Configure Telephony Organizationally Unique Identifiers (OUI) Settings on a Switch

Objective

The Voice Virtual Local Area Network (VLAN) is used when traffic from Voice over Internet Protocol (VoIP) equipment is assigned to a specific VLAN that is made up of voice devices such as IP phones, VoIP endpoints, and voice systems. The switch can automatically detect and add port members to the Voice VLAN, and assign the configured Quality of Service (QoS) to packets from the Voice VLAN. If the voice devices are in different Voice VLANs, IP routers are needed to provide communication.

Organizationally Unique Identifiers (OUI) can add a particular manufacturer Media Access Control (MAC) address to the OUI table. The first three bytes of the MAC address has an identifier of the manufacturer, and the last three bytes contain a unique station ID. Once the OUIs are added to the table, the voice which is received from a specific IP phone on the ports of the voice VLAN ports is forwarded on the voice VLAN provided the particular IP phone is listed in the OUI table.

This article provides instructions on how to configure Telephony OUI settings on a switch.

Applicable Devices

- Sx200 Series
- Sx250 Series
- Sx300 Series
- Sx350 Series
- SG350X Series
- Sx500 Series
- Sx550X Series

Software Version

- 1.4.7.06 Sx200, Sx300, Sx500
- 2.2.5.68 Sx250, Sx350, SG350X, Sx550X

Configure Telephony OUI Settings on a Switch

Configure Telephony OUI Settings

Important: Before proceeding with the steps below, make sure that VLANs are configured on the switch. To know how to configure VLAN settings on your switch, click <u>here</u> for instructions.

Step 1. Log in to the web-based utility and choose **Advanced** from the Display Mode dropdown list.

Display Mode:	Basic	۲	Logout	SNA
	Basic			
	Advanced			
		_		

Note: If you have an Sx300 or Sx500 Series switch, skip to Step 2.

<u>Step 2</u>. Choose VLAN Management >Voice VLAN > Telephone OUI.



Note: The menu options may vary depending on the switch that you have. In this example, SG350X switch is used.

The Telephony OUI Operation Status area shows whether voice traffic is identified by the OUIs. It is disabled by default. To learn how to configure this feature, click <u>here</u> for instructions.

Step 3. Choose the CoS/802.1p queue to be designated to the voice traffic from the CoS/802.1p drop-down list. A queue is like a buffer that filters the outbound traffic, and holds it until it can leave the switch through an outgoing port.

Telephony OUI			
Telephony OUI Operational Status: Enabled			
CoS/802.1p:	6 🔻		
Remark CoS/802.1p:	0 1		
🗢 Auto Membership Aging Time:	2 3	d	
	4		
Apply Cancel	5 6		
Telephony OUI Table	7		

Note: In this example, 6 is chosen.

Step 4. Check the **Remark CoS/802.1p** check box to remark the egress traffic.

Telephony OUI Operational Status:	Enabled
CoS/802.1p:	6 ▼
Remark CoS/802.1p:	

Step 5. In the *Auto Membership Aging Time* fields, enter the time delay to remove a port from the voice VLAN after all the MAC addresses of the phones which are associated with the ports have timed out. It can be entered in terms of days, hours and minutes.

Telephony OUI	
Telephony OUI Operational Sta	atus: Enabled
CoS/802.1p:	6 ▼
Remark CoS/802.1p:	
Auto Membership Aging Time:	2 day(s) 12 hr(s) 30 min(s) (1 min - 30 days)
Apply Cancel	

Note: In this example, the aging time used is 2 days, 12 hours, and 30 minutes.

Step 6. Click **Apply** to apply the settings.

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



You should now have configured the Telephony OUI settings on your switch.

Configure Telephony OUI Table

The Telephony OUI table displays the following:

- Telephony OUI Displays the first six digits of the MAC address that is allocated for OUIs.
- Description Displays the corresponding OUI description.

Step 1. Click Add to add a new OUI.

Telephony OUI Table		
	Telephony OUI	Description
	00-01-e3	Siemens_AG_phone
	00-03-6b	Cisco_phone
	00-09-6e	Avaya
	00-0f-e2	H3C_Aolynk
	00-60-b9	Philips_and_NEC_AG_phone
	00-d0-1e	Pingtel_phone
	00-e0-75	Polycom/Veritel_phone
	00-e0-bb	3Com_phone
	Add D	elete Restore Default OUIs

Step 2. Enter the new OUI in the *Telephony OUI* field. It contains three octets.

		 1
Telephony OUI:	00-34-ab	(3 Octets)

Note: In this example, 00-34-ab is used.

Step 3. Enter the OUI Name in the Description field.

Description:	Sample Phone		(12/32	characters	used)
		· · · · · · · · · · · · · · · · · · ·			

Note: In this example, Sample Phone is used.

Step 4. Click **Apply** then click **Close**. The Telephony OUI should be added to the Telephony OUI table.

🌣 Telephony OUI:	00-34-ab	(3 Octets)
Description:	Sample Phone	(12/32 characters used)
Apply	Close	

Step 5. (Optional) Click **Restore Default OUIs** to remove all the user-created OUIs and show only default OUIs in the table.

Telephony OUI Table			
	Telephony OUI	Description	
	00-01-e3	Siemens_AG_phone	
	00-03-6b	Cisco_phone	
	00-09-6e	Avaya	
	00-0f-e2	H3C_Aolynk	
	00-34-ab	Sample Phone	
	00-60-b9	Philips_and_NEC_AG_phone	
	00-d0-1e	Pingtel_phone	
	00-e0-75	Polycom/Veritel_phone	
	00-e0-bb	3Com_phone	
	Add D	elete Restore Default OL	JIs

Step 6. (Optional) To delete a particular Telephony OUI, check the check box of the desired OUI then click **Delete**.

Tele	Telephony OUI Table		
	Telephony OUI	Description	
	00-01-e3	Siemens_AG_phone	
	00-03-6b	Cisco_phone	
	00-09-6e	Avaya	
	00-0f-e2	H3C_Aolynk	
\odot	00-34-ab	Sample Phone	
	00-60-b9	Philips_and_NEC_AG_phone	
	00-d0-1e	Pingtel_phone	
	00-e0-75	Polycom/Veritel_phone	
	00-e0-bb	3Com_phone	
	Add D	elete Restore Default OUIs	

Note: In this example, 00-34-ab is deleted.

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

t Gigabit PoE	Save cisco Language: Enç Stackable Managed Switch
Telephony OUI	
Success. To p	ermanently save the configuration, go to the File Operations
Telephony OUI Op	erational Status: Enabled
CoS/802.1p:	6 🔻
Remark CoS/802.	1p: 🕑
🜣 Auto Membership	Aging Time: 2 day(s) 12 hr(s) 30 min(s) (1 min -
Apply Car	ncel
Telephony OUI Table	
Telephony OUI	Description
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00-09-6e	Avaya
00-0f-e2	H3C_Aolynk
00-60-b9	Philips_and_NEC_AG_phone
00-d0-1e	Pingtel_phone
00-e0-75	Polycom/Veritel_phone
00-e0-bb	3Com_phone
Add D	elete Restore Default OUIs

You should now have configured the configured the Telephony OUI Table on your switch.