

Wave Desktop Application Release Notes

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WAVE DESKTOP VERSION 1.19.12

PRODUCT NAME

Wave Desktop Application

DATE

02/20/2023

IMPORTANT NOTE

• Wave Desktop application is available for Windows and macOS. Users can download the latest Wave desktop application from the link: <u>https://fw.gdms.cloud/wave/download/</u>

CHANGES SINCE VERSION 1.17.8

ENHANCEMENTS

- [Add-in] Added WhatsApp add-in, Office 365 add-in, and IPVideoTalk add-in to the Wave App Store. Please refer to the Wave Desktop CRM Add-ins User Guide in the Grandstream Documentation Center.
- [Add-in] Added Wave add-in on Outlook [WAVE ADD-IN FOR OUTLOOK]
- [Add-in] Added Wave H5 Google Chrome add-in [WAVE H5 GOOGLE CHROME ADD-IN]
- [Call/Meeting] Added a toolbar and a small personal window that appears during screen share [SCREEN SHARE TOOLBAR AND PERSONAL WINDOW]
- [Call/Meeting] Calls and meetings will now use their own window [CALL/MEEETING WINDOW]
- [Call/Meeting] Users can now change what they are sharing without exiting the current screen share [CHANGE SCREEN SHARE CONTENT]
- [Call/Meeting] Added a call/meeting ending indicator tone
- [Call/Meeting] Added support for GSFEC, which improves audio packet loss protection capabilities.
- [Chat] Users can now forward multiple chat messages to a contact [FORWARD MULTIPLE MESSAGES]
- [Chat] The local time of Wave contacts outside the user's time zone will now be displayed at the bottom of chats and under contact details
- [Chat] Images can now be forwarded to other chats and rotated. Note: Forwarded images will not retain rotation
- [Chat] Added end-to-end encrypted chat feature [END-TO-END ENCRYPTED CHAT]
- [Contacts] Added the Personal Contacts feature [PERSONAL CONTACTS]
- [Meetings] Users can now schedule onsite meetings [ONSITE MEETINGS]
- [Meetings] Meeting hosts can now edit and cancel upcoming meetings from the *Meeting List* page. Ongoing meetings can also be ended from this page.



BUG FIXES

- [User Interface] Several UI improvements and fixes
- [Application] Fixed a memory leak issue caused by virtual backgrounds in long video calls
- [Calls/Meetings] Fixed an issue with the toolbar working abnormally
- [Calls/Meetings] Fixed an issue with retrieving a remote meeting participant's details
- [Calls/Meetings] Fixed an issue with the Alternative Ringing Speaker device continuing to ring even after an incoming call is declined.
- [Application] Fixed an issue with high usage of CPU under some specific scenarios.

KNOWN ISSUES

• Wave Desktop cannot be opened after overwriting an existing installation with a .msi installation file.

NEW FEATURES OVERVIEW

This section describes the major new features/changes introduced in the update and provides instructions for usage.

WAVE ADD-IN FOR OUTLOOK

Wave Desktop 1.19.11 introduces and supports the Outlook add-in, allowing users to quickly start and schedule calls/meetings directly from Outlook.

To set up the Outlook plugin:

1. Download and install the **Wave Plug-in for Outlook** add-in from the Wave App Store. After clicking the *Install* button, the user will be redirected to download the add-in through their browser, which can then be installed into an existing Outlook application.



Figure 1: Installing the Wave Outlook Plugin

2. After installing the add-in to Outlook, the user can see the Wave **Meeting** and **Call** buttons on the Outlook Ribbon.





Figure 2: Wave Add-in on Outlook

To set up Wave meetings from Outlook, user can click the **Meeting** button and select either *Instant Meeting* or *Schedule*. The user will then be redirected to the Wave Desktop interface to create/schedule the meeting. meeting creation interface of Wave Desktop application. Selected Outlooks email contacts will be automatically added as meeting invitees.



Figure 3: Start/Schedule Wave Meeting from Outlook

Users can also call Outlook contacts by clicking the **Call** button to dial the contact's number via Wave. If the Outlook contact does not have a number, Wave Desktop will use the contact's email address to look for a Wave contact with that same email address and dial that Wave contact's number.

WAVE H5 GOOGLE CHROME ADD-IN

The Wave H5 Google Chrome add-in is now available in the Chrome Web Store and is a simpler alternative to Wave Desktop.



- 1. Install the Wave H5 add-in from the Chrome Web Store
- 2. Log into your Wave account

Note: Users cannot log into the Wave H5 add-in, Wave Web, and Desktop client at the same time. If the user logs into Wave H5 add-in, the same Wave account will be logged out from Wave Desktop and Wave Web.

S Wave
Welcome to Wave
E Server
& Account
🔁 User Password 🦙
Log In Automatically
LOG IN
Forgot Password?

Figure 4: Wave H5 Login

1. After login, the Wave interface will be displayed as such:





Figure 5: Wave H5 Dial Pad

Dial Pad: From here, users can enter numbers or names to search for contacts.

Recent Calls & Voicemails: Users can access recent calls and voicemail by clicking on the **Phone** icon. The call flip feature is supported. Users can dial the call flip feature code or click on the *Call Flip* button to quickly take over an existing call from another endpoint.





Figure 6: Wave H5 Recent Calls and Voicmail



The incoming call notification will be displayed as such:



Figure 7: Wave H5 Incoming Call

Note: This add-in does not support the meeting feature. Users can still join meetings through Wave H5, but the meeting will be considered a single call party.



In-Call Interface: Wave H5's in-call interface supports the following: multiple lines, audio/video calls, blind/attended transfer, and call holding.



Figure 8: Wave H5 In-Call Inteface



If the user minimizes the in-call interface, the user will see this:





Contacts: Contacts and contact details will be displayed as such:

Figure 9: Wave H5 Contacts



Settings:

S Wave	
• 1005	*
Audio Settings	>
Webcam Settings	>
Date/Time Format	>
Language	>
显示网页悬浮窗	-
屏幕取号	
Sign Out	
	Talking



- Audio Settings Change audio device settings
- Webcam Settings Change video device settings
- Date/Time Format
- Language
- Floating Window If enabled, Wave H5 will use its own dedicated window that can be freely moved and closed. A button will also be displayed that, if clicked on, will show the floating window.
- Click-2-Dial If enabled, numbers detected on the Google Chrome page can be dialed via Wave.
 - Hovering over a detected number will show a button to call the number via Wave.
 - Right-clicking a number will bring up the context menu, which will display the option to call the number via Wave.



	Back	Alt+Left Arrow
	Forward	Alt+Right Arrow
	Reload	Ctrl+R
ww.an	Save as	Ctrl+S
d Re	Print	Ctrl+P
ut <u>123</u>	Cast	
e CD's	Search images with Goog	le Lens
1	Create QR Code for this p	age
oen.sp 678 –	Translate to 中文(简体)	
6:37	Call via Wave	
ww.sh	之法即许	,
678	View page source	Ctrl+U
12345-01	Inspect	

• Figure 11: Wave H5 Context Menu Option

SCREEN SHARE TOOLBAR AND PERSONAL WINDOW

When screen sharing from Wave Desktop, a toolbar with the meeting options will now appear at the top of the screen. Additionally, a small personal floating window with one's own video (if shared), mute/unmute button, and video sharing button will also be displayed during the screen share.



Figure 12: Toolbar and Small Video Window

CALL/MEEETING WINDOW

Creating new calls/meetings will now open their own dedicated window that can be freely moved and closed.





Figure 13: Call/Meeting Window

If the window is closed, the call/meeting will be hung up or ended. If the window is minimized, it will become a mini window as seen in the following figure:



Figure 14: Mini Call/Meeting Window

Clicking on the white arrow button will change the size of this mini window.

CHANGE SCREEN SHARE CONTENT

Users can now change what they are screensharing without having to stop the existing screen share. Clicking on the arrow button next to the *Stop Sharing* button will show the option to change the content to



share.



Figure 15: Change Screen Share Content

FORWARD MULTIPLE MESSAGES

Users can now forward messages from one chat to a different chat by right clicking on a message and selecting the *Select Multiple* option.

	Li i kan in, we are aware of the is back as soon as possible.	1/31 09:43 AM
Carria	1/31 12:53 PM	☐ Copy & Share ⊙ Reply
() Daniel Parez 's	local time 03:20 AM	🚈 Select Multiple

Figure 16: Forward Multiple Chat History - I

Messages will now be selectable:



•		
	See, 8521-521	
	An else ar est of the same tipe ryle in Attacker series are the	8
二 徐 (ms)		

Figure 17 - Selecting Chat Messages

The following options will appear at the bottom of the chat:



Figure 18: Forwarding Options

Forward One-by-one: Forwards each message individually and will appear as separate messages in the chat window.



Merge and Forward - Combines all messages into a single message separated by line before forwarding.

Group Ci	nat History	
sonuarg:	123	
soliuar (p	345	
softuaritz	666	

Figure 19: Merge and Forward

END-TO-END ENCRYPTED CHAT

Wave Desktop 1.19.11 has added support for end-to-end encrypted (E2EE) chatting. If the user has been given permission via the UCM6300 management portal), the **E2EE chat** option will be available. UCM firmware must be 1.0.19.8 or higher. Users can start an E2EE chat with a contact by clicking on a contact, clicking the *Chat* icon and selecting **E2EE chat**.



Figure 20: Contact→E2EE Chat

Alternatively, E2EE chat can also be accessed from an existing chat's *More* menu.





Figure 21: More→E2EE Chat

An E2EE chat is indicated by the lock icon next to a contact's name.



Q Search	Q	en gan 🔒 es ses
Finity white; Augusting This release ha	11/23 as so	
IW Emily Wond		
Meeting Assistant 0 [Notice]The meeting has	9:45 AM en 🔶	

Figure 22 - E2EE Indicator

If logging in from another device, the user would not be able to access previous E2EE chat history unless they sync the secret key of the device from which the chat history originated from.

Unable to view this message	
Unable to view this message	
[File] Unable to view this message	
	[File] Unable to view this message
	[File] Unable to view this message
	Unable to view this message
	[File] Unable to view this message
	[File] Unable to view this message

Figure 23: Unviewable E2EE Chat History

Note:



- 1. Group chats do not support E2EE.
- If viewing old E2EE messages from a different device, only received messages will be viewable. Previously sent messages are only viewable from the device they were originally sent from. For more details about viewing old E2EE messages, please see the [ADD PREVIOUS SECRET KEY] section.
- 3. If the secret key in the current client is not up to date, E2EE chats cannot be started. Users will need to sync the secret key, which will be detailed in the following section.

SYNCING SECRET KEY

If the user logins into Wave from a previously used device, its secret key may need to be updated before E2EE messages can be sent. To update it, the user will need to sync the secret key from the most recently used device. Two methods of syncing are available:

- 1. Export the secret key from the most recently used device and import it into the new device's Wave.
- 2. Scan the most recently used device's secret key QR code (Wave Mobile only).

To access the secret key, click on the User Profile and select **E2EE chat settings**.



Figure 24: E2EE Chat Settings

The following window will then appear:



E2EE chat set	ttings $ imes$
Secret ke	-
The secret key is used to encrypt end-to-	end chat messages.Learn more
The secret key is not up-to-d	ate. Please sync or reset it.
Sync secret	
Syncing instru-	cuons

Figure 25: E2EE Chat - Sync Secret Key

From here, users can click the **Sync secret key** button to import a secret key file or scan the QR code with Wave Mobile.

EXPORT SECRET KEY

There are two ways to export a secret key:

To import a secret key into Wave Desktop, users will need the secret key file exported from the most recently used device. To retrieve this secret key, open the E2EE chat settings on that device. Click the •••• button at the upper right corner of the QR code and select Export secret key. The user can then save the file to desired location.



E2EE chat settings ×	
Secret key	
The secret key is used to encrypt end-to-end chat messages.Learn more	
 Reset secret key Export secret key The secret key is not up-to-date. Please sync or reset it.	
Sync secret key	
Syncing instructions	
Sync secret key	

Figure 26: E2EE Chat - Export Secret Key

2. The QR code can be screenshotted and saved as an image for offline access. This QR code can be scanned by Wave Mobile to retrieve the most recently used device's secret key.

ADD PREVIOUS SECRET KEY

If the user is unable to view E2EE chat history originating from another device, the user will need to export that device's secret key and import it into the new device's Wave to decrypt and view the old device's E2EE chat history.

Note: The Add previous secret key option is only available if the currently used device's secret key is upto-date.



5	E2EE chat settings	×
r	Secret key	
The s	ecret key is used to encrypt end-to-end chat messages.Learn more	
r C C 2	The secret key is up-to-date.	
1	Add previous secret key Previous secret key instructions	

Figure 27: E2EE Chat - Add Previous Secret Key

RESET SECRET KEY

If the user has switched to another client and is unable to find or retrieve the latest secret key, the user can reset it.

Note:

- 1. Before resetting the secret key, the user can export the most recent secret key they have and import it after reset. This will allow the user to decrypt and view previous E2EE chat history from different devices.
- 2. After resetting the secret key, other devices will need to sync this new key to start E2EE chats or to decrypt/view newly received E2EE messages on those devices.

To reset the key, open the E2EE chat settings. Click the **button** at the upper right corner of the QR code and select **Reset secret key** option.



E2EE chat settings	×
Secret key	
The secret key is used to encrypt end-to-end chat messages.Learn more	
Reset secret key	
Add previous secret key Previous secret key instructions	

Figure 28: E2EE Chat - Reset Secret Key

Click on the **Reset** button to finalize the reset.

Reset Secret Key	×
Reset secret key? Once reset, other clients must sync the secret key before they can send E2EE messages.	
Cancel Reset	

PERSONAL CONTACTS

Personal Contacts is now available for users with paid UCM RemoteConnect plans. Users can add their own contacts to Wave convenient access and calling. To get started, navigate to the *Contacts* →*Personal*



e Q Search Personal Contacts . 2 All Favorites 1 Contacts Extended Contacts 10 **C**alls 1 Personal Contacts theetings 10.00 allocase. MERCENC (AAA) in the n No personal contacts 1.1 New ALC: NO DECK

Contacts page and click on the New button to add a contact.

Figure 29 - Personal Contacts List



	New	
* First Name	Please enter	
Last Name	Please enter	
Personal Phone	Please enter	
Home Phone	Please enter	
Email	Please enter	
Company	Please enter	
Fax	Please enter	
Remark	Please enter	
	Cancel	

Figure 30 - New Personal Contact

Users can then enter their contact details. Once a contact has been added, the contact will be displayed as such:

Personal Contacts	New
B (1)	
BS Bob Smith 123-456-7890	e v
	Edit Before Calling
	🖉 Edit Contact
	莭 Delete

Figure 31: Personal Contact Options

The user can click the "Add" button to add personal contacts. The user can also edit or delete the personal contacts, and also dial to the personal contacts. The user can also invite the personal contacts to the meeting.

ONSITE MEETINGS

UCM6300 1.0.19.8 introduces the **Onsite Meeting** feature, a way to stay organized and keep up-to-date with in-person meetings. To use this feature, the UCM administrator will need to have created an onsite meeting room in the UCM management portal. Wave can be used to schedule, manage, and cancel meetings.

There are two methods to schedule an onsite meeting:

Method 1: Users can navigate to the *Meetings* \rightarrow *Meeting List* page and click on the **Schedule** button. On the *Schedule Meeting* page, select **Onsite meeting room** as the meeting room type.

Meeting List Meeting Room	n		Not star	
C Meet Now Scher		Schedule Meeting	X	AM 2h 06
4:00 AM - 6:00 AM	* Subject :	Needing by BER Majhuang		0/26
A	* Meeting room type :	Onsite meeting room		urs every week on Wednesd 2_南望培训室
	* Meeting Room :	General Meeting room [Virtual] Public meeting room [Virtual]		大厦10楼
	* Time :	Onsite meeting room		jector Whiteboard
	* Recurrence:	No Repeat 💌		eo meeting device htop adapter cable
	Invitees:	Please enter meeting invitees here, press Enter to separate		**C-2 %
				(*54)
				88 (D.C.
		Add		en xon
				510-945 S
		Cancel		$(q_i \oplus \Phi \circ h \to q)$
			erg =	den man



Users can then select the onsite meeting room and reserve the time period for the meeting, similar to scheduling an online meeting.

GRANDSTREAM



Please select meeting room	×
2022-10-21	12h 24h
9 10 11 12 1 2 3 4 5 6 7	8 9 PN
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8 9 PM
Bill Class Sells Video meeting device & 50 Image: Sell Class Sells	Whiteboard

Figure 33: Onsite Meeting Room - Select Duration

Method 2: On the *Meeting Room* tab, users can see all available onsite meeting rooms and schedule meetings for specific rooms. If a time block has already been occupied, it will be highlighted as such:

- als	ien	an fraith-fai		
dir.	<u></u> <u></u> 50	() of [10]	行用而自然	
	10	11	12	

Figure 34: Onsite Meeting Room - Method 2

Note: Only users with email addresses or company contacts can be invited. Unknown numbers cannot be



invited. Invitees will receive the meeting reminder email notifications and meeting assistant notifications, if applicable.

Once an onsite meeting has been scheduled successfully, it will be displayed under the *Meeting List* page. Clicking on a meeting will display its details on the right side of the Wave window.

	eting Room chedule	Not started yet	
omorrow Friday 12:00 PM - 12:30 PM	Meeting Room Address Creator	eeting 目田 Q CIII家県都市区 空島町市 空田時時間 Roi 市市社時時間 Roi 市市社時代目	a Cancel Meeting 2022/10/21 30m 12:30 PM 2022/10/21 2022/10/21 2022/10/21 11 전:12 등 관계로 응 후토곳는 11 전:12 등 관계로 응 후토곳는 11 단말 등 분위로 하나 12 등 관계로 등 12 등 1
0/26 Wednesday			<u>B</u> 50
4:00 AM - 6:00 AM	Meeting Room Address Creator	- 20mg 予 生理型 - ① 1945年1月2日時日 1945年1月2日 1953年1月20日 1953年7月23-01日	던 Video meeting device Whiteboard 요 Me (3536)
		Meeting History >	

Figure 35: Scheduled Onsite Meetings

Once a scheduled meeting starts, the meeting status will be updated to "In process" automatically, and users will no longer be able to edit the meeting details.