Ascom IP-DECT Base Station (IPBS2)

Microsoft<sup>®</sup> Lync<sup>™</sup> Server 2010

## SIP Phone Support (SPS)

# Configuration Note Connecting Ascom IP-DECT Base Station (IPBS2) to Microsoft Lync Server 2010 via SPS





January 2013 Document # LTRT-12210



#### **Table of Contents**

1	Intro	oduction	9
2	2 Components Information		11
	2.1 2.2	Ascom Components AudioCodes Components	11 11
3	Asc	om IPBS2 Setup Notes	13
	3.1	Configuring IP-DECT Base Station IP Addresses	14
	3.2	Configuring DECT System	15
	3.3	Configuring DECT Master	16
	3.4	Configuring DTMF Settings	17
	3.5	Configuring DECT SARI	18
	3.6	Configuring DECT Users	19
	3.7	Configuring Call Waiting Feature for DECT Users	21
	3.8	Configuring Message Waiting Indication (MWI)	22
	3.9	Activating Call Transfer	23



### List of Figures

Figure 1-1: Topology and Conventions	9
Figure 3-1: General Info	14
Figure 3-2: DECT System	15
Figure 3-3: DECT Master	16
Figure 3-4: DTMF Settings	17
Figure 3-5: DECT SARI	18
Figure 3-6: Add User	19
Figure 3-7: Users List	20
Figure 3-8: MWI	22
Figure 3-9: Consulting and Blind Transfer	23

#### List of Tables

Table 2-1: Ascom Components	.11
Table 2-2: AudioCodes Components	.11



**Reader's Notes** 

#### Notice

This document provides the guidelines for setting up Ascom IP-DECT Base Station (IPBS2) with AudioCodes' SIP Phone Server (SPS) in order to connect to Microsoft Lync 2010.

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#### **Related Documentation**

#### **Manual Name**

SPS Web Admin User Guide

Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway (software version 5.1.x)

## 1 Introduction

This document describes the configuration guidelines required to setup the Ascom IP-DECT Base Station (IPBS2) with Microsoft Lync 2010 via AudioCodes' SIP Phone Server (SPS).

The objective of this configuration note is to assist with the required integration of the Ascom IPBS2 with the AudioCodes SPS. For a comprehensive setup of the Ascom IPBS2, refer to the Ascom IPBS2 manual.

This document does not include any Microsoft Lync 2010 configuration. The Ascom IPBS2 user on the SPS does not require any special configuration on the SPS. For more information on the SPS configuration, refer to the *SPS Web Admin User Guide*.

It is assumed that users are already defined in the Microsoft Lync 2010 environment and AudioCodes SPS Server.

This document is intended for IP-DECT Installation Engineers or Microsoft Lync Partners who are installing Ascom IP-DECT Base Station in front of AudioCodes SPS.

The standard architecture is illustrated in the figure below:



Figure 1-1: Topology and Conventions



**Reader's Notes** 

## **2** Components Information

### 2.1 Ascom Components

#### Table 2-1: Ascom Components

Vendor	Ascom
Models	<ul><li>Ascom IP-DECT Base Station (IPBS2)</li><li>Ascom d62 DECT Handsets (Talker)</li></ul>
Software Version	<ul> <li>Ascom IP-DECT Base Station (IPBS2) - firmware version 5.1.8</li> </ul>

### 2.2 AudioCodes Components

#### Table 2-2: AudioCodes Components

Vendor	AudioCodes
Models	<ul><li>Windows 2008 Server with AudioCodes SPS</li><li>AudioCodes M1000B gateway</li></ul>
Software Version	<ul> <li>Windows 2008 Server with AudioCodes SPS - firmware version 2.43.1</li> <li>AudioCodes M1000B gateway - firmware version 6.60A.010.006</li> </ul>
Additional Notes	<ul> <li>Windows 2008 Server with AudioCodes SPS was used for testing.</li> <li>AudioCodes M1000B gateway was used to connect PSTN users.</li> </ul>



**Reader's Notes** 

## 3 Ascom IPBS2 Setup Notes

This section provides guidelines for configuring the Ascom IP-DECT Base Station. These guidelines are based on the setup example illustrated in Figure 1-1: Topology.

All configurations were performed according to the document *Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway (software version 5.1.x).* 

### 3.1 Configuring IP-DECT Base Station IP Addresses

This section describes how to configure the IP address of the IP-DECT Base Station.

- To configure IP addresses:
- Change the IP-DECT IP address according to your network topology. Refer to Section 8.2.2 of the Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway (software version 5.1.x) document.
- 2. After you have changed the IP address, verify in the Info screen (**Configuration** > **General** > **Info**) that the configuration was successful (as shown in the screen below).

<b>2</b> 10 15 17 40: Assess ID									. 0 X
d 10.13.17.40: Ascom IP-									
← → C 🗋 10.15	5.17.40/admin.xml?xsl=	admin.xsl						2	3 🧖 🔳
	IP-DECT I	Base	Statio	on				asc	om
Configuration	Info Admin Up	date NTP	Logging	HTTP	HTTP Client	SNMP	Kerberos	Certificates	License
General									
LAN	Version Social Number	IPBS2[5.1.8]	, Bootcode[5.	1.8], Har	dware[IPBS2-A3/	1B1]			
IP	MAC Address (LAN)	00-01-3e-14-	2b-f4						
LDAP	SNTP Server	10.15.21.10	2011						
DECT	Time	08.01.2013 1	15:06						
VoIP	Uptime	0d 1h 11m	42s						
UNITE									
Central Phonebook									
Administration									
Users									
Device Overview									
DECT Sync									
Traffic									
Gateway									
Backup									
Update									
Diagnostics									
Reset									

#### Figure 3-1: General Info

### 3.2 Configuring DECT System

This section describes how to configure the DECT System.

- > To configure the DECT system:
- Open the DECT System screen (Configuration > DECT > System) and configure the DECT system as described in Sections 8.5.1 – 8.5.11 of the Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway (software version 5.1.x) document.

The screen below shows the Ascom IPBS2 configuration of the DECT System. Note that the password ("123456" in example below) is used for the handset's subscription.

a 10.15.17.40: Ascom IP-E							
← → C [ 10.15.17.40/admin.xml?xsl=admin.xsl							
IP-DECT Base Station asc							
Configuration	System Suppl. Serv.	Master Mobility Master Radio Radio config PARI SARI	Air Sync				
General							
LAN	System Name	ascom					
IP	Password	123456					
LDAP	Confirm Password						
DECT	Subscriptions						
VoIP	T						
UNITE	lones	EUROPE-PBX V					
Central Phonebook	Default Language	English 💌					
Administration	Frequency	Europe -					
Users	Enabled Carriero	0 1 2 3 4 5 6 7 8 9					
Device Overview	Linabled Gamers						
DECT Sync	Local R-Key Handling						
Traffic	No Transfer on Hangup						
Gateway	No On-Hold Display						
Backup	Coder	G729A 💌 Frame (ms) 30 Exclusive 🖾 SC 🗐					
Update	Secure RTP						
Diagnostics							
Reset	OK Cancel						

Figure 3-2: DECT System

## AudioCodes

### 3.3 Configuring DECT Master

This section describes how to configure the DECT Master.

- **To configure DECT Master:**
- 1. Open the DECT Master screen (Configuration > DECT > Master).
- 2. Configure the 'Proxy' parameter with the IP address of the SPS.
- 3. Optionally configure the 'Domain' parameter with the Microsoft Lync Domain Name.

#### Figure 3-3: DECT Master

a 10.15.17.40: Ascom IP-D	DEC ×					
← → C 🗋 10.15.	17.40/admin.xml?xsl=admin.xsl			☆ 🖻 =		
	IP-DECT Base	Station		ascom		
Configuration	System Suppl. Serv. Mas	ter Mobility Master Radio Radio	config PARI 9	SARI Air Sync		
General				^		
LAN	Mode Active -					
IP	Multi-Master Master ID 0 Enable RAPI Function					
LDAP						
DECT						
VoIP						
UNITE						
Central Phonebook	Protocol	SIP 💌				
Administration	Proxy	10.15.21.12:5060				
Users	Alt. Proxy			=		
Device Overview	Domain	ACSupport local		-		
DECT Sync	Mary Internal Neuropean Law ath		in t			
Traffic	Max. Internal Number Length	20 used to decide internal/external rin	g signal			

For detailed configuration of the DECT Master, refer to Sections 8.5.13 and 8.5.14 of the *Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway (software version 5.1.x)* document.

### 3.4 Configuring DTMF Settings

This section describes how to configure different DTMF settings.

- > To configure DTMF:
- 1. Open the DECT Master screen (Configuration > DECT > Master).
- 2. Configure the appropriated DTMF settings.

Figure 3-4: DTMF Settings

a 10.15.17.40: Ascom IP-E		
← → C 🗋 10.15.	17.40/admin.xml?xsl=admin.xsl	
		Station ascom
		Station
Configuration	System Suppl. Serv. Mas	ster Mobility Master Radio Radio config PARI SARI Air Sync
General		· · · · · · · · · · · · · · · · · · ·
LAN	Mode Active	
IP	Multi-Master	
LDAP	Master ID 0	
DECT	Enable PARI Function	
VoIP		
UNITE	IP-PBX	
Central Phonebook	Protocol	SIP 🔹
Administration	Proxy	10.15.21.12:5060
Users	Alt. Proxy	E
Device Overview	Domain	ACSupport local
DECT Sync		
Traffic	Max. Internal Number Length	20 used to decide internal/external ring signal
Gateway	International CPN Prefix	
Backup	Enbloc Dialing	
Update	Enable Enbloc Send-Key	If enabled, DTMF is negotiated according
Diagnostics	Send Inband DTMF	to RFC2833, resulting in DTMF digits
Reset	Allow DTMF Through RTP	If the other party does not support RFC2833,
	Short Disconnect Tone	there will be fallback to DTMF over the signalling channel (SID INFO)
	Configured With Local GK	

For detailed configuration of the DTMF Settings, refer to Sections 8.5.16 (paragraph 10) of the *Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway* (software version 5.1.x) document.

## AudioCodes

### 3.5 Configuring DECT SARI

This section describes how to configure the DECT SARI.

- To configure DECT SARI:
- 1. Open the SARI screen (Configuration > DECT > SARI) and enter the appropriate SARI value.

For more information, refer to Section 8.5.26 of *Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway (software version 5.1.x)* document.

#### Figure 3-5: DECT SARI

IP-DECT Base Station       Second         Configuration       System Suppl. Serv. Master Mobility Master Radio Radio config PARI SARI Air Sync         General       IAN         LAN       IP         IDAP       Introduction         DECT       OK         VolP       OK         UNITE       OK         Device Overview       DECT Sync         Traffic       Gateway         Backup       Update         Diagnostics       Reset
Configuration       System       Suppl. Serv.       Master       Mobility Master       Radio       Radio config       PARI       SARI       Air Sync         General       SARI       International Social

### 3.6 Configuring DECT Users

The DECT users should be pre-defined in the Microsoft Lync 2010 environment as well as in the SPS. The 'Name' and 'Auth.Name' parameters should be configured identically to the Microsoft Lync 2010 definition.

The procedure in this section describes the 'Add User' step in the Ascom IPBS2. The complete procedure is described in Section 7.13 of *Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway (software version 5.1.x)* document.

- > To configure users:
- 1. Open the Users page (Administration > Users).
- 2. Click the **new** button; the following screen is displayed:

Edit User - Google Chrome     Edit User - Google Chrome     10.15.17.40/GW-DECT/mod cmd login.xml?cmd=show&user-guid=22e1e							
User Vser User Administrator							
Long Name	ascom 8100						
Display Name	SPS-DECT1						
Name	SPS-DECT1						
Number							
Auth. Name	SPS-DECT1	(SIP only)					
Password		]					
Confirm Password	•••••	]					
IPEI / IPDI	085870303690						
Idle Display	8100						
Auth. Code 8100							
Feature Status							
OK Apply Delete Unsubs. Cancel							

#### Figure 3-6: Add User

## AudioCodes

- **3.** In the password field of the user, enter the user password as defined for this user in the SPS ("12345678" in the example above).
- 4. Define as many users as required using the respective passwords defined in the SPS.
- 5. After you have defined all users, go to **Administration** > **Users** and click the **show** button to view all defined users and their respective statuses.

<ul> <li></li></ul>	a 10.15.17.40: Ascom IP-		_
Long       Configuration       Configuration <thconfiguration< th=""> <thconfiguration< th=""></thconfiguration<></thconfiguration<>	← → C 🗋 10.15	ة.17.40/admin.xml?xsl=admin.xsl ثوًا الله المالية المالية المالية المالية المالية المالية المالية المالية المالية الم	
Configuration       Users       Anonymous         General       LAN       PARK 31100466226500       PARK         IP       3rd pty 2110024402       Master       User Administrators: 0         UDAP       Master       0       Users         VolP       show       new       import         VOIP       show       new       import         Central Phonebook       new       import       export         Users       Long Name Name       No       Fty Display IPE1/IPDI       AC       Prod       SW       Registration         ascom 8100       SPS-DECT1       +       8100       085870303690       8100       d62-Talker       3.4.11       10.15.21.12         users       Device Overview       new       import       export       Users : 2, Registrations: 2       3.4.11       10.15.21.12       Users : 3.4.11       10.15.21.12       users : 2, Registrations: 2         Device Overview       Device Overview       Device Overview       Backup       Ugdate       Home Second Sec		IP-DECT Base Station ascom	
General         LAN       PARK 31100466226500         PARK       3rd pty         3rd pty       211002402         Master       0         Id       0         DECT       Show         new       ascom 8100         SPS-DECT1       + 8100         0       SPS-DECT1         10       SPS-DECT1         11       10.15.21.12         ascom 8200       SPS-DECT2         4dministration       export         Users       Users: 2. Registrations: 2         Users: 2. Registrations: 2       Users: 3.4.11         Users: 2. Registrations: 2       Users: 4.11         Users: 2. Registrations: 2       Users: 2. Registrations: 2	Configuration	Users Anonymous	
LAN       PARK 3110466225500         IP       3rd pty 2110024402         Master       0         Id       0         VolP       show         new       import         import       export         Vers       0         Device Overview       Dect Sync         Traffic       Gateway         Backup       Update         Diagnostics       Diagnostics	General	BABY 24400405005500 User Administrators	
IP       3rd pty       2110024402         LDAP       Master       0         DECT       Id       0         VoIP       Show       Image: Show         UNITE       new       import         Central Phonebook       import       export         Users       Users: 2, Registrations: 2         Users       Users: 2, Registrations: 2         Device Overview       DECT Sync         Traffic       Gateway         Backup       Update         Diagnostics       Image: Show	LAN	PARK 31100466226500 Long Name Name	
LDAP         Master Id         0           DECT         show         Image: Control of the state of th	IP	3rd pty 2110024402 User Administrators: 0	
DECT       Id         VolP	LDAP	Master 0 Users	_
VolP         show           UNITE         new           import         ascom 8100         SPS-DECT1         +         8100         085870303690         8100         d62-Talker         3.4.11         10.15.21.12           ascom 8200         SPS-DECT2         +         8200         085870303720         8200         d62-Talker         3.4.11         10.15.21.12           users         Users         Device Overview         DECT Sync         - <t< th=""><th>DECT</th><th>IG Long Name Name No Etv Display IPEL/IPDL AC Prod SW Registration</th><th></th></t<>	DECT	IG Long Name Name No Etv Display IPEL/IPDL AC Prod SW Registration	
UNITE       new         Central Phonebook       import         Administration       users         Device Overview       Decrease         DECT Sync       Traffic         Gateway       Backup         Update       Diagnostics	VoIP	show ascom 8100 SPS-DECT1 + 8100 085870303690 8100 d62-Talker 3.4.11 10.15.21.12	
Central Phonebook     Import export       Administration     Users: 2, Registrations: 2       Users     Device Overview       DECT Sync     Traffic       Gateway     Backup       Update     Diagnostics	UNITE	new ascom 8200 SPS-DECT2 + 8200 085870303720 8200 d62-Talker 3.4.11 10.15.21.12	
Administration       Users       Device Overview       DECT Sync       Traffic       Gateway       Backup       Update       Diagnostics	Central Phonebook	export Users: 2, Registrations: 2	
UsersDevice OverviewDECT SyncTrafficGatewayBackupUpdateDiagnostics	Administration		-
Device Overview DECT Sync Traffic Gateway Backup Update Diagnostics	Users		
DECT Sync Traffic Gateway Backup Update Diagnostics	Device Overview		
Traffic Gateway Backup Update Diagnostics	DECT Sync		
Gateway Backup Update Diagnostics	Traffic		
Backup Update Diagnostics	Gateway		
Update Diagnostics	Backup		
Diagnostics	Update		
	Diagnostics		
Reset	Reset		

#### Figure 3-7: Users List

### 3.7 Configuring Call Waiting Feature for DECT Users

This section describes how to activate and use the Call Waiting Feature on the Ascom IPBS2 handset.

- > To activate the Call Waiting feature for the DECT user:
- 1. Open the Users page (Administration > Users).
- 2. Click the **show** button to display a list of all users.
- 3. Select the + button for a specific user and select the **Call Waiting** feature.
- Open the 'Suppl.Serv' page (DECT > Suppl.Serv) and note the key sequence for activating the Call Waiting feature.
- > To answer the second incoming call:
- On the DECT handset, press the R button and then the 2 button.
   This key combination (R+2) is used for switching between calls.

### 3.8 Configuring Message Waiting Indication (MWI)

This section describes how to configure the Message Waiting Indication (MWI) Feature in the Ascom IPBS2.

- > To activate the Message Waiting Indication feature for the DECT user:
- 1. Open the 'Suppl.Serv' page (DECT > Suppl.Serv)
- 2. For 'MWI Mode' parameter drop-box, choose 'User dependent notify number'
- **3.** In **'MWI Interrogate Number**' parameter, configure the subscriber number, as defined extension of specific user in the Lync

a 10.15.17.40: Ascom IP-(×							
← → C 🗋 10.15	→ C 🗋 10.15.17.40/admin.xml?xsl=admin.xsl 😒 🙆 🔘 🗉						
	IP-DECT Base Station ascom						
Configuration	System Suppl Serv Ma	e Otation	Radio Radio config	PARI SARI Air Sync			
General	System Suppli Servi Int	ister mobility musici	Ruuro Ruuro coning				
LAN	Enable Supplementary Services						
IP		Activate	Deactivate	Disable			
LDAP	Call Forwarding Unconditional	*21*\$#	#21#				
DECT	Call Forwarding Busy	*67*\$#	#67#				
VoIP		ο/ φπ	104 //				
UNITE	Call Forwarding No Reply	*61*\$#	#61#				
Central Phonebook	Do Not Disturb	*42#	#42#				
Administration	Call Waiting	*43#	#43#				
Users	Call Completion	5	#37#				
Device Overview	Call Park						
DECT Sync	Call Service LIRI		]				
Traffic	Call Carries UDI (Armunent)		]				
Gateway	Call Service ORI (Argument)						
Undate	Logout User	#11*\$#					
Diagnostics		100 //	٦				
Reset	Clear Local Setting	~UU#					
	MWI Mode User dependent notify number						
	MWI Interrogate Number	4247		ו			
	Local Clear of MWI		]				
	External Idle Display						
	OK Cancel						

For detailed configuration of the MWI, refer to Sections 8.5.12 of the *Installation and Operation Manual IP-DECT Base Station and IP-DECT Gateway (software version 5.1.x)* document.

#### Figure 3-8: MWI

#### 3.9 Activating Call Transfer

This section describes how to activate and use the Consulting and Blind Transfer in Ascom IPBS2.

- > To activate the Consulting and Blind Transfer Features:
- 1. Open the DECT Master page (Administration > DECT > Master).
- 2. Select the Enbloc Dialing option.
- 3. Set the 'Hold Signaling' parameter to "sendonly with 0.0.0.0".

#### Figure 3-9: Consulting and Blind Transfer

Backup	Enbloc Dialing	V	For Consulting Transfer	
Update	Enable Enbloc Send-Key			
Diagnostics	Send Inband DTMF			
Reset	Allow DTMF Through RTP			
	Short Disconnect Tone			
	Configured With Local GK			
	SIP Interoperability Settings -			
	Registration Time-To-Live		3600 [sec]	
	Hold Signalling		sendonly with 0.0.0.0	
	Hold Before Transfer			
	Accept Inbound Calls Not Rou	uted Via Home Proxy		
	Register With Number			
	KPML support			
	Registration For Anonymous D	evices		

#### > To perform Consulting Transfer:

- 1. Setup the first call between DECT users.
- 2. On the DECT handset, press the **R** button; a dial tone is received and the first call is placed on hold.
- Type the destination of the second call and wait. After five seconds the call is established.
- **4.** After the second call is established, press the **R** button, and then the **4** button to transfer the call on hold to an ongoing call.
- > To perform Blind Transfer:
- **1.** Setup the first call between DECT users.
- 2. For one of the users, press the **R** button twice (RR).
- Dial the new destination, specifying # at the end. The call is transferred to the dialed number.



## **Configuration Note**

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