

# Configure VLAN Interface IPv4 Address on an Sx350 or SG350X Switch

## Objective

This article provides instructions on how to configure VLAN interface IPv4 address on the switch.

## Introduction

The switch can have multiple IP addresses and can be configured either on a port, a Link Aggregation Group (LAG), a Virtual Local Area Network (VLAN), or a loopback interface. If a switch does not have a Dynamic Host Configuration Protocol (DHCP) server then the IP address needs to be assigned statically. The switch routes traffic between the directly-attached IP subnets configured on the device and continues to bridge traffic between devices in the same VLAN. Traffic is routed by the device in layer 3 mode.

If you are unfamiliar with the terms used below, check out [Cisco Business: Glossary of New Terms](#).

**Note:** For instructions on how to configure IPv4 management interfaces on the switch, click [here](#).

## Applicable Devices

- Sx350 Series
- SG350X Series

## Software Version

- 2.3.0.130

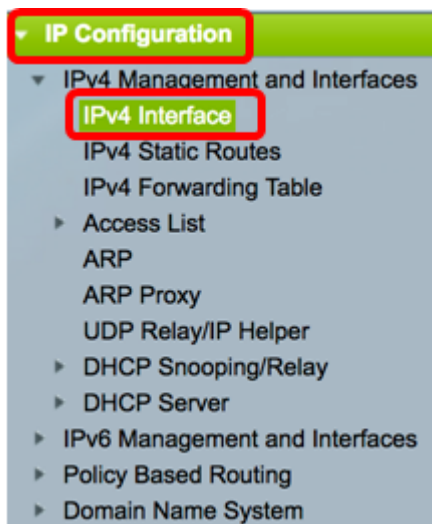
## Configure IPv4 Management Interface

When the switch is in a stacking mode with a standby switch present, it is recommended to configure the IP address as a static address to prevent disconnecting from the network during a stacking active switchover. This is because when the standby switch takes control of the stack, when using DHCP, it might receive a different IP address than the one that was received by the original active-enabled unit on the stack.

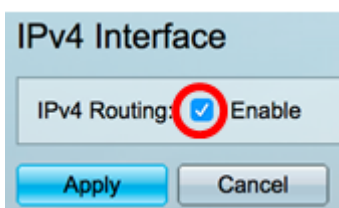
## Enable IPv4 Routing

Step 1. Log in to the web-based utility of the switch then choose **IP Configuration > IPv4 Management and Interfaces > IPv4 Interface**.

**Note:** The available menu options may vary depending on the device model. In this example, SG350X-48MP is used.

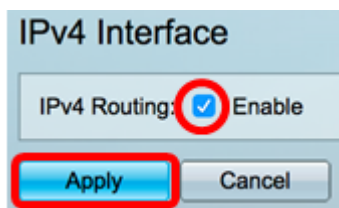


Step 2. To enable IPv4 routing, check the **Enable IPv4 Routing** check box.



**Note:** If you want to configure VLAN mapping on your switch, you must disable this feature.

Step 3. Click **Apply**.



You should now have successfully enabled IPv4 routing on your switch.

## Configure IPv4 Address on the Interface

The IPv4 Interface Table on the IPv4 Interface page contains the following information:

- *Interface* - The Unit or interface for which the IP address is defined. This can also be a loopback interface.
- *IP Address Type* - The available options are:
  - *DHCP* - Received from Dynamic Host Configuration Protocol (DHCP) server.
  - *Static* - Entered manually. Static interfaces are non-DHCP interfaces that are created by the user.
  - *Default* - The default address that exists on the device by default, before any configurations have been made.
    - *IP Address* - Configured IP address for the interface.
    - *Mask* - Configured IP address mask.
    - *Status* - Results of the IP address duplication check.
  - *Tentative* - There is no final result for the IP address duplication check.

- *Valid* - The IP address collision check was completed, and no IP address collision was detected.
- *Valid-Duplicated* - The IP address duplication check was completed, and a duplicate IP address was detected.
- *Duplicated* - A duplicated IP address was detected for the default IP address.
- *Delayed* - The assignment of the IP address is delayed for 60 seconds if DHCP Client is enabled on startup in order to give time to discover DHCP address.
- *Not Received* - Relevant only for DHCP Address. When a DHCP Client starts a discovery process, it assigns a dummy IP address 0.0.0.0 before the real address is obtained. This dummy address has the status of Not Received.

**Note:** In this example, the IPv4 Interface Table contains the default VLAN 1 which has a DHCP-assigned IP address of 192.168.100.19 with 255.255.255.224 subnet mask.

Step 1. To add a new interface, click the **Add** button.

Step 2. In the Interface area, click on the radio button of the interface type that you want to assign with an IP address then choose the specific interface accordingly.

**Note:** In this example, VLAN is clicked and VLAN 20 is chosen from the drop-down list. To learn how to configure VLANs on your switch, click [here](#).

Step 3. In the IP Address Type area, choose from the following options:

- *Dynamic IP Address* - The IP address is received from DHCP server. If this option is chosen,

skip to [Step 6](#).

- *Static IP Address* - The IP address is entered manually. Static interfaces are non-DHCP interfaces that are created by the user.

Interface:  Unit 1  Port GE1  LAG 1  VLAN 20

IP Address Type:  Dynamic IP Address  
 Static IP Address

**Note:** In this example, Static IP Address is chosen.

Step 4. (Optional) If Static IP Address is chosen, enter the IP address in the *IP Address* field.

IP Address Type:  Dynamic IP Address  
 Static IP Address

IP Address:

**Note:** In this example 192.168.100.66 is used.

Step 5. Click a radio button from the Mask area then enter the corresponding subnet mask. The options are:

- *Network Mask* - IP mask for this address.
- *Prefix Length* - Length of the IPv4 prefix.

IP Address:

Mask:  Network Mask  Prefix Length 27 (Range: 8 - 30)

**Note:** In this example, Prefix Length is chosen and 27 is entered in the corresponding field which also translates to 255.255.255.224 network mask.

[Step 6](#). Click **Apply** then click **Close**.

Interface:  Unit 1  Port GE1  LAG 1  VLAN 20  Loopback

IP Address Type:  Dynamic IP Address  
 Static IP Address

IP Address:

Mask:  Network Mask  Prefix Length 27 (Range: 8 - 30)

Step 7. (Optional) Click **Save** to save settings to the startup configuration file.

MP 48-Port Gigabit PoE Stackable Managed Switch

Save

IPv4 Interface

IPv4 Routing:  Enable

Apply Cancel

**IPv4 Interface Table**

<input type="checkbox"/>	Interface	IP Address Type	IP Address	Mask	Status
<input type="checkbox"/>	VLAN 1	DHCP	192.168.100.19	255.255.255.224	Valid
<input type="checkbox"/>	VLAN 20	Static	192.168.100.66	255.255.255.224	Valid

Add... Edit... Delete

You have now successfully configured the IPv4 management interface settings on your switch through the web-based utility.

## Edit or Delete an IPv4 Management Interface

Step 1. To edit the interface, check the check box of the entry that you want to modify then click the **Edit** button.

**IPv4 Interface Table**

<input type="checkbox"/>	Interface	IP Address Type	IP Address	Mask	Status
<input type="checkbox"/>	VLAN 1	DHCP	192.168.100.19	255.255.255.224	Valid
<input checked="" type="checkbox"/>	VLAN 20	Static	192.168.100.66	255.255.255.224	Valid

Add... Edit... Delete

**Note:** In this example, VLAN 20 will be edited.

Step 2. Update the necessary details on the page then click **Apply** then **Close**.

Interface:  Unit 1  Port GE1  LAG 1  VLAN 20  Loopback

IP Address Type:  Dynamic IP Address  Static IP Address

IP Address: 192.168.100.66

Mask:  Network Mask  Prefix Length 27 (Range: 8 - 30)

Apply Close

Step 3. To delete an interface, check the check box of the entry that you want to modify then click the **Delete** button.

IPv4 Interface Table					
<input type="checkbox"/>	Interface	IP Address Type	IP Address	Mask	Status
<input type="checkbox"/>	VLAN 1	DHCP	192.168.100.19	255.255.255.224	Valid
<input checked="" type="checkbox"/>	VLAN 20	Static	192.168.100.66	255.255.255.224	Valid

**Note:** In this example, VLAN 20 will be deleted.

The page will update indicating that you have deleted the interface.

IPv4 Interface

Success. To permanently save the configuration, go to the [File Operations](#) page or click the Save icon.

IPv4 Routing:  Enable

IPv4 Interface Table					
<input type="checkbox"/>	Interface	IP Address Type	IP Address	Mask	Status
<input type="checkbox"/>	VLAN 1	DHCP	192.168.100.19	255.255.255.224	Valid


You should now have successfully edited or deleted an IPv4 management interface on your switch through the web-based utility.

## Access the IPv4 Management Interface

Step 1. To access the web-based utility of the interface, enter the IP address on your web browser.

**Note:** Make sure that your computer is connected on the same VLAN as the switch interface. In this example, 192.168.100.66 is entered.

Not secure **192.168.100.66** cs3d2a9bd3/config/log\_off\_page.htm

Cisco Small Business  screendump.bmp (80 TN INSTALLING HYPER-V File Exchange

**Switch**  
CISCO

Application: Switch Management ▼

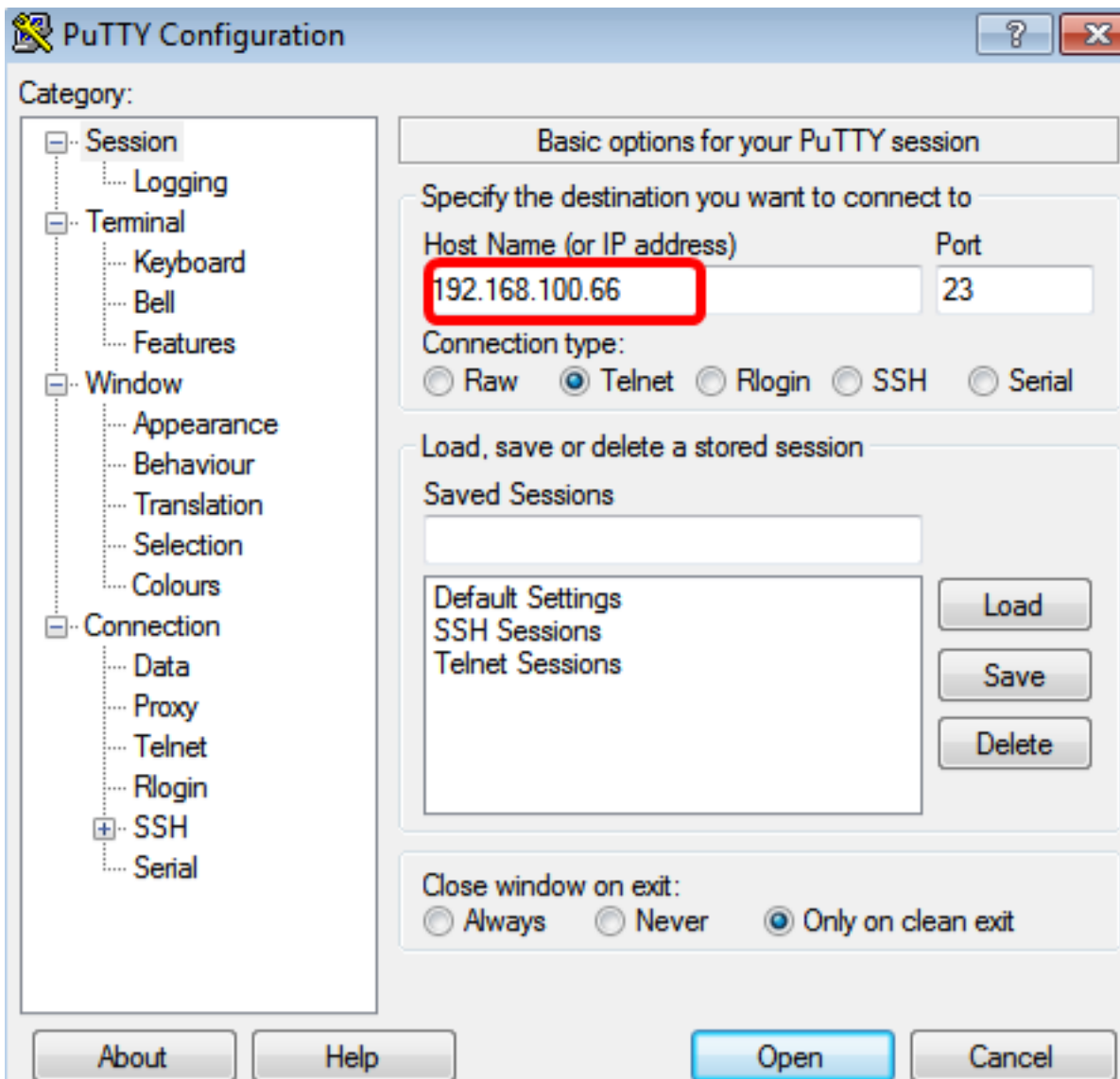
Username:

Password:

Language: English ▼

Step 2. (Optional) To access the CLI of the switch interface, enter the IP address in the client that you are using. In this example, PuTTY is used.

**Note:** To learn how to access an SMB switch CLI through SSH or Telnet, click [here](#).



The CLI of the switch should be accessible.



You have now successfully accessed the CLI or the web-based utility of the switch using IPv4 management interface IP address.

**Note:** To learn how to configure additional IPv4 routes for routing to non-directly attached subnets on the switch, click [here](#).