SoftwareUCM PBX Firmware Release Notes

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FIRMWARE VERSION 1.0.33.18

PRODUCT NAME

SoftwareUCM

PROGVER= 1.0.33.18; WAVEVER= 1.0.33.20

DATE

Published: 11/10/2026

FIRMWARE FILE INFORMATION

- SoftwareUCM PBX firmware file name (bin): softwareucm_1_0_33_18.bin
  MD5: 3a4895b079abd90eab6595fc0560f815

CHANGES SINCE FIRMWARE VERSION 1.0.33.7

ENHANCEMENTS

- **[System]**
  - Improved call status update speed.
- **[Zero Config]**
  - Added support for provisioning Cisco IP CP-3905.
  - Added support for provisioning Cisco IP phones' dial plan and "Send Calls with #" (or similar) configuration.

BUG FIXES

- **[Security]**
  - Fixed the following security vulnerabilities:
    - CVE-2026-111497
    - CVE-2026-114820
  - Additional security improvements.
- **[System]**
  - Fixed several system stability issues.
- **[Routing]**
  - Fixed an issue with saving inbound route changes.
- **[Zero Config]**
  - Fixed an issue where the P8036 p-value would not apply correctly.

NEW LIMITATIONS

- **[System]**
  - Increased concurrent call recording capacity to 1000 concurrent calls.
  - Increased CAPS capacity to 50

FIRMWARE VERSION 1.0.33.7 (BETA ONLY)

PRODUCT NAME

SoftwareUCM

PROGVER=1.0.33.7; WAVEVER=1.0.33.15

DATE

Published: 5/26/2026

FIRMWARE FILE INFORMATION

- SoftwareUCM PBX firmware file name (bin): softwareucm_1_0_33_7.bin
  MD5: b8d064c42b3febec4a65473d38d9d33f

CHANGES SINCE FIRMWARE VERSION 1.0.27.15

Features and bug fixes introduced starting from UCM6300 Series 1.0.29.x and higher have been ported over.

ENHANCEMENTS

- **[System]**
  - Added optimizations to improve handling of large numbers of subscription requests.
  - On factory settings, the UCM will now have the following services and corresponding ports disabled:
    - SSH
    - SFTP
    - Any other feature or service not actively in use
    - Any service that would send network information to Grandstream servers for services such as date/time syncing, region detection, etc.
- **[Security]**
  - Added Geo-IP Access Control option *Strict Defend Mode*, which drops traffics from blocked countries entirely instead of the original behavior of rejecting at the application/service layer and sending explicit responses.
  - Users can now manually add entries to the Fail2ban blocklist. Up to 100 can be manually added.
  - Fail2ban, SYN Flood Defense and Ping Defense firewall settings are now enabled on factory settings.
- **[AMI]**
  - Added LinkedID parameter to CDR AMI event reporting for improved call tracking and management.
- **[Announcement Center]**
  - Added a *Call Privileges* field where users can select the calling privilege level of the announcement center.
- **[Call Statistics]**
  - Added several new call report types for various call scenarios [NEW CALL STATISTICS REPORTS]
- **[Call Flip]**
  - BFCP will no longer be offered if support is not explicitly stated.

- **[CDR]**
  - Added call billing support. *Call Rates* page has been added to under the *CDR* section, and a *Carrier* page has been added to the *Outbound Routes* section. Call statistics will now also contain call billing information.
  - Callee name is now displayed under the Callee column
- **[CRM]**
  - Added support for Bitrix24 CRM integration. Please refer to the official Bitrix24 CRM Configuration Guide for detailed instructions on setup and usage.

- **[Clustering]**
  - Added support for clustering. Before license activation, users can now designate their SoftwareUCM instance as either a main Business Server or a Media Server for cluster environments. SoftwareUCMs designated as a media server function only as an additional resource pool for the designated SoftwareUCM business server and thus **do not require** license activation. For more details about this functionality, please see the SoftwareUCM Media Cluster Guide.
- **[Email Settings]**
  - Wave information is no longer included in the *New Messages to Inactive User Notification* email template.
- **[Emergency Calling]**
  - ELINs can now be mapped to specific extensions instead of subnets. [EMERGENCY LOCATION – EXTENSION-TO-ELIN MAPPING]
  - *Send PAI Header* option has been added to the *Add/Edit Location Mapping* page.
- **[Extensions]**
  - Added *Call Policy* tab. Call forwarding and DND settings have been moved to this tab.
  - Added comprehensive extension-level call number handling feature under the new *Call Policy* tab.
  - The *Emergency CID* field of new extensions will now be auto-filled with the extension number.
  - Added support for Cisco CP69xx/78xx/88xx endpoint DND. Pressing DND on Cisco phones will now also update the UCM extension presence status to DND. Note: DND status sync for other Cisco endpoints may work despite not being explicitly stated.
  - Added *Use callee DOD on FWD or RS* option to *Edit Extension→Features* page to allow extensions to use their DOD as CID for outbound blind transfers and redirected calls.
  - Wave Administrator has been added as a *User Portal/Wave* Privileges option under the extension settings.
  - Added Multi-Factor Authentication toggle option to Edit Extension→Wave Client page. [**Error! Reference source not found.**]

- **[HA]**
  - Added support for High Availability (HA). HA environments will require the new "HA Standby Device" add-on, which will be available when purchasing or renewing SoftwareUCM PBX plans. If this add-on is included, an additional license file for the standby device will be provided. This license file **cannot** be used for standalone SoftwareUCM instances and will not work with other SoftwareUCM instances besides the one designated in the license.
  - The console can now retrieve HA status and display the HA cluster IP address and

active/standby machine IP addresses.

- For more details about this functionality, please see our official HA guides:
  - For local device redundancy within the same network: SoftwareUCM – High Availability User Guide: Local HA
  - For remote device redundancy located on different networks: SoftwareUCM – High Availability User Guide: Remote Disaster Recovery

- **[HTTP Server]**
  - Added *Automatically Update the External Host Address for Wave* option to the RemoteConnect—>Plan Settings page, allowing users to choose whether the *HTTP Server—>Wave—>External Host* field is automatically updated when a RemoteConnect plan is active.
- **[HTTPS API]**
  - Added API support for adding, editing, and deleting LDAP contacts. The following commands have been added: addContact, deleteContact, and updateContact. Please check our official IPPBX HTTPS API guide for details on usage.
  - Added ability to customize the permissions of each API user.
- **[Integrations]**
  - Added support for retrieving and syncing contacts from Windows AD, Microsoft Entra ID, and Google Workspsace into dedicated UCM LDAP phonebooks [INTEGRATION OF COLLABORATION PLATFORMS]
- **[IVR]**
  - Added support for IVR Webhook, allowing the UCM to send/receive call event notifications and receive call control commands. [IVR WEBHOOK]
  - Added the *PMS Wake-up Call Service Mode* option that, if enabled, would allow the IVR to be selected and used for wakeup service calls.
  -
- **[LDAP]**
  - Added a *TLS Compression* toggle to the *LDAP Server Configuration* page. This option is disabled on factory settings.
  - Added the *LDAP Attribute Conversion* option to the *LDAP Server→Phonebook Download Configurations* page. This allows the UCM to display OpenLDAP contact details as if they were normal UCM LDAP contacts by mapping the source LDAP server attributes to UCM's LDAP server attributes.
- **[Live Chat]**
  - Added ability to toggle Live Chat on/off.
  - Added **Advanced Messaging** page under the Sidebar→Messaging section. [ADVANCED MESSAGING]
- **[Maintenance]**
  - Backups are now created in .tgz file format.
  - Backup restoration now supports both .tar and .tgz file formats.
  - Added options to check online for new firmware and schedule regular firmware checks via the *Task Management* page.
  - SECURITY syslog is now enabled on factory settings.
- **[Meetings]**
  - Added the *Play Joining/Leaving Meeting Announcement* toggle to allow users to enable/disable the meeting join/leave notification sound.

- Added the *Auto End Meeting* toggle to configure whether meetings will automatically end if there are no other participants in a meeting besides monitoring devices such as GDS, IP cameras, etc.
- The designated meeting host of scheduled meetings can now download recordings of their meetings. Previously, only the meeting creator could do this. Note 1: Transferring host privileges during the meeting will not give the new host the ability to download meeting recordings. Note 2: Hosts cannot download recordings of meetings originating from UCMs different from their own.
- Users can now set an ending date for when to stop recurring meetings.

- **[Network Settings]**
  - Added IPv6 support. Requires SoftwareUCM ISO version 1.0.3.5.
  - Added Dual network method, allowing for usage of two separate NICs. Requires SoftwareUCM ISO version 1.0.3.5.
  - Added the Port Management tab to the Network Settings page. Users can now customize the port number for the following: SSH, MySQL, LDAP, LDAPS, SNMP, HTTPS, HTTP, SIP UDP, SIP TCP, SIP TLS, RTP, AMI, and Wave.
  - The following changes have been made for EAP-TLS 802.1x mode:
    - Renamed MD5 Password field to 802.1X Client Private Key Password.
    - Added 802.1X Client Private Key field.
    - Uploaded 802.1X client certificates will now be automatically renamed to 8021x_client_cert
    - Uploaded 802.1X client private keys will now be automatically renamed to 802x_client_pem
- **[Paging]**
  - Added the *First Answer Termination* option. If enabled, as soon as one recipient answers a page, it will be ended for the other recipients.
  - Added live broadcasting functionality to the Multicast paging type. Users are now able to set up background sound and make impromptu announcements while the page is ongoing.

- **[PBX Settings]**
  - Added support for Amazon S3 cloud storage as a backup location. This new feature can be found under the new *PBX Settings→Storage Device Management* page. [AMAZON S3 SUPPORT]
  - Only applicable for Oracle Hospitality's OPERA PMS. Added option to the PBX→General Settings page to set prefixes that will allow the UCM to distinguish and definitively label different types of calls (i.e., local calls, long-distance calls, and international calls) for call billing purposes.
- **[PMS]**
  - Added support for Oracle Hospitality OPERA. [ORACLE HOSPITALITY OPERA INTEGRATION]
  - Hmobile has been renamed to "char pmslink".
  - Local PMS's wakeup service now supports the use of existing IVRs for wakeup calls and its own unique key press events [WAKEUP IVR]
  - Users can now create wakeup calls for checked-out rooms.
  - Added various new features to Local PMS. [LOCAL PMS ENHANCEMENTS]
  - Local PMS wake-up service prompt will now dynamically use the language configured during room check-in.
  - Local PMS check-in and check-out actions will take effect immediately without requiring "Apply Changes".
  - Added support for automatic room allocation for bookings.
- **[Queue]**
  - Users can now specify the voice prompt language used for each queue.

- Queue chairman can now view the CDR of their managed queues.
- Added agent proficiency-based routing. [QUEUE AGENT PROFICENCY-BASED ROUTING]
- Added *Premium Code* and *Premium Code Voice Prompt* options to the *Advanced Settings* page. Queue callers can increase their priority in queue by entering this code after the premium code prompt.
- The *Enable RPID Header* option has been added to the *Advanced Settings* page

- **[Routing]**
  - Added Least Cost Routing (LCR) support. [CARRIER CALL RATES & LEAST COST ROUTING]
  - Users can now adjust the query timeout when using Don't Call Me Blocklist from 1~180 seconds. Default value is now 5 seconds.
  - When importing, users now have the option to skip importing duplicate routes or update duplicate routes with the settings in the import file.
  - Added option to change how outbound routes are prioritized. [OUTBOUND ROUTE PRIORITY POLICY]
  - Added support for contact querying to 3rd party SQL servers in addition to the MySQL support in 1.0.27.x. Database configuration has been moved to Integrations→3rd Party Database Integration page. Queried contacts can also be set to be saved to the local UCM LDAP phonebook. [3RD PARTY SQL DATABASE SUPPORT]
  - Added Caller ID Manipulation section to outbound route page. Users can use it to strip and prepend the CID of an outgoing call before it goes out. [CALLER ID MANIPULATION]
  - Users can now configure per-call and total call duration limits for outgoing calls. [Outbound Call Duration Limits]
- **[SIP Settings]**
  - Added the *Replace '#' with %23 in SIP URI* option to the *SIP Settings→ToS* page. If disabled, the UCM will not encode # as %23 during call processing.
- **[SNMP]**
  - Added support for more OIDs in the MIB. [SNMP: NEW OIDS]
- **[Speed Dial]**
  - Added *Speed Dial Name* field for entries.
- **[System Events]**
  - Added **GDMS Cloud Storage** alert for failed uploads to GDMS cloud storage.
  - Added option to not generate Lost Registration alerts for Wave clients.
- **[Time/Date Settings]**
  - Added support for configuring holidays by date and week.
  - The system can now check for time zone updates and update its time zone list automatically. Users can manually check for updates and schedule update checks from the *Task Management* page.
  -
- **[User Management]**
  - Users that have permission for features will also be able to access the corresponding scheduled tasks for those features.
  - Added Wave permission *Wave App Screenshot and Screen Recording*.
  - Added support for configuring pre-installed Wave add-ins for users under the User Portal/Wave Privileges page.
  - Added Wave permission **Recording Status** to toggle visibility of the call recording status icon in calls and meetings.
  - Added Administrator Privileges tab, which currently supports permissions for CDR/recording viewing and downloading of select departments and extensions. [Administrator Privileges]

- Added the following new User Portal/Wave privileges:
  - *Delete Message* Wave permission
  - *Multi-client Loging Settings* Wave permission
- Added the following new custom privileges:
  - PMS – Room Management
  - PMS – Room Status
  - PMS – Housekeeper
  - Music On Hold

- **[Voicemail]**
  - Added support for batch deletion of voicemail messages and voicemail group messages.
  -
- **[Voice Prompts]**
  - Added support for playback of custom prompts.
  - Users can now customize the prompt that plays when an outgoing call has been blocked by going to *PBX Settings→Call Prompt Tones→General Call Prompt Tones* and configuring the Blocklist Outgoing Failure option.
- **[VoIP Trunks]**
  - Added Concurrent Call Threshold and related system alerts.
  - Added the **Response to Blocked Call** option to customize the response code sent to the caller when a call is blocked due to hitting concurrent call thresholds.
  - Added the **Send Diversion Header** option to the *Advanced Settings* page, allowing users to configure whether to send Diversion Header for each trunk.
- **[Wave]**
  - Added support for automatically refreshing Wave login QR code.
  - Added support for Wave account switching.
-
- **[Web]**
  - Users can now batch delete inbound routes, outbound routes, and DODs.
  - Trunk status and active call count will now be displayed on the VoIP Trunks overview page.
  - Room Status page has been changed to "Check-in Management".
  - Zero Config port information has been added to the System Settings→Network Settings→Port Management page.
  - Dashboard now displays NAS connection status and space usage.
  - Dashboard now displays the IP addresses of available network interfaces.
  - Users can now import and export data in XLSX format.
  - Made several improvements to the webUI.
- **[Zero Config]**
  - Added ability to search device templates by vendor.
  - Added Zero Config support for 3rd party phones such as Cisco, Polycom, and Yealink. [ZERO CONFIG SUPPORT FOR 3RD PARTY DEVICES]
  - Added wallpaper resolutions 320x240 and 1280x720 to Global Policy page.
  - Added support for filtering devices by vendor. Currently, only Grandstream devices can be identified. Vendors are identified through MAC OUI.
  -

NEW LIMITATIONS

- **[System]**

    - Updated strong password requirements for User Passwords and SIP Registration passwords to the following:
        - Minimum length of 10 characters
        - Must satisfy all of the following character conditions:
            - 1 or more uppercase letters
            - 1 or more lowercase letters
            - 1 or more numbers
                - 1 or more special characters
        - No consecutive repeating characters
        - Must not match username
    - Updated strong password requirements for voicemail and voicemail groups:
        - No consecutive repeating characters
        - Must not match extension number
- **[Extensions]** Job Title field now supports blanks.
- **[Maintenance]** Backup upload file size limit has increased from 30MB to 100MB.
- **[VoIP Trunks]**
    - PAI header field now supports plus signs (+).
    - Max number of SIP trunks has been increased to 1000.

- **[Zero Config]** Increased firmware upload size limit to 1.5GB.

NEW FEATURES OVERVIEW

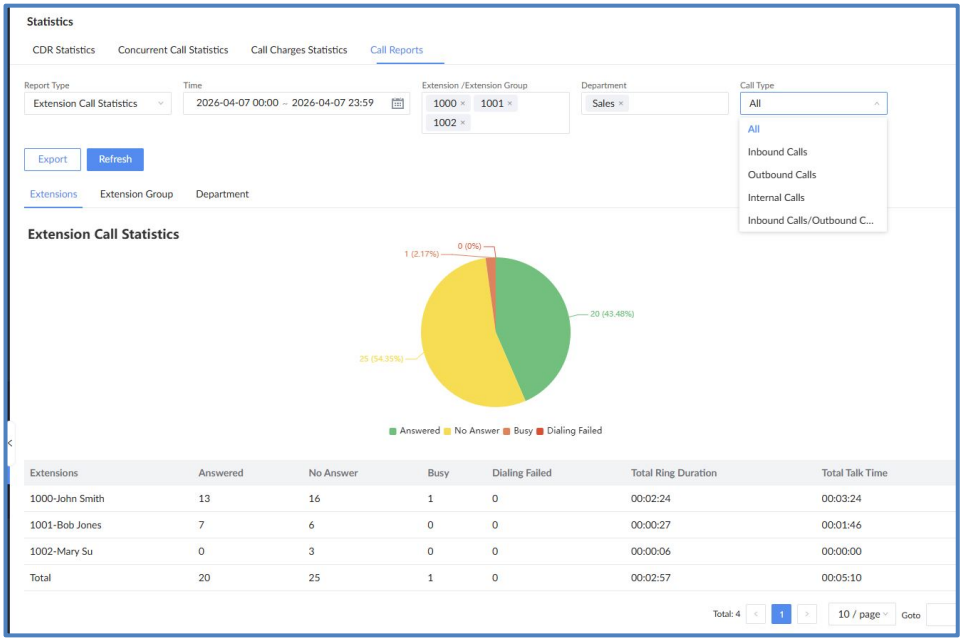
This section describes the major new features/changes introduced in the update and provides instructions for usage.

Note: Some of the screenshots in this section are from the UCM6300 series web UI and may not accurately reflect the SoftwareUCM UI.

NEW CALL STATISTICS REPORTS

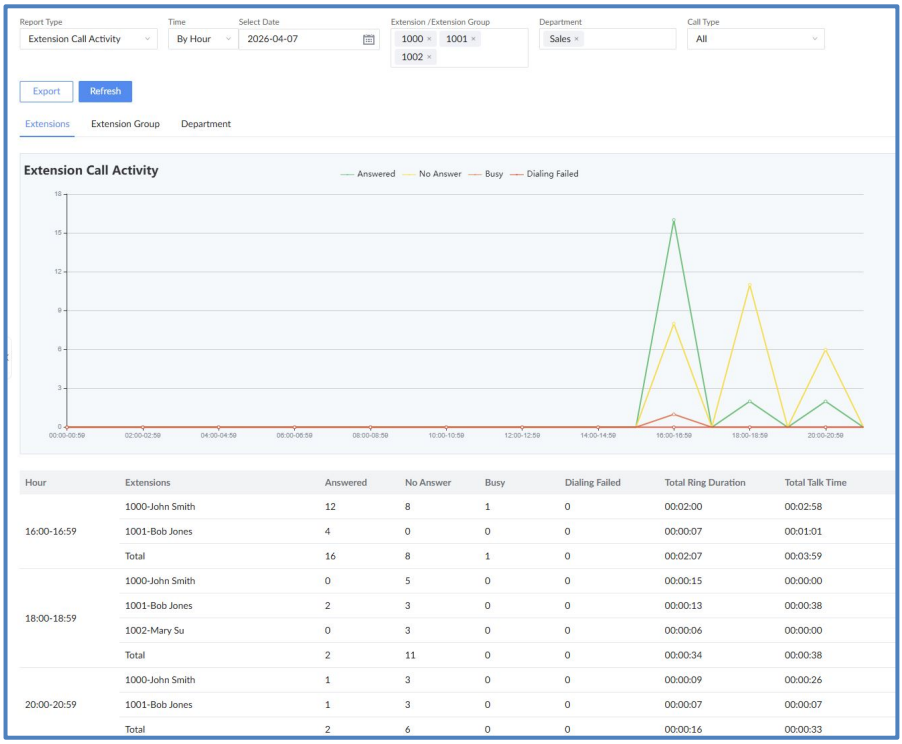
UCM now supports specialized call reports and statistics graphics for the various scenarios. This feature can be found under the new **CDR—>Statistics—>Call Reports** tab. The following scenarios are supported:

- **Extension Call Statistics** – Shows call statistics of selected extensions/extension groups/departments over specified time periods and call types.



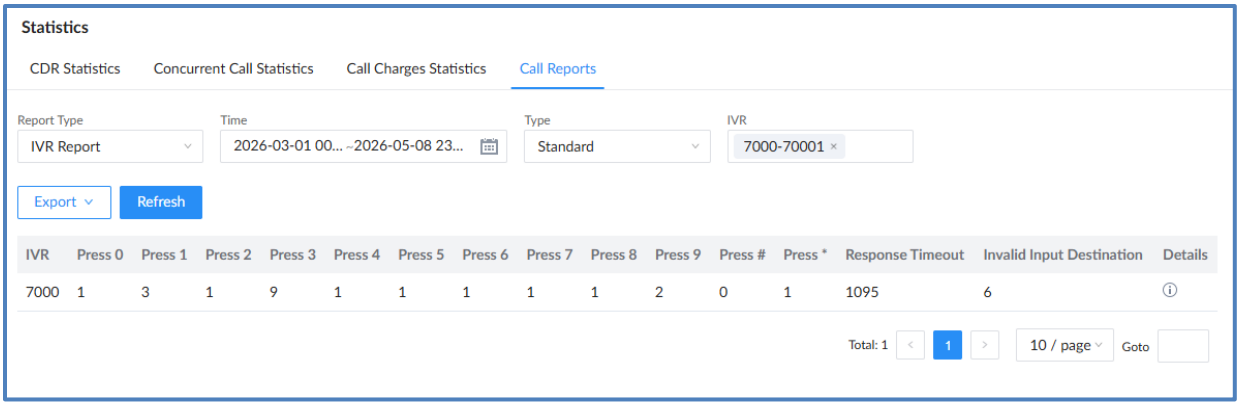
Extension Call Statistics

- **Extension Call Activity** – Shows how calls and selected call types were handled by the specified extensions/extension groups/departments over the specified time periods.



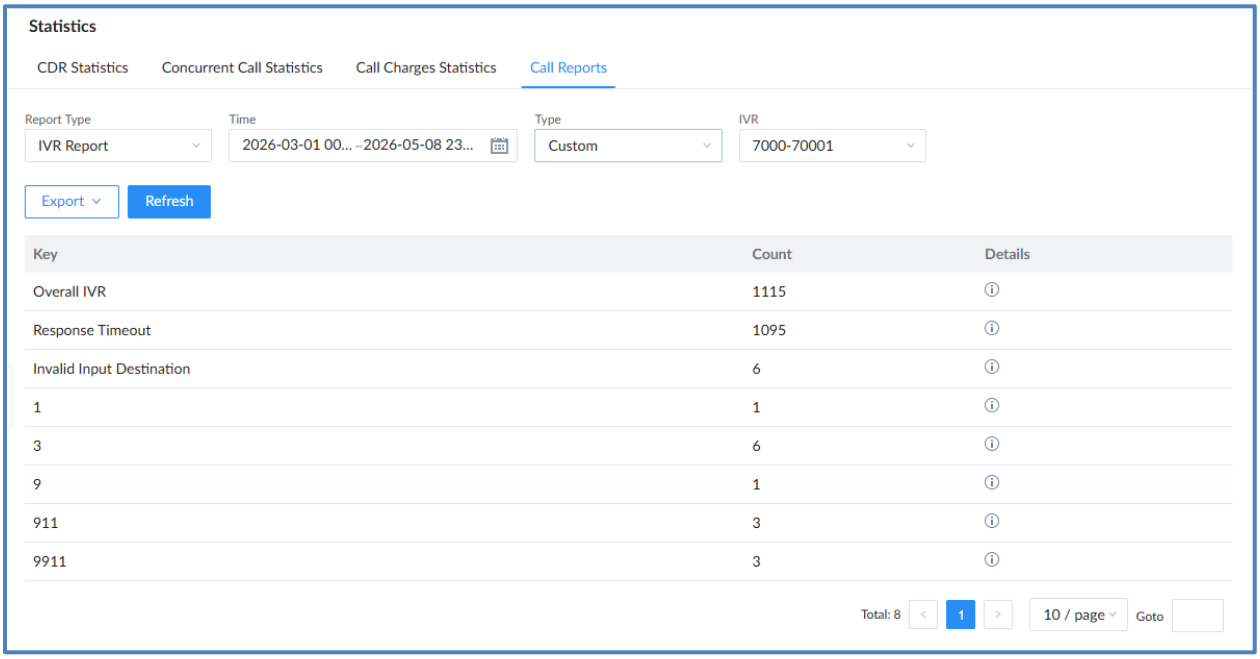
Extension Call Activity

- **PBX Call Activity** – Shows general PBX call statistics over the specified time periods using specified trunks. Users can choose to include or exclude internal calls for comparison and select among viewing all call types, only outbound calls, or only inbound calls.
    - Note 1: **Device** in the Trunk column refers to the PBX as a whole, indicating any and all calls made by this UCM.
    - Note 2: **Internal** in the Trunk column indicates any extension-to-extension calls (i.e., any call that both originated and ended within this UCM).
- **Outbound Caller ID Activity** – Shows outgoing call statistics for the selected trunk over a specified period of time.
- **IVR Report** – Shows statistics for the selected IVR over a specified period of time.
    - ***Type*** indicates the IVR key press event format to see statistics for.
        - *Standard* refers to the typical 0-9, *, # key press events along with invalid input and response timeout events. Statistics for each key press event type will be calculated.



IVR Standard Key Press Statistics

- *Custom* refers to customized key press events that support key combinations, allowing for more options beyond the standard 0-9, *, and # single keys. However, reports for *Custom* type will only show data for overall IVR call-ins, response timeouts, and invalid inputs. It will not provide statistics for each custom key press event.



IVR Custom Key Press Event Statistics

- Users can export two types of IVR reports: Basic and Detailed
  - Basic List– Lists all IVRs and the trigger counts of their key press events.
  - Detailed List – In addition to the information in the Basic report, the Detailed report will also include the caller information, what key press events were triggered, the time of the events, and how long the callers were in the IVRs.

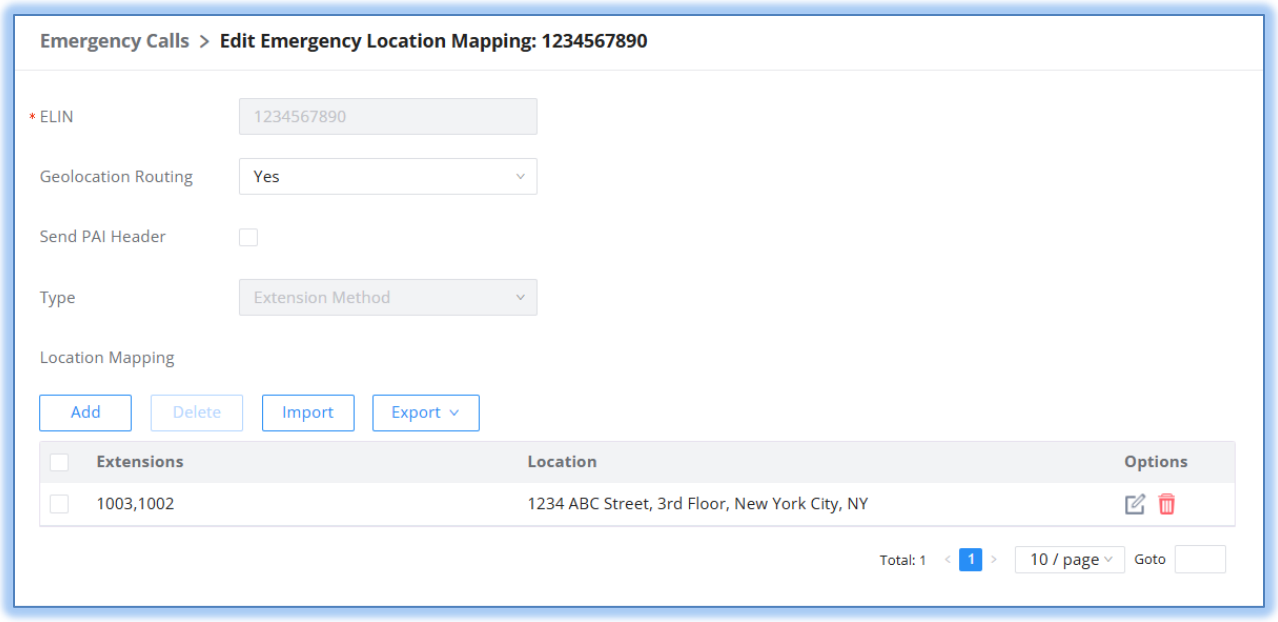
IVR	Press 0	Press 1	Press 2	Press 3	Press 4	Press 5	Press 6	Press 7	Press
7000	0	0	1	0	0	0	0	1	
	ID	Time	Caller Num	Key	Destinatic	Operation	Duration		
	1772613113	03/04/2026	1002	2	Pressed 2	0:00:05			
	1772613137	03/04/2026	1002	8	Pressed 8	0:00:00			
	1772613173	03/04/2026	1002	7	Pressed 7	0:00:00			
	1772613418	03/04/2026	1002	Response Timeout		0:00:10			
	1772613418	03/04/2026	1002	Invalid Input Destir		0:00:00			
	1772613418	03/04/2026	1002	Invalid Input Destir		0:00:00			
	1772613418	03/04/2026	1002	Invalid Input Destir		0:00:00			
	1773916428	03/19/2026	1033	Response Timeout		0:00:10			
	1773916456	03/19/2026	1033	Invalid Input Destir		0:00:00			

IVR Detailed List Export

- **Ring Group Statistics** – Shows call statistics for the specified ring groups, including how many calls were received, how many were answered, and the calculated answer rate.

EMERGENCY LOCATION – EXTENSION-TO-ELIN MAPPING

As an alternative to mapping subnets to ELINs, users can now directly map extensions to ELINs. This can be done by going to the *Advanced Call Features→Emergency Calls→Mergency Location Mapping→Add Location Mapping* page and selecting *Extension Method* for the **Type** field.



Emergency Call Location Extension Mapping

Each extension can only be mapped to one ELIN. Up to 50 mappings can be configured.

WAVE EMAIL MULTI-FACTOR AUTHENTICATION

Multi-factor authentication via email is now supported for Wave users. To set up MFA for extensions, go to their **Extension/Trunk→Edit Extensions→Wave Client** page and enable the **Multi-Factor Authentication** option.

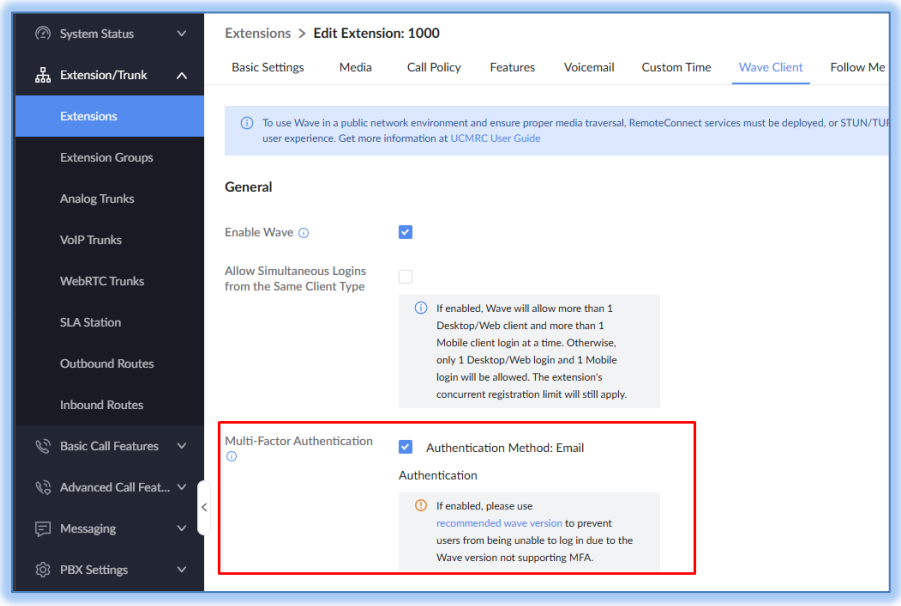


Figure 1 - Enable Wave MFA

Users must then use Wave Desktop/Web to complete the setup. **MFA setup is currently not supported on Wave Mobile**. When logging into Wave, they will encounter this message:

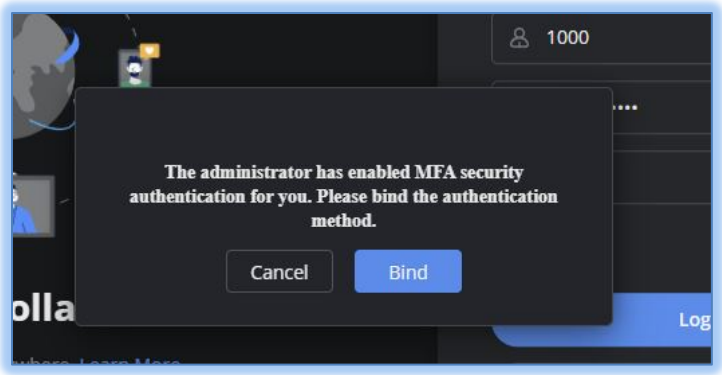


Figure 2 - Wave MFA Setup

Select the **Email Authentication** option.

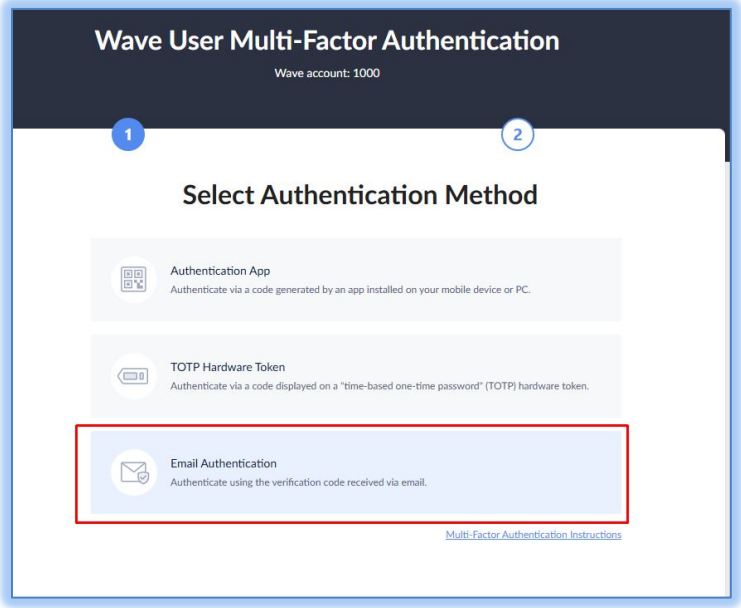


Figure 3 - Email Authentication Option

Enter the desired email address for MFA and click on the **Send** button to send the authentication code to the configured email inbox.

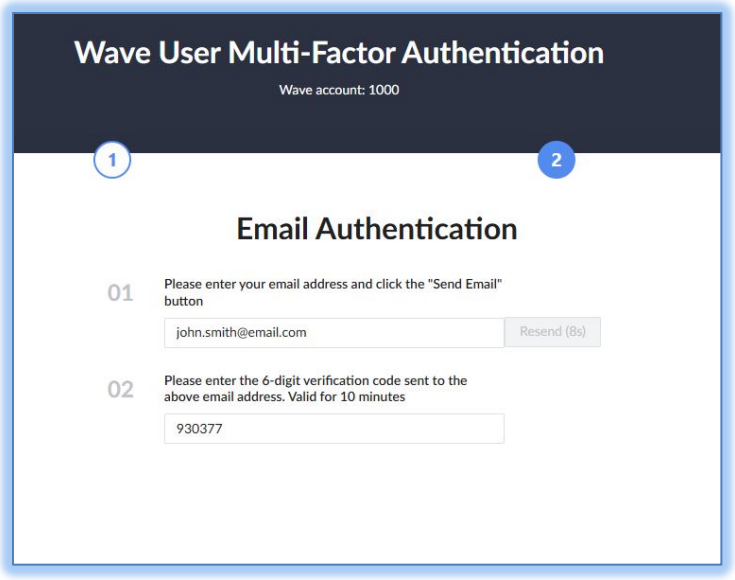


Figure 4 - Send Verification Code

Enter the received code into Step 2's field.

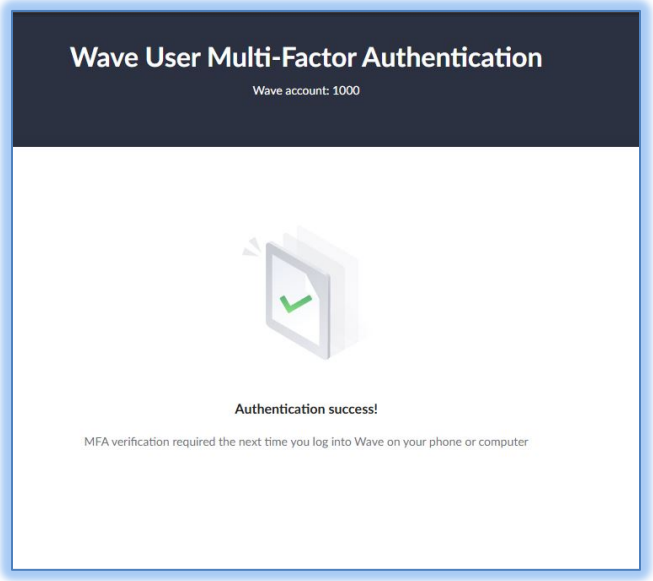


Figure 5 - MFA Setup Success

Now that setup is complete, go back to the Wave login page and log in with your credentials again. This time, the following pop-up window will appear:

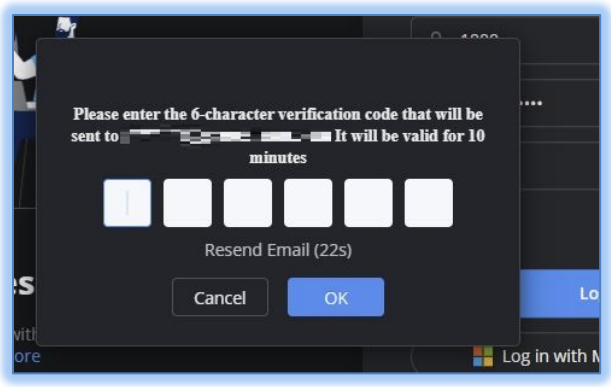
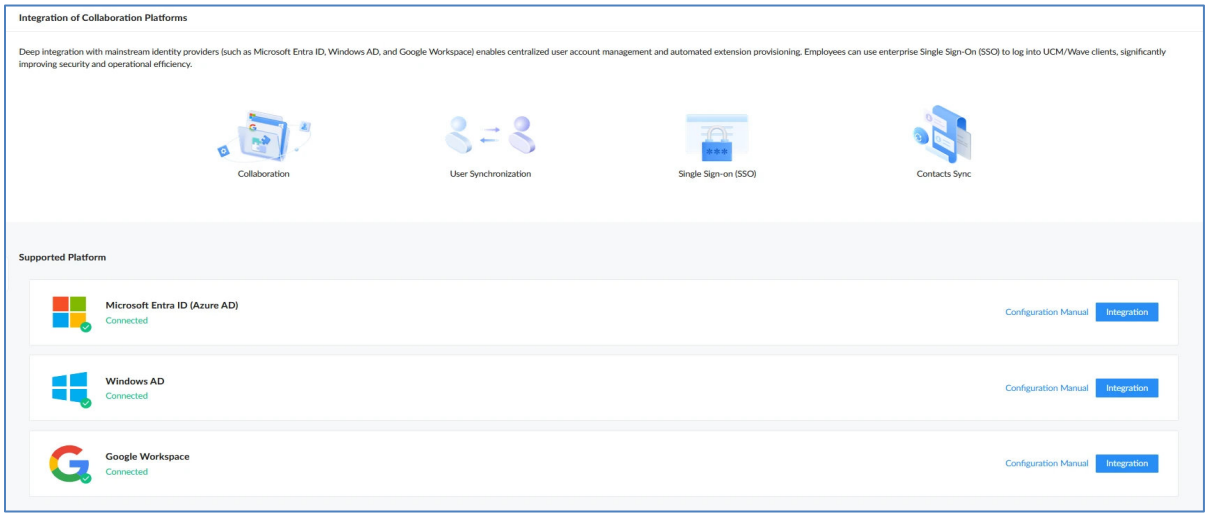


Figure 6 - Wave Email MFA

Check your configured email inbox for the verification code and enter it into the fields shown above. Please check the spam folder if the email cannot be found in the main inbox. If the verification code is correct, you will successfully log into Wave.

INTEGRATION OF COLLABORATION PLATFORMS

Microsoft Entra ID (Formerly Azure AD), Windows AD, and Google Workspace integrations are now supported and can be found under the new **Integration of Collaboration Platforms** page under the **Integrations** section, providing a centralized location for 3rd party user platform integration configuration.



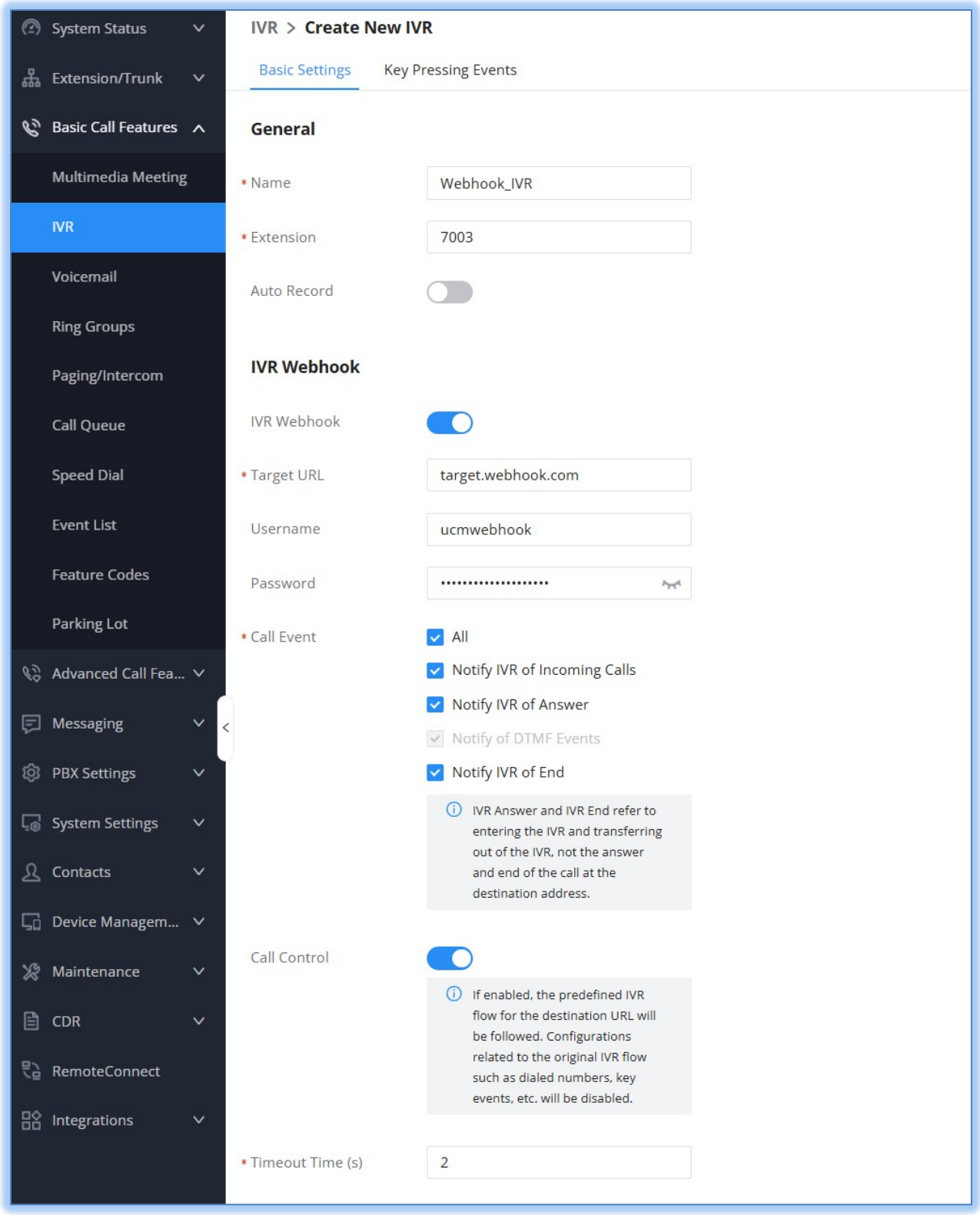
Integration of Collaboration Platforms

GUIDES

- Windows AD Configuration Guide
- Microsoft Entra ID (Azure AD) Configuration Guide
- Google Workspace Integration Configuration Guide

IVR WEBHOOK

Users can now configure webhooks for IVRs, allowing the UCM to collect data from supported call events, send them to target URLs, and receive call control instructions, allowing for enhanced integration with 3rd party services.


System Status
Extension/Trunk
Basic Call Features
Multimedia Meeting
IVR
Voicemail
Ring Groups
Paging/Intercom
Call Queue
Speed Dial
Event List
Feature Codes
Parking Lot
Advanced Call Fea...
Messaging
PBX Settings
System Settings
Contacts
Device Managem...
Maintenance
CDR
RemoteConnect
Integrations
IVR > Create New IVR
Basic Settings
Key Pressing Events
General
* Name
Webhook_IVR
* Extension
7003
Auto Record
IVR Webhook
IVR Webhook
* Target URL
target.webhook.com
Username
ucmwebhook
Password
* Call Event
All
Notify IVR of Incoming Calls
Notify IVR of Answer
Notify of DTMF Events
Notify IVR of End
IVR Answer and IVR End refer to entering the IVR and transferring out of the IVR, not the answer and end of the call at the destination address.
Call Control
If enabled, the predefined IVR flow for the destination URL will be followed. Configurations related to the original IVR flow such as dialed numbers, key events, etc. will be disabled.
* Timeout Time (s)
2

IVR Webhook

After setup, no manual intervention or operation is needed unless settings need to be adjusted. UCM will automatically and seamlessly handle the processing of call events and call handling instructions.

Supported Call Events

- Notify IVR of Incoming Calls – Inform the webhook of incoming calls.
- Notify IVR of Answer – Inform the webhook that a call has entered the IVR.
- Notify of DTMF Events – Inform the webhook of all entered DTMF key presses.
- Notify IVR of End – Inform the webhook that a call has left the IVR.

Call Control – Enabling this will hand over control of calls to the webhook. The UCM IVR's key press events and number dialing will not work while this is enabled.

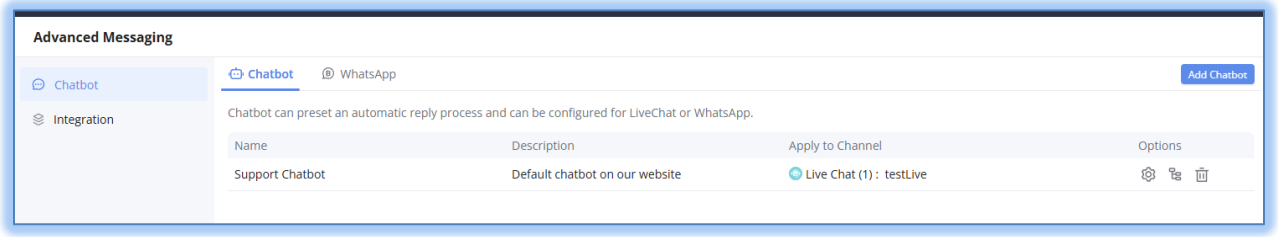
Timeout Time (s) – The amount of time to wait for a call control command from the webhook after sending a call event. After timeout, the system will send the event 3 more times, and if the webhook still does not respond, the call will be ended.

ADVANCED MESSAGING

The **Advanced Messaging** page has been added to allow users to create and configure chatbots, integrate Whatsapp, and 3rd party integrations directly from the UCM management portal. While these features were present in Wave versions 1.0.27.x, they could only be configured from the Wave interface.

For more details on configure the chatbot, please see our Live Chat Chatbot Admin Guide.

For more details on how to set up WhatsApp integration, please see our Wave Desktop 3rd Party Add-In User Guide.



Advanced Messaging

AMAZON S3 SUPPORT

Users can now configure and select Amazon S3 cloud storage as a backup location. To configure, go to the **PBX Settings→Storage Device Management→Amazon S3** page.

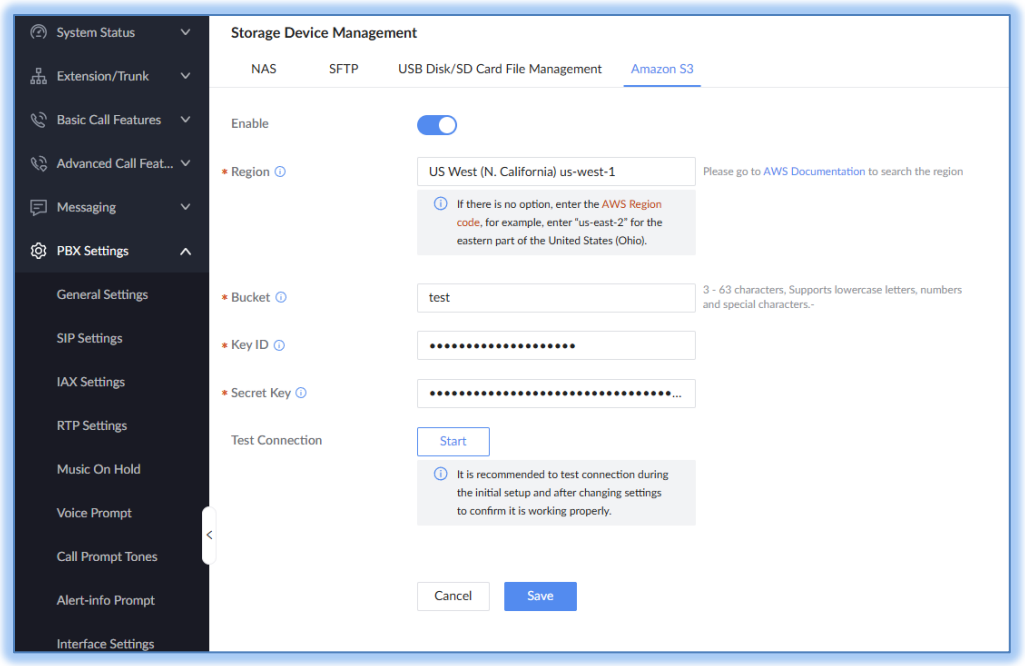


Figure 7 - Amazon S3 Configuration

Once configured successfully, Amazon S3 will become one of the available backup locations.

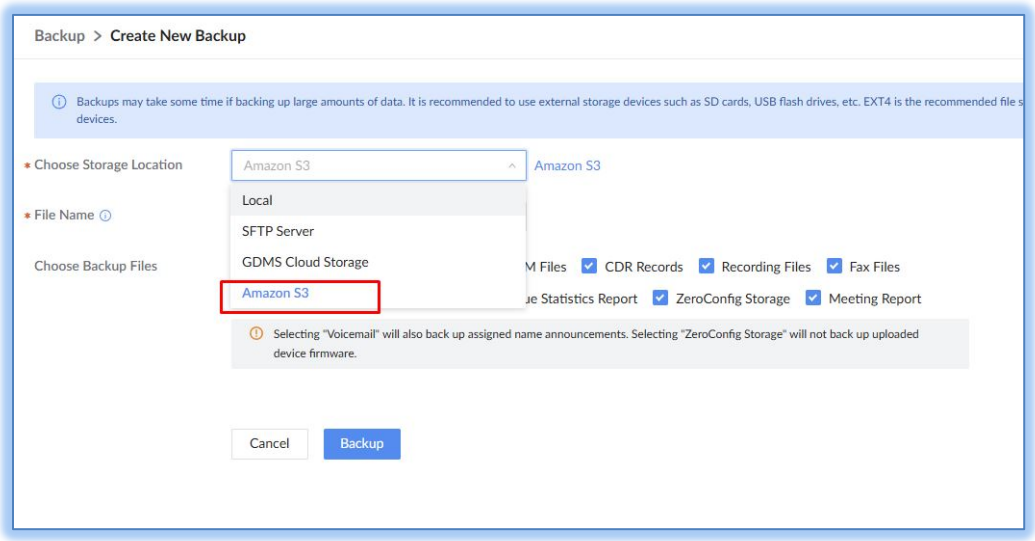


Figure 8 - Amazon S3 Backup Location

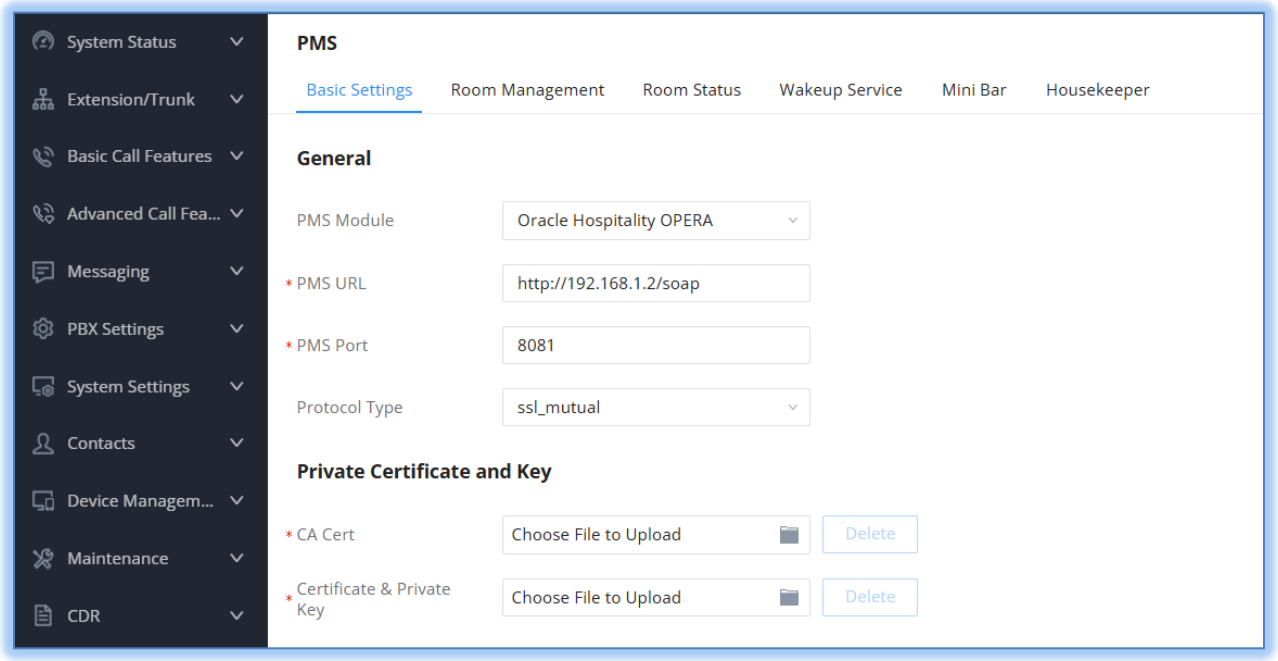
ORACLE HOSPITALITY OPERA INTEGRATION

UCM now supports integration with Oracle Hospitality OPERA (including OPERA 5 and OPERA Cloud) via the IFC8 interface. The following protocols are supported: TCP, Simple SSL, and Mutual SSL.

To order the interface required for Grandstream's UCM series, please provide the following information to your local Oracle Sales representative:

- Interface ID: **IFC_PBX**
- Specific Interface: **Oracle Hospitality OPERA TMS interface for UCM Series PBX by Grandstream Networks**

In addition to the existing PMS features, some new options have been added to work together with OPERA PMS specifically.



Oracle Hospitality OPERA

With OPERA, users can either send call charges and minibar charges to the PMS, and the PMS would handle the final bill calculation and processing, or they can have the UCM handle all the calculation and processing and sync the final bill to OPERA.

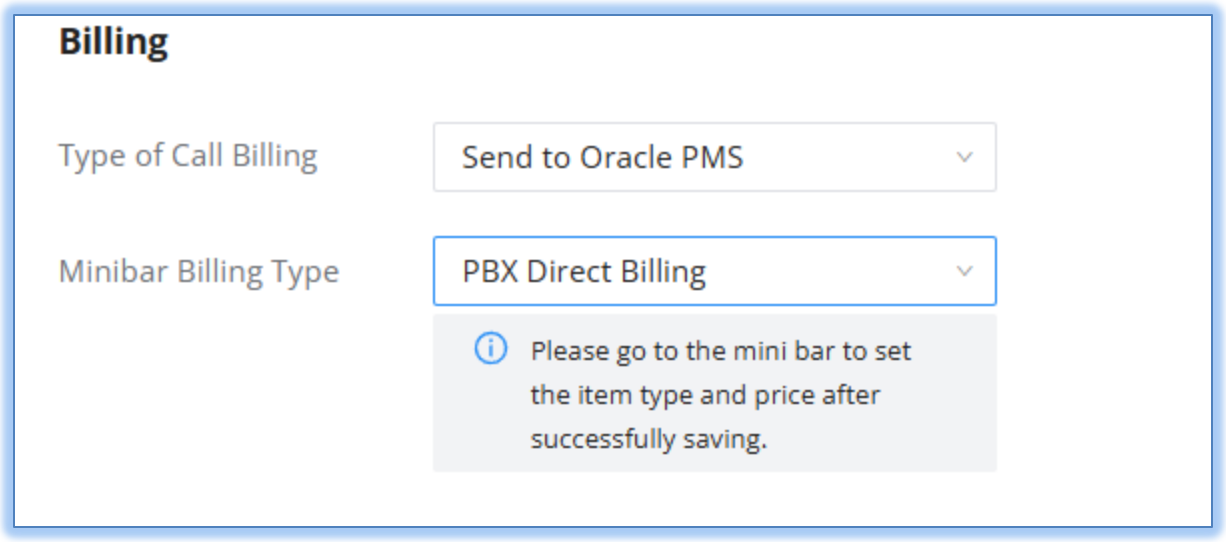
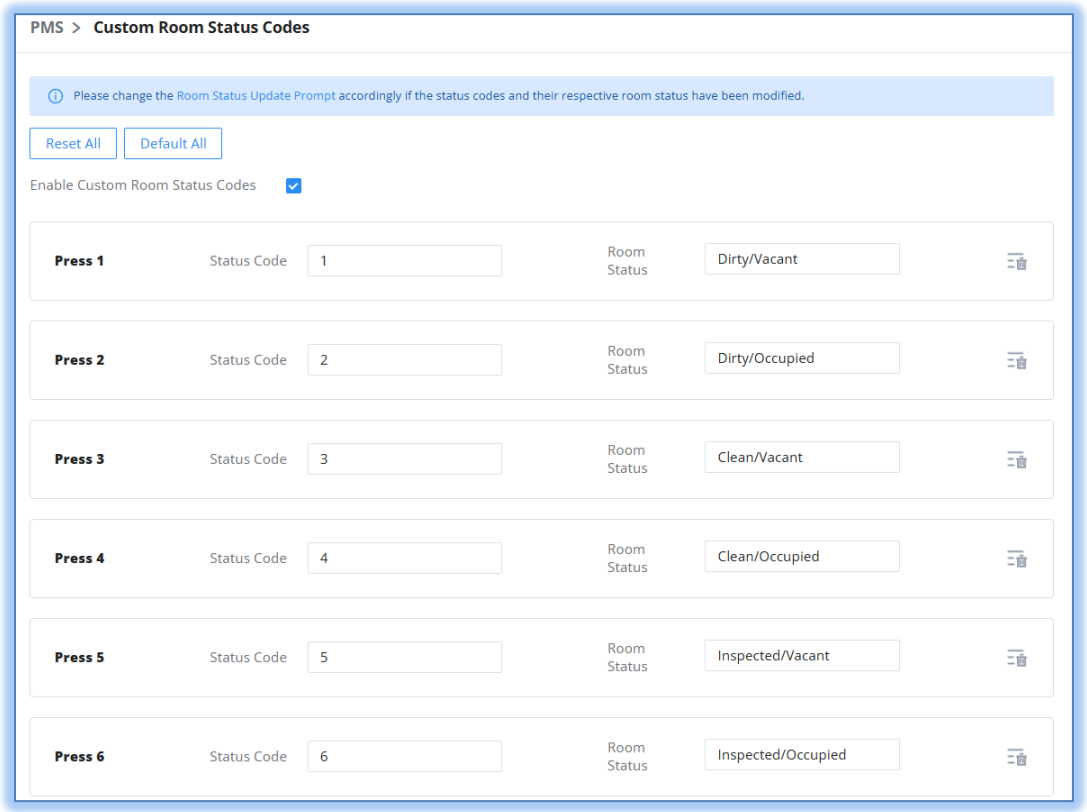


Figure 9 - OPERA Billing

ROOM STATUS

OPERA has its own room statuses, which can be shown after toggling on the **Enable Custom Room Status Codes** under the *Room Status* page.



OPERA Room Status

Extension Do Not Disturb (DND) is supported and can by synced to OPERA PMS.

MINI BAR

When using OPERA PMS, the following options have been added to the Mini Bar page:

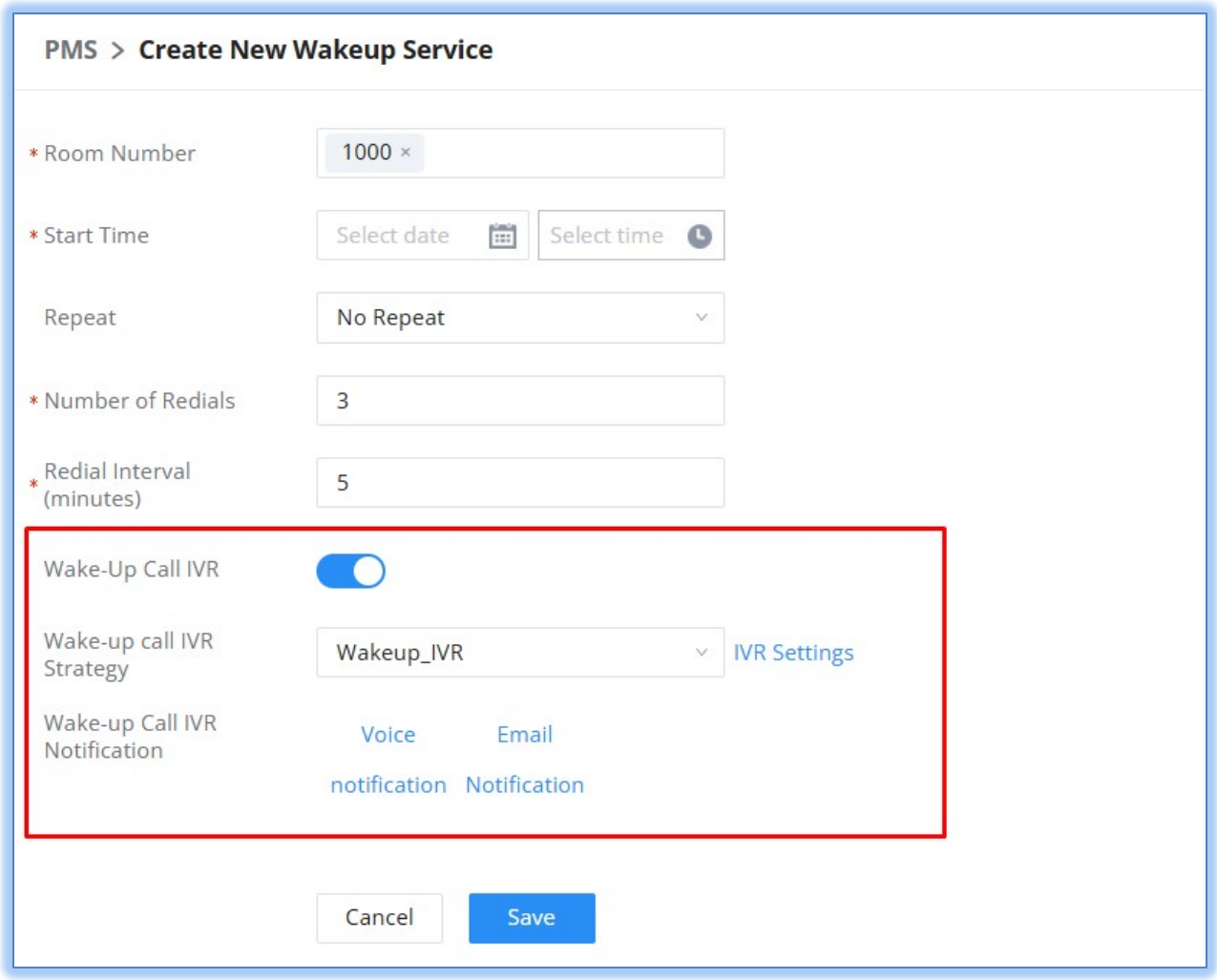
- **Increase Mini Bar Usage Code**: Adjusts the quantity of the minibar item to charge.
- **Global Tax Rate**: Sets a global tax rate on the minibar items as an additional charge.
- **Tax Rate**: Sets a tax rate for an individual minibar item as an additional charge.

YOUTH HOSTEL MODE

Divides individual rooms into multiple units to account for multiple different groups and separate billing within the same room.

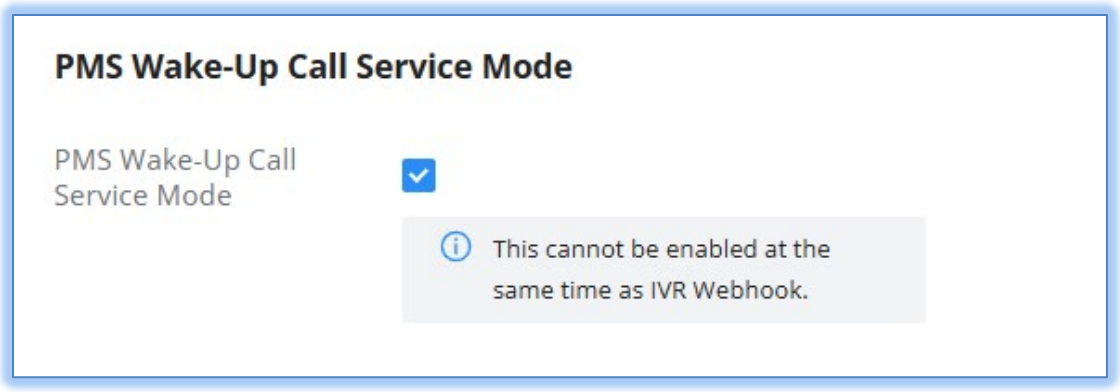
WAKEUP IVR

Users can now create wakeup services with IVRs. To do so, add or edit a wakeup service and enable the **Wake-up Call IVR** option.



Wakeup Service IVR Selection

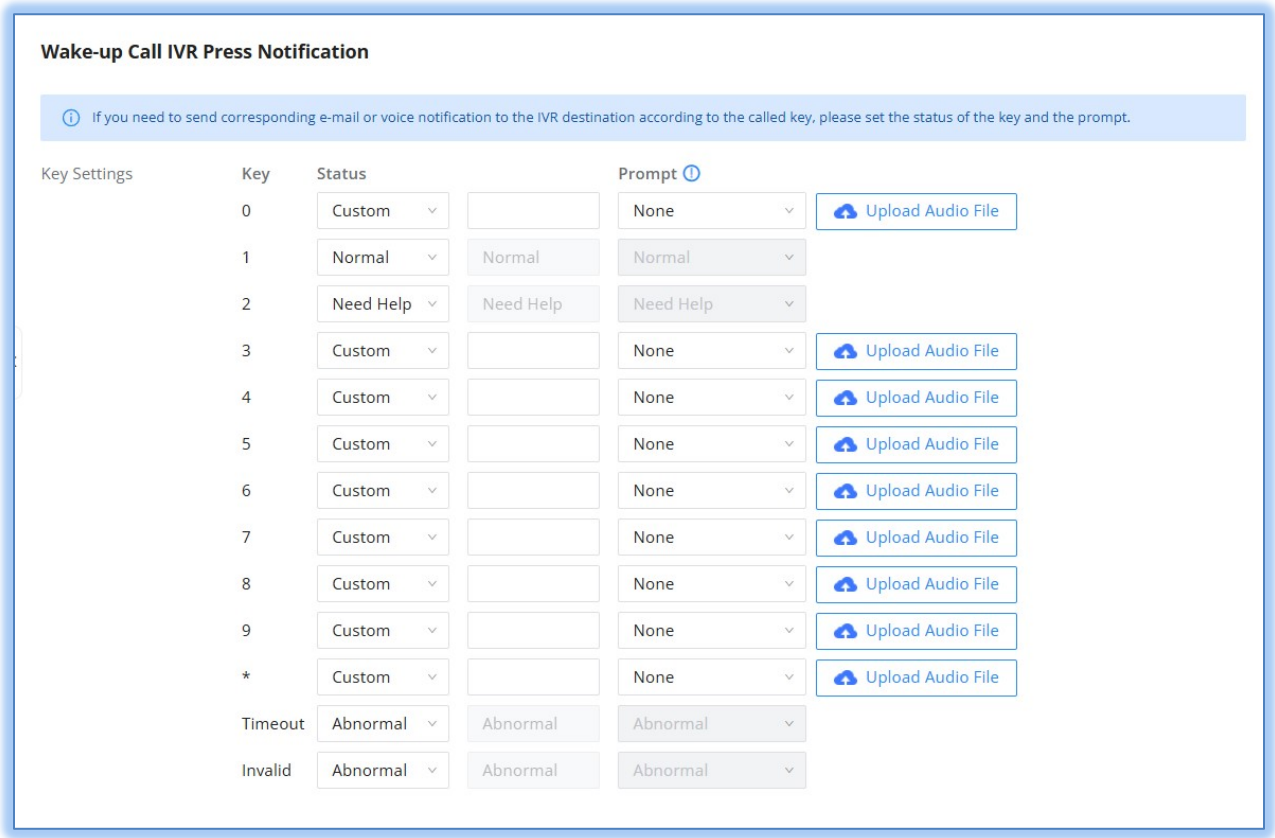
Select the desired IVR to use. Only IVRs that have **PMS Wake-Up Call Service Mode** option enabled will be selectable.



IVR PMS Wake-Up Call Service Mode

Note: IVRs that have this enabled will only have access to the **Standard Key Event** set (0-9, *), and **Custom Key Event** will not be selectable.

Once created, users can then configure the **Wake-up Call Notification** page. The **Wake-up Call IVR Press Notification** section has been added.



Wakeup IVR Key Press Events

These key press events will only be accessible via wakeup calls.

LOCAL PMS ENHANCEMENTS

New Basic Settings

Several new options have been added to the Basic Settings page when Local PMS is selected.

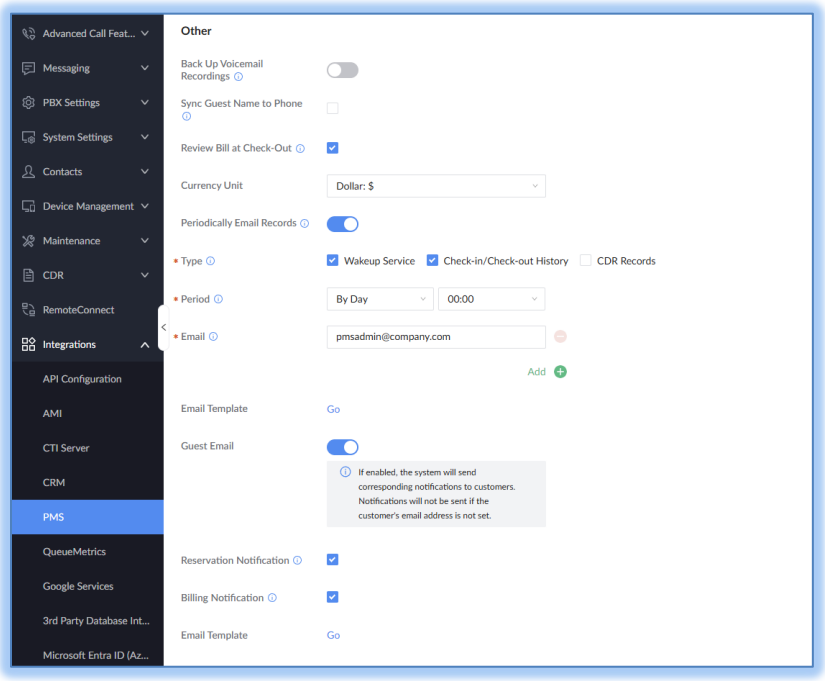


Figure 10 - New Basic Settings

Review Bill at Check-Out
When checking out a guest, a pop-up windows showing all of the guest's charges will appear for review.

PMS Self Check-in/Check-out
Users can now allow guests to check themselves in and out via email. Check-in/check-out emails can be sent in advance based on the **Send in Advance (hrs)** settings.

Periodically Email Records

Users can set to periodically send wakeup service logs, check-in/check-out history, and CDR to a specified email address for administrative review.

Guest Email

Email notifications can be enabled to send guests important information about their reservations such as confirmations, cancellations, and invoices.

New Check-in Management Page

The **Room Status** tab has been renamed to **Check-in Management**, and the original Room Status contents are now in their own sub-tab.

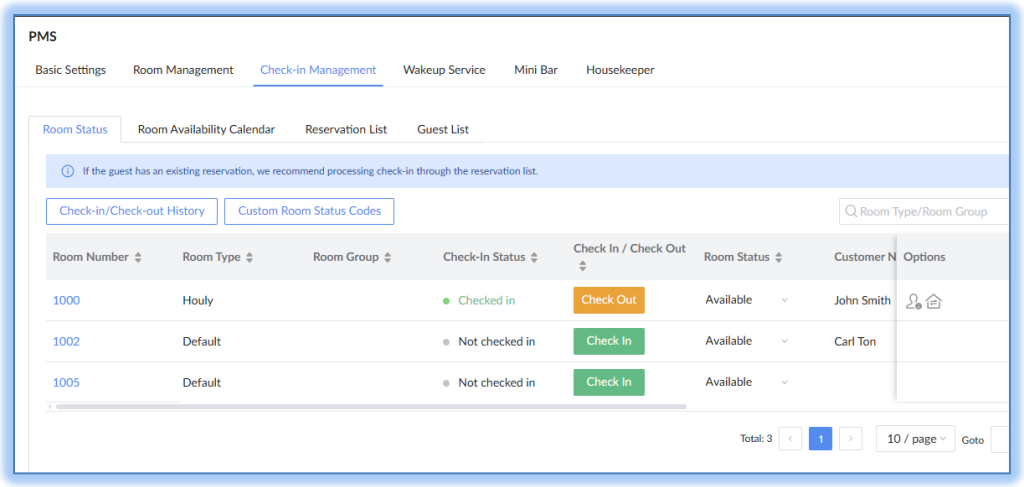


Figure 11 - Check-in Management

The **Room Availability Calendar** provides a simple daily view of all the existing rooms and their availability each day.

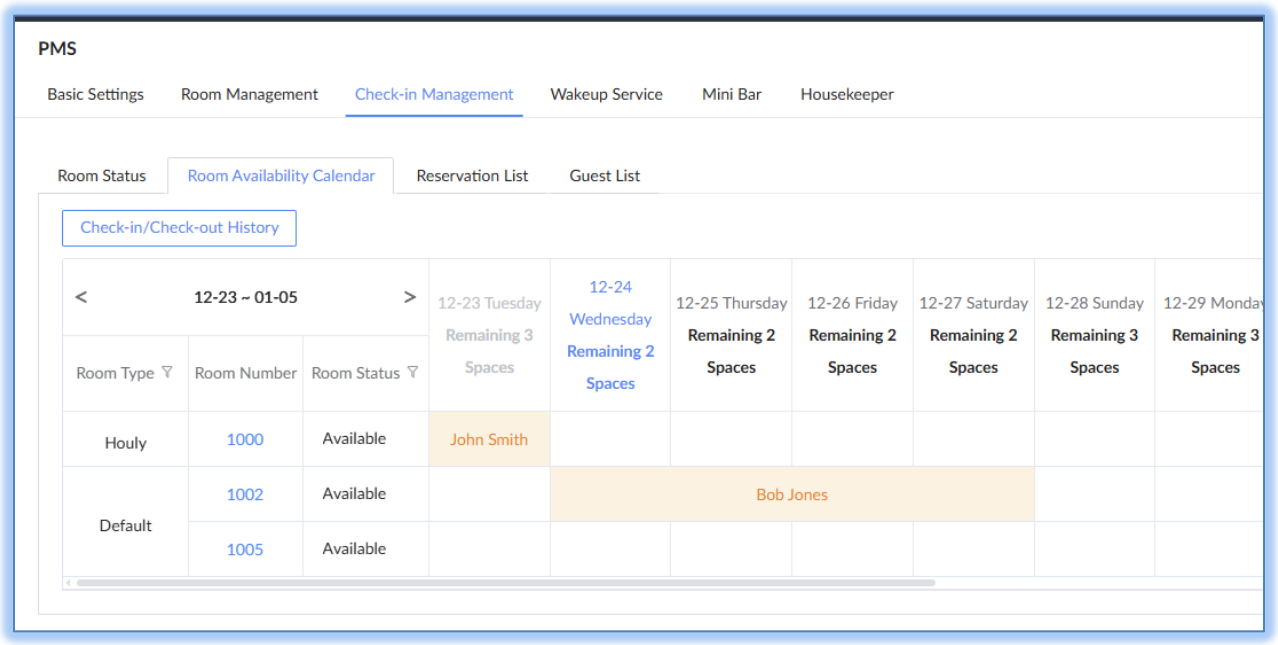


Figure 12 - Room Availability

The **Reservation List** page displays information of all existing reservations and allows users to manually check-in guests if needed.

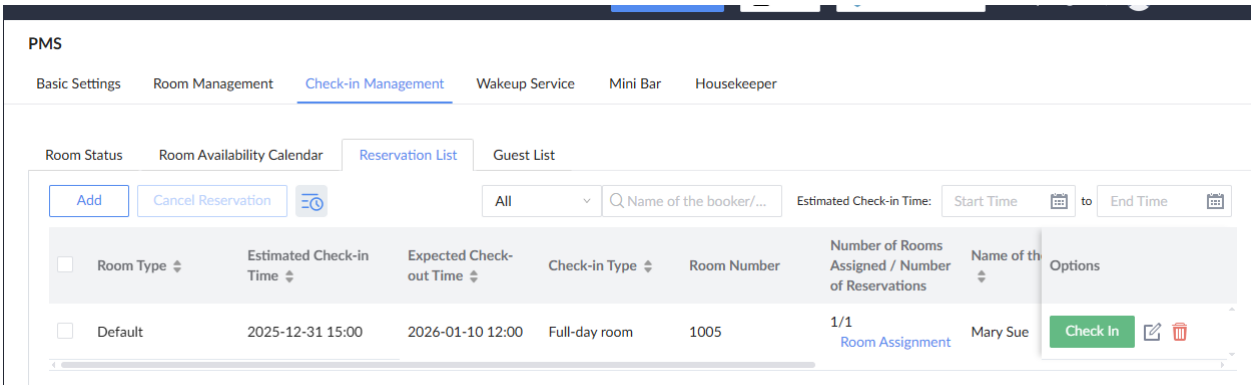


Figure 13 - Reservation List

Finally, the **Guest List** page displays all guests that have made room reservations. Note: Guest entries are not automatically deleted upon check-out and must be manually deleted if needed.

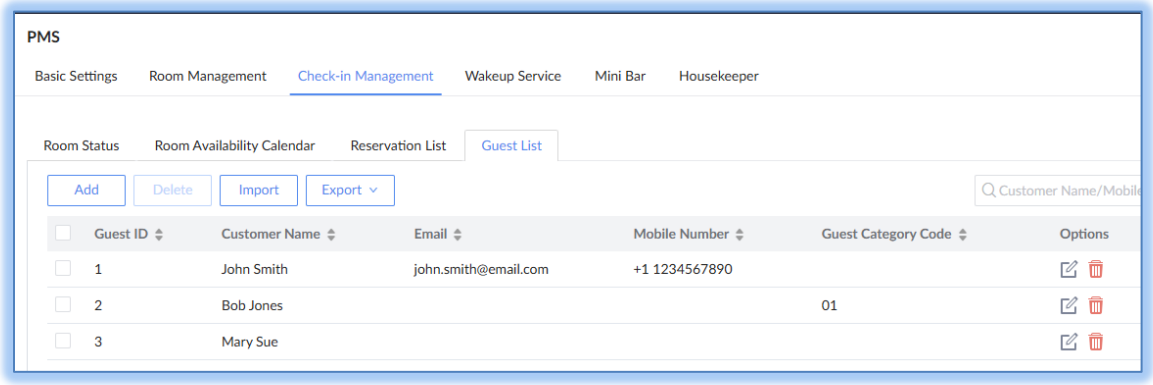


Figure 14 - Guest List

Room Types & Hourly Rentals

Under the **Room Management→Room** Type page, users can create room types with different availabilities and per-day pricing. Additionally, they can set rooms to allow hourly rentals instead of traditional night stays.

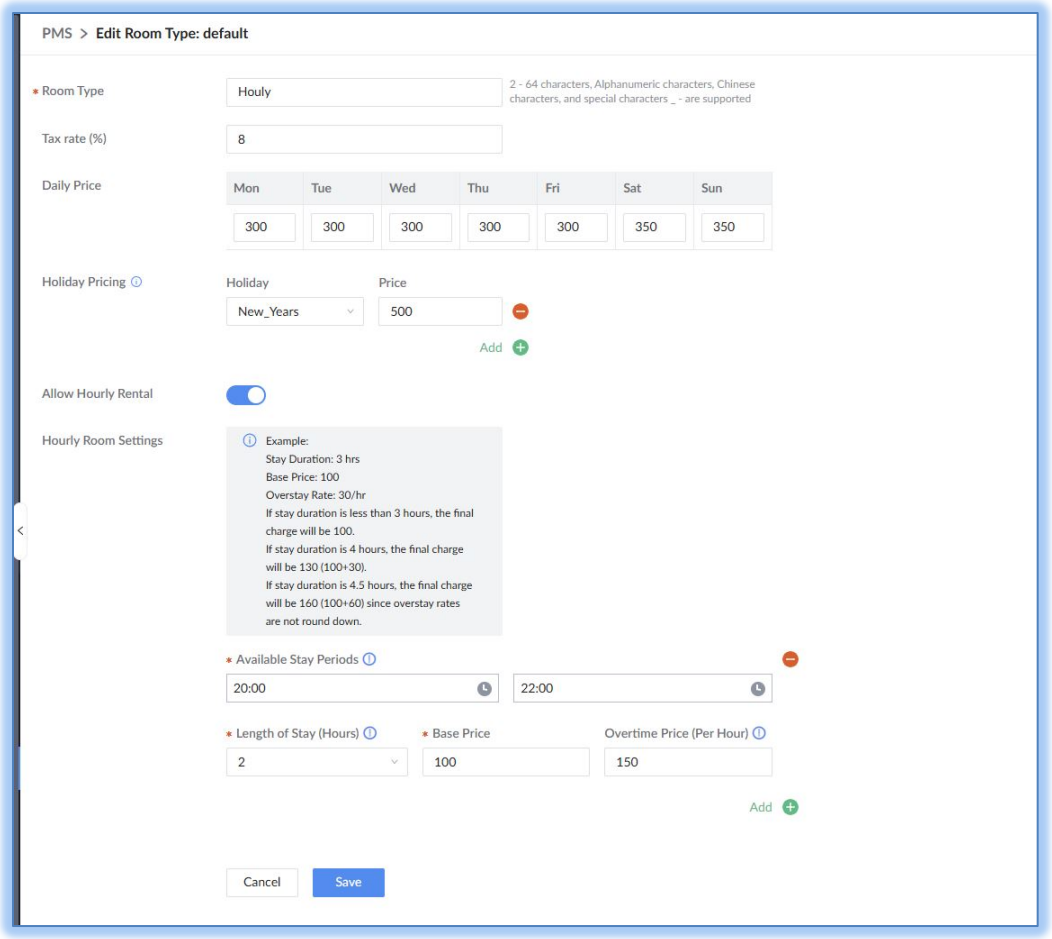


Figure 15 - Room Type

QUEUE AGENT PROFICENCY-BASED ROUTING

Proficiency Routing option has been added to the Call Queue Basic Settings page, and call queue agents can now be assigned numerical proficiency levels. The lower the number, the higher the proficiency (e.g. 1 indicates higher proficiency than 50). If Proficiency Routing is enabled, agents with higher proficiency levels will be given priority for calls. If agents have the same proficiency levels, the call will then be routed based on the new **Ring Strategy for Same Proficiency Level** setting.

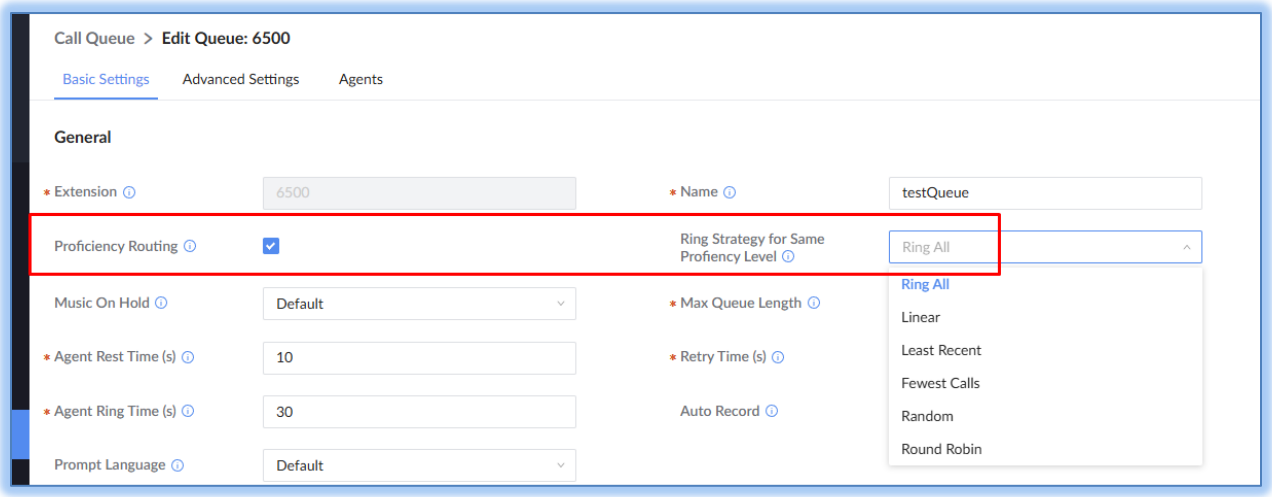


Figure 16 - Proficiency-Based Routing

Agent proficiency levels can be viewed and assigned from the **Agents** page.

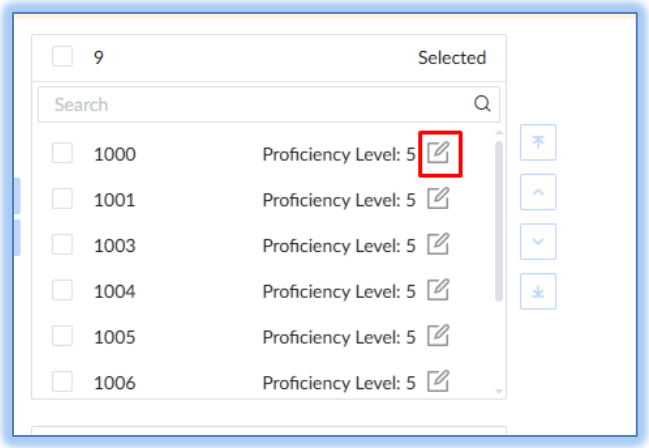
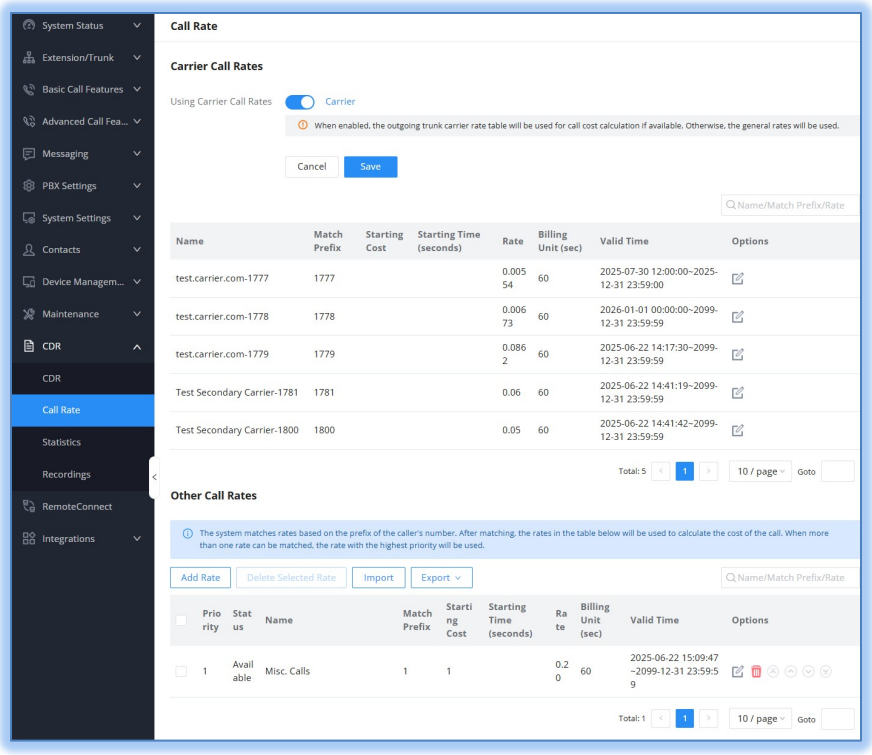


Figure 17 - Proficiency Level

Note: All agents are assigned proficiency level 5 by default.

CARRIER CALL RATES & LEAST COST ROUTING

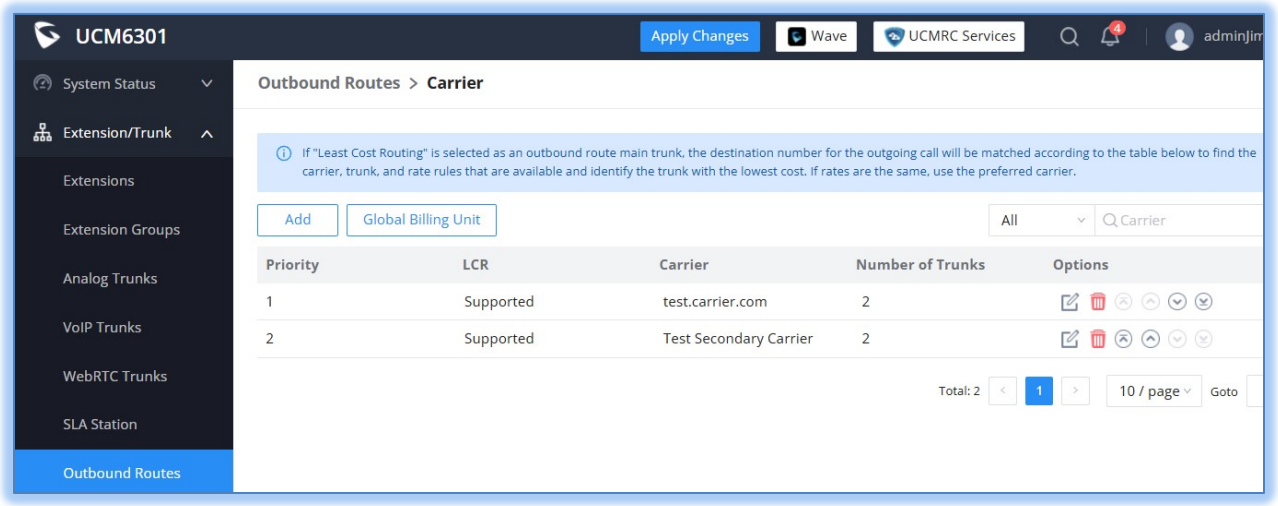
UCM now supports call rates, allowing for call billing and least cost routing. To view all available call rates in the UCM, go to the *CDR→Call Rate* page.



Call Rates Overview

Here, users can see both **Carrier Rates** (call rates tied to trunks) and **Other Call Rates** (rates for calls that do not use trunks).

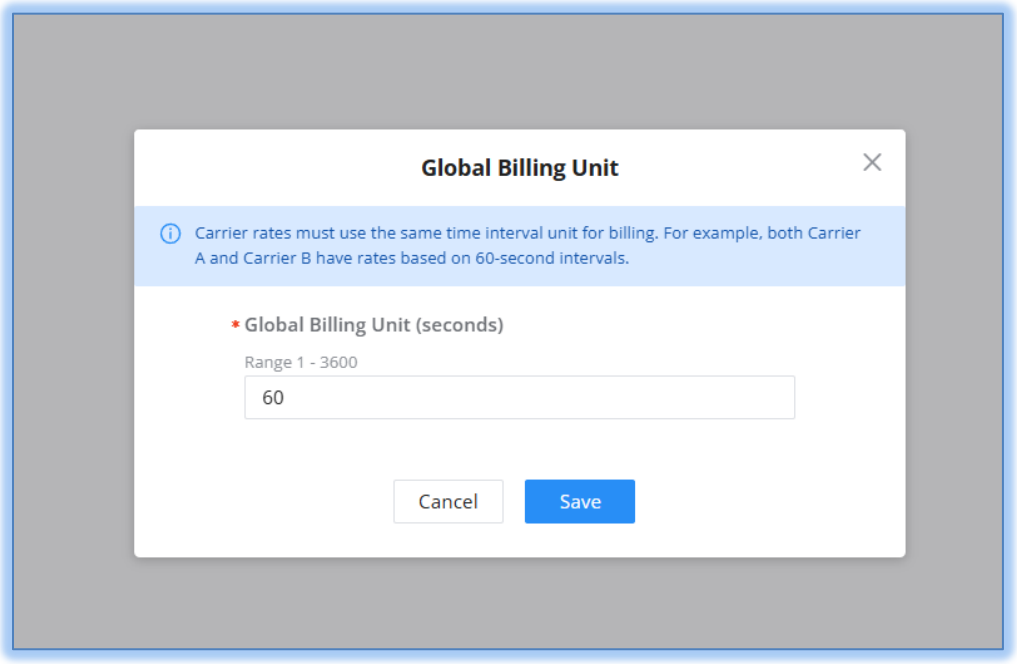
To set up carrier rates, click on the **Carrier** link next to the **Using Carrier Call Rates** toggle or go to *Extension/Trunk→Outbound Routes* page and clicking on the **Carrier** button.



Carrier Overview

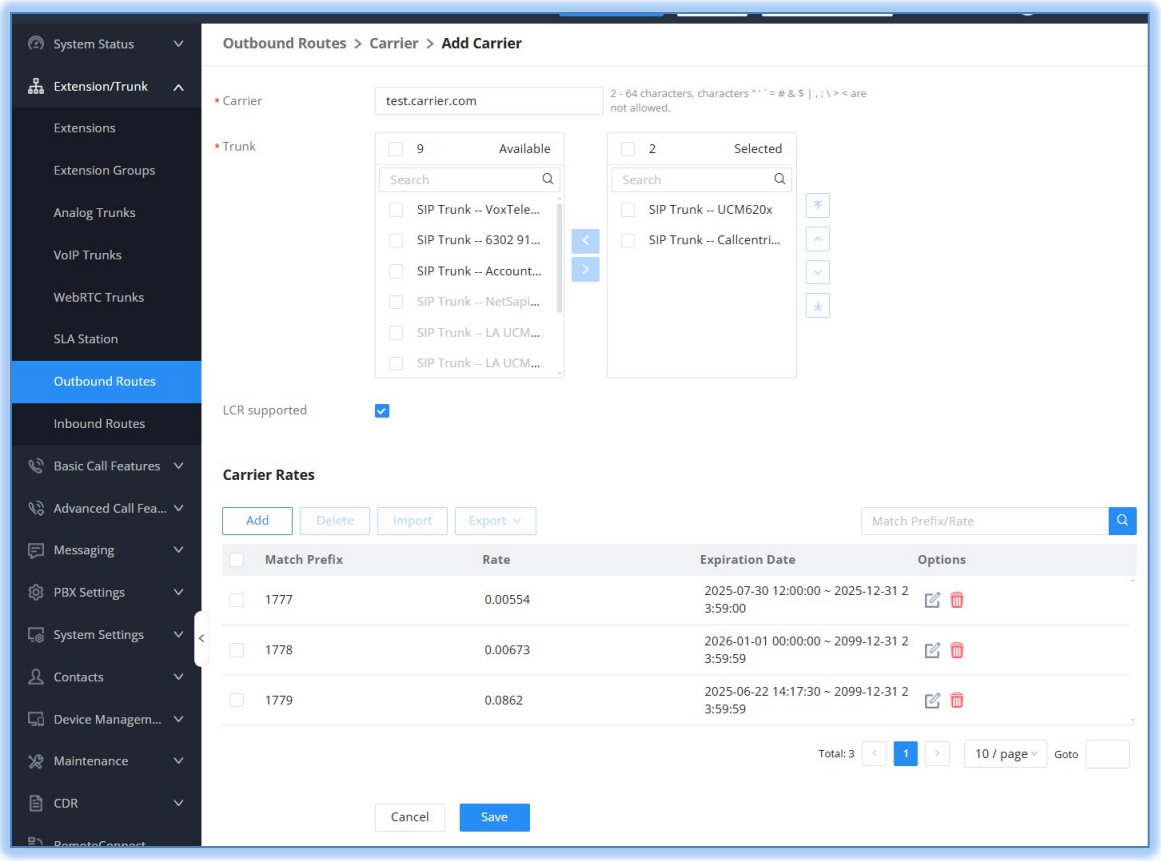
Users can set a **Global Billing Unit**, which is simply the unit of time used when calculating call cost. Default

is 60 seconds.



Global Billing Unit

To create a carrier, click on the **Add** button



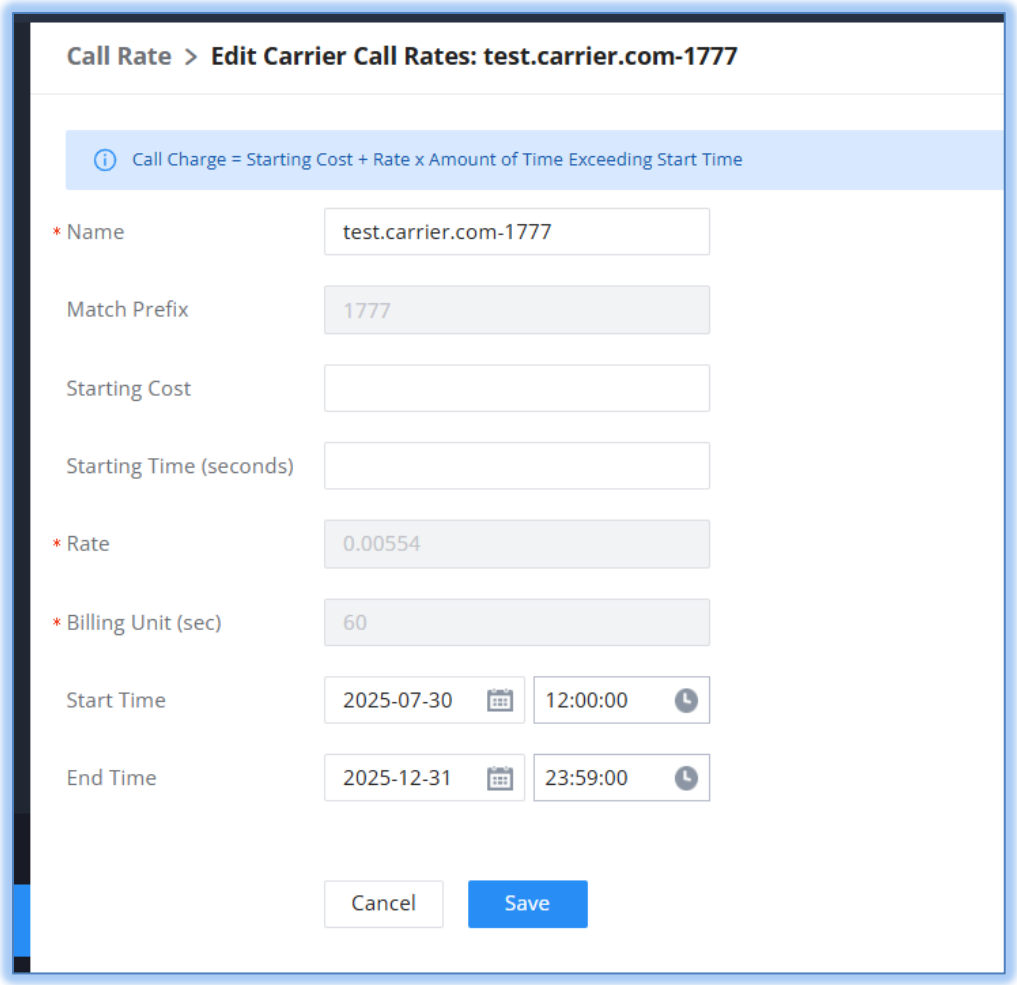
Carrier Rates

From here, users can configure carriers, link trunks to the carriers, and set the call rates based on the prefixes of dialed numbers. Call rates can be imported and exported so users can quickly enter information from carrier rate tables provided by ITSPs.

With these settings call costs can be calculated as such:
Call Cost = Global Billing Unit x Carrier Rate

Least Cost Routing can be enabled here, allowing the system to automatically select the most economic trunk to use for outbound calling based on existing call rates.

If users want to configure a flat starting cost for calls to numbers with certain prefixes (i.e., calls to specific countries, local calls, long distance calls ,etc.), they will need to do so from the *CDR→Call Rate* page and edit the desired rate.



Carrier Call Rate with Starting Cost

From here, users can set the flat starting cost and how much time can pass before the UCM will start adding to the call cost based on the configured call rates.

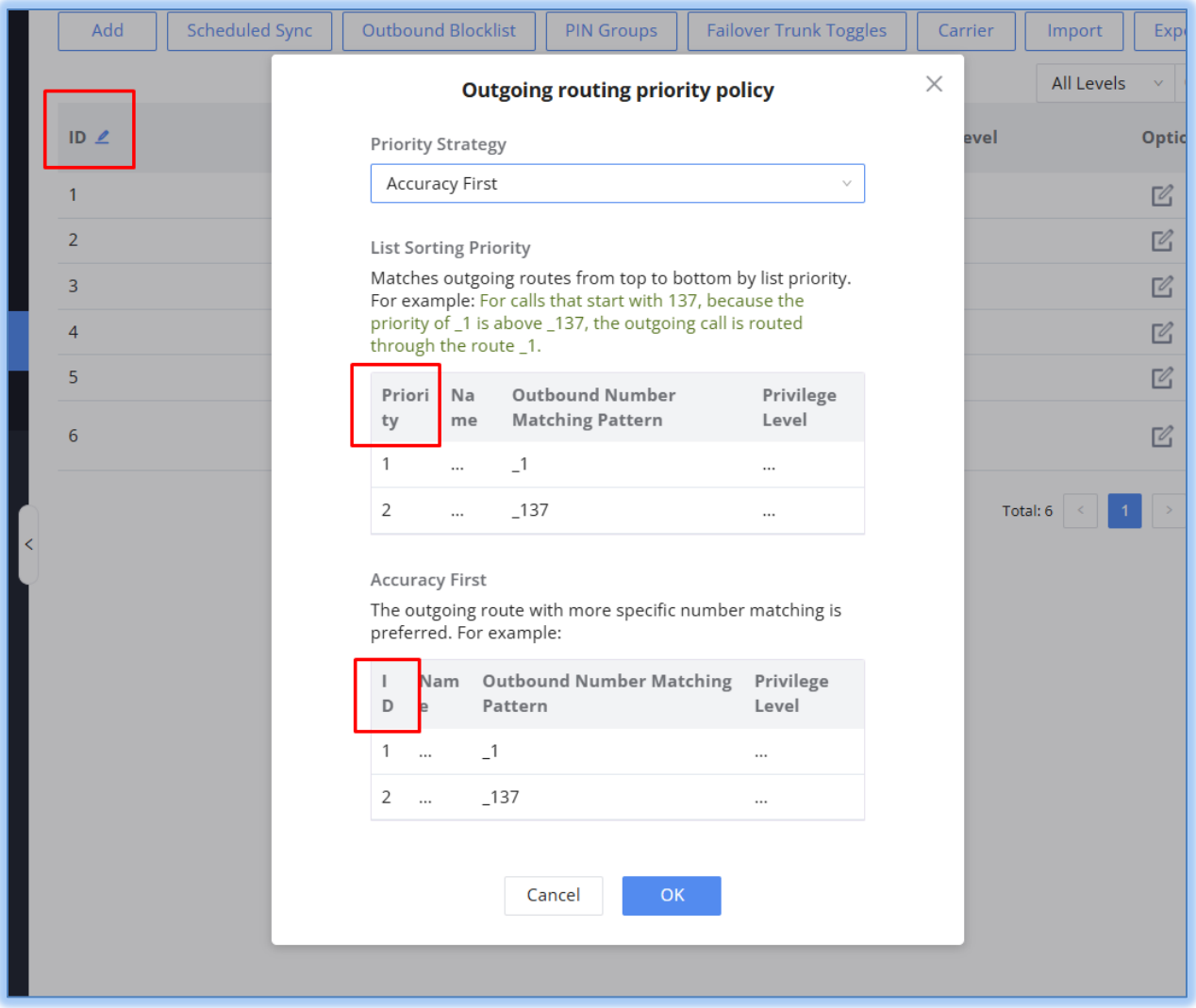
With starting costs in mind, assuming the call time exceeds the configured *Starting Time*, call costs can be calculated as such:

Total Call Cost = Starting Cost + (Billing Unit x Carrier Rate)

Other Call Rates will be used if **Using Carrier Call Rates** is disabled or has no matching prefixes for an outgoing call.

OUTBOUND ROUTE PRIORITY POLICY

Users can now choose the outbound route selection behavior for calls to numbers that match multiple patterns. To change this setting, go to *Extension/Trunk→Outbound Routes* page and click on the Edit icon next to the first column header.

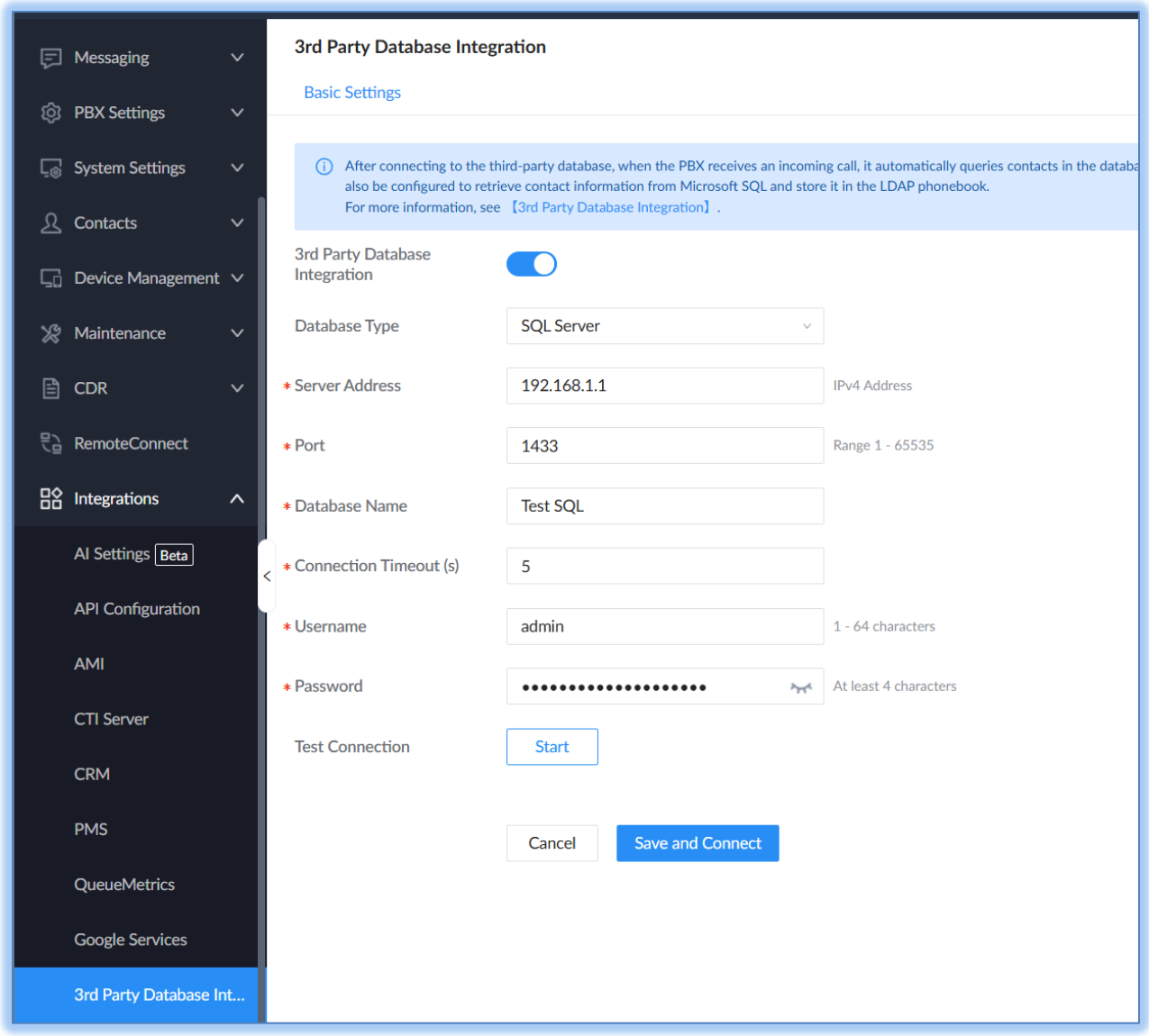


- **Accuracy First**: The original behavior. Selects routes based on pattern granularity. If a dialed number has multiple matches, the route with the more specific pattern will be selected.

- **List Sorting Priority**: Selects routes based on the displayed list order (ascending). The lower the number in the **Priority** column, the higher the priority.

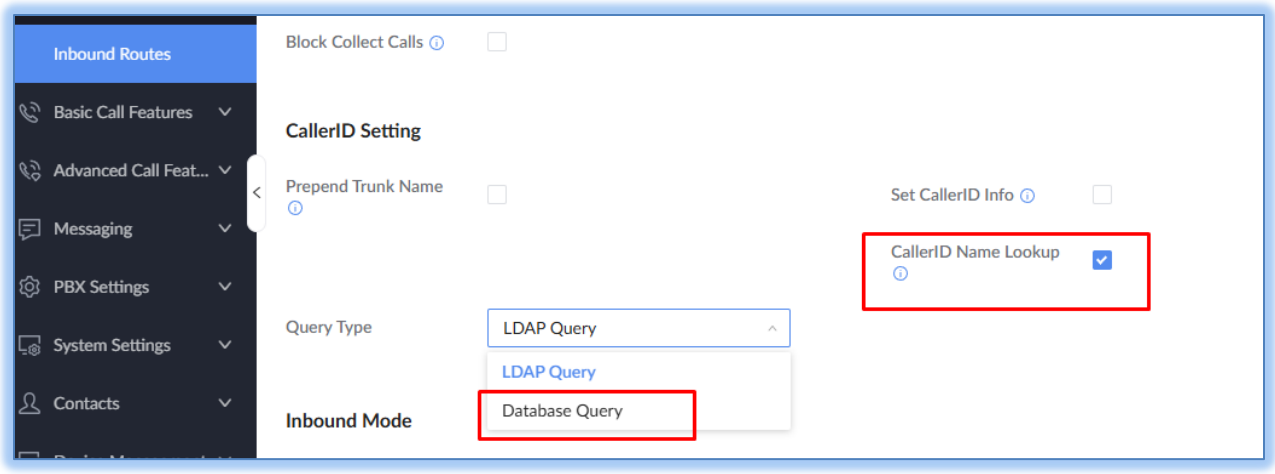
3RD PARTY SQL DATABASE SUPPORT

Users can now configure SQL servers to query to for contact information lookup for incoming calls. Originally, this was limited to only MySQL servers, and configuration was located in the **Inbound Routes** configuration page. Server configuration has been moved to **Integrations→3rd Party Database Integration**.



3rd Party Database Integration

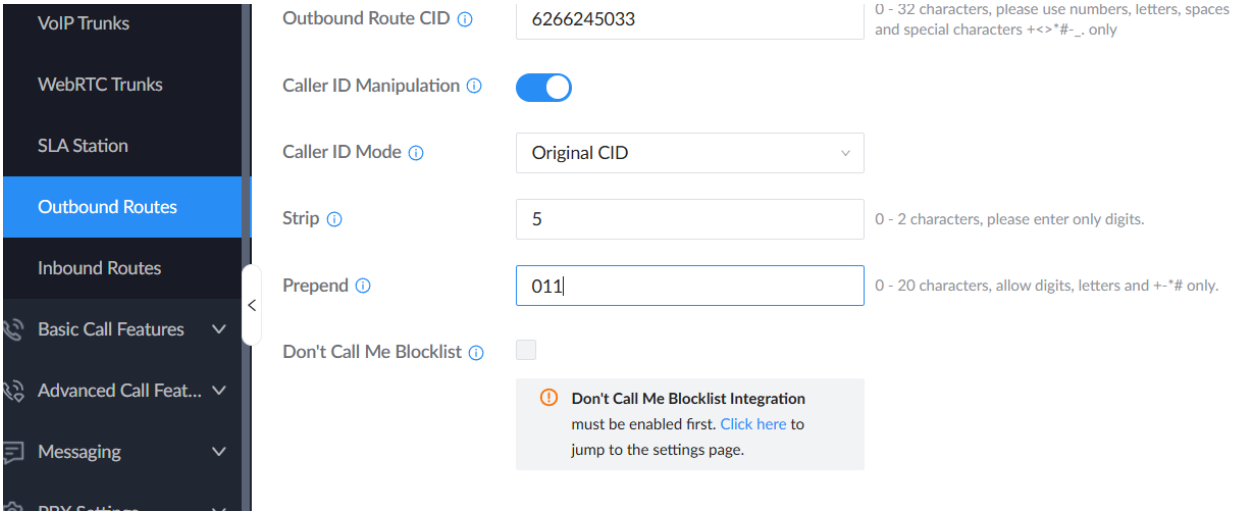
Once configured, users can then go to the **Extension/Trunk→Inbound Routes→3rd Party Database Search** page to enable CID lookup for incoming calls. Finally, CID name lookup can then be configured for individual routes.



Inbound Route Configuration

CALLER ID MANIPULATION

Users can now do a last-step modification of outgoing CIDs on the **Outbound Routes** configuration page, specifically modifying the call's SIP FROM header.



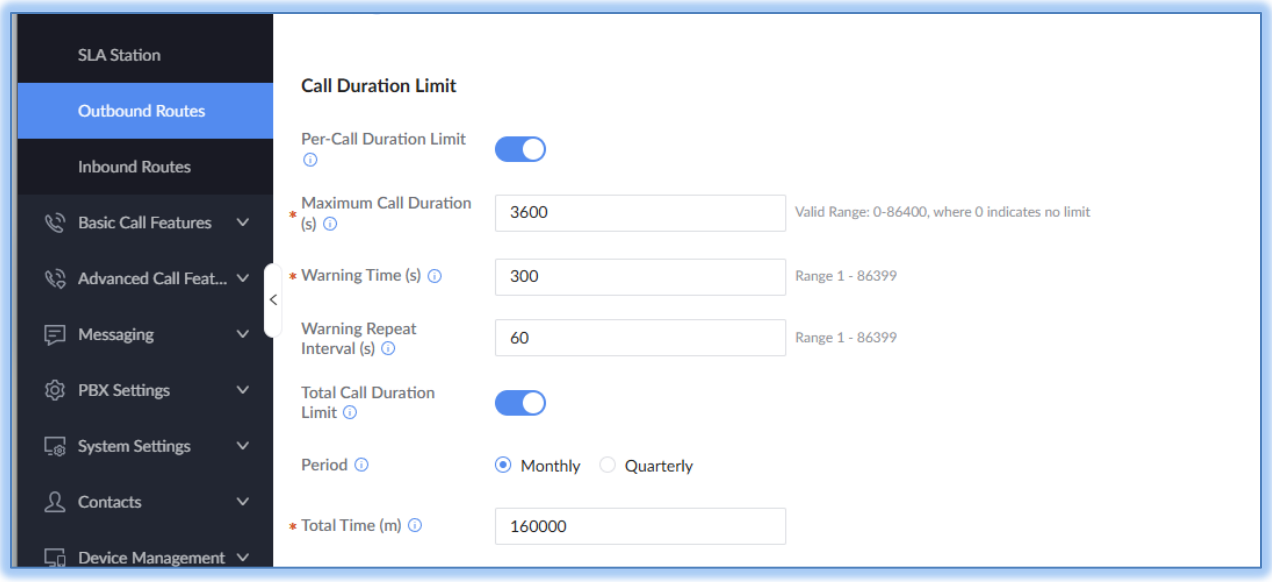
CID Manipulation

Two options are available for **Caller ID Mode**:

- **All:** All outgoing calls will have their CIDs modified based on the configuration.
- **Original CID:** Only calls that originated from a trunk will have their CIDs modified based on the configuration.

OUTBOUND CALL DURATION LIMITS

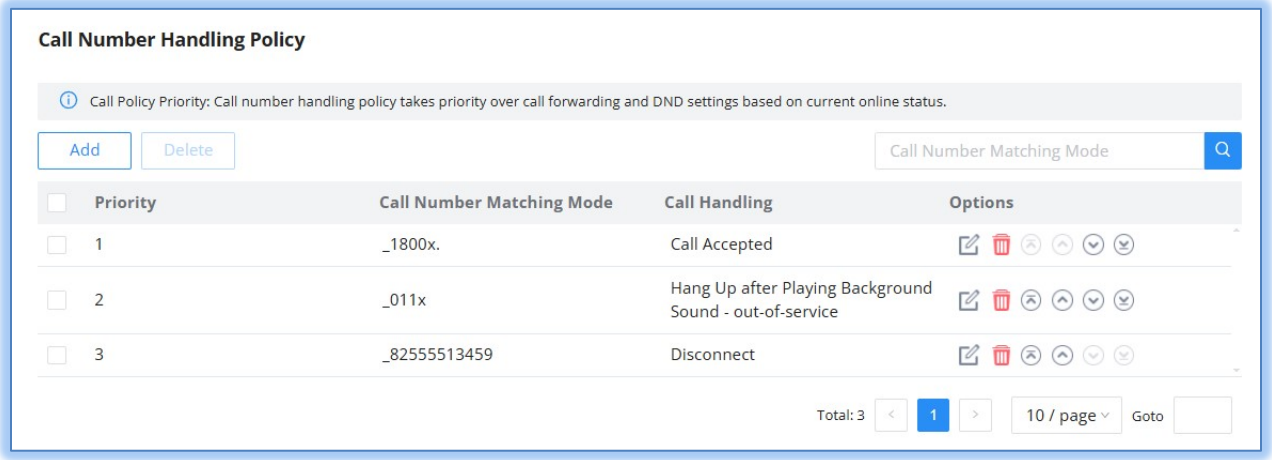
In addition to trunk-level call duration limits, users can now also configure maximum call duration and per-call duration limits on each outbound route, allowing for finer control of enterprise communications.



Outbound Route Call Duration Limit

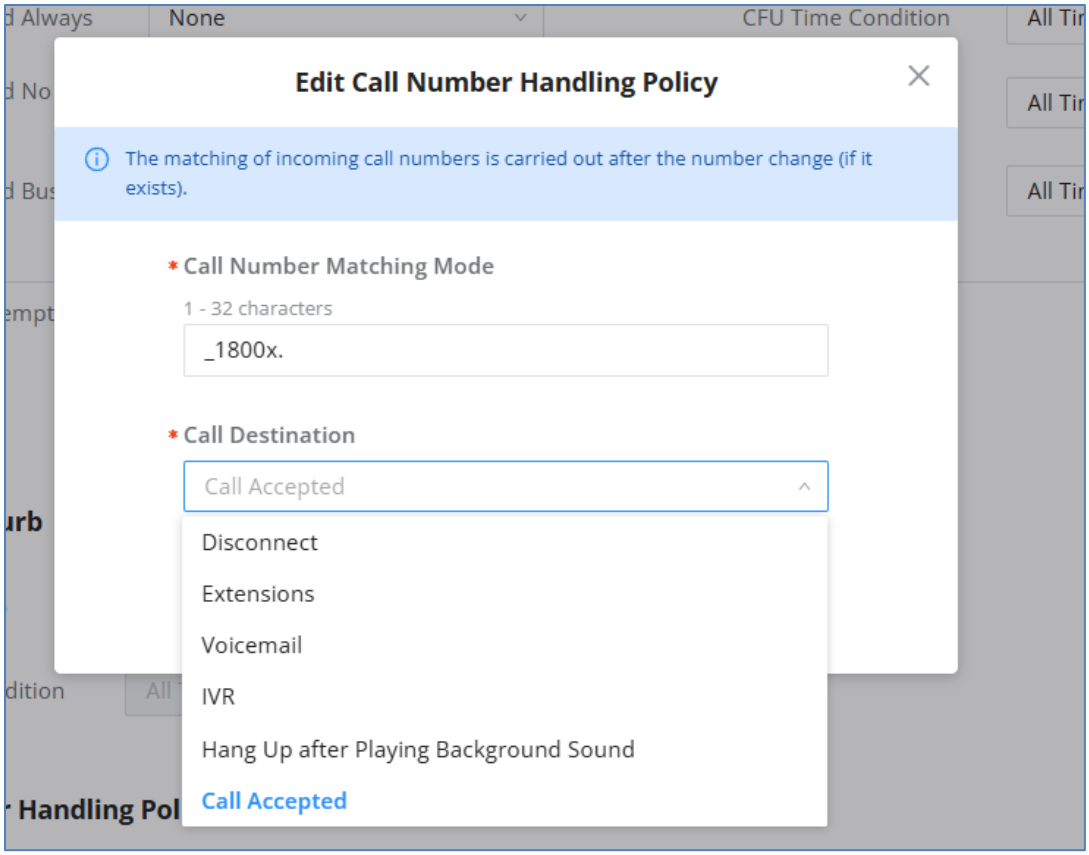
EXTENSION CALL POLICY

Users can now fine-tune the call policy of extensions past call forwarding and DND status. Call policies are always active and will take priority over status-based call forwarding and DND. They can be configured under the new *Extension/Trunk→Extensions→Add/Edit Extension→Call Policy* page.



Call Number Handling Policy

When creating a policy, the pattern and destination of the call must be configured.



Edit Call Number Handling Policy

The following options are available for destination:

- Disconnect – Immediately drop the call.
- Extensions – Forward the call to another extension.
- Voicemail – Forward the call to voicemail, including other extensions' voicemail.
- IVR – Forward the call to an IVR.
- Hang Up After Playing Background Sound – Drop the call after playing the selected prompt.
- Call Accepted – Receive the call normally.

SCHEDULING FIRMWARE UPDATE CHECKS

When scheduling firmware update checks, users can select between one of two behaviors if a new firmware is available:

- **Notify When New Firmware is Available** – Generate an alert in the webUI's notification center.
- **Auto Download and Upgrade Firmware –** Automatically download and upgrade to the new firmware as soon as an update is detected.

SNMP: NEW OIDS

UCM now supports the following new OIDs:

OID	NAME	TYPE	DESCRIPTION

1.3.6.1.4.1.22736.2.1.1.0	sTotalCalls	Integer	Total number of calls
1.3.6.1.4.1.22736.2.1.2.0	sInternalCalls	Integer	Number of internal calls
1.3.6.1.4.1.22736.2.1.3.0	sOutboundCalls	Integer	Number of outgoing calls
1.3.6.1.4.1.22736.2.1.4.0	sInboundCalls	Integer	Number of incoming calls
1.3.6.1.4.1.22736.2.1.5.0	sAnsweredCalls	Integer	Number of answered calls
1.3.6.1.4.1.22736.2.1.6.0	sFailedCalls	Integer	Number of failed calls
1.3.6.1.4.1.22736.2.1.7.0	sBusyCalls	Integer	Number of calls to busy numbers
1.3.6.1.4.1.22736.2.1.8.0	sNoAnsweredCalls	Integer	Number of unanswered calls
1.3.6.1.4.1.22736.2.2.1.0	sProductType	String	Product type
1.3.6.1.4.1.22736.2.2.2.0	sHardwareVersion	String	PBX hardware version
1.3.6.1.4.1.22736.2.2.3.0	sFirmwareVersion	String	PBX firmware version
1.3.6.1.4.1.22736.2.2.4.0	sSerialNumber	String	PBX serial number
1.3.6.1.4.1.22736.2.2.5.0	sUptime	String	PBX system uptime
1.3.6.1.4.1.22736.2.2.6.0	sDiskUsage	String	System's disk usage
1.3.6.1.4.1.22736.2.2.7.0	sMemoryUsage	String	System's memory usage
1.3.6.1.4.1.22736.2.2.8.0	concurrentCall	Integer	Number of ongoing concurrent calls
1.3.6.1.4.1.22736.2.2.9.0	avgCpuLoad	String	Average CPU load
1.3.6.1.4.1.22736.2.2.10.0	asteriskStatus	String	Asterisk status
1.3.6.1.4.1.22736.2.2.11.0	cputTop10	String	Top 10 CPU-consuming processes
1.3.6.1.4.1.22736.2.2.12.0	memTop10	String	Top 10 memory-consuming processes
1.3.6.1.4.1.22736.2.3.1.0	sHostName	String	PBX's host name

1.3.6.1.4.1.22736.2.3.2.0	sLanStatus	String	LAN connection status
1.3.6.1.4.1.22736.2.3.3.0	sLanName	String	LAN name
1.3.6.1.4.1.22736.2.3.4.0	sLanMac	String	LAN MAC address
1.3.6.1.4.1.22736.2.3.5.0	sLanIpaddress	String	LAN IP address
1.3.6.1.4.1.22736.2.3.6.0	sLanSubnetMask	String	LAN subnet mask
1.3.6.1.4.1.22736.2.3.7.0	sLanGateWay	String	LAN gateway
1.3.6.1.4.1.22736.2.3.8.0	sLanConnectType	String	LAN IP assignment method
1.3.6.1.4.1.22736.2.3.9.0	sLanPrimaryDns	String	LAN primary DNS
1.3.6.1.4.1.22736.2.3.10.0	sLanSecondaryDns	String	LAN secondary DNS
1.3.6.1.4.1.22736.2.3.11.0	sWanStatus	String	WAN connection status
1.3.6.1.4.1.22736.2.3.12.0	SWanName	String	WAN name
1.3.6.1.4.1.22736.2.3.13.0	sWanMac	String	WAN MAC address
1.3.6.1.4.1.22736.2.3.14.0	sWanIpaddress	String	WAN IP address
1.3.6.1.4.1.22736.2.3.15.0	sWanSubnetMask	String	WAN subnet mask
1.3.6.1.4.1.22736.2.3.16.0	sWanGateWay	String	WAN gateway
1.3.6.1.4.1.22736.2.3.17.0	sWanConnectType	String	WAN IP assignment method
1.3.6.1.4.1.22736.2.3.18.0	sWanPrimaryDns	String	WAN primary DNS
1.3.6.1.4.1.22736.2.3.19.0	sWanSecondaryDns	String	WAN secondary DNS
1.3.6.1.4.1.22736.2.4.1.1.1.0	sExternsionsIndex	Integer	Extension serial number
1.3.6.1.4.1.22736.2.4.1.1.2.0	sExternsionsPort	String	Extension port number
1.3.6.1.4.1.22736.2.4.1.1.3.0	sExternsionsNum	String	Extension number
1.3.6.1.4.1.22736.2.4.1.1.4.0	sExternsionsStatus	String	Extension status

1.3.6.1.4.1.22736.2.4.1.1.5.0	sExternsionsVoiceMail	String	The number of urgent, unread, and read voicemails
1.3.6.1.4.1.22736.2.4.1.1.6.0	sExternsionsType	String	Extension type
1.3.6.1.4.1.22736.2.5.1.1.1.0	sTrunksIndex	Integer	Trunk's serial number
1.3.6.1.4.1.22736.2.5.1.1.2.0	sTrunksName	String	Trunk's name
1.3.6.1.4.1.22736.2.5.1.1.3.0	sTrunksType	String	Trunk type
1.3.6.1.4.1.22736.2.5.1.1.4.0	sTrunksPort	String	Trunk's port
1.3.6.1.4.1.22736.2.5.1.1.5.0	sTrunksStatus	String	Trunk's status (Available, Unreachable, Disabled, Unmonitored)
1.3.6.1.4.1.22736.2.5.1.1.6.0	sTrunksHostName	String	Trunk's hostname
1.3.6.1.4.1.22736.2.5.1.1.7.0	sTrunksUserName	String	Trunk's username
1.3.6.1.4.1.22736.2.6.1.1.1.0	sIpAttacksIndex	String	Serial number of the malicious network attack
1.3.6.1.4.1.22736.2.6.1.1.2.0	sIpattacksTime	String	Timestamp of the malicious network attack
1.3.6.1.4.1.22736.2.6.1.1.3.0	sIpattacksPort	String	Port that was maliciously attacked
1.3.6.1.4.1.22736.2.6.1.1.4.0	sIpattacksIpAddress	String	Source IP address of the malicious attacker
1.3.6.1.4.1.22736.2.6.1.1.5.0	sIpattacksProtocol	String	Protocol used in the malicious network attack

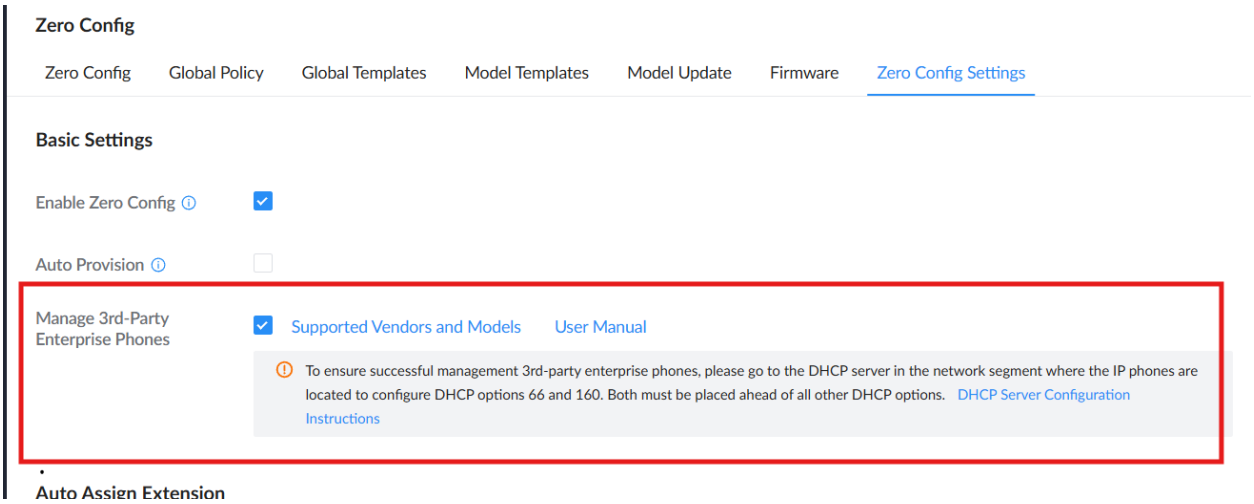
ZERO CONFIG SUPPORT FOR 3RD PARTY DEVICES

UCM has begun support for 3rd party devices. Currently, UCM supports:

- Cisco:
  - CP-78XX
  - CP-88XX
  - DP-98XX
- Polycom:
  - Edge-E
  - Edge-B
  - VVX (non-Obi)
- Yealink:
  - AX series
  - T4 series
  - T5 series

- T7 series
- T8 series

To get started, go to **Device Management→Zero Confg→Zero Config Settings** and enable **Manage 3rd Party Phones**.



Zero Config 3rd Party Phones

DHCP Options 66 and 160 must be configured on the phones' network segment's DHCP server. Once enabled, Zero Config will be able to scan and find support 3rd party device models.

Global Policy, Global Templates, and Model Templates will support these 3rd party devices. Model templates will be gradually added upon with more settings. Users may also manually upload model template packages (.pack format) for these 3rd party devices.