



Grandstream Networks, Inc.

SIP Presence Guide



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SUPPORTED DEVICES

Model	Supported			Firmware
	Using VPK (Visual Status)	Using MPK (LED Status)	Using EXT board (LED Status)	
GXP21XX Series				
GXP2130	Yes	Yes	No	1.0.9.25 or higher
GXP2140	Yes	No	Yes	1.0.9.25 or higher
GXP2160	Yes	Yes	No	1.0.9.25 or higher
GXP2135	Yes	No	No	1.0.9.25 or higher
GXP2170	Yes	No	Yes	1.0.9.25 or higher
GXP17XX Series				
GXP1760	Yes	No	No	1.0.1.28 or higher
GXP1780	Yes	No	No	1.0.1.28 or higher
GXP1782	Yes	No	No	1.0.1.28 or higher
GXP16XX Series				
GXP1610/GXP1615	No	Yes	No	1.0.4.67 or higher
GXP1625/1620	No	Yes	No	1.0.4.67 or higher
GXP1630/1628	No	Yes	No	1.0.4.67 or higher



INTRODUCTION

The UCM6XXX is now offering the ability to subscribe to extensions state, and to be informed about the current presence status of a coworker phone extension. So far, the users can use the BLF (Busy Lamp Field) to check the phone communication state, and will be advertised of every state change (Idle / Ringing / Connected), the added value of SIP Presence is to keep the user advertised on the monitored extension's current general state as well (Available / Busy / DND ...).

SIP Presence is one of the new added features on the UCM6XXX series, allowing a user to publish his/her presence state, this state can be predefined and known state (Available / Busy / Unavailable ..), or a custom state that can take any format, and can be customized by the user. The monitoring extension can subscribe to the presence status and be updated about any status change.

This guide describes the utility and steps for configuring the SIP Presence on UCM6xxx, as a main feature when the user wants to be informed about other extensions' status.

OVERVIEW

The SIP Presence feature improves the users monitoring on the UCM6xxx and extends the MPKs utility on end points. A Busy Lamp is limited in its usability to phone line status, it can provide line connectivity and calling status, but something more informative is required.

SIP Presence can provide ability to be informed about user's extension when it's offline / online like a Busy Lamp, but that's just the basis. Users can also use Presence to share their status, and tell the others that they are out of office / On Chat / Do not Want to Be Disturbed, and so on.

This guide will be explicating the SIP Presence feature, and the user should have the UCM6xxx and end points supporting Presence Watcher features:

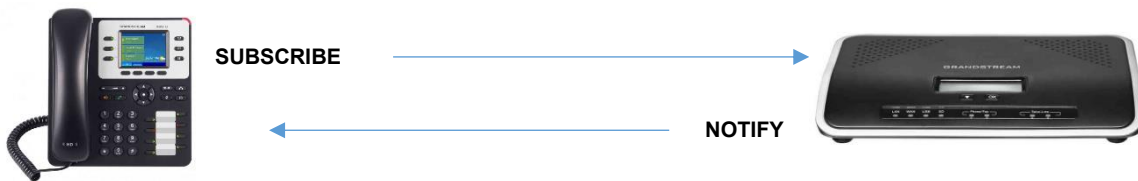


Figure 1 : SIP Presence Feature

The prerequisites in our scenario are as follow:

- UCM6xxx with firmware version 1.0.14.23 or higher.
- A phone supporting presence watcher feature see **[SUPPORTED DEVICES]** section.



SETTING YOUR PRESENCE STATUS

Setting Presence Status via Admin Web Interface

The SIP Presence feature on UCM6xxx includes six available statuses, users can access to the UCM Web GUI → **Extension/Trunk** → **Extensions** → **Features** and list the different statuses:

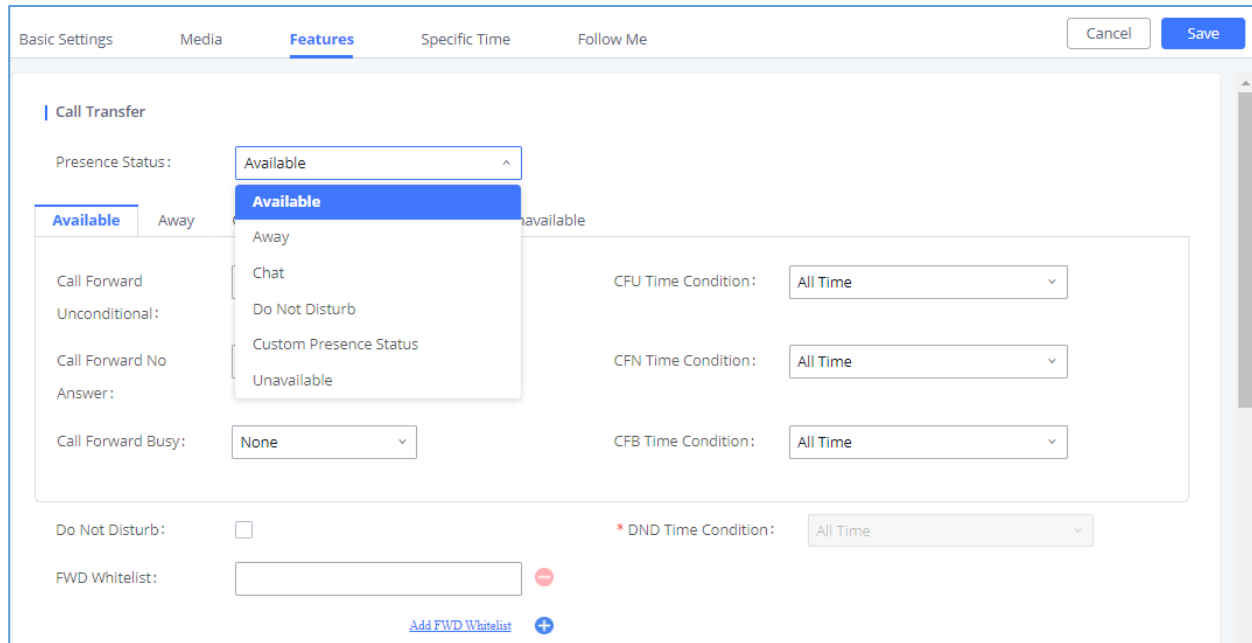


Figure 2 : Presence Status

The above screenshot shows the available statuses, user can select a status depending on their availability and preferences. Once done, a NOTIFY message will be sent to the subscribers announcing the new defined status.

The above available statuses are explained in the following table:

Table 1: SIP Presence Status

Available	The contact is online and can participate in conversations/phone calls.
Away	The contact is currently away (ex: for lunch break).
Chat	The contact has limited conversation flexibility and can only be reached via chat.
Do Not Disturb	The Contact is on DND (Do Not Disturb) mode.
Custom Presence Status	Please enter the presence status for this mode on the web GUI.
Unavailable	The contact is unreachable for the moment, please try to contact later.

The default status among the listed ones above is '**Available**', changing it will generate a NOTIFY message that will be sent to all the subscribed presence watchers.



Users can also set a new custom state under the “**Custom Presence Status**” tab, following figure shows a new custom presence status named “**InMeeting**”:

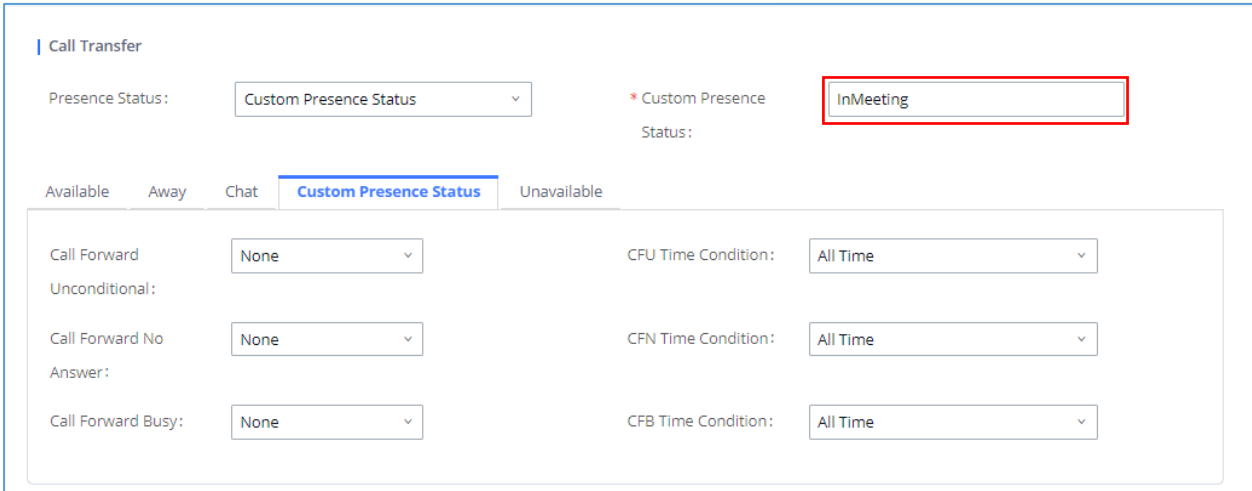
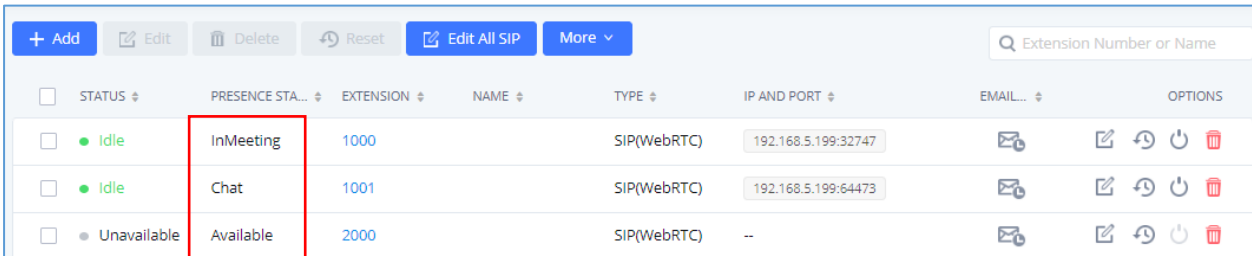


Figure 3: Custom Presence Status

To simplify the status viewing, a new column was added to the main Extensions page, listing all the extensions Presence Statuses, as displayed in the following figure:



STATUS	PRESENCE STA...	EXTENSION	NAME	TYPE	IP AND PORT	EMAIL...	OPTIONS
Idle	InMeeting	1000		SIP(WebRTC)	192.168.5.199:32747		
Idle	Chat	1001		SIP(WebRTC)	192.168.5.199:64473		
Unavailable	Available	2000		SIP(WebRTC)	--		

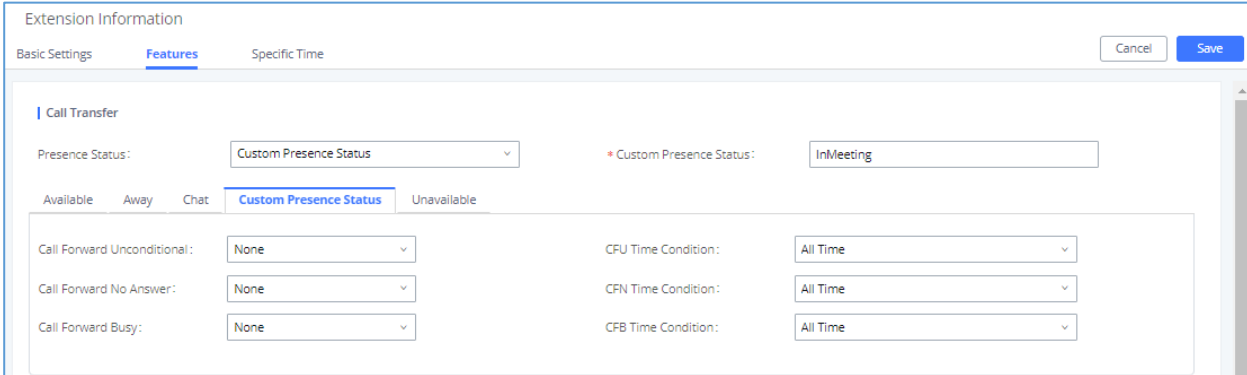
Figure 4 : Extensions Presence Status



Setting Presence Status via User Portal

Users can also login to their portal to view and edit their Presence Status, this feature is available when accessing to the user portal and navigating to **Basic Information**→**Extensions**→**Features**.

The same six statuses are also available, and user can select any status as displayed in the following screenshot:



The screenshot shows the 'Extension Information' user portal interface. At the top, there are tabs for 'Basic Settings', 'Features', and 'Specific Time'. The 'Features' tab is active. Below the tabs, there are 'Cancel' and 'Save' buttons. The main content area is titled 'Call Transfer' and contains the following settings:

- Presence Status:** A dropdown menu set to 'Custom Presence Status'. To its right, a text input field shows 'InMeeting'.
- Available** | **Away** | **Chat** | **Custom Presence Status** | **Unavailable** (A horizontal menu where 'Custom Presence Status' is selected and highlighted in blue).
- Call Forward Unconditional:** A dropdown menu set to 'None'.
- Call Forward No Answer:** A dropdown menu set to 'None'.
- Call Forward Busy:** A dropdown menu set to 'None'.
- CFU Time Condition:** A dropdown menu set to 'All Time'.
- CFN Time Condition:** A dropdown menu set to 'All Time'.
- CFB Time Condition:** A dropdown menu set to 'All Time'.

Figure 5 : Presence Status in User Portal

Setting Presence Status via Feature Code

If the user is not having Web Access, the Presence feature can be accessible using feature code, and users can dial this code to get the corresponding voice prompt with various options in order to choose which presence status they want to put themselves into then follow the instructions to confirm the setting.

The default used feature code for Presence feature is *48, users can access / edit this case from Web GUI→**Call Features**→**Feature Codes**:



Feature Maps DND/Call Forward **Feature Codes** Cancel Save

Reset All Default All

* Voicemail Access Code:	<input type="text" value="*98"/>	<input checked="" type="checkbox"/>	* My Voicemail:	<input type="text" value="*97"/>	<input checked="" type="checkbox"/>
* Agent Pause:	<input type="text" value="*83"/>	<input checked="" type="checkbox"/>	* Agent Unpause:	<input type="text" value="*84"/>	<input checked="" type="checkbox"/>
* Paging Prefix:	<input type="text" value="*81"/>	<input checked="" type="checkbox"/>	* Intercom Prefix:	<input type="text" value="*80"/>	<input checked="" type="checkbox"/>
* Blacklist Add:	<input type="text" value="*40"/>	<input checked="" type="checkbox"/>	* Blacklist Remove:	<input type="text" value="*41"/>	<input checked="" type="checkbox"/>
* Pickup on Ringing Prefix:	<input type="text" value="**"/>	<input checked="" type="checkbox"/>	* Pickup In-call Prefix:	<input type="text" value="*45"/>	<input type="checkbox"/>
* Pickup Extension:	<input type="text" value="*8"/>	<input checked="" type="checkbox"/>	* Direct Dial Voicemail Prefix:	<input type="text" value="*"/>	<input checked="" type="checkbox"/>
* Direct Dial Mobile Phone Prefix:	<input type="text" value="*88"/>	<input checked="" type="checkbox"/>	* Call Completion Request:	<input type="text" value="*11"/>	<input checked="" type="checkbox"/>
* Call Completion Cancel:	<input type="text" value="*12"/>	<input checked="" type="checkbox"/>	Enable Spy:	<input type="checkbox"/>	
* Listen Spy:	<input type="text" value="*54"/>		* Whisper Spy:	<input type="text" value="*55"/>	
* Barge Spy:	<input type="text" value="*56"/>		* Wakeup Service:	<input type="text" value="*36"/>	<input checked="" type="checkbox"/>
* PMS Wakeup Service:	<input type="text" value="*35"/>	<input checked="" type="checkbox"/>	* Update PMS Room Status:	<input type="text" value="*23"/>	<input checked="" type="checkbox"/>
* Presence Status:	<input type="text" value="*48"/>	<input checked="" type="checkbox"/>	* Dynamic Agent Logout:	<input type="text" value="*85"/>	<input checked="" type="checkbox"/>
* Voicemail Group Access Code:	<input type="text" value="*99"/>	<input checked="" type="checkbox"/>			

Figure 6 : Presence Status Feature Code

When dialing Presence feature code, users have also six available states, below is the order you get on voice prompt when dialing the feature code:

- 1- Unavailable: Press '1' to set the Available state.
- 2- Available: Press '2' to set Available state.
- 3- Away: Press '3' to set Away state.
- 4- Chat: Press '4' to set Chat state.
- 5- DND: Press '5' to set DND state.
- 6- Custom Presence Status: Press '6' to set the Custom state.

Note: When pressing '6', the extension will use the custom status. See [**Custom Presence Status**]



MONITORING PRESENCE STATUS

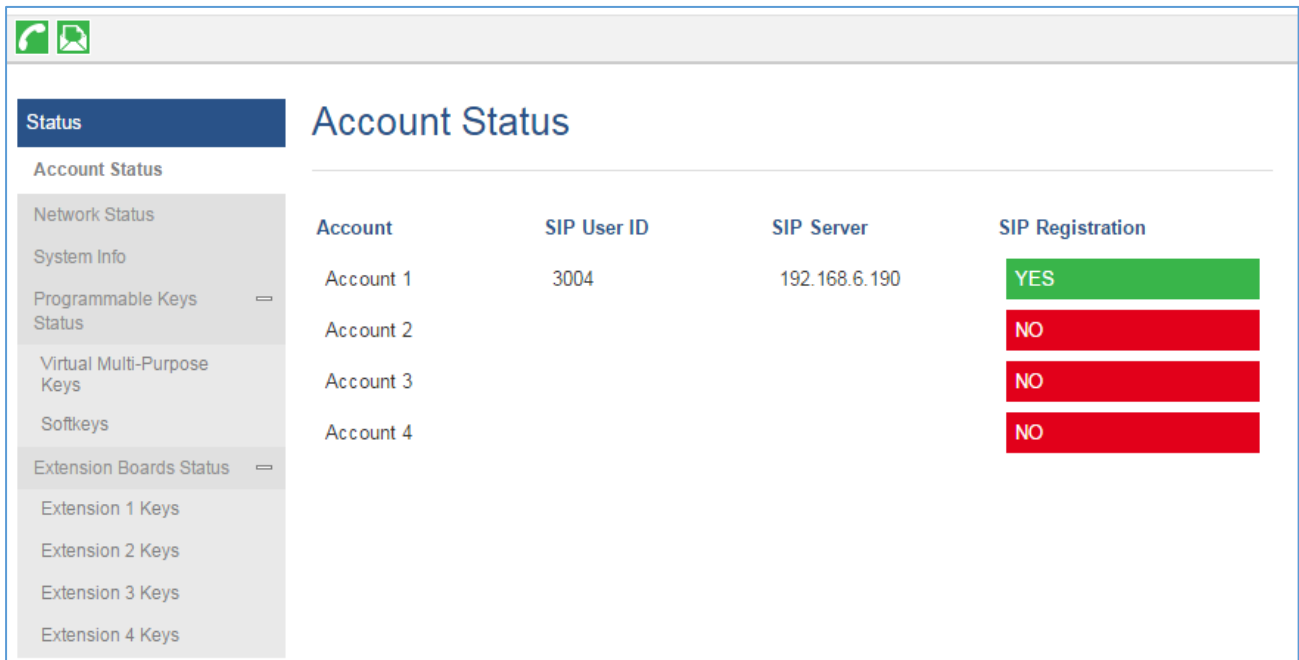
Using VMPKs

In our scenario, we will be using GXP phone to illustrate the use of VMPKs to monitor another SIP entity's Presence status.

The recommendations on the GXP phone before proceeding to the presence watcher configuration on the VMPKs are as follow:

- Have a GXP phone supporting presence feature → Refer to [**SUPPORTED DEVICES**].
- Have a registered SIP account on the same UCM6xxx as the monitored extension.

The presence watcher can use one of the available accounts on the phone, at least one should be registered as illustrated on the following screenshot:



Account	SIP User ID	SIP Server	SIP Registration
Account 1	3004	192.168.6.190	YES
Account 2			NO
Account 3			NO
Account 4			NO

Figure 7 : Account Status

Once the phone is having a registered account, we can proceed to presence watcher configuration on phone's VMPK settings.

Virtual Multi-Purpose Keys (VPK) configuration page is under phone's web UI → **Settings** → **Programmable Keys** → **Virtual Multi-Purpose Keys** tab. By default, all fixed VPKs are listed:



Virtual Multi-Purpose Keys

Order	Mode	Account	Description	Value	Locked
1	Default	1			<input type="button" value="Edit VPK"/>
2	Default	2			<input type="button" value="Edit VPK"/>
3	Default	1			<input type="button" value="Edit VPK"/>
4	Default	4			<input type="button" value="Edit VPK"/>

Figure 8 : VMPKs Configuration

Click on “Edit VPK” for the line (VPK) you would like to configure. A new window will pop up for VPK configuration, up to 20 mode options can be selected for the VPK, select presence watcher. Once done, press “Save” on this window and press “Save VPK” on the bottom of the Virtual Multi-Purpose Keys page again to apply the change.

The configuration should be like the following:

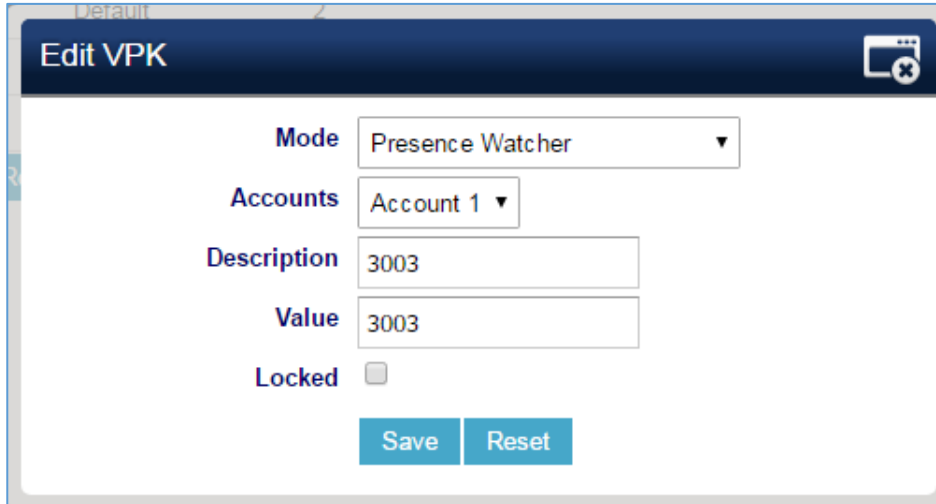


Figure 9 : VMPKs with Presence Watcher

Users can also use the following p-value to provision the VMPK with Presence Watcher mode:

Table 2: Presence Watcher P Value

Mode Name	Mode String	Mode P-Value
Presence Watcher	presencewatcher	12



Once done, phone will display the new VMPK with monitored extension and status icon, the LED should be Green, as displayed in the following screenshot:

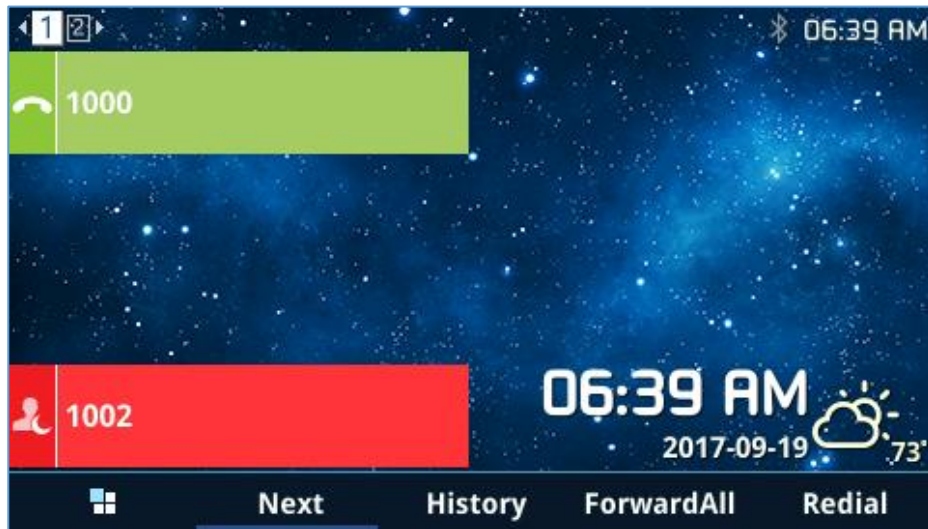


Figure 10 : Presence DND Status on GXP21XX

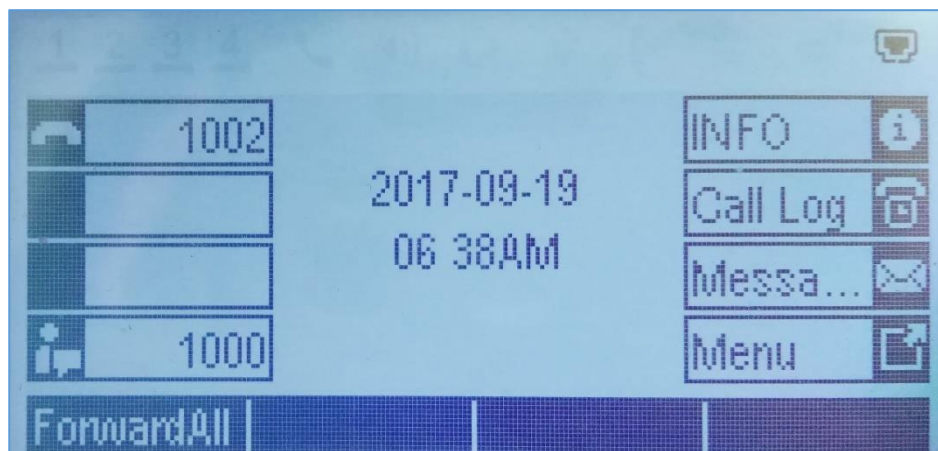


Figure 11: Presence Chat Status on GXP17XX

Six presence statuses lead to six VMPKs and icons states. Each status is indicated by a different icon on the LCD and different LED color and Label color (GXP21xx only).



Please find the icon indications below for different Presence Status (Starting from firmware 1.0.9.25):

Table 3: VPK Icon Indications on GXP21XX phones













VPK Mode	State	Icon + Label	LED Status
Presence Watcher	Available	 3003	GREEN
	Away	 3003	GREEN
	Chat	 3003	RED
	Custom Status	 3003	GREEN
	DND	 3003	RED
	Unavailable	 3003	OFF

Table 4: VPK Icon Indications on GXP17XX phones

VPK Mode	State	Icon + Label	LED Status
Presence Watcher	Available	 1000	GREEN
	Away	 1000	GREEN
	Chat	 1000	RED
	Custom Status	 1000	GREEN
	DND	 1000	RED
	Unavailable	 1000	OFF



Using Extension Boards and MPKs

Users have also the ability to set presence watcher on phone MPKs (Multi-purpose Keys), and connected Extension Boards.

For MPKs configuration, similarly to the VMPKs configuration, you need to have a phone supporting Physical Multi-Purpose Keys. For instance, GXP2130 / GXP2160 / GXP1628 are offering physical MPKs, and you can do the same configuration for Presence Watcher. This is available on phone Web UI→**Settings**→**Programmable Keys**→**Physical Multi-Purpose Keys**.

Note: Using Physical MPKs, the Presence Watcher feature will be limited in comparison with VMPKs. The six available Presence Statuses will have the following LED states when using MPKs:

Table 5: MPKs LED States

Presence Watcher	Chat, DND, Unavailable	LED Off
	Available, Custom Status, Away	LED On

Users can also use Extension Boards for Presence Watcher configuration, for example GXP2140 and GXP2170 support Extension Boards (GXP2200Ext), the extension board configuration is available under web UI→**Settings**→**Extension Boards**.

Following are examples of LED status on extension boards:



Figure 12 : Ext Presence Status

