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™ and iOS™ 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™ 8.0+ and iOS™ 11.0+ with 2G/3G/4G/5G and Wi-Fi networks
- Voice channel switching between Bluetooth, mobile device, speakerphone and 3.5mm headset 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:

http://www.grandstream.com

PREREQUISITES

Device Requirements

Operating system: Android™ 4.2+, iOS™10+

Hardware： Compatible with most Mobile phones and tablets running Android™ 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 to open it.

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

Figure 1: Gestures on Touchscreen

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

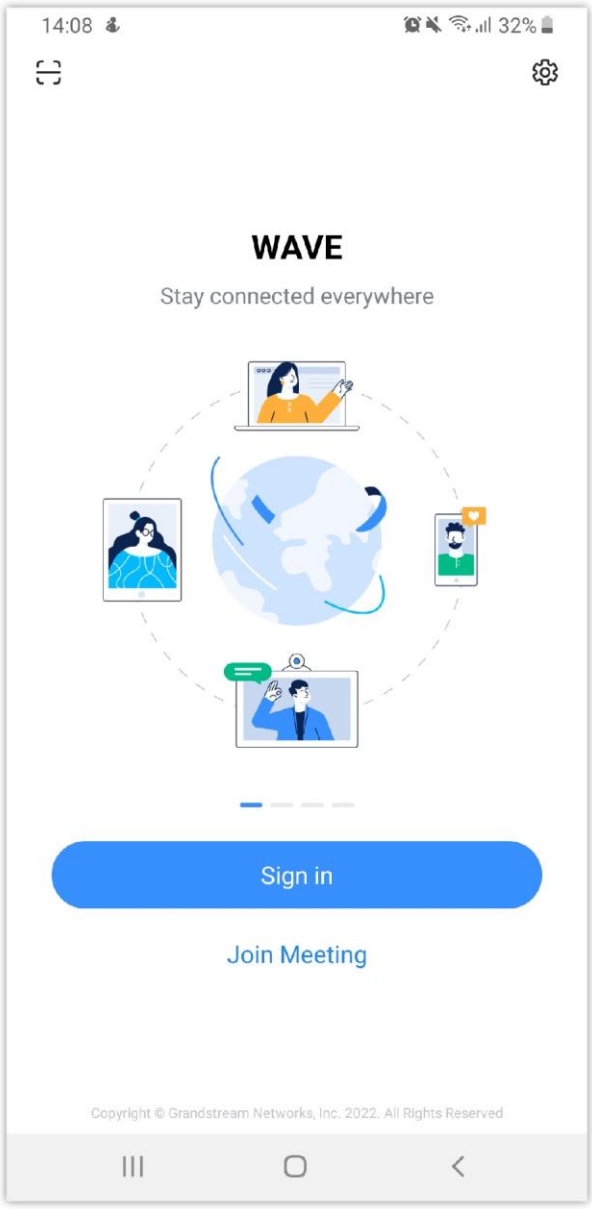
- **Tap**： Touch the screen with a fingertip once to select or open a menu.
- **Press and hold**： Touch and hold the screen with one fingertip for about 2 seconds to bring up more operations.
- **Flick and Slide:** Slide a fingertip across the screen. For example, users can swipe up/down to scroll through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

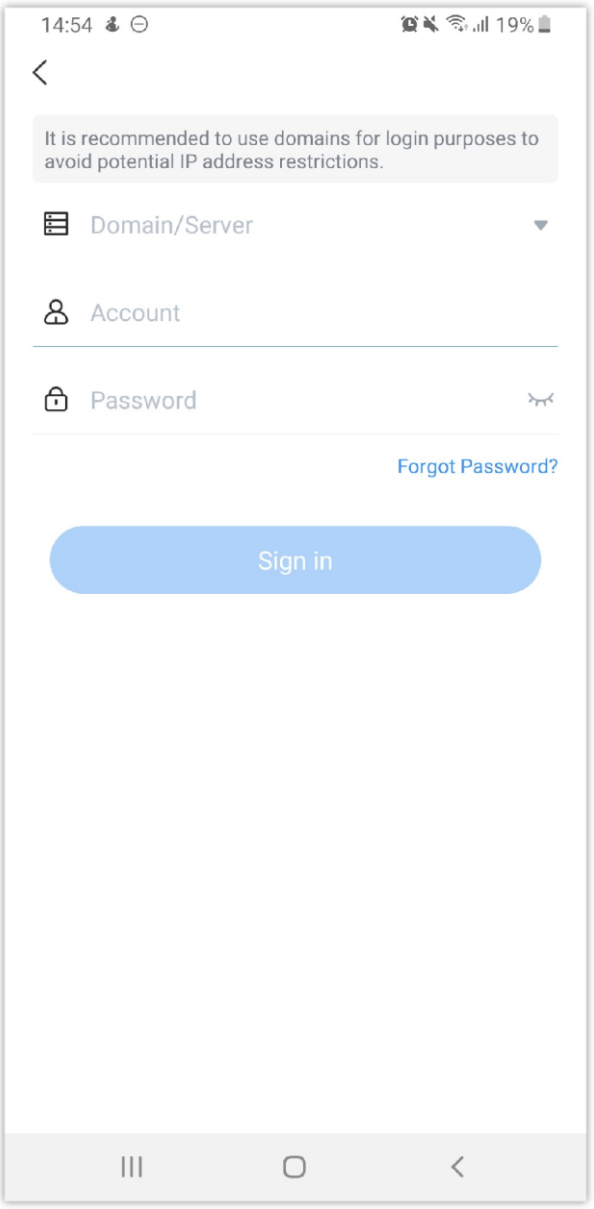
USING WAVE APP

Signing In Using Credentials

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

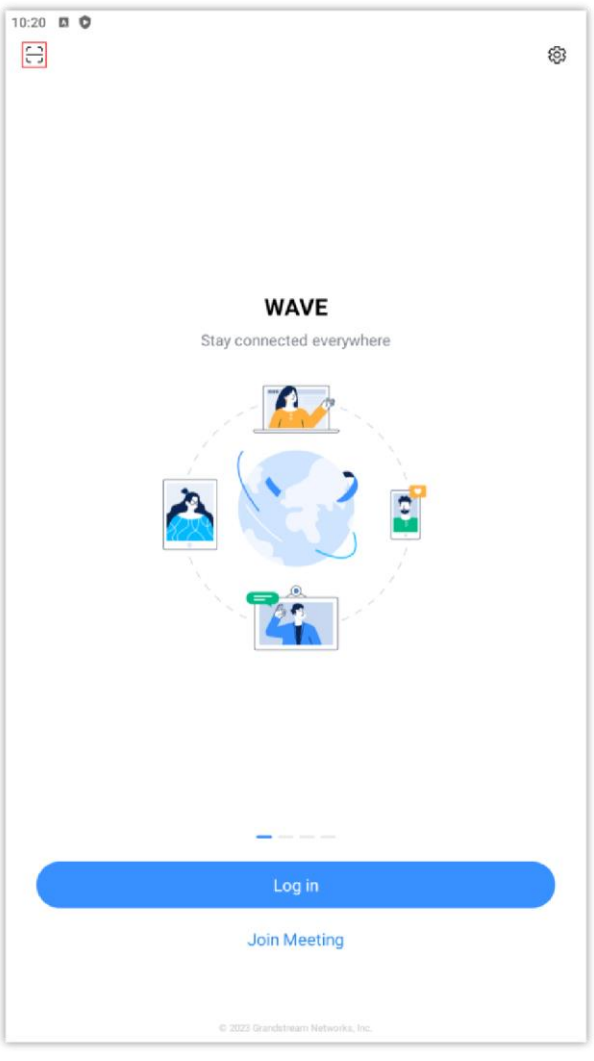
Step 2: Enter server address, account number and User password. Then click “Sign in”.





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.



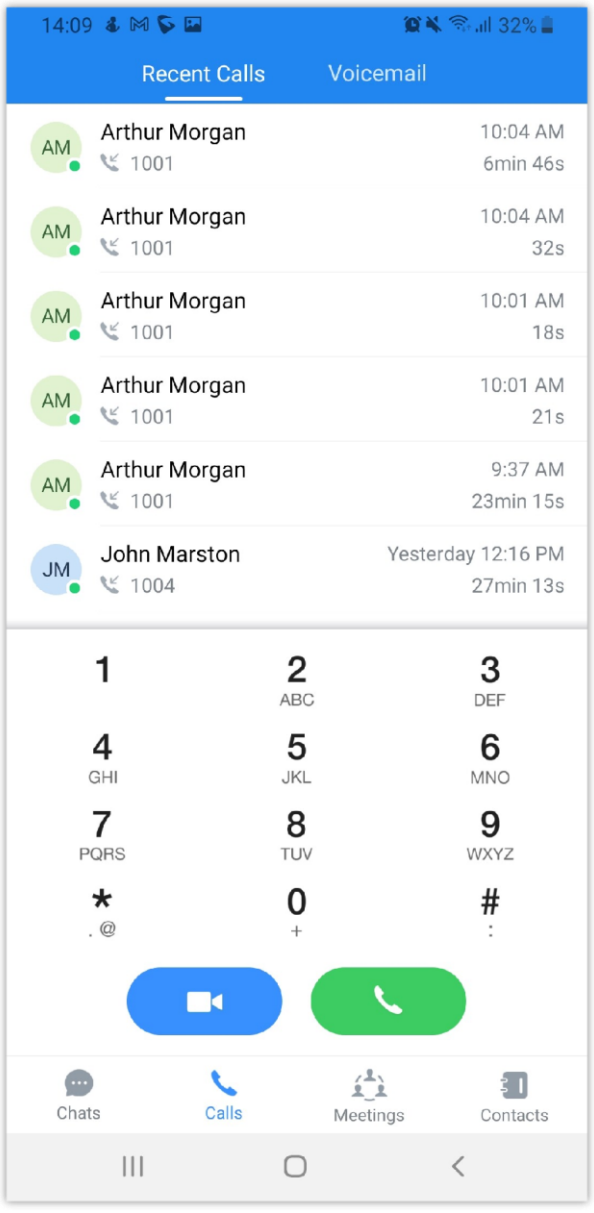
Making a Call

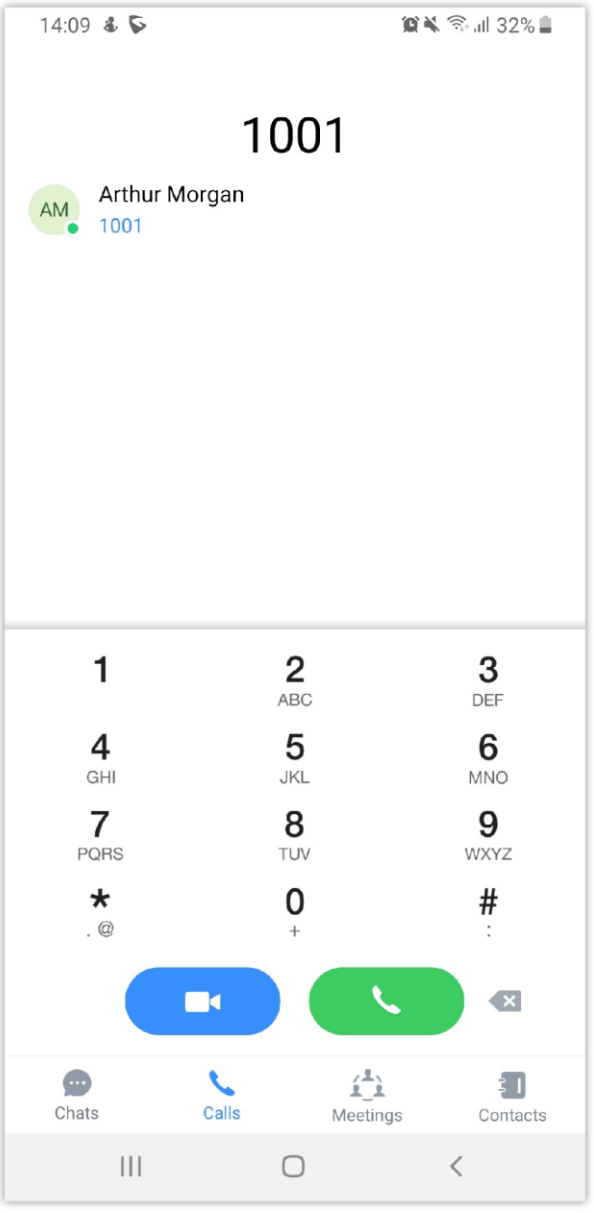
Step 1: Click on on the bottom right corner of the app to bring up the dial pad.

Step 2: Enter the number to dial.

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

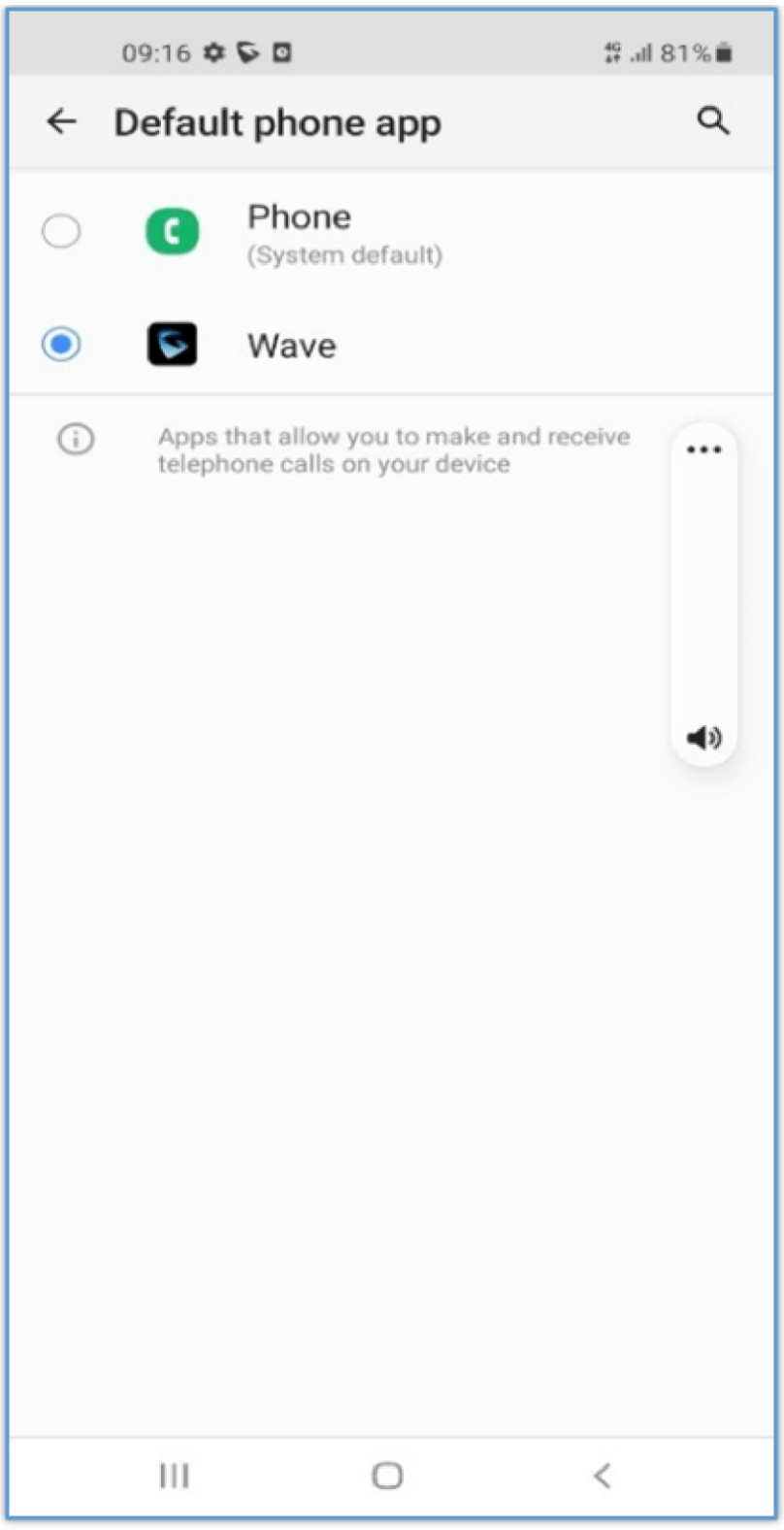
Note: With the Wave app, users can dial other extensions and any other number allowed by the UCM server.





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.

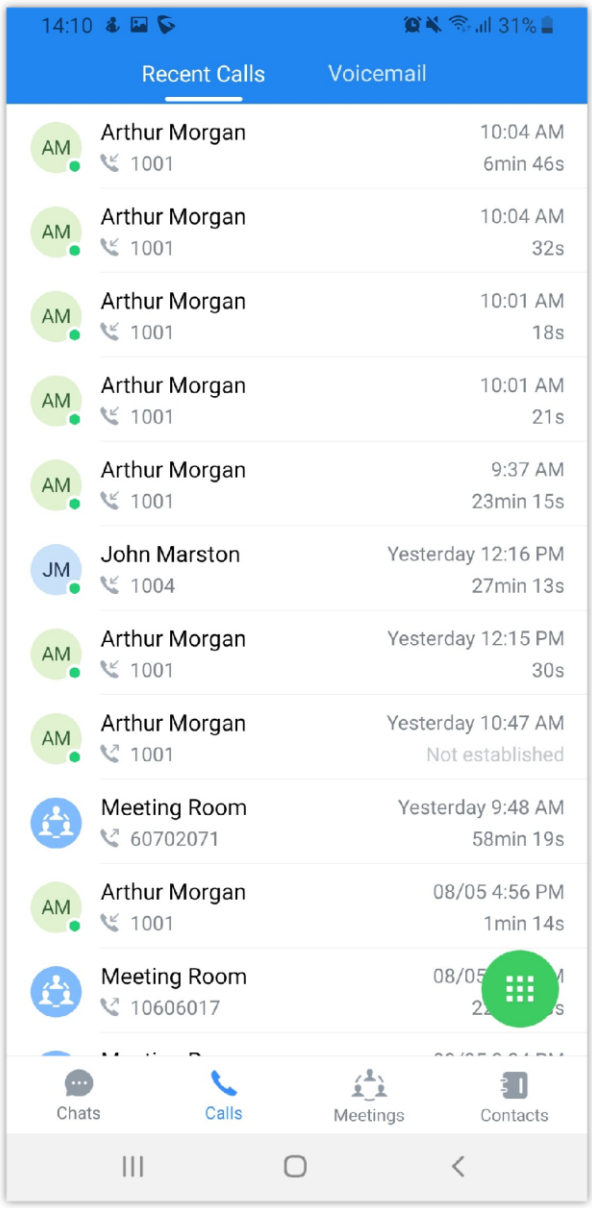
Method 1: Open the dialing interface by tapping on the Dial tab.

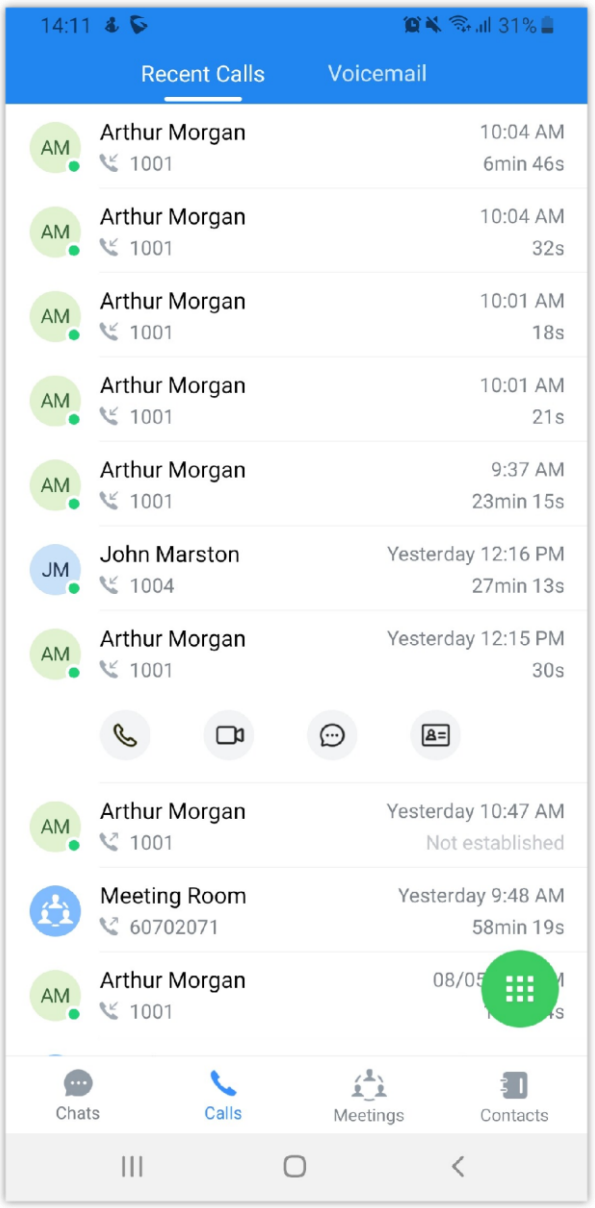
Method 2: Tap on the pound key # on the dial pad to automatically call the last dialed number.

Call History

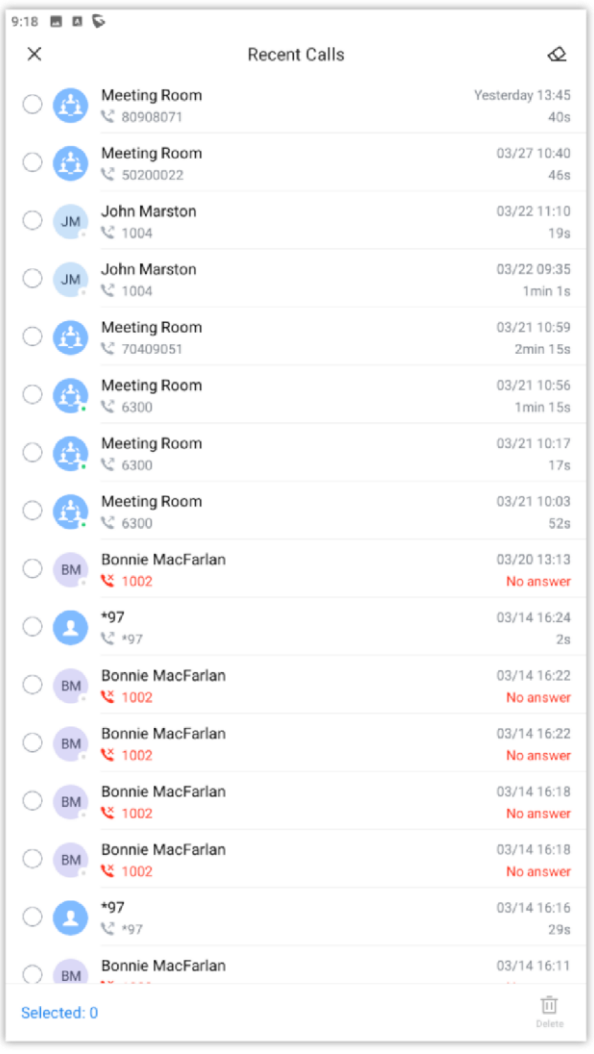
Call history is displayed on the **Dial** page. It displays all call history and voicemail messages in each Wave client for the Wave account.

- 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.





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

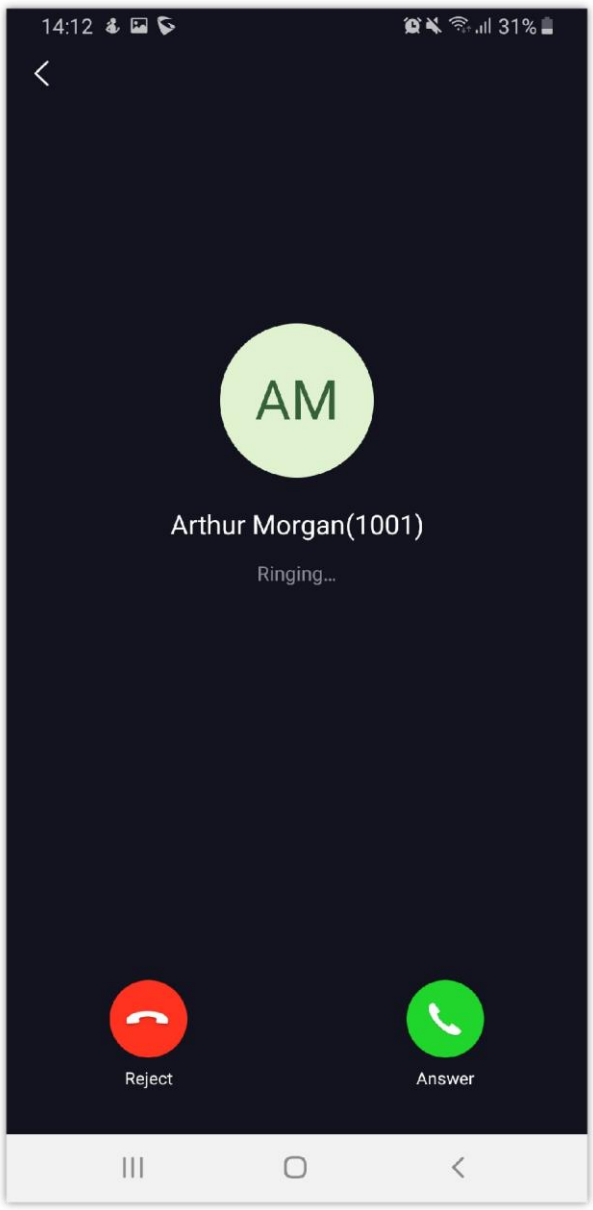


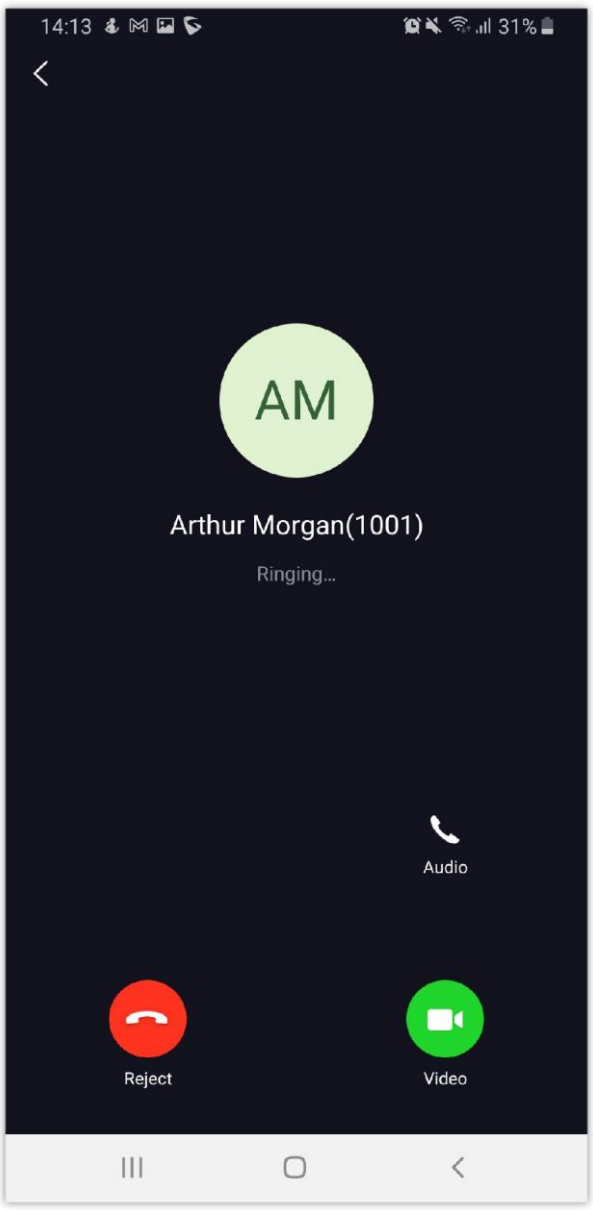
Select the entries that you want to delete and then tap on Delete. To delete all the entries, tap

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 to answer the call, or tap on to reject it.
- For incoming video calls, an additional button is available to answer the call with video on.



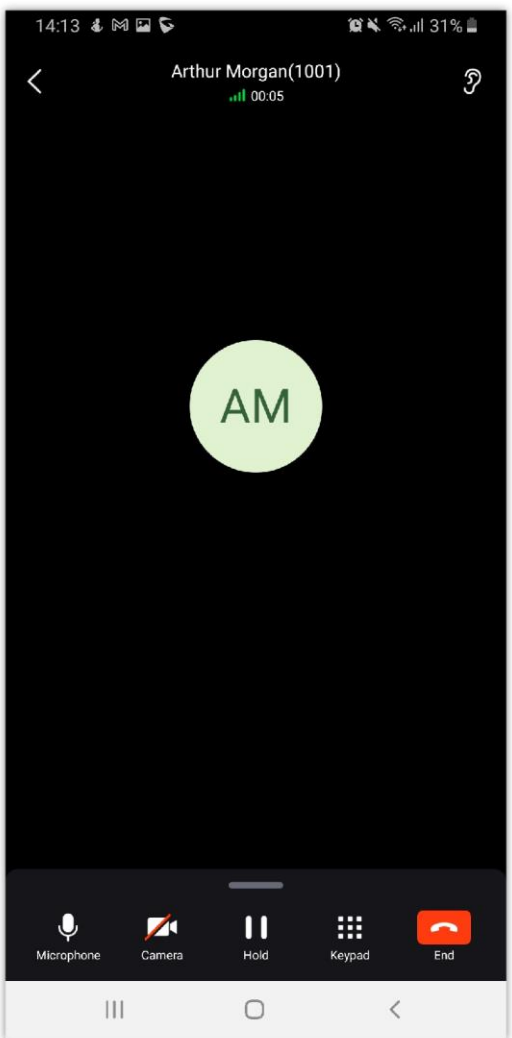


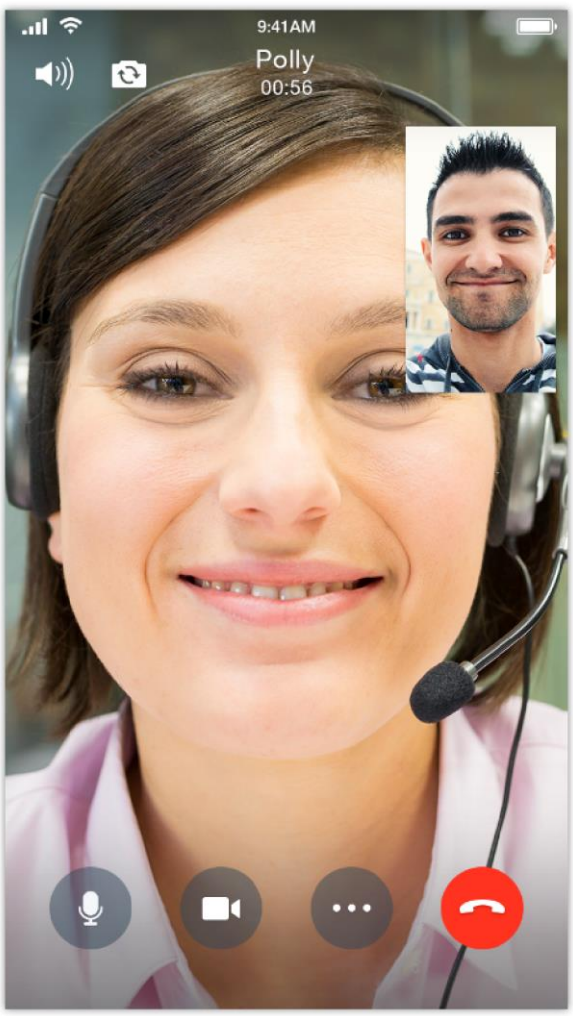
Note

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.





- Use speaker as audio channel. User can select to switch to earpiece, wired headset or Bluetooth headset.
- Use earpiece as audio channel. User can select to switch to speaker, wired headset or Bluetooth headset.
- 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.

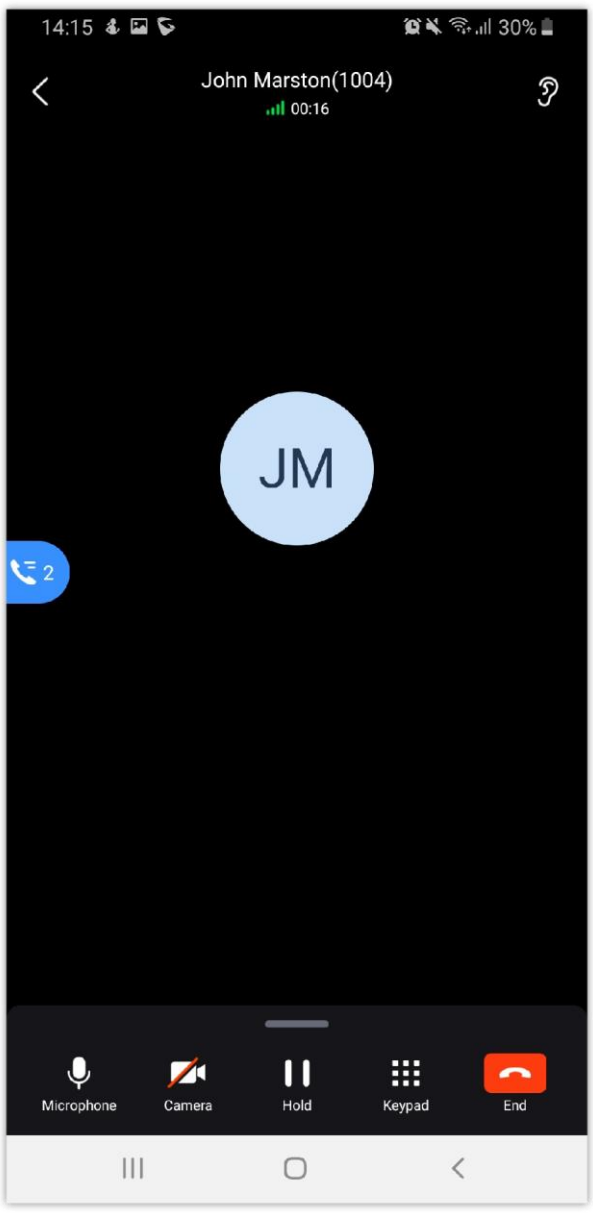
- N-way conference. Click to add participants into conference.
- Hold/unhold: Tap on hold a call or retrieve a held call.
- Transfer: Click to transfer the call. Blind transfer and attended transfer are supported.
- DTMF: Tap to bring up dial pad and enter DTMF.

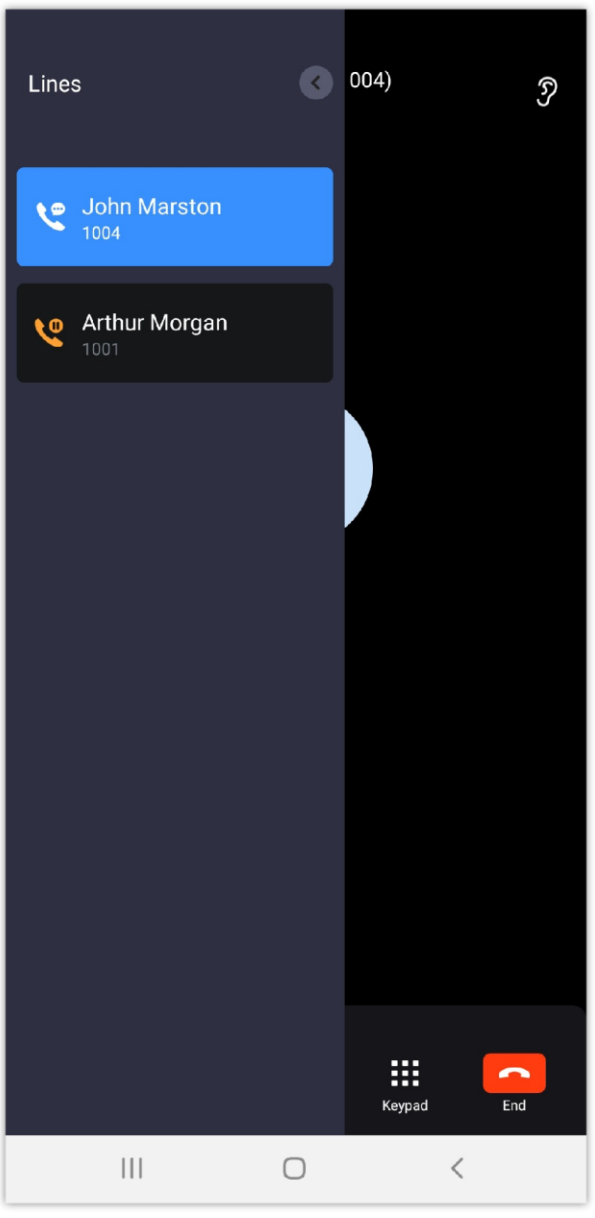
Call Waiting

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 to switch to the other call.





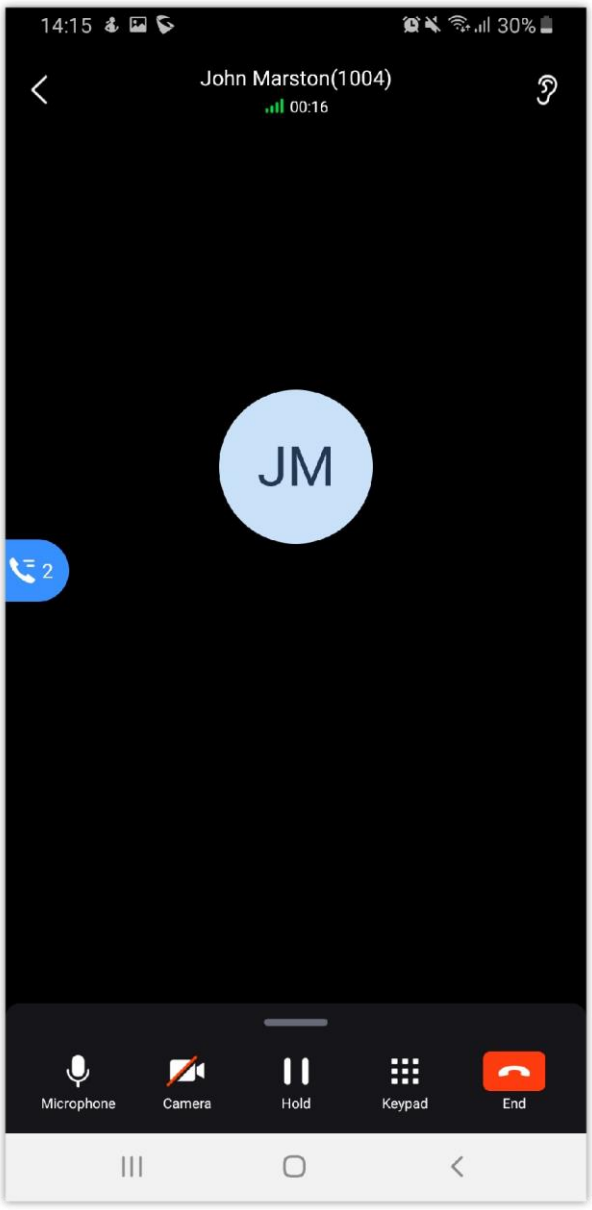
Hold/Unhold and Multiple Lines

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

Step 1: During a call, click on “More” icon and 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.



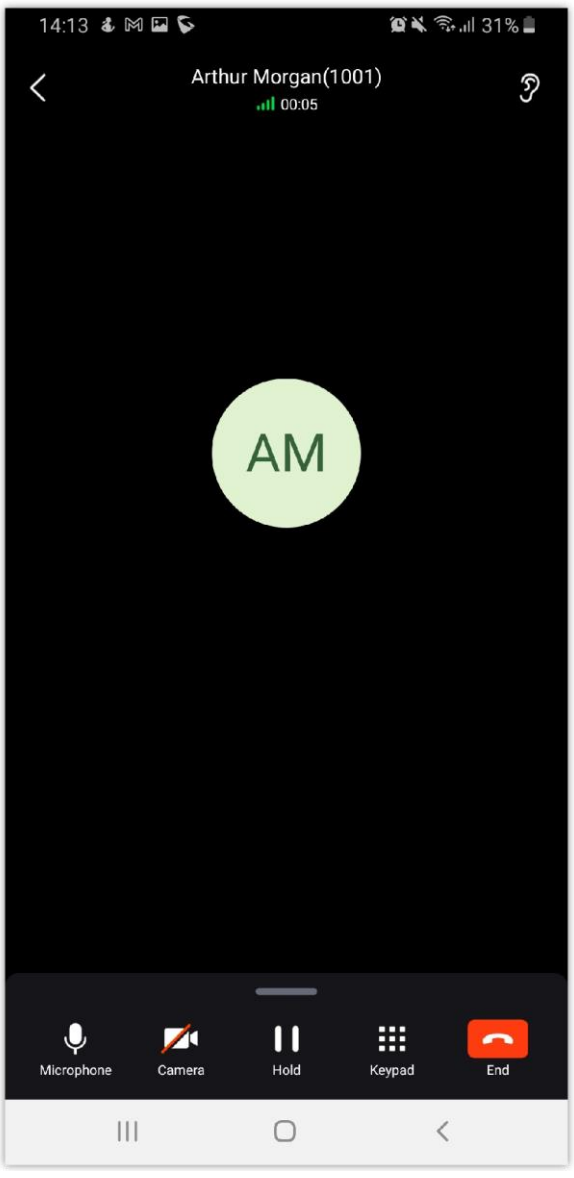
Mute

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

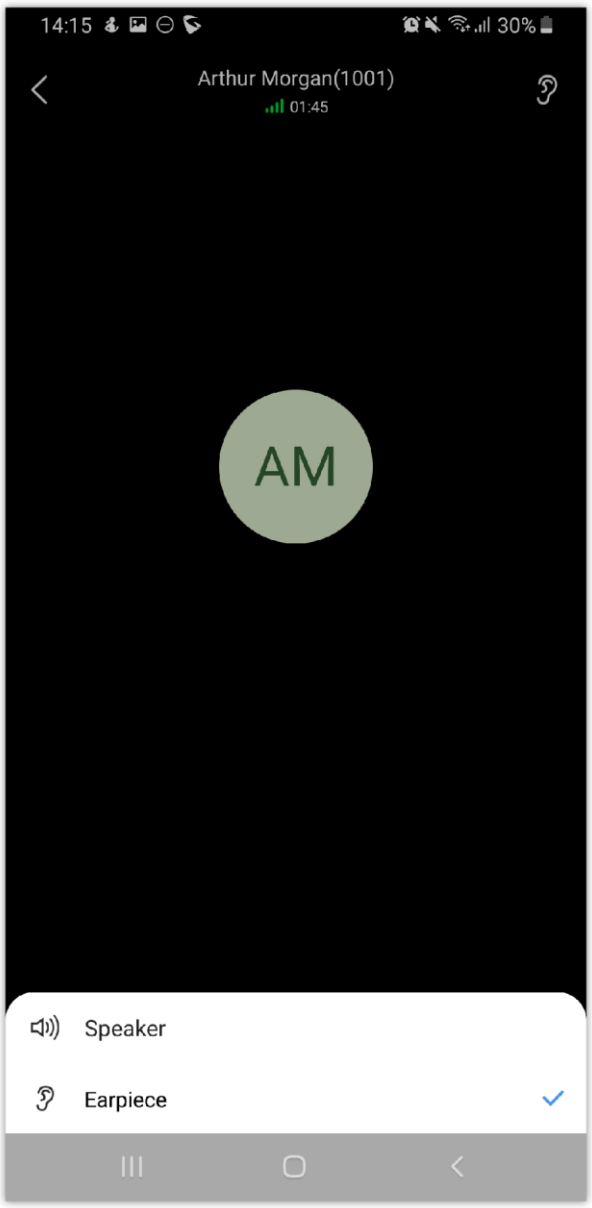
to unmute your microphone.



Switching Audio Channel

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

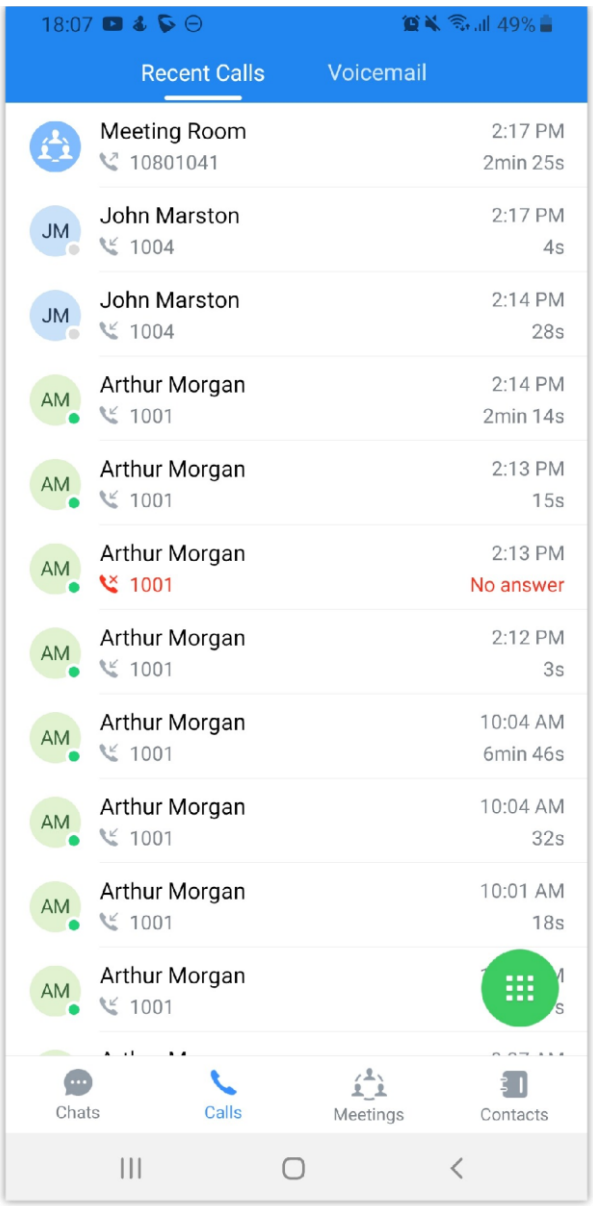
- Use Bluetooth headset.
- Use wired headset.
- Use phone earpiece.
- Use phone speaker.



Change Call

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

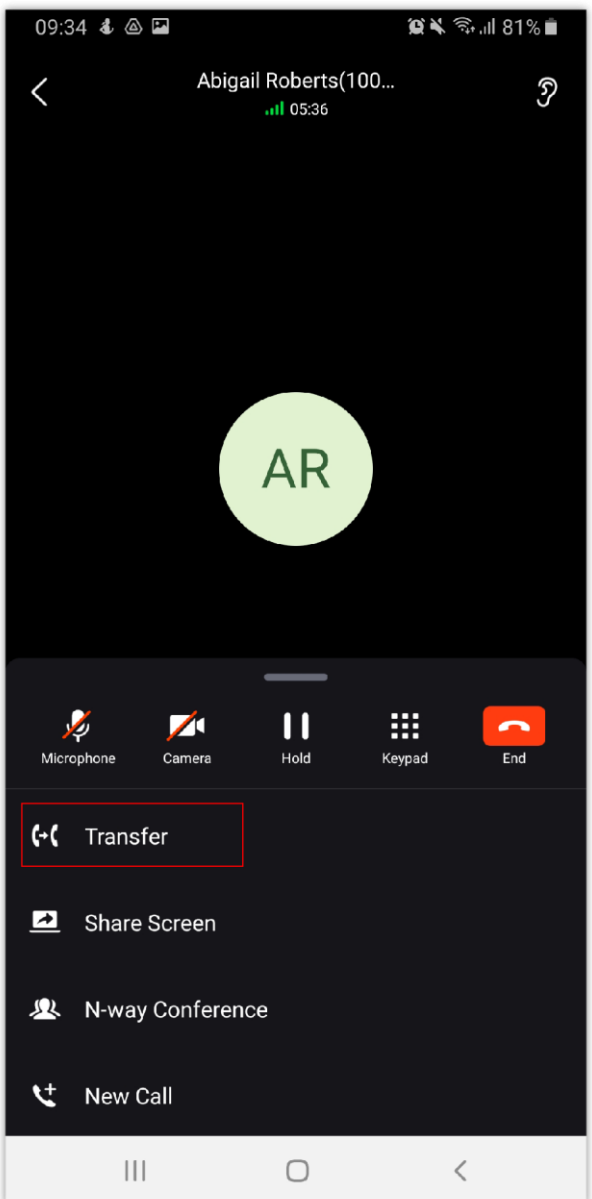


Call History

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.

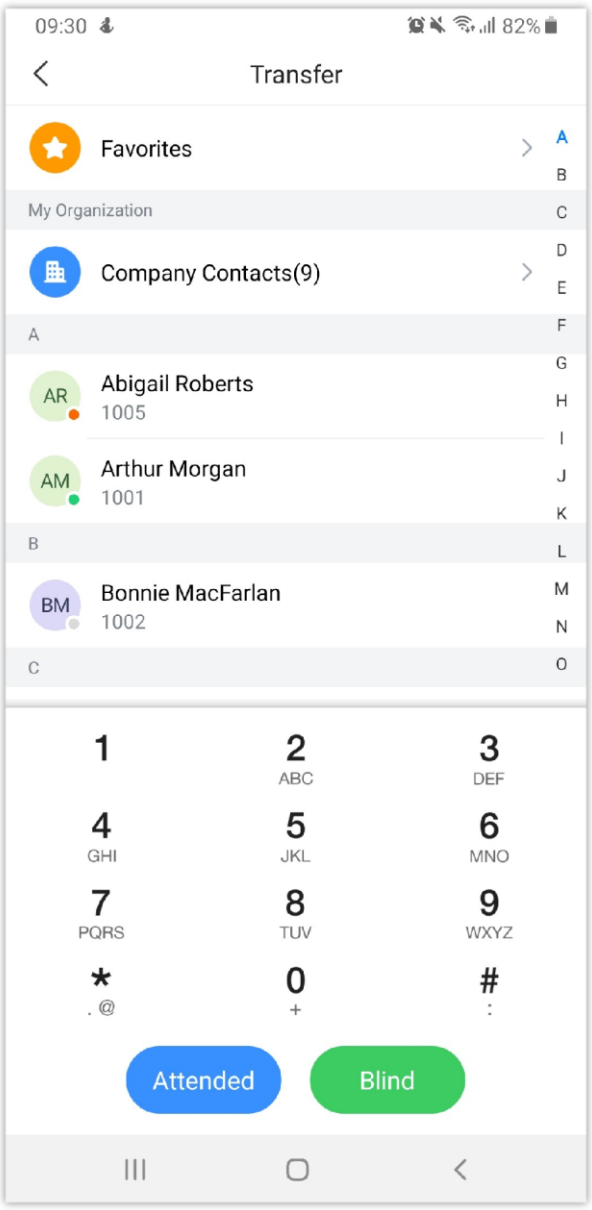
Step 1: Pull up the menu located at the bottom of the screen for more options then select “Transfer” to initiate the transfer process



Initiate a Transfer

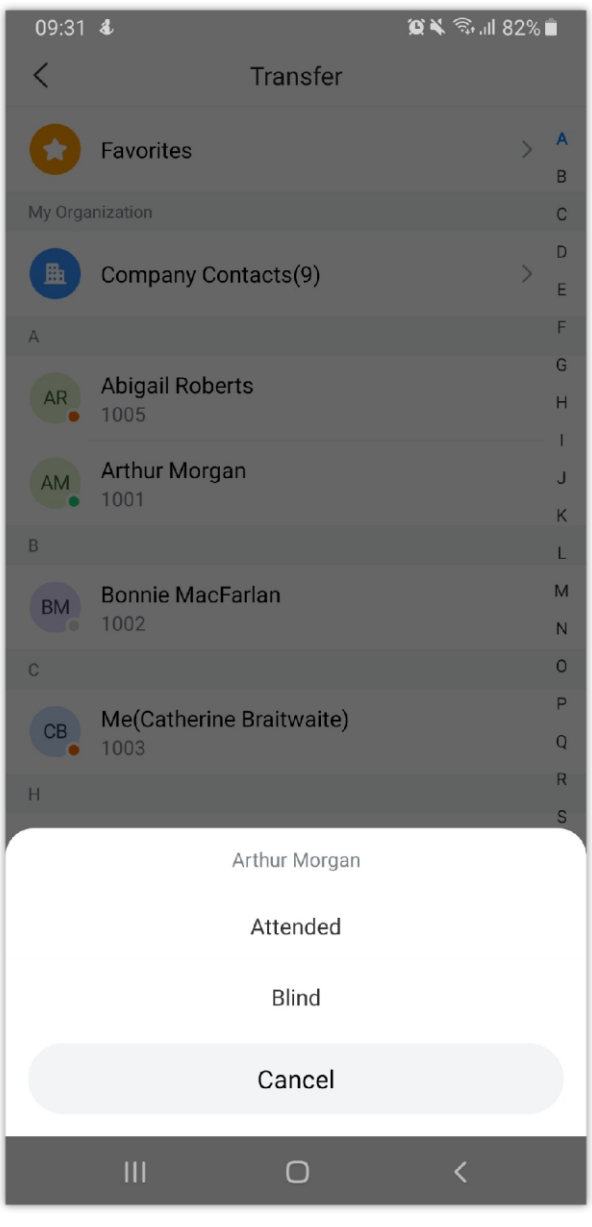
Step 2: Either enter an extension number or select a contact from the list of contacts.

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



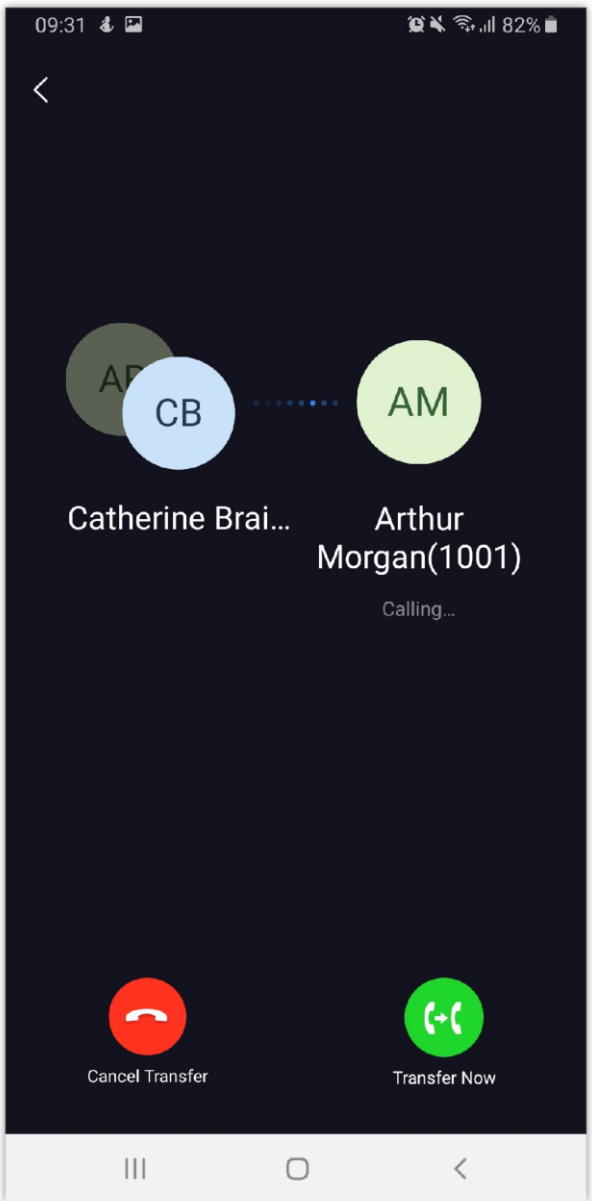
Choose a Contact

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: User A swipes up to bring more options

Step 3: Select the option "Transfer".

Step 4: User A enters User C's number to transfer the call to, then press "Attended" to transfer the call.

Step 5: User C rings. User B will be put on hold.

Step 6: 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 7: 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: User A swipes up from the bottom of the screen to bring additional options menu.

Step 3: Select the option "Transfer".

Step 4: User A enters User C's number to transfer the call to, then press "Attended" to transfer the call.

Step 5: User C rings. User B will be put on hold.

Step 6: 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 7: 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.

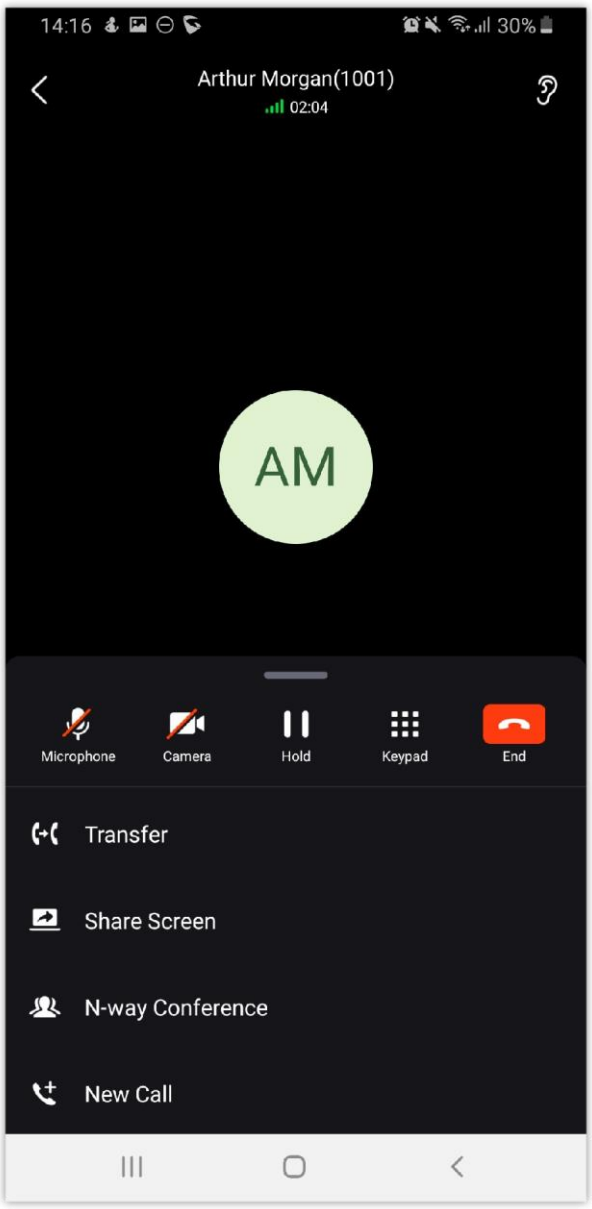
N-Way Conference

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.

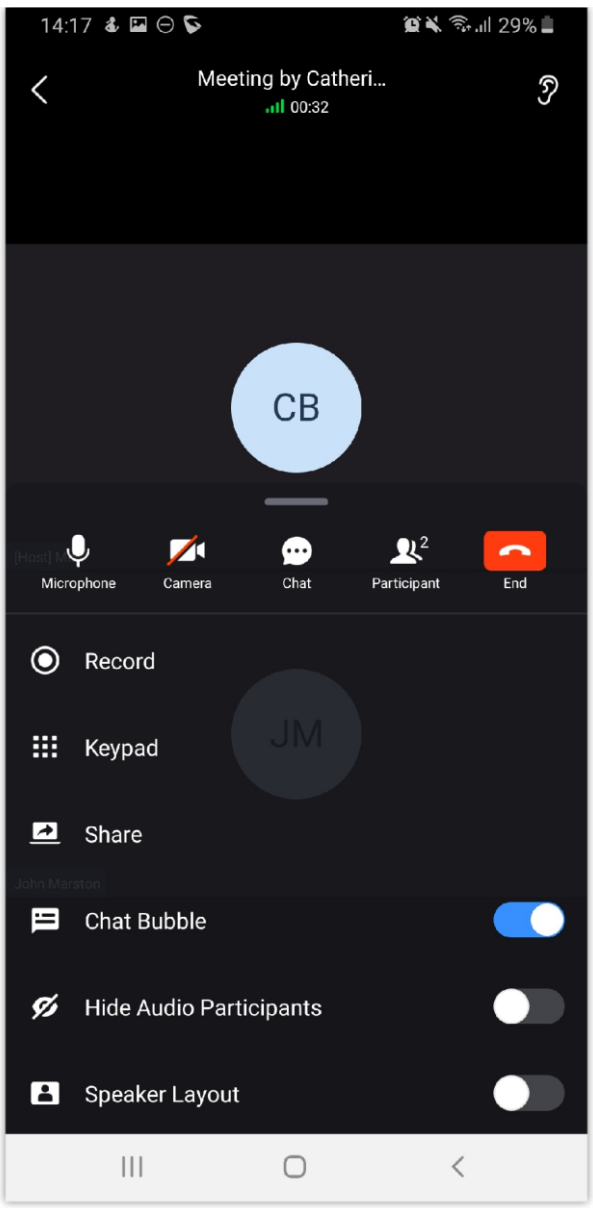
Step 2: Pull up the menu on the bottom of the screen.

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



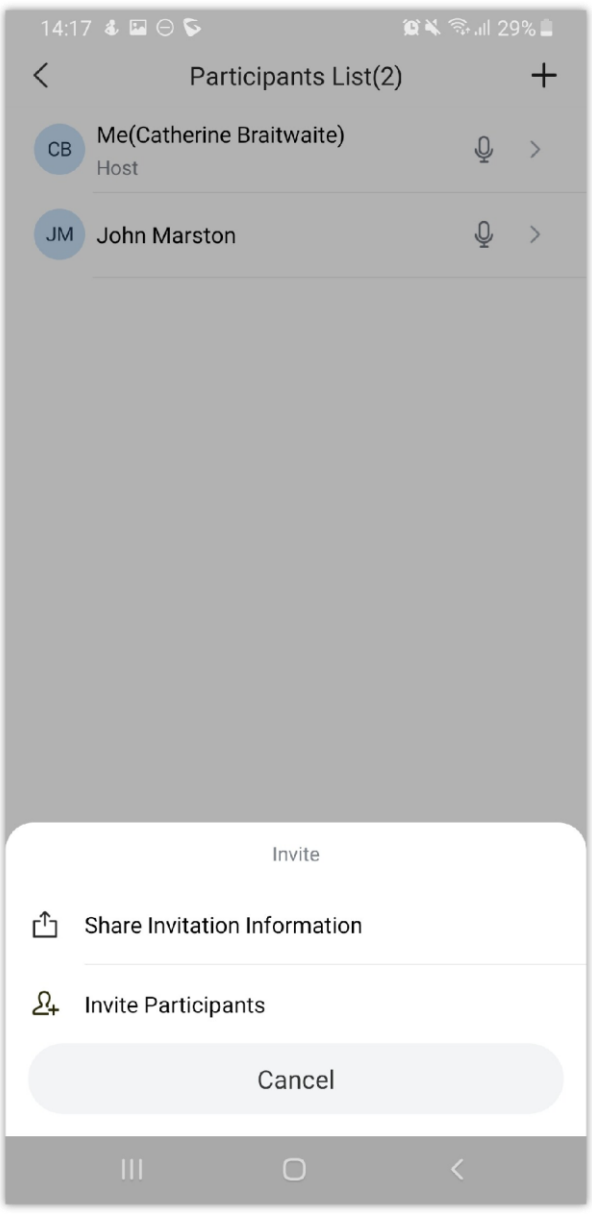
Start N-way Conference

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 then on to bring more people to the call.



Invite Participants

Step 6: Then select “Invite Participants”.

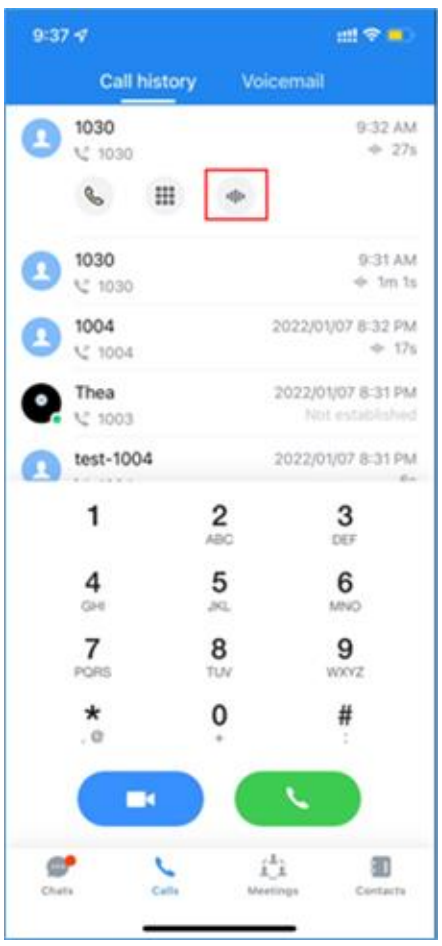
Call Flip Function

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 during the call to start recording the call. Once the call is ended, the user can click button to view the recording files on the call history interface. Please see the screenshots below:

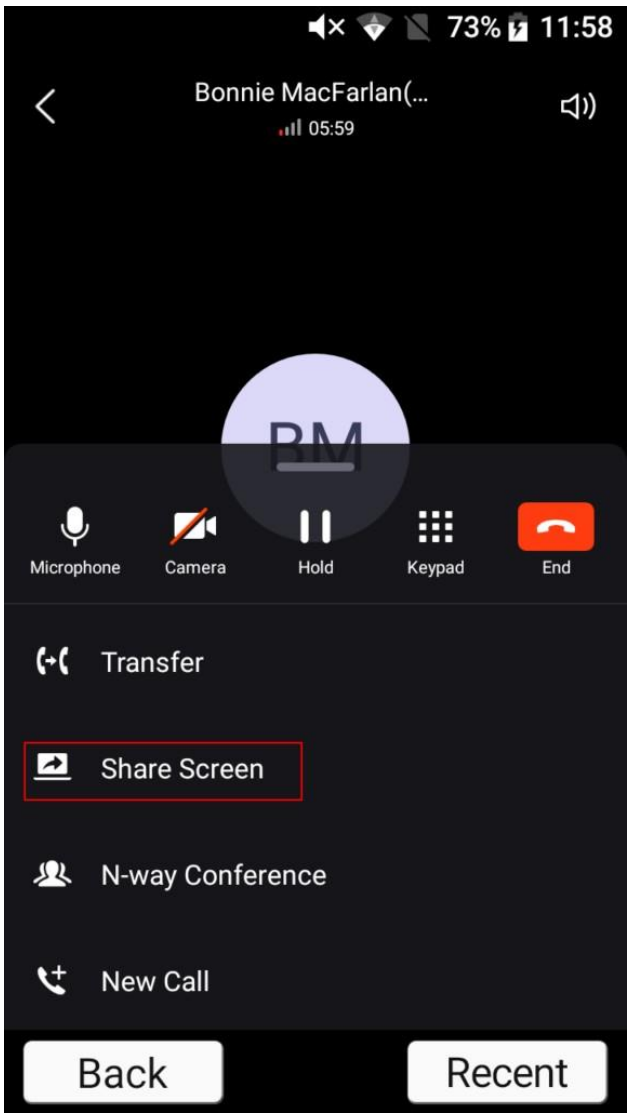
Start a Call Recording



Listen to the Call Recording

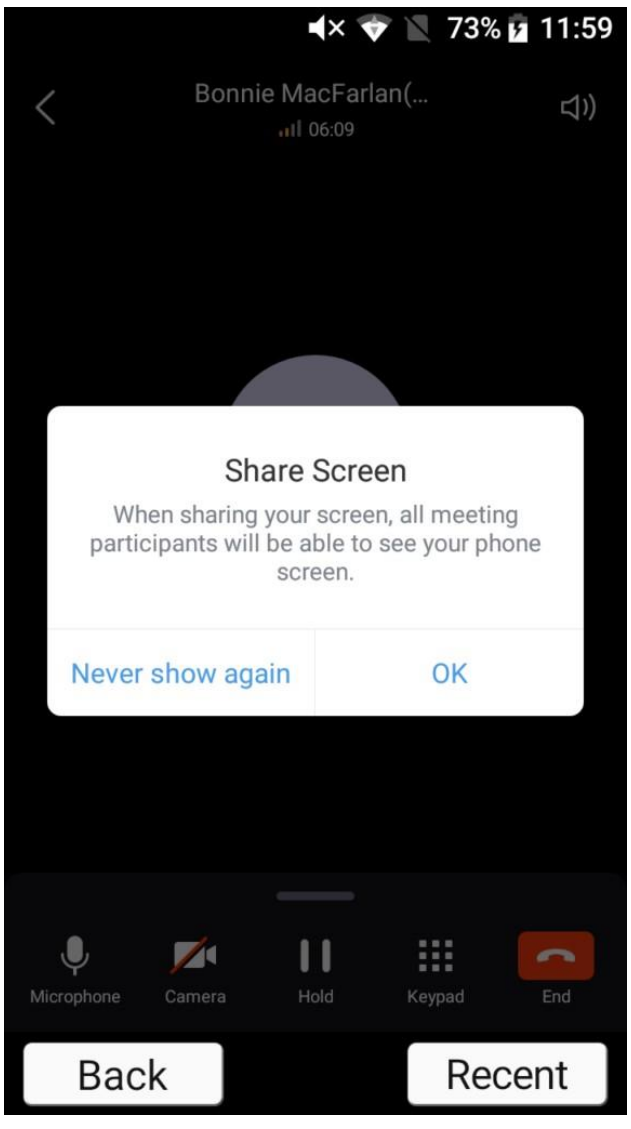
Screen Sharing

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:



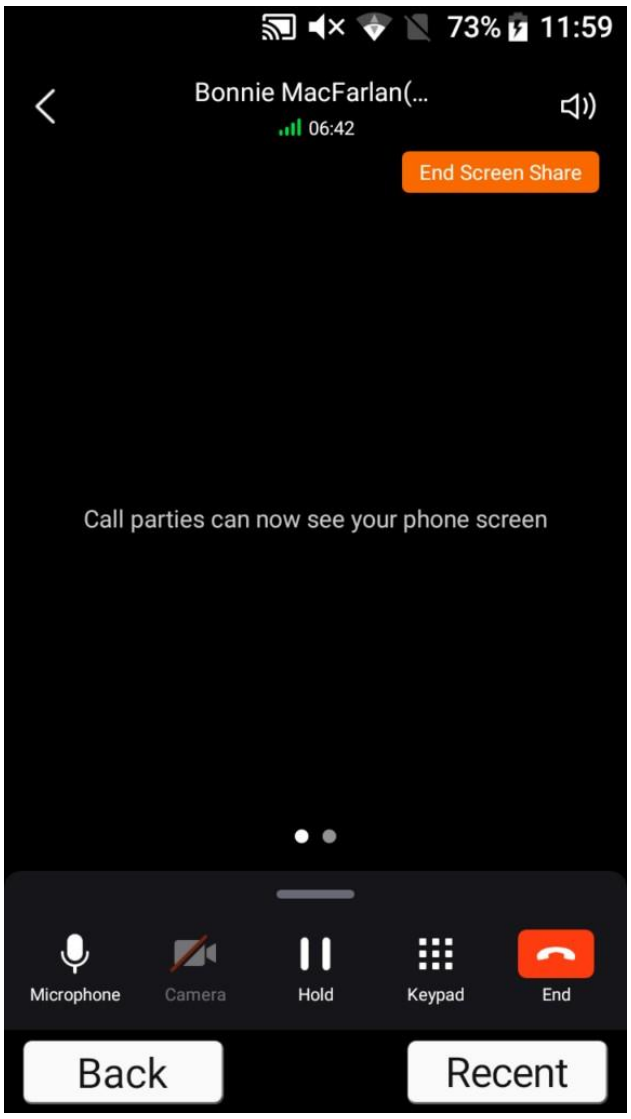
Share Screen

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



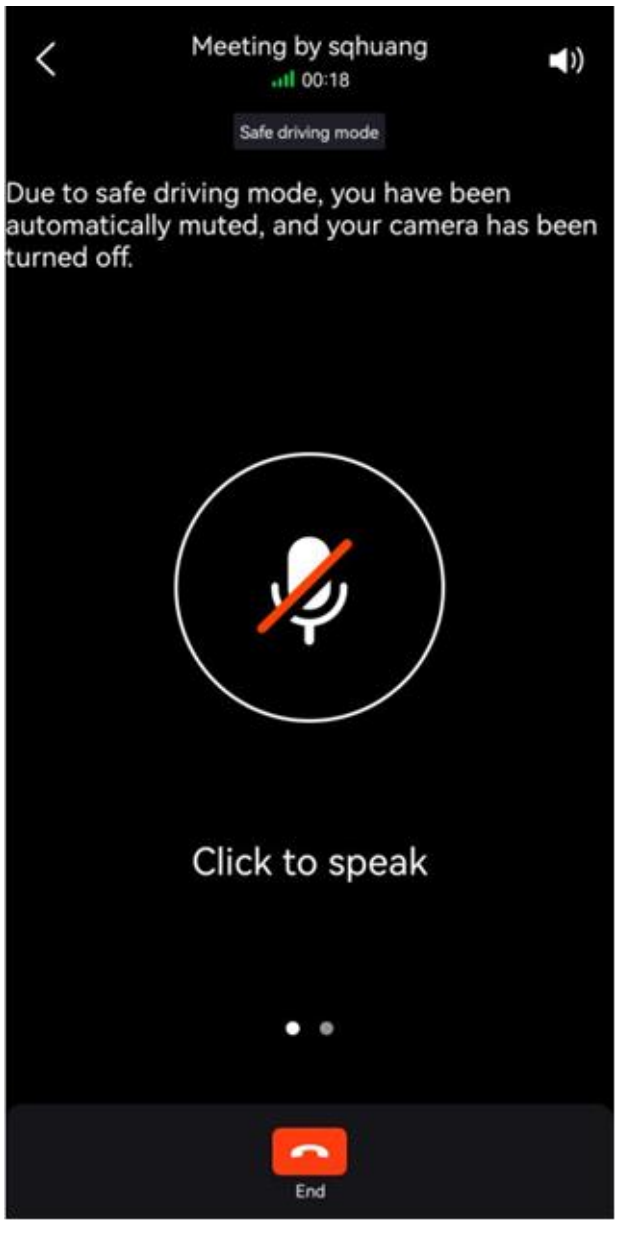
End Share Screen

To end the screen-sharing please click on End Screen Share.

Safe Driving Mode

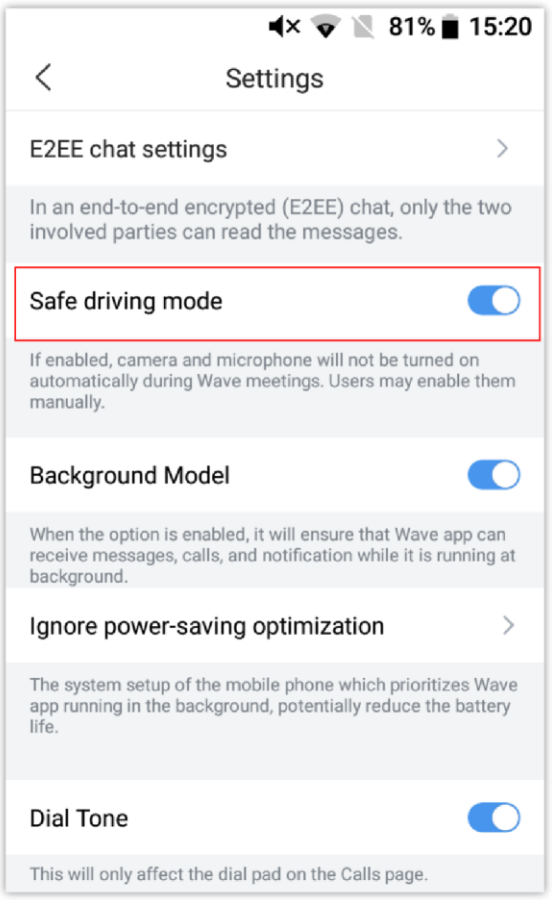
Wave has a safe driving mode which enables a reduced user interface to make it easier to access the main controls of Wave call/meeting. This feature has been introduced to remove any kind of distractions from Wave user interface. The camera will be turned off by default while this mode is enabled, and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



Meeting Layout

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



Safe Driving Mode

CHAT

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

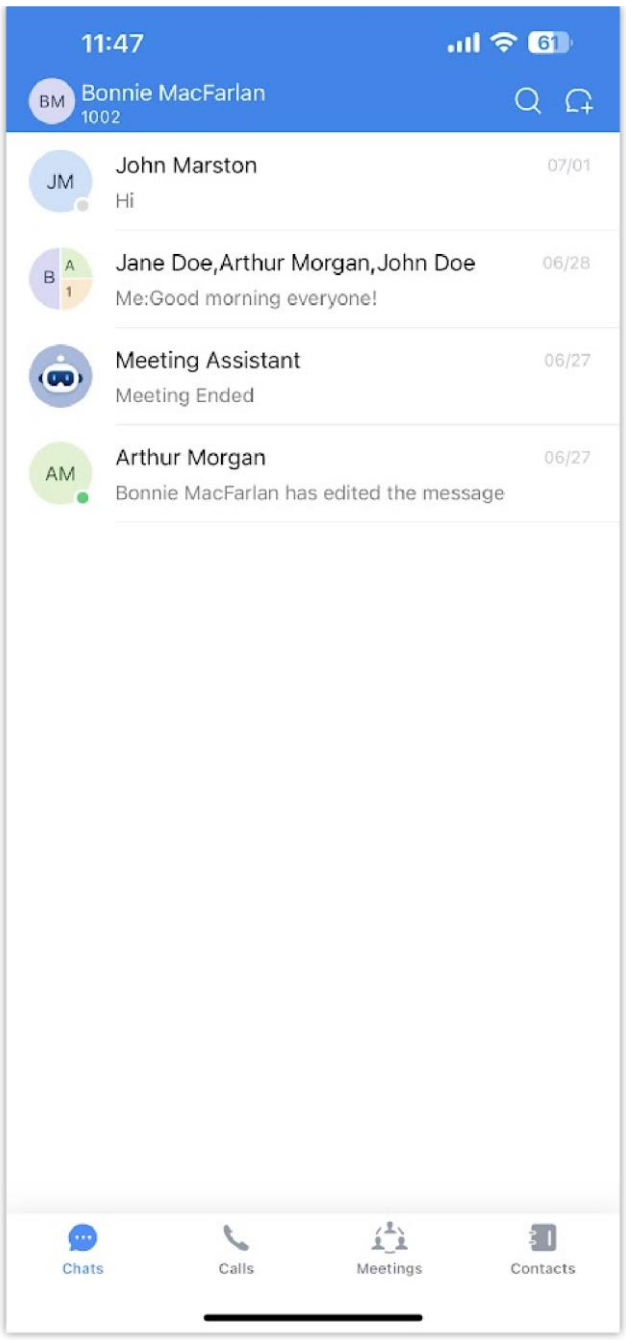
Single chat

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

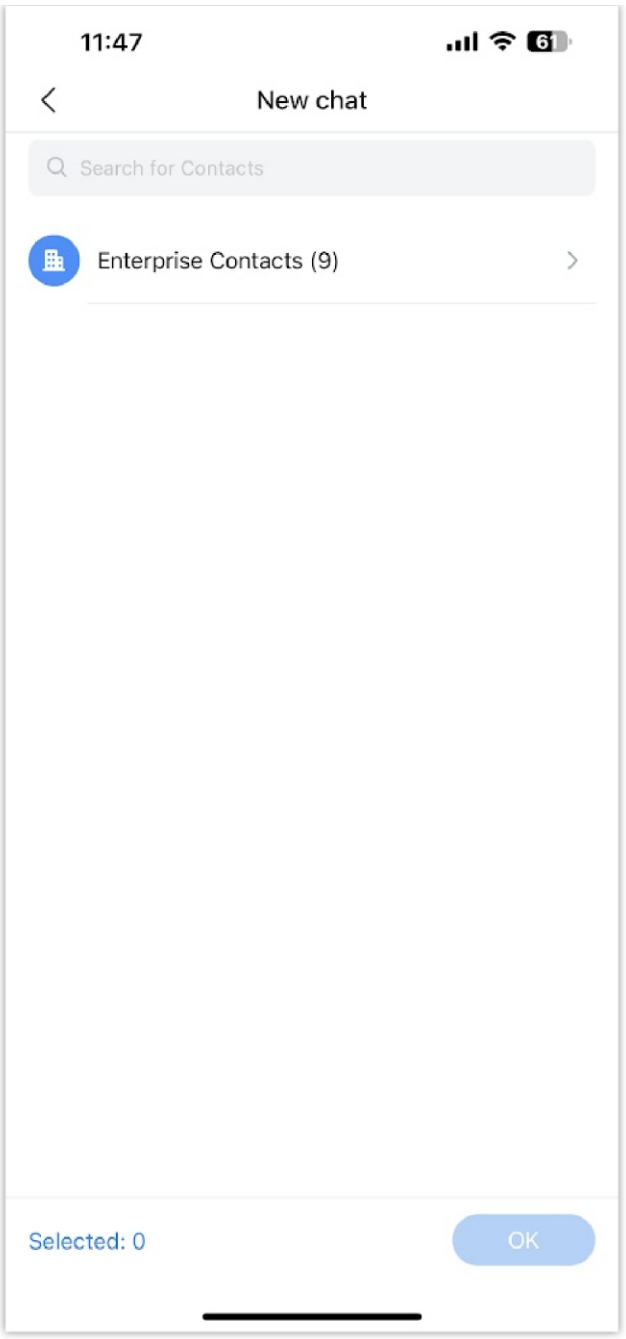
Step 1: Go under **Chats** page and click on

Step 2: Select the type of contacts repertoire.

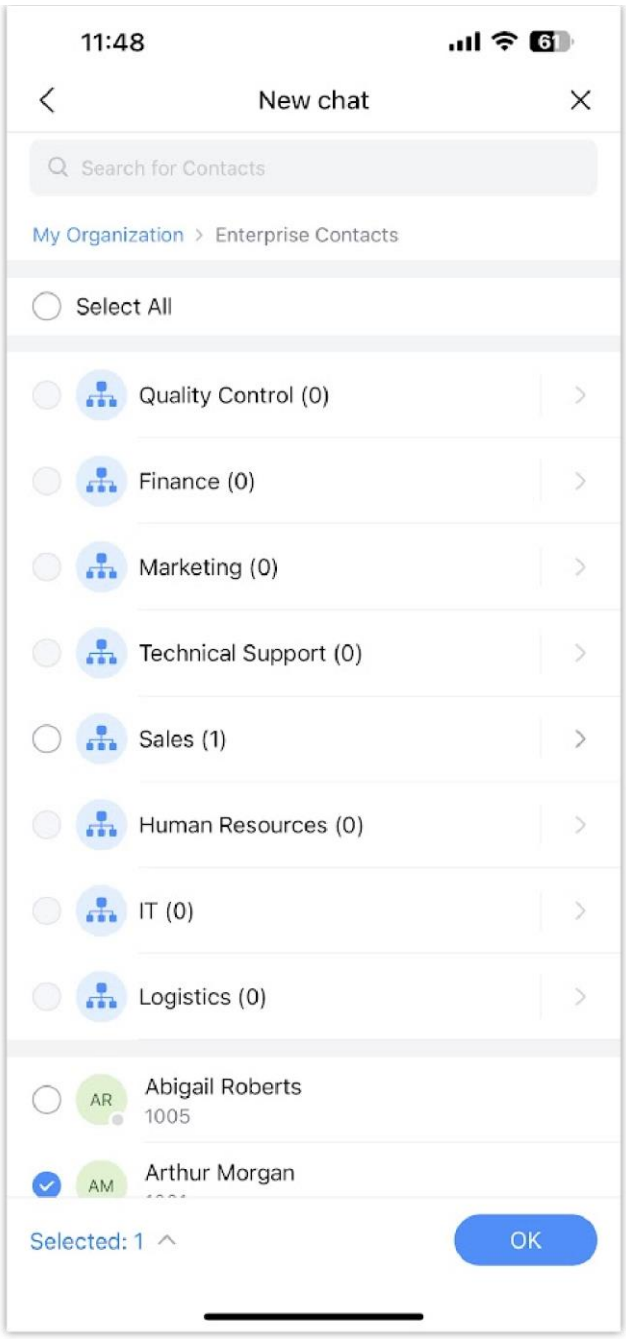
Step 3: Select a contact to send a message to, then click “OK”.



Start a One-to-One Chat

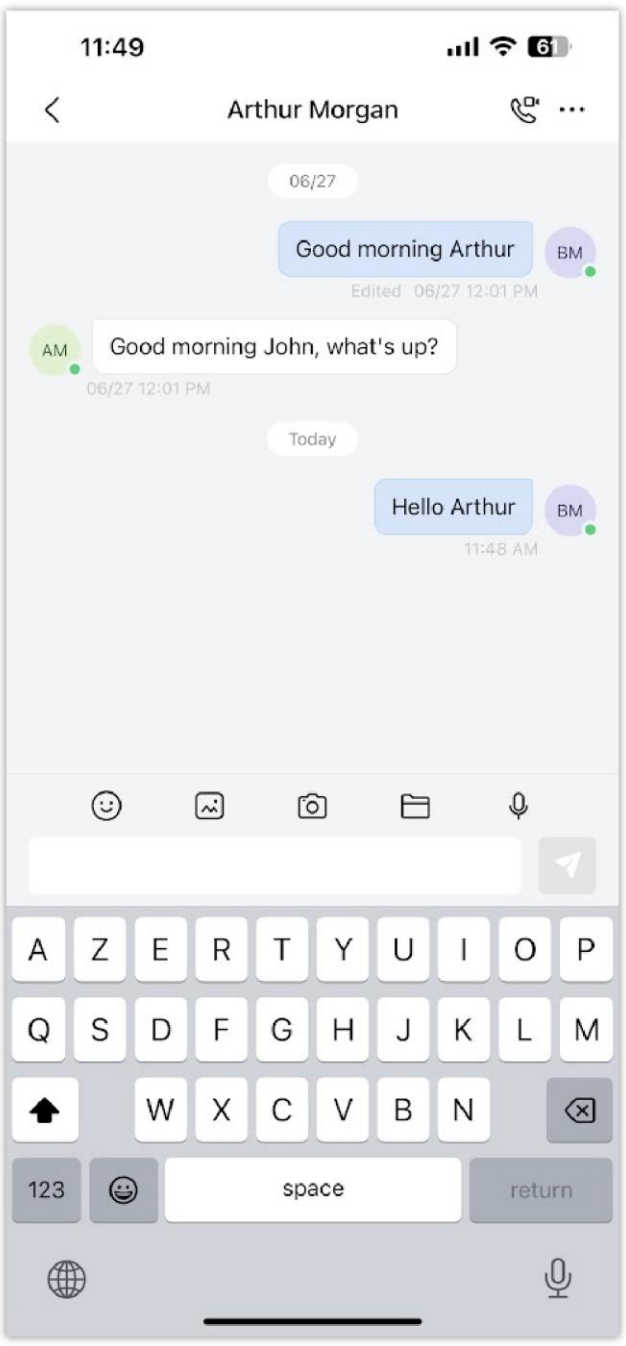


Contact Category



Contact List

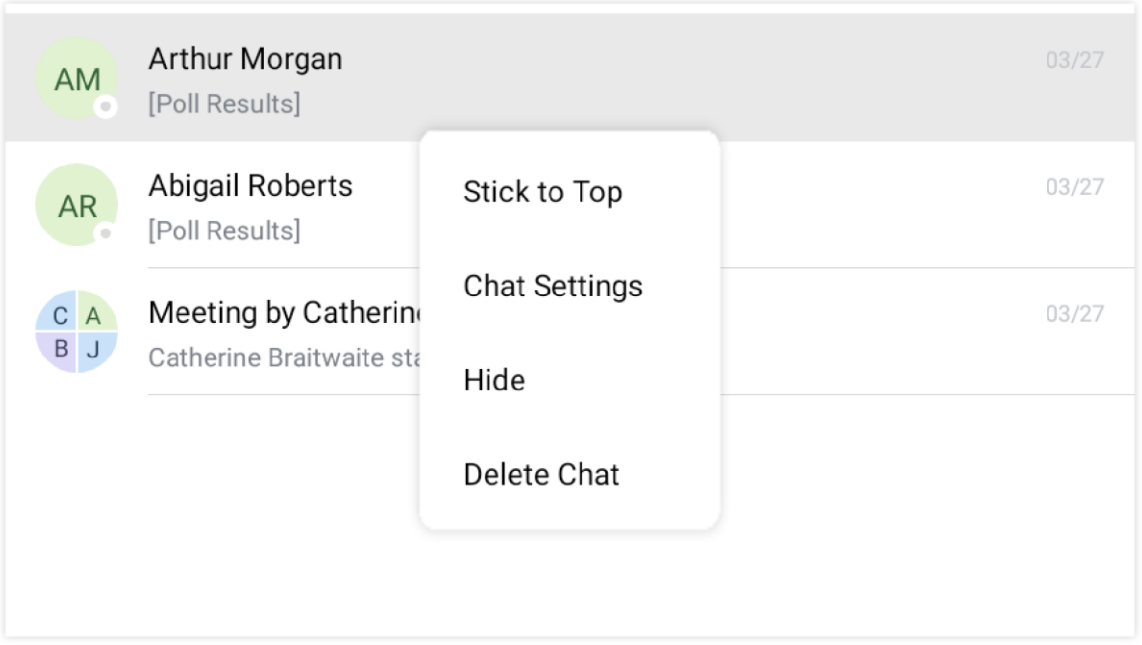
Step 4: Start chatting.



Chat Window

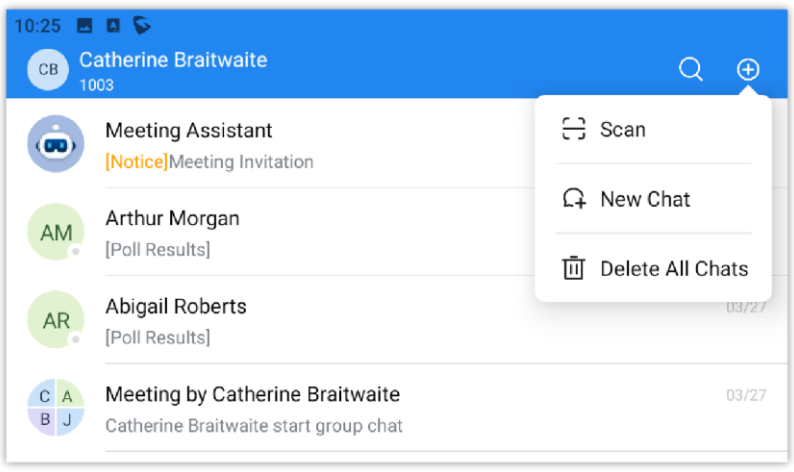
When a message is delivered, a small icon will appear next to the message . When the user reads the message, Wave will indicate that by showing a small icon .

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



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

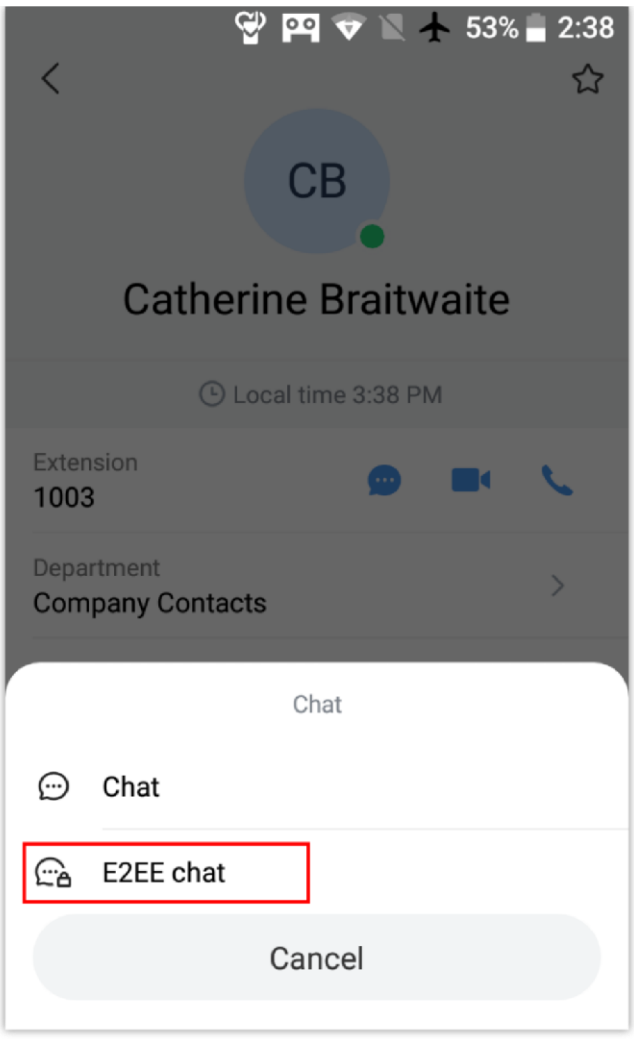
End to End Encryption Chat

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 and select EE2E chat as shown below in the screenshot.

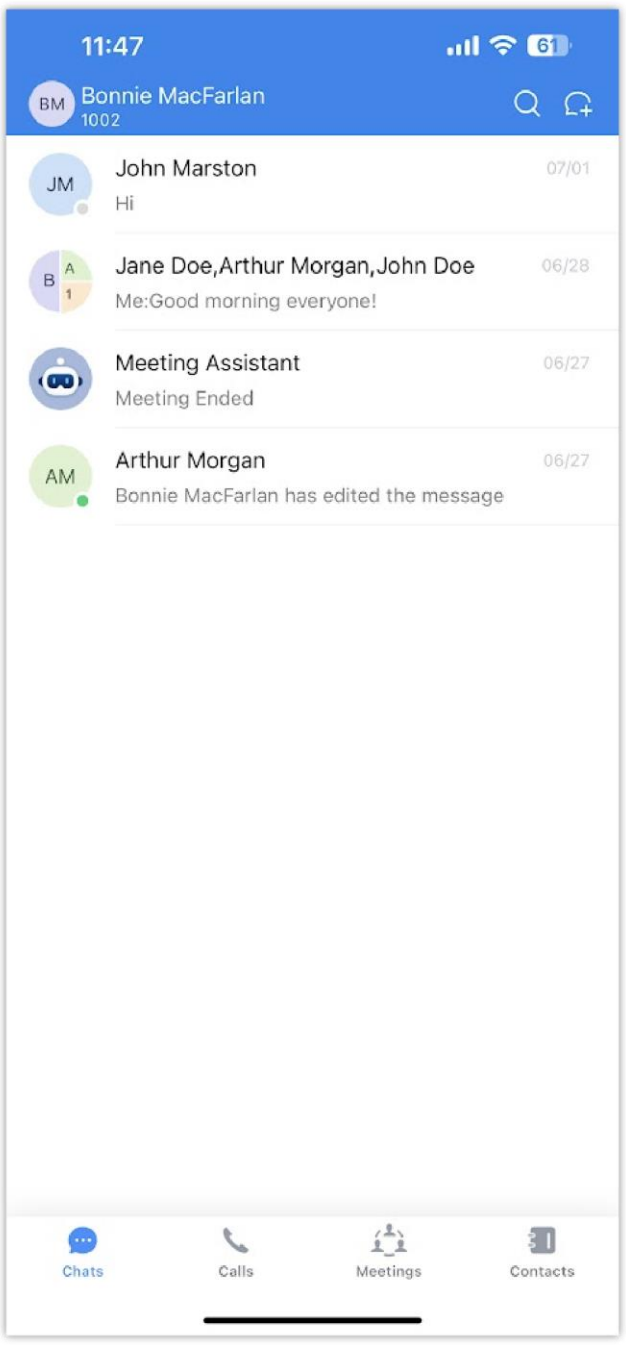


Start an End to End Encrypted Chat

Group Chat

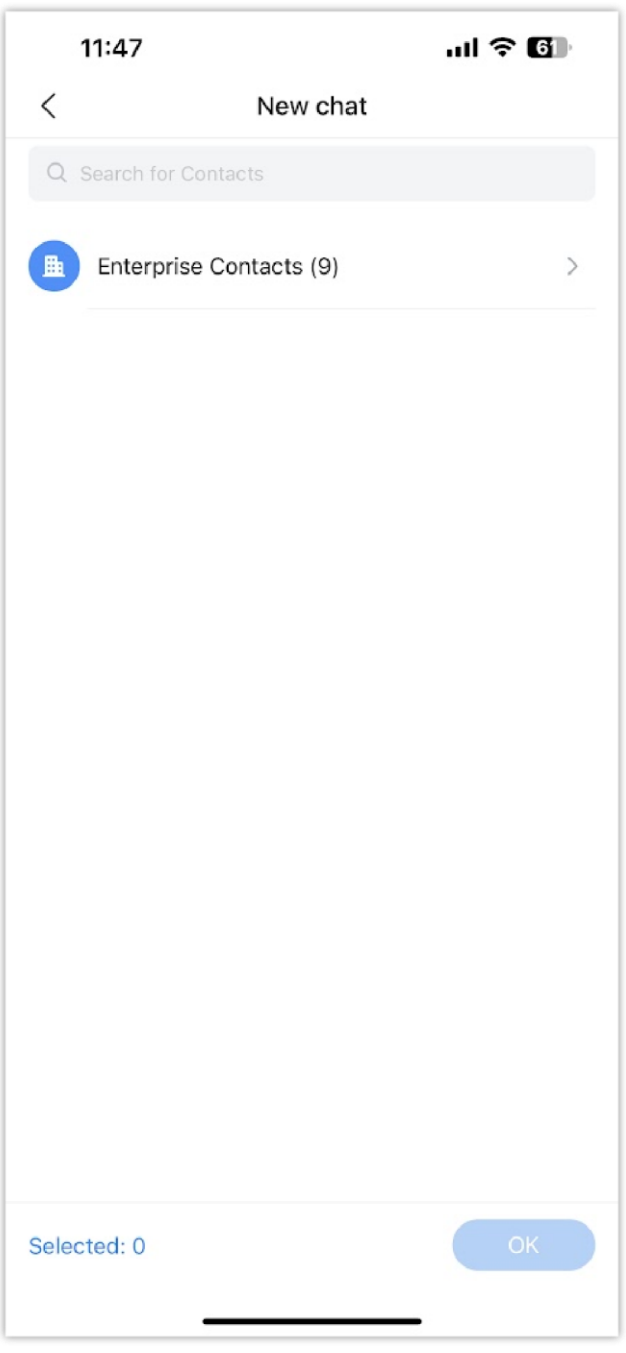
In order to Chat with multiple contacts at the same time, please follow the steps below:

Step 1: Go under **Chats** page and click on



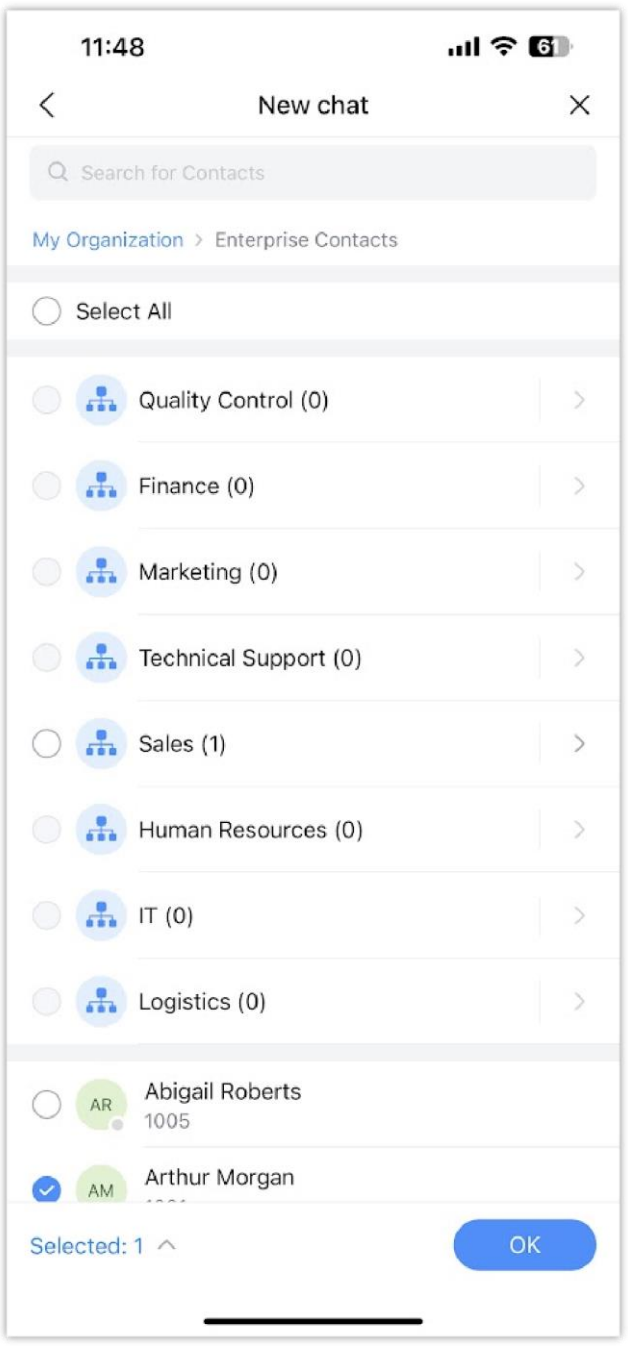
Start a New Group Chat

Step 2: Select the contact repertoire.



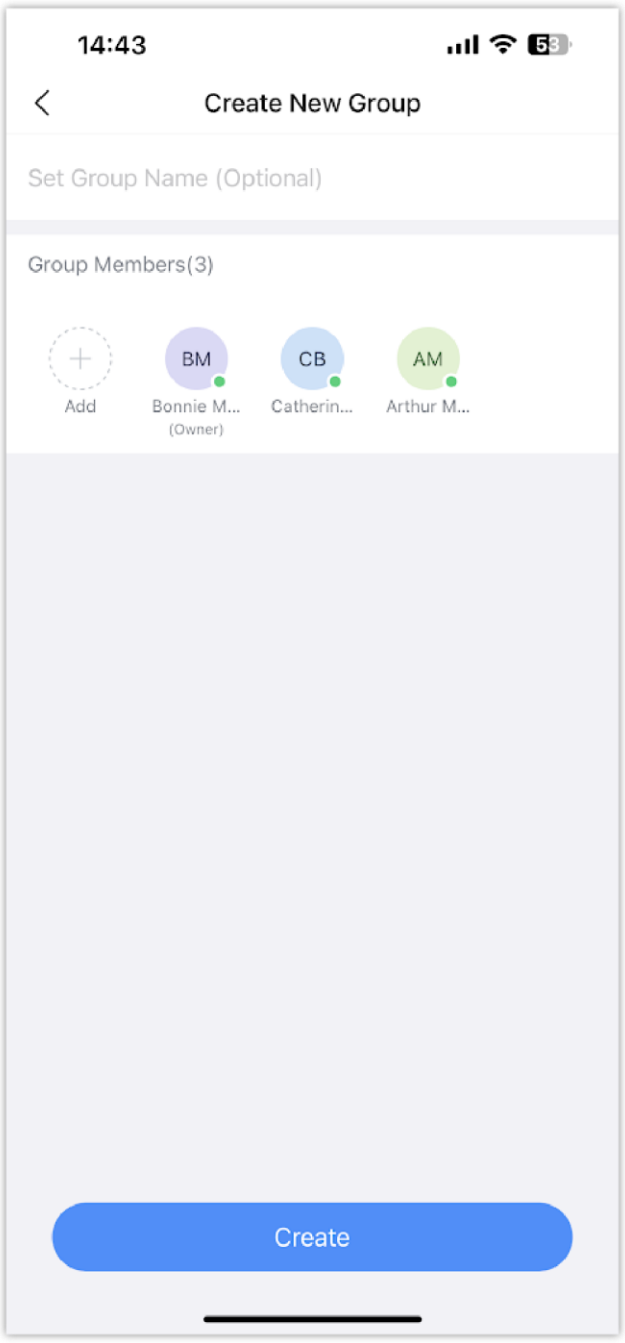
Choose Contact Category

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



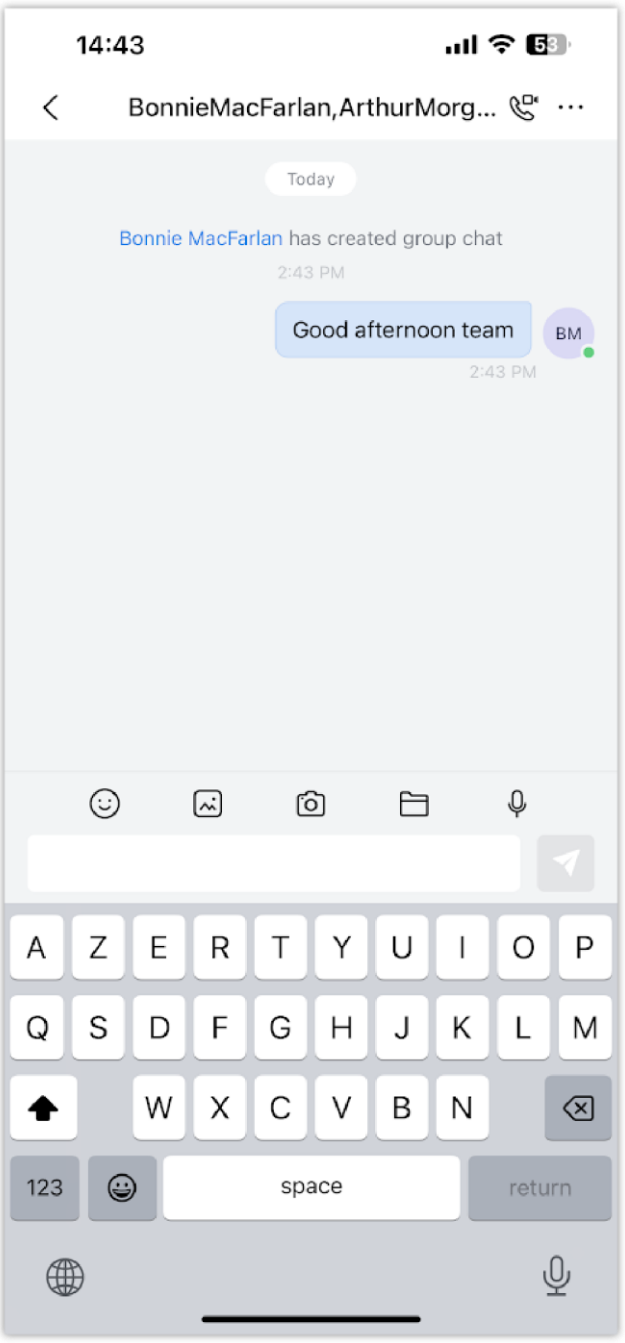
Choose a Department or a Direct Contact

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



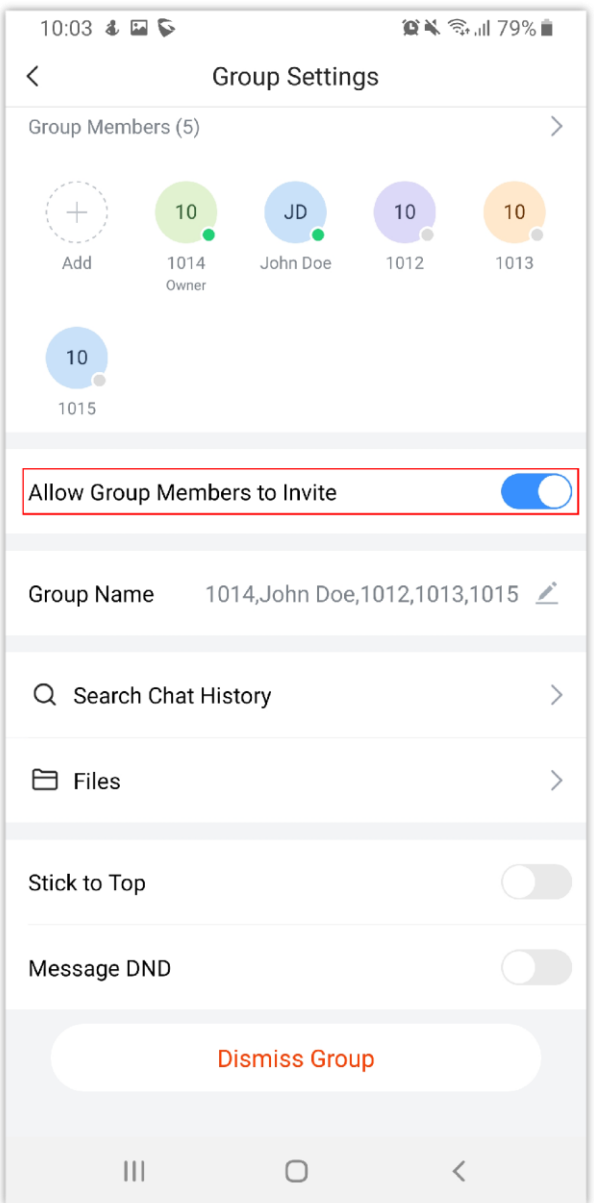
Create New Group

Step 5: Start chatting.



Group Chat

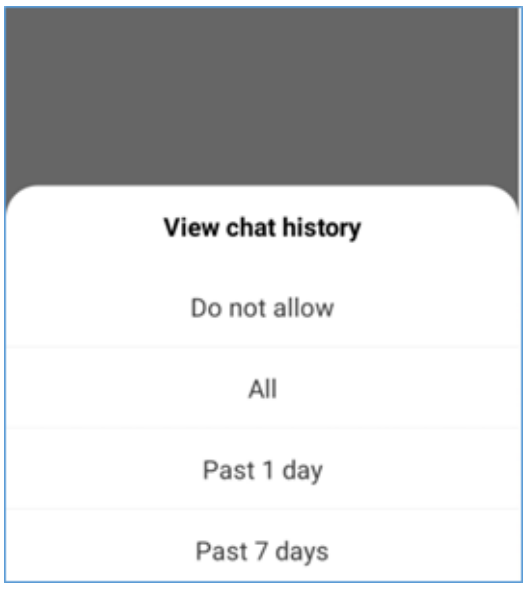
The chat group creator can access the group's setting to allow or prohibit other user from inviting other members, as the screenshot below shows.



Allow Group Members to Invite

Note

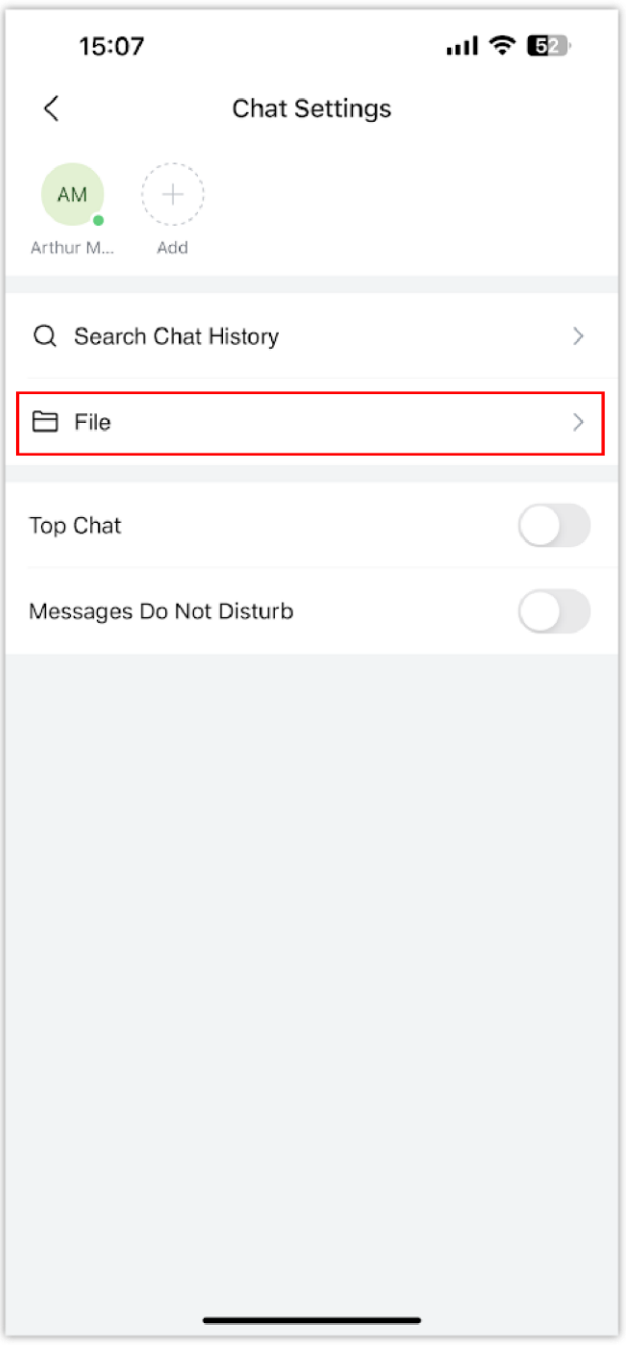
The newly joined members in the group chat cannot view the group chat history by default (Only the group owner can set the chat history that the group members can view: No, All, 1 Day, 7 Days).



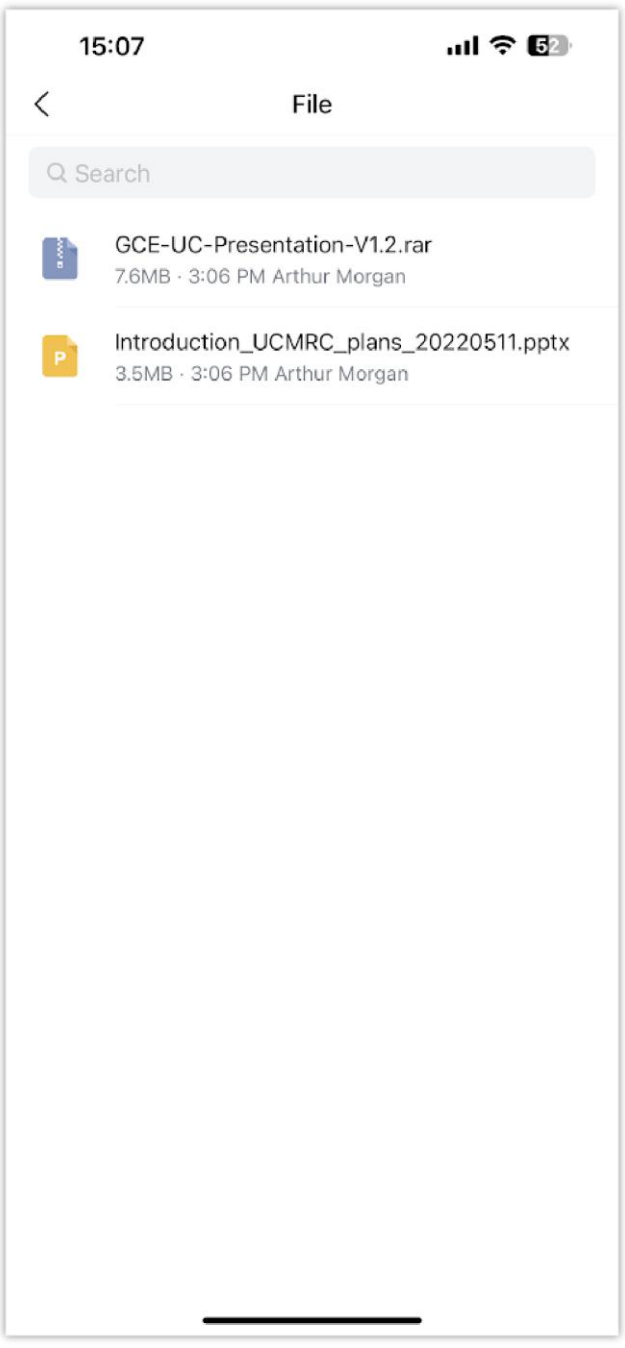
Allow Viewing Chat History

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.



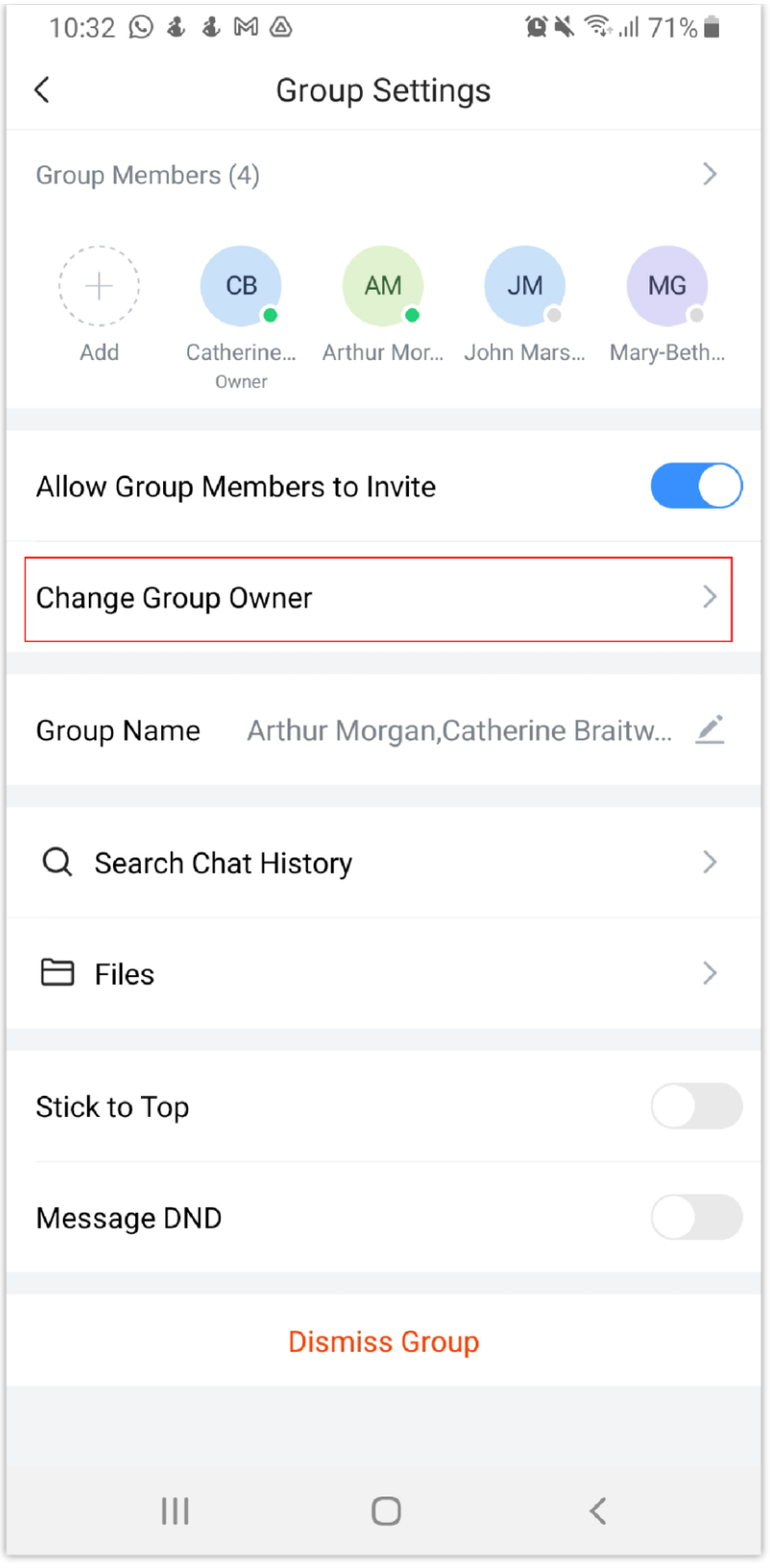
Files List



Files Exchanged in the Chat

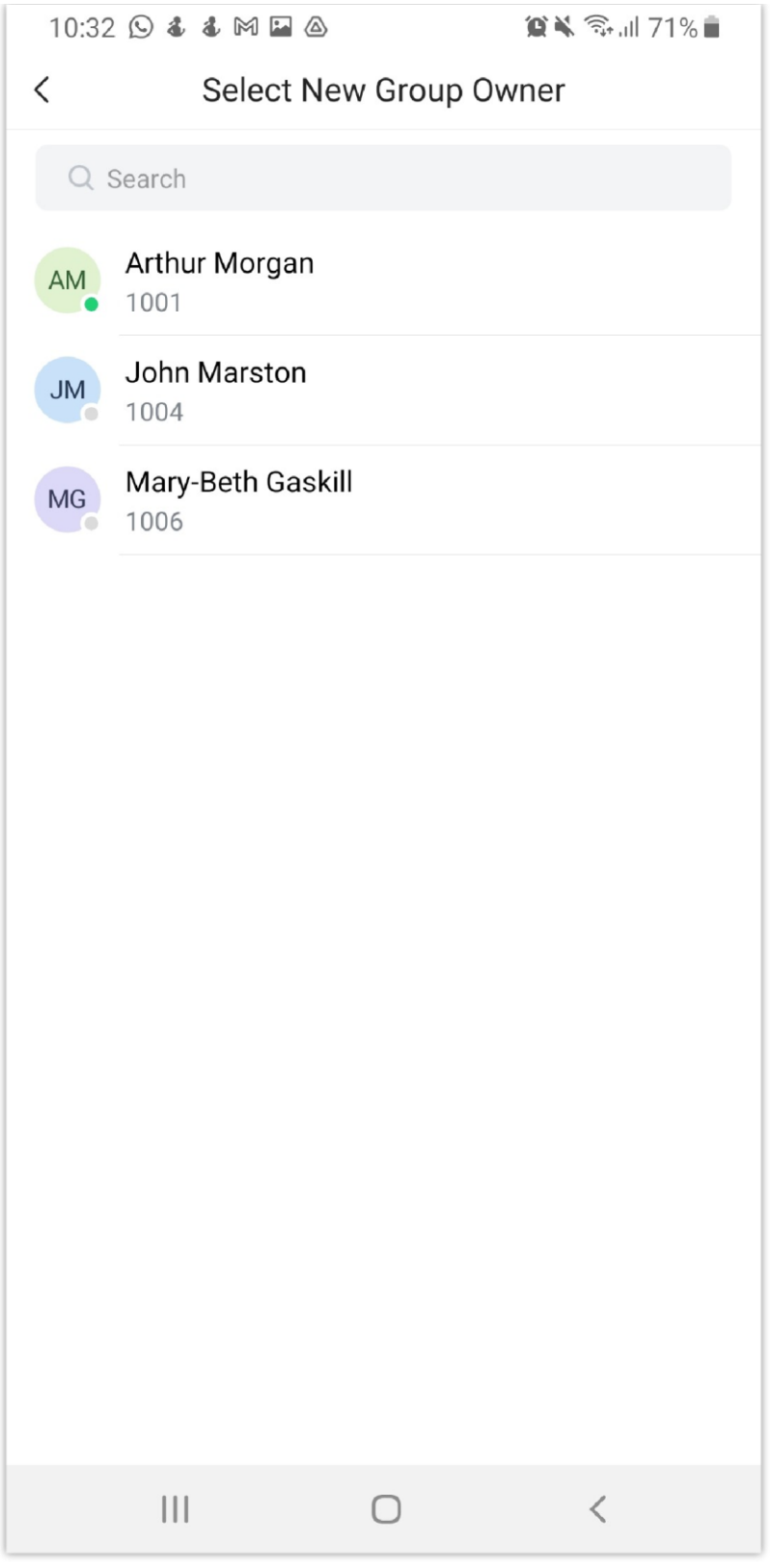
At any point the group owner can relegate his/her role to another member of the group, to do that please refer to the steps below:

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



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.

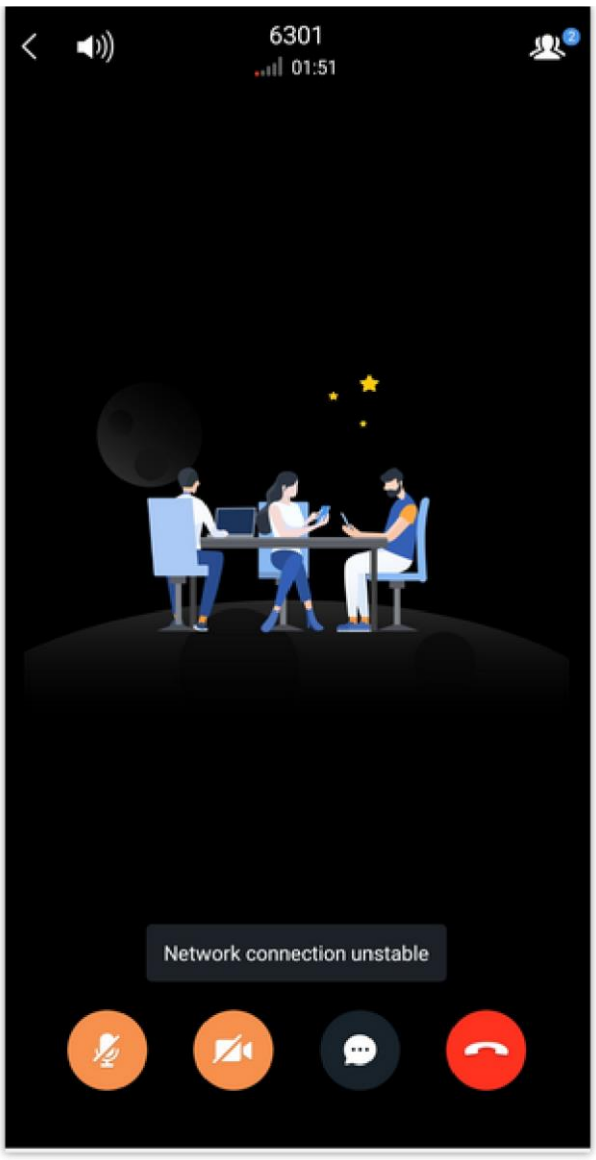
Meeting Chat

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

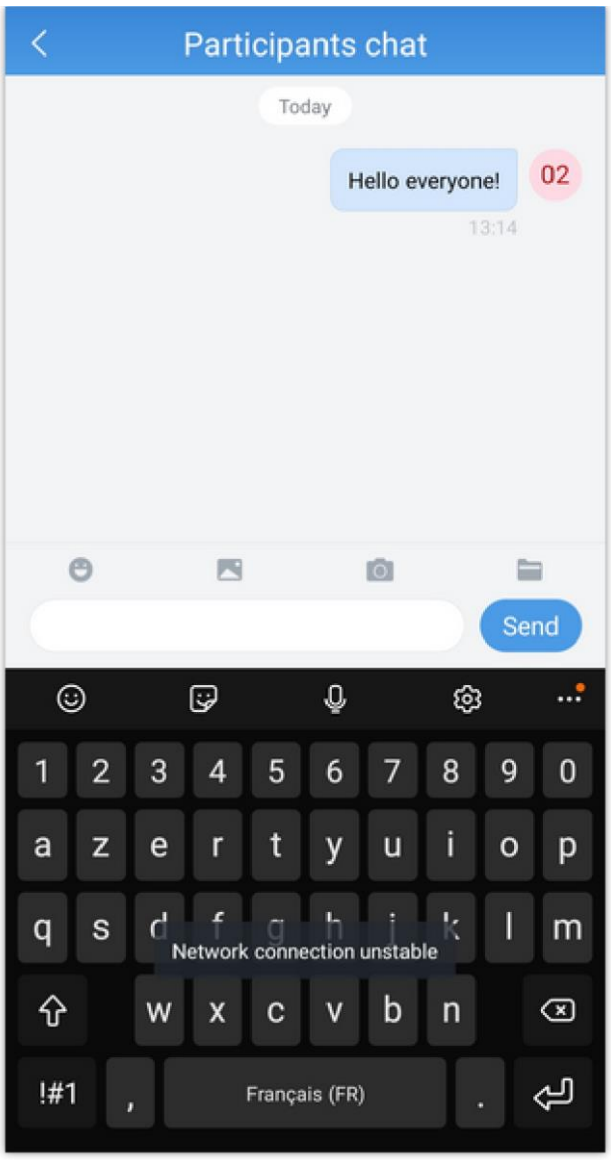
Step1: Start an audio/video meeting.

Step2: Click on to initiate chatting with participants.

Step3: Start chatting.



Meeting Call

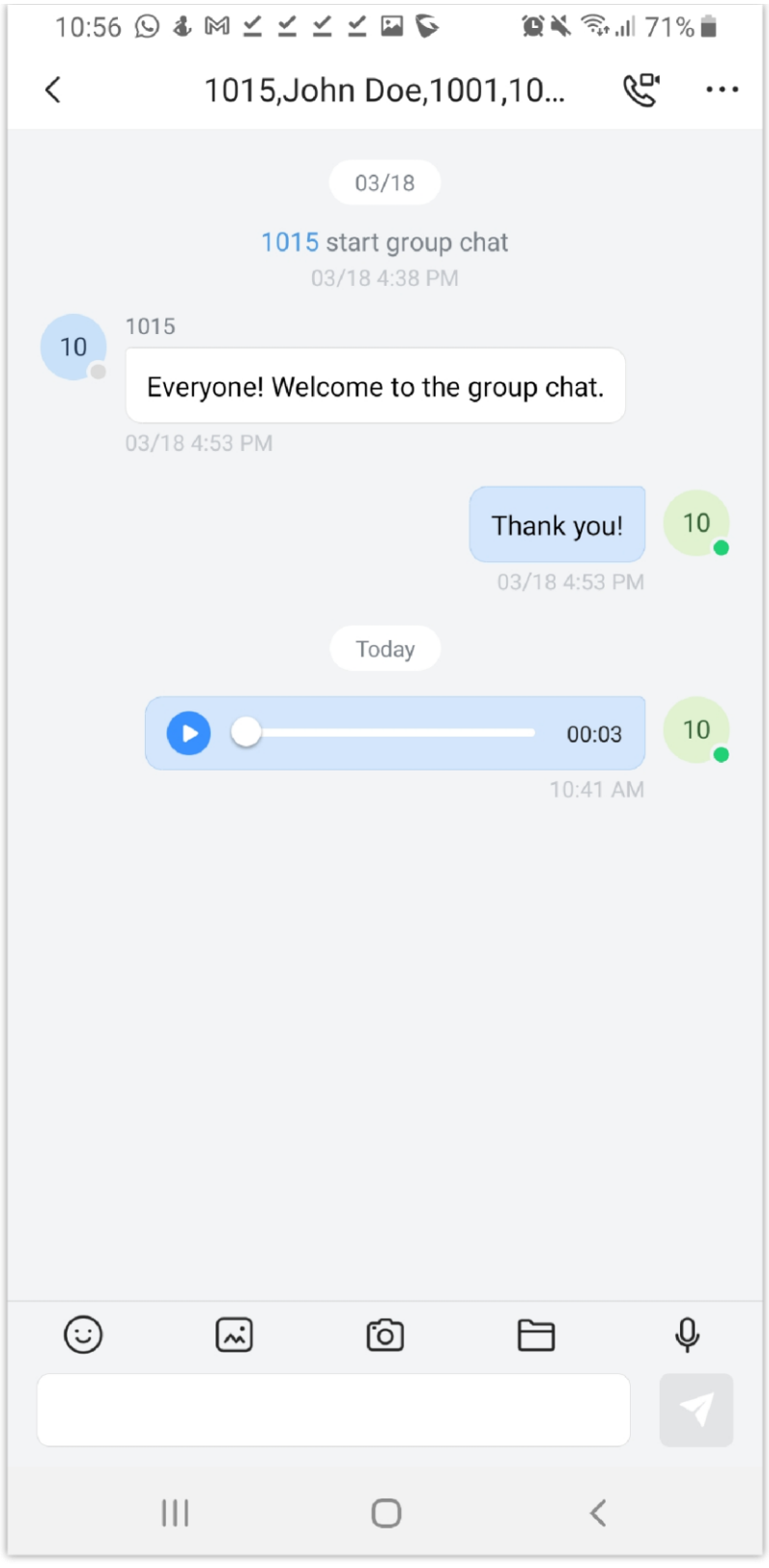


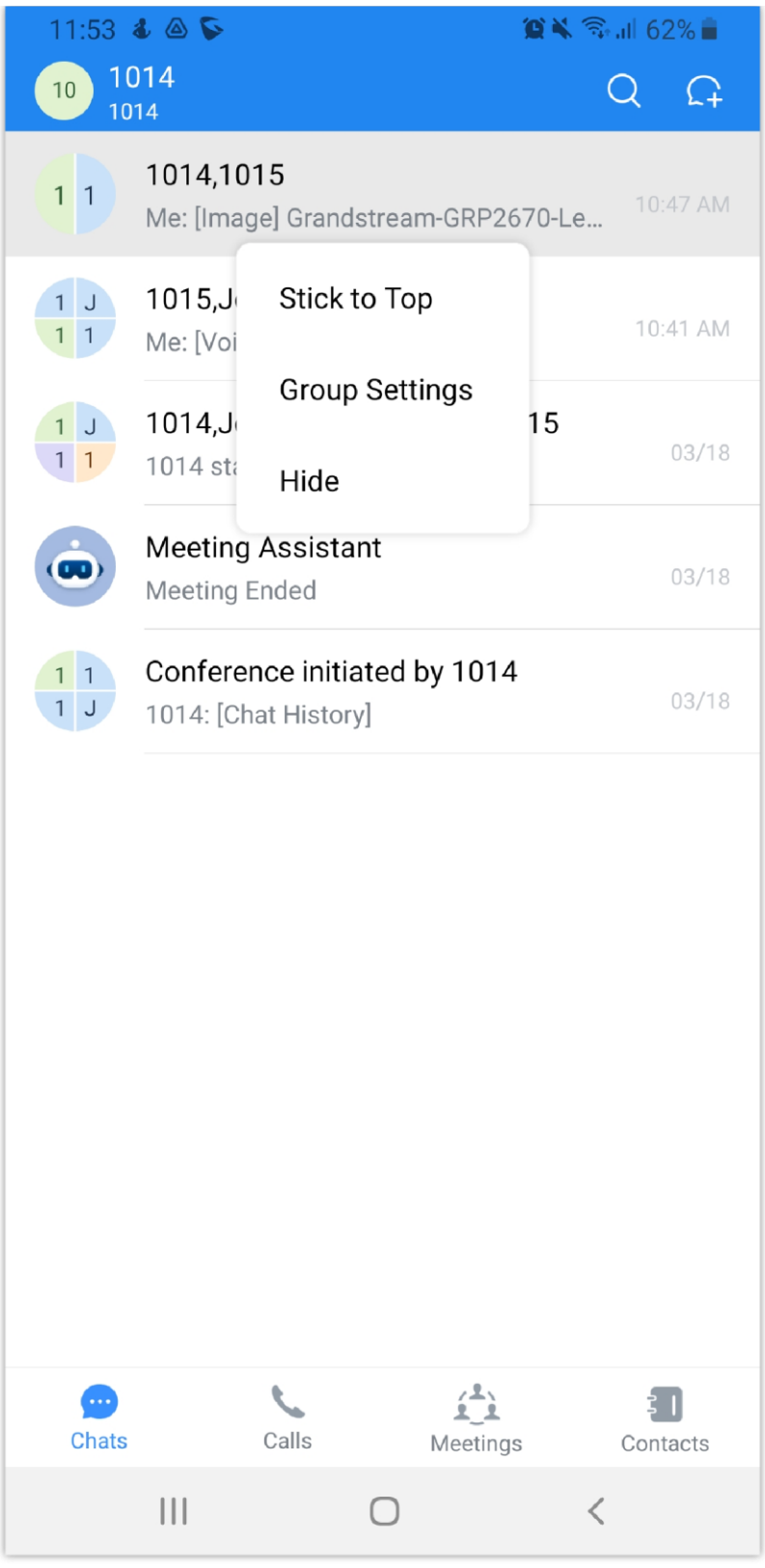
Meeting Chat

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





Note

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.

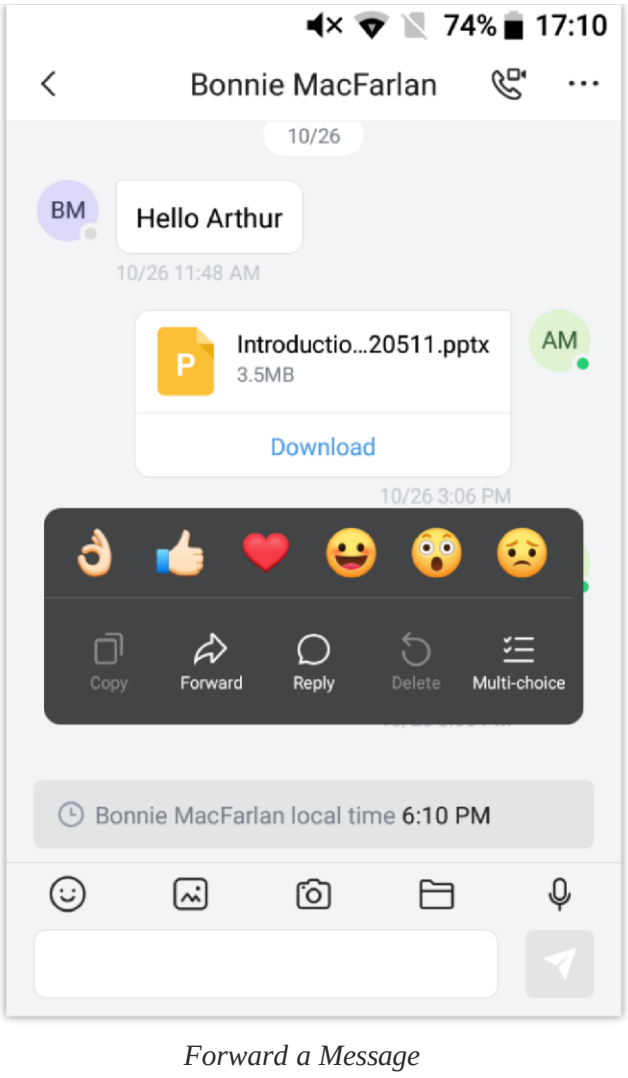
Message Forwarding

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

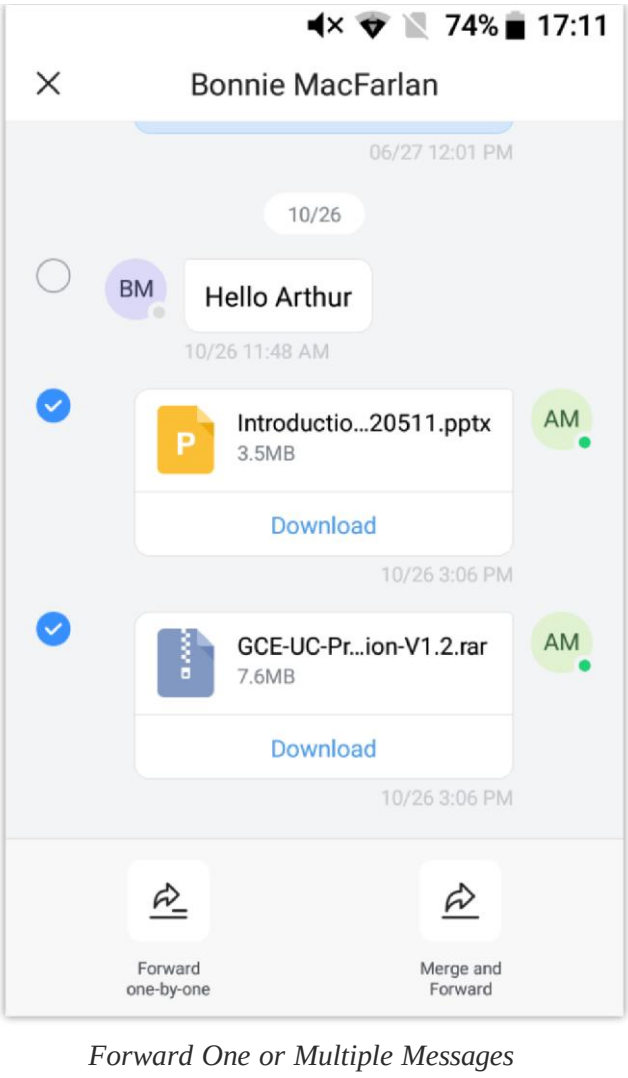
Step 1: Long press the message that you want to send, then select **Forward** to forward one message. Or select **Multi-choice** to forward multiple messages.

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

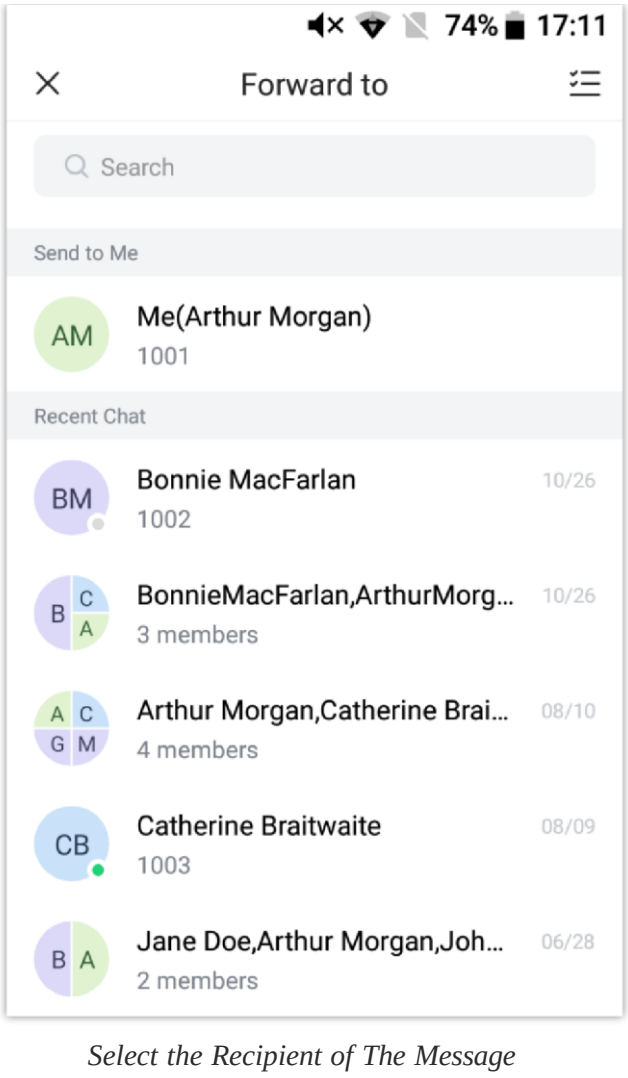
Step 3: Select one or multiple recipients of the forwarded messages.



Forward a Message



Forward One or Multiple Messages



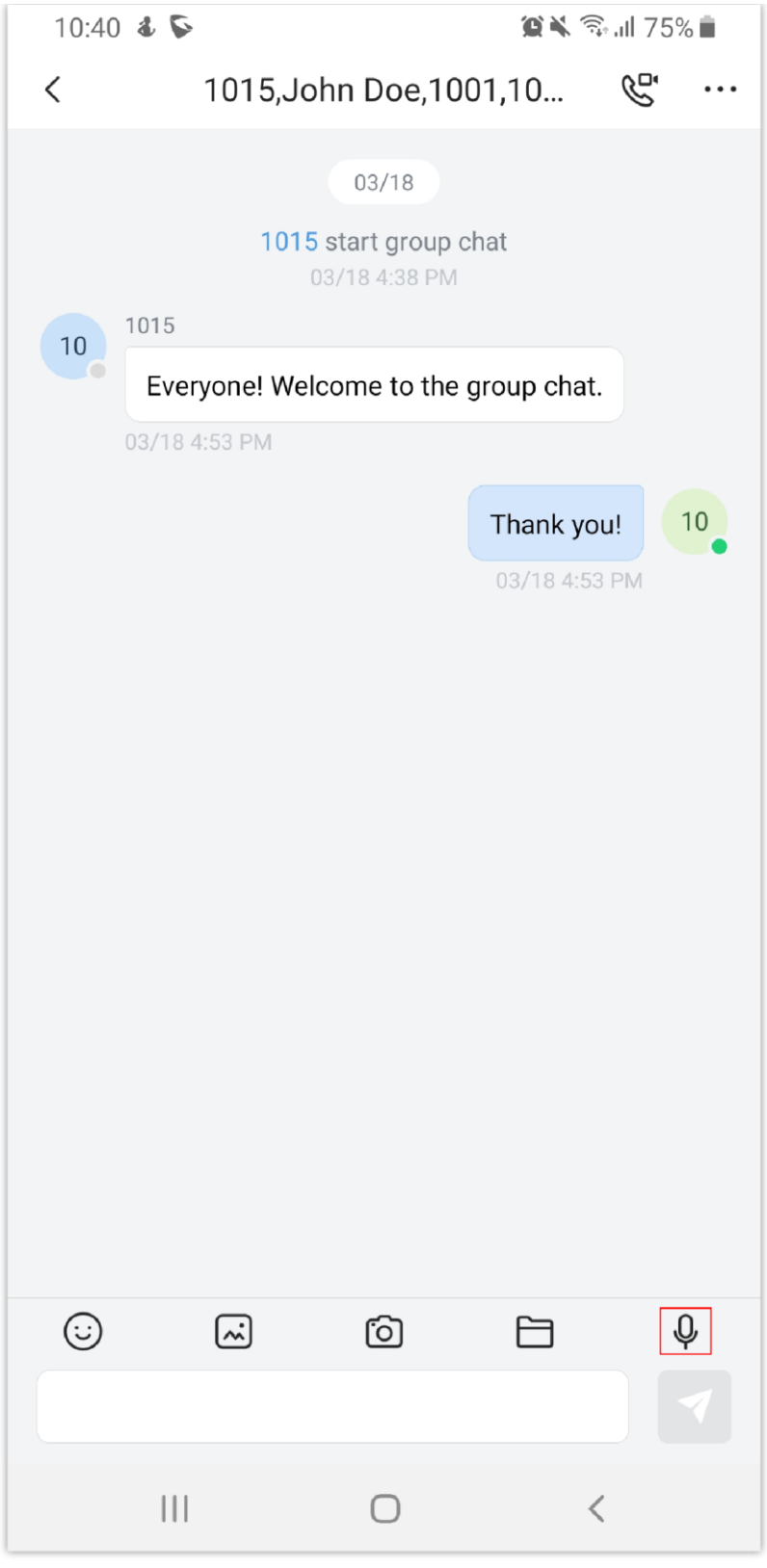
Select the Recipient of The Message

Voice Messages

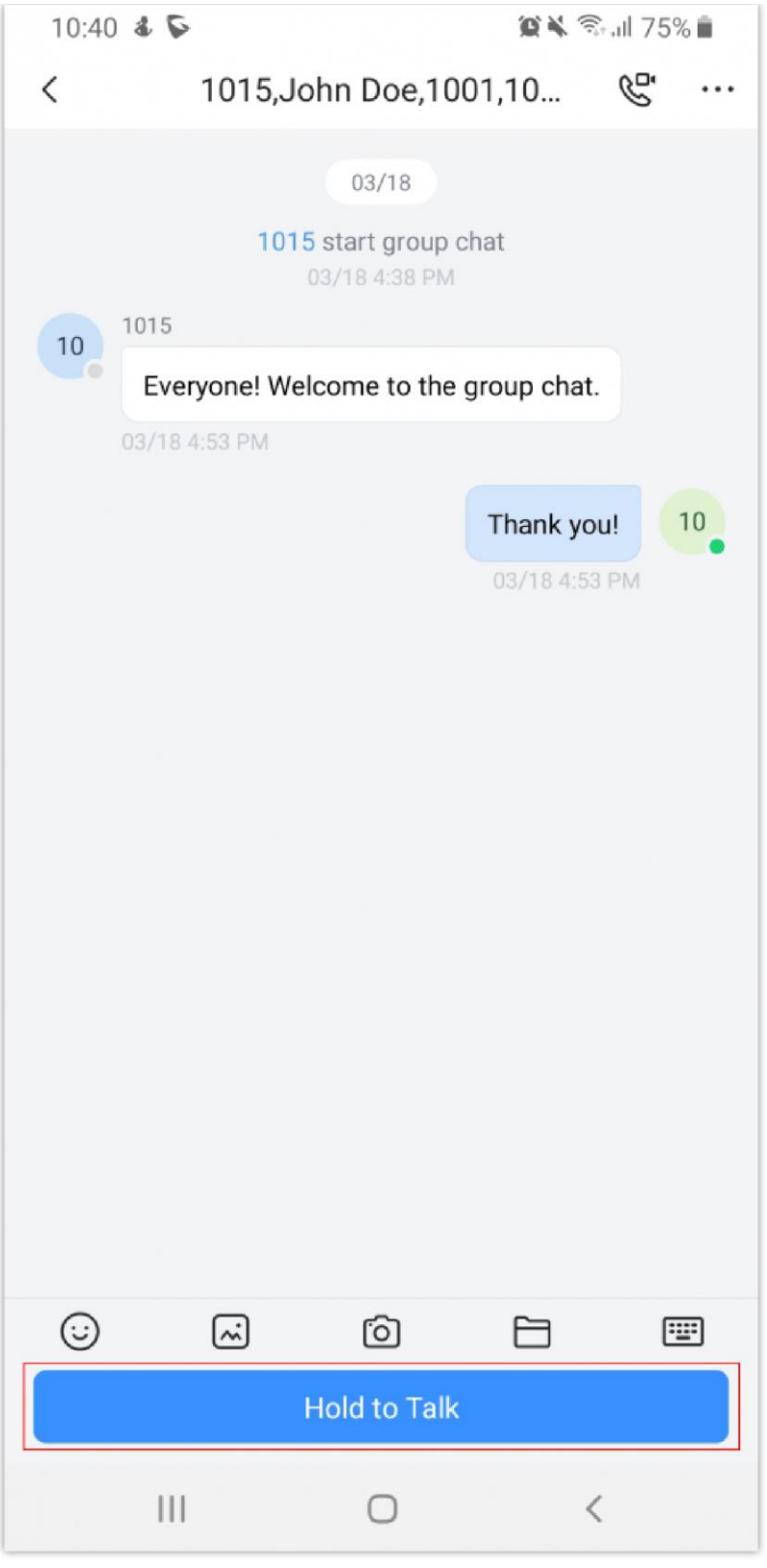
Wave Mobile application supports recording and sending voice messages instantly in point-to-point chat or group chat. To use this feature please follow the instructions below

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

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



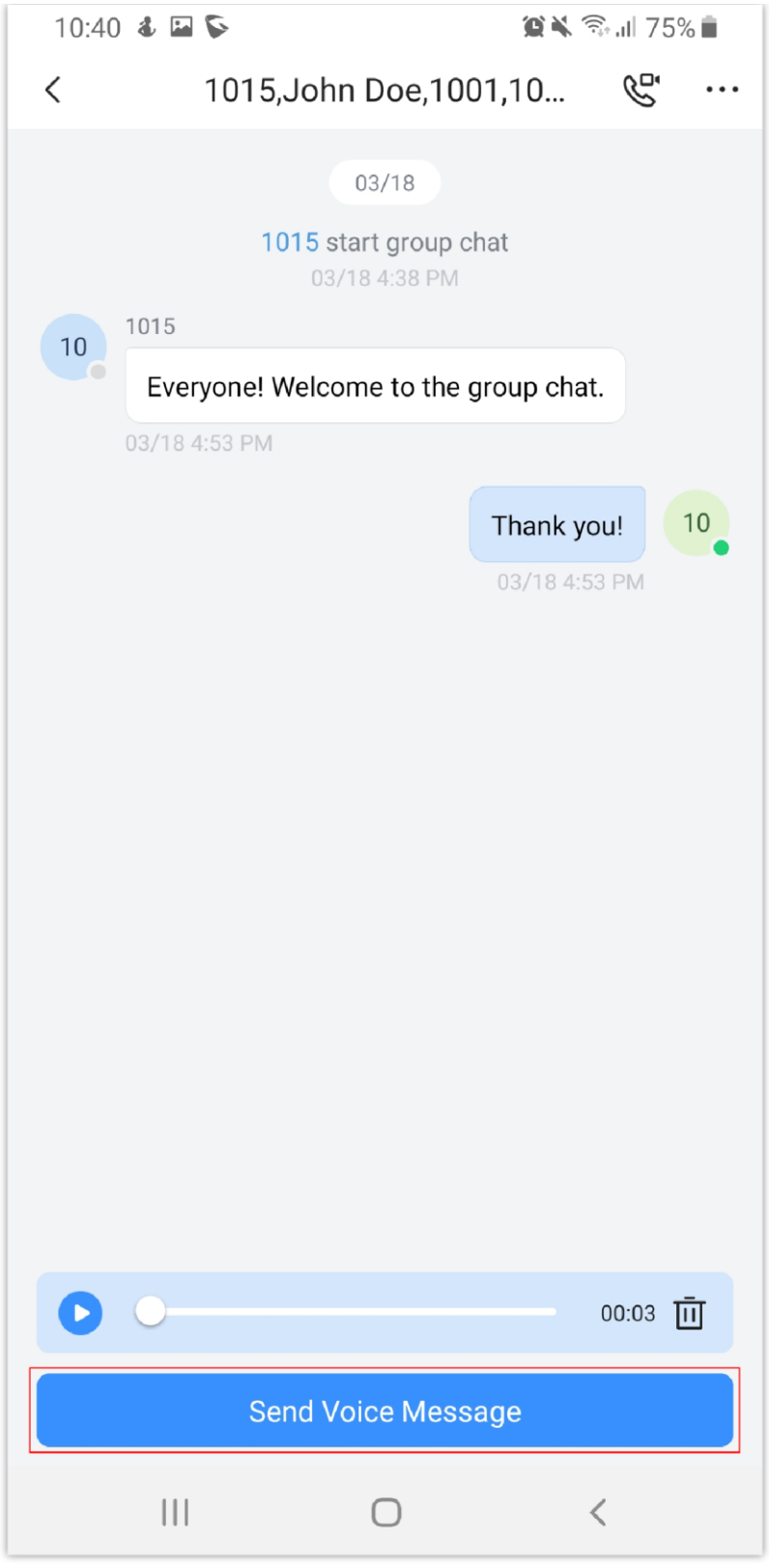
Record a Voice Message



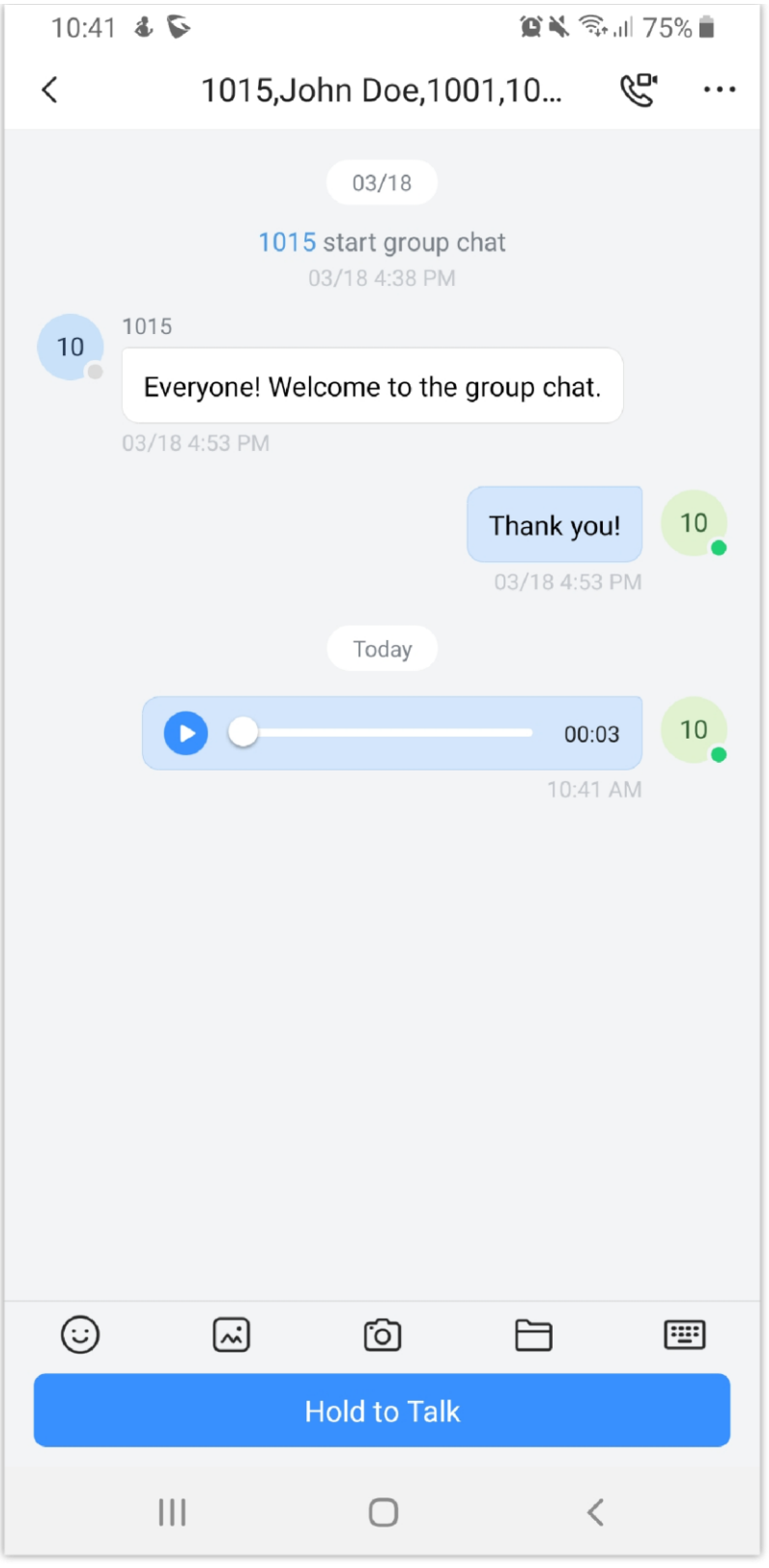
HoldTo Talk

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

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



Send The Voice Message



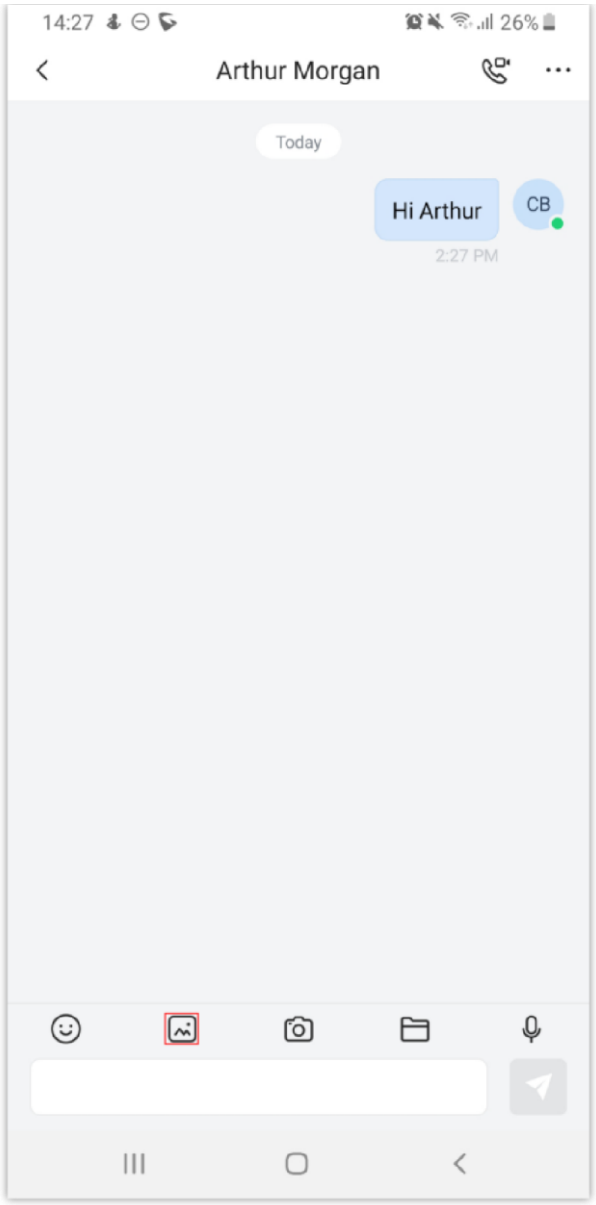
Sent Voice Message

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:

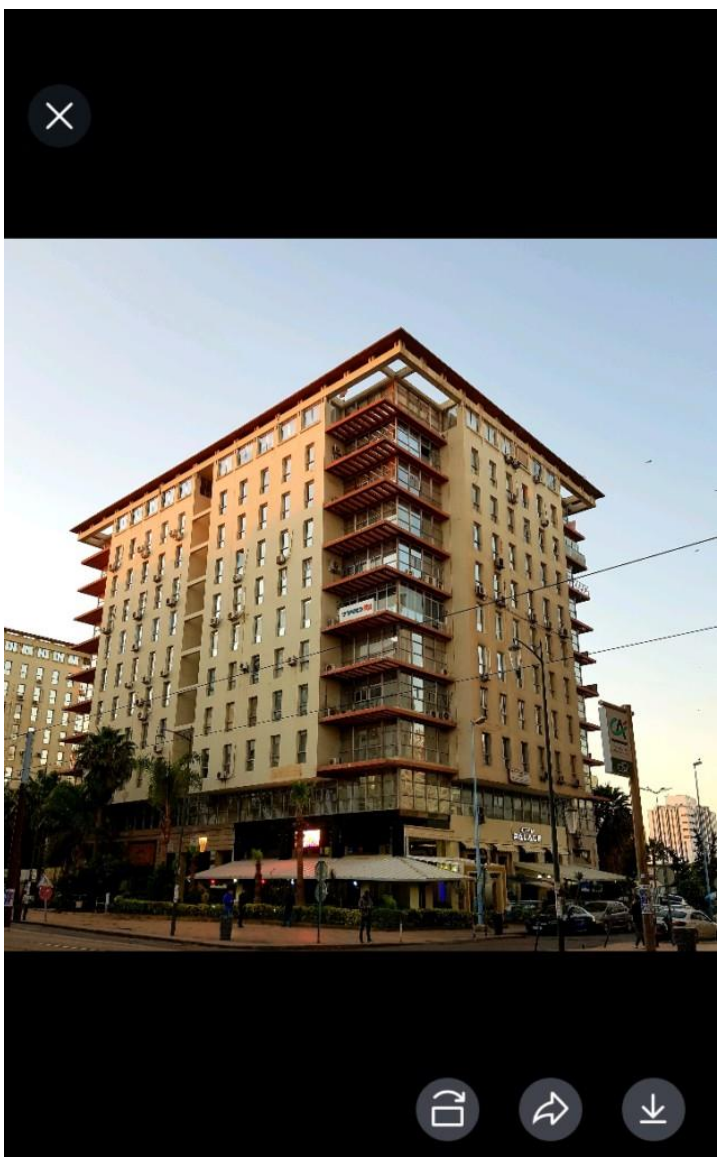


Send and Image

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.

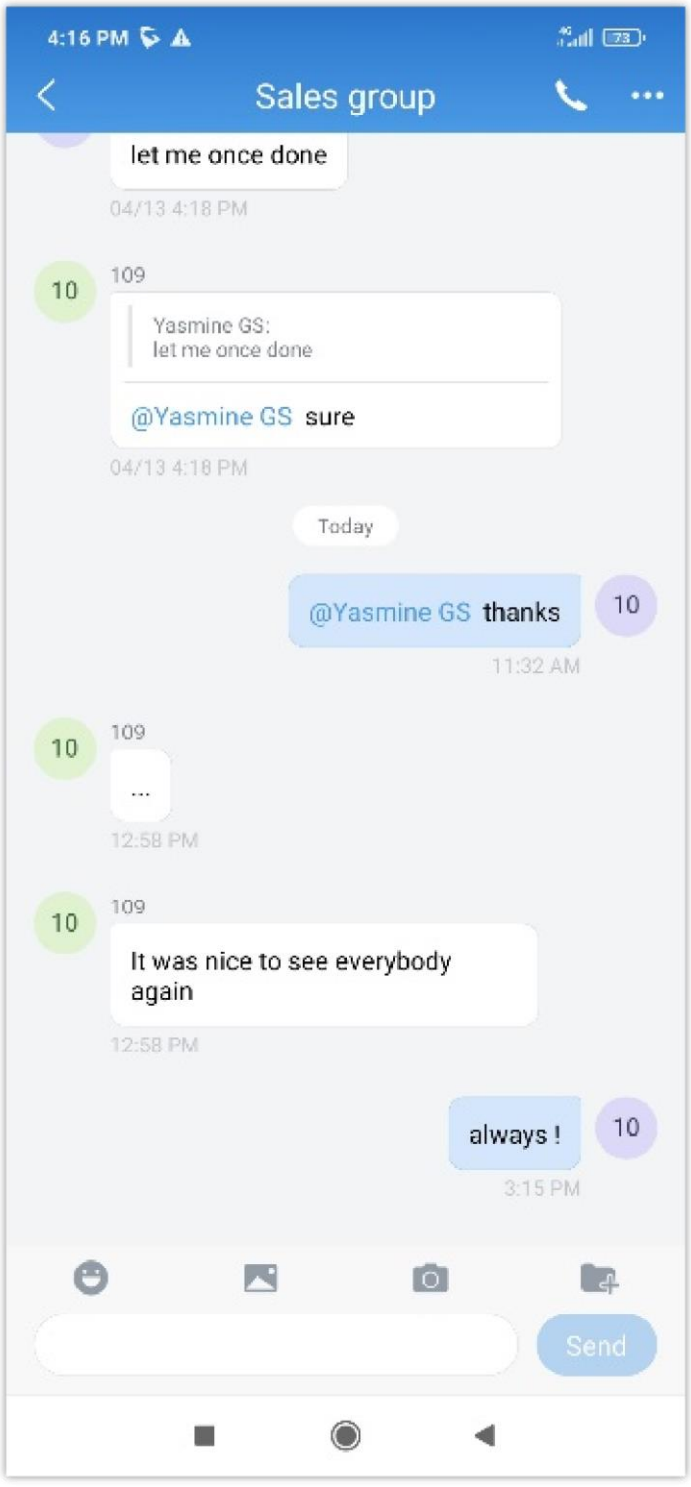
: This button can be used to rotate the image clock-wise.

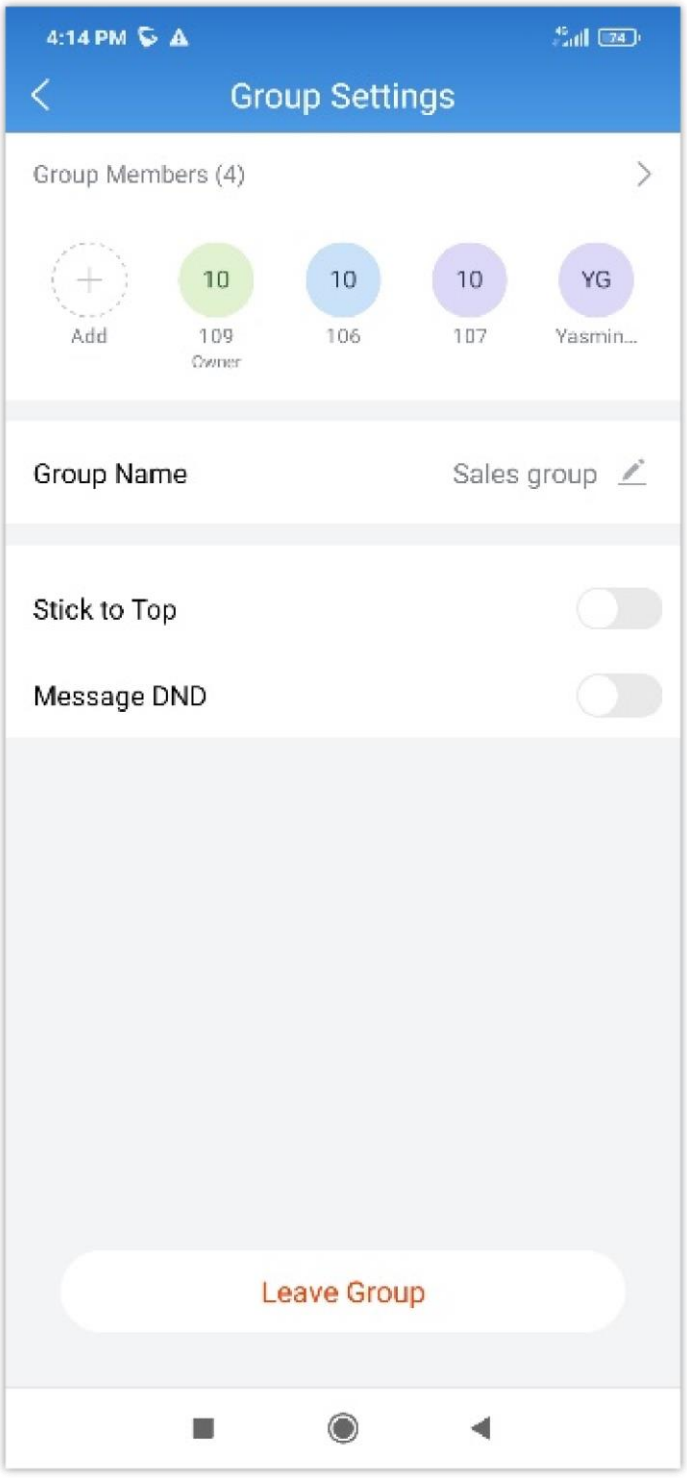
: This button can be used to forward the image to another contact.

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

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.



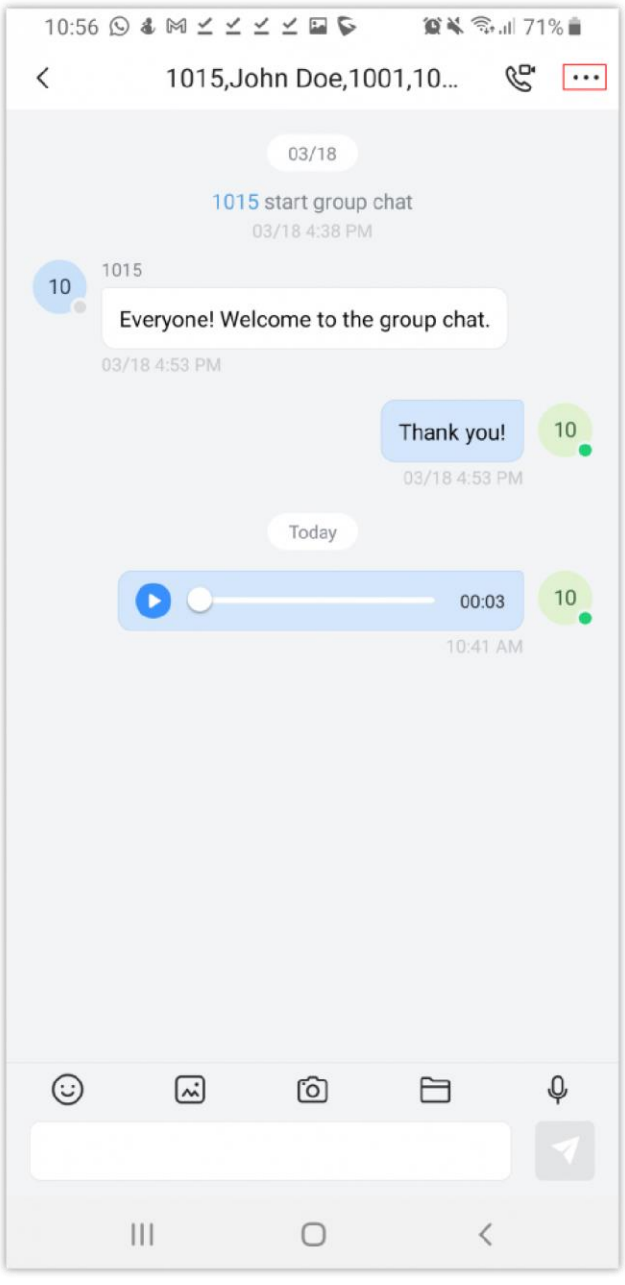


- Add Group Member: The user can click button + to add group members and select from the contacts.
- Pin: The user can select this option and the current group chat window will be displayed at the top of the chat list.
- DND: The user can select this option and all new messages from this group chat will 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.

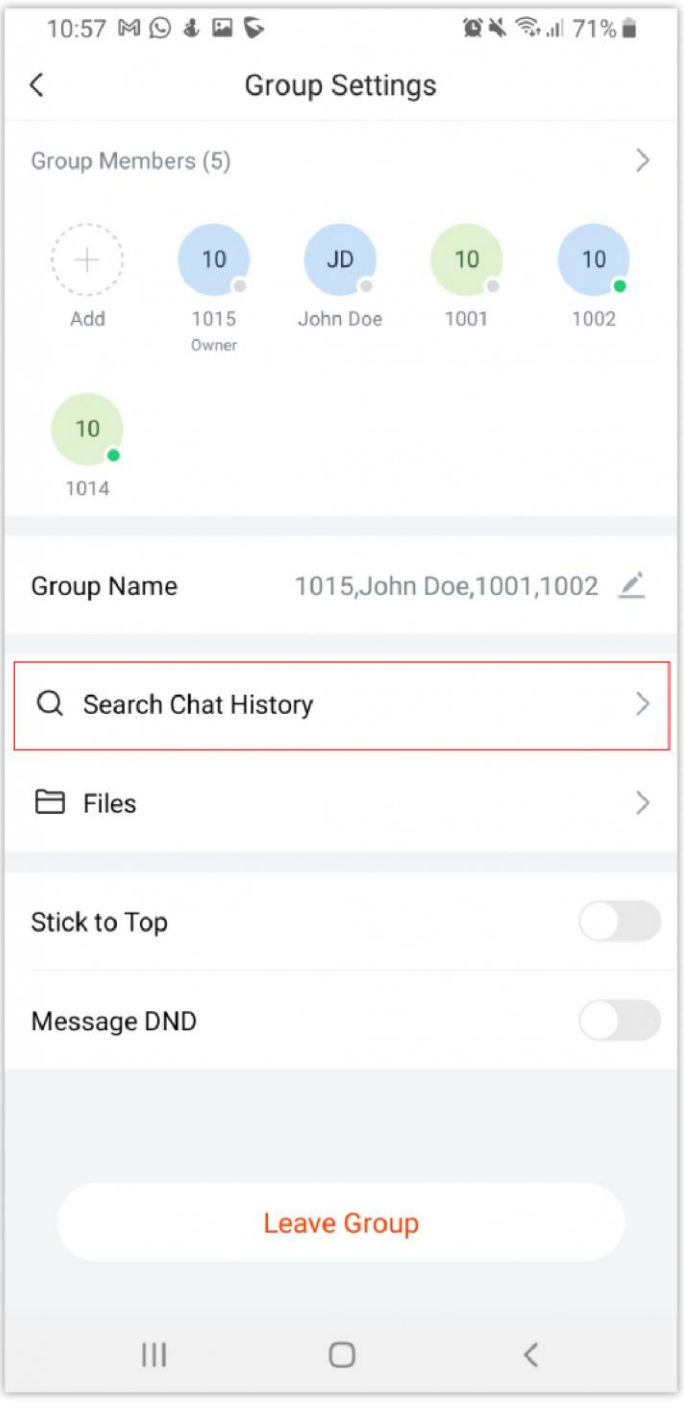
Search in a Chat History

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.

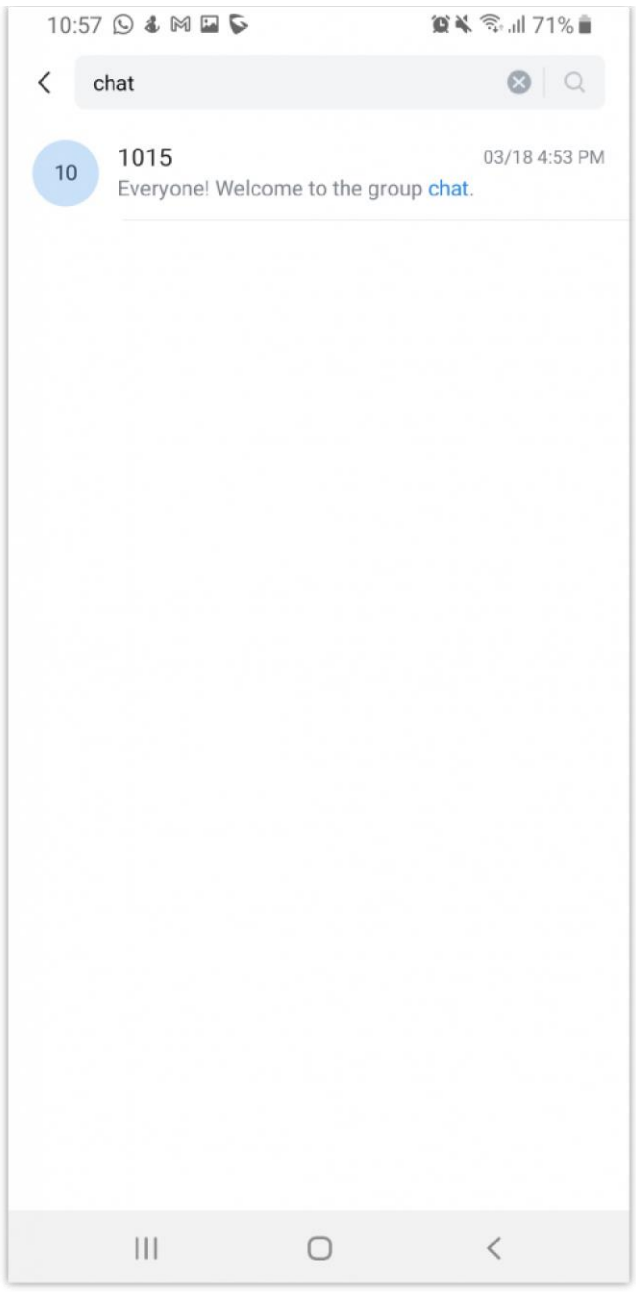
Step 1: Go to the conversation you wish to search in then tap on ••• on the top right corner of the screen



Step 2: Tap on “Search Chat History”

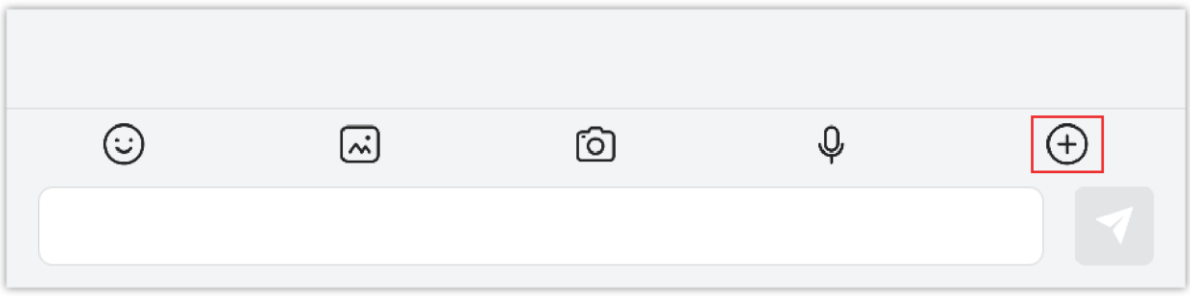


Step 3: In the search box, enter the keywords you’d like to search for, and the result will be displayed similarly to the screenshot below.

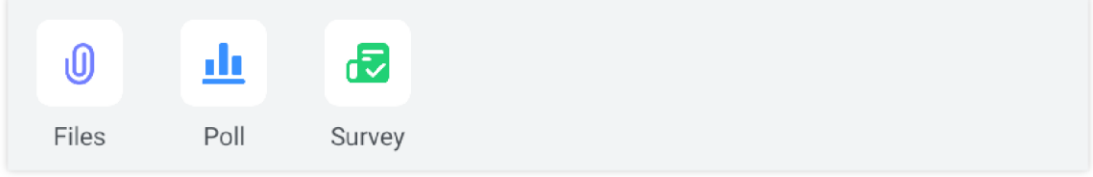


Create Poll/Survey

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



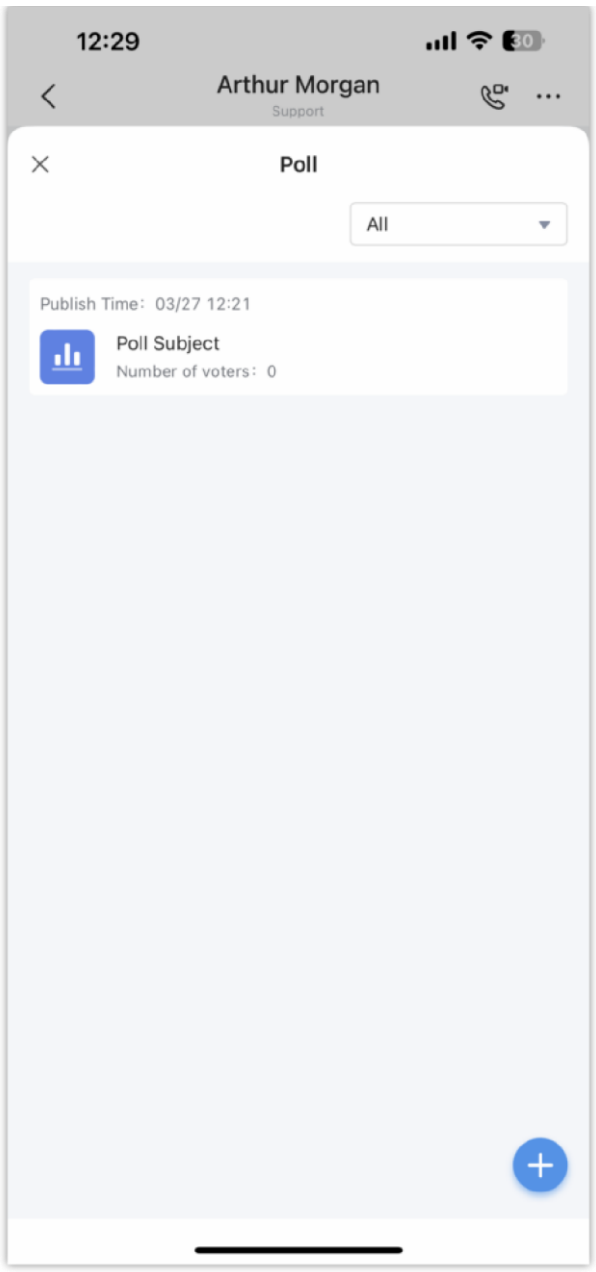
Then choose either Poll or Survey.



- **Create a Poll**

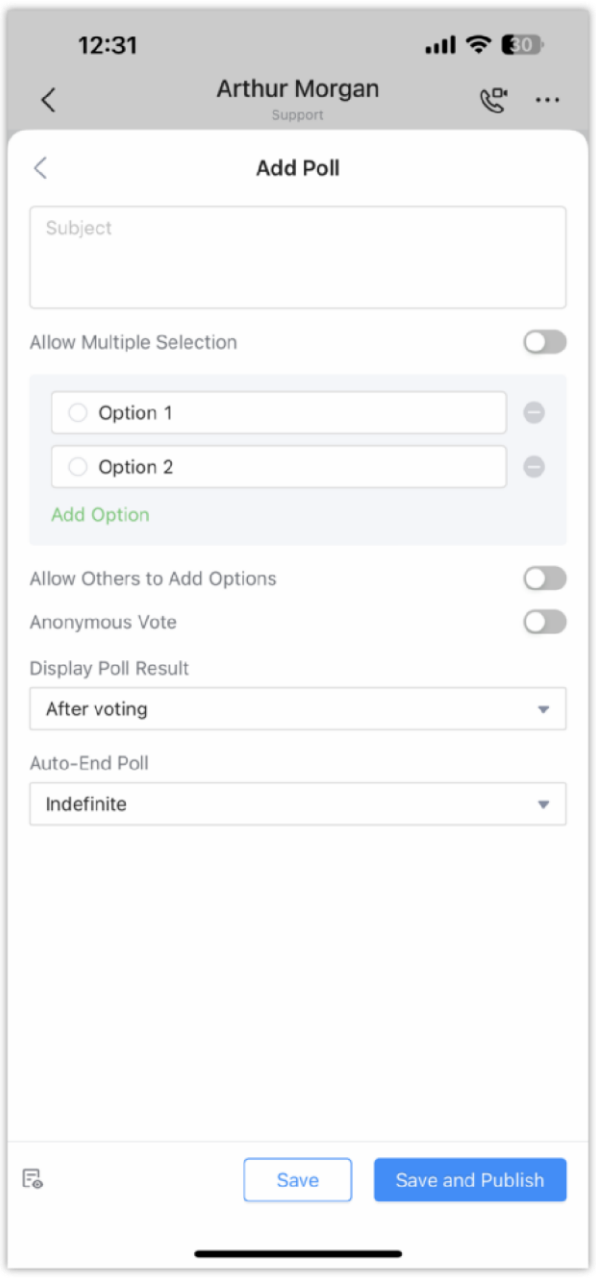
To create a poll, tap

then click on



Add Poll

Enter the necessary information for the poll.

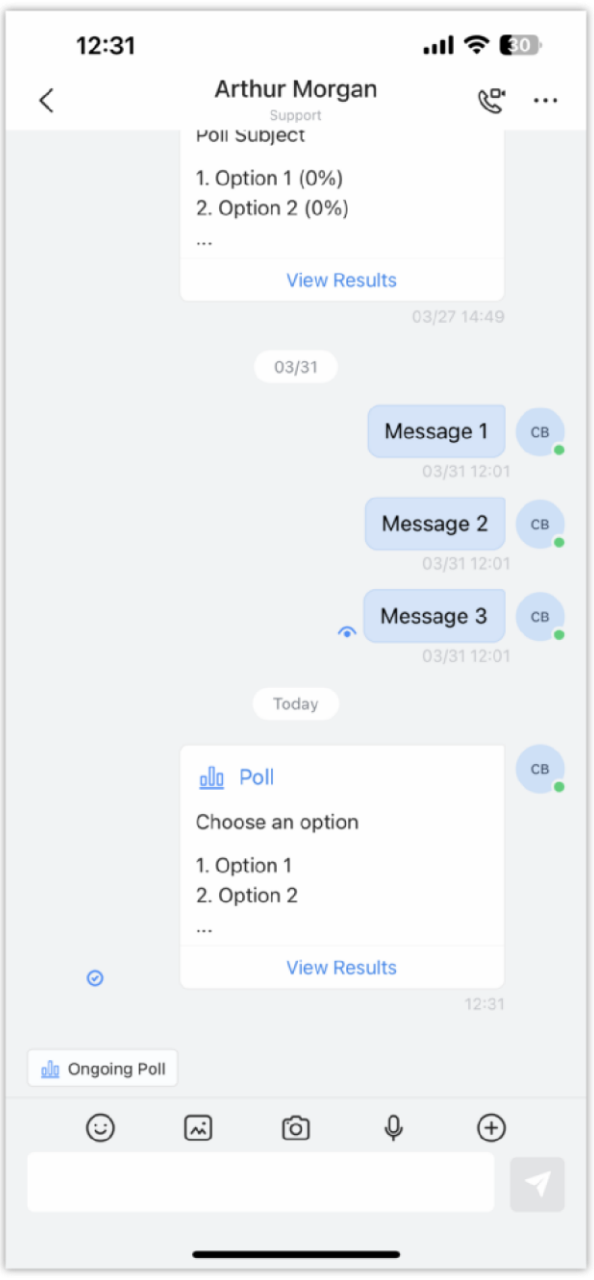


Add Poll Subject and Options

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	● **After Voting:** The results will be displayed to the user as soon as he/she picks an option to vote for. ● **After Poll Ends:**
Auto-End Poll	This determines the time after which the poll will end. The time periods which can be configured are: **Indefinite, 10 minutes, 30 minutes, 1 hour, 2 hours, 3 hours, 4 hours, and 5 hours**

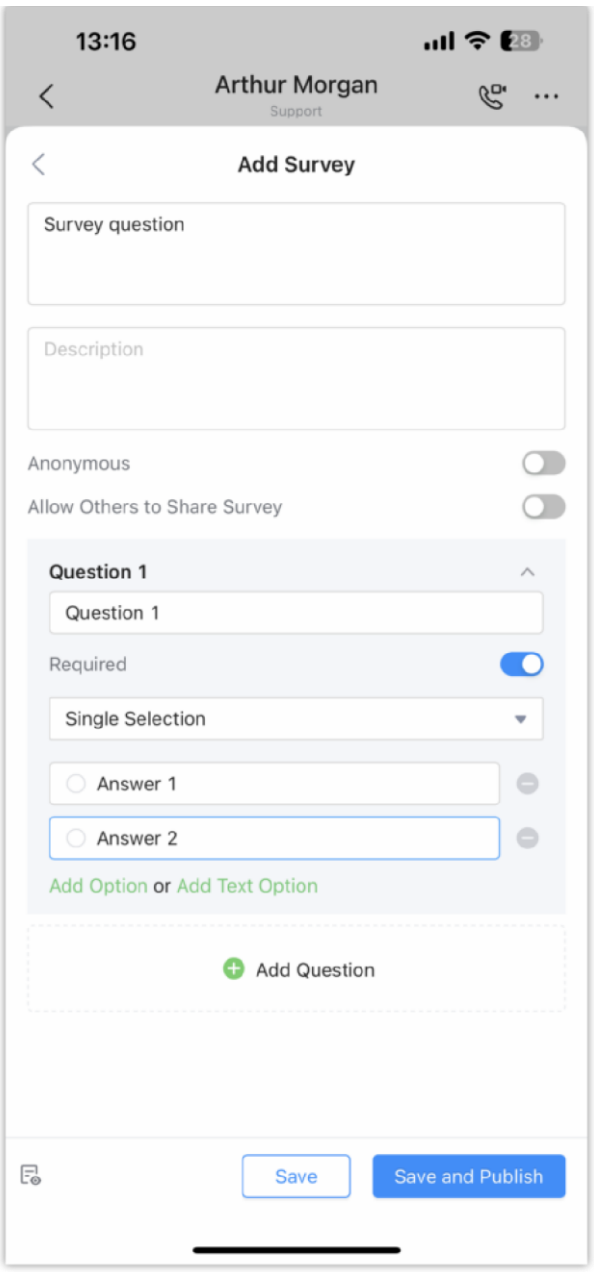
Then click on Save to save the poll, or click on Save and Publish to save and published the poll. The published poll will be posted to the conversation and will look like the following figure.



Published Poll

- **Create a Survey**

To create a Survey, please tap on Survey

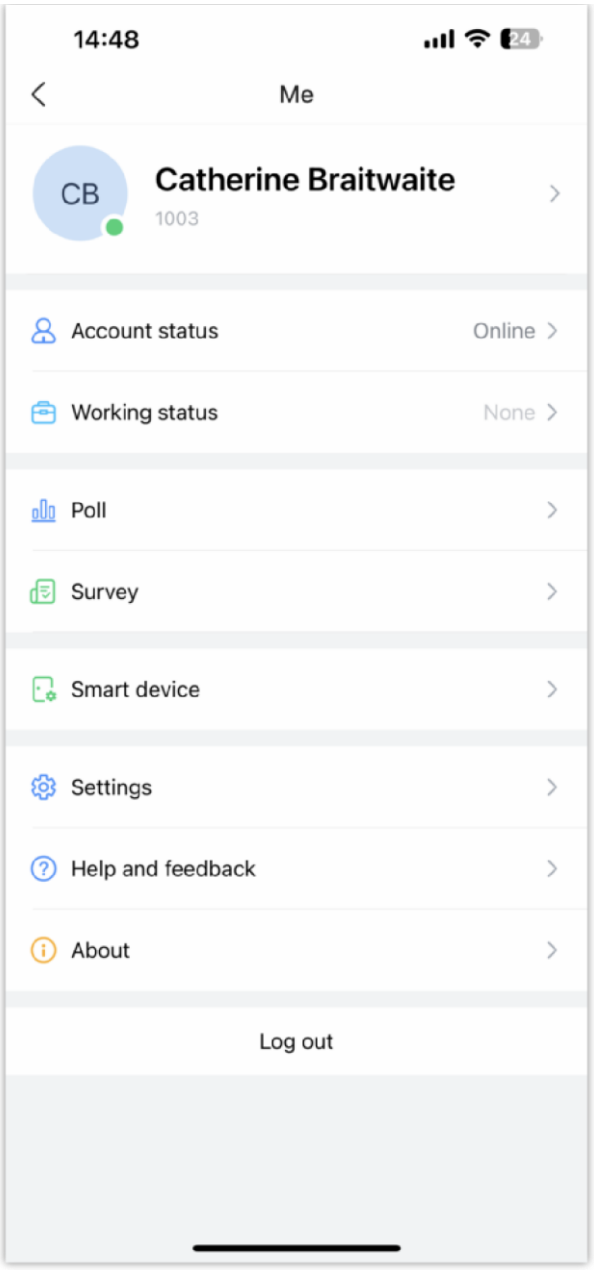


Create a Survey

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	● **Single Selection:** Only one option can be selected as an answer to the question. ● **Multiple Selection:** Multiple options can be selected as answers of the question. ● **Text:** The user can enter a text to answer the question. ● **Yes/No:** The user can only answer the question by either choosing "Yes" or "No".
Add Question	Add more questions to the survey.

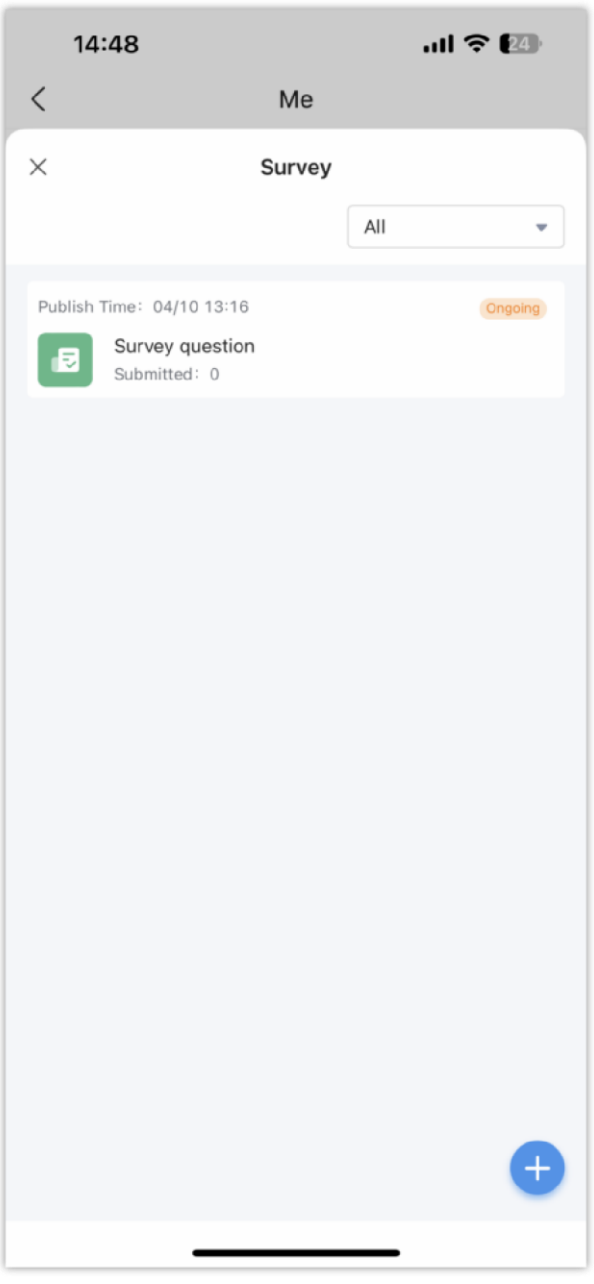
- **Stop a Poll/Survey**

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



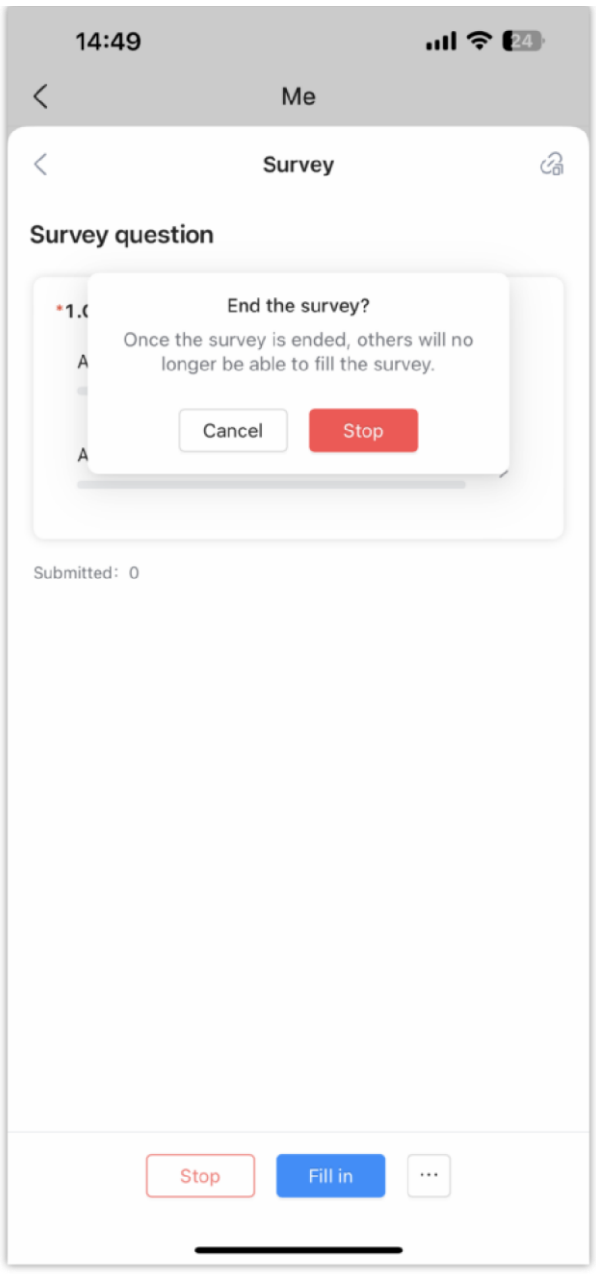
Wave Mobile Profile

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



List of Surveys

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



Stop a Survey

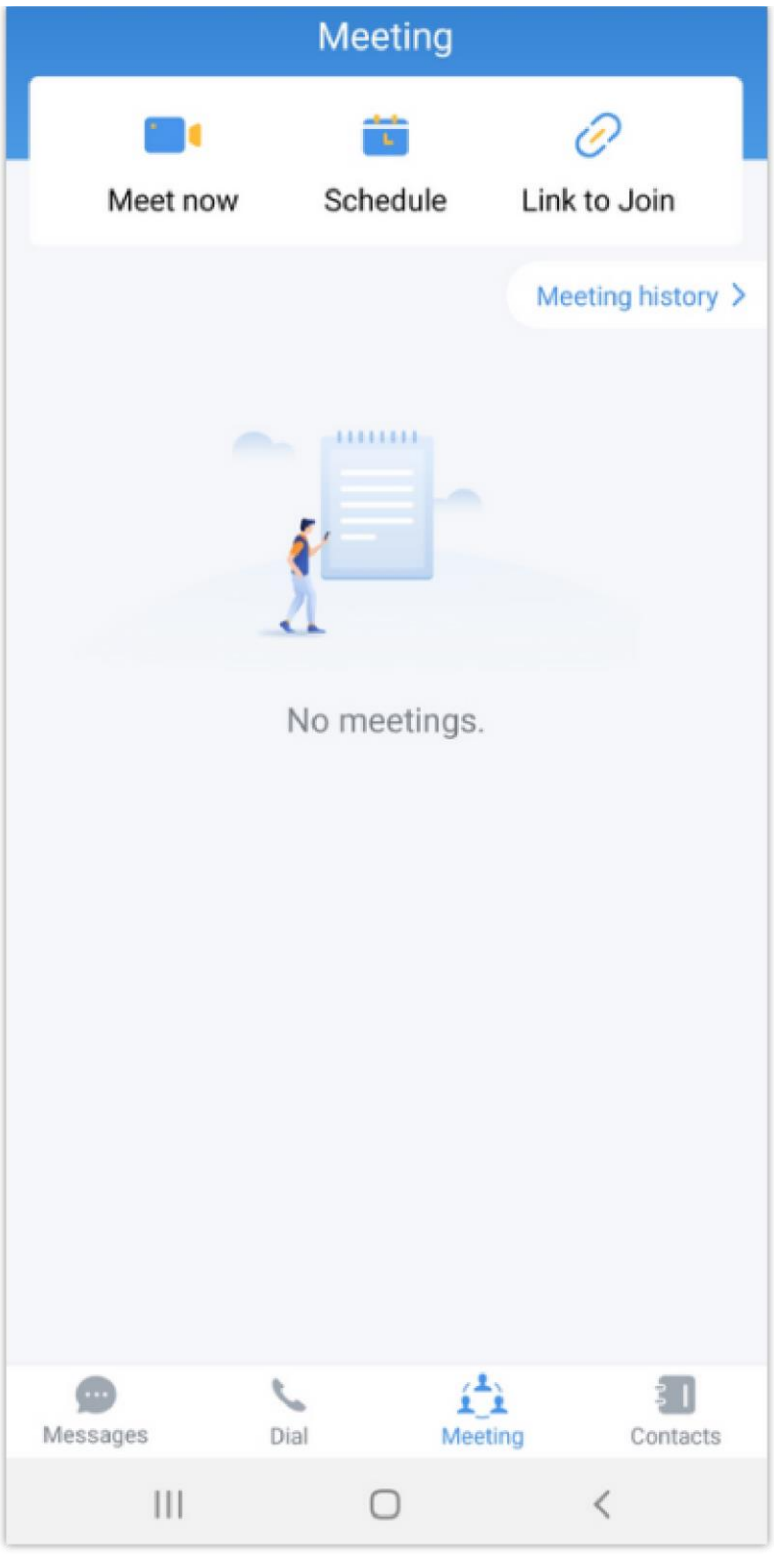
Step 4: Click on “Stop” to end the survey.

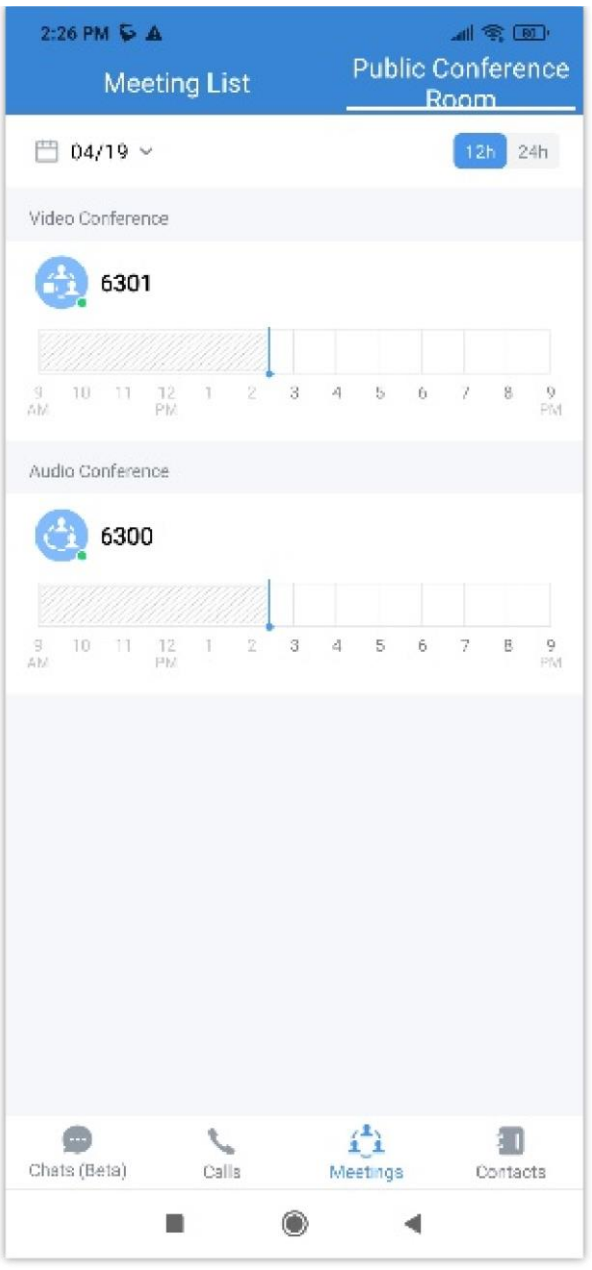
MEETING

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.





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.

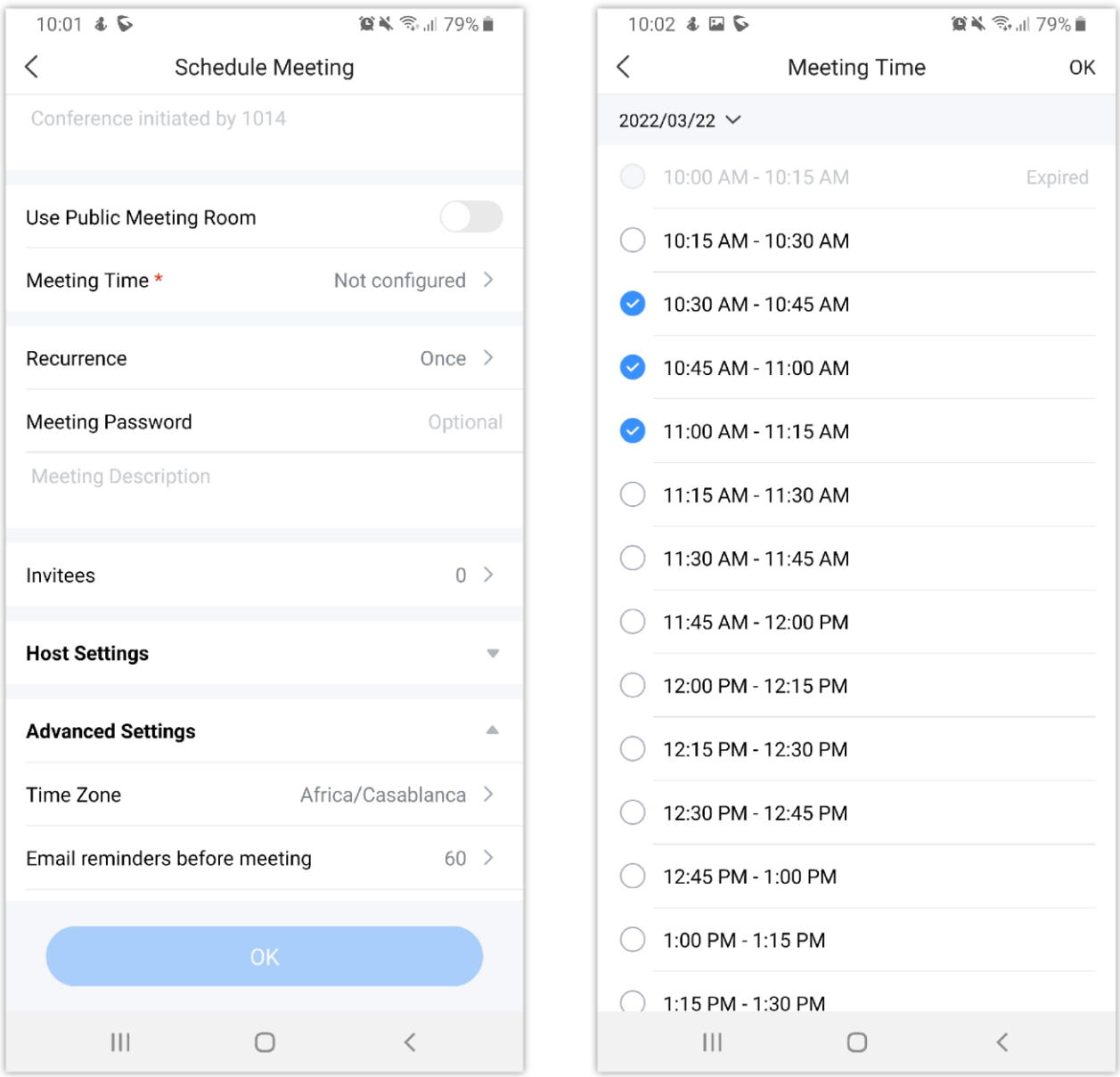
Step 4: Set the password for the meeting room.

Step 5: Select meeting participants.

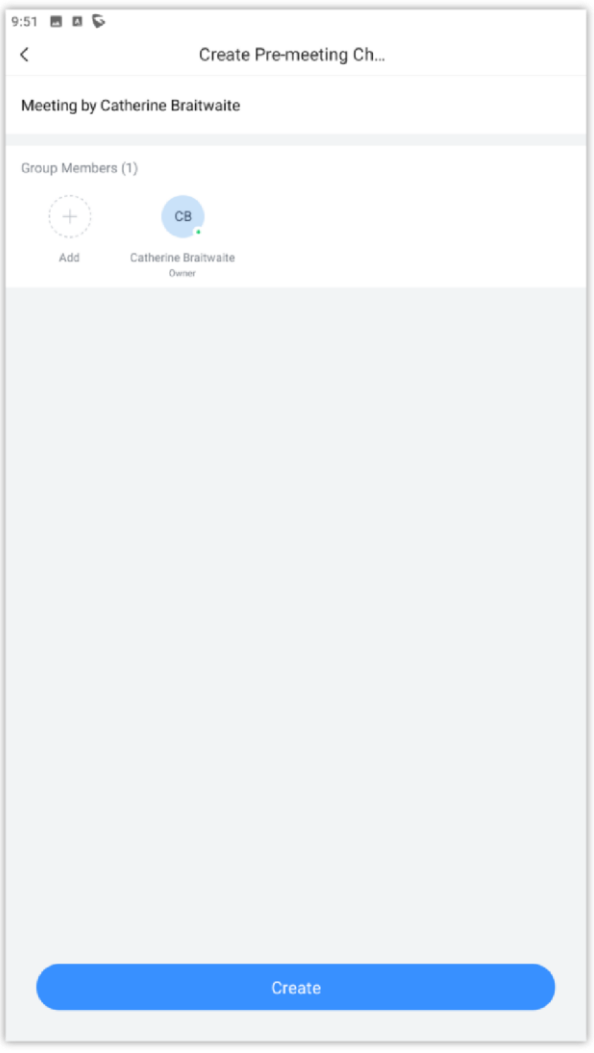
Step 6: Select the meeting host. Set the host code, set the meeting property, etc.

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.

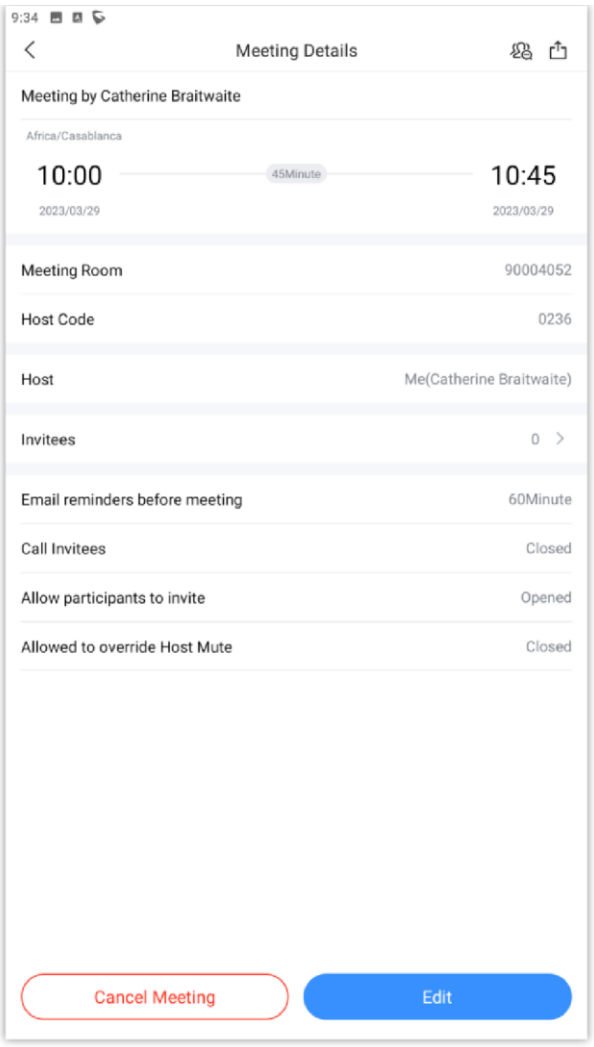


When scheduling a meeting, the user can create a group chat by tapping on . Then, tap on “Create”.

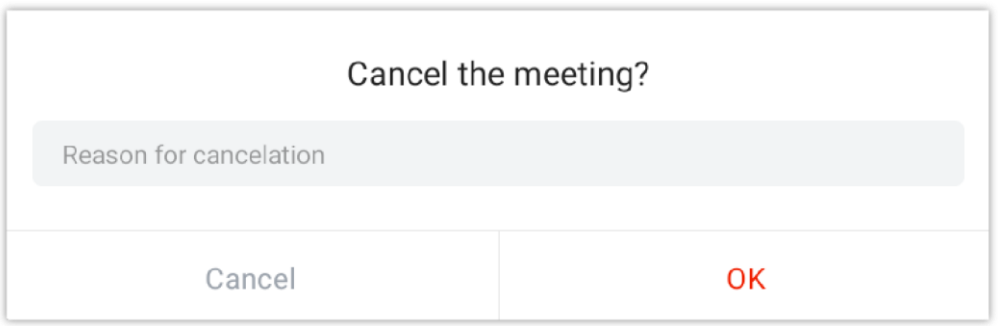


After the meeting ends, the system will prompt the user to whether to forward the chat history of the meeting to the new meeting group chat.

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.



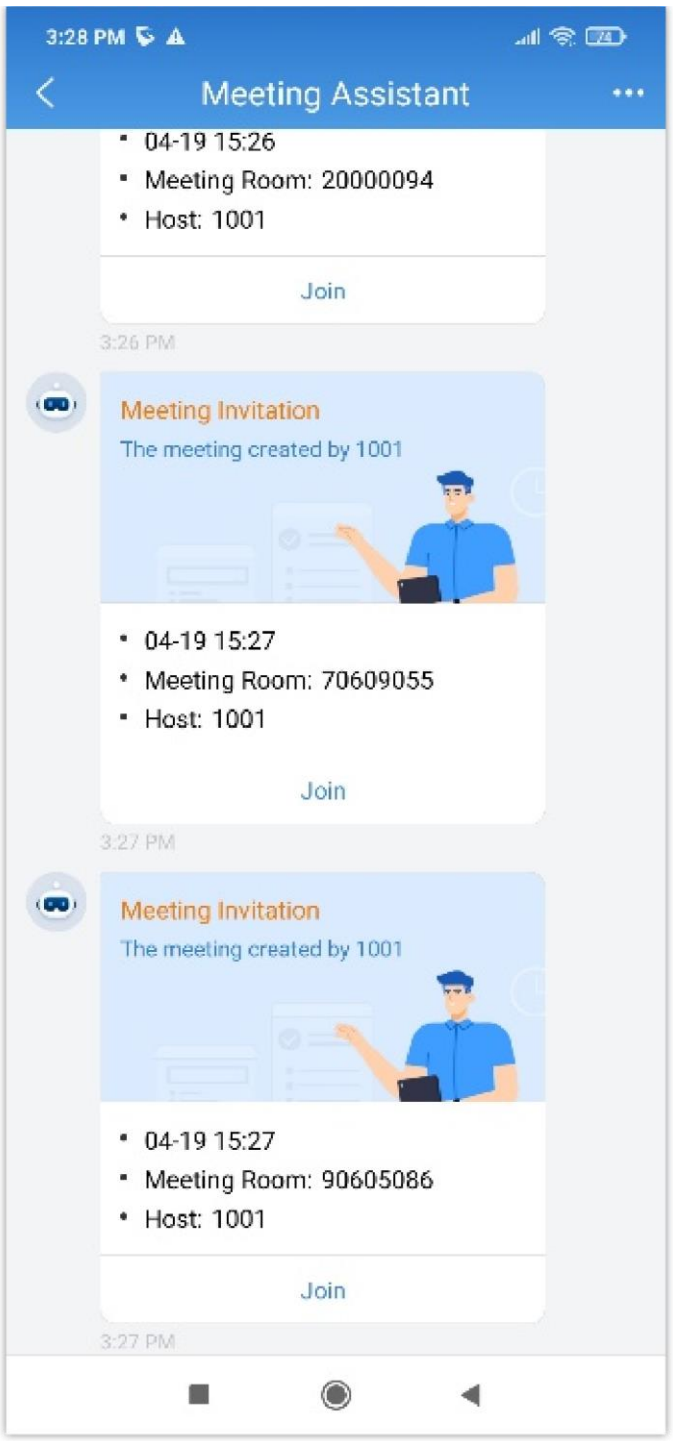
Then the user will be prompted to enter the reason of the cancellation of the meeting. The reason specific will be relayed by meeting assistant to the extension added in the meeting.

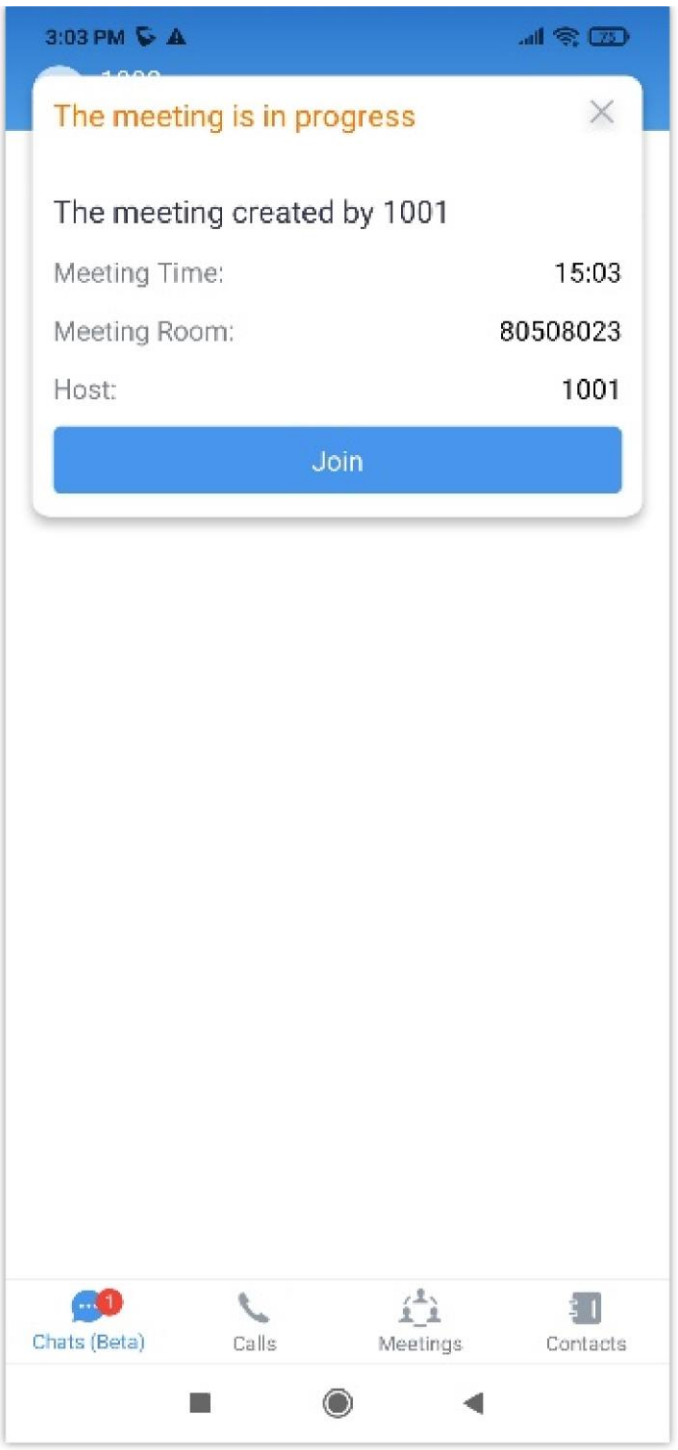


Meeting Invitation

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.





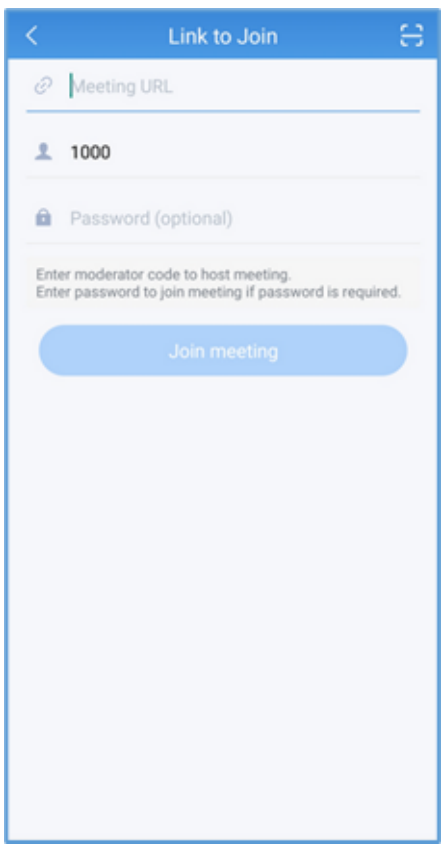


Figure 25: Link to Join

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

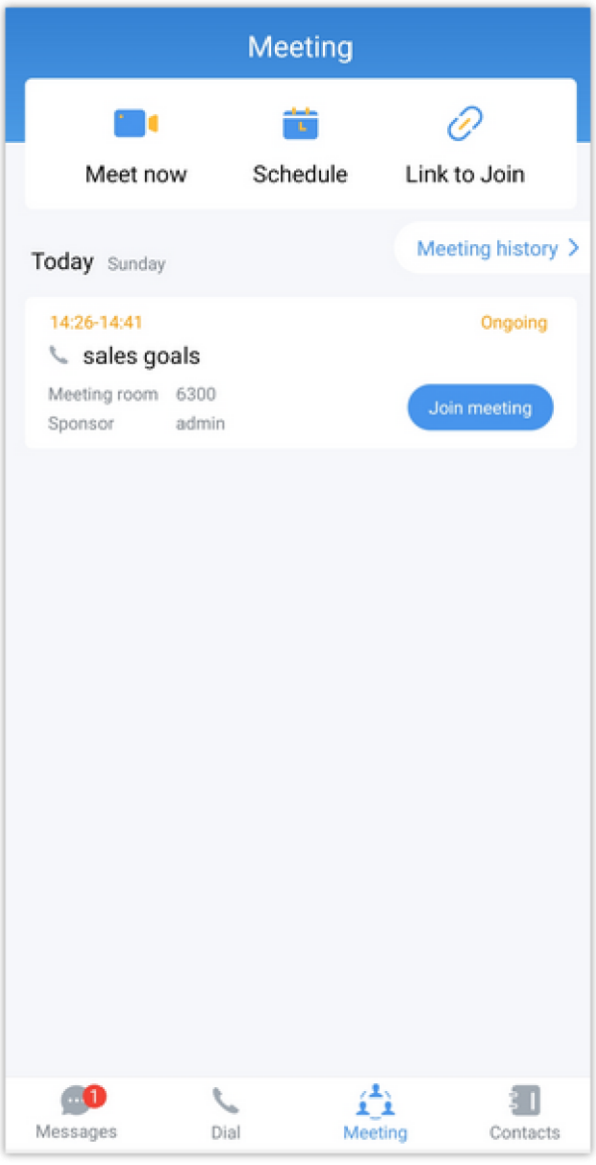
Meeting participants can invite the IP camera devices they have permission to access to meetings. Other meeting participants will be able to view the video feed of the invited IP camera devices.

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.



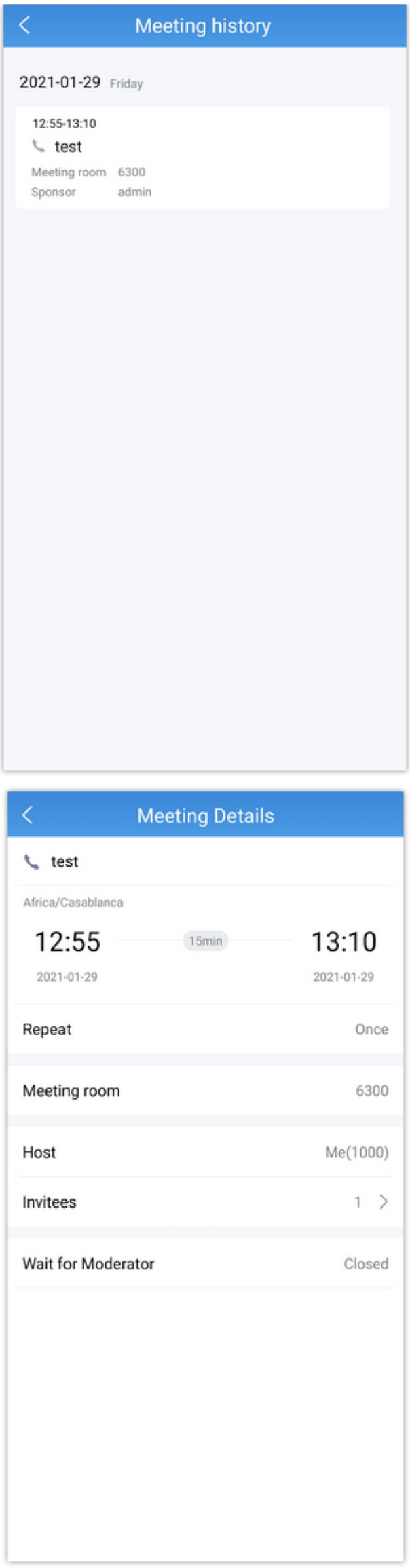
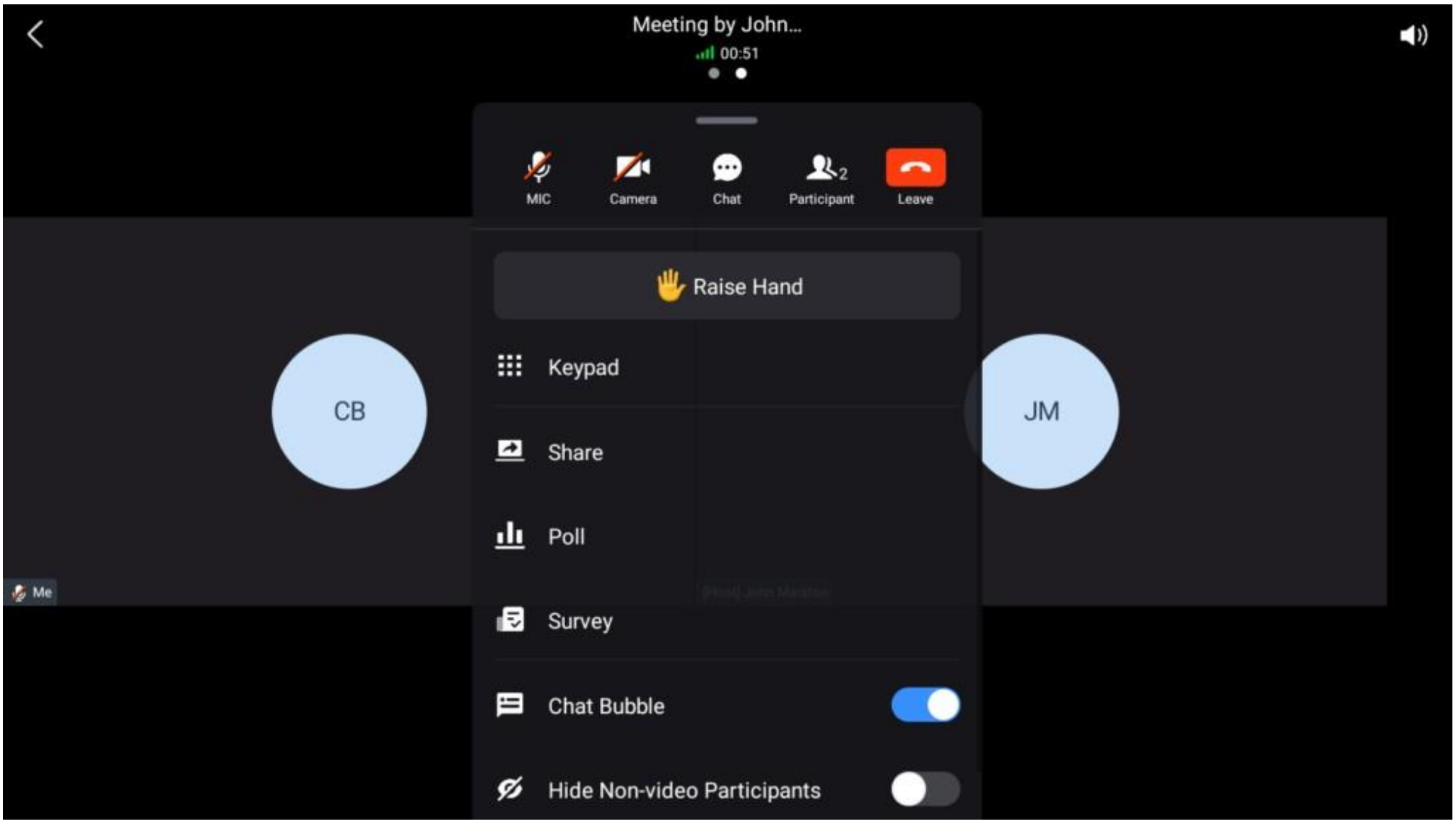


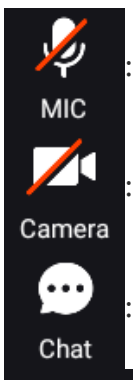
Figure 26: Meeting History

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



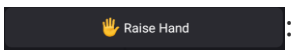
: Enable or disable the microphone.

: Enable or disable the camera.

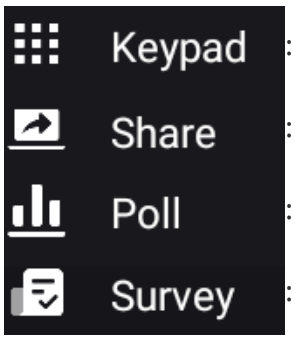
: Open the chat box.

: Open the list of participants.

: 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 your hand.



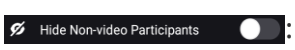
: Open the keypad.

: Share your screen with the meeting’s participants.

: Create a poll.

: Create a survey.

: Toggle the Chat Bubble on and off.



: Hide the participants who do not have their camera activated.

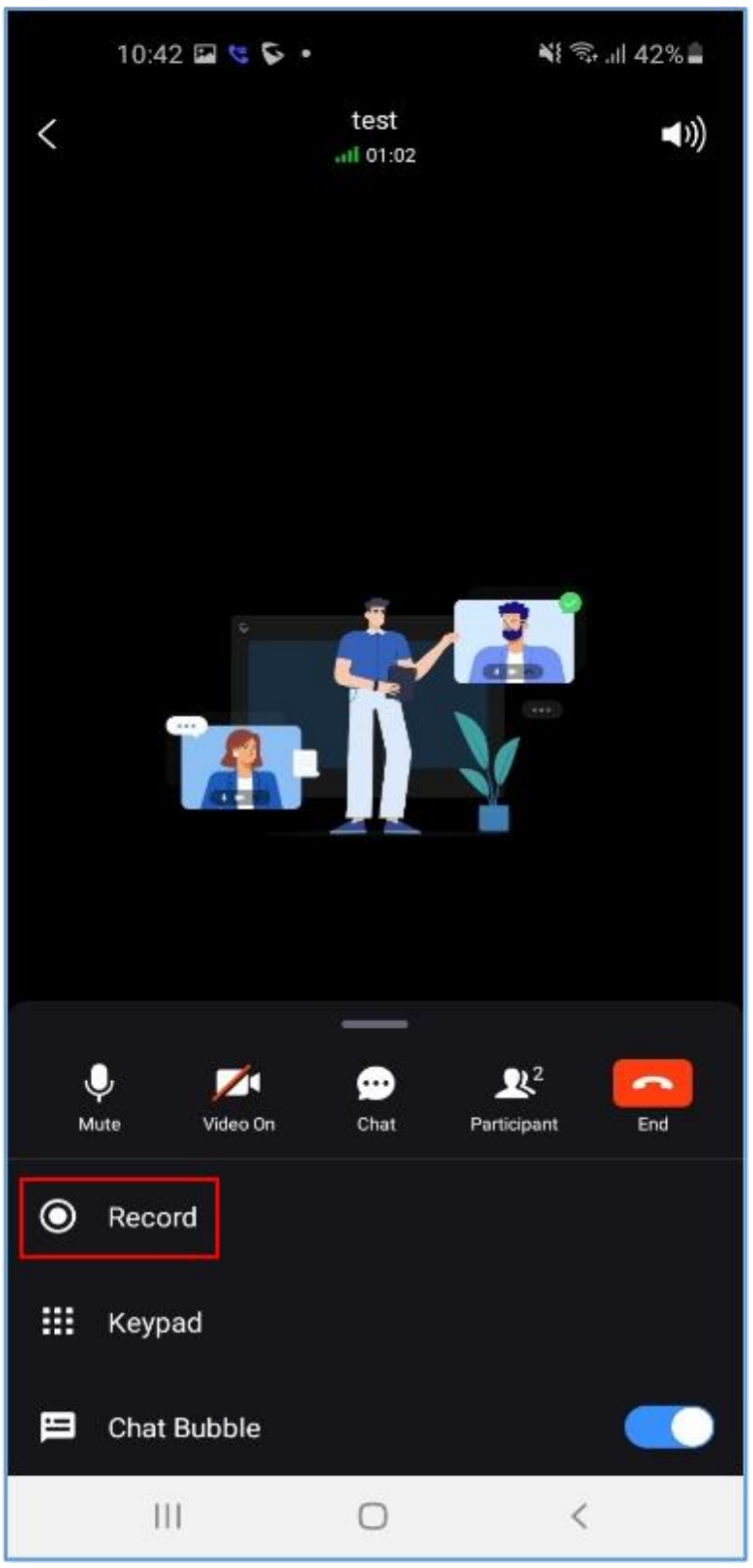
Note

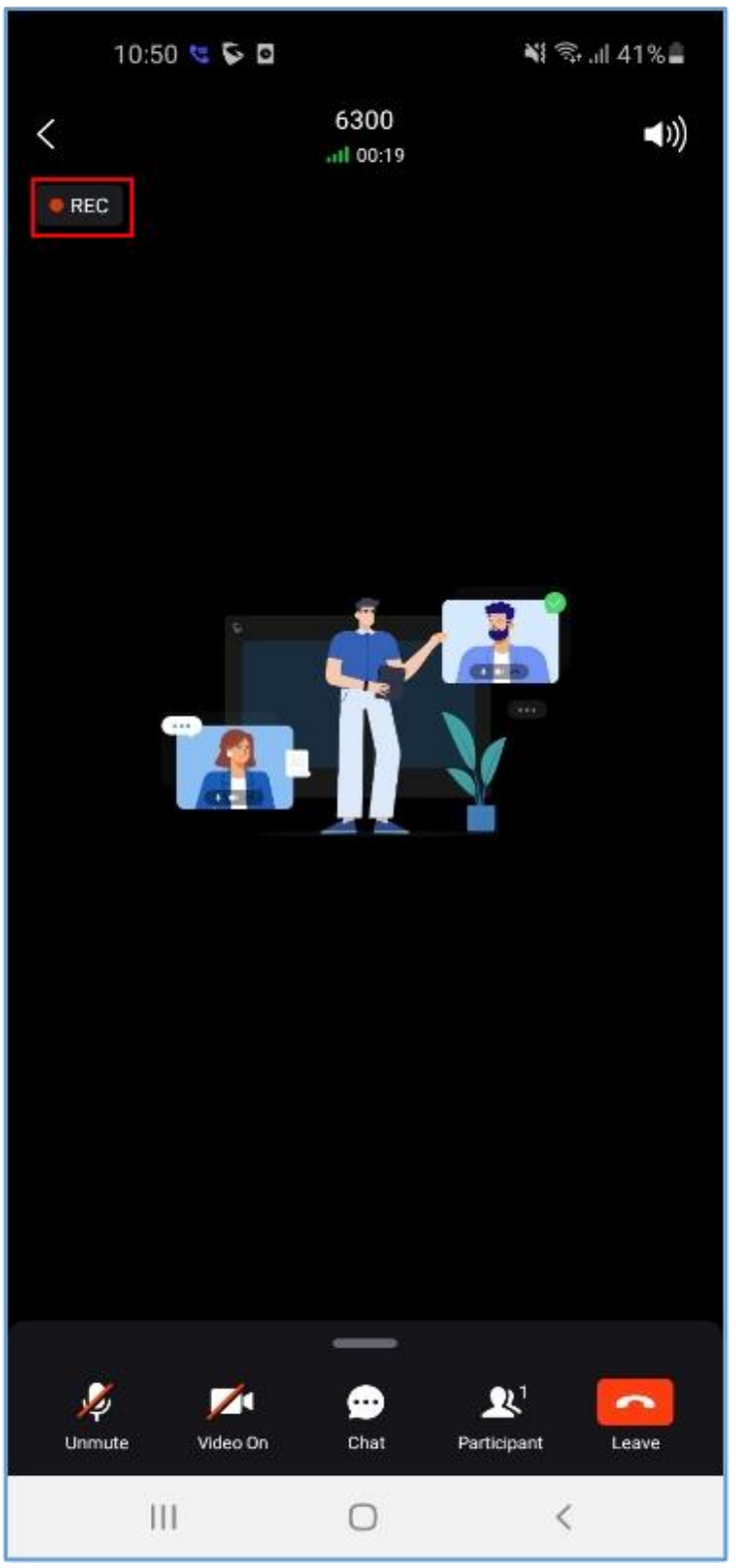
During a meeting, the host can mute a participant who seems to be in a noisy environment. This will enable push-to-talk for the participant. If he/she wishes to speak, he/she needs to press and hold the microphone and release it when he/she is done speaking.

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.





Video Meeting Participants

During video meeting, click on button 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.

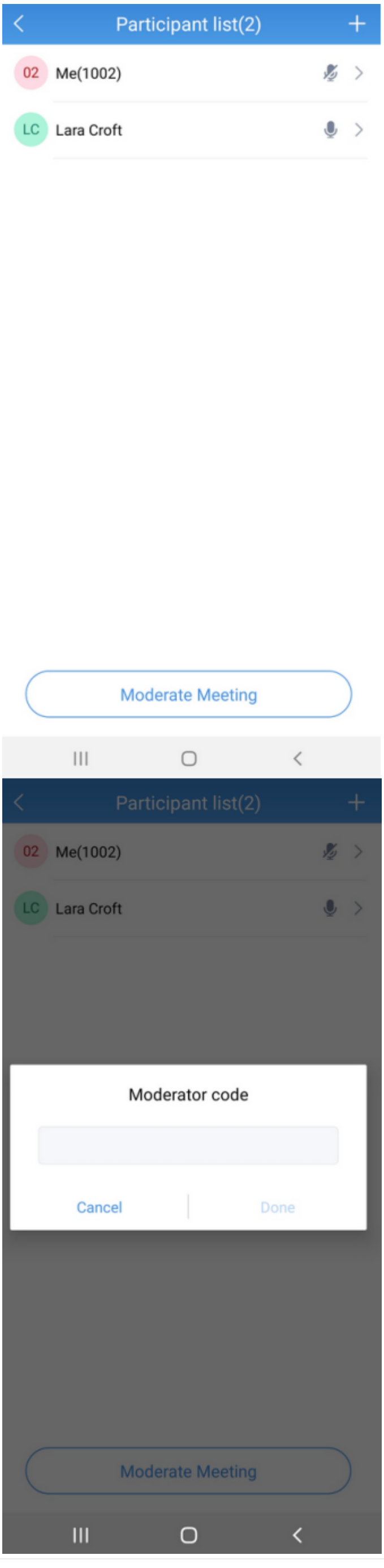


Figure 28: Participant list view for Participant

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.

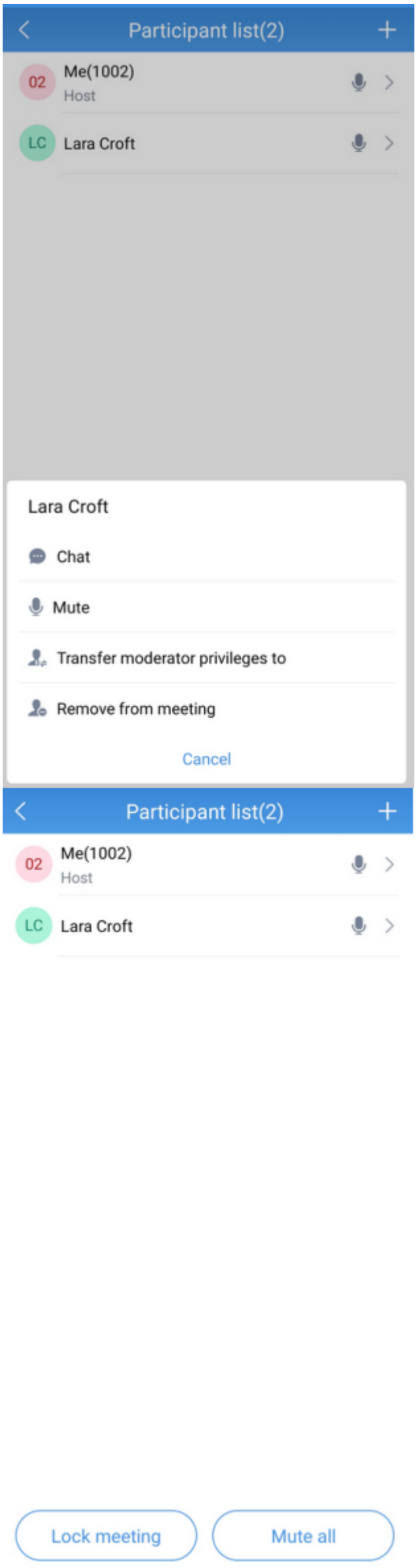


Figure 29: Participant List view for Moderator

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

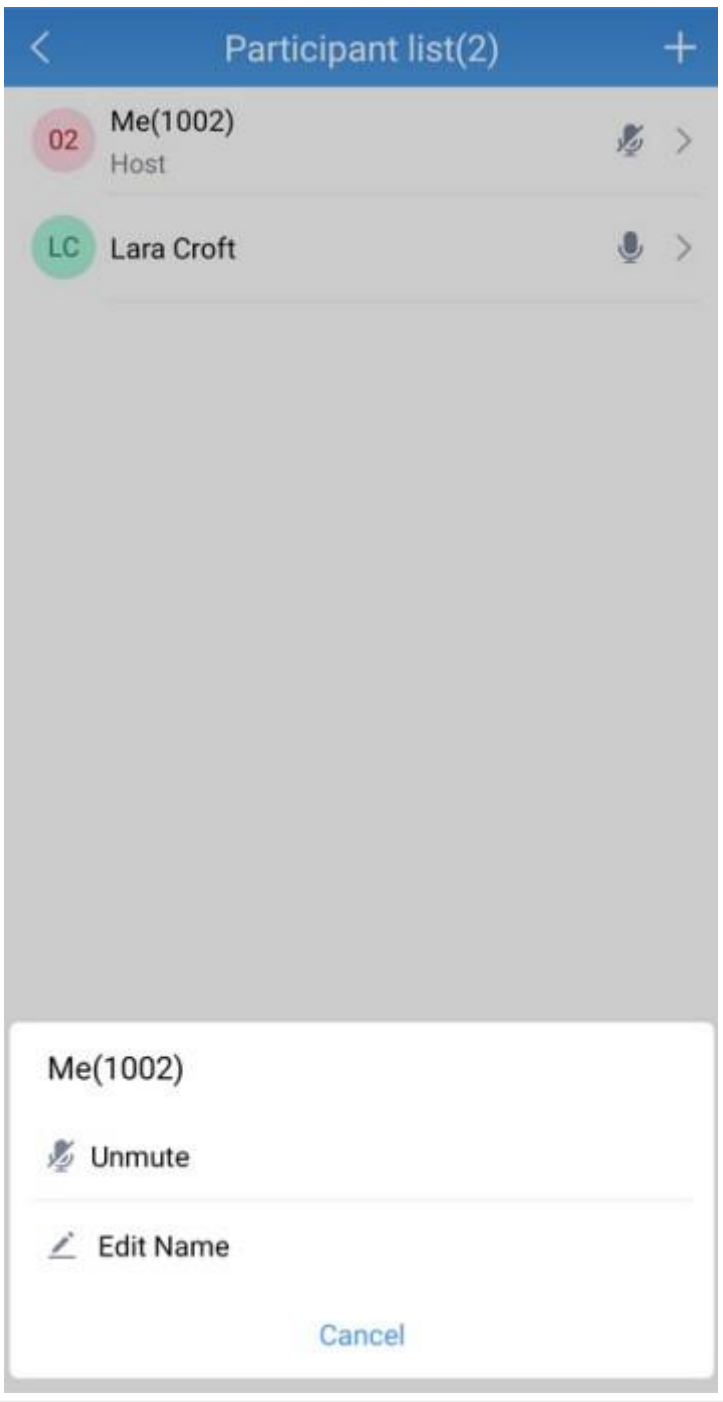


Figure 30: Edit Name

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.

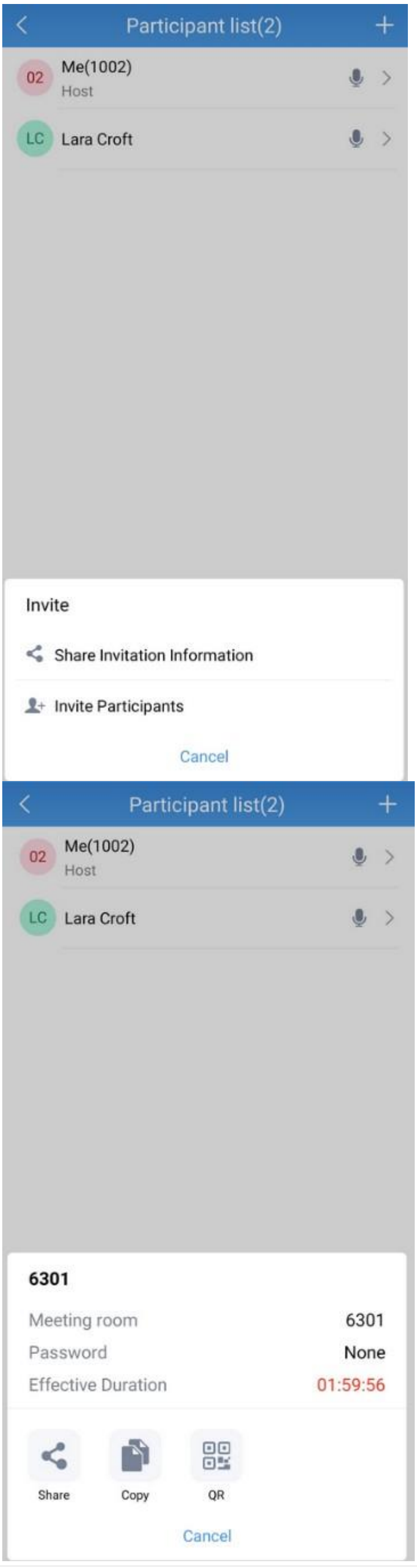


Figure 31: Invite Participants

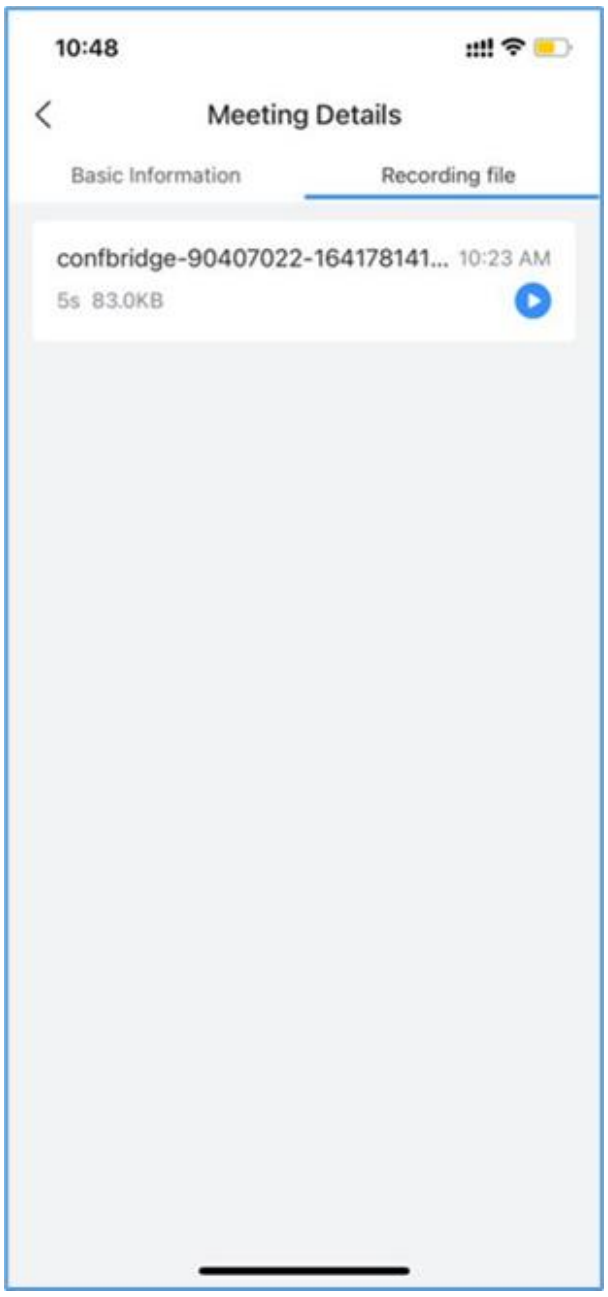
For the Audio/Video Wave meetings, the host can see invitee's absent list:

- 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 invitee list will display based on attended status and unattended status. An invite button will be available for unattended invitees 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.

Absent Invitees List

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.



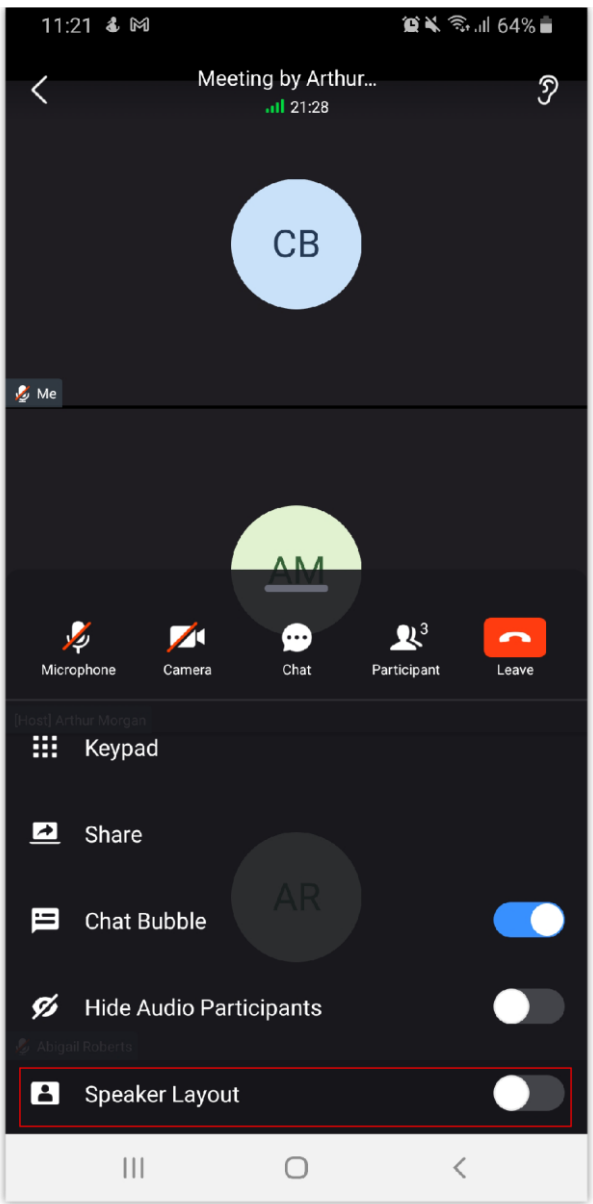
Recording Files Mobile

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:



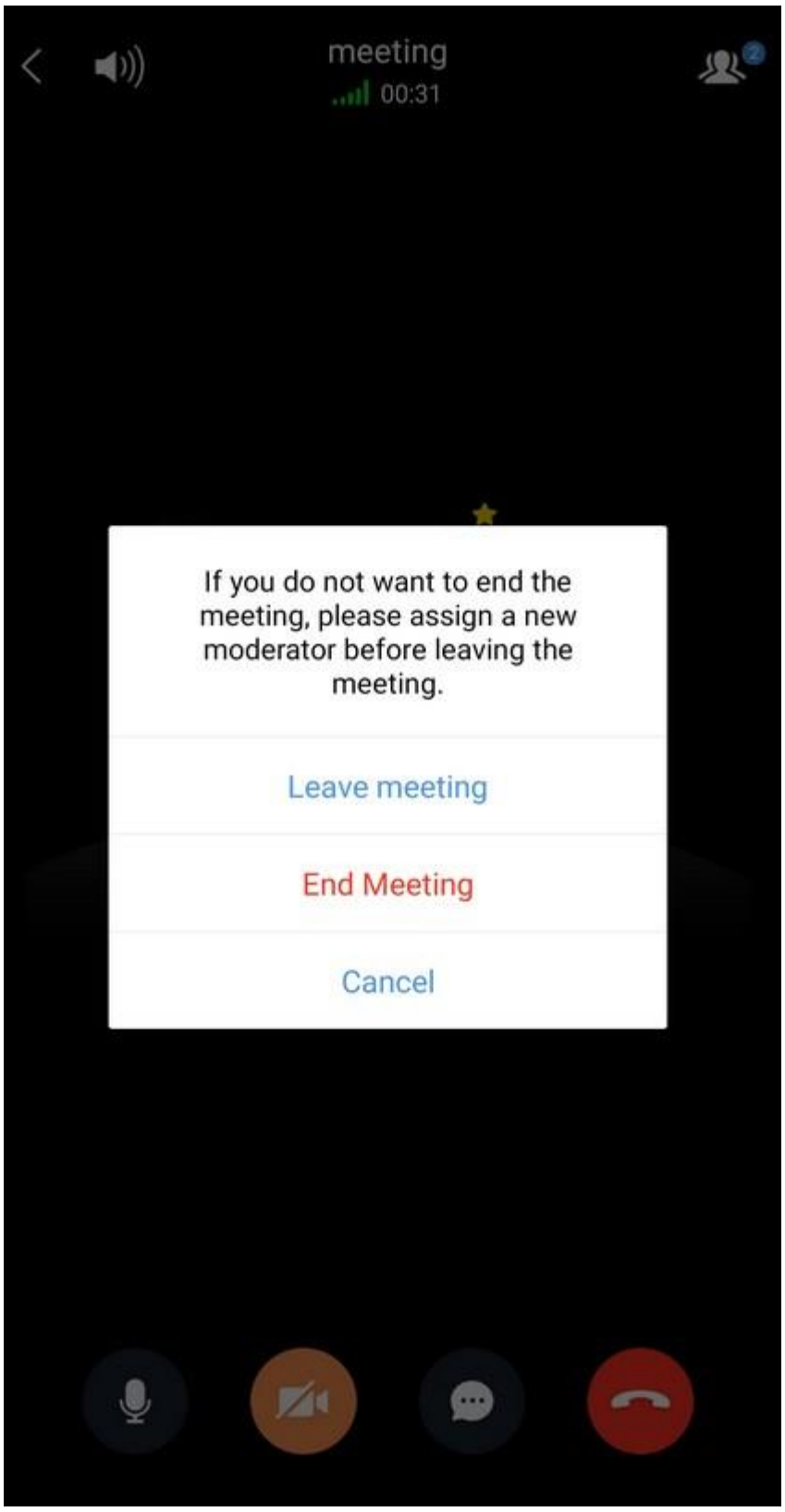
End Meeting

- **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.



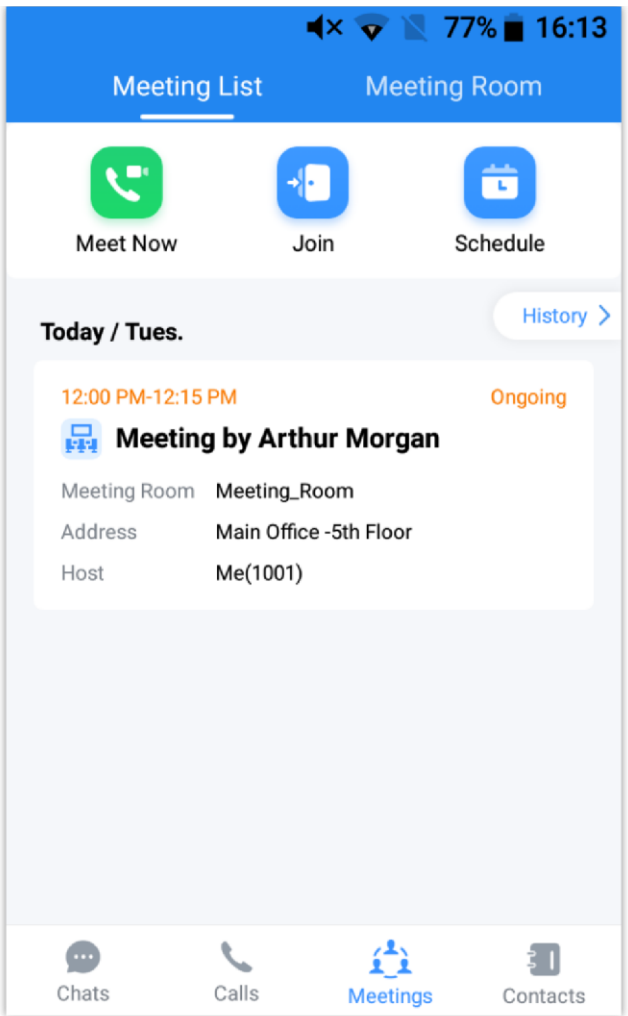
- **Onsite Meeting**

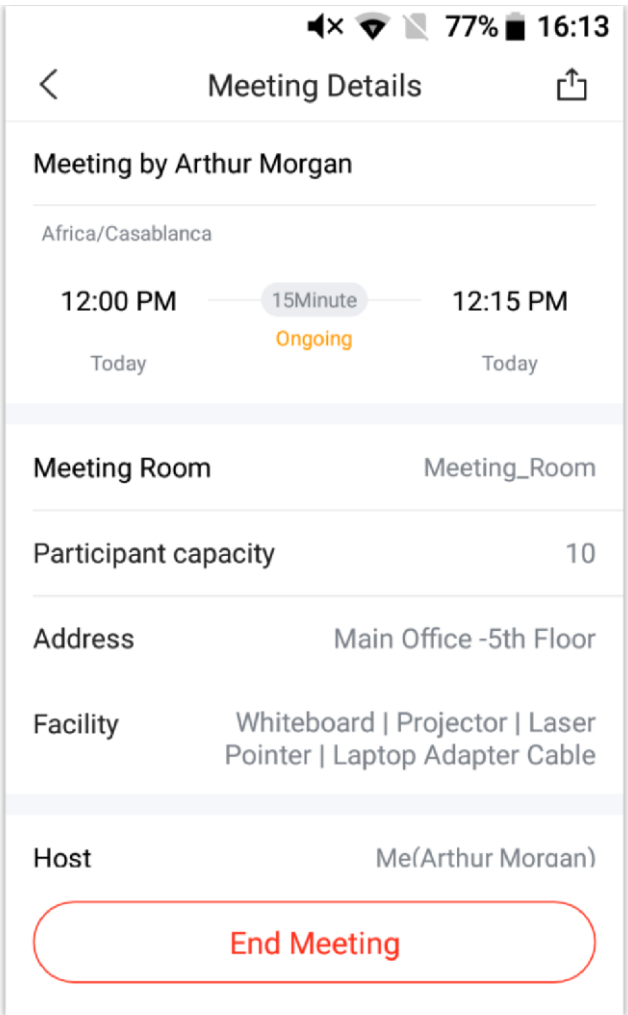
To end an onsite meeting, please navigate to “Meetings” tab and select the meeting that you want to end. You can either end an ongoing meeting or a scheduled meeting that has not started yet.

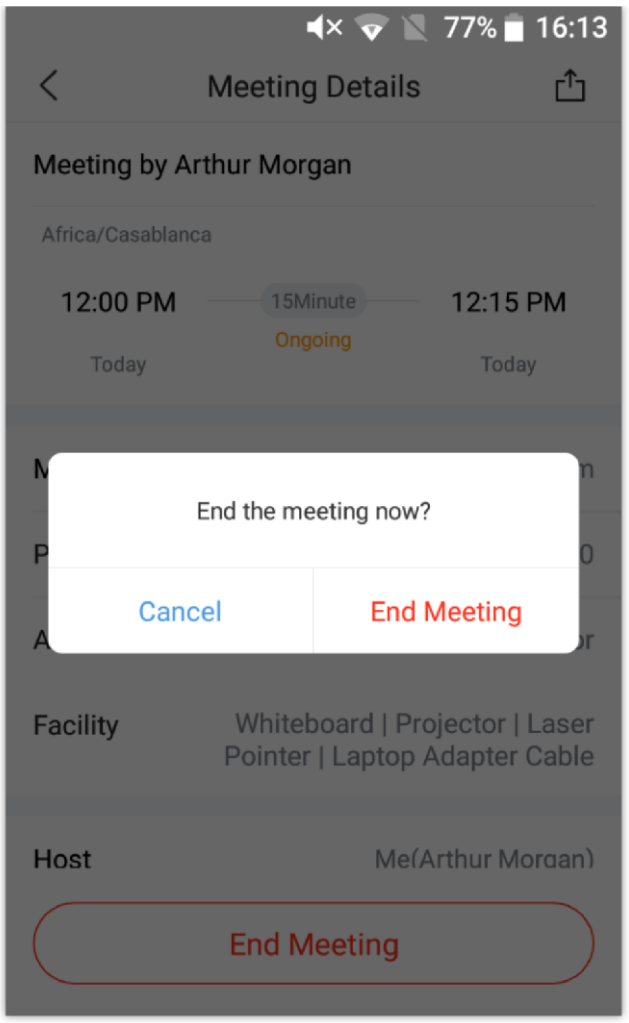
Step 1: Tap on the meeting that you would like to end.

Step 2: Click on “End Meeting”

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







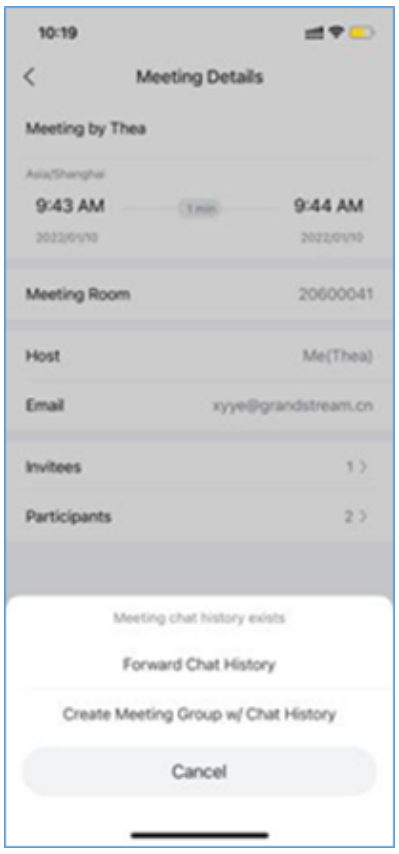
Note

- 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.

- 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.

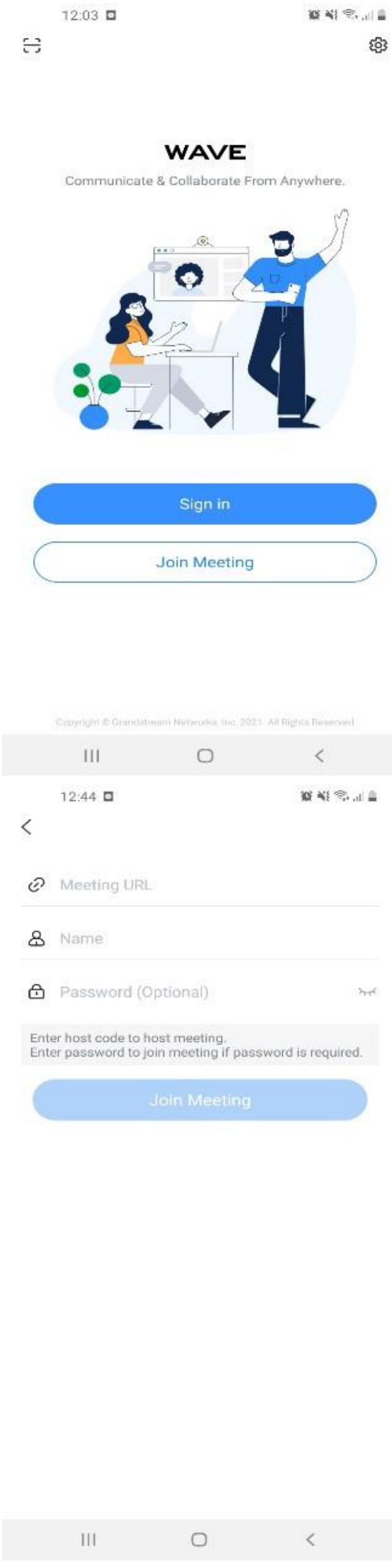
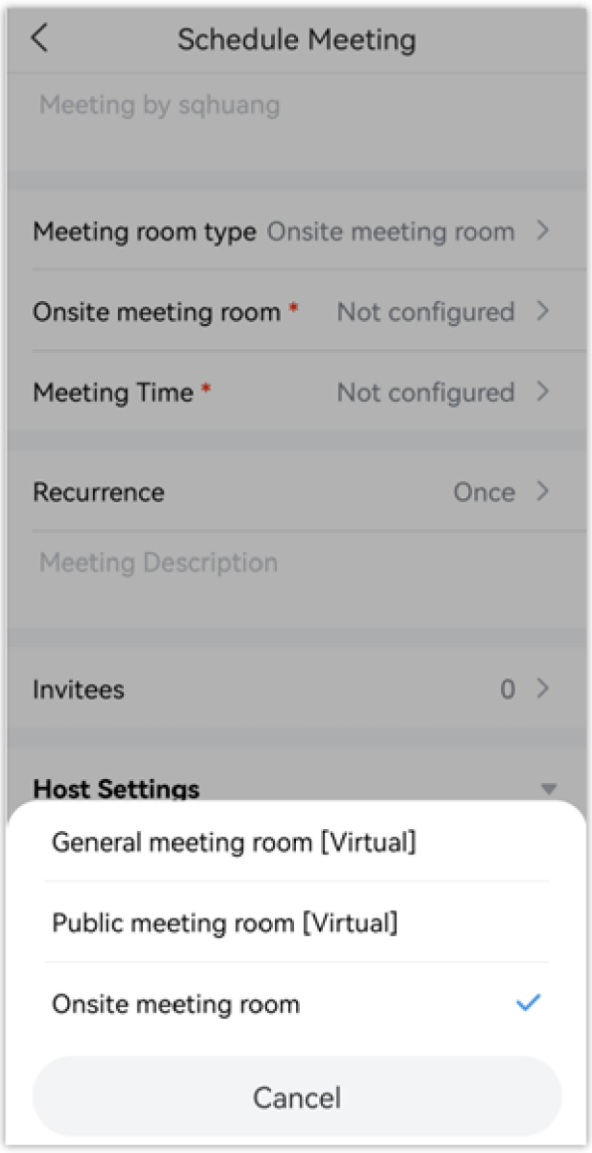


Figure 33: Join Meeting via Link

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.

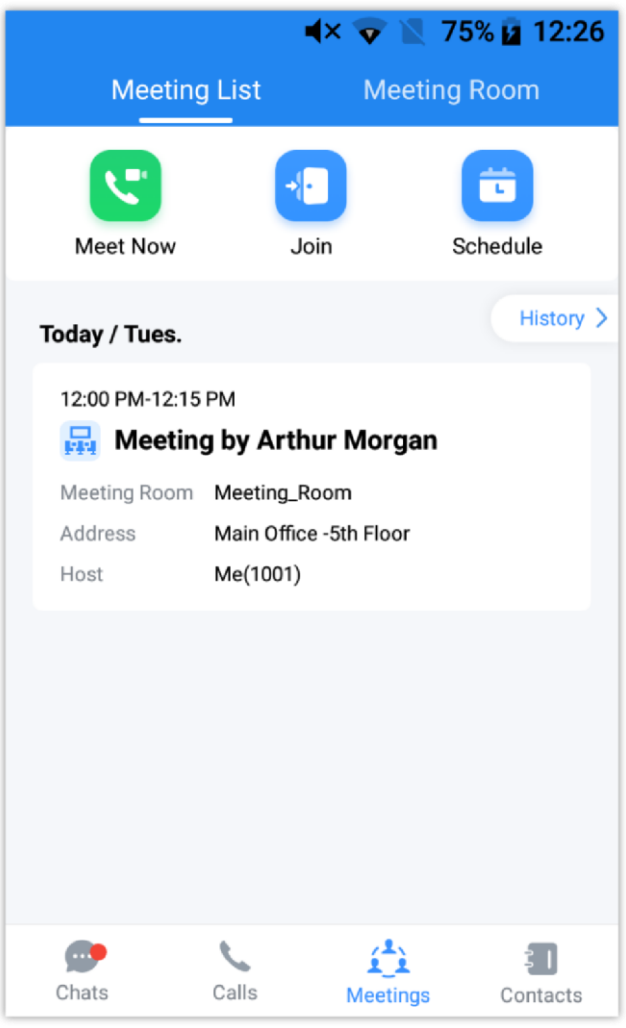


Schedule Onsite Meeting

Parameter	Description
Meeting Name	Enter the name of the meeting
Type	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	Select the extensions that you would like to invite. ● **Phone Contacts:** Select the personal contacts you would like to invite. ● **Group Member:** Select the groups which you would like to invite. ● **Email Invitations:** ● **Company Contacts:** Select the company contacts or departments that you would like to invite to the meeting.
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.

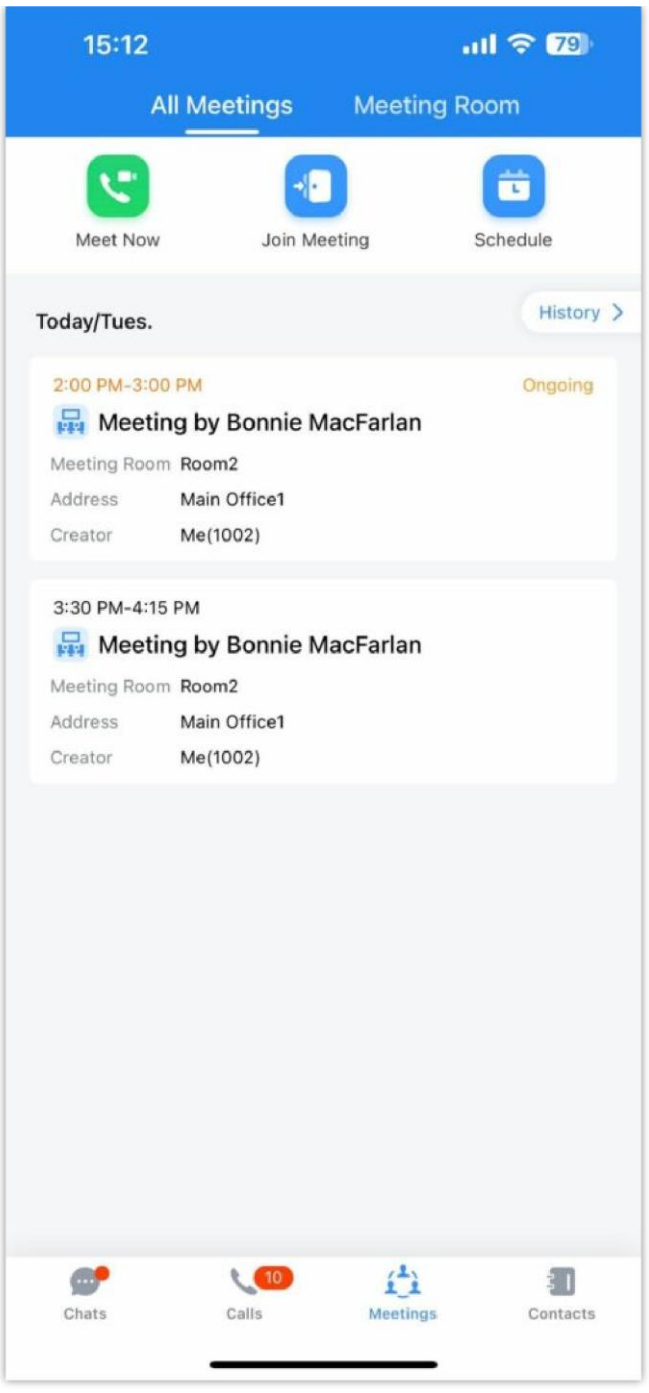
Once the meeting has been scheduled, it will appear in the list of pending meetings as shown in the screenshot below:



Scheduled Meetings

Meeting List

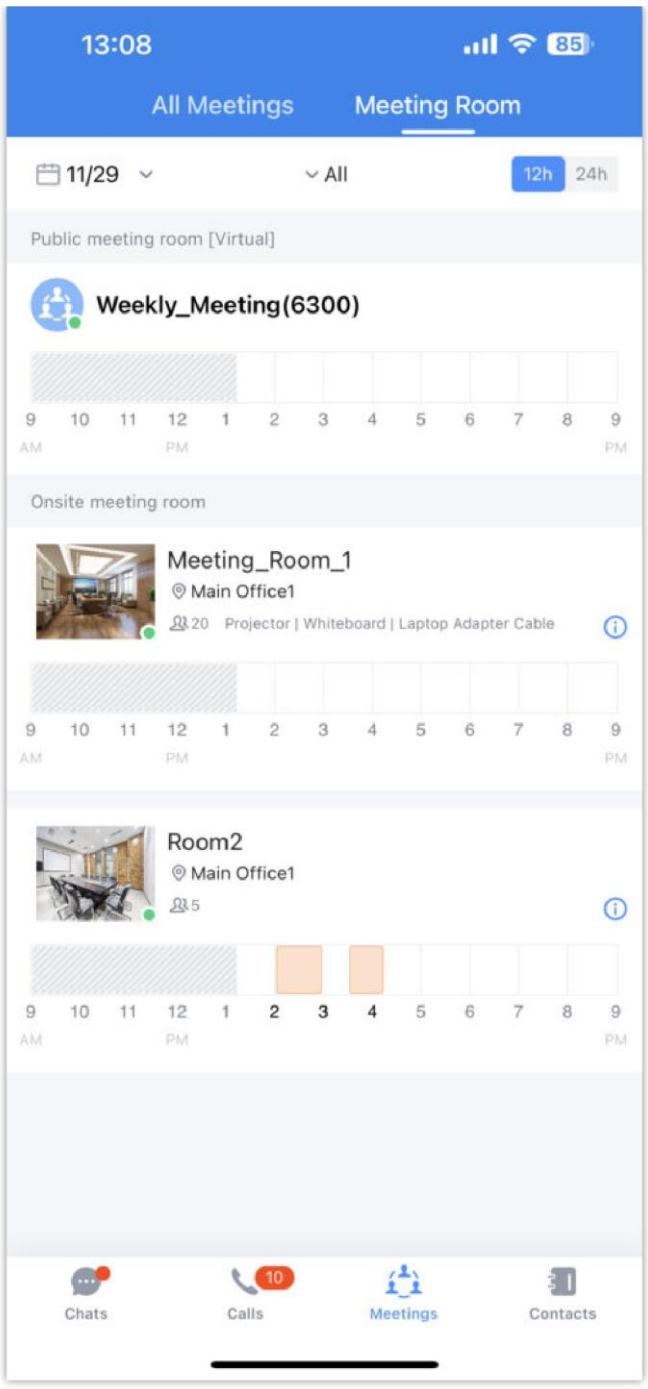
All the meetings that have been created in the UCM can be viewed in the **Meeting List** (This includes the virtual and onsite meetings).



All Meetings – Wave Mobile Client

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.

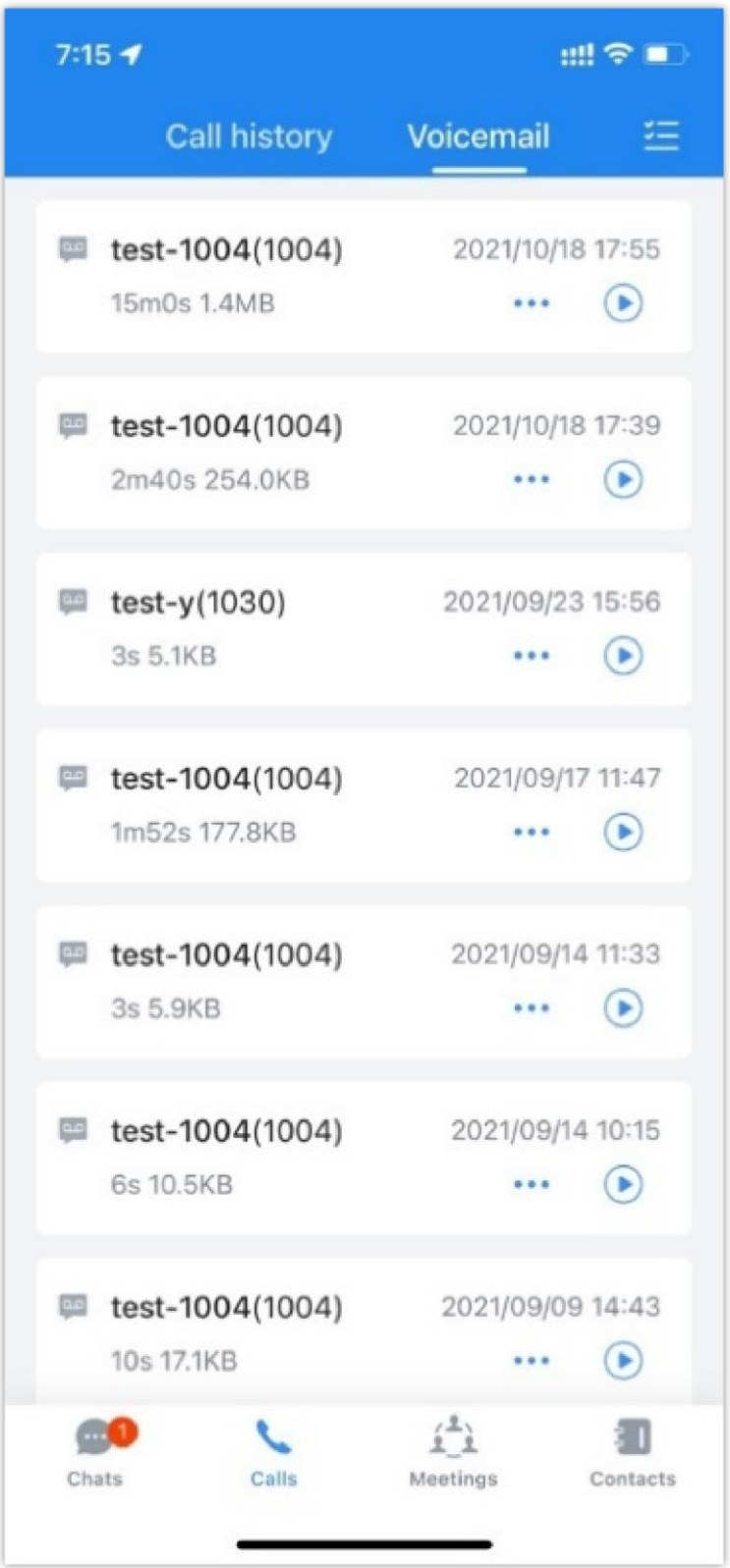


Onsite Meeting Room

VOICEMAIL

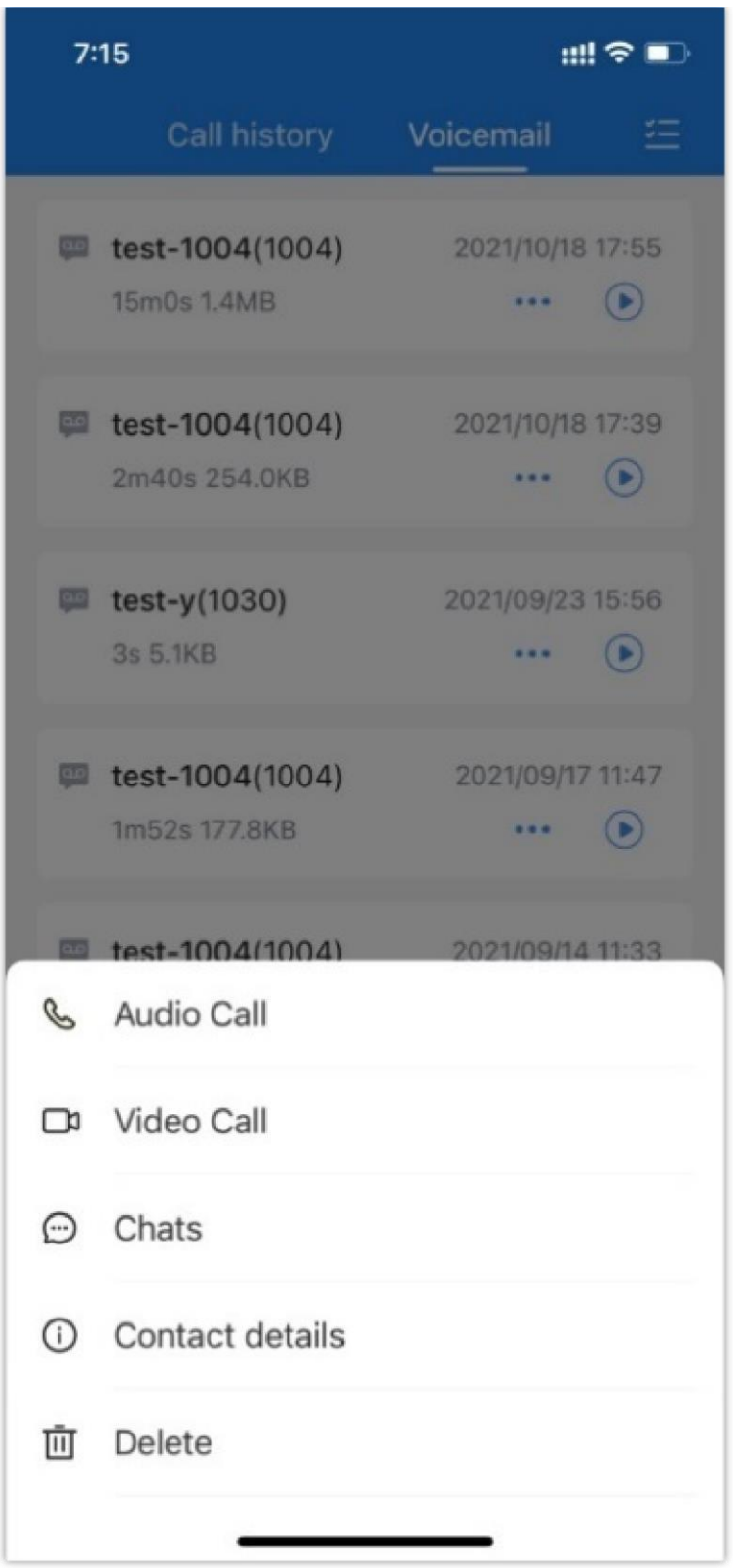
In “**Voicemail**” module, users can check all voicemail received by the account, including the common voicemail and urgent voicemail.

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:



Voicemail

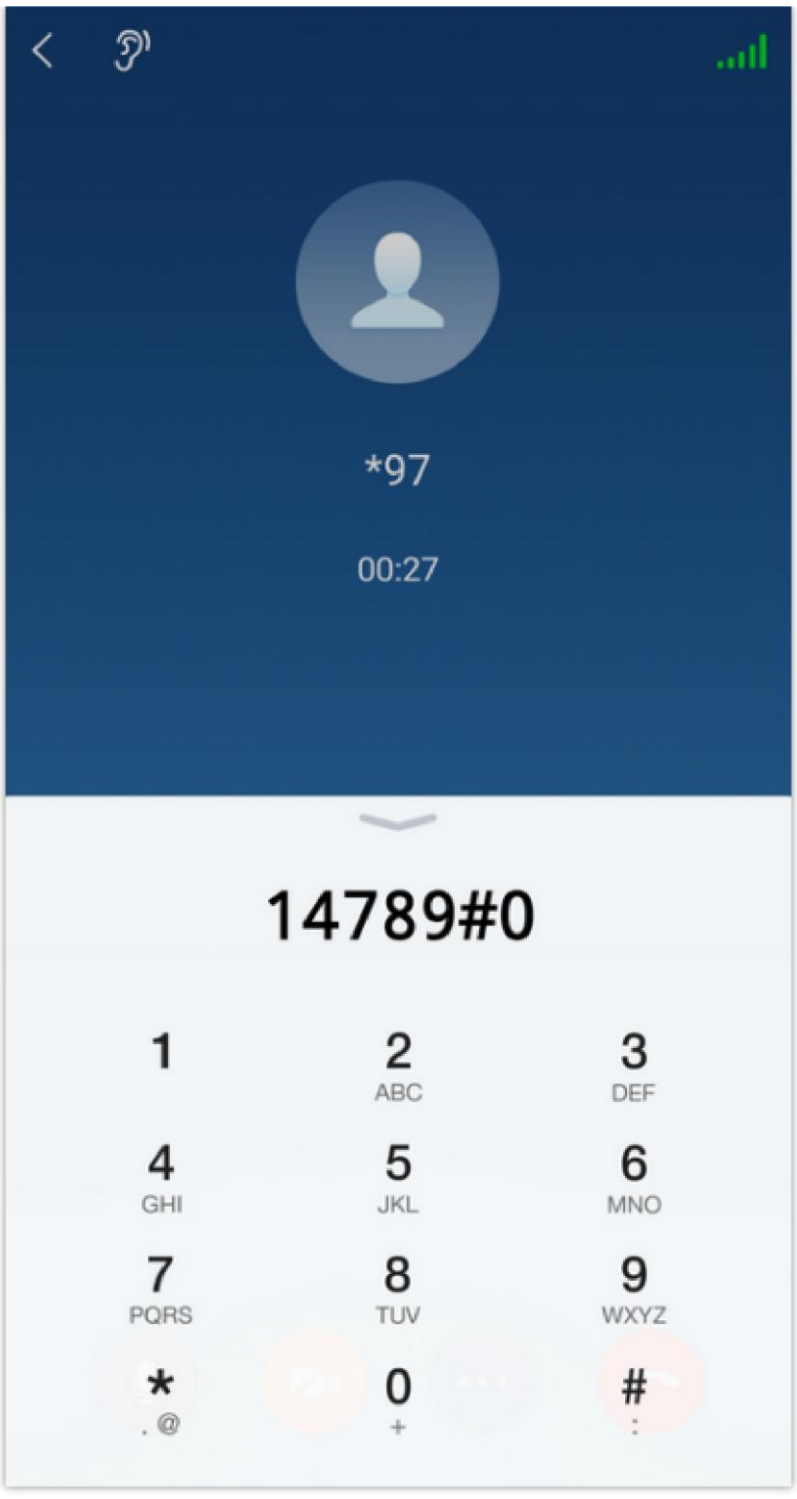
In the Voicemail menu, the user can select 1 voicemail message, and click ••• button to select to make audio/video call or send chat message to the voicemail sender. As the screenshot shows on the right side:



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.



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.

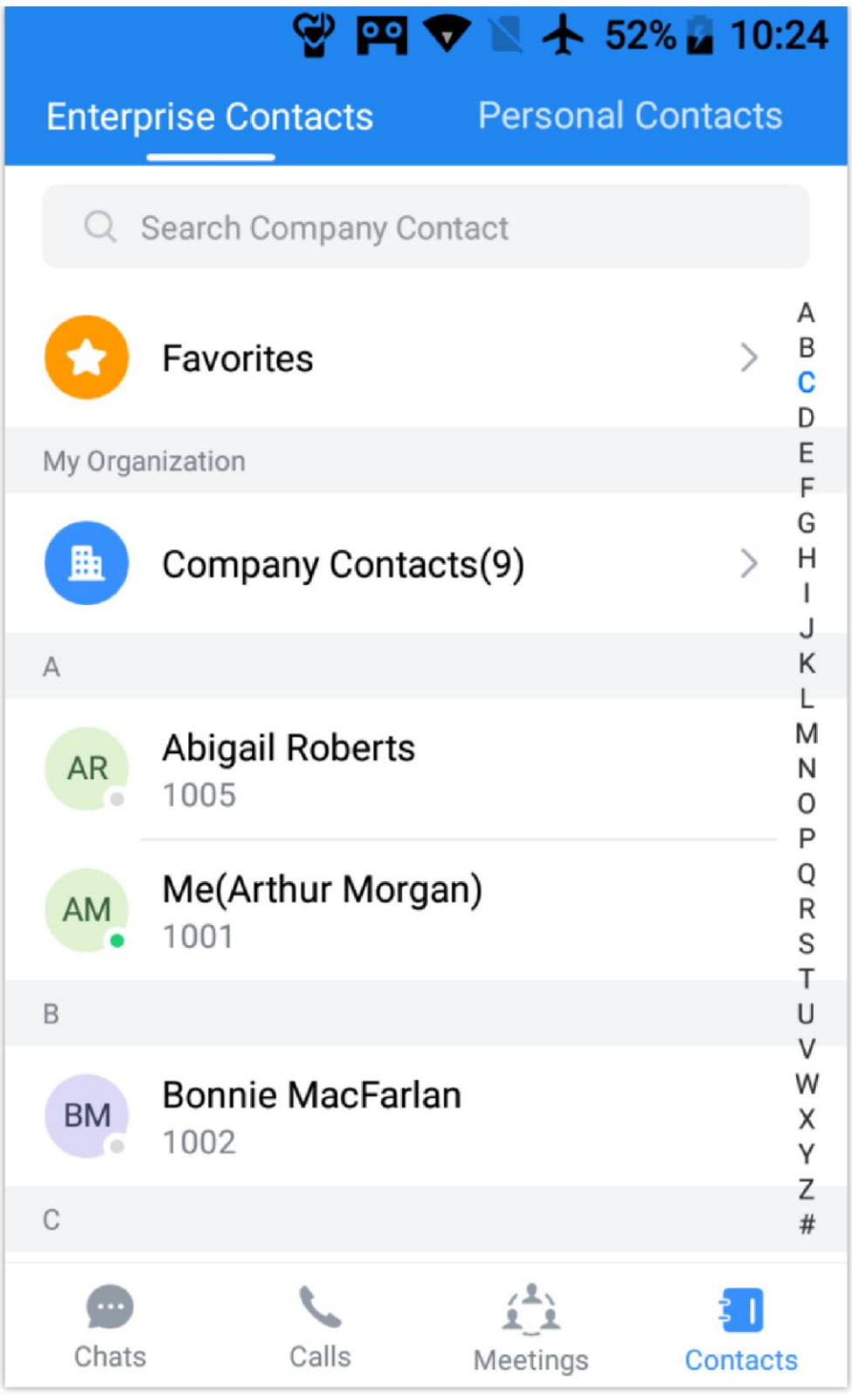
Personal Contacts: These are the contacts which the user has added to Wave.

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

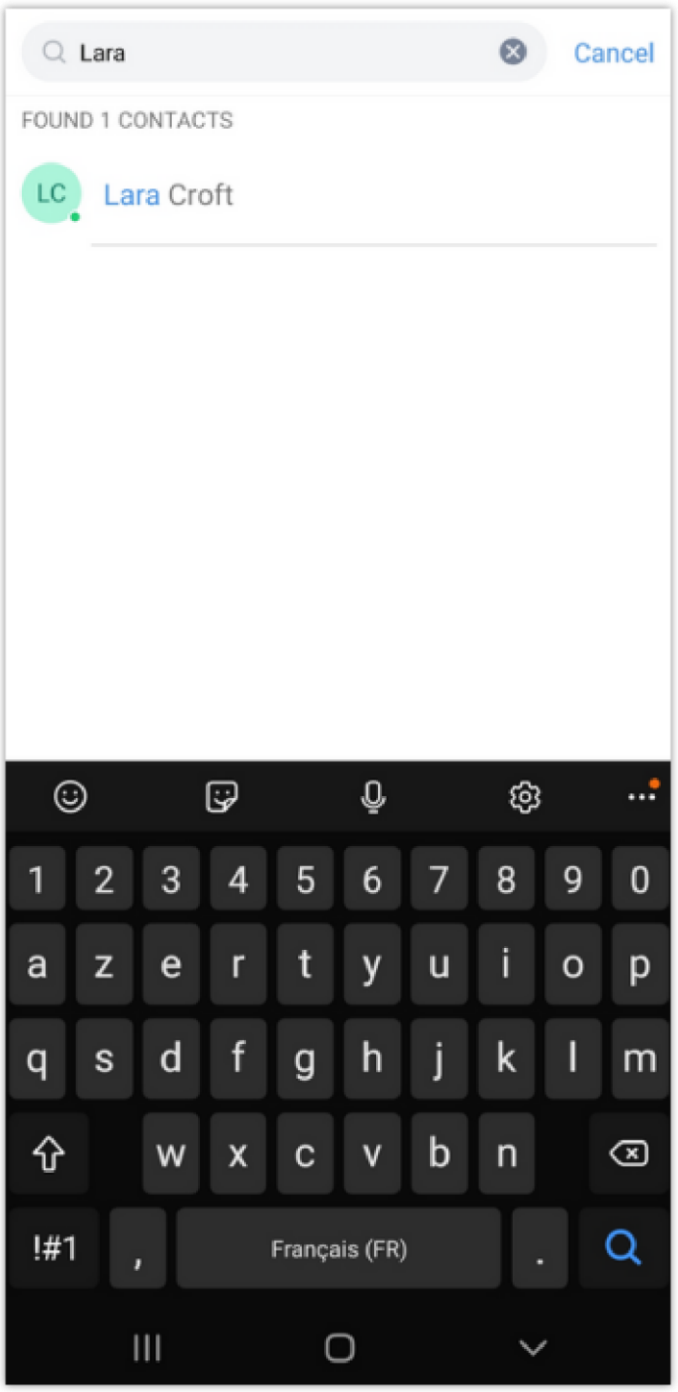
The contacts displayed in the Grandstream Wave web portal contain UCM extensions (based on contact privilege settings), meeting room extensions, and LDAP contacts (based on the UCM's LDAP phonebook settings). (Refer to the UCM630x/A User Manual for more details)



Enterprise Contact

Search Contacts

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

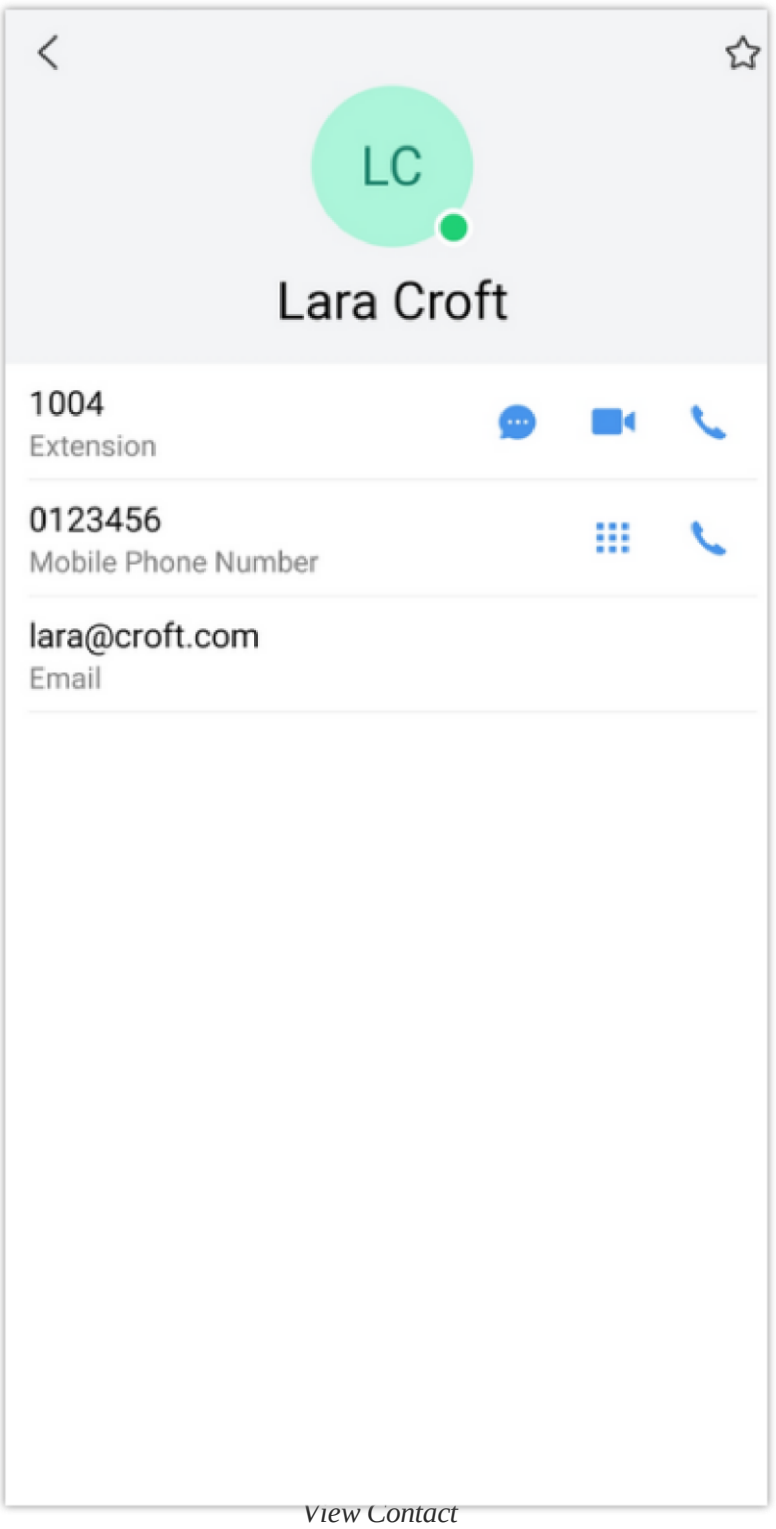
After searching contacts, users can click on the search result to view the details of the selected contact. The following options will be available in the **Contact Details** page:

: Initiate audio call

: Initiate video call

: Open dial pad to edit the contact’s number before dialing

: Chat with the contact



View Contact

Favorites

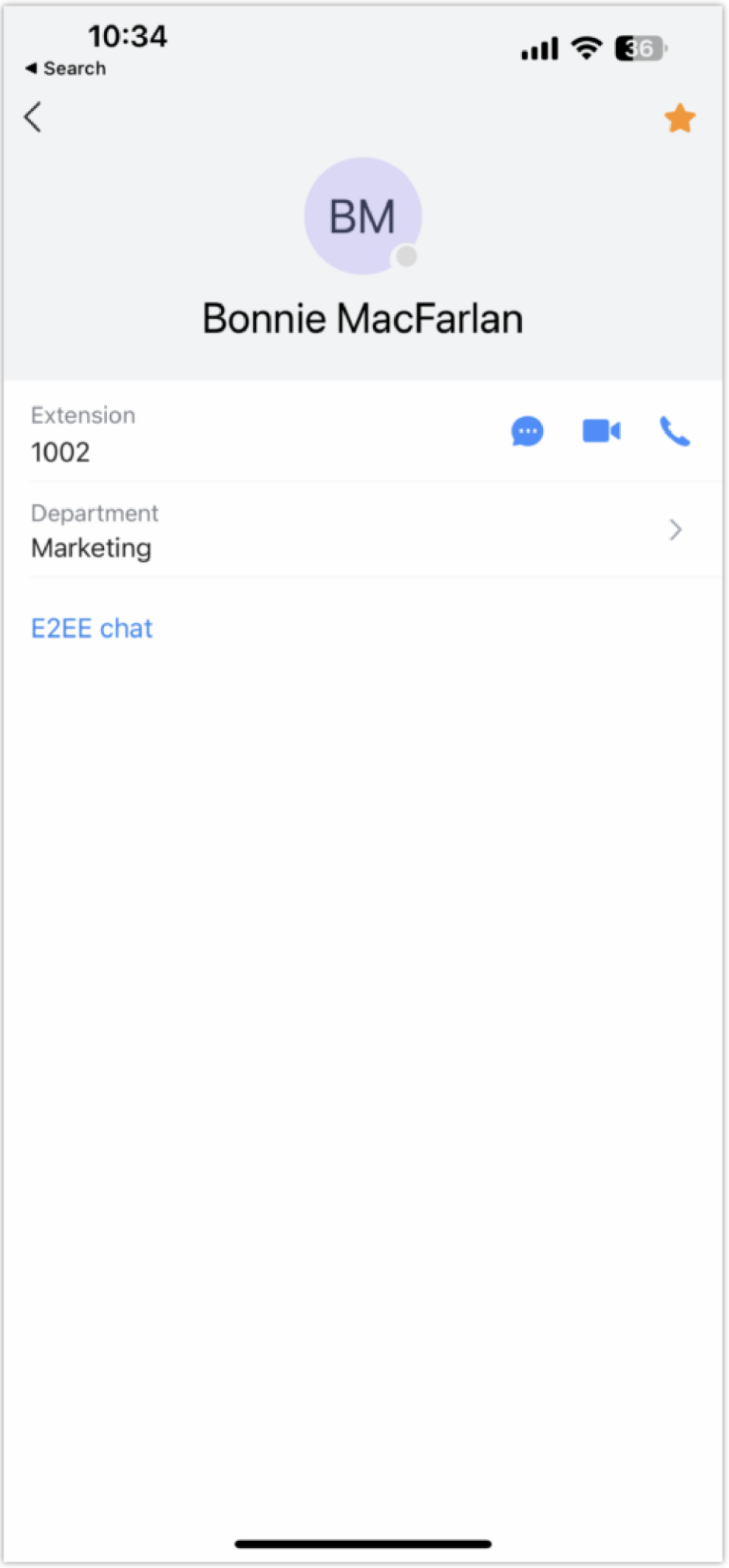
Favorite contacts are displayed at the top of the contact list. There are two ways to add a contact as a favorite:

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 ☆ 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.

Click on the button at the bottom right corner of the interface to enter the contact selection page.

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.

Figure 41: Favorites 2nd Method

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
- Missed audio/video calls and rejected calls
- Incoming video call
- Outgoing video call

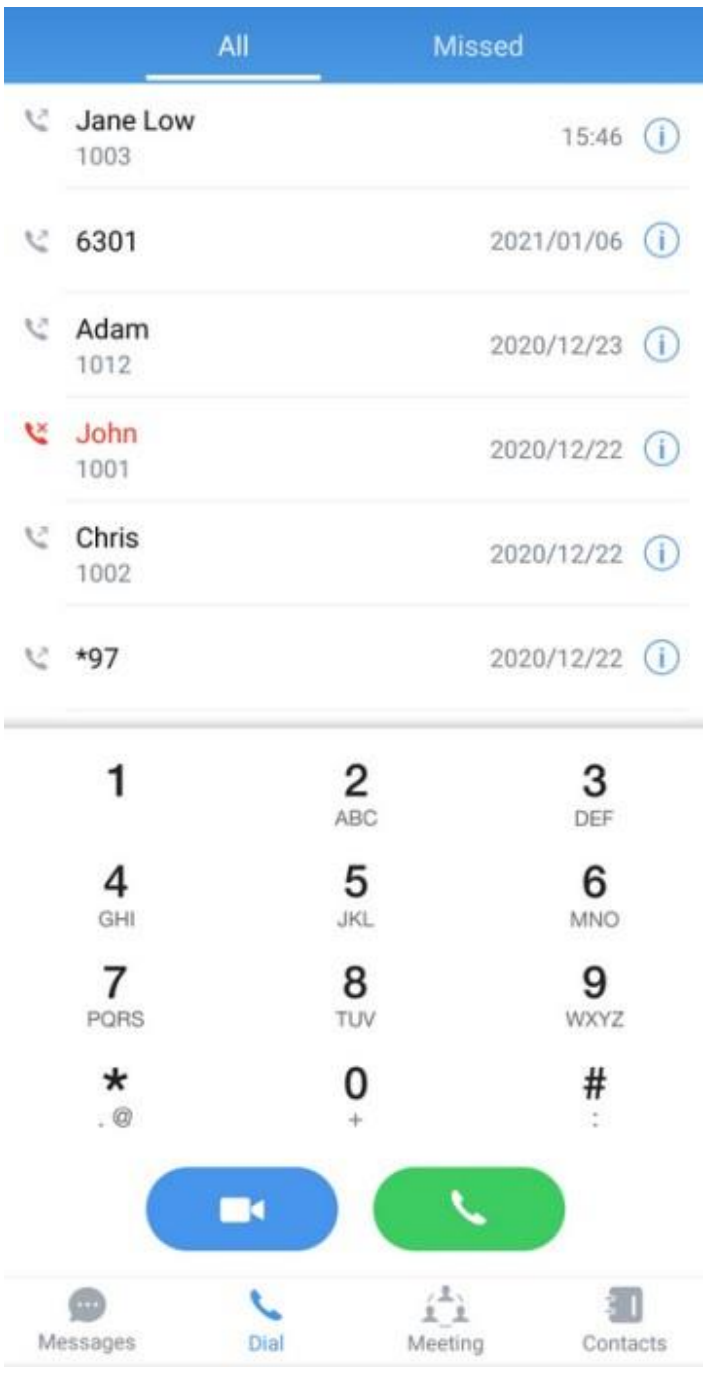


Figure 42: Call History

Figure 42: Call History

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:

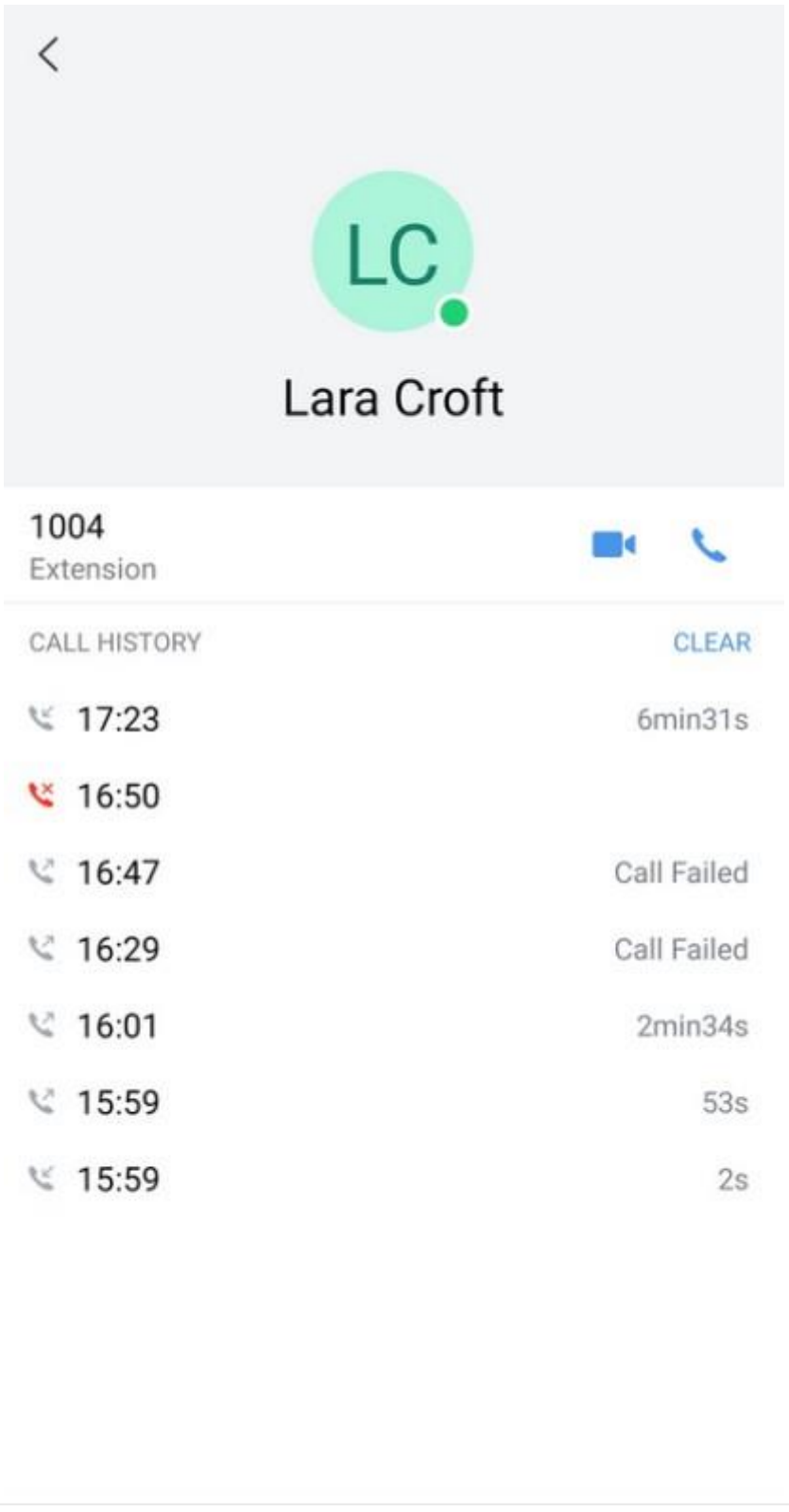
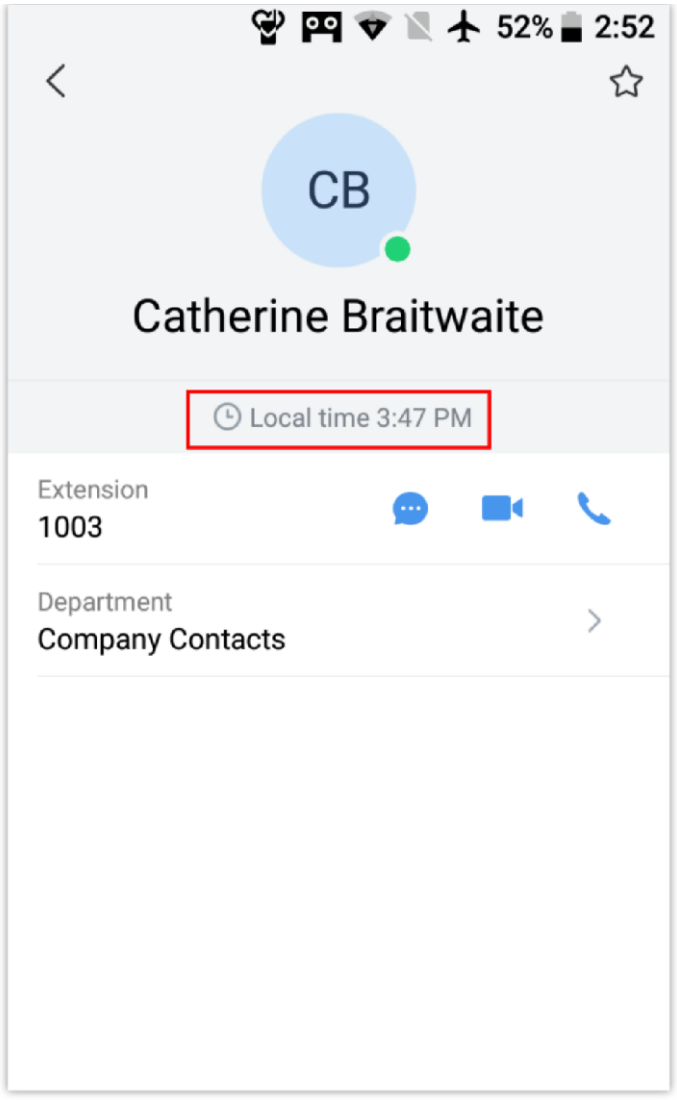


Figure 43: Call History Details

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.

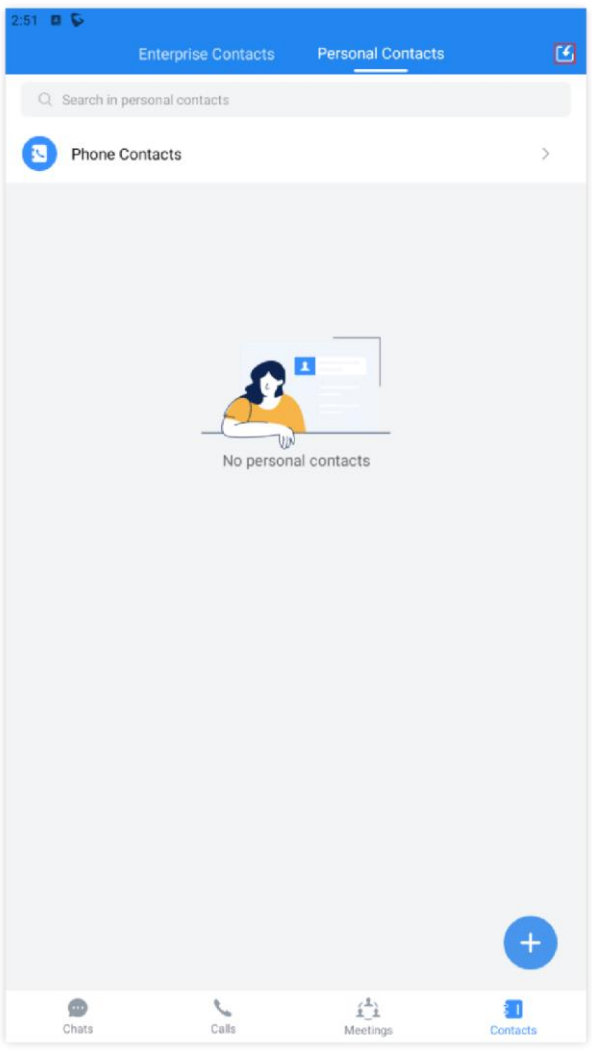


Contact Local Time

Import Contacts

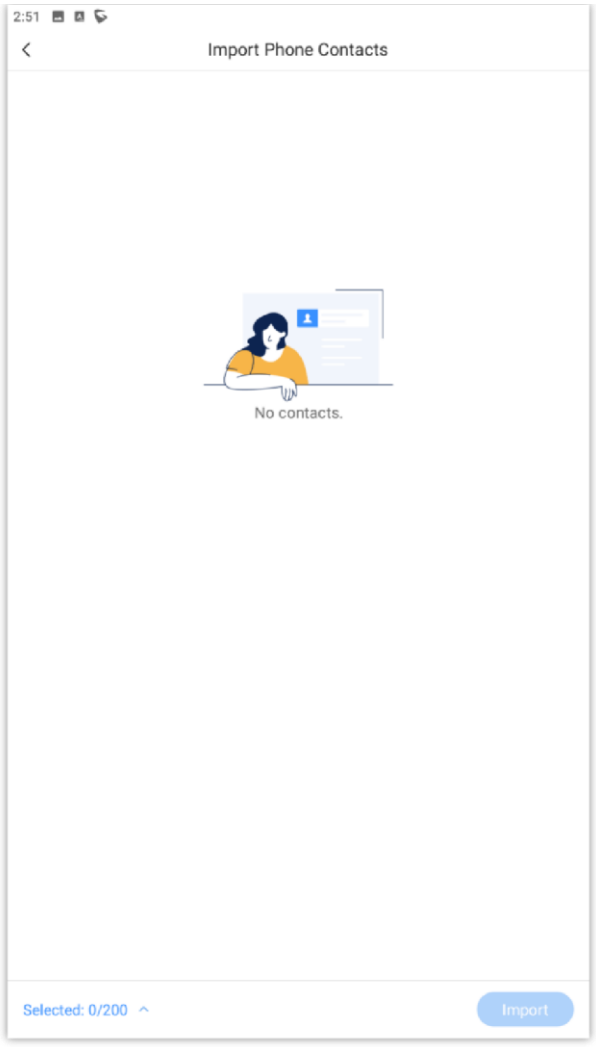
Wave allows importing the mobile phone contacts to **Personal Contacts** within Wave, this makes it easier for the user to call other parties using Wave instead of the phone's telephony service itself.

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



Import Personal Contacts

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



Select Contacts to Import

SETTINGS

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

1. **Account Information** page about the user.
2. 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.

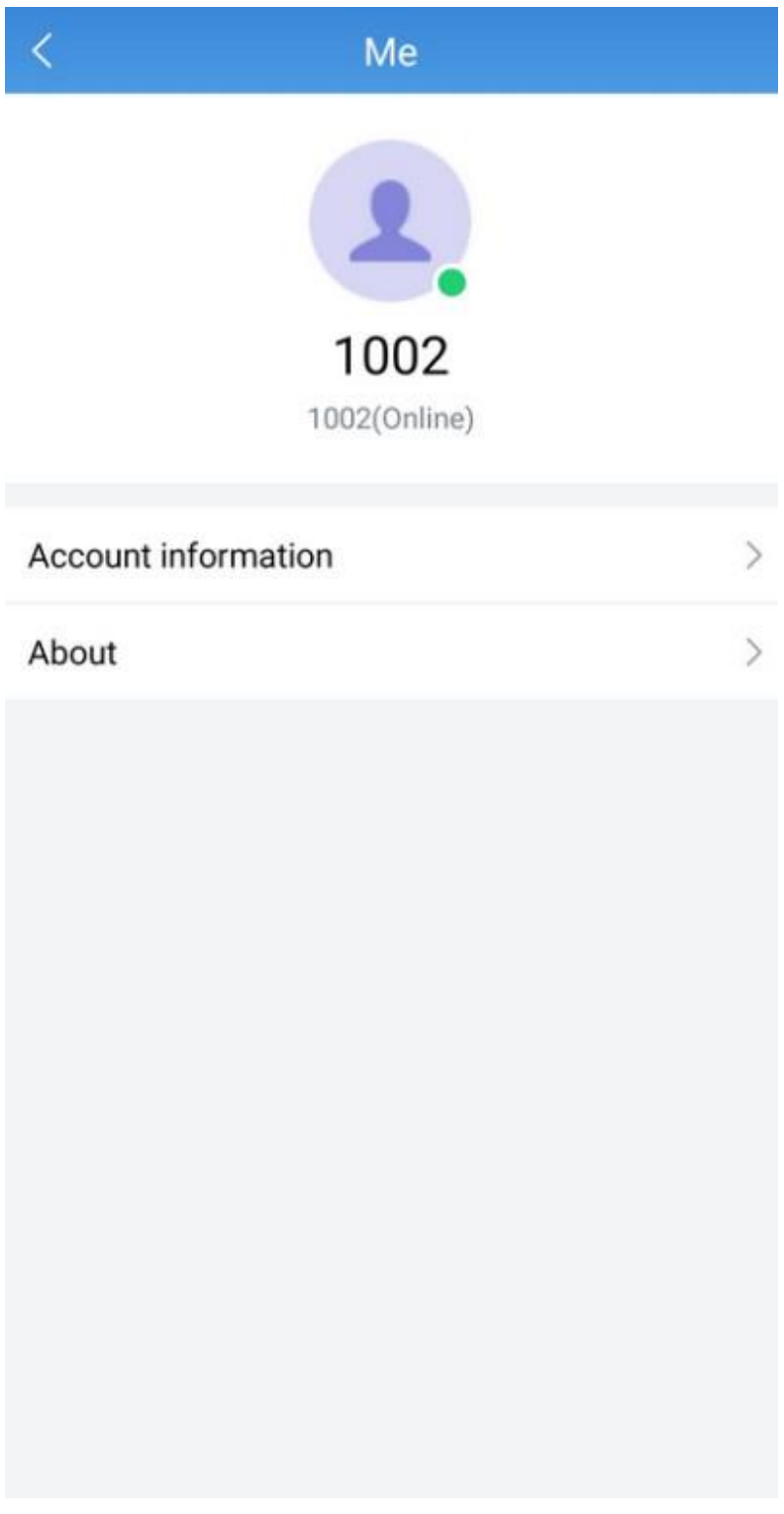


Figure 44: "Me" Interface

Account Info

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

Additionally, tapping on the **Log Out** button will log users out of the app.

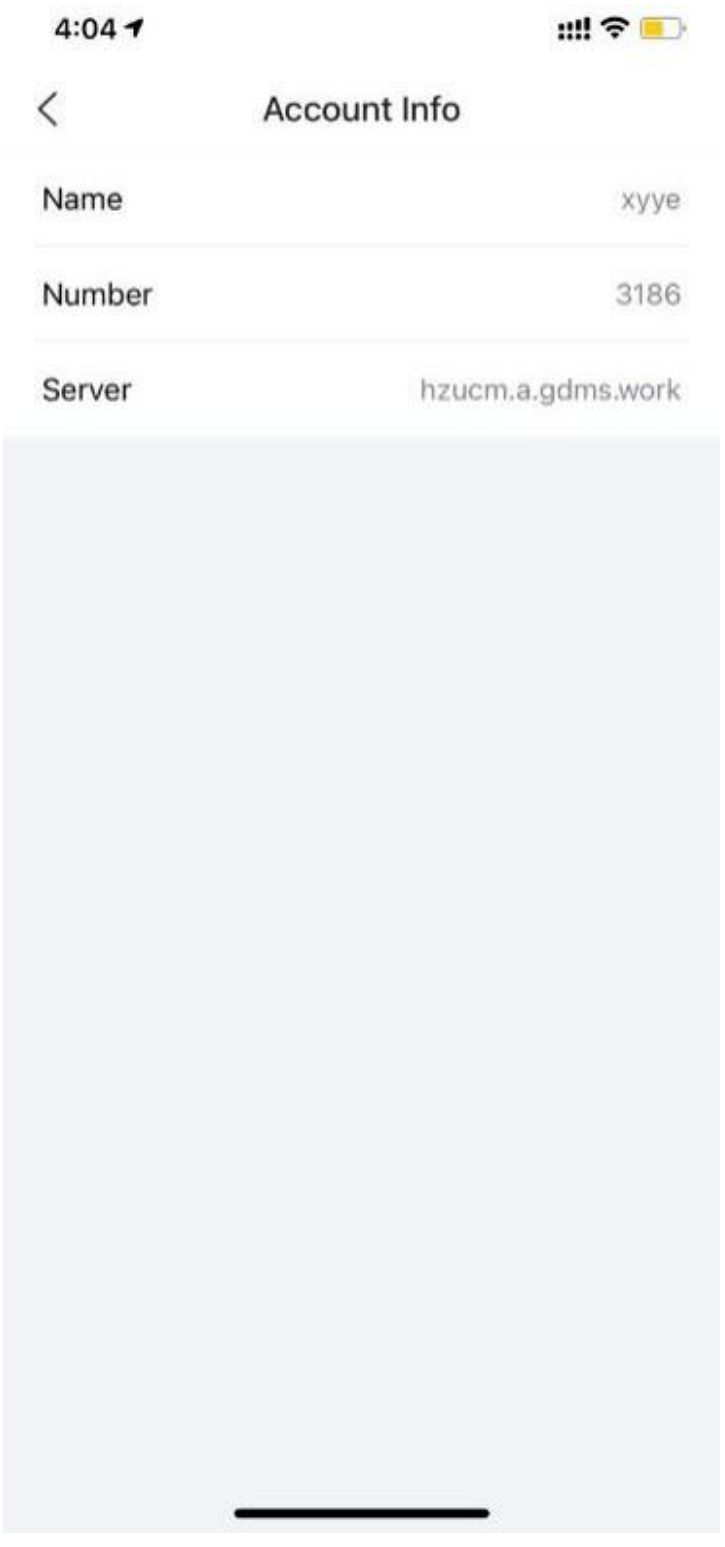


Figure 45: Account Info

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.

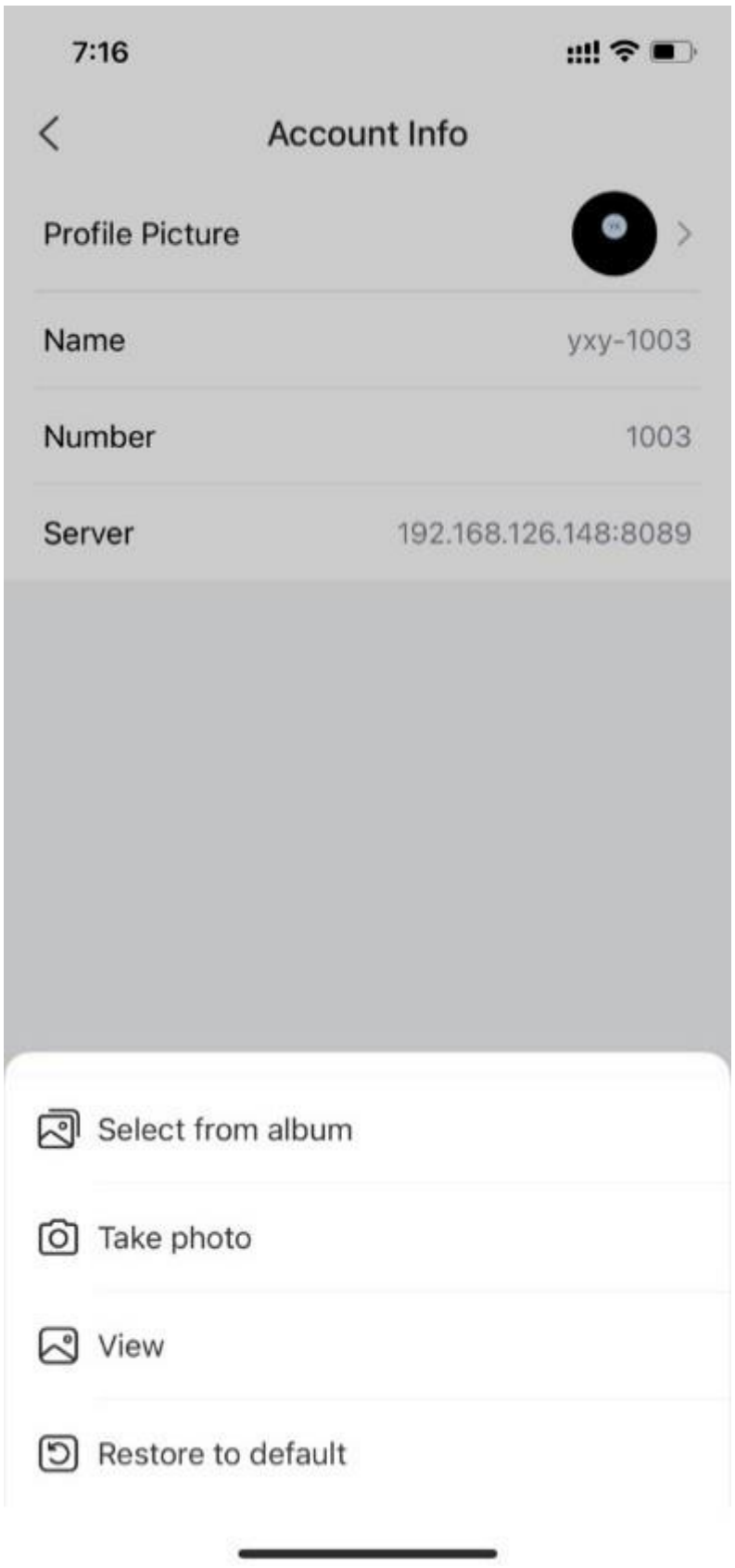


Figure 46: Custom Avatar

Note

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

Account Status

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.

Busy: The user is busy now, and the user can send/receive new calls and messages normally.

Do not disturb: The new incoming calls and messages will be prompted without any sounds, and there is no pushing notification. The new incoming calls will be ignored, and the new missed call history will be generated.

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

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

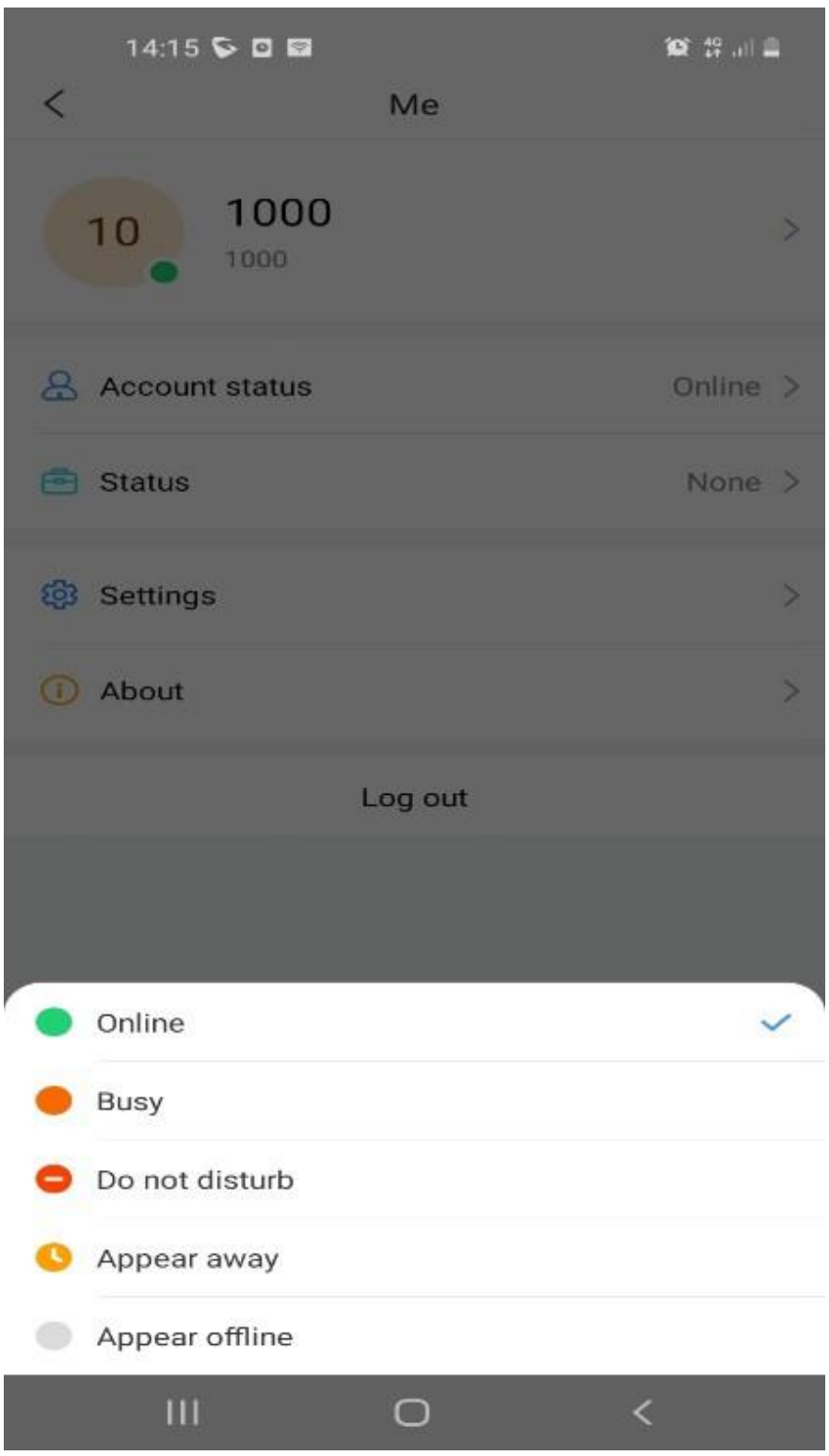


Figure 47: Account Status

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 in progress, On a business trip, Working remotely, Sick leave, On leave, None and Custom.

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

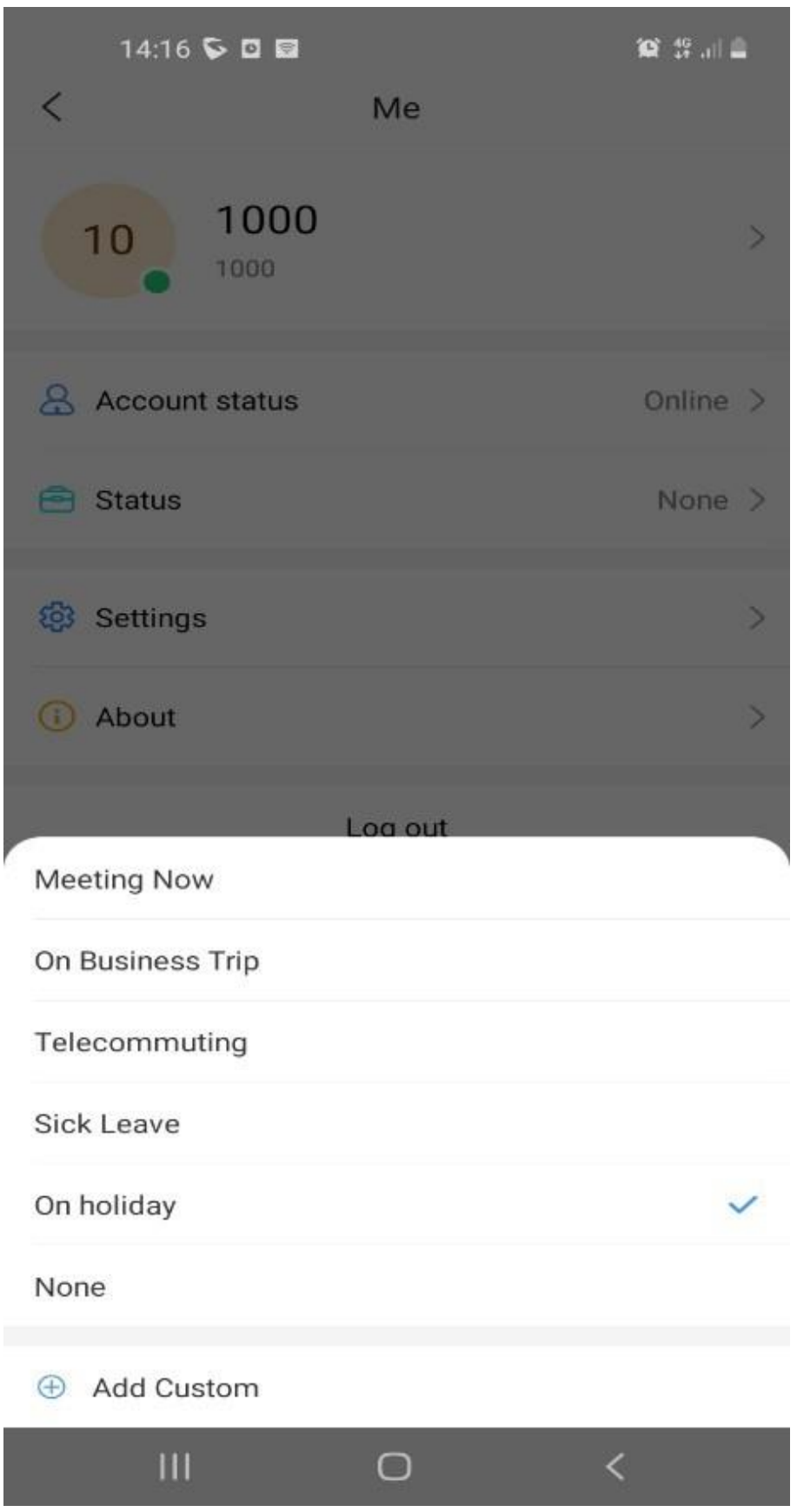
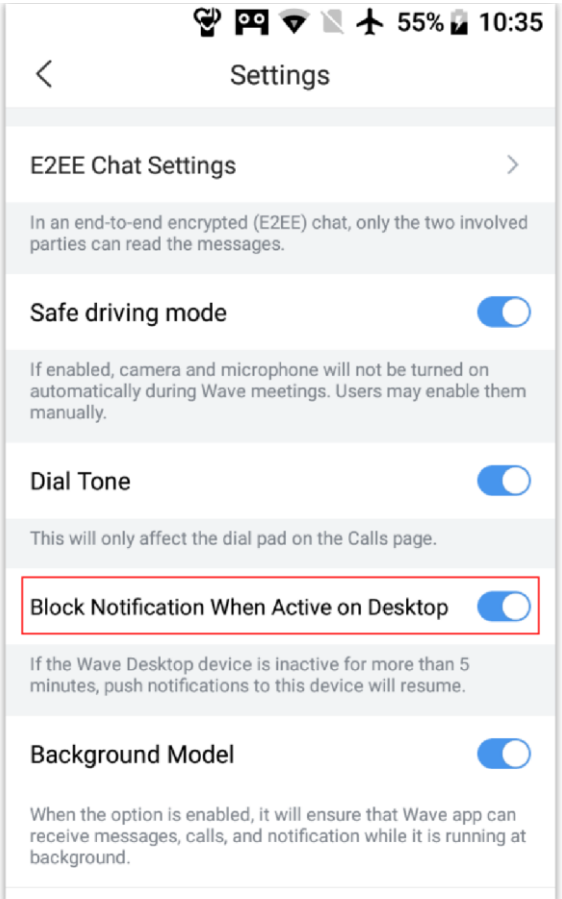


Figure 48: Working Status

Notifications

Wave allows blocking notifications on the mobile app when the same extension is active on the Wave desktop application. To enable this setting, please tap on your profile picture, then select **Settings** then enable **Block Notification When Active on Desktop.**



Wave Mobile Settings – Block Notification When Active on Desktop

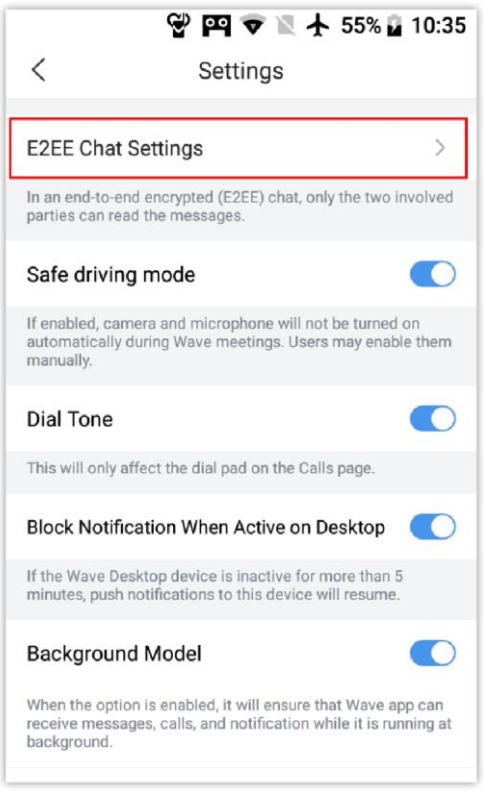
Note

If the Wave Desktop device is inactive for more than 5 minutes, push notifications to this device will resume.

End-to-End Encryption Chat Settings

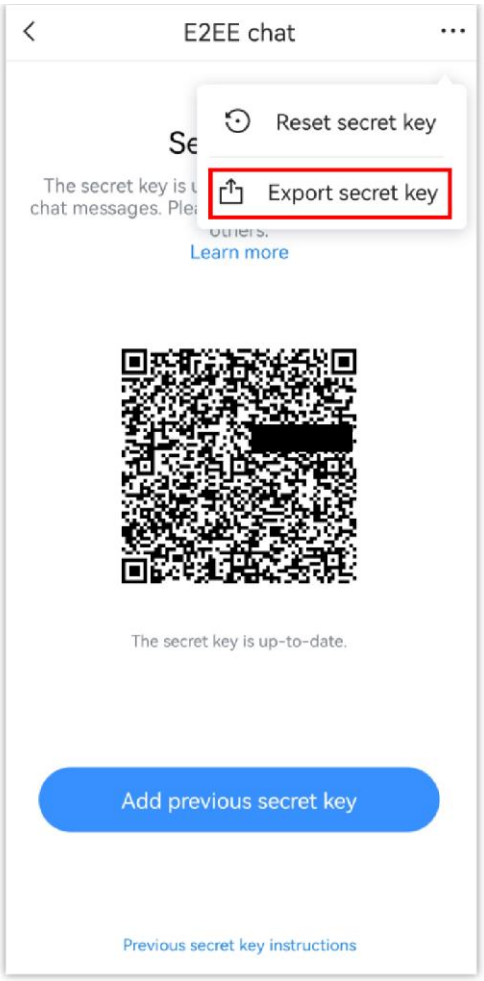
Export a secret key

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



Wave Mobile Settings – E2EE Chat Settings

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

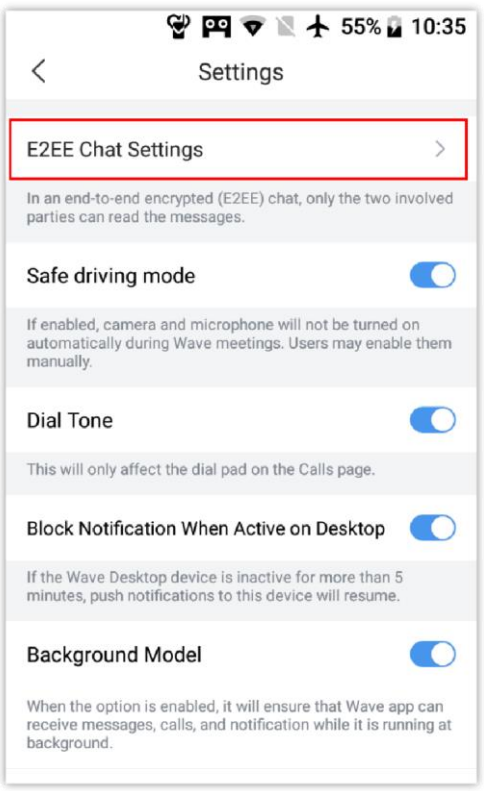


Export Secret Key

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**.

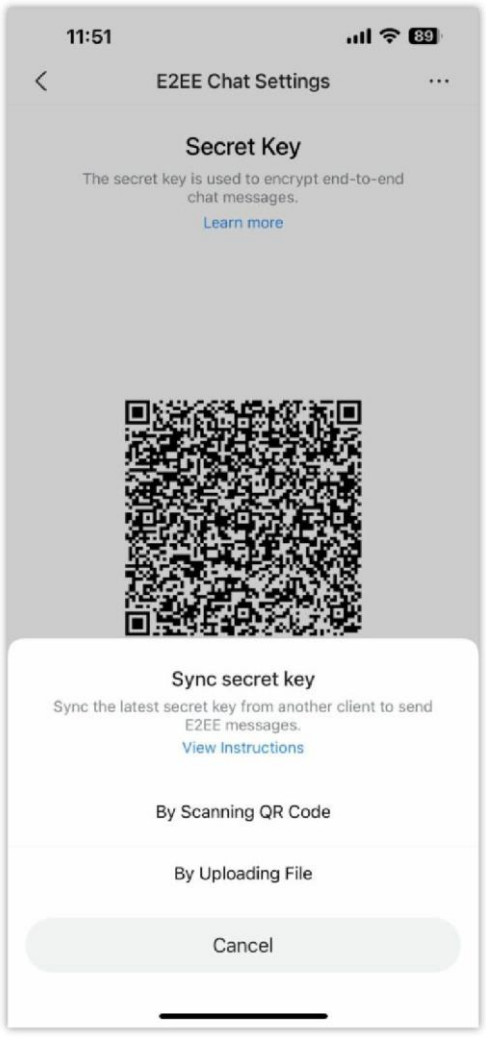


Wave Mobile Settings – E2EE Chat Settings

Then tap **Sync Secret Key** button

Sync Secret Key

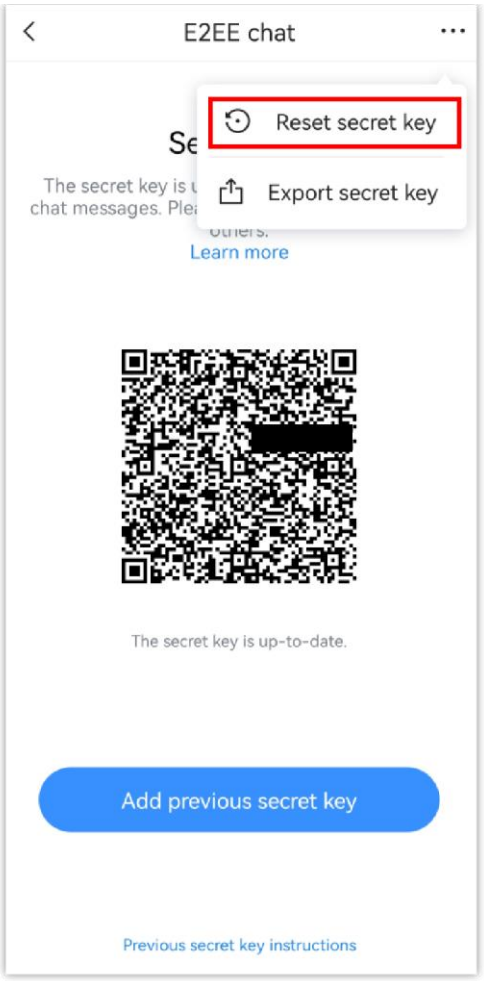
Choose to add the previous key secret either by **Scanning QR code**, or by **Uploading the file**.



Scan QR Code

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



Reset Secret Key

Smart Device

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 to each Wave account.

This function is only supported by Grandstream GDS Door System products.

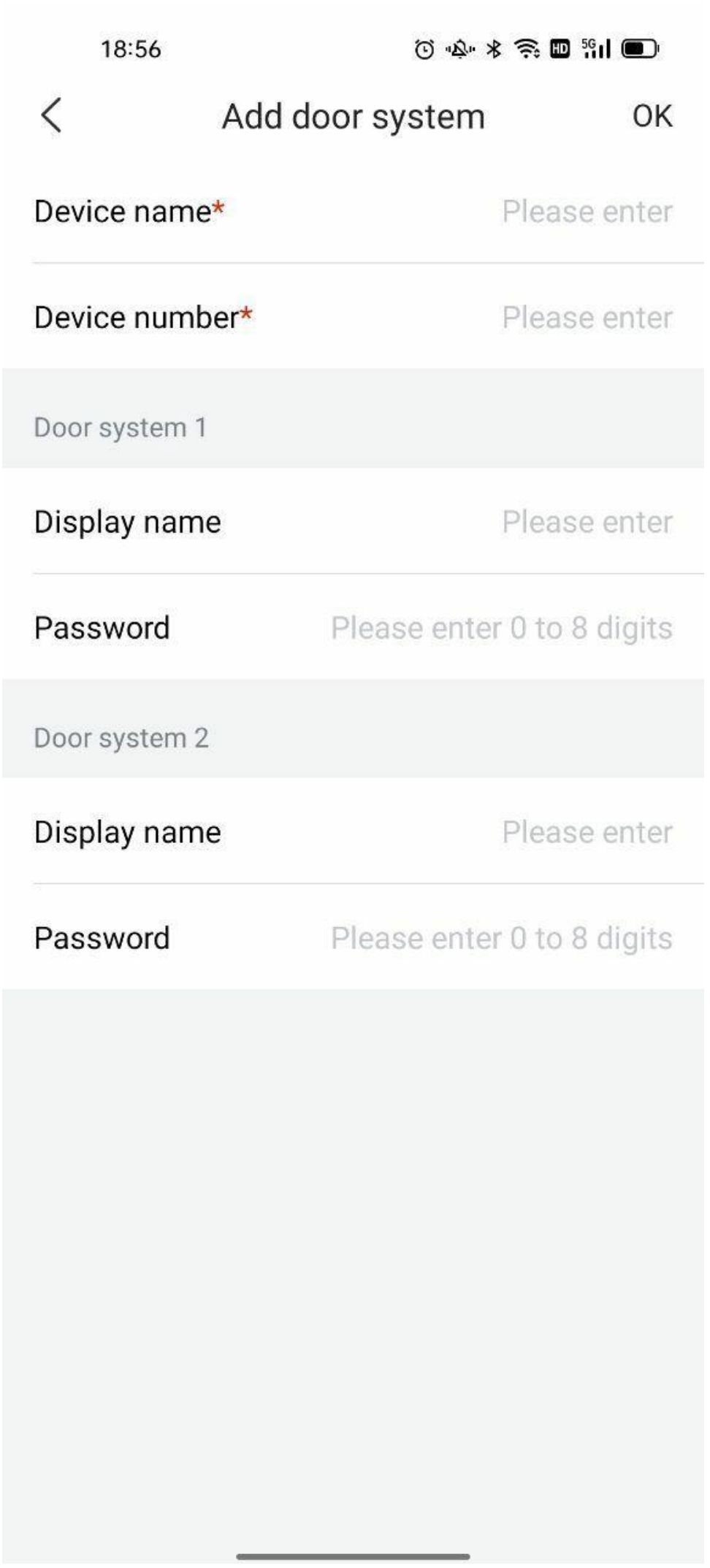


Figure 49: Add Door System

Note

The user can add up to 10 door systems in each Wave account.

When the door system has been configured, the Wave user will receive an incoming call once someone rings the door system, as the screenshot shows on the right side:

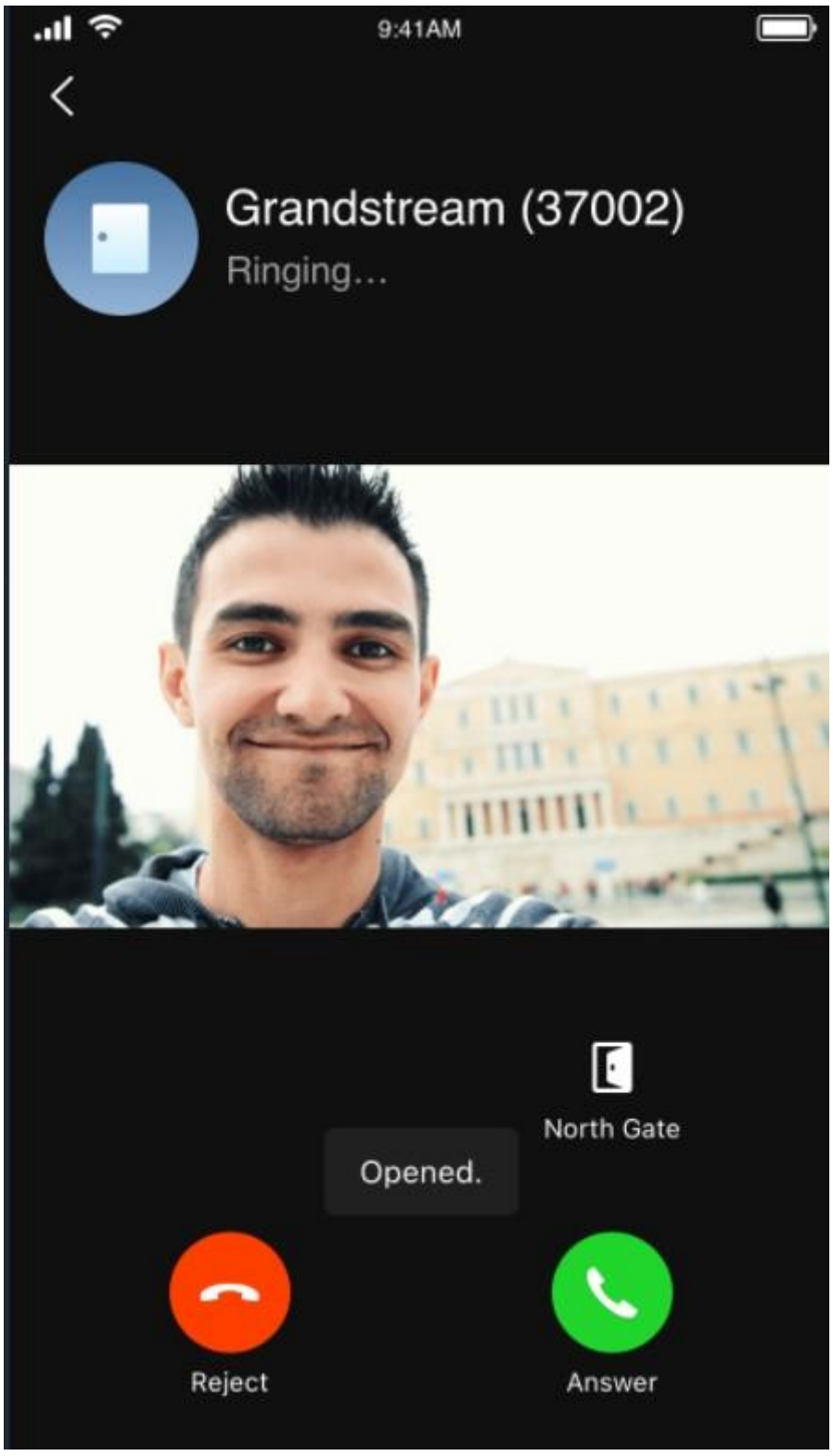


Figure 50: Incoming Call from Door System

Settings

Users can select whether to enable “Background Mode” and “Ignore power-saving optimization” function in Wave application. When the background mode is enabled, the user can still receive incoming calls, messages, and notifications when the application is running at background. If the “**Ignore power-saving optimization**” option is selected, it will keep Wave application running in the background.

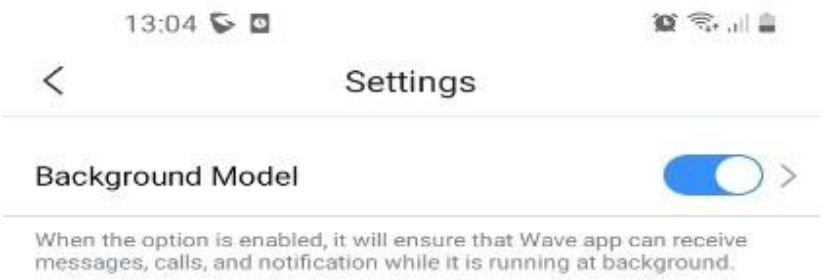


Figure 51: Settings Interface

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.

Time & Date Format

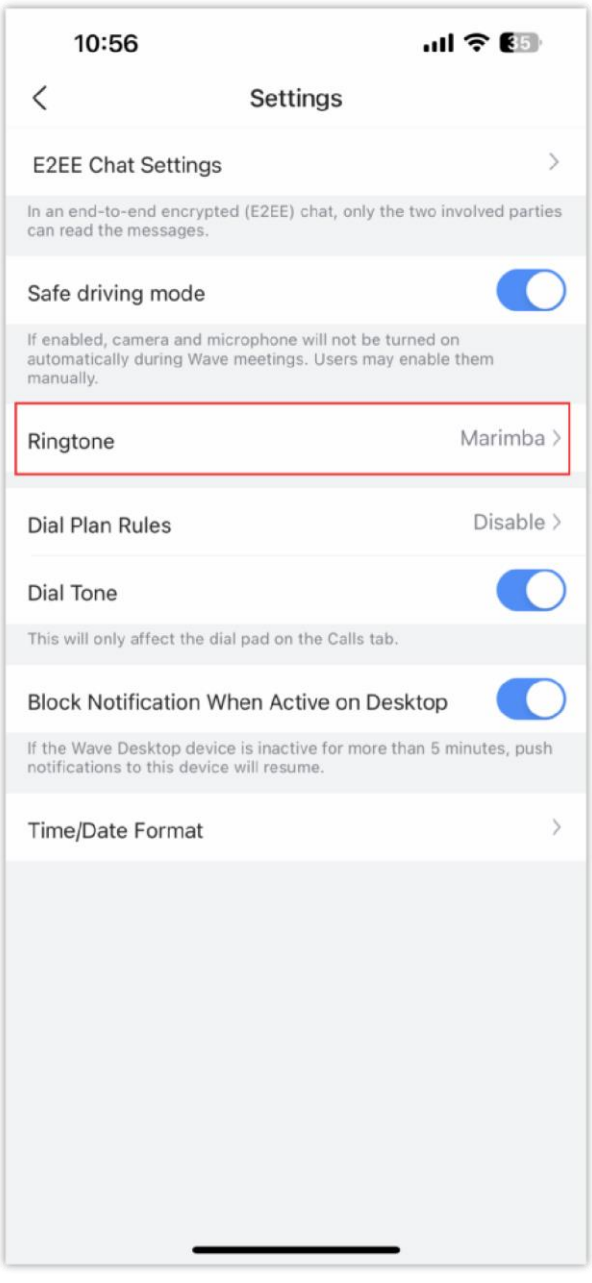
The users can select the Time/Date format as shown in the screenshot below:

Time & Date Format

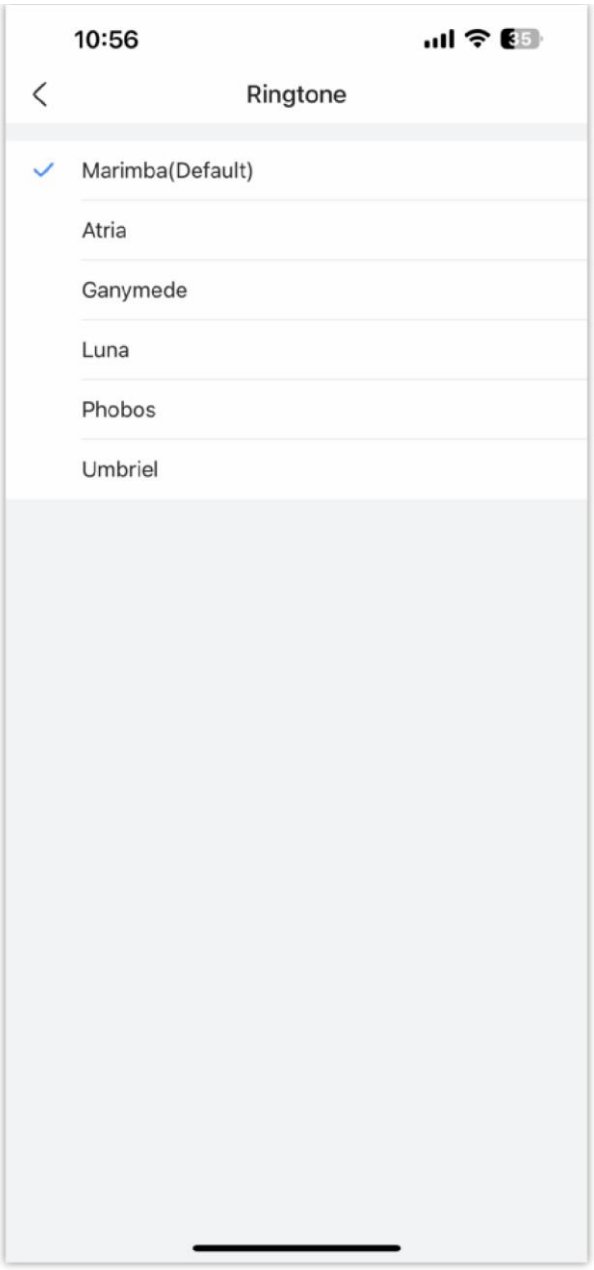
Ringtone

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.

> **Important**
>
> Please note that custom ringtone is currently supported on Wave for iOS only.



Ringtone

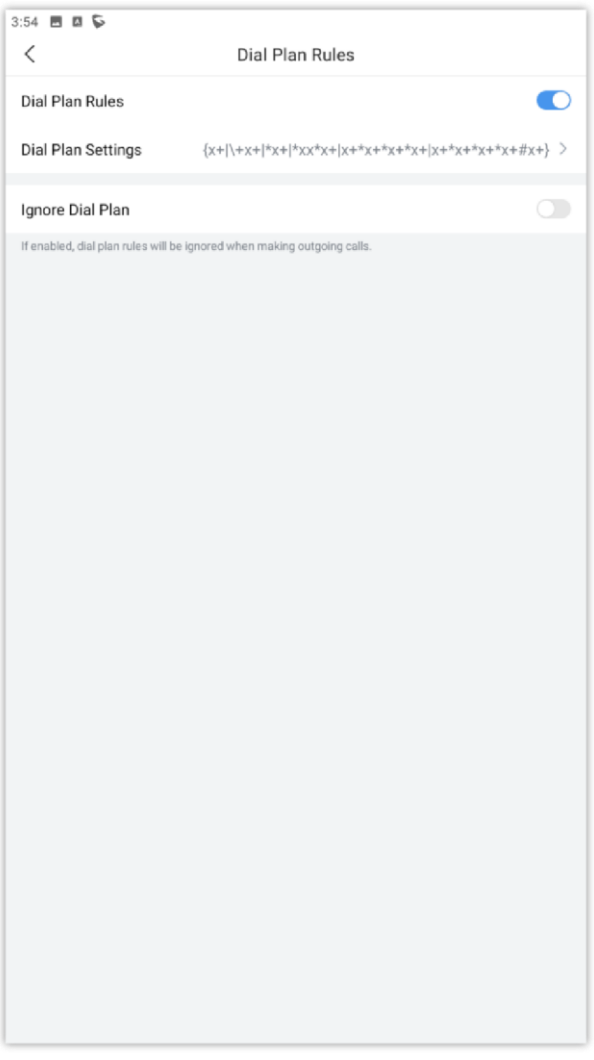


List of Ringtones

When “Always ring via Speaker” is enabled, the phone’s speaker and earphone will ring at the same time when receiving a call.

Dial Plan

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



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:

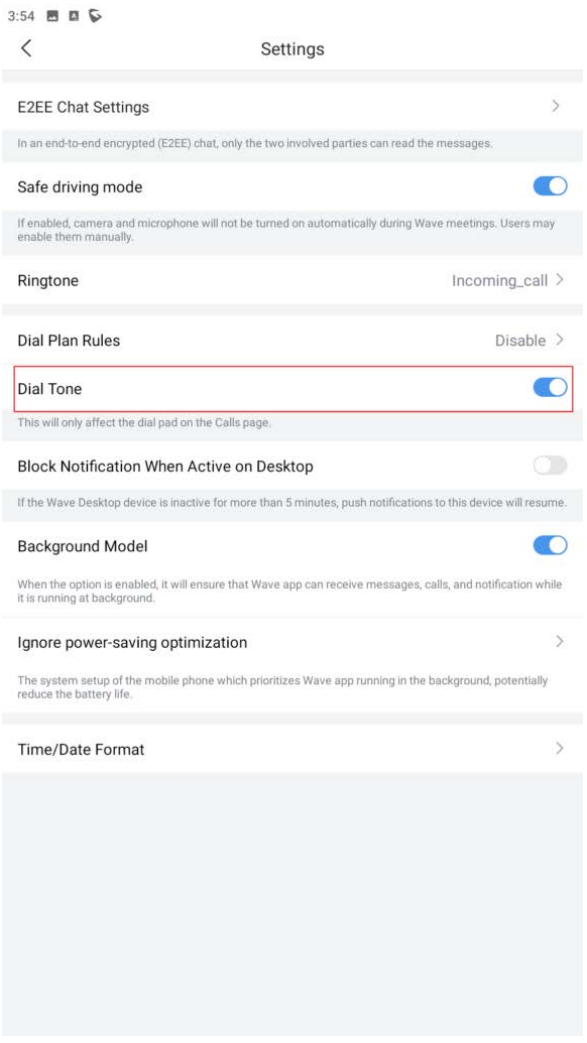
- **xx** – Any 2-digit number
- **xx+** – At least 2-digit number
- **xx.** – At least 1-digit number
- **xx?** – 1-digit or 2-digit number
- ^ – Reject
- **T** – Delay call after matching
- | – Or
- **+** – Add + to the number
- **[3-5]** – Dial the number 3, 4, or 5
- **[147]** – Dial the number 1, 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 7-digit 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.


3:54
Settings
E2EE Chat Settings
In an end-to-end encrypted (E2EE) chat, only the two involved parties can read the messages.
Safe driving mode
If enabled, camera and microphone will not be turned on automatically during Wave meetings. Users may enable them manually.
Ringtone
Incoming_call
Dial Plan Rules
Disable
Dial Tone
This will only affect the dial pad on the Calls page.
Block Notification When Active on Desktop
If the Wave Desktop device is inactive for more than 5 minutes, push notifications to this device will resume.
Background Model
When the option is enabled, it will ensure that Wave app can receive messages, calls, and notification while it is running at background.
Ignore power-saving optimization
The system setup of the mobile phone which prioritizes Wave app running in the background, potentially reduce the battery life.
Time/Date Format

Help and Feedback

1. Users can go to the settings menu and click "**Help and Feedback**" to display the help, feedback, and exporting logs menu.

- If the user has any questions while using Wave application, the user can click "**Help**" option to go to the official website of Grandstream and view the user guide of Wave application.
- 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.
- The user can set whether to collect the logs of the Wave application. The default setting is enabled.
- The user can click "**Export Logs**" button to export the logs to the local storage device.

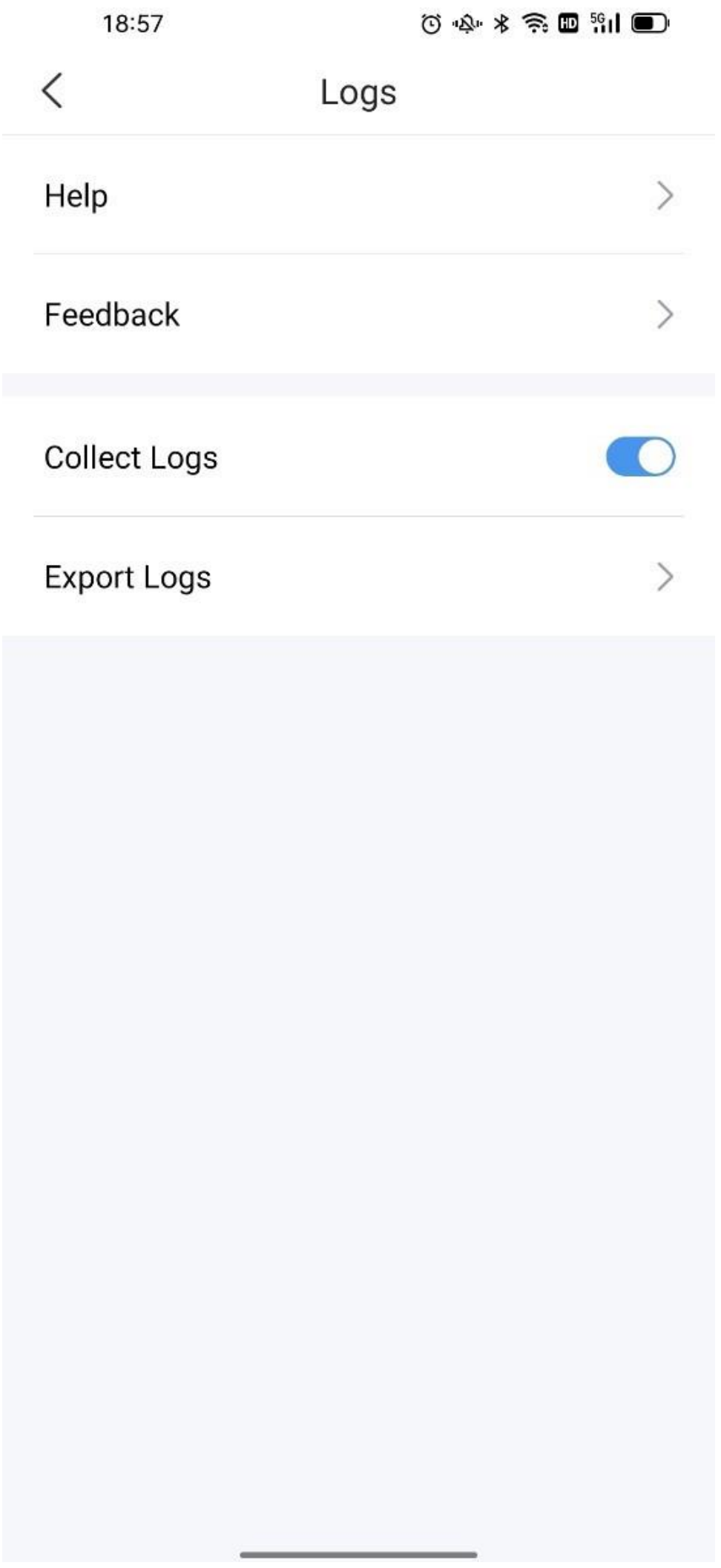


Figure 52: Help and Feedback

About

The following options will be available in the **About** page

- “Check for update” check to see if there is a new version of the Wave app available.
- “Privacy agreement” view privacy related terms.
- “Help” view the Wave app user manual.
- “Export logs export logs to the device’s internal storage for troubleshooting purposes. Logging is automatically running so users can quickly export the logs as soon as issues occur.

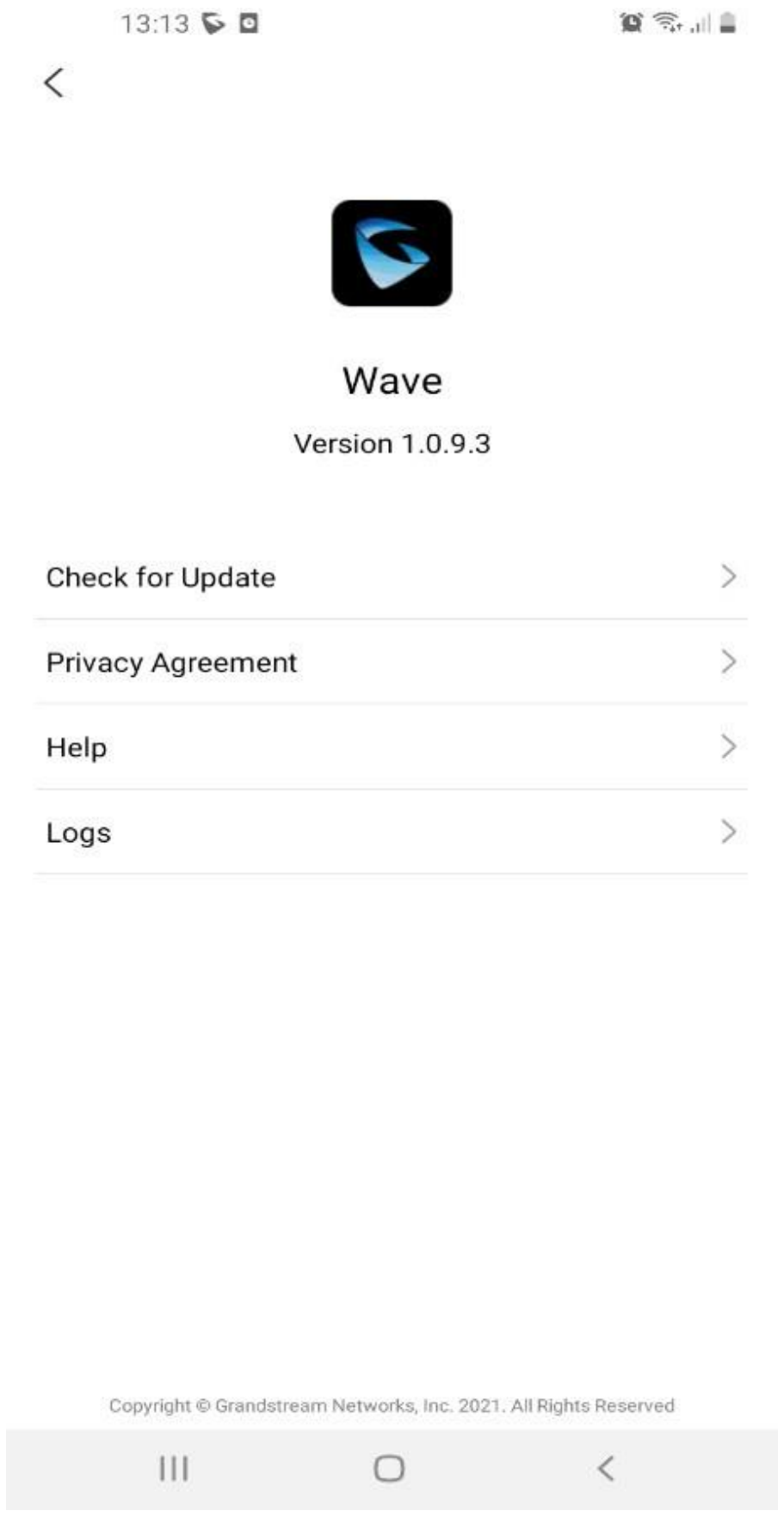


Figure 53: “About” Interface

RESET ACCOUNT PASSWORD

Users can reset their Account password in case it is forgotten by clicking on **Forgot Password?** On the **Sign in** page like shown in the figure below:

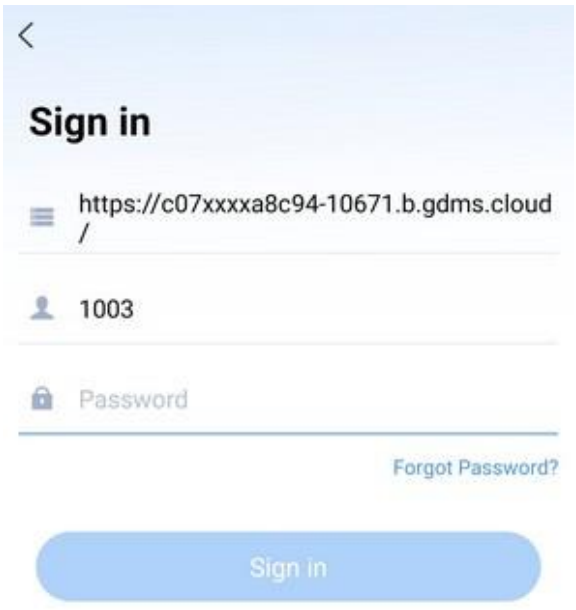


Figure 54: Forgot Password Option

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.

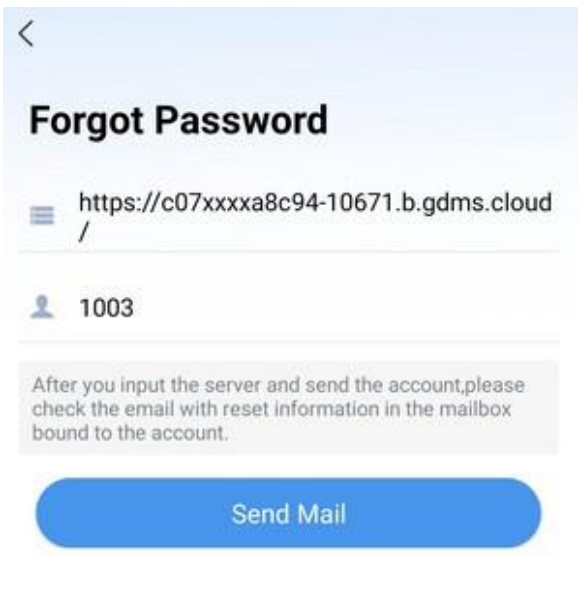


Figure 55: Send Mail to reset Password

After clicking on "**Send Mail**" button, a verification code will be provided.

Note: An email address should be previously configured under the extension on the UCM630x

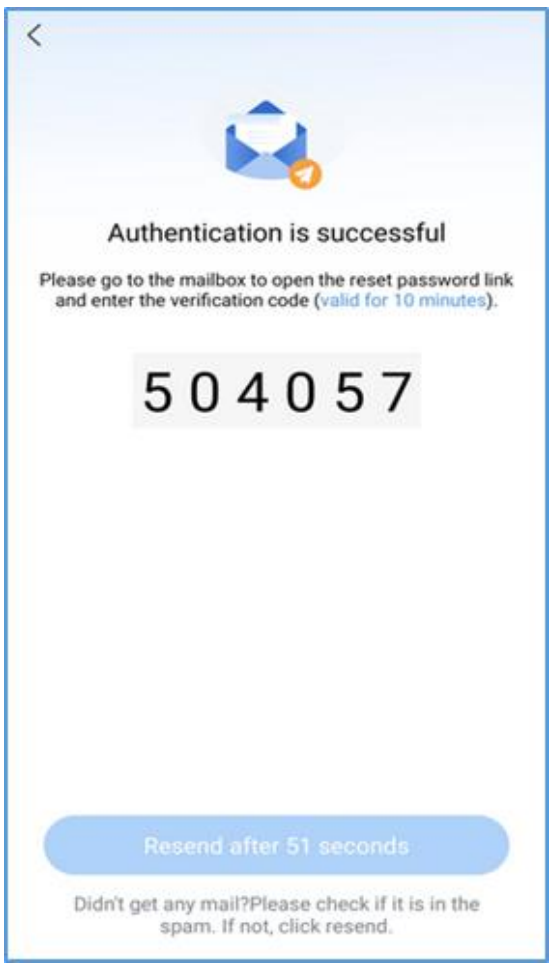


Figure 56: Verification Code

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.

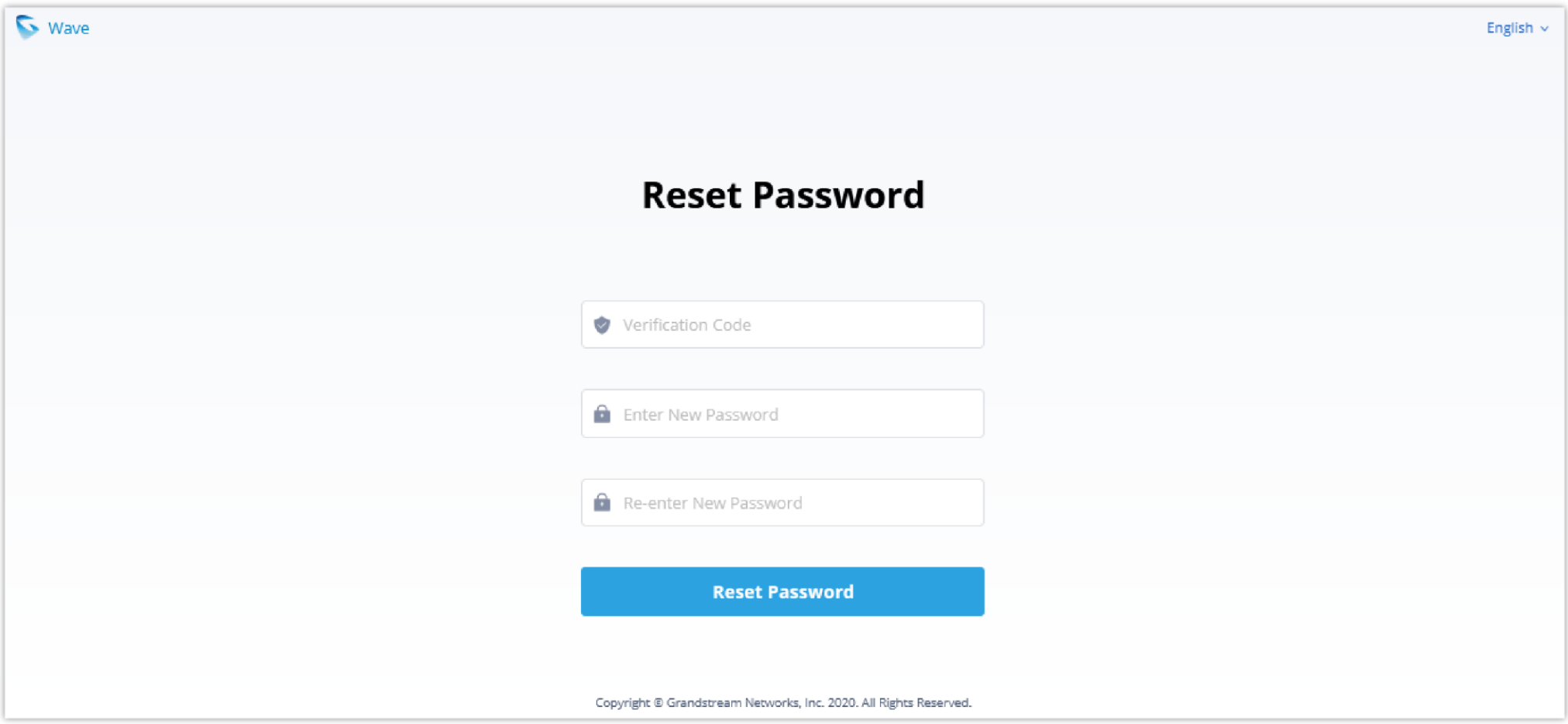


Figure 57: Reset Password Page

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.)

CHANGELOG

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 1.0.21.8 (Android™) / 1.21.8 (iOS™)

- 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™) / 1.19.10 (iOS™)

- 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™) / 1.17.8 (iOS™)

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

Version 1.0.15.9 (Android™) / 1.15.8 (iOS™)

- 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.

Version 1.0.13.8 (Android™) / 1.13.9 (iOS™)

- Made several UI adjustments.
- Added ability to change date and time format. [Time/Date Format]
- Added Portuguese and Vietnamese language support. [Table 1: Wave Technical Specifications]
- Added support to start audio recording during the Wave meetings. [Figure: Record an Ongoing Meeting]
- Added support to display absent meeting invitees for the host. [Figure: 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. [Figure 21: Files list]
- The Wave app can now be selected as default phone app. [Figure 4: Default phone app]
- Added support for iPad landscape mode.

Version 1.0.11.x (Android™) / 1.11.X (iOS™)

- 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™) / 1.9.14 (iOS™)

- 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™) 1.7.8 (iOS™)

- 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™) / 1.5.1 (iOS™)

- 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™) / 1.1.9 (iOS™)

- 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. [Figure 30: Edit Name]
- Added the ability to reset account password. [RESET ACCOUNT PASSWORD]
- Added landscape layout support.

Version 1.0.0.17 (Android™) / 1.0.15 (iOS™)

- This is the initial version