

UCM Series IP PBX Firmware Release Notes

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FIRMWARE VERSION 1.0.9.10

PRODUCT NAME

UCM6301, UCM6302, UCM6304, UCM6308, UCM6300A, UCM6302A, UCM6304A, UCM6308A

DATE

8/24/2021

FIRMWARE FILE INFORMATION

- UCM6301/6302 firmware file name: ucm6301_ucm6302fw.bin
MD5: 6a60caac9b38d5f89d0f8f5669ba41c8
- UCM6304/6308 firmware file name: ucm6304_ucm6308fw.bin
MD5: 719105436953dd266beabe82ff1403b9
- UCM6300A/6302A firmware file name: ucm6300A_ucm6302Afw.bin
MD5: 91b7da342e15a7c2f5723516be899f04
- UCM6304A firmware file name: ucm6304Afw.bin
MD5: b0c6cba21a4682b2a1c9b5a8ea9c4545
- UCM6304/6308 firmware file name: ucm6308Afw.bin
MD5: 60aa38fdc0d196ffa97cab2baac420b1

IMPORTANT UPGRADING NOTE

- **ALWAYS create a backup of your configuration and data before a firmware upgrade.**
- **After upgrading to 1.0.2.18 or higher, you will no longer be able to downgrade to 1.0.2.17 or lower.**
- **If the device is on a firmware version lower than 1.0.2.15, please upgrade to 1.0.2.15/16/17 first and then to the latest version.**
 - **UCM6301/2:** http://firmware.grandstream.com/Release_UCM6301_6302_1.0.2.17.zip
 - **UCM6304/8:** http://firmware.grandstream.com/Release_UCM6304_6308_1.0.2.17.zip
- **It is recommended to upgrade UCM to latest firmware for product lifespan and security improvements.**

CHANGES SINCE FIRMWARE VERSION 1.0.9.8

ENHANCEMENTS

- **[HA]** GDMS can now retrieve the MAC address information of both the active and standby UCMs in an HA environment.

BUG FIXES

- **[HA]**
 - Fixed an issue with certain information not updating after HA is disabled.
 - Fixed an issue with the former active UCM not rebooting after a switchover.
 - Fixed an issue with UCM's bound IP addresses in an HA environment after certain types of crashes.
 - Fixed an issue with HA backup status.
 - Fixed an issue with remote extensions not being able to dial out after an HA switchover.
 - Fixed an issue with UDP port 5060 not listening after upgrading UCMs in an HA environment.
- **[Meetings]**
 - Fixed an issue with abnormal noise in meetings when using opus.
 - Fixed a meeting status display issue.
- **[SIP Settings]**
 - Fixed an issue with abnormal RTP timestamps after the meeting host mutes or unmutes a participant.
- **[Wakeup Service]**
 - Fixed an issue with not setting up wake-up services properly.
- **[Web]**
 - Fixed an issue with "No permission" prompts appearing when logged in as an Administrator.

CHANGES SINCE FIRMWARE VERSION 1.0.7.12

ENHANCEMENTS

- **[HA (High Availability)]** Added support for HA redundancy [HA REDUNDANCY SUPPORT]
- **[Security]** Updated MariaDB version to 10.3.29
- **[AMI]** Added the option to restore default certificates.
- **[CDR]** Trunk name will now be included in CDR entries when inviting an external number to join a meeting.
- **[Call Monitor]** MOH will no longer be played to the monitoring party when a monitored extension is placed on hold.
- **[Call Statistics]** Improved the process of calculating certain call statistics.
- **[Cloud IM]** Added the ability to set the UCM as a cloud IM server.
- **[Extensions]** Added the ability to restrict calls between extensions [RESTRICTING EXT-TO-EXT CALLS]
- **[Extensions]** Added support for opus DTX when NETEQ is enabled on the extension.

- **[Extensions]** To reduce the risk of user account compromise, extension exports will no longer include user password information. To account for this change, if the Replace import method is used to import extensions with no user password information in the CSV file, random passwords will be assigned to these extensions. If the Update or Skip import method is used instead, new extensions will have a random password, but existing extensions will retain their original user passwords.
- **[Extensions]** Added Sync Contact option to toggle whether an extension will be displayed in Wave contacts list. [TOGGLE WAVE CONTACT LIST VISIBILITY]
- **[Fax]** Optimized the process of CED and CNG detection.
- **[FXO/FXS]** Added the *FXO Signaling Type Settings* page to support the configuration of FXO ports. [FXO SIGNALING TYPE SETTINGS]
- **[HTTPS API]** Added "inbound_rt_name" parameter for checking and modifying the name of inbound routes.
- **[HTTPS API]** Added IP address whitelist option to restrict what IP addresses can send API requests.
- **[HTTPS API]** Brought back the legacy API options.
- **[LDAP]** Added option *LDAP Automatic Update Cycle* to the *Phonebook Download Configurations* page to automatically update LDAP phonebooks at 12:00 AM system time at the configured frequency.
- **[Maintenance]** Added HA-related syslog modules.
- **[Meetings]** Added new *Max Number of Video Feeds* option to allow 6 video feeds in video meetings.
- **[Meetings]** The default maximum allowed number of video feeds for the UCM6304 and UCM6308 has been changed from 4 to 6.
- **[Meetings]** In a meeting, the system will now ask the meeting host 15, 10, and 5 minutes before the end of the meeting if they want to extend it or let it end on the scheduled time.
- **[Network Troubleshooting]** Added *Record Meeting for Diagnosis* page to capture audio from an ongoing meeting for troubleshooting purposes. [RECORD ONGOING MEETINGS]
- **[Queue]** Added option to play a Satisfaction Survey prompt after a call to measure customer service satisfaction. [QUEUE SATISFACTION SURVEY]
- **[Queue]** Added QueueMetrics integration support. [QUEUOMETICS INTEGRATION]
- **[Paging]** Added delayed paging option for 1-way paging groups. [DELAYED PAGING]
- **[PBX General Settings]** Added "Meeting AGC" option in PBX General Settings page (Beta). [MEETING AGC (BETA)]
- **[RemoteConnect]** Added the "Troubleshooting" and "Remote Link" diagnosis tools for troubleshooting network connection to the RemoteConnect service. [REMOTECONNECT SERVICE CONNECTION DIAGNOSIS]
- **[RemoteConnect]** RemoteConnect will now report call statistics to GDMS daily at 2:00 AM system time.
- **[RemoteConnect]** Added the *Company Name* option to the *UI Customization* page (formerly known as *Logo Customization*).

- **[Routing]** Added the ability to import and export outbound routes.
- **[SIP Settings]** Reduced the frequency of UPDATE messages that contain the record flag.
- **[Time Settings]** Added additional time conditions for extensions Outside Specific Time, Outside Specific Time/Holiday, and Specific Time & Outside Holiday.
- **[User Management]** Added the option "Enable Delete CDR and Recording Files" to toggle ability to delete CDR and recordings for custom privilege users. [PERMISSION TO DELETE CDR & RECORDINGS]
- **[Wave General]** Added the option to end meetings directly from the Meetings page. [END MEETINGS FROM MEETING LIST]
- **[Wave General]** If an invited participant for scheduled meeting has already entered the designated meeting room or has rejected the meeting invitation already, meeting invitation calls will not be sent to the participant's other registered endpoints.
- **[Wave Mobile]** Push notifications will now show CID name on incoming calls.
- **[Wave Mobile]** Optimized transmission of audio and video streams to the UCM.
- **[Web]** Adjusted the display of registered IPv6 addresses.
- **[Zero Config]** Added the ability to import and export ZeroConfig policies and templates.
- **[ZeroConfig]** Added compatibility with legacy format of ZC device CSV imports.

BUG FIXES

- **[System]**
 - Fixed several system stability issues.
 - Fixed an issue with being unable to upgrade in recovery mode.
- **[Active Calls]**
 - Fixed several display issues
- **[Backup/Restore]**
 - Fixed an issue with Data Sync not backing up CDR after a certain period of time.
 - Fixed an issue with duplicate voicemail backup files after creating a Dial By Name extension.
 - Fixed an issue with the chat page not being updated properly after restoring a backup with IM data.
 - Fixed an issue with high CPU usage from calls after restoring a converted UCM backup.
 - Fixed an issue where TURN server configurations would not be restored properly from a converted UCM backup.
- **[Basic Calls]**
 - Fixed an issue with calls not disconnecting immediately after a failed external call.
 - Fixed an issue with no audio when forwarding a call to an external number.
 - Fixed an issue with displaying the incorrect CID when a call is made between the UCM and a register trunk and then transferred.
 - Fixed an issue with being unable to control video output via FECC in video calls.
- **[Call Failure Tone Settings]**
 - Fixed an issue with not playing modified No Permission prompts.
- **[Call Monitor]**

- Fixed an issue with monitoring calls with external numbers if the Inbound Route used has Set CallerID configured.
- **[CDR]**
 - Fixed several CDR display issues.
 - Fixed an issue with not being able to play recordings on the CDR page if the recording storage location is NAS.
 - Fixed an issue with being unable to play recordings of inbound calls to IVR that are forwarded to extensions that have Ring Simultaneously enabled.
 - Fixed an issue with downloading search results under certain conditions.
 - Fixed an issue with the concurrent call statistics graph displaying incorrectly.
- **[Cloud IM]**
 - Fixed an issue with @mentioning users not in a meeting created from a group chat.
- **[Dashboard]**
 - Fixed an issue with attended transfers from queue members showing up as occupying two channels.
 - Fixed an issue with abnormal call status on the Dashboard page after parking a call twice.
- **[DTMF]**
 - Fixed an issue with RFC4733 DTMF not being detected properly.
 - Fixed an issue with DTMF not being detected properly during the Dial by Name greeting prompt.
- **[Email Settings]**
 - Fixed an issue with missed call email notifications not being sent.
 - Fixed an issue with the Reset Password email template not being consistent between HTML format and text format.
 - Removed User Password legacy email template.
 - Fixed an issue where Wave login portal public URL related email templates had a /#/ , causing login issues for Wave Desktop.
- **[Extension]**
 - Fixed an issue with saving configuration if an extension's first name or last name have an apostrophe (').
 - Fixed an issue with Ring Simultaneously extensions now displaying the correct inbound call CID.
 - Fixed an issue with registered endpoint connection stability.
- **[Fax]**
 - Fixed an issue with abnormal fax status.
 - Fixed an issue where T.30 fax is used even when T.38 fax is selected.
- **[Feature Code]**
 - Fixed an issue with seamless transferring inbound calls established via 302 transfer.
- **[Follow Me]**
 - Fixed an issue with failed outbound follow me calls if Skip Trunk Auth is enabled, and the current time does not fit the Time Condition window for Skip Trunk Auth.
- **[FXO/FXS]**
 - Fixed an issue with no ringback tone when dialing an external number via DISA.

- Fixed an issue with importing extensions if the CSV file contains two FXS extensions.
- **[HTTPS API]**
 - Fixed an issue with updating an outbound route's permission level as "Internal".
 - Fixed an issue with not being able to save and apply changes made to the Upload Prompts User Configuration page.
- **[IAX]**
 - Fixed an issue with updating the Call Token Whitelist in the IAX settings page.
 - Fixed an issue with abnormal IAX extension status after unregistering and registering via 3rd party softphone apps.
- **[IVR]**
 - Fixed an issue with being unable to return to IVR after a ring group rejects a call from a trunk.
- **[LCD]**
 - [UCM6304A only] Fixed an issue with white screen after a period of time.
- **[LDAP]**
 - Fixed an issue with being unable to retrieve contacts from an LDAP client with custom attributes.
- **[Login Settings]**
 - Fixed an issue where users can successfully set the currently used password as the new password.
- **[Maintenance]**
 - Fixed an issue with abnormal syslogs.
 - Fixed an issue with not generating the correct log when copying recordings to a different storage location.
 - Fixed an issue with chat data not being cleared properly.
 - Fixed an issue where Wave logins would not generate successful Wave login alerts.
- **[Meetings]**
 - Fixed an issue with not sending email notifications when a meeting is deleted.
 - Fixed an issue with abnormal participant statistics in post-meeting email reports.
 - Special character forward slash (/) is now supported in the Video Meeting Description field.
 - Fixed an issue with abnormal system error warning when trying to edit a scheduled meeting created by a Wave user.
 - Fixed an issue with displaying meeting as "In Progress" after rebooting the UCM.
 - Fixed an issue where GVC's device type was categorized as "Other".
 - Fixed an issue with the list of Wave meeting participants when an admin modifies the time of an upcoming meeting.
 - Fixed an issue with scheduled meeting room status if the meeting is ended from Wave Mobile.
 - Fixed an issue with abnormal scheduled meeting status after all participants leave.
 - Fixed an issue with joining a meeting via DISA and then attempting to open video.
 - Fixed an issue with calling meeting participants that joined a scheduled meeting early.
 - Fixed an issue with not displaying host video after closing and re-opening camera.
 - Fixed an issue with meeting reports when the meeting subject is long.

- Fixed an issue with not seeing some meetings in the meeting history, and the meeting report date and time is abnormal.
 - Fixed an issue with inaccurate call statistics in certain scenarios.
- **[Music On Hold]**
 - Fixed an issue with not displaying all the items in a playlist after changing system language.
- **[NAS]**
 - Fixed an issue with syncing IM data to NAS.
- **[Network Settings]**
 - Fixed an issue with batch unbinding MAC addresses.
- **[Paging]**
 - Fixed an issue with being unable to save changes to a paging group after deleting one of the paging group member extensions.
- **[Pickup Groups]**
 - Fixed an issue with importing a large number of pickup groups.
- **[PMS]**
 - Fixed an issue with abnormal room status after moving a guest.
 - Fixed an issue where date and time would be displayed as unknown when cancelling a wake-up call via API.
- **[Recording]**
 - Fixed several issues with abnormal recording names.
 - Fixed several issues with auto-record not working properly in various scenarios.
 - Fixed an issue with recordings considered as not existing if a call goes to a ring group and is picked up by a pickup group member.
 - Fixed an issue with recordings showing as not existing if the external party CID contains special characters and if recordings are stored on an SD card.
 - Fixed an issue with being unable to record outbound calls picked up via *45 feature code.
 - Fixed an issue with the "stop recording" prompt playing even if recording has not stopped under certain conditions.
 - The recording whitelist will now be ordered by extension number in ascending order.
 - Fixed an issue with incorrectly updating inbound route blacklist after searching and deleting a blacklist entry.
- **[RemoteConnect]**
 - Fixed an issue with reporting Fail2ban alerts to GDMS.
 - Fixed an issue with SIP extension syncing if a VLAN is configured.
 - Fixed an issue with not generating alerts and email notifications when the maximum number of concurrent RemoteConnect calls has been reached.
 - Fixed an issue with being unable to reset password when remotely accessing the UCM web portal via GDMS.
 - Fixed an issue where if one user fails to log in to the UCM web portal via RemoteConnect and is then required to enter the captcha verification code, other users who access the web portal

through the same RemoteConnect link will also need to enter the captcha verification code even if they didn't fail to log in previously.

- **[Ring Group]**
 - Fixed an issue with calling IAX extensions when Skip Busy Agent is disabled.
 - Fixed an issue with ring group members not being able to call
 - Fixed an issue being unable to set the voicemail password as blank.
 - Fixed an issue with not being able to ring LDAP members if the outbound route has a PIN group configured.
 - Fixed an issue with the Replace Display Name configuration not working when rerouting a call to an external number.
- **[Routing]**
 - Fixed an issue with inbound route blacklist display after adding a new blacklist entry.
 - Fixed an issue with abnormal inbound route destinations if the destination is a paging group, and the paging type is changed to Announcement Paging.
 - Fixed an issue where global inbound mode values would be blank.
 - Fixed an issue with saving the page after deleting outgoing route patterns.
- **[Security]**
 - Fixed an issue with blacklist entries being removed under certain conditions.
- **[Setup Wizard]**
 - Fixed an issue with saving changes when IAX register trunk passwords contain special characters.
- **[SIP Settings]**
 - Fixed an issue with redundant alert-info when a call comes into IVR, is redirected to an extension, and then parked.
 - Fixed an issue with diversion header not being sent when a call is forwarded to an SCA extension.
 - Fixed an issue with importing virtual fax extensions and extension groups.
 - Fixed several issues with muting.
- **[SIP Trunks]**
 - Fixed an issue where trunk group status would be labeled Unmonitored instead of Unregistered.
 - Fixed an issue with peer trunk calls where calls would be terminated after the caller requests video.
 - Fixed an issue with missing statistics for trunk groups.
- **[STIR/SHAKEN]**
 - Fixed an issue with being unable to save changes if the device name contained vertical bar (|).
- **[User Management]**
 - Fixed an issue where a custom privilege user is logged out after attempting to create a new extension range.
- **[Voice Prompts]**
 - Fixed several issues with the incorrect voice prompts playing.
- **[Voicemail]**

- Fixed an issue with not sending email notifications when forwarding a voicemail from a peered UCM.
- Fixed an issue with not forwarding personal voicemail to ring group voicemail.
- Fixed an issue with voicemail getting cut off.
- Fixed an issue with forwarding voicemail to other extensions.
- **[Wave General]**
 - Fixed an issue with Wave not receiving meeting invitations when invited via contact groups.
 - Fixed an issue with Wave not receiving meeting invitations when sending the invite via Wave Web, and the meeting room has no participants.
 - Fixed an issue with inviting Wave users to join meeting via pressing 0 or 1.
 - Fixed an issue with audio output device list not being updated properly after host privileges are transferred.
 - Fixed an issue with black screen share video feed after disconnecting and reconnecting to a call.
 - Fixed an issue with starting an instant meeting.
 - Fixed an issue with audio input device list not updating properly under certain conditions.
 - Fixed an issue with abnormal scheduled meeting status.
 - Fixed an issue where if Wave users join a meeting via the Meeting Assistant, reminder calls to other registered endpoints would still be sent.
 - Fixed an issue with uploading files and images to chat after rebooting the UCM.
 - Fixed an issue where instant meeting participants do not receive a Meeting Ended notification from the Meeting Assistant.
- **[Wave Mobile]**
 - Fixed an issue with starting group chat meetings if the group includes users from a peer UCM.
 - Fixed an issue with incorrect meeting participant join times.
 - Fixed an issue with detecting DTMF from Wave Mobile.
 - Fixed an issue where the Wave iOS app would not display the Share button in the details page of instant meetings.
 - [Wave Mobile] Due to several issues discovered with the meeting talking indicator, the feature has been temporarily disabled.
- **[Web]**
 - Fixed an issue with sorting after changing the number of items to display per page from 10/page to 40/page.
 - Fixed an issue with fax file sizes not displaying properly in the User Portal.
 - Fixed an issue with accessing specific pages of the UCM management portal.
 - Fixed an issue when displaying inbound route blacklist search results.
 - Fixed an issue with searching outbound route blacklist if the search contains a space.
 - Fixed an issue with page display when editing specific times in the inbound/outbound route pages.
 - Fixed an issue with displaying storage values in the Manual Cleaning page.
 - Fixed several issues with searching for certain configuration items.

- Fixed an issue where the resend email timer is reset after refreshing the page or changing languages.
- Fixed an issue with the "sensitive characters" error appearing in several pages.
- Fixed an issue with the extension ranges fields showing errors when they shouldn't.
- Fixed an issue with saving after enabling Click2Call and then navigating to the Plan Settings page.
- **[Zero Config]**
 - Fixed an issue with not sending NOTIFY messages to devices across network segments when in Dual network method.
 - Fixed an issue with not provisioning the LDAP default username and password.
 - Fixed an issue with the Apply Changes button appearing on the web portal after a Grandstream endpoint selects a UCM extension.
 - Fixed an issue with sluggish input when editing device custom parameters.

NEW LIMITATIONS

- **[Callback]** The maximum character limit of the Outbound Prepend field has been changed to 32 characters.
- **[SIP Trunks]** Added new DOD name import restrictions. DOD names cannot exceed 32 characters and supports alphanumeric characters, underscores (_) and white space.
- **[SIP Trunks]** Passthrough PAI Header field will no longer support special characters ~ ' | /
- **[Time Settings]** Commas (,) are no longer supported in the holiday name field in CSV holiday imports.
- **[Time Settings]** Apostrophes (') are now supported in the holiday name field in CSV holiday imports.
- **[User Management]** User Password character limit is now 30.
- **[ZeroConfig]** ZeroConfig p-value character limit increased to 2047 characters.

NEW FEATURES OVERVIEW

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

WAVE LOGIN PASSWORD CHANGE & EMAIL NOTIFICATION

Starting from 1.0.9.x, SIP passwords will no longer be supported for Wave login. User Passwords must now be used instead. Upon upgrading the UCM to 1.0.9.x, the system will email the UCM administrator and Wave users regarding the change. If system administrators do not wish for these emails to be sent, please configure invalid email sending settings before upgrading.

HA REDUNDANCY SUPPORT

With firmware 1.0.9.x, UCM6300 series devices now supports High Availability (HA) redundancy, which serves to minimize PBX service downtime in the case of hardware faults, physical network disconnections, and system

abnormalities such as crashes and freezes. In contrast to UCM62xx/6510's HA functionality, the UCM6300 series will not require a dedicated HA100 device for redundancy.

To set up HA on UCM6300 series devices:

1. Prepare 2 UCM6300 series devices of the exact same model.
2. Make sure both UCMs on the same firmware version.
3. Make sure both UCMs are using either Route or Switch network method. Dual method is not supported.
4. Make sure both UCMs are using **different** static IP addresses. DHCP and PPPoE are not supported.
5. Navigate to *System Settings* → *HA* → *HA Settings*
6. The following options will be available:

The screenshot shows the 'HA Settings' page with the following configuration:

- High Available Enable: ☒
- Force Switch: [Switch](#)
- * HA Station Type: Primary (dropdown menu)
- * HA Cluster IP: 192.168.50.20
- * HA Peer IP: 192.168.50.10
- HA Peer MAC Address: (empty field)
- * Heartbeat Port: 9527
- * Heartbeat Timeout Period (s): 7
- Software Fault Switch: ☒
- Hardware Fault Switch: ☒ FXO1

Figure 1 - HA Settings

- a. *High Available Enable* - Toggles the HA functionality on and off
- b. *Force Switch* – Clicking on the button will force a switchover to the standby UCM.
- c. *HA Station Type* - Used for the initial assignment of the HA active/standby role of the UCM system. If set to Primary, the current UCM system will be assigned as the initial active device. If set to Secondary, the peer UCM system will be assigned as the initial standby device. The roles of the UCM systems may change as HA switchovers occur.

- d. *HA Cluster IP* – The shared IP address of the HA setup. This IP address should be different from both of the UCMs' individual static IP addresses. Navigating to this IP address will automatically redirect users to the currently active UCM's web portal.
 - e. *HA Peer IP* – The static IP address of the partner UCM.
 - f. *HA Peer MAC Address* – The MAC address of the partner UCM.
 - g. *Heartbeat Port* – The port number used for heartbeat detection. The value should be the same for both UCMs.
 - h. *Heartbeat Timeout Period* – The standby UCM will frequently communicate with the active UCM to check on its status via the Heartbeat Port. If no communication is detected from the active UCM for the configured number of seconds, a switchover will occur, and the standby UCM will take over as the new active UCM.
 - i. *Software Switch Fault* – If the active UCM experiences a system crash, freeze, or a deadlock, a switchover will be triggered.
 - j. *Hardware Switch Fault* – If an issue is detected with the UCM's hardware connections (including network interface connections), a switchover will be triggered.
- 7. Upon saving and applying changes, the UCM will prompt a reboot.
 - 8. After rebooting, the HA Status page will now be available.

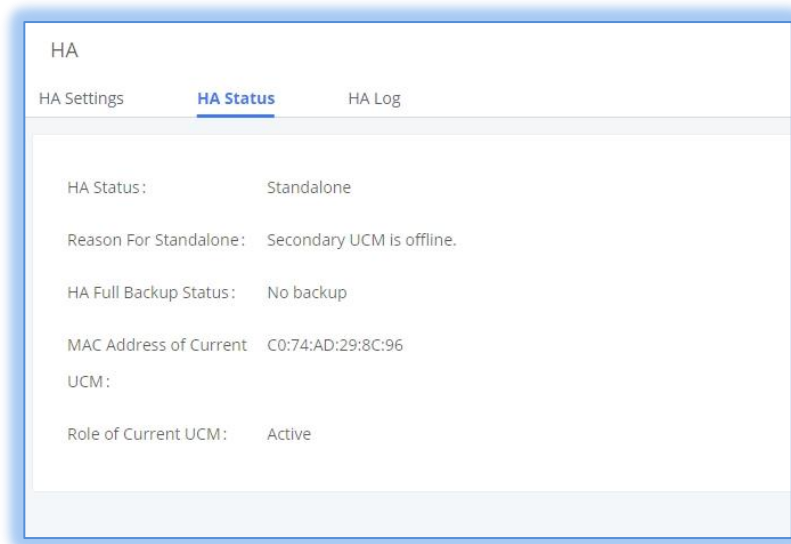


Figure 2 - HA Status

9. This page will show the status of the HA connection, the reason for why the HA connection is not available (if applicable), the status of configuration syncing between the UCMs, the current UCM's MAC address, and the role of the current
10. The *HA Log* page contains the following:
 - a. *HA Backup Log* – Shows the configuration sync history between the two UCMs.
 - b. *HA Failover Log* – Shows the switchover activity between the two UCMs.

To account for the new HA feature, the relevant syslog modules and system event alerts have been added.

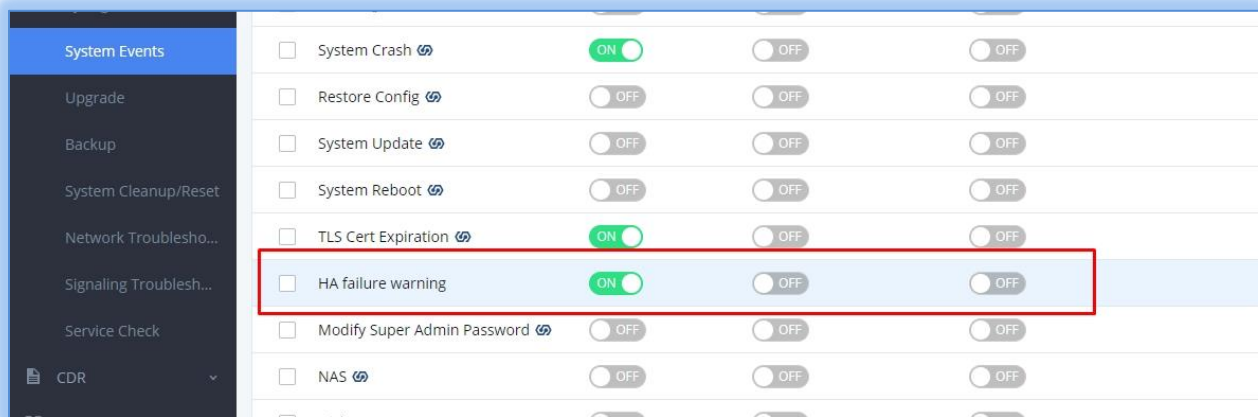


Figure 3 - HA System Alert

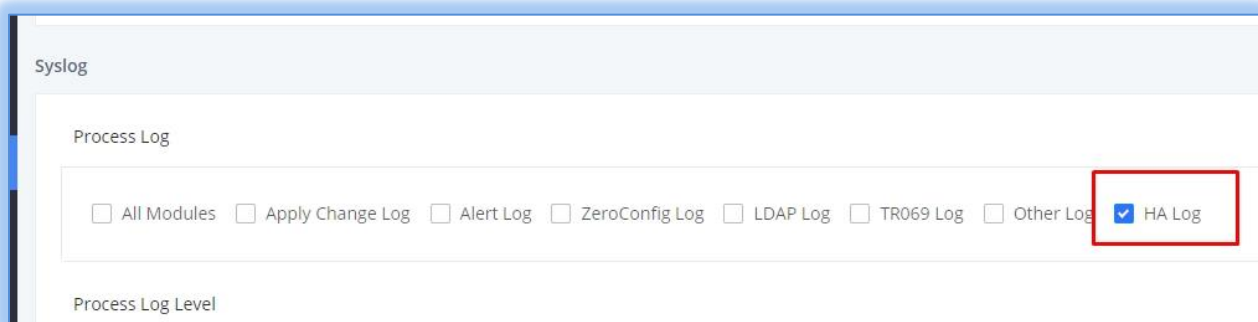


Figure 4 - HA Log



PBX Modules						
MODULE	ALL LEVEL	ERROR	WARN	NOTICE	DEBUG	VERBOSE
haserver	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

10 / page Got

Figure 5 - HA Server Syslog

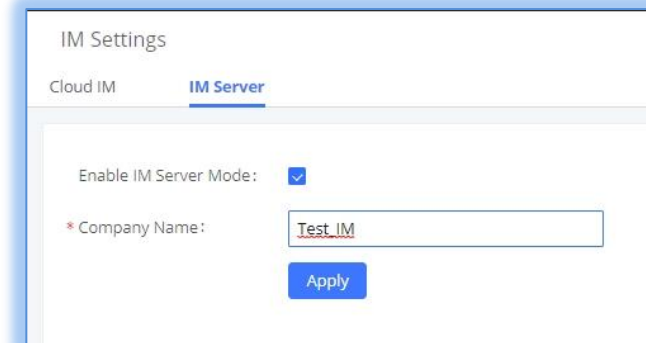
To upgrade UCMs in an HA setup:

1. Access the **standby** UCM via its individual static IP address.
2. Upgrade it to the desired firmware version.
3. Access the **active** UCM via its individual static IP address.
4. Click on the **Switch button** in the **HA Settings** to change the currently active UCM to standby.
5. Upgrade the UCM to the same firmware version as the initial UCM.

The main rule to remember is to upgrade the **Standby** UCM. The UCM should never be upgraded if it is currently the **Active** UCM.

IM SERVER

Users can configure the UCM to act as an IM server for another UCM system. However, this will disable many other PBX-related features and functionality. It is highly recommended to make a backup of the UCM system before configuring the UCM as an IM server.



IM Settings

Cloud IM **IM Server**

Enable IM Server Mode: ☒

* Company Name:

Apply

Figure 6 - IM Server

RESTRICTING EXT-TO-EXT CALLS

The **Restrict Calls** page has been added under **Call Features**. Clicking on the **Add** button will bring up the following page to create a call restriction rule:

Figure 7 - Restricting Calls

- **Restrict Calls between Extensions:** Toggles the restriction rule on/off.
- **Members:** Selected extensions will not be able to call any extensions besides those in the *Allowed List*.
- **Allowed List:** The extensions configured in the previously mentioned *Members* list will only be able to call the extensions selected in the *Allowed List*.

Additionally, the **Restrict Calls** custom privilege has been added to the list of custom privileges for user.

TOGGLE WAVE CONTACT LIST VISIBILITY

System administrators and users may not want certain extensions visible in the Wave Contacts list. To hide these extensions, the **Sync Contact** option in the *Extension/Trunk* → *Extensions* → *Edit Extension* → *Basic Settings* page can be toggled off.

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

Figure 8 - Sync Contact

FXO SIGNALING TYPE SETTINGS

Users can now change the signaling type of FXO ports to Kewlstart or Loopstart in the *PBX Settings* → *Interface Settings* → *Edit FXO Port* → *FXO Signaling Type Settings* page.

UCM6301

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

Menus

- System Status
- Extension/Trunk
- Call Features
- PBX Settings
 - General Settings
 - SIP Settings
 - IAX Settings
 - RTP Settings
 - Music On Hold
 - Voice Prompt
 - Call Failure Tone Set...
 - Interface Settings

FXO Port

ACIM Settings

FXO Signaling Type Settings

Port 1:

Loopstart

Kewlstart

Loopstart

Figure 9 - FXO Signaling Type Settings

RECORD ONGOING MEETINGS

Users can now start audio captures of ongoing meetings. This new tool can be found in the new *Record Meeting for Diagnosis* page under *Maintenance* → *Network Troubleshooting*.

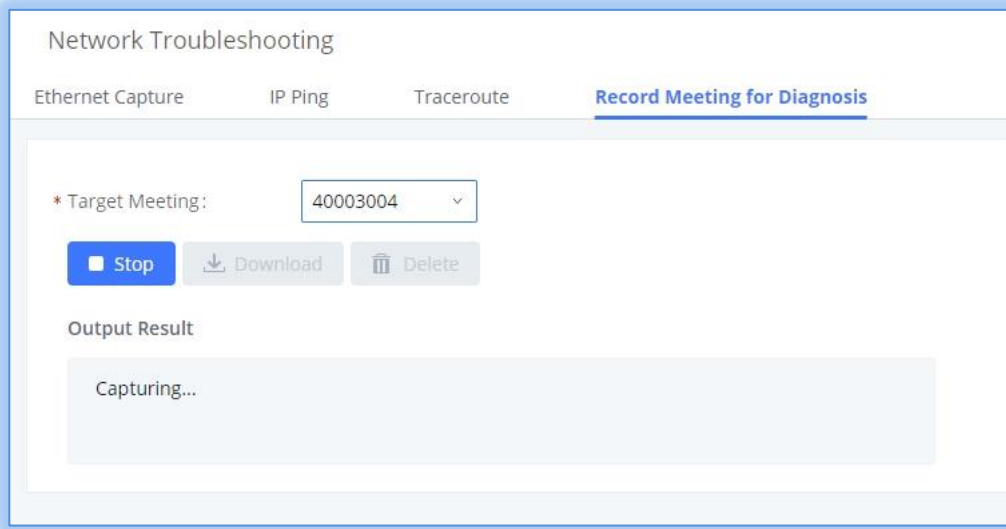


Figure 10 - Record Meeting for Diagnosis

The audio captures will be saved in PCM format and compressed into a tar.gz archive file. Users can use archiving tools such as 7-zip and WinRAR to extract the audio files.

QUEUE SATISFACTION SURVEY

Users can now configure queues to give callers a survey about their call experience.

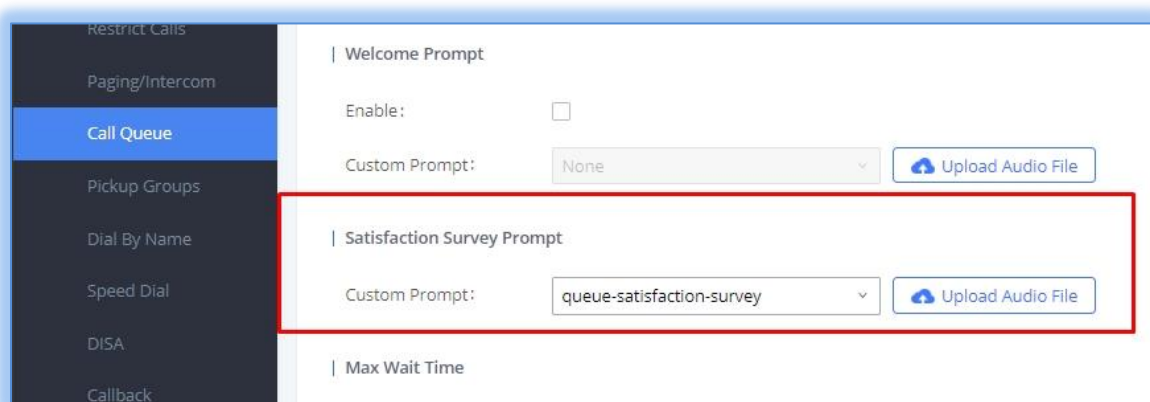


Figure 11 - Queue Satisfaction Survey Toggle

Survey results are collected and can be viewed from the *Call Features* → *Call Queue* → *Call Queue Statistics* page.

Agent Statistics

Queue Statistics

Agent Satisfaction ...

Queue Satisfaction...

Search

AGENT	NOT SURVEYED	NOT EVALUATED	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
1111	0	2	0	1	0	0	5

Figure 12 – Individual Agent Satisfaction

Agent Statistics

Queue Statistics

Agent Satisfaction ...

Queue Satisfaction...

Queue

Search

Queue statistics do not include agent-less queues.

QUEUE	NOT SURVEYED	NOT EVALUATED	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
5:00	0	0	0	0	0	0	0
1:12	0	2	0	1	0	0	5

Figure 13 – Overall Queue Satisfaction

QUEUEMETRICS INTEGRATION

UCM6300 series now supports QueueMetrics. To get started on using this, navigate to the **Value-added Features→QueueMetrics** page and enter your QueueMetrics server address and credentials. Please see the QueueMetrics Integration documentation on our website for more details on usage.

QueueMetrics

Enable QueueMetrics
☒

Integration:

* QueueMetrics URL:

* Username:
webqloader_user

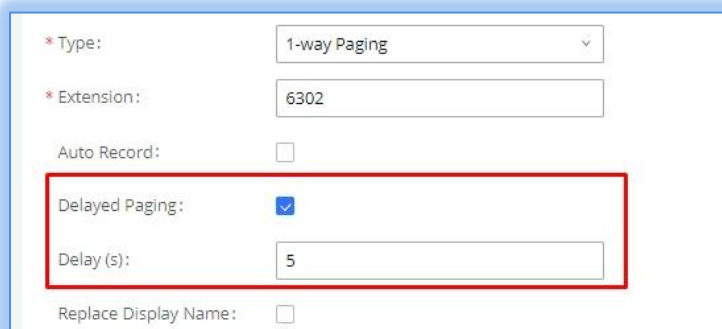
* Webqloader Password:

Partition:

Figure 14 - QueueMetrics Configuration

DELAYED PAGING

Users can now set up one-way paging to send a recorded message after a specified amount of time from recording the message. To start a delayed paging call, a caller can enter *82 before the 1-way paging group extension. the system will then prompt the caller to record a message. Once the messaging is recorded and saved, and the configured delay has passed, the paging call will be sent out. When a paging group member answers the call, the recorded message will be played, and the call will end after it is finished playing.

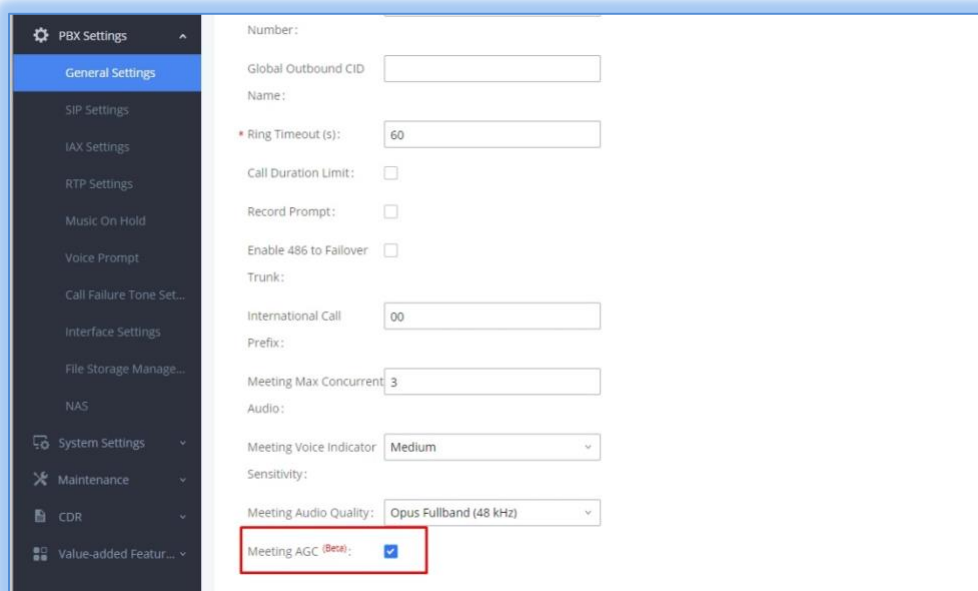


The screenshot shows a configuration form for 'Delayed Paging'. It includes fields for 'Type' (set to '1-way Paging'), 'Extension' (set to '6302'), 'Auto Record' (unchecked), 'Delayed Paging' (checked), 'Delay (s)' (set to '5'), and 'Replace Display Name' (unchecked). A red rectangular box highlights the 'Delayed Paging' checkbox and the 'Delay (s)' field.

Figure 15 - Delayed Paging

MEETING AGC (BETA)

Automatic Gain Control (AGC) has been implemented on firmware version 1.0.9.8. The option can be found and toggled under the **PBX Settings**→**General Settings** page.



The screenshot shows the 'PBX Settings' menu on the left with 'General Settings' selected. The main panel displays various settings. At the bottom, the 'Meeting AGC (Beta)' option is checked, highlighted by a red rectangular box. Other visible settings include 'Ring Timeout (s)' set to 60, 'Meeting Max Concurrent' set to 3, and 'Meeting Audio Quality' set to 'Opus Fullband (48 kHz)'.

Figure 16 - Meeting AGC

AGC is a system that dynamically reduces the variability of sound levels by adjusting high and low volumes based on the average or peak sound level. High volume sounds will be lowered, and low volume sounds will be boosted.

Warning: This option is still in Beta and may produce unexpected results.

REMOTECONNECT SERVICE CONNECTION DIAGNOSIS

Users can now check details about their UCM system's connection to the RemoteConnect Service. If the UCM has a RemoteConnect plan, the option will be called *Troubleshooting*.

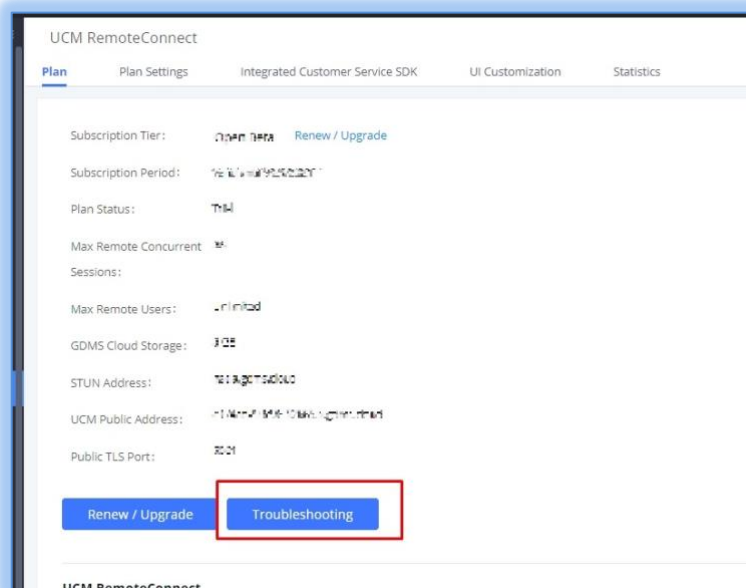


Figure 17 - RemoteConnect Troubleshooting

If the UCM does not have a RemoteConnect plan, the option will be called *Remote Link Diagnosis*.

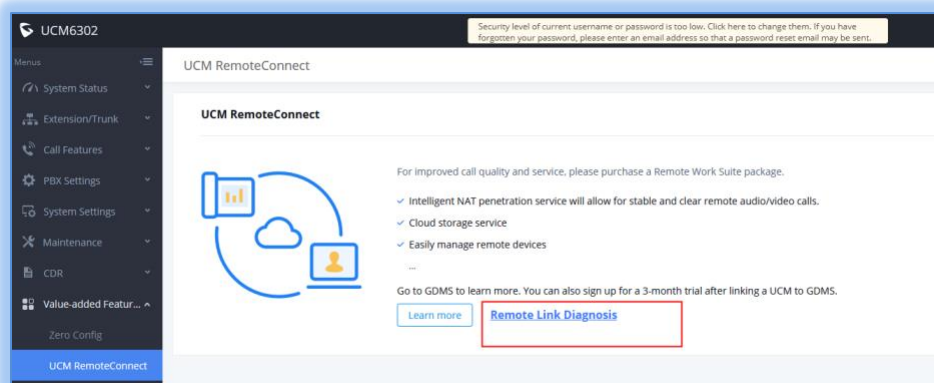


Figure 18 - Remote Link Diagnosis

Clicking on either option will open the following window:

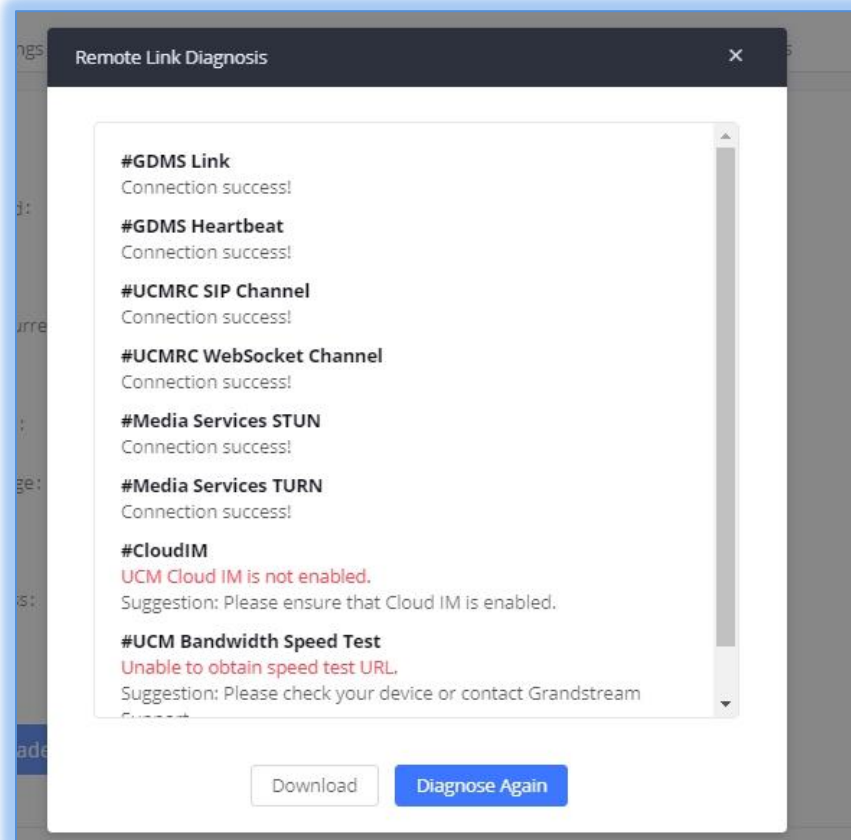


Figure 19 - Diagnosis Window

Once diagnosis is completed, users have the option to download the diagnosis results as a CSV file.

	A	B	C	D
1	Module name	Results	Advice	
2	GDMS Link	Connection success	--	
3	GDMS Heartbeat	Connection success	--	
4	UCMRC SIP Channel	Connection success	--	
5	UCMRC WebSocket Channel	Connection success	--	
6	Media Services STUN	Connection success	--	
7	Media Services TURN	Connection success	--	
8	CloudIM	UCM Cloud IM is not enabled	Please check that CloudIM is enabled	
9	UCM Broadband Test	serviceUnavailable	Please confirm whether you have purchased the package	
0				

Figure 20 - Diagnosis Results

PERMISSION TO DELETE CDR & RECORDINGS

Users can now configure custom privileges with either *CDR Records* or *CDR Recording Files* to allow or forbid the deletion of CDR entries and call recordings.

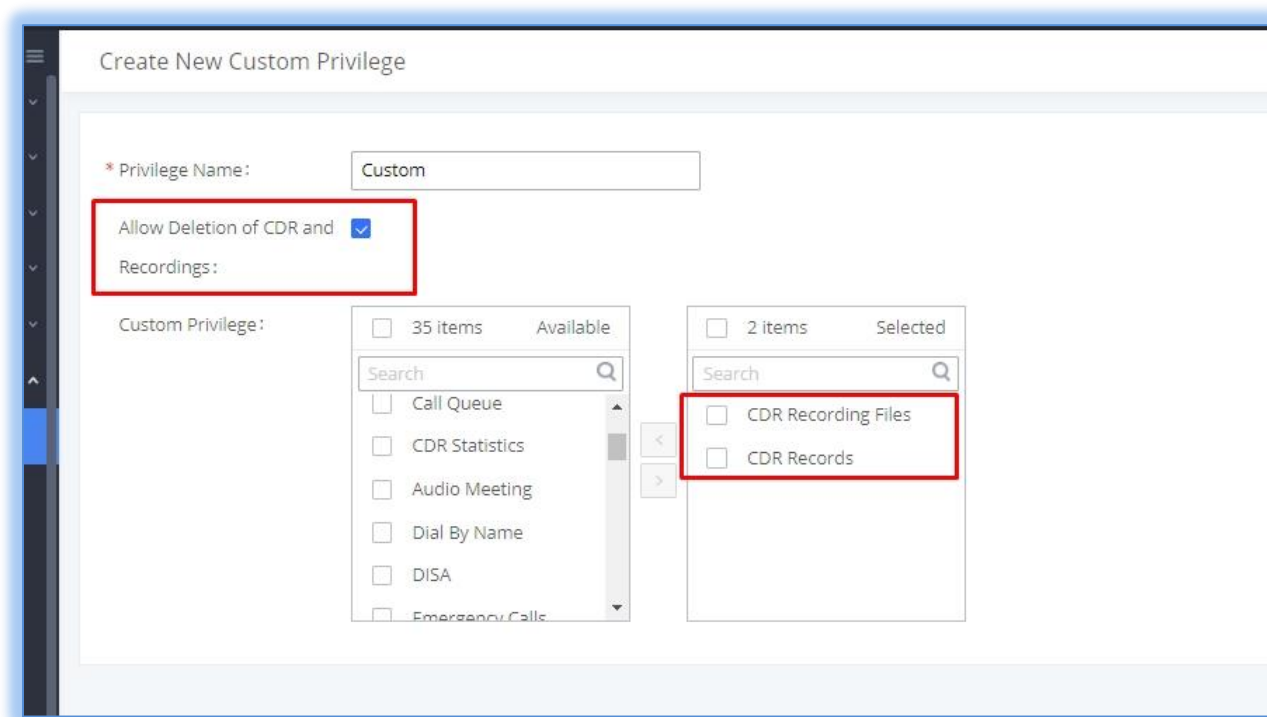


Figure 21 - Allow Deletion of CDR and Recordings

END MEETINGS FROM MEETING LIST

Meeting hosts can now end meetings directly from Wave's *Meeting List* page.



Figure 22 - Meeting List Options

Clicking on the *Completed* button will bring up a prompt asking if the host wants to end the meeting.