

---

## Customization After Automatic Setup

---

**Time Estimate: 60 – 90 minutes**

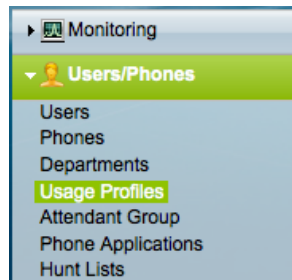
### Task 1: Edit Custom Profiles

---

**NOTE** Take a few minutes to familiarize yourself with the lab topology. Use the Lab Topology Diagram to familiarize yourself with the LAN/WAN IP addresses so that you remain oriented throughout the labs.

---

**Step 1** Log in to the BE 3000 and access the Users/Phones -> Usage Profile menu.



**Step 2** The profiles you created during Automatic Setup are listed, along with the default profiles:

Usage Profiles	
Name	Description
Assistant	For assistants
Common Area	For uses like common area phones (meeting room phone, etc)
ISS-1	Single Line
ISS-4-MD	Mobility + Do Not Disturb
ISS-4-MM	Mobility + Meet Me
ISS-4-SD	Speed Dial
Manager	For managers
Power	For users like IT administrators, etc
Standard	For regular employees

**Step 3** The Automatic Setup configures only the settings on the General tab of each profile. We need to complete the profile setup.

**Step 4** Our primary need in this demo is to showcase as many features as we can with just four phones, so our choices may not necessarily be the same as you might make for a production system. We'll include a copy of the table below in the demo script lab so that you have a fast reference to help you understand the capabilities of each phone in the demo kit.

**Step 5** The settings for custom profiles are listed below:

<b>Name:</b> <b>Setting:</b>	<b>ISS-4-MD</b>	<b>ISS-4-MM</b>	<b>ISS-4-SD</b>	<b>ISS-1</b>
<b>Target Model</b>	8941	8941	6941	3905
<b>Target User(s)</b>	Lu P	Tao L	Suresh R	Anna T
<b>Description</b>	Mobility + Do Not Disturb	Mobility + Meet Me	Speed Dial	Single Line
<b>Calls Allowed</b>	International	International	International	Long Distance
<b>Emergency Calls</b>	Allow	Allow	Allow	Allow
<b>Barge</b>	No	No	Allow (5400)	No
<b>Park</b>	Allow	Allow	Allow	No
<b>Pick Up</b>	Allow	Allow	Allow	Allow
<b>Reach Me</b>	Allow	Allow	No	No
<b>Extension Mobility</b>	Allow/Allow	Allow/Allow	No/No	No/No
<b>Voice Mail / Divert</b>	Allow	Allow	Allow	No
<b>CFB/CFNA</b>	VM	VM	VM	5042
<b>Hold Audio</b>	Sample	Audio Jack	Sample	Sample
<b>Button Template</b>	Line Line Mobility DND	Line Line Mobility Meet Me	Line Line Line Speed Dial	Line
<b>Mobility</b>	Button 3	Button 3	N	N
<b>Meet Me</b>	N	Button 4	N	N
<b>DND</b>	Button 4	N	N	N
<b>Speed Dial</b>	N	N	CiscoHQ - 14085264000	N

**Step 6** Click the Edit link for the ISS-4-MD profile. The General tab should look as follows:

**Add Usage Profile**

General | Phone Button Template | Phone Features | Phone Applications

**Profile Information**

\* Name: ISS-4-MD

Description: Mobility + Do Not Disturb

---

**Allowed Calls**

\* Highest Level of Calls Allowed: International Calls

Emergency Calls:  Allow

---

**Call Features**

Call Barge:  Allow user to barge in on calls

Call Park:  Allow user to park call and pick call up from another phone

Call Pickup:  Allow user to pick up calls of another user

Reach Me Anywhere:  Allow user to be reached on multiple phones at the same time

Extension Mobility:  Allow Cisco Extension Mobility to be used on phone of user

Allow user to use Cisco Extension Mobility service

Voicemail:  Allow user to use Voicemail service

Call Divert:  Allow users to divert an incoming call to voicemail

Forward Busy Calls To:  Voicemail

Forward No Answer Calls To:  Voicemail

Audio For Hold: Sample Audio Source

**Step 7** Choose the Phone Button Template tab and change the settings as follows (double click in the feature column to change each setting):

**Add Usage Profile**


General | **Phone Button Template** | Phone Features | Phone Applications

Button Number	Feature
1	Line
2	Line
3	Mobility
4	Do Not Disturb

**Step 8** Click the Save button.

**Step 9** A confirmation message will appear. Click Continue.

**Confirm Save UsageProfile** [X]

 In order to save the changes to the usage profile, all phones owned by users with this profile will need to be rebooted. The system will wait until phones are idle to reboot them, so no calls will be disconnected, but features such as redial, conferencing and transfer will be unavailable for currently active calls.

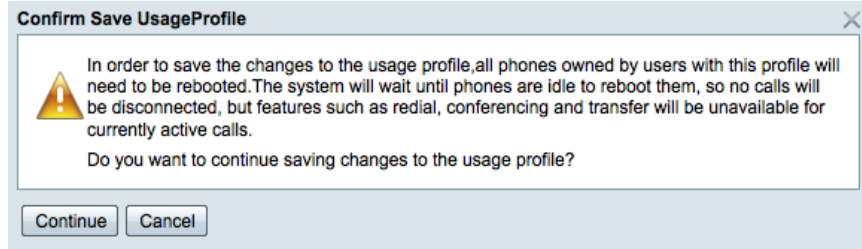
Do you want to continue saving changes to the usage profile?

Continue Cancel

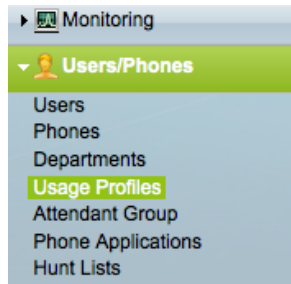


**Step 13** Click the Save button.

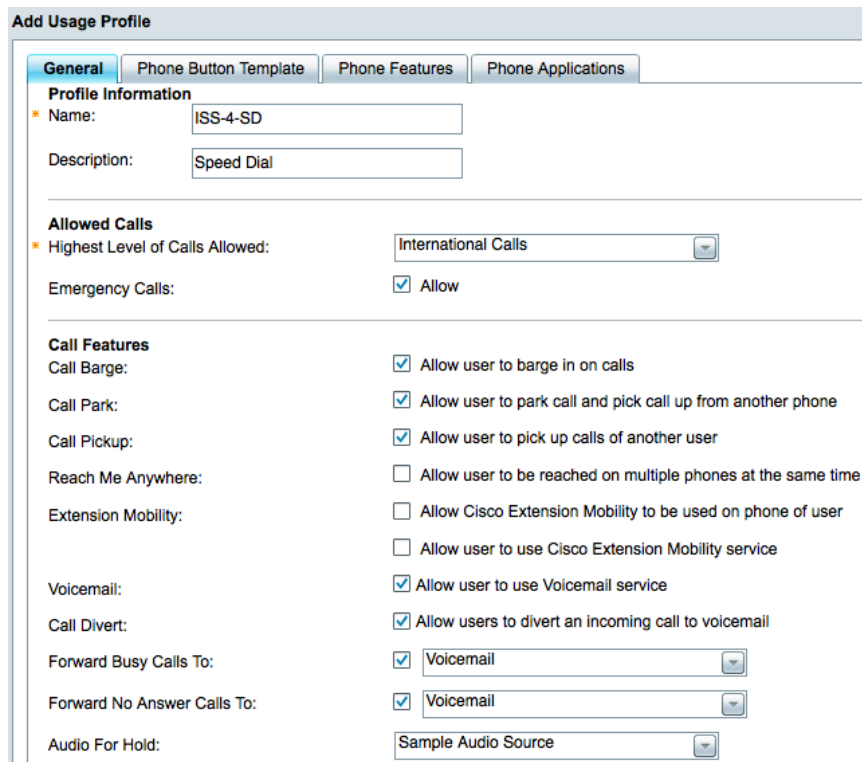
**Step 14** A confirmation message will appear. Click Continue.



**Step 15** Click the Usage Profile entry in the left hand navigation pane to return to the list of profiles.



**Step 16** Click the Edit link for the ISS-4-SD profile. The General tab should look as follows:

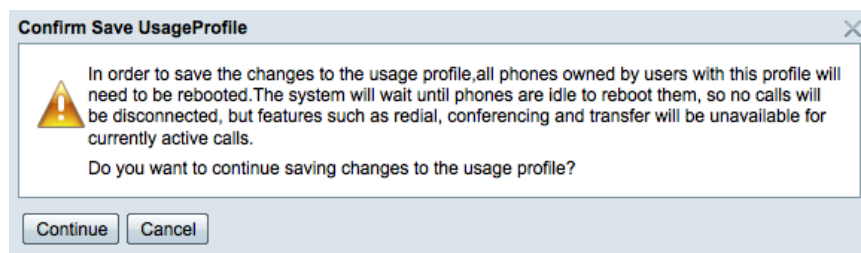


**Step 17** Choose the Phone Button Template tab and change the settings as follows (double click in the feature column to change each setting):

Add Usage Profile	
General	Phone Button Template
Button Number	Feature
1	Line
2	Line
3	Line
4	Speed Dial

**Step 18** Click the Save button.

**Step 19** A confirmation message will appear. Click Continue.



**Step 20** Click the Edit link for the ISS-1 profile. The General tab should look as follows:

Add Usage Profile	
General	Phone Button Template
<b>Profile Information</b>	
* Name:	ISS-1
Description:	Single Line
<b>Allowed Calls</b>	
* Highest Level of Calls Allowed:	Long Distance Calls
Emergency Calls:	<input checked="" type="checkbox"/> Allow
<b>Call Features</b>	
Call Barge:	<input type="checkbox"/> Allow user to barge in on calls
Call Park:	<input type="checkbox"/> Allow user to park call and pick call up from another phone
Call Pickup:	<input checked="" type="checkbox"/> Allow user to pick up calls of another user
Reach Me Anywhere:	<input type="checkbox"/> Allow user to be reached on multiple phones at the same time
Extension Mobility:	<input type="checkbox"/> Allow Cisco Extension Mobility to be used on phone of user
	<input type="checkbox"/> Allow user to use Cisco Extension Mobility service
VoiceMail:	<input type="checkbox"/> Allow user to use Voicemail service
Call Divert:	<input type="checkbox"/> Allow users to divert an incoming call to voicemail
Forward Busy Calls To:	<input checked="" type="checkbox"/> 5042
Forward No Answer Calls To:	<input checked="" type="checkbox"/> 5042
Audio For Hold:	Sample Audio Source

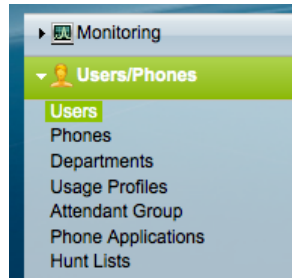
**Step 21** Choose the Phone Button Template tab and change the settings as follows (double click in the feature column to change each setting):

Add Usage Profile			
General	Phone Button Template	Phone Features	Phone Applications
Button Number	Feature		
1	Line		

**Step 22** The changes to these profiles have been applied to the affected users and phones.

## Task 2: Edit Users, Phones and Hunt Lists

**Step 1** Log in to the BE 3000 and access the Users/Phones -> Users menu.



**Step 2** You should have 4 existing users with information for each user as follows:

Name	Profile	User ID	Password	PIN	Admin Access	Line Numbers
Luciana P	ISS-4-MD	LuP	be3000	12345	N	5100/6100
Anna T	ISS-1	AnT	be3000	12345	N	5200/6200
Suresh R	ISS-4-SD	SuR	be3000	12345	N	5300/6300
Tao L	ISS-4-MM	TaL	be3000	12345	Y	5400/6400

Continued...




Name	Line Numbers	External Caller ID (same for both lines)
Luciana P	5100/6100	9585505100
Anna T	5200/6200	9585505200
Suresh R	5300/6300	9585505300
Tao L	5400/6400	9585505400

**Step 3** Each user has a main extension number as configured during automatic setup. We want to add a secondary extension (in the 6000 range) to each user as per the table above.









**Step 4** For each user, you will click the edit button and associate their additional line number by clicking on the plus symbol. In more detail, the steps are:







Click +

Line Number	External Caller ID	Call Forward All
5100	9585505100	<input type="checkbox"/> Phone Number
		<input type="checkbox"/>   

Then complete the fields of the new line number entry (in this example 6100).

Line Numbers		
<a href="#">Show User's Phones</a>		
Line Number	External Caller ID	Call Forward All
5100	9585505100	<input type="checkbox"/> Phone Number
		<input type="checkbox"/>   
6100	9585505100	<input type="checkbox"/> Phone Number
		<input type="checkbox"/>   

**Step 5** As an example, the settings for Luciana P are shown below:

General	Speed Dials	
<b>User Information</b>		
First Name:	<input type="text" value="Luciana"/>	
* Last Name:	<input type="text" value="P"/>	
E-mail Address:	<input type="text"/>	
* Usage Profile:	<input type="text" value="ISS-4-MD"/>	
<b>System and Device Access</b>		
* User ID:	<input type="text" value="LuP"/>	
Password:	<input type="password"/> <input type="button" value="Reset Credentials..."/>	
Confirm Password:	<input type="password"/>	
	<input type="checkbox"/> User must change password at next login	
Phone PIN:	<input type="password"/>	
Confirm Phone PIN:	<input type="password"/>	
	<input type="checkbox"/> Enable Administrator Access	
<b>Line Numbers</b>		
<a href="#">Show User's Phones</a>		
Line Number	External Caller ID	Call Forward All
5100	9585505100	<input type="checkbox"/> Phone Number
		<input type="checkbox"/>   
6100	9585505100	<input type="checkbox"/> Phone Number
		<input type="checkbox"/>   

**Step 6** Click Save after editing each user's settings and continue editing users until all have been configured with their additional extension.

**Step 7** Each of the users should now have two extensions when you are finished.

Users				
Filter	Last Name	<input type="text"/>	Go	Clear Filter
Last Name	First Name	User ID	Usage Profile	Line Numbers
P	Luciana	LuP	ISS-4-MD	5100, 6100
T	Anna	AnT	ISS-1	5200, 6200
R	Suresh	SuR	ISS-4-SD	5300, 6300
L	Tao	TaL	ISS-4-MM	5400, 6400

**Step 8** We will also configure a speed dial for Suresh. Click the Edit button next to Suresh R and then click on the Speed Dials tab.

**Step 9** Edit entry 1 by setting the Phone Label and Phone Number to the following:

Cisco HQ            914085264000

Users/Phones > Users > SuR

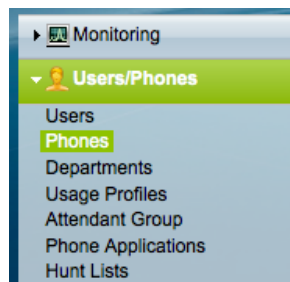
### Edit User - SuR

General    **Speed Dials**

	Phone Label	Phone Number			
1	Cisco HQ	914085264000	+	-	↓

**Step 10** Click Save.

**Step 11** Click on the Phones menu link.



**Step 12** You should have 4 existing phones, as follows (your MAC addresses will be different):

Phones						
Filter	Extension	<input type="text"/>	Go	Clear Filter		
Name	Owner	Extension	Description	Model	Actions	
SEP503DE57D9FDC	LuP	5100	Customer Relations	Cisco 8941	Edit   Delete...	
SEP64D989693654	AnT	5200	Engineering	Cisco 3905	Edit   Delete...	
SEP503DE5E941EA	SuR	5300	Research	Cisco 6941	Edit   Delete...	
SEP503DE57D5E55	TaL	5400	Project Management	Cisco 8941	Edit   Delete...	

**Step 13** Add a second extension for each phone as per the table below:

Owner	Extension
LuP	6100
AnT	6200
SuR	6300
TaL	6400

**Step 14** For each phone, click the Edit button and add the appropriate extension in the number 2 position and click Save.

The screenshot shows a configuration interface titled "Extensions". It contains a table with three rows, each representing a line. The first row is marked with an asterisk and shows line 1 with extension 5100 and owner LuP. The second row shows line 2 with extension 6100 and owner LuP. The third row shows line 3 with an empty extension field and owner LuP. Each row has a dropdown arrow on the right side of the extension field and two arrow buttons (down and up) on the right side of the owner field.

	Extension	Owner
* 1	5100	LuP
2	6100	LuP
3		LuP

**Step 15** Click the Users/Phones entry in the left hand navigation pane to return to the list of phones so that you can continue editing:



**Step 16** Each of the phones should now have two extensions when you are finished.

**Step 17** Set up a shared line on Suresh's phone so that its third button uses the same extension as Tao's primary extension. Click the edit link for Suresh's phone and select extension 5400 for line 3.

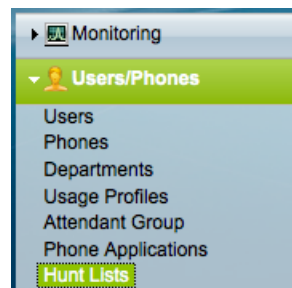
**Step 18** The settings for Suresh's phone at extension 5300 are shown below:

			Extension Owner
* 1	5300	SuR	
2	6300	SuR	
3	5400	TaL	
4			
5			
6			

**Step 19** Click Save.

**Step 20** Take note of the logic when assigning extensions to lines. Assigning the same extension to lines on two different phones creates a shared line. Assigning the same extension to two different lines on the same phone creates a rollover line.

**Step 21** Click on the Hunt Lists link.



**Step 22** Click Add Hunt List.

**Step 23** Create a hunt group using the following settings:

Pilot Extension: 5041

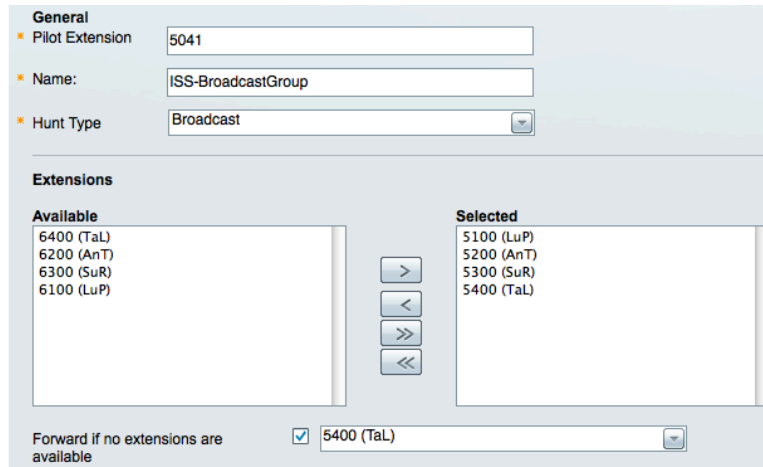
Name: ISS-BroadcastGroup

Hunt Type: Broadcast

Selected Extensions: 5100, 5200, 5300, 5400

Forward if no extensions are available: 5400

**Step 24** Your settings should look similar to the following:



**General**

- \* Pilot Extension: 5041
- \* Name: ISS-BroadcastGroup
- \* Hunt Type: Broadcast

**Extensions**

**Available**

- 6400 (TaL)
- 6200 (AnT)
- 6300 (SuR)
- 6100 (LuP)

**Selected**

- 5100 (LuP)
- 5200 (AnT)
- 5300 (SuR)
- 5400 (TaL)

Forward if no extensions are available  5400 (TaL)

**Step 25** Click OK.

**Step 26** Create a hunt group using the following settings:

Pilot Extension: 5042

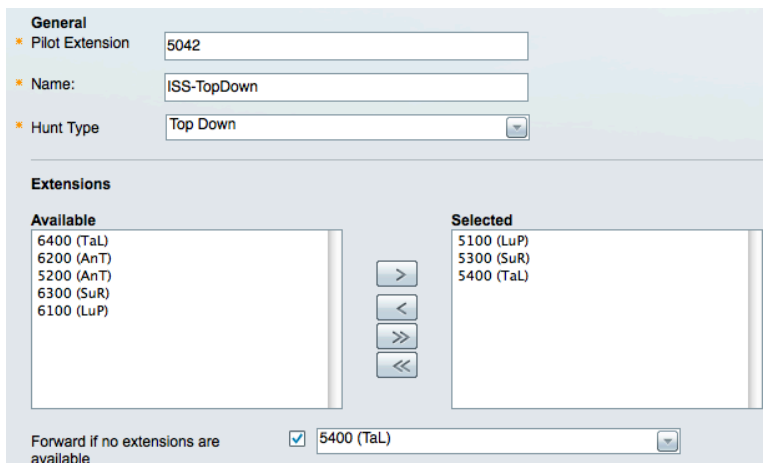
Name: ISS-TopDown

Hunt Type: Top Down

Selected Extensions: 5100, 5300, 5400

Forward if no extensions are available: 5400

**Step 27** Your settings should look similar to the following:



**General**

- \* Pilot Extension: 5042
- \* Name: ISS-TopDown
- \* Hunt Type: Top Down

**Extensions**

**Available**

- 6400 (TaL)
- 6200 (AnT)
- 5200 (AnT)
- 6300 (SuR)
- 6100 (LuP)

**Selected**

- 5100 (LuP)
- 5300 (SuR)
- 5400 (TaL)

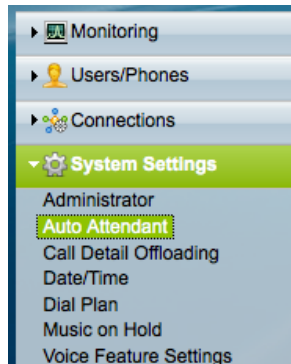
Forward if no extensions are available  5400 (TaL)

**Step 28** You should have two hunt groups when you are finished:

Hunt List		
Filter	Pilot	
Pilot	Name	Type
5041	ISS-BroadcastGroup	Broadcast
5042	ISS-TopDown	Top Down

### Task 3: Configure Auto Attendant

**Step 1** Access the System Settings -> Auto Attendant menu.



**Step 2** Change the Auto Attendant mode to Auto Attendant with different Menus for Open and Closed Hours.

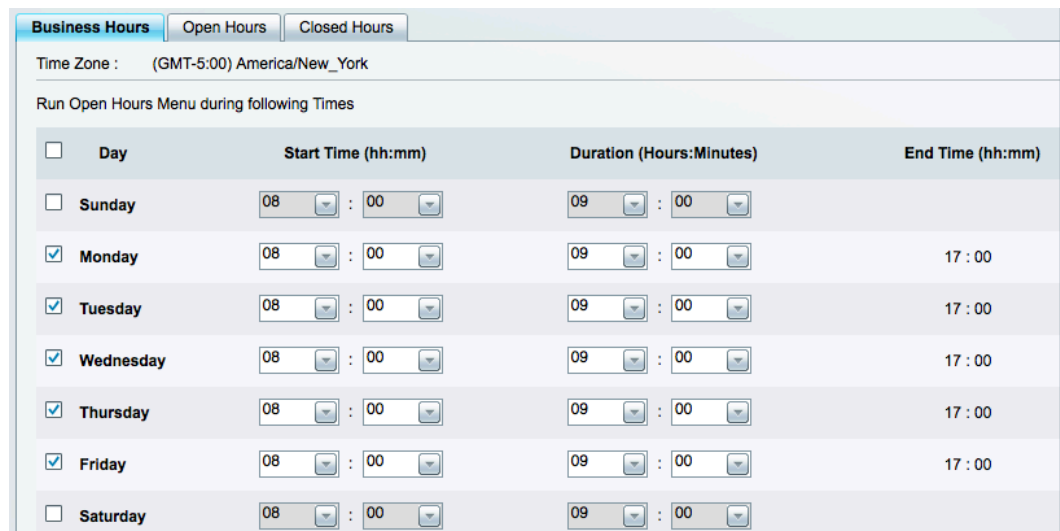
**Step 3** Note that the Auto Attendant Extension is 5000 – this is the number that we will direct outside callers to so that we can efficiently handle their calls.

**Step 4** By default all days of the week are selected as business days – deselect Saturday and Sunday.

**Step 5** Note that the default start time is 8AM and the default duration is 9 hours. This implies that the close time is 5PM.

**Step 6** In our lab, the Open Hours tab will control the Auto Attendant behavior from Monday to Friday, 8AM to 5PM and the Closed Hours tab will control Auto Attendant behavior from 5PM to 8AM the next day.

**Step 7** The Business Hours tab should look similar to the following:

A screenshot of the 'Business Hours' configuration page. At the top, there are three tabs: 'Business Hours', 'Open Hours', and 'Closed Hours'. Below the tabs, the 'Time Zone' is set to '(GMT-5:00) America/New\_York'. The main section is titled 'Run Open Hours Menu during following Times' and contains a table with columns for 'Day', 'Start Time (hh:mm)', 'Duration (Hours:Minutes)', and 'End Time (hh:mm)'. The table has seven rows, one for each day of the week. The 'Day' column has checkboxes: Sunday (unchecked), Monday (checked), Tuesday (checked), Wednesday (checked), Thursday (checked), Friday (checked), and Saturday (unchecked). The 'Start Time' column shows '08 : 00' for all days. The 'Duration' column shows '09 : 00' for all days. The 'End Time' column shows '17 : 00' for Monday through Friday, and is empty for Sunday and Saturday.

Day	Start Time (hh:mm)	Duration (Hours:Minutes)	End Time (hh:mm)
<input type="checkbox"/> Sunday	08 : 00	09 : 00	
<input checked="" type="checkbox"/> Monday	08 : 00	09 : 00	17 : 00
<input checked="" type="checkbox"/> Tuesday	08 : 00	09 : 00	17 : 00
<input checked="" type="checkbox"/> Wednesday	08 : 00	09 : 00	17 : 00
<input checked="" type="checkbox"/> Thursday	08 : 00	09 : 00	17 : 00
<input checked="" type="checkbox"/> Friday	08 : 00	09 : 00	17 : 00
<input type="checkbox"/> Saturday	08 : 00	09 : 00	

**Step 8** Click on the Open Hours tab and apply the following settings:

Enable callers to dial lines directly: Enabled

Key 1 Enabled, 5100

Key 2 Enabled, 5200

Key 3 Enabled, 5300

Key 4 Enabled, 5400

Key 5 Enabled, 5041

Key 6 Enabled, 5042

**Step 9** The Open Auto Attendant audio greeting should match the features that have been enabled. We have provided a sample file that you can use or you can create and upload your own file.

**Step 10** Click the Browse button and access the .wav file of your choice. Our sample file is named ISS-Open.wav

**Step 11** Your settings should look similar to the following:

The screenshot shows the configuration interface for an Auto Attendant. At the top, the Mode is set to "Auto Attendant with different Menus for Open and Closed Hours". Under the "General" section, the Auto Attendant Extension is 5000. The "Open Hours" tab is selected, showing "Greeting Options" with an "Audio Greeting" field containing a "Play" button and a "New File" field with "ISS-Open.wav" and a "Browse..." button. Below this, the "Dial by Extension" checkbox is checked, with the label "Enable callers to dial lines directly". A table lists keys 1 through 6, each with a checked checkbox and a dropdown menu containing a line name: 1 (5100(LuP)), 2 (5200(AnT)), 3 (5300(SuR)), 4 (5400(TaL)), 5 (5041 (ISS-BroadcastGroup)), and 6 (5042(ISS-TopDown)).

Key	Transfer to Line
1	<input checked="" type="checkbox"/> 5100(LuP)
2	<input checked="" type="checkbox"/> 5200(AnT)
3	<input checked="" type="checkbox"/> 5300(SuR)
4	<input checked="" type="checkbox"/> 5400(TaL)
5	<input checked="" type="checkbox"/> 5041 (ISS-BroadcastGroup)
6	<input checked="" type="checkbox"/> 5042(ISS-TopDown)

**Step 12** Note that \* will always be used to access voicemail and # will always hang up the call.

**Step 13** Click on the Closed Hours tab and apply the following settings:

Enable callers to dial lines directly: Enabled

Key 1 Enabled, 5041

Key 2 Enabled, 5042

**Step 14** The Closed Auto Attendant audio greeting should match the features that have been enabled. We have provided a sample file that you can use or you can create and upload your own file.

**Step 15** Click the Browse button and access the .wav file of your choice. Our sample file is named ISS-Closed.wav

**Step 16** Your settings should look similar to the following:

The screenshot displays the configuration interface for an Auto Attendant. At the top, the mode is set to "Auto Attendant with different Menus for Open and Closed Hours". Under the "General" section, the "Auto Attendant Extension" is 5000. Three tabs are visible: "Business Hours", "Open Hours", and "Closed Hours", with "Closed Hours" being the active tab. In the "Greeting Options" section, the "Audio Greeting" field has a "Play" button next to it. Below this, the "New File" field contains "ISS-Closed.wav" and a "Browse..." button. The "Dial by Extension" section has a checked checkbox for "Enable callers to dial lines directly". At the bottom, under the "Key Transfer to Line" section, there are two entries: "1" with a checked checkbox and "5041 (ISS-BroadcastGroup)", and "2" with a checked checkbox and "5042 (ISS-TopDown)".

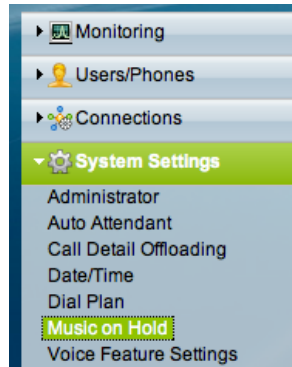
**Step 17** Click Save.

**Step 18** Play the sample Audio Greetings for Open and Closed Hours to confirm that the audio message matches the auto attendant key settings. Click on the play button next to the Audio Greeting on each tab.



## Task 4: Configure Custom Music on Hold

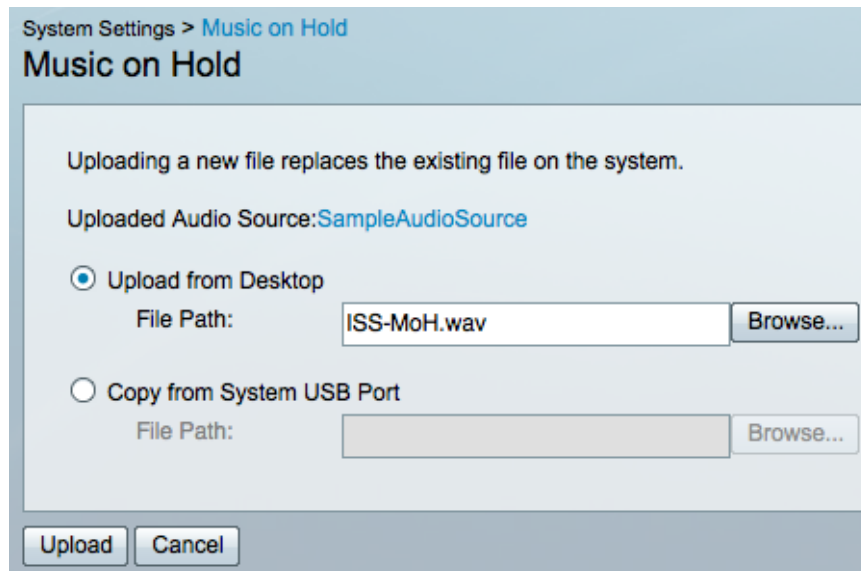
**Step 1** Access the System Settings -> Music on Hold menu.



**Step 2** We have provided a sample file that you can use or you can create and upload your own file.

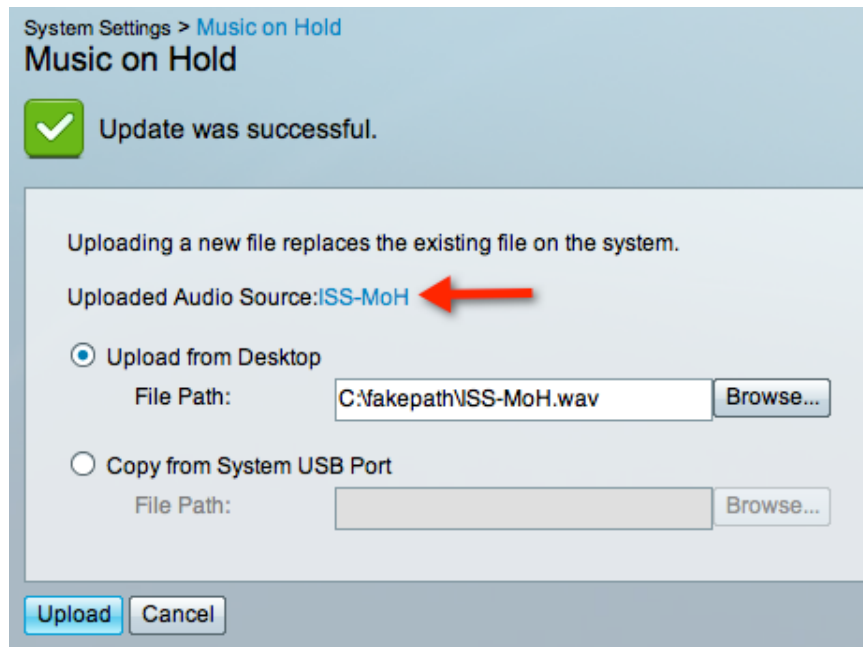
**Step 3** Click the Browse button and access the .wav file of your choice. Our sample file is named ISS-MoH.wav

**Step 4** Your settings should look similar to the following:

A screenshot of the 'Music on Hold' configuration page. The page title is 'System Settings > Music on Hold' and 'Music on Hold'. Below the title, there is a message: 'Uploading a new file replaces the existing file on the system.' The 'Uploaded Audio Source' is 'SampleAudioSource'. There are two radio button options: 'Upload from Desktop' (selected) and 'Copy from System USB Port'. Under 'Upload from Desktop', there is a 'File Path' field containing 'ISS-MoH.wav' and a 'Browse...' button. Under 'Copy from System USB Port', there is an empty 'File Path' field and a 'Browse...' button. At the bottom of the form, there are 'Upload' and 'Cancel' buttons.

**Step 5** Click Upload. An upload status message will appear, wait for it to complete.

**Step 6** Notice that the default MoH file has now changed to your uploaded version.



**Step 7** All usage profiles that previously depended on the default audio file are automatically updated to use the new file that has just been uploaded. In our case, usage profiles ISS-4-MD, ISS-4-SD and ISS-1 will be updated and as a result, users LuP, SuR, and AnT will now have updated MoH settings.

## Task 5: Assign IP Addresses and Network Parameters to IP Phones

---

**NOTE** While production systems will likely have an available DHCP server to assign IP addresses to IP phones, we will not make that assumption for the demo. Therefore we will assign IP address and related parameters manually to the IP phones for the purposes of this demonstration. You will not need to re-do the IP address assignments again for your demo unit unless the phone's configuration is erased.

---

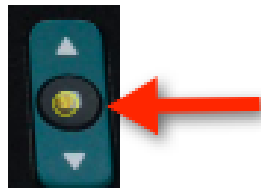
- Step 1** Attach an Ethernet cable to the network port on the back of each phone and plug it into an available port on the Cisco 300 series PoE-capable switch. Ensure that the switch is also powered up.
- Step 2** Each phone will begin its boot process and will eventually display a message, such as "Phone not registered".
- Step 3** Press the Setup button; it looks like a gear wheel. A menu will appear on the phone display.



Use the down arrow to navigate down to Administrator Settings,



and then press the select button



- Step 4** From the Administrator Setting menu, choose Network Setup and press the select button.
- Step 5** From the Network Setup menu, choose IPV4 Setup and press the select button.

**Step 6** On the IPV4 Setup menu configure the following settings:

---

**NOTE** The screens and navigation may vary by phone model. Generally you will use the up/down keys to navigate to an entry, the select key to begin editing that entry and the select key a second time to complete an entry. When editing IP addresses the "\*" button is used to place a dot "." There will typically be a soft button configured as a backspace or erase key if you need to delete digits or characters.

---

DHCP Enabled: No

IP Address: <As per table below>

Subnet Mask: 255.255.255.0

Default Router: 192.168.1.1

DNS Server: 192.168.1.1

TFTP Server 1: 192.168.1.250

TFTP Server 2: 192.168.1.250

User	Model	Extension	IP Address
Luciana P	8941	5100	192.168.1.11
Anna T	3905	5200	192.168.1.12
Suresh R	6941	5300	192.168.1.13
Tao L	8941	5400	192.168.1.14
If you add phones continue with this addressing scheme			

**Step 7** When finished editing these settings, press the Apply soft button and then continue to exit the editing process until you have exited the entire menu system.

**Step 8** It may expedite the phone booting process if you unplug the Ethernet cable from the phone, wait a few seconds, and then plug the cable back in.

**Step 9** Each phone will come up with its configured extensions and will be ready for further configuration and testing.

**Step 10** This completes the lab.