Traffic Admission

Tunnel admission is the first step towards enabling services on TE tunnels. There are a number of mechanisms that can be used for forwarding traffic into a tunnel to provide basic IP connectivity. The current implementation of Cisco IP Solution Center Traffic Engineering Management (ISC TEM) uses static routing.

The TE Traffic Admission tool is used to assign traffic to traffic-engineered tunnels.

This chapter contains the following sections:

Overview

Static routing is perhaps the simplest way of forwarding traffic into a tunnel. Traffic that matches a target destination prefix is routed into a particular tunnel.

While this achieves the basic goal of directing traffic into a given tunnel, this approach has limitations. First, the offering of differentiated Class-of-Service (CoS) treatment is limited to destination-based CoS. As each source PE serves as an aggregation point for a number of traffic flows, there is no way to restrict which traffic receives preferential treatment to a destination since access to a tunnel is through general routing. Second, it does not generally provide a scalable solution because the static routing mechanism must capture both the large number of subnets that can be served by each PE router, and it must be able to further capture CoS treatment for each of these subnets.

Static routing works best if there is no need to provide differentiated CoS treatment by destination. That is, all packets destined for one or more particular prefixes all receive the same CoS.

Creating a TE Traffic Admission SR

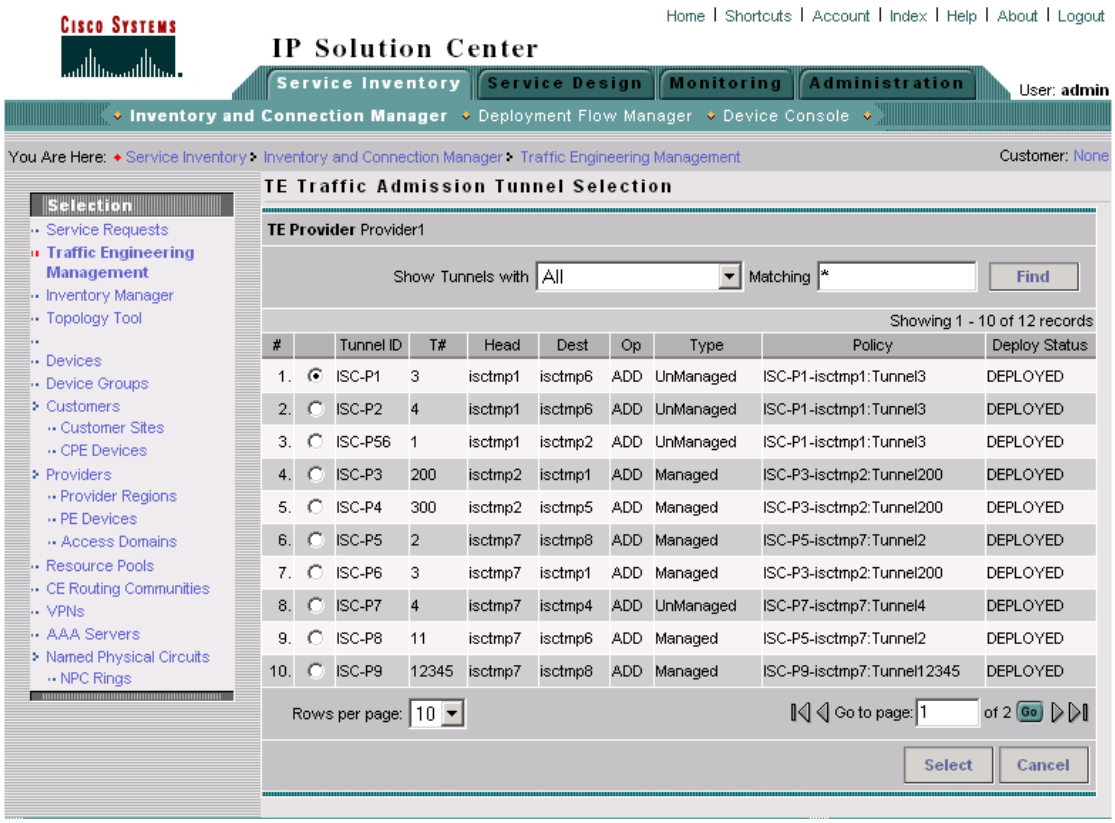
To create a TE Traffic Admission SR, use the following steps:

Step 1 Navigate **Service Inventory** > **Inventory and Connection Manager** > **Traffic Engineering Management**.

Step 2 Click **TE Traffic Admission**.

The TE Traffic Admission Tunnel Selection window in Figure 8-1 appears.

Figure 8-1 TE Traffic Admission Tunnel Selection



For an explanation of the various window elements, see Select TE Tunnel for Admission, page A-64.

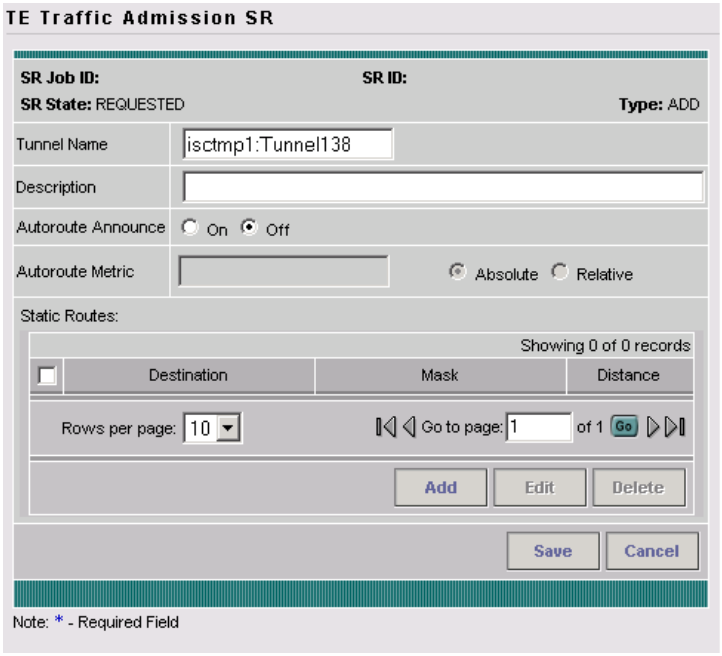
The TE Traffic Admission Tunnel Selection window lists all primary tunnels, both managed and unmanaged, that are not already associated with an admission SR.

The **Deploy Status** can be **Pending**, **Deployed**, or **Functional**.

Note Backup tunnels are not displayed in the TE Traffic Admission Tunnel Selection window.

Step 3 Select a TE tunnel by clicking the corresponding radio button and clicking **Select**. The TE Traffic Admission SR window in Figure 8-2 appears.

Figure 8-2 TE Traffic Admission SR

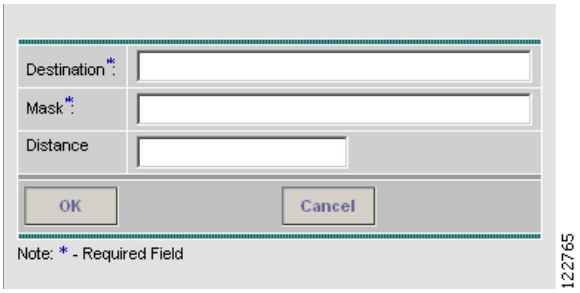


For an explanation of the various fields and buttons, see TE Traffic Admission SR, page A-65.

Step 4 When filling out the form, if **Autoroute Announce** is set to **On**, indicate whether **Autoroute Metric** should be **Absolute** or **Relative**.

When clicking the **Add** button, the Add TE Static Route window in Figure 8-3 appears.

Figure 8-3 Add TE Static Route



Step 5 In the Add TE Static Route window, specify at a minimum a **Destination** router and a network **Mask**. Optionally specify an administrative **Distance**.

Click **OK** to accept the entries or **Cancel** to exit the screen.

Step 6 Back in the main TE Traffic Admission SR window, you can add another TE Static Route or edit existing routes.

Step 7 Click **Save SR** to save the SR.

To deploy the SR from the Service Requests window, see Deploying a TE Traffic Admission SR, page 8-4.

Deploying a TE Traffic Admission SR

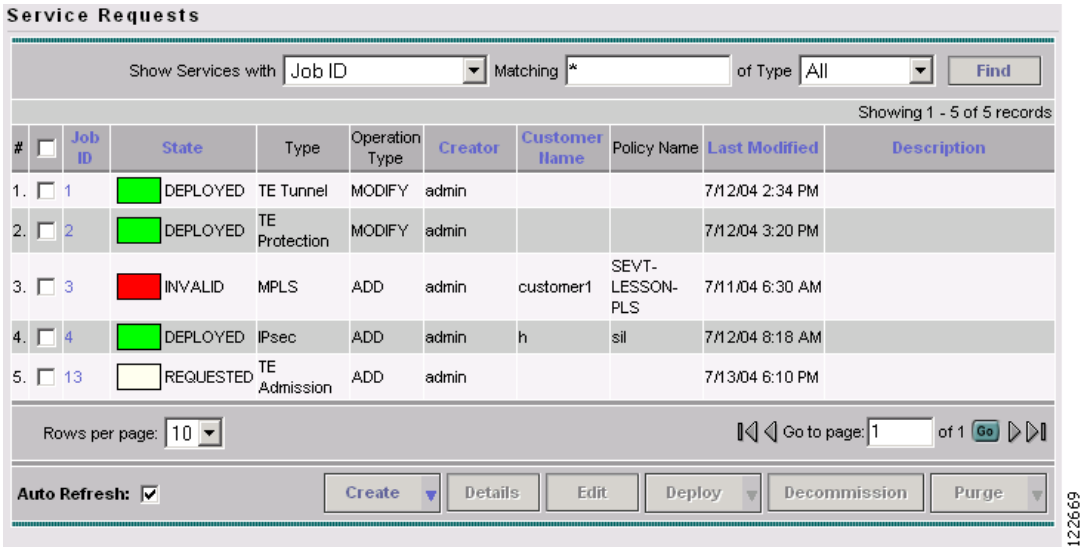
As opposed to the TE Primary and Backup Tunnel SR screens, a TE Admission SR must be deployed from the general Service Requests window.

To deploy a TE Admission SR, use the following steps:

Step 1 Navigate **Service Inventory** > **Inventory and Connection Manager** > **Service Requests**.

Step 2 Click **TE Traffic Admission**. The Service Requests window in Figure 8-4 appears.

Figure 8-4 Service Requests



The Service Requests window contains the following elements:

- **Job ID**—Job ID for the SR.
- **State**—Indicates whether the tunnel state is DEPLOYED or NOT DEPLOYED and whether it is Conformed or Not Conformed.
- **Type**—The type of service request, indicating which service issued the request. For a detailed description of the possible service types, see Cisco IP Solution Center Infrastructure Reference, 4.0.
- **Operation Type**—SR operation on the tunnel, can be either **ADD, MODIFY, DELETE,** or **ADMIT**. Applicable only to tunnels in the current SR.
- **Creator**—ID for the user who created the SR.
- **Customer Name**—Name of the customer to which the SR applies.
- **Policy Name**—Name of the policy associated with the SR.
- **Last Modified**—Date and time when the SR was last modified.
- **Description**—SR description provided by the user.

Step 3 Select the desired service request and click **Deploy**. A drop-down menu appears under the **Deploy** button.

In the drop-down menu, select **Deploy** or **Force Deploy**. After having been successfully deployed, the **State** of the SR changes to **Deployed**.

Viewing the SR State

To view a service request state, go to the Service Requests window under **Inventory and Connection Manager**.

If the SR does not enter the **Deployed** state, go to the **Task Logs** screen to see the deployment log (**Monitoring > Task Manager** > **Logs**) as described in SR Deployment Logs, page 10-1.