Using Spectralink IP-DECT Server 400 and 6500 with Cisco Unified Communication Manager, 3rd party SIP

Technical Bulletin

Introduction

This document provides introductory information on how to use a Spectralink IP-DECT Server 400 and 6500 system with the Cisco Unified Communication Manager PBX. It offers answers to frequently asked questions along with feature configuration examples for both Cisco Unified CM and Spectralink IP-DECT Systems. Find the Cisco Unified CM wiki at:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/

This document assumes that you have an installed and functioning Cisco Unified CM server. If you do not have a functioning Cisco Unified CM server, check the support page from Cisco website.

Terms and Definitions:

• Cisco Unified CM or CUCM server refers to a functioning Cisco Unified Communication Manager PBX installation.

The examples in this document were tested with Spectralink IP-DECT Server 400 and 6500 PCS06A_ (available from http://www.polycom.eu/support/voice/dect/index.html)

If there is an issue with a configuration that is specific to a particular software release, the issue is noted.

Please ensure that you have read and understood our Admin Guide and set up the IP-DECT System before following the advice given below:

IP-DECT Server 400

http://support.spectralink.com/sites/default/files/resource_files/Spectralink%20IP-DECT%20Server%20400_Installation%20and%20configuration%20guide.pdf

IP-DECT Server 6500

http://support.spectralink.com/sites/default/files/resource_files/Spectralink%206500%20Server_Instal lation%20and%20Config%20Guide_ed5.pdf

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Using Spectralink IP-DECT Server 400 and 6500 with CUCM, 3rd party SIP

The topics in this document include:

- <u>Creating a Basic Configuration</u>
- Phone License Units
- Bulk Administration Tool (BAT)
- Additional Resources

The configuration file fragments in the figures of this document show the basic settings required to configure both CUCM server and the IP-DECT Server 400 and 6500 to successfully interoperate. Note that these settings are minimal configurations and only show changes from default factory settings on the Server.

Creating a Basic Configuration

To create a basic configuration:

For each phone to be connected, follow the steps below:

1. On the Cisco Unified CM Administration page click on User Management and select End User

System • Call Routing • Media Resources • Advanced Features • Device • Application •	User Management 👻	Bulk Administration 👻 Help 👻
Cisco Unified CM Administration	Credential Policy Credential Policy Application User	Default
System version: 8.0.2.40000-1	End User	
	Role	
	User Group	
	User/Phone Add	
	Application User	CAPF Profile
	End User CAPF P	rofile
Last Successful Logon: Mar 30, 2011 7:51:47 AM	SIP Realm	
Copyright © 1999 - 2009 Cisco Systems, Inc. All rights reserved.	h	

A page similar to the one below will be displayed.

System 👻	Call Routing 👻	Media Resources 👻	Advanced Features 👻	Device 🔻	Application +	User Management 👻	Bulk Administration 👻	Help 🔻
Find and	List Users							
Add 1	New							
User								
Find User	where First na	ame 🔽 begins with	n 💌	Fi	nd) Clear Fil	lter 🔂 🚍		
				Noi	active query. Pl	ease enter your sear	ch criteria using the or	ptions above.
Add Ne	ew)							

Click on Add New to add a new user:

User ID*	9998]
Password		Edit Credential
Confirm Password]
PIN		Edit Credential
Confirm PIN]
Last name*	Polycom IP 6000 Type	1

The User ID reflects the SIP DDI (direct dial-in) that will be assigned to the Spectralink Handset.

• A Password should be used for security reasons. This Password is only used CUCM internally. In above example *12345* is used.



- The same Value is used for the *PIN*. The Pin is the authentication Password used on the Spectralink Handset.
- The *Last Name* entry is used to identify this User and it is mandatory

After making these settings, click on the Save Icon to store the information. The operation described above must be repeated for every SIP DDI that will be added to the Cisco Unified CM.

2. On the Cisco Unified CM click on Device and select Phone

System ▼ Call Routing ▼ Media Resources ▼ Advanced Features ▼	Device Application User Management Bulk Administration Help
Cisco Unified CM Administration	CTI Route Point Gatekeeper Gateway Phone
System version: 8.0.2.40000-1	Trunk Remote Destination Device Settings
Last Successful Logon: Mar 30, 2011 7:51:47 AM Copyright © 1999 - 2009 Cisco Systems, Inc.	

A page similar to the one below will be displayed.

Find and List Phones	
Add New	
Phone	
Find Phone where Device Name Image: Select item or enter search text Select item or enter search text	
No active query. Please enter your search criteria using the options abo	ove.
Add New	

Click on Add New and select a Third-Party SIP Device(Basic) from the drop down list, then click Next to proceed.

Status Status: Ready	
Select the type of phone you would like to creat Phone Type* Third-party SIP Device (Basic)	te 🔽
- Next	

In the **Device Information** area, add the *Mac Address* of the Spectralink Handset and ensure that *Device Pool* and *Phone Button Template* are selected as highlighted. Notice the *Owner User ID* which must reflect the SIP DDI that has been assigned to the User. Also make sure that *Is Active* button is checked.



Device Information		
MAC Address*	000770544145	Ĵ
Description	SEP000770544145	
Device Pool*	Default	View Details
Common Device Configuration	< None >	View Details
Phone Button Template*	Third-party SIP Device (Basic)	3
Common Phone Profile*	Standard Common Phone Profile	•
Calling Search Space	< None >	•
AAR Calling Search Space	< None >	 Image: A set of the set of the
Media Resource Group List	< None >	 Image: A set of the set of the
Location*	Hub_None	
AAR Group	< None >	 Image: A set of the set of the
Device Mobility Mode*	Default	View Current Device Mobility Settings
Owner User ID	9998	
Use Trusted Relay Point*	Default	 Image: A set of the set of the
Always Use Prime Line*	Default	 Image: A set of the set of the
Always Use Prime Line for Voice Message*	Default	
Calling Party Transformation CSS	< None >	 Image: A set of the set of the
Geo Location	< None >	
Use Device Pool Calling Party Transform	nation CSS	
Ignore Presentation Indicators (internal	calls only)	
✓ Logged Into Hunt Group		
Remote Device		

In the **Protocol Specific Information** area chose the *Device Security Profile, SIP Profile* and the *Digest User* as highlighted below and press save to store this information within the CUCM server.

١	- Protocol Specific Information		
	Presence Group*	Standard Presence group	
	MTP Preferred Originating Codec*	711ulaw 🗸	
	Device Security Profile*	Third-party SIP Device Basic - Standard SIP Non-5 💌	
	Rerouting Calling Search Space	< None >	
	SUBSCRIBE Calling Search Space	< None >	
	SIP Profile*	Standard SIP Profile 🛛 🗸	
	Digest User	9998	
	Media Termination Point Required		
	Unattended Port		
	Require DTMF Reception		
l			

In **Association Information** area click on *Add a new DN* Button in order to assign the selected SIP DDI.

Association Information ———				
Modify Button Items				
1	1 Line [1] - Add a new DN			

In the **Directory Number Information** area write the desired SIP DDI and the *Alerting Name* (This number will be added as the Username/Extension within the User data for the Handset on the IP-DECT Server 400/6500 Web Interface)

— Directory Number	Information	
Directory Number*	9998)
Route Partition	< None >	
Description	Polycom IP6000]
Alerting Name	Polycom IP6000]
ASCII Alerting Name	Polycom IP6000]
Active		

- The description is used only internally.
- Alerting name is displayed whilst a SIP Device rings another Device. Once connected the Display (Internal Caller ID) is shown.

The Display (Internal Caller ID) and ASCII Display (Internal Caller ID) is a feature that displays the added entry on Cisco Phones when they receive a call from a Spectralink Handset.

Line 1 on Device SEP00	0770544145	
Display (Internal Caller	9998	Display text for a line appearance is intended for displaying text such as a name instead of a directory number for internal calls. If
ID)	you specify a number, the person receiving a call may	not see the proper identity of the caller.
ASCII Display (Internal Caller ID)	9998	
External Phone Number Mask		
Monitoring Calling Search Space	< None >	

- The Display (Internal Caller ID) is displayed on outgoing Calls on the ringing End
- External Phone Number Mask is for Cisco Phones only.

The process is finalized by clicking on Save Button.

3. Once the Cisco Unified CM configuration is completed, configure the IP-DECT Server 400 or 6500. Browse to your IP-DECT Server 400/6500 Configuration page -> Generel configuration :

a sea a		🔲 DA Danish (Denmark) 🕐 Help 🚦	
S http://172.29.202.40/configuration_general.html	の + C 👙 IP-DECT Server 6500	×	n 🖈
Edit View Favorites Tools Help			
🚯 Spectralink Corporation 📓 Roadmap Priotities and F 🚯 Sp	ectralink Solutions Depl 🧃 Agile Product Lifecycle M 🧃 Ho	me - KIRK Business Unit 🚺 Suggested Sites 🔻 🕘 Web Slice Gallery 👻 🗿 Agile Web Client 9.3.2 🧧	🔋 Blue Jeans 🗿 PROD Oracle EBS 🥂 🦄 🔻 🔝 👻 🚍 🗰 🔻 Page 🔻 Safety 🔻 Tools 🕶 😝 🖛
spectralinks	IP-DECT Server 6500		
Status General Wireless Server Media Reso	Configuration	Users Administration	Firmware Statistics
Ceneral Mileicos Scivel Micula Auso	are occurry octunicates on Eyre	rionaloning redundancy importexport	
		General Configuration	
	IPv4		
	Method * **	Use static IP address V	
	IP addr **	172.29.202.40	
	Netmask **	255.255.240.0	
	Gateway **	retmask used for static IPV4 address	
	MTU **		
	IPv6		
	Method **	Disabled	
	Address/prefix **		
	Default gateway **		
	Ethernet		
	VLAN **		
	DNS		
	Hostname (FQDN)		
	Search domain **		
	Primary Server **	172.29.129.47	
	Secondary Server **	172.29.129.54	
	NTP		
	Server	pool.ntp.org	
	Time zone	Amsterdam, Barcelona, Berlin, Brussels, Copenhagen, Paris, Stockholm	
	Posix timezone string	CET-1CEST-2,M3.5.0/02:00:00,M10.	
	UPnP		
	Enabled **	~	
	Broadcast announcements		
	Remote syslog		
	First	E14	
	Port -	314 40 Jan 10 Jan	
	Facility *	16 LOCALU V	\$ 110%
			17-02-20

The above configuration shows a basic setup:

- Choose the designated Transport protocol as UDP only.
- Enter the CUCM Domain Name or the IP address of the Subscriber as Default domain.
- Enter the CUCM Domain Name or the IP address of the Subscriber as Proxy 1

It is usually a best practice to register all of the users with the Subscriber, rather than the Publisher, in order to reduce the overall load on the Publisher and for cases when the CUCM installation has not a CUCM service active on its Publisher.

- Enter IP address 127.0.0.1 as Proxy 2 in order for the KWS to handle internal calls between the DECT handsets in case the first Proxy cannot be reached.
- Tick the Register each endpoint on separate port and Send all messages to current registrar.
- Change the offered rfc to 101.

All other settings can be left with factory default values.

Note that Hostname must be left blank under DNS settings when connected to a CUCM.

45	General Configuration	
IP		
DHCP assigned	0	
Use static IP address		
IP addr* **	172.29.202.1	
Netmask **	255.255.240.0	
Gateway **	172.29.192.1	
MTU **		
VLAN **		
DNS		
Hostname **		-
Domain	1	
Primary Server	172.29.129.30	
Secondary Server	172.29.129.31	



IP-DECT Server 400/6500 & SRST (Survivable Remote Site Telephony) feature

In order for the KWS to support SRST within a Cisco Unified CM setup with a SRST router, the following settings have to be made:

 Browse to Cisco Unified CM Administration and then select System -> Cisco Unified CM -> select CUCM Publisher server -> section "Server Information" -> field "Cisco Unified Communications Manager Name". Enter the CUCM Publisher server name and description.

Cisco Uni Cisco For Cisco Uni	fied CM Administration				
System 👻 Call Routing 👻 Ma	dia Resources 👻 Advanced Features 👻	Device 👻 Applicatio	n 👻 User Management 👻	Bulk Administration 👻	Help 👻
Cisco Unified CM Configu	ation				
🔚 Save 🎦 Reset 🟒	Apply Config				
Status					
i Status: Ready					
Cisco Unified Communica	tions Manager Information				
Cisco Unified Communicatio	ns Manager: HQ322CUCM1 (used by 20	01 devices)			
Server Information ——					
CTI ID Cisco Unified Communicatio Cisco Unified Communicatio Description	1 ns Manager Server*(6.3.22.1) ns Manager Name* (HQ322CUCM1 (HQ322CUCM1				
_ Auto-registration Inform	ation				
Starting Directory Number*	1000				
Ending Directory Number*	2000				
Partition	< None >	•			
External Phone Number Mas	k 🔤				
Auto-registration Disable	d on this Cisco Unified Communication	s Manager			
Cisco Unified Communica	tions Manager TCP Port Settings fo	or this Server			
Ethernet Phone Port* 20	00				
MGCP Listen Port* 24	27				
MGCP Keep-alive Port* 24	28				
SIP Phone Port* 50	50				
SIP Phone Secure Port* 50	61				
- Save Decet Apoly	Coofia				
indicates required in	em.				

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Using Spectralink IP-DECT Server 400 and 6500 with CUCM, 3rd party SIP

- Browse to your IP-DECT Server 400/6500 Configuration page and then select -> Sip menu.
 In addition to the basic sip configuration setup from above, set the following as in the picture below:
 - Enter the CUCM Publisher server name as the Default name.
 - Enter the IP address of the CUCM Subscriber server as Proxy 1.
 - Enter the IP address of the CUCM Publisher server as Proxy 2.
 - Enter the IP address of the SRST router as Proxy 3.

•

w Favorites Tools Help				» -
nk Corporation 🚺 Roadmap Priotities and F 🧕	👂 Spectralink Solutions Depl 🦉 Agile Product Lifecycle M 🦉 Home - KIRK Busin	ess Unit 🚺 Suggested Sites 🔻 🗿 Web Slice Gallery 👻 🎒 Agi	e Web Client 9.3.2 🗿 Blue Jeans 🦉 PROD Oracle EBS	🦈 📩 🔻 🖾 👻 🚍 🖶 👻 Page 🕶 Safety 🕶
spectralink🕏	IP-DECT Server 6500			-
Status	Configuration Users	Administration	Firmware	Statistics
General Wireless Server Media R	esource Security Certificates SIP Lync Provisioni	ng Redundancy Import/Export		
		SIP Configuration		
	General			
	Local port * **	5060		
	Transport * **	UDP V		
	DNS method * **	ism used for SIP messages.		
	Default domain * **	172.29.202.81		
	Register each endpoint on separat	te port **		
	Send all messages to current regis	strar ** 🗌		
	Registration expire(sec) *	3600		
	Max forwards *	70		
	Client transaction timeout(msec) *	4000		
	SIP type of service (TOS/Diffserv)	* ** 0		
	SIP 802.1p Class-of-Service *	3		
	GRUU			
	Use SIPS URI			
	TLS allow insecure **			
	TCP ephemeral port in contact add	dress **		
	Proxies			
	0	Priority Weight URI		
	Proxy 1			
	Proxy 2 **	2 100		
	Proxy 3 **	3 100		
	Proxy 4 **	4 100		
	Authentication			
	Default üser			
	Default password			
	Realm			
	DTMF signalling			

NOTE: See the configuration xml file from your IP-DECT Server 6500 system attached at the end of this document, page 30.

Adding a user to the IP-DECT Server 400/6500:

Choose the Users -> List Users menu from the Web interface and select New and a new window will open.

sp	pectralink🕏		IP-DECT S	erver 6500		i I		
	Status		Configuration	Users	Administratio	n XOX BA	Firmware	Statistics
List Osers								
					User List			
				Overview				
				System ARI	10046546160 [10 26 b3 1c 00]			
				Total	18 18 2			
				New Enable Disable Del	lete Re-register Un-subscribe	Firmware update		
Show All	✓ entries							Search:
	Enabled	🔶 User	Displayname	¢ IPEI	🗧 Handset	Firmware	Subscripti	on Registration
	×	5003	5003	00077 0589205	Spectralink 7640	13J	×	×
	×	<u>5004</u>	5004	05003 0303507	Spectralink 7710	14L	✓	×
	×	5005	5005	05003 0196901	Spectralink 7640	14D	×	×
	×	<u>5006</u>	5006	05003 0008380	Spectralink 7710	14A	×	×
	×	5007	5007	05003 0196937	Spectralink Butterfly	13M	~	×
	×	5008	5008	00077 0527873	Spectralink 7540	14A	×	×
	×	5009	5009	00077 0522224	Spectralink 7540	14A	×	×
	×	<u>5010</u>	5010	00077 0845036	KIRK 40XX	13A	¥	×
	×	<u>5011</u>	5011	00077 0823965	KIRK 40XX	08B	¥	×
	×	<u>5012</u>	5012	00077 0389627	KIRK 40XX	09B	¥	×
	×	<u>5013</u>	5013	05003 0196908	Spectralink 7720	14A	×	×
	×	<u>5014</u>	5014	05003 0286678	Spectralink 7720	14A	×	×
	×	<u>5015</u>		05003 0008393	Spectralink 7740	14A	×	×
	✓	<u>5017</u>	5017	05003 0129335	Spectralink Butterfly	14A	✓	×
	×	<u>5018</u>	5018	05003 0149175	Spectralink Butterfly	14L	¥	×
	×	5019	5019	05003 0196910	Spectralink 7720	14L	×	×
	×	5020	5020	05003 0058725	Spectralink 7640	14D	×	×
	×	<u>5021</u>	5021	05003 0197904	Spectralink 7740	14L	¥	×
Showing 1	to 18 of 18 entries							First Previous 1 Next Last

User 9998

DECT						
IPEI	00077 0544145					
Access code						
Standby text	9998					
SIP						
Username / Extension *	9998					
Domain						
Displayname	9998					
Authentication user	9998					
Authentication password	••••					
Disabled						
Features						
Call forward unconditional						
Save Delete Cancel						
*) Requ	uired field					

IPEI ¹ = the 12 digit serial Number of the Spectralink Handset
Access Code = is not mandatory
Standby text = the text that the Handset shows when
on hook
Username / Extension = the Directory number that has
been added in the CUCM
Domain = is not mandatory (can be used on a per-user
basis in order to register the specific handset to a
separate SIP call handler).
Displayname = is not mandatory (may be overwritten
by the SIP call handler).
Authentication user ² = user ID that has been used
when the user was created in the CUCM menu.
Authentication password = the PIN that has been used
when the User was created in the CUCM menu
Call forward unconditional = a CFU can be
added/removed via the Web interface (configure
the desired extension on related field) or the

¹ It is not necessary to fill out the IPEI field. The system will do it automatically when the handset is subscribed.

 2 With firmware >=PCS05C_ the Authentication user is not required if it is the same as the Username. 14205603, Ed1



NOTE: Please be aware that 3rd party phones may need an Access code to register to the Polycom KIRK KWS server and may not support the Standby text facility or the time display.

Please check within the **Configuration => Server** menu to centrally deactivate the **Send date and time** feature.

Activating Call Forward unconditional Feature (CFU)

On the Spectralink IP-DECT Server 400/6500 Configuration -> Wireless Server Web Interface.

Wireless S	erver Configurat	tion
DECT		
Subscription allowed		
Authenticate calls		
Encrypt voice/data	Disabled	*
Autocreate users		
System access code		
Send date and time		
Application interface		
Username *	GW-DECT/admin	
New password		
New password again		
Enable MSF **		
Enable XML-RPC **		
Internal messaging		
Feature codes		
Enable		
Call forward unconditional - ena	able *21*\$#	
Call forward unconditional - dis	able #21#	
5	ave Cancel	
*) Requi	ed field **) Require restart	



CFU can be activated permanently at subscription time by the service provider. By modifying the Rerouting Calling Search Space option, this will provide the sufficient rights for the handset to action the CFU on the CUCM.

The Directory Number Configuration page defines some fields that let one set calling search spaces associated with call forwarding: Call Forward All Calling Search Space, Call Forward Busy Calling Search Space (internal and external), Call Forward No Answer Calling Search Space (internal and external), Call Forward No Coverage Calling Search Space (internal and external). Using these fields, one can forward a user's calls to destinations the user could not normally call directly. Conversely, the user can be prevented from forwarding calls to certain destinations, even if the user could normally dial such destinations directly.

One can configure calling search space for Forward All, Forward Busy, Forward No Answer, Forward No Coverage, and Forward on CTI Failure directory numbers. The value that one chooses applies to all devices that are using this directory number. It must be configured either primary Forward All Calling Search Space or Secondary Forward All Calling Search Space or both for Call Forward All to work properly.

If the system is using partitions and calling search spaces, it is recommended to configure the other call forward calling search spaces as well. When a call is forwarded or redirected to the call forward destination, the configured call forward calling search gets used to forward the call. If the forward calling search is none, the forward operation may fail if the system is using partitions and calling search spaces.

Successful registration

A successful registration may be verified on CUCM; it is shown in the CUCM *Device* -> *Phone* selection.

System 👻 C	all Routing 👻 Media Resources	▼ Voice Mail ▼ Device	e 👻 Application 👻	User Management 🔻	Bulk Administration 👻	Help 👻		
Find and Lis	st Phones					Related Links	Actively Logged	In Device
Add New	V Select All Clear A	II 🙀 Delete Selected	Reset Selected	🧷 Apply Config to Se	ected			
Status —	ds found							
Phone (1 - 1 of 1)						Ro	ws per Pa
Find Phone v	vhere Device Protocol	♥ contains	♥ sip Select item o	Find C	lear Filter	2		
	Device Name(Line) [▲]	Description	Dev	ice Type	Device Protocol	Status	IP Address	Сору
	SEP000770544145	SEP000770544145	Third-party SIP	Device (Basic)	SIP	Registered with CUCM	192.168.10.60	ß
Add New	Select All Clear All	Delete Selected	Reset Selected	Apply Conf	ig to Selected			



System 👻 Call Rou	iting 👻 Media Resources 👻	Advanced Features • Dev	ice 👻 Application 👻 User Management 👻	Bulk Administration 👻 H	elp 🔻			
Find and List Ph	ones				Relate	d Links: Actively Logg	ed In Devi	ce Re
Add New	Select All Clear All	Delete Selected 🏻 😭 F	leset Selected 🛛 🤌 Apply Config to Selected					
Status	und						Rows por	. 0.2.0
Filone (1-1	011)						Rows per	Page
Find Phone where	Device Protocol	begins with 💌	Select item or enter search text 👻	Filter				
Г	Device Name(Line) [▲]	Description	Device Type	Device Protocol	Status	IP Address	Сору	s
	EP000770544145	SEP000770544145	Third-party SIP Device (Basic)	SIP	Registered with cucm8	192.168.10.180	В	¢
Add New S	elect All Clear All	Delete Selected R	eset Selected Apply Config to	Selected				

On the Spectralink IP-DECT Server 400/6500 Users -> List Users web interface:

			IP-DECT S	Server 6500				
List Users	Status Import/Export		Configuration	Users	Administratio	n	Firmware	Statistics
					llearliet			
				Overview	USCI LIST			
				System ARI	10046546160 [10 26 b3 1c 00]			
					Users Subscribed Registered			
				Total	18 18 2	-		
Show All	V entries			New Enable Disable Delet	e Re-register Un-subscribe	Firmware update		Search:
	Enabled	≜ llear	A Dienlawnam	a A IDEI	Handeat	Eirmware	Subscript	tion Peristration
	×	5003	5003	00077 0589205	Spectralink 7640	13.1		×
	×	5004	5004	05003 0303507	Spectralink 7710	141		×
	×	5005	5005	05003 0196901	Spectralink 7640	14D	~	×
	X	5006	5006	05003 0008380	Spectralink 7710	14A	~	×
	×	5007	5007	05003 0196937	Spectralink Butterfly	13M	~	×
	×	5008	5008	00077 0527873	Spectralink 7540	14A	~	×
	×	5009	5009	00077 0522224	Spectralink 7540	14A	~	×
	×	5010	5010	00077 0845036	KIRK 40XX	13A	×	×
	×	5011	5011	00077 0823965	KIRK 40XX	08B	×	×
	×	5012	5012	00077 0389627	KIRK 40XX	09B	×	×
	×	5013	5013	05003 0196908	Spectralink 7720	14A	×	×
	×	5014	5014	05003 0286678	Spectralink 7720	14A	×	×
	×	<u>5015</u>		05003 0008393	Spectralink 7740	14A	×	×
	×	<u>5017</u>	5017	05003 0129335	Spectralink Butterfly	14A	×	~
	×	<u>5018</u>	5018	05003 0149175	Spectralink Butterfly	14L	×	×
	×	5019	5019	05003 0196910	Spectralink 7720	14L	×	×
	×	5020	5020	05003 0058725	Spectralink 7640	14D	×	×
	×	<u>5021</u>	5021	05003 0197904	Spectralink 7740	14L	×	×
Showing 1	to 18 of 18 entries							First Previous 1 Next Li

Phone License Units

In order to be able to register Spectralink Handsets with Cisco Unified CM, license units are needed. To calculate the amount of license units required for a specific number of Handsets, go to System -> Licensing -> License Unit Calculator page from CUCM administration webpage.

	Cisco Unifie	d Con	CM Administration Cisco Unified CM Admini
Suet	am - Call Pouting - Madia P	eeou	admin Ab
Syan	Server	.0300	ices • voice maii • Device • Application • Oser management • Duix Administration • Help •
	Ciaco Unified CM		
	Ciaco Unified CM Group		
	Dhone NTD Deference		Administration
	Date/Time Group		,
	Presence Group		
	Region		censes. Please upload relevant license files.
	Device Pool		Page for more details.
	Device Mobility		
	DHCP		1:32:45 AM
	LDAP	•	is, Inc.
	Location		
	Physical Location		tures and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does r bute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this produ-
	SRST		tions. If you are unable to comply with U.S. and local laws, return this product immediately.
	MLPP	•	co cryptographic products may be found at our Export Compliance Product Report web site.
	Enterprise Parameters		nmunications Manager please visit our Unified Communications System Documentation web site.
	Enterprise Phone Configuration		t our <u>Technical Support</u> web site.
	Service Parameters		
	Security Profile	•	
	Application Server		
	Licensing	•	License Unit Report
	Geolocation Configuration		License Unit Calculator
	Geolocation Filter		License File Upload
			Capabilities Assignment

A new page similar to the one below is displayed. Scroll down until Third-Party SIP Device (Basic) appears and fill in the box with the specific number of handset required to register with Cisco Unified CM, then press Calculate. The total Phone License Units needed will be displayed:

		Total Phone Uni	License 3 its Used:	Total Phone License Units Needed:	369
Transnova S3	4	0	0	0	0
Third-party SIP Device (Basic)	3	1	3	0	123
Third-party SIP Device (Advanced)	6	0	0	0	0
Other Phone	5	0	0	0	0
Mobility Enabled End Users (Adjunct)	2	0	0	0	0
Mobility Enabled End Users	4	0	0	0	0
IP-STE	6	0	0	0	0
H.323 Client	2	0	0	0	0
Cisco VGC Virtual Phone	0	0	0	0	0
Cisco VGC Phone	0	0	0	0	0
Cisco Unified Presence Server End User Feature License	1	O	U	U	0

Bulk Administration Tool (BAT)

The Cisco Unified CM Bulk Administration Tool (BAT) lets you add, update or delete a large number of similar phones and users at the same time. In order for BAT to work, you need first to activate Bulk Provisioning Service (BPS) from Cisco Unified CM Serviceability.

Log-on to Cisco Unified Serviceability from the Navigation Tab, as shown in the screen dump below:



Go to Tools -> Service Activation:



A new page similar to the one below is displayed. Go to *Cisco Bulk Provisioning Service* (found in Database and Admin Services category) and activate it (by checking the box) then click on *Save* to store the information. Activation status should change to Activated.

Database and Admin Services								
Service Name	Activation Status							
Cisco AXL Web Service	Deactivated							
Cisco UXL Web Service	Deactivated							
🔽 Cisco Bulk Provisioning Service	Activated							
Cisco TAPS Service	Deactivated							
Performance and Monitoring Services								
Service Name	Activation Status							
Cisco Serviceability Reporter	Deactivated							
Cisco CallManager SNMP Service	Deactivated							
Security Services								
Service Name	Activation Status							
Cisco CTL Provider	Deactivated							
Cisco Certificate Authority Proxy Function	Deactivated							
Directory Services								
Service Name	Activation Status							
Cisco DirSync	Deactivated							
- Save Set to Default Refresh								
*- indicates required item.								

Once the service is activated, logon into Cisco Unified CM Administration page and go to Bulk Administration -> Upload/Download Files:



A new page as the one below is displayed. Click on *Find* and search for bat.xlt in the list. Check left side the box and click on Download Selected. Save the file on your hard drive.

cisco	Cisco l For Cisco	Unified CM A	dministrat	ion s						Navigatio	on Cisco Uni	fied CM / admin	Administra About
System 👻	Call Routing 👻	Media Resources 🔻	Voice Mail 👻 D	levice 👻 Appli	cation 👻	User Manag	ement 👻	Bulk Administration	▼ Help ▼				
Find and	List Files												
Add N	New Sele	ect All 🔛 Clear All	Delete Select	ed 🔋 Down	load Select	ted							
Status -	cords found									 			
File (1 - 1 of 1)											Rows	per Pag
Find File w	vhere Name	♥ begins with ♥	Select item or en	Using A Iter search tex		ind 1							
			Fil	e Name 📩						Function Type			
2	2 🔽	bat.xlt					В	AT Excel CSV Tool					
Add Ne	w Select /	All Clear All	Delete Selected	1 Dow	nload Sel	ected	3						

- Open the bat.xlt spread sheet you just saved on your machine.
- When prompted, click **Enable Macros** to use spread sheet capabilities.
- Click on **Phones-Users** tab at the bottom of the spread sheet.
- Make sure that Selected Model is on Phone and click on Create File Title button. A new page appears as shown in the picture below
- Add Owner User ID and Digest User to appear in Selected Device Fields
- Add Directory Number, Alerting Name, Alerting Name ASCII, Display and ASCII Display to appear in Selected Line Fields.
- Click on Create and Yes when prompted



	S	Т	U	V	W	X
N F 1 (I	laximum Wait Time for Desk ickup Pr lumber[5] OPTIONAL) (S	rimary User Device String[50] OPTIONAL)	MAC Address/Device Name (Integer[12/50] MANDATORY)	Description (String [50] OPTIONAL)	Create File Title	Export to BAT Format
2 3 4	Field Selection				Select Model	Dummy MAC Address
5	Device Fields		Selected Device Fields		Phones	Maximum Number of Phone L
7	Authentication String		MAC Address/Device Name		C CTI Port	Maximum Number of Intercom Lines
8 9	Secure Shell User		Owner User ID Digest Liser		C H.323 Client	Maximum Number of Speed Dia
10 11	SIP Profile SIPCodec_MTPPreferred	dOrigCodec		Down	C VGC Virtual Phone	Dials
12 13	Logout Profile	<u> </u>			C VGC Phone	Maximum Number of Remote Destinations
14 15	Line Fields		Selected Line Fields		C Motorola CN 622	Maximum Number of IP Servic
16 17	MLPP No Answer Ring Du Line Description	uration	Directory Number Alerting Name	Up	C Cisco IP Communicator	and Parameters
18	Line Presence Group Secondary CSS for Forw	vard Al	Display ASCII Display		Note	Noto: Diagon antay the data in
20	Forward on CTI Failure (Forward on CTI Failure (AMP Destination Mark	CSS <	Hott biging	Down	If the Max number of calls	<pre>Maximum number of IP Services>:<maximum number="</pre"></maximum></pre>
22) Here bestinddon Hask				selected as line fields then	Parameters> format. For Eg:
24	Intercom Fields		Selected Intercom Fields		than or equal to the Max	Select the line fields from the before changing the number
25	Intercom Directory Num	ber			- Mobility User ID, Remote	box.
27 28	Intercom Route Partition Intercom Description Intercom Alerting Name			Up	Remote Destination	
29 30	Intercom Alerting Name Intercom CSS	ASCII		Down	Number, Answer Too Soon Timer, Answer Too	
31	Intercom Presence Grou	ip 🗾			 Late Timer, Delay Before Ringing Cell, Active 	
33					 Access List Name, Blocked Access List 	
34 35		Creati			Name are device fields specific to Dual Phones	
36 37						
38						
40						
41 42						
43 44						
45	N / User Davise Profiles / Harr	/ Undata Ucarr Dhonas Usars				
Read		Opuace users Phones-Users	VOLUU TIPITTICAS EIPITPAS PA			100% - +

Now you have to fill the following fields which contain minimal information about users:

- Last Name: used to identify the user. Ex: Spectralink IP 6500 Horsens
- User ID: reflects the SIP DDI that will be assigned to the Spectralink Handset. Ex: 9998
- *Password*: is recommended to use a pass for security reasons.
- PIN: is the Authentication Password used on the Spectralink Handset
- MAC Address/Device Name: the IPEI of the handset.
- **Owner User ID**: user ID of the assigned phone user. Ex: 9998
- Digest User: end user that is associated to the phone Ex:9998
- Directory Number 1: phone number (SIP DDI). Ex: 9998
- *Alerting Name 1:* is displayed whilst a SIP device rings another device. Once connected the Display1 is shown.
- Alerting Name Ascii 1: same as Alerting Name, but only ASCII characters
- **Display 1**: if blank the system will display the extension.
- ASCII Display 1: same as Display1.

You can enter as many users as needed, each one on its separate row. After the spread sheet is filled with all the above info about the users, the file must be saved and then uploaded on the Cisco Unified CM. Click on *Export to BAT Format* and save the file on your local hard drive. Next go to Cisco Unified CM Administration Page, and from there to *Bulk Administration -> Upload/Download File* page:



abala Cisco Unified CM Administration	Navigation Cisco Unified CM Administra	
For Cisco Unified Communications Solutions	admin Search Documentation About	
System 👻 Call Routing 👻 Media Resources 👻 Advanced Features 👻 Device 👻 Application 👻 User Management 💌	Bulk Administration 👻 Help 👻	
	Upload/Download Files	
Cisco Unified CM Administration System version: 8.0.2.40000-1 Likensing Warnings: System is supporting on Demo Homous, Planse upload relavant likense files. Please visit the License Report Page for more details. VMware Installation: 2 vCPU Intel(R) Xeon(R) CPU ES504 @ 2.00GHz, disk 1: 80Gbytes, disk 2	Phones Users Phones & Users Managers/Assistants User Device Profiles Gateways Forced Authorization Codes Client Matter Codes	
Last Successful Logon: Mar 31, 2011 1:18:12 AM Copyright © 1999 - 2009 Cisco Systems, Inc. All rights reserved. This product contains cryptographic features and is subject to United States and local country laws governing impr import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for comp regulations. If you are unable to comply with U.S. and local laws, return this product immediately. A summary of U.S. laws governing Cisco cryptographic products may be found at our <u>Export Compliance Product</u> For information about Cisco Unified Communications Manager please visit our <u>Unified Communications System Do</u> For Cisco Technical Support please visit our <u>Technical Support</u> web site.	Call Pickup Group Mobility Region Matrix Import/Export Phone Migration EMCC Intercompany Media Services CUPS TAPS Job Scheduler	F Cisco cryptographic products does not imply third-part By using this product you agree to comply with applicab

A new page similar to the one below should appear. From here you can upload the file created with bat.xlt spread sheet.

System 👻 Call Routing 👻 Me	dia Resources 👻 Voice Mail 👻 Device	✓ Application ✓ User Management	■ Bulk Administration ■	Help 👻				
Find and List Files								
Add New Select All	Clear All 💥 Delete Selected [Download Selected						
— Status —								
1 records found	1 records found							
File (1 - 1 of 1)					Rows per Pag			
Find File where Name 💌 b	egins with 💌	Using AND V Find						
	Select item or enter se	arch text 🚩						
Γ	File Nan	ne 📥		Functi	on Type			
	bat.xlt		BAT Excel CSV Tool					

Click on Add New to add the file created with bat.xlt to the CUCM server. A page similar to the one below should appear:

System 👻	Call Routing 🔻	Media Resources 👻 Voice Mail 👻 Device 👻 Application 👻 User Management 👻 Bulk Administration 👻 Help 👻	
File Uplo	ad Configurat	ion	Related Links: Back To Find
Save			
- Status			
(i) Stat	us: Ready		
— Upload	the CSV file -		
File: *		C:\Documents and Settings\gabriel.kalauz\Desktop\UsersBAT.txt	
Select Th	ie Target *	Phones/users	
Select Tr	ansaction Type	* Insert Phones/users	
Over	write File if it e:	dists.**	
Save			
(i) *- indic	cates required i	tem.	
(i)** If vo	ou are trying to	upload a file which is already present for a particular transaction.it will be overwritten.	

Make sure that **Select The Target** is set to Phones/users and **Select Transaction Type** is set to Insert Phones/users. Browse to the file created with bat.xlt from your local drive and then click save. To make sure the file is uploaded on the CUCM server, go to *Bulk Administration ->* 14205603, Ed1 Page | 20

Upload/Download Files and click on Find. The uploaded file should appear along with bat.xlt file, as shown below:

System 👻 Call Routing 👻 Media Resources 👻 Voice Mail 👻 Device 👻 Application 👻 User Manage	ment 🔻 Bulk Administration 👻 Help 👻
Find and List Files	
🕂 Add New 🏢 Select All 🏢 Clear All 💥 Delete Selected 阗 Download Selected	
- Status (i) 2 records found	
File (1 - 2 of 2)	Rows per Pag
Find File where Name v begins with v Using AND v Find Select item or enter search text v	
☐ File Name ▲	Function Type
UsersBAT.txt	Insert Phones/users
D bat.xlt	BAT Excel CSV Tool
Add New Select All Clear All Delete Selected Download Selected	

Next you have to create a Phone Template and a User Template. To create a Phone Template, go to *Bulk Administration -> Phones -> Phone Template*.

ystem 💌 Call Routing 👻 Media Resources 💌 Advanced Features 👻 Device 👻 Application 👻 User Management 💌	Bulk Administration 👻 Help 👻				
	Upload/Download Files				
	Phones	•	Phone Template		
Cisco Unified CM Administration	Users	÷.	Phone File Format	,	
System version: 8.0.2.40000-1	Phones & Users	•	Validate Phones		- Fi
Licensing Warnings:	Managers/Assistants	•	Insert Phones		
System is operating on Demo licenses. Please upload relevant license files.	User Device Profiles	•	Update Phones	•	
Please visit the License Report Page for more details.	Gateways	•	Delete Phones	•	
VMware Installation: 2 vCPU Intel(R) Xeon(R) CPU E5504 @ 2.00GHz, disk 1: 80Gbytes, disl	Forced Authorization Codes	•	Export Phones	•	
	Client Matter Codes	•	Add/Update Lines	•	
st Successful Logon: Mar 31, 2011 2:04:18 AM	Call Pickup Group	•	Reset/Restart Phones	•	
pyright © 1999 - 2009 Cisco Systems, Inc.	Mobility	•	Generate Phone Reports		
	Region Matrix	•	Migrate Phones	•	
is product contains cryptographic features and is subject to United States and local country laws governing impo port, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for comp	Import/Export	•	Add/Update Intercom	•	nply with app
gulations. If you are unable to comply with U.S. and local laws, return this product immediately.	Phone Migration	Т			
summary of U.S. laws governing Cisco cryptographic products may be found at our Export Compliance Product	EMCC	- F			
r information about Cisco Unified Communications Manager please visit our <u>Unified Communications System Do</u>	Intercompany Media Service	s 🕨			
r Cisco Technical Support please visit our <u>Technical Support</u> web site.	CUPS	•			
	7100				

A page similar to the one below appears:

cisco	Cisco Unified CM Administration For Cisco Unified Communications Solutions	Navigation Cisco Unified CM Administri admin About
System 👻	Call Routing 👻 Media Resources 👻 Voice Mail 👻 Device 👻 Application 👻 User Management 👻 Bulk Administration 👻 Help 💌	
Find and I	ist Phone Templates	Related Links: Actively Logged In Device Re
Add N	w	
Phone		
Find Phone	where Device Name v begins with v Find Clear Filter 4 = Select item or enter search text v	
	No active query. Please enter your search criteria using the options above.	
Add Nev		

Click on Add New to add a new phone template. A new window appears as below. Make sure to select Phone type to be Third-Party SIP Device (Basic) and then click on Next.

cisco	Cisco Unified CM Administration For Cisco Unified Communications Solutions	Navigation Cisco Unified CM Administra admin About
System 👻	Call Routing 💌 Media Resources 💌 Voice Mail 💌 Device 💌 Application 💌 User Management 💌 Bulk Administration 💌 Help 💌	
Add a Nev	v Phone Template	Related Links: Back To Find/
Next		
– <mark>Status</mark> – i Statu	s: Ready	
- Select t	he type of phone you would like to create	
- Next		
(i) *- in	dicates required item.	

A new page is displayed as below. Make sure to fill the following fields as below:

- Template Name: a name of your choice. Ex: Template_Phone
- **Device Pool**: set to Default
- Phone Button Template: set to Third-party SIP Device (Basic)
- Device Security Profile: set to Third-party SIP Device Basic Standard SIP Non-Secure
- Sip Profile: set to Standard SIP Profile

Click on Save after you finished storing the information.

Device Information				
Template Name*		Template_Phone		
Description				
Device Pool*		Default	~	<u>View Details</u>
Common Device Configuration		< None >	~	View Details
Phone Button Template*		Third-party SIP Device (Basic)	*	
Common Phone Profile*		Standard Common Phone Profile	*	
Calling Search Space		< None >	*	
AAR Calling Search Space		< None >	*	
Media Resource Group List		< None >	~	
Location*		Hub_None	*	
AAR Group		< None >	*	
Device Mobility Mode*		Default	¥	View Current Device Mobility Settings
Owner User ID		< None >	*	
Use Trusted Relay Point*		Default	~	
Always Use Prime Line*		Default	~	
Always Use Prime Line for Voice Me	essage*	Default	*	
Calling Party Transformation CSS		< None >	*	
Geo Location		< None >	*	
Use Device Pool Calling Party T	ransform	nation CSS		
Ignore Presentation Indicators	(internal	calls only)		
Logged Into Hunt Group				
Remote Device				
- Protocol Specific Information Presence Group*		d Durana annua		
MTP Preferred Originating Codec*	Standar	a Presence group		
Device Security Profile*	Third-pa	arty SIP Device Bacic - Standard SIP Non-S		
Rerouting Calling Search Space				
SUBSCRIBE Calling Search Space	< None >			
SIP Profile*	Standar	d SIP Profile		
Digest User	< None	>		
Media Termination Point Pequin	ed			
Upattended Port				
Pequire DTME Pecentico				
14005600 111				



Click on Add a new DN button:

- Association Information	Phone Type							
Modify Button Items	Product Type: Third-party SIP Device (Basic)							
1 Line [1] - Add a new DN	Device Protocol: SIP							
	Device Information							
	✓ Is Active							
	Template Name*		Template_Phone					
	Description							
	Device Pool*		Default	~	<u>View Details</u>			
	Common Device Configuration		< None >	~	View Details			
	Phone Button Template*		Third-party SIP Device (Basic)	*				
	Common Phone Profile*		Standard Common Phone Profile	~				
	Calling Search Space		< None >	~				
	AAR Calling Search Space		< None >	~				
	Media Resource Group List		< None >	*				
	Location *		Hub_None	~				
	AAR Group		< None >	~				
	Device Mobility Mode*		Default	*	View Current Device Mobility Settings			
	Owner User ID		< None >	*				
	Use Trusted Relay Point*		Default	~				
	Always Use Prime Line*		Default	~				
	Always Use Prime Line for Voice Me	ssage*	Default	*				
	Calling Party Transformation CSS		< None >	~				
	Geo Location		< None >	~				
	☑ Use Device Pool Calling Party Tr	ansforn	nation CSS					
	Ignore Presentation Indicators (i	internal	calls only)					
	🗹 Logged Into Hunt Group							
	Remote Device							
	Protocol Specific Information - Presence Group*	0 k a a d a a						
	MTP Preferred Originating Codec*	ztanuar Ztanuar						
	Device Security Profile*	Third party CID Davids Paris Charlest CID No. 6						
	Rerouting Calling Search Space	ch Space < None >						
	SUBSCRIBE Calling Search Space	alling Search Space < None >						
	SIP Profile*	Standard SIP Profile						
	Digest User	< None	>					
	Madia Termination Doint Dequire	a						

A page similar to the one below appears. Fill the Line Template Name with a name of your choice and make sure Active check box is enabled. Press Save to store the information.

cisco	Cisco For Cisco	Unified CM A	dministra	ntion ons					Navigation Cisco Unified
System 👻	Call Routing	Media Resources 👻	Voice Mail 👻	Device 👻	Application +	User Management 👻	Bulk Administration \bullet	Help 👻	
Line Temp	plate Config	uration							Related Links: Configure Device (T
Save									
- Status -									
i Statu	is: Ready								
	v Number 1	nformation —							
Line Temp	late Name*	Template_Line							
Route Part	tition	< None >			*				
Descriptio	n								
Alerting Na	ame								
ASCII Ale	rting Name								
Active)								

To create a Users Template, go to Bulk Administration -> Users -> Users Template:

Gisco Unified CM Administration Gisco Unified Communications Solutions		Navigation Cisco Unified CM Administrat			
System 👻 Call Routing 👻 Media Resources 🖛 Advanced Features 👻 Device 👻 Application 👻 User Management 👻	Bulk Administration 👻	Help 👻	admin Searc	h Documentation About	
System Cal Routing Media Resources Advanced Features Device Application User Management Cisco Unified CM Administration System version: 8.0.2.40000-1 Usersing Warmings: System is operating on Demo licenses. Please upload relevant license files. Please visit the License Report Page for more details. VMware Installation: 2 vCPU Intel(R) Xeon(R) CPU E5504 @ 2.00GHz, disk 1: 80Gbytes, disk 2 Last Successful Logon: Mar 31, 2011 2:04:18 AM Copyright © 1999 - 2009 Cisco Systems, Inc.	Buk Administration ♥ Upload/Download Phones Users Phones & Users Managers/Assita User Device Profil Gateways Forced Authorizat Client Matter Code Call Pickug Group Mobility	Help Files Files ints ion Codes s	User Template Insert Users Update Users Delete Users Export Users Reset Password/PIN Generate User Reports Line Appearance		
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ERROR: stackunderflow OFFENDING COMMAND: ~

STACK: