

UC320 Lab 1:

Initial UC320 Configuration

Task 1: Gathering Pod Equipment and Initial Configuration

NOTE Do **NOT** cable everything at this point. Connect your PC to Port 4 on the UC320 and connect the UC320 to power

Equipment	Required	Optional
UC320	X	
PoE Switch	X	
SPA8800		X (Lab 2 Only)
SPA525G2 + 500S		X
SPA525G		X (or similar)
SPA508G		X (or similar)
Analog Phone	X	
USB Drive		X
Cables/Power/PC	X	

- STEP 1** To ensure that you are starting with a default configuration on the UC320, use something like a mechanical pencil or toothpick and carefully press the **reset** button located on the left side between the two USB ports. Hold the reset button down until the **POWER/SYS** light on the left side of the front panel starts to blink.
- STEP 2** It will take a few minutes for the UC320 to reset. You will know that it has properly reset when the **POWER/SYS** light is solid green.
- STEP 3** From your PC, open a command prompt **Start > Run > cmd <enter>** and type **ipconfig**
- STEP 4** You should see something similar to the output below

```
Administrator: C:\Windows\system32\cmd.exe
C:\Users\Administrator>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::5cd3:9ed2:5b45:e0c%15
    IPv4 Address. . . . . : 192.168.10.100
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.10.1

Tunnel adapter isatap.<75B5F460-6FE2-4934-9E4B-23351F715352>:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 

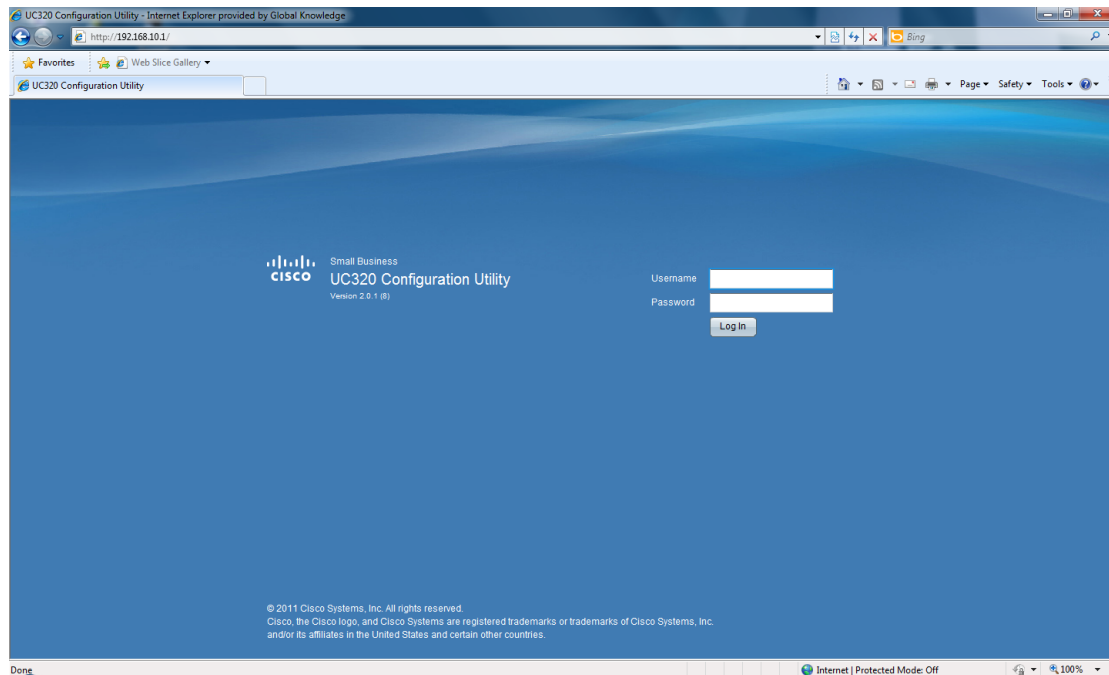
Tunnel adapter Teredo Tunneling Pseudo-Interface:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 

C:\Users\Administrator>
```

- STEP 5** If you do not have an IP address in the **192.168.10.X** range and default gateway of **192.168.10.1** type **ipconfig /release** then **ipconfig /renew** at the command line. You should now have the correct addressing information.

- STEP 6** If you are using a MAC, you can view the IP configuration under **System Preferences > Network > Ethernet**
- STEP 7** Now open a web browser to <http://192.168.10.1>
- STEP 8** Login with the default username of **cisco** and default password of **cisco**



- STEP 9** You will get a popup notifying you of configuration initialization. Then you will be prompted to change the default authentication credentials. You cannot use **cisco** or **admin** as the username. Set **uc320admin** as the username and **logmein** as the password
- STEP 10** You will then be provided with 4 help links. You may view them if you wish or skip for now. This lab assumes we are skipping the help links.
- STEP 11** Click **Begin Configuration**
- STEP 12** Click **Next** on the Configuration Welcome Page
- STEP 13** On the Region Settings, select the correct settings for your area. For example: **New Zealand and GMT+12 New Zealand Time**
- STEP 14** Click **Next**
- STEP 15** The next screen presents you with choices on how to access the management page. Leave **Enable Wireless Management** and **Remote Management** unselected.

NOTE If you intend to remotely manage your UC320, it is strongly suggested that you secure a static IP address from your provider.

- STEP 16** Click **Next**
- STEP 17** If you have a USB drive, make sure it is plugged into **USB1** and select the **Enable USB Backup** checkbox. Change the default backup time if you wish.
- STEP 18** Click **Next**
- STEP 19** Review your settings. Go back if you have made a mistake and correct it. If not, click **Next**
- STEP 20** Click **Next** on the Telephony Configuration Welcome Page
- STEP 21** No devices are detected at this point because we have not connected them. We will connect them later after we have completed the configuration. Take a moment to record the MAC address of your three phones. If you do not have at least three IP phones, then create additional phones with fake MAC addresses (eg 0000.0000.0001, 0000.0000.0002 etc). For the purpose of this lab, choose phone

models with several buttons.

Phone 1 (SPA525G2+500S) _____
Phone 2 (SPA5XX) _____
Phone 3 (SPA5XX) _____

- STEP 22** There is an optional Lab 2 where we will create a SPA8800 gateway. We will skip that configuration for now.
- STEP 23** Click **Create a Phone**. In the Model drop down box, select **SPA525G2**. Then select **1 in the Side Cars** drop down box.
- STEP 24** Type the **MAC address** you recorded in the MAC address field.
- STEP 25** Click **Create a Phone**. In the Model drop down box, select **your phone model**.
- STEP 26** Type the **MAC address** you recorded in the MAC address field.
- STEP 27** Click **Create a Phone**. In the Model drop down box, select **your phone model**.
- STEP 28** Type the **MAC address** you recorded in the MAC address field.
- STEP 29** Click **Next**
- STEP 30** On the system mode page, leave the default of **Blend** selected and click **Next**
- STEP 31** On the scheduling page, select the **Day/Night Menu/Schedule** for AA and Call Routing. If you leave the **Manually Select Day/Night Service** check box checked, the scheduler will continue to be grayed out. **Deselect this** to set custom Day/Night.
- STEP 32** Add open hours for **Saturday of 8AM-Noon**
- STEP 33** Add some holidays: For example **December 25th** and **January 1st**. Select the **Yearly** check box for these since they are always the same date. Add the **2nd Monday in June**. Leave the Yearly check box unchecked since it is not always the same date.
- STEP 34** Click **Next**
- STEP 35** View the **Internal Dialing** default settings. 1XX, 2XX and 3XX are the internal extensions with 3XX being configured for MoH, etc and the default extension length is 3 digits. Voicemail is set to use 7XXX and since we selected to use Blend, we have 9 as the pattern to define an outside call.
- STEP 36** Change the defaults to use 0 for outside calls and 9 to access the Auto Attendant, and then click **Next**
- STEP 37** Note the default settings for Music on Hold and click Next. The Line In port is used if you connect a Music on Hold source to your UC320.
- STEP 38** Review the configuration. Go back and fix any errors, otherwise, click **Next**
- STEP 39** Click **Next** on the Ports and Trunks Welcome Page
- STEP 40** **Enable only the first FXO port**. Give the port an appropriate label (eg Line 1).
- STEP 41** Click **Next**
- STEP 42** Accept the FXS port being enabled and click **Next**
- STEP 43** Click **Next** on the add SIP/BRI trunk
- STEP 44** Click **Next** on the Outside Trunk configuration. Since we only have FXO trunks we do not need to perform any configuration here.
- STEP 45** Review the configuration. Go back and fix any errors, otherwise, click **Next**
- STEP 46** Click **Next** on the User and Phone Assignment Welcome Page
- STEP 47** Add the following Users: **Michael Scott, Jim Halpert, Pam Beasley, and Dwight Schrute**. Take the default extension assignment and voicemail box creation.
- STEP 48** Click **Next**
- STEP 49** Next assign phones to users. Drag the **SPA525G2+500S to Pam**. Drag the other **SPA525 or similar to Michael** and the **SPA508 or similar to Jim**. You should now have only the FXS phone left. **Drag the FXS to Dwight**.
- STEP 50** Click **Next**
- STEP 51** Review the configuration. Go back and fix any errors, otherwise, click **Next**
- STEP 52** Click **Next** on the Extensions Welcome Page
- STEP 53** Click **Next** on the Shared FXO line. This will be configured in a later lab.

- STEP 54** Create a **Shared Extension** between Michael and Jim. Label it **MGR** and take the default first shared extension of **200**.
- STEP 55** Expand the **Shared Extension** setting and **select the shared voicemail box**
- STEP 56** Expand **Select Members** and select **Michael and Jim**'s checkbox.
- STEP 57** Click **Next**
- STEP 58** Click **Next** to skip creating any additional extensions - we will address this in a later lab.
- STEP 59** Review the configuration. Go back and fix any errors, otherwise, click **Next**
- STEP 60** Click **Next** on the Routing Welcome Page
- STEP 61** Create a **paging group** called **ALL PAGE** and accept the default extension of **201**. Expand the **Select Members** and select **Michael, Jim and Pam**'s checkboxes.
- STEP 62** Click **Next**
- STEP 63** Create a **Hunt Group** called **IN CALL** and accept the default extension of **202**. Expand the **Select Members** and select **Jim** and **Dwight**'s checkboxes. Notice the FXS port is supported for this feature.
- STEP 64** Click **Next**
- STEP 65** Click **Next** to accept the default Auto Attendant configuration.
- STEP 66** Route the **Day** inbound calls to **Pam** in the drop down
- STEP 67** Route the **Night** inbound calls to **Auto Attendant** in the drop down
- STEP 68** Click **Next**
- STEP 69** Review the configuration. Go back and fix any errors, otherwise, click **Next**
- STEP 70** Click **Next** on the User and Group Features Welcome Page
- STEP 71** Expand the **User Call Forwards** and notice the defaults. Expand the **Group Call Forwards**. Leave MGR at the current setting of the group mailbox, but change **IN CALL** to **Auto Attendant**.
- STEP 72** Click **Next**
- STEP 73** Select the **Use Voicemail to Email** checkbox. We will configure a fictitious email notification. Set the SMTP Server to **SMTP.theoffice.com** with username **admin** and password **theoffice**
- STEP 74** Enter the email addresses for **michael@theoffice.com, jim@theoffice.com, pam@theoffice.com, dwight@theoffice.com, and mgr@theoffice.com**
- STEP 75** Select the **Attach Voicemail** checkbox for all five. This will actually attach the voicemail instead of just sending notification.
- STEP 76** Click **Next**
- STEP 77** We are not going to do any custom button configuration at this time. Click **Next Set** to view the existing configuration of each phone, then click **Next**
- STEP 78** The Directory Configuration Page allows you to create External Directory entries as well as view the current internal directory that has been created from the User/Extension configuration. Click **Next**
- STEP 79** Review the configuration. Go back and fix any errors, otherwise, click **Next**
- STEP 80** Click **Next** on the Network Welcome Page
- STEP 81** Leave the default UC320 Routes Voice and Data setting. Examine the other topologies available and consider when you would use these. Discuss with your instructor if you are not sure.
- STEP 82** Click **Next**.
- STEP 83** Choose the **Estimated Uplink Bandwidth** to **1M**. This should match your provider specifications.
- STEP 84** Choose the **WAN type** to **Static IP**
- STEP 85** Enter the IP address of **1.1.1.10x**, where **x** is your pod number
- STEP 86** Enter the Default Gateway of **1.1.1.1**
- STEP 87** Enter the Primary DNS of **1.1.1.1**
- STEP 88** Leave the Secondary DNS blank
- STEP 89** Enter the Domain Name of **THEOFFICE.COM**
- STEP 90** The above steps assume you have secured a static IP from your provider and are entering the settings they have given you. If you have not secured a static IP from

- your provider, keep the **default DHCP setting**.
- STEP 91** Click **Next**
 - STEP 92** Expand the **Data VLAN** and observe the default settings
 - STEP 93** Expand the **Voice VLAN** and observe the default settings
 - STEP 94** Click **Next**
 - STEP 95** Leave both the **Data and Voice wireless networks** checkboxes disabled
 - STEP 96** Click **Next**
 - STEP 97** Leave the Port Forwarding page blank. This would be used to create a firewall exception so that a service hosted on an internal machine could be accessed from the Internet.
 - STEP 98** Click **Next**
 - STEP 99** Review the configuration. Go back and fix any errors, otherwise, click **Next**
 - STEP 100** Review the Site Summary
 - STEP 101** Click **Next**
 - STEP 102** Click **Apply All Changes**
 - STEP 103** Click **OK**
 - STEP 104** Once the UC320 has completed the configuration and reloaded you will get the **Finish and View Status** screen. Click that button.
 - STEP 105** This will give you the **summary tab** page
 - STEP 106** Now connect your switch if you have one to Port 1 on the UC320
 - STEP 107** Connect your SPA phones to the switch or the UC320 LAN ports. If necessary, connect power adapters to the phones.
 - STEP 108** Connect your Analog phone to the FXS port
 - STEP 109** Wait for all the phones to register
 - STEP 110** Click **Status** in the top left tool bar and select **devices**
 - STEP 111** You should see all your phones in **green** status.
 - STEP 112** Stay logged in to the UC320 Configuration Utility for the next lab.

This completes Lab 1.