

# GRANDSTREAM Wave Web Client Application User Guide

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## GRANDSTREAM Wave Web Client Application

### INTRODUCTION

#### OVERVIEW

Wave web is a client application for the UCM63xx/Audio series IP PBX users to use web browser to participate in web video/audio conferences and make calls via WebRTC. With Wave web client, users can easily create, schedule, manage, and join video conference calls, share presentation, chat during conference calls, register UCM extension and make point-to-point calls. Wave web helps enterprise users to join meetings and communicate efficiently. It is an ideal product for enterprises looking for tools for users to communicate and work productively.

#### Feature Highlights

- Supports Google Chrome v75+ and Mozilla Firefox v70+.
- Native integration with UCM including contacts and ability to display SIP users' online status.
- Supports LDAP to access contacts in the UCM LDAP server.
- Supports call display, voicemail, and call encryption.
- Support synchronized multi-terminal call records.

- Supports call history.
- High quality point-to-point audio and video calling.
- Full integration with Grandstream UCM6300 IP PBX, including creation of QR code for automatic login, call transfer, call recording from server and etc. Supports Opus and G.722 for HD audio. Jitter resilience up to 50% audio packet loss and 20% video packet loss.
- Supports H.264.
- Supports joining meeting via link without logging in.
- Supports schedule meeting and meetings now at anywhere anytime.
- Built-in NAT traversal including automatic NAT discovery and TURN/ICE.
- Integrated UCM user portal entry to access personal data, follow me settings, SCA, wakeup calls etc.

## Specifications

<b>Protocols/Standards</b>	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, DNS (A record, SRV, NAPTR), STUN/TURN/ICE, SIMPLE, LDAP, TLS, SRTP, IPv6
<b>Voice Codecs and Capabilities</b>	Opus, G.711 A-law/U-law, G.722, G722.1 G722.1C, G.723.1 5.3K/6.3K, G.726-32, G.729A/B, iLBC, GSM, NetEQ FEC 2.0, NACK Full-duplex speaker, AEC, AGC, Noise Reduction, PLC , Adaptive JIB
<b>DTMF</b>	In-audio, RFC2833, SIP INFO
<b>Video Codecs and Capabilities</b>	H.264, H.263, H.263+, VP8 1080P HD video supports displaying multiple videos, screen sharing, camera on/off, GS-Fec

<b>Telephony Features</b>	Call hold/unhold, mute/unmute, call transfer, audio meeting room, call history, scheduling meeting, voicemail, call recording, etc. User portal entries allow access to personal data, wakeup call settings, SCA, follow me settings, call queue, CDR, CRM user settings, etc.
<b>UCM Applications</b>	Supports UCM feature codes (transfer, call park, recording, meeting control options, etc.)
<b>QoS</b>	Layer 3 QoS (ToS, DiffServ, MPLS)
<b>Security</b>	SIP over TLS, SRTP (128-bit and 256-bit), HTTPS
<b>Multi-language Support</b>	English, Simplified Chinese, French, Spanish (Latin America), Spanish (Spain), Italian, Greek, Arabic, Russian, German, Polish, Portuguese and Vietnamese.
<b>Login</b>	Supports login with SIP extension and password. Supports joining meetings via a link without logging in.
<b>Upgrade</b>	Wave Web client is built-in with UCM and upgrades via UCM.

Please visit our website for more Wave web information and product documentation:

- <http://www.grandstream.com>

## WAVE CONFIGURATION

Grandstream Wave feature requires UCM WebRTC function which is build-in. To check and ensure that the UCM has WebRTC turned on, please make sure of the following:

1. Select the extensions that would use Wave Web and enable Wave on them under the Basic Settings section.

Edit Extension: 1000

Basic Settings   Media   Features   Specific Time   Follow Me   Cancel

Send Voicemail Email: <span>Default</span>	Attach Voicemail to Email: <span>Default</span>
Notification:	Keep Voicemail after Emailing: <span>Default</span>
Enable Keep-alive: <input type="checkbox"/>	* Keep-alive Frequency: <span>60</span>
Disable This Extension: <input type="checkbox"/>	Enable SCA: <input type="checkbox"/>
Emergency CID: <input type="text"/>	Enable Wave: <input checked="" type="checkbox"/>
Sync Contact: <input checked="" type="checkbox"/>	

*Wave Web Support for Extension*

2. Also, the administrator can configure some global conference options like the maximum Concurrent Audio and Voice quality a conference can have by navigating to UCM web UI admin page ? Call Features ? Meeting Settings like shown in the figure below.

\* Meeting Max Concurrent Audio: 3

Meeting Voice Indicator Sensitivity: Medium

Meeting Audio Quality: Opus Fullband (48 kHz)

Meeting AGC (Beta): ☐

Silence Suppression: ☐

Enable Talk Detection: ☒

\* DSP Talking Threshold (ms): 200

\* DSP Silence Threshold (ms): 2500

Max Number of Video Feeds: 4

Audio Codec Preference

<input type="checkbox"/> 0 item Available <input type="text"/> Search <div>None</div>	<input type="checkbox"/> 8 items Selected <input type="text"/> Search <div> <input type="checkbox"/> OPUS  <input type="checkbox"/> PCMU  <input type="checkbox"/> PCMA  <input type="checkbox"/> GSM  <input type="checkbox"/> G.726  <input type="checkbox"/> G.722 </div>
---	--

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*Global Conference Options*

<b>Meeting Max Concurrent Audio</b>	Maximum number of participants that can be heard simultaneously in multimedia meetings. If the number of participants talking at any given point exceeds this value, the audio of the excess participants will not be heard.
<b>Meeting Voice Indicator Sensitivity</b>	<p>Configures the sensitivity of the talking indicator in multimedia meetings. Setting this higher will make the talking indicator appear more easily for lower volumes of audio.</p> <p><b>Note:</b> This does not adjust audio input sensitivity itself. Lower volumes of sounds may still be heard even if the talking indicator does not show the source.</p>
<b>Conference Voice Quality</b>	<p>Configures the voice quality of audio conferences, two options are available :</p> <ul style="list-style-type: none"> <li>● <b>OPUS Full band (48KHZ)</b></li> <li>● <b>OPUS Narrowband (8KHZ)</b></li> </ul>
<b>Meeting AGC (beta)</b>	Enabling this option will toggle on Automatic Gain Control for meeting audio . AGC is a system that dynamically reduces the variability of sound levels by adjusting high and low volumes based on the average or peak sound level. High volume sounds will be lowered, and low volume sounds will be boosted.
<b>Silence Suppression</b>	Silence suppression for temporary accounts (e.g., meeting participants that joined the meeting via link). If enabled, the UCM will send CN packets for silence suppression after a successful CN negotiation in the SIP

	SDP. If the client endpoint's OPUS codec supports the reception of DTX packets, the UCM will send DTX packets instead.
<b>Enable Talk Detection</b>	If enabled, the AMI will send the corresponding event when a user starts or stops talking.

<b>DSP Talking Threshold (ms)</b>	The amount of time(ms) that sound exceeds what the DSP has established as the baseline for silence before a user is considered to be talking. This value affects several operations and should not be changed unless the impact on call quality is fully understood.
<b>DSP Silence Threshold (ms)</b>	The amount of time(ms) that sound falls within what the DSP has established as the baseline for silence before a user is considered to be silent. This value affects several operations and should not be changed unless the impact on call quality is fully understood.
<b>Max Number of Video Feeds</b>	Set the maximum number of video feeds supported per meeting room.
<b>Audio Codec Preference</b>	Configures the preferred codecs for temporary accounts such as meeting participants who joined via link.
<b>Packet Loss Retransmission</b>	Packet Loss Retransmission configuration for temporary accounts (meeting participants without registered extensions who entered the meeting via link)
<b>Jitter Buffer</b>	<p>Select jitter buffer method for temporary accounts such as meeting participants who joined via link.</p> <ul style="list-style-type: none"> <li>● <b>Disable:</b> Jitter buffer will not be used.</li> <li>● <b>Fixed:</b> Jitter buffer with a fixed size (equal to the value of "Jitter Buffer Size")</li> <li>● <b>Adaptive:</b> Jitter buffer with a adaptive size that will not exceed the value of "Max Jitter Buffer").</li> <li>● <b>NetEQ:</b> Dynamic jitter buffer via NetEQ.</li> </ul>

## CONTACT MANAGEMENT

When the "Sync Contact" is enabled, this extension will be displayed in the UCM and Wave contact list. If disabled, it will not be shown in the contact list, but Wave users will still be able to manually dial the extension number.

Edit Extension: 1000

Basic Settings | Media | Features | Specific Time | Follow Me

Send Voicemail Email:  Attach Voicemail to Email:

Notification:  Keep Voicemail after Emailing:

Enable Keep-alive: ☐ Keep-alive Frequency:

Disable This Extension: ☐ Enable SCA: ☐

Emergency CID:

Sync Contact: ☒ Enable Wave: ☒

Cancel

*Extension Basic Settings*

Currently, it is possible to manage which group of extensions otherwise known as Department can see which group from the Wave web. By default, you can either set to “see all” or “see department”. The former allows all contacts to see all the other departments, while the latter allows contacts to see only the other contacts within the same groups. You can also set a custom privilege in case you want contacts in two or more departments to be able to see each other. E.g., Marketing department would have to be able to see Sales department.

UCM6301

Security level of current username or password is too low. Click here to change them. If you have forgotten your password, please enter an email address so that a password reset email may be sent.

Menu

System Status

Extension/Trunk

Call Features

PBX Settings

System Settings

Contacts

Contact Management

Department Management

Device Management

Maintenance

CDR

RemoteConnect

Other Features

Department Management

+ Add

Quality Control

Finance

Marketing

Technical Support

Sales (1)

Human Resources

IT

Logistics

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*Adding/Editing Departments*

UCM6301

Security level of current username or password is too low. Click here to change them. If you have forgotten your password, please enter an email address so that a password reset email may be sent.

Menu

System Status

Extension/Trunk

Call Features

PBX Settings

System Settings

Contacts

Contact Management

Department Management

Device Management

Maintenance

CDR

RemoteConnect

Other Features

Department Management

+ Add

Quality Control

Finance

Marketing

Technical Support

Sales (1)

Human Resources

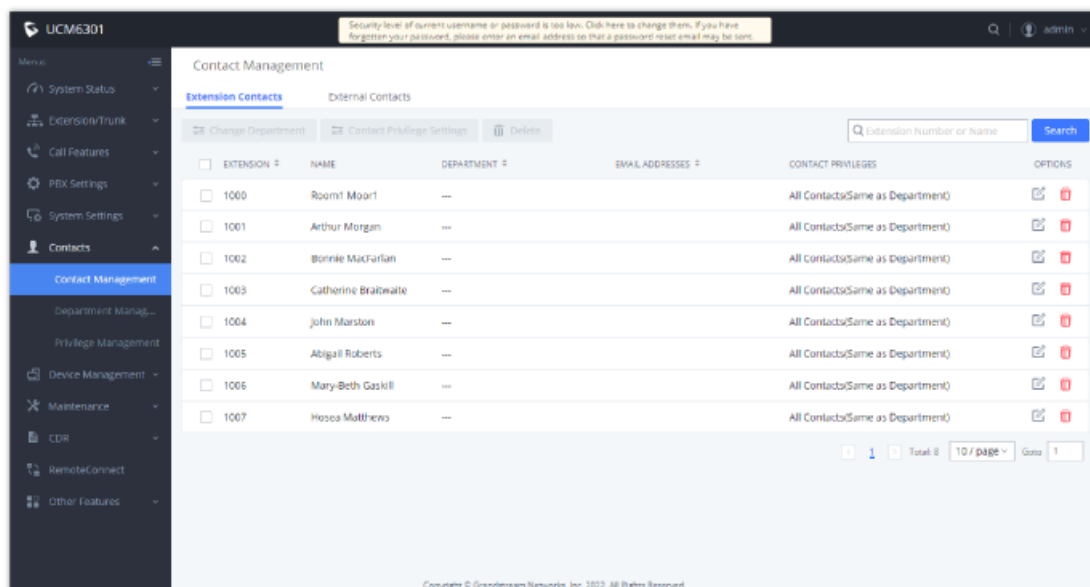
IT

Logistics

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*Department Management*

The Contact Management section will show each extension and the department it belongs to.

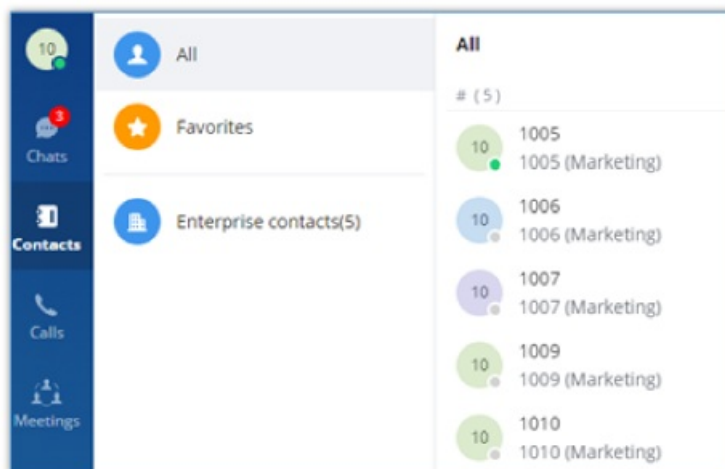


*Contact Management Interface*

On the Wave web interface, the contacts within the authority will be displayed on the Contacts section, as shown in the illustration below. Users can select All to display all available contacts, or Favorites to display favorites contacts only.

### Note

The contacts displayed in the Grandstream Wave web portal contain UCM extensions (based on contact privilege settings), meeting room extensions, and LDAP contacts (based on the UCM's LDAP phonebook settings). (Refer to the UCM630x/A User Manual for more details)



*Contacts Display on Wave Web*

For more information regarding contact management for Wave, please refer to the UCM6300 User Manual, CONTACTS section.

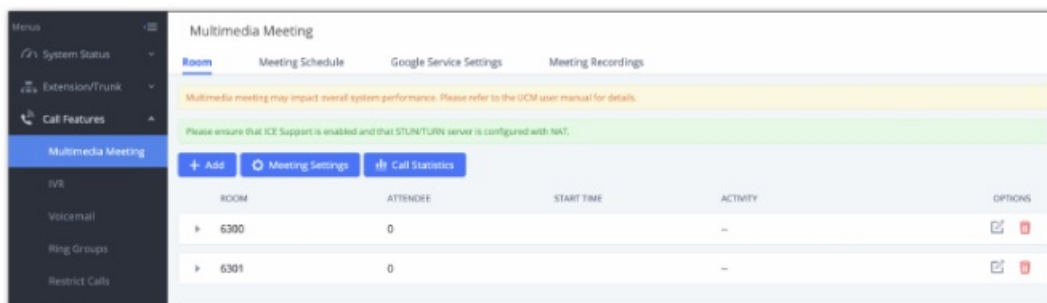
## MULTIMEDIA MEETING

The UCM630X supports multimedia meeting rooms allowing multiple rooms used at the same time. The multimedia meeting room configurations can be accessed under Web GUI?Call Features? Multimedia Meeting. In this page, users could create, edit, view, invite, manage the participants, and delete multimedia meeting rooms. The multimedia meeting room status and meeting call recordings (if recording is enabled) will be displayed in this web page as well. For video meeting, which is based on WebRTC, participants can join the meeting from PC without installing extra plug-in or software. The UCM admin can create multiple multimedia meeting rooms for users to dial in.

UCM630x series	Number of public meeting rooms	Participant limit
UCM6301	4	75
UCM6302	8	150
UCM6304	15	200
UCM6308	25	300


Meeting room specifications affect user participation to a certain extent. The UCM supports the forecasting of meeting resources. There will be corresponding judgments and adjustments in the following scenarios:


1. When the conference resources are full, members of the scheduled conference room cannot join the conference in advance.
2. When conference resources are full, joining a conference is prohibited when a point-to-point call is transferred to a conference.
3. When the conference resources are full, when the IM group chat initiates a conference, it is forbidden to join the conference.
4. When the conference resources are full, when an instant conference is initiated, joining the conference is prohibited.
5. Close other instant conferences or scheduled conferences that have timed out to ensure that all invited members of the scheduled conference can enter the conference.
6. If the number of invited members in the ongoing conference exceeds the maximum number of resources in the conference, the invitation of members is not allowed to join the conference.
7. Turn on the flow control of video and presentation in the meeting room. Log in to the UCM Web GUI and open the Call Features ? Multimedia Meeting page to manage the conference room. Users can create, edit, view, invite, manage meeting members, and delete meeting rooms. The conference room status and conference call recording (if recording function is enabled) will be displayed on the page. The meeting rooms in the list include public meeting rooms and random meeting rooms. For temporary meeting room administrators, only the “batch kicking people” function is supported. The temporary meeting room has no meeting password and host code. The member who initiates the group meeting is the host, and ordinary members have the right to invite.



*Multimedia Meeting*

- Click on “+Add” to create a new audio conference room.

- Click on  to edit the audio conference room.

- Click on  to delete the audio conference room.

## Creating Meeting Room

Click on “+ Add” to create a new conference room. Users will be prompted to configure the following options for the audio conference room:

**Multimedia Meeting > Create New Meeting Room**

\* Extension

6300

Meeting Name

\* Call Privileges

Internal

Allow User Invite

☒

Allowed to Override Host Mute

☐

\* Auto Record

None

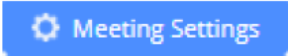
Room Password

*Meeting Room Parameters*

<b>Extension</b>	The number to dial to reach the meeting room.
<b>Meeting Name</b>	Meeting Name
<b>Privilege</b>	Please select the permission for outgoing calls.
<b>Allow User Invite</b>	If enabled, participants will be able to invite other to the meeting by pressing 1 on t heir keypad or by clicking the Participants -> Invite option on the Wave bottom bar.
<b>Allowed to Override Most Mute</b>	Allowed to Override Host Mute

<p><b>Auto Record</b></p>	<p>Meeting audio and video can be automatically recorded. These recordings can be found under the Meeting Recording or Meeting Video Recordings Page.</p> <p><b>Record Audio:</b> Record only the meeting Audio.</p> <p><b>Record video:</b> Record the meeting audio and all video feeds. When there is a shared source (shared screen/shared whiteboard/shared document) or focus, only the shared or focus screen is recorded, and when both are present, the shared screen will be recorded.</p> <p><b>Record video (Focus Mode):</b> Record the focus screen and all audio of the meeting. When a shared source is present in the meeting, only the shared screen is recorded.</p>
<p><b>Password</b></p>	<p>If meeting room password is configured, meeting participants will need to enter a password to enter the room. Scheduling meetings will not be supported for this room.</p>

## Meeting Settings

- Click on  on the audio meeting room page to access and configure global settings for all audio meeting rooms. The configuration settings page contains the following options:

<b>Meeting Max Concurrent Audio</b>	Maximum number of participants that can be heard simultaneously in multimedia meetings. If the number of participants talking at any given point exceeds this value, the audio of the excess participants will not be heard.
<b>Meeting Voice Indicator Sensitivity</b>	Configures the sensitivity of the talking indicator in multimedia meetings. Setting this is higher will make the talking indicator appear more easily for lower volumes of audio. Note: This does not adjust audio input sensitivity itself. Lower volumes of sounds may still be heard even if the talking indicator does not show the source.
<b>Meeting Audio Quality</b>	Audio quality of multimedia meetings
<b>Meeting AGC</b>	Enabling this option will toggle on Automatic Gain Control for meeting audio. AGC is a system that dynamically reduces the variability of sound levels by adjusting high and low volumes based on the average or peak sound level. High volume sounds will be lowered, and low volume sounds will be boosted.

<b>Enable Talk Detection</b>	If enabled, the AMI will send the corresponding event when a user starts or stops talking.
<b>DSP Talking Threshold (ms)</b>	The amount of time(ms) that sound exceeds what the DSP has established as the baseline for silence before a user is considered to be talking. This value affects several operations and should not be changed unless the impact on call quality is fully understood.
<b>DSP Silence Threshold (ms)</b>	The amount of time(ms) that sound falls within what the DSP has established as the baseline for silence before a user is considered to be silent. This value affects several operations and should not be changed unless the impact on call quality is fully understood.
<b>Max Number of Video Feeds</b>	Set the maximum number of video feeds supported per meeting room.
<b>Audio Codec Preference</b>	Configures the preferred codecs for temporary accounts such as meeting participants who joined via link.
<b>Packet Loss Retransmission</b>	Packet Loss Retransmission configuration for temporary accounts (meeting participants without registered extensions who entered the meeting via link)
<b>Jitter Buffer</b>	<p>Select the jitter buffer method for temporary accounts such as meeting participants who joined via link.</p> <ul style="list-style-type: none"> <li>● Disabled: Jitter buffer will not be used.</li> <li>● Fixed: Jitter buffer with a fixed size (equal to the value of "Jitter Buffer Size")</li> <li>● Adaptive: Jitter buffer with an adaptive size that will not exceed the value of "Max Jitter Buffer").</li> <li>● NetEQ: Dynamic jitter buffer via NetEQ.</li> </ul>

**Multimedia Meeting > Meeting Settings**

\* Meeting Max Concurrent Audio:

Meeting Voice Indicator Sensitivity:

Meeting Audio Quality:

Meeting AGC (Beta): ☐

Silence Suppression: ☐

Enable Talk Detection: ☒

\* DSP Talking Threshold (ms):

\* DSP Silence Threshold (ms):

Max Number of Video Feeds:

Audio Codec Preference:

☐ 0 item Available

Search

None

☐ 8 items Selected

Search

- ☐ OPUS
- ☐ PCMU
- ☐ PCMA
- ☐ GSM
- ☐ G.726
- ☐ G.722











Packet Loss Retransmission:

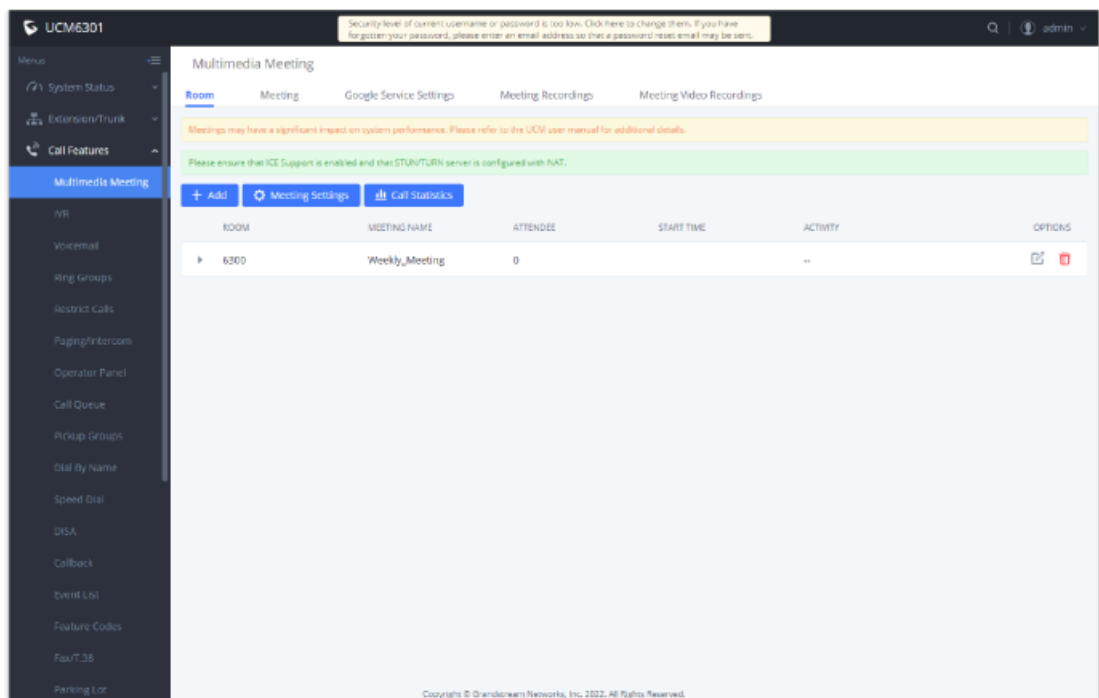
Jitter Buffer:

Meeting Settings

## Managing Multimedia Meeting

During the conference call, users can manage the conference from Web GUI after logging in as admin.

- Click on  on the left of each conference room to expand the real-time participant list for the admin to view.
- Click on  to remove selected participants from the conference.
- Click on  to mute selected participants.
- Click on  to unmute selected participants.
- Click on  to invite contact group or remote conference room so multiple conference rooms that can be bridged.
- Click on  to invite other users into the conference room.
  -  : This indicates the conference room is unlocked. Click on  to lock conference. If the conference is locked, no new party can be invited or can join the conference.
  -  : This indicates the conference room is locked. Click on  to unlock this conference room.



*Ongoing Meeting with Participants*

## ONSITE MEETING

The UCM6300 Onsite Meeting feature allows the user to manage the meeting that take place in the office. This feature will make managing onsite meetings easier by informing the employees of the time, the room and the floor where the meeting is taking place. Using this feature will not only do what we have mentioned before, but also it will tell the user which rooms and facilities are able to be used and which are not. Therefore, onsite meetings will be much easier to manage, keep track of upcoming meetings, and check the meeting that had taken place already. In order to use this feature, please navigate to the Web GUI

- Other Features → Onsite Meeting
  - Address Management

First add the addresses of the office buildings to the Address Management by clicking on Add button.

\* Name:

Main Office

Address:

23, Lakewood St., San Fierro, CA.

Floors:

2 x

3 x

4 x

5 x

6 x

Please enter floors and separate with Enter

Cancel

Save

*Address Management*

Fill in the needed information. For Floors, please add the number of floors that the building has. Press enter after

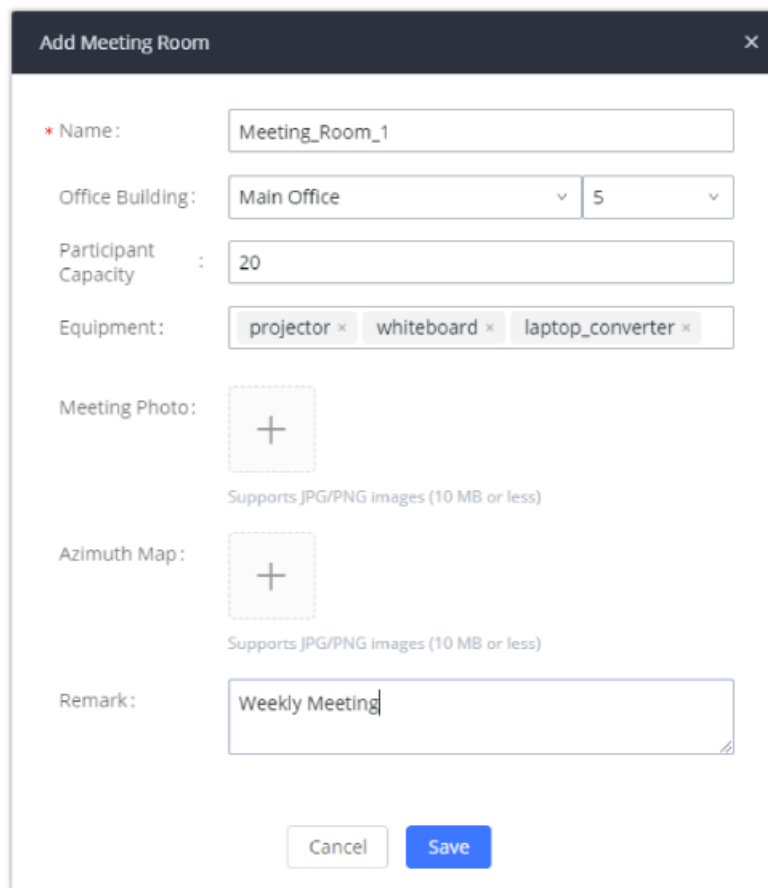
each floor number to add another floor.

- Equipment

In this section, you can add the equipment which are used in the meetings. To add equipment, click on Add then enter the name of the equipment, then click Save.

- **Room Management**

In this section, you can add the meeting rooms. To do that, click on Add.

A screenshot of a web form titled "Add Meeting Room" with a close button (X) in the top right corner. The form contains several input fields: "Name:" with a text box containing "Meeting\_Room\_1"; "Office Building:" with a dropdown menu showing "Main Office" and a floor number dropdown showing "5"; "Participant Capacity:" with a text box containing "20"; "Equipment:" with a row of three tags: "projector", "whiteboard", and "laptop\_converter", each with a close button (X); "Meeting Photo:" with a dashed box containing a plus sign and a note "Supports JPG/PNG images (10 MB or less)"; "Azimuth Map:" with a dashed box containing a plus sign and a note "Supports JPG/PNG images (10 MB or less)"; and "Remark:" with a text box containing "Weekly Meeting". At the bottom are "Cancel" and "Save" buttons.

**Add Meeting Room** X

\* Name: Meeting\_Room\_1

Office Building: Main Office 5

Participant Capacity : 20

Equipment: projector × whiteboard × laptop\_converter ×

Meeting Photo: +  
Supports JPG/PNG images (10 MB or less)

Azimuth Map: +  
Supports JPG/PNG images (10 MB or less)

Remark: Weekly Meeting

Cancel Save

*Add Meeting Room*

### **Scheduled Meeting**

In this section, you can see scheduled meetings, schedule a meeting, or see the history of the meetings that have taken place. To schedule an onsite meeting, please navigate to the Pending Meeting tab, then click on Schedule Meeting.

Add Schedule Meeting

Meeting Subject:

Weekly Meeting

Time Zone:

( UTC+01:00 ) Africa/Casablanca

Time:

2022-11-17

10:00-10:45

Meeting Room:

Meeting\_Room\_1

Host:

1003 "Catherine Br..."

cbraitewalt@mycompany.cor

Email Reminder (m):

60

Repeat:

Weekly

Meeting Agenda:

Discussing the goals that have been achieved during the week and setting the goals for the upcoming week.

Invitees:

1001 "Arthur Morgan" (Add Email Address) ×

1002 "Bonnie MacF..." (Add Email Address) ×

1005 "Abigail Rob..." (Add Email Address) ×

1006 "Mary-Beth G..." (Add Email Address) ×

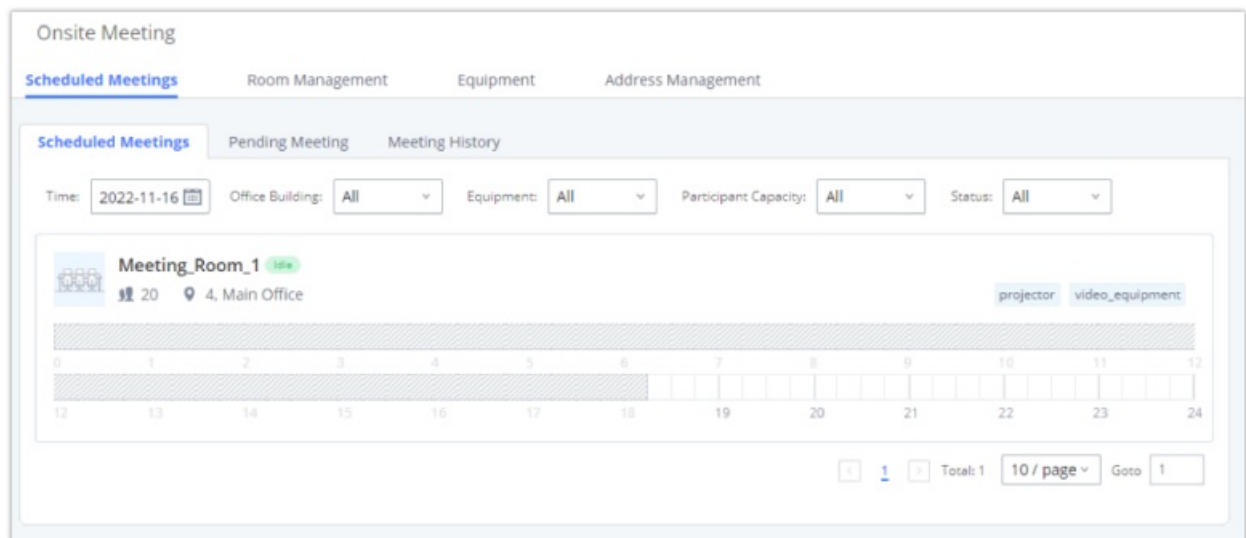
Please enter and submit participants with the Enter key

Cancel

Save

Fill in the needed information and set the parameters of your onsite meeting, then click on Save.

Then the scheduled meeting can be previewed in the Scheduled Meeting tab.






## SCHEDULE A MEETING

UCM admin can log in UCM web UI to schedule a meeting. Log in to the UCM Web GUI, open the Call Features ? Multimedia Meeting ? Meeting Schedule page. Users can create, edit, view, and delete a meeting Schedule. The following is a set meeting room reservation, which shows the ongoing and pending reservations. Once the conference room is reserved, all users will be removed from the conference room at the start time, and extensions will no longer be allowed to enter the conference room. At the scheduled meeting time, UCM will send invitations to the extensions that have been selected to participate in the meeting. At the same time, it supports users to enter the meeting 10 minutes in advance. If the current meeting is occupied, enter the waiting room and wait

(members joining the meeting in advance occupy global member resources, but it will be released after the scheduled meeting starts); otherwise, you can join the meeting directly and the meeting will be held in advance. After the meeting ends, the reservation record is transferred to the historical meeting list. History meeting displays the information of the ended and expired meetings.

- Click on “Schedule Meeting” to add a new Meeting Schedule.

- Click on  to edit a scheduled meeting.
- Click on  to view meeting schedule details.
- Click on  to delete the meeting schedule. Click the button, you can choose to delete the most recent meeting of the meeting room or delete the entire recurring meeting to delete the meeting room reservation.

*Schedule meeting Interface*

<b>Schedule Options</b>	
<b>Meeting Subject</b>	Configure the name of the scheduled conference. Letters, digits, Other special characters are also supported. such as #%&@*=
<b>Meeting Room</b>	<p>Choose which room to have this scheduled meeting.</p> <p>If this option has been enabled, please select an existing room for this meeting. If this option has not been enabled, a new meeting room will be created.</p>
<b>Time</b>	Configure the meeting date and time.
<b>Time Zone</b>	Select the meeting time zone.
<b>Password</b>	Configure the conference login password.

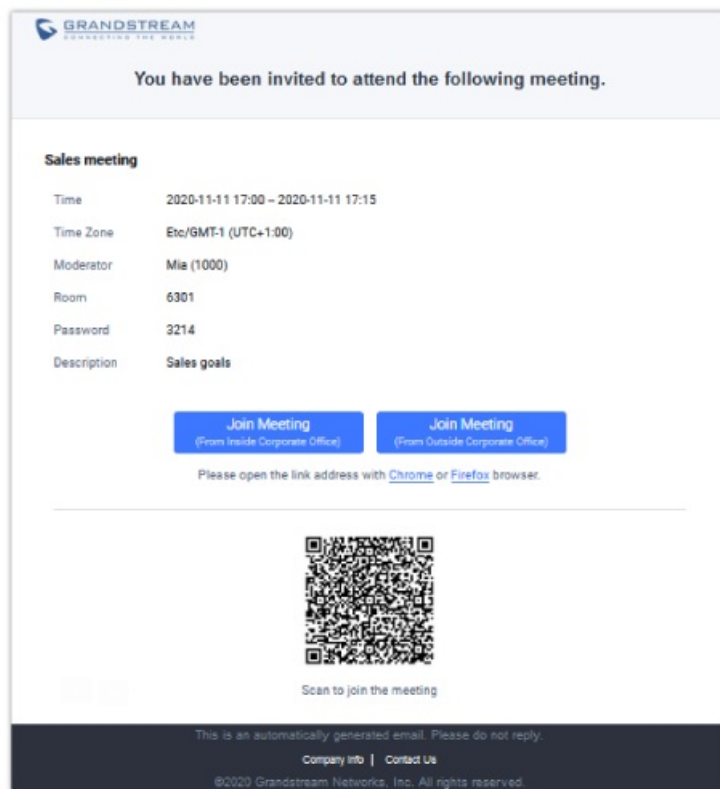
<b>Host Password</b>	<p>Configure the Host Password.</p> <p><b>Note:</b> It is randomly generated when first creating a new meeting Schedule.</p>
<b>Host</b>	Configure Host.
<b>Repeat</b>	Choose when to repeat a scheduled conference.

<b>Allow User Invite</b>	<p>If this option is enabled, the user can:</p> <ul style="list-style-type: none"> <li>● Press '0' to invite others to join the meeting with invited party's permission</li> <li>● Press '1' to invite without invited party's permission</li> <li>● Press '2' to create a multi-meeting room to another meeting room</li> <li>● Press '3' to drop all current multi-meeting rooms.</li> </ul> <p><b>Note:</b></p> <p>Meeting host is always allowed to access this menu.</p>
<b>Call Participant</b>	<p>If enabled, the invited participants will be called upon meeting start time.</p>
<b>Allowed to Override Host Mute</b>	<p>If enabled, participants will be able to unmute themselves if they have been muted by the host.</p>
<b>Email Reminder (m)</b>	<p>Email reminders will be sent out x minutes prior to the start of the meeting. Valid range is 5-1440. 60 is the default value. 0 indicates not to send out email reminders for the meeting.</p> <p><b>Note:</b> After editing the time of a single recurrence of a scheduled meeting, a cancellation email will now be sent out followed by a meeting update email.</p>
<b>Auto Record</b>	<p>If selected, the meeting will be recorded and saved as either a .WAV or .MKV file. The default filename</p> <p>is meeting-\${Meeting Number}-\${UNIQUEID}. Recordings can be downloaded from either the Meeting Recordings or the Meeting Video Recordings page. Video recordings require external storage to be available. When recording a screen share, only the screen share and meeting audio will be recorded.</p> <p><b>Note:</b> Please note that UCM63XX Audio Series doesn't support Screen Sharing, Whiteboard, or PDF file sharing.</p>
<b>Enable Google Calendar</b>	<p>Select this option to sync scheduled conference with Google Calendar.</p> <p><b>Note:</b> Google Service Setting OAuth2.0 must be configured on the UCM630X. Please refer to section <b>[Google Service Settings Support]</b>.</p>

<b>Meeting Agenda</b>	Enter information about the meeting, e.g., the purpose of the meeting or the subjects that will be discussed in the meeting.
<b>Invitees</b>	Local extensions, remote extensions, and special extensions are supported.

Once created, the Web GUI will display scheduled meetings under Unstarted Meeting. After scheduling the meeting, an email reminder will be sent to the participants at the configured email reminder time. The email reminder will include the meeting details and a link to the meeting. Upon clicking the link, participants will be prompted to enter their Grandstream Wave portal passwords to log in and join the meeting.

**Note** When there is participant in the meeting, the meeting room configuration cannot be modified.



*Email Reminder for the Scheduled Meeting*

If meeting schedule information has been modified, participants will receive email update immediately. To join meeting, the Wave user can click on the link in the email notification to join meeting directly, or Wave mobile app user can scan the QR code in the email notification to join meeting as well. Once the Meeting Schedule is configured, scheduled meeting will be displayed as below figure.

Multimedia Meeting

Room [Meeting Schedule](#) [Google Service Settings](#) [Meeting Recordings](#)

[Pending Meeting](#) [Meeting History](#)

Host  [Schedule Meeting](#)

MEETING SUBJECT	MEETING ROOM	MEETING OWNER	START TIME	MEETING DURATION	REPEAT	OPTIONS
Group Meeting <span>Starting soon</span>	6300	admin	Today 08:15 Etc/GMT+7	00:45:00	No Repeat	
Weekly Status Meeting	20403041	admin	Tomorrow 13:45 Etc/GMT+7	01:00:00	No Repeat	

*Meetings Schedule*

- Click the button to view the meeting details in the Meeting room. The meeting details of Meeting History include actual participant information. When there is participant in the meeting, the meeting room configuration cannot be modified.

Meeting Details

Room Number: 6301

Meeting Subject: meeting

Start Time: 2021-04-05 09:30

End Time: 2021-04-05 09:45

Time Zone: Etc/GMT-1

Session state: The session has expired

Enable Google Calendar: No

Repeat: No Repeat

[Invitees](#) [Attendee](#)

STATUS	FIRSTNAME	PHONE NUMBER	EMAIL	LEAVE A MESSAGE
Require Confirmation	Amore	100		
Require Confirmation	John doe	1000		
Require Confirmation		1002	yi@grandstream.com	
Require Confirmation	Calvin	1004		
Require Confirmation		1008	ie@grandstream.com	

*Meeting details*

- Click on to edit the Meeting Schedule.
- Click on to delete the Meeting Schedule.

At the scheduled meeting time, UCM630X will send INVITE to the extensions that have been selected for the conference. Once the meeting starts, it will be displayed under Pending Meeting with an "Ongoing" status, as displayed below:

Audio Meeting

Room

Meeting Schedule

Contact Group

Google Service Settings

Meeting Recordings

Pending Meeting

Meeting History

Schedule Meeting

MEETING SUBJECT	MEETING ROOM	MEETING OWNER	START TIME	MEETING DURATION	REPEAT	OPTIONS
meeting <span>Ongoing</span>	6301	admin	Today 10:50 Africa/Algiers	00:15:00	No Repeat	<div><div></div><div></div><div></div></div>

*Meeting Scheduled – Ongoing*

Once the conference is finished, the conference will be displayed under Historical meeting as below:

Audio Meeting

Room

Meeting Schedule





Contact Group

Google Service Settings

Meeting Recordings

Pending Meeting

Meeting History

MEETING SUBJECT	MEETING ROOM	MEETING OWNER	START TIME	MEETING DURATION	REPEAT	OPTIONS
meeting	6301	admin	2021-04-02 10:50	00:15:00	No Repeat	   

*Meeting Schedule – Completed*

- Click the button to download the Meeting Report of the meeting.
- Click the button to reschedule the Meeting.

In addition, once the meeting ends, the system will send a meeting report email to the host including PDF file where he/she can view the meeting, participant information, device type and trend graph of participant levels.

## Note

Please make sure that outbound route is properly configured for remote extensions to join the meeting. The users can Clean up the history of audio and video and schedule meeting regularly.

Enable Cleaner:

☒

\* Cleanup Type:

☐ Queue Statistics Report
 ☐ Meeting Call Statistics Report

☒ Multimedia Scheduled Meeting History

*Scheduled cleanup for multimedia meeting history*

## OPERATOR PANEL



UCM supports the addition and configuration of the call console, which can realize one or more extensions as administrators to manage PBX activities, such as extension status, call queue status, call transfer, call monitoring, call hangup, etc. Grandstream Wave displays the status information of the extension, ring group, voice mailbox, call queue, and parking space managed by the current extension. This chapter mainly introduces the configuration method of Call Features ? Operator Panel.

### Configure Operator Panel

The call console can be set through Call Features ? Operator Panel.

Operator Panel

+ Add

NAME	ADMINISTRATOR	OPTIONS
User	1000	 

Total: 1 10 / page Goto 1

*Operator Panel Interface*

The steps to configure the call console are as follows:

- Click the “Add” button to add the call console.
- Click the button  to edit the call console.
- Click the button  to delete the call console.

Please refer to the following for the description of the specific configuration items of the Operator Panel:

<b>Name</b>	The Operator panel name.
<b>Administrator</b>	The operator of the call console can select extensions, extension groups, and departments. For the selected extension groups and departments, subsequent extensions will automatically become administrators.
<b>Management Module</b>	
<b>Extension</b>	The selected extensions will be supervised by the administrator, and you can choose extensions, extension groups, and departments. For the selected extension groups and departments, subsequent extensions will be automatically supervised by the administrator.

<b>Ring Groups</b>	The checked Ring Groups will be supervised by the administrator. Select “All”, all Ring Groups and subsequent updates will be automatically supervised by the administrator.
<b>Voicemail Groups</b>	The checked Call Queue will be supervised by the administrator. Select “All”, all Call Queue and subsequent updates will be automatically supervised by the administrator.
<b>Call Queue</b>	The checked Call Queue will be supervised by the administrator. Select “All”, all Call Queue and subsequent updates will be automatically supervised by the administrator.
<b>Parking Lot</b>	The checked Parking Lot will be supervised by the administrator. Select “All”, all Parking Lot and subsequent updates will be automatically supervised by the administrator.

## MONITOR

This feature allows the user to retrieve the video feed of the monitoring devices that he/she has permission to user. These devices and permissions are handled by the UCM. To know how to configure these devices on the UCM side, please refer to this guide below:

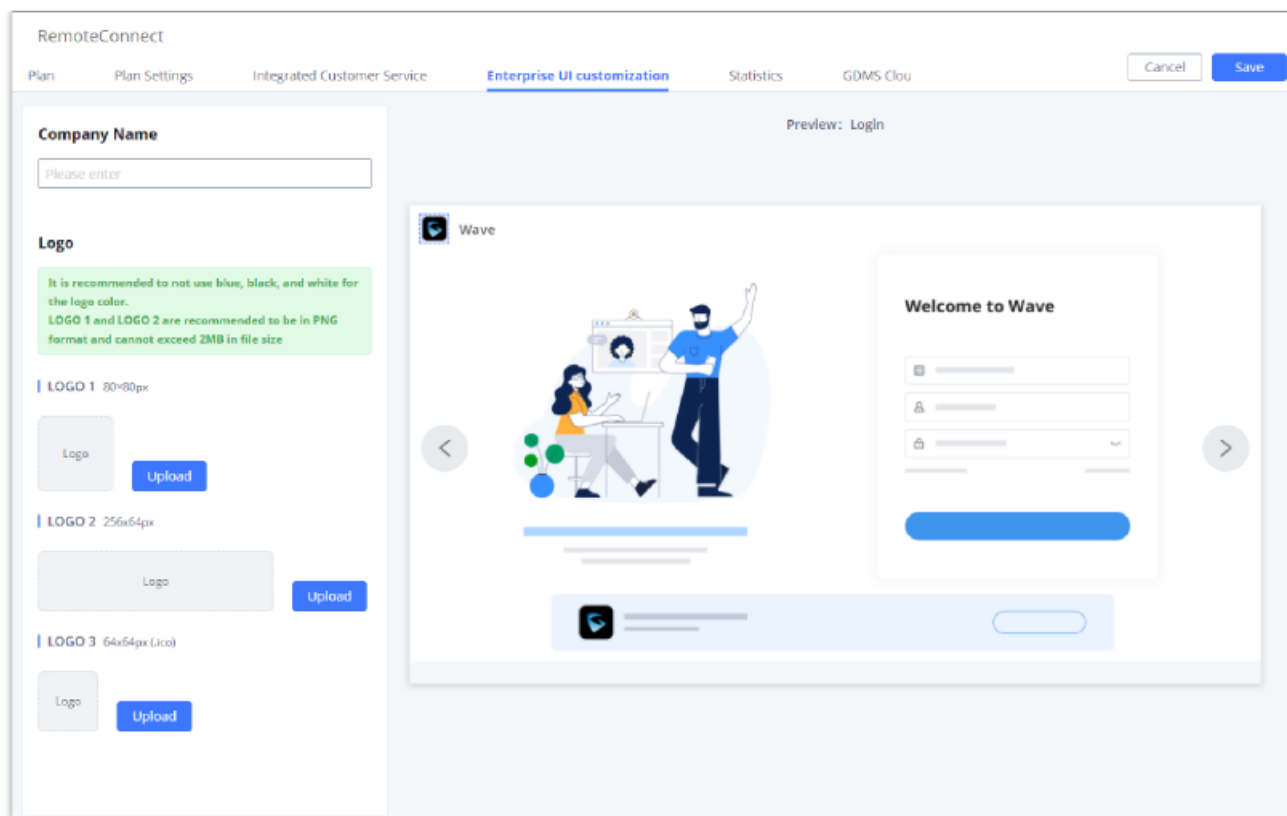
UCM63XX Device Management

## ENTERPRISE UI CUSTOMIZATION

UCM needs to connect to GDMS, so an open beta plan package for RemoteConnect will be assigned to it to start with. On the UCM Web UI ? UCM RemoteConnect ? Enterprise UI Customization page, users can edit the company name and select a local image file as the new logo. The company name acts on the text part with the company's logo, and the pictures are in different formats and sizes according to the logo position, which are LOGO1 80\*80px, LOGO2 256\*256px, LOGO3 64\*64px (only “ico” format is supported), these logos will be displayed on the “UCM management platform/login”, “Reset Password”, “Email Template”, “Wave\_PC”, “Wave Login”, “Browser Label”, “Guide Page” interface preview. Once done, the administrator can log in to the UCM management platform and customize the Wave LOGO, please refer to the UCM RemoteConnect user guide for details:

### UCM RemoteConnect User Guide

After customizing the logo, all Logos on the Wave page are displayed as customized Logos.



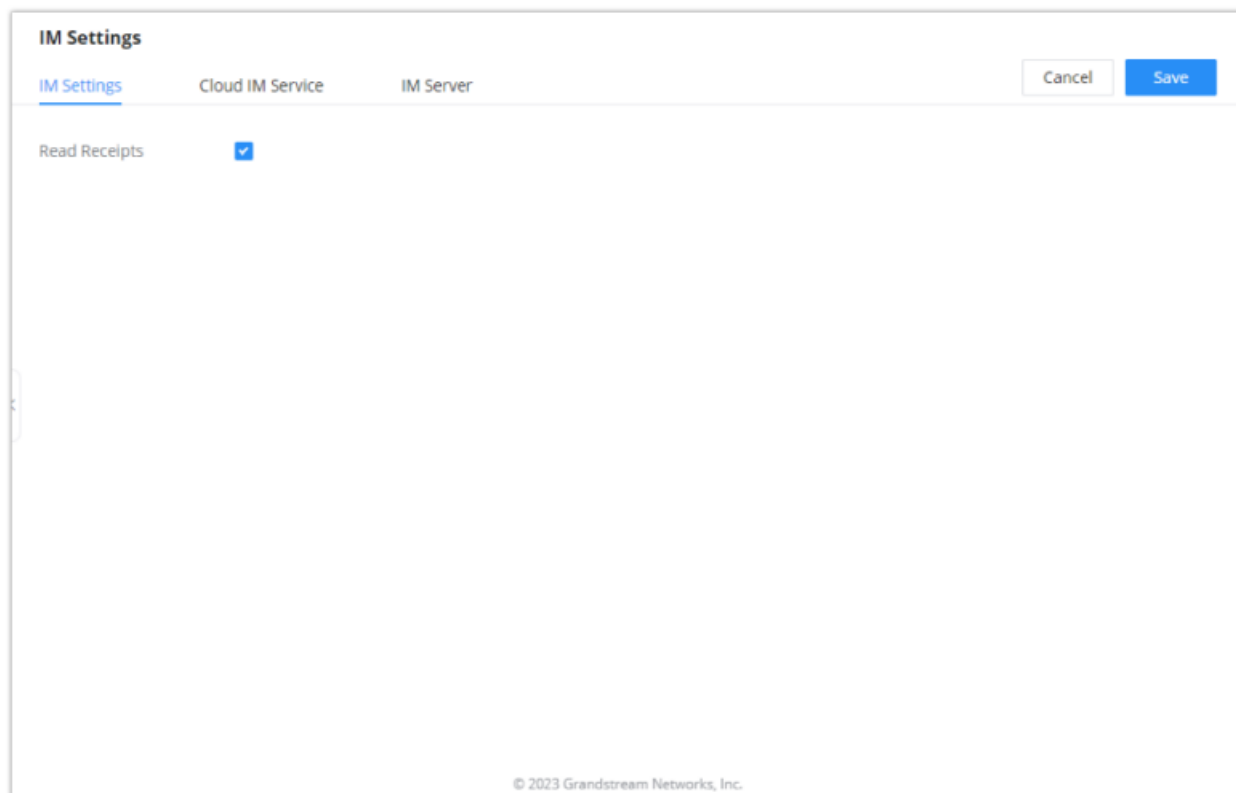
*Company Brand Customization Interface*

## IM Settings

Under System Settings ? IM Settings, the user can enable or disable whether to show a read receipt to the message sender when the recipient reads the message.

### Note

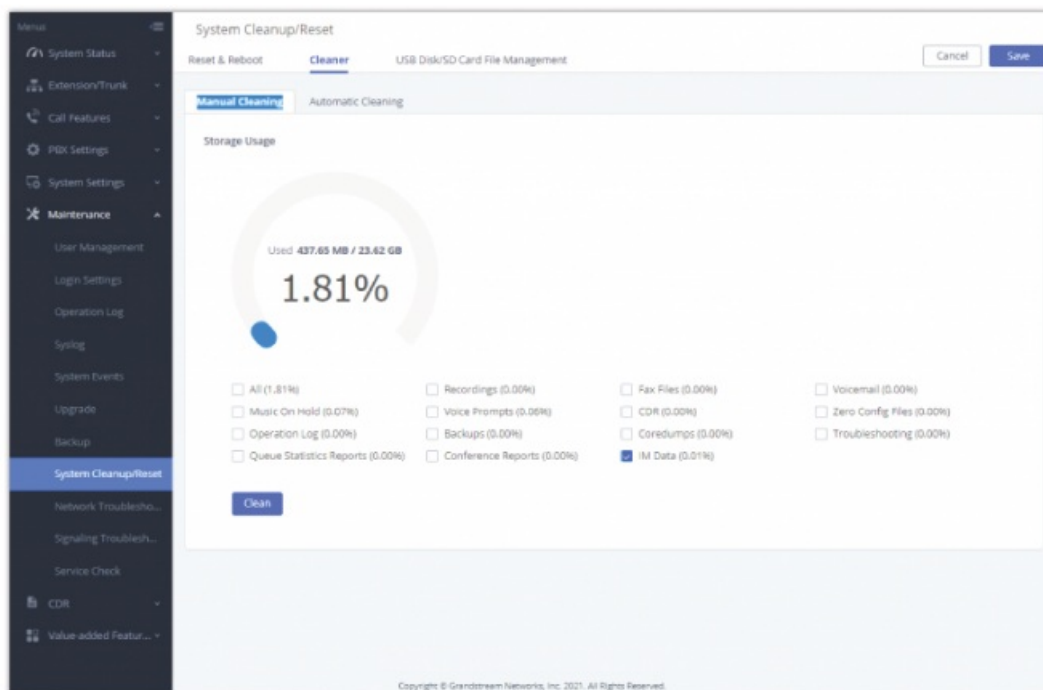
Please note that disabling read receipt will also disable the indication if a message has been delivered.



## IM DATA CLEANING

Administrators are able to clean the Instance message data generated during chat discussions using Wave web and in order to do that, please navigate the UCM630x web interface and go under Maintenance ? System Cleanup/Reset ? Cleaner.

It can either be done manually under Manual Cleaning as shown below:



*Manual IM Data cleaning*

Alternatively, it can be done automatically by configuring IM Data Cleaner as shown below:

IM Data Cleaner

Enable Cleaner:

☒

Cleanup Type::

☐ IM Message☐ IM Shared Files

\* Clean Time:

Cleaning Conditions:

\* File Clean Interval (d):

*Automatic IM Data Cleaner*

<b>Enable Cleaner</b>	Enable the IM Data Cleaner function.
<b>Cleanup Type</b>	Choose the cleanup type; either IM message or IM shared files or both.
<b>Clean Time</b>	Enter the hour of the day to start the cleaning. The valid range is 0-23.
<b>Cleaning Conditions</b>	<ul style="list-style-type: none"> <li>● <b>By Schedule:</b> If the clean interval is 3, cleaning will be performed every 3 days to delete all files.</li> <li>● <b>By Threshold:</b> Check at the configured cleaning time every day to see if the storage threshold has been exceeded and perform cleaning of all files if it has.</li> <li>● <b>Keep Last X Days:</b> Delete all files older than X days.</li> </ul>

<b>File Clean Interval</b>	Enter 1-30 to specify the day of the month to clean up the files.
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## CLOUD IM

When enabling the Cloud IM, all IM data in Grandstream Wave is stored in the external server Cloud IM, it is no longer stored in the UCM. The GDMS can configure CloudIM service for UCM devices. At this time, the UCM device synchronizes the configuration item information.

IM Settings

IM Settings

Cloud IM Service

IM Server

Cancel

Save

Enable Cloud IM

☒

Local Proxy

☐

Cloud IM Server Address

im1.gdms.cloud

To view the external CloudIM server address, please go to [RemoteConnect](#)

Service ID

100198

Key

.....

Copy

Site Name

UCM

Trusted User

Prepend

Sync Local Chat Data

☐

Get more information about Cloud IM Settings at [《Cloud IM Server Admin Guide》](#)

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Cloud IM

## Cloud IM Service

### Enable Cloud IM

If you have purchased the UCM Cloud IM package or purchased the Grandstream IM server, you can configure it. If you have not purchased it, the configuration will not take effect, but UCM local IM service is allowed. Please note that after enabling this feature, local chat data will not be visible.

### Local Proxy

If enabled, the local proxy will be used to forward files and text messages if the IM server cannot be connected to upon Wave login due to certificate issues.

### Cloud IM Server Address

The address of the server that provides IM service, you can fill in the address of the Cloud IM server provided by the RemoteConnect package or the IM server address of the GDMS.

### Service ID

The service ID of the Cloud IM server.

### Key

The Key to the Cloud IM server.

<b>Company Name</b>	Company Name
<b>Trusted User</b>	The trusted user of the cloud IM. Only letters, numbers, and special characters are allowed.
<b>Prepend</b>	As the extension prefix, it is added before the extension number.
<b>Sync Local Chat Data</b>	<p>Syncing existing local chat data to Cloud IM server. The Wave chat feature will not be available during the syncing process. It is recommended to avoid syncing during active working hours.</p> <p>– <b>Time Range</b></p> <ul style="list-style-type: none"> <li>● All</li> <li>● Last 12 Months</li> <li>● Last 6 Months</li> <li>● Last 3 Months</li> <li>● Last Month</li> </ul> <p>– <b>Data Type</b></p> <ul style="list-style-type: none"> <li>● IM Data</li> <li>● Images</li> <li>● Files</li> </ul>

#### Note

Only account details and department information will be synced on local IM and cloud IM. Other configurations such as profile picture, work status and favorite contacts will not be synced and these are stored in local IM or cloud IM respectively. Therefore, please be aware that when switching between local IM and cloud IM, part of the data cannot be synced and the previously stored data on local IM or cloud IM (depending on which one is switched to) will be retrieved.

## CHANGE LOG

#### Firmware 1.0.21.9

Added support for enabling and disabling read receipt for Wave instant messaging. [IM Settings]

#### Firmware 1.0.19.9

Added support for scheduling Onsite Meetings. [Onsite Meeting]

#### **Firmware 1.0.17.7**

Added the Allowed to override Host Mute option to the Edit Meeting / Schedule Meeting pages → Advanced Settings page. If enabled, participants muted by the meeting host will be able to unmute themselves. [Schedule a Meeting]

#### **Firmware 1.0.15.7**

No major change was added.

#### **Firmware 1.0.13.6**

- Made several UI improvements.
- Added Portuguese and Vietnamese language support. [Table 1: Wave Web Specifications]
- Added support to set permissions in the UCM admin to allow Wave users to view the specific contacts. [CONTACTS MANAGEMENT]

#### **Firmware 1.0.11.8**

- Added support for Operator Panel. [Operator Panel]
- Support multi-terminal synchronization of call records. [call records]
- Grandstream Wave step update (only manual update, no functional configuration).
- [Wave Web] Merged audio conference and video conference to Conference module. [MULTIMEDIA MEETING]

#### **Firmware 1.0.9.10**

- Added support for deleting the most recent meeting of the recurring scheduled meeting and the entire recurring meeting. [SCHEDULE A MEETING]
- Added support for UI customization. [UI CUSTOMIZATION]

#### **Firmware 1.0.7.12**

Added support for email reminder when editing the time of a scheduled meeting. [Email Reminder]

#### **Firmware 1.0.7.9**

- Video/Audio meeting room cancel the host password and meeting password. [Creating Meeting Room]
- Add email reminder configuration in meeting room. [Figure 9: Email Reminder for the Scheduled Meeting]
- Record the actual member information in the historical schedule meeting details. [Figure 13: Meeting Schedule – Completed] Clean up the history of audio and video schedule meeting regularly. [Figure 14: Scheduled cleanup for multimedia meeting history] Added support to use Cloud IM service. [CLOUD IM]
- Support to join the schedule meeting 10 minutes in advance and affected by meeting management. [SCHEDULE A MEETING]

#### **Firmware 1.0.5.4**

- Added Historical Meetings for Conference Schedule. [Figure 13: Meeting Schedule – Completed]
- Added post-meeting report email reminder. [Email Reminder]
- Improve meeting room specifications. [MULTIMEDIA MEETING]
- Added ability to customize LOGO. [UI CUSTOMIZATION]
- Added the ability to clean IM Data. [IM DATA CLEANING]


### Firmware 1.0.3.10

No major changes.

### Firmware 1.0.2.25

This is the initial version.

## Documents / Resources

	<p><a href="#"><b>GRANDSTREAM Wave Web Client Application</b></a> [pdf] User Guide UCM63xx, Audio series, Wave Web Client Application, Wave Web, Client Application</p>
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Manuals+.