Configure Layer 2 Services

For supported software information, click [here](#).

You can configure Layer 2 services on Versa Operating System™ (VOS™) devices. These services allow you to apply many Layer 3 SD-WAN path selection policies to Layer 2 traffic.

When you enable Layer 2 services, the VOS device identifies traffic flows on which to use VOS Layer 2 services. A common use case is an Ethernet VPN (EVPN) over SD-WAN. With Layer 2 SD-WAN policies, you can create rules to match different flows and apply actions. You can define forwarding profiles and SLA profiles, to apply traffic engineering for Layer 2 traffic. You can achieve granular control of Layer 2 traffic and use all available WAN transport paths optimally.

When you enable Layer 2 services you can configure Layer 2 SD-WAN traffic steering, Layer 2 SD-WAN policies, SLA profies for Layer 2 SD-WAN traffic steering, and MOS score monitoring for Layer 2 forwarding.

This article describes how to enable Layer 2 services.

Enable Layer 2 Services

On VOS devices, you configure, at the organization level, whether to switch Layer 2 traffic with services. By default, Layer 2 services are disabled and so Layer 2 traffic is switched without applying any services.

A subset of Layer 3 SD-WAN services are selected for Layer 2 flows. When you configure Layer 2 services for an organization, you can enable or disable whether Layer 2 services run.

To enable Layer 2 services:

1. In Director view:
   a. Select the Administration tab in the top menu bar.
   b. Select Appliances in the left menu bar.
   c. Select an appliance in the main pane. The view changes to Appliance view.
2. Select Configuration in the top level menu.
3. Select Others > Organization > Settings in the left menu bar.
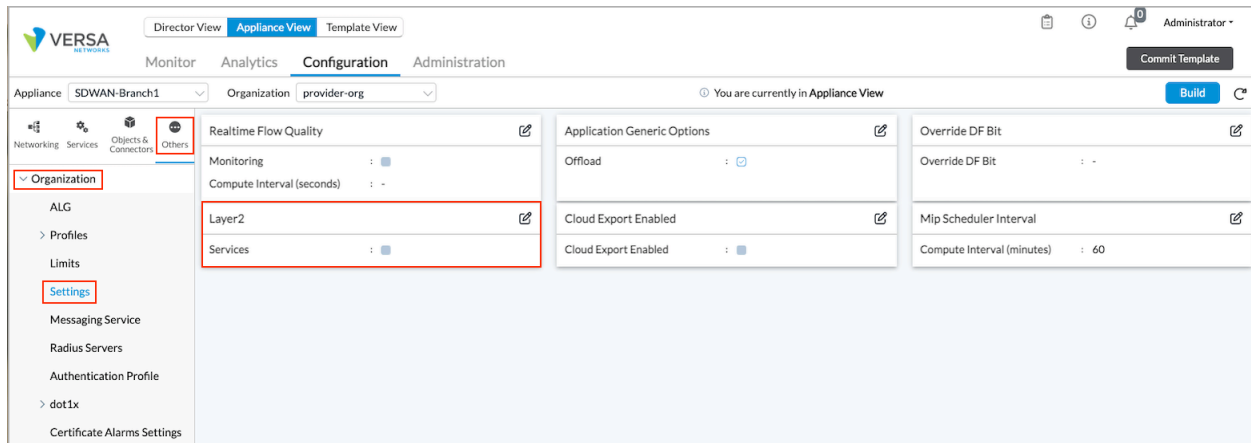
4. Click the Edit icon in the Layer 2 pane. The Edit Layer 2 popup window displays.
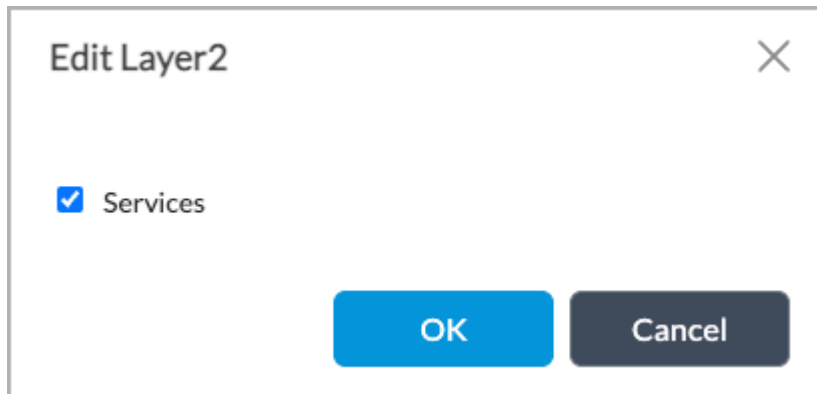
5. Click the Services field.
6. Click OK.

Enable the MPLS Service

The Versa SD-LAN solution allows you to connect disjointed MPLS networks over SD-LAN. The solution allows you to not only connect remote MPLS sites, which can connect to each other using LDP or RSVP, but also to look inside MPLS packets, distinguish different flows, and perform traffic steering and COS operations. To enable this feature and allow the system to look inside MPLS data packets, you need to enable the MPLS service at the virtual-switch level.

For Layer 2 service policies, the following information from first the Ethernet header (for example, VLAN, MAC addresses) and starting from first IP header is used:
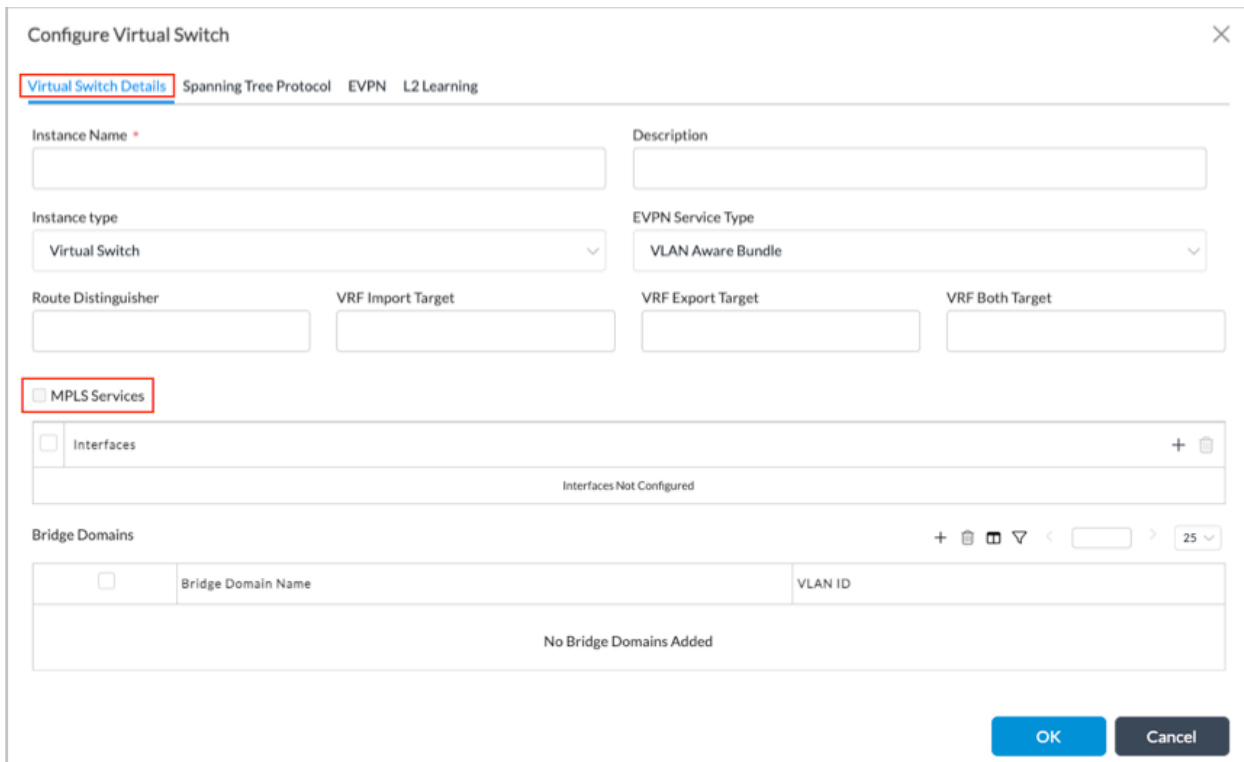
Ether Header | MPLS Labels | IP4/IP6
Ether Header Outer | MPLS Labels | Control Word(4 Bytes) | Ether Header Inner | IP4/IP6

To enable the MPLS service:

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1. Enable Layer 2 services at the organization level, as described in <u>Enable Layer 2 Services</u> above.

2. In Director view:

    a. Select the Administration tab in the top menu bar.

    b. Select Appliances in the left menu bar.

    c. Select an appliance in the main pane. The view changes to Appliance view.

3. Select Configuration in the top menu bar.

4. Select Networking > Virtual Switches in the left menu bar. The main pane displays a list of the already configured virtual switches.

5. Click the + Add icon or select an existing virtual switch. In the popup window, select Virtual Switch Details in the top menu bar, then click the MPLS Services checkbox.

    Note: If you are adding a new virtual switch, see <u>Configure a Virtual Switch with Bridge Domains and Bridge Interfaces</u> for configuration information.
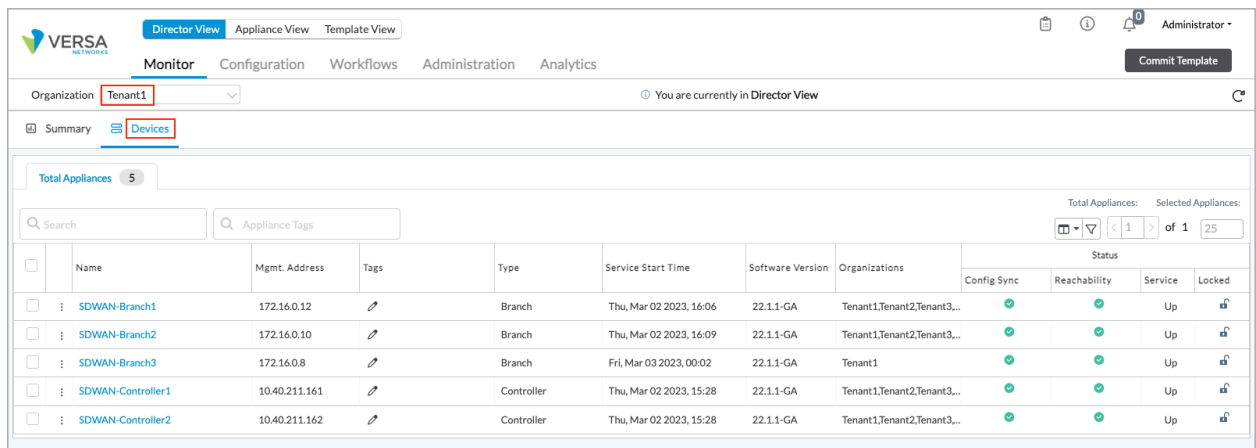

6. Click OK to enable the MPLS service feature.

Verify Layer 2 Sessions

1. In Director view:

    a. Select the Monitor tab in the top menu bar.

    b. Select the organization in the Organization field.

c. Select the Devices tab in the horizontal menu bar. The currently configured devices display in the main pane.
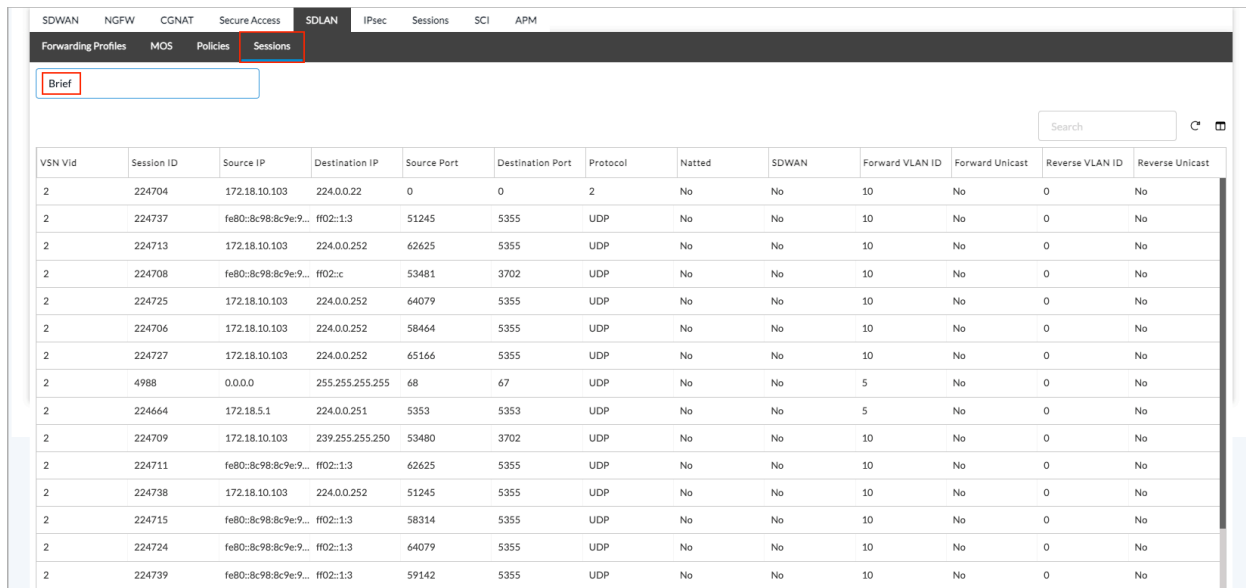

d. Select a device in the main pane. The view changes to Appliance view.

2. Select the Services tab in the horizontal menu bar.

3. In the Services pane, select SD-LAN > Sessions in the horizontal submenus
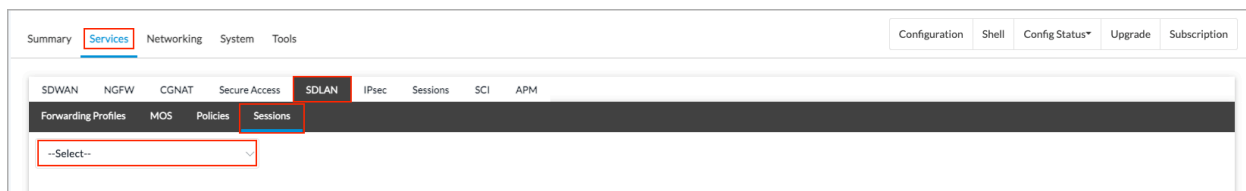
4. Select Brief, Detail, Summary, or Extensive from the drop-down list to display the corresponding session data.

Supported Software Information

Releases 21.2.1 and later support all content described in this article.

Additional Information

[Configure Layer 2 Forwarding](#)
[Configure MOS Score Monitoring](#)
[Configure SD-WAN Policy](#)
[Configure SD-WAN Traffic Steering](#)
[Configure SLA Profiles for SD-WAN Traffic Steering](#)