# Wave Mobile Application (Android/iOS) – User Guide

# WELCOME

Thank you for using Grandstream Wave mobile app. Wave is a free mobile app that provides remote voice and video collaboration tools for businesses utilizing Grandstream's UCM6300 series of IP PBXs. Ideal for remote and travelling workers, Wave offers an easy-to-use platform to remotely join, schedule and hold meetings, calls and conferences from mobile devices. It also allows UCM6300 series users to directly call other extensions, landlines, and mobile numbers. Wave is available for Android<sup>™</sup> and iOS<sup>™</sup> devices, can be quickly configured by scanning a QR Code produced by the UCM6300 series and is compatible with Grandstream's UCM RemoteConnect cloud service to ensure fully secure remote connections. With Wave, businesses can provide remote workers with a powerful mobile app to meet and collaborate from anywhere, boosting communication and productivity for multi-location organizations.

# **PRODUCT OVERVIEW**

#### Feature Highlights

- Supported by Android<sup>™</sup> 8.0+ and iOS<sup>™</sup> 11.0+ with 2G/3G/4G/5G and Wi-Fi networks.
- Voice channel switching between Bluetooth, mobile device, speakerphone and 3.5mm handset jack.
- Native integration with mobile devices including contacts and call history and ability to display SIP users' online status
- LDAP support makes finding contacts easier
- Supports call display, voicemail, and call encryption
- Full integration with Grandstream's UCM6300-series of IP PBXs, including creation of QR code for automatic login, call transfer, call recording from server, etc.
- Supports H.264
- Conveniently join meetings without logging in
- High quality point-to-point audio/video calling, jitter resilience up to 50% audio packet loss and 20% video packet loss
- Support schedule meeting and meeting now at anywhere anytime
- Built-in NAT traversal including automatic NAT discovery and TURN/ICE.
- Support basic chat features, including point-to-point chat and group chat features, sending document and emoji, starting video meeting in group chat, synchronizing group chat and meeting chat, etc.

#### Wave Technical Specifications

Protocols/Standards	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, DNS (A record, SRV, NAPTR), STUN/TURN/ICE, SIMPLE, LDAP, TLS, SRTP, IPv6
Network	Wi-Fi, 2G/3G/4G, 5G
Display	720P resolution or above
Camera	Support mobile device's forward or rear-facing cameras

Bluetooth	Yes, with mobile device's Bluetooth support
Voice Codecs and Capabilities	Opus, G.711 A-law/U-law, G.722, G.726-32, G.729A/B, iLBC, GSM FEC 2.0 (pending), NACK Full-duplex speaker, AEC, AGC, Noise Reduction, PLC, Adaptive JIB
DTMF	In-audio, RFC2833, SIP INFO
Video Codecs and Capabilities	H.264, video resolution up to 1080P HD, on-screen-display, camera block, Video GS-FEC
Telephony Features	Hold, mute, call transfer, audio meeting, video meeting
Chat Function	Point-to-point chat/Group chat Supports to send text, emoji, document, picture; Forward message, copy message, reply message; Pin/unpin chat window, hide chat window, message prompt tone settings.
Enterprise Features	LDAP, Presence, Call history, Contacts
UCM Integration	Feature code synchronization, such as call forwarding, call park, call recording, meeting room, voicemail and etc.
QoS	Layer 3 (ToS, DiffServ, MPLS) QoS
Security	SIP over TLS, SRTP (128-bit and 256-bit), HTTPS
Language	English, Simplified Chinese, French, Spanish (Latin America), Spanish (Spain), Italian, Greek, Arabic, Russian, German, Polish, Portuguese and Vietnamese.
Login	Supports login with SIP extension and User password. Supports login through QR code scan (using UCM6300-series of IP PBXs)
Download/Upgrade	Available from Google Play Store and Apple iTunes App Store

Table 1: Wave Technical Specifications

Please visit our website for more Wave application information and product documentations:



Device Requirements

**Operating system:** Android<sup>™</sup> 4.2+, iOS<sup>™</sup>10+

Hardware: Compatible with most Mobile phones and tablets running Android<sup>™</sup> 4.2+ or iOS10+

Network: Wi-Fi, 2G, 3G, 4G, and 5G networks

# Download and Installation

Wave app can be downloaded from Google Play or App Store and installed.

Click on the Wave app icon S to open it.

#### **O** Notes

- When running Wave app for the first time, users will be prompted to confirm whether to allow the application to access contacts. If allowed, users could view local contacts on Wave app.
- Wave app requires permission related to making call, managing calls, as well as accessing camera, microphone, some system files, call status, mobile network information and etc. When prompted to allow permission, please select allow in order for Wave app to be used normally.
- For some Android devices, Wave app requires users to enable floating window or background pop-up window permissions. Otherwise,
   incoming call notification cannot be received.

#### Touchscreen Gestures



Gestures on Touchscreen

When using Wave app, users can manipulate above shown gestures to control the touchscreen.

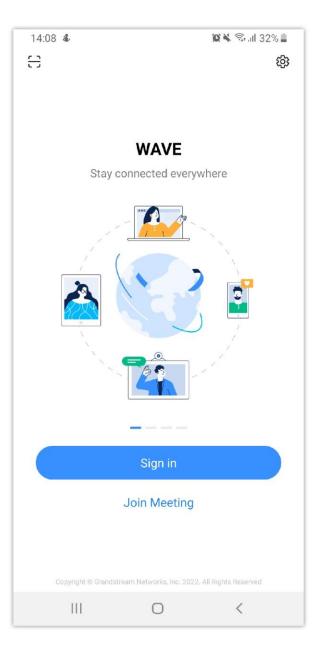
- **Tap**: Touch the screen with a fingertip once to select or open a menu.
- Press and hold: Touch and hold the screen with one fingertip for about 2 seconds to bring up more operations.
- Flick and Slide: Slide a fingertip across the screen. For example, users can swipe up/down to scroll through a page or slide left/right to switch video feeds during video conference.

# USING WAVE APP

#### Signing In Using Credentials

Step 1: After opening Wave app, tap on "Sign in" to open the login interface.

Step 2: Enter server address, account number and User password. Then click "Sign in".



It is recommended to use domains for login purposes avoid potential IP address restrictions.	s to
Domain/Server	•
Account	
Password	$\succ$
Forgot Passv	vord?
Sign in	



# Signing In Using QR Code

The user can also tap - to log in using the QR code provided in the Wave welcome email, or if the user has already open his/her account on Wave Desktop or Wave Web.



#### Making a Call

**Step 1**: Click on (iii) on the bottom right corner of the app to bring up the dial pad.

Step 2: Enter the number to dial.

**Step 3**: Click on to make a video call or click on to make an audio call.

Note: With the Wave app, users can dial other extensions and any other number allowed by the UCM server.

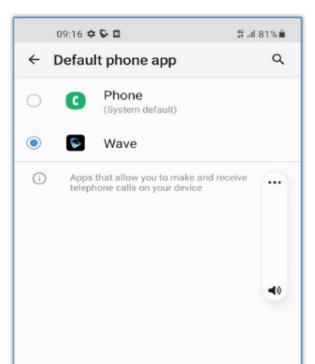
	Recent Calls	Voicemail	=
AM	Arthur Morgan 🌿 1008	11:5 1min 56	
СВ	Catherine Braitwa	ite 11:4 21	1.1
AM	Arthur Morgan 1008	11:4 1min 5	
AM	Arthur Morgan	11:4 23	
AM	Arthur Morgan 🌿 1008	11:4 No answ	
AM	Arthur Morgan 🌿 1008	11:4 No answ	
AM	Arthur Morgan	11:4	13





# Notes

- With the Wave app, users can dial other extensions and any other number allowed by the UCM server.
- The user can select the Wave app as Default phone app to make calls.





Default Phone App

## Redial

Users can quickly call the last dialed number as long as it exists in the call history.

**Method 1:** Open the dialing interface by tapping on the Dial tab.

**Method 2:** Tap on the pound key # on the dial pad to automatically call the last dialed number.

#### Call History

Call history is displayed on the **Dial** page. It displays all call history and voicemail messages in each Wave client for the Wave account.

- To hide the dial pad, swipe down on the page. Users will be able to view more call history entries.
- Click on the

button on the bottom right corner of the app to bring up the dial pad.

	Recent Calls	Voicema	il 🖭
AM	Arthur Morgan 🌿 1008		11:50 1min 56s
СВ	Catherine Brait	waite	11:49 21s
AM	Arthur Morgan ¥ 1008		11:49 1min 5s
AM	Arthur Morgan		11:47 23s
AM	Arthur Morgan 🌿 1008		11:44 No answer
AM	Arthur Morgan 🌿 1008		11:43 No answer
AM	Arthur Morgan		11:43 8s
AM	Arthur Morgan ¥ 1008		11:42 9s
AM	Arthur Morgan 🌿 1008		N III) <sup>2</sup>
	Arthur Morgon		11.41
Chats	Calls	Meetings	<b>3</b> ا Contacts

	Recent Calls	Voicemail	<u>ت</u>
AM	Arthur Morgan 🌿 1008		11:50 1min 56s
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AM	Arthur Morgan 🌿 1008		11:49 1min 5s
AM	Arthur Morgan		11:47 23s
AM	Arthur Morgan 🌿 1008	Ν	11:44 lo answer
AM	Arthur Morgan 🌿 1008	Ν	11:43 lo answer
AM	Arthur Morgan 1008		11:43 8s
AM	Arthur Morgan 🌿 1008		2 S
Chats	Calls	Meetings	Contacts

By clicking on 🔚 the user can delete the entries in the call history tab.

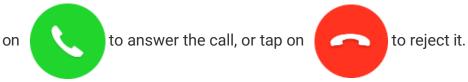
×	Recent Calls	$\Diamond$
	Arthur Morgan 🌿 1008	11:50 1min 56s
ОСВ	Catherine Braitwaite 1010	11:49 21s
O AM	Arthur Morgan 🌿 1008	11:49 1min 5s
O AM	Arthur Morgan 1008	11:47 23s
	Arthur Morgan 锋 1008	11:44 No answer
	Arthur Morgan 锋 1008	11:43 No answer
	Arthur Morgan	11:43 8s
	Arthur Morgan 🌿 1008	11:42 9s
	Arthur Morgan 锋 1008	11:42 No answer



# Answering a Call

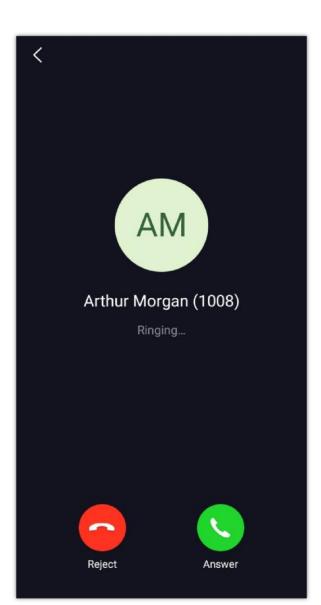
While Wave is running in the background, incoming calls will ring the device and bring up the following screen shown in the images.

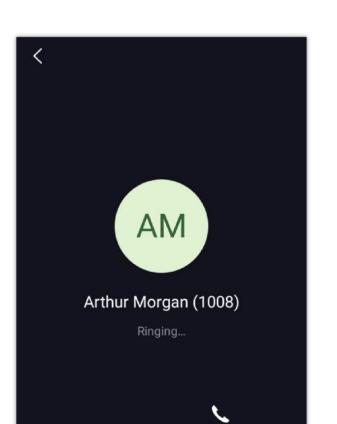
• For incoming audio calls, users can tap on

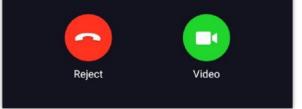


• For incoming video calls, an additional button

is available to answer the call with video on.







Audio

## Note

Limited by the network, the call reminder will have a delay of about 4-5 seconds. If the region of the iPhone is set to China, you will not be able to

receive a call reminder. It is suggested to change the region of the mobile phone to non-China area.

#### During a Call

During a call, users can hold/unhold the call, mute/unmute, bring up the dial pad to enter DTMF, switch audio channel and etc.



Audio Call



Video Call

- (i)) Use speaker as audio channel. User can select to switch to earpiece, wired headset or Bluetooth headset.
- $\circ$  Use earpiece as audio channel. User can select to switch to speaker, wired headset or Bluetooth headset.
- **C** End call: Tap to end the current call.
- • Mute/unmute: Click to mute or unmute.

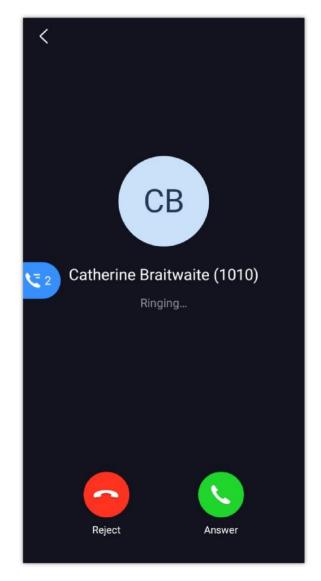
- Video on/off: After tapping on enable video, a video invitation will be sent to the remote party. If the remote party accepts, video feeds for both parties will be displayed.
- **N**-way conference. Click to add participants into conference.
- || Hold/unhold: Tap on hold a call or retrieve a held call.
- [+{ Transfer: Click to transfer the call. Blind transfer and attended transfer are supported.
- DTMF: Tap to bring up dial pad and enter DTMF.

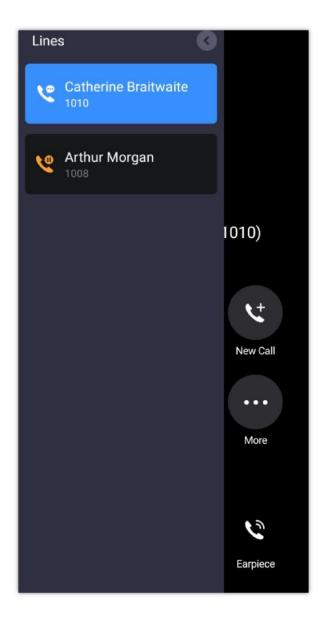
#### Call Waiting

Wave application supports call waiting; users can receive multiple calls at the same and switch between calls by following the below steps:

**Step1**: During a call, user receives a second call and answer it.

**Step2**: Click on **C**<sup>2</sup> to switch to the other call.





## Hold/Unhold and Multiple Lines

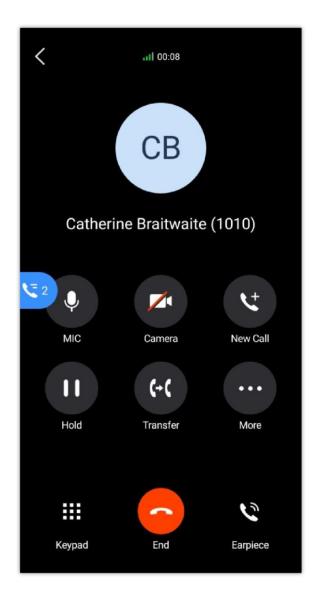
Wave Mobile application supports up to 6 simultaneous lines. The user can hold each call or switch between them.

Step 1: During a call, tap on

to put the call on hold.

Step 2: Tap on to resume the call

Step 3: The user can click the button to switch the call to the other line.



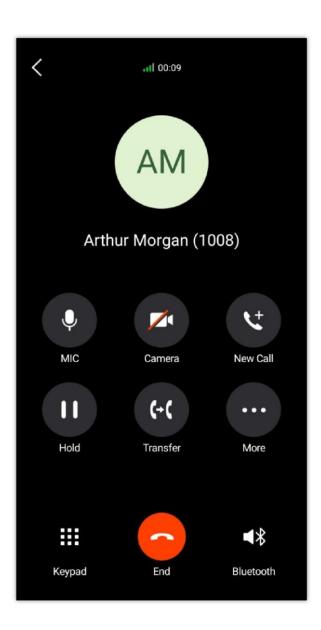
#### Mute

**Step 1:** During the call, tap on the Mute button to mute your microphone. The remote party will no longer be able to hear you.

Step 2: Tap the unmute button

to unmute your microphone.

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#### Switching Audio Channel

Wave Mobile application supports changing audio channel during calls. To perform this action, tap on  $\mathfrak{C}$  icon at the top right corner of the application to bring up audio channel selections. The following options will be available:

- Use Bluetooth headset.
- GUse wired headset.
- $\circ$   $\bigcirc$  Use phone earpiece.
- Use phone speaker.

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	Ų		4
	MIC	Camera	New Call
	11	(-(	•••
	Hold	Transfer	More
<b>(</b> )	Speaker		
C	Earpiece		~
<b>■</b> ∦	Bluetooth		
	Switchi	na Audio Cha	nnel

#### Missed Call

Missed calls will be indicated in the call log with the extension number highlighted in red with missed call icon right next to it 🛛 😫

	Recent Calls	Voicemail	≝
AM	Arthur Morgan 🜿 1008	1	11:50 min 56s
СВ	Catherine Braitw	vaite	11:49 21s
AM	Arthur Morgan		11:49 1min 5s
AM	Arthur Morgan		11:47 23s
AM	Arthur Morgan 🌿 1008	No	11:44 answer
AM	Arthur Morgan 🌿 1008	No	11:43 answer
AM	Arthur Morgan		11:43 8s
AM	Arthur Morgan		11:42 9s



#### Call Transfer

Wave app supports transferring calls from one party to another party. Blind transfer and attended transfer are supported. To initiate a transfer

please refer to the screenshots below; and to understand how each type of transfer works, please refer to their respective sections below.

Step 1: Tap "Transfer" to initiate the transfer process



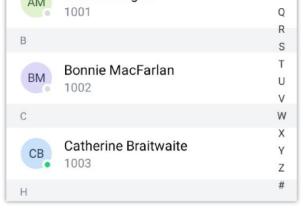
Initiate a Transfer

**Step 2:** Either enter an extension number or select a contact from the list of contacts.

If you entered an extension number, please select the type of transfer that you want to perform by clicking either start the transfer.

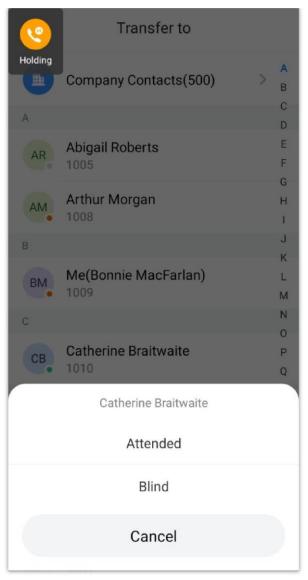
Attended Or Blind TO

<b>(</b>	Transfer to		
Holding	Search Company Contact		
	Phone Contacts	>	A B C
0	Favorites	>	D E F
My Orga	anization		G
	Company Contacts(500)	>	H I J
A			К
AR	Abigail Roberts		L M N
			0
AM	Arthur Morgan		Ρ



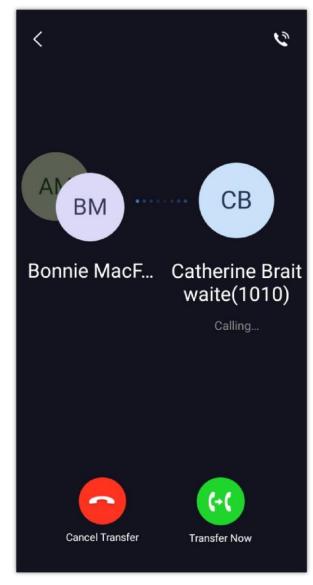
Choose a Contact

If you select a contact from the list of contacts, a menu will appear to select the type of transfer that the user desires to initiate.



Choose the Type of the Transfer

**Step 3:** As an example, we have picked Attended transfer, the user can either wait until the contact that the call transferred to picks up the call, or he can tap "Transfer now" to transfer and leave the call even before the contact transferred to picks up the call.



Call Transfer – Call Screen

#### Blind Transfer

Step 1: Establish a call between User A and User B.

Step 2: Tap "Transfer" button.

Step 3: User A enters User C's number to transfer the call to, then press "Attended" to transfer the call.

**Step 4:** User C rings. User B will be put on hold.

**Step 5:** If User C answers, the call between User A and User C will be established. User A can press END call button to complete the call transfer. The call is established between User B and User C.

**Step 6:** If User C does not answer the call, User C will continue ringing. Now User A can press END call button to complete the call transfer. When User C answers, the call will be established between User B and User C.

#### Attended Transfer

Step 1: Establish a call between User A and User B.

Step 2: Tap "Transfer" button.

Step 3: User A enters User C's number to transfer the call to, then press "Attended" to transfer the call.

Step 4: User C rings. User B will be put on hold.

**Step 5:** If User C answers, the call between User A and User C will be established. User A can press END call button to complete call transfer. The call is established between User B and User C.

**Step 6:** If User C does not answer the call, User C will continue ringing. Now User A can press END call button to complete call transfer. When User C answers, the call will be established between User B and User C.

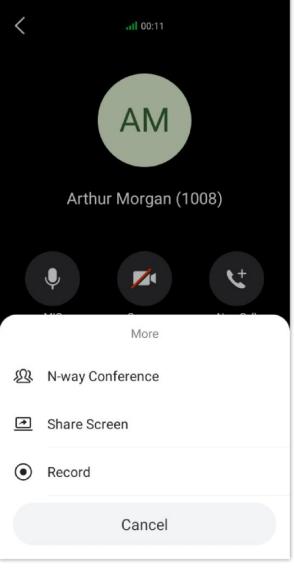
#### N-Way Conference

N-Way Conference allows users to add multiples parties to a conference call. No access codes are required. Below are the steps to follow:

Step 1: Dial or receive a call from the first party and accept the call.

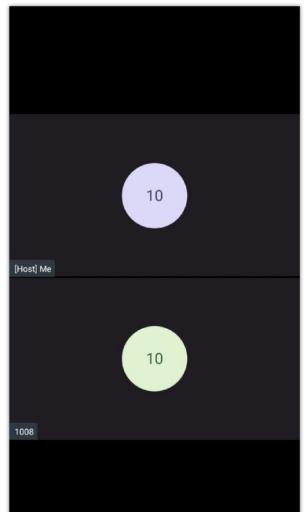
Step 2: Tap "More" button.

Step 3: Select option "N-way conference".



Start N-way Conference

Step 4: The user will be redirected to the conference page where he can add more participants.





N-way Conference

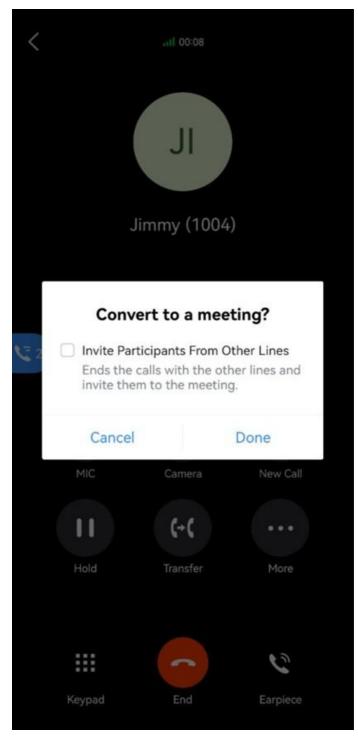
**Step 5:** To add more participants, click on **equal** then on **equal** to bring more people to the call.

<	Participants List(2)	)	+
10	<b>Me(1009)</b> Host	Ŷ	>
10	1008	Q	>
	Invite		
Ċ S	Share Invitation Informatio	n	
<u>_2</u> +	Invite Participants		
	Cancel		

Invite Participants

Step 6: Then select "Invite Participants".

If there are calls already established on multiple lines, the user can quickly merge all the calls into one meeting by clicking on "**N-way Conference**" button. Once click, it will prompt to whether to invite all the other members from other lines, select that option then click "**Done**".



Convert to a meeting

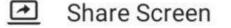
#### Call Flip Function

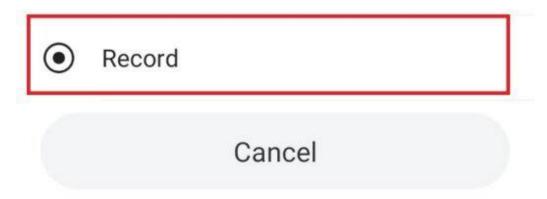
Wave Desktop/Mobile/Web client and other desk phones can switch the ongoing calls between each client. For example, Wave mobile app and Wave Desktop client both have account 1003 logged in, and if the Wave mobile app user establishes the call between 1003 and 1004, the user can also transfer the active call to the Wave Desktop client, and the account 1004 owner will not notice that. Btw, if the user is using the desk phone, the user can dial \*46 to implement the call flip function.

#### Record an Ongoing Call

The user can record a call even if the call has already started. To do that, swipe up from the bottom side of the screen to bring the options menu, then tap the recording button of during the call to start recording the call. Once the call is ended, the user can click who button to view the recording files on the call history interface. Please see the screenshots below:







Start a Call Recording

	Recent Calls	Voicemail	≝	
AM	Arthur Morgan 1008		12:12 12:12	
	6	0	<b>A=</b>	
AM	Arthur Morgan 🌿 1008		12:10 🕑 8s	
AM	Arthur Morgan 🌿 1008		12:05 19s	
AM	Arthur Morgan V 1008		12:04 13s	
AM	Arthur Morgan 🌿 1008		12:02 26s	
	Meeting Room 30004021		12:01 47s	
AM	Arthur Morgan 🌿 1008		12:01 8s	
СВ	Catherine Braitv	vaite Not es		
	0-46 D 14.		44.50	
		í_ì	ĘI	
Chats	Calls	Meetings	Contacts	
	Listen to the Call Recording			

Screen Sharing

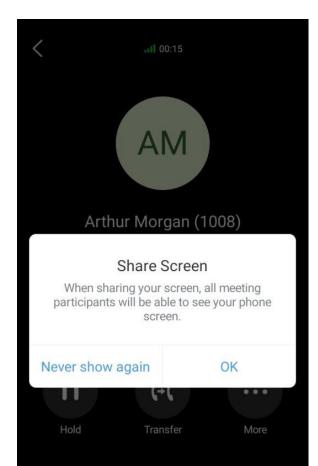
Using Wave mobile, the user can share the screen of his/her mobile phone for other users in one-to-one call or in a meeting. To do that, the user

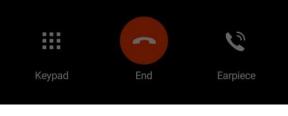
should swipe the contextual menu to reveal more options and select "Share Screen" as shown in the screenshot below:

<	ull 00:08
	AM
	Arthur Morgan (1008)
	V V+ More
迎	N-way Conference
•	Share Screen
۲	Record
	Cancel



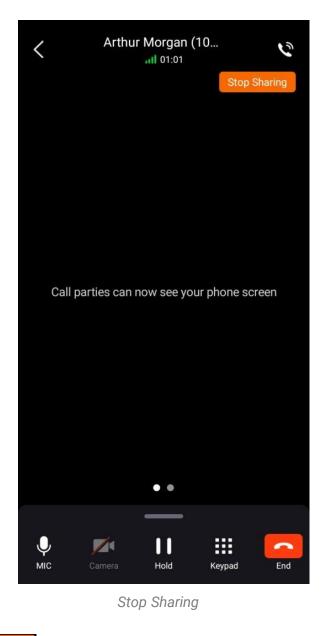
A prompt will appear telling the user that everyone in the meeting/call will be able to see the screen of the user. Click "OK" to confirm that you want to share the screen with the other users.





Share Screen

Then the screen-sharing will immediately start

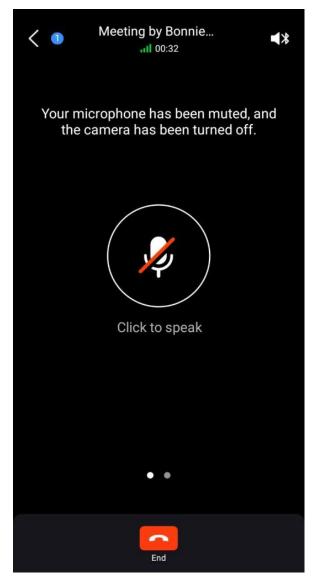


To end the screen-sharing please click on Stop Sharing

#### Safe Driving Mode

Wave has a safe driving mode which enables a reduced user interface to make it easier to access the main controls of Wave call/meeting. This feature has been introduced to remove any kind of distractions from Wave user interface. The camera will be turned off by default while this mode is enabled, and the user can use the button shown in the screenshot below to unmute and mute themself.

In the Wave meeting, the user can slide the meeting UI to the left side to access the safe driving mode. Please see the screenshot below:



Safe Driving Mode

Please make sure that safe driving mode has been enabled first by going to Wave settings as the screen below shows:

<	Settings	
Notification and Ring	itone	
Notifications & I	Ringtone Settings	>
Block Notification Desktop	When Active on	
	device is inactive for mo ations to this device will	
Calls and Meetings		
Call Waiting		
If enabled, new incor calls.	ning calls can be receive	ed during
Call Waiting Ton	ne	
Echo Cancelatio	on	
Noise Suppress	ion	
Safe driving mo	de	
	nd microphone will not b Wave meetings. Users r	
Car/Bluetooth S	Support	

Settings – Safe Driving Mode

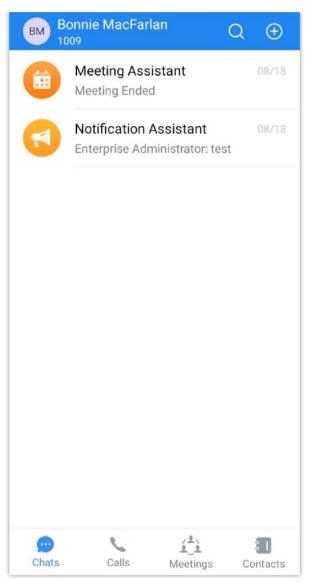
# CHAT

Wave application supports single chat, group chat and meeting chat.

# Single chat

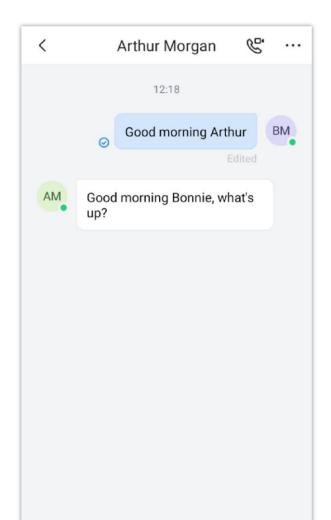
In order to start single chat with a user, please follow the steps below:

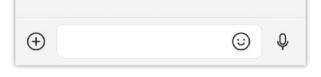
Step 1: Go under Chats page and click on



Start a One-to-One Chat

#### Step 4: Start chatting.



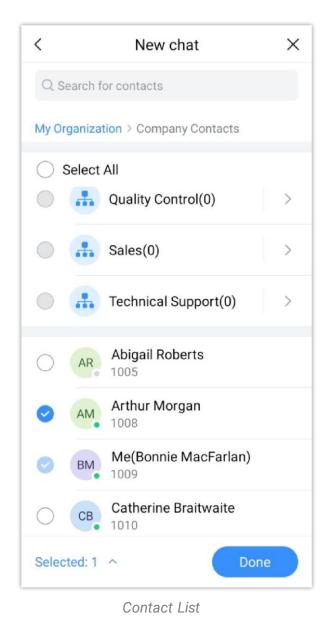


Chat Window

**Step 2:** Select the type of contacts repertoire.

×	New chat	
Q Search	n for contacts	
Con	mpany Contacts(	500) >
Selected:	0 ^	Done
Contact Category		

Step 3: Select a contact to send a message to, then click "OK".



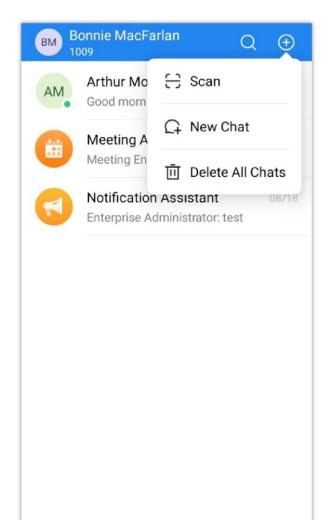
When a message is delivered, a small icon will appear next to the message ③. When the user reads the message, Wave will indicate that by showing a small icon  $\sim$ .

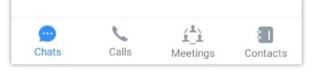
To delete a single chat, please tap and hold the chat you wish to delete, then tap Delete Chat.

Bonnie MacFarlan Q 🕀					
AM		Arthur Morgan Good morning Bonnie, what's u			12:19
•	Meeting Assistant Meeting Ended				
•	N Ei	Pin to To	ор	۶t	08/18
		Chat Se	ttings		
		Hide			
		Delete C	Chat		
9		6	12		1
Chats		Calls	Meetings	С	ontacts

Delete a Specific Chat

To delete all the chats at once, please tap on the plus icon on the top right corner of the screen. Then select Delete All Chats.





Delete All Chats

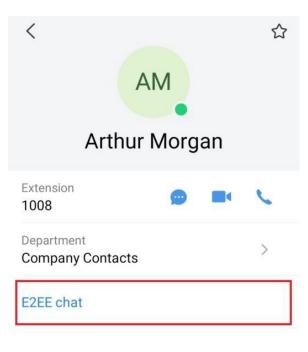
#### End to End Encryption Chat

Wave supports end-to-end encryption which encrypts the messages from the terminal sending the messages and decrypts the message once it reaches the recipient's terminal. This protects the confidentiality of the messages exchanged; this includes all the type of messages exchanged, text messages, images, documents and files, voice recordings etc... Wave uses advanced asymmetric encryption technology to ensure that nobody, other than the two involved parties, can read the messages.

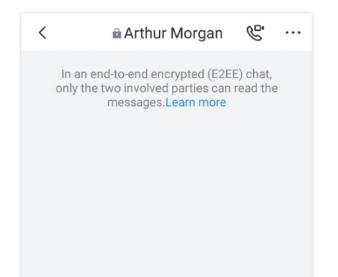
#### Important Note

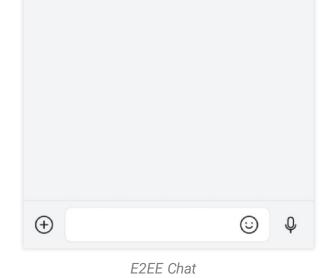
Please note that end-to-end encryption is not supported on group chat and on audio/video calls.

To start a single end-to-end encrypted chat please go to **Contacts** then select the contact you wish to message. Then click on  $\bigcirc$  and select E2EE chat as shown below in the screenshot.



Start an End to End Encrypted Chat

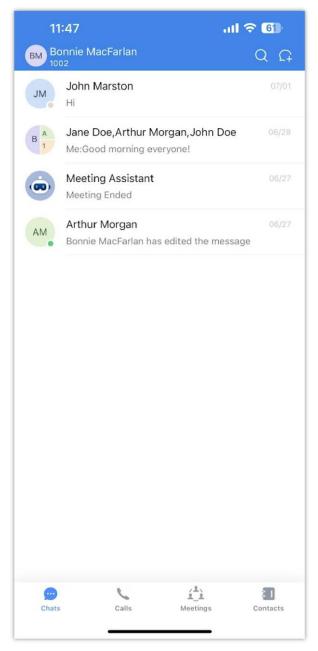




# Group Chat

In order to Chat with multiple contacts at the same time, please follow the steps below:

Step 1: Go under Chats page and click on



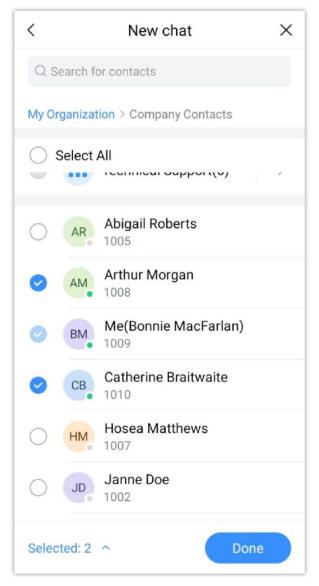
Start a New Group Chat

Step 2: Select the contact repertoire.

11:47		ul 🗟 🗊
<	New chat	
Q Search for	Contacts	
Enterpri	se Contacts (9)	>
Selected: 0		ОК
		_

Choose Contact Category

**Step 3:** Select the departments or the contacts that you wish to message in a group chat.



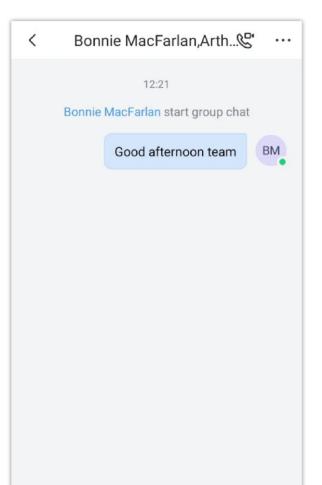
Choose a Department or a Direct Contact

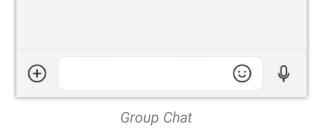
**Step 4:** Set a name for the group. Then click **Create**.

< Create New Group
Bonnie MacFarlan,Arthur Morgan,Catherine B
Group Members (3)
Add Bonnie Arthur M Catherin Owner
Create

Create New Group

Step 5: Start chatting.





The chat group creator can access the group's setting to allow or prohibit other user from inviting other members, as the screenshot below

shows.

< Group Settings	
Group Members (3)	>
Add Bonnie Arthur Catherin	
Add Bonnie Arthur Catherin <sub>Owner</sub>	_
Allow Group Members to Invite	
Change Group Owner	>
Group Name Bonnie MacFarlan,A	rt 🔎
EQ Search Chat History	>
🔁 Files	>
Pin to Top	
Message DND	

Allow Group Members to Invite

## Note

The newly joined members in the group chat cannot view the group chat history by default (Only the group owner can set the chat history that the group members can view: No, All, 1 Day, 7 Days).

View chat history	
Do not allow	
All	
Past 1 day	
Past 7 days	

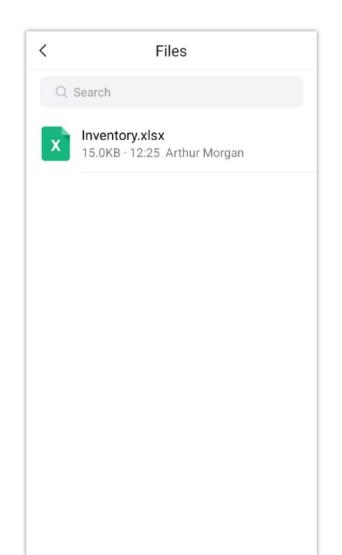
Allow Viewing Chat History

In the point-to-point chat and group chat, users can view the files list.

Click the button 🛛 at the right upper corner of the interface to access to group settings interface.

< Group Settings	
Group Members (3)	>
Here     Here     Am     CB       Add     Bonnie     Arthur     Catherin       Owner     Owner     Catherin	
Allow Group Members to Invite	O
Change Group Owner	>
Group Name Bonnie MacFarlan,Art	2
EQ Search Chat History	>
🔁 Files	>
Pin to Top	
Message DND	

Files List



#### Files Exchanged in the Chat

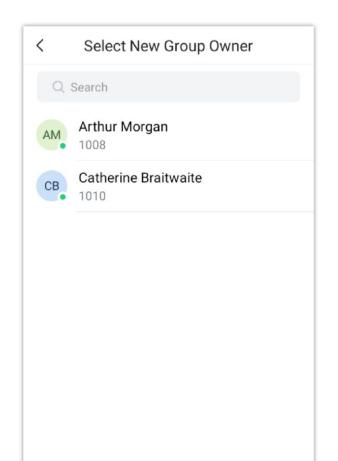
At any point the group owner can relegate his/her role to another member of the group, to do that please refer to the steps below:

**Step 1**: Click on the three dots at the top right corner of the application, then select "Change Group Owner".

< Group Settings			
Group Members (3)	>		
Here     Here     Am     CB       Add     Bonnie     Arthur     Catherin       Owner     Owner     Catherin			
Allow Group Members to Invite			
Change Group Owner >			
Group Name Bonnie MacFarlan,Art 🗡			
$\overline{\XiQ}$ Search Chat History	>		
🗀 Files	>		
Pin to Top			
Message DND			

Change Group Owner

Step 2: The select the member to whom you want to relegate the group chat host.

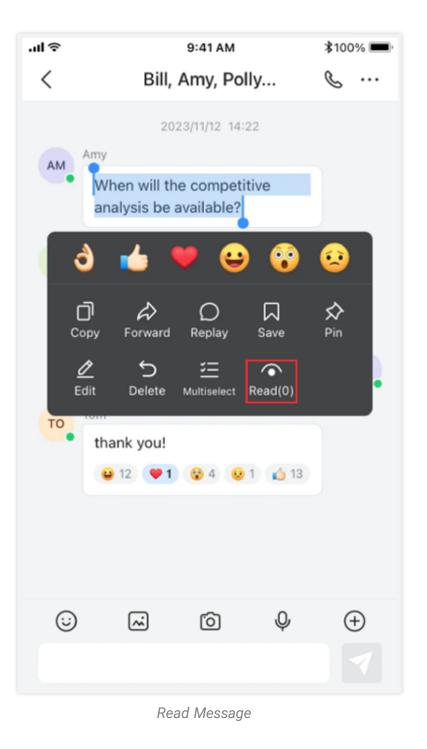


Select The New Group Owner

# Important Note

Please note that group chat is not supported by end-to-end encryption.

The message sender can view who has seen his/her message by tapping on the message then tapping on "Read" option to display the names of the users who have seen the message.



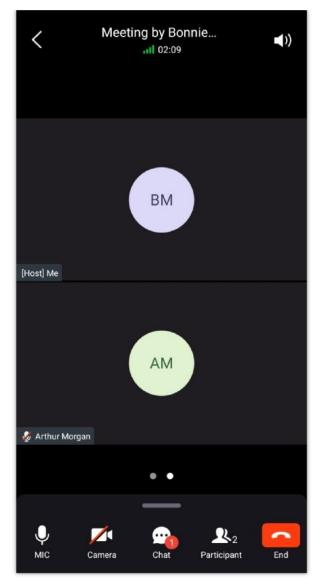
#### Meeting Chat

Participants can chat during audio/video meeting, by following steps below:

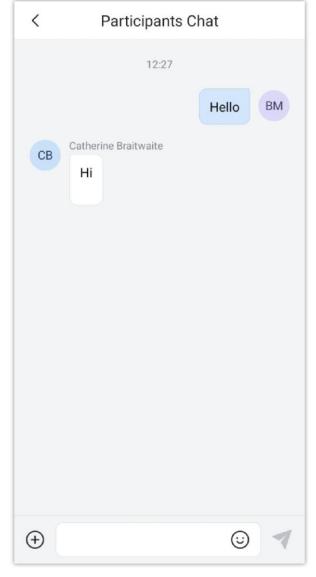
Step1: Start an audio/video meeting.

Step2: Click on on to initiate chatting with participants.

Step3: Start chatting.



Meeting Call



Meeting Chat

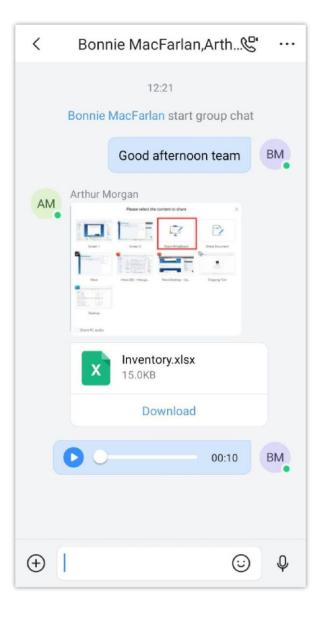
#### Instant Messaging

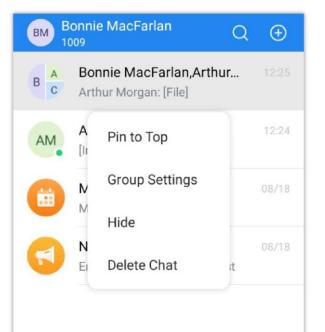
In the chat interface, the application allows the user to send text, emoji, documents, voice messages and pictures.

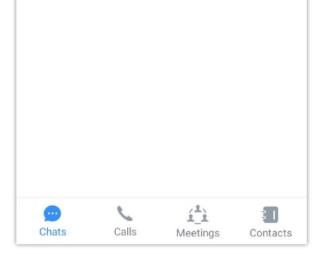
• For the message contents in the chat interface, if the user long presses the contents, the user can copy/forward/reply/recall the contents/reply with emojis.

• Users can send quick replies with emojis. For example, if the user enters "[Smile]" in the chat window, the emoji 😀 will be shown directly.

- Users can record a short video for up to 15 seconds and send it to the current chat.
- Drag the chat window to the left, the user can pin/unpin/hide/set the group settings for the chatbox. If the user clicks the "Group Settings" button, the user can access the group settings interface to pin/unpin the chatbox and enable/disable DND for the new message notification.
- If the user has set the DND for the new message notification for the group chat, the new messages from the group will no longer be notified and reminded









The upper limit of the input content is up to 5000 characters. If it exceeds 5000 characters, the content in the input box will be converted to a document. The uploaded file/image size limit is 50MB.

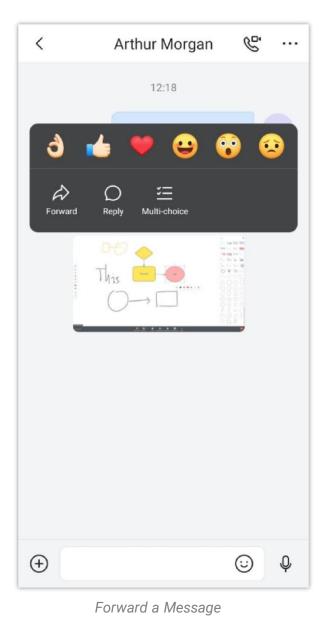
#### Info

It's possible to slide left and write when a user opens an image in a conversation to view all the images that have been sent before.

### Message Forwarding

Wave allows forwarding one or multiple messages to one recipient or multiple recipients. Please follow the steps below.

Step 1: Long press the message that you want to send, then select Forward to forward one message. Or select Multi-choice to forward multiple messages.

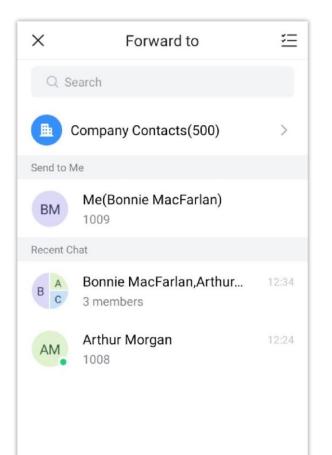


Step 2: Select the messages that you would like to forward then tap Forward one-by-one or Merge and Forward.

×		Arthur Morgan
		12:18
0	•	Good morning Arthur BM
		Edited
0	AM	Good morning Bonnie, what's up?
0		
	Forward	드슈 Merge and
	one-by-one	

Forward One or Multiple Messages

Step 3: Select one or multiple recipients of the forwarded messages.



Select the Recipient of The Message

### Pin Message

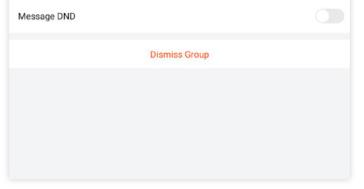
Pin message feature allows the user to pin a message in a group for all the members of the group. To pin a message in group chat, press and hold the message, then a menu will appear, press "Pin" button

Once the message has been pinned, it will be displayed on the top of the group chat as shown in the figure below.

.ul 奈	9:41 AM	\$100% 🔳
<	Bill, Amy, Polly	C
Bill: W	nned Message hen will I discuss the remaining iss ee at 14:00? @All	X sues? Are
	analysis be available?	
BI	Bill	
•	@Mary Look at the time.	
	Reply	
	Will give you next Mond	lay. MA
то	Tom	
	thank you!	
	😝 12 🖤 1 😵 4 🥺 1 🔥 13	
	Bill pined a message. View Pine	d
$\odot$	4 Ó 14	$(\pm)$

The user can view all the pinned message in a chat group, access the group settings using the three dots button on the top right corner of the conversation, then select "**Pinned Messages**".

<		Group Settings		
Group Members	(4)			>
(+)	10	10	10	10
Add	1001 Owner	1002	1003	1004
Allow Group M	embers to Invite			
Allow Group M	embers to Pin M	essages		
Change Group	Owner			>
Group Name			1001,1002	2,1003,1004 🗡
🖈 Pin Messa	ges(1)			>
EQ Search Ch	at History			>
🗎 Files				>
Pin to Top				

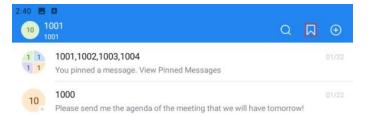


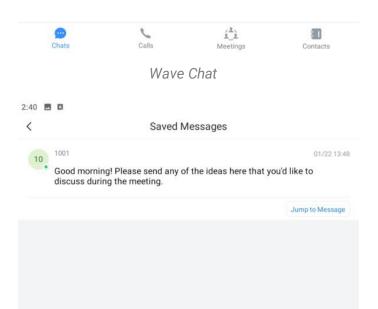
Group Settings

## Save Message

To save a message from a specific discussion, you should press and hold the message you'd like to save, once the menu appears, tap on the save button

To view all the saved message, please click on the bookmark icon on top of the chat window, as show below.





Saved Messages

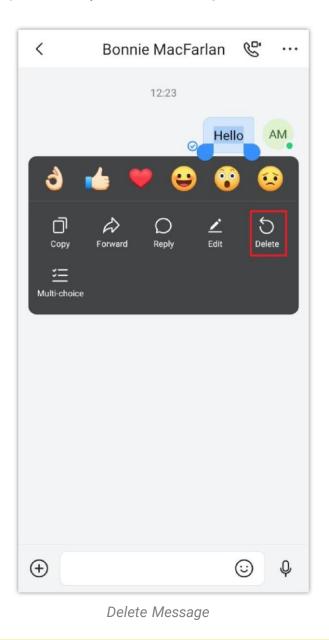
### Delete Message

Step 1: In the chat interface, the user can select a message and long press on it then click "Delete" button to delete the message.

Step 2: After deleting the message, the remote party will delete the message synchronously.

**Step 3:** The deleted text can be re-edited by the user.

Note: After deleting the message, it will be deleted permanently, and the message cannot be recovered.



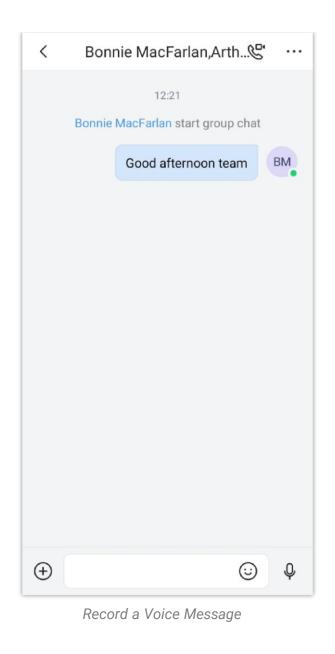
Note:

To delete a message, the user must have the "Delete Chat" permission. Please refer to the UCM63xx User Manual for more details.

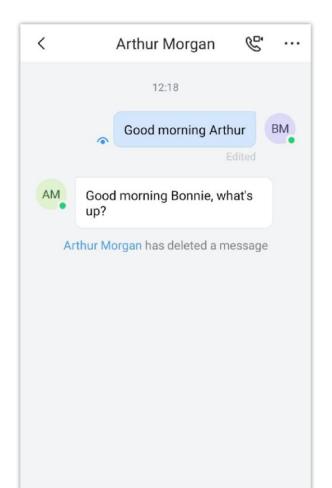
### Voice Messages

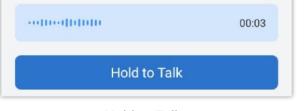
Wave Mobile application supports recording and sending voice messages instantly in point-to-point chat or group chat. To use this feature please follow the instructions below

Step 1: Tap on the microphone icon in the chat window.



Step 2: Then tap and hold "Hold to Talk" to start recording





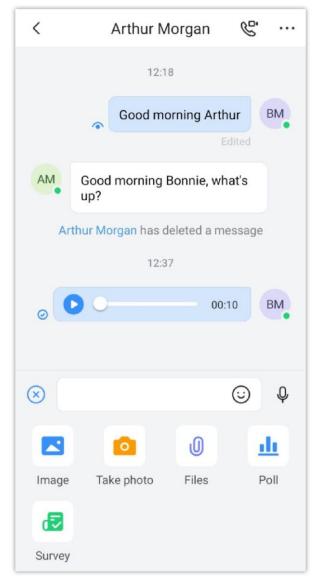
Hold to Talk

**Step 3:** Once your message has been recorded please tap on send message.

<	Arthur Morgan 🛭 🕲 \cdots
	12:18
	Good morning Arthur
AM	Good morning Bonnie, what's up?
Ar	thur Morgan has deleted a message
0	O 00:10 Ū
	Send Voice Message

Send The Voice Message

The voice note will be sent and it can be played be tapping the pay button.



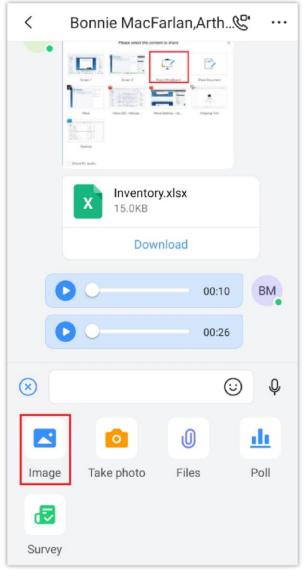
Sent Voice Message

## Note

Please note that sending voice message is only possible on Wave Mobile application.

## Send an Image

You can also send an image to any contact or a group chat, to do so, tap the image icon as shown in the figure below:

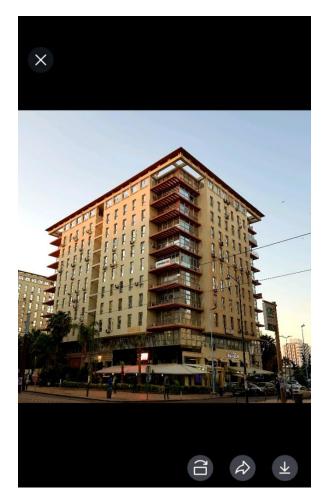


Send and Image

Then select an image and press send.

### View an Image

To view an image in full screen on Wave, please tap to open the image.



View Image

When viewing an image, the user has three options on the bottom right of the screen.

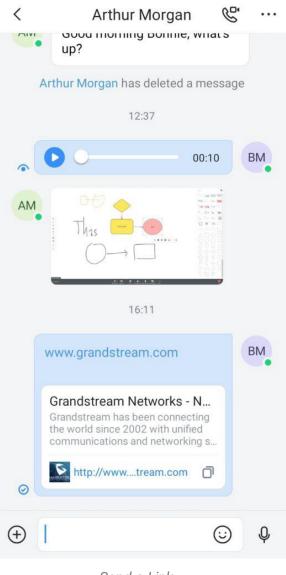
: This button can be used to rotate the image clock-wise.

ightarrow: This button can be used to forward the image to another contact.

💵 : This button can be used to download the image to the smartphone.

### Send a Link

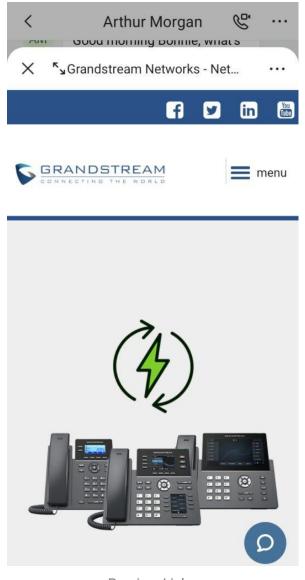
You can also send a link to any contact or a group chat, to do so, just paste the link or type the link in the chat window.



Send a Link

#### Preview link

You can preview links in chat messages, and you can click on a link in the Wave app to view the web page through a small popup window.

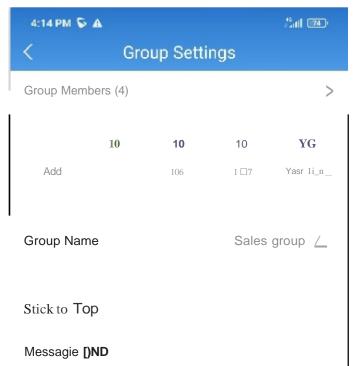


Preview Link

### Group Settings

- In the group settings interface, the user can modify group name, add/delete group members, and leave/dismiss the group chat. The user can click the button \_\_\_\_\_\_ at the right upper corner of the interface to access to group settings interface.
- Modify Group Name: The user can click the group name to edit the group name.
- View All Group Members: The user can click "Group Members" option to view all group members.
- Delete Group Members: In the group member list, the user can long press a specific member icon and delete the group member. Only the group owner can operate.





#### Leave Group

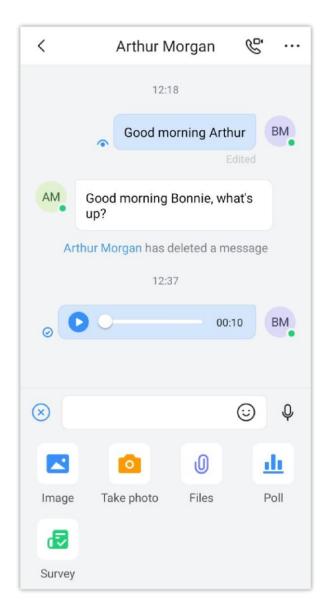
◀

- Add Group Member: The user can click button  $\oplus$  to add group members and select from the contacts.
- Pin: The user can select this option and the current group chat window will be displayed at the top of the chat list.
- DND: The user can select this option and all new messages from this group chat will not be notified and reminded.
- Dismiss Group: The user can click this option to remove all members from the current group chat. All group chat history will be deleted.
   Only the group owner can operate.
- Leave Group: The group member can click to leave the group at any time and the group chat history will be deleted for this user.

### Search in a Chat History

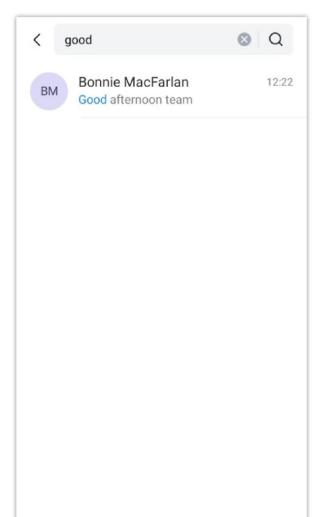
Wave app allows searching within a discussion using keywords in order to find the information you are looking for and read the context in which it was relayed. To use the chat search functionality please follow the instruction below.

**Step 1:** Go to the conversation you wish to search in then tap on *···* on the top right corner of the screen



< Group Settings	
Group Members (3)	
Here     Here     Am     CB       Add     Bonnie     Arthur     Catherin       Owner     Owner     Catherin	
Allow Group Members to Invite	
Change Group Owner >	
Group Name Bonnie MacFarlan,Art 🔎	
$\overline{\Xi Q}$ Search Chat History >	
🔁 Files >	
Pin to Top	
Message DND	

Step 3: In the search box, enter the keywords you'd like to search for, and the result will be displayed similarly to the screenshot below.





## Create Poll/Survey

To create a poll or a survey, please tap on the plus button at the bottom right corner of the chat window.



Then choose either Poll or Survey.

		$\otimes$	(	÷
			0	Ш
		Image Take pl		Poll
		Survey		101
oll				
poll, tap	then click on +			
		< Bonnie I	MacFarlan,Arth.	œ"
		<	Add Poll	
		Subject		
		Subject Allow Multiple Selec	tion	0
				0
		Allow Multiple Selec	1	
		Allow Multiple Selec	1	-
		Allow Multiple Select	1	-
		Allow Multiple Select C Enter option C Enter option Add Option	1	-
		Allow Multiple Select C Enter option Add Option Allow Others to Add	1	-
		Allow Multiple Select Enter option Add Option Allow Others to Addo Anonymous Vote	1	-
		Allow Multiple Select Enter option Add Option Allow Others to Addo Anonymous Vote Display Poll Result	1	

Add Poll

Enter the necessary information for the poll.

K Bonnie MacFarlan,Arth	s
< Add Poll	
Subject	
Allow Multiple Selection	
O Enter option	•
O Enter option	•
Add Option	
Allow Others to Add Options	
Anonymous Vote	
Display Poll Result	
After voting	
Auto-End Poll	
Indefinite	•
Save Save and Pu	ublish

Add Poll Subject and Options

Subject	Enter the subject of the poll.
Allow Multiple Selection	Allow voters to select multiple options when voting
Add Option	Add an option to the poll.
Allow Others to Add Options	Allow other users to add options when voting.
Anonymous Vote	The voters names will not be displayed.
Display Poll Result	<ul> <li>After Voting: The results will be displayed to the user as soon as he/she picks an option to vote for.</li> <li>After Poll Ends:</li> </ul>
Auto-End Poll	This determines the time after which the poll will end. The time periods which can be configured are: <b>Indefinite, 10 minutes, 30 minutes, 1 hour, 2 hours, 3 hours, 4</b> <b>hours, and 5 hours</b>

Then click on Save to save the poll, or click on

Save and Publish

to save and published the poll. The published poll will be posted to the

conversation and will look like the following figure.

<	Bonnie MacFarlan,	Arth	o
	Image: State		
	Inventory.xlsx 15.0KB		
	Download		
	0 0	00:10	ВМ
	0 0	00:26	
	12:42		
	II Poll		BM
	Poll Subject 1.Option 1 2.Option 2 		
	View Results		
<u>olo</u> Or	ngoing Poll		
$\oplus$		$\odot$	Ą
	Published Poll		

#### • Create a Survey

To create a Survey, please tap on

Ŀ

Survey

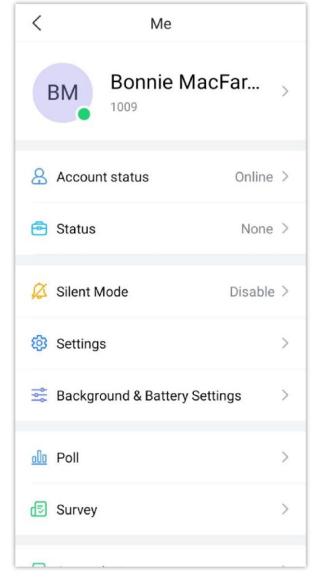
< Bonnie MacFa	rlan,Arth🕲 · · · ·
< Add Sur	vey
Subject	
Description	
Anonymous	
Allow Others to Share Surve	у 🔿
Question 1	^
Question	
Required	
Single Selection	•
O Enter option	
C Enter option	0
Eo Save	Save and Publish

Create a Survey

Subject	Enter the subject of the survey.
Description	Enter a description for the survey.

Anonymous	Toggle this option to hide the names of the participants of the survey.
Allow Others to Share The Survey	Toggle this option on to allow the users to share this survey.
Question	Enter a question
Answer Type	<ul> <li>Single Selection: Only one option can be selected as an answer to the question.</li> <li>Multiple Selection: Multiple options can be selected as answers of the question.</li> <li>Text: The user can enter a text to answer the question.</li> <li>Yes/No: The user can only answer the question by either choosing "Yes" or "No".</li> </ul>
Add Question	Add more questions to the survey.
<ul> <li>Stop a Poll/Survey</li> </ul>	

**Step 1:** To stop a poll or a survey, please click on your profile picture.



Wave Mobile Profile

Step 2: Then tap on "Poll" or "Survey". For the sake of this example, we will choose "Survey".

< Me
× Survey
All
Publish Time: 08/23 12:46 Ongoing
Survey Subject Submitted: 0
Publish Time: 08/23 12:44
Survey Subject Submitted: 2
<b>e</b>
List of Surveys

Step 3: Open the survey you wish to stop, then tap

<	Me						
<	Survey	G					
Su	rvey Subject						
Sut	End the survey? Once the survey is ended, others will no longer be able to fill the survey. Cancel Stop						

Stop

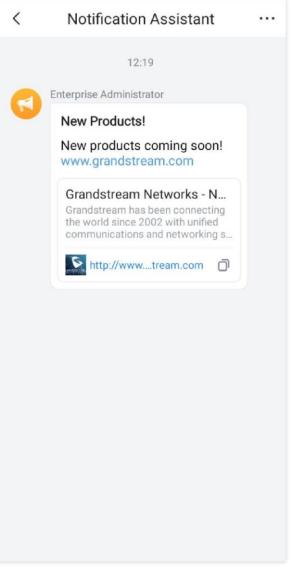


Stop a Survey

Step 4: Click on "Stop" to end the survey.

### Notification Assistant

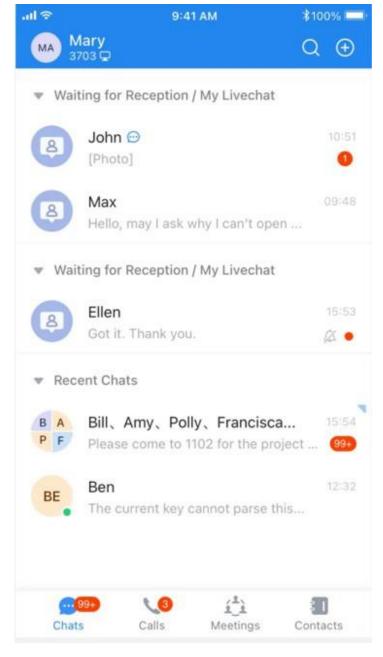
The administrator of your UCM can log in the **Web UI of the UCM** -> **Messaging** -> **Message Broadcast** to publish a broadcast message to all extension users, and Wave users can receive this message and display through the Notification Assistant.



Notification Assistant

### Live Chat

When customers initiate Live Chat sessions, the agent can receive the message on Wave mobile client and reply to the customer. The agent can also view the session which have already been processed.



Live Chat

9:41 AM	\$100% 🔳
Adam Livechat1000	G 🗸
2023/11/12 14:22	
Hello, is this product still available?	
Hello, welcome to visit our website. Our company has the following businesses: 1.xxxxxxx xxxxxxxxx 2.xxxxxxxxxxxxx 3.xxx xxxx	
Marry received this conversation.	
0	K MA
•	
	© ₽
	Adam Livechat1000 2023/11/12 14:22 Hello, is this product still available? Hello, welcome to visit our website. Our company has the following businesses: 1.xxxxxxxxxxxxxxxxxx 2.xxxxxxxxxxxxxxxxx

Live Chat Session

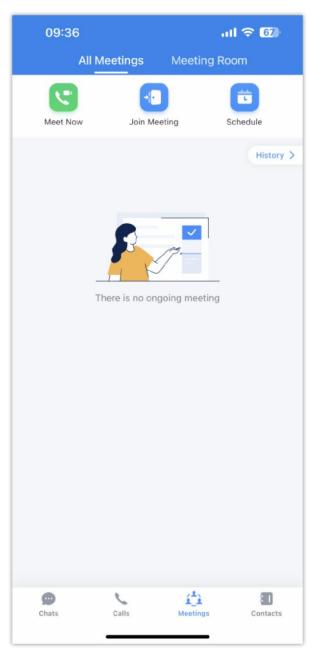
Once the agent has provided the needed support to the customer, the agent can click on  $\checkmark$  to mark the session as resolved. If the user wishes to transfer the session to a different agent, he/she can click on  $\bigcirc$ .

# MEETING

#### Meet Now

Immediately create a new meeting using one of the UCM's meeting rooms. Step 1: Tap on "Meet now". Step 2: Set the meeting subject. Step 3: Select the participants from contacts/group members. Step 4: Click "Meet now" button to create a video conference and join the video conference room.

**Note:** After creating the instant meeting, the video meeting number is a random meeting number. If the user wants to use the public meeting room, the user can access to the public meeting room list and join the public meeting room.



All Meetings



4		50										
0	2	4	6	8	10	12	14	16	18	20	22	24
	Chats	5		Ca	• IIs			L L etings		С	ontact	6

Meeting Room

Users can also directly enter a meeting room by dialing its extension from the **Dial** page.

### Schedule Meeting

**Step 1:** Click the "Schedule" button to open the interface as shown on the right.

**Step 2:** Select whether to use the public meeting room. If the user wants to use the public meeting room, the user needs to select the public meeting room number.

**Step 3:** Set meeting time and repeat cycle.

**Step 4:** Set the password for the meeting room.

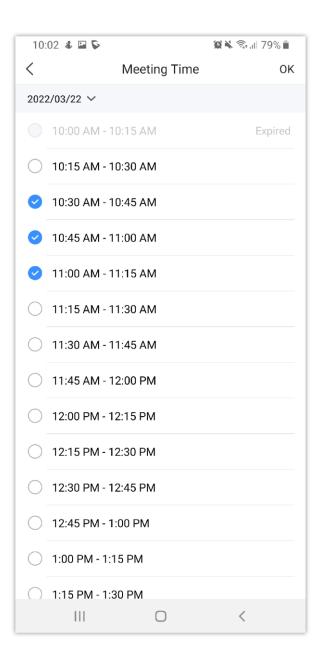
**Step 5:** Select meeting participants.

**Step 6:** Select the meeting host. Set the host code, set the meeting property, etc.

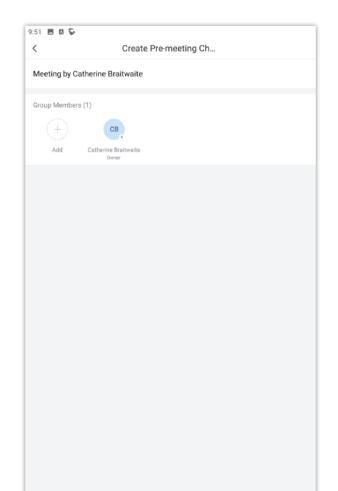
Note: If "Allowed to Override Host Mute" is enabled, the participant can unmute themself after they have been muted by the host of the meeting.

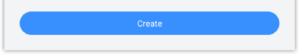
**Step 7:** Click on "OK" button in the upper right corner to complete the conference room reservation.

10:01 🌡 🏷	🌘 🔧 🗟 💷 79%	5 🔳				
< Schedule Meeting						
Conference initiate	d by 1014					
Use Public Meeting	Room					
Meeting Time *		Not configured	>			
Recurrence		Once	>			
Meeting Password		Optio	nal			
Meeting Description	n					
Invitees		0	>			
Host Settings			•			
Advanced Settings			•			
Time Zone	/	Africa/Casablanca	>			
Email reminders be	fore meeting	<b>9</b> 60	>			
Ш	0	<				



When scheduling a meeting, the user can create a group chat by tapping on  $\mathfrak{L}_{\mathfrak{G}}$ . Then, tap on "Create".





After the meeting ends, the system will prompt the user to whether to forward the chat history of the meeting to the new meeting group chat.

If the user decides to cancel a meeting, he/she can do so by navigating to the list of meetings and tapping on the meeting and then tapping cancel meeting as the figure below indicates.

<	Meeting Details	£8 🗅
Meeting by Catherine Bra	itwaite	
Africa/Casablanca		
2023/03/29	45Minute	10:45
2023/03/29		2023/03/29
Meeting Room		90004052
Host Code		0236
Host		Me(Catherine Braitwaite)
Invitees		0 >
Email reminders before n	neeting	60Minute
Call Invitees		Closed
Allow participants to invit	te	Opened
Allowed to override Host	Mute	Closed
Cancel Meeti	ing	Edit

Then the user will be prompted to enter the reason of the cancellation of the meeting. The reason specific will be relayed by meeting assistant to the extension added in the meeting.

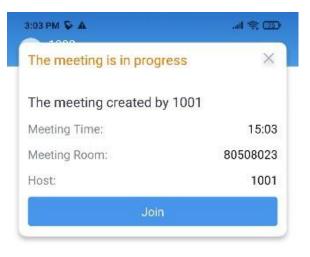
	Cancel the	meeting?		
Reason for cancelation				
Cancel			ОК	

### Meeting Invitation

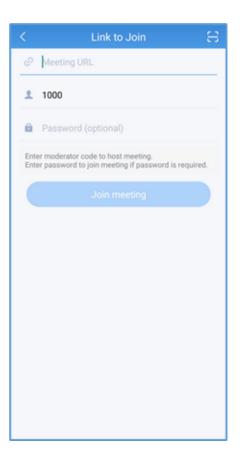
When the user receives the meeting invitation, the user can quickly click to join the meeting through the message reminder in "Meeting Assistant".

There will be a notification 10 minutes before the meeting starting time or the scheduled meeting is about to begin.

3:28	РМ 🕏 🛦	🛪 🚥
<	Meeting Assistant	
	<ul> <li>04-19 15:26</li> <li>Meeting Room: 20000094</li> <li>Host: 1001</li> </ul>	
	Join	
	3-26 PM	
	Meeting Invitation The meeting created by 1001	Ģ
	<ul> <li>04-19 15:27</li> <li>Meeting Room: 70609055</li> <li>Host: 1001</li> <li>Join</li> </ul>	
	3:27 PM	
	Meeting Invitation The meeting created by 1001	
	<ul> <li>04-19 15:27</li> <li>Meeting Room: 90605086</li> <li>Host: 1001</li> </ul>	
	Join 3/27 PM	
	15-02 20277586 CL331	







There are two methods to join meeting via link:

1. Click on 😑 to scan the QR code from the meeting invitation email or provided by meeting host to join meeting.

2. Fill in manually the Meeting URL and password. By default, meeting invitation emails also provide a link to join the meeting.

### Note

Meeting participants can invite the IP camera devices they have permission to access to meetings. Other meeting participants will be able to view the video feed of the invited IP camera devices.

#### Receive Calls When Receiving an Invitation

If an ongoing meeting sends an invitation to a user, the user will not only receive the message notification, and the user will receive an incoming call notification, so that the user can be notified in time.

#### Meeting History

To review the historical meetings, users can always go back to "**Meeting history**" to display information about old meetings. To do so, please follow the steps below:

#### Step 1: Click on Meeting history.

Step 2: Select the desired meeting to display more details.

	Meeting	
Meet now	to a chedule	Dink to Join
Today sundar 142f>1441 \ sales goals M 1iil9 rcij011 6300 Spooso admin		Meeting history >
Messages	.1.	1. II et,ng
2021•□1-2:9 Friday 12:56-13:10 \. te\$t Mee1ing room 6300 Spoo Ol" admin		

< Meeting Det	ails
📞 test	
Africa/Casablanca	13:10
2021-01-29	2021-01-29
Repeat	Once
Meeting room	6300
Host	Me(1000)
Invitees	1 >
Wait for Moderator	Closed

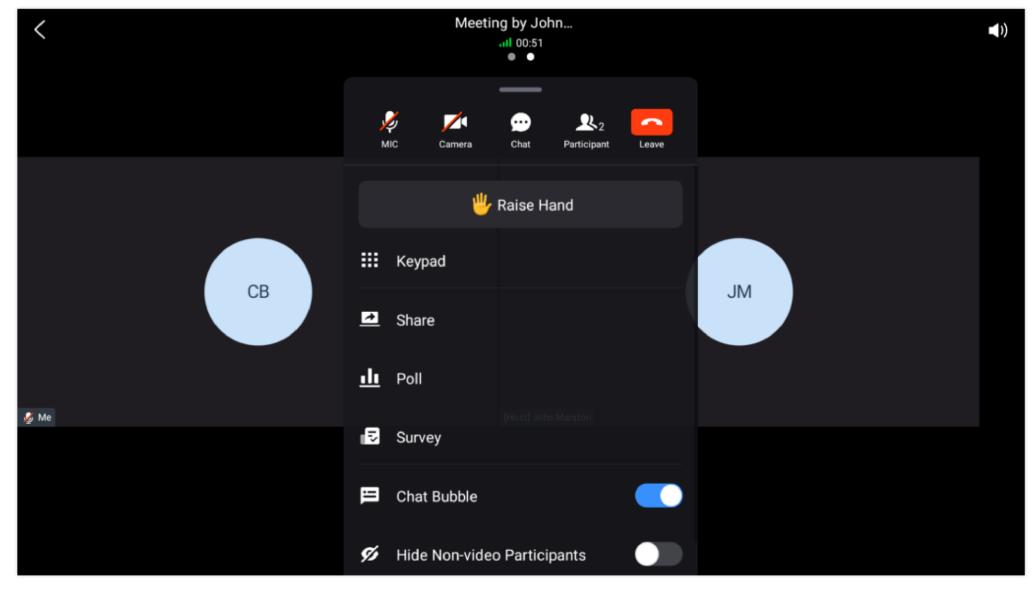
#### Meeting History

### **1** Information:

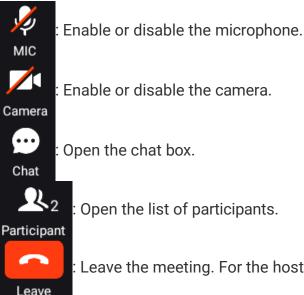
You can search for the recent 6 months meeting history. The period will be counted by natural month.

### During the Meeting

During a meeting, the participant will be presented with the screen shown below. The participant will be able to perform a number of actions and use features offered by Wave to have a productive meeting.



During the Meeting



: Leave the meeting. For the host of the meeting, when he/she clicks on this button, it will prompt two options: "End Meeting" and

"Leave Meeting". End Meeting will finish the meeting and Leave Meeting will result in the host leaving and another member will be assigned as

the host, and the meeting will carry on.

	🖐 Raise Hand	: Raise your hand.
	Keypad	: Open the keypad.
•	Share	: Share your screen with the meeting's participants.
<u>.lı</u>	Poll	: Create a poll.
Ð	Survey	: Create a survey.
😑 Chat Bub	bble	: Toggle the Chat Bubble on and off.

**CO**: Toggle to display the current speaker during the meeting.

TOD: Hide the participants who do not have their camera activated. 9 Hide Non-video Participants

■ Speaker Layout ■: Change the layout to display the speaker.

#### Note

During a meeting, the host can mute a participant who seems to be in a noisy environment. This will enable push-to-talk for the participant. If he/she wishes to speak, he/she needs to press and hold the microphone and release it when he/she is done speaking.

#### Note

The meeting host can start audio recording during the Wave meetings, and only the meeting organizer can view the meeting recording files in the Meeting Details menu after the meeting.

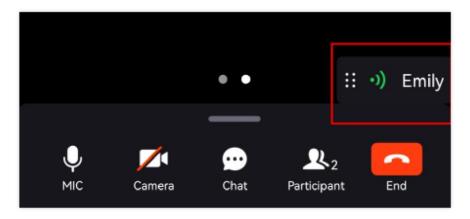
Please follow the instructions showed in the two screenshots below to start recording a meeting.

10:42	2 🖬 💐 🖗 •		<b>n</b> (),	.ıll 42% 🛢
<		test 1 01:02		<b>■</b> )))
		Ś		
<b>Q</b> Mute	Video On	 Chat	Rarticipant	End
O Reco	rd			
🔢 Кеура	ad			
📁 Chat I	Bubble			
1,11	1	0	<	

10:50 🔩 🔄 🖬		💐 🖘 "il 41% 🛢	
<		6300 11 00:19	<b>■</b> D))
y Unmute	Video On	 Chat	Participant Leave
		Ο	<

### Display Current Speaker

During a meeting, the current speaker will be displayed in real-time. You can configure to display or hide the speaker identity in Settings.

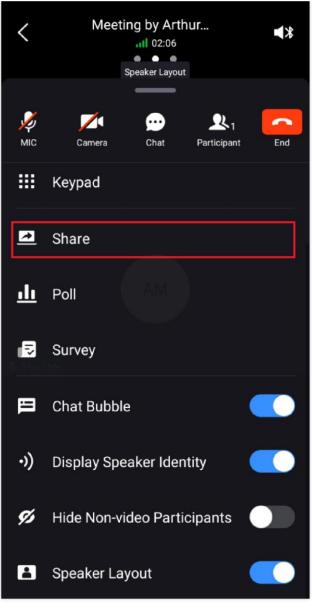


Display Current Speaker

#### Share

Using Wave mobile, the user can share the screen, share whiteboard or share a document of/from his/her mobile phone for other users in a meeting.

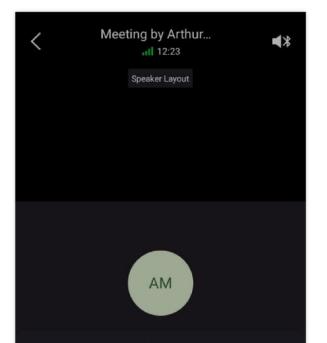
To do that, the user should swipe the contextual menu to reveal more options and select "Share" as shown in the screenshot below:

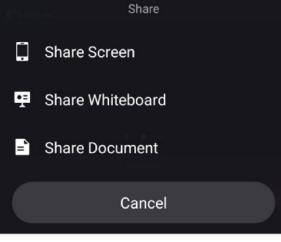


Share Screen

A prompt will appear with the sharing options:

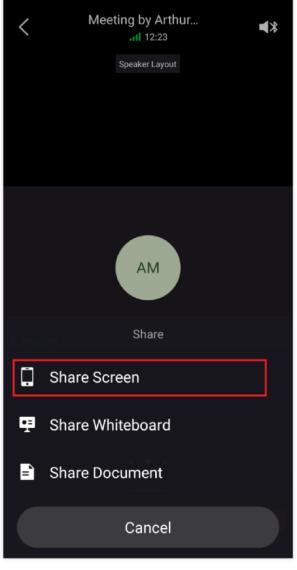
- "Share Screen": To share the entire screen
- "Share WhiteBoard": To share the WhiteBoard (Supported in meetings only)
- "Share Document": To share a PDF file (Supported in meetings only)





Share Options

#### Share Screen



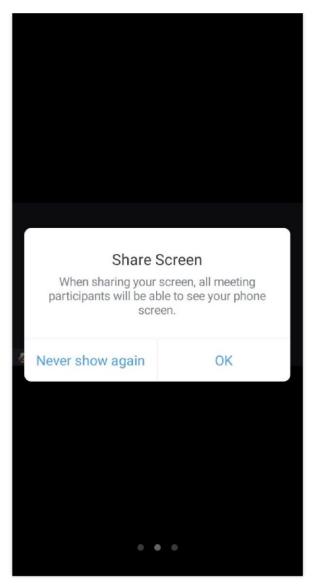
Share Screen

A prompt informing you that all your screen content will be shared and viewed by other meeting participants.

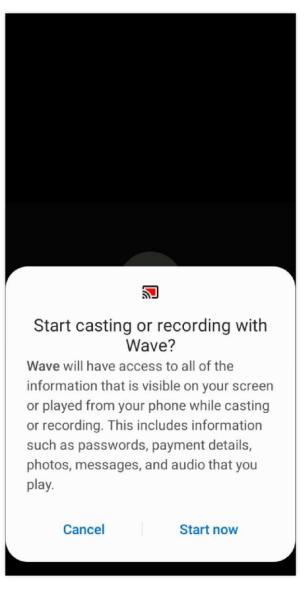
Click "OK" to accept.

Click "Start now" to start sharing your screen.

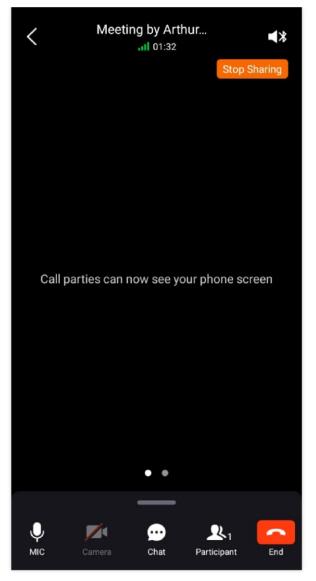
The screen will be shared.



Share Screen Prompt



Start Casting



Shared Screen

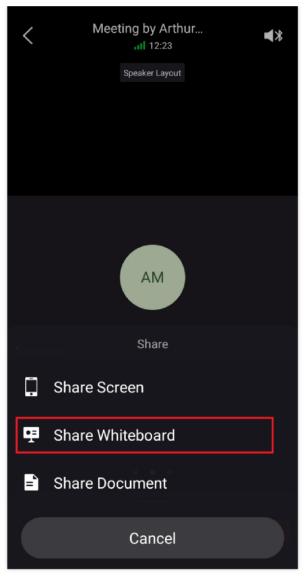
## Note

- Only one user can share a screen at a time.
- During screen sharing, the users can double click on the sharing screen or video screen to enlarge the display area to full screen.

#### Share WhiteBoard

**(**) Share WhiteBoard is supported in meetings only.

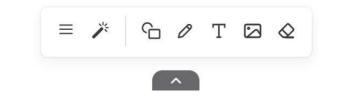
The user can click on the "Share" icon , and select "Share WhiteBoard".

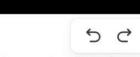


Share WhiteBoard

The new shared whiteboard contains complete features including laser pointer, highlighter, input texts, graphics, flow charts, charts and other more graphics and styles. You can drag graphics, and edit graphics for multiple times. The real-time drawing feature is very simple and fast for users.



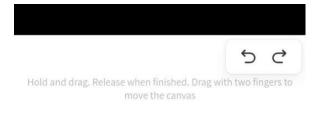




You can keep pressing the blank space or drag with two fingers to move the canvas, or zoom the canvas with two fingers.











E<sup>2</sup>: The drawing toolbar will appear after clicking this icon.

 $\equiv$ : Click to view more options (only the sharer has the permission) including: Enable/Disable Collaboration function (After enabling this function, other participants can draw at the same time), change the Canvas Color, Empty Canvas, Open File (the whiteboard data picture which was previously saved), Save as Picture, etc.

>: This is the laser pointer option and only the sharer has this option. It displays the drawn track and will disappear in 3 seconds.

𝖕 : This is the graphics option. It only supports basic graphics. You can double click the graphic to add text.

⊘: This is the brush option. There are two types brush "Common Brush" and "Highlighter".

 $\ensuremath{ \mathrm{T}}$  : This is the text option.

🖂 : Pictures can be inserted. After inserting a picture, you can drag the edge to change the size of the picture.

 ${\boldsymbol{\vartriangle}}$  : This is the eraser option.

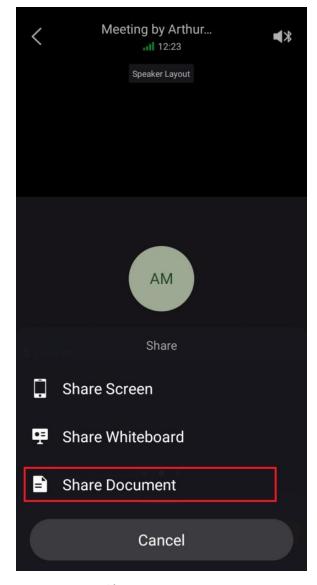
5: This is the undo option.

*c*: This is the recovery option.

### Share Document

• Share Document is supported in meetings only.

The user can click on the "Share" icon, and select "Share Document".



Share Document

Supports PDF file only, with up to 20 MB



Shared Document

The users can click 🛃 button to use annotations on the shared document.



O: This option to change the brush thickness and color.

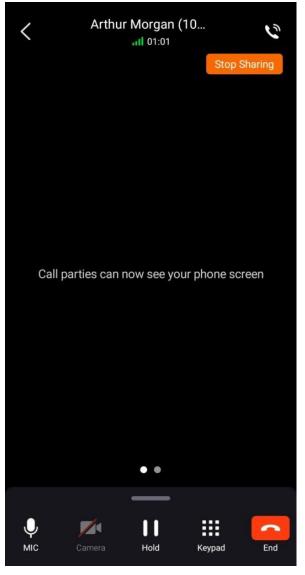
2: This is the paint brush option. It supports different modes: Free, Line, Rectangle/square, Circle and Arrow.

- $\oslash$ : This is the eraser option.
- i: This is the empty option to clear all the annotations.
- **2**: This option to other the other participants to draw annotations at the same time.

### Stop Sharing

To end the screen-sharing please click on





Stop Sharing

### Video Meeting Participants

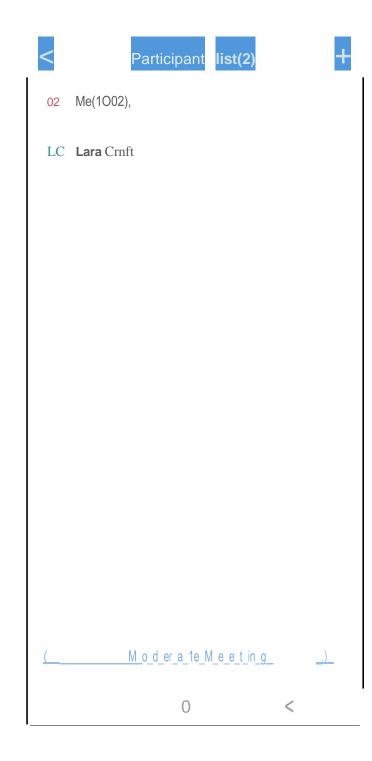
During video meeting, click on button **Mathematical State** to view participant list.

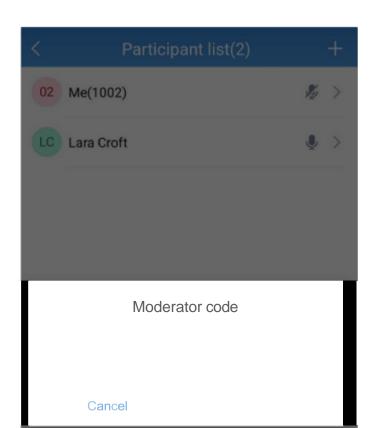
Participants can view meeting participant list, click on "Moderate meeting" on the bottom and enter moderator code to become meeting moderator.

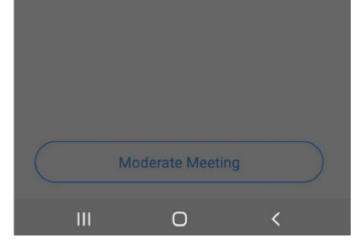
Moderator can tap on a participant name to mute/unmute the participant, transfer moderator privilege to the participant, remove participant from meeting, chat with participants, lock meeting and mute/unmute all participants.

During the meeting, the user can also tap on his/her own name to mute/unmute or edit display name in the meeting.

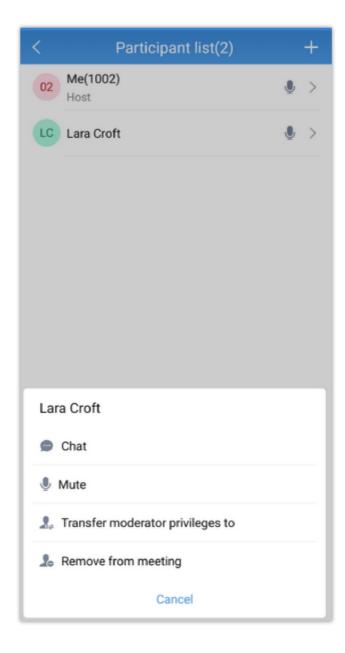
The host can invite members by clicking on the button in the upper right corner. The video conference supports inviting participants, sharing link invitation, and scanning QR code to join the meeting with Wave app.

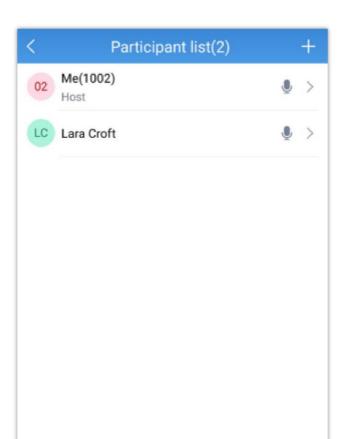






Moderator can tap on a participant name to mute/unmute the participant, transfer moderator privilege to the participant, remove participant from meeting, chat with participants, lock meeting and mute/unmute all participants.



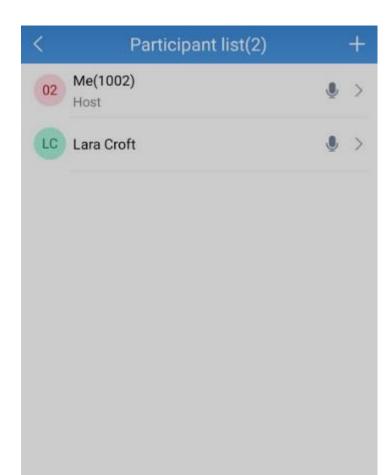


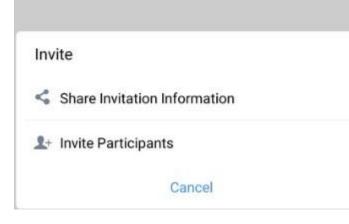


During the meeting, the user can also tap on his/her own name to mute/unmute or edit display name in the meeting.

<	Participant list(2)	+
02	<b>Me(1002)</b> Host	۵ ک
LC	Lara Croft	۵ پ
$\subset$	Lock meeting Mute all	$\supset$

The host can invite members by clicking on the button in the upper right corner. The video conference supports inviting participants, sharing link invitation, and scanning QR code to join the meeting with Wave app.





<	Par	ticipant list(2)	+
02	Me(1002) Host		<b>9</b> >
LC	Lara Croft		۵. ک
630	11		
	eting room		6301
	sword		None
	ective Duration	n	01:59:56
~	:		
Sha	are Copy	QR	
		Cancel	

For the Audio/Video Wave meetings, the host can see invitee's absent list:

- Only meeting host can see invitee's list and can invite them directly from there. For non-host participants, only participant list is available.
- Applicable to scheduled meeting, instant meeting and group meetings.
- Definition of absent invitees:
  - 1. Invitee list contains those invited by email or extension before meeting.
  - 2. When meeting room is available which is 10 minutes before meeting schedule, after host joins meeting, host can see invitee list and participant list. Now the status of invitees will be determined.
  - 3. The invite list will display based on attended status and unattended status. An invite button will be available for unattended invites for host to click to invite directly.
  - 4. After the absent invitee joins meeting, this invitee cannot be invited again (the invite button for this invitee will be in grey meaning unavailable).

5. On the invitee list, invitee's status (whether available or busy) needs to be shown.

6. If there is no invitee before meeting, invitee list will not show.

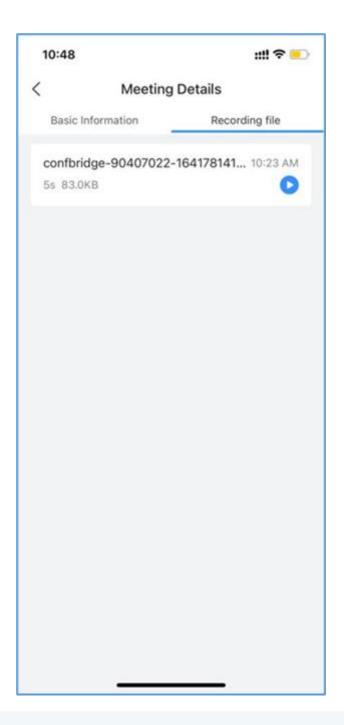
- After host transfers host privilege, the new host can see the invitee list and invite as needed.
- The participant list's status cannot change in real time. The invitee list is based on whether the invitee joins the meeting before, not based on the current participating status. For example, if invitee A joins meeting and exit after he/she is done with meeting while the rest are still in meeting, the invitee list should display he/she as attended invitee.

	1:03	t.s i> •		i!	iJ•.di	39
<		P rtici	ban s L	Jst(2)		+
	Pair11c e	ents(2)		Invite	es(3)	
10	M (10 Ho	00)				>
10	1002					>
<u>(</u>	Lock N	leeting)	<u>(.</u>	M_u_te	<u>A</u> ]	<u>)</u>
			0		<	

	11:02 🖬 💐 🕏		NI 8.	al 39%≘
<	Pa	rticipants Li	ist(2)	+
	Participants(2)		Invitees(3	)
Not Joi	ned (2)	0		
10	<b>1001</b> 1001			2+
10	<b>1003</b> 1003			2+
Joined	(1)			
10	<b>1002</b> 1002			
C		Click to invi	ite	
		0	<	

# Record an Ongoing Meeting

The meeting host can start recording the meeting after it has started. When the meeting has ended, the meeting host can view the recording files on Meeting Details interface.



### Note

If the meeting does not support video, only audio will be recorded.

# Speaker Layout

Enabling speaker layout will allow only the speaker's video feed to show on the screen during a meeting. To enable this please see the screenshot below:

11::	2 <b>1 &amp;</b> M			<b>i x</b> 🕏	ul 64% 着
<			by Arthur		Ŋ
V Me			CB		0
ار Micro	ophone Came		Chat	2 <sup>3</sup> Participant	Leave
[Host] Art					
	Keypad				
	Share				
Ħ	Chat Bubble	9			
💋 🛃 Abiga	Hide Audio	Particip	oants		
	Speaker La	/out			
			0	<	

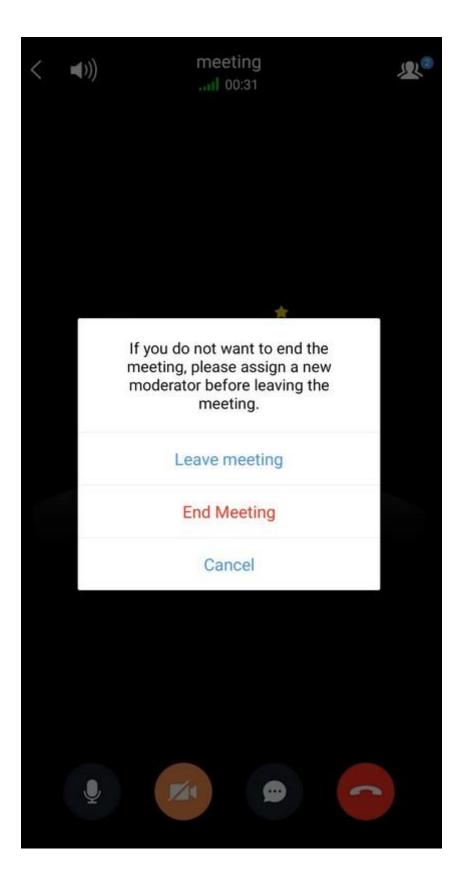
### End Meeting

#### • Virtual Meeting

If moderator clicks \_\_\_\_\_, during the meeting, the moderator will be prompted to select whether to end the meeting or leave the meeting.

- Leave meeting: Leave the meeting without ending it. The other participants will remain in the meeting room.
- **End meeting:** End the meeting. All participants will be disconnected from the meeting room.

On the meeting list, the meeting creator can click End Meeting button to end the meeting which is currently in progress. Then, the meeting will be ended directly.



#### • Onsite Meeting

To end an onsite meeting, please navigate to "Meetings" tab and select the meeting that you want to end. You can either end an ongoing meeting or a scheduled meeting that has not started yet.

**Step 1:** Tap on the meeting that you would like to end.

	∎×	🔽 🛛	77% 💼 16:13
Meeting	List	Meetin	g Room
Meet Now	Join		Schedule
Today / Tues.			History >
12:00 PM-12:15	PM g by Arthur I	Morgan	Ongoing
Meeting Room Address Host	Meeting_Room Main Office -5t Me(1001)		
Chats	Calls	الم Meetings	Contacts

### Step 2: Click on "End Meeting"

	¶× ♥	🔍 77% 💼 16:13			
<	Meeting Detail	s 🗅			
Meeting by Arthur Morgan					
Africa/Casablar	ica				
12:00 PM	15Minute	12:15 PM			
Today	Ongoing	Today			
Meeting Roo	m	Meeting_Room			
Participant c	apacity	10			
Address Main Office -5th Floor					
Facility	-	Projector   Laser o Adapter Cable			
Host	Me	e(Arthur Moraan)			
	End Meeting				

**Step 3**: Confirm that you want to end the meeting.

		(× マ 🛛	77% 💼	16:13			
<	Meeting	Details		Û			
Meeting by A	Meeting by Arthur Morgan						
Africa/Casabla	nca						
12:00 PM	15Mi Ong		12:15 F	PM			
Today			Today				
N P	N End the meeting now?						
Can	icel	End M	Meeting	)r			
Facility		ooard   Pro					
Host		Me(A	rthur Mo	raan)			
	End M	eeting					

### Note

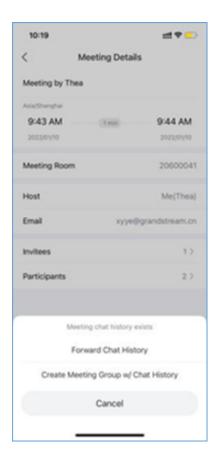
 If there is only one participant in the meeting, and the total duration of the meeting reaches 30 minutes, the specific participant will be prompted whether to continue the meeting Create a group chat after successfully scheduling the meeting. Messages created during the meeting will be automatically synced to the group after the meeting.

The single meeting will end after 5 min. Extend

• When the meeting duration is about to reach 12 hours and the meeting host is still in the meeting, the meeting interface of the host will be prompted whether to extend the meeting. The meeting host can click to extend the meeting for another 12 hours. The meeting can only be extended once. After another 12 hours, the meeting will be ended. If the meeting host is not in the meeting, the meeting will be ended when the meeting duration reaches 12 hours.

# Create a Chat Group After The Meetings

After the meeting has ended, only the meeting organizer can create a chat group from the Meeting Details interface. The chat group will include the members who had participated in the meeting. The meeting's host can click "More" button to choose to "Forward Chat History" or "Create Chat Group and Forward Chat History". Please see the screenshot below:



### Join Meeting via Link

Users who do not have UCM extensions to log in Wave app can join meeting via link.

There are two methods to join meeting via link:

- 1. Scan the QR code from the meeting invitation email or provided by meeting host to join meeting.
- 2. Tap on the **Join meeting** button and enter the required information. By default, meeting invitation emails also provide a link to join the meeting. Opening the link with the Wave app will automatically fill in the *Meeting URL* field.



Sign in			
	Join Meeting		
Copyright © Grands	tream Networks, Inc. 2021	. All Rights Reserved	
111	0	<	

<	12:44 🖸	1	or ang 🖘 🕼 🗎
Θ	Meeting URL		
8	Name		
₿	Password (Optional	)	Y <sub>Pr</sub> K
Ente Ente	er host code to host meet er password to join meeti	ing. ng if password is	s required.
		eeting	

# Schedule Onsite Meeting

Wave users can schedule an onsite meeting. The UCM6300 administrator should add a meeting room first so the Wave users can be able to schedule an onsite meeting.

K Schedule Meeting				
Meeting by sqhuang				
Meeting room type Ons	site meeting room	>		
Onsite meeting room *	Not configured	>		
Meeting Time *	Not configured	>		
Recurrence	Once	>		
Meeting Description				

Invitees	0 >
Host Settings	
General meeting room [Virtual]	
Public meeting room [Virtual]	
Onsite meeting room	~
Cancel	

Schedule Onsite Meeting

Parameter I	Description
Meeting Name	Enter the name of the meeting
Туре	Choose the type of meeting. • General meeting room [Virtual] • Public meeting room [Virtual] • Onsite meeting room
Meeting Room	Select the meeting room in which the physical meeting will take place.
Meeting Time	Select when the meeting is going to take place.
Recurrence	Select the recurrence of the meeting.  Once Daily Weekly Monthly
Meeting Description	Enter the description of the meeting.
Invitees	<ul> <li>Select the extensions that you would like to invite.</li> <li>Phone Contacts: Select the personal contacts you would like to invite.</li> <li>Group Member: Select the groups which you would like to invite.</li> <li>Email Invitations:</li> <li>Company Contacts: Select the company contacts or departments that you would like to invite to the meeting.</li> </ul>
Host Settings	
Host	Select the extension of the host.
Email	Select the email of the host.
Advanced Settings	

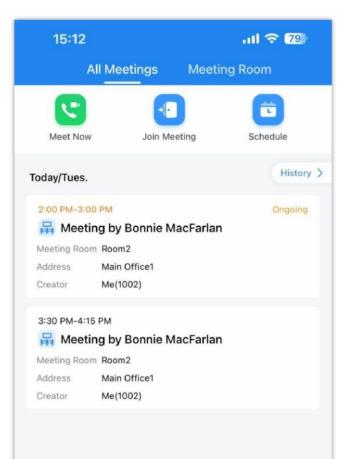
Time Zone	Select the timezone.
Email Reminder Before Meeting	Select the interval of time of the reminder.

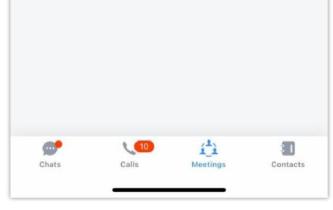
### Once the meeting has been scheduled, it will appear in the list of pending meetings as shown in the screenshot below:

Meeting			75% 🔽 12:26
Meet Now	Joir		Schedule
Today / Tues.			History >
12:00 PM-12:15 Meeting Meeting Room Address	<b>g by Arthu</b> Meeting_Roo Main Office	om	
Host	Me(1001)		
Chats	Calls	Meetings	۲ ا Contacts

### Meeting List

All the meetings that have been created in the UCM can be viewed in the Meeting List (This includes the virtual and onsite meetings).



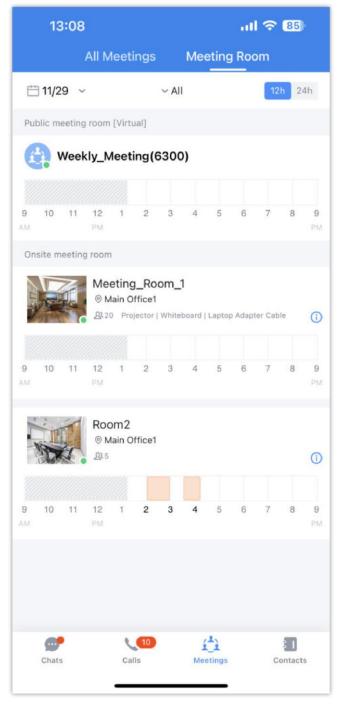


All Meetings – Wave Mobile Client

Scheduled Meetings

### Meeting Room

All the rooms that have been created in the UCM (this includes the virtual and onsite meeting rooms) can be viewed by going to **Meeting** tab, then tap **Meeting Room** tab.



**Onsite Meeting Room** 

# VOICEMAIL

In "Voicemail" module, users can check all voicemail received by the account, including the common voicemail and urgent voicemail.

Users can view and play all voicemail in the Voicemail menu, and users can also batch delete the voicemail messages. As the screenshot shows on the right side:

7:15 ┥	::!! 중 ■
Call histor	ry Voicemail 🚈
test-1004(100 15m0s 1.4MB	<b>4)</b> 2021/10/18 17:55
test-1004(100 2m40s 254.0KB	-
test-y(1030) 3s 5.1KB	2021/09/23 15:56 •••
test-1004(100 1m52s 177.8KB	<b>4)</b> 2021/09/17 11:47
test-1004(100 3s 5.9KB	4) 2021/09/14 11:33 (>
test-1004(100 6s 10.5KB	<b>4)</b> 2021/09/14 10:15
test-1004(100 10s 17.1KB	<b>4)</b> 2021/09/09 14:43
Chats Calls	Meetings Contacts

In the Voicemail menu, the user can select 1 voicemail message, and click •••• button to select to make audio/video call or send chat message to the voicemail sender. As the screenshot shows on the right side:

7:	15	iii ≎ I	D
	Call history	Voicemail 💈	Ξ
-	test-1004(1004) 15m0s 1.4MB	2021/10/18 17:55 •••	5
¢	<b>test-1004(1004)</b> 2m40s 254.0KB	2021/10/18 17:39 •••	,
<u>pe</u>	<b>test-y(1030)</b> 3s 5.1KB	2021/09/23 15:56	3
<u></u>	<b>test-1004(1004)</b> 1m52s 177.8KB	2021/09/17 11:47 •••	,
	test-1004(1004)	2021/09/14 11:33	
S	Audio Call		
	Video Call		
$\bigcirc$	Chats		
()	Contact details		
Ū	Delete		_
	-		

Voicemail Context Menu

To access the extension's voicemail: **Step 1:** Bring up the dial pad to enter the voicemail access feature code for the registered user's personal voicemail box (\*97 by default) or for another extension's voicemail box (\*98 by default). **Step 2:** Tap on icon and select "DTMF" option.

**Step 3:** Enter the DTMF keys to access the voicemail and listen to the messages.

<	Э <sup>р</sup>		.al
		*97	
		00:27	
		$\sim$	
		14789#0	
	1	<b>2</b> ABC	3 DEF
	<b>4</b> GHI	5 JKL	6 MNO
	7 PQRS	<b>8</b> TUV	9 wxyz
	*	<b>0</b> +	<b>#</b> •

Wave Mobile Dial Pad

### Note

Please contact UCM admin or service provider to obtain the voicemail password if needed.

# CONTACTS

There are two types of contacts that Wave can display.

Enterprise Contacts: These contacts are the extensions which are registered on the UCM.

Personal Contacts: These are the contacts which the user has added to Wave.

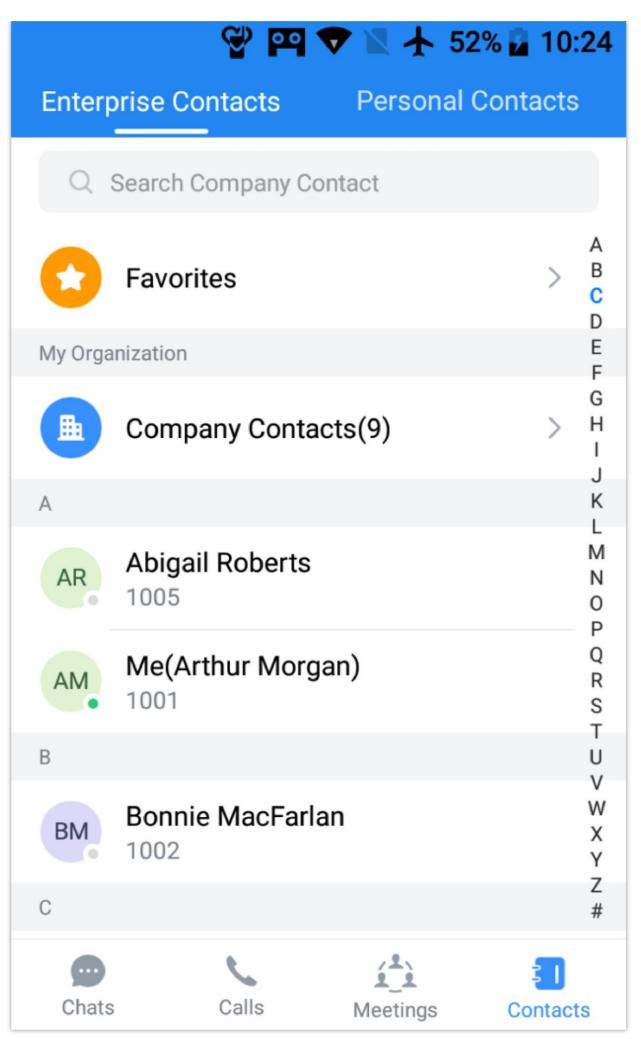
Phone Contacts: These are the contacts which are registered on the phone.

In Wave app, click on 📒 to display contacts as the screenshot shows on the right side: In Wave app, users can click "Contacts" menu to view

all contacts, favorites, LDAP contacts, local UCM contacts and CloudIM contacts.

## Note

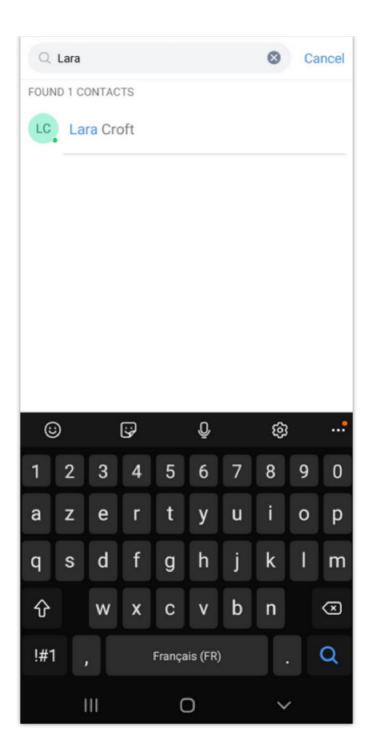
The contacts displayed in the Grandstream Wave web portal contain UCM extensions (based on contact privilege settings), meeting room extensions, and LDAP contacts (based on the UCM's LDAP phonebook settings). (Refer to the UCM630x/A User Manual for more details)



Enterprise Contact

Users can search for contacts in the Contacts tab. Tap on the search bar near the top of the app and enter keywords to search. Clicking on a

result will bring up the contact details.



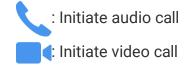
Search Contact

# Note

Wave mobile application support T9 contact matching.

### **View Contacts**

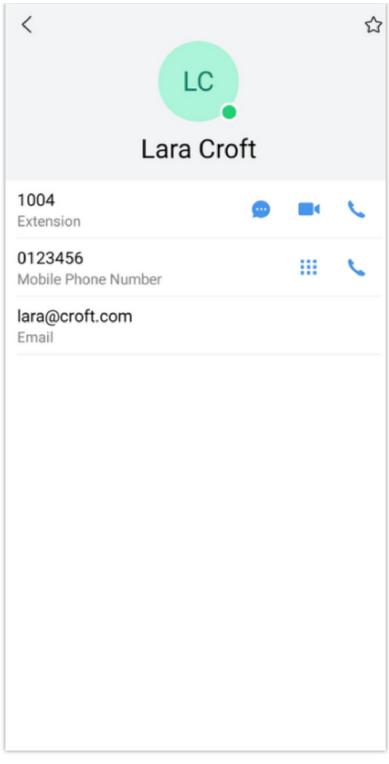
After searching contacts, users can click on the search result to view the details of the selected contact. The following options will be available in the Contact Details page:



• • • • Open dial pad to edit the contact's number before dialing



#### 😑 : Chat with the contact



View Contact

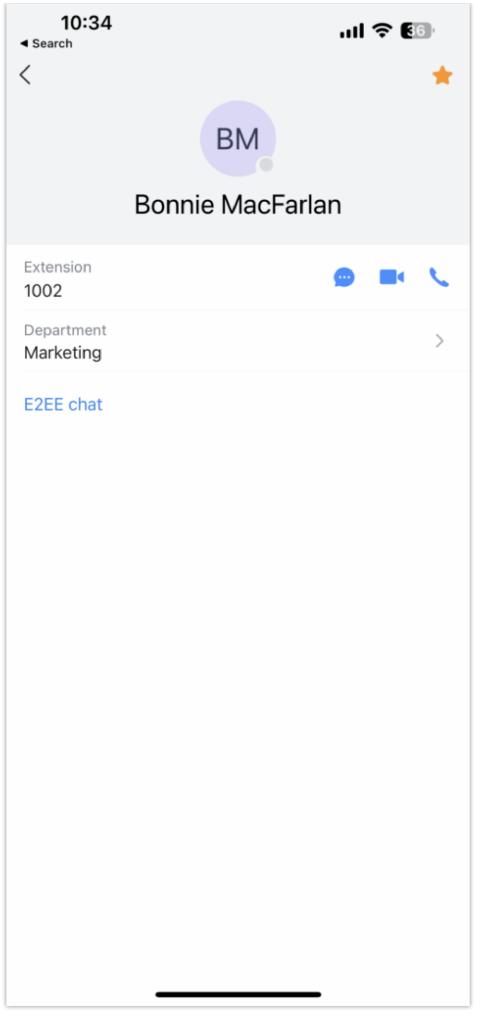
### Favorites

Favorite contacts are displayed at the top of the contact list. There are two ways to add a contact as a favorite:

**Method 1**: Enter the contact details and follow the steps below:

Click on a contact in the contact list as shown on the right.

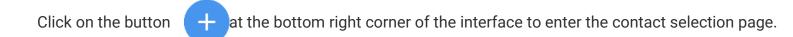
Click on the button 2 at the top right of the interface, when the button changes to +, the contact will be set as a favorite contact. Click again on the button + to remove the contact from favorites.



Favorite Contact

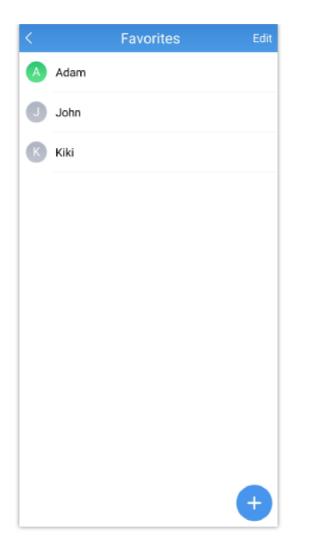
Method 2: Enter the favorites list and follow the steps below to add a contact as favorite:

Click on Favorites menu 🖸 at the top in the contact list to enter the favorites management interface as shown on the right.



After checking the contacts that need to be set as favorite contacts, confirm by clicking on OK to complete the setting.

Note: You can set up to 20 Favorite contacts. Favorite contacts can monitor their BLF status.

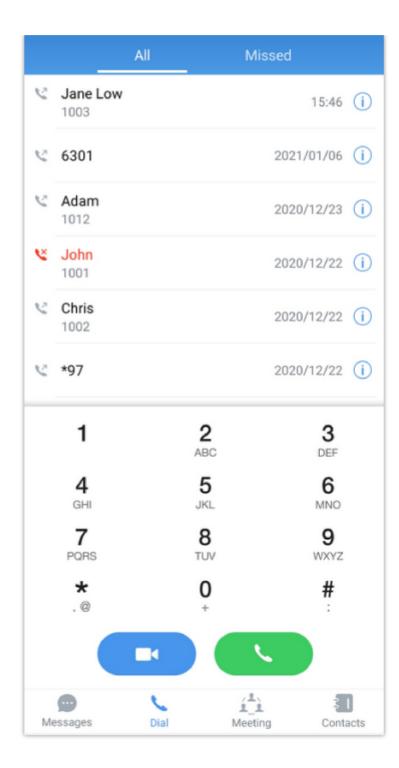


## Call History

In Wave app, users can click "Call" menu to view all call history of the current Wave account. Two tabs are available: Call History and Voicemail.

The following icons will be displayed on the left of each entry.

- 😢 Incoming audio call
- 🗸 Outgoing audio call
- **K**Missed audio/video calls and rejected calls
- Incoming video call
- Outgoing video call



Users can tap on the call history entry to call the number. Users can click any specific call record to view the detailed information of this call, as the screenshot shows on the right side:

<	LC Lara Croft	
1004 Extension		
CALL HISTORY		CLEAR
17:23		6min31s
<b>%</b> 16:50		
16:47		Call Failed
16:29		Call Failed
16:01		2min34s
15:59		53s
😢 15:59		2s

### Contact Local Time

When the contact is on a different time zone, Wave mobile application will display the local time of the contact. Wave is able to retrieve the contact's time settings from the user's mobile phone in order to show the correct time zone. If no local time is displayed for the user, then that means that yourself and the other user are on the same time zone.

To see the local time for a specific contact, please navigate to **Contacts** and tap on the contact to open his/her profile, then the local time will be displayed under the contact's name.

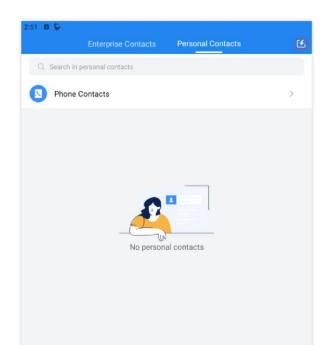
	🗑 🎮 👽 🖹 🛧 52% 🛢 2	:52
<		☆
	СВ	
	CD	
Ca	atherine Braitwaite	
	Local time 3:47 PM	
Extension 1003	👳 🔤 🔍	
Department Company (	Contacts	

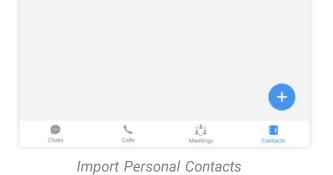
Contact Local Time

### Import Contacts

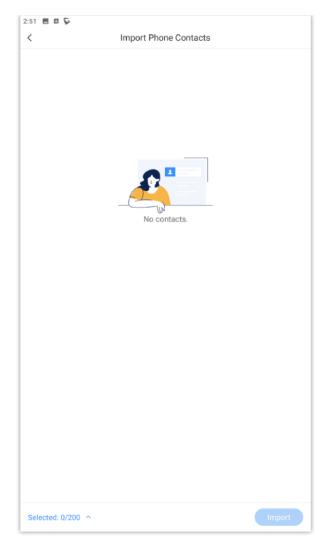
Wave allows importing the mobile phone contacts to **Personal Contacts** within Wave, this makes it easier for the user to call other parties using Wave instead of the phone's telephony service itself.

To import your phone's local contacts to **Personal Contacts** on Wave, please navigate to **Contact** tab in Wave and click on import button **[5]**.





Select the contacts to import then tap "Import" button.

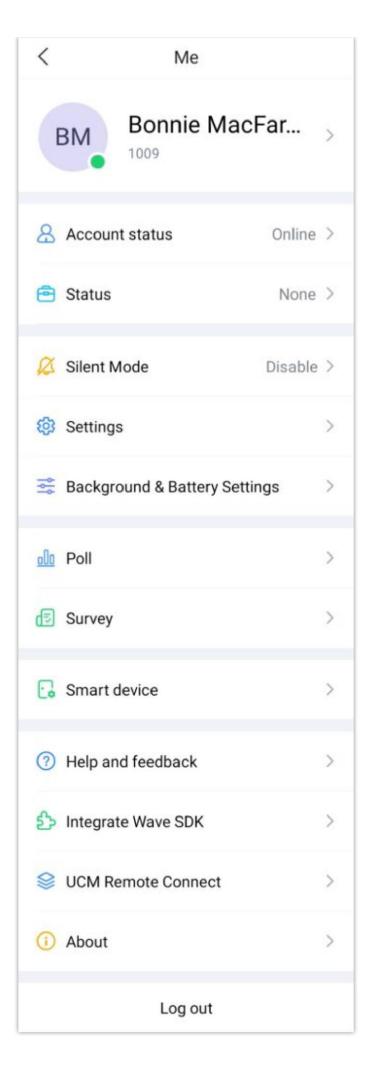


Select Contacts to Import

# SETTINGS MENU

Tapping on the **user account** under Messages window will bring up:

- 1. Account Information page about the user.
- 2. Account Status and Status pages.
- 3. Silent Mode, Settings, Background & Battery Settings pages.
- 4. Poll & Survey pages.
- 5. Smart Device page (Door System & Monitor).
- 6. Help and Feedback, Integrate Wave SDK, UCM RemoteConnect, and About pages. Tapping on the *About* option will allow users to bring up details about the Wave app, check for app updates, privacy agreement, help, and export logs for troubleshooting purposes.



### Account Info

Change Avatar

The Account Info page will display custom avatar, the currently registered account's name/number, and the SIP server the account is registered

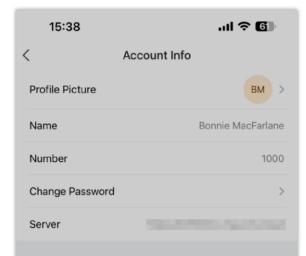
to.

15:26		ul 🗢 🚱
<	Me	
ВМ	Bonnie MacFarlan	e ,
Account	status	Online >
😑 Working	status	None >
oll Poll		>
🗟 Survey		>
🔒 Smart de	evice	>
🔅 Settings		>
Help and	d feedback	>
☆ Integrate	e Wave SDK	ž
😂 UCM Re	mote Connect	>
Diagnos	is	>
(i) About		>

Account Info

The user can select to take a photo or upload a photo from album as the custom avatar. For the uploaded custom avatar, the user can select to view the details or restore to the default image, as the screenshot shows on the right side:

Note: Custom avatar uploading only supports PNG, JPG and JPEG files.



R	Select	from	album
---	--------	------	-------

O Take photo

## Note

Custom avatar uploading only supports PNG, JPG and JPEG files.

# Change Password

To change password, please tap on "Change Password" in **Account Info** page.

15:26	ul † 69
(	Account Info
Profile Picture	BM >
Name	Bonnie MacFarlane
Number	1000
Change Password	>
Server	

### 15:26 ...l 🗢 🚱

#### < Change Password

Old Password

|--|

### Set New Password

New Password

#### Confirm New Password

*	

### Account Status

0

0

0

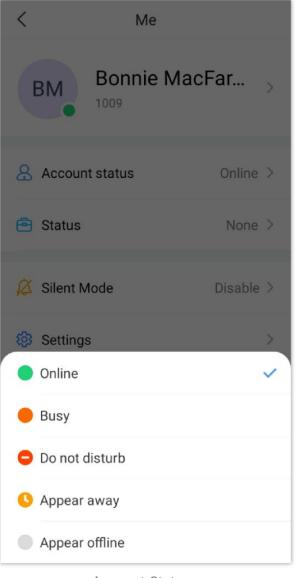
It displays the login status of Wave account. When the account status is set, the account status will be displayed in contacts module and chat module.

The Account Status can be set to Online, Busy, Do not disturb, Away, and Offline:

- **Online:** This is the default account status. The new calls and messages will prompt users.
- 10 **Busy:** The user is busy now, and the user can send and receive new calls and messages normally.
  - 10 **Do Not Disturb:** The new incoming calls and messages will be prompted without any sounds, and there is no push notification. The

new incoming calls will be ignored, and the new missed call history will be generated.

- 10 Offline: The account status will be displayed as offline, but the user still can send/receive calls and messages normally.
- 10 Away: The account status will be displayed as away, but the user still can send/receive calls and messages normally.



Account Status

# Working Status

It displays the working status of Wave account. When the working status is set, the working status will be displayed in contacts module and chat module.

The working status can be set to:

- Meeting Now
- On Business Trip
- ◇ Telecommuting
- Sick Leave
- On holiday
- None
- Add Custom

**Note:** The custom working status allows users to enter up to 64 characters and the emojis are not allowed.

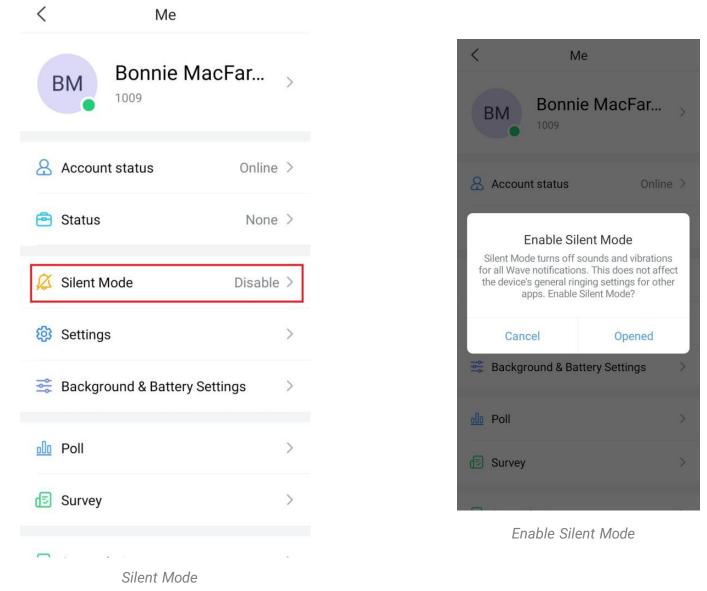
<	Me	
BM	Bonnie M	acFar >
🐣 Accoun	t status	Online >
🖻 Status		None >
Meeting Now	V	
On Business	Trip	
Telecommut	ing	
Sick Leave		
On holiday		
None		~
① Add Cus	stom	
	Working Statu	S

## Silent Mode

Silent mode allows silencing all the sounds and vibrations prompted by Wave, this includes the vibrations and sounds produced when a call or a message is received. To enable silent mode, please follow the steps below:

Step 1: Tap on your profile picture on Wave mobile application

Step 2: Tap on "Silent Mode" then click "Opened" to enable Silent Mode.



## Settings

### Notification and Ringtone

- Enable or disable notifications by using the toggle "Allow Notification". If you slide the toggle to the left, all the notifications will be suppressed.
- To customize the notifications settings, please tap on **Message Notification Settings** and then tailor the notification behavior based on your needs, then choose to play a sound or vibrate when a notification is received.
- Tap on **Vibration** to customize which notifications will trigger vibration.

11:28 🖪 🖪	
Notifications & Ringtone Settings	
Allow Notification	
Message Notification Settings Includes notifications for chat messages, voicemail, missed calls, and meeting notifications	>
Vibration	>

• Wave mobile offers 6 ringtones to choose from when receiving calls. When Wave is running in the background and a call has been received, Wave will use the system's default ringtone.

11:28		
<	Notifications & Ringtone Settings	
Allow	v Notification	D
	sage Notification Settings is notifications for chat messages, voicemail, missed calls, and meeting notifications	>
Vibra	tion	>
Ringt	one	
~	Default Ringtone	
	Use System Ringtone	
	Atria	
	Ganymede	
	Luna	
	Phobos	
	Umbriel	
	Custom Ringtone	



• "Block Notification When Active on Desktop": If the Wave Desktop device is inactive for more than 5 minutes, push notifications to Wave

Mobile will resume. Default is disabled.

### Calls and Messages

- **Call Waiting**: If enabled, new incoming calls can be received during calls. Default is enabled.
- **Call Waiting Tone**: If enabled, play a tone for call waiting. Default is enabled.

Notifications & Ringtone Settings

- Echo Cancellation: If enabled, improve the audio quality using echo cancelation. Default is enabled.
- Noise Suppression: If enabled, suppress the noise during calls. Default is disabled. 0
- Safe Driving Mode: If enabled, camera and microphone will not be turned on automatically during Wave meetings. Users may enable them manually. Default is enabled.
- Car/Bluetooth Support: Answer and end calls with your bluetooth headset or from your car. Not all devices support this feature. If unsupported, or if the current device is in an active call, Wave calls may not be able to be controlled by the bluetooth device. Default is enabled.
- Audio Subsystem API: Using different audio APIs, the sound effects will be different.
  - **OpenSL** (the older and most widely used API)
  - AAudio (Widely used API started from Android 8.0+)

### **Dial Settings**

### **Dial Plan Rules**

Wave mobile support dial plan which can be configured and taken into consideration when numbers are dialed through Wave.



**Dial Plan Rules** 

Toggle "Dial Plans Rules" so Wave starts taking the dial plan settings into consideration.

If "Ignore Dial Plan" is toggled on, Wave will ignore the dial plan settings.

Set the dial plan rules grammar for the number dialed. You can either enable the dial plan to have Wave take it into consideration, or to ignore completely when dialing numbers.

Here are the valid values:

1, 2, 3, 4, 5, 6, 7, 8, 9, 0, \*, #, T,+, A-Z, a-z

Dial Plan rules:

• **xx** – Any 2-digit number

- xx+ At least 2-digit number
- **xx.** At least 1-digit number
- xx? 1-digit or 2-digit number
- ^ Reject
- T Delay call after matching
- | − Or
- $\circ$  + Add + to the number
- [3-5] Dial the number 3, 4, or 5
- [147] Dial the number 1, 4, or 7
- <2=011> When the dial number is 2, it is replaced with 011
- Set \{x+\} All all digital numbers to make outgoing calls
- "+character" It indicates a fixed character.

Note: it does not need to be added in front of \* and #, and it cannot be added in front of T^;; and |

• Set \{X+\} Allow all 0-9, A-Z, a-z inputs with at least one character

#### Examples:

- Example 1: {[369]11 | 1617xxxxxx} Allow 311, 611, 911, any 10-digit call that starts with 1617 to make the outgoing calls.
- Example 2: {^1900x+ | <=1617>xxxxxxx} It will refuse to dial numbers starting with 1900, and adding the prefix 1617 when dialing any 7digit number
- Example 3: \{ax+\} It will dial a number starting with a and followed by at least 1-digit

### **Dial Tone**

Choose to enable or disable Dial Tone. Default is enabled.

This will affect the dial pad on the calls page.

< Settings	
Audio Subsystem API Using different audio APIs, the sound different.	AAudio >
Dial Settings	
Dial Plan Rules	Disable >
<b>Dial Tone</b> This will only affect the dial pad on t	he Calls page.
Use system default dialer for en calls	nergency 🚺
Contacts Sort Order	First, Last >
E2EE Chat Settings In an end-to-end encrypted (E2EE) c involved parties can read the messa	
Multi-languages	>
Time/Date Format	>

Dial Tone

# Use System Default Dialler for Emergency Calls

If enabled, emergency calls will use the default dialler to initiate the call even if the number is dialed on Wave. Default is enabled.

<	Settings	
Audio Subsys Using different au different.		AAudio >
Dial Settings Dial Plan Rules		Disable >
Dial Tone This will only affect	ct the dial pad on	the Calls page.
Use system def calls	ault dialer for e	emergency
Contacts Sort C	Order	First, Last >
E2EE Chat Se		> chat, only the two

involved parties can read the messages.

 Multi-languages
 >

 Time/Date Format
 >

 Use System Default Dialler for Emergency Calls
 >

Contacts Sort Order

Select the sorting order for the contacts: "Last Name, First Name" or "First Name, Last Name"

K	Settings	controlled by the
bidetootii device.		
Audio Subsyster	m API	AAudio >
Using different audio different.	APIs, the sound e	effects will be
Dial Settings		
Dial Plan Rules		Enable >
Dial Tone		0
This will only affect th	ne dial pad on the	Calls page.
Use system defaul calls	t dialer for eme	ergency
Contacts Sort Ord	er	First, Last >
E2EE Chat Settir	ngs	>
In an end-to-end encr involved parties can		
Last Name, Firs	t Name	
First Name, Las	t Name	~
Conta	acts Sort Ord	ler

# E2EE Chat Settings

In an end-to-end encrypted (E2EE) chat, only the two involved parties can read the messages.

<	Settings	
Audio Subsyste Using different audio different.		AAudio >
Dial Settings		
Dial Plan Rules		Disable >
Dial Tone This will only affect t	he dial pad on t	he Calls page.
Use system defau calls	lt dialer for er	nergency 💽
Contacts Sort Ord	ler	First, Last >
E2EE Chat Settin	ngs	>
In an end-to-end enco involved parties can		
Multi-languages	6	>
Time/Date Forn	nat	>

E2EE Chat Settings

# Export a Secret Key

Wave allows exporting the privacy key, to do that go to E2EE Chat Settings under Settings

Then tap on the three dots on the top right corner of the screen, then select **Export secret key.** 



Export Secret Key

Then you can select to send it to yourself or to another contact on Wave, or to an email address.

### Sync Secret Key

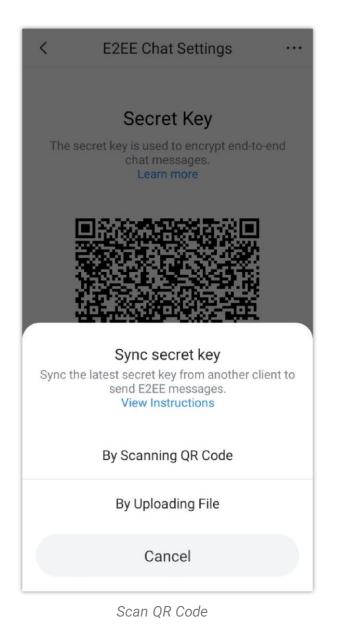
To synchronize a previous end-to-end encryption key, the user can either upload to the application or by scanning the QR code generated by Wave mobile application. To do that please tap on the profile picture of your Wave account, then go **Settings**, then tap **E2EE Chat Settings**.

Then tap Sync Secret Key button



Sync Secret Key

Choose to add the previous key secret either by **Scanning QR code**, or by **Uploading the file**.



### Reset the Secret Key

The user can choose to reset to a new secret key by choosing **Reset secret key** from the E2EE settings page

< E2EE	Cha	t Settings •	
the secret key	ſ	Reset secret key Export Secret Key	

The secret key is up-to-date.
Add previous secret key

Previous secret key instructions

Reset Secret Key

## Multi-languages

Select the language to use on Wave Mobile App.

ve		
Vave	Language	
OTHER LANGUAG	ES	
简体中文		
Chinese, Simplified		
Čeština		
Czech		
Nederlands		
Dutch		
Français		
French		
Deutsch		
German		
Ελληνικά		
Greek		
עברית		
Hebrew		
Italiano		
Italian		
Polski		
Polish		
Português		
Portuguese		
Русский		
Russian		
Español		
Spanish		

Multi-Languages

The languages supported are: Simplified Chinese, Czech, Dutch, French, German, Greek, Hebrew, Italian, Polish, Portuguese, Russian, Spanish, Spanish (Latin America), Thai, Turkish, Traditional Chinese, and Vietnamese.

### Time and Date Format

The users can select the Time/Date format as shown in the screenshot below:

<	Time/Date F	Format	
24 Hours		(	
Date Form	at	YYYY/MM/D	D >

	Date Format	
YYYY/MM/DD		~
DD/MM/YYYY		
MM/DD/YYYY		

Time & Date Format

# Background and Battery Settings

**Background and Battery Settings** allow to control the behavior of Wave application in the background. This affects notifying the user when a call or a new message is received.

<		Me	9		
E	ВМ	Bonnie	e MacFar.		>
8	Accoun	t status	On	line	>
8	Status		Ν	one	>
Ø	Silent N	lode	Dis	able	>
ඟ	Settings	3			>
4   4	Backgro	ound & Batt	ery Settings		>
<u>.000</u>	Poll				>
¢	Survey				>
0	Backgr	ound & Ba	ttery Settings	2	017
<	Backgi	ound & Ba	attery Setting	gs	
lf you call/r		encing issues otifications, it i	with receiving inc s recommended t		
Disable Battery Usage Optimization Allows Wave to have unrestricted battery usage. Otherwise, the system will stop Wave from running in the background, resulting in delayed or unreceived Wave notifications.					
Allow Othe	vs Wave to rwise, the s		ted mobile data u strict Wave's netw		D

Background & Battery Settings options

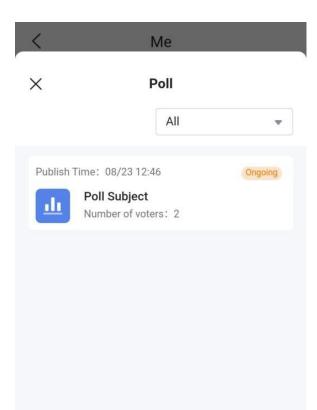
Background Mode	When the background mode is enabled, the user can still receive incoming calls, messages, and notifications when the application is running at background It is recommend to enable this if issues are experienced with message notifications and receiving incoming calls.
Disable Battery Usage Optimization	This allows Wave to use the battery in the background. If this option is disabled, issues like not receiving notifications and incoming calls might not be received.
Enable Background Data	Enable this option to allow Wave to use data in the background. Disabling this will prevent any messages or calls to be delivered when Wave is on the background.

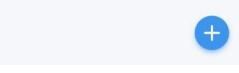
# Note

If the background mode is disabled, the user may miss some calls/messages/notifications when the application is running at background. If the "Ignore power-saving optimization" option is selected, it may shorten the battery life.

# Poll

This page allows to view the ongoing polls, add new poll or stop a poll.

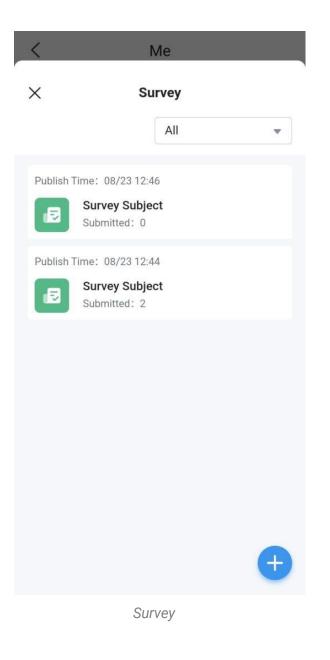




### Poll

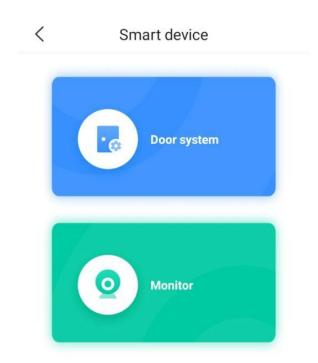
# Survey

This page allows to view the ongoing surveys, add new survey or stop a survey.



# Smart Device

This page allows to add/view GDS Door Systems and to Monitor Grandstrem Suveillance cameras.



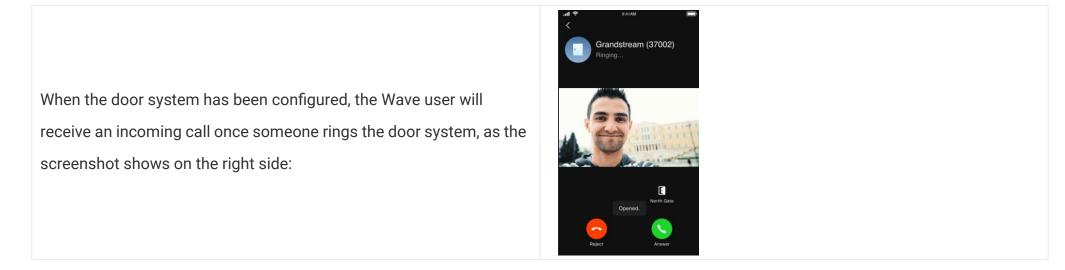
Smart Device

# Door System

The user can click "+" button to add door system to the Wave application and configure the relevant parameters, as the screenshot shows on the right side: The user can add multiple door systems in the Wave application. The user can also call the door system and view the door system details.

### Note

- The user can add up to 10 door systems in each Wave account.
- This function is only supported by Grandstream GDS Door System products.



Incoming Call from Door System

# Help and Feedback

Users can go to the settings menu and click "Help and Feedback" to display the, What's New, help, feedback, and exporting logs menu.

<	Help and feedbac	k
What's N	lew	>
User Gui	de	>
Help		>
Feedbac	k	>
Collect L	ogs	
Export Lo	ogs	>

Android System Settings

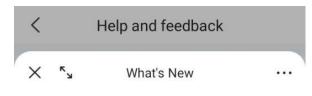
View Wave's notification, permission, and other settings on Android



Help and Feedback

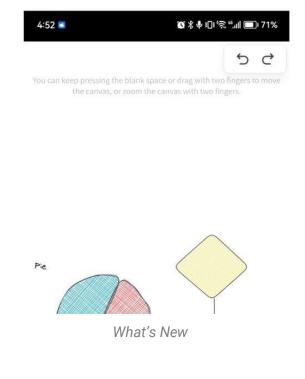
#### What's New

A popup window will display the new features introduced in the current version.



# Whiteboard New Revision for In-meeting Sharing

The new shared whiteboard contains complete features including laser pointer, highlighter, input texts, graphics, flow charts, charts and other more graphics and styles. You can drag graphics, and edit graphics for multiple times. The real-time drawing feature is very simple and fast for users.



### User Guide

If the user has any questions while using Wave application, the user can click "**User Guide**" option to go to the official website of Grandstream and view the user guide of Wave application.

### Feedback

If the user encounters any problems with Wave application, or the user wants to share any suggestions about Wave application, the user can click "**Feedback**" option to connect to the Grandstream Feedback System. It allows users to share feedback and we can collect questions/suggestions from users, so that we can provide better using experiences for users.

<ul> <li>Questions &amp; Suggestions</li> <li>Please enter your question or suggestion</li> <li>Please enter your question or suggestion</li> <li>()</li> <li>()</li></ul>	< Feedback
Jupport JPEG, JPG, PNG images. 0/5   Upload System Log 0/5   Upload the system log at the same time, so as to better locate the problem	Questions & Suggestions
Upload System Log Upload the system log at the same time, so as to better locate the problem Feedback Category Select Contact Email Address	Please enter your question or suggestion
Upload System Log Upload the system log at the same time, so as to better locate the problem Feedback Category Select Contact Email Address	+
Upload the system log at the same time, so as to better locate the problem Feedback Category Select Contact Email Address	Support JPEG, JPG, PNG images. 0/5
Select ~  * Contact Email Address	Upload the system log at the same time, so as
Contact Email Address	Feedback Category
	Select ~
Culturate	* Contact Email Address
Culture to	
Submit	

#### Feedback Interface

### Collect and Export Logs

Users can enable "Collect Logs" to attach them when submiting feedback.

Users can go to the settings interface and click "Export Logs" option to export the application logs. If the user encounters any issues about the Wave application, the user can export the logs and save them. The exported logs can help users to troubleshoot the issues so that we can offer users better using experiences.

## Diagnosis

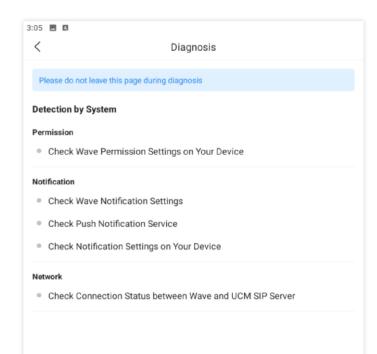
When you encounter an issue using Wave mobile application, it is highly recommended to run the diagnosis tools built into Wave to identify the cause of the issue. The diagnosis tools offered in Wave include permission verification, notification verification, and network test.

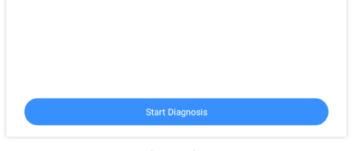
1. To perform a diagnosis, please tap on your account profile on the top left corner, then select "Diagnosis" from the list.

3:05 ■ ■ K Me	
10 1001 1001	>
Account status	Online >
😑 Status	None >
🔀 Silent Mode	Disable >
Settings	>
Background & Battery Settings	>
📲 Poli	>
Survey	>
Co Smart device	>
Help and feedback	>
🖉 Diagnosis	>
✤ Integrate Wave SDK	>
Second Connect	>
() About	>
Logaut	

Wave Profile

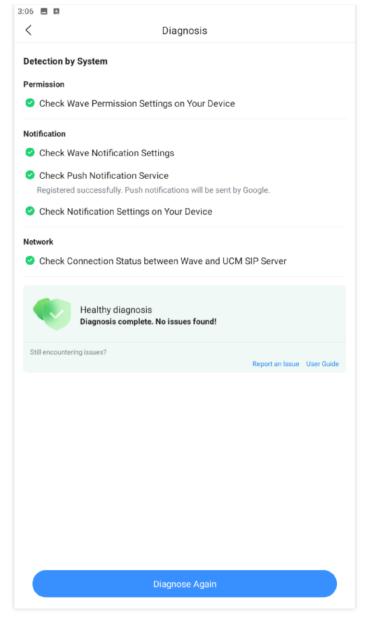
### 2. Then click on "Start Diagnosis"





Diagnosis

3. When the diagnosis ends, the results will be displayed, see the example below.



Diagnosis Results

### Integrate Wave

Users can learn about the available Add-in API and SDK for further development to integrate Wave with other platforms. When clicked, the user will be redirected to the corresponding instruction guide.

- Add-in Development Instructions
- SDK Development Instructions

### **UCM Remote Connection**

Users can learn more about UCM RemoteConnect services by accessing this menu.

The users will be redirected to UCMRC website: https://ucmrc.gdms.cloud/home

### About

- Users can go to the settings interface and click "About" to get more details about the Wave application. 0
- Display the current version of the Wave application.
- If there is an updated application version, the user can click "**Update Version**" to upgrade the application.
- The user can click on "**Privacy Agreement**" to view the privacy terms of Wave application.
- The user can click on "Learn more about Wave" to direct to Grandstream Official website to view the Wave application user manual.

<	
Wave	
Version 1.0.23.10	
Check for Update	>
More version	>
Privacy Agreement	>
Learn more about Wave	>
© 2023 Grandstream Networks, Inc.	

About

# Log out

Users can click "Log out" to jump to the login interface and log in again.

# RESET ACCOUNT PASSWORD

	<
	Sign in
	<pre>https://c07xxxxa8c94-10671.b.gdms.cloud /</pre>
	<b>1</b> 003
	D Password
Users can reset their Account password in case it is forgotten by	Forgot Password?
clicking on <b>Forgot Password?</b> On the <b>Sign in</b> page like shown in the figure below:	Sign in

Forgot Password Option

Once clicking on Forgot Password, the user will need to click on **Send Mail** button in order to receive an email to reset the password.

_	https://c07xxxxa8c94-10671.b.gdms.cloud
	/
2	1003
	ck the email with reset information in the mailbox nd to the account.
(	Send Mail
	Send Mail
	Send Mail
	Send Mail

Send Mail to reset Password

After clicking on " <b>Send Mail</b> " button, a verification code will be provided.	Authentication is successful Please go to the mailbox to open the reset password link and enter the verification code (valid for 10 minutes).
<b>Note</b> : An email address should be previously configured under the extension on the UCM630x	
	Resend after 51 seconds

Didn't get any mail?Please check if it is in the spam. If not, click resend.

### Verification Code

The user will need to go to the mailbox to open the reset password link, enter the provided Verification code and the new desired password.

S Wave		English 🗸
	Reset Password	
	Verification Code	
	Enter New Password	
	Re-enter New Password	
	Reset Password	
	Copyright @ Grandstream Networks, Inc. 2020. All Rights Reserved.	
	Reset Password Page	

### **O** Note

Resetting the Account password on Wave application will result in changing the user portal password, the new user portal password will need to be used afterwards.

# FREQUENTLY ASKED QUESTIONS

#### Q: My account is unable to register. What should I do?

A: Please check the following:

• Network connection:

Please check whether the device is connected to Wi-Fi, 2G, 3G, 4G, or 5G network properly.

• Server Address:

Please check whether the server address is entered correctly. Wave uses the web access address, not the SIP server address. The server address should be the web access address, not the SIP server address.

For internal server address using IP address (IPv4 or IPv6), port number is required. For external server address (domain name), please confirm whether port number is required. If the external server address contains port number, port number must be entered. Otherwise, there is no need

to enter port number.

• Extension and Password:

Check whether the extension number and User password are correct.

Q: Why do I see contacts from my phone in Wave app?

A: When using Wave for the first time, users will be prompted to allow or deny permission to access contacts. If allowed, the phone's contacts will be displayed in Wave. To change this, go to your device's app settings and change the Permissions for the Wave app.

Q: Why does my device not display any notifications from Wave?

A: Please confirm that notifications for the Wave app are enabled on your device. If enabled, the status bar will display account registration status. (This display may vary on different brands or systems of mobile devices.)

# CHANGE LOG

This section documents significant changes from previous versions of user manuals for Wave mobile app. Only major new features or major document updates are listed here. Minor updates for corrections or editing are not documented here.

### Version 1.0.25.10 (Android<sup>™</sup>)/ 1.25.9 (iOS<sup>™</sup>)

- Added support for replying to Live Chat calls and messages. [Live Chat]
- Added support for pinning messages and viewing pinned messages in chat groups. [Pin Message]
- Added support for saving messages. [Save Message]
- Added diagnostic tools. [Diagnosis]
- Added support for converting calls from multiple lines into an n-way conference. [N-way Conference]
- Added support for viewing who has seen a message in a group chat. [Group Chat]
- The user can now change the password directly on Wave mobile application. [Change Password]
- Added more emojis.

#### Version 1.0.23.14 (Android<sup>™</sup>)/ 1.23.14 (iOS<sup>™</sup>)

• Added new language – Traditional Chinese

### Version 1.0.23.13 (Android<sup>™</sup>) / 1.23.13 (iOS<sup>™</sup>)

- Added Dutch language.
- Updated Hebrew language display.

#### Version 1.0.23.10 (Android<sup>™</sup>) / 1.23.10 (iOS<sup>™</sup>)

- Whiteboard new revision for in-meeting sharing. [Share]
- Optimized Audio Call Interface. [Using Wave App]
- Supported Emergency Calls on Mobile Phones [Dial Settings]
- Display Current Speaker in Meetings. [Display Current Speaker]
- Receive Calls when receiving an Invitation. [Receive Calls when receiving an Invitation]
- Notification Assistant [Notification Assistant]
- Preview Links in Messages. [Preview Link]
- Added following new settings: Call Waiting, Call Waiting Tone, Contacts Sort Order ("Last Name, First Name" or "First Name, Last Name"), etc. [Calls and Messages] [Contacts Sort Order]
- Added menu entrances: What's New, SDK Integration Development Instructions, Add-in Integration Development Document. [What's New]
   [Integrate Wave]
- Added "Delete Chat" permission. [Delete Message]
- On the Meeting list, you can search for the recent 6 months meeting history. The period will be counted by natural month. [Meeting History]

### Version 1.0.21.18 (Android<sup>™</sup>) / 1.21.15 (iOS<sup>™</sup>)

• No major changes.

#### Version 1.0.21.14 (Android<sup>™</sup>) / 1.21.11 (iOS<sup>™</sup>)

- Added silent mode feature. [Silent Mode]
- Added custom ringtone for Wave on Android. [Notifications and Ringtones Settings]
- Added related battery settings. [Background and Battery Settings]

#### Version 1.0.21.8 (Android<sup>™</sup>) / 1.21.8 (iOS<sup>™</sup>)

- Added Raise Hand feature. [During the Meeting]
- Users can now set dial plan rules in Wave mobile. [Dial Plan]
- Users can now customize their ringtone by picking a ringtone from the list of ringtones (Currently supported on iOS Only). [Ringtone]
- T9 contact name matching is now supported. [Search Contacts]
- Users can now delete specific chats, or delete all the chats at once. [Single Chat]
- Meeting hosts can now specify the reason why a scheduled meeting was cancelled. [Schedule Meeting]
- Wave mobile application indicates now when a message has been delivered and read. [Single Chat]
- Added Survey and Poll features. [Create Poll/Survey]
- Added support for importing phone contacts to Personal Contacts on Wave. [Import Contacts]

#### Version 1.0.19.10 (Android<sup>™</sup>) / 1.19.10 (iOS<sup>™</sup>)

- Safe-driving mode has been added. [Safe Driving Mode]
- Ability to zoom in and out when a screen is shared in a meeting has been added.
- Added support for call/meeting ending indicator tone.
- Added support for scheduling onsite meetings. [Schedule Onsite Meeting]
- Added support for canceling and editing upcoming scheduled meetings, or ending ongoing meetings. [Onsite Meeting]
- Added support for forwarding multiple messages in one message, or separately. [Message Forwarding]
- Added support for displaying the local time in the contact's messaging window. [Contact Local Time]
- Added support for rotating, forwarding and downloading images exchanged in Wave mobile application. Note: Forwarded images will not retain the rotation. [View an Image]
- Added support for blocking Push notifications on Wave mobile app when the user is logged into Wave desktop. [Notifications]
- Added support for end-to-end encryption [End-to-end encryption]
- Added support for Personal Contacts
- Added an indicating tone once the call is ended or exiting the meeting

### Version 1.0.17.6 (Android<sup>™</sup>) / 1.17.8 (iOS<sup>™</sup>)

- Made several UI improvements.
- The last 10 server addresses logged into will now be remembered. These server addresses can be viewed and selected by tapping on the arrow icon in the Server Address field on the login page.

- [Calling]
  - Users can now have up to 6 simultaneous calls instead of just 2.
  - Improved attended transfer functionality.
  - When copy/pasting a number with special characters into the dialpad, the special characters will be automatically filtered out.
- [Chat]
  - Added the Change Group Owner option to the group chat settings to transfer ownership of the group to an existing group member.
  - Added additional emojis.
- [Meetings]
  - Users can now start and stop video recordings during meetings by swiping up the bottom bar and tapping on the Record option. If the meeting does not support video recordings, audio will be recorded instead. Recordings can be viewed and played directly from Wave.
  - Users can now change the video feed layout of meetings by swiping up the bottom bar during meetings and toggling the Speaker Layout option. Enabling Speaker Layout will display only the video feed of the designed speaker, and users can swipe left or right to view just the speaker or all video participants respectively. Disabling the option will just display all video participants instead.
  - Users can now create a meeting group chat when scheduling a meeting.
  - When there is only 1 participant in a meeting, and the meeting duration has reached 30 minutes, a prompt will appear asking whether to extend the meeting. If extended, the meeting will last another 30 minutes. Otherwise, the meeting will automatically end after 5 minutes.
  - If the duration of a meeting is about to reach 12 hours, and the meeting host is in the meeting, they can extend the meeting for another 12 hours once. The meeting will automatically end once another 12 hours have passed. If the meeting host is not in the meeting after the initial 12 hours, the meeting will automatically end.
  - Users can now invite IP camera devices they have permission to access to meetings. Other meeting participants can view the video feed of invited IP camera devices.
  - $\circ$  Added the Allowed to override Host Mute option to the Edit Meeting / Schedule Meeting pages  $\rightarrow$  Advanced Settings page. If enabled, participants muted by the meeting host will be able to unmute themselves.

### Version 1.0.15.9 (Android<sup>™</sup>) / 1.15.8 (iOS<sup>™</sup>)

- Added support for creating meeting group chat for a scheduled meeting. [Schedule Meeting]
- The host of a group chat can now allow or prohibit the group members from adding other users. [Group Chat]
- Added support for sending and receiving instant voice messages. [Voice Messages]
- Added support for viewing all images sent in a discussion in a gallery style display. [Instant Messages]
- Added support for searching chat history. [Search in a Chat History]
- Added support to enable or disable dial tone when using the keypad. [Dial Tone]
- Added support for sending files and video through the mobile phone system. 0

Version 1.0.13.8 (Android<sup>™</sup>) / 1.13.9 (iOS<sup>™</sup>)

- Made several UI adjustments.
- Added ability to change date and time format. [Time/Date Format]
- Added Portuguese and Vietnamese language support. [Wave Technical Specifications] 0
- Added support to start audio recording during the Wave meetings. [Record an Ongoing Meeting]

- Added support to display absent meeting invitees for the host. [Absent Meeting Invitees]
- Added support for Call Flip Function. [Call Flip Function]
- Added support to start audio recording during a point-to-point call. [Record an Ongoing Call]
- Added support to create a chat group after a meeting with the members of the meeting. [Create Chat Group After Meetings]
- Added support for viewing contacts based on UCM contact privilege settings. [CONTACTS]
- LDAP phonebook contact visibility is now based on the UCM's LDAP phonebook settings. [CONTACTS]
- Added support for restricting visibility of chat history when inviting contacts to a group chat. [Group Chat]
- Added more emojis. [Instant Message]
- Added support for quick reply with emojis. . [Instant Message]
- Added support to view the files list. [Files list]
- The Wave app can now be selected as default phone app. [Default phone app]
- Added support for iPad landscape mode.

#### Version 1.0.11.x (Android<sup>™</sup>) / 1.11.X (iOS<sup>™</sup>)

- Added more functions in Chat module: supported replying with emoji, set the viewable range of chat history for new chat members, supported displaying the other party's status (XXX is typing...), and supported more emojis. [Instant Message]
- Added multiple hierarchical organizational structure contacts in Contacts module. [Contacts]
- Added Voicemail function in Wave mobile applications. [VOICEMAIL]
- Added custom avatar function in Wave mobile applications. [Account Info]
- Added Help and Feedback module in Wave mobile applications. [Help and Feedback]
- Added to support GDS door system involved functions on the call interface. [Smart Device]
- Added chat bubble function during the meeting. [Conference]
- Added to synchronize call history from multiple clients for a single Wave account. [Call History]
- Merged audio conference and video conference to Conference module. [Conference]

#### Version 1.0.9.15 (Android<sup>™</sup>) / 1.9.14 (iOS<sup>™</sup>)

- Added support for the DTMF soft keyboard during the call. [During a Call]
- Added the ability to set the account status. [Account Status]
- Added the ability to set the workings status. [Working Status]

• Added support for Background Mode. [Settings]

### Version 1.0.7.7 (Android<sup>™</sup>) 1.7.8 (iOS<sup>™</sup>)

- Added New features in chat module: pin chat box, mute message notice, hide chat box, quote to reply message, delete messages, etc.
   [Group Settings]
- Supported multi-lines calls. [Hold/Unhold and Multiple Lines]
- Supported to transfer an active call to a video conference. [N-Way Conference]
- Added public meeting room list and the list will show the meeting room status in different periods. [MEETING]
- Added to create a meeting with random meeting number. The meeting can be created as instant meeting or scheduled meeting. [Meet Now]

Added to display the actual meeting duration and actual participants list for the previous meetings. [Meeting History]

Supported to add participants from contacts/groups when scheduling a meeting. [Schedule Meeting]

Supported to set meeting subject and add invitees for instant meetings. [Meet Now]

Added meeting assistant module. When there are new meeting invitations, meeting reminders and meeting cancelation notifications, the meeting assistant will send messages to the host and participants. [Meeting Invitation]

#### Version 1.0.5.2 (Android<sup>™</sup>) / 1.5.1 (iOS<sup>™</sup>)

Add chat feature, including single chat, group chat. [Single chat][Group Chat] Chat feature is supported in the meeting. [Meeting Chat] Support call waiting and switch two calls on Wave Android. [Call Waiting] Support N-Way audio conference. [N-Way Conference] Add history meeting list. [Meeting History] Wave users support using links to join the meeting. [Link to Join]

### Version 1.0.1.9 (Android<sup>™</sup>) / 1.1.9 (iOS<sup>™</sup>)

Added the option Favorites. [Favorites]

Add the option of scheduled meeting. [Schedule Meeting]

Added the option of listing participants and inviting members to the meeting. [Video Meeting Participants]

Added the option of modifying the display name in the meeting. [Edit Name]

Added the ability to reset account password. [RESET ACCOUNT PASSWORD]

Added landscape layout support.

#### Version 1.0.0.17 (Android<sup>™</sup>) / 1.0.15 (iOS<sup>™</sup>)

This is the initial version.