

Configure App-Hosting on High Performance Catalyst 9500 Switches

Contents

Introduction

This document describes how to configure app hosting on high performance C9500 switches using an interface from the front panel.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- LAN Switching
- App hosting on Catalyst 9000

Components Used

The information in this document is based on these software and hardware versions:

- Hardware: C9500-24Y4C, C9500-48Y4C, C9500-32C, C9500-32QC
- Software Version: 17.12.3

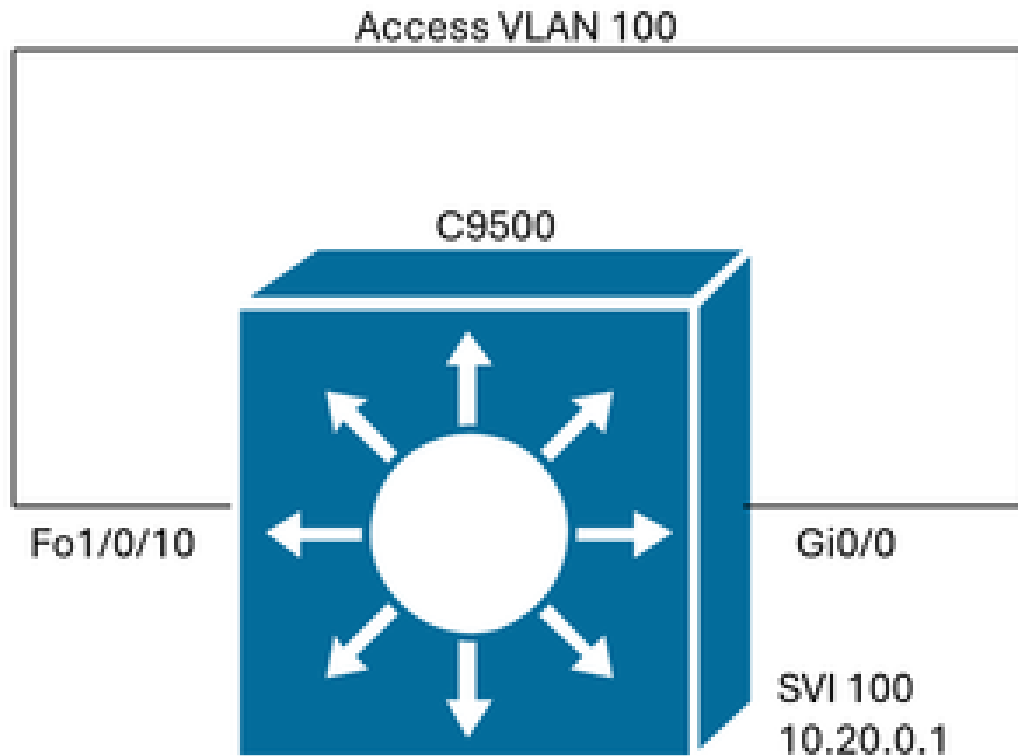
The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Problem

The problem is that high performance C9500 switches do not support an AppGigabit interface for reachability to an Application hosted on the switch. If you connect a host to the Mgmt interface, you must be able to reach the application, but if you require reachability from various hosts in the network, you must use a front panel port.

Solution

The connectivity for applications hosted on these models is achieved through management interface via loopback from any front panel ports. This is a workaround for the lack of AppGig interface support on high-performance C9500 switches. The workaround requires physically looping a cable from the front panel to the management interface and configuring the looped interface as an access port for the same VLAN as the application SVI. Consider this topology:



Step 1: Configure the looped interface

```
interface FortyGigabitEthernet1/0/10
 switchport access vlan 100
```

Step 2: Configure the VLAN interface

```
interface Vlan100
 ip address 10.20.0.1 255.255.0.0
```

Step 3: Configure the management interface - the IP must be in the same subnet as the SVI for which the APP is hosted on.

```
interface GigabitEthernet0/0
 vrf forwarding Mgmt-vrf
 ip address 10.20.0.101 255.255.0.0
 negotiation auto
```

Step 4: Configure app-hosting - iPerf is used in this example, please see this doc for further details: <https://www.cisco.com/c/en/us/support/docs/switches/catalyst-9200-series-switches/220197-use-iperf-on-catalyst-9000-switches-to-p.html>

The IP address of the application must be in the same subnet as the SVI

```
app-hosting appid iPerf
app-vnic management guest-interface 0
  guest-ipaddress 10.20.0.2 netmask 255.255.0.0
app-default-gateway 10.20.0.1 guest-interface 0
```

Step 5: Configure static route on the vrf that points to the SVI

```
ip route vrf Mgmt-vrf 0.0.0.0 0.0.0.0 10.20.0.1
```

Next, if you would like to configure a host to have reachability to the application on the C9500 observe these steps:

Note - A downstream switch using SVIs in different subnets to emulate different hosts is being used for this example.

Step 1: Configure host with an IP address

```
interface Vlan200
ip address 10.17.0.2 255.255.0.0
```

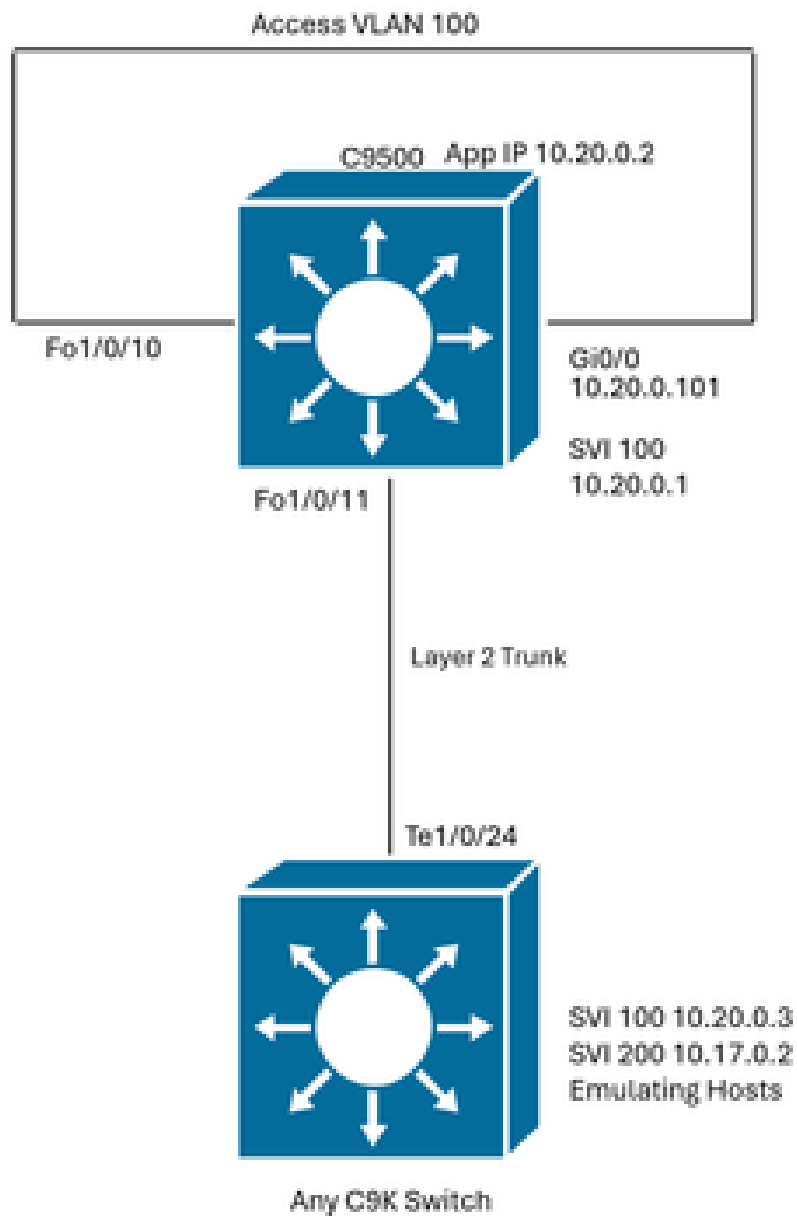
Step 2: On the C9500, you must configure an SVI whose IP is in the same subnet as the host network.

```
#C9500
interface Vlan200
ip address 10.17.0.1 255.255.0.0
```

Step 3: In this example, I have configured a layer 2 trunk that allows all Vlans:

```
interface TenGigabitEthernet1/0/24
switchport mode trunk
```

See final topology below:



Related Information

- [Use iPerf on Catalyst 9000 Switches to Perform Bandwidth Tests](#)
- [Cisco Technical Support & Downloads](#)