UCM Series IP PBX Firmware Release Notes

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FIRMWARE VERSION 1.0.29.19

PRODUCT NAME

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

DATE

Published: 08/22/2025

FIRMWARE FILE INFORMATION

- UCM6301/6302 firmware file name: ucm6301_ucm6302fw.bin
  MD5: e5f6a35cd8430d005273dfd5460a8cbb
- UCM6304/6308 firmware file name: ucm6304_ucm6308fw.bin
  MD5: 8f0d1f286026a6e723303446b39371f9
- UCM6300A/6302A firmware file name: ucm6300A_ucm6302Afw.bin
  MD5: bb1b835583ef2a372ac55c3ddf3cc584
- UCM6304A firmware file name: ucm6304Afw.bin
  MD5: 8695f7184c7cb67288d88de5aedb155a
- UCM6304/6308 firmware file name: ucm6308Afw.bin
  MD5: 590fd70418cf8020e1dbc8557149e212

IMPORTANT UPGRADING NOTE

- **WARNING: BEFORE UPGRADING TO 1.0.27.10 OR HIGHER, PLEASE MAKE A FULL BACKUP. DUE TO THE SUPPORT OF ENCRYPTION IN 1.0.27.10 AND HIGHER, DOWNGRADING TO 1.0.25.9 OR LOWER WILL REQUIRE A FACTORY RESET.**
- **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 before upgrading further.**
  - **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
- **If the device is on firmware version 1.0.7.x or lower, please upgrade to 1.0.9.x first before upgrading to the latest firmware.**
  - **UCM6301/2:** http://firmware.grandstream.com/Release_UCM6301_6302_1.0.9.10.zip
  - **UCM6304/8:** http://firmware.grandstream.com/Release_UCM6304_6308_1.0.9.10.zip
  - **UCM6300A/6302A:** http://firmware.grandstream.com/Release_UCM6300A_6302A_1.0.9.10.zip
  - **UCM6304A:** http://firmware.grandstream.com/Release_UCM6304A_1.0.9.10.zip
  - **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 1.0.29.11

ENHANCEMENTS

- **[Live Chat]** Added **Advanced Messaging** page under the Sidebar→Messaging section. [ADVANCED MESSAGING]
- **[PBX settings]** 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's Youth Hostel Mode, which divides individual rooms into multiple units to account for multiple different groups and separate billing within the same room

BUG FIXES

- **[System]**
  - Fixed several system stability issues.
  - Fixed an issue with slow page performance when there are a high number of extensions.
  - Fixed an issue with being unable to log in after upgrading firmware and going through the setup wizard.
- **[CDR]**
  - Fixed an issue with duplicate CDR entry when using Call Flip.
- **[HTTPS API]**
  - Fixed an issue with invalid parameter error when saving API settings.
- **[Integrations]**
  - Fixed an issue causing incorrect QueueMetrics statistics.
- **[Maintenance]**
  - Fixed an issue with being unable to upgrade due to database incompatibility.
  - Fixed an issue with backup compatibility between UCM6300A and UCM6300 models.
- **[Paging]**
  - Fixed an issue with being unable to delete Announcement pages.
- **[Security Settings]**
  - Fixed an issue with Djibouti being under the wrong continent in the Geo-IP Access Control page.
- **[SIP Settings]**

- Fixed an issue with incorrect Contact header when transferring inbound calls to external numbers.

- **[Voice Prompts]**
  - Fixed an issue with uploading voice prompt packages.
- **[Web]**
  - Fixed several display issues.
- **[Zero Config]**
  - Fixed an issue with failing to provision Global Policy template when setting the Time Zone to GMT+1.

NEW LIMITATIONS

- **[VoIP Trunks]** PAI header field now supports plus signs (+).

NEW FEATURES OVERVIEW

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.

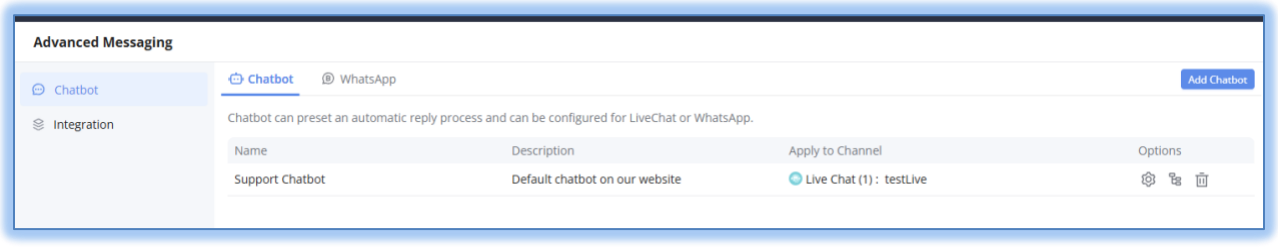

Figure 1 - Advanced Messaging

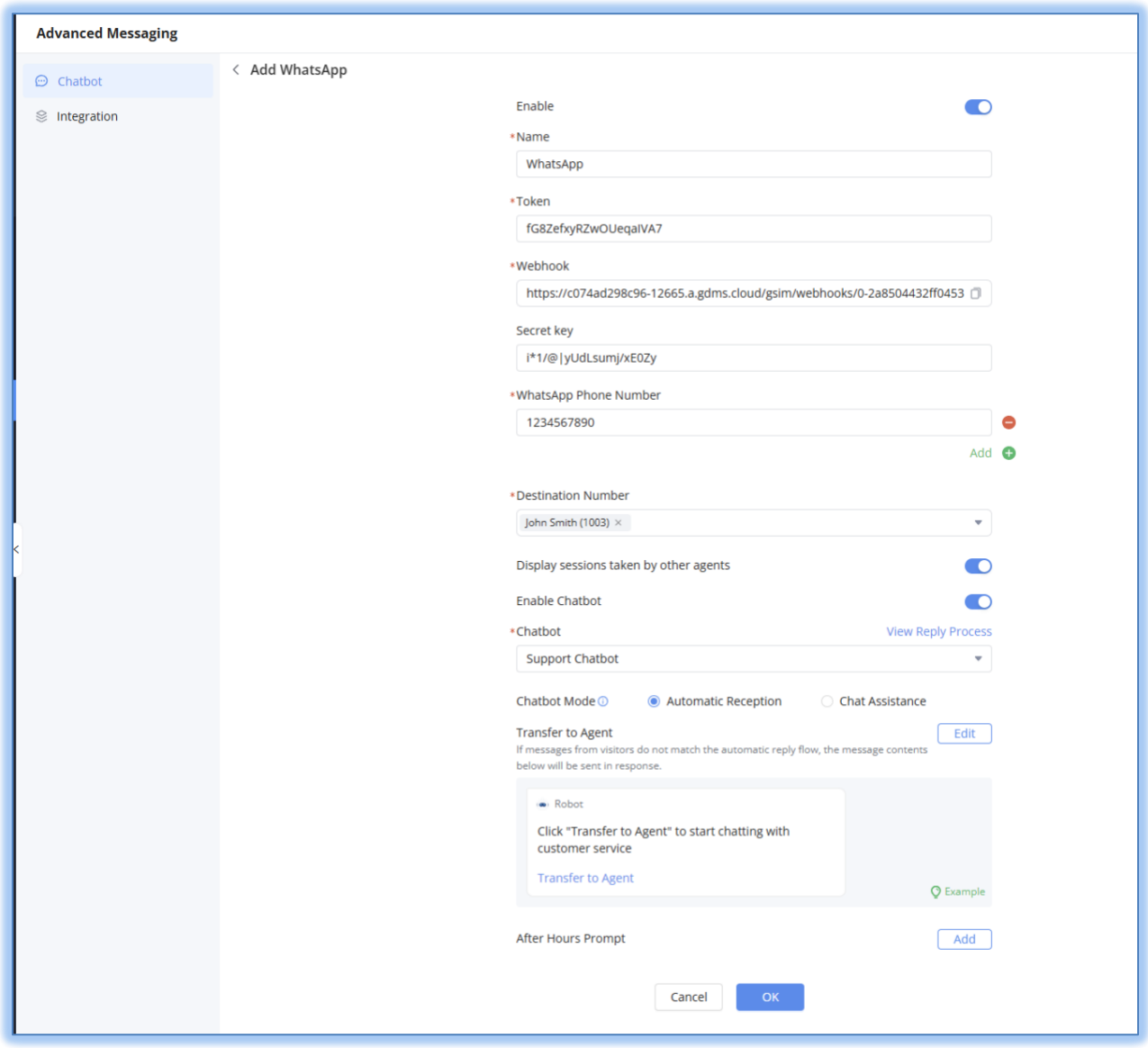

Figure 2 - WhatsApp

From the **Integrations** page, users can configure integrations with 3rd party systems to allow them to send messages and notifications directly to Wave users. For more details on configuration, please see our Wave Administration Guide.

FIRMWARE VERSION 1.0.29.11

PRODUCT NAME

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

DATE

Published: 06/24/2025
Updated: 08/08/2025

FIRMWARE FILE INFORMATION

- UCM6301/6302 firmware file name: ucm6301_ucm6302fw.bin
  MD5: 42f211c0338833483da1c583da18d4fd
- UCM6304/6308 firmware file name: ucm6304_ucm6308fw.bin
  MD5: 39039bbae2a549fd0201870733f449a2
- UCM6300A/6302A firmware file name: ucm6300A_ucm6302Afw.bin
  MD5: d654e6fe664a5bb76a3f31e05692f544
- UCM6304A firmware file name: ucm6304Afw.bin
  MD5: 1038215e2f2eaffb8dbc4f156b5f744c
- UCM6304/6308 firmware file name: ucm6308Afw.bin
  MD5: 264311e51f1c7c9ec41fae442bb711af

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  - **UCM6300A/6302A:** http://firmware.grandstream.com/Release_UCM6300A_6302A_1.0.9.10.zip
  - **UCM6304A:** http://firmware.grandstream.com/Release_UCM6304A_1.0.9.10.zip
  - **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 1.0.27.23

ENHANCEMENTS

- **[System]** New or factory reset UCM systems will now be inoperable until new login credentials are set during initial setup.
- **[System]** 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.
- **[System]** Improved system stability.
- **[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
- **[System]** Updated strong password requirements for voicemail and voicemail groups:
    - No consecutive repeating characters
    - Must not match extension number
- **[Security]** Added support for Geo-IP access control. The **Geo-IP Access Control** tab has been added to the *Security Settings* page. Affects Extension ACL, HTTP server access, and API access. Related scheduled tasks to regularly check and keep the country/region list up-to-date have been added to the *Task Management* page.
- **[Security]** Fail2ban, SYN Flood Defense and Ping Defense firewall settings are now enabled on factory settings.
- **[Security]** Improved system security.

- **[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.
- **[Backup/Restore]** Backups are now created in .tgz file format.
- **[Backup/Restore]** Backup restoration now supports both .tar and .tgz file formats.
- **[CDR]** Callee name is now displayed.
- **[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.
- **[Email Settings]** Wave information is no longer included in the *New Messages to Inactive User Notification* email template.
- **[Email Settings]** The *New Messages to Inactive User Notification* email template now contains
- **[Emergency Calling]** ELINs can now be mapped to specific extensions instead of subnets. [EMERGENCY LOCATION – EXTENSION-TO-ELIN MAPPING]
- **[Emergency Calling]** *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.
- **[Extensions]** Added comprehensive extension-level call number handling feature under the new *Call Policy* tab.
- **[Extensions]** The *Emergency CID* field of new extensions will now be auto-filled with the extension number.
- **[File Manager]** Users can now store video recordings in GDMS cloud storage.
- **[GDMS]** Added support for UCM configuration provisioning from GDMS.
- **[HTTPS API]** Added ability to customize the permissions of each API user.
- **[Integrations]** Added Microsoft Entra ID / Azure AD support, allowing for SSO, automatic generation of associated SIP extensions and LDAP contacts based on Microsoft user information and linking existing SIP extensions to Microsoft users. [MICROSOFT ENTRA ID (AZURE AD) INTEGRATION]
- **[Integrations]** Added Windows AD support, allowing the UCM to retrieve contacts and sync them to its own LDAP phonebook. [WINDOWS AD INTEGRATION]
- **[IVR]** Added support for IVR Webhook, allowing the UCM to send/receive call event notifications and receive call control commands. [IVR WEBHOOK]
- **[IVR]** 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. [WAKEUP IVR]
- **[LDAP]** Added a *TLS Compression* toggle to the *LDAP Server Configuration* page. This option is disabled on factory settings.

- **[LDAP]** 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.
- **[Meetings]** Added the *Play Joining/Leaving Meeting Announcement* toggle to allow users to enable/disable the meeting join/leave notification sound.
- **[Meetings]** 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.
- **[Meetings]** Users can now set an ending date for when to stop recurring meetings.
- **[Meetings]** 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.
- **[Network Settings]** 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.
- **[Network Settings]** 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.
- **[Paging]** 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.
- **[Queue]** Users can now specify the voice prompt language used for each queue.
- **[Queue]** Queue chairman can now view the CDR of their managed queues.
- **[Queue]** 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.
- **[Queue]** The *Enable RPID Header* option has been added to the *Advanced Settings* page.
- **[PMS]** Hmobile has been renamed to "char pmslink".
- **[PMS]** Added support for Oracle Hospitality OPERA. [ORACLE HOSPITALITY OPERA INTEGRATION]
- **[PMS]** Local PMS's wakeup service now supports the use of existing IVRs for wakeup calls and its own unique key press events [WAKEUP IVR]

- **[PMS]** Added the *Periodically Email Records* option for Local PMS, allowing users to periodically send the records for wakeup service, check-in/out history, and CDR in an email. The corresponding *PMS Records* email template has been added.
- **[PMS]** Users can now create wakeup calls for checked-out rooms.
- **[Routing]** Added Least Cost Routing (LCR) support. [CARRIER CALL RATES & LEAST COST ROUTING]
- **[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.
- **[Routing]** When importing, users now have the option to skip importing duplicate routes or update duplicate routes with the settings in the import file.
- **[Routing]** Added option to change how outbound routes are prioritized. [OUTBOUND ROUTE PRIORITY POLICY]
- **[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.
- **[Syslog]** SECURITY syslog is now enabled on factory settings.
- **[System Events]** Added option to not generate Lost Registration alerts for Wave clients.
- **[System Events]** Added **GDMS Cloud Storage** alert for failed uploads to GDMS cloud storage.
- **[Time Settings]** 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.
- **[Voicemail]** Added support for batch deletion of voicemail messages and voicemail group messages.
- **[Voice Prompt]** 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.
- **[Voice Prompt]** Added support for direct web playback of custom prompts on the webUI.
- **[VoIP Trunks]** Added **Concurrent Call Threshold** and related system alerts.
- **[VoIP Trunks]** 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.
- **[VoIP Trunks]** Added the **Send Diversion Header** option to the *Advanced Settings* page, allowing users to configure whether to send Diversion Header for each trunk.
- **[Upgrade]** Added options to check online for new firmware and schedule regular firmware checks via the *Task Management* page. [SCHEDULING FIRMWARE UPDATE CHECKS]
- **[User Management]** Users that have permission for features will also be able to access the corresponding scheduled tasks for those features.
- **[User Management]** Added the following new custom privileges:
    - PMS – Room Management

    - PMS – Room Status
    - PMS – Housekeeper
    - Music On Hold
- **[User Management]** Added the following new User Portal/Wave privileges:
    - *Delete Message* Wave permission
    - *Multi-client Loging Settings* Wave permission
- **[Web]** Dashboard now displays NAS connection status and space usage.
- **[Web]** Dashboard now displays the IP addresses of available network interfaces.
- **[Web]** Users can now import and export data in XLSX format.
- **[Web]** Added a link to the UCM's Open Source License to the bottom of the web page.
- **[Web]** Made several improvements to the webUI.
- **[Zero Config]** Added support for filtering devices by vendor. Currently, only Grandstream devices can be identified. Vendors are identified through MAC OUI.

BUG FIXES

- **[System]**
    - Fixed several system stability issues.
- **[Calling]**
    - Fixed an issue with displaying incorrect remote party ID when using attended transfer.
- **[CDR]**
    - Fixed an issue with CDR Real-time Output now showing the extension name.
    - Fixed an issue with CDR not displaying the name of External Contacts
    - Fixed an issue with the recording not appearing on the CDR for callees with 3 or more registered endpoints.
    - Fixed an inconsistency issue where a queue call is displayed as being answered by the correct agent in the CDR while it is displayed as being answered by someone else in Wave.
    - Fixed an issue where unanswered calls are shown as Answered in filtered results.
- **[CTI]**
    - Fixed a consistency issue with BLF monitoring of call queues.
- **[Extensions]**
    - Fixed an issue where the **Send Voicemail Email Notification** column in the extension import/export CSV was case-sensitive.
- **[Fax]**
    - Fixed an issue with virtual fax sending when the file name has Hebrew characters.
- **[HTTPS API]**
    - Fixed an issue with processing first names with special characters.

    - Fixed an issue where extensions created via API will not have their name displayed in the extension list.
- **[IVR]**
    - Fixed an issue with not detecting DTMF in certain cases.
- **[LDAP]**
    - Fixed an issue with not including the Department attribute in the LDAP response.
- **[Paging]**
    - Fixed an issue with schedule pages not working properly with extension groups in certain cases.
- **[PMS]**
    - Fixed an issue with char pmslink and PMSAPI where when moving rooms, some of the old room's information is not automatically cleared.
- **[Queue]**
    - Fixed an issue with queue caller assignment.
    - Fixed an issue with the being unable to rate the queue agent in certain cases.
- **[Ring Group**
    - Fixed an issue with abnormal interactions when the first member of a ring group has DND enabled.
- **[SIP Settings]**
    - Fixed an issue with parsing phone-context parameter when receiving calls.
- **[VoIP Trunks]**
    - Fixed an issue where the PPI header does not contain the correct value in certain cases.
    - Fixed an issue where the Total Time Limit For Outbound Calls was not calculated properly for transferred calls.
- **[Web]**
    - Fixed an issue with slow web responsiveness.
    - Fixed an issue where users are regularly receiving the GDMS plan expiration alert in the UCM notification center.
    - Fixed several web display issues.
- **[Zero Config]**
    - Fixed an issue with device discovery via SIP message.
    - Fixed an issue with provisioning Mexico City and Monterrey time zone information.

NEW LIMITATIONS

- **[Emergency Calling]** *ELIN* field now supports 4~32 letters, numbers, and plus sign (+).

- **[Security]** The ***Fail2Ban→Max Retry Duration (s)*** max limit has been reduced from 999,999,999 seconds to 86,400 seconds.
- **[Web]** Several name/identifier fields now support Chinese characters, excluding SNMP related fields.
- **[UCM6308-only] [Voicemail Group]** VM group member limit has been increased to 150 members.

NEW FEATURES OVERVIEW

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

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.

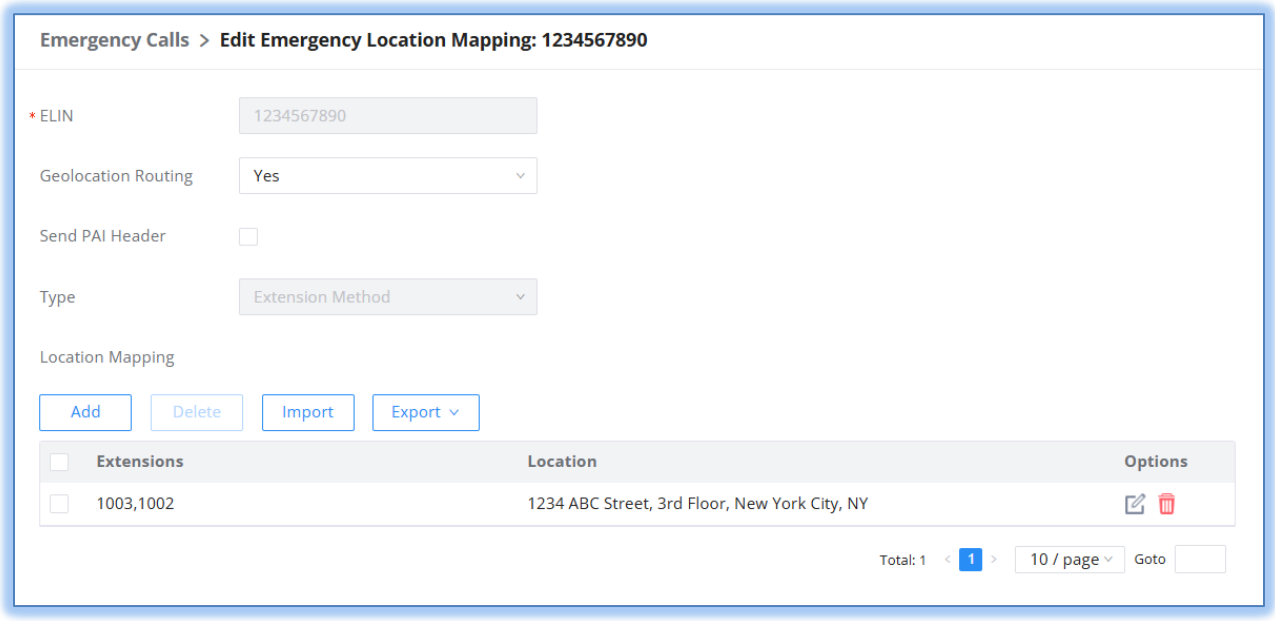


Figure 3 - Emergency Call Location Extension Mapping

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

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.

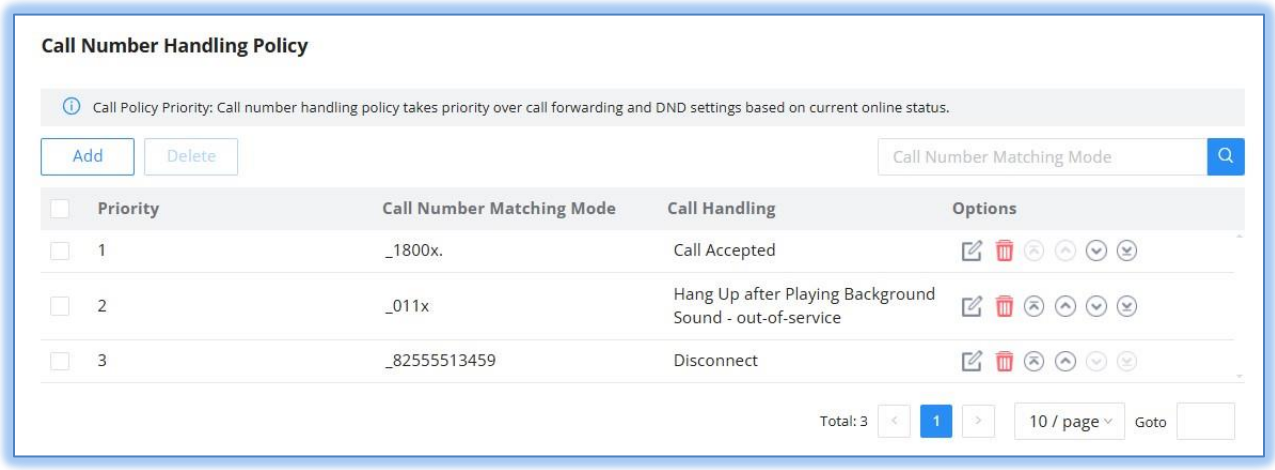


Figure 4 - Call Number Handling Policy

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

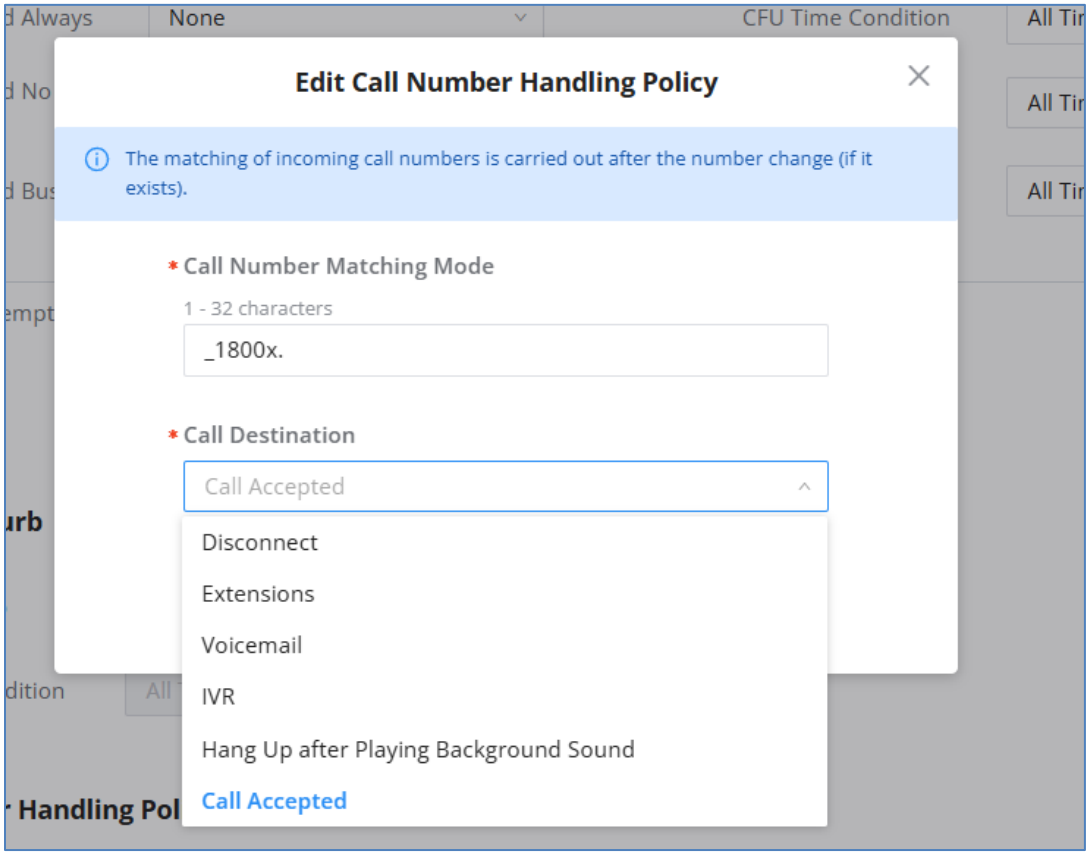


Figure 5 - Edit Call Number Handling Policy

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.

MICROSOFT ENTRA ID (AZURE AD) INTEGRATION

For details on usage, please see our official Microsoft Entra ID (Azure AD) Configuration Guide.

WINDOWS AD INTEGRATION

For details on usage, please see our official Windows AD Configuration Guide.

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

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.

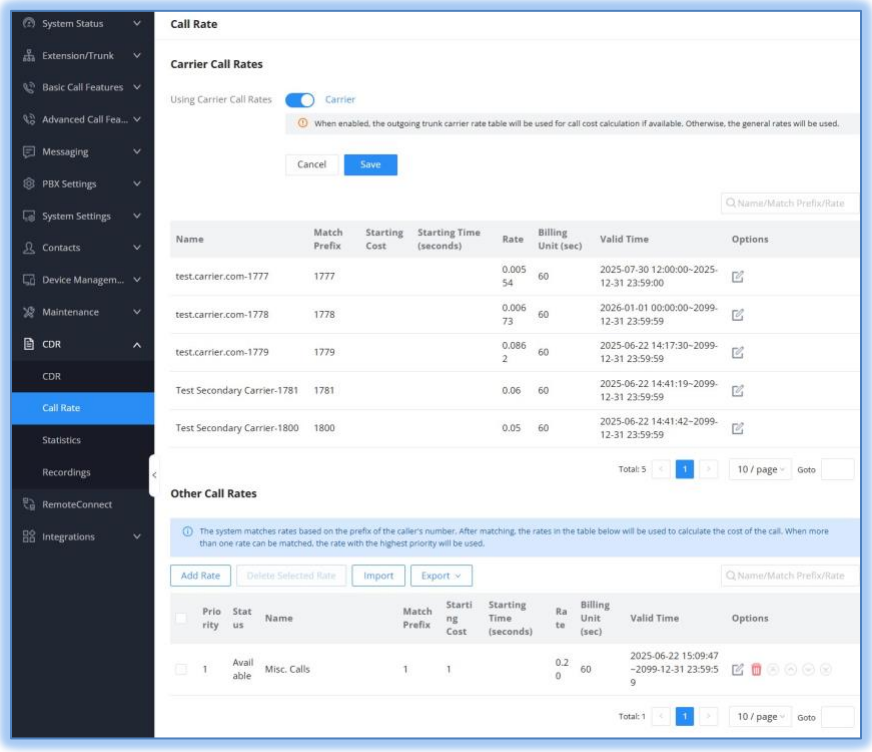


Figure 6 - Call Rates Overview

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.

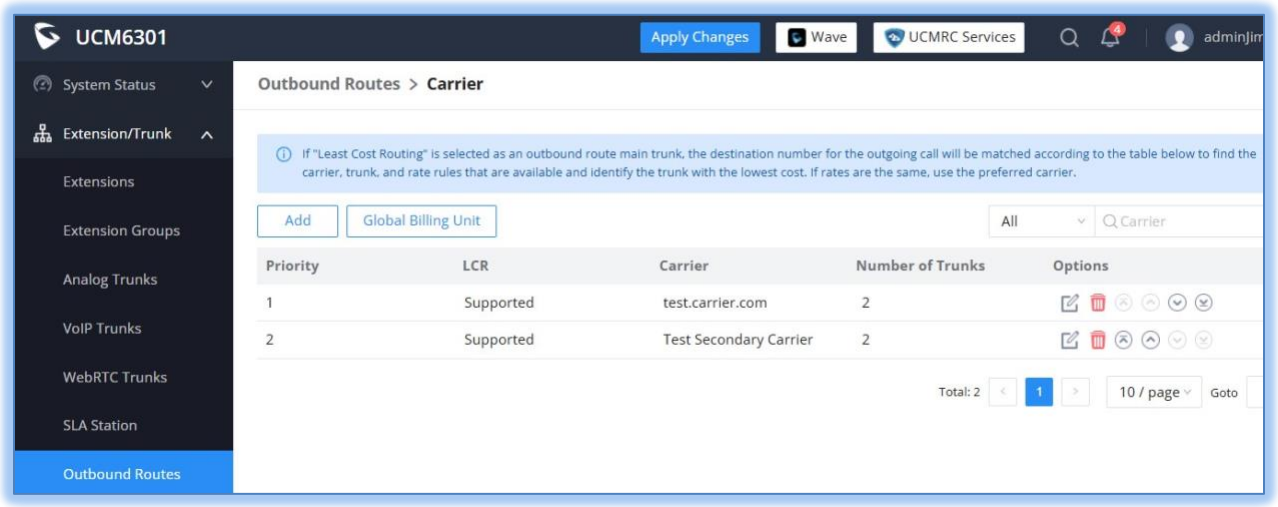


Figure 7 - Carrier Overview

Users can set a **Global Billing Unit**, which is simply the unit of time used when calculating call cost. Default is 60 seconds.

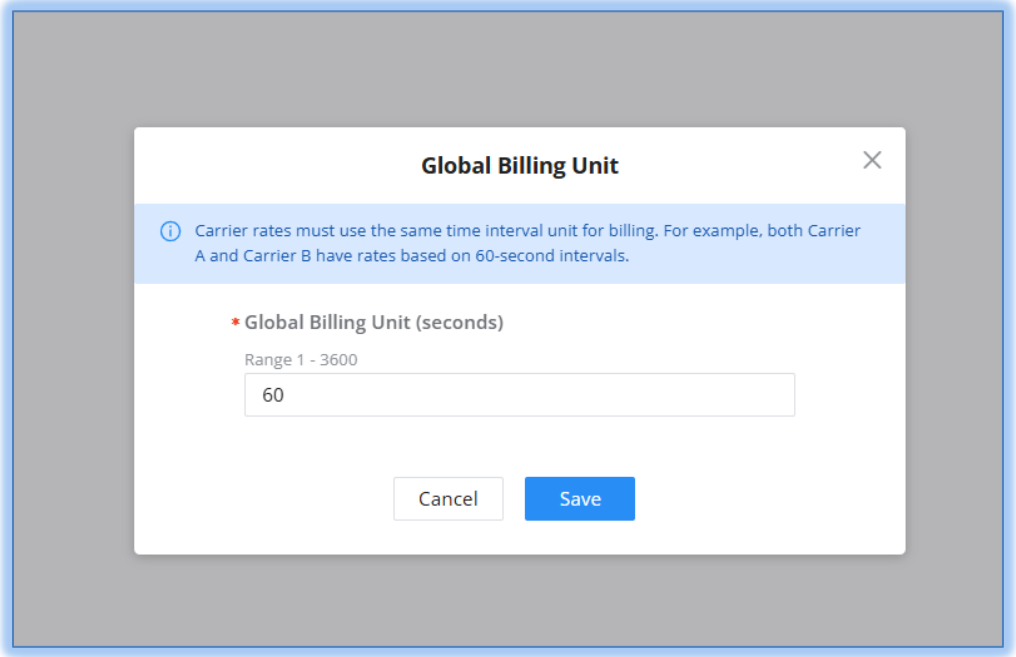


Figure 8 - Global Billing Unit

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

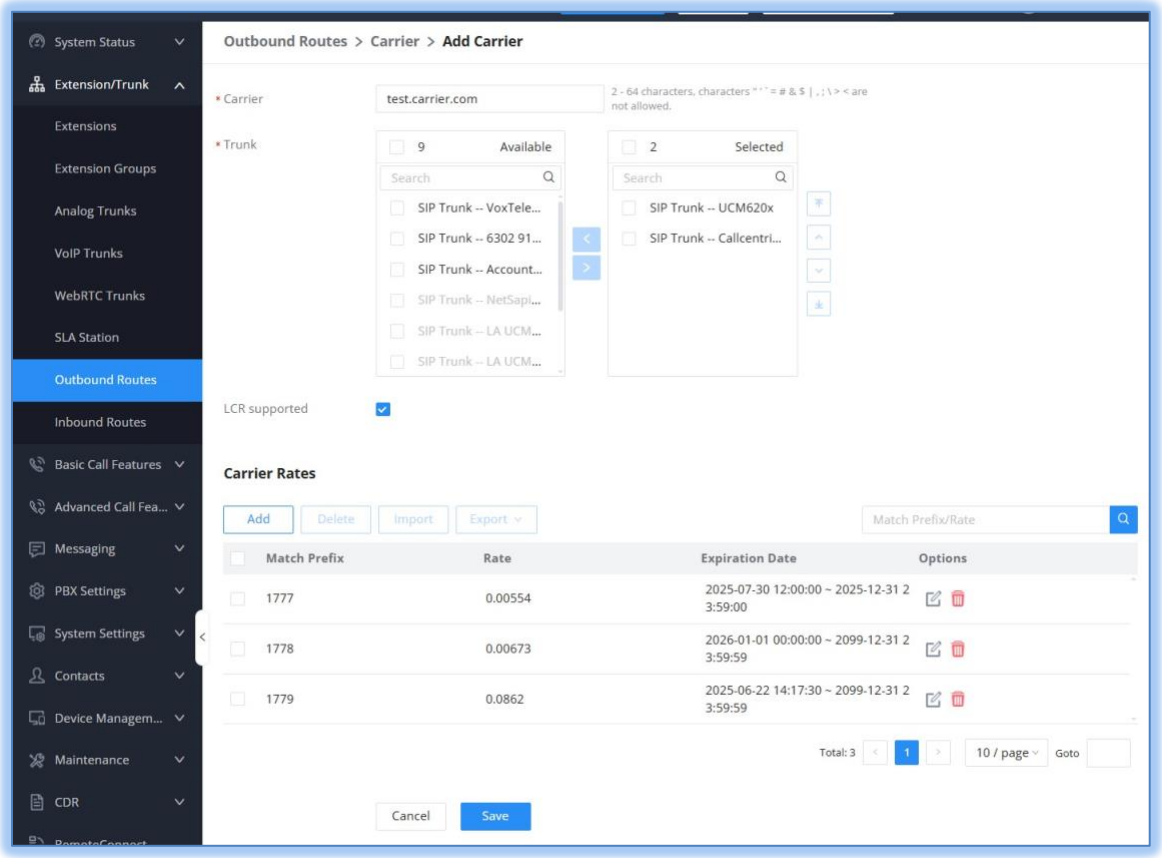


Figure 9 - Carrier Rates

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 for 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.

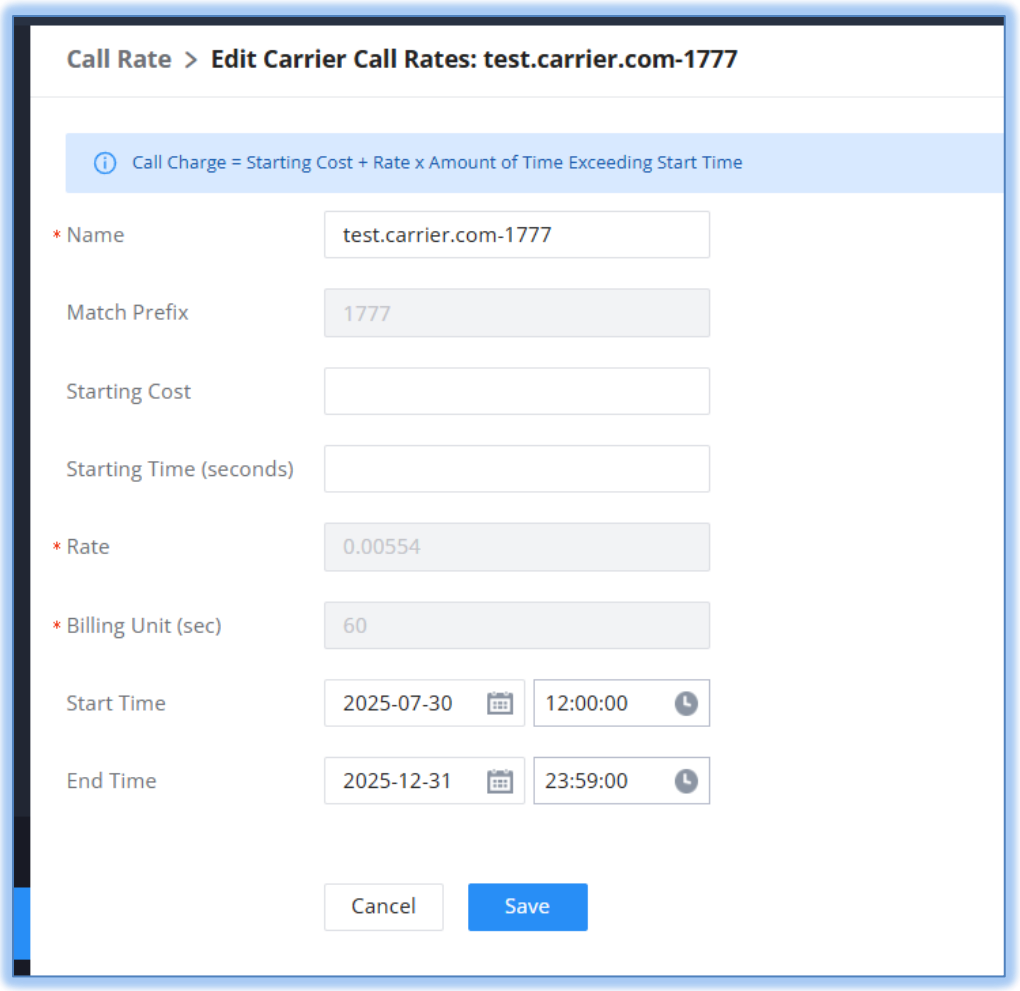


Figure 10 - Carrier Call Rate with Starting Cost

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.

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.

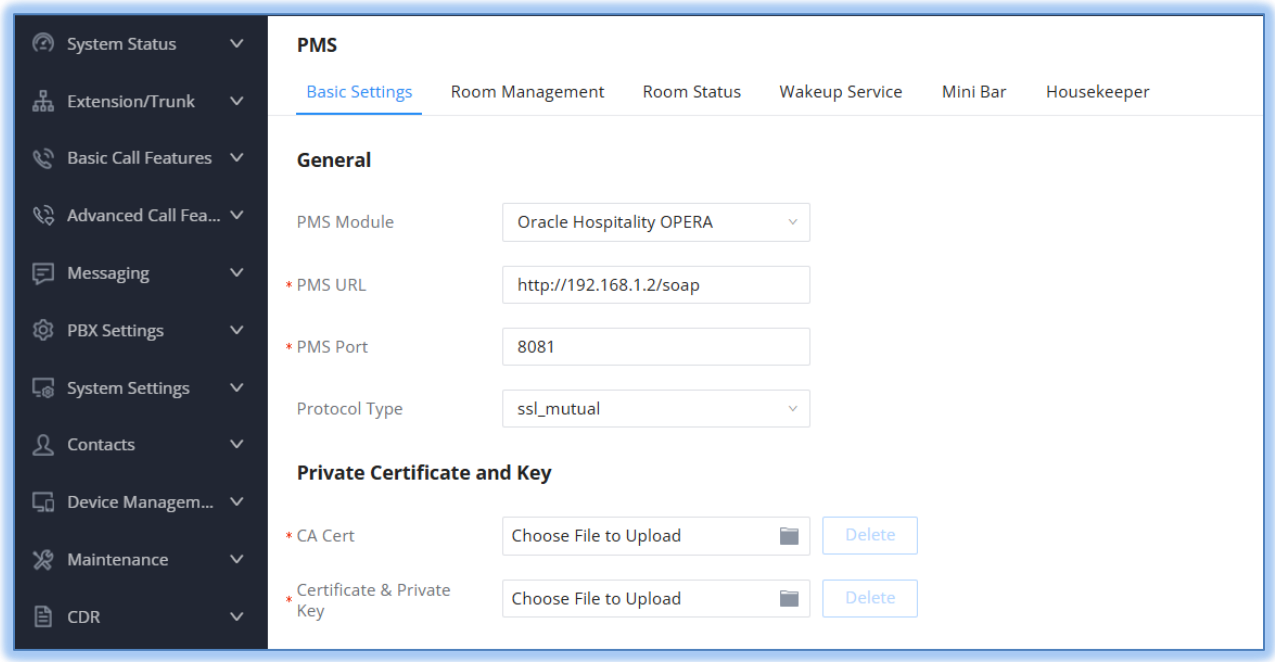


Figure 11 - Oracle Hospitality OPERA

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.

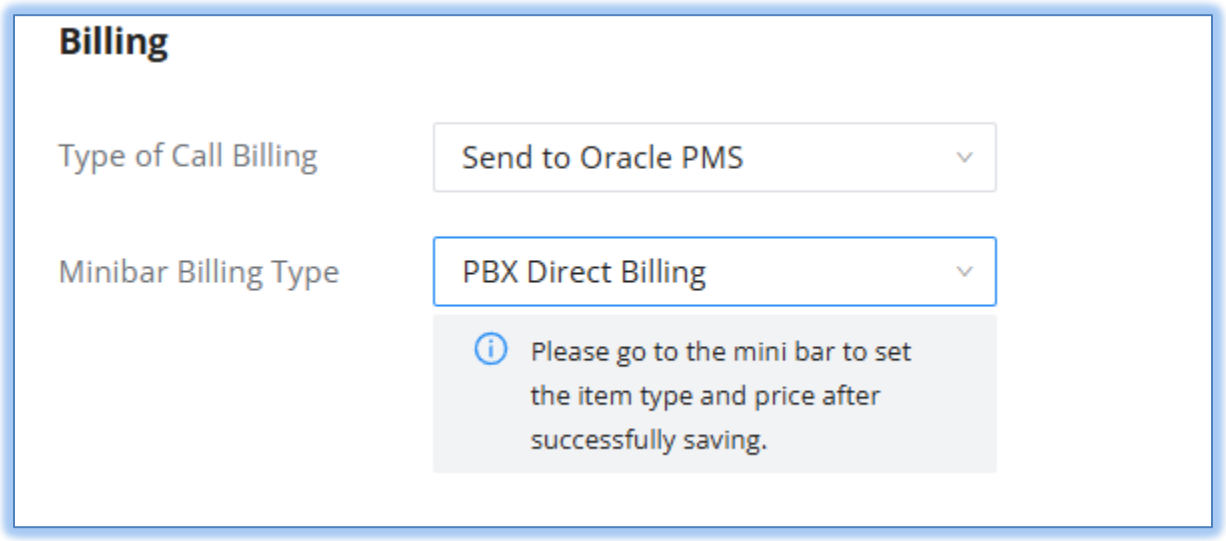


Figure 12 - OPERA Billing

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.

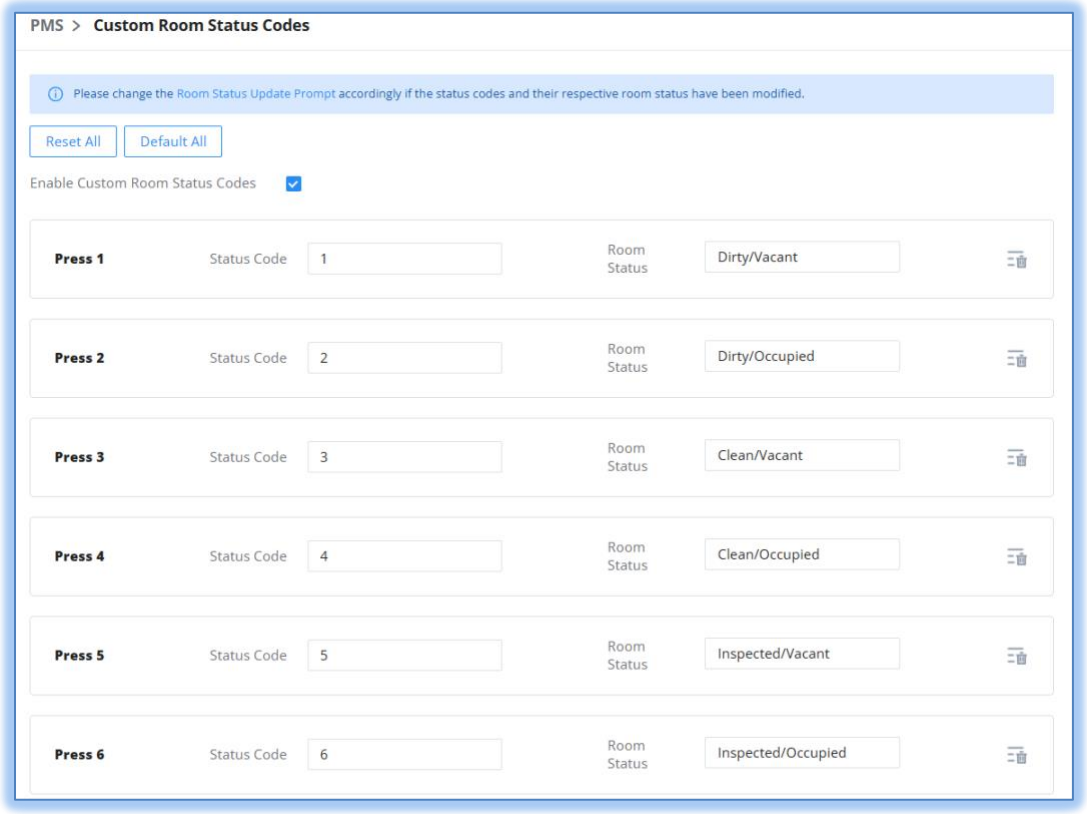


Figure 13 - OPERA Room Status

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.

PENDING

The following features are pending and currently still in development:

- Youth Hostel Mode: Divides individual rooms into multiple units to account for multiple different groups and separate billing within the same room.
- Dial-up Code: 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).

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.

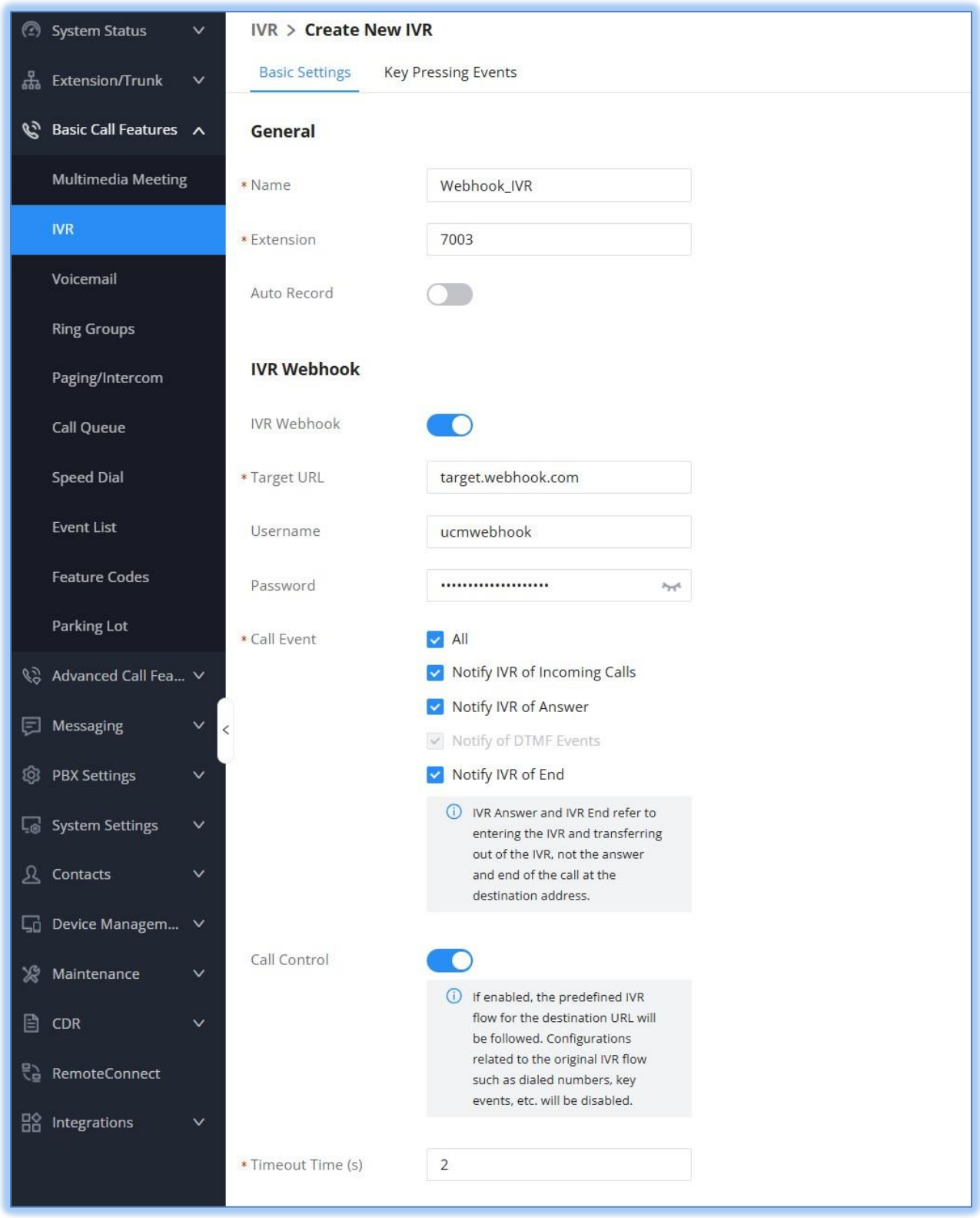


Figure 14 - IVR Webhook

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.

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.

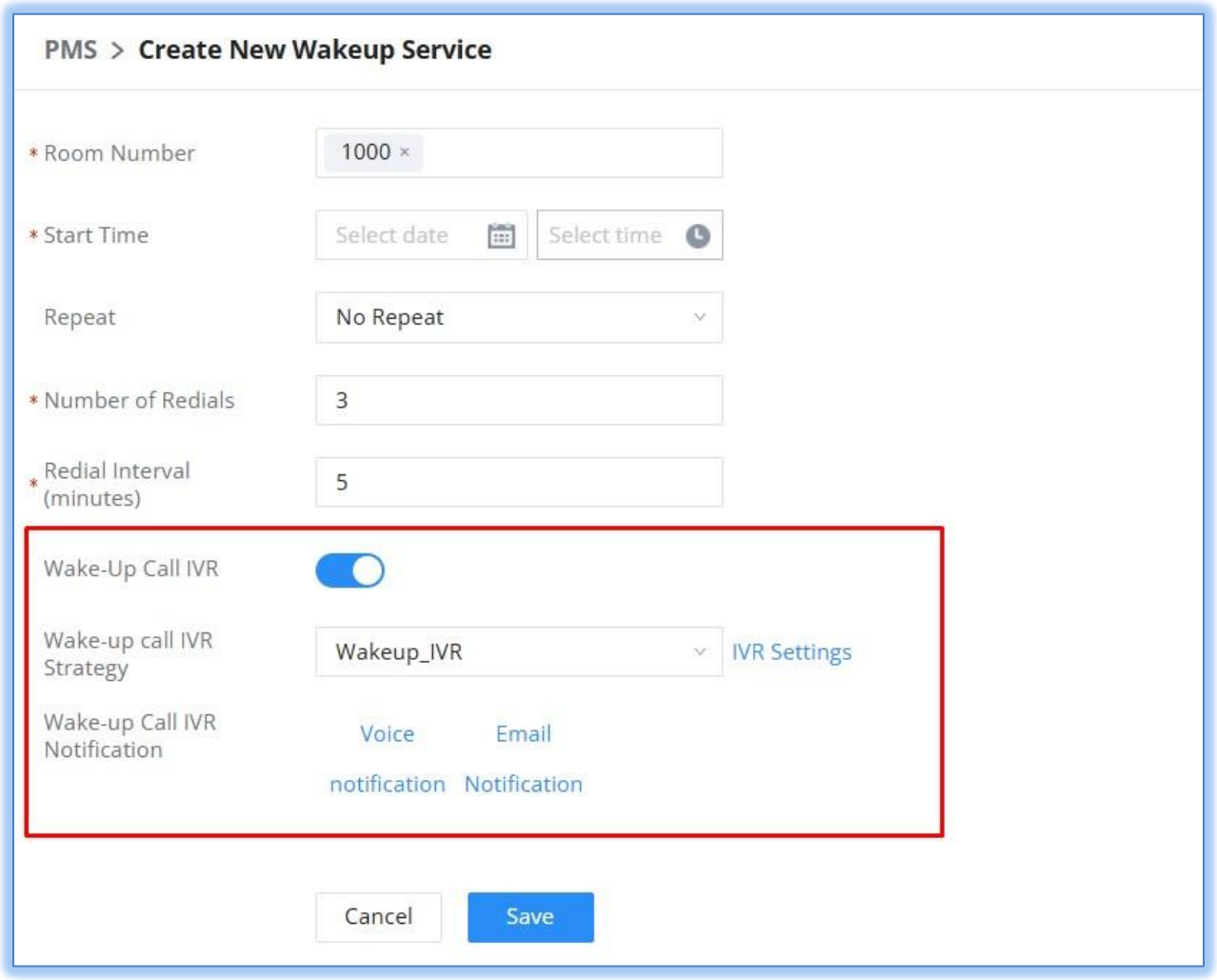


Figure 15 - Wakeup Service IVR Selection

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

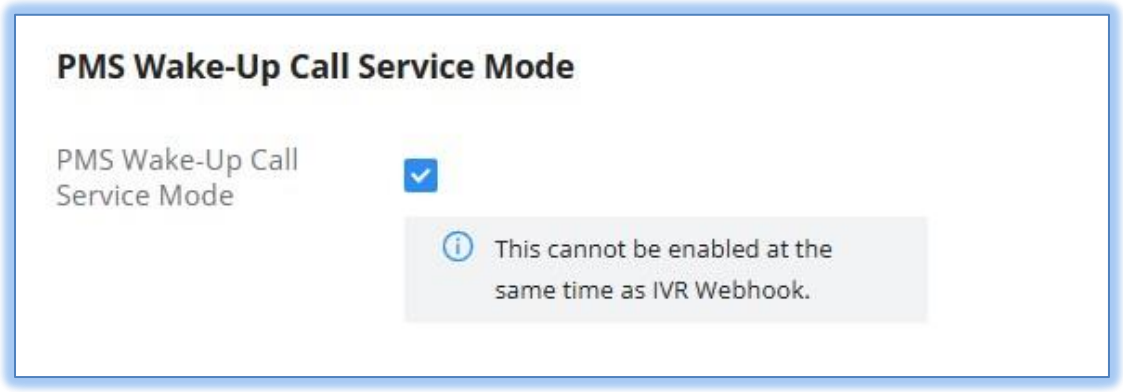


Figure 16 - IVR PMS Wake-Up Call Service Mode

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.

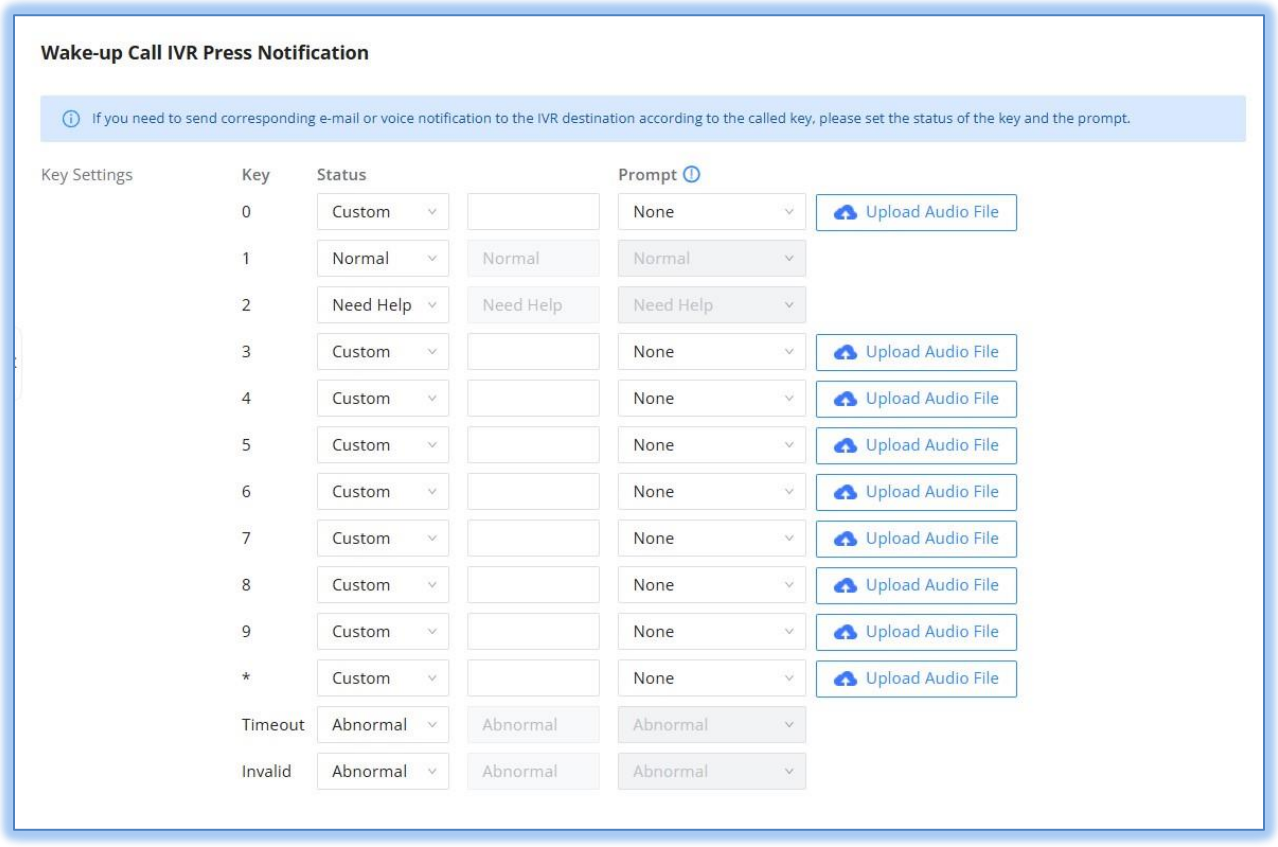
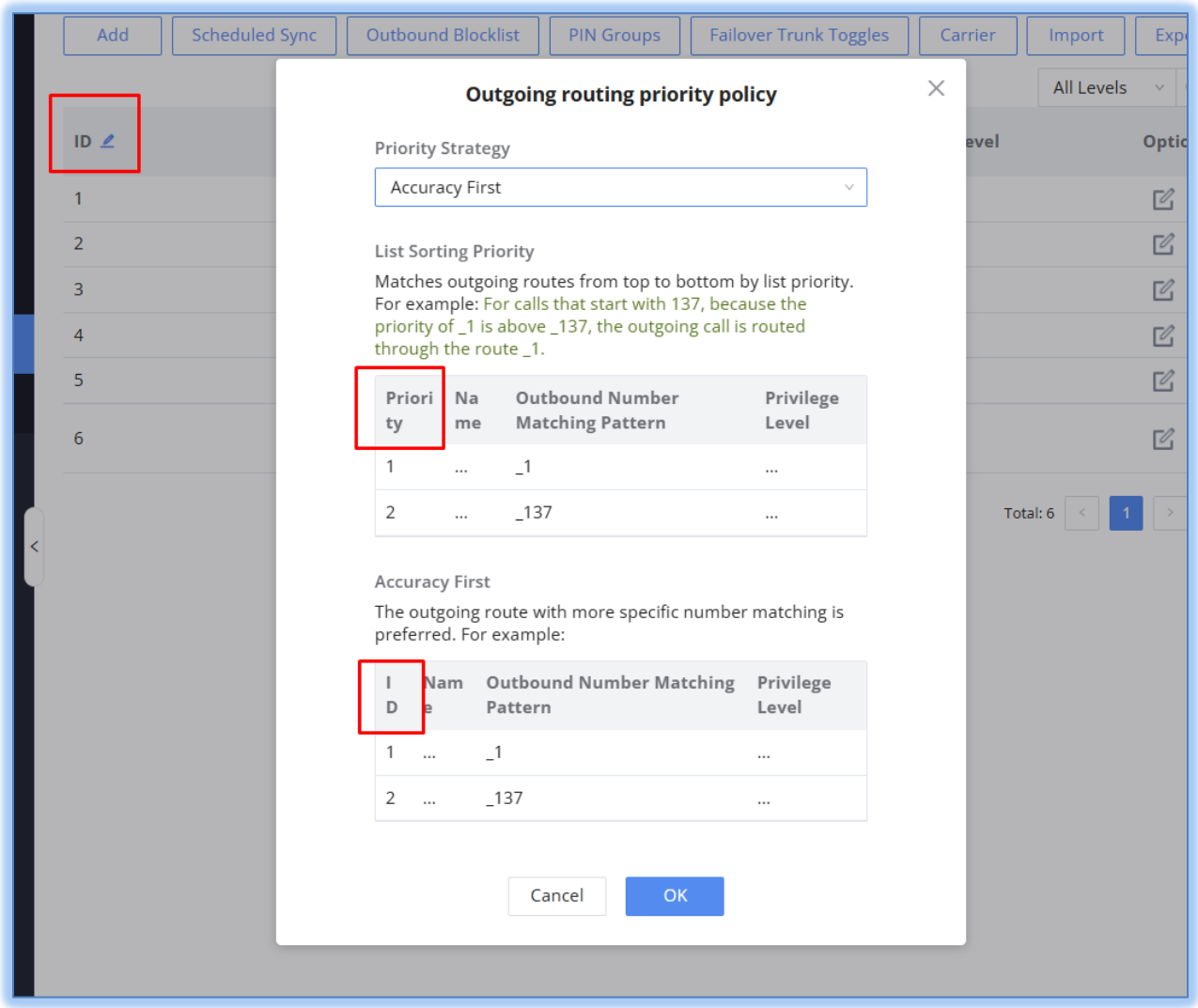


Figure 17 - Wakeup IVR Key Press Events

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

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.