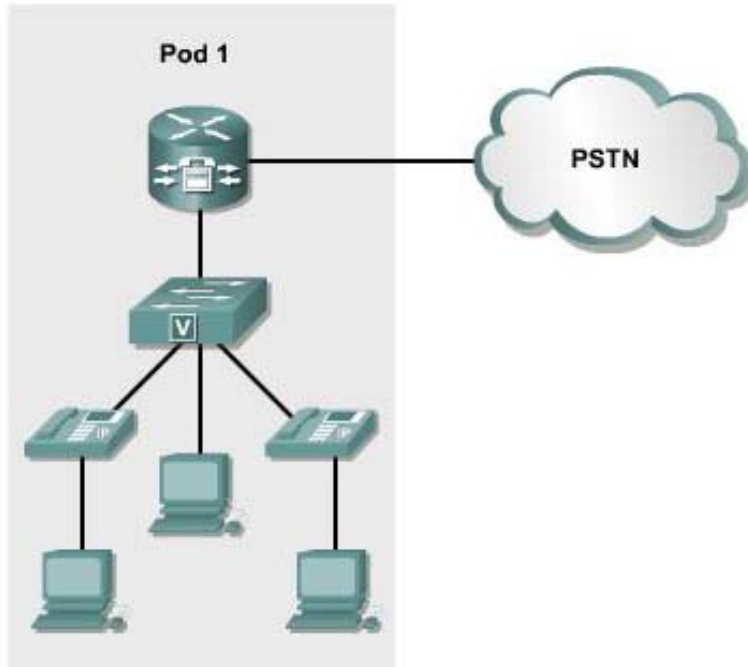


Lab 4.1.2 Configuring a FXO Port



Objective

Configure a router FXO port for an analog phone

Equipment Requirements

- Cisco CallManager Express (CME) capable router with a FXO port
- Inline power capable switch or non-inline power switch with power injectors
- Adtran
- Two IP phones
- Two analog phones

This lab relies on labs 2.1.1, 2.1.3, 3.1.1, and 4.1.1 being successfully completed and loaded.

In this lab the ACME.com Company has configured the IP phones and now wishes to configure the analog connection to the PSTN. This lab will allow an outbound call only.

Step 1 Configure the FXO Port

- Connect a RJ-11 phone cable from the lowest numbered FXO port on the router to a port on the Adtran Octal FXS card.
- What port on the Adtran was used to connect the FXO router port? _____
- What slot does the FXO card use on the router? _____
- Use the **show running-config | begin voice-p** command to verify the slot number and the format of the slot number.
- Write the format shown in the **show running-config** command output of the FXO port 0. _____
- From global configuration mode, use the command **voice-port slot/subunit/port** to enter the configuration for the FXO port. The **slot/subunit/port** is the numbers representing the FXO card shown in the **show running-config** command. An example of this command is **voice-port 0/2/0**

```
CMERouterX(config)# voice-port slot/subunit/port
```

- Enter the **ring number 2** command to set the FXO port to answer after two rings. The default number of rings is one ring. Normally the default is fine so that incoming calls are answered quickly. If other equipment that can be used to answer incoming calls (such as a fax machine), the **ring number** value might want to be set to a higher value to give the equipment sufficient time to respond. In that case, the FXO interface would answer the call if the other equipment did not answer the incoming call within the configured number of rings.

This command is not applicable to FXS ports because these types of ports do not receive ringing on incoming calls.

```
CMERouterX(config-voiceport)# ring number 2
```

Step 2 Configure the Dial Peer

- From global configuration mode, create an analog dial peer with the command **dial-peer voice 5 pots**.

```
CMERouterX(config)# dial-peer voice 5 pots
```

- Use the command **destination-pattern 5556...** to set the digits that will match this dial-peer. This command sets the pattern to any call that comes in destined for 5556XXX where the X's are any numbers from 0 to 9. The periods shown in the command define the dial pattern digit as any number.

```
CMERouterX(config-dial-peer)# destination-pattern 5556...
```

- Use the command **port slot/subunit/port** to associate the FXO port being used with dial-peer number 5.

```
CMERouterX(config-dial-peer)# port slot/subunit/port
```

- The router needs to know which phone number digits to forward for voice calls. Use the command **forward-digits all** to forward all the digits (the full length of the destination dial pattern) to the PSTN (the Adtran).

```
CMERouterX(config-dial-peer)# forward-digits all
```

- Connect an analog phone to a port on the Adtran Octal FXS card. Ensure a second analog phone connects to the router FXS port 0.

- f. From the analog phone attached to router FXS port, dial the number associated with the analog phone attached to the Adtran. The phone numbers used on the Adtran Octal FXS ports are as follows: port 1 phone number is 555-6001; port 2 is 555-6002; port 3 is 555-6003, etc. The analog phone connected directly to the Adtran port should ring.
- g. Does the called analog phone ring? If not, perform appropriate troubleshooting before proceeding. _____
- h. From enable mode on the router, debug the dial peer information.

```
CMERouterX# debug voice dialpeer all
```
- i. While viewing the **debug** output, list the line that proves that the dial peer works correctly.

- j. Turn the debugging off.

```
CMERouterX# undebug all
```
- k. Test the configuration by calling from an IP Phone to the analog phone attached directly to the Adtran.
- l. Did the call work? If not, perform appropriate troubleshooting before proceeding. _____