



# Grandstream Networks, Inc.

UCM6xxx Series

HMobile PMS Integration Guide



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## INTRODUCTION

Property Management System is a software application used in the hospitality industry to automate some hotel functions such as guest booking, guest details, etc...

The system can be divided into three parts:

- PMS (Property Management System)
- PMSI (Property Management System Interface)
- PBX

Grandstream UCM6XXX series have integrated HMobile Connect PMSI which supports a large variety of PMS software providing following hospitality features: Check-in, Check-out, set Room Status, Wake-up call and more.

The following figure illustrates the communication flow between the PBX (Grandstream UCM6xxx Series) and PMS software, which is done through a middleware system (HMobile Connect) acting as interface between both parties.

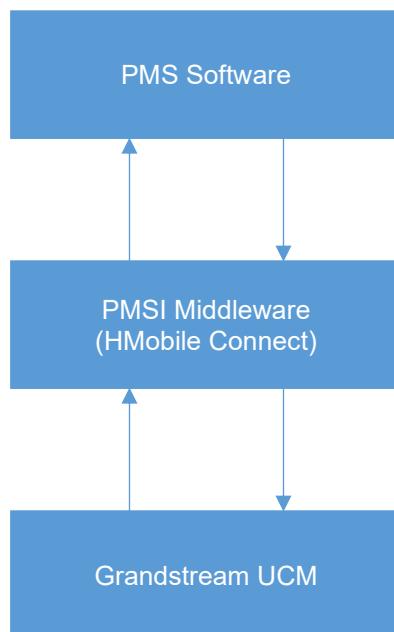


Figure 1: UCM & PMS interaction

The following list includes all PMS systems that are compatible with Hmobile:

[http://www.chardesarrollodesistemas.com/download/general/documentation/char\\_pms\\_integrated\\_en.pdf](http://www.chardesarrollodesistemas.com/download/general/documentation/char_pms_integrated_en.pdf)

For more information about Hmobile you can visit their website below:

<http://www.hmobile.es>



## SUPPORTED PMS FEATURES

The UCM6xxx supports the following features using HMobile PMS Systems.

Table 1: PMS Supported Features

Features
Check-In
Check-out
Wake-up Call
Update
Room Status
Room Move
Do Not Disturb
Mini Bar
MSG

### Check-in

**Check-in** feature is used to store information such as Room Number, Extension, Username, Guest Account, Guest Credit Money, Maid Code, Arrival/Departure Date upon guest arrival.

Guest language can also be received from PMS to customize phone system prompts (if possible).

<input type="checkbox"/>	Address	<input type="checkbox"/>	Room Number	<input type="checkbox"/>	Extension	<input type="checkbox"/>	Room Status	<input type="checkbox"/>	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	2000	<input type="checkbox"/>	2000	<input type="checkbox"/>	2000	<input type="checkbox"/>	Check-in	<input type="checkbox"/>	JohnDoe				1155	<input type="checkbox"/> <input type="checkbox"/>

Figure 2: Check-in

### Check-out

**Check-out** feature is used upon guest departure to clear stored data at check-in and restore extension's default settings including language, privileges and deleting all voicemails on that extension.

The "Room Status" will be set to "checkout".

<input type="checkbox"/>	Address	<input type="checkbox"/>	Room Number	<input type="checkbox"/>	Extension	<input type="checkbox"/>	Room Status	<input type="checkbox"/>	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	2000	<input type="checkbox"/>	2000	<input type="checkbox"/>	2000	<input type="checkbox"/>	Check-out	<input type="checkbox"/>					1155	<input type="checkbox"/> <input type="checkbox"/>

Figure 3: Check-out

### Update Entry

When an update is needed for an entry, in case of an error for instance, PMS sends **Update** command to the UCM6XXX containing Name, Surname, and Language to update according to modifications made on PMS side.



## Update Room Status

**Room Status** feature is used to update the status of the room.

Three statuses are available:

- **Cleaning**
- **Repairing**
- **Cleaning Repair finished.**

\*23XXXX is the feature code to update the Room Status, where XXXX is the Maid Code.

When dialing \*23XXXX, the room status (**Cleaning**, **Repairing** or **Cleaning Repair finished**) should be selected by the maid using corresponding status code.

	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	2000	2000	2000	Cleaning	JohnDoe			956	2000	 

Figure 4: Cleaning

	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	2000	2000	2000	Repairing	JohnDoe			956	2000	 

Figure 5: Repairing

	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	2000	2000	2000	Check-in	JohnDoe			956	2000	 

Figure 6: Cleaning Repair Finished

## Room Move

When a guest changes or moves to another room, **Room Move** command is sent by the PMS through “H-Mobile Connect” to notify a guest room change, and all stored information will be moved to the new room. In the figure below, all data on room 4000 is moved to room 2000.

	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	2000	2000	2000	Check-in	JohnDoe			956	2000	 
<input type="checkbox"/>	4000	4000	4000	Check-out						 

Figure 7: Room Move

## Wake-up Call

**Wake-up** feature is used to make the extension ring upon PMS signal.

The UCM sends a notification message to the PMS including time and date of answered call in order for the system to repeat (or not) the wake-up call.

### Wake-up Call Action Status

- When setting up a Wake-up call on the PMS, UCM6XXX initially sets “Action Status” to **Programmed**.
- Once the call is made, UCM6XXX sets “Action Status” to **Executed**.
- Programmed Wake-up calls can be **Cancelled** from the PMS, the UCM will update the Action Status to **Cancelled** as shown on the following figure.



Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Cancelled	Single	No action	2017-08-10	09:30	 

Figure 8: Wake-up Call Cancelled

## Wake-up Call Types

Two types of wake-up call are available:

### Single

The call will be made once at the programmed time.

Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Programmed	Single	No action	2017-08-10	09:30	 

Figure 9: Single Wake-up Calls

### Daily

The call will be repeated each day at the programmed time.

Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Programmed	Daily	No action	2017-08-10	09:30	 

Figure 10: Daily Wake-up Calls

## Wake-up Answer Status

Three Answer Statuses are available in response to the Wake-up call:

### Answered

If the guest answers the wake-up call, UCM6XXX will set “Answer Status” to **Answered**.

Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Executed	Daily	Answered	2017-08-10	06:53	 

Figure 11: Wake-up Call Answered

### Rejected

If the guest rejects the wake-up call, UCM6XXX will set “Answer Status” to **Busy**.

Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Executed	Daily	Busy	2017-08-10	06:54	 

Figure 12: Wake-up Call Busy



## No Answer

If the guest doesn't answer the wake-up call after timeout, UCM6XXX will set "Answer Status" to **No Answer**.

Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Executed	Daily	No Answer	2017-08-10	06:55	 

Figure 13: Wake-up Call No Answer

## Error

If an error occurs during the wake-up call, UCM6XXX will set "Answer Status" to **Error**.

Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Executed	Daily	Error	2017-08-10	06:59	 

Figure 14: Wake-up Call Error

## MSG Notification

Sent by PMS through HMobile Connect to notify the existence of a new message for the guest (in Reception, voicemail, etc.)

## Do Not Disturb

When **Do Not Disturb** is activated on an extension, all calls to that extension will get busy treatment. This command is sent by PMS through "H-Mobile Connect" to enable/disable DND status.

## Mini Bar

**Mini Bar** feature is used by the maid to monitor the consumer's goods.

Users need to create first a mini bar and the maid code in order to consult the goods, please refer to **Mini Bar** for more details.



## UCM6XXX CONFIGURATION

Following configuration are based UCM6XXX with firmware 1.0.15.16. The configuration may vary using higher firmware versions.

### Create Extensions

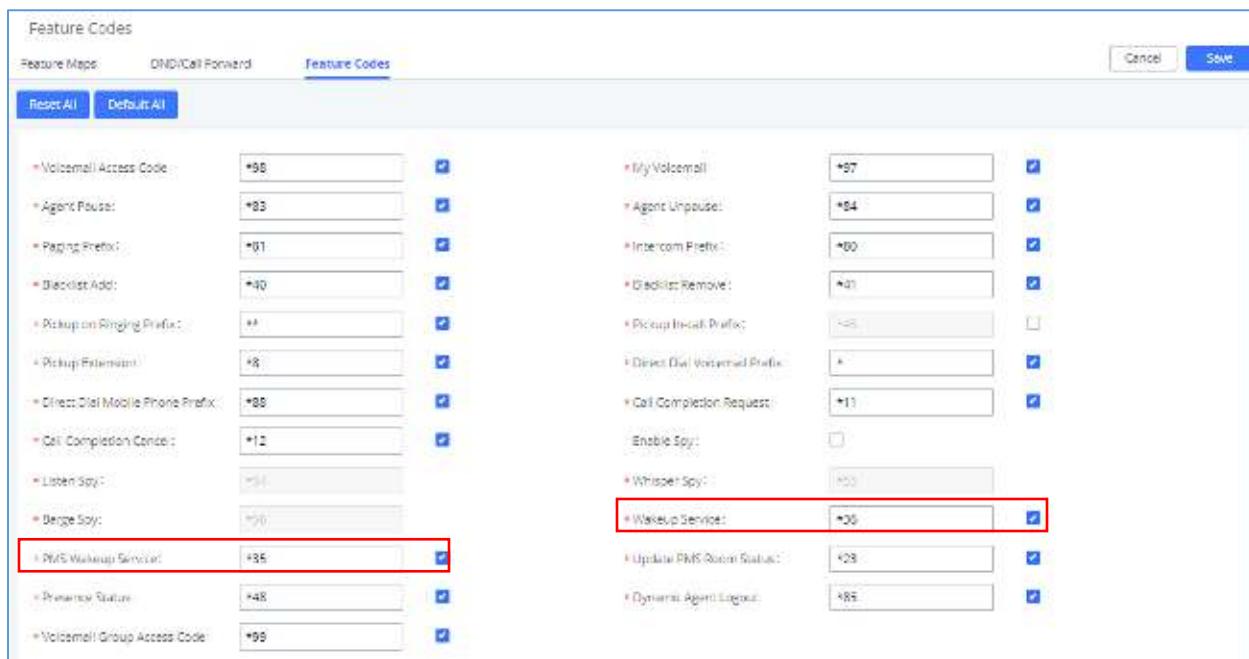
To configure the UCM6XXX with a PMS Server, users need first to create some extensions on the UCM6XXX that will be associated with guests' rooms.

To create or modify existing extensions, log in to the UCM6XXX's by typing its address on a browser, then go to **Extension/Trunk→Extensions**.

### Configure UCM6XXX with PMS Server

To use all PMS features, make sure that the following feature codes are configured from UCM6XXX Web GUI→Call Features→Feature Codes:

- **Update PMS Room Status**
- **PMS Wake Up Service**



Feature Code	Description	Enabled
*98	VoiceMail Access Code	<input checked="" type="checkbox"/>
*83	Agent Pause	<input checked="" type="checkbox"/>
*81	Paging Prefix	<input checked="" type="checkbox"/>
*40	Blacklist Add	<input checked="" type="checkbox"/>
*	Pickup on Ringing Prefix	<input checked="" type="checkbox"/>
*8	Pickup Extension	<input checked="" type="checkbox"/>
*88	Direct Dial Mobile Phone Prefix	<input checked="" type="checkbox"/>
*12	Call Completion Codes	<input checked="" type="checkbox"/>
*	Listen Spy	<input type="checkbox"/>
*70	Barge Spy	<input type="checkbox"/>
*36	PMS Wakeup Service	<input checked="" type="checkbox"/>
*48	Presence Status	<input checked="" type="checkbox"/>
*99	VoiceMail Group Access Code	<input checked="" type="checkbox"/>
*87	My VoiceMail	<input checked="" type="checkbox"/>
*84	Agent Unpause	<input checked="" type="checkbox"/>
*80	Intercom Prefix	<input checked="" type="checkbox"/>
*21	Blacklist Remove	<input checked="" type="checkbox"/>
*	Pickup In-call Prefix	<input type="checkbox"/>
*	Direct Dial Voicemail Prefix	<input checked="" type="checkbox"/>
*11	Call Completion Request	<input checked="" type="checkbox"/>
*	Enable Spy	<input type="checkbox"/>
*50	Whisper Spy	<input type="checkbox"/>
*39	WakeUp Service	<input checked="" type="checkbox"/>
*28	Update PMS Room Status	<input checked="" type="checkbox"/>
*85	Dynami Agent Logout	<input checked="" type="checkbox"/>

Figure 15: PMS Feature Codes

Navigate to **Value-added Features→PMS→Basic settings**, the following table explains the fields needed to be configured to set the connection for PMS system.

Table 2: PMS Basic Settings

Field	Description
PMS Module	Select <b>HMobile</b> to use HMobile PMS system features.



<b>Wake Up Prompt</b>	Choose the prompt to be played upon Wake-Up call request, users can click on Prompt to upload a customer prompt to the UCM6XXX.
<b>PMS URL</b>	Enter the server's URL address (i.e <a href="http://192.168.6.185:8081/soap">192.168.6.185:8081/soap</a> ).
<b>UCM Port</b>	Enter the UCM6XXX's port to use when communicating with H-Mobile Server.
<b>Username</b>	Enter the Username for PMS system authentication.
<b>Password</b>	Enter the Password for PMS system authentication.
<b>Site</b>	Enter the Site ID to identify the hotel on the PMS server.
<b>Back Up Voicemail Recordings</b>	Used for backing up voicemail recordings to external storage after check-out.

PMS

<b>Basic Settings</b>	Room Status	Wakeup Service	Mini Bar	Maid
PMS Module:	Hmobile			
Wakeup Prompt:	Wake Call			
* PMS URL:	192.168.6.185:8081/soap			
* UCM Port:	8081			
* Username:	userid			
* Password:	3254sa			
* Site:				
Back Up Voicemail Recordings:	<input type="checkbox"/>			

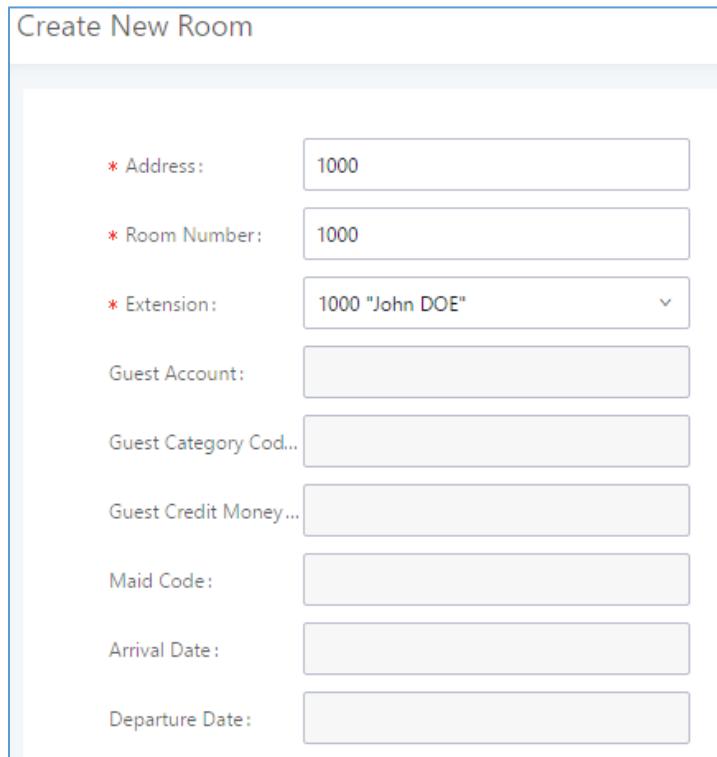
Figure 16: PMS Basic Settings - HMobile



## Room Management

Users can then create and manage Rooms from **Value-added Features→PMS→Room Status**:

- Click **Create Add Room** to Create a new room for a guest.



The dialog box is titled "Create New Room". It contains the following fields:

* Address:	1000
* Room Number:	1000
* Extension:	1000 "John DOE"
Guest Account:	
Guest Category Cod...	
Guest Credit Money...	
Maid Code:	
Arrival Date:	
Departure Date:	

Figure 17: Create a New Room

- Click on **Delete Selected Rooms** to delete any selected room.

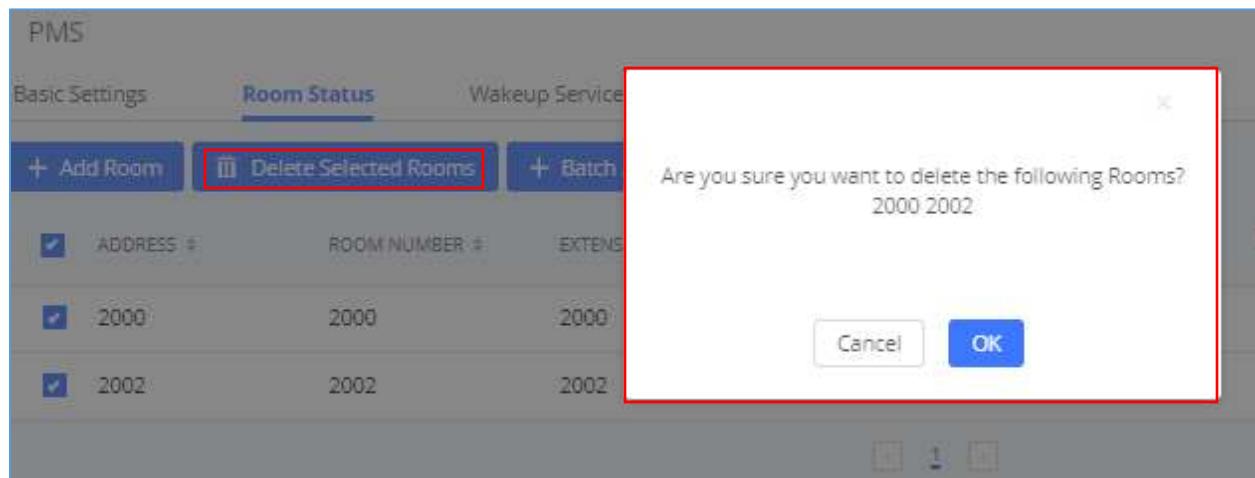
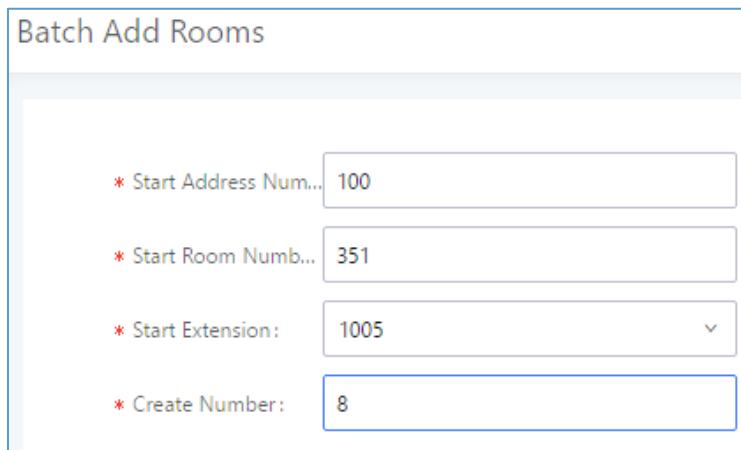


Figure 18: Delete Selected Rooms



- Click on **Batch Add Rooms** to create multiple rooms at the same time.



The dialog box is titled "Batch Add Rooms". It contains four input fields with validation asterisks (\*):  
 - \* Start Address Num...: 100  
 - \* Start Room Numb...: 351  
 - \* Start Extension: 1005  
 - \* Create Number: 8

Figure 19: Batch Add Rooms

- User can also click on  next to a room to delete it, or click on  to edit the room's options.



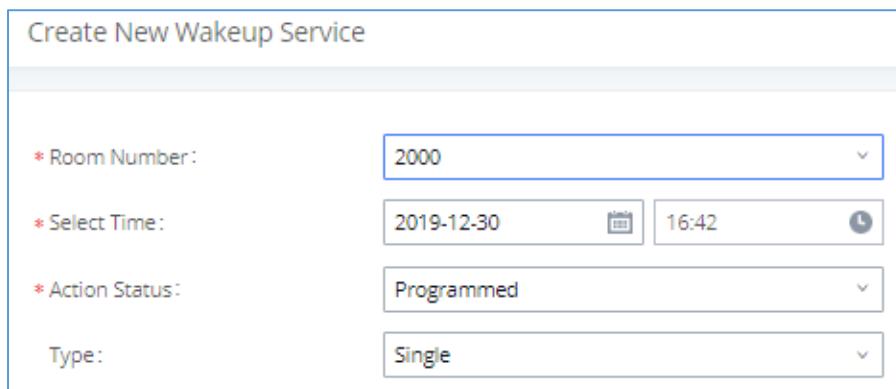
The table is titled "PMS" and has tabs for "Basic Settings", "Room Status" (selected), "Wake-up Service", "M/H Bar", and "Mail".  
 Buttons: "+ Add Room", "Delete Selected Rooms", and "+ Batch Add Rooms".  
 Columns: ADDRESS, ROOM NUMBER, EXTENSION, ROOM STATUS, USER NAME, GUEST CATEGORY CODE, ARRIVAL DATE, DEPARTURE DATE, and OPTIONS.  
 Data:  
 Row 1: ADDRESS: 2000, ROOM NUMBER: 1000, EXTENSION: 2000, ROOM STATUS: Check-out, USER NAME: (empty), GUEST CATEGORY CODE: (empty), ARRIVAL DATE: (empty), DEPARTURE DATE: (empty), OPTIONS:    
 Row 2: ADDRESS: 2002, ROOM NUMBER: 2002, EXTENSION: 2002, ROOM STATUS: Check-out, USER NAME: (empty), GUEST CATEGORY CODE: (empty), ARRIVAL DATE: (empty), DEPARTURE DATE: (empty), OPTIONS:  

Figure 20: Room Status

## Wake Up Service

Users can create a New Wake Up service for Rooms from **Value-added Features→PMS→Wake Up Service**.

Click on **Create New Wake Up Service**, the following window will pop up:



The dialog box is titled "Create New Wakeup Service". It contains four input fields with validation asterisks (\*):  
 - \* Room Number: 2000  
 - \* Select Time: 2019-12-30 16:42  
 - \* Action Status: Programmed  
 - Type: Single

Figure 21: Create New Wake Up Service



Please refer to the following table for fields description of Wake-Up Service:

Table 3: PMS Wake Up Service

Field	Description
Room Number	Select the room number where to call.
Time	Set the time of the wakeup call.
Action Status	Show the status of the call: <ul style="list-style-type: none"> <li><b>Programmed:</b> the call is scheduled for the time set.</li> <li><b>Cancelled:</b> the call is canceled.</li> <li><b>Executed:</b> the wakeup call is made.</li> </ul>
Type	<ul style="list-style-type: none"> <li><b>Single:</b> The call will be made once on the specific time.</li> <li><b>Daily:</b> The call will be repeated every day on the specific time</li> </ul>

The following figure shows the status of the wakeup call once the call is made at the specified time.

<input type="checkbox"/>	Name	Extension	Status	Action Status	Answer Status	Date	Time	Options
<input type="checkbox"/>	John	1000	Enabled	Executed	Answered	2017-05-04	05:18	 

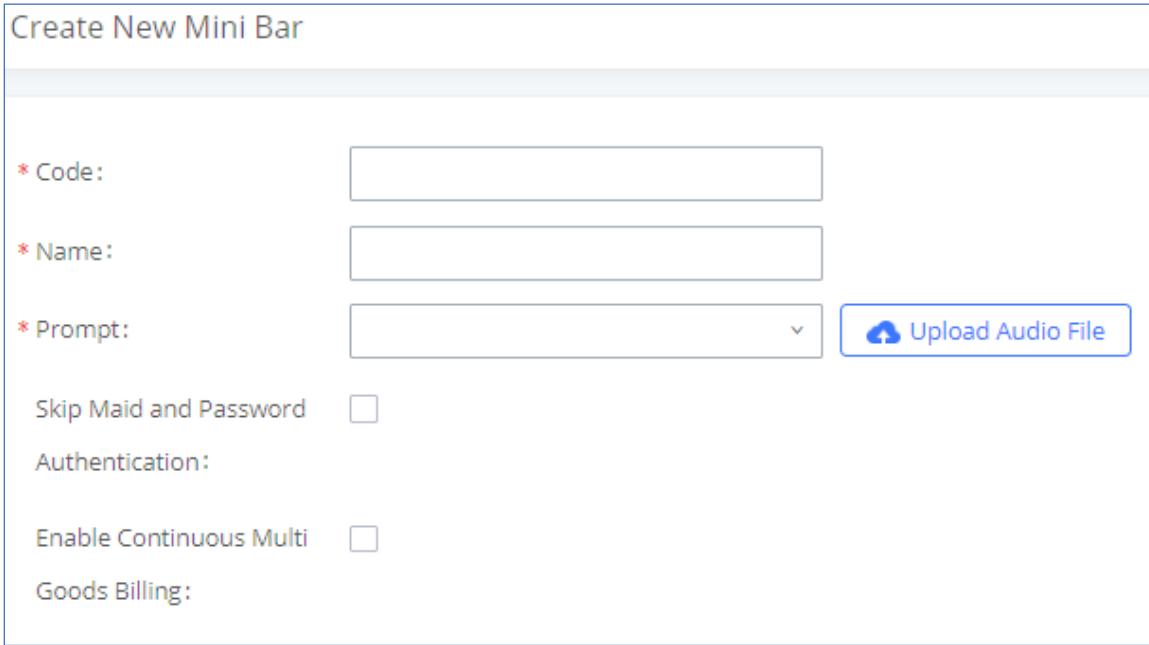
Figure 22: Wake Up Call Executed



## Mini Bar

### Create New Mini Bar

To create a new mini bar, click on “**Add Mini Bar**” under UCM webGUI→**Value-added Features→PMS→Mini Bar**, the following window will pop up:



The form titled "Create New Mini Bar" contains the following fields:

- \* Code: Input field
- \* Name: Input field
- \* Prompt: Input field with a dropdown arrow and a "Upload Audio File" button with a cloud icon.
- Skip Maid and Password:
- Authentication:
- Enable Continuous Multi Goods Billing:
- Goods Billing:

Figure 23: Create New Mini Bar

Table 4: Create New Mini Bar

<b>Code</b>	Enter a non-existing extension number to be dialed when using the mini bar feature.
<b>Name</b>	Enter a name for the mini bar.
<b>Prompt</b>	Select the Prompt to play once connected to the mini bar.
<b>Skip Maid and Password Authentication</b>	If enabled, the default maid code will be 0000, no authentication is required. Enter 0000 followed by # to access the consumer goods
<b>Enable Continuous Multi Goods Billing</b>	If enabled, please separate the goods' codes by * (star).

To create a new prompt please refer to **CREATE CUSTOM PROMPT**

### Create New Maid

Once the Mini Bar created, a new maid needs to be created to consult the consumer goods.

To create a new maid, click on **Add** under UCM webGUI→**Value-added Features→PMS→Maid Code**, the following window will popup:



Create New Maid

* Maid Code:	1100
* Password:	123456

Figure 24: Create New Maid

Table 5: Create New Maid

<b>Maid Code</b>	Enter a code to identify the new maid. Only digits accepted. This code is required to identify the maid when checking consumer's goods.
<b>Password</b>	Enter a password associated with the maid. Only digits accepted.

User could either edit the “Maid” secret by clicking on  , or delete a maid by clicking on  to remove the selected maid.

## Create Consumer Goods

Create then the consumer goods and set associated prompts to them.

- To create a new consumer goods, click on  under UCM webGUI→Value-added Features→PMS→Mini Bar, the following window will popup:

Create New Consumer Goods

* Code:	
* Name:	

Figure 25: Create New Consumer Goods

Table 6: Consumer Goods

<b>Code</b>	Enter the Goods Code.
<b>Name</b>	Enter the Name of the Goods

- Users could edit the created consumer goods by clicking on  , The name can be changed while the consumer goods “Code” cannot:



Edit Consumer Goods: Water

* Code:	101
* Name:	Water

Figure 26: Edit Consumer Goods.

- To delete a consumer goods user could click on  to remove the item.

The Minibar page shows as following:

PMS			
Basic Settings	Room Status	Wakeup Service	Mini Bar
<a href="#">+ Add Mini Bar</a>			
CODE		NAME	OPTIONS
4000		Minibar	 
<a href="#">+ Add Consumer Goods</a>			
CODE		NAME	OPTIONS
101		Water	 

Figure 27: Mini Bar



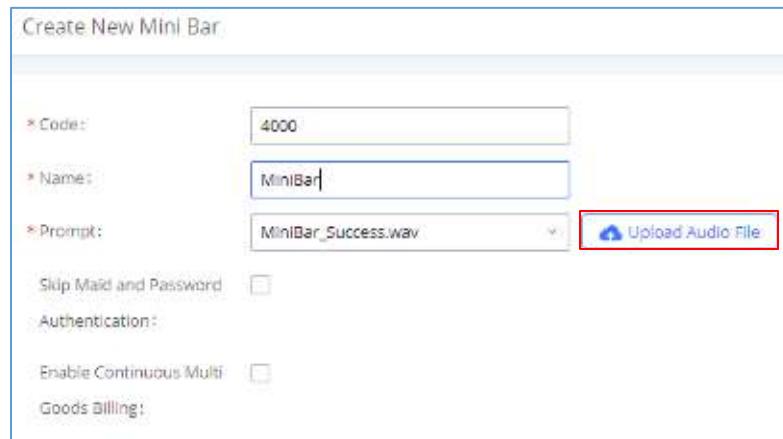
## Using Mini Bar

To use Mini Bar feature, follow the steps below:

1. Make a call to the Mini Bar extension (4000 in this example), a voice prompt will be played.
2. Enter the Maid Code followed by star and the password followed by pound (example: 1100\*123456#).
3. Type the consumer's code that the Maid wants to check followed by pound (example: 101#).

## CREATE CUSTOM PROMPT

Prompts on PMS can be customized/personalized at customer's convenience by either recoding or uploading new prompts. Click on "Prompt" option as shown on the following figure to be redirected to "Custom Prompt" page, or go to Web GUI→PBX Settings→Voice Prompt→Custom Prompt page directly.



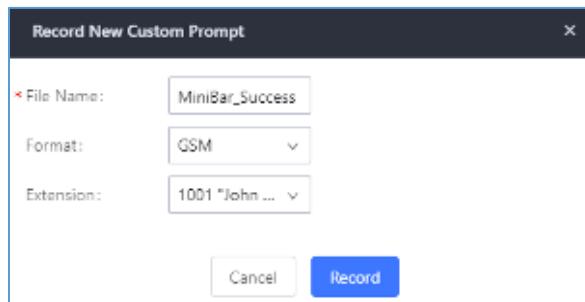
The screenshot shows a 'Create New Mini Bar' dialog box. It has fields for 'Code' (4000), 'Name' (MiniBar), and 'Prompt' (MiniBar\_Success.wav). There is a red box around the 'Upload Audio File' button next to the prompt dropdown. Other options like 'Skip Maid and Password' and 'Authentication' have checkboxes, but they are not checked.

Figure 28: Customize Prompt

Once the PMS prompt file (created/uploaded) is successfully added to the UCM6xxx, it will be shown in the prompt list options to select in different PMS scenarios.

## Record New Custom Prompt

In the UCM6xxx web UI→PBX Settings→Voice Prompt→Custom Prompt page, click on **+ Record** and follow the steps below to record new prompt.



The screenshot shows a 'Record New Custom Prompt' dialog box. It has fields for 'File Name' (MiniBar\_Success), 'Format' (GSM), and 'Extension' (1001 "John ..."). At the bottom right is a blue 'Record' button.

Figure 29: Record New Prompt



1. Specify the custom prompt file name.
2. Select the format (GSM or WAV) for the prompt file to be recorded.
3. Select the “Extension” to receive the call from the UCM6xxx to record the prompt.
4. Click the “Record” button. A call will be initiated to the selected extension.
5. Pick up the call and start the recording following voice prompts.
6. The recorded file will be listed in the Custom Prompts page (see figure 30). Users could select to rerecord, play or delete the recording.



Figure 30: Custom Prompt

## Upload Custom Prompt

If the user has a pre-recorded prompt file, click on **Upload** in Web GUI under **PBX Settings→Voice Prompt→Custom Prompt** page to upload the file to the UCM6xxx.

Following are PMS prompt requirements to be accepted by UCM6xxx series:

- PCM encoded.
- 16 bits.
- 8000Hz mono.
- In .mp3 or .wav format; or raw/ulaw/alaw/gsm file with “.ulaw” or “.alaw” suffix.
- File size under 5M.

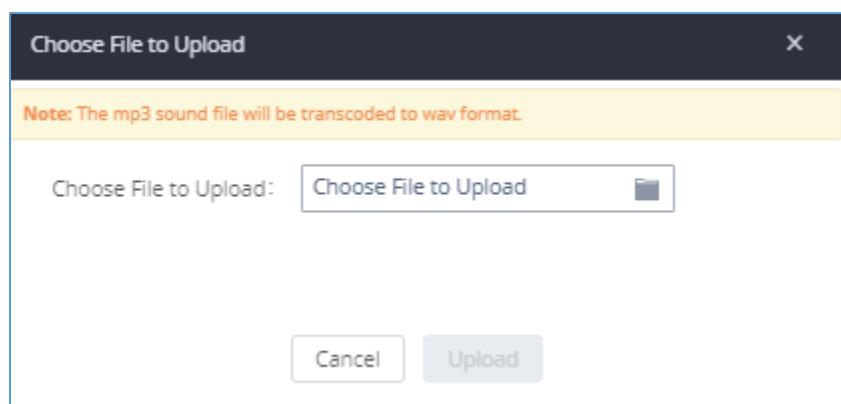


Figure 31: Upload Custom Prompt

Click on the button to select audio file from local PC and click on to start uploading it. Once uploaded, the file will appear in the “Custom Prompt” web page.

