPN name displayed.
- Step 4 Click Add Link. See Figure 5-31.

Figure 5-31 End-To-End Wire Editor



You can enter a description for the service request in the first **Description** field. The description will show up in this window and also in the Description column of the Service Requests window. The maximum length for this field is 256 characters.

You can enter a description for each end-to-end wire in the **Description** field provided for each wire. The description shows up only in this window. The data in this field is not pushed to the device(s). The maximum length for this field is 256 characters.

The ID number is system-generated identification number for the circuit.

The Circuit ID is created automatically, based on the service. For example, for Ethernet, it is based on the VLAN number; for Frame Relay, it is based on the DLCI; for ATM, it is based on the VPI/VCI.

Step 5 Click Add AC in the Attachment Circuit (AC1) column. See Figure 5-32.

Figure 5-32 Select the PE for the Attachment Circuit

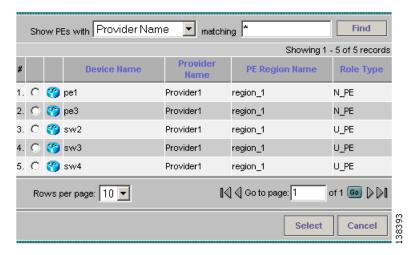


Step 6 Click Select N-PE/PE-AGG/U-PE. The PE for Attachment Circuit window appears as shown in Figure 5-33.

This window displays the list of currently defined PEs.

- **a.** From the **Show PEs with** drop-down list, you can display PEs by Customer Name, by Site, or by Device Name.
- **b.** You can use the **Find** button to either search for a specific PE, or to refresh the display.
- **c.** You can set the **Rows per page** to 5, 10, 20, 30, 40, or All.

Figure 5-33 PE for Attachment Circuit



- Step 7 In the Select column, choose a PE for the L2VPN link.
- Step 8 Click Select.
- **Step 9** Choose a PE interface from the drop-down list as shown in Figure 5-34.

Figure 5-34 PE Interface





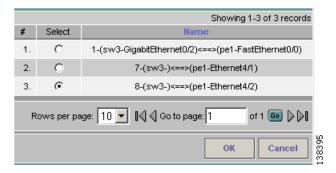
ISC only displays the available interfaces for the service, based on the configuration of the underlying interfaces, existing service requests that might be using the interface, and the customer associated with the service request. You can click the **Details** button to display a pop-up window with information on the available interfaces, such as interface name, customer name, VPN name and service request ID, service request type, VLAN translation type, and VLAN ID information.

- **Step 10** Click **OK** if the PE role type is N-PE.
- **Step 11** If the PE role type is U-PE, click **Select one circuit** in the Circuit Selection column. The NPC window appears (see Figure 5-35). If only one NPC exists for the Chosen PE and PE interface, that NPC is auto populated in the Circuit Selection column and you need not choose it explicitly.



If the PE role type is N-PE, the columns Circuit Selection and Circuit Details are disabled.

Figure 5-35 Select NPC



- **Step 12** Choose the name of the NPC from the Select column.
- Step 13 Click OK.

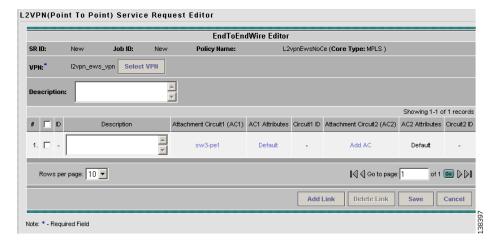
Each time you choose a PE and its interface, the NPC that was precreated from this PE and interface is automatically displayed under **Circuit Selection** as in Figure 5-36. This means that you do not have to further specify the PE to complete the link.

Figure 5-36 NPC Created



**Step 14** Click **OK**. The Service Request Editor window (Figure 5-37) appears displaying the name of the selected PE in the AC1 column.

Figure 5-37 Attachment Circuit Selected



Step 15 Click AC1 Link Attributes and edit the attributes if desired (see the Modifying the L2VPN Service Request, page 5-22). Click OK.

You can enter a description for the service request in the first **Description** field. The description will show up in this window and also in the Description column of the Service Requests window. The maximum length for this field is 256 characters.

You can enter a description for each end-to-end wire in the **Description** field provided for each wire. The description shows up only in this window. The data in this field is not pushed to the device(s). The maximum length for this field is 256 characters.

The ID number is system-generated identification number for the circuit.

The Circuit ID is created automatically, based on the service. For example, for Ethernet, it is based on the VLAN number; for Frame Relay, it is based on the DLCI; for ATM, it is based on the VPI/VCI.

- **Step 16** Repeat Steps 5 through 15 for **AC2**.
- **Step 17** Click **Save**. The EWS service request is created and saved in ISC.

## **Modifying the L2VPN Service Request**

After you choose all the CE end points and the NPC from the CE, go to the End-to-End Wire Editor and work on the end-to-end wire—the end-to-end connection that links two CEs. An end-to-end wire is a virtual logical link between a CE-CE pair. Each end-to-end-wire is associated with one end-to-end wire attribute and two attachment circuits (ACs). An AC is a virtual logical link between a CE-PE pair. Each AC is associated with one set of AC attributes and one or more L2VPN logical links.

Step 1 Select Service Inventory > Inventory and Connection Manager > Service Requests. See Figure 5-38.

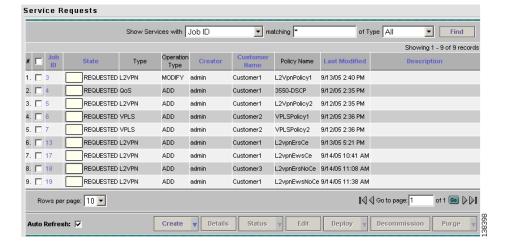


Figure 5-38 L2VPN Service Activation

- **Step 2** Select a check box for a service request.
- Step 3 Click Edit. The End-to-End-Wire Editor window appears as shown in Figure 5-39.

L2VPN(Point To Point) Service Request Editor EndToEndWire Editor SR ID Job ID: 13 L2vpnErsCe (Core Type: MPLS ) I2vpn\_ers\_vpn | Select VPN Showing 1-1 of 1 records Attachment Circuit1 (AC1) Attachment Circuit2 # 🗀 ID Description <u></u> ← 1. 🔲 8 VLAN:1 104 Rows per page: 10 ▼ of 1 🚳 🕨 💵 Note: \* - Required Field

Figure 5-39 End-to-End Wire Editor

Step 4 The VPN for this service request appears in the Select VPN field. If this request has more than one VPN, click Select VPN to choose a VPN.

You can choose any of the blue highlighted values to edit the End-to-End Wire.

You can edit the AC link attributes to change the default policy settings. After you edit these fields, the blue link changes from Default to Changed.

You can enter a description for the service request in the first **Description** field. The description will show up in this window and also in the Description column of the Service Requests window. The maximum length for this field is 256 characters.

You can enter a description for each end-to-end wire in the **Description** field provided for each wire. The description shows up only in this window. The data in this field is not pushed to the device(s). The maximum length for this field is 256 characters.

The Circuit ID is created automatically, based on the VLAN data for the circuit.

If the policy was set up for you to define a VC ID manually, enter it into the empty **VC ID** field. If policy was set to "auto pick" the VC ID, ISC will supply a VC ID, and this field will not be editable. In the case where you supply the VC ID manually, if the entered value is in the provider's range, ISC validates if the entered value is available or allocated. If the entered value has been already allocated, ISC generates an error message saying that the entered value is not available and prompts you to re-enter the value. If the entered value is in the provider's range, and if it is available, then it is allocated and is removed from the VC ID pool. If the entered value is outside the provider's range, ISC displays a warning saying that no validation could be performed to verify if it is available or allocated.

You can also click **Add Link** to add an end-to-end wire.

You can click Delete Link to delete an end-to-end wire.

The ID number is system-generated identification number for the circuit.

The Circuit ID is created automatically, based on the service. For example, for Ethernet, it is based on the VLAN number; for Frame Relay, it is based on the DLCI; for ATM, it is based on the VPI/VCI.

Step 5 To add a template data file to an attachment circuit, click **Default**. The Link Attributes window appears as shown in Figure 5-40.



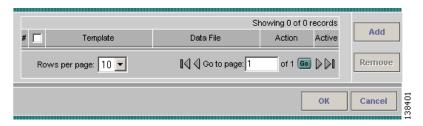
To add a template to an attachment circuit, you must have already created the template. For detailed steps to create templates, see *Cisco IP Solution Center Infrastructure Reference*, 4.1.

Link Attributes Attribute Value PE Information Interface Name Ethernet4/3 굣 Standard UNI Port PE/UNI Interface Description: DOT1Q 🔻 Encapsulation: CE Information Ethernet0/1 Interface Name Encapsulation: DOT1Q (xxxxxx) VLAN and Other Information 굣 VLAN ID AutoPick VLAN Name None Link Speed ▼ None 🔻 Link Duplex Use Existing ACL Name Port-Based ACL Name Edit UNI MAC Addresses 굣 VLAN Translation Device Name Templates MANAGED N\_PE Cancel Note: \*- Required Field

Figure 5-40 Link Attributes Window

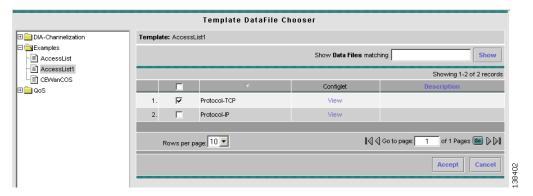
**Step 6** Choose a Device Name, and click **Add** under Templates. The Add/Remove Templates window appears as shown in Figure 5-41.

Figure 5-41 Add/Remove Templates



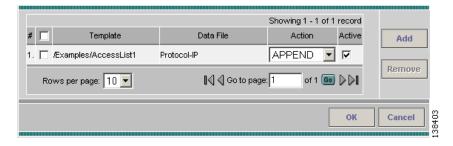
**Step 7** Click **Add**. The Template Data File Chooser window appears as shown in Figure 5-42.

Figure 5-42 Template Datafile Chooser



**Step 8** Select the template that you want to add and click **Accept**. The Add/Remove Templates window appears with the template displayed as shown in Figure 5-43.

Figure 5-43 Add/Remove Templates with Templates Shown



- **Step 9** Choose a Template name.
- **Step 10** Under Action, use the drop-down list and select **APPEND** or **PREPEND.** Append tells ISC to append the template generated CLI to the regular ISC (non-template) CLI. Prepend is the reverse and does not append the template to the ISC CLI.
- **Step 11** Select Active to use this template for this service request. If you do not select Active, the template is not used.
- Step 12 Click OK. The Link Attributes with the template added appears as shown in Figure 5-44

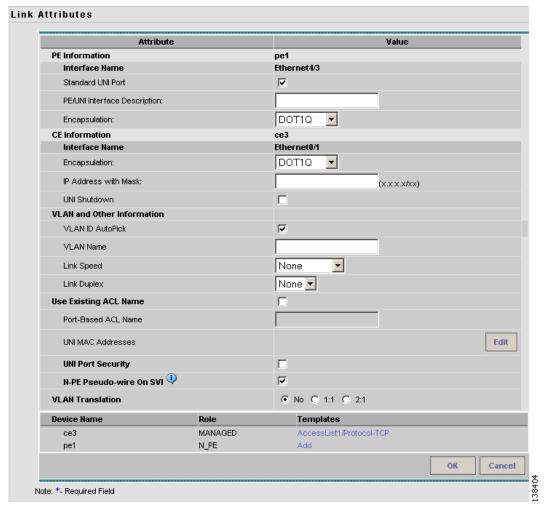


Figure 5-44 Link Attributes with Template Added

Step 13 Click OK. The Service Request Editor window appears showing the default for AC1 changed as shown in Figure 5-45.

Figure 5-45 Service Request Editor with Link Attributes Changed.

**Step 14** When you are finished editing the end-to-end wires, click **Save**.

## Saving the L2VPN Service Request

When you are finished with Link Attributes for all the Attachment Circuits, click **Save** to finish the L2VPN service request creation as shown in Figure 5-46.

If the L2VPN service request is successfully created, you will see the service request list window where the newly created L2VPN service request is added with the state of REQUESTED as shown in Figure 5-46. If, however, the L2VPN service request creation failed for some reason (for example, the value chosen is out of bounds), you are warned with an error message. Go back to correct the error and **Save** again.

Figure 5-46 L2VPN Service Request Created



The L2VPN service request is in Requested state. See Deploying Service Requests, page 12-1 for information on deploying L2VPN service requests.

Saving the L2VPN Service Request