Lab 3.1.3 CME Partially Automated Phone Setup

Objective

- Configure an IP phone using the partially automated process

Equipment Requirements

- Cisco CallManager Express (CME) capable router with .tar configuration files already extracted
- Inline power capable switch or non-inline power switch with power injectors
- Workstation with an Ethernet 10/100 NIC installed
- Two Cisco IP Phones (one of which was configured in Lab 3.1.2 lab)

In this lab the ACME.com Company has decided to use the partially automated setup to configure the Cisco CallManager Express router and phones. Use IOS commands to achieve the following goals

- Configure the second IP phone through the use of the auto assign command
- Attach the second IP phone to the network

NOTE: This lab relies on lab 3.1.2 being successfully completed. Redo lab 3.1.2 if necessary to configure one IP phone before starting this lab.
Step 1 Add a Second IP Phone by using the Auto Assign Method

a. Ensure the second IP phone is not connected to the switch. Add a second ephone-dn by using the `ephone-dn 2 dual-line` command.

```
CMERouterX(config)# ephone-dn 2 dual-line
```

b. Use the `number X001` command to add a DN (where X is the pod number).

```
CMERouterX(config-ephone-dn)# number X001
```

c. Enter telephony service mode by entering the `telephony-service` command from global configuration mode.

```
CMERouterX(config)# telephony-service
```

d. The `auto assign` command is used to partially automate the IP phone configuration process. The `auto assign` command specifies a range of ephone-dn numbers to assign newly discovered IP phones. This method is used when there are multiple phones to install and each phone has a unique extension number.

A phone type can be specified so that all 7940 IP phone models receive an extension in a particular range and all 7960 models receive an extension in a different range of numbers.

View the models supported by the `auto assign` command by typing the following command:

```
CMERouterX(config-telephony)# auto assign 2 to 2 type ?
```

e. How many IP phone models are listed? _________________________________________

f. For this lab, the basic concept of automatic number assignment is being demonstrated, so simply enter the command `auto assign 2 to 2` from telephony-service configuration mode.

Step 2 Connect an IP Phone

a. From privileged mode, enter the `debug ephone pak` command, which allows ephone packets to be displayed.

b. Connect the second IP phone to the appropriate switch port that has been configured for IP Telephony. Verify the switch configuration if necessary.

c. View the ephone pak debugging output. This may take a few moments. Once the phone has registered, what is the last line of the `debug` output?

___________________________________________________________________________

d. Verify that both phones are registered and configured by typing the `show ephone` command.

e. What indication is shown in the output to prove that both phones are configured properly?

___________________________________________________________________________

f. From one of the IP phones, press the lower right button that has a speaker icon. A dial tone sounds.

g. After approximately 10 seconds of no input, what sound emits from the phone?

___________________________________________________________________________
h. Is this the sound you normally hear on an analog phone when the phone is taken off the hook and a number has not been dialed? _________________________

i. Press the lower right button again to cancel the speaker function.

j. Lift the handset of the first IP phone and dial the other IP phone by pressing the four digit identifier of the second phone. This number is located in the upper right display of the second phone.

k. If the second IP phone rings, save your configuration by using the copy running-config startup-config. If unsuccessful, troubleshoot as necessary.