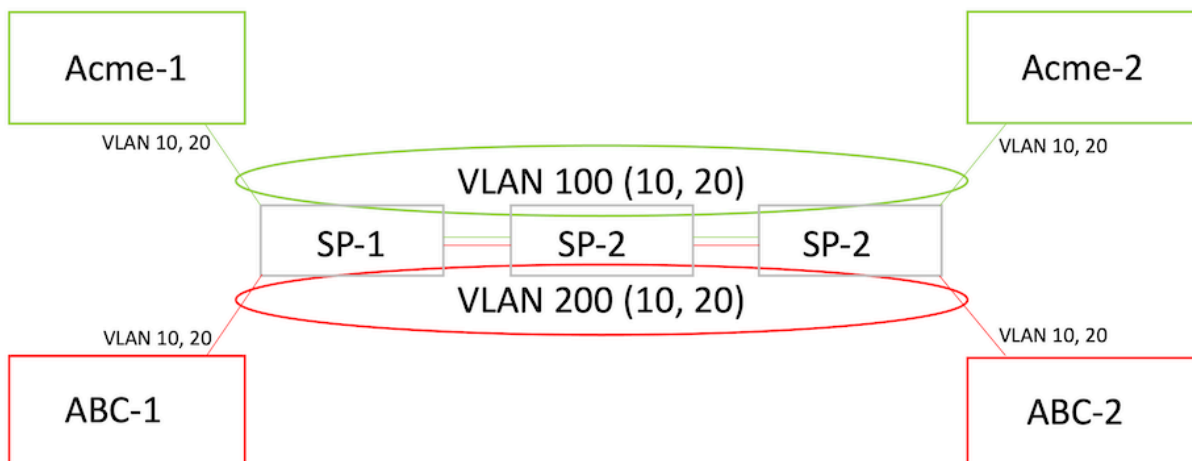


Configure Q-in-Q Inner VLAN Tagging in Concerto

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

IEEE 802.1Q tunneling, commonly called Q-in-Q, extends VLANs between different enterprises in a service provider network. You configure Q-in-Q by defining an inner VLAN ID in addition to the regular VLAN ID for a WAN or LAN interface. Versa Q-in-Q allows you to use the full VLAN space (4096 x 4096) as a single addressing and segmentation space, and it allows you to classify and forward packets using any Q-in-Q VLAN values.

The example below illustrates Q-in-Q. Here, a service provider has two customers, Acme and ABC, and each of the customers has two locations, Acme-1 and Acme-2, and ABC-1 and ABC-2. Both customers use VLAN IDs 10 and 20 for the traffic between their sites. To separate the traffic of the two customers, the service provider inserts a second, inner VLAN ID that is unique to each customer. For customer Acme, the service provider creates VLAN 100, which includes Acme's VLAN IDs 10 and 20. Likewise, the service provider creates VLAN 200 for customer ABC that includes ABC's VLAN IDs 10 and 20. The inner VLAN tags (100 and 200) are added when the traffic enters the service provider's network and is removed when the traffic exits the service provider's network. In this way, the service provider can separate and transport the traffic for each customer even though they use the same VLAN IDs (VLAN 10 and VLAN 20).



To configure Q-in-Q inner VLAN tagging:

1. In the Tenant view for the SD-WAN tenant, click the Configuration lifecycle in the left menu bar.
2. Select the master profile that contains the interface on which to configure Q-in-Q tagging.
3. Select the General tab in the Create Interface screen, and enter information for the following fields.

<

Create Interface

V1

General

Connection

QoS

Permissions

Name

Private

Version 1

Description

Type

Physical

Virtual

Enabled

Block ICMP

Speed Test Server

Category

WAN

Sub Category

Wired

Location

VLAN ID

10

Inner VLAN ID

0-4094

Link

Speed

Mode

MTU

Auto

AUTO_DUPLEX

72-9000

Cancel

Next

Field	Description
Name	Enter a name for the interface.

Field	Description
Type	Click the slider to Physical.
Enabled	Click the slider to Enabled.
Category	<p>Select the interface category. Q-in-Q VLAN tagging is supported on the following types of interfaces:</p> <ul style="list-style-type: none"> ◦ LAN—AE, AE subinterface, IRB, wired ◦ Redundant WAN—IRB, wired ◦ WAN—IRB, wired
Subcategory	Select Wired.
Location	Select the location of the interface.
VLAN ID	<p>Enter the VLAN ID of the interface.</p> <p><i>Range:</i> 0 through 4094</p> <p><i>Default:</i> None</p>
Inner VLAN ID	<p>Enter the inner VLAN ID of the interface. Note that the Inner VLAN ID field is not visible until you enter a VLAN ID.</p> <p><i>Range:</i> 0 through 4094</p> <p><i>Default:</i> None</p>

4. Configure the remaining interface details as desired.
5. Select the Permissions tab, and then click Save.

Supported Software Information

Releases 11.3.1 and later support all content described in this article.

Additional Information

[Configure Appliances and Hubs](#)