IP Phone Management Server

EMS Provisioning Server

400HD Series IP Phones

Administrator's Manual

	a a a a a a a a a a a a a a a a a a a	geme	nt Server				
Navigation Tree Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard Dashboard	Devices	Status	358 Registered Devices	A 4 Nerr Registerer Device Status	d S Devices Status	12 Disconnected Devices	Registered 05 72%
	Rece	int Rep	oorts				
		-	User 5	Report Time 2	MAC Addr 8	IP 1	FW Version 0
		8	Guy Shterlich	10 11 2014 15 26 59		10 5 0 50	
					009057463818	10.2.2.00	UC_2.0.7.71
		8	Neta Amozeg-Levy	10.11.2014 15:26:12	00908463818	10.52.13.148	UC_2.0.7.71 UC_2.0.9.48
	,	8	Neta Amozeg-Levy Sharon Leibovich	10 11 2014 15 26 12	009034558447 0090345484652	10.32.60 10.22.13.148 10.22.13.165	UC_2.0.7.71 UC_2.0.9.46 UC_2.0.9.46
	7 7 7	8	Neta Amozeg-Levy Sharon Leibovich Binyamin Zox	10.11.2014.15.26.12 10.11.2014.15.26.55 10.11.2014.15.25.31	00908485818 009084556a47 009084484652 00908448467b	10.3.2.60 10.22.13.148 10.22.13.168 172.17.114.10	UC_2.0.7.71 UC_2.0.9.45 UC_2.0.9.45 UC_2.0.9.45
	, , ,	8 8 8	Neta Amozeg-Levy Sharon Leibovich Binyamin Zox Lilach Duenias	10, 11, 2014, 15, 26, 12 10, 11, 2014, 15, 26, 55 10, 11, 2014, 15, 26, 30 10, 11, 2014, 15, 25, 04	00905455558 009054555847 009054846652 00905440467b 00905484701	10.3.2.60 10.22.13.148 10.22.13.168 172.17.114.10 172.17.114.29	UC_2.0.7.71 UC_2.0.9.48 UC_2.0.9.48 UC_2.0.9.48 UC_2.0.9.48
	7 7 7 7 7 7 7 7	8	Neta Amozeg-Levy Sharoh Lebovich Dinyamin Zax Lilach Duenias Baruch Geber	10.11.2014.15.26.12 10.11.2014.15.26.85 10.11.2014.15.26.85 10.11.2014.15.26.04 10.11.2014.15.26.04	00005465016 00908506447 00908464652 00908464665 00908464701 009084684701	10.3.2.80 10.22.13.148 10.22.13.168 172.17.114.10 172.17.114.29 10.22.13.212	UC_2.0.771 UC_2.0.9.45 UC_2.0.9.45 UC_2.0.9.45 UC_2.0.9.45 UC_2.0.9.45
	7 7 7 7 7	8	Neta Amozeg-Levy Sharin Lebouch Binyamin Zax Lillori Duenias Baruch Geber Uzi Kaston	10.11.2014.15.26.12 10.11.2014.15.26.55 10.11.2014.15.26.55 10.11.2014.15.26.04 10.11.2014.15.26.04 10.11.2014.15.24.48	00903845319 00903855447 009038484652 009038484655 009038484701 009038556924 009038556924	10.32.80 10.22.13.148 10.22.13.168 172.17.114.19 172.17.114.29 10.22.13.212 10.22.13.212	UC_2.0.7.71 UC_2.0.9.48 UC_2.0.9.48 UC_2.0.9.48 UC_2.0.9.48 UC_2.0.9.48 UC_2.0.9.48
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Version 7

March 2015 Document # LTRT-91082

Table of Contents

1	Intro	oduction	.9
	1.1	EMS Platforms Specifications	.9
	1.2	Ports Required for IP Phone Management	10
	1.3	Managing IP Phones Behind a NAT	10
	1.4	About this Manual	10
2	Dep	loying the IP Phones1	11
	2.1	Planning the Deployment	11
	2.2	Preparing the Enterprise Network	11
	2.3	Deploying Phones in a Lync vs. Non-Lync Environments	12
		2.3.1 Lync Environment	12
		2.3.2 Non-Lync Environments	13
	2.4	Logging in to the Management Server	14
	2.5	Configuring a 'System User'	15
	2.6	Plugging Phones into the Network	16
	2.7	Approving Users	16
		2.7.1 Lync Environment	16 17
2	Mon	itoring and Maintaining the Phone Network	19
0	2.4	Manitaring the Natural from the Dashboard	10
	3.1 2.2	Checking Devices Status	19
	3.Z	Monitoring Alarma	21 24
	3.3	3.3.1 Registration Failure Alarm	<u>-4</u> 25
		3.3.2 Survivable Mode Start Alarm	25
		3.3.3 Lync Login Failure Alarm	26
	• •	3.3.3.1 Searching for Alarms	26
	3.4	Maintaining Users	26
		3.4.1 Adding a Oser	27 28
		3.4.3 Editing a User	29
		3.4.4 Deleting a User	29
	3.5	Managing Multiple Users	30
	3.6	Maintaining Multiple Devices	33
4	Τιοι	ubleshooting	35
Α	Impo	orting Users into the Server	37
	A.1	Making a CSV File	37
		A.1.1 Export the 'System User' to a CSV File	37
		A.1.2 Defining Users in the CSV File	38
	A.2	Importing the New CSV File into the Server	38
В	Prep	paring a Configuration File	39
	B.1	Selecting a Configuration Template	39
	B .2	Editing a Configuration Template	39
		B.2.1 About the Template File	41
		B.2.2 Global Parameters	41

		B.2.3	User-Specific Parameters	41
		B.2.4	Restoring a Template to the Default	41
		B.2.5	Downloading a Template	41
		B.2.6	Uploading an Edited Template	41
		B.2.7	Generating an Edited Template	42
		B.2.8	Defining Template Placeholders	42
	B.3	Manag	ging Configuration Files	52
	B.4	Manag	ging Phone Firmware Files	52
С	Prov	visioni	ng Flows	55
	C.1	Lync F	Phones	55
	C.2	Other	Phones	56

List of Figures

Figure 2-1: Default cfg File Located on the EMS Provisioning Server	11
Figure 2-2: EMS - IP Phone Management Server button1	14
Figure 2-3: Welcome to the IP Phone Management Server1	14
Figure 2-4: IP Phone Management Server User Interface - Homepage	15
Figure 2-5: Manage Users1	15
Figure 2-6: Add User1	15
Figure 2-7: Manage Users Screen Displaying Added User1	16
Figure 2-8: Devices Status1	16
Figure 2-9: Devices Status – Selected Rows Actions - Approve Selected	17
Figure 2-10: Approve IP Phones1	17
Figure 2-11: Devices Status1	18
Figure 3-1: Dashboard and Users1	19
Figure 3-2: Dashboard	19
Figure 3-3: Dashboard - Lync IP Phone Not Registered	20
Figure 3-4: Devices Status	21
Figure 3-5: Devices Status Filter	21
Figure 3-6: Actions Menu - Single User	22
Figure 3-7: Actions Menu - Selected Rows	22
Figure 3-8: Alarms	24
Figure 3-0: Manage Lleere	27
Figure 3-10: Add Lleer	<u>-</u> 1 27
Figure 3-10: Add User Definitions	21 27
Figure 3-12: Add New Device to User	21 28
Figure 3-12: Rountew Device to User	20
Figure 3-13: Frompt: Do you want to update the device file?	20 20
Figure 3-14. Prompt. D0 you want to update the device me?	20
Figure 3-15. Manage Multiple Osers	20
Figure 3-10. Manage Multiple Devices	33 25
Figure 4-1. System Logs	30 25
Figure 4-2. System Logs – Web Admin Level Log	30
Figure 4-3: System Logs – web Admin Level IXI Log File Displayed	30
Figure 4-4: System Logs – Activity Log	30
Figure 4-5: System Logs – Activity Level txt Log File Displayed	30
Figure A-1: Import Users – Export to USV	37
Figure A-2: CSV File in Excel	38
Figure A-3: Import Users	38
Figure B-1: IP Phone Models Configuration Templates	39
Figure B-2: IP Phone Configuration Template	40
Figure B-3: Edit Template	40
Figure B-4: Generate Configuration Template – 'Global files' Prompt	42
Figure B-5: Configuration Template	42
Figure B-6: Show Placeholders	43
Figure B-7: Default Placeholders Values	43
Figure B-8: System Settings	44
Figure B-9: LDAP Configuration	45
Figure B-10: LDAP Configuration - Phone	46
Figure B-11: Phone Model Placeholders	47
Figure B-12: Edit Phone Model Placeholder4	48
Figure B-13: Add New Phone Model Placeholder4	48
Figure B-14: Manage Region Placeholders	49
Figure B-15: Edit Region Placeholder4	49
Figure B-16: Add New Region Placeholder4	49
Figure B-17: Manage Devices Placeholders	50
Figure B-18: Change IP Phone Device Placeholder	E O
	50
Figure B-19: Change IP Phone Device Placeholder – Selecting the Device	50 50

Figure B-21: Manage Configuration Files	52
Figure B-22: Phone Firmware Files	52
Figure B-23: .img Firmware File Download/Upload	53
Figure C-1: Lync Phone > IP Phone Management Server Flow when MAC is Known	55
Figure C-2: Lync Phone > IP Phone Management Server Flow when MAC is Unknown	55
Figure C-3: Generic Phone > IP Phone Management Server Flow when MAC is Known	56

List of Tables

Table 1-1: EMS Platforms Specifications	9
Table 1-2: Ports Required for IP Phone Management	10
Table 3-1: Dashboard – Status Thumbnails	20
Table 3-2: Actions Menu	22
Table 3-3: Alarms	24
Table 3-4: IP Phone Registration Failure Alarm	25
Table 3-5: IP Phone Survivable Mode Start Alarm	25
Table 3-6: IP Phone Lync Login Failure Alarm	26
Table 3-7: Managing Multiple Users - Actions	31
Table 3-8: Managing Multiple Devices - Actions	34
Table A-1: CSV File	
Table B-1: System Settings	44
Table B-2: LDAP Configuration	46

Notice

This document shows how to use AudioCodes' IP Phones Management Server user interface.

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Abbreviations and Terminology

Each abbreviation, unless widely used, is spelled out in full when first used.

Related Documentation

Manual Name
420HD IP Phone User's Manual
430HD and 440HD IP Phone User's Manual
400HD Series IP Phones Administrator's Manual
400HD Series IP Phone with Microsoft Lync Administrator's Guide
420HD IP Phone Quick Guide
430HD IP Phone Quick Guide
440HD IP Phone Quick Guide
EMS and SEM Server IOM Manual
EMS User's Manual

Document Revision Record

LTRT	Description
91080	Initial document release for Version 7.0 beta.
91081	Version 7.0 GA. DHCP Option 160 changed. 'System' user added. New Device Status page features. Added img file management at device and region levels. Improved Template Placeholders. Installation procedure extended. New appendices. Enhanced alarm tables. New actions on multiple phones.
91082	Added support for the EMS to manage IP phones residing behind a NAT, though full management functionality support is still pending.

1 Introduction

AudioCodes' IP Phone Management Server features a user interface that enables enterprise network administrators to effortlessly and effectively set up, configure, and update up to 10000 AudioCodes 400HD Series IP phones in globally distributed corporations.

The IP Phone Management Server client, which network administrators can use to connect to the server, can be any standard web browser supporting HTML5:

Internet Explorer version 11 and later, Chrome or Firefox.

REST (Representational State Transfer) based architecture, an extension of HTTP, enables statuses, commands and alarms to be communicated between the IP phones and the server. The IP phones send their status to the server every hour for display in the user interface.

Accessed from AudioCodes' Element Manager Server (EMS), the IP Phone Management Server user interface enables network administrators to effortlessly load configuration files and firmware files on up to 10000 IP phones.

Other actions administrators can perform on multiple phones are to upload a CSV file with devices' MAC addresses and SIP credentials (supported in all environments except Lync), approve devices at the press of a button (supported in Lync environments only), send messages to phones' LCDs, reset phones, and move phones between regions.

A configuration file template feature lets network administrators customize configuration files per phone model, region, and device.

Integrated into the EMS, the IP Phone Management Server provides added value to AudioCodes 400HD Series IP phones.

1.1 EMS Platforms Specifications

EMS 7.0 must run on one of the following platforms to support the IP Phone Management Server:

- Dedicated hardware platform (HP ProLiant DL360p Gen8 Server) -OR-
- VMware ESXi Hypervisor virtual environment -OR-
- Microsoft Hyper-V virtual environment

These platforms must comply with the following specifications:

Table 1-1: EMS Platforms Specifications

EMS Platform	Platform Description	# of Managed IP Phones
HP ProLiant DL360p Gen8 Server	CPU: E5-2690 (8 cores X 2.9 GHz) Memory: 32 GB Disk: 2 disks X 1.2 TG in RAID 0 (SAS 10K RPM)	10000
VMware ESXi bare metal hypervisor / Microsoft Hyper-V (minimum)	CPU: 1 core X 2 GHz Memory: 4 GB Disk: 170 GB	1000
VMware ESXi bare metal hypervisor / Microsoft Hyper-V (maximum)	CPU: 6 cores X 2.0 GHz Memory: 32 GB Disk: 1.2 TB (SAS 10K RPM)	5000

For details on installing the EMS, see the EMS and SEM Server IOM Manual.

Note:

- The EMS can manage IP phones residing behind a NAT, though full management functionality support is still pending see Section 1.3 below.
- Multi tenancy is not supported.

1.2 Ports Required for IP Phone Management

The table below shows the ports required for IP phone management. The table shows the firewall ports, protocol, and direction that users must open.

Connection	Port Type	Port Number	Purpose	Port Side / Flow Direction
EMS Server ↔ IP Phones	ТСР	8080	REST-based communication between EMS server and IP phones. Initiator: IP phone	EMS server side / Bi-Directional
	ТСР	8081	REST-based communication between EMS server and IP phones. Initiator: EMS server	EMS server side / Bi-Directional

Table 1-2: Ports Required for IP Phone Management

1.3 Managing IP Phones Behind a NAT

The EMS can manage IP phones residing behind a NAT, though support for full management functionality is still pending.

The EMS can automatically update phones' .cfg configuration file. The phone periodically checks whether there is a new file on the EMS server. The frequency of the check is configurable: Every night, Every hour, etc. The default setting is **Every day at 00:00**. The administrator can change a value in the .cfg file using the management interface and view the result after the phone loads the new file.

The EMS can automatically update phones' .img firmware file. The phone periodically checks whether there is a new .img file on the EMS server.

The administrator can also view phones' online statuses (Started, Registered, Unregistered, etc.). Support is pending for actions such as Send Message, Restart, Open Web Admin and Check Status.

1.4 About this Manual

This Administrator's Manual shows network administrators how to use the IP Phone Management Server to set up, configure, and maintain AudioCodes IP phones in an enterprise network, from a single centralized point.

2 Deploying the IP Phones

This section shows how to deploy AudioCodes IP phones in the enterprise.

2.1 Planning the Deployment

Before deploying the phones:

- 1. List the configurations specific to your phone network, e.g., language per region, speed dials, etc.
- 2. List the phone features and parameter configurations you want in each region.
- **3.** In the EMS, configure the regions with which you want to associate different users configuration templates (see the *EMS User's Manual*).
- 4. Log in to the IP Phone Management Server (see Section 2.4).
- 5. Configure a 'system user' whose username is **system** and whose password is **system** (see Section 2.5).
- 6. Before plugging phones into the network, define parameter placeholders values for criteria such as region and phone model, to maintain an automatic provisioning scheme (see Section B.2.8).

2.2 **Preparing the Enterprise Network**

This section shows how to prepare the enterprise network for IP phones.



Note: This section applies to all AudioCodes 400HD Series IP Phones regardless of whether they're to be deployed in a Microsoft Lync or non-Lync environment.

> To prepare the enterprise network:

- Obtain the phones' latest firmware files from AudioCodes and upload them to the EMS Provisioning Server - see under Section B.4 for detailed information:
 - In the Phone Firmware Files screen, click the **Upload firmware** button.
 - Navigate to the .img file and upload to the EMS server.
- Configure your enterprise's DHCP Server with DHCP Option 160 to point to the EMS provisioning server's URL.

In addition to DHCP Option 160, DHCP Option 66/67 can also be used.

As DHCP clients, AudioCodes IP phones will then automatically be provisioned with the cfg and img files located on the EMS provisioning server.

The figure below shows the default **dhcpoption160.cfg** file.

Figure 2-1: Default cfg File Located on the EMS Provisioning Server



Legend	Description
1	Pointing to the URL of the EMS provisioning server.
2	STATIC provisioning method, so the cfg and img files are automatically pulled from the EMS provisioning server rather than from the DHCP server.
3	Location of the cfg file, pulled by the phones when they're plugged into the network, on the EMS provisioning server.
4	Location of the img file, pulled by the phones when they're plugged into the network, on the EMS provisioning server.
5	Name of the 'system user', necessary for basic REST API authentication when the phones are plugged in to the network for the first time.
6	(Encrypted) Password of the 'system user', necessary for basic REST API authentication when the phones are plugged in to the network for the first time.



Note:

- The **dhcpoption160.cfg** file is created when logging in for the first time to the IP Phone Management Server.
- The file is an internal EMS file and cannot be manually modified.
- After installation, the first, second and third lines in the file are automatically updated.

2.3 Deploying Phones in a Lync vs. Non-Lync Environments

Deployment of IP phones in non-Lync environments differs slightly from deployment in a Lync environment.

This section shows:

- How to deploy phones in a Lync environment (see Section 2.3.1 below)
- How to deploy phones in non-Lync environments (see Section 2.3.2 below)

2.3.1 Lync Environment

This section describes how to deploy IP phones in a Microsoft Lync environment.



Note: Ensure you defined http://<EMS IP address>/firmwarefiles;ipp/dhcpoption160.cfg for DHCP Option 160 in the enterprise's DHCP server, as shown in the previous section.

> To deploy IP phones in a Lync environment:

- **1.** Plug in the phone (see Section 2.6).
- 2. Approve the user and define the region with which the user is associated; the phone restarts and the cfg file is uploaded (see Section 2.7).

The cfg file includes default values and overwritten values according to configured placeholders. If no placeholder was configured, the cfg file will include only default values. See Section B.2.8 for details on how to configure parameters placeholders.

2.3.2 Non-Lync Environments

This section describes how to deploy IP phones in non-Lync environments.



Note: Ensure you defined http://<EMS IP address>/firmwarefiles;ipp/dhcpoption160.cfg for DHCP Option 160 in the enterprise's DHCP server, as shown in the previous section.

> To deploy IP phones in non-Lync environments:

- 1. Log in to the IP Phone Management Server (see Section 2.4).
- 1. Import a Comma Separated Values (CSV) file with users and devices. Best practice is to create one or more users with devices and export them to a CSV file, add to the CSV file new users and devices in the same format, and import it (see Appendix A).
- 2. Use the **Approve** button to add a device manually if you don't know it's MAC address (see Section 2.7.2).

2.4 Logging in to the Management Server

This section shows how to log in to the IP Phone Management Server UI. The UI is a secured web client that runs on any standard web browser supporting HTML5: Internet Explorer version 11 and later, Chrome or Firefox. Before logging in, you need to run the EMS.



Note: To access the IP Phone Management Server UI without running the EMS, point your web browser to **http://<EMS_IP_Address>/ipp** and then in the login screen that opens, log in.

For information on installing and operating the EMS, see the EMS and SEM Server IOM *Manual* and the EMS User's Manual.

> To log in to the IP Phone Management Server via the EMS:

1. Open the EMS and in the main screen toolbar, click the **IP Phones** button.

Figure 2-2: EMS - IP Phone Management Server button



The Welcome to the IP Phone Management Server screen opens:

Figure 2-3: Welcome to the IP Phone Management Server

	Welcome to the
AudioCode	s® IP Phone Management Server
Username:	acladmin
Password:	•••••
	Login



Note:

•

- The 'Username' and 'Password' used to log in to the IP Phone Management Server are the same as those used to log in to the EMS.
- Only the **Supervisor** and **Administrator** EMS roles can log in to the server.
- Enter your Username and Password (default = acladmin and pass_1234) and click Login; the application is launched and the homepage displayed.

		3	358	A	4 55	12	
Nevigation Tree			2 Registered Devices	Non	Registered Devices	3 Disconnected Devices	Registered 95.72%
Configuration Diagnostics	Device	is Status	0	Devices Status	Devices Sta	us O	
1	🖻 Re	cent Re	ports				97
			User 0	Report Time \$	MAC Addr 9	IP ¢	FW Version \$
	2	8	Anat Schwartzman	10.11.2014 15:48:46	00908/55/996	10.22.14.181	UC_2.0.9.48
	2	œ	Surpin Kosovitch	10.11.2014 15:47:46	00908f55fa7d	10.22.10.159	UC_2.0.9.48
		R	Alex Shlachter	10.11.2014 15:44:41	00908f55fa79	172.17.114.37	UC_2.0.9.48
		8	Shay Harel 4	10.11.2014 15:43:40	009081484688	10.22.13.158	UC_2.0.9.48
		œ	Orgad Shaneh	10.11.2014 15:41:34	009081551803	10.22.13.172	UC_2.0.9.48
		8	Alexander Steingold	10.11.2014 15:41:33	00908/55/d2c	172.17.114.22	UC_2.0.9.48
	7	8	Itay Cohen	10.11.2014 15:40.58	00908148303c	10.22.11.9	UC_2.0.9.48
	1	8	Igor Maller	10.11.2014 15:40:54	00908/55/567	172.17.114.28	UC_2.0.9.48
	2	8	Roman Bar Am	10.11.2014 15:40:48	00908/55fa66	172.17.114.23	UC_2.0.9.48

Figure 2-4: IP Phone Management Server User Interface - Homepage

- 1 = Navigation pane
- **2** = Network registration status
- 3 = Network health status
- 4 = List of users and their current status



Note: After first-time login, no users and devices are displayed in the Home page.

2.5 Configuring a 'System User'

This section shows how to configure a 'system user' whose user name is **system** and whose password is **system**. This is necessary for *basic REST API authentication*, after the phones are plugged in to the network for the first time.

> To configure a 'system user':

1. From the IP Phone Management Server navigation tree, access the Manage Users page (Users > Manage Users).

Figure 2-5: Manage Users

Manage Users			
Region Demo	Search	b Go	Add User
No users found			

2. Click the Add User button; the Add User screen opens.

Figure 2-6: Add User

User Name	system	
Password Weak	•••••	
Display Name	System	×

- 3. Configure the 'User Name' field as system and the 'Password' field as system.
- 4. From the dropdown, select the 'Region' you want, and then click the **Submit** button.
- 5. Make sure in the Manage Users screen that the user is added.

Figure 2-7: Manage Users Screen Displaying Added User

Manag	je Users							
Region	Demo	[Search	•	Go		< First Bray Navt	Add-User
	Devices	Registered Devices	Login Name	0	Display Name	Region	Line URI	Action
1			system	-	System	Demo		Add Device Edit delete

2.6 Plugging Phones into the Network

In Lync as well as in non-Lync environments, you can plug the phones into the network after configuring the 'system user'.

However, in non-Lync environments, *before* plugging the phones in for the first time, it is recommended to first:

- Import a CSV file with users and devices. Best practice is to create one or more users with devices and export them to a CSV file, add new users and devices in the same format to the CSV file, and import it (see Appendix A).
- 2. Generate a cfg file and apply it to users (see Appendix B). After this, the phones pull the cfg containing unique usernames and passwords from the EMS provisioning server.

2.7 Approving Users

After plugging the phones into the network, you need to approve the users. If you import a CSV file containing *devices* (as well as users), this step is not necessary.

2.7.1 Lync Environment

After plugging the phones in, they report to the Management Server which does not display user name in the UI until sign-in is performed or, until users are approved in the UI.

- > To approve users in a Lync environment:
- In the IP Phone Management Server UI, open the Devices Status page (Dashboard > Devices Status).

₿ De	evices Stat	us										📥 Export 😂 Reload
First	- Previou	n 1 Net →	Lost					4		٩		5 Rilter
			~	User +	1 Report Time	MAC +	IP +	Model +	Firmware Version 💌	Region +	Location *	Subnet +
	Actions		0		11.01.2015 13:06:35	009081366602	172.17.188.88	420HD	UC_2.0.9.50	RivkaRegion		255.255.255.0
	Actions	2	13		07.01.2015 08:54:45	00908/487914	10.13.2.26	420HD	2.2.0.7			255.255.0.0
		Approve	23	Shay Harel	05.01.2015 13.53.00	009085484658	10.13 3	440HD	UC_2.0.9.65			255.255.0.0
	Actions	Approve	5	Shay Harel2	05.01.2015 13:52:38	00908/484688	10.13.22.9	440HD	UC_2.0.9.65			255.255.0.0

- 1 = Device actions: refresh, reset, download files, open web page, delete, send text message to the phone
- 2 = Device approval
- 3 = Device status: User, MAC, IP Address, SIP URI, Location
- **4** = Search option
- **5** = Smart filters

2. Select the upper left checkbox (in the figure below it's indicated in red); the **Selected Rows Actions** menu and the **Approve Selected** button are displayed.

Figure 2-9: Devices Status – Selected Rows Actions - Approve Selected

⊠ D	evices Status										٨	Export C Reload	8
Firs	t - Previous 1 Next-+	Last							Q			Q Filter	er
	Selected Rows Actions	Approve Selected		User +	1 Report Time	MAC +	IP +	Model +	Firmware Version *	Region +	Location +	Subnet +	~
2	Actions		0		11.01.2015 13:06:35	00908/366602	172.17.188.88	420HD	UC_2.0.9.50	RivkaRegion		255.255.255.0	1
\blacksquare	Actions		5		07.01.2015 08:54:45	009065487914	10.13.2.26	420HD	2.2.0.7			255.255.0.0	1
	Actions	Approve	53	Shay Harel	05.01.2015 13:53:00	00908/484658	10 13 22 9	440HD	UC_2.0.9.65			255 255 0 0	
×	Actions	Approve	\$	Shay Harel2	05.01.2015 13:52:38	00908/484688	10.13.22.9	440HD	UC_2.0.9.65			255.255.0.0	1

Click the Approve Selected button; you're prompted to approve the phone/s selected.
 Figure 2-10: Approve IP Phones

Approv	ve IP Phones		×
Please se Region	lect a region to associate ACL-Hong-Kong	e the users too:	
Note that	the approved devices w	ill restart!	
		Approve	Cancel

4. In the prompt, select the region and then click **Approve**; all selected users are approved; all phones restart; the cfg file is automatically uploaded to the phones from the EMS provisioning server, which the DHCP server points them to.

2.7.2 Non-Lync Environments

After plugging phones in, they report to the Management Server, which does not display user names in the UI.

Note:



- Before plugging in the phones, it's recommended to import a CSV file with users and devices. Best practice is to create one or more users with devices, export them to a CSV file, add users and devices to the CSV file in the same format, and then import the file (see Appendix A).
- In contact centers, where multiple users may use a particular phone, a 'user' is sometimes made the equivalent of the Direct Inward Dialing (DID) number associated with the phone.

> To approve users in non-Lync environments:

In the IP Phone Management Server UI, open the Devices Status page (Dashboard > Devices Status).

f De	vices Stat	us										📥 Export 😂 Reload
First	- Previou	s 1 Next	Lost						()	x		Q Filte
1			~	User +	1 Report Time	MAC +	IP +	Model +	Firmware Version +	Region *	Location +	Subnet +
-												
]	Actions		0		11.01.2015 13:06:35	00908/366602	172.17.188.88	420HD	UC_2.0.9.50	RivkaRegion		255.255.255.0
1	Actions Actions		0		11.01.2015 13:06:35 07.01.2015 08:54:45	00908/366602	172.17.188.88	420HD 420HD	UC_2.0.9.50 2.2.0.7	RivkaRegion		255.255.255.0 255.255.0.0
1	Actions Actions Actions	Approve	0 0 0	Shay Harel	11.01.2015 13:06:35 07.01.2015 08:54:45 05:01.2015 13:53:00	00908/366602 00908/487914 00908/484658	172.17.188.88 10.13.2.26 10.13.22.9	420HD 420HD 440HD	UC_20.9.50 2.2.0.7 UC_2.0.9.65	RivkaRegion		255.255.255.0 255.255.0.0 255.255.0.0

Figure 2-11: Devices Status

2. Click the **Approve** button adjacent to the user; you're prompted with:

The page at 10.1.8.23 says:		×
Please enter user name		
	ок]

3. Click **OK**; the Approve Device dialog opens.

Approve De	vice		×
User Name			
Password	•••••		
Display Name			
MAC Address	00908f3bde06		
IP Phone Type	Audiocodes_420HD	•	
Region	ACL-Hong-Kong	•	
		Ok	Cancel

4. Enter the User Name and the Display Name, and then click **OK**.; the user name is displayed in the Management Server UI and the user is approved.

The User Name and Password will function as the SIP user name and password.

Note:



- This procedure only applies when connecting phones for the first time. After firsttime connection, the cfg file - containing user name and password - is automatically uploaded to the phones from the EMS provisioning server, which the DHCP server points them to.
- In some non-Lync environments, for example, in Genesys contact centers, Password is not specified.

3 Monitoring and Maintaining the Phone Network

This section shows how to monitor and maintain the phone network in the enterprise. The following Dashboard and Users pages let you monitor and maintain the phone network:

Figure 3-1: Dashboard and Users

Navigation Tree
B Dashboard
Dashboard
Devices Status
Alarms
BellUsers
Users
Manage Multiple Users
Manage Multiple Devices
Import Users & Devices

The sections below show what each page lets you do.

3.1 Monitoring the Network from the Dashboard

The Dashboard page lets you quickly identify

- which phones in the network are registered
- which phones in the network are non-registered
- # of registered and non-registered phones (in terms of SIP registration)
- % of registered phones
- MAC and IP address of each phone
- the time the information was reported
- the firmware version
- > To open the Dashboard page:
- In the navigation tree, click **Dashboard** > **Dashboard**.

Figure 3-2: Dashboard

AudioCodes	IP Phone Ma	inageme	nt Server 🚯 Home	🙆 Help 🛛 🔭 Log off	1.0.6.37958			
Nevigation Tree		3	366 Registered Devices	A	5 Non Registered Devices	<u> </u>	Disconnect Devic	Registered 95 31%
Devices Status Alarms Users Phones Configuration System Diagnostics	Dovic	os Status	0	Devices Status	0	Devices Stat	us	0
	BS R	ecent Re	User ¢	Report Time \$	MAC Addr	1	IP ÷	FW Version \$
		8	QACOM2	23 11 2014 15 47 06	00908748676	3	10.22.13.157	UC_2.0.9.50_20141111_1
	2	8	Doron Flint	23.11.2014 15.46.50	00906/4844/	b	172.17.114.14	UC_2.0.9.50
		8	Ran Inbar	23.11.2014 15:46:23	00908/4817	к	10.22.12.161	UC_2.0.9.50
	2	8	Avi Seniour	23.11.2014 15:44:50	00908/55/8b	b	10.22.14.11	UC_2.0.9.50
	7	8	Yhiel Spector	23.11.2014 15:43:24	00908/55/67	3	10.22.14.174	UC_2.0.9.50
		8	Ilan Kazin	23.11.2014 15.42.54	00908/55/ce	8	172.17.114.46	UC_2.0.9.50
		*		23.11.2014 15:42:46	00908r3bde0	6	10.13.2.14	2.0.8.49
		4		23.11.2014 15:42:40	00908736666	s5	10.13.2.18	2.0.8.13
		8	Nir Klieman	23.11.2014 15.42.07	00908f55fa4	6	172.17.114.43	UC_2.0.9.50
		8	Olivia Fridman	23.11.2014 15:41:34	00908/48466	19	10.22.10.200	UC_2.0.9.50

AudioCodes

If a Lync IP phone is signed out (offline, or not registered), you'll see a grey circle icon with an x inside, and the 'User' column will be blank, as shown in the figure below. It will be counted as a Non Registered Device.

Figure 3-3: Dashboard - Lync IP Phone Not Registered

	3	O Registered Devices	A 1 Non Registered Devices	ŝ	Disconnected Devices	100 50%
Devic	es Status	0	Devices Status O	Devices Sta	atus O	
🖾 Re	cent Reports					
	~	User \$	Report Time \$		MAC Addr \$	IP \$
	offline	0	26.08.2014 15:16:59		009081484cf0	10.22.13.18

- Point your mouse over the icon to view the 'offline' indication (see the figure above).
- If the phone is a generic model, a red triangle enclosing an exclamation mark will be displayed, as shown in the figure above.
- View the following status thumbnails on the Dashboard:

Table 3-1: Dashboard – Status Thumbnails

Status Thumbnail	Description
259 Registered Devices Devices Status	The number of registered devices. Click the Devices Status link to quickly access the Devices Status page.
A 1 Non Registered Devices Devices Status 0	The number of non-registered devices. Click the Devices Status link to quickly access the Devices Status page.
Image: Status	The number of disconnected devices. Click the Devices Status link to quickly access the Devices Status page.
Registered 67 27%	The percentage of registered devices.

3.2 Checking Devices Status

The Devices Status page lets you check a phone's status

- > To check a phone's status:
- 1. Open the Devices Status page (Dashboard > Devices Statuses)

Figure 3-4: Devices Status

C 🖻	levices S	Status									C Reload
Firs	it ← Pre	tvious 1	Next -	- Last						٩	Q Filter
			~	User *	L Report Time	MAC *	IP ¥	Model *	Firmware Version *	Location +	Subnet *
	Actions			Golan Orlev	23 11 2014 15:51:28	00908f55f91a	10.22 10.201	440HD	UC_2.0.9.50		255.255.255.0
	Actions	Approve	8	Sagit Treger	23.11.2014 15:51:27	00908f55f5af	10.22.12.130	440HD	UC_2.0.9.50		255.255.255.0
	Actions	Approve	8	Anat Schwartzman	23.11.2014 15:51:25	009081551996	10.22.14.181	440HD	UC_2.0.9.50		255.255.255.0

2. Click the **Filter**; the filter lets you quickly access specific information in the page.

Figure 3-5: Devices Status Filter

User (Q)	User Name	
MAC Address	MAC Address	
IP Address	IP Address	aunat -
Model RivisRegion	420HD 440HD	200.265.255.0
Version	2.2.0.7 UC_2.0.9.65 UC_2.0.9.50	
Status	offline	~
Approve		~
User With Multiple Dev	/ices	
Region	sha region riv region	
Max Devices in Page	50	•
Filter	lear Filter	

- **3.** You can filter per user, MAC, IP address, model, version, status (offline, registered, disconnected, approved or pending approval, or users with multiple devices.
- 4. Non-Lync and Lync phones are displayed differently. The format of 'User Agent' for non-Lync phones is for example AUDC-IPPhone/2.0.4.30 (430HD; 00908F4867AF) while the format for Lync phones is AUDC-IPPhone-430HD_UC_2.0.7.70/1.0.0000.0 Only Lync phones are displayed under 'Location', non-Lync phones are not.

5. You can click an individual user's **Actions** link; the following menu is displayed:

Figure 3-6: Actions Menu - Single User





Action	Description
Check Status	Select the 'Check Status' option; the status is displayed: Status × SIP User: * Register: • User Name: Alan Roberts * User Agent: AUDC-IPPhone-430HD_UC_2.0.7.70/1.0.0000.0 * MAC: 00908/484cf0 * IPP Model: 430HD * VLan ID: 213 * Firmware Version: UC_2.0.7.70 SIP Proxy: audiocodes-affiliate.com
Change Region	Select the 'Change Region' option:
Update Firmware	You can update firmware per device, or for multiple selected devices (see step 6 below). Select the 'Update Firmware' menu option: Update Firmware Please select a firmware: Update IP phone configuaration file and restart the phone Ok Cancel From the dropdown, select the firmware file, and then click Ok.; the firmware file is updated.

Action	Description
Open Web Admin	Opens the Web interface (see the Administrator's Manual)
Reset Phone	Sends a reset command to the selected device/s. Note that some phone models wait for the user to finish an active call, while others may perform an immediate restart.
Update configuration	Sends a command to the phone to check whether there is a new configuration file to upload and updates the phone after a configurable 'Delay Time' (Default = 2 seconds).
Send Message	Lets you send a message to the LCD/s of the selected device/s. Enter the message in the 'Text' field. You can configure for how long the message will be displayed in the LCD/s.
Delete	Deletes the devices from the Status table.

6. You can select multiple users and then click the **Selected Rows Actions** link; the following menu is displayed:

Figure 3-7: Actions Menu - Selected Rows



See the table above for descriptions. Any action you choose will apply to all selected rows. For example, select rows, click the **Selected Rows Actions** link, and then select the **Update Firmware** option; all selected devices will be updated with the firmware file you select.

3.3 Monitoring Alarms

AudioCodes IP phones send alarms via the REST protocol. The EMS forwards them as mail, SNMP traps, etc.

The Alarms page (Dashboard > Alarms) shows you

- each phone alarm in the network
- a description of each alarm
- MAC address of the phone (source)
- alarm severity
- IP address of the phone
- last action time
- date and time of receipt of the alarm

Figure 3-8: Alarms

(JAudioCodes	IP Phone Management Server	🔥 Home 🕜 Help 🗲 Log off 1.0.6.37958					
**	S Alarms						
Navigation Tree	Showing 1 to 18 of 18 entrie	ext→ Lani					Q
Alarms	Name ©	Description 0	Source ¢	Severity 0	Remote Host 0	Last Action Time \$	Received Time \$
Phones Configuration	IPPbone Registration Failure	This Alarm is activated upon registration failure	IPPhone/00908f3bde06	Critical	10.13.2.14		23 11 2014 12 42 42
System Diagnostics	IPPhone Registration Failure	This Alarm is activated upon registration failure	IPPhone/00908/3666a5	Critical	10.13.2.18		23.11.2014 12.42.37
	IPPhone Registration Failure	This Alarm is activated upon registration failure	IPPtione/00908f3bbba5	Critical	10.13.2.18		20 11 2014 16 17 47
	IPPhone Registration Failure	This Alarm is activated upon registration failure	IPPhone/00908/3666a5	Critical	10.13.22.7		20.11.2014 16:14:52
	IPPhone Registration Failure	This Alarm is activated upon registration failure	IPPhone/009081484ct0	Critical	10.22.13.130		20.11.2014 16:12:13
	IPPhone Registration Failure	This Alarm is activated upon registration failure	IPPtione/00905f3bde06	Critical	10.13.2.14		20.11.2014 16:11.52
	IPPhone Registration Failure	This Alarm is activated upon registration failure	IPPhone/00905f3bbba5	Critical	10.13.2.16		20.11.2014 16 11.51

The management server displays *active* alarms, not historical alarms.

Red indicates a severity level of Critical

Orange indicates a severity level of Major

After an alarm is cleared, it disappears from the Alarms screen.

The table below shows the three alarms that users can receive.

Table	3-3:	Alarms
	•••	/

Alarm Name	IP Phone Type	Severity
Login Failure	Microsoft Lync	Critical
Registration Failure	Generic (non Lync)	Critical
Survivable Mode Start	Microsoft Lync	Major

3.3.1 Registration Failure Alarm

The table below describes the Registration Failure alarm. The alarm is issued if SIP registration, with the PBX, fails.

Alerm				
Alarin	IPPhoneRegisterFailure			
OID	.1.3.6.1.4.1.5003.9.20.3.2.0.39 is the OID used in the EMS to forward the IPPhoneRegisterFailure alarm			
Description	This alarm is activated when a registration failure occurs			
Alarm Title	Registration Failure			
Alarm Type	communicationsAlarm(1)			
Probable Cause	communicationsProtocolError(5)			
Severity	Critical			
Corrective Action	The problem is typically not related to the phone but to the server. The user/phone may not be defined, or may be incorrectly defined, or may previously have been defined but the username (for example) may have been changed, causing the registration to fail. Make sure the username and password credentials are the same in server and phone, and weren't changed; server-phone credentials must be synchronized. Make sure the server is responsive.			

Table 3-4: IP Phone Registration Failure Alarm

3.3.2 Survivable Mode Start Alarm

The table below describes the Survivable Mode Start alarm.

Table 3-5: IP Phone Sur	vivable Mode Start Alarm
-------------------------	--------------------------

Alarm	IPPhoneSurvivableModeStart
OID	.1.3.6.1.4.1.5003.9.20.3.2.0.40 is the OID used in the EMS to forward the IPPhoneSurvivableModeStart alarm
Description	This alarm is activated when entering survivable mode state with limited services
Alarm Title	Survivable Mode Start
Alarm Type	Other(0)
Probable Cause	other (0)
Severity	Major
Additional Info	
Corrective Action	The problem is typically not related to the phone but to the server or network. Make sure all servers in the enterprise network are up. If one is down, limited service will result.

3.3.3 Lync Login Failure Alarm

The table below describes the Lync Login Failure alarm.

Table 3-6: IP Phone Lync Login Failure Alarm

Alarm	IPPhoneLyncLoginFailure
OID	.1.3.6.1.4.1.5003.9.20.3.2.0.41 is the OID used in the EMS to forward the IPPhoneLyncLoginFailure alarm
Description	This alarm is activated when failing to connect to the Lync server during sign in
Alarm Title	Lync Login Failure
Alarm Type	communicationsAlarm(1)
Probable Cause	communicationsProtocolError(5)
Severity	Critical
Additional Info	TIsConnectionFailure NtpServerError
Corrective Action	This alarm may typically occur if the user is not registered - or is registered incorrectly - in the Lync server. Make sure in the server that the username, password and PIN code are correctly configured and valid. Try resetting them. Try redefine the user.

3.3.3.1 Searching for Alarms

You can search for alarms in the Alarms page. The 'Search' field enables the functionality. You can search by

- alarm name
- a phone's MAC address
- a phone's IP address

3.4 Maintaining Users

The Manage Users page lets you maintain users. You can

- add a user
- add a device to a user
- edit user/device
- delete a user/device
- search for a device by region
- search for a device by name

3.4.1 Adding a User

> To add a user to the Management Server:

1. Access the 'Manage Users' page (Management > Users > Users):

Figure 3-9: Manage Users

Arres 1	Manag	e Users								_	
	Region			✓ Search		► Go			Add	User	
· P	-							< First Prev Next Last >	Showing 1	0 25 0	f 269 users
		Devices	Registered Devices	Login Name		Display Name	Region	Line URI		tion	_
	1	(I) ®		Zvi Steiner	۰.	Zvi Steiner	ACL-Israel		Add Device	Edit	delete
	2	· (1)		Zohar Medina		Zohar Medina	ACL-Israel	***	Add Device	idt	delete
	3	(8) (1)		2v zvran		Ziv Zviran	ACL-Israel		Add Device	tdi	delete
	4	· (1)		Zeev Bodnev	+	Zeev Bodnev	ACL-Israel		Add Device	Tdit	delete
	5	···· (1)	200	Yuval Yosha	1	Yuval Yosha	ACL-Israel		Add Device	Tdit	delete
	0	·* (1)		Yuval Granit	2	Yuval Granit	ACL-Israel		Add Device	E dit	deleter
Configuration 7 Diagnostics 8	7	(i) (i)		Yossi Zadah		Yossi Zadah	ACL-terael		Add Device	Edi	delutu
	8	(#)(1)		Yossi Merzbach	9	Yossi Merzbach	ACL-Israel		Add Device	tdit	delete
	9	iti (1)		Yoram Shushan	÷.	Yoram Shushan	ACL-Israel		Add Device	tdl	delete
	10	(i) (i)		Yoram Naim	-	Voram Naim	Marketing-Application		Add Device	tdit	delete
	11	(I) (E)		Yoav Gilad		Yeav Gilad	ACL-Israel		Add Device	tdit	delete
	12	. (1)		Yshai Gil		Yishai Gil	ACL-Israel		Add Device	Edit	delete
	13	(8) (1)		Yfat Gi		Yifat Gil	ACL-Israel		Add Device	tdi	delete
	14	(8) (1)		Yevgeny Kamardash		Yevgeny Kamardash	ACL-Israel	<u></u>	Add Device	Frilt	delete
	15	(1)		Yelena Ishov	÷.	Yelena Ishov	ACL-Israel		Add Device	Idit	delete
	16	(i) (i)		Yehoshua Gev		Yehoshua Gev	ACL-Israel		Add Device	Tdit	delete
	17	(1)	(100)	Yehoshua Froman	2	Yehoshua Froman	ACL-Israel		Add Device	Edit	delete
	18	. (1)		Yariv Voner		Yariv Vizner	ACL-Israel		Add Device	tdt	delete
	19	(8)(1)		Yariv Milber		Yariy Miber	ACL-Israel		Add Device	Tdit	delete

2. Click the **Add User** button (before adding phones to the IP phone management server you must add users); the following screen is displayed:

Figure 3-10: Add User

User Name Password	••••••	
Display Name Region	IPP phone	V

- **3.** Define a name and password for the user.
- 4. Define the 'Display Name' and select a region from the 'Region' dropdown.



Note: Region/s must first be defined in the EMS.

Figure 3-11: Add User Definitions

User Name	John Smith	
Password Strong	•••••	
	John Smith	
Display Name	John Smith	

5. Click the **Submit** button; you're returned to the Manage Users page; locate the listed added user.

AudioCodes

3.4.2 Adding a Phone

You can manually add a single phone to the server.

- > To add a phone:
- 1. In the Manage Users page, click the **Add Device** button in the row of the listed added user; the following screen opens:

2	
device 1	×
Audiocodes_420HD	~
00908F	
	Audiocodes_420HD

Figure 3-12: Add New Device to User

- 2. Enter the 'Display Name'. This is the name that will be displayed in the management server interface.
- 3. Click the **Submit** button.
- 4. Click Add Device (to associate the employee's name/line with the IP phone).
- 5. Enter the remaining characters of the 'MAC Address'. The prefix characters are displayed by default.
- 6. Click the Submit button; the following screen is displayed:

Figure 3-13: Prompt: Do you want to generate configuration files?



7. Click Yes.

Figure 3-14: Prompt: Do you want to update the device file?

	X			
Create IP-Phone configuration files				
Generated files on: Local server EMS/10.59.0.200				
/data/NBIF/ippmanager/generate - 00908f55fa30.cfg				
Do you want to update the device file?				
Yes No				

8. Click Yes.

3.4.3 Editing a User

You can edit a user.

- > To edit a user:
- 1. Click the **Edit** button in the row adjacent to the user; the Edit User screen opens, identical to that shown in Figure 3-10.
- 2. Edit the same fields as when adding the device (see Section 3.4.2).

3.4.4 Deleting a User

You can delete a user.

- > To delete a user:
- Click the **Delete** button in the row adjacent to the user; the user and device are removed.

3.5 Managing Multiple Users

The Manage Multiple Users page lets you easily perform a single operation on all or on many users simultaneously:

- reset passwords
- delete users
- restart devices
- generate IP phones configuration files
- update configuration files
- send a message to multiple phones
- > To manage multiple users:
- 1. Access the 'Manage Multiple Users' page (Management > Users > Manage Multiple Users):

Manage Multiple Users		
Region Marketing-Application	Search	Go
Available Users	Selected Users	
David Rozmaryn (David Rozmaryn) Eran Hagay (Eran Hagay) Erez Gabbay (Erez Gabbay)		
Gilad Moyal (Gilad Moyal) Ido Hershkovitz (Ido Hershkovitz) Kairat Ziman (Kairat Ziman)		
Ron Miller (Ron Miller) Shay Harel (Shay Harel App) Yacov Alster (Yacov Alster)	> <	
Yacov Kouris (Yacov Kouris) Yael Golan (Yael Golan) Yoram Naim (Yoram Naim)	>>	
Alan Roberts		
< First Prev Next Last >		
Showing 1 to 14 of 14 users		
Action		
Delay Time	✓	

Figure 3-15: Manage Multiple Users

- 2. In the **Available Users** pane, select the users on which to perform the operation.
- Click the right arrow (>) to add new users to the Selected Users pane. Click the left arrow (<) to remove selected users.

4. From the **Action** dropdown, select the required action.

Set Users Region
Reset Users Passwords
Delete Users
Restart Devices
Generate IP Phones Configuration Files
Update Configuration Files
Send Message
Ŭ Ŭ

Use the table below as reference.

Table 3-7: Managing Multiple Users - Actions

Action	Description
Set Users Region	Action Set Users Region
Reset Users Passwords	 Set the same password to all users Reset Users Passwords Note: To load new user(s) password, please: Generate IPP Configuration File is necessary. Resets users passwords. A random password is generated for each user. To generate a single password for all users selected, select the Set the same password to all users option. To load the new user passwords:
Delete Users	Deletes users and applies a configurable 'Delay Time' (Default = 2 seconds) after each delete is performed.
Restart Devices	 Restarts devices. A reset command is sent to all selected devices. The commands are sent in batches; each batch contains 5 devices with a delay of 2 minutes between each batch. From the dropdown, choose the type of restart: Graceful (default) Force Scheduled Before restarting, some models wait for the user to finish an active call while others may perform an immediate restart.
Generate IP Phones Configuration Files	Generates new configuration files. Updates each phone with the newly generated configuration files after a configurable 'Delay Time' (default = 2 seconds) - if you select the Updating IP Phones after generating files option. You can generate a private configuration file per user group, device group, or specific regions.
Update Configuration Files	Updates each phone after a configurable 'Delay Time' (default = 2 seconds).



Action	Description
Send Message	Lets you send a message to the LCDs of all user phones selected. Enter the message in the 'Text' field. You can configure the length of time the message will be displayed in the LCD. Phones beep to alert users when messages come in.
	Send Message Text Display Time 10 sec

The page also lets you

filter per region, before selecting the users on which to perform an action

3.6 Maintaining Multiple Devices

The Manage Multiple Devices page lets you perform a single operation on all or on many user devices. The page lets you

- delete multiple devices
- change IP phone type
- change language
- restart multiple devices
- generate IP phones configuration files
- update configuration files
- send a message to multiple phones
- > To manage multiple devices:
- 1. Access the 'Manage Multiple Users' page (Management > Users > Manage Multiple Devices):

Manage Multiple Devices		
Region	Search	Go
Available Devices 3002 - device 3002 1 7000 - device 7000 1 7777 - device 7777 1 Abraham Goldfrid - device Abraham Goldfrid Adi Goldberg - device Adi Goldberg Adva Ambar - device Adi Goldberg Adva Ambar - device Adva Ambar Alberto Castro - device Alberto Castro Alex Agranov - device Alberto Castro Alex Agranov - device Alex Agranov 1 Alex Orta - device 1 Alex Shlachter - device Alex Shlachter 1 Alex Shlachter - device Alex Shlachter 1 Alexander Kruglov - device Alexander Kruglo Alexander Steingold - device Alexander Kruglo Alexander Steingold - device Alexander Steir Alon Rozen - device Alon Rozen 1 Alon Steiner - device Alon Steiner Alon Yzhak - device Alon Yzhak Amir Kagan - device Amir Kagan Amir Katan - device Amir Natan 1 Amir Raanan - device Amir Raanan 1	>	Selected Devices
< First Prev Next Last > Showing 1 to 275 of 275 devices		
Action	~	
Delay Time	~	

Figure 3-16: Manage Multiple Devices

The devices are displayed in the following format:

- 2. You can search for devices by entering a string in the 'Search' field and then clicking Go.
- **3.** You can filter the devices per region, before selecting those on which to perform an action.
- 4. In the Available Devices pane, select the devices on which to perform the action.
- 5. Click the right arrow → to add new devices to the Selected Devices pane, or use the left arrow ← to remove selected devices.



6. From the **Action** dropdown, select an action. Use the table below as reference.

Table 3-8: Managing Mult	tiple Devices - Actions
--------------------------	-------------------------

Action	Description
Delete Devices	Deletes selected devices from the server applying a configurable 'Delay Time' (default = 2 seconds) in the process.
Change IP Phone Type	You can change the phone model: Audiocodes_420HD Audiocodes_430HD Audiocodes_440HD Audiocodes_430HD_LYNC Audiocodes_440HD_LYNC To view the usage of a model, click View Usage . To load a new phone model: 1 Generate the phone's configuration file. 2 Restart/update the phone.
Change Language	 Changes the phone language. Select the language from the Language dropdown and click Change. To view the usage of a language, click View Usage. To load a new language: Generate the phone's configuration file. Restart/update the phone.
Restart Devices	 Restarts online devices. Before restarting, some models wait for the user to finish an active call while others may perform an immediate restart. From the dropdown, choose the type of restart: Graceful (default) Force Scheduled
Generate IP Phone Configuration files	Generates new configuration files. Updates each phone with the newly generated configuration files after a configurable 'Delay Time' (default = 2 seconds) - if you selected the Updating IP Phones after generating files option.
Update Configuration Files	Updates each phone after a configurable 'Delay Time' (default = 2 seconds).
Send Message	Lets you send a message to the LCDs of all user phones selected. Enter the message in the 'Text' field. You can configure the length of time the message will be displayed in the LCD. Phones beep to alert users when messages come in.

- > To update all existing configuration files according to the new template:
- Use the Generate IP Phones Configuration Files option in the Manage Multiple Devices page.

4 Troubleshooting

You can display log files to help troubleshoot problems and determine cause.

- > To display log files:
- 1. Access the System Logs page (System Diagnostics > System Logs):

Figure 4-1: System Logs

Sys	System Logs				
	System Logs				
	Web Admin				
	Activity				

2. Click the **Web Admin** arrow or the **Activity** arrow link.



Note:

- The Web Admin log displays recent actions performed in the user interface
- The Activity log displays recent activities performed with the EMS server

> To display Web Admin log files:

1. Click the **Web Admin** arrow link; the System Logs – Web Admin page opens:

Figure 4-2: System Logs – Web Admin Level Log

	-			
			Web Admin	
	Archive Files			
	IPP_ERROR WARN	(24-07-2014 15:26:16) 8.36 KB		Hide log lines Show last 10 log lines
Log	Level VERBOSE		Save	Show last 20 log lines Show last 30 log lines Show last 40 log lines Show last 50 log lines Show last 100 log lines

- 2. From the 'Log Level' dropdown select
 - ERROR
 - WARN
 - INFO
 - DEBUGGING
 - VERBOSE (default) All Levels (Detailed)
- **3.** From the 'Hide log lines' dropdown select
 - Hide log lines
 - Show last 10 log lines
 - Show last 20 log lines
 - Show last 30 log lines
 - Show last 40 log lines
 - Show last 50 log lines
 - Show last 100 log lines
- 4. View the generated IPP_web_admin_log.txt file.



Syste	System Logs						
		Web Admin					
	Archive Files						
	IPP_web_admin_log.txt (24-07-2014 15:39:59) 8.52 KB			Show last 10 log lines			
14:12: 14:13: 14:17: 14:34: 15:14: 15:26: 15:26: 15:39: 15:39:	29 10.13.2.4 INFO: Logout successfully user name= server=10.13.2.4 59 10.13.2.4 acadamin INFO: Login successfully name=acladamin server=10.13.2.4 10.37.2.1 acladmin INFO: Login successfully name=acladmin server=10.37.2.1 10.13.2.4 INFO: Logout successfully name=acladmin server=10.37.2.1 10.13.2.4 Acladmin INFO: Login successfully name=acladmin server=10.13.2.4 11.0.13.2.4 NIFO: Logout successfully name=acladmin server=10.13.2.4 11.0.13.2.4 Acladmin INFO: Login successfully name=acladmin server=10.13.2.4 52.10.13.2.4 Acladmin INFO: Login successfully name=acladmin server=10.13.2.4 51.0.13.2.4 NIFO: Login successfully name=acladmin server=10.13.2.4 59.10.13.2.4 acladmin INFO: Login successfully name=acladmin server=10.13.2.4						
Log	evel VERBOSE V	Save					

Figure 4-3: System Logs – Web Admin Level txt Log File Displayed

5. Click **Save** to save the file and share it with others.

> To display Activity log files:

1. Click the **Activity** arrow; the System Logs – Activity page opens:

Figure 4-4: System Logs – Activity Log

Syste	System Logs					
		Activity				
	Archive Files					
	IPP_activity_log.csv (24-07-2014 15:52:08) 10.55 KB	Hide log lines Show lat 10 log lines				
		Show last 30 log lines Show last 30 log lines Show last 40 log lines Show last 50 log lines Show last 100 log lines				

- 2. From the 'Hide log lines' dropdown select
 - Hide log lines
 - Show last 10 log lines
 - Show last 20 log lines
 - Show last 30 log lines
 - Show last 40 log lines
 - Show last 50 log lines
 - Show last 100 log lines

Figure 4-5: System Logs – Activity Level txt Log File Displayed

Syst	System Logs						
		Activity					
	Archive Files						
	IPP_activity_log.csv (24-07-2014 15:52:08) 10.55 KB		Show last 10 log lines				
acladn ,2014 ,2014 acladn ,2014 ,2014 acladn ,2014 ,2014 acladn	nin,2014-07-24 15:14:03,10.13.2.4,LOGIN,ADMIN,OK,acladmin,Success login user name=acladmin 07-24 15:26:11,0.13.2.4,LOGIN,ADMIN,BRROR,,Fail login user name= 07-24 15:26:16,10.13.2.4,LOGIN,PASSWORD,OK,acladmin,Correct current password: *****, 07-24 15:39:52,10.13.2.4,LOGIN,ADMIN,BRROR,,Fail login user name= 07-24 15:39:52,10.13.2.4,LOGIN,ADMIN,BRROR,Fail login user name= 07-24 15:39:59,10.13.2.4,LOGIN,ADMIN,BRROR,Fail login user name= 07-24 15:39:59,10.13.2.4,LOGIN,ADMIN,BASSWORD,OK,acladmin,Correct current password: *****, 10:2014-07-24 15:39:50,10.3.2.4,LOGIN,ADMIN,BRROR,Fail login user name= 07-24 15:39:50,10.3.2.4,LOGIN,ADMIN,BRROR,Fail login user name= 07-24 15:39:50,10.3.2.4,LOGIN,ADMIN,BRROR,Fail login user name= 07-24 15:50:02,10.13.2.4,LOGIN,ADMIN,BRROR,Fail login user name= 07-24 15:50:08,10.13.2.4,LOGIN,ADMIN,OKD,OK,acladmin,Correct current password: *****, nin,2014-07-24 15:52:08,10.13.2.4,LOGIN,ADMIN,OK,acladmin,Correct current password: *****,						

Importing Users into the Server



Α

Note: Applies to non-Lync environments.

You can import up to 10000 users or phones, defined in a CSV file, into the IP Phone Management Server. Before you import the CSV file into the server, you need to make it.

A.1 Making a CSV File

This section shows how to make a CSV file. To make the CSV file:

- 1. Configure a 'system user' (it can be any other user as well) (see Section 2.5)
- 2. Add a device to this user ('system user' or any other user)
- **3.** Export the 'system user' to a CSV file (see Section A.1.1 below)
- 4. Define in Excel the other users in the enterprise (see Section A.1.2)
- 5. Import the new CSV into the server.

A.1.1 Export the 'System User' to a CSV File

This section shows how to export the 'system user' that you configured previously (as shown under Section 2.5), to a CSV file. You can export from either the Devices Status page or from the Import Users & Devices page.

- > To export the 'system user' to a CSV file from the Devices Status page:
- 1. Access the Devices Status page (see Figure 2-8).
- 2. Select the 'system user', and then click the **Export** link in the top right corner:

Export to CSV		×
Are your sure you want to export to C	:SV?	
	Export	Cancel

- 3. Click the Export button
- > To export the 'system user' to a CSV file from the Import Users & Devices page:
- 1. Access the Import Users and Devices page (Users > Import Users & Devices):

Figure A-1: Import Users – Export to CSV

Import Users and Devices information
This page lets you import a CSV file containing users and devices information into the server. Browse to the file and then click the import button.
Browse
Import
Making a CSV File to Import
If you do not have a CSV file to import, you need to make one. Click here to start making a CSV file containing <i>users only</i> , without devices. Click here to start making a CSV file containing <i>both</i> users <i>and</i> devices.
To export a CSV file containing users and devices information already defined in the server, click the Export to CSV button.
Export to CSV



2. Click the **Export to CSV** button and open the CSV in Excel; the 'system user' you configured previously is displayed:

	B5	• (0	f_x								
	А	В	С	D	E	F	G	н	1	J	
1	Name	Password	Display Name	Region	Device 1 Display Nan	Device 1 MAC Address	Device 1 IP Phone Mod	Device 1 Language	Device 1 VLAN Mod	Device 1 VLAN ID	
2	system	1234	system	ACL-Hong-Kong	device 1	00908f00908f	Audiocodes_420HD	English	Disabled		0
3											
4											
5											
М	♦ ► ► export	Users (9) 🦯 🖏 🦯					I 4 III				ÞĪ
Re	ady								🔲 🛛 💾 100%	⊖	-+

Figure A-2: CSV File in Excel

Table A-1: CSV File

Name	Password	Display Name	Region	Device 1 Display Name	Device 1 MAC Address	Device 1 IP Phone Model
system	system	system	ACL-Hong Kong			

A.1.2 Defining Users in the CSV File

You need to define users in the CSV file.



Tip: To facilitate this task, you can export a CSV from your enterprise PBX and then edit it to conform to the 'system user' CSV row, shown in the figure above.

A.2 Importing the New CSV File into the Server

After making the CSV file, import the new CSV file into the IP Phone Management Server.

- > To import the new CSV file into the IP Phone Management Server:
- 1. Access the Import Users page (Users > Import Users & Devices).

Figure A-3: Import Users

Import Users
The Import Users feature allows you to import new Users and Devices into the system. The import feature makes it easy to add a large amount of Users and Devices information from a CSV file into the system.
Click Browse to select a file to import:
Browse
Import
Export to CSV
Advanced options

- 2. Click **Browse** and then navigate to and select the CSV file which you created and saved on your Desktop previously.
- 3. Click the **Import** button; the file is imported into the IP Phone Management Server.
- 4. Click the **Home** icon; verify that all enterprise users that you imported are displayed.
- 5. Plug in the phones; the cfg configuration file is automatically uploaded to the phones from the EMS provisioning server, which the DHCP server points them to.

B Preparing a Configuration File

You can prepare a configuration file from a template in the IP Phone Management Server UI. The template defines how a phone's configuration file will be generated. The phones pull the cfg from the EMS provisioning server.



Note: Before plugging phones into the network, define parameter placeholders values for criteria such as region and phone model, to maintain an automatic provisioning scheme.

B.1 Selecting a Configuration Template

Configuration templates are available

- per phone model
- per model for Microsoft Lync server phones
- per model for regular (non-Lync) third party server phones

Depending on the models and the server in the enterprise, select a template for:

- AudioCodes 420HD
- AudioCodes 430HD
- AudioCodes 440HD
- AudioCodes 420HD Lync
- AudioCodes 430HD Lync
- AudioCodes 440HD Lync
- > To select a configuration template:
- In the navigation tree, access the IP Phones Configuration Templates page (Phones Configuration > Templates):

Figure B-1: IP Phone Models Configuration Templates

IP Phones Configuration Templates			
			Add new IP Phone model
		IP Phones Configuration Templates	
	Audiocodes_420HD	The 420HD SIP IP Phone is a high-definition IP phone with an affordable price.	(j) Edit
	Audiocodes_430HD	The 430HD SIP IP Phone is an advanced, mid-range enterprise IP Phone,	() Edit
	Audiocodes_440HD	The 440HD SIP IP Phone is a high-end, executive IP phone it includes a dedicated L	(j) Edit
	Audiocodes 420HD LYNC	The template file of Audiocodes 420HD LYNC is overwritten. The file location is in the system.	(j) Edit
	Audiocodes 430HD LYNC	The template file of Audiocodes 430HD LYNC is overwritten. The file location is in the system.	
	Audiocodes 440HD LYNC	The template file of Audiocodes 440HD LYNC is overwritten. The file location is in the system.	(j) Edit

B.2 Editing a Configuration Template

You can edit a phone model's template but typically it's unnecessary to change it.

- **To edit a template:**
- 1. In the IP Phones Configuration Templates page, click the link of the IP phone model, or its **Edit** icon; this dialog is displayed:



Figure B-2: IP Phone Configuration Template

- 1 = generic templates can be modified and generated per phone model
- Click the Edit configuration template button; the template opens in an integral editor: Figure B-3: Edit Template

xml version="1.0" encoding="ISO-8859-1"?	
<ipphonetamplate></ipphonetamplate>	
<type>audiocodes_430HD</type>	
<description>AudioCodes 430HD LYNC</description>	
<file_config></file_config>	
<type>global_file</type>	
<profile>global</profile>	
<encrypt_mode>0</encrypt_mode>	
<name>Audiocodes_430HD_global_LYNC.cfg</name>	
<destinationdir>%ITCS_destination%</destinationdir>	
<data></data>	
<![CDATA[management/telnet/enabled=0</td> <td></td>	
ems_server/keep_alive_period=60	
ems_server/provisioning/url=http://%ITCS_ServerIP%:8081/	
lync/BToE/CheckNetwork=0	
lync/BToE/name=AudioCodes 400HD Phone	
lync/moh/url=	
network/lan/dhcp/domain_name/enabled=1	*
network/lan/dhcp/gateway/enabled=1	

3. Edit the template and then click **Save**; the modified template is saved in its URL location on the server, for example, http://10.59.0.200/ipp/admin/AudioCodes.php

See the phone's *Administrator's Manual* for parameter descriptions. See also Section B.2.8.

B.2.1 About the Template File

The template is an xml file. It defines how a phone's configuration file will be generated. The template shows two sections.

- The upper section defines the global parameters that will be in the global configuration file
- The lower section defines the *private user* parameters that will be in the *device* configuration file

B.2.2 Global Parameters

Global parameters apply to *all* phones in the enterprise network. The **ems_server/provisioning/url** parameter, for example, is a global parameter because all phones in the enterprise network point to the same provisioning server.

Only one file is generated for each template, so every change in the global file will automatically impact all the phones from this template.

B.2.3 User-Specific Parameters

Private user parameters apply to specific phones. They can pull global parameters using the template's 'include' function. The **network/lan/vlan/mode=%ITCS_VLANMode%** parameter, for example, is a user parameter because each user in an enterprise is defined in a user-specific VLAN.

This parameters will be store in the MAC.cfg file for each device.

B.2.4 Restoring a Template to the Default

You can restore a template to the factory default at any time.

- > To restore a template to the default:
- Click the **Restore to default** button (displayed only if a change was made); the phone model and its description are displayed.

B.2.5 Downloading a Template

You can download a template, for example, in order to edit it in a PC-based editor.

- > To download a template:
- Click the **Download configuration template** button and save the *xml* file in a folder on your PC.

B.2.6 Uploading an Edited Template

You can upload a template, for example, after editing it in a PC-based editor.

- > To upload an edited template:
- Click the Upload configuration template button and browse to the *xml* template file on your PC. The file will be the new template for the phone model.

B.2.7 Generating an Edited Template

After editing a template if necessary, you must generate the edited template.

- > To generate an edited template:
- 1. In the IP Phone Configuration Template page, click the **Generate Configuration Template** button; this prompt is displayed:

Figure B-4: Generate Configuration Template – 'Global files' Prompt

Global files		×
The Global files will be generated to template (destinationDir).	the location defined	in the
	Yes	Cancel

2. Click **Yes**; the generated template reflecting the edit/s is available in the IP Phone Models Configuration Templates page.

B.2.8 Defining Template Placeholders

Templates include *placeholders* whose values you can define. After defining values, the placeholders are automatically resolved when you generate the template, for example, the placeholder **%ITCS_TimeZoneLocation%** is replaced with the local time zone in a globally distributed enterprise's phones. Placeholders can be defined per system, region, IP phone model, and devices.

> To show placeholders:

1. In the IP Phones Configuration Templates page (**Phones Configuration** > **Templates**), click the **Edit** button adjacent to the phone model; this screen opens:

Figure	B-5:	Configuration	Template
--------	------	---------------	----------



2. Click Advanced, and then click the Show Placeholders button.

Figure B-6: Show Placeholders



The figure above shows placeholders currently defined in the xml Configuration Template file for the 430HD Lync phone model.

There are four kinds of placeholders: (1) System (2) Phone Model (3) Region (4) Devices.

- To manage an available placeholder, see Section B.2.8.1
- To add/edit/delete a phone model placeholder, see Section B.2.8.2
- To add/edit/delete a region placeholder, see Section B.2.8.3
- To add/edit/delete a device placeholder, see Section B.2.8.4

B.2.8.1 Default Placeholders Values

You can define placeholders. Before defining values for placeholders, you can view the default placeholders values defined.

> To view default placeholders values defined:

Access the Default Placeholders Values page (Phones Configuration > Default Placeholders Values):

Figure I	B-7:	Default	Placeholders	Values
----------	------	---------	--------------	--------

Default indecidited voided				
Placeholder	Value	Description		
%ITCS_ServerIP%	10.21.8.30			
%ITCS_TimeZoneName%	UTC	The IP SPS TimeZone/Country name		
%ITCS_TimeZoneLocation%	+00:00	The IP SPS TimeZone offset format is +/-xx:xx		
%ITCS_DayLightSwitch%	0			
%ITCS_MwiVmNumber%	1000	The Voice Mail number		
%ITCS_Version%	1421074579			
%ITCS_Language%	English	Determines IPP display user interface language: English, Spanish or Russian		
%ITCS_SRTP%	0			
%ITCS_IPPhoneUsername%	admin	The IPPhone administration user name		
%ITCS_IPPhonePassword%	1234	The IPPhone administration password		
%ITCS_destination%	/data/NBIF/ippmanager/generate/	configuration files location on the disk		

ult Place



To define a placeholder value: ≻

Access the System Settings page (Phones Configuration > System Settings). 1.

System Settings		_		
Note: Changes to va	alues of parameters in this s	screen will not	be applied if the device's configuration file does not inclu	b
		System Settings		
Default Phone Config	uration			
IP Phones Language	English	•	(%ITCS_Language%)	
NTP Server IP Address			(%ITCS Primary NTP%)	
Voice Mail Number	1000		(%ITCS_MwiVmNumber%)	
	e mone comgaration me		(%11C5_5KTP %)	
Outbound Proxy				
Redundant Mode	No Redundant	~	(%ITCS_Redundant_outbound_proxy_enable%)	
Primary	10.62.0.42		(%ITCS_Outbound_proxy%)	
LDAP Configurati	ion			
Configurat				

Figure B-8: System Settings



Note: The screen above only applies to enterprises whose environments are *non Lync* (except for the 'IP Phones Language' parameter).

Define values for available placeholders according to your enterprise IP phone 2. configuration requirements, and then click the Submit button. Use the table below as reference. Except for the 'IP Phones Language' parameter, all parameters are only applicable to enterprises whose environments are non Lync.

Table B-1: System Settings

Parameter	Description
IP Phones Language	From the dropdown select the language you want displayed in the phones' LCD screens: English (default), French , German , Hebrew , Italian , Polish , Portuguese , Russian , Spanish or Ukraine .
NTP Server IP Address	Enter the IP address of the Network Time Protocol (NTP) server from which the phones can get the time.
Voice Mail Number	Enter the number of the enterprise's exchange. Configuration depends on the enterprise environment, specifically, on which exchange the enterprise has. If the enterprise has a Lync environment, ignore this parameter. Default=1000.
Require SRTP in the Phone Configuration File	Select this option for Secure RTP. Real-time Transport Protocol (RTP) is the standard packet format for delivering voice over IP.

Parameter	Description
Redundant Mode	From the dropdown select No Redundant (default) or Primary/Backup .
	Allows the administrator to set the primary PBX / Lync server to which the phone registers and the fallback option if the server is unavailable.
	Primary/Backup, or 'outbound proxy', is a feature that enables the phone to operate with a primary or backup PBX/Lync server. If the primary falls, the other backs it up.
Primary	Enter the IP address of the primary PBX/Lync server, i.e., the outbound proxy.
Backup	Displayed only if you select the Primary/Backup option for the 'Redundant Mode' parameter (see above).
LDAP Configuration	Lightweight Directory Access Protocol lets you provide distributed directory information services to users in the enterprise. Not applicable in a Microsoft Lync environment. See Section B.2.8.1.1 below.

3. View newly defined placeholder values in the IP Phone Placeholders page (Phones Configuration > System Placeholders).

B.2.8.1.1 Configuring the LDAP Directory

The IP Phone Management Server lets you configure an enterprise's LDAP directory.



Note: When in a Microsoft Lync environment, this section is inapplicable because Lync uses its own Active Directory server.

> To access the LDAP directory:

- 1. Access the System Settings page (Phones Configuration > System Settings).
- 2. Click the LDAP Configuration button; the LDAP Configuration page opens.

Figure B-9: LDAP Configuration

LDAP Configuration		
Note: LDAP Configuration is usually not used in an MS Lync environment.		
		LDAP Configuration
General		
Server Address		
Port	389	Check LDAP
User Name		
Password		
Base		
⊞ Phone		

- 3. Click **+Phone**; the screen expands to display the 'Active' parameter.
- 4. From the 'Active' parameter dropdown, select **Enable**; the figure shown below is displayed.



Figure B-10: LDAP Configuration - Phone

🖶 Phone		
Active	Enable	
Name Filter	(](sn=%)(givenname=%)(displayname=%))	DAP
Name Attributes	sn givenname displayname	
Number Filter	(](telephoneNumber=%)(Mobile=%)(homePhone=%)(facsimileTelephoneNumber=%)(ppPhone=%)(pager=%))	
Number Attributes	telephoneNumber Mobile homePhone facsimileTelephoneNumber ipPhone pager	
Display Name	%displayname	
Max Hits (1~1000)	50	
Country Code		
Area Code		
Sort Result	Disable	
Search Timeout(in seconds)		
Call Lookup	Disable	

5. Configure the parameters using the table below as reference.

Table B-2: LDAP Configuration

Parameter	Description
Server address	Enter the IP address, or URL, of the LDAP server.
Port	Enter the LDAP service port.
User Name	Enter the user name used for the LDAP search request.
Password	Enter the password of the search requester.
Base	Enter the access point on the LDAP tree.
Active	From the dropdown, select Disable LDAP (default) or Enable LDAP. If Enable is selected, the parameters below are displayed.
Name Filter	Specify your search pattern for name look ups. For example, when you type in the (&(telephoneNumber=*)(sn=%)) field, the search result includes all LDAP records which have the 'telephoneNumber' field set, and the '("sn">surname)' field starting with the entered prefix.
	When you type in the (<i> (cn=%)(sn=%)</i>) field, the search result includes all LDAP records which have the '("cn">CommonName)' OR the '("sn">Surname)' field starting with the entered prefix.
	When you type in the (!(cn=%)) field, the search result includes all LDAP records which "do not" have the 'cn' field starting with the entered prefix.
Name Attributes	Specifies the LDAP name attributes setting, which can be used to specify the "name" attributes of each record which is returned in the LDAP search results. When you type in the following field, for example, <i>cn sn displayName</i> ", this requires you to specify 'cn>commonName'. This is the Full name of the user, sn>Surname, last name or family name and "displayName" fields for each LDAP record.
Number Filter	Specifies your search pattern for number look ups. When you type in the following field, for example, (/(telephoneNumber=%)(Mobile=%)(ipPhone=%)), the search result is all LDAP records which have the "telephoneNumber" OR "Mobile" OR "ipPhone"field match the number being searched. When you type in the (&(telephoneNumber=%)(sn=*)) field, the search result is all LDAP records which have the 'sn' field set and the "telephoneNumber" match the number being searched.

Parameter	Description
Number Attributes	Specifies the LDAP number attributes setting, which can be used to specify the "number" attributes of each record which is returned in the LDAP search results.
	When you type in the following field, for example, <i>Mobile telephoneNumber ipPhone</i> , you must specify 'Mobile', 'telephoneNumber' and 'ipPhone' fields for each LDAP record.
Display Name	Specifies the format in which the "name, e.g. "Mike Black" of each returned search result is displayed on the IPPHONE.
	When you type in the following field, for example, %sn, %givenName, the displayed result returned should be "Black, Mike".
Max Hits (1~1000)	Specifies the maximum number of entries expected to be sent by the LDAP server (this parameter is sent to the LDAP server).
Country Code	Defines the country code prefix added for number search.
Area Code	Defines the area code prefix added for number search.
Sort Result	Sorts the search result by display name on the client side.
Search Timeout (in seconds)	The time out value for LDAP search (this parameter is sent to the LDAP server).
Call Lookup	Defines the user name used for the LDAP search request.

6. Click Submit.

B.2.8.2 Phone Model Placeholders

You can edit the values defined for an existing phone model placeholder and/or you can add a new model placeholder.

B.2.8.2.1 Editing Phone Model Placeholders

You can edit the values for existing phone model placeholders.

- > To edit values for existing phone model placeholders:
- 1. Access the Phone Model Placeholders page (Phones Configuration > Phone Model Placeholders):

Pho	ne Model Placeholders			
				Add new placeholder
Filter	Model: Autocodes_420HD Show Place Holders			
-	Placeholder	Value	Description	
1	%ITCS_DayLightActivate%	Disable	Day Light Activate - Enable/Disable	Edit Delete
2	%ITCS_DayLightEndDay%	14	Day Light End Day	Eik Delete
3	%ITCS_DayLightEndMonth%	9	Day Light End Month	Est Delete
4	%ITCS_DayLightStartDay%	26	Day Light Start Day	Edit Delete
5	%ITCS_DayLightStartMonth%	3	Day Light Start Month	Elit Delete
6	%ITCS_FirmwareFile%		Firmware File Name	Cit Delete
7	%ITCS_SipDigitMap%	**xxxxx	Digit map for the IPP e.g 4xxx for 4 digit	Edt

Figure B-11: Phone Model Placeholders

The page shows the placeholders and their values defined for a phone model.

> To edit a value of an existing phone model placeholder:

1. Click the **Edit** button; the 'Edit placeholder' screen is displayed:

Figure D-12		enoluei
Edit placeholder		
I	Phone Model - Audiocodes_420HD	
Name:	DayLightActivate	×
Value:	Disable	
Description:	Day Light Activate - Enable/Disable	

Figure B 42, Edit Dhene Medel Disseholder

2. In the 'Name' field, you can edit the name of the placeholder.

- 3. In the 'Value' field, you can edit the value of the placeholder.
- 4. In the 'Description' field, you can edit the placeholder description.
- 5. Click **Submit**; the edited placeholder is added to the table.

B.2.8.2.2 Adding a New Phone Model Placeholder

You can add a new phone model placeholder. A new placeholder can be added and assigned with a new value.

- > To add a new phone model placeholder:
- 1. Access the Phone Model Placeholders page (Phones Configuration > Phone Model Placeholders):
- 2. From the **IP Phone Model** dropdown in the Phone Model Placeholders page, select the model, e.g., IP Phone Model Audiocodes_420HD.
- 3. Click the Add new placeholder button.

Figure B-13: Add New Phone Model Placeholder

Add new placehold	er		
IP	Phone Model -	Audiocodes_420HD	
Name:	ſ		
Value:			
Description:			

- 4. In the 'Name' field, enter the name of the new placeholder.
- 5. In the 'Value' field, enter the value of the new placeholder.
- 6. In the 'Description' field, enter a short description for the new placeholder.
- 7. Click **Submit**; the new placeholder is added to the table.

B.2.8.3 Region Placeholders

You can edit values for existing region placeholders and/or you can add new region placeholders.

B.2.8.3.1 Editing Region Placeholders

You can edit the values for existing region placeholders.

- > To edit values for existing region placeholders:
- 1. Access the Manage Region Placeholders page (Phones Configuration > Region Placeholders):

		anaye Keylon Flacenoluers		
Mar	nage Region Placeholders			
Regio	- v			
Filter	n			
	Placeholder	Value	Region	
1	%ITCS_DayLightActivate%	DISABLE	Region1	Edit Delete
2	%ITCS_KeepAlivePeriod%	5	Region1	Edit Delete
3	%ITCS_SpeedDialName1%	IZIK	Region1	Edit Delete
4	%ITCS_SpeedDialName2%	Marina	Region1	ttit Delete
5	%ITCS_SpeedDialNumber1%	4006	Region1	telt Delete
6	%ITCS_SpeedDialNumber2%	5555	Region1	tilt Delete
7	%ITCS_test2%	test3	מיקר	tilt Delete

Figure B-14: Manage Region Placeholders

> To edit a value of an existing region placeholder:

1. Click the **Edit** button; the 'Edit placeholder' screen is displayed:

Figure B-15: Edit Region Placeholder

Edit placeholder			
	Region Overwrite		
Name:	DayLightActivate	×	
Value:	DISABLE		
Region	Region1	•	

- 2. In the 'Name' field, you can edit the name of the placeholder.
- 3. In the 'Value' field, you can edit the value of the placeholder.
- 4. From the 'Region' dropdown, you can select another region.
- 5. Click **Submit**; the edited placeholder is added to the table.

B.2.8.3.2 Adding a New Region Placeholder

You can add a new region placeholder.

- > To add a new region placeholder:
- 1. Access the Manage Region Placeholders page (Phones Configuration > Region Placeholders):
- 2. From the **Region** dropdown, select a region, and then click the **Add new placeholder** button.

	2					
Add new placeholder						
	Region Overwrite					
Name:						
Value:						
Region	IPP phone					

Figure B-16: Add New Region Placeholder

- 3. In the 'Name' field, enter the name of the new placeholder.
- 4. In the 'Value' field, enter the value of the new placeholder.
- 5. From the 'Region' dropdown, select a new region.
- 6. Click **Submit**; the new placeholder is added to the table.

B.2.8.4 Devices Placeholders

You can change placeholders values for specific phones, for example, you can change placeholders values for the CEO's phone. You can also edit a phone's placeholders values.

B.2.8.4.1 Changing a Device Placeholder Value

> To change a device placeholder value:

1. Access the Manage Devices Placeholders page (Phones Configuration > Devices Placeholders):

Figure B-17: Manage Devices Placeholders

				Cha	nge placeholder value
lter					
	Placeholder	Value	Device Name	User Name	
1	%ITCS_DayLightEndDay%	4	430-NonLync	430-NonLync	Edit Delete



Tip: Use the 'Filter' field to quickly find a specific device if many are listed. You can search for a device by its name or by its extension.

2. Click the **Change placeholder value** button; the Change IP Phone Device Placeholder screen opens.

Fi	gure	B-18:	Chang	ge IP	Phone	Device	Placehold	er

Change IP Phone Device Placeholder				
Change IP Phon	e Device Placeholder			
Device		~		

3. From the **Device** dropdown, select the device.

Figure B-19: Change IP Phone Device Placeholder – Selecting the Device

Change IP Phone Device Placeholder				
Change IP Phone	Device Placeholder			
Device	420-Non-Lync-1 - 420-Non-Lync-1 430-Lync-1-New - 430-Lync-1-New 430-Lync-1-New-Hakshur4 - 430-Lync-1-New-Hakshur4 430-NonLync - 430-NonLync 440-Non-LYNC-Izik - 440-NonLync-Izik 440-Jync-izik1 - 440-izik-1 440_demo1 - 440_demo1 Gal1 - Gal1 Gal2 - Gal2 hak5-Lync-420 - hak5-Lync-420 ipphone1 ipphone2 ipphone3 ipphone4 ipphone5 ipphone6 ipphone6 ipphone8 ipphone8 ipphone9 Moshe1 - moshe_420 rubi1_4200_440HD - rubi1_4200_440HD			

_		
Edit IP Phone Device Pla	aceholder	
	Device Disselation	
Edit IP Pr	tone Device Placeholder	
Device	ipphone3	~
(IP Phone Model)		
Key	No Values Found	
Ney		
(Default Value)		
Overwrite Value		

Figure B-20: Edit IP Phone Device Placeholder

- 4. From the **Key** dropdown, choose the phone configuration key.
- 5. Enter the device's overwrite value in the 'Overwrite Value' field, and then click the **Submit** button.

B.2.8.4.2 Editing a Device Placeholder Value

You can edit a device placeholder value.

- > To edit a device placeholder value:
- 1. Access the Manage Devices Placeholders page (Phones Configuration > Devices Placeholders).
- 2. Click the **Edit** button; the 'Edit placeholder' screen is displayed, as shown above.
- 3. In the 'Overwrite Value' field, you enter a new value.
- 4. Click **Submit**; the edited device placeholder is added to the table.



Note: The new overwrite value is not automatically generated in the device IP phone configuration file. To generate the new device in the IP phone configuration template file, click the **Generate Configuration Template** button in the Templates page (**Phones Configuration > Templates**).

B.3 Managing Configuration Files

You can manage IP phones configuration files. All cfg files are created and located on the EMS server. You can view and manage storage and upload and delete files from storage. To avoid network congestion, a delay feature enables an interval between each installation.

> To manage IP phone configuration files:

Access the Manage Configuration Files page (Phones Configuration > Phone Configuration Files).

Figure B-21: Manage Configuration Files

Manage Configuration Files					
	Browse. Upload				
Filename filter:					
	Name	Size	Date		
0	00908f55fa30.cfg	9.4 K8	August 10, 2014, 4:46 pm	Download	
	00908f404cf0.cfg	6.25 KB	August 10, 2014, 3:33 pm	Download	
	Audiocodes 420HD alobal GENERIC.cfg	3.01 KB	August 10, 2014, 3:22 pm	Download	
	Audiocodes 430HD alobal LYNC.cfa	2 KB	August 10, 2014, 3:33 pm	Download	
Select All					
6					

The page lets you

- Filter by filename the .cfg configuration files listed
- Browse to a location on your PC and upload a .cfg configuration file
- Select and delete any or all of the .cfg configuration files listed
- Open any of the .cfg configuration files listed in an editor
- Save any of the .cfg configuration files listed
- Download any of the .cfg configuration files listed
- View all configuration files currently located on the server (global configuration files, company directory configuration files, and IP phone configuration files)

B.4 Managing Phone Firmware Files

You can manage the phones' .img firmware files.

- > To manage the .img firmware files:
- Access the Phone Firmware Files page (Phones Configuration > Phone Firmware Files).

Figure B-22: Phone Firmware Files

	Add new IP Phone firmware				
	Name	Description	Version	File Name	
1	420HD_test	test	420MD2.2.0.7	420HD_test.img	Edit Delete
2	Alan_FW	test	440HDUC_2.0.9.65	Alan_FW.img	Edit Delete
3	405HD	405HD - default firmware			Edit Delete
4	430HD	440HD - default firmware			Edit Delete
5	440HD	440HD - default firmware	440HDUC_2.0.9.65	440HD.img	Edit Delete
6	test	test desc	430HD2.0.2.63_ems	test.img	Eilè Delete
7	420_test2	420	420HDUC_2.0.9.50	420_test2.img	Edit Delete

In this page you can

- View all .img firmware files currently located on the server
- Add a new IP phone firmware file. Note that if default names are used (e.g., 420HD.img), all devices of this type will automatically use it.
- Filter by filename the .img firmware files listed

- Determine from the phone's name if it does not have firmware it will be red-coded. If so, you must upload the phone's .img firmware file that you obtained from AudioCodes, to the EMS Provisioning Server:
 - a. Click the name of the phone; this screen opens:

Figure B-23: .img Firmware File Download/Upload

IP Phone 420HD_test Firmware			
IP Phone 420HD_test Firmware			
Name:	420HD_test		
Description:	test		
Version:	420HD2.2.0.7		
File Name:	420HD_test.img		
Download:	Download configuration firmware		
Upload:	Upload configuration firmware		

- **b.** Click the **Upload firmware** button, and then navigate to the .img file you received from AudioCodes and put on the EMS Provisioning Server. You can perform this part of the installation procedure before or after configuring your enterprise's DHCP Server with DHCP Option 160 (see also Section 2.2).
- Download a phone's .img firmware file to the pc. Click the phone's Name; the screen shown in Figure B-23 opens. Click the **Download firmware** button.
- Edit a phone's .img firmware file. Click the name or click the **Edit** button in the row.
- Delete any.img firmware file listed. Click the **Delete** button in the row.
- Manage .img firmware files by grouping them.
 - a. Click the Add new IP Phone firmware button.

Add new IP Phone firmware		
	Add new IP Phone firmware	
Name:	New York 440HD	
Description:	440HD phones in NY	
Version:		

b. Define an intuitive 'Name' and 'Description' to facilitate easy identification. You can leave the 'Version' field empty, and then click the Submit button; this screen is displayed:

	IP Phone New York 440HD Firmware	
Name:	New York 440HD	
Description:	440HD phones in NY	
Version: Descript	ion	

c. Click Upload firmware; this screen is displayed:

Press the Browse button to locate the file and then press the Subn	it button. When file upload is complete The file has been uploaded succ	essfully message will be shown.
1	Browse	

d. Click **Browse**, navigate to the .img file, and then click the **Submit** button; the 'Version' field is populated and the .img file is uploaded to the phone.

Unload TD Dh



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C Provisioning Flows

This appendix illustrates the provisioning flows between phones and IP Phone Management server.

C.1 Lync Phones

The figure below shows the provisioning flow between the Lync phone and the IP Phone Management server when the MAC address is known.

Figure C-1: Lync Phone > IP Phone Management Server Flow when MAC is Known



The figure below shows the provisioning flow between the Lync phone and the EMS server when the MAC address is unknown.

Figure C-2: Lync Phone > IP Phone Management Server Flow when MAC is Unknown



C.2 Other Phones

The figure below shows the provisioning flow between other (non-Lync) phones and the IP Phone Management server when the MAC address is known.

Figure C-3: Generic Phone > IP Phone Management Server Flow when MAC is Known



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Administrator's Manual



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