Configure Cisco Discovery Protocol Settings on Cisco Business 220 Series Switches

Objective

This article provides instructions on how to configure Cisco Discovery Protocol (CDP) settings on your CBS220 switch using the Graphical User Interface (GUI).

Introduction

The Cisco Discovery Protocol (CDP) is a protocol used by Cisco devices to share device information with other connected Cisco devices. This includes the type of device, firmware version, IP address, serial number, and other identifying information. CDP is enabled by default.

CDP settings can be adjusted globally or on an individual port basis. Let’s get started!

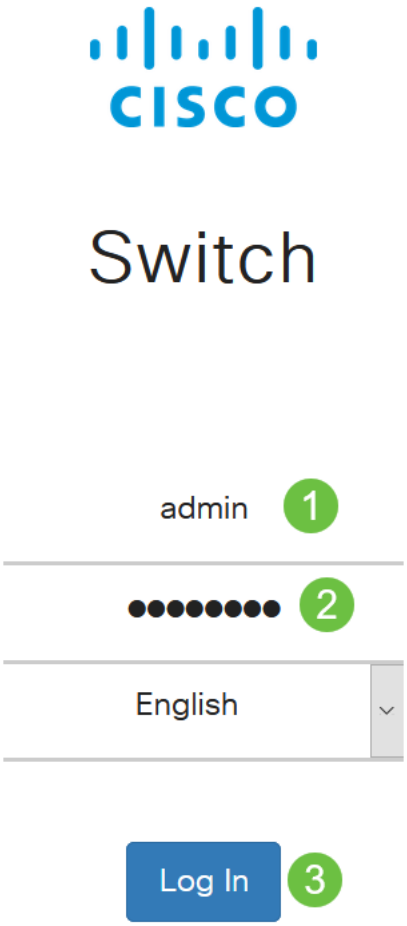
Applicable Devices | Software Version

- CBS220 series **(Data Sheet)** | 2.0.0.17

CDP Properties

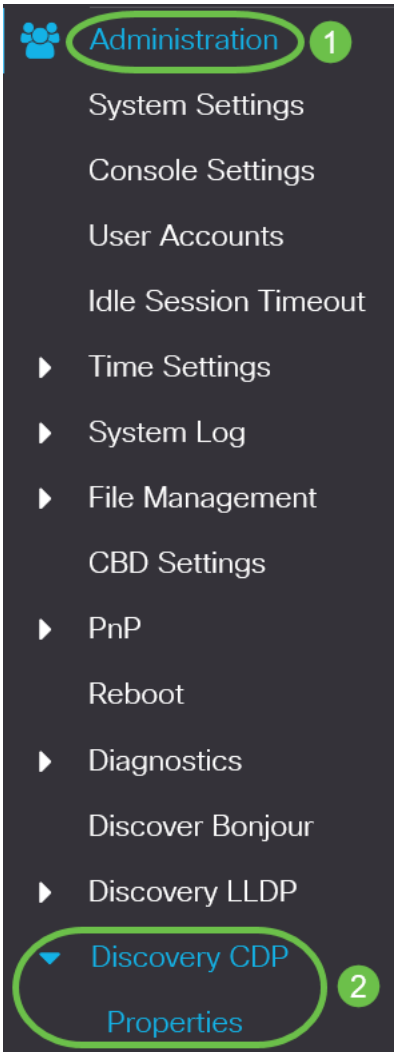
Step 1

Log in to the CBS220 switch.



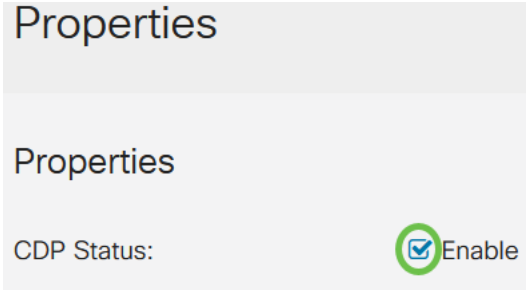
Step 2

Choose **Administration > Discovery CDP > Properties**.



Step 3

In the *CDP Status* field, check the **Enable** checkbox to activate CDP on the switch.

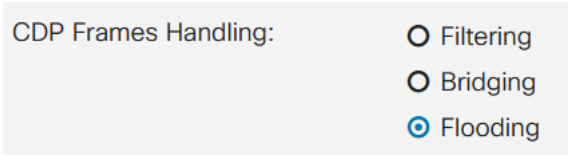


It is enabled by default.

Step 4

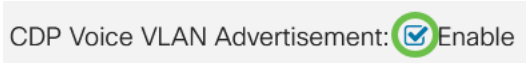
If CDP is not enabled, select a radio button corresponding to the action you want the switch to take when it receives a CDP packet. The options are:

- Bridging - Forwards the packet based on the VLAN.
- Filtering - Deletes the packet.
- Flooding - Forwards all CDP packets to all ports, excluding the port it originated from.



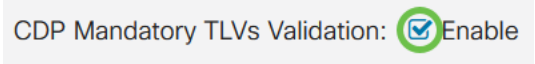
Step 5

In the *CDP Voice VLAN Advertisement* field, check the **Enable** checkbox to have the switch advertise the voice VLAN over CDP on all ports that have CDP enabled and are members of the voice VLAN.



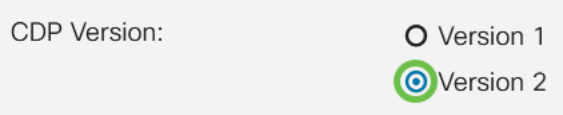
Step 6

In the *CDP Mandatory TLVs Validation* field, check the **Enable** checkbox to discard incoming CDP packets that do not contain the mandatory TLV (type-length-value).



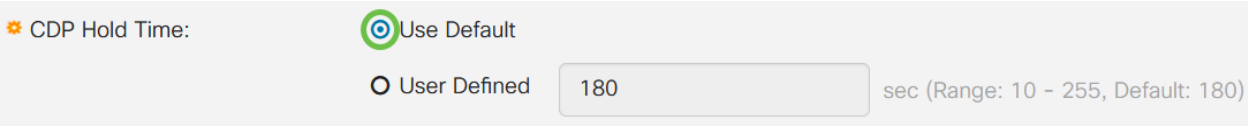
Step 7

In the *CDP Version* field, select a radio button to choose which version of CDP to use (*Version 1* or *Version 2*).



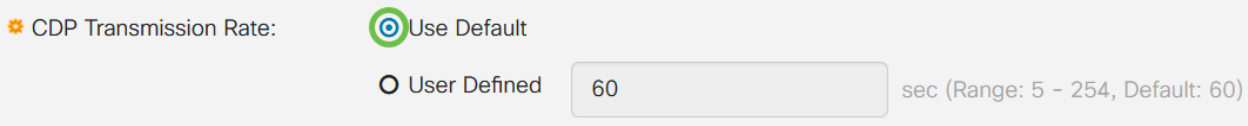
Step 8

In the *CDP Hold Time* field, select a radio button to determine the amount of time CDP packets are held before being discarded. Select *Use Default* to use the default amount of time (180 seconds) or *User Defined* to specify a custom amount of time between 10 - 255 seconds.



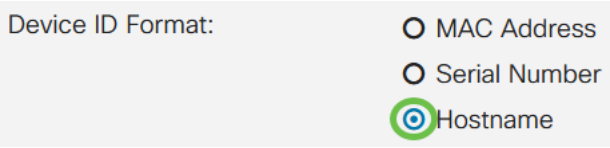
Step 9

In the *CDP Transmission Rate* field, select a radio button to determine the transmission rate of CDP packets in seconds. Select *Use Default* to use the default amount of time (60 seconds) or *User Defined* to specify a custom amount of time between 5 - 254 seconds.



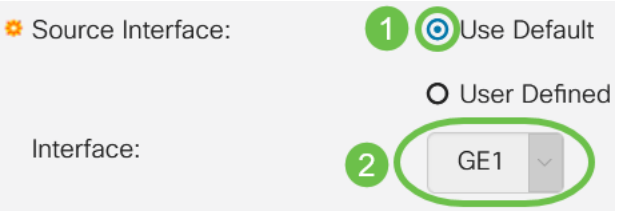
Step 10

In the *Device ID Format* field, select a radio button to determine the format of the device ID.



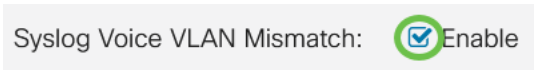
Step 11

In the *Source Interface* field, select a radio button to determine what IP address will be used in the TLV field of outgoing CDP packets. Select *Use Default* to use the IP address of the outgoing interface, or *User Defined* to choose an interface (the selected interface's IP address will be used) from the drop-down menu in the *Interface* field.



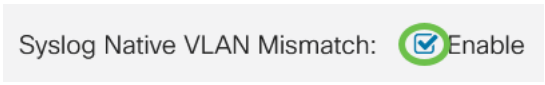
Step 12

In the *Syslog Voice VLAN Mismatch* field, check the **Enable** checkbox to send a syslog message when a voice VLAN mismatch is detected. A VLAN mismatch is when VLAN information in an incoming frame does not match the advertised capabilities of the local device.



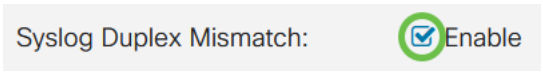
Step 13

In the *Syslog Native VLAN Mismatch* field, check the **Enable** checkbox to send a syslog message when a native VLAN mismatch is detected.



Step 14

In the *Syslog Duplex Mismatch* field, check the **Enable** checkbox to send a syslog message when a duplex mismatch is detected.



Step 15

Click **Apply**. The CDP properties are defined.

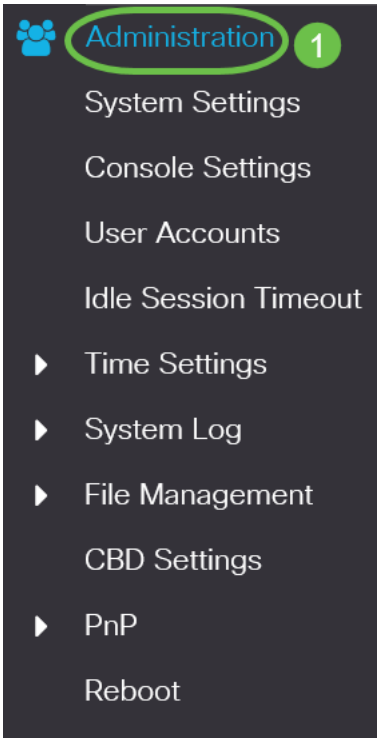


CDP Port Settings

The Port Settings page allows you to enable/disable CDP per port. By setting these properties, it is possible to select the types of information to be provided to devices that support the protocol.

Step 1

Click **Administration > Discovery CDP > Port Settings**.



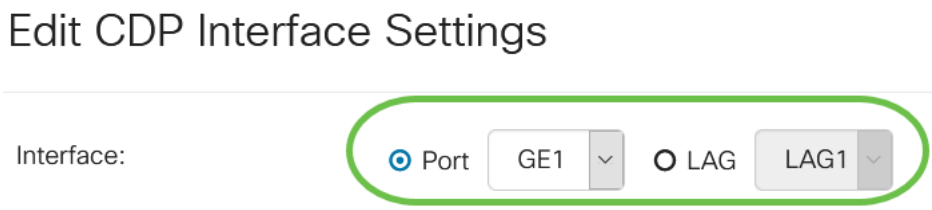
Step 2

Select a port and click **Edit**.



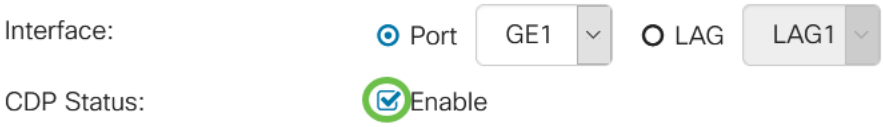
Step 3

The *Interface* field displays the port selected in the *CDP Interface Settings Table*. You can use the Port and *LAG* drop-down lists to select another port and LAG to configure, respectively.



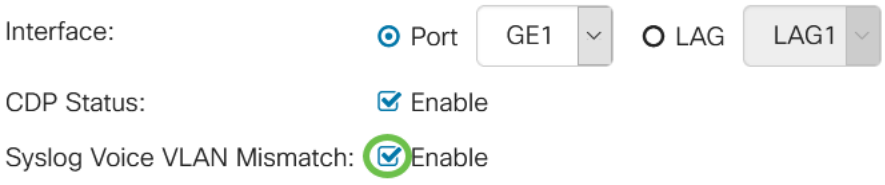
Step 4

In the *CDP Status* field, check the **Enable** checkbox to enable CDP on the port specified.



Step 5

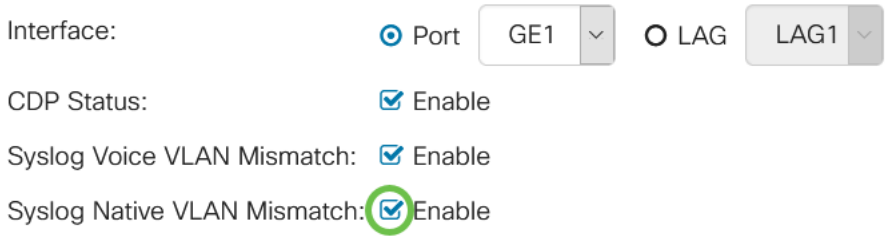
In the *Syslog Voice VLAN Mismatch* field, check the **Enable** checkbox to send a syslog message when a voice VLAN mismatch is detected on the port specified. A VLAN mismatch is when VLAN information in an incoming frame does not match the advertised capabilities of the local device.



Step 6

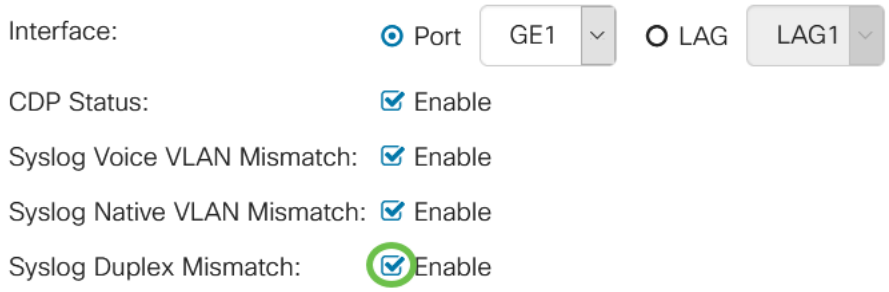
In the *Syslog Native VLAN Mismatch* field, check the **Enable** checkbox to send a

syslog message when a native VLAN mismatch is detected on the port specified.



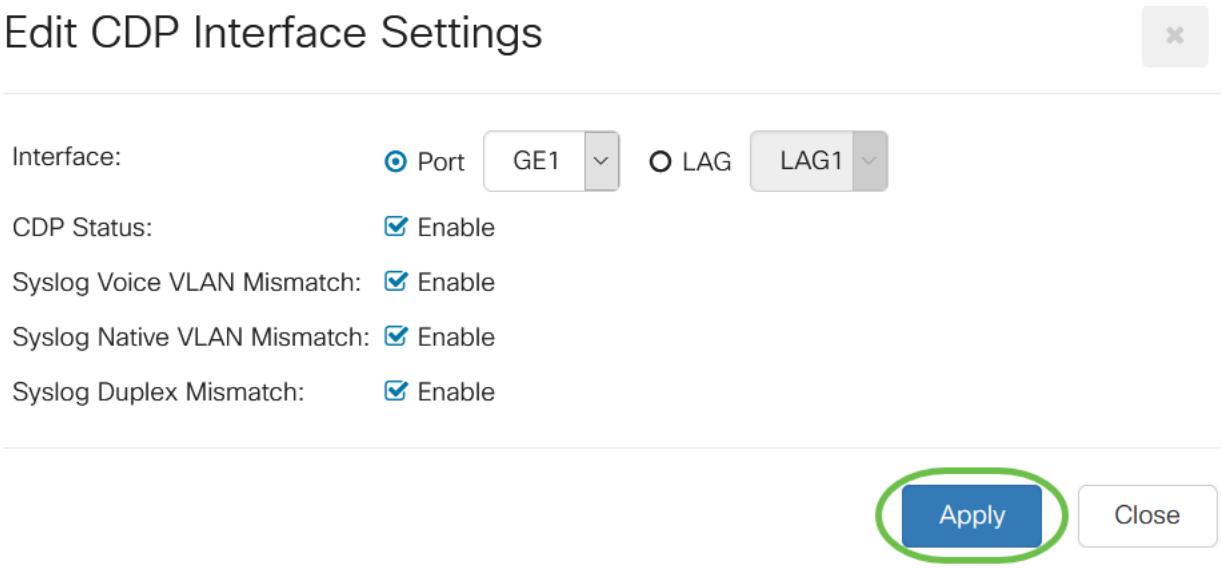
Step 7

In the *Syslog Duplex Mismatch* field, check the **Enable** checkbox to send a syslog message when a duplex mismatch is detected on the port specified.



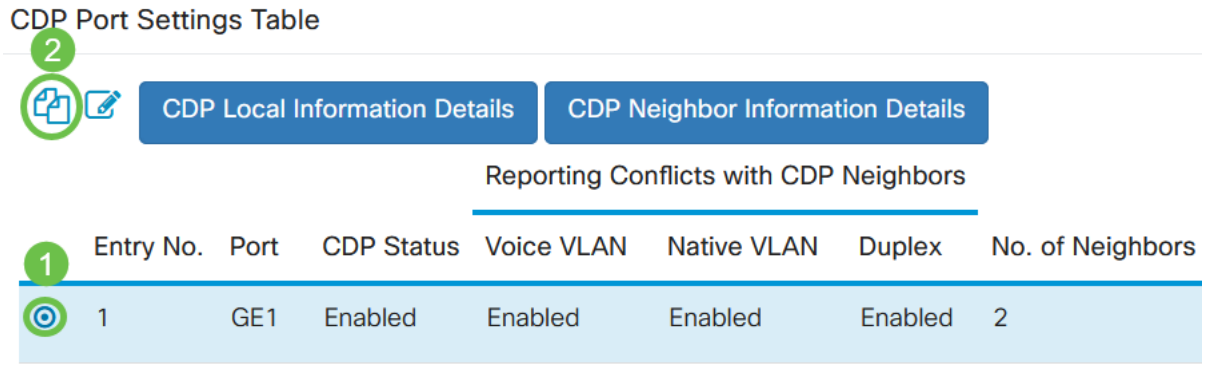
Step 8

Click **Apply**. The changes will be applied to the port specified.



Step 9

To quickly copy a port's settings to another port or ports, select its radio button and click the **Copy Settings** icon. The *Copy Settings* window opens.



Step 10

In the text field, enter the port or ports (separated by commas) that you want to copy the specified port's settings to. You can also enter a range of ports. Click **Apply**.



Conclusion

That's it! You have successfully configured CDP settings either globally or on individual ports on your CBS220 switch.

For more configurations, refer to the **Cisco Business 220 Series Switches Administration Guide**.