



Visualize RSVP-TE Tunnels



Note When using the Crosswork Network Controller solution, the navigation is **Traffic Engineering & Services > Traffic Engineering**.

For a list of known limitations, important notes, and what networking technologies are supported, see the [Cisco Crosswork Optimization Engine Release Notes](#).

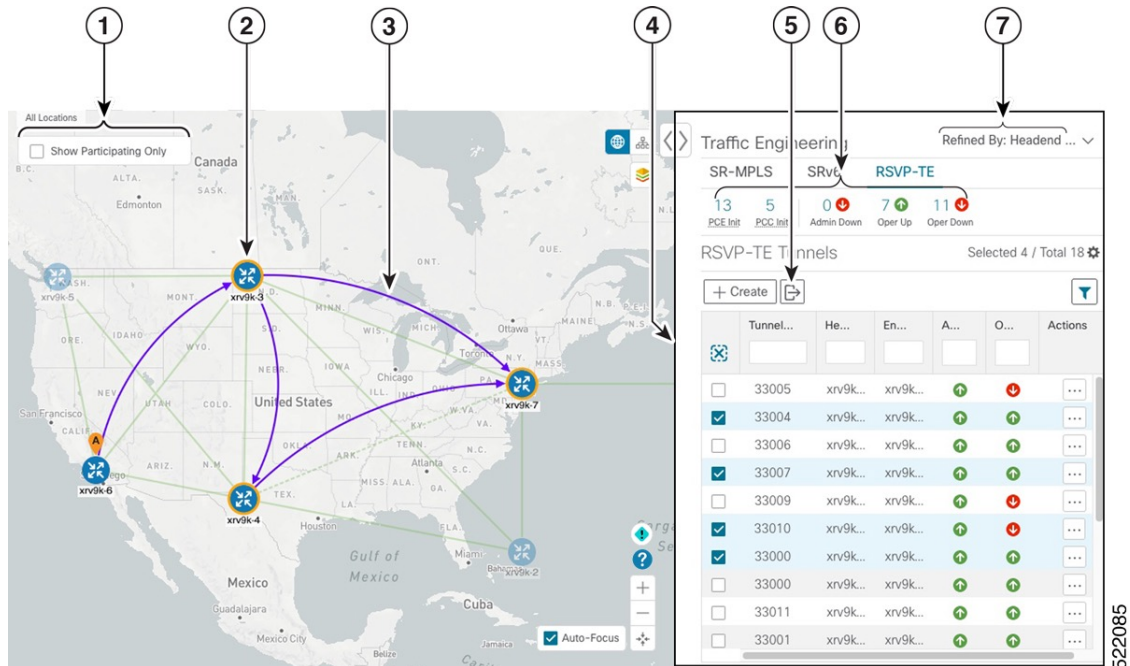
This section contains the following topics:

- [View RSVP-TE Tunnels on the Topology Map, on page 1](#)
- [View RSVP-TE Tunnel Details, on page 3](#)
- [View Traffic Engineering Device Details, on page 5](#)

View RSVP-TE Tunnels on the Topology Map

To get to the Traffic Engineering topology map for RSVP-TE visualization, choose **Traffic Engineering > Traffic Engineering > RSVP-TE** tab.

Figure 1: Traffic Engineering UI - RSVP-TE Tunnels



Callout No.	Description
1	Click Show Participating Only to display links that only belong to the selected RSVP-TE tunnels. All other links and devices disappear.
2	<p>A device with a solid orange outline (🔴) indicates that it is a strict hop. A dashed orange outline indicates that a loose hop was discovered.</p> <p>Note RSVP-TE tunnels cannot be configured with loose hops when provisioning in the UI.</p>
3	<p>When RSVP-TE tunnels are selected in the RSVP-TE Tunnel table, they show as purple directional lines on the map indicating source and destination.</p> <ul style="list-style-type: none"> Record Route Object (RRO) paths are shown as straight lines. Explicit Route Object (ERO) paths are shown as curved lines. <p>Note If both RRO and ERO paths are available, the RRO path is displayed by default.</p> <ul style="list-style-type: none"> An adjacency segment ID (SID) is shown as a green dot on a link along the path (🟢). <p>If both A and Z are displayed in a device cluster, at least one node in the cluster is a source and another is a destination. The A+ denotes that there is more than one RSVP-TE tunnel that originates from a node. The Z+ denotes that the node is a destination for more than one RSVP-TE tunnel.</p>

Callout No.	Description
4	<p>The content of this window depends on what has been selected or filtered. In this example, the RSVP-TE tab is selected and the RSVP-TE Tunnels table is displayed. Depending on what is selected on the topology map, or whether you are in the process of viewing and managing RSVP-TE tunnels, you can do the following:</p> <ul style="list-style-type: none"> • Create Dynamic RSVP-TE Tunnels Based on Optimization Intent • Create Explicit RSVP-TE Tunnels • Modify RSVP-TE Tunnels • View RSVP-TE Tunnel Details, on page 3 • View Device and Link Details
5	Exports <i>all</i> data into a CSV file. You cannot export selected or filtered data.
6	The Mini Dashboard provides a summary of the operational RSVP-TE tunnel status and the number of PCC and PCE initiated tunnels that are <i>currently</i> listed in the RSVP-TE tables. If filters are applied, the Mini Dashboard is updated to reflect what is displayed in the RSVP-TE table.
7	<p>This option allows you to choose how the group filter (when in use) should be applied on the table data. For example, if Headend only was selected, then it would only display policies where the headend device of the policy is in the selected group. This filter allows you to see specific configurations and is useful when you have a large network.</p> <p>Filter options:</p> <ul style="list-style-type: none"> • Headend or Endpoint—Show policies with either the headend or endpoint device in the selected group. • Headend and Endpoint—Show policies if both the headend and endpoint are in the group. • Headend only—Show policies if the headend device of the policy is in the selected group. • Endpoint only—Show policies if endpoint device of the policy is in the selected group.

View RSVP-TE Tunnel Details

View RSVP-TE tunnel details such as binding label, delegated PCE, metric type, ERO/RRO, delay, and so on.

Step 1 From the **Actions** column, click  > **View Details** for one of the RSVP-TE tunnels.

View RSVP-TE Tunnel Details

Traffic Engineering Refined By: Headend ...

SR-MPLS SRv6 **RSVP-TE**

13 FSC Inst 2 FSC Inst 0 Admin Down 7 Oper Up 8 Oper Down

RSVP-TE Tunnels Selected 1 / Total 15

+ Create

Tunnel ID	Headend	Endpoint	Admin St...	Oper Sta...	Actions
<input type="checkbox"/> 33005	xrv9k-3	xrv9k-7	+	-	...
<input type="checkbox"/> 33004	xrv9k-3	xrv9k-7	+	+	...
<input type="checkbox"/> 33006	xrv9k-3	xrv9k-7	+	+	...
<input type="checkbox"/> 33007	xrv9k-3	xrv9k-7	+	+	...
<input type="checkbox"/> 33009	xrv9k-3	xrv9k-7	+	-	...
<input type="checkbox"/> 33010	xrv9k-3	xrv9k-7	+	+	...
<input checked="" type="checkbox"/> 33000	xrv9k-6	xrv9k-7	+	+	View Details Edit / Delete
<input type="checkbox"/> 33000	xrv9k-7	xrv9k-5	+	+	...
<input type="checkbox"/> 33011	xrv9k-3	xrv9k-5	+	+	...
<input type="checkbox"/> 33001	xrv9k-3	xrv9k-5	+	+	...
<input type="checkbox"/> 32321	xrv9k-5	xrv9k-7	+	-	...
<input type="checkbox"/> 33013	xrv9k-3	xrv9k-7	+	-	...
<input type="checkbox"/> 33014	xrv9k-3	xrv9k-7	+	-	...
<input type="checkbox"/> 33015	xrv9k-3	xrv9k-7	+	-	...
<input type="checkbox"/> 1235	xrv9k-3	xrv9k-7	+	-	...

Step 2 View RSVP-TE tunnel details.**Note**

- For end-to-end delays on RSVP-TE tunnels, inter-domain RSVP-TE tunnels must all be explicit (every interface along that path is specified as an adjacency hop).
- The Delay value is calculated for all policies every 10 minutes. Hover your mouse over the "i" icon (next to the Delay value) to view the last time the value was updated.

RSVP-TE Tunnel Details
⋮ | ✕

Headend A xrv9k-6 (192.168.0.6)

Endpoint Z xrv9k-7 (192.168.0.7)

Tunnel ID 33000

▼ Summary

- Description** -
- Path Name** 60701-rsvp
- LSP ID** 6
- Path Type** Unknown
- Admin State** ↑ Up
- Oper State** ↑ Up
- Utilization** 0 Mbps
- Delay** 109 ⏱
- Signaled Bandwidth** 0 Mbps
- Setup / Hold Priority** 7 / 7
- Metric Type** IGP
- Fast Re-route (FRR)** Disable
- Binding Label** 24012
- Accumulated Metric** 20
- Disjoint Group** ID: -
Association Source: -
Type: -
- PCE Initiated** true
- Delegated PCE** 2001:420:28f:2011:250:56ff:fe85:a025
- Non-delegated PCEs** -
- Affinity** Exclude-Any: -
Include-Any: -
Include-All: -
- PCE Computed Time** 27-Oct-2021 12:33:03 PM PDT
- Last Update** 27-Oct-2021 12:39:58 PM PDT

Explicit Route Object (ERO)

Hop	Node	IP	Interface Name	Type
0	xrv9k-3	10.0.0.29	GigabitEthernet0/0/0/4	Strict
1	xrv9k-7	10.0.0.42	GigabitEthernet0/0/0/1	Strict

View Traffic Engineering Device Details

To view Traffic Engineering Device details (SR-MPLS, SRv6, RSVP-TE, and Flexible Algorithm information), do the following:

- Step 1** From the main menu choose **Traffic Engineering > Traffic Engineering**.
- Step 2** From the Traffic Engineering topology map, click on a device.
- Step 3** From the **Device Details** page, click on the traffic engineering tab you are interested in. Each tab displays associated data for that device.

The following example shows SR-MPLS Prefix information which includes the MSD value for the device.

View Traffic Engineering Device Details

All Locations

Show Groups
 Auto-Focus

Device Details

[Details](#)
[Links](#)
[Alarms](#)
[SR-MPLS](#)
[SRv6](#)
[Tree-SID](#)
[RSVP-TE](#)

[Policies](#)
[Prefixes](#)
[Expand All](#)

IGP: Domain ID: 1000, ISIS System ID: 0000.0000.0005, Level: 2

SRGB 16000 - 23999
SRv6 105000 - 105999
MSD 10

Prefixes	Label	Algo
192.168.0.5	18115	0