

MITEL

Communications Director



IP-DECT System (Global)
Push-to-Talk (PTT) Configuration Guide

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IP-DECT System (Global)
Push-to-Talk (PTT) Configuration Guide
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About this Guide	1
Push to Talk (PTT)	2
PTT Solution Components	3
PTT Solution Components Minimum Software Requirements	3
Configuring PTT	4
Configuring the 3300 ICP	4
Configuring MAS 2.0 or later	6
Configure System Options	6
Configuring the SIP Server	7
Configure Users	8
Set Up Reservationless Conferences	9
Configuring WSM	12
Configuring the 3300 System Speed Call Configuration	13
Configuring the 5604/5607 Handset Template - Option 1	14
Configuring the 5604/5607 Handset Template - Option 2	15

About this Guide

This guide describes how to configure the Push-to-Talk (PTT) solution for the 5604 and 5607 Wireless Handsets. For more detailed information, see the following documents:

- *5604 Wireless Handset User Guide*
- *5604 Wireless Handset Configuration Guide*
- *5607 Wireless Handset User Guide*
- *5607 Wireless Handset Configuration Guide*
- *WSM Installation and Operation Guide*
- *Audio and Web Conferencing (AWC) Configuration and Maintenance Manual*
- *Mitel Application Suite Installation and Maintenance Guide*

Push to Talk (PTT)

The Push-to-Talk function enables a pre-defined group of mobile staff to participate in a call whereby they all listen to the group's call activity, typically in loudspeaker (Handsfree) mode. They press and hold a button in order to speak.

For PTT to function, the PTT-capable handsets in the PTT group must be configured on the Wireless Messaging Services (WSM) Gateway. Additionally, a conference bridge, such as Mitel's Audio & Web Conferencing (AWC) must be configured to support the PTT calls.

Two types of PTT calls can be made:

- PTT Voice Style (initiated by the handset)
- PTT Message Style (initiated by the system)

PTT Voice Style Calls (Handset initiated)

Each member of a PTT group is able to initiate a PTT call via a PTT request. This PTT Call request is typically programmed onto a softkey, hotkey or multi-function button on the handset for quick access.

Once a PTT Call request is made, the system invites the other members of the PTT group into the PTT call. The invitation typically barges onto the invited members' handsets following brief alerting of the incoming PTT call; manual PTT Call acceptance can be configured optionally.

Once the PPT group members have received/accepted their PTT invitations, the system automatically dials them onto the configured conference bridge and they are now active in a PTT call.



Note: Depending on the configuration, it may take 10 seconds or more for all members to be active on the PTT call from the time a user initiates a PTT request.



Note: Multiple PTT groups are supported; if a handset is a member in multiple groups, the PTT Groups can be programmed onto the handset menu to enable selection of the appropriate PTT group Call request.

PTT Message Style (System/Application initiated):

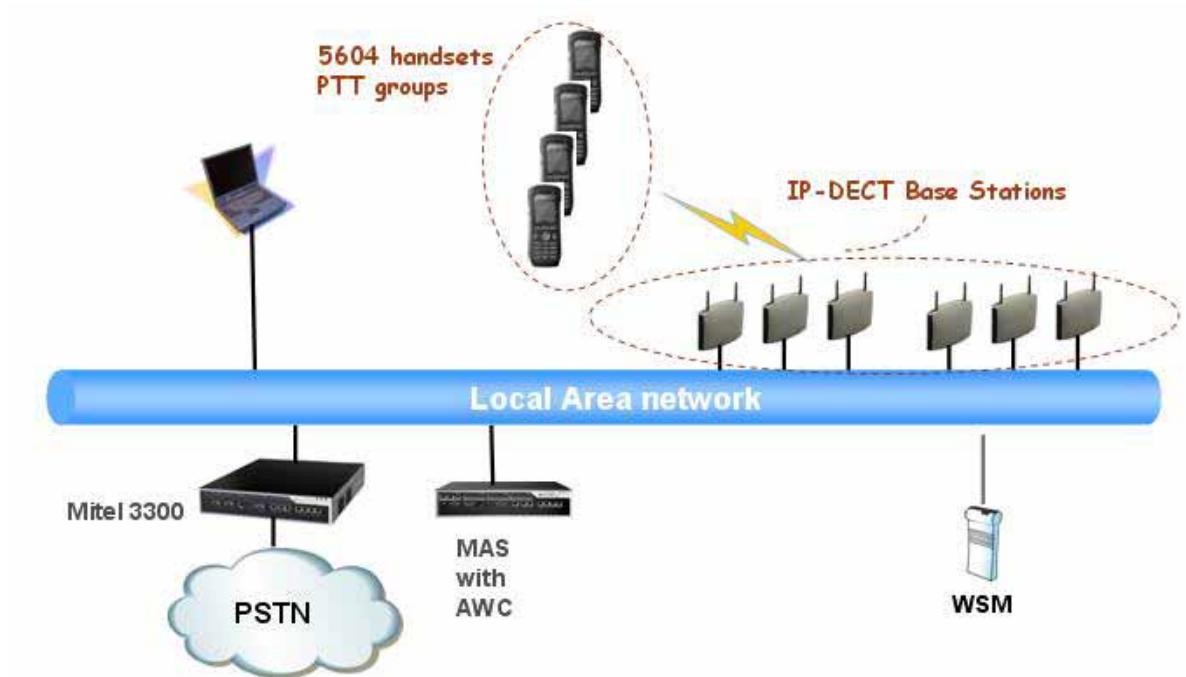
This mode is typically utilized in conjunction with an application that will trigger the PTT call based on a alarm or communication escalation.



Note: This method is not covered in this guide and requires an additional Alarm Management Server (AMS) module.

PTT Solution Components

The diagram below illustrates the components that comprise the PTT solution.



PTT Solution Components Minimum Software Requirements

- Mitel Communications Director, Release 4.1 or later
- IP-DECT Base Stations, Release 4.0 or later
- 5604 Wireless Handsets, Release 3.0 or later
- 5607 Wireless Handset, Release 3.2 or later
- Wireless Services Messaging (WSM), Release 2.5 or later
- Mitel Application Suite (MAS) Installation and Maintenance Guide, Release 2.0 SP1 or later
- Audio Web Conferencing (AWC), Release 3.7 or later

Configuring PTT

Configure the following components for PTT:

- Mitel Communications Director - the 3300 ICP
- Mitel Application Suite (MAS)
- Audio Web Conferencing (AWC)

Configuring the 3300 ICP

Configure the 3300 ICP first before you enter the SIP Server Configuration information in AWC:

1. Configure SIP Device Capabilities

- Select the SIP Device Capabilities Assignment form
- Select **Yes** for the **Replace System based with Device based In-Call Features** option
- In the **Session Timer** box, type 0 for the value to clear the timer

SIP Device Capabilities Number:	20
Comment:	MAS - AWC
Call Routing and Administration Options	
Outbound Proxy Server:	[Dropdown]
Replace System based with Device based In-Call Features:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Allow MWI Notifications without Subscription:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Enable Digit Collection In Busy Or Alerting State:	<input type="radio"/> No <input checked="" type="radio"/> Yes
SDP Options	
Allow Device To Use Multiple Active M-Lines:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Allow Using UPDATE For Early Media Renegotiation:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Force sending SDP in initial Invite message:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Limit to one Offer/Answer per INVITE:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Prevent SDP Renegotiation If Peer Is On Hold:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Prevent the Use of IP Address 0.0.0.0 in SDP Messages:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Renegotiate SDP To Enforce Symmetric Codec:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Repeat SDP Answer If Duplicate Offer Is Received:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Suppress Use of SDP Inactive Media Streams:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Signaling and Header Manipulation	
Minimum Registration Period:	300
Session Timer:	0
Allow Display Update:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Disable Reliable Provisional Responses:	<input type="radio"/> No <input checked="" type="radio"/> Yes

2. Configure the Class of Service (COS) for the AWC hunt group
 - Select **Yes** for **Suppress Simulated CCM after ISDN Progress**

SMDR External:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
SMDR Internal:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Speak@Ease Preferred:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Suppress Delivery of Caller ID Display between Sets:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Suppress Delivery of Caller ID Display between Sets - Override:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Suppress Display Of Account Code Numbers:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Suppress Redial Display:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Suppress Simulated CCM after ISDN Progress:	<input type="radio"/> No	<input checked="" type="radio"/> Yes
Third Party Call Forward Follow Me Accept:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Third Party Call Forward Follow Me Allow:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Timed Reminder Allowed:	<input type="radio"/> No	<input checked="" type="radio"/> Yes
Trunk Calling Party Identification:	<input type="radio"/> No	<input checked="" type="radio"/> Yes
Trunk Flash Allowed:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Two B-Channel Transfer Allowed:	<input checked="" type="radio"/> No	<input type="radio"/> Yes

3. Create IP Devices for the AWC Hunt Group
 - Select **Users and Devices > Advanced Configuration > IP Phones > Multiline IP Sets**
 - Complete the following information for the Multiline IP set range:
 - Click **Add** to create new IP devices
 - Enter the number of records to add: The number of IP devices that you are creating. The value entered equals the number of AWC User Licenses purchased.
 - **Device Type:** Select Generic SIP Phone from the list.
 - **Number:** Type the starting extension number. increment by 1.
 - **Interconnect Number:** Type 1.



Note: It is recommended that you create consecutive extension numbers for AWC IP devices.

4. Create a hunt group for AWC for dialing into a conference using the IP devices you created.
 - Select **Users and Devices > Group Programming > Hunt Groups.**
 - Click **Add** to create a hunt group.
 - **Hunt Group:** Type an extension number for the hunt group.
 - **Class of Service Day/Night1/Night2:** Type the number of the COS you created earlier.
 - **Hunt Group Priority:** Leave as the default value, which is 64.
 - **Hunt Group Type:** Select Voice from the list.
 - Click **Add Member** at the bottom of the Hunt Group Assignment page to add the extensions you created to the hunt group.

Configuring MAS 2.0 or later

- Follow the instructions from *MAS Installation and Maintenance Guide*:
 - Upgrade MAS to 2.0 SP1 or later version
 - Install AWC 3.7 or later with a license on MAS server
- Select Audio and Web Conferencing from MAS GUI
 - Configure System Options
 - Configure SIP server
 - Configure users

Configure System Options

Configure the following system options:

- **Dial-In Phone Number:** enter the hunt group number created from 3300 ICP
- **Platform:** Mitel 3300

System Options

Dial-In Phone Number 1	<input type="text"/>	Dial-In Phone Number 1 Label	main
Dial-In Phone Number 2	<input type="text"/>	Dial-In Phone Number 2 Label	toll-free
Dial-In Phone Number 3	x46200	Dial-In Phone Number 3 Label	extension
International Dialing Prefix	011	National Dialing Prefix	1
Country Code	1	Webserver Admin E-mail	admin@masserver1.np
Outgoing Prefix	8	Max Extension Length	5
Enable DAS Rules	<input checked="" type="checkbox"/>	Active Speaker Indication	<input checked="" type="checkbox"/>
Default Caller ID	46200	Always use Default Caller ID	<input type="checkbox"/>
General Alarm E-mail	admin@masserver1.np	General Alert E-mail	admin@masserver1.np
Port Usage Notification Threshold	9	Executive Ports	0
Prompts Language	System Default - English (United States)	Conference URLs	<input checked="" type="radio"/> http: <input type="radio"/> https:
Document Timeout	24 hours	User Login Timeout	8 hours
Minimum IVR Access Code Length	7	Use HTTPS only	<input type="checkbox"/>
Platform	Mitel 3300	Dial 1 to join outbound calls	<input type="checkbox"/>
Prompt to extend conference <input type="text" value="5"/> minutes prior to its end time Enabling this will terminate each conference at its end time if not extended		<input type="checkbox"/>	
<input type="button" value="Save"/>			

Configuring the SIP Server

1. Configure the following SIP Server fields:
 - **Extension First:** Type the extension number of the first IP device in the hunt group
 - **Extension Last:** Type the extension number of the last IP device in the hunt group
 - **SIP Domain:** This can be the domain name, fully qualified domain name (FQDN) or the IP address of the Mitel 3300 system used to register the AWC SIP ports.
 - **IP Address:** Type the IP address of the Mitel 3300 system.
 - **SIP Port:** typically 5060.
2. Click **Save**, and then click **OK** at the prompt.

SIP Server Configuration

Mitel 3300 SIP Server Configuration	
Extension First	46837
Extension Last	46861
SIP Domain	10.37.20.46
IP Address	10.37.20.46
SIP Port	5060
<input type="button" value="Save"/>	

Configure Users

1. From the AWC administrator page, select **Add User** to create the conference user.
 - **Username:** email address of user

Username	<input type="text"/>
Password	<input type="password"/>
Registered Phone	<input type="text"/>
<input type="button" value="Create User"/>	

2. Select the Default User Settings:
 - Select **Reservationless calls allowed leader not required.**
 - Configure the **Maximum length of reservationless conference duration.**
 - Recommend the conference duration is within two years
3. Save the configuration.

Default User Settings

Dial Out Allowed <input checked="" type="checkbox"/>	Deny Multiple Leaders <input type="checkbox"/>
Reservationless Calls	Reservationless calls allowed, leader not required
Maximum Length of Reservationless and Recurring Conferences	52 weeks
E-mail Type	<input checked="" type="radio"/> Generic Long <input type="radio"/> Generic Short
<input type="button" value="Save Changes"/> <input type="button" value="Restore Original Defaults"/>	
<input type="button" value="Restore All Users to Defaults"/>	

Set Up Reservationless Conferences

Follow the steps below to set up the conference details.

1. Log in to the AWC User Portal.
2. Enter `http://xx.xx.xx.xx` in web browser address field:
 - for example: `xx.xx.xx.xx` : MAS server IP address
3. Select AWC User Portal to set up the conference.
4. Login and select **Audio and Web Conferencing**.
5. Select conference type: **Audio only**.
6. Set up a conference: **Select Reservationless conference**

The screenshot displays the MITEL My Unified Communications user portal. At the top, the user is identified as 'User : alices@mitel.com'. A navigation menu includes 'Home', 'Set Up a Conference', 'My Conferences', 'Recordings', and 'Settings'. Below the menu, there are links for 'Published Conferences', 'Published Documents', and 'Published Recordings'. The main content area is titled 'Instant Conference' and contains the following fields and buttons:

- Set conference type:** A dropdown menu with 'Audio Only' selected.
- Your phone number:** A text input field containing '46881'.
- Phone number of participant:** An empty text input field.
- Start Conference:** A button to initiate the conference.

Below the main form, there are two side-by-side panels:

- Set Up a Conference:** Contains buttons for 'One-time Conference', 'Recurring Conference', 'Reservationless Conference', and 'See My Conferences'.
- Other Features:** Contains buttons for 'Recorded Conferences', 'Usage Reports', 'Account Settings', and 'Test Browser'.

A left-hand sidebar menu is visible, with 'Audio and Web Conferencing' highlighted.

Configure the Conference Details

1. Select the Conference Type: **Audio only**.
2. Enter the conference name.
3. Select the start date and end date (default is the maximum length of conference defined by Default user settings).
4. Configure call features.
5. Click **OK** to save configuration.

Reservationless Conference

OK Clear Cancel

Conference Details	
Conference Type	Audio Only
Conference Name	PTT Group 1
Start Date	February 12 2010
End Date	February 12 2011
Published	<input type="checkbox"/> Show this conference in the Published Area

Billing Codes	
Department	
Project	

Call Features	
Leader Required	<input type="checkbox"/> The leader must be in this conference for it to start.
Roll Call	<input type="checkbox"/> Record and announce participants' names.
Join, Leave Tone	<input checked="" type="checkbox"/> Play a beep tone when participants join and leave. <input checked="" type="radio"/> Play to All Participants. <input type="radio"/> Play to Leader Only.

Password Protection (optional)	
Conference Password	
Confirm	
E-mail Password	<input type="checkbox"/> Send the password in the invitation

6. Keep records of the following information:
 - Dial-in Numbers
 - Participant Access Code
7. Repeat the steps above to set up more conferences for additional PTT groups.



Note: Each PTT group needs one Reservationless conference.

MITEL | My Unified Communications

User : alices@mbel.com

Settings
Portal Password
Passcode
Search Directory

Audio and Web Conferencing

Home Set Up a Conference **My Conferences** Recordings Settings Reports

PTT group 1

[Change Details](#) [Delete Conference](#) [Join](#) [See available conferences](#)

Conference Details Documents Participants

Name and Time	
Conference Name	PTT group 1
Start Time	Jan 14, 2010 12:00 AM Canada/Eastern
Duration	5 months, 26 days, 23 hours <i>The conference will not stop automatically after the duration time. No new participants can join this conference.</i>
Published Conference	This conference is not published.

Access Information	
Dial-in Numbers	x46200
Access Codes	Leaders 0169541
	Participants 0179514
E-mail Invitation	Leaders
	Participants

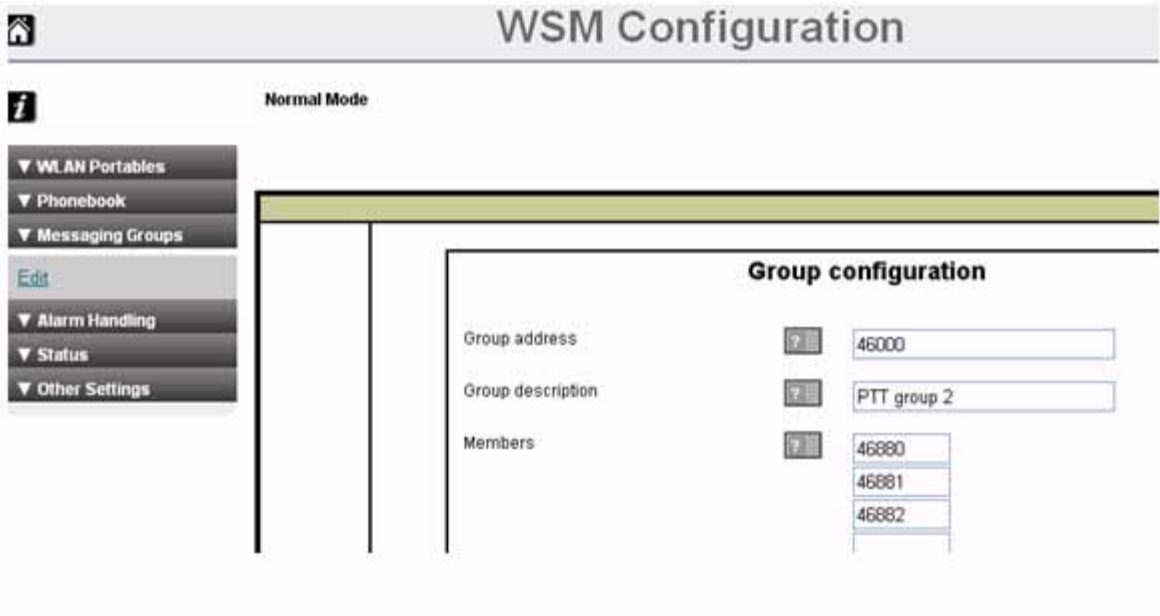
Call Features	
Leader Required	✗ The leader does not have to be in this conference for it to start.
Conference Link	✓ Use these links to join the conference:
Leaders	http://10.39.61.4/call/0169541
Participants	http://10.39.61.4/call/0179514
Roll Call	✗ Participants' names are not recorded and announced.
Join and Leave Tone	✓ Play a tone to everyone when participants join and leave.

This is conference access code for all PTT group members

Configuring WSM

Follow the steps below to configure WSM.

- 1. Select **Messaging Groups**.
- 2. Create PTT group number, name and members.



Configuring the 3300 System Speed Call Configuration

Follow the steps below to configure the 3300 system speed call for the PTT group:

1. From 3300 ICP, select **System Options**.
2. Verify **Speed Call Pause Duration** is set to 3 seconds.
3. Select **System Speed Call**.
4. Create a speed call number in 3300 ICP for PTT groups:
 - Click **Add** and fill in the following field to create speed call number:
 - **Speed Call Number:** the number the handset dials to the AWC, 46888 for example.
 - **Actual Number:** AWC hunt group number + pause + conference access code # + Pause #

For example:
46200PP#0179514#P#

 - PP#: pause 6 seconds to wait for AWC call response
 - P# at end: stop second voice prompt to reduce call set up time
5. Repeat this procedure to create additional speed call numbers for all PTT groups.



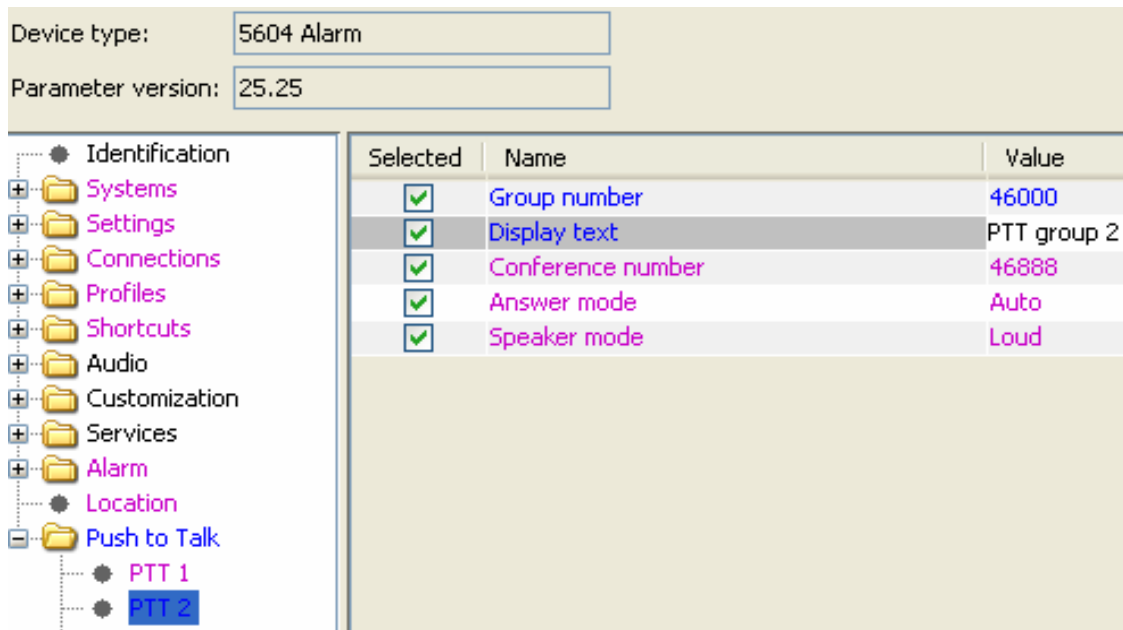
Note: Every PTT group has its conference access code.

System Speed Calls	
Speed Call Number:	<input type="text" value="46888"/>
Actual Number:	<input type="text" value="46200PP#0179514#P#"/>
Overrides Toll Control:	<input checked="" type="radio"/> No <input type="radio"/> Yes
Type:	<input checked="" type="radio"/> S/C <input type="radio"/> Int

Configuring the 5604/5607 Handset Template - Option 1

Follow the steps below to configure the 5604/5607 Handset template.

1. Select **Device Manager** from the WSM main page.
2. Select the **Template** tab.
3. Create a 5604/5607 template with PTT groups.
4. Select **Push to Talk**.
 - Select PTT group
 - **Group number**: the group number created from WSM, for example, 46000.
 - **Conference number**: the speed call number programmed from the 3300 ICP, for example, 46888.
5. Select **Answer mode**: auto or manual.
6. Select **Speaker mode**: loud or normal.
7. Apply the template to the 5604/5607 handsets.



Configuring the 5604/5607 Handset Template - Option 2

The Enbloc Send-key can be enabled to reduce call setup time by 4 seconds.

1. In the Master Base Station configuration, select **DECT – Master**, and enable **Enable Enbloc send-key**.
2. In the PTT group configuration: add '#' after the conference number.
 - Conference number: for example, 46888# .



Note: When Enable Enbloc send-key is enabled, it will not be possible to dial a number that includes '#'. Confirm with 3300 ICP-related configurations, such as FAC. For example, if a FAC contains a #, it is recommended that this option not be used because it will interfere with the operation of the FAC.

Configuration	System	Suppl. Serv.	Master	Mobility Master	Radio
General					
LAN					
IP					
LDAP					
DECT					
VoIP					
UNITE					
Administration					
Users					
Device Overview					
Traffic					
Backup					
Update					
Diagnostics					
Reset					

Mode	Active
Multi-master	
Master Id	0
Enable Pari function	<input checked="" type="checkbox"/>
IP-PBX	
Protocol	SIP
Proxy	10.37.68.196
Alt. Proxy	10.37.20.46
Domain	
Max. internal number length	5 used to decide internal/exter
Enbloc Dialing	<input checked="" type="checkbox"/>
Enable Enbloc Send-key	<input checked="" type="checkbox"/>
Allow DTMF through RTP	<input checked="" type="checkbox"/>

Device type: 5604 Alarm

Parameter version: 25.25

Selected	Name	Value
<input checked="" type="checkbox"/>	Group number	45000
<input checked="" type="checkbox"/>	Display text	PTT group 1
<input checked="" type="checkbox"/>	Conference number	46888#
<input checked="" type="checkbox"/>	Answer mode	Auto
<input checked="" type="checkbox"/>	Speaker mode	Loud

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