Assign an Interface VLAN as an Access or Trunk Port on a Cisco Business Switch

Objectives

Virtual Local Area Network (VLAN) is a group of ports that enables devices to communicate with each other over the Ethernet MAC layer, regardless of the physical Local Area Network (LAN). A port is a member of a VLAN if it can send to and receive data from the VLAN. A port is an untagged member of a VLAN if all packets destined for that port into the VLAN have no VLAN tag. A port is a tagged member of a VLAN if all packets destined for that port into the VLAN have a VLAN tag. VLANs are typically used to isolate endpoints as a workgroup. A basic example is setting up a different VLAN for Voice and a separate VLAN for Data. This ensures that packets for both data types are isolated from each other, maximizing the utilization of the switch.

You can assign an interface VLAN into a specific mode such as an Access or Trunk port.

- Access port A port that carries traffic only to and from the specific VLAN assigned to it.
- Trunk port A port that is capable of carrying traffic for any or all the VLANs that are accessible by a specific switch.

This article aims to show you how to configure an interface VLAN on your switch to be an access, or trunk port.

Applicable Devices | Software Version

- CBS250 (Data Sheet) | 3.0.0
- CBS350 (Data Sheet) | 3.0.0
- CBS350-2X (Data Sheet) | 3.0.0
- CBS350-4X (Data Sheet) | 3.0.0

Interface Settings

Step 1. Log in to the web-based utility and choose VLAN Management > Interface Settings.



Step 2. In the Interface Settings Table, choose an interface from the Interface Type equals to drop-down list and then click **Go**. The options are:

- Port Choose Port if only a single port needs to be configured.
- Link Aggregation (LAG) Choose LAG if you intend to configure a group of ports defined in the LAG configuration.

Note: In the example below, LAG is chosen.



Step 3. Click the radio button for the port or LAG you want to modify and click Edit.

Interface Settings Table									
4									
Filter: Interface Type equals to LAG ~ Go									
				Interface					
	Entry No.	Interface	Switchport Mode	VLAN Mode	Ethertype Tagging				
	Entry No.	Interface	Switchport Mode Layer 2	VLAN Mode Access	Ethertype Tagging Dot1q - 8100 (Global)				
() () ()	Entry No. 1 2	Interface LAG 1 LAG 2	Switchport Mode Layer 2 Layer 2	VLAN Mode Access Access	Ethertype Tagging Dot1q - 8100 (Global) Dot1q - 8100 (Global)				
1 () () () ()	Entry No. 1 2 3	Interface LAG 1 LAG 2 LAG 3	Switchport Mode Layer 2 Layer 2 Layer 2	VLAN Mode Access Access	Ethertype Tagging Dot1q - 8100 (Global) Dot1q - 8100 (Global) Dot1q - 8100 (Global)				

A pop-up window will then appear showing the chosen interface type in the previous page.

Edit Interface Settings

Interface:	O Port G	E1 🗸 💿 LAG 🔤 1 🗸

Step 4. Choose the radio button that corresponds to the desired VLAN mode for the interface.

- Access The interface is an untagged member of a single VLAN. A port configured in this mode is known as an access port.
- Trunk The interface is an untagged member of at most one VLAN and is a tagged member of one or more VLANs.
- General The interface can support all functions as defined in the IEEE 802.1q specification. The interface can be a tagged or untagged member of one or more VLANs.
- Customer Selecting this option places the interface in QinQ mode. This enables you to use your own VLAN arrangements (PVID) across the provider network. The device is in Q-in-Q

mode when it has one or more customer ports.

- Private VLAN-Host Select to set the interface as either isolated or community. Then select either an isolated or community VLAN in the Secondary VLAN-Host field.
- Private VLAN-Promiscuous Select to set the interface as promiscuous.
- VLAN Mapping-Tunnel Select to set the interface as a VLAN tunnel edge port.
- VLAN Mapping-One to One Select to set the interface as to be used as a VLAN mapping one to one edge port.



Note: For this example, Trunk was chosen.

Step 5. Click **Apply**.

Interface:	O Port GE1 👻 💿 LA	G 1
Switchport Mode:	 Layer 2 Layer 3 	
Interface VLAN Mode:	Trunk	~
Ethertype Tagging:	 Use Global Setting (Dot Dot1q - 8100 Dot1ad - 88a8 9100 9200 	1q)
rame Type: ngress Filtering:	 Admit All Admit Tagged Only Admit Untagged Only Enable 	
Primary VLAN:	None 👻	

Step 6. The page will then show with a check mark that the settings have been successful. Click **Close**.

Edit Interface S	Settings	×
Success. To perm	anently save the configuration, go to the File Operations page or click the Save Icon.	^
Interface:	O Port GE1 v O LAG 1 v	
Switchport Mode:	Layer 2	
Interface VLAN Mode:	O Layer 3	
	Trunk ~	
Ethertype Tagging:	• Use Global Setting (Dot1q)	
	O Dot1q - 8100	
	O Dot1ad - 88a8	
	○ 9100	
	O 9200	
Frame Type:	Admit All	
	Admit Tagged Only	
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You will now be taken back to the Interface Settings Table.

Step 7. Check the interface mode that you have configured to verify your recent setting.

Interface Settings Table



You have now successfully assigned the interface VLAN on your switch.