UCM Series IP PBX Firmware Release Notes

Table of Content

FIRMWARE VERSION 1.0.21.9

PRODUCT NAME

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

DATE

05/24/2023

FIRMWARE FILE INFORMATION

- UCM6301/6302 firmware file name: ucm6301_ucm6302fw.bin

  MD5: fec503160f1dcd0cd15d20ed29731ec9

- UCM6304/6308 firmware file name: ucm6304_ucm6308fw.bin

  MD5: 642e0fa0a2fe10ea0a62bb5f23ea9e3d

- UCM6300A/6302A firmware file name: ucm6300A_ucm6302Afw.bin

  MD5: fdbf842e0291c063e6ed26a179c14587

- UCM6304A firmware file name: ucm6304Afw.bin

  MD5: 9788a6472ac084a7c3e35063a2fef945

- UCM6304/6308 firmware file name: ucm6308Afw.bin

  MD5: 16538fab26815dc7e4f651848fe625ae

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
- **For UCM6304A on firmware version lower than 1.0.9.10, please upgrade to 1.0.9.10 first before upgrading to 1.0.11.10. UCM6304A firmware 1.0.9.10 can be downloaded here:** https://firmware.grandstream.com/Release_UCM6304A_1.0.9.10.zip
- **If the device is on a firmware version lower than 1.0.7.x, please upgrade to 1.0.9.x first before upgrading to 1.0.15.x.**

- o **UCM6301/2:** http://firmware.grandstream.com/Release_UCM6301_6302_1.0.9.10.zip
- o **UCM6304/8:** http://firmware.grandstream.com/Release_UCM6304_6308_1.0.9.10.zip
- o **UCM6300A/6302A:** http://firmware.grandstream.com/Release_UCM6300A_6302A_1.0.9.10.zip
- o **UCM6304A:** http://firmware.grandstream.com/Release_UCM6304A_1.0.9.10.zip
- o **UCM6308A:** http://firmware.grandstream.com/Release_UCM6308A_1.0.9.10.zip

- **It is recommended to upgrade UCM to latest firmware for improved product lifespan and security.**

CHANGES SINCE FIRMWARE VERSION 1.0.19.10

ENHANCEMENTS

- **[System]** Optimized various system processes
- **[Basic Calls]** Added ability for external callers to opt out of call recordings. This can be configured under *PBX Settings->General Settings->General Preference*.
- **[Basic Calls]** If an LDAP contact dials in, the LDAP contact name will be used as the CID name.
- **[Click2Call]** Users can now select a regular extension as the destination for click2call calls. Note: This is referring to the option under RemoteConnect->Integrated Customer Service, not the webRTC trunk.
- **[Departments]** Added support for *Shared Departments* when Cloud IM is enabled. [SHARED DEPARTMENTS]
- **[Email Settings]** Extension and Wave Welcome email templates now have the option to configure to Wave QR code to use either the UCM's private IP address or public IP address.
- **[Email Settings]** Added IMAP support for the Email-to-Fax feature.
- **[Extensions]** Users can now configure call forwarding settings for internal calls and external calls separately.
- **[Extensions]** Added call forwarding destination option *Custom Prompt* to play a custom prompt to callers.
- **[Extensions]** Updated extension concurrent registration setting. [CONCURRENT REGISTRATION BEHAVIOR UPDATES]
- **[IM]** Added support for syncing personal contacts to local IM.
- **[LDAP]** Contact position information is now visible when viewing LDAP phonebook contacts.
- **[Maintenance]** Added support for saving captures to SFTP Server.
- **[Maintenance]** Add options to stop Ethernet captures after a specified number of time or files has been reached. These options will only be available when the *Storage Location* is set to either *External Storage* or *SFTP Server*.
- **[Meeting]** Conference CEI now contains meeting creator information.
- [**Meeting**] Added support for sending meeting information to register trunk clients.
- **[Meeting]** Added *Raise Hand* feature to meetings.
- **[Onsite Meeting]** Added ability to sort onsite meeting rooms.
- **[Onsite Meeting]** Added meeting cancelation reason to IM notifications when onsite meetings are deleted.
- **[Paging/Intercom]** Added *Private Intercom* option as a paging type. [PRIVATE INTERCOM PAGING]
- **[PBX Settings]** Added *Online Storage* page under *PBX Settings.* In addition to NAS, users can now

configure an SFTP server for scheduled backups, Data Sync and Ethernet captures.

- **[PMS]** Added the ability to customize room status update keys. [PMS ROOM STATUS CUSTOMIZATION]
- **[PMS]** Removed *Automatically Clear Wakeup Calls* and *Automatically Reset User/Wave Password* options for HSC PMS since these options were not applicable.
- **[Queue]** Users can now dial the pause feature code + reason code all at once to quickly set pause status instead of dialing the feature code, waiting for the prompt, and then dialing the reason code.
- **[Queue]** Added Pause Reason to the queue switchboard.
- **[Queue]** Added Play Full Welcome Prompt option to queues. If enabled, the full queue welcome prompt will be played before ringing queue agents. If disabled, queue agents will be rung while the welcome prompt plays.
- **[Queue]** Added agent name information to queue switchboard and statistics pages.
- **[Queue]** Added *Enable Feature Codes* option to the *Call Features→Call Queue→Edit Queue→Advanced Settings* page. If enabled, agents will be able to use the UCM's feature codes to manage calls such as manually starting/stopping call recordings, transferring, parking and disconnecting calls.
- **[RemoteConnect]** A warning about how the storage path priority will change is now prompted when binding to RemoteConnect.
- **[Routing]** Added CallerID Name Lookup option to allow the UCM to look up the number in its LDAP phonebook to see if it matches any LDAP contact. If a match is found, the caller's CID name will be replaced with the LDAP contact name.
- **[RTP Settings]** Added trickle ICE support.
- **[Security Settings]** GDMS Remote SSH is now initiated through the Feedback platform and requires an access token to enable access.
- **[SIP Settings]** Replaced the TCP/TLS certificate *Delete* feature with a *Reset Certificates* feature. This will reset certificates to the factory ones.
- **[SIP Settings]** 180 ringing will be sent instead of 183 when receiving a 183 without SDP.
- **[SIP Settings]** Added teams to CSP headers.
- **[SIP Settings]** Added *Cipher Blacklist* option to the *PBX Settings-SIP Settings->TCP/TLS* page to control what cipher suites are supported for SIP TLS. Note: Items selected will be supported.
- **[System]** Added support for RADIUS authentication. [RADIUS AUTHENTICATION & USE]
- **[System]** Added SMS support. [CONFIGURING SMS]
- **[User Management]** Added the *Pre-Installed Apps* permission to the list of available User Portal/Wave permissions. [WAVE PRE-INSTALLED APPS]
- **[Voicemail]** The *GS-voicemail* SIP header will now be added when using *97 to dial UCM voicemail system.
- **[Voicemail Group]** Added *Shared Voicemail Status* option to allow members to monitor voicemail left in the voicemail group. Red BLF light indicates there are existing unread voicemail while green indicates no unread voicemail. Reading voicemail group emails requires dialing the Voicemail Access feature code (*98 by default). Read status will be shared among all members. Note: this does not affect the individual copies of the voicemail sent to each voicemail group extension.

- **[VoIP Trunks]** *Host Name* and *From Domain* fields no longer require IP address/domain format.
- **[VoIP Trunks]** Added ability to filter DOD by name and number.
- **[Wave]** Added support for read receipts for private chats. If local IM is used, or if the UCM is used as an IM server, this can be configured in the *System Settings→IM Settings→IM Settings* page. If Cloud IM is used instead, this can be configured under the GDMS management portal→Plans& Services→My Plans→Edit Cloud IM (*Cloud IM* must be enabled for the option to appear).
- **[Wave Desktop/Web]** The "last person in the meeting" prompt will no longer play when adding call parties to a regular call.
- **[Wave Desktop/Web]** Added support for logging into Wave Desktop/Web via QR code.
- **[Web]** Updated web interface.
- **[Web]** Added one-time-password for logging into web portal via SMS.

BUG FIXES
- **[System]**
  - Fixed several system stability issues.
  - Fixed an issue where the delay between system prompts were abnormally long
  - [6304/6308/6308A only] Fixed an issue with hardware compatibility and system firmware downgrading.
- **[Active Calls]**
  - Fixed several display issues.
  - Fixed an issue with disconnecting calls from the Active Calls page.
- **[Analog Trunks]**
  - Fixed an issue with poor audio quality when calling in from an analog trunk to a SIP extension.
- **[Basic Calls]**
  - Fixed an issue with choppy audio when transcoding to G.279.
  - Fixed an issue with Call Completion requests not working properly.
  - Fixed an issue with no audio after holding and unholding a call.
  - Fixed an issue with being unable to forward RTP in certain cases.
  - Fixed an issue with poor audio quality if the caller is using GSM codec.
- **[CDR]**
  - Fixed several display issues
  - Fixed an issue where unanswered queue calls and IVR-redirected calls are labeled as "Answered".
  - Fixed an issue with being unable to filter CDR and download filtered records if accessing the UCM via Passwordless Remote Access.
  - Fixed an issue with CDR filtering.
  -
- **[Call Flip**]
  - Fixed an issue with not ending calls correctly after flipped calls have reached the call duration limit.
- **[Contacts]**

- o Fixed an issue where cross-server contacts cannot be seen in some lists.
- **[Device Management]**
  - o Fixed an issue with no audio in RTSP calls to IP camera devices.
- **[Emergency Calling]**
  - o Fixed an issue where an emergency call through a disabled trunk will not generate an alert event.
- **[Email Settings]**
  - o Fixed an issue with the Wave QR code.
  - o Fixed an issue with abnormal email status after sending multiple Extension Information emails.
  - o Fixed an issue with email notifications to IAX/FXS extensions not containing login password.
  - o Fixed an issue with time zone preview being displayed abnormally.
  - o Fixed an issue where email templates could not be modified in certain cases.
  - o Fixed an issue where the start time and time zone information of meetings is not changed after modifying system time zone.
  - o
- **[Emergency Calls]**
  - o Fixed an issue where an emergency call through a disabled trunk will not generate an alert event.
  - o Fixed an issue with not sending email notifications if the caller is an FXS/IAX extension.
- **[Extensions]**
  - o Fixed an issue where if the Ring Simultaneously has a Specific Time condition, and it is configured as month+week, the Ring Simultaneously will not work properly.
  - o Fixed an issue where an endpoint's IP address remained even after it does not respond to OPTIONS SIP messages.
  - o Fixed an issue where an extension in DND could still be rung by other extensions in certain cases.
  - o Fixed an issue where the *88 feature code does not work properly after updating an extension's mobile number.
- **[FXO/FXS]**
  - o Fixed an issue where FXS extensions configured with an emergency CID cannot dial out.
-
- **[HA]**
  - o Fixed an issue where NAS status would not be updated after configuration.
  - o Fixed an issue where a failed IM server connection attempt was labeled as a successful operation in the Operation Log.
  - o Fixed an issue with abnormal behavior after the outbound call limit has been reached.
  - o Fixed an issue with the standby UCM not retrieving IM data.
  - o Fixed an issue with the standby UCM not deleting recordings on NAS.
  - o Fixed an issue with the Backup Voicemail Recordings configuration did not sync to the standby UCM.
  - o Fixed an issue with abnormal Wave logout behavior after upgrading firmware and force switching.

- o Fixed an issue where scheduled meetings on the Active UCM do not start after the standby UCM is upgraded and rebooted.
  - o Fixed an issue with LDAP not working correctly.
  - o Fixed an issue with not generating alert logs after a system reboot in a standalone environment.
- **[HTTPS API]**
  - o Fixed an issue with not being able to clear endpoint IM data if the extension number contains +.
  - o Fixed an issue where the Login Whitelist didn't apply to API logins.
  - o Fixed an issue with displaying the incorrect number of available trunks when subscribing to pbxstatus.
  - o Fixed an issue with CDRAPI not being able to download and play ring group recordings.
  - o Fixed an issue with abnormal response when updating a guest's name via HTTPS API.
  - o Fixed an issue with abnormal response when using an unpermitted IP address to log into the API.
  - o Fixed an issue with delayed calling when initiated from CRM API.
  - o Fixed an issue with being unable to view and retrieve recordings via API.
- **[IAX]**
  - o Fixed an issue with not playing ringback tone when receiving 0x0E Call Progress.
- **[IVR]**
  - o Fixed an issue where a call would not return to the IVR menu if "Voicemail Remote Access" was enabled.
  - o Fixed an issue with dropping calls after dialing a key press event.
- **[LDAP]**
  - o Fixed an issue with LDAP sync failing after deleting an extension.
  - o Fixed an issue with the initial addition of an LDAP phonebook.
  - o Fixed an issue where the LDAP phonebook XML export did not contain external contacts.
- **[Maintenance]**
  - o Fixed an issue with the scroll bar not being displayed on the Alert Events List page.
  - o Fixed an issue with automatic cleaning even if the storage threshold has not been reached.
  - o Fixed an issue with recent SIP Peer Trunk alerts being generated again after a system reboot.
  - o Fixed an issue where syslog timestamp information was not consistent and changed depending on whether the numbered months and days were single digit or 2 digits.
  - o Fixed an issue with Outbound Call Duration alert not being sent properly.
- **[Meetings]**
  - o Fixed an issue with abnormal participant audio detection.
  - o Fixed an issue with abnormal prompt playing.
  - o Fixed an issue with incorrect scheduled meeting time after system reboot.
  - o Fixed an issue with incorrect participation status if an SCA private number joins the meeting.
  - o Fixed an issue with abnormal Meeting Assistant notifications if a recurring meeting is canceled once.
  - o Fixed an issue with being unable to obtain the Google Calendar authorization code.
  - o Fixed several issues with recording video meetings.

- o Fixed an issue with missed call notifications when receiving cross-server meeting invitations.
  - o Fixed an issue with meetings not being recorded properly in certain cases.
  - o Fixed an issue where the participant list is not updated after joining a meeting.
- **[MoH]**
  - o Fixed an issue with being unable play custom MoH under certain cases
- **[NAS]**
  - o Fixed an issue where the UCM frequently wrote to NAS servers.
- **[Network Settings]**
  - o Fixed an issue supported characters
- **[Onsite Meetings]**
  - o Fixed several issues with notifications when meetings are edited or deleted.
  - o Fixed an issue with the Meeting Assistant displaying incorrect meeting ending times.
  - o Fixed an issue where extended contacts are displayed abnormally in the participant list.
  - o Fixed an issue with abnormal behavior after adding a weekly scheduled meeting.
  - o Fixed an issue with the meeting schedule showing only the current day's meetings.
  - o
- **[Operator Panel]**
  - o Fixed an issue with incorrect active call information after blind transferring a ringing call to an unregistered extension.
- **[Paging/Intercom]**
  - o Fixed an issue where the recording prompt would not be heard in certain cases.
- **[Parking]**
  - o Fixed an issue with custom MoH not being played to parked calls.
  - o Fixed an issue where a caller seemingly receives a call from themselves after parking timeout if they were attended transferred to the parking lot.
  - o Fixed an issue where callback would not occur after call park timeout if call flip was used.
- **[PMS]**
  - o Fixed an issue where it was required to enter an arrival date and departure date when modifying the status of a checked-out room.
  - o Fixed an issue where the Update Room Status feature code *23 could not work in certain cases.
- **[Queue]**
  - o Fixed an issue with virtual queue callbacks not generating recordings.
  - o Fixed an issue where clearing call queue statistics would not clear the queue switchboard.
  - o Fixed an issue where the *3 call recording feature code was not working properly for queue agents.
  - o Fixed an issue with the formatting of agent details in the statistics report.
  - o [UCM6308A only] Fixed an issue with not being able to add the maximum allowed number of static agents to a queue.
  - o .
- **[Recordings]**
  - o Fixed an issue with displaying recordings from certain calls.

- o Fixed an issue with incorrectly sorting recordings by file size.
  - o Fixed an issue with Wave still displaying meeting recordings after they are deleted from UCM.
  - o Fixed an issue where calls from analog trunks to DISA and calls to SCA extensions will not be recorded.
  - o Fixed an issue where the recordings list is not updated after scanning.
- **[RemoteConnect]**
  - o Fixed an issue with communicating with endpoints connecting via the RemoteConnect address.
  - o
- **[Ring Group]**
  - o Fixed an issue with playing prompts twice after doing a 302 transfer, and the transfer is rejected.
- **[Routing]**
  - o Fixed an issue where users could not strip more than the length of the pattern when a prepend is configured.
  - o Fixed an issue where inbound routes followed holiday year incorrectly.
  - o
- **[RTP Settings]**
  - o Fixed an issue where STUN/TURN detection is disabled if *Number of ICE Candidates* is set to 0.
- **[SIP Settings]**
  - o Fixed an issue with Ring Simultaneously calls not containing the correct remote party ID.
- **[System Events]**
  - o Fixed an issue with incorrect alert content for the *Local Disk Usage* alert.
- **[Time Settings]**
  - o Fixed an issue where the America/Mexico City time zone still followed Daylight Savings. It is now UTC-6 year round.
  - o
- **[Voicemail]**
  - o Fixed an issue where remote voicemail management prompts had abnormal audio if audio FEC was enabled.
  - o Fixed an issue with voicemail count after manual deletion of voicemail.
- **[VoIP Trunks]**
  - o Fixed an issue where the Provider Name dropdown list search feature was case-sensitive.
  - o Fixed an issue with carrying the incorrect CID in certain cases.
  - o Fixed an issue where remote voicemail management will no longer work after refusing a direct callback.
- **[Wave]**
  - o Fixed an issue with incorrect status after logging in.
  - o Fixed an issue with not displaying call history of inbound calls that were routed by DID with Strip configured.
  - o Fixed an issue with abnormal voicemail count.
  - o Fixed an issue with sending invalid SMS login verification codes.

- **[Wave Android]**
  - o Fixed an issue where Wave Android would continue to show the ringing screen even after another endpoint has already answered the call.
- **[Wave Desktop]**
  - o Fixed an issue with displaying a missed call pop-up when canceling an out bound call.
- **[Wave iOS]**
  - o Fixed an issue with muting and camera initialization when joining scheduled meetings via Meeting Assistant.
  - o Fixed an issue where scheduled meetings cannot be ended.
- **[Wave Web]**
  - o Fixed an issue with abnormal video display.
  - o Fixed an issue with recordings showing incorrect time after call flipping a DISA call.
  - o Fixed an issue where Wave Web could not successfully negotiate RTX when using Firefox.
  - o Fixed an issue where meetings that the user is invited to are not displayed.
- **[Web]**
  - o Fixed various display issues.
  - o Fixed an issue with jumping to the incorrect call queue page.
  - o Fixed an issue where the "No Permission" error abnormally appears for admin users.

- **[Zero Config]**
  - o Fixed an issue where Auto Discover scanned both interfaces' networks instead of just the selected Default Interface.
  - o Fixed an issue with not displaying imported global templates.
  - o Fixed an issue where assigned extension information is not displayed for GXW devices.
  - o Fixed an issue where if Dual network method is used, Auto Discover will display LAN1 with LAN2's IP address.
  - o Fixed an issue with failing to import model templates.
  - o Fixed an issue where UCM sends its server address to endpoints even when Enable Automatic Configuration Assignment is disabled.
  - o Fixed an issue with page freezing when selecting and editing two devices that are the same model.
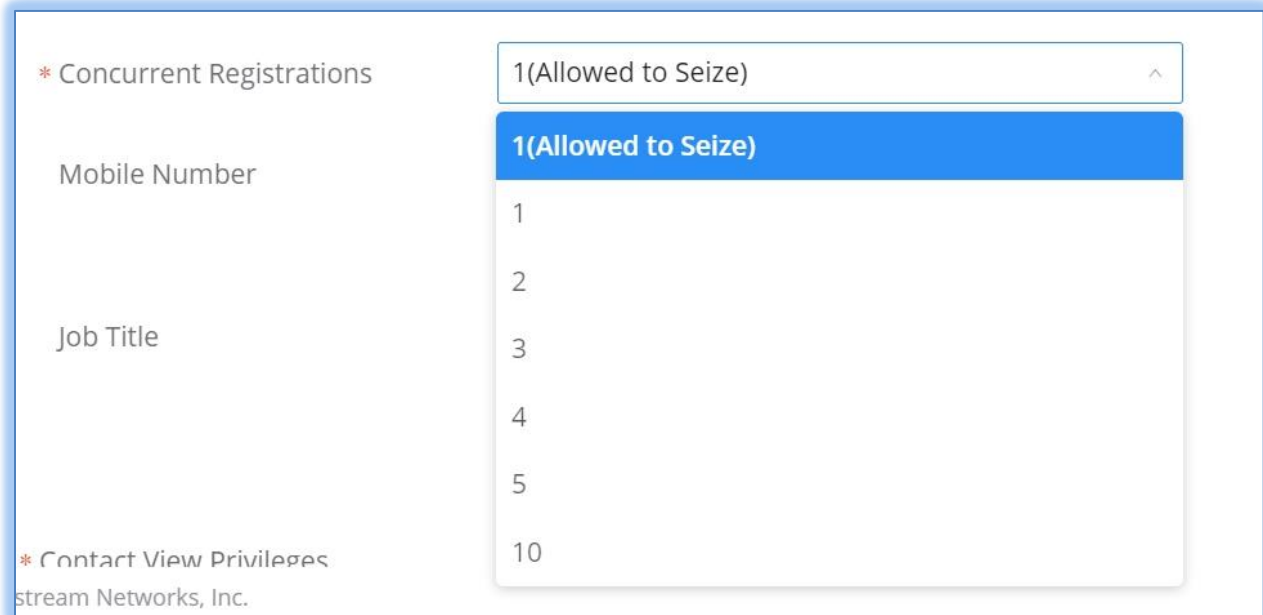
NEW LIMITATIONS
- **[Extension]** Increased max number of extension groups for UCM6304/8/4A/8A to 100.
- **[Routing]** Increased outbound blacklist limit for UCM6304/8/4A/8A to 10,000.

NEW FEATURES OVERVIEW

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

CONCURRENT REGISTRATION BEHAVIOR UPDATES

Firmware 1.0.20.7 has updated concurrent registration behavior, updated the concurrent registration field to a dropdown list and added the **1 (Allowed to Seize)** option.

Figure 1 - Concurrent Registration

If the maximum number of concurrent registrations has been reached, the UCM will no longer allow other registrations from other clients to override the existing registrations. If **1 (Allowed to Seize)** is selected, the registration can be taken over by another client's registration request.

SHARED DEPARTMENTS

Shared departments offer a centralized way for administrators to manage departments and members across multiple servers using the same Cloud IM account. To get started, make sure that the UCM has Cloud IM enabled and configured. Navigate to **Contacts→Department Management** and add/edit a department.

Figure 2 - Shared Department

If the UCM has Cloud IM enabled and configured, the following options will be available:

- **Set as Shared Department** – Toggles the shared status of the department. If there are existing cross-server members in this department, this option will be grayed out.
- **Share to Following Sites** – Select the sites (servers) to that will be allowed to move their extensions in and out of the shared department.
- **Apply Settings to Sub-Level Departments** – Only available when editing an existing department. Apply the same sharing settings to its sub-department. If a department has sharing enabled and is configured to be shared with specific sites, its sub-departments will also have sharing enabled and be shared with the same sites.

Shared departments can be distinguished by a icon next to their name.
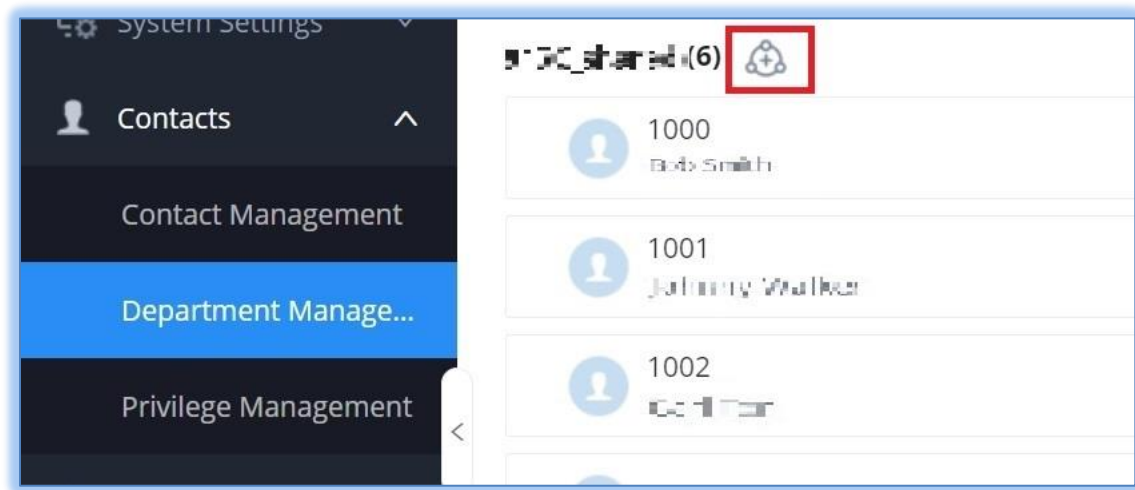
Figure 3 - Shared Department Symbol

There are 3 potential marks in the center of that icon that represent the permission level that the current UCM has for that site.

- The + symbol indicates that the current UCM is the creator of the shared department. It has full management privileges over it, which include the ability to edit it, delete it, add sub-departments under it, add its own extensions to it and remove **any** extensions from it, including extensions from other servers.

- The checkmark symbol indicates that the department was shared to the current UCM has been authorized to move its own extensions in and out of the department.

- No symbol indicates that the department is from a UCM that is under the same Cloud IM account as the current UCM, but it has not been shared to the current UCM for management. The current UCM can only view this shared department and its members but cannot interact with it unless the shared department has the current UCM's extensions as members. In this case, the current UCM can still remove members from the shared department.

Notes:
- Removing a member from a shared department will move it to the root directory of its original site.
- A shared department cannot be deleted unless all cross-server members are removed from it.

If a UCM with a shared department no longer wants to use Cloud IM, it must first do the following:
- If there are no cross-server members in its shared departments, it must set them as local departments and assign new parent departments to them.
- If there are existing cross-server members in its shared departments, it must assign the shared departments to another site for management.
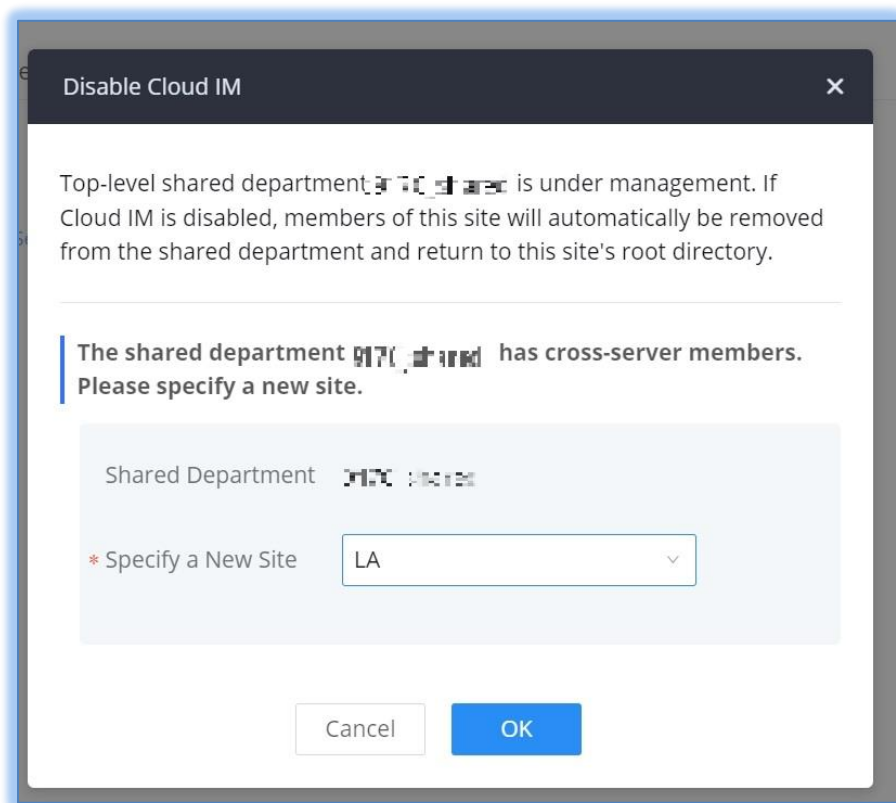
Figure 4 - Assigning Shared Department

If the UCM re-enables Cloud IM, it will not reclaim ownership of its original shared departments.

CONFIGURING SMS

Firmware 1.0.20.7 has added SMS support. Under *System Settings→SMS Settings*, users can now configure their Amazon SMS service account or Twilio SMS account. At this time, SMS can be used to send system alert notifications and one-time passwords for web login. To take advantage of this feature, make sure that accounts have associated phone numbers by configuring them under the **Maintenance→User Management** page.

Figure 5 - SMS Settings

Please use the account information provided by your SMS service provider to fill in the fields. Use the Test button to check if SMS has been set up properly.

Figure 6 - SMS Template

Users can also configure the SMS templates.

Finally, there is an **SMS Delivery Log** tab that shows historical SMS sending history, similar to the Email Send Logs.

The **SMS Notification** column has also been added to the **Maintenance→System Events→Alert Events List** page, where users can select what alerts they want to receive SMS notifications for.

Figure 7 - SMS Notifications

LOGGING IN VIA ONE-TIME PASSWORD

If SMS has been configured successfully, the UCM web portal login screen should now appear as such:
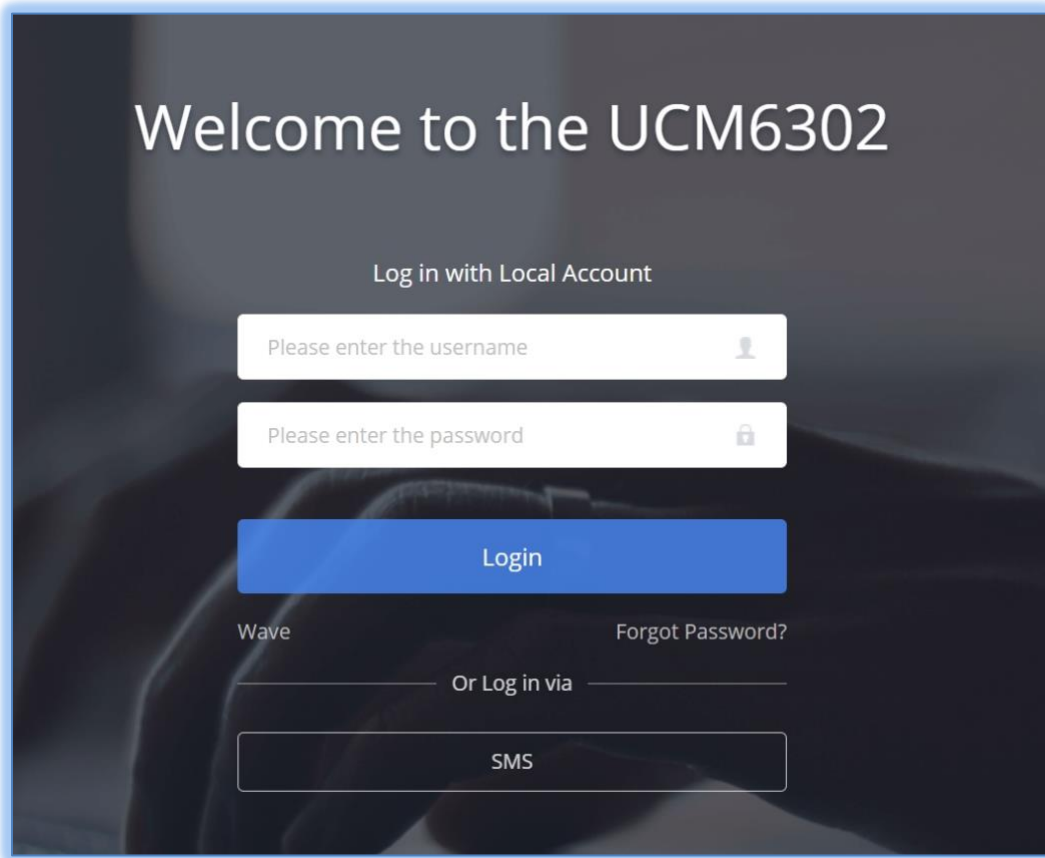
Figure 8 - Login Screen

From here, users can click on the **SMS** button at the bottom to log in via SMS.

Figure 9 - Log in with SMS

Enter your account username, and click on the **Send SMS** button to send an SMS message to the account's associated phone number. The message should contain the code that must be entered into the **SMS Verification Code** field. If the account does not have a phone number, please configure it under under the **Maintenance→User Management** page.
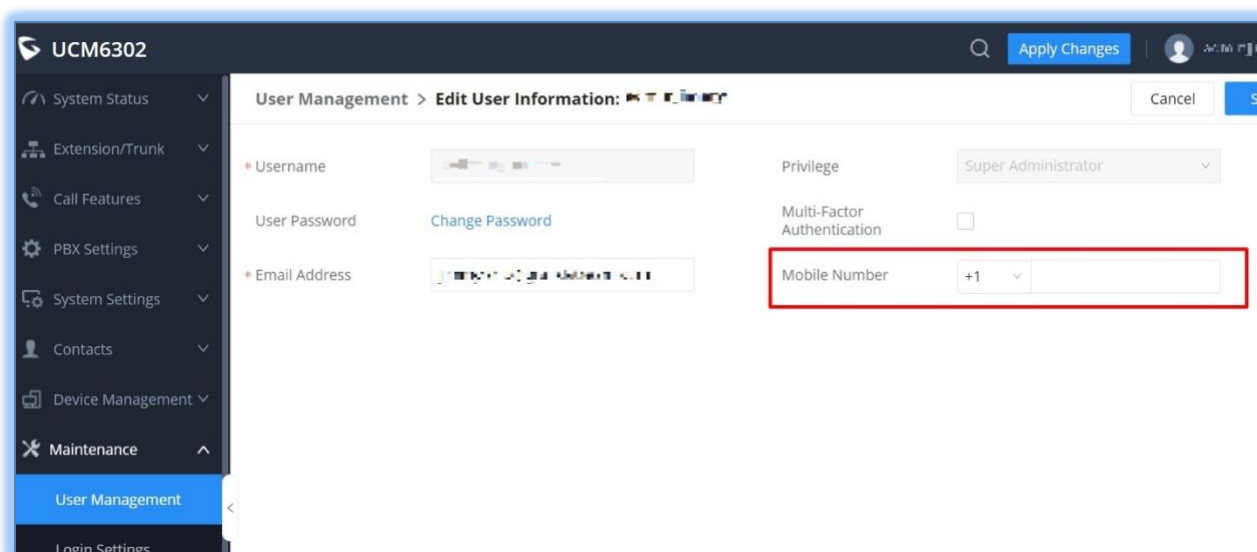
PRIVATE INTERCOM PAGING

Only applicable when using the GSC3510. This option is the same as the Private Intercom paging type found in the UCM62xx/6510 models.

Figure 10 - Private Intercom

When using this paging type, the paging/intercom caller can hear and be heard by all members of the paging group. However, the paging group members will only hear the caller and not other members.

PMS ROOM STATUS CUSTOMIZATION

To improve flexibility of PMS integrations, users can now configure custom room status codes and key events from 0-9. To get started, navigate to the **Other Features→PMS** page and click on the **Custom Room Status Codes** button.
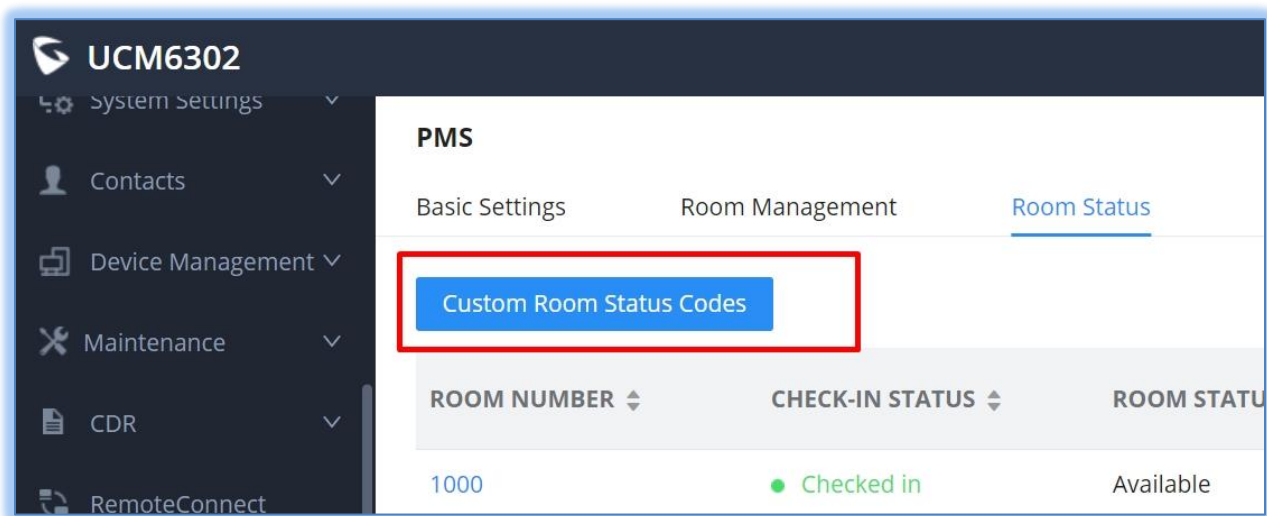
Figure 11 - Custom Room Status Codes Button

From here, users can then set the key events for different room statuses and corresponding codes.

Figure 12 - Room Status Codes

RADIUS AUTHENTICATION & USE

UCM now supports logging in via RADIUS server. To get started, navigate to the **System Settings→RADIUS** page. From here, configure your RADIUS server and authentication settings.

Figure 13 - RADIUS

Tooltips for some settings:

- **Maximum Number of Retransmissions –** The maximum allowed number of login requests
- **RADIUS Timeout (s)** – The message timeout for login requests

Once configured, users will have the option to log into the UCM web portal via RADIUS credentials.
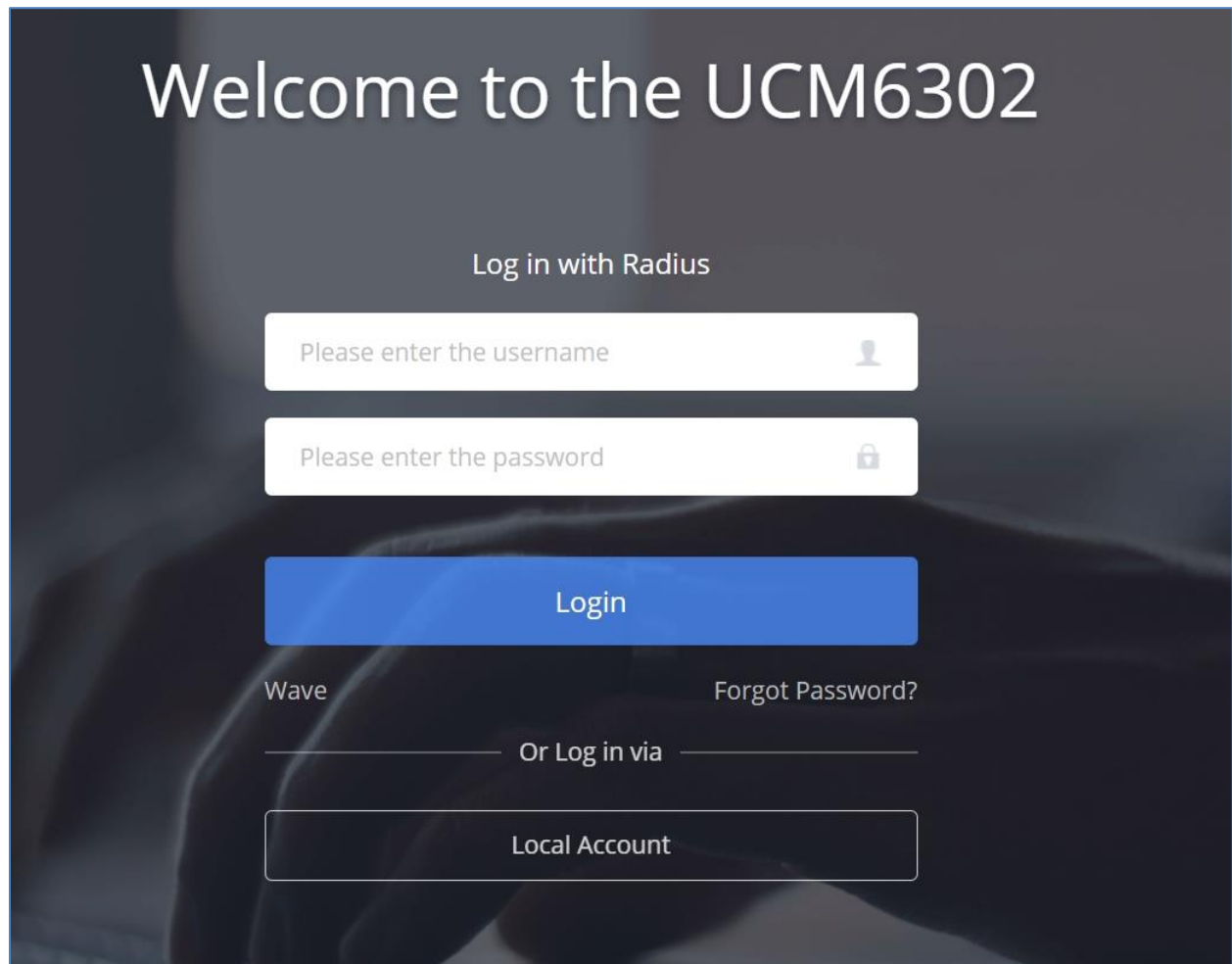
Figure 14 - RADIUS Login

Only UCM super administrator and administrator permission types can be configured on the RADIUS server.

WAVE PRE-INSTALLED APPS

Users can now enable/disable permissions for pre-installing apps for Wave and configure them. To do so, navigate to **Maintenance→User Management→User Portal/Wave Privileges→Edit Privilege→Wave Permissions→3ʳᵈ Party Applications.**
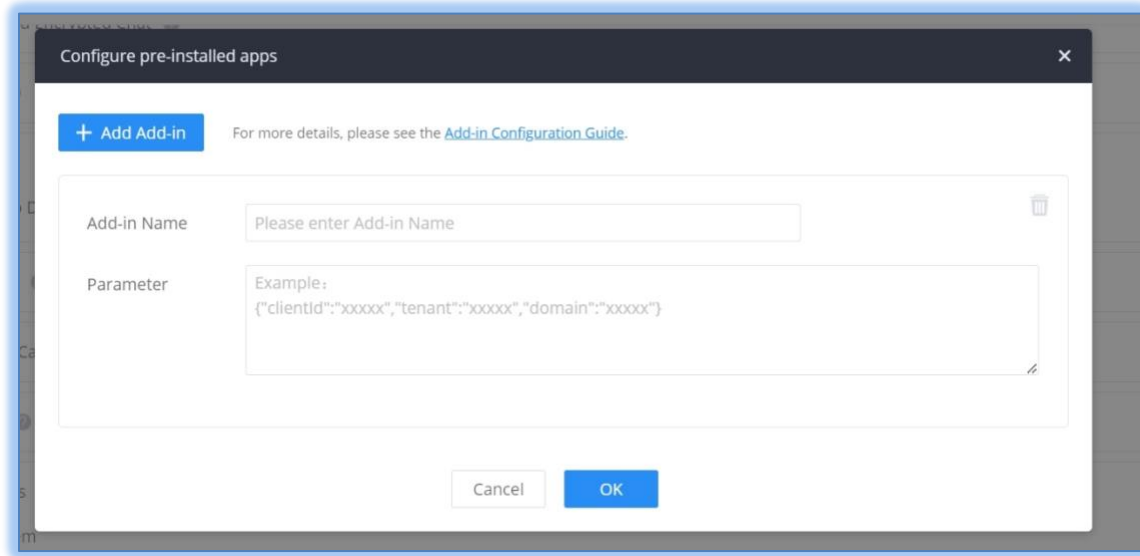
Figure 15 - Wave Pre-installed Apps

More details about pre-installing Wave add-ins can be found in the Add-in Configuration Guide.