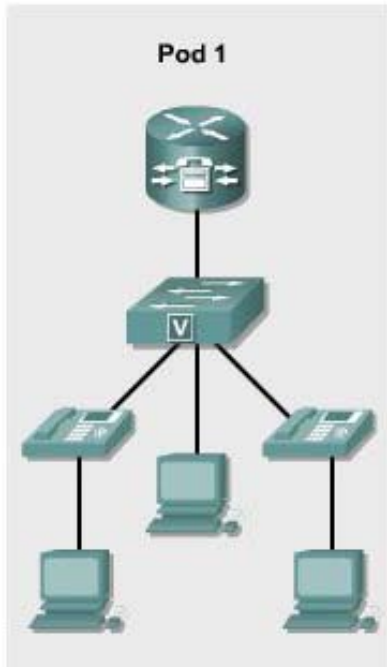


## Lab 5.1.1 Configure GUI for System Administrator



### Objective

- Configure and use the GUI system administrator interface

### Equipment Requirements

- Cisco CallManager Express (CME) capable router
- Appropriate .tar file loaded on the router or available from the instructor or student assistant
- Inline power capable switch or non-inline power switch with power injectors
- Workstation with an Ethernet 10/100 NIC installed
- Two Cisco IP phones
- TFTP Server application

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

In this lab ACME.com wishes to use a Web GUI instead of the CLI for adds, moves, and changes. Currently the GUI is not installed or configured. Configure and use the GUI to do various administrative tasks.

- Enable the GUI on the CallManager Express router using files located on the TFTP server
- Create a username and password
- Use the GUI to create an ephone-dn and assign it to one of the two IP phones
- Use the GUI to add a speed dial to one of the two IP phones
- Use the GUI to change the date and time format on the IP phones
- Use the GUI to change the system time

## Step 1 Configure the GUI interface for the System Administrator

- The router and switch should be configured with the basic configuration. The IP phones should be plugged into the switch and configured with a basic configuration using any of the methods previously demonstrated.
- From one of the phones, dial the other phone. Does the call go through properly? If not, troubleshoot as necessary. \_\_\_\_\_
- From privileged mode, use the **show flash:** command to verify the IP phone GUI firmware files are present. The firmware files for a 7960 and 7940 will include some HTML files such as admin\_user, ephone\_admin, and telephony\_service.

If these files are not present, there is a file that the instructor must obtain from the Cisco site that starts with the letters “cme-gui” and has a file extension of “.tar”. An example of the filename is cme-gui-123-11T.tar. Note that some of the older IOS versions did not combine these files in a .tar file.

**Note:** The .tar file must match the IOS version on the CME router.

Once the .tar file is obtained from the Cisco site, the GUI files are extracted from the .tar file and uploaded to the router Flash memory. This is done from a TFTP server. Copy the .tar file into the appropriate TFTP server folder. From privileged mode, use the **archive tar /xtract tftp://tftp\_server\_ip\_address/.tar\_filename flash:.** *tftp\_server\_ip\_address* is the address of the TFTP server (that contains the .tar file). *.tar\_filename* is the name of the file that starts with the letters “cme-gui” and has a filename extension of .tar. An example of this command is as follows: **archive tar /xtract tftp://10.3.0.33/cme-gui-123-11T.tar flash:.** A successful extraction shows an output similar to the following:

```

Loading cme-gui-123-11T.tar from 10.3.0.33 (via
GigabitEthernet0/0.3): !
extracting CiscoLogo.gif (1602 bytes)
extracting Delete.gif (953 bytes)
extracting Plus.gif (1347 bytes)!
extracting Tab.gif (174 bytes)
extracting admin_user.html (3845 bytes)!
extracting admin_user.js (641134
bytes)!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!
!!!!
extracting dom.js (16344 bytes)!!!!
extracting downarrow.gif (864 bytes)

```

```

extracting ephone_admin.html (6146 bytes)!
extracting logohome.gif (4658 bytes)!
extracting normal_user.html (3724 bytes)!
extracting normal_user.js (76732 bytes)!!!!!!!!!!!!!!
extracting sxiconad.gif (843 bytes)!
extracting telephony_service.html (2357 bytes)
extracting uparrow.gif (870 bytes)!
extracting xml-test.html (9968 bytes)!!
extracting xml.template (3311 bytes)!
[OK - 788992 bytes]

```

- d. Was the extraction successful? If not, troubleshoot as necessary. \_\_\_\_\_

## Step 2 Configure the GUI interface for the System Administrator

- a. The CME GUI interface allows administrators to configure CallManager Express using web access rather than from a console or Telnet connection. Enter the command **ip http server** to enable the Web server on the Cisco CallManager Express router.

```
CMERouterX(config)# ip http server
```

- b. Enter the command **ip http path flash:** to define that the location of the HTML files are in Flash memory of the router. The HTML files on the router are needed to perform GUI administration.

```
CMERouterX(config)# ip http path flash:
```

- c. Enter **ip http authentication local** to define that login credentials will be defined locally on the router. Without this command, the default authentication is the router's enable secret password, or the enable password if enable secret is not set.

```
CMERouterX(config)# ip http authentication local
```

- d. Move to the telephony service mode by using the command **telephony-service**.

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

- e. From telephony service mode define a username and password used for web-based access. The username will be ACMEadmin with a password of cisco.

```
CMERouterX(config-telephony)# web admin system name ACMEadmin
password cisco
```

- f. Enter **dn-webedit** to allow changes to the Directory Number through the Web interface.

```
CMERouterX(config-telephony)# dn-webedit
```

- g. Enter **time-webedit** to allow the Cisco CallManager Express time to be set from the Web interface.

```
CMERouterX(config-telephony)# time-webedit
```

Currently, the only changes that can be made through the web interface are the directory number and the time based on the commands just entered, but more can be configured.

- h. Return to privileged mode and save the router configuration.

### Step 3 Configure a speed dial using the GUI

- a. Ensure the PC that will be used to access the CME GUI either (1) connects to a switch port that has been configured for the data VLAN or (2) connects to the 10/100 PC port on one of the IP phones. The PC can be configured for DHCP and if so configured, should receive an IP address from the CME router. Ensure the router has been configured for a data DHCP pool (see previous lab). If the router has not been configured, the PC can be manually configured with an IP address in the data VLAN IP address range. See Table 1 for these addresses.

If the PC connects to a switch port, ensure the switch interface is configured for (1) access mode and (2) the data VLAN (X0 where X is the pod number).

The PC should be able to ping the router interfaces before any other step is attempted.

- b. Can the PC ping all of the router interfaces? If not, troubleshoot as necessary. \_\_\_\_\_
- c. What IP address is assigned to the PC? \_\_\_\_\_
- d. Open the Web browser on the PC and enter the URL of **http://10.X0.0.1/ccme.html** (where **X** is the pod number). Attempt to log in using a blank username and the enable secret password.
- e. Were you able to login using blank username and the enable password? Why or why not?  
\_\_\_\_\_  
\_\_\_\_\_
- f. Try logging in again and when asked for credentials, use **ACMEadmin** for the username and **cisco** for the password.
- g. What are the five menu options available through the web interface? \_\_\_\_\_  
\_\_\_\_\_
- h. From the Configure menu option, select **Extensions**. The currently configured extensions are shown on the screen.
- i. How many extensions display on the screen? If none, the phones have not been configured correctly. Start this lab over. \_\_\_\_\_
- j. From the Configure menu option, select **Phones**. The two configured phones should be listed. If none are listed, the phones are not configured correctly. Start this lab over and connect the phones properly.
- k. In the Phone Physical ID(MAC Address) column, click on the first MAC address. The MAC address is underlined. The phone line buttons list in a separate window in a table. Note that popups may have to be enabled in order to see this window.
- l. How many buttons list on the screen? Does this correspond to the correct number of buttons located to the right of the IP phone's LCD? \_\_\_\_\_
- m. Scroll down until the Speed Dial Information section is reached. In the Speed Dial 1: textbox, type in the four digit extension of the *other* IP phone. Normally, the number for the phone that is being accessed is shown as the first button. For example, if configuring this for the IP phone that currently has the extension of 1001 (shown higher in this web configuration window), type 1000 (the other IP phone extension). In the Label: textbox, type a name or description that will display on the IP phone. An example is Alyssa.
- n. Click on the **Change** button at the bottom of the screen. When prompted if the changes are to be saved, click the **OK** button.

- o. What feedback is received as a result of clicking the OK button? \_\_\_\_\_
- p. In the message that appears on the screen, click the **OK** button to clear the message.
- q. Look at the IP phone that was being changed. What happens as a result of creating a speed dial using the GUI? \_\_\_\_\_
- r. Once the phone has reset, what has changed on the phone display?  
\_\_\_\_\_
- s. Press the second button on the phone that was just configured (the one that contains the words just created with the speed dial). What happens as a result?  
\_\_\_\_\_

#### Step 4 Configure system time using the GUI

- a. From the Configure menu, select **System Parameters**. Notice the different selections that can be changed.
- b. Use the **System Time** option to change the date and/or time to a different time than is currently defined. Note that the current time is based on the time of the computer and not the router.
- c. Click on the **Set** button to use the currently configured settings. Click on the **OK** button to save the changes and select the **OK** button to acknowledge the save.
- d. Select the **Date and Time Format** option from the left column. Change the format to a different selection.
- e. Reset the two IP phones by using the **Configure** drop down menu and selecting the **Phones** option. Use the **Reset All** link to reset the phones. Click **OK** to reset the phones and **OK** again to acknowledge the save.
- f. View the changes as they occur on the IP phones. Record your observations.  
\_\_\_\_\_
- g. From the Configure menu, select **System Parameters** again. Click on the **Directory Service** option from the left column and select **Name Schema**.
- h. What is the other name schema that can be selected? \_\_\_\_\_
- i. Click on the **System Message** option from the left column.
- j. In the System Message: textbox, type in a message. Click on the **Set** button and click on **OK** to save the changes. Click on the **OK** button to acknowledge the save.
- k. How does the phone change as a result of the last configuration step?  
\_\_\_\_\_
- l. How might a system administrator use this option? \_\_\_\_\_
- m. Logout of the GUI Web page by clicking on the **Logout** option from the upper right portion of the screen.
- n. From the router CLI, save the configuration to be used in future labs.