



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 softwares 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.

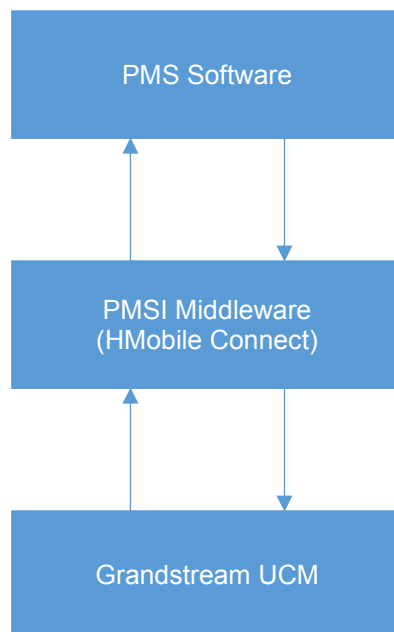


Figure 1: UCM & PMS interaction

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	Co	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	2000	2000	2000	Checkin	John Doe	123456	2		9999900	--	 

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	Co	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	2000	2000	2000	Checkout	John Doe	--	--		--	--	 

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 Accou	Guest Category	Co	Guest Credit Mone	Maid Code	Options
<input type="checkbox"/>	2001	2001	2001	Cleaning	John Doe	123456	2		9999900	588	 

Figure 4: Cleaning



<input type="checkbox"/>	Address	Room Number	Extension	Room Status	User Name	Guest Accou	Guest Category	Co	Guest Credit Mone	Maid Code	Options
<input type="checkbox"/>	2001	2001	2001	Repairing	John Doe	123456	2		9999900	588	 

Figure 5: Repairing



<input type="checkbox"/>	Address	Room Number	Extension	Room Status	User Name	Guest Accou	Guest Category	Co	Guest Credit Mone	Maid Code	Options
<input type="checkbox"/>	2001	2001	2001	Checkin	John Doe	123456	2		9999900	4862	 

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 2001 is moved to room 2000.





<input type="checkbox"/>	Address	Room Number	Extension	Room Status	User Name	Guest Accou	Guest Category	Co	Guest Credit Mone	Maid Code	Options
<input type="checkbox"/>	2000	2000	2000	Checkin	John Doe	123456	2		9999900	4862	 
<input type="checkbox"/>	2001	2001	2001	Checkout	--	--	--		--	--	 

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	2016/08/18	11:50	 

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	2016/08/17	10:29	 

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	2016/08/18	11:48	 

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	Single	Answered	2016/08/18	11:31	 

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	Single	Busy	2016/08/18	11:35	 

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	Single	No Answer	2016/08/18	11:35	 

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	Single	Error	2016/08/17	11:41	 

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 1.0.13.14. 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 PBX > Basic/Call Routes.

Configure UCM6XXX with PMS Server

To use all PMS features, make sure that the following feature codes are configured from UCM6XXX Web GUI > PBX > Internal Options > Feature Codes:

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

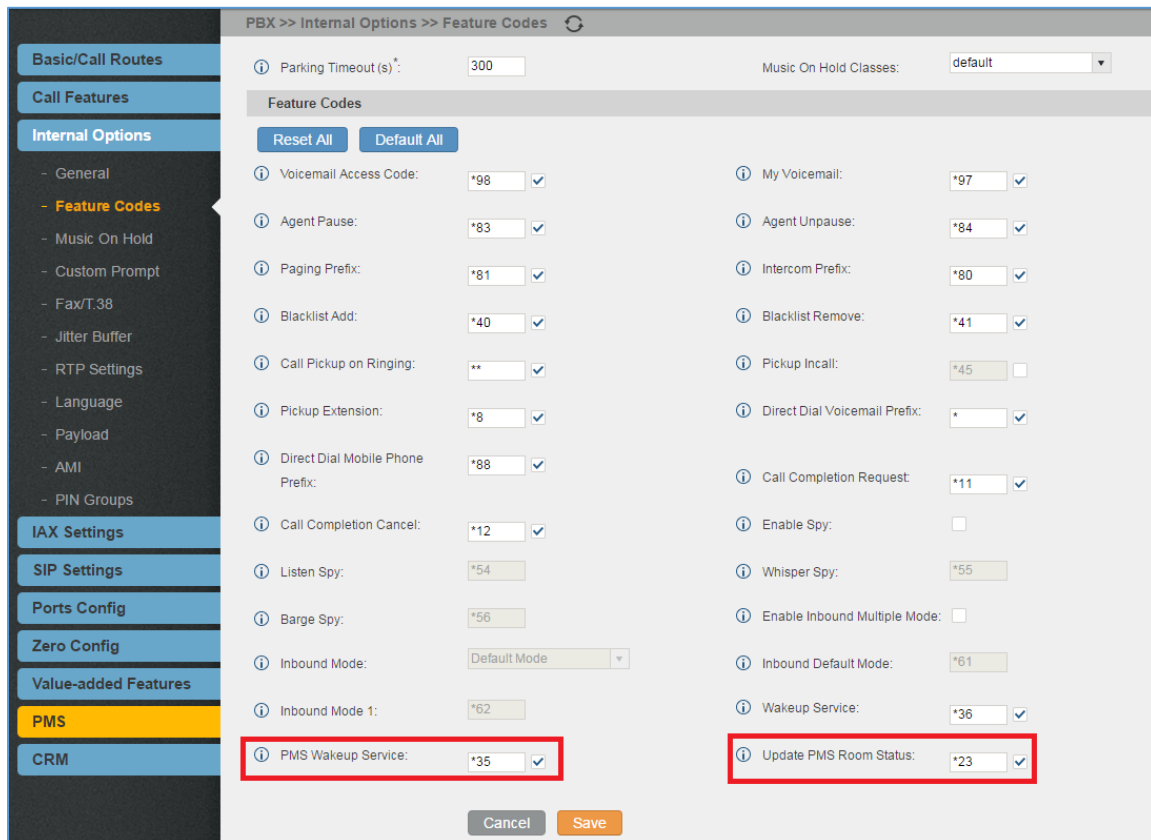


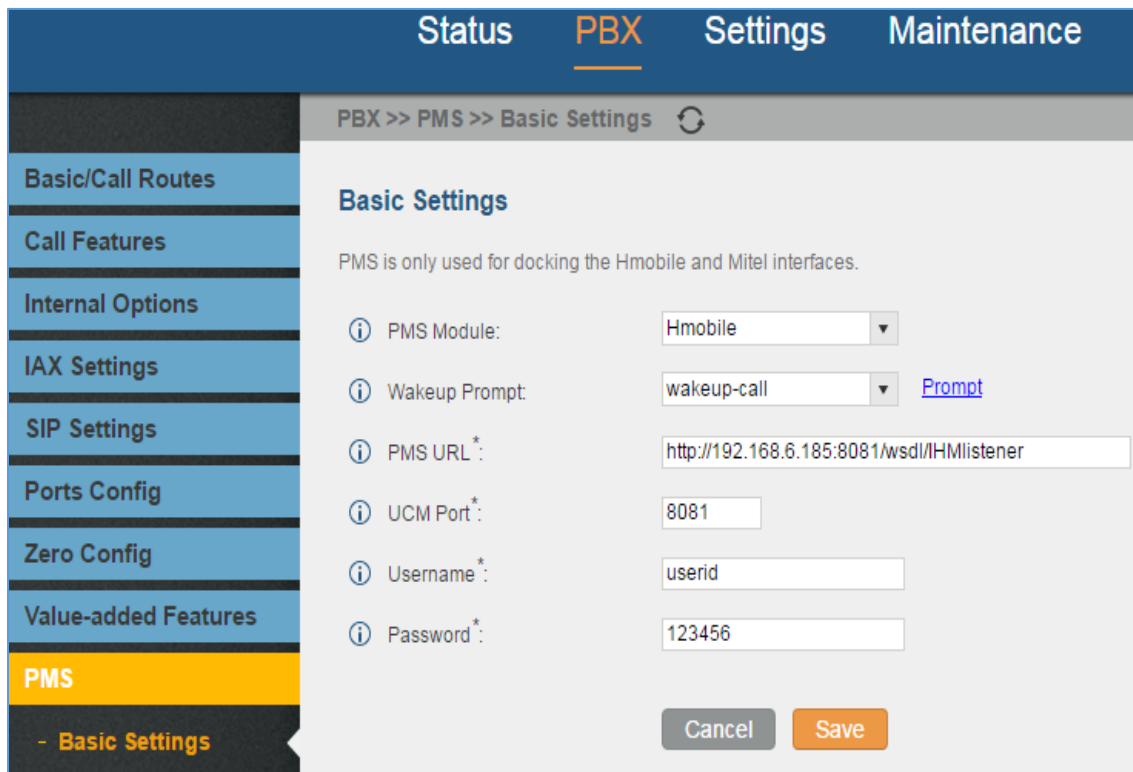
Figure 15: PMS Feature Codes

Navigate to PBX > 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/wsd/).
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.



The screenshot shows the PBX settings interface. The top navigation bar includes Status, PBX, Settings, and Maintenance. The left sidebar lists various configuration categories, with 'PMS' highlighted. Under 'PMS', 'Basic Settings' is selected. The main content area displays the 'Basic Settings' for PMS, which is noted as being used for docking Hmobile and Mitel interfaces. The settings are as follows:

- PMS Module:** Hmobile (selected from a dropdown)
- Wakeup Prompt:** wakeup-call (selected from a dropdown, with a 'Prompt' link next to it)
- PMS URL *:** http://192.168.6.185:8081/wsd/IHMListener
- UCM Port *:** 8081
- Username *:** userid
- Password *:** 123456

At the bottom of the settings area are 'Cancel' and 'Save' buttons.

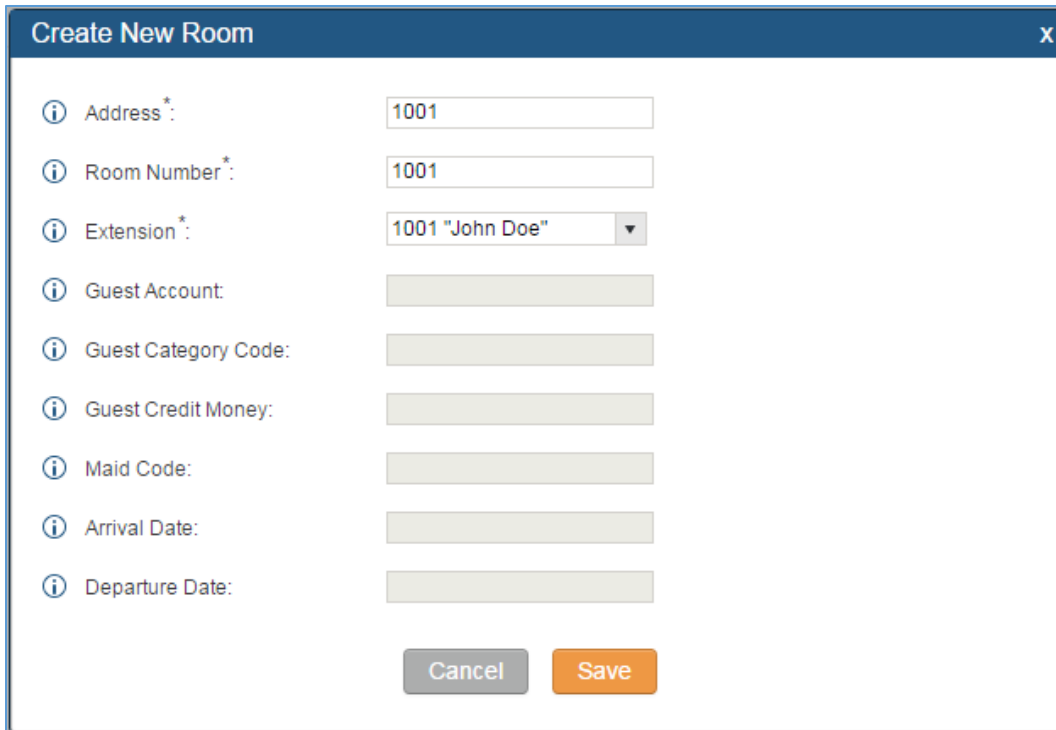
Figure 16: PMS Basic Settings - HMobile

Room Management

Users can then create and manage Rooms from PBX > PMS > Room Status:

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



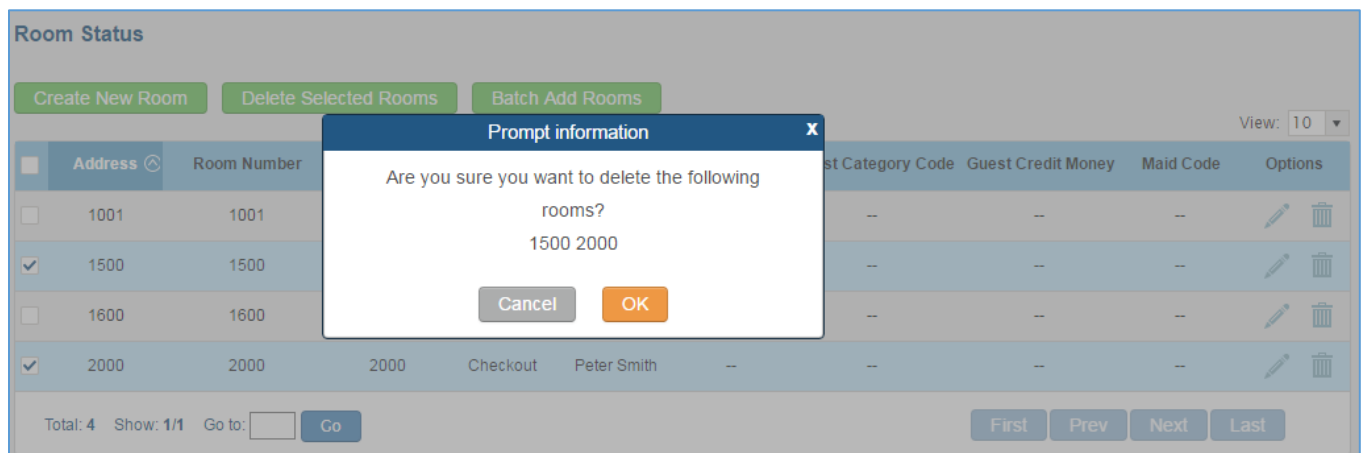


Create New Room [X]

ⓘ Address*: 1001
 ⓘ Room Number*: 1001
 ⓘ Extension*: 1001 "John Doe" ▼
 ⓘ Guest Account:
 ⓘ Guest Category Code:
 ⓘ 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.



Room Status

View: 10 ▼

	Address	Room Number	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	1001	1001	--	--	--	
<input checked="" type="checkbox"/>	1500	1500	--	--	--	
<input type="checkbox"/>	1600	1600	--	--	--	
<input checked="" type="checkbox"/>	2000	2000	2000	Checkout	Peter Smith	--

Total: 4 Show: 1/1 Go to:

Prompt information [X]

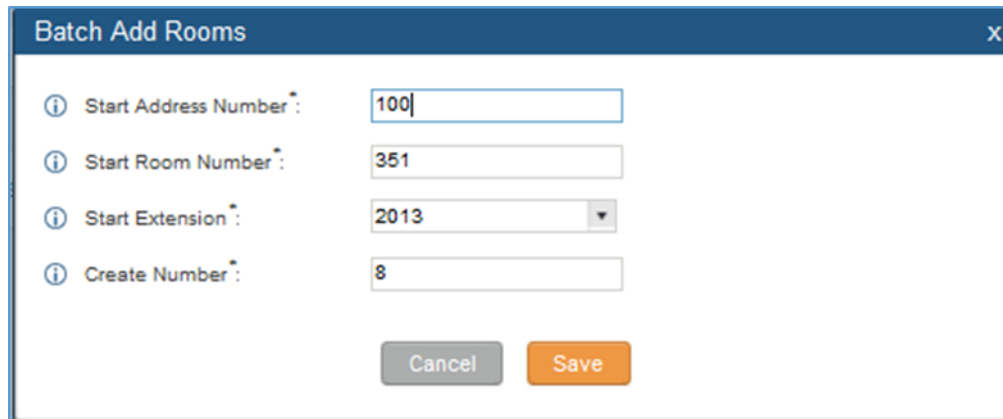
Are you sure you want to delete the following rooms?

1500 2000

Figure 18: Delete Selected Rooms

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





Batch Add Rooms [X]



Start Address Number :

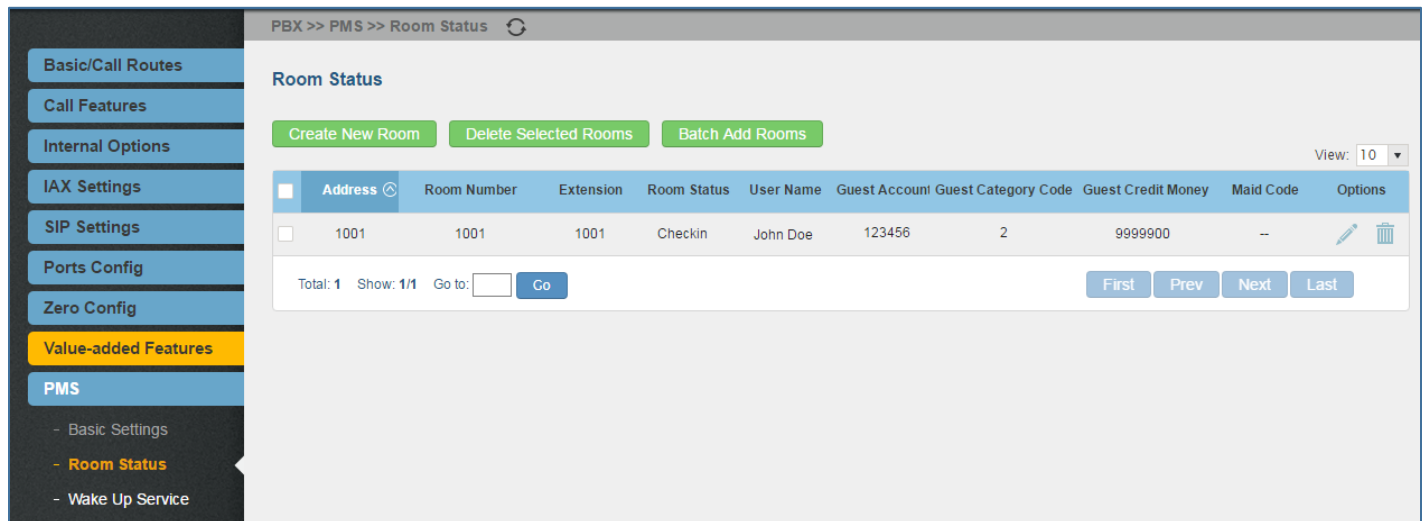
Start Room Number :

Start Extension :

Create Number :

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.



PBX >> PMS >> Room Status

Room Status

View: 10

	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
<input type="checkbox"/>	1001	1001	1001	Checkin	John Doe	123456	2	9999900	--	

Total: 1 Show: 1/1 Go to:

PMS

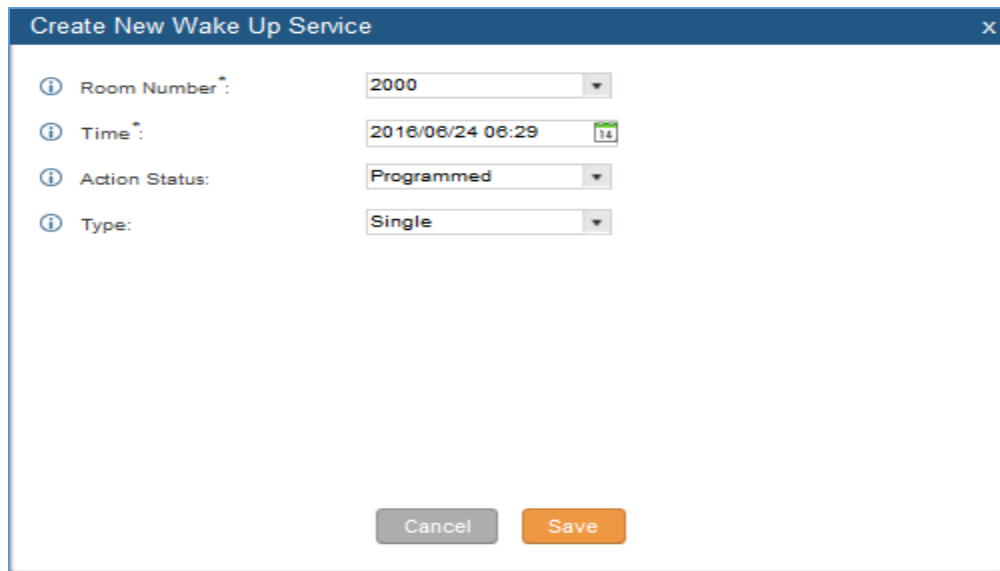
- Basic Settings
- **Room Status**
- Wake Up Service

Figure 20: Room Status

Wake Up Service

Users can create a New Wake Up service for Rooms from PBX > PMS > Wake Up Service. Click on **Create New Wake Up Service**, the following window will pop up:





The dialog box titled "Create New Wake Up Service" contains the following fields:

- Room Number:** A dropdown menu with "2000" selected.
- Time:** A date and time picker showing "2016/06/24 06:29".
- Action Status:** A dropdown menu with "Programmed" selected.
- Type:** A dropdown menu with "Single" selected.

At the bottom, there are "Cancel" and "Save" buttons.

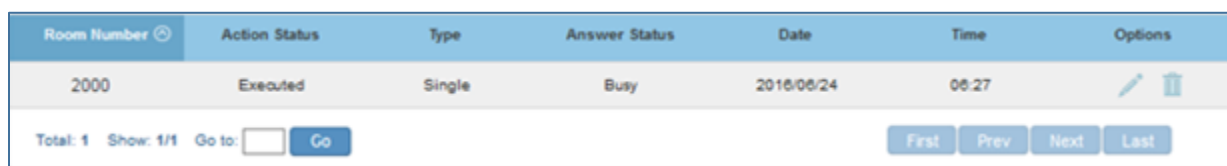
Figure 21: Create New Wake Up Service



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



Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Executed	Single	Busy	2016/06/24	06:27	 

Total: 1 Show: 1/1 Go to: Go

First Prev Next Last

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 > PBX > PMS > Mini Bar, the following window will pop up:

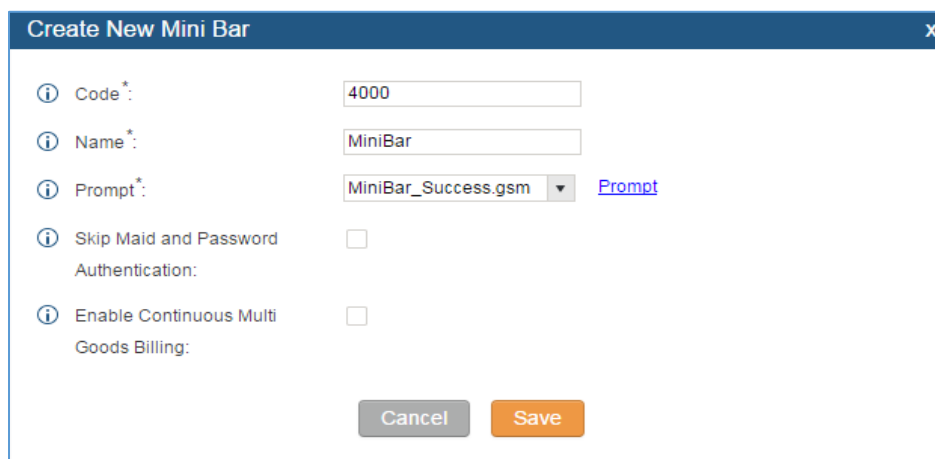


Figure 23: Create New Mini Bar

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).

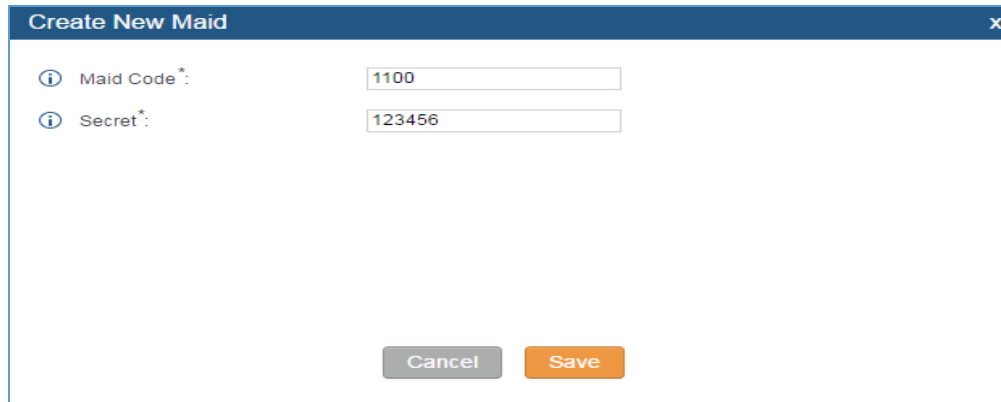
To create a new prompt please refer to **CREATE CUSTOM PROMPT**

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 > PBX > PMS > Mini Bar, the following window will popup:





The dialog box titled "Create New Maid" has a close button (X) in the top right corner. It contains two input fields: "Maid Code*" with the value "1100" and "Secret*" with the value "123456". At the bottom, there are "Cancel" and "Save" buttons.

Figure 24: Create New Maid

Table 5: Create New Maid

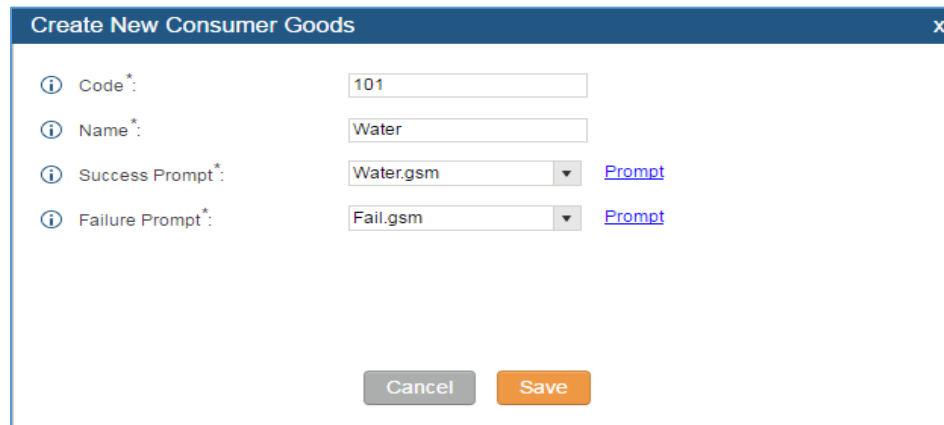
Maid Code	Enter a code to identify the new maid. Only digits accepted. This code is required to identify the maid when checking consumer's goods.
Secret	Enter a password associated with the maid. Only digits accepted.

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 **Create New Consumer Goods** under UCM webGUI > PBX > PMS > Mini Bar, the following window will popup:




The dialog box titled "Create New Consumer Goods" has a close button (X) in the top right corner. It contains four input fields: "Code*" with the value "101", "Name*" with the value "Water", "Success Prompt*" with a dropdown menu showing "Water.gsm" and a "Prompt" link, and "Failure Prompt*" with a dropdown menu showing "Fail.gsm" and a "Prompt" link. At the bottom, there are "Cancel" and "Save" buttons.

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:

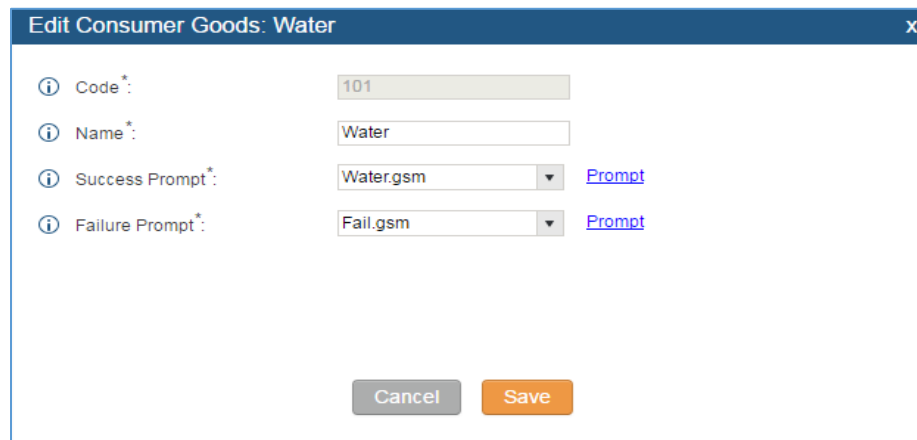



Figure 26: Edit Consumer Goods.

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

The Minibar page shows as following:

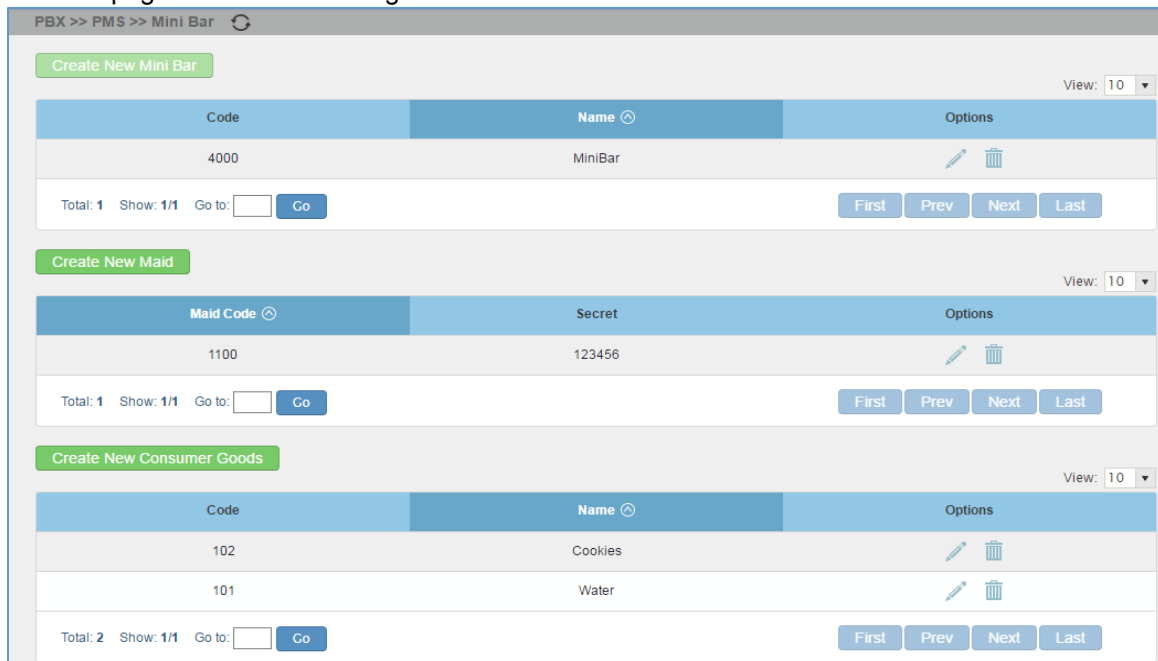


Figure 27: Mini Bar

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->Internal Options->Custom Prompt** page directly.

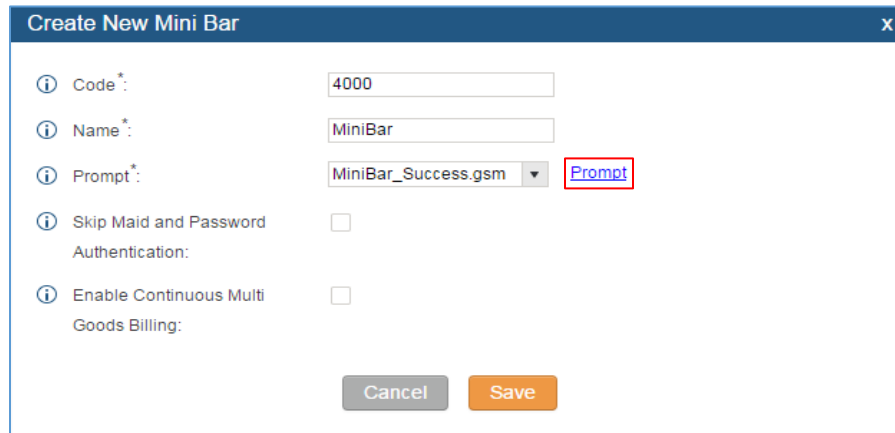


Figure 28: Customize Prompt

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->Internal Options->Custom Prompt** page, click on **Record New Custom Prompt** and follow the steps below to record new prompt.

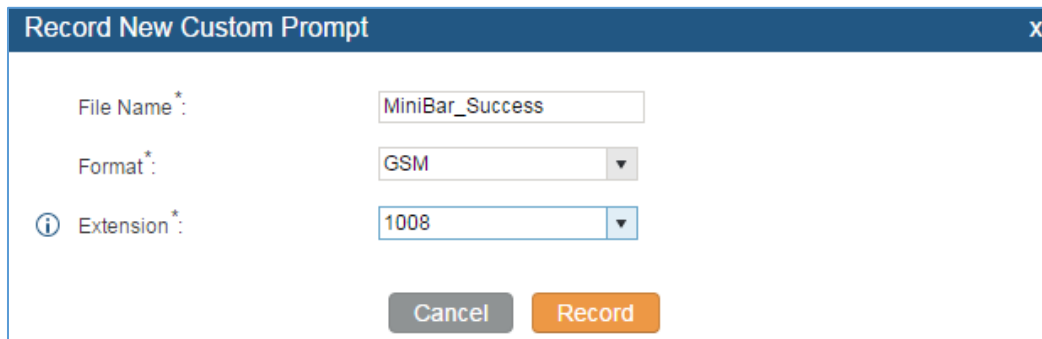


Figure 29: Record New Prompt

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.



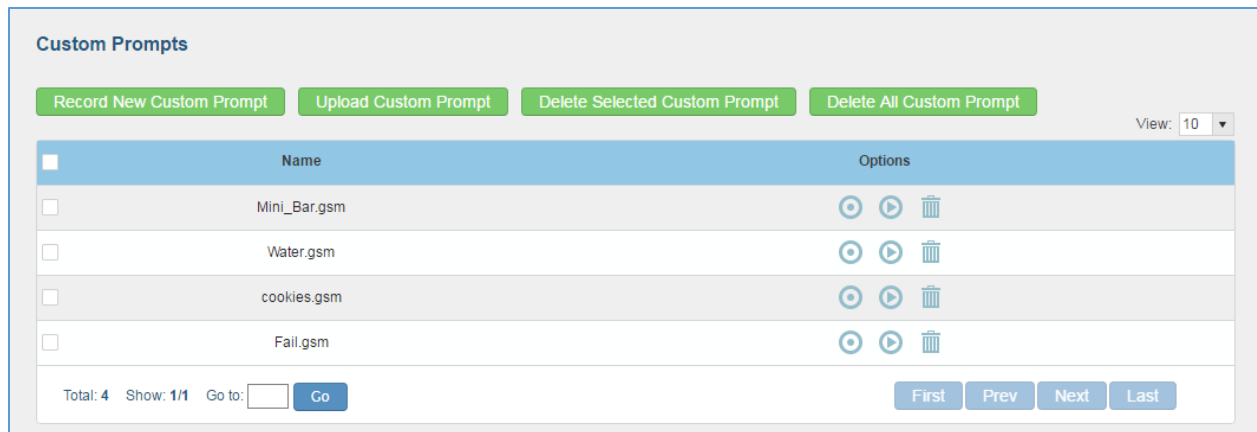


Figure 30: Custom Prompt

Upload Custom Prompt

If the user has a pre-recorded prompt file, click on **Upload Custom Prompt** in Web GUI under **PBX > Internal Options > 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.

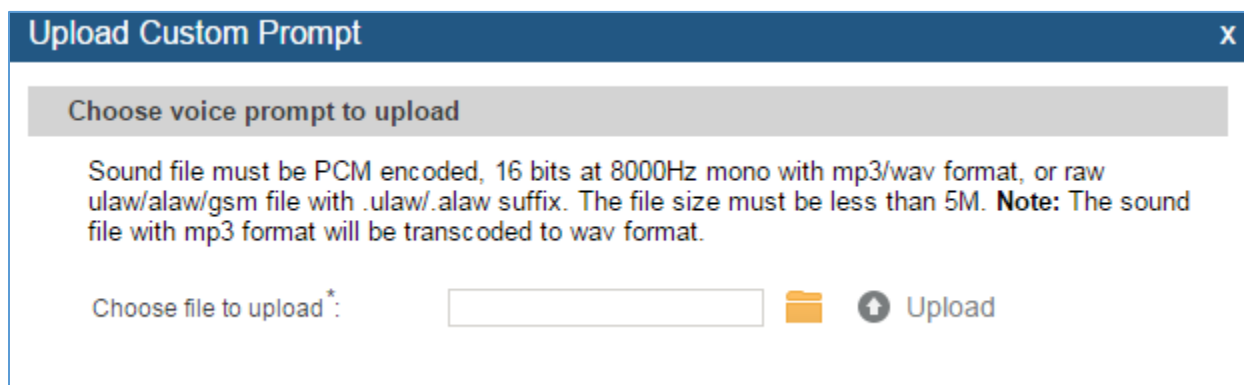




Figure 31: Upload Custom Prompt

Click on  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.

