



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.

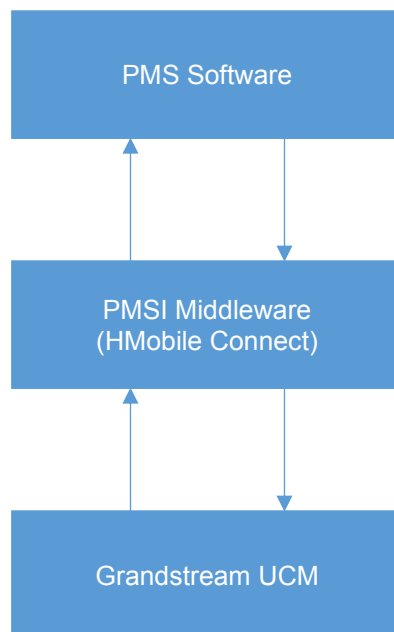


Figure 1: UCM & PMS interaction

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

http://www.chardesarrollodesistemas.com/download/general/documentation/char_pms_integrated_en.pdf

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	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			1155		 

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	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-out						 

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.



<input type="checkbox"/>	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



<input type="checkbox"/>	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



<input type="checkbox"/>	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.





<input type="checkbox"/>	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 1.0.14.23. The configuration may vary using higher firmware versions.

Create Extensions

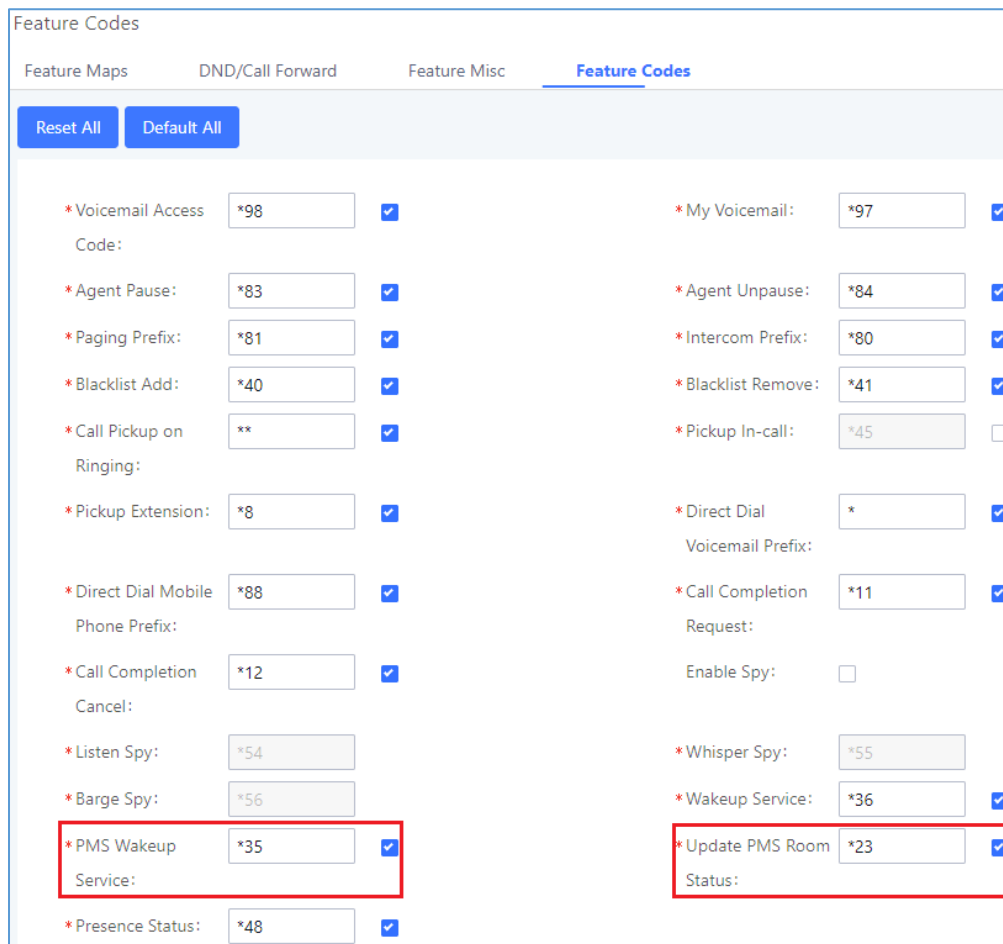
To configure the UCM6XXX with a PMS Server, users need first to create some extensions on the UCM6XXX that will be associated with guests' rooms.

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 Name	Code	Enabled
* Voicemail Access Code:	*98	<input checked="" type="checkbox"/>
* Agent Pause:	*83	<input checked="" type="checkbox"/>
* Paging Prefix:	*81	<input checked="" type="checkbox"/>
* Blacklist Add:	*40	<input checked="" type="checkbox"/>
* Call Pickup on Ringing:	**	<input checked="" type="checkbox"/>
* Pickup Extension:	*8	<input checked="" type="checkbox"/>
* Direct Dial Mobile Phone Prefix:	*88	<input checked="" type="checkbox"/>
* Call Completion Cancel:	*12	<input checked="" type="checkbox"/>
* Listen Spy:	*54	<input type="checkbox"/>
* Barge Spy:	*56	<input type="checkbox"/>
* PMS Wakeup Service:	*35	<input checked="" type="checkbox"/>
* Presence Status:	*48	<input checked="" type="checkbox"/>
* My Voicemail:	*97	<input checked="" type="checkbox"/>
* Agent Unpause:	*84	<input checked="" type="checkbox"/>
* Intercom Prefix:	*80	<input checked="" type="checkbox"/>
* Blacklist Remove:	*41	<input checked="" type="checkbox"/>
* Pickup In-call:	*45	<input type="checkbox"/>
* Direct Dial Voicemail Prefix:	*	<input checked="" type="checkbox"/>
* Call Completion Request:	*11	<input checked="" type="checkbox"/>
Enable Spy:		<input type="checkbox"/>
* Whisper Spy:	*55	<input type="checkbox"/>
* Wakeup Service:	*36	<input checked="" type="checkbox"/>
* Update PMS Room Status:	*23	<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 HMobile to use HMobile PMS system features.
Wake Up Prompt	Choose the prompt to be played upon Wake-Up call request, users can click on Prompt to upload a customer prompt to the UCM6XXX.
PMS URL	Enter the server's URL address (i.e http://192.168.5.131:8081/wsdl).
UCM Port	Enter the UCM6XXX's port to use when communicating with H-Mobile Server.
Username	Enter the Username for PMS system authentication.
Password	Enter the Password for PMS system authentication.

PMS

Basic Settings Room Status Wakeup Service Mini Bar

PMS Module: ▼

* Wakeup Prompt: ▼ Prompt

* PMS URL:

* UCM Port:

* Username:

* Password:

* Site:

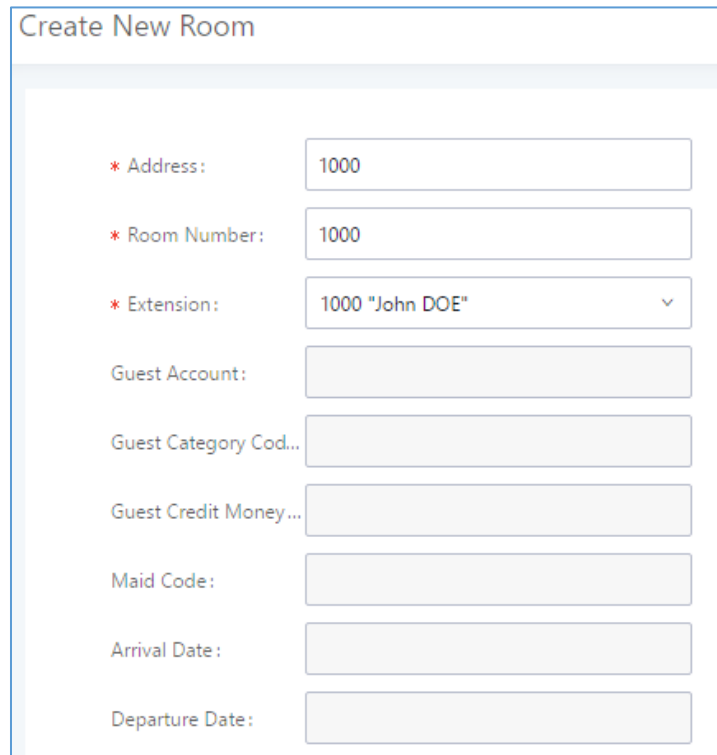
Figure 16: PMS Basic Settings - HMobile



Room Management

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

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



The screenshot shows a 'Create New Room' form with the following fields:

- * Address: 1000
- * Room Number: 1000
- * Extension: 1000 "John DOE" (dropdown menu)
- Guest Account: (empty)
- Guest Category Cod...: (empty)
- Guest Credit Money...: (empty)
- Maid Code: (empty)
- Arrival Date: (empty)
- Departure Date: (empty)

Figure 17: Create a New Room

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

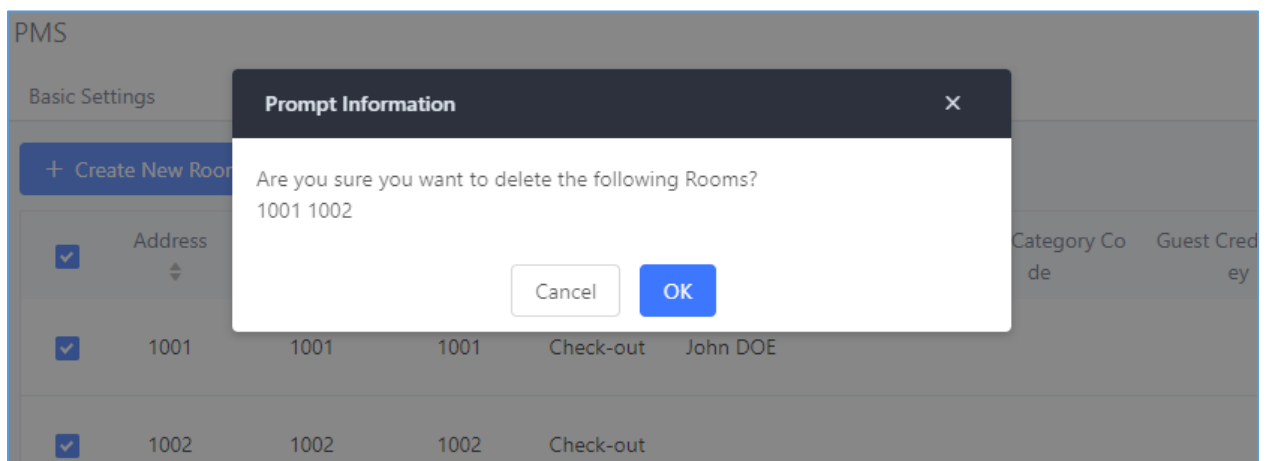


Figure 18: Delete Selected Rooms



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

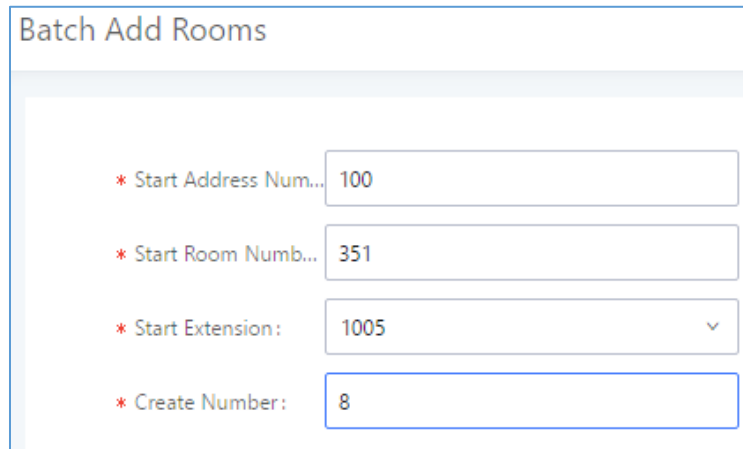

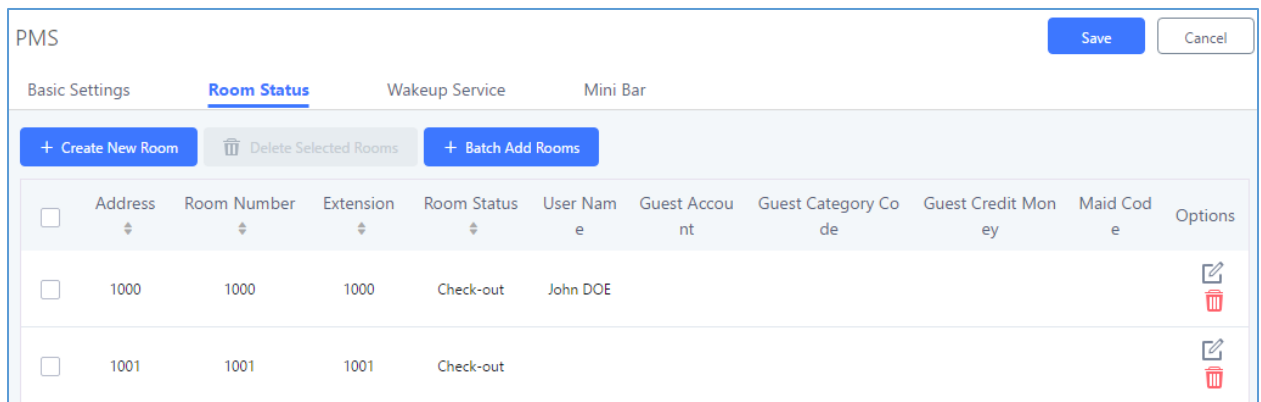


Figure 19: Batch Add Rooms

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







	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	1000	1000	1000	Check-out	John DOE					 
<input type="checkbox"/>	1001	1001	1001	Check-out						 

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:



Create New Wakeup Service

* Room Number:

* Date:

* Time:

* Action Status:

Type:

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"> Programmed: the call is scheduled for the time set. Cancelled: the call is canceled. Executed: the wakeup call is made.
Type	<ul style="list-style-type: none"> Single: The call will be made once on the specific time. Daily: The call will be repeated every day on the specific time

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 **+ Create New Mini Bar** under UCM webGUI→**Value-added Features**→**PMS**→**Mini Bar**, the following window will pop up:

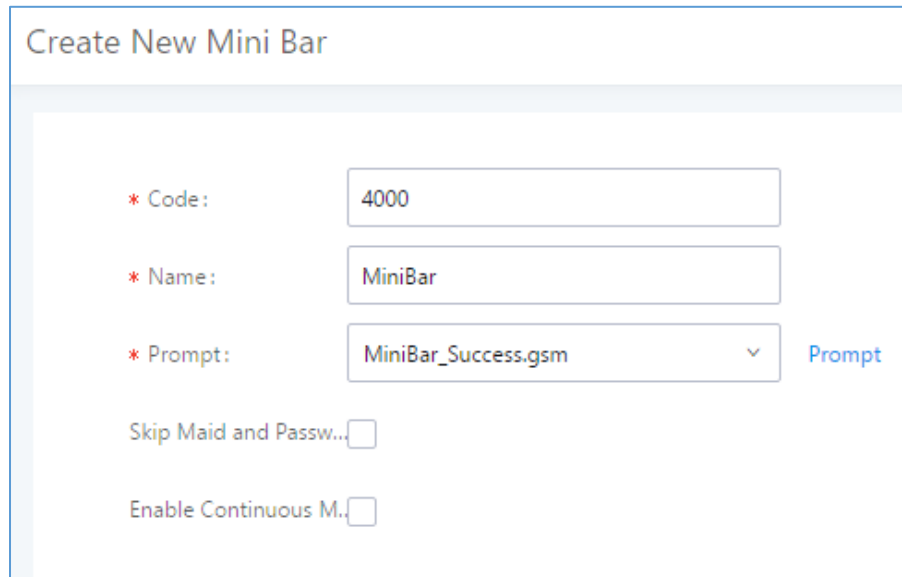


Figure 23: Create New Mini Bar

Table 4: Create New Mini Bar

Code	Enter a non-existing extension number to be dialed when using the mini bar feature.
Name	Enter a name for the mini bar.
Prompt	Select the Prompt to play once connected to the mini bar.
Skip Maid and Password Authentication	If enabled, the default maid code will be 0000, no authentication is required. Enter 0000 followed by # to access the consumer goods
Enable Continuous Multi Goods Billing	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 **+ Create New Maid** under UCM webGUI→**Value-added Features**→**PMS**→**Mini Bar**, the following window will popup:



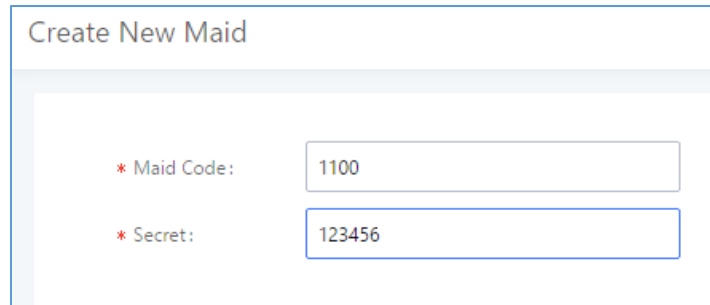



Figure 24: Create New Maid

Table 5: Create New Maid

Maid Code	Enter a code to identify the new maid. Only digits accepted. This code is required to identify the maid when checking consumer’s goods.
Secret	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:

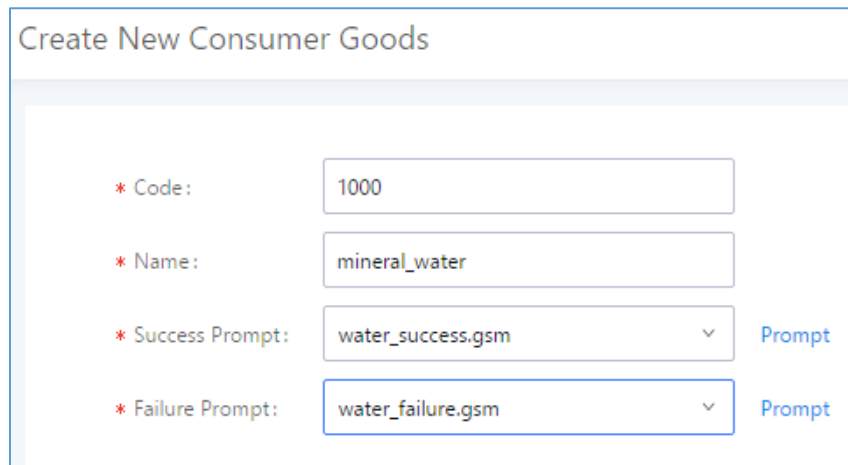



Figure 25: Create New Consumer Goods

Table 6: Consumer Goods

Code	Enter the Goods Code.
Name	Enter the Name of the Goods
Success Prompt	Select the success prompt when typing the code of the goods by the maid.
Failure Prompt	Select the failure prompt.



- Users could edit the created consumer goods by clicking on , All the parameter could be changed (Name, Success Prompt, Failure Prompt) except for the consumer goods “Code” as shown below:




* Code:	<input type="text" value="101"/>	
* Name:	<input type="text" value="Water"/>	
* Success Prompt:	<input type="text" value="Water.gsm"/> 	Prompt
* Failure Prompt:	<input type="text" value="Fail.gsm"/> 	Prompt

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**

[+ Create New Mini Bar](#)



Code	Name	Options
4000	MiniBar	 

[+ Create New Maid](#)

Maid Code	Secret	Options
1100	123456	 

Total: 1 < 1 > 10 / page Goto 1

[+ Create New Consumer Goods](#)

Code	Name	Options
7000	mineral_water	 

Total: 1 < 1 > 10 / page Goto 1

Figure 27: Mini Bar



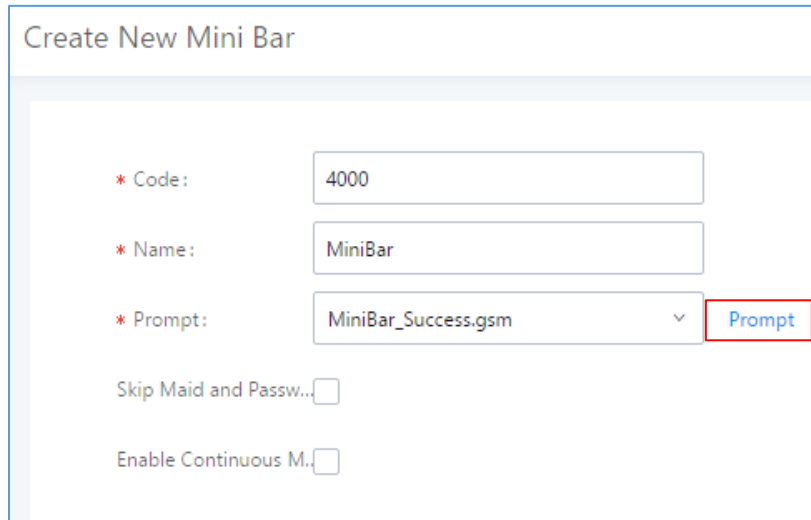
Using Mini Bar

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 web form titled "Create New Mini Bar". It has the following fields and options:

- * Code: 4000
- * Name: MiniBar
- * Prompt: MiniBar_Success.gsm (with a dropdown arrow and a "Prompt" button highlighted in red)
- Skip Maid and Passw...
- Enable Continuous M...

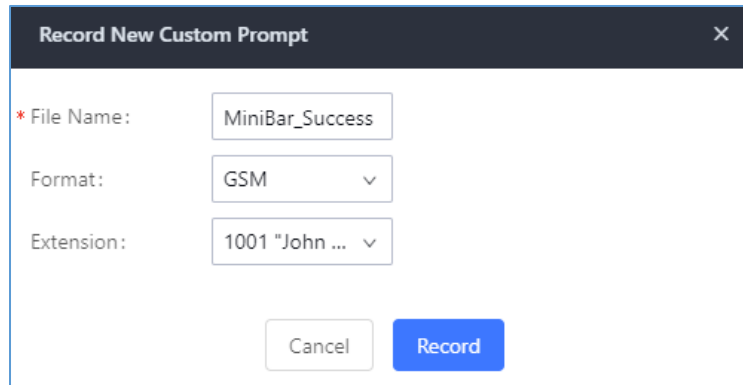
Figure 28: Customize Prompt

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 New Custom Prompt](#) and follow the steps below to record new prompt.





Record New Custom Prompt [X]

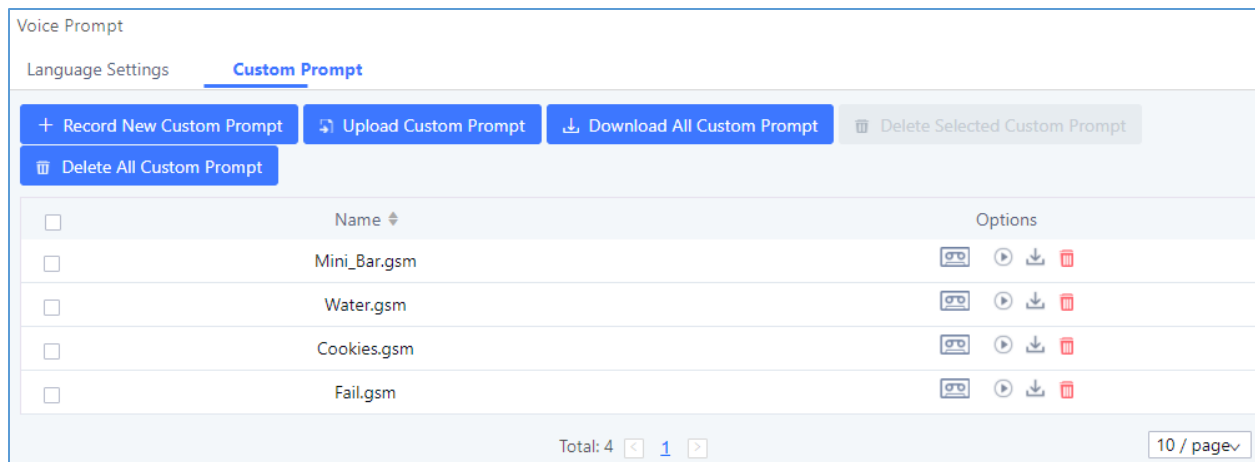
* File Name:

Format:

Extension:

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.



Voice Prompt

Language Settings **Custom Prompt**

<input type="checkbox"/>	Name	Options
<input type="checkbox"/>	Mini_Bar.gsm	<input type="button" value="Play"/> <input type="button" value="Download"/> <input type="button" value="Delete"/>
<input type="checkbox"/>	Water.gsm	<input type="button" value="Play"/> <input type="button" value="Download"/> <input type="button" value="Delete"/>
<input type="checkbox"/>	Cookies.gsm	<input type="button" value="Play"/> <input type="button" value="Download"/> <input type="button" value="Delete"/>
<input type="checkbox"/>	Fail.gsm	<input type="button" value="Play"/> <input type="button" value="Download"/> <input type="button" value="Delete"/>

Total: 4

10 / page

Figure 30: Custom Prompt

Upload Custom Prompt

If the user has a pre-recorded prompt file, click on 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.



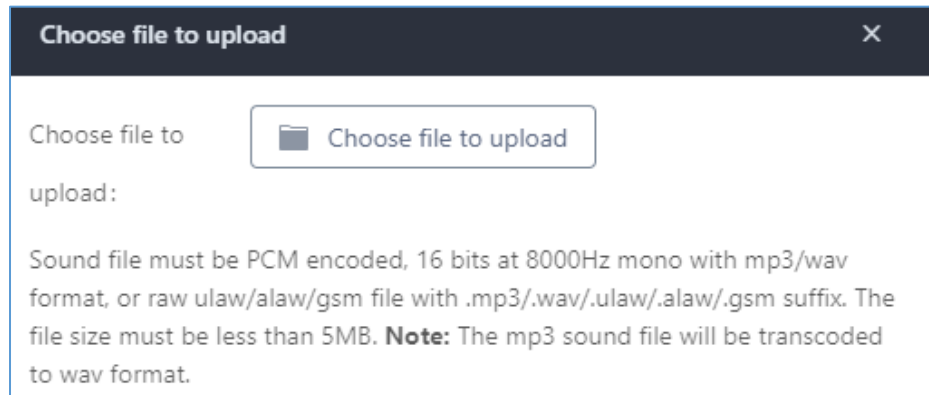


Figure 31: Upload Custom Prompt

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.