



Grandstream Networks, Inc.

UCM6xxx Series

Mitel 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 two parts:

- PMS (Property Management System)
- PBX

Grandstream UCM6XXX series have integrated Mitel PMS 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 (Mitel). The communication between both parties is direct with no middleware.

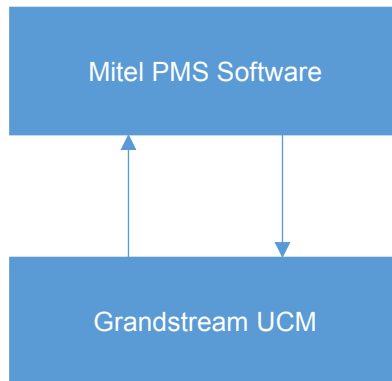


Figure 1: UCM & PMS interaction



SUPPORTED PMS FEATURES

The UCM6xxx supports the following features using Mitel PMS Systems.

Table 1: PMS Supported Features

| Features |
|-------------------------|
| Check-In |
| Check-out |
| Wake-up Call |
| Name Change |
| Set Credit |
| Set Station Restriction |

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

Name Change

Name Change feature is used to add a name, delete or replace it from Mitel PMS system.

| <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 | ChangedName | | | 1155 | | |

Figure 4: Add/Replace/Delete Name



Set Credit

This feature is used to set the guest credit money, PMS send the set credit command to set the guest money credit on the UCM6XXX.



| <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 | | | 976 | |   |

Figure 5: Set Credit

Set Station Restriction

This feature is used to set restriction on the extension permission.

4 level of permissions are allowed on the extensions:

- Internal
- Local
- National
- International.

The PMS send the restriction command to the UCM6XXX, and the UCM update the permission on the extension.

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 6: Wake-up Call Cancelled

Wake-up Call Types

Two types of wake-up call are available:

Single

The call will be repeated 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 7: 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 8: 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 9: 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 10: 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 11: 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 12: Wake-up Call Error

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 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

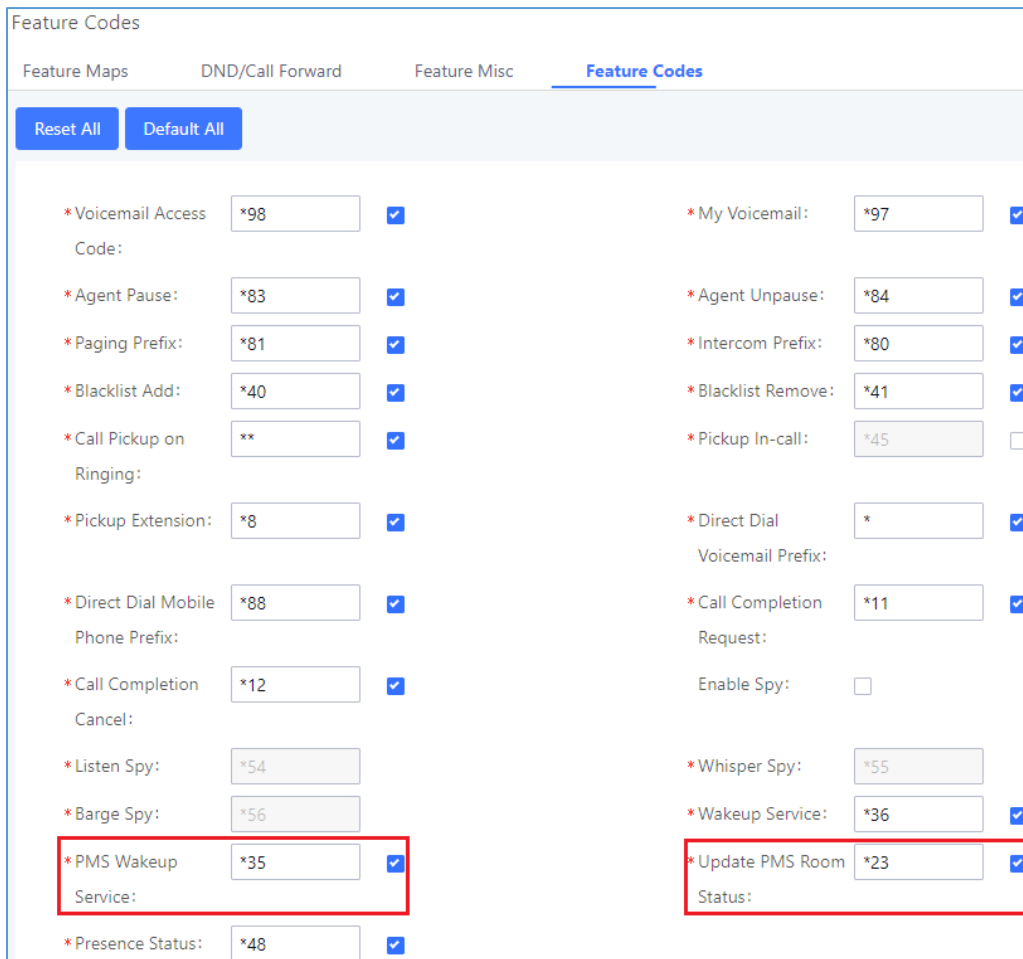
To configure the UCM6XXX with a PMS Server, users need first to create some extensions on the UCM6XXX that will be associated with guests' rooms.

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→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"/> |

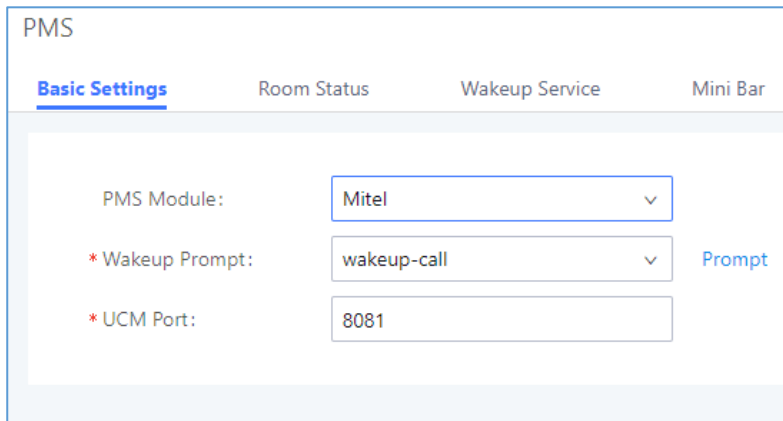
Figure 13: PMS Feature Codes



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 Mitel to use Mitel 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. |
| UCM Port | Enter the UCM6XXX's port to use when communicating with Mitel PMS system. |



The screenshot shows the 'PMS' configuration interface with the 'Basic Settings' tab selected. The settings are as follows:

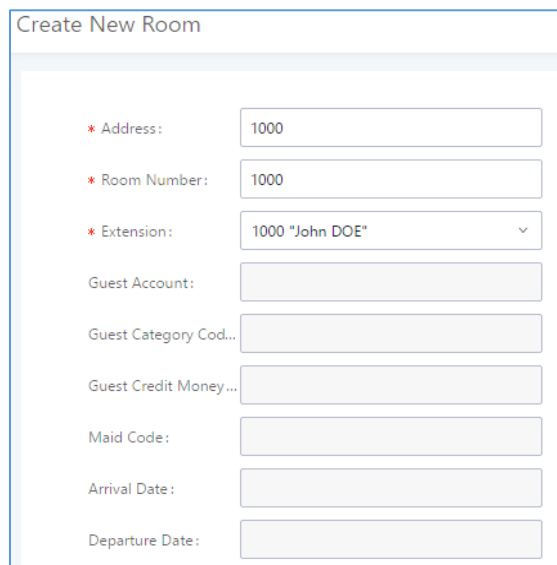
- PMS Module:** Mitel (selected from a dropdown menu)
- * Wakeup Prompt:** wakeup-call (selected from a dropdown menu, with a 'Prompt' button next to it)
- * UCM Port:** 8081 (entered in a text field)

Figure 14: PMS Basic Settings - Mitel

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 the 'Create New Room' form with the following fields:

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

Figure 15: Create a New Room



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

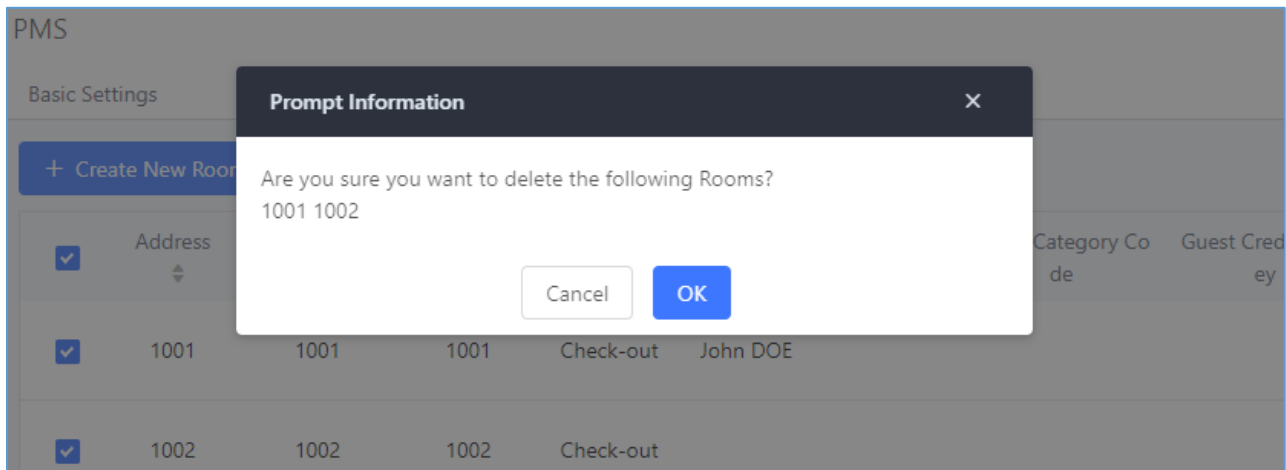




Figure 16: Delete Selected Rooms

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

Batch Add Rooms

- * Start Address Num...
- * Start Room Num...
- * Start Extension:
- * Create Number:

Figure 17: Batch Add Rooms

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

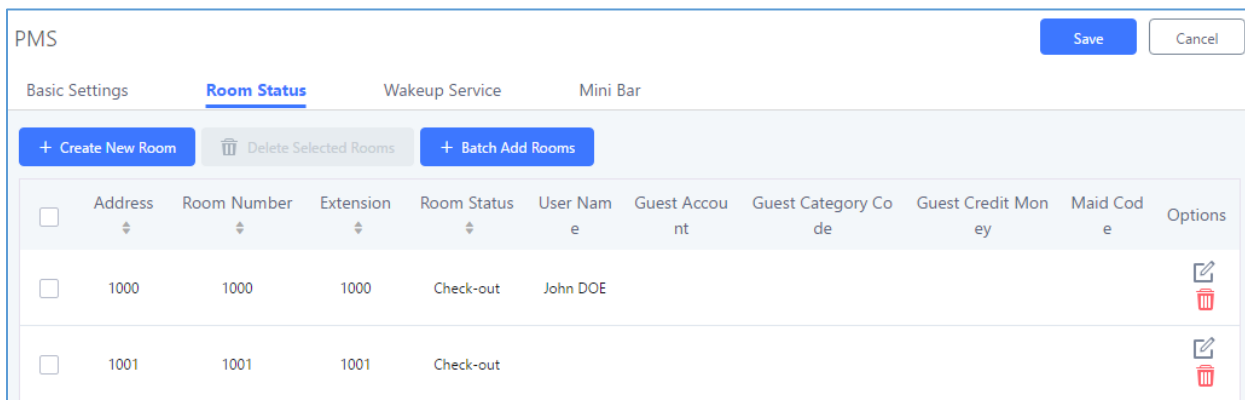


Figure 18: Room Status



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:

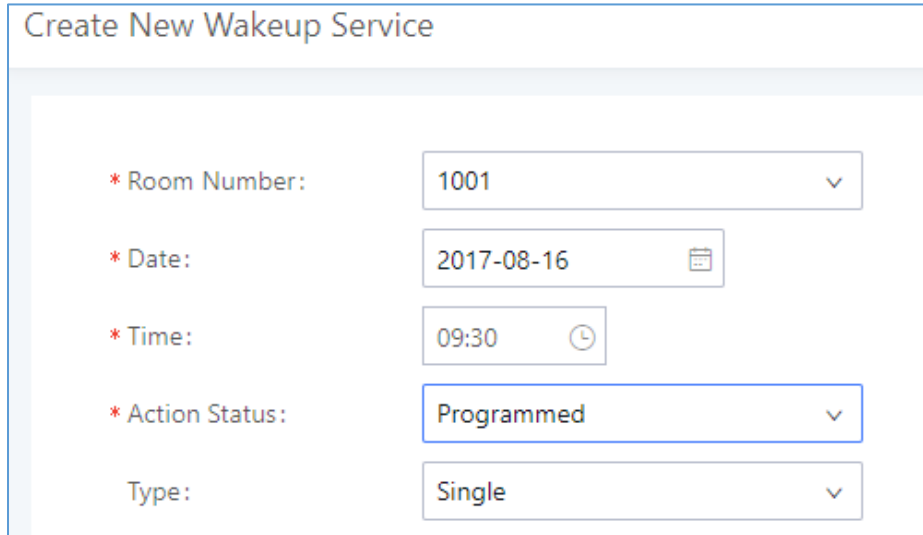


Figure 19: Create New Wake Up Service

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 20: 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:

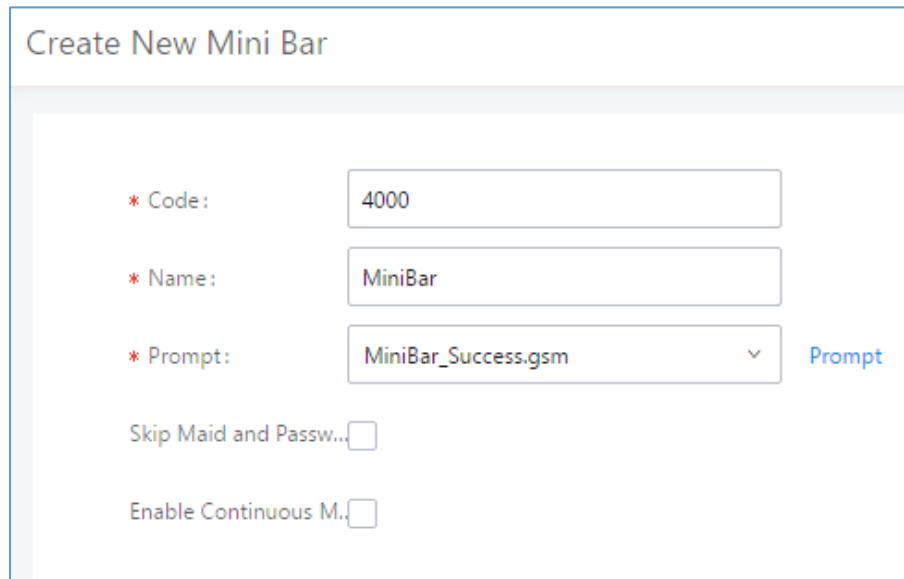


Figure 21: Create New Mini Bar

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:



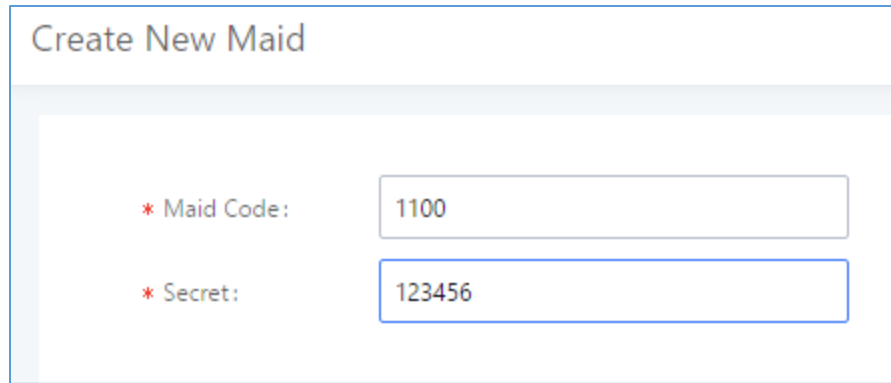




Figure 22: Create New Maid

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→**Value-added Features**→**PMS**→**Mini Bar**, the following window will popup:

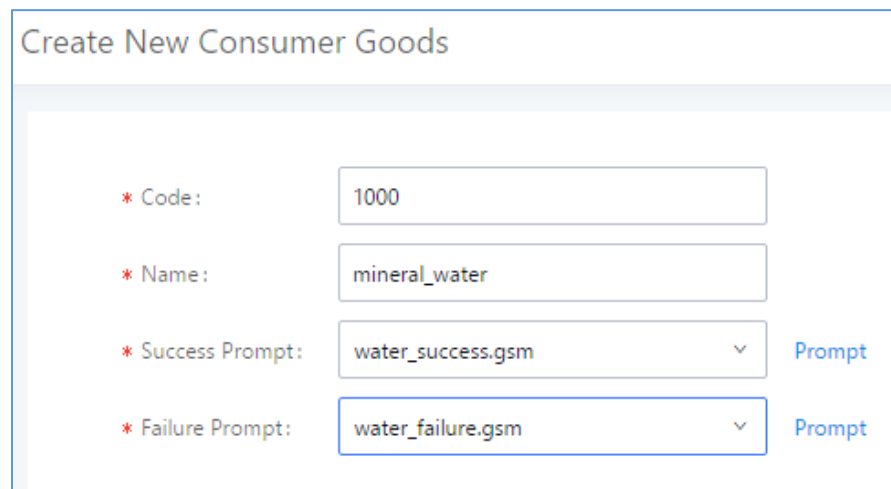



Figure 23: Create New Consumer Goods

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 24: 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 25: 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.

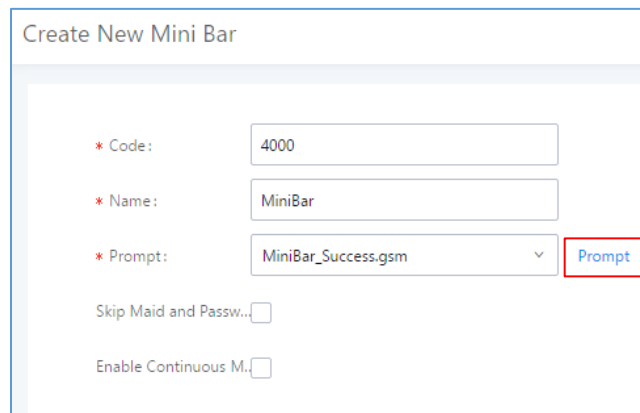



Figure 26: Customize Prompt

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  and follow the steps below to record new prompt.

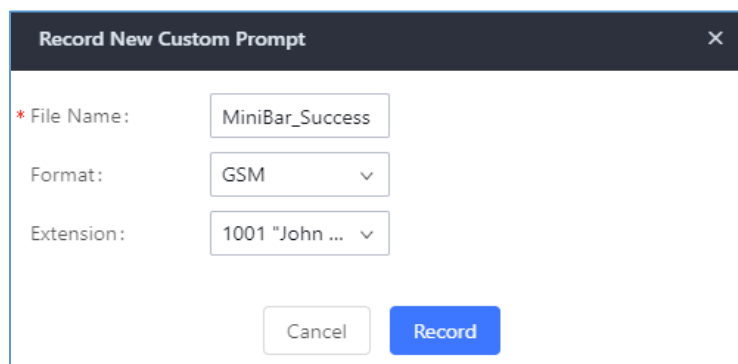


Figure 27: Record New Prompt



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.

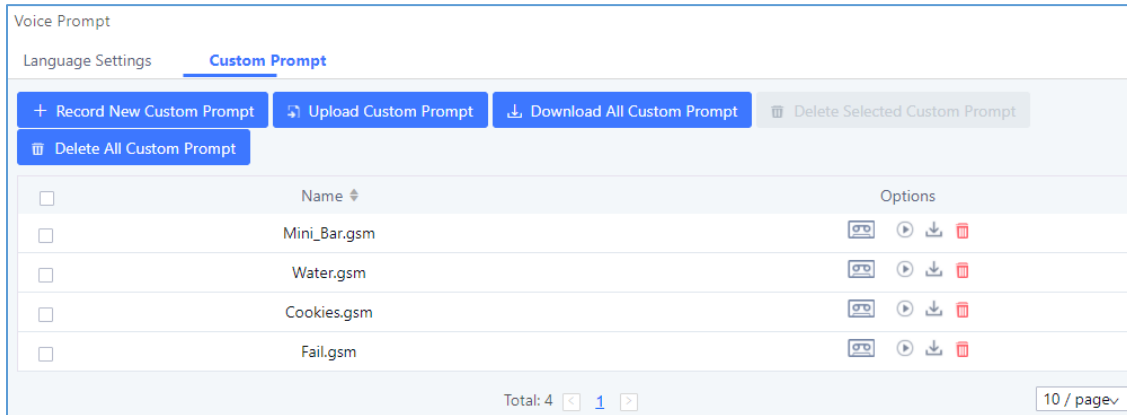


Figure 28: Custom Prompt

Upload Custom Prompt

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

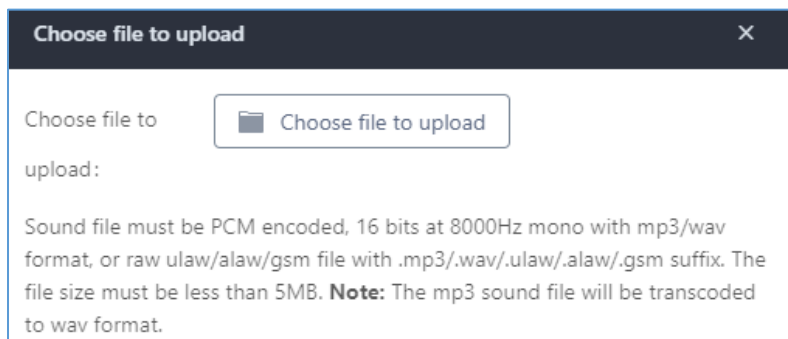


Figure 29: Upload Custom Prompt

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