# Cisco Small Business Smart Business Communication System



Technical Enablement Lab #25
Configuring "The Office" UC540 Demo
using CCA 3.0

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#### Introduction

In the Small Business Support Community, Partner Zone: Demo Lounge, or SBSC Documents area will find "The Office" demo, which is used by Small Business Account Managers (SBAM) to demonstrate UC540 capabilities and features to Partners, and for Partners to demonstrate to their end customers.

We can now configure 'The Office' using CCA 3.0 allowing additional capabilities to be programmed bringing it up to date with UC500 SWP 8.1.0.

This TEL furnishes this CCA procedure so it can be leveraged as a training exercise for Partners to use on their Not for Resale (NFR) Demo Kit<sup>1</sup>. It also allows for practiced demonstrations of a lot of functionality which can help ignite Partner Sales once it's configured!

## **Site Survey**

A Site Survey document must be completed for any UC500 installation, in advance of partner configuration. To be successful, we would expect that most configurations based on this survey can be staged, in the Partner offices prior to going on site with all the phones where some customer tweaking should be expected to occur during the familiarization and training delivered as part of the deployment.

According to this model, this lab allows most configurations to be performed without a single phone being plugged in. All you need are the MAC addresses of your devices (found on the outside of the box or on the phone itself) and the correlation/association of the phone model and MAC to a user name and extension number.

A sample completed Site Survey with this configuration is in Appendix A.

#### Reference Sheets

A one page phone features and buttons reference sheet resulting from this configuration is in Appendix B

A one page system features reference sheet resulting from this configuration is in Appendix C

# **HW Equipment Required**

Recommended equipment required listed.

UC540 (8 User SKU base system or higher)

Phone 1 – 201 Michael Scott <mac> 7970 or 7975

Phone 2 - 202 Pam Beasley < mac > SPA525G

Phone 3 – 203 Jim Halpert <mac> c7921 or 7925 with Battery

Phone 4 – 204 Dwight Schrute <PC Ethernet mac> CIPC 7.x

Phone 5 - 205 Angela Martin <mac> SPA504G

Phone 6 – 221/222 Conference Room <mac> SPA508G

Analog POTS phone (FXS)

PVC2300 IP Camera

<sup>&</sup>lt;sup>1</sup> Contact your local SBAM for information and availability of a demo kit for your use

ESW Switch (any model)
CUVA-V2 Web Camera and a PC.

#### **Software**

You will need to download the following two files to your PC as they are required for this procedure.

## UC500 Software pack 8.1.0

Choose the UC540 8.1.0 zip file and Save it to your PC. Leave this as a ZIP File and you will use it from CCA later

https://supportforums.cisco.com/docs/DOC-9829

## **SWP 8.1.0 Default Configuration Changes**

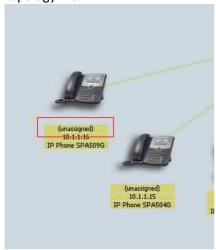
1. Disabled STCAPP feature access codes – "no stcapp feature access-code"

STCAPP is a subsystem in IOS that enables Skinny Client Control Protocol (SCCP) supplementary features for analog FXS ports. Since CME already provides support for FAC we disabled STCAPP FAC's to prevent any overlap. In order to enable STCAPP feature access codes you can do this through CCA by going to Troubleshoot > Telephony Diagnostics > SCCP Analog Phones. Refer to the following forum post for more information-

https://supportforums.cisco.com/message/3150023

2. Removed the DN "auto assign" behavior when a phone is connected to the UC500. Prior to CCA 3.0 when a phone is connected to the UC500 a DN would automatically be assigned to a phone. In CCA 3.0 an extension would need to be manually assigned either through TSW or in Expert Mode.





3. Enabled Direct Station Select. This feature enables phone users to quickly transfer calls to an extension selected by a speed-dial or monitor line button without having to press the Transfer button. A user can transfer a call when the call is in the connected state by simply pressing a speed-dial or monitor line

button to select the transfer destination. This feature is supported only on phones on which monitorline buttons for speed dial or speed-dial line buttons are configured.

#### CCA 3.0

Download the latest CCA and install it on your PC. Check the CCA data sheet for supported operating SW.

http://www.cisco.com/go/configassist

## **SW Upgrade and Factory Reset**

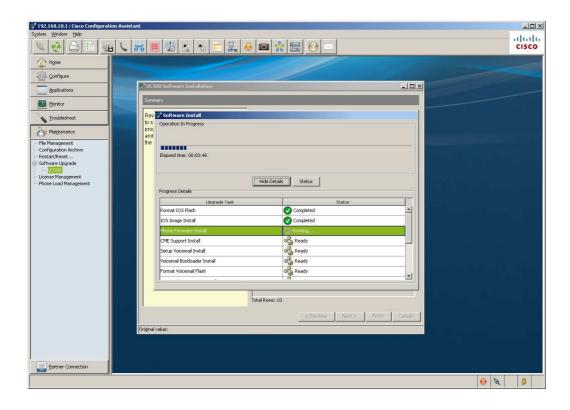
Connect your PC to the UC540 LAN and launch CCA. On the Connect Window click on the Host Name/IP Address tab and enter 192.168.10.1. Click 'Connect' and enter authentication credentials to discover your UC540. The default username/password is cisco/cisco.

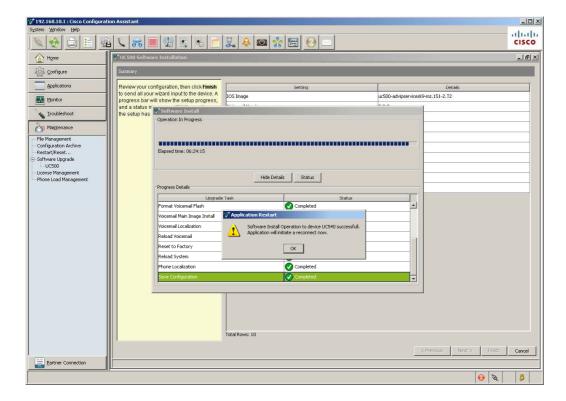
Disconnect all phones prior to performing these step and do not reconnect them until told. The factory reset and SW Upgrade can be done in one step and will take less than 1 hour (much less if you are already on the latest SW bundle (less than 20 minutes).

#### **STEPS**

- 1. Select the Maintenance Feature Bar
- 2. Expand the **Software Upgrade** option and click on "**UC500**"
- 3. Select the "Install Software Pack" radio button and click Next
- 4. Browse to the UC540 Software Pack zip file and click Next to validate the file
- 5. Select the default language options and click Next
- 6. Check all the phone loads for the models you are using (reference the BOM discussed earlier) and click
- 7. Select both checkboxes and click Next:
  - **Reformat UC500 Flash** Required as CCA now only supports directory folder format **Apply Factory Default Configuration** - Factory Reset and is mandatory for the TSW
- 8. Review the settings on Summary page and click on Finish to start the SW Upgrade and Factory Reset procedure.

Reference pictures below.





When the Software Upgrade and Factory Reset completes CCA will reconnect automatically. You don't have to save the topology or device configurations at this point since the UC500 has been reset to factory defaults (click

cancel). You may want to create a "Site" to not only manage the UC500 but other devices such as switches, access points, cameras, etc. Refer to the next section to create a "Site".

#### **Create CCA Site**

We will be creating a Customer Site called "The Office".

#### **STFPS**

- 1. Upon launching CCA the "Connect" screen should appear giving you the option to "Add a New Site". If you don't see this screen you can select the "Home" Feature Bar and select "Customer Sites".
- 2. Click on the "Add a New Site" button
- 3. Fill in the following information-

Name: The Office

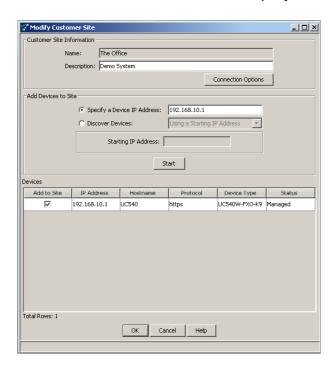
Description: Demo System

Specify a Device IP Address: 192.168.10.1

4. Click on the Start button to discover the devices and use the following default credentials when prompted

Username: **cisco** Password: **cisco** 

5. Click OK and CONNECT to the site you just created.



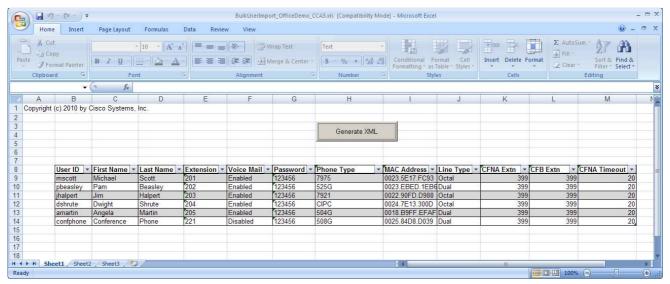
## **Bulk User Import Configuration File**

We will be using the Bulk Use Import Tool introduced in CCA 3.0 to import the initial user and phone configurations. Locate the BulkUserImport.xls file. If you installed Configuration Assistant to the default location, this file is located in the following directory:

C:\Program Files\Cisco Systems\CiscoSMB\Cisco Configuration\Assistant\appdata

There is also a pre-filled .xls file available on the Cisco Support Community that you can use where you will need to change the MAC address of the phones according to your setup.

BulkUserImport\_OfficeDemo\_CCA3.xls



Note: Make sure that the password is a minimum of 6 characters for Office Manager compatibility.

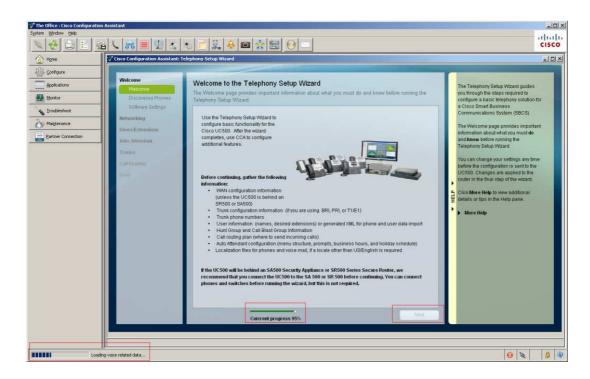
Once you have all the fields filled out according to the above .xls sheet click on "Generate XML". Save the XML file to a location where you can retrieve at a later step.

# **Telephony Setup Wizard (TSW)**

Under the HOME Feature Bar of CCA is the Telephony Setup Wizard (TSW). CCA will recognize whether your system has the factory default configurations and will launch automatically. Running the TSW will take about 10 minutes to insert the data and about 30 more minutes to APPLY the final configurations, but a time estimate will be given before APPLY is selected.

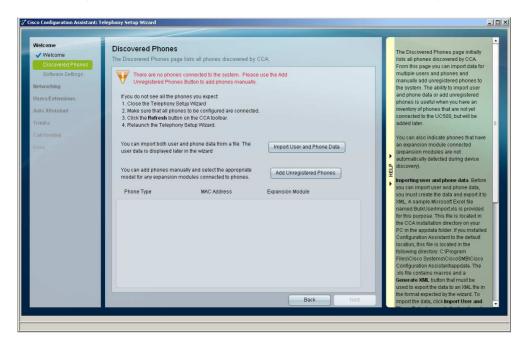
#### Welcome

When TSW launches you will be prompted by the Welcome Screen. At this point TSW is discovering the underlying network elements. Do not interrupt this process until it is 100% complete. <u>Do not</u> have your PC wireless NIC enabled during this procedure.



#### **Discovered Phones**

After clicking next above, since there are no phones connected, click "Import User and Phone Data":

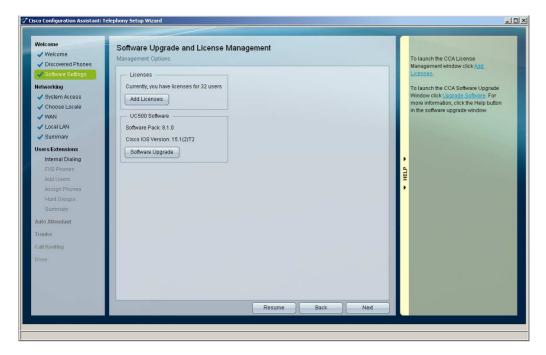


Locate the XML file that was created previously using the Bulk User Import Tool.



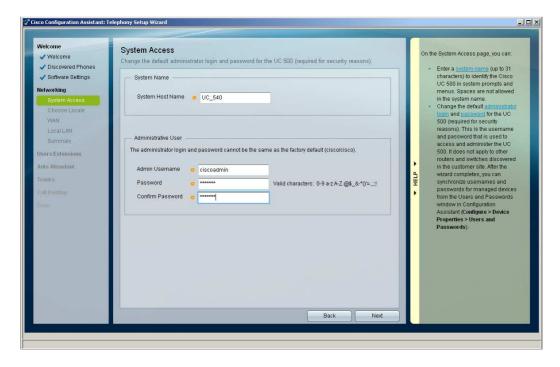
# Software Settings

After confirming the correct information above and clicking NEXT, you come to the Software Upgrade and License Management page. This page should display the same Software Pack that you upgraded to previously. Click Next.



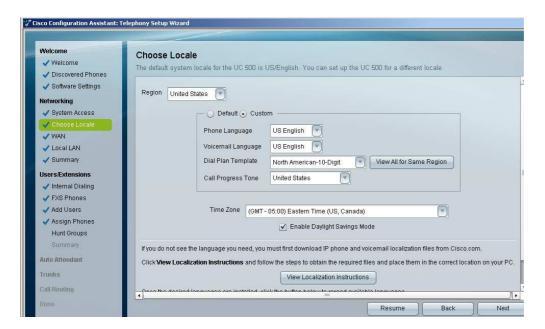
# System Access

Change the default username/password of cisco/cisco and we recommend ciscoadmin/ciscosb for the demo system. The hostname is what you will see on the UC500 CLI prompt, not the MOTD, so you may leave that as is.



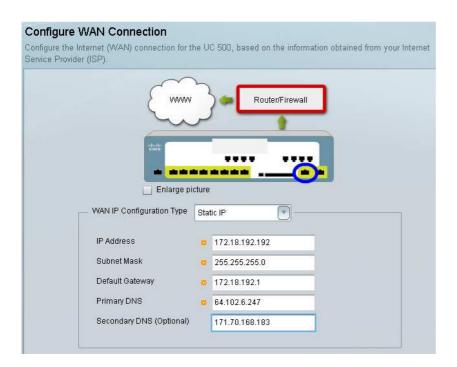
#### Choose Locale

For Choose Locale, in the U.S. Market, select custom and select North American 7 or 10 and set your time zone and click next.



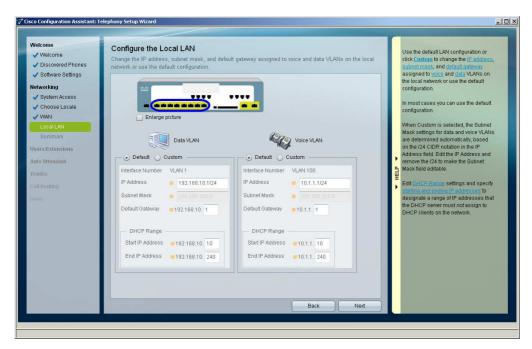
#### WAN

The WAN IP is not required for the DEMO System, but you can see your options. Set it if you have WAN connectivity. I have set mine for Cisco LAB access (shown as example only):



#### Local LAN

The Local LAN configurations may be left at the default values. This is where you would change the Local LAN configuration if needed in case this was the second system of a multisite, or if you are integrating into an existing data VLAN.

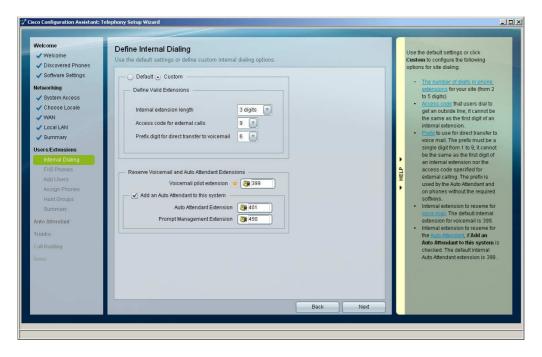


This will bring you to a summary page where you confirm your entries and click NEXT.

#### User Extensions

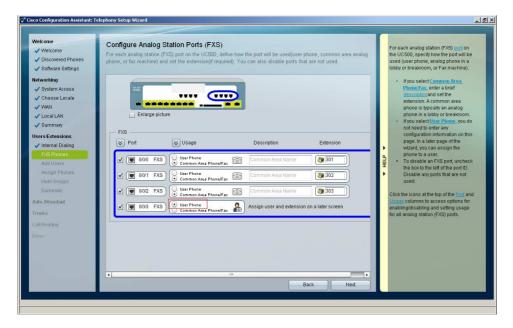
## **Internal Dialing**

Click CUSTOM, and confirm 399 for Voice Mail extension, 9 for Prefix digit, then check the AA box and enter 401 for AA extension and 450 for Prompt Management extension.



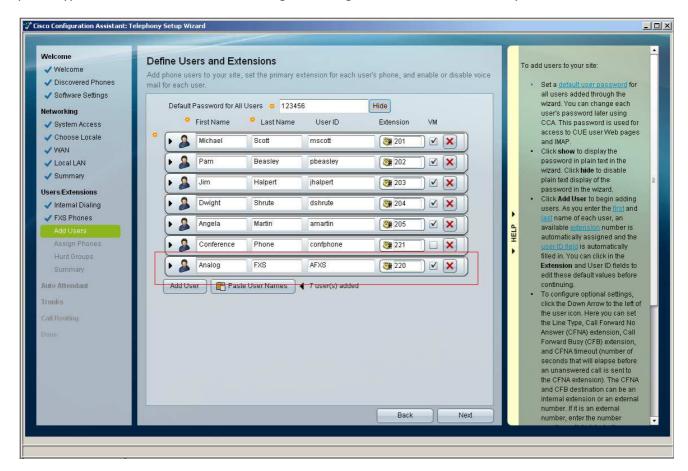
#### **FXS Phones**

We will configure a single analog station with a voice mail box and some feature capability (Feature Access Codes). Use FXS port 0/0/3 to 'user mode phone' (uses an SCCP feature license). This corresponds to the FXS port that connects to FXO port 0 when there is a power failure so a good choice if you have just one analog phone.



#### **Add Users**

When the Add Users screen appears the Users and Extension field should already be populated based on the XML Bulk User Import file that was created earlier. Since the Bulk User Import Tool does not support analog phone types at this moment we will be adding the Analog User information at this step-



#### **Assign Phones**

The next step is to assign users to phones. The Users and Phones that were imported using the Bulk Import Tool should already be assigned. The only User and Phone that needs to be assigned is the Analog Phone user. You can also change the system message here. Then click NEXT.



## **Hunt Groups**

We will add:

- A Voice Hunt Group (Parallel or 'Blast Group') with extension 501 with all members of the team excluding the conference phone
- A Longest Idle Hunt Group with extension 502 including 3 members shown (204,205,220)

Select users and adding them using the center arrow button.

In order to display the second hunt group, collapse the member list of the first created group(red circles):

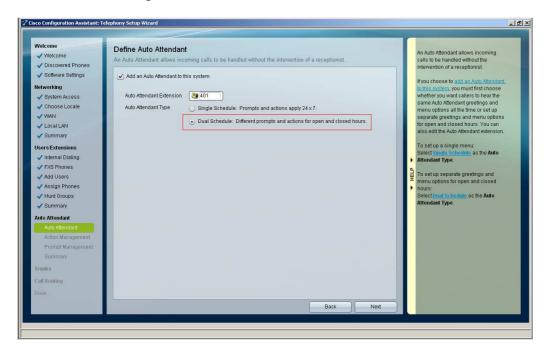


## **Summary**

Confirm the summary and click NEXT.

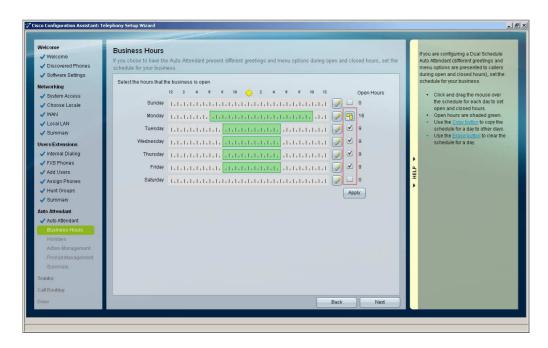
#### **Auto Attendant**

Since we specified an AA, we will now configure it the way we want it. We want a DUAL SCHEDULE, so check that box before clicking NEXT.



#### **Business Hours**

Considering you want this to operate as if you were open most of the time, slide the hours so the Green appears from 6AM to 10PM for Monday, then use the copy paste buttons to copy that schedule for T-F, and click APPLY, and then NEXT. When you click APPLY The MONDAY bar will paste to T-F.



#### **Holidays**

Set some relevant Holidays for the coming year. Add as many as you like to that for 2010 and 2011.



## **Action management**

We will have two greetings for OPEN and CLOSED (you type these in the fields provided). For this demo, the actions are identical whether opened or closed (customizable using the SUN/MOON icon). And we will use

- 1 dial by number
- 2 dial by last name
- 3 Transferred to the blast group Parallel 501 \* Select 'Transfer Caller' to see this choice
- 4 to the receptionist (Pam @ 202)

- 5 remote access to voice mail (399) \* Transfer Caller default
- 6 for Directions (custom prompt) \* Play Prompt and type Directions

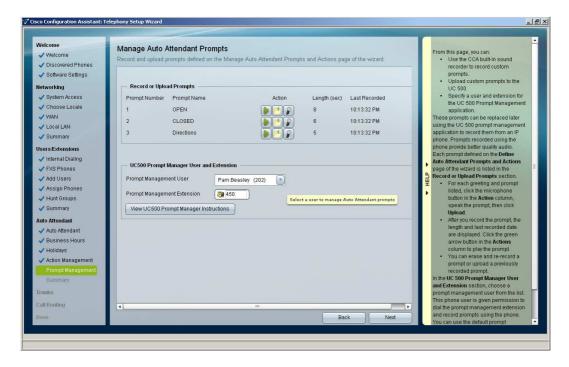
No Action Transfer to Pam (202)





## **Prompt Management**

When you click NEXT above, you will now have an opportunity to record the prompts and greetings, using your PC Microphone. Do that to satisfy the GUI and populate the CUE with placeholders, which are much easier to rerecord, since they are already assigned in the AA script. You will rerecord later with an IP phone. There are three prompts; Open, Closed, and Directions.

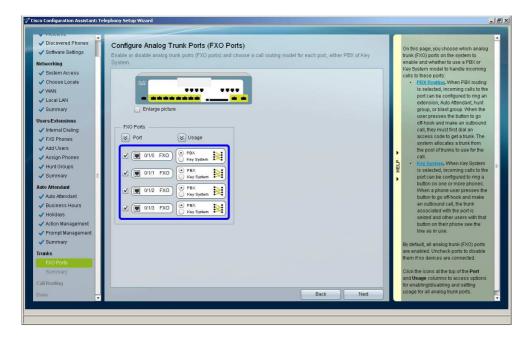


#### Summary

Confirm the Summary and click NEXT

## **Trunks (FXO Ports)**

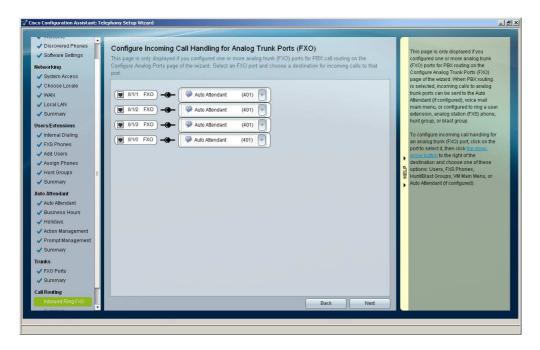
Leave the defaults (PBX) mode.



Confirm the summary and click NEXT.

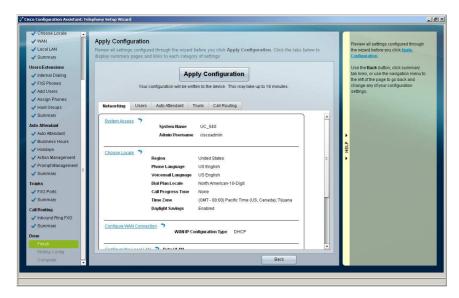
#### Routing

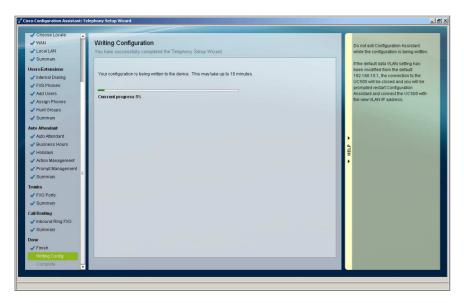
This is the last input for the FXO and leaving them mapped to the AA is fine as an incoming dial plan:

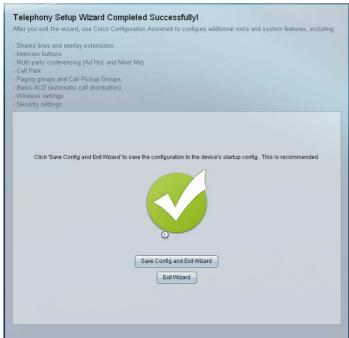


#### **APPLY and Save**

At this point, you click apply and let CCA configure the system. Do not plug in any phones yet. Let the system complete this. Takes about 25 minutes, but depending on whats entered, could be as high as 45 minutes. CCA will save this for you as well when done.







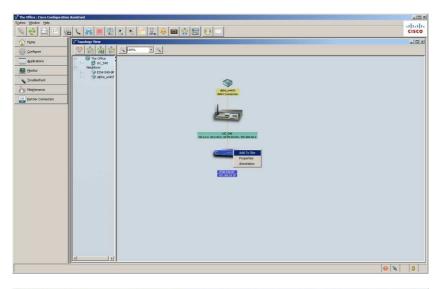
## **Expert Mode Configuration using CCA**

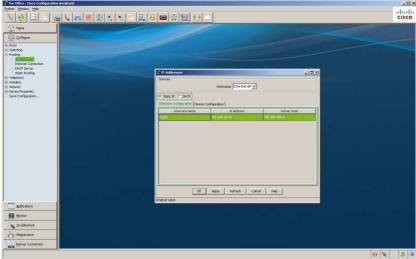
In this section, we complete The Office demo kit with CCA menus, called 'expert mode'. This is the same thing a Partner would do for usual deployments after the TSW is completed. Phones should remain unplugged. Plug in the switch at this point.

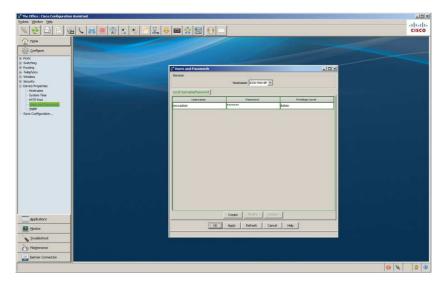
# CCA Site Adjustments

Launch the Topology View by expanding the HOME Feature Bar and click on Topology where you should see the UC500 and switch in the Topology View. If the switch is not present try refreshing the discovered devices by going to the "System" menu and select "Refresh". The keyboard shortcut is Ctrl+Q. Right mouse click on the switch and click "Add to site'. The default username and password for the switch is cisco/cisco. You should

change the username and password of the switch to ciscoadmin/ciscosb as well. You can change the IP address of the switch to a Static IP as well, so subsequent DHCP discovers don't result in a new IP, and a readjustment of the CCA community.



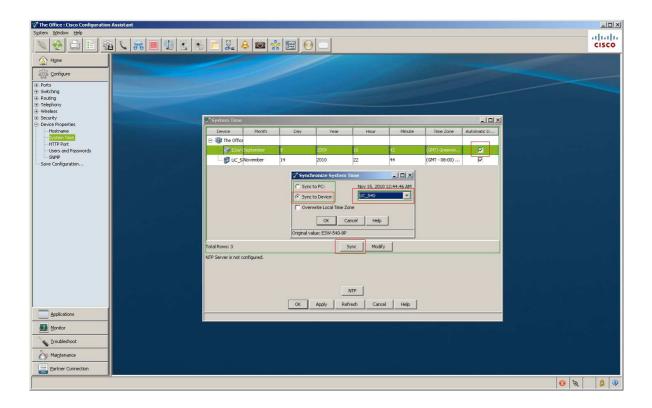




# System Time

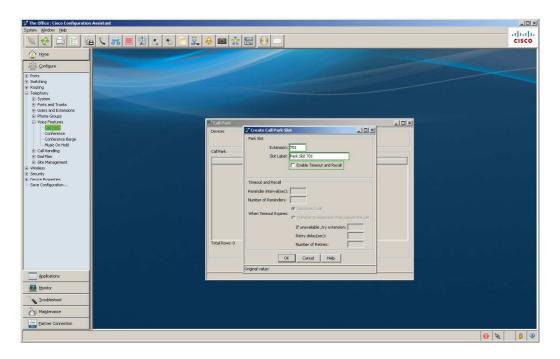
Go to Configure → Device Properties → System Time and:

- Synch Switch to UC540 as shown in picture
- Enter NTP (if you have WAN access to an NTP Server)
- Synch the UC540 to the PC (if no WAN connection) or to NTP (if WAN access with NTP configured)



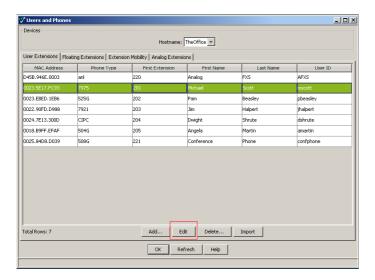
### Park Slots

Configure  $\rightarrow$  Telephony  $\rightarrow$  Voice Features  $\rightarrow$  Call Park and configure 1 slot, which we will monitor from all phones with a monitor button later.



## **Voice**

Navigate to Configure  $\rightarrow$  Telephony  $\rightarrow$  Users and Extensions -> Users and Phones and configure the following Button Maps for each user-





#### Michael Scott's Phone (7975):

Button 1 is extension 201

Button 2 is Dialable Intercom with no MUTE

Button 3 is Monitor 701 (Park Slot)

Button 4 is Share 250 (new extension you create) with Label 250-Share

Button 5 is Whisper Intercom to Dwight (CIPC) on his button 5

Button 6 is an OCTAL Share 251 with label 251-OctalShare (click the octal line for this button)



## Pam Beasley's Phone (525G):

Button 1 is extension 202

Button 2 is Dialable Intercom

Button 3 Monitor 701 (Park Slot)

Button 4 is Share 250



#### Jim Halpert's Phone (7921):

Button 1 is extension 203

Button 2 is Dialable Intercom

Button 3 Monitor 701 (Park Slot)

Button 4 is Share 250



#### **Dwight Schrute's Phone (CIPC):**

Button 1 is extension 204

**Button 2 Dialable Intercom** 

Button 3 is Monitor 701 (Park Slot)

Button 4 is Share 250

Button 5 is Whisper Intercom from Mike Scott

Button 6 is an OCTAL Share 251 (just select 251 which is already Octal) with label 251-OctalShare



#### Angela Martin's Phone (504G):

Button 1 is extension 205

Button 2 Dialable Intercom with no mute

**Button 3 Monitor 701 (Park Slot)** 

Button 4 is Share 250

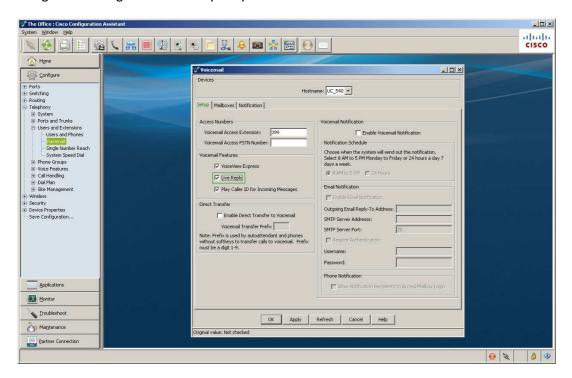


Analog FXS (220):

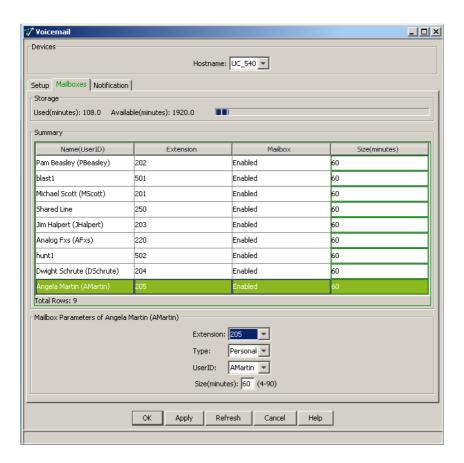
Restrict to Local Calls only

#### Voicemail

Navigate to Configuration → Telephony → Users and Extensions -> Voicemail and enable Live Reply:



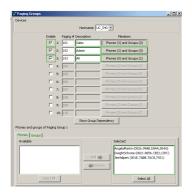
Then tab over to MAILBOXES and adjust every mailbox (Personal and GDM) to 60 minutes:



# **Paging Groups**

Navigate to Configure → Telephony → Phone Groups → Paging Groups and check paging group 101, 102, and 103. Build as follows:

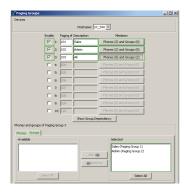
101 – Sales (name) – members: Dwight, Angela, and Jim



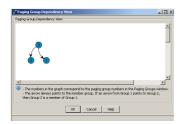
102 - Admin (name) - members: Mike and Pam



103 – All (name) – Group 1 and Group 2



Notice the analog FXS is not allowed in paging group. Check Group Dependency:



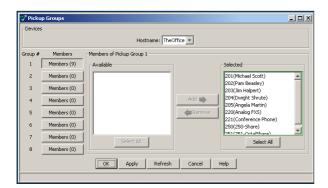
Then click APPLY and OK.

# Call Pickup Group

Navigate to Configure  $\rightarrow$  Telephony  $\rightarrow$  Phone Groups  $\rightarrow$  Pickup Groups

Add all the phones into pickup Group 1 (Click Members, Select All, Add)

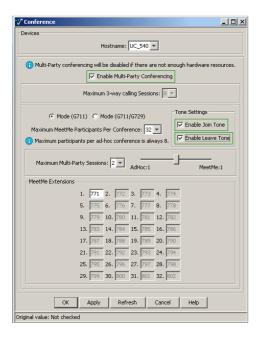
ОК



## Conference (Adhoc and MeetMe)

Configure → Telephony → Voice Features → Conferencing

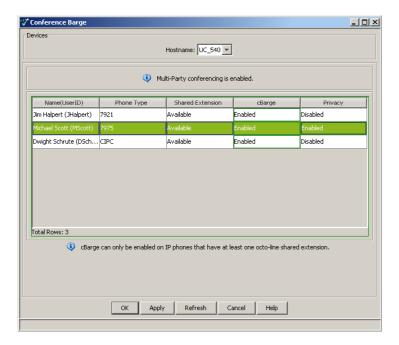
Enable Multi-Party Conferencing (gives) MeetMe and Adhoc.



## C-Barge

Navigate to Configure → Telephony → Voice Features → Conference barge

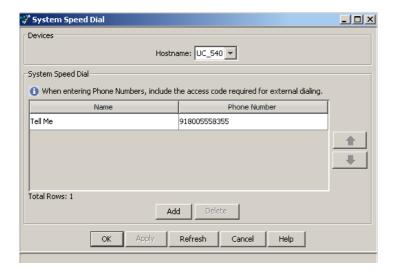
Notice the Share Octal Line members are the only ones that appear and are allowed. Enable C-barge for BOTH phones and privacy for Mike Scott only. If you don't see them, you probably didn't check the Octal Line button for the Share 251. If so, Delete it and read it on both Dwight and Mike)



# Speed Dial

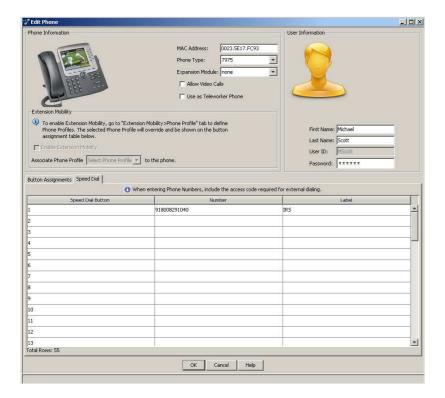
Navigate to Configure → Telephony → Users and Extensions → System Speed Dial

Add the same entry for all phones to use called "Tell Me"

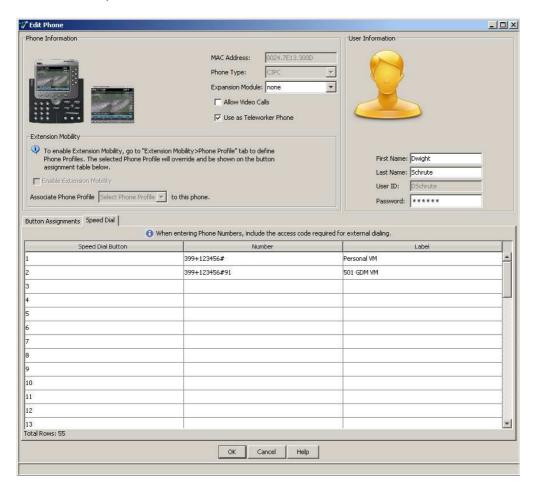


Navigate to Configure  $\rightarrow$  Users and Extensions  $\rightarrow$  Users and Phones. For each user navigate to the Speed Dial tab.

And add an entry for "IRS" for Michael and Pam:



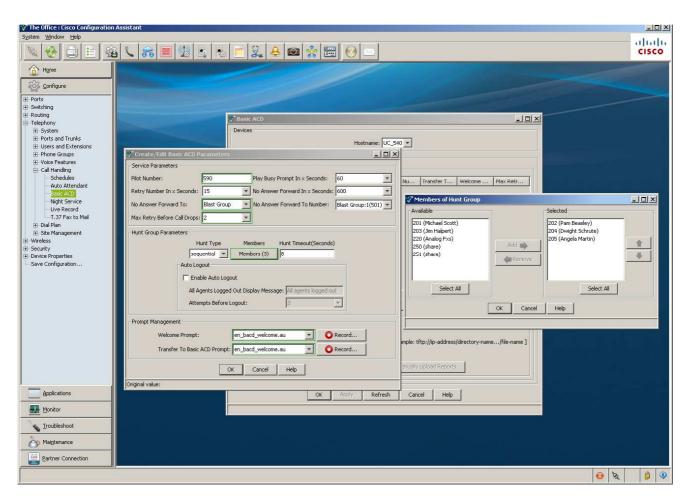
For Dwight add two speed dials where one would access his personal voicemail and the other to access the General Delivery Voicemail Box 501.



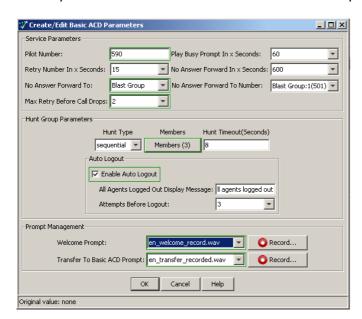
#### Basic ACD

Navigate to Configure → Telephony → Call Handling -> Basic ACD

Assign 3 members listed to the BACD with no answer forwarding to the Blast Group 501 and other miscellaneous settings shown.



You may also record custom Welcome and Transfer Prompts:



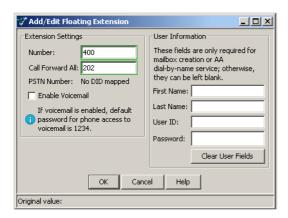
# Night Service

When the Night Service feature is used in conjunction with Floating Extensions we can achieve Time of Day (TOD) routing with the UC500.

#### Scenario:

- All inbound calls route to pilot extension 400
- During business hours (6AM 10 PM) defined by the Night Schedule calls route to the receptionist, Pam Beasley, at extension 202
- During after hours (10 PM 6 AM) calls route to the Auto Attendant at extension 401
- Allow Pam Beasley to set the inbound calls to route to the Auto Attendant independent of the schedule by dialing \*299. E.g. During lunch hours toggle \*299 to route calls to the AA or back to the receptionist's extension.
- 1. Create a Floating Extension.

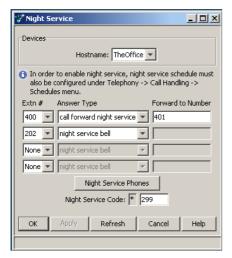
Configure > Telephony > Users and Extensions > Users and Phones > Floating Extensions



The Floating Extension acts as our pilot number handling all incoming calls. Since we want calls to be forwarded to Pam Beasley during business hours we use extension 202 as the "Call Forward All" extension.

2. Configure Night Service for the Floating Extension.

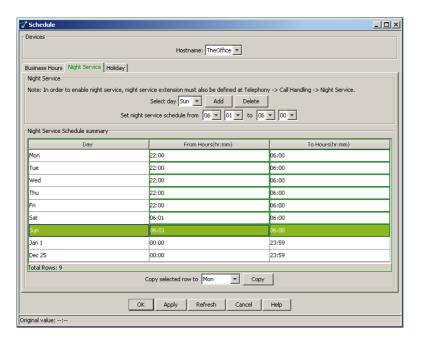
Configure > Telephony > Call Handling > Night Service



When the Night Service (After hours) schedule is active we want calls to the 400 pilot to be forwarded to extension 401, which is the Auto attendant. It's important that we also configure extension 202 for "night service bell" because this will allow Pam Beasley toggle the access code \*299 to override the Night Service schedule and direct calls to her extension or the Auto Attendant at her choosing. If we want to allow other users to be able to toggle the call routing decision you would configure "night service bell" for their extension as we did with extension 202.

3. Define the Night Service Schedule based on our criteria

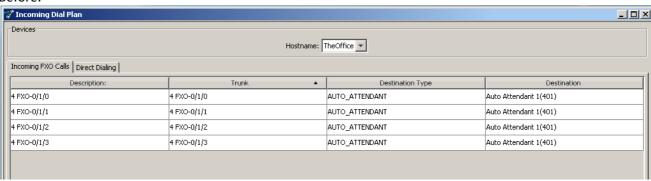
Configure > Telephony > Call Handling > Schedules > Night Service



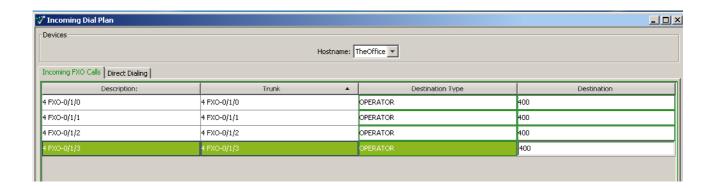
4. Configure inbound calls to route to the pilot extension 400.

Configure > Telephony > Dial Plan > Incoming

#### Before:



After:

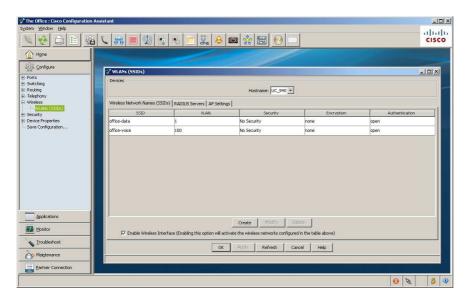


### **Wireless**

Configure → Wireless → WLAN (SSID)

Change the SSIDs for voice and data to office-voice and office-data.

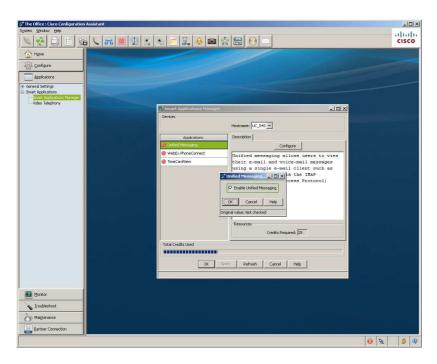
Leave them open and non secure.



# **Smart Applications**

# **Unified Messaging**

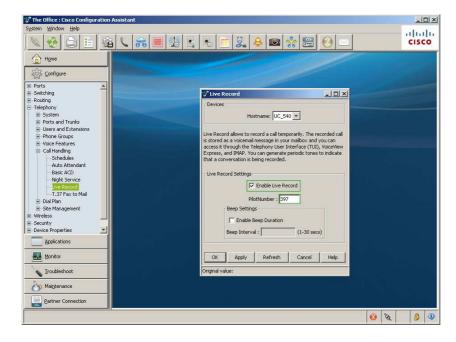
Navigate to Applications → Smart Applications manager and enable Unified Messaging, which will allow IMAP integration of any user to your Outlook EMAIL account or iPhone client.



For your iPhone IMAP configurations refer to the following-

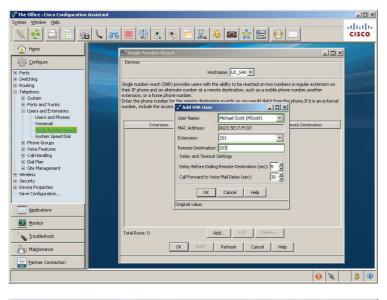
### Live Record

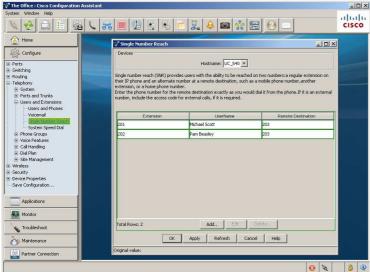
Navigate to Configure → Telephony → Call Handling -> Live Record. Enable Live Record with pilot number 397



## Single Number Reach

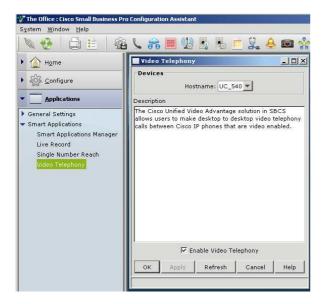
Navigate to Telephony → Users and Extensions → Single Number Reach. Activate SNR for Mike and PAM to EXT 203.





# Video telephony

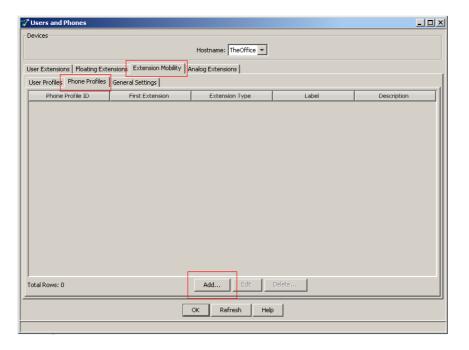
Navigate to Applications → Smart Applications → Video telephony and make sure it is enabled (should be by default), and remember this will work for NON SPA500 series phones (like 79xx and CIPC with CUVA).

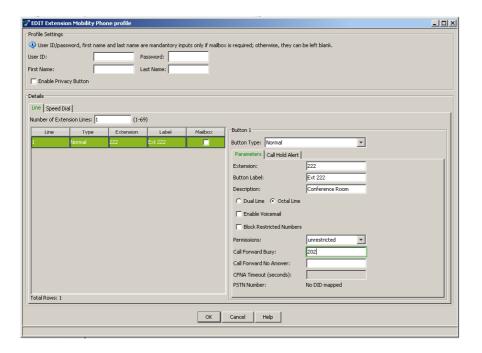


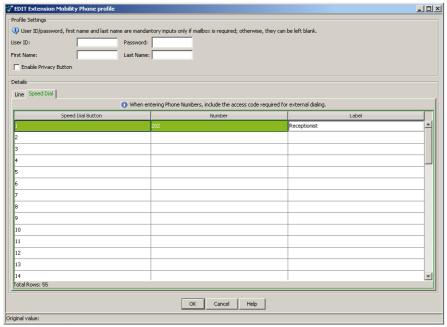
### **Extension Mobility**

We will enable Extension Mobility on the Conference Room phone allowing Dwight and Jim the ability to login on the phone with their user profile.

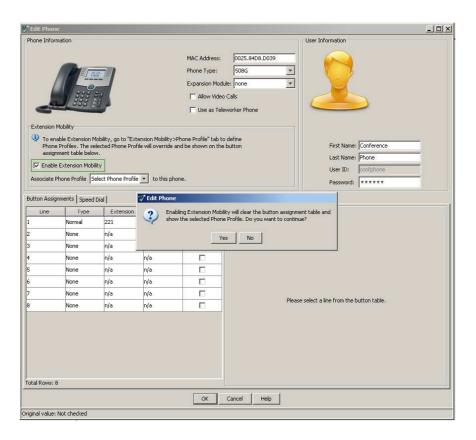
1. Create a Phone Profile with the extension 222. This will be the Conference Room phone number when no one is logged in with their Extension Mobility User Profile. Remember to configure the Call Forward Busy parameter. When a user is logged in with their Extension Mobility User Profile, extension 222 is no longer reachable and is considered "busy". During this time we forward the calls to the receptionist, Pam Beasley, at extension 202.



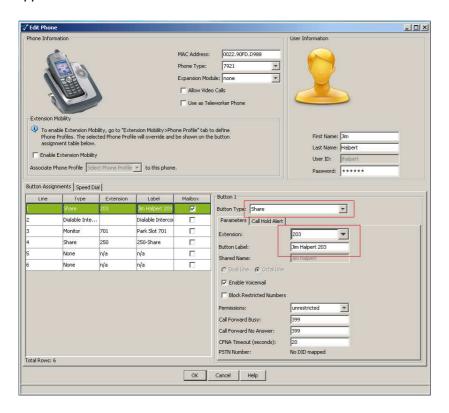


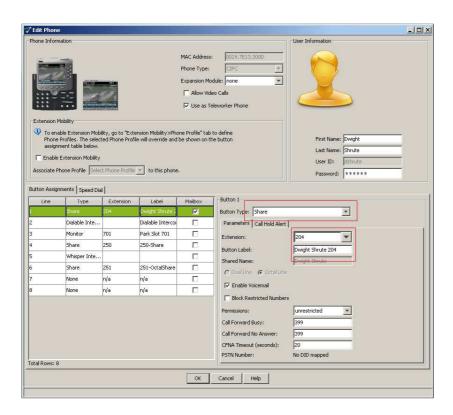


2. Enable Extension Mobility on the Conference Room Phone. At the prompt select YES and associate the phone with the Phone profile you just created.

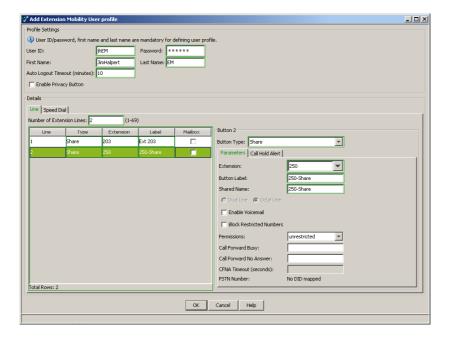


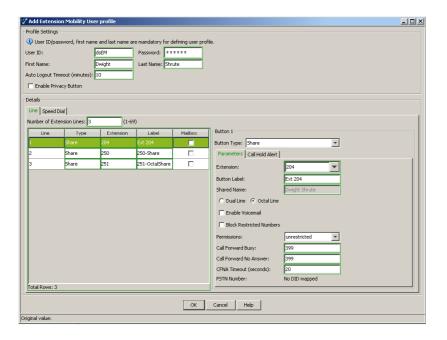
3. We must now change Jim and Dwight's primary extension from a Normal Button Type to a Shared Button Type so that the Extension Mobility User Profile can share their primary extension line appearance.





4. Go back to the Extension Mobility > User Profiles tab and create User Profiles for Jim and Dwight.





### Plug In Phones here

Now we plug in the phones, Power on the 7921, and fire up CIPC on the PC. This is emulating the truck roll (visit to end customer site) and unpacking all of them for the first time. You can also plug in one or two just to make sure they are configured correctly and features operate as they should.

Staging of this system is now completed and now you're ready to be on site.

### **Initialize/Enroll Voice Mail**

Dial the voice mail extension (399), or press the envelop button from each phone, one at a time and record the name and enter a PIN = 123456. You don't have to do anything fancy for greeting unless you want to, but the name **must be** recorded so AA dial by name will work.

Remember to also use Option 9 on any of the phones in the voice mail menu to configure the GDMs (all three) for 501 Blast Group, 502 longest idle Hunt Group, and 250-Shared Line. No PIN required, Members use their own PIN to access later.

### **Rerecord AA Prompts**

Now we need to use a high quality instrument (Cisco Phone) to professionally record over the prompts we made in TSW (which used PC MIC). Even if you're happy with PC Mic., do this anyway, because it's nice to learn to us this. ③

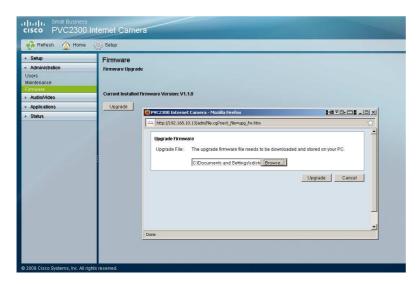
Dial 450 from PAMs phone (she was authorized). Enter credentials for her voice mail (202/1234) and you will hear the greeting to AA Administration. Skip over Alternate Greeting (you can do that later), and select existing recorded prompts (Open, Closed, Directions) and record over each of them as you want it to sound when someone dials in.

### **Video Monitoring**

For this step, the SPA525G must be plugged in.

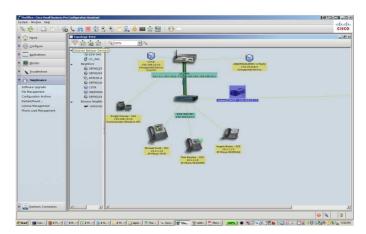
Plug in a PVC2300 to your UC540 or ESW switch and determine the IP address it receives ('sh arp' on UC500) or just allow 'bonjour' to it in the topology view.

Navigate a browser to its IP address (http://192.168.10.xx) and upgrade the PVC2300 to the latest FW on CCO.

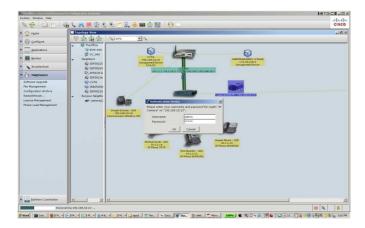




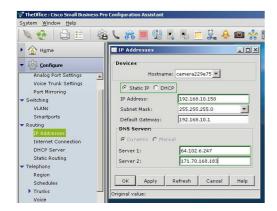
Now Press the Bonjour Discovery button on the CCA topology page to find the camera.



Right mouse click on the camera ICON and "add to site" (admin/admin).



Change its IP to Static 192.168.10.150:

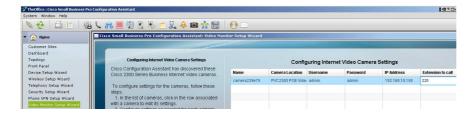


The Topology ICON will update to the new address. If the old device doesn't disappear, close and reopen CCA.

Go to the HOME -> Video Monitor Wizard.



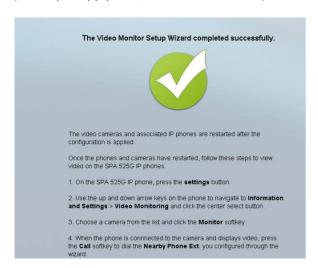
Enter credentials and extension to dial (use 220 Analog FXS).



Associate Video Camera to Pam's IP Phone (SPA525G):

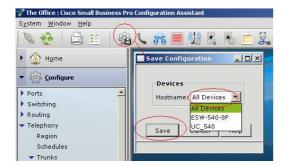


(When you apply this, SPA525G will reboot).



### SAVE

Save your work



### **Verify the Phones**

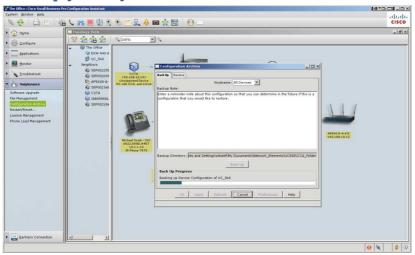
The wireless phones will connect to office-voice WiFi SSID.







### **Backup your System**

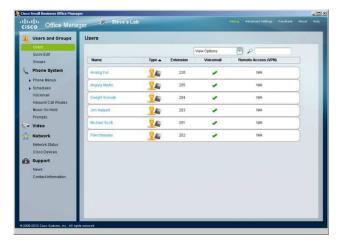


### **Office Manager Customization**

Launch the latest OM after closing CCA and letting it completely exit (OM and CCA don't run simultaneously).

CCA 2.2.5 configures AAAnew-model on the system to have it able to work with Smart Call Connector applications. In setting the system up this way, we have an enable password required when telnet is used to access the UC500. CCA requires this to be the same as the login password. The newest OM works with this as well.





While you can adjust lots of things from this end user tool, we will do one thing for now. Adjust the MOH file for the UC500. Navigate to your PC and pick your favorite .wav, .mp3, or .au file and upload it (obeying copyrights of course). OM will convert it for you.



## **Demo Your System**

You can now demo your system. See Demo Guide Document published in the small business support community at the link in the footer of this document. It is listed right under TEL #25 at the URL in the footer of this document.

# Appendix A – Site Survey

# Cisco SBCS Customer Site Survey – for "The Office" Demo System

This Site Survey captures the configuration required. We have marked in RED the values collected for this deployment

#### **Customer Account Information**

Table 1. Site Survey — Customer Account Information

Customer Account Information	Customer Account Information	
Business Name	The Office	
Business Street Address	Partner Demo Way	
Country/Postal Code	USA 27709	
Primary Business Phone Number	919-392-5524	
Primary Contact(s)	Steve DiStefano	
Business Email	sdistef@cisco.com	
Business Description	Demo System	
Deployment Type	□ New Installation □ Existing Installation (Greyfield)	
Multisite Required?	☐ Yes ☐ No  Multisite deployments require special consideration. Refer to the chapter on the Multisite Manager in the Cisco Configuration Assistant Smart Business Communications System Administrator Guide for deployment requirements and guidelines.	

### Equipment

Table 2. Site Survey — Equipment

Equipment	Quantity/Model	Description
Base UC500 Platform	UC 520 (max 64 user licenses) UC 540 (max 32 user licenses) UC 560 (max 104 user licenses)	UC500 model, based on number of user licenses.

Switches	Total number of switch ports required:  PoE ports required?	IP Camera and most phones
Secure Router Present in Network or Required?	Cisco SR 500 Series Secure Routers  Cisco SR 520-ADSL  Cisco SR 520-Ethernet  Cisco Small Business Pro SR 520-T1  Cisco Small Business Pro SA 500 Series  SA 520  SA 520W (integrated wireless)  SA 540	Cisco SR 500 Series secure routers and Cisco Small Business Pro SA 500 Security Appliances require additional security and firewall configuration.  For more information, go to www.cisco.com/go/sa500 (SA 500 Series) or www.cisco.com/go/sr500 (for SR 500 Series).
Cisco IP Phones (non- wireless)	Model:SPA525G, SPA504G, C7975, C7921, CIPC Qty: 1 each Model: Qty Model: Qty	List non-wireless IP phone quantities by model  See Site Survey — Wireless Network and Device Information to enter information about wireless phones.
Expansion Module(s) required?	Model(s): Qty:	Sidecar for receptionist/admin phones
Number of wireless access points	□ UC 520W (integrated wireless) □ UC 540W (integrated wireless) □ SR 500W (integrated wireless) □ SA 500W (integrated wireless) □ AP541N external AP (max of 10) □ AP 521 external AP (max of 12) Quantity	Number present in network or number required  NOTE Cisco Small Business Pro AP541N wireless APs support clustering; this eliminates the need for a wireless LAN controller). For more information, see www.cisco.com/go/ap500.  Cannot mix AP541N and AP 521 APs at a single site.  Office-data  Office-voice

Wireless LAN controller required?	_	WLC 526 (max of 2)	
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### **Basic Network Information (Single Site)**

Table 3. Site Survey — Basic Network Information

Network Information	Requirements/Options	Notes
WAN Edge Device	□ UC 500 Series □ Secure Router SR 500 Series □ SA 500 Series Security Appliance	This is the device that is directly connected to the Internet.
WAN Connection Type	□ DHCP □ Static IP IP Address: 172.18.192.192 □ PPPoE □ PPPoE w/ Negotiated IP	Static IP is required for VPN termination.
DNS Server IP Addresses	Primary: <b>64.102.6.247</b> Secondary: <b>171.70.168.183</b>	Primary DNS server IP is required.
Data LAN DHCP Server	Enable	If disabled on the UC500, some other device must provide this functionality.
Data LAN Subnet	UC 500  Use Default Custom:  SR 500 Use Default Custom:	Can only be customized through the Telephony Setup Wizard or Multisite Manager.  Default Data VLAN subnet is 192.168.10.1/25 for the UC 500 and 192.168.75.1/24 for the SR 500.
Voice LAN Subnet	UC 500:  Use Default Custom:	Can only be customized through the Telephony Setup Wizard. The default is 10.1.1.1.
DDNS Required?	☐ Yes ☐ No If Yes: Provider: DDNS host name:	Only required for multisite deployments that use DHCP to obtain the WAN IP address

#### Existing Network ("Greyfield") Deployment Considerations

For more in-depth discussion and instructions, see the Technical Enablement Labs, available on the Cisco Small Business Support Community at: https://www.myciscocommunity.com/docs/DOC-10395

Table 4. Site Survey — Greyfield Deployment with Existing Network Information

Network Information	Requirements/Options	Notes
Deployment Scenario	<ul> <li>□ UC 500 behind ALG -capable firewall</li> <li>□ UC 500 behind a firewall, no ALG support</li> <li>□ UC 500 located in the firewall's DMZ</li> <li>□ Firewall deployed on the UC500's DMZ</li> </ul>	Typically requires opening access to ports and protocols and deleting firewall/DMZ settings on the UC 500.  For more information, see Integrating the UC500 into an existing Network, available on the Cisco Small Business Support Community at: https://www.myciscocommunity.com/docs/DOC-5869
DHCP Server	☐ UC 500 with existing DHCP server	Disable/delete DHCP server on UC 500
VLAN settings	Change default VLAN settings Voice VLAN: Data VLAN: Guest VLAN: (if wireless is enabled):	Default voice VLAN is 1 (ciscovoice)  Default data VLAN is 100.

#### **Wireless Network and Device Information**

Table 5. Site Survey — Wireless Network and Device Information

Wireless Information	Requirements/Options	Notes
Wireless Coverage Survey	Total Area:  Conduct a wireless site survey to define coverage area to determine placement of wireless access points at the customer site.	Refer to the 7921 Phones in SBCS Environment Configuration Guide, available on Cisco.com at the following URL: http://www.cisco.com/en/US/products/p s7320/products_white_paper09186a00 80973d69.shtml
Wireless Encryption Type	☐ WPA2 (WPA-PSK) ☐ WEP Other: None	WEP and WPA are not recommended. Use WPA2 (WPA-PSK) instead.

Service Set ID (SSID)	SSID name(s): office-voice and office-data	Default SSID for wireless voice is ciscovoice.  Default SSID for wireless data is ciscodata
Guest Access Required?	☐ Yes ☐ No	
Number and Model of Wireless IP Phones	7975 0022555DA4E7  525G 0023EBED2012,  7921 001E7ABB7AC8,  CIPC 00218656CEE2,  504G 002699ABD84A,	The presence of wireless IP phones (7921 or SPA 525G phones has different design implications.  For more information, refer to the SBCS 1.6 SPA525G Wireless Deployment Guide for Cisco SBCS (OL-18871-01)
Radius Authentication Server	□ Not required □ External □ Local IP Address:	

### **Security Information**

Table 6. Site Survey — Security Information

Security Information	Requirements/Options	Notes
Secure Router SR520 present or required?	☐ Yes ☐ No	Secure Router SR 500 Series devices requires a different set of configurations for security.
Advanced Security Features	☐ IPS (Intrusion Prevention System) ☐ URL Filtering	IPS and URL filtering available on SR 500 Series Secure Routers and SA 500 Series Security Appliances only. IPS and URL filtering are licensed security
		features. If configuring on SR 520-T1, requires FL-SR520-T1-SEC Security Feature License.

#### **Secure Remote Access**

Table 7. Site Survey — Remote Access Information

Remote Access	Requirements/Options	Notes

	VPN Server Configuration		
Remote Site Access required?	☐ Yes ☐ No	Allow Internet access from remote VPN sites using VPN server WAN connection	
VPN Type	SSL-VPN EZVPN	Static WAN IP is required for VPN termination	
VPN User Accounts for remote access	List VPN usernames and passwords for VPN access	Default is cisco/cisco	
Number of VPN connections	VPN Connections (default is 10)	Although you can configure more than 10 VPN connections, the maximum number of simultaneous connections is 10. This restriction currently applies to all UC 500 platforms: UC 520, UC 540, UC 560.	
VPN Remote IP Range	From: To:	Optional	
VPN Tunneling Mode	Full-Tunnel Split Tunnel	IMPORTANT If split tunneling is enabled, make sure that you include the voice subnet (default 10.1.1.0/24), CUE subnet (10.1.10.0/30), SR 500 data subnet (192.168.75.1/24), UC 500 data subnet (default 192.168.10.1/24), and any other multisite data subnets to the list of allowed subnets.	
Port Forwarding Rules — Allowed Protocols	□ POP3 □ IMAP □ SMTP □ SSH	Allowed protocols for thin-client mode SSL-VPN	
DNS IP Address	Primary: Secondary:	Primary is required; secondary is optional.	
Remote Teleworker Setup needed?	☐ Yes ☐ No		

### **Basic Voice Configuration**

Table 8. Site Survey — Basic Voice Configuration

Field Requ	rements/Options	Notes
------------	-----------------	-------

Voice System Type	□ PBX □ Keysystem	Refer to the Cisco Smart Business Communications System Administrator Guide for voice system configuration details.					
PSTN Trunk(s)	□ BRI □ PRI □ T1/E1 □ FXO	Obtain information for trunk settings and phone numbers from Telco.					
Analog Lines	☐ Common area phone(s) - 2 ☐ User phones - 1 ☐ Fax - 1						
SIP Trunk	SIP Trunk Provider:	Obtain SIP trunk configuration requirements from the Service Provider. See the CCA administration guide or online help for more information.					
Key System Configuration	Number of phones:  Number of shared lines: 1 (ext 250)	Number of phones participating in the shared-line configuration and number of shared lines on each phone.  The number of buttons required on each phone participating in shared line configuration is equal to the number of shared lines + 1 (one button is reserved for the primary extension).					
Number of Digits per Ext	2 3 4 Other:	Michael Scott 201, Pam Beasley 202, Jim Halpert 203, Dwight Schrute 204, Angela Martin 205, Analog Fxs 220					
Region Settings	Region: US  Call Progress Tone  Phone Language" ENG  Voicemail Language: ENG  Date Format: mm/dd/yy  Time Format: xx:xxam/pm  System Message: TheOffice	Voice system region settings for the desired locale					

Ringing Options	User Extension (s)  Auto Attendan - FXO  Voice mail  Hunt Group  Basic ACD  Other Phone:	Destination for inbound calls  Plan the mapping between PSTN DID numbers and internal user extensions, groups, AA, or operator.				
Dial Plan	Locale:  Access code for external calling: 9  Other locale-specific dial plan settings.	Country-specific dial plan configuration (local dialing, long- distance dialing, and so on)				
Calling permissions?	List requirements for calling permissions: Analog restricted	Phones can be configured to only allow certain calling permissions (class-of service restrictions)				
Call blocking required?	List numbers to be blocked for outgoing calls	Also requires Block Restricted Calls to be enabled on phones				
Emergency CLID	Number: 911	Calling line ID for emergency services				
Caller ID	☐ Use Main PSTN number☐ Set per-phone caller ID	See the CCA administration guide or online help for current Caller ID options				
User Extensions	Record user first name, last name, ID, and password.  You can also perform a bulk import of this information using the sample.csv file provided in the CCA installation.	Use the sample.csv file as an example for assembling phone user information.  This file is located in the C:\Program Files\Cisco Systems\CiscoSMB\Cisco Configuration Assistant\appdata directory, if you installed CCA to the default location.				

### **Voice Feature Requirements**

Table 9. Site Survey — Voice Feature Requirements

Voice Feature Requirements	Requirements/Options	Description/Notes					
Business Hours (Half-Hour Increments)							

Open Hours  Monday Tuesday Wednesday Thursday Friday Saturday Sunday	From: 6AM To: 10PM From: 6 To: 10 From: 6 To: 10 From: 6 To: 10 From: 6 To: 10 From: To: From: To: Holidays	Default business hours are 8am to 5pm, Monday through Friday.
	Holidays	
Holiday Name/Date	Christmas 2010 12/25/10  New Years 2011 1/1/2011  Ground Hogs Day 2011 2/2/2011	List of holidays for creating business schedules (up to 26 allowed); required for AA and Night service.
	Night Service Hours	,
Monday Tuesday Wednesday Thursday Friday Saturday Sunday	From: 10PM To: 6AM From: 10 To: 6 From: 10 To: 6 From: 10 To: 6 From: 10 To: 6 From: To: 6 From: To: 70: From: To:	Only required if Night Service is configured.
	Auto Attendant Settings	
AA Mode	None Standard	
AA PSTN Number	Number: FXO	
AA Internal Extension	☐ Use Default ☐ Use Custom: 401	
AA Script	Use Default (aa_sbcs_v03.aef) Use Custom	In most cases, the default script, aa_sbcs_v02.aef, which supports multi-level AAs, multiple AAs, and other features, is recommended.
Number of AAs	<b>1 2 3</b>	
Multi-Level Menus	☐ 1 level ☐ 2 levels ☐ 3	

required?	levels					
AA Key Mappings	Key Pressed — Option/Action (same open and closed)  1 for call by number  2- by last name  3 to be transferred to the blast group  4 to the receptionist - Pam  5 if you have a voice mail box on this system 399  6 for Directions (custom Prompt)  7  8  9 0 *	Available actions include:  Transfer to VM  Transfer to extension or other number  Transfer to BACD, if configured  Transfer to hunt group, if configured  Play prompt  Menu  Dial by name, dial by number				
AA Prompt Management	Use Default Prompts Record Custom Prompts Prompt Mgmt User Ext# 450 (if used)	Open, Closed, Direction				
	Voicemail Settings					
VM Access Extension	☐ Use Default ☐ Use Custom: 399					
VM Access PSTN Number	Number:					
Enable Voice mailboxes for all users?	☐ Yes ☐ No	You can disable voicemail on a peruser basis; users created with CFB or CFNA set to VM (the default) will have a personal mailbox.				
	Call Forward (CF) Settings					
CF Busy	Destination: 400	VM, AA, extension, hunt group				
CF No Answer	Destination: 400	VM, AA, extension, hunt group				
	Hunt Groups					
Hunt Groups needed?	Yes  No	502 – LIDLE Dwight, Angela, Analog				

Number/type of hunt groups	Hunt Groups (up to 10 total)  Sequential Longest Idle Peer Call Blast groups (up to 10)  Call Blast Groups	501 – blast – all
	Other Voice Features	
Call Pickup required?	☐ Yes ☐ No Number of groups (max 8):	All members
Paging Groups?	☐ Yes ☐ No Number of groups (max 4):3	101-sales Dwight, Angela, and Jim 102 – Admin – Mike and Pam 103 – All – Group 1 and Group 2
Call Park required?	☐ Yes ☐ No Number of slots (max 8):1	701
Intercom required?	☐ Yes ☐ No	Dialable Intercom – 1 button, every phone
Music on Hold?	☐ Yes ☐ No	lpod or default
Voice Conferencing?	☐ Yes ☐ No ☐ MeetMe ☐ AdHoc	MM = 771
Single Number Reach required?	☐ Yes ☐ No	201 → 203 202 → 203
ACD (Automated Call Distribution) required?	☐ Yes ☐ No  Number of BACD groups: 1 (up to 10)  Pilot Numbers:590	590 pilot, sequential, auto agent logout, custom prompts members
	Voice Applications	
Call Detail Recording	☐ Yes ☐ No	
Unified Messaging (IMAP Integration)	☐ Yes ☐ No	Mike to Outlook
VoiceView Express	☐ Yes ☐ No	All Phones

LiveRecord	☐ Yes ☐ No	Number 397
TimeCardView	☐ Yes ☐ No	
Additional Service URLs	☐ Yes ☐ No	For 3rd-party application support
Smart Call Connector	☐ Yes ☐ No	
Operator Console	☐ Yes ☐ No	
Button Maps:		
Michael Scott's Phone (79) Button 1 is extensi		

Button 2 is Dialable Intercom

Button 3 is Monitor 701 (Park Slot)

Button 4 is Share 250 (new extension you create) with Label 250-Share

Button 5 is Whisper Intercom to Dwight (CIPC) on his button 2

#### Pam Beasley's Phone (525G):

Button 1 is extension 202

**Button 2 is Dialable Intercom** 

**Button 3 Monitor 701 (Park Slot)** 

Button 4 is Share 250

#### Jim Halpert's Phone (7921)

Button 1 is extension 203

Button 2 is Dialable Intercom

**Button 3 Monitor 701 (Park Slot)** 

Button 4 is Share 250

#### Dwight Schrute's Phone (CIPC)

Button 1 is extension 204

**Button 2 Dialable Intercom** 

**Button 3 is Monitor 701 (Park Slot)** 

Button 4 is Share 250

#### Angela Martin's Phone (504G)

Button 1 is extension 205

**Button 2 Dialable Intercom** 

**Button 3 Monitor 701 (Park Slot)** 

Button 4 is Share 250

#### Analog FXS (220)

Restrict to Local Calls only

### **Appendix B**

			VM													
	╙	Buttons	Size			Pickup	Cbarge	Priv	PSD	AA	BACD	NS	VPN	SNR	Video	IMA
		A I- M I'-		B1	101	١.						D-11			_,_	
504G	-	Angela Martin	60	L1	103	1	n/a	n/a	918008291040		1	Bell	n		n/a	₩
	1	205 Dial Intercom (no mute)														$\vdash$
		Monitor Park 701														$\vdash$
		Share-250														$\vdash$
	4	Snare-250		_	400					NAT						⊢
5250		Dans Dansley		D4	102		-/-	- /-	918008291040	NAT,		F.4 . 202	_	202	-1-	l.,
525G		Pam Beasley	60	B1	103	1	n/a	n/a	910000291040	PM	1	Ext -> 203	n	203	n/a	Ye
	1	202		_						_						⊢
	-	Dial Intercom														₩
	-	Monitor Park 701														₩
	-	Share-250														├
	5	<psd></psd>														⊢
					101	١.			[							
7921	ļ.	Jim Halpin	60	B1	103	1			918008291040			Bell	n		n/a	├
	1	203														₩
		Dial Intercom														_
		Monitor Park 701														_
		Share-250														_
	5															╙
	6															
				B1	101											
CIPC		Dwight Schrute	60	L1	103	1	enable	disable	918008291040		1	Bell	n		Υ	
	1	204														
	2	Dial Intercom														
		Monitor Park 701														$\vdash$
		Share-250														$\vdash$
		Whisper Intercom Mike														$\vdash$
		Share-251-Octal														$\vdash$
	Ť	Chare 201 Cotal			102											$\vdash$
7975		Mike Scott	60	B1	103	1	enable	enable	918008291040			EXT -> Bell	n	203	Υ	
1010	1	201	-		100	<u>'</u>	CHUDIC	Citable	510000251040			EXT = BOII		200		$\vdash$
		Dial Intercom (no Mute)														$\vdash$
	r	Diar intercent (no mate)														$\vdash$
	3	Monitor Park 701														
		Share-250														$\vdash$
		Whisper Intercom Dwight														$\vdash$
	6	Share-251-Octal														$\vdash$
	7	Share-251-Octal		_						_			<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	$\vdash$
	8									_					_	$\vdash$
	0			B1						-				<del>                                     </del>		$\vdash$
FXS		Analog Evo	60	L1	n/o	4	0/0	0/0				Bell	0/0			
LVO	1	Analog Fxs	00	LI	n/a	1	n/a	n/a		_		Dell	n/a		-	$\vdash$
	1 1	220	I	I	I	I	I	1	l	1	ı	I	I	I	1	
	+	<restricted local=""></restricted>														

#### Legend:

- PSD = Personal Speed Dial
- NAT = No Action Transfer (Target)
- Bell = NS Bell role
- EXT = NS Extension on Night Service
- BACD Basic ACD (hunt group 1 is a BACD group using sequential hunting)
- AA = Auto Attendant
- B1 = Call Blast Group (ext 501)

L1 = Longest Idle Hunt group (ext 502)

# Appendix C

UC500 WAN IP	IP Address of UC540	172.18.192.192			
	Subnet Mask	255.255.255.0			
	DGW of ISP Router	172.18.192.1			
	DNS1	64.102.6.247			
	DNS2	171.70.168.183			
System Time	Time Zone	GMT-5			
	NTP IP Address	169.229.70.201			
Device Access	Telnet and SSH	enabled both			
Automated Attendant	Pilot	401			
	Schedule	Dual (Open/Closed) 6AM - 10PM (M-F)			
	No Action Transfer	Ext 202 (Pam)			
	Prompt Management Ext and User	450 & Pam			
	Prompt Menu Actions (Open and Closed)	1 - by number			
		2 - by last name			
		3 - Transferred to the blast group 501			
		4 - to the receptionist (Pam @ 202)			
		5 - remote access to voice mail (399)			
		6 - for Directions (custom prompt)			
Park Slots	1-8 Park Slots (701-708)	1 (ext 701)			
Voice Mail	Extension	399			
	Live Reply	enabled			
	Play Caller ID for INC Messages	yes			
	PIN for access	1234			
	Direct Transfer to VM	6			
	VVE	enabled			
	Mail box (personal and GDM) sizes	60 minutes			
Conference	Meetme	1 (771)			
	Tones	enabled			
	Adhoc	1			
	CODEC	G711			
System SpeedDial	Tell Me VXML	918005558355			
BACD	Pilot 590	590			
	Hunt Type	Sequential			
	No Answer forwarding	Blast Group 501			
	Retries	2			
LiveRecord	Pilot	397			
Dial Plan	Dial Plan Template to be selected	North American 10			
Night Service	NS Toggle Code	*299			
Default User Password	Phone Password (not voicemail PIN)	123456			
Wireless SSID	Data and Voice	UC540W integrated office-data, office-voice			