

how can cisco discovery protocol be used to set a vlan for a poly vvx 450 desk phone and allow a pc to be connected to the desk phone's pc ethernet port on default vlan?

ChatGPT

To configure a VLAN for a Poly VVX 450 desk phone using Cisco Discovery Protocol (CDP) and allow a PC to be connected to the desk phone's PC Ethernet port on the default VLAN, follow these steps:

Steps:

1. Configure the Switch Port for Voice VLAN:

- First, configure the switch port connected to the Poly VVX 450 desk phone to support both a voice VLAN for the phone and a data VLAN for the PC.

```
plaintext
Copy code
interface GigabitEthernetX/X
    switchport mode access
    switchport access vlan <DATA_VLAN>
    switchport voice vlan <VOICE_VLAN>
    spanning-tree portfast
```

Replace <DATA_VLAN> with the VLAN ID you want the PC to be on (default VLAN), and <VOICE_VLAN> with the VLAN ID you want the Poly VVX 450 phone to be on.

2. Enable CDP on the Switch:

- Ensure that CDP is enabled globally and on the specific switch port.

```
plaintext
Copy code
cdp run
interface GigabitEthernetX/X
    cdp enable
```

3. Configure the Poly VVX 450 Desk Phone:

- On the Poly VVX 450 phone, ensure that the CDP is enabled to detect the voice VLAN.
- Log in to the phone's web interface or use the phone's menu to navigate to the network settings.
- Enable CDP under the network settings.
- Set the VLAN tagging to accept the voice VLAN provided by the switch through CDP.

Via Web Interface:

- Go to Settings > Network > Ethernet.
- Enable CDP.

Via Phone Menu:

- Navigate to Settings > Advanced > Administration Settings > Network Configuration > Ethernet.
 - Enable CDP.
4. **Verify Configuration:**
- Verify that the phone is assigned to the correct VLAN by checking the network status on the phone or by using the switch commands to check which VLAN the phone is using.
 - Ensure the PC connected to the phone's PC port is on the default data VLAN.

Example Configuration:

Assume the following VLAN IDs:

- **Data VLAN (for PC): 10**
- **Voice VLAN (for Phone): 20**

Switch port configuration would be:

```
plaintext
Copy code
interface GigabitEthernet0/1
  switchport mode access
  switchport access vlan 10
  switchport voice vlan 20
  spanning-tree portfast
  cdp enable
```

After configuring the switch port, configure the phone to use CDP for VLAN discovery. The Poly VVX 450 should now place its traffic on VLAN 20 and the PC connected to its Ethernet port should use VLAN 10.

Verification:

1. On the Switch:

- Check the VLAN assignment for the connected devices:

```
plaintext
Copy code
show mac address-table interface GigabitEthernet0/1
```

- Verify CDP neighbors to ensure the phone is recognized:

```
plaintext
Copy code
show cdp neighbors detail
```

2. On the Phone:

- Check the network status to ensure it's using the correct VLAN.

By following these steps, the Poly VVX 450 will use the voice VLAN configured via CDP, and any PC connected to its Ethernet port will use the default data VLAN.

40

what poly template parameters can be used to configure multiple Poly VVX 450 Desk Phones?
ChatGPT

To configure multiple Poly VVX 450 desk phones, you can use configuration templates with specific parameters. These templates can be provisioned via a central provisioning server using Poly's centralized configuration management system. Here are some common parameters and their usage:

Basic Configuration Parameters:

1. Network Configuration:

- **VLAN Settings:**

- `device.set="1"`
- `device.net.vlanId=""`
- `device.net.vlanEnabled="1"`
- `device.net.lldpEnabled="1"`
- `device.net.cdpEnabled="1"`

- **DHCP Configuration:**

- `device.net.dhcp.menuEnabled="1"`
- `device.net.dhcp.enabled="1"`

2. Provisioning Server Configuration:

- **Server URL:**

- `device.prov.0.address="http://provisioningserver/path/to/config"`

- **Authentication:**

- `device.prov.0.user="username"`
- `device.prov.0.password="password"`

- **Periodic Resync:**

- `device.prov.0.resync.periodic="86400" // 86400 seconds = 24 hours`

3. SIP Configuration:

- **SIP Server:**

- `reg.1.address="sipserver.domain"`
- `reg.1.auth.userId="username"`
- `reg.1.auth.password="password"`

- **SIP Line:**

- `line.1.label="User1"`
- `line.1.displayName="User1"`
- `line.1.address="sip:user1@sipserver.domain"`
- `line.1.auth.userId="username"`

- line.1.auth.password="password"
- 4. **CDP and LLDP Settings:**
 - Enable CDP:
 - device.net.cdpEnabled="1"
 - Enable LLDP:
 - device.net.lldpEnabled="1"
- 5. **Time and Date Configuration:**
 - **NTP Server:**
 - device.snmp.server.1.address="ntp.server.address"
 - device.snmp.gmtOffset="-5"
 - device.snmp.daylightSavings.enable="1"
- 6. **QoS Configuration:**
 - **Voice Priority:**
 - qos.ip.rtp.priority="46"
 - **Signaling Priority:**
 - qos.ip.sip.priority="26"

Example Template Configuration:

Here is an example of a configuration template that you can use for multiple Poly VVX 450 desk phones:

plaintext

Copy code

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<polycomConfig xmlns="http://www.polycom.com/xml/rest/provisioning">
  <!-- Network Configuration -->
  <device.set="1"/>
  <device.net.vlanId.set="1"/>
  <device.net.vlanId="20"/>
  <device.net.vlanEnabled.set="1"/>
  <device.net.vlanEnabled="1"/>
  <device.net.lldpEnabled.set="1"/>
  <device.net.lldpEnabled="1"/>
  <device.net.cdpEnabled.set="1"/>
  <device.net.cdpEnabled="1"/>

  <!-- DHCP Configuration -->
  <device.net.dhcp.menuEnabled.set="1"/>
  <device.net.dhcp.menuEnabled="1"/>
  <device.net.dhcp.enabled.set="1"/>
  <device.net.dhcp.enabled="1"/>

  <!-- Provisioning Server Configuration -->
  <device.prov.0.address.set="1"/>
  <device.prov.0.address="http://provisioningserver/path/to/config"/>
  <device.prov.0.user.set="1"/>
  <device.prov.0.user="username"/>
  <device.prov.0.password.set="1"/>
  <device.prov.0.password="password"/>
  <device.prov.0.resync.periodic.set="1"/>
  <device.prov.0.resync.periodic="86400"/>
</polycomConfig>
```

```

<!-- SIP Configuration -->
<reg.1.address.set="1"/>
<reg.1.address="sipserver.domain"/>
<reg.1.auth.userId.set="1"/>
<reg.1.auth.userId="username"/>
<reg.1.auth.password.set="1"/>
<reg.1.auth.password="password"/>
<line.1.label.set="1"/>
<line.1.label="User1"/>
<line.1.displayName.set="1"/>
<line.1.displayName="User1"/>
<line.1.address.set="1"/>
<line.1.address="sip:user1@sipserver.domain"/>
<line.1.auth.userId.set="1"/>
<line.1.auth.userId="username"/>
<line.1.auth.password.set="1"/>
<line.1.auth.password="password"/>

<!-- Time and Date Configuration -->
<device.snmp.server.1.address.set="1"/>
<device.snmp.server.1.address="ntp.server.address"/>
<device.snmp.gmtOffset.set="1"/>
<device.snmp.gmtOffset="-5"/>
<device.snmp.daylightSavings.enable.set="1"/>
<device.snmp.daylightSavings.enable="1"/>

<!-- QoS Configuration -->
<qos.ip.rtp.priority.set="1"/>
<qos.ip.rtp.priority="46"/>
<qos.ip.sip.priority.set="1"/>
<qos.ip.sip.priority="26"/>
</polycomConfig>

```

Provisioning the Phones:

1. Upload the Template:

- Place the configuration file on the provisioning server.
- Ensure that each Poly VVX 450 phone is set to check the provisioning server URL.

2. Provision the Phones:

- Reboot the phones or trigger a resync to fetch the new configuration from the provisioning server.

3. Verify the Configuration:

- Check each phone to ensure it has correctly applied the configuration settings.

This template should be adjusted based on the specific needs of your network environment and the configuration requirements of your Poly VVX 450 phones.