![epygi®]

Manual-III: User Guide for QX IP PBXs

This manual is effective for QX IP PBXs: QX20, QX50, QX80, QX200, QX500, QX2000, QX3000 and QXISDN4+.

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Emergency 911 Calls

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Epygi Technologies, LLC. ('Epygi') warrants to the original end-user purchaser every QX and Quadro to be free from physical defects in material and workmanship under normal use for a period of one (1) year from the date of purchase (proof of purchase required) or two (2) years from the date of purchase (proof of purchase required) for products purchased in the European Union (EU). If Epygi receives notice of such defects, Epygi will, at its discretion, either repair or replace products that prove to be defective.

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If the product proves to be defective during this warranty period, please contact the establishment where the unit was purchased. The Integrator will provide guidance on how to return the unit in accordance with its established procedures. Epygi will provide the Return Merchandise Authorization Number to your retailer.

Please provide a copy of your original proof of purchase. Upon receiving the defective unit, Epygi, or its service center, will use commercially reasonable efforts to ship the repaired or a replacement unit within ten business days after receipt of the returned product. Actual delivery times may vary depending on customer location. The Distributor is responsible for shipping and handling charges when shipping to Epygi.

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Extended Warranty

Extended Warranty Option

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Extended Warranty Statement

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Epygi Technologies, LLC.

2233 Lee Road Suite 201 Winter Park, Florida 32789

Administrative Council for Terminal Attachments (ACTA) Customer Information

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. Located on the equipment is a label that contains, among other information, the ACTA registration number and ringer equivalence number (REN). If requested, this information must be provided to the telephone company.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total REN's contact the telephone company to determine the maximum REN for the calling area.

This equipment cannot be used on the telephone company-provided coin service. Connection to Party Line Service is subject to State Tariffs.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right the file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact EPYGI TECHNOLOGIES, LLC.

If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved.

Electrical Safety Advisory

To reduce the risk of damaging power surges, we recommend you install an AC surge arrestor in the AC outlet from which the QX or Quadro is powered.

Industry Canada Statement

This product meets the applicable Industry Canada technical specifications.

Safety Information

Before using the QX or Quadro, please review and ensure the following safety instructions are adhered to:

- To prevent fire or shock hazard, do not expose your QX or Quadro to rain or moisture.
- To avoid electrical shock, do not open the QX or Quadro. Refer servicing to qualified personnel only.
- Never install wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specified for wet locations.
- Never touch non-insulated telephone wire or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying cable or telephone lines.
- Avoid using your QX or Quadro during an electrical storm.
- Do not use your QX, Quadro or telephone to report a gas leak in the vicinity of the leak.
- An electrical outlet should be as close as possible to the unit and easily accessible.

Emergency Services

The use of VoIP telephony is made available through IP networks such as the Internet and is dependent upon a constant source of electricity, network availability and proper operation of the equipment. If a power outage, network disruption or equipment failure occurs, the VoIP telephony service could be disabled. User understands that in any of those events the QX or Quadro may not be able to support 911 emergency services, and further, such services may only be available via the user's regular telephone line or mobile lines that are not connected to the QX or Quadro. User further acknowledges that any interruption in the supply or delivery of electricity, network availability or equipment failure is beyond Epygi's control and Epygi shall have no responsibility for losses arising from such interruption.

Music on Hold Copyright

The default Music on Hold on the QX and Quadro is a 22 second fragment from Chopin's Nocturne Op.9 #2 performed by Marina Vardanyan and kindly provided to Epygi Technologies, LLC. The recording is royalty free.

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Document Edition History

Revision	Date	Description	Valid for Models	Valid for FW
1.0	24-Mar-17	Initial Release	QX IP PBXs	6.1.45 and higher
1.1	16-Jun-17	Added a new licensable feature - Calling Cost Control. Updated.	QX IP PBXs	6.1.50 and higher
1.2	11-Dec-17	Updated for the new QX3000.	QX20, QX50, QX200, QX500, QX2000 QX3000 and QXISDN4+	6.2.1 and higher
1.3	31-May-18	Updated	QX20, QX50, QX200, QX500, QX2000 QX3000 and QXISDN4+	6.2.11 and higher

Table of Contents

1 About User Guide

User guide is intended for users as well as for administrators as an aid to configure and operate QX IP PBXs (herein QX). The functionality and configuration of user-level settings with reference to other guides, manuals and complementary resources are described in this guide.

Many screen illustrations can be found in this guide. Since QX offers a wide variety of features and functionality, the example screenshots shown may not appear exactly the same for a specific QX as they appear in this manual. The example screenshots are for illustrative and explanatory purposes and should not be construed to represent your unique setup and scenarios.

2 Conventions Used in this Guide

Following conventions are used in this guide:

- **Add** button is used to create and add new entry.
- **Edit** button is used to modify the selected entry(s).
- **Delete** button is used to remove the selected entry(s).
- **Save** button is used to apply the changes.
- **Start** button is used to start a service, connection, etc.
- **Stop** button is used to start a service, connection, etc.
- **Enable/Disable** button is used to enable/disable the selected entry(s).
- **Generate Password** button is used to generate a system-defined strong password.
- **Call Type** lists the available call types:
  - **PBX** – local calls to QX extensions.
  - **SIP** – calls via SIP.
  - **PSTN** – calls to a legacy telephone network (N/A for QX20, QX80, QX500, QX2000 and QX3000).
  - **Auto** – calls to a destination resolved by the **Call Routing Table**.
- **Address (Redirect Address, Calling Address or Call to)** field is used to define the destination address the call will be addressed to. The address strictly depends on the call type. Thus, define an extension number for the PBX calls, SIP address for the SIP calls, phone number for the PSTN calls, and, finally, define a routing pattern for the Auto type calls. The Wildcards are allowed in this field.
- **Description** field is used to enter any optional information about the entry.
- **Wildcard supported** notification is used to mention that wildcards are allowed for the field. Go to the Allowed Characters and Wildcards section to see the complete list of the supported characters and wildcards.
- The following options are available on the QX to select the way custom voice message will be provided:
  - **RTP Channel** is used to stream messages through **RTP Channels**.
  - **Audio Line In** is used to stream messages through **Audio Line In**. This option is not available on QX80, QXISDN4+, QX2000 and QX3000.
  - **File** is used to upload/record custom messages.
    - Click **Choose File** to open a file chooser window to upload the file.
    - Click **Record from Extension** to record a message directly on the phone.
    - Once the message has been uploaded/recorded the following links will appear: The **Download … message** link used to download the uploaded/recorded message. The **Remove … message** link used to remove the uploaded/recorded message or restore the default one.
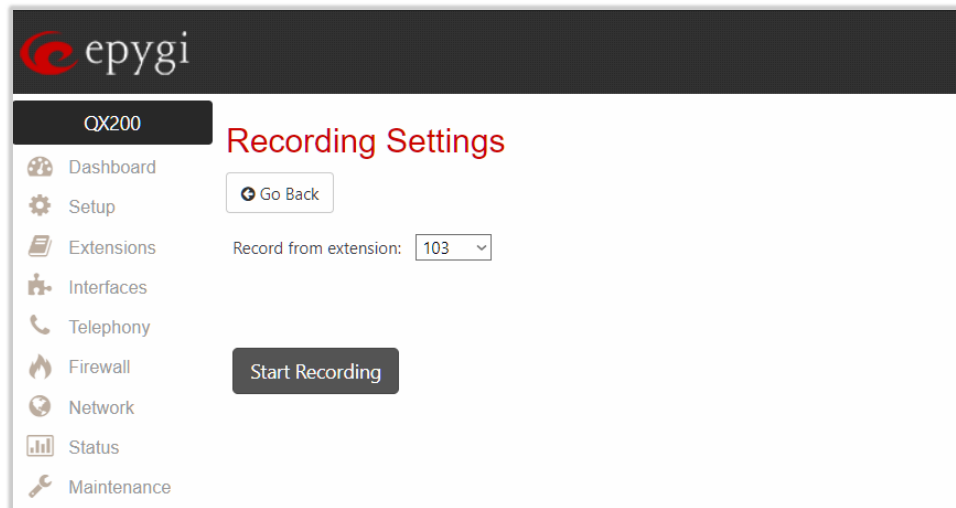
Figure 1: Recording Settings page

The **Recording Settings** page is used to initiate a custom voice message recording for the current extension directly from an IP phone. The **Record from extension** drop-down box lists all phone extensions that are available for recording.

Record a message as follows:

1. Select the extension from the **Record from extension** list.
2. Click **Start Recording**. The phone for the selected extension will start ringing.
3. Answer the call and follow the audio prompts to record a message.
4. Once the message has been recorded the following buttons will appear:
   - ➤ **Download Recording** is used to download the recorded message.
   - ➤ **Restore Default Recording** is used to remove the recorded message and restore the default one.

Note:

- The uploaded file should be either in (***.wav**) or (***.mp3**) format.
- The maximum duration of the uploaded file is limited to **5** minutes.
- The maximum size of the uploaded file is limited to **7.5** MB.

3   User Extension Menu

QX configuration management can be accessed by users (extensions) and administrators. If you are a user, log in with the extension number and the password (if any) you received from your system administrator.

- **Log Out** is used to terminate the active WEB GUI session.
- **Admin Settings** is used to go the extension **admin** settings.
- **Return** link is used to return back to **Extensions Management** page.

User Extension # menu allows to access the following settings to operate and perform actions that are private for each user.

- Voice Mail
- Call History
- PBX Information
- Speed Calling
- Account
- Basic Services
- Caller ID Services

3.1   Voice Mail

The **Voice Mail** service allows the caller to leave brief message when the called extension is **busy** or **unavailable**. The voice mail greeting message and the signal imitating message recording, are played back to the caller. The received messages are stored in the Voice Mailbox. You can play, mark (from GUI only), delete, reply to (from handset only) or forward the messages.

Facsimile (FAX) messages will be displayed in a special way in the **Voice Mailbox** and will be indicated by a special voice signal when accessing the message from the handset. You can view and download the FAX messages from the **Voice Mailbox**.

All voice mail service settings, such as enabling the greeting message, adjusting the maximum voice mail duration, voice mail service activation timeout, etc. can be configured through the extension Voice Mail Settings.
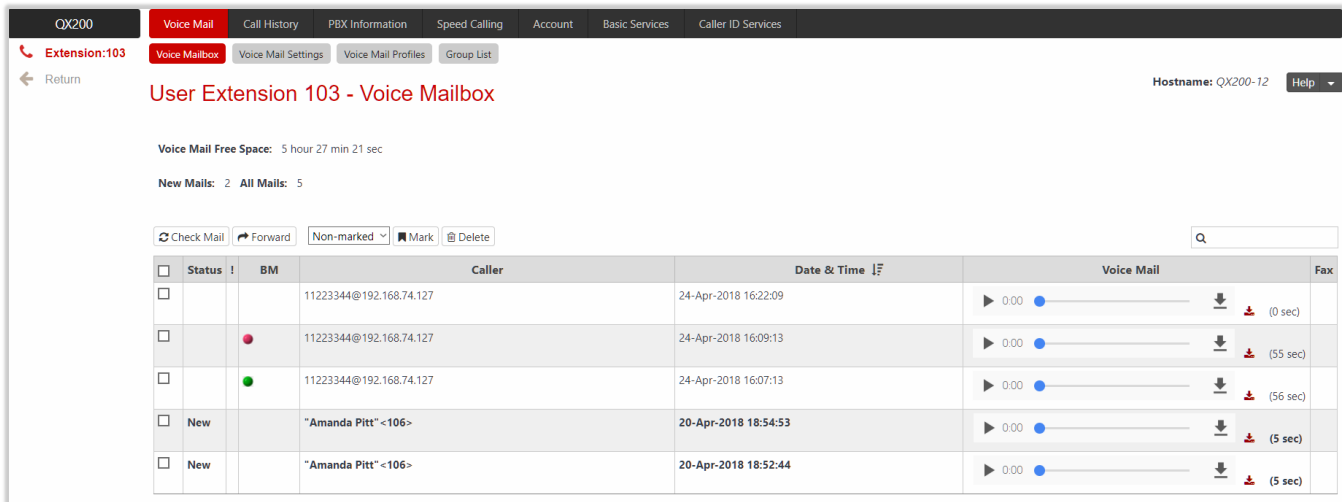
3.1.1 Voice Mailbox

The messages in the **Voice Mailbox** are accessible from the handset or WEB GUI. To access the messages from the handset simply dial ✱ 0 and follow the audio prompts. The **Voice Mailbox** can hold **New** (not yet played) and **Old** (already played) voice mails and faxes. The messages can be played, deleted, marked as important or bookmarked, etc. Additionally, you can forward messages via e-mail address.

The **Voice Mailbox** page consists of the following components:

- **Voice Mail free space** shows free space of the voice mailbox.
- **New mails** show the number of newly arrived messages since the user last access to the voice mailbox.
- **All mails** show the number of all messages in the **Voice Mailbox**.
- **Check Mail** is used to refresh the **Voice Mailbox** for any latest messages or status changes.
- **Forward** allows to forward the selected voice mail to one or more e-mail addresses with some enclosed message in the message body. The link refers to the page where e-mail address should be set (use a space, semicolon or a comma to separate the e-mail addresses in the "**To**" field), email subject and some message may be entered. Voice messages will get automatically converted to the **G.711u** codec

before being attached to the e-mail. If the message contains FAX inside, then the graphical file of the FAX will be forwarded together with the accompanying voice mail.

- **Mark** submits the values chosen out of the drop-down list aside (**Important** or **Bookmark**) to the selected records.

Figure 2: Voice Mailbox page

3.1.2 Voice Mail Settings

Voice Mailbox and **Voice Mail Settings** are available and accessible by default for all user extensions on QX. The **Voice Mail** service can be disabled/enabled from the extension **admin** settings. **Voice Mail Settings** consists of the following sections:

General Settings

The following settings (options) are available:

- **Maximum Voice Mail duration** is used to select the maximum duration of message recording. The **Unlimited** selection allows message recording as long as the user space allows.
- **Forward/Rewind duration (sec)** is used to select the timeout in seconds to shift the message playback from the handset.
- **Ask password before granting local access to Voice Mailbox** protects local access to the user voice mailbox. If selected, a user password will be required to access the voice mailbox locally.
- **Ask password before granting remote access to Voice Mailbox** protects remote access to the user voice mailbox. If selected, a user password will be required to access the voice mailbox remotely, through the auto attendant.
- **Play welcome message** enables the welcome message to be played when accessing voice mailbox.
- **Play Voice Mail Help** – if selected, plays voice mail help instructions when entering voice mailbox. These audio prompts guide the user through all mailbox options.
- **Automatically play Voice Mail** – if selected, automatically plays all messages available in the mailbox. Once accessed, the system will sequentially play the messages, in the order of the specified priority level (starting from the message with highest priority). If no priority is specified, messages will be played in the order they were received, i.e. starting with first (oldest) one. When the last message is played, the **Voice Mail Help** will start replaying.
- **Play Voice Mails count information message** – if selected, announces the number of **New** (unread) messages when entering the mailbox.

- **Play date/time information message** announces the time and date message was received before playing it.
- **Play beep at the end of message** activates a **beep** after each played message.
- **Silent Voice Mail recording** – if selected, callers who have reached the extension voice mail service will not hear the voice mail greeting and the beep sound. The message recording will start without notification.
- **Voice Mail Greeting Message** is used to play a greeting message to the caller. You can upload/record a new greeting message.
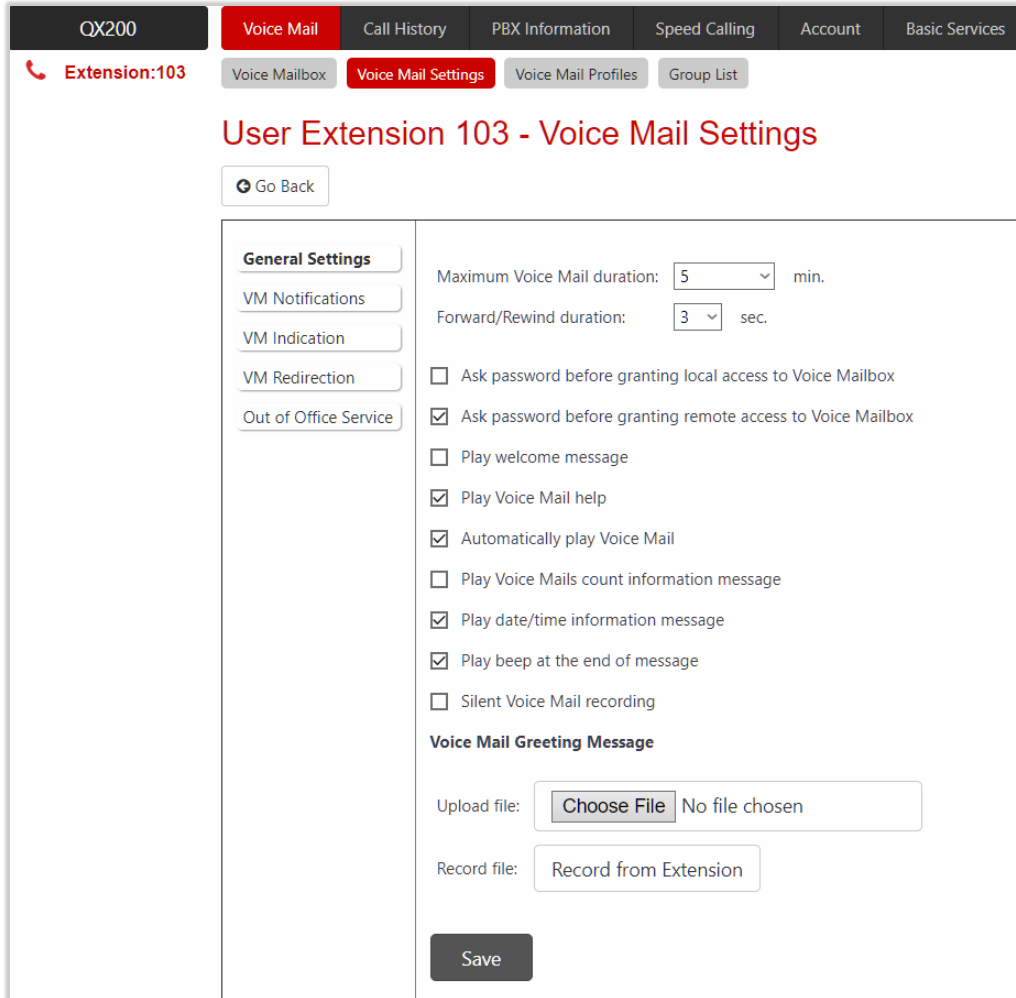
Figure 3: General Settings section

VM Notifications

The following settings (options) are available:

- **Send new Voice Mail notifications via E-mail** allows to send new voice mail or fax attachments via e-mail to the defined recipients. **TIP:** This service will work only when **SMTP Service** is enabled on QX. Voice mails will be automatically converted to QX supported **wav** format (CCITT u-law, 8 kHz, 16-bit Mono) before being attached to the e-mail. The fax attachments are sent in (***.tiff**) or (***.pdf**) format. If selected, the following options become available:

  - **E-mail Address** is used to set the e-mail address of the recipient. **TIP:** Use a space, semicolon or a comma to separate e-mail addresses in case of multiple recipients.
  - **Repeat every** is used to set the interval between the retransmission attempts.
  - **Maximum** is used to set the maximum number of retransmission attempts.
  - **Voice Mail** and **Fax** drop-down lists allow to select the mail sending options.
  - **Remove Voice Mail on send** is used to remove the voice mail from the mailbox after sending it to the e-mail recipient(s).
  - **Remove Fax on send** is used to remove the fax attachment from the mailbox after sending it to the e-mail recipient(s).
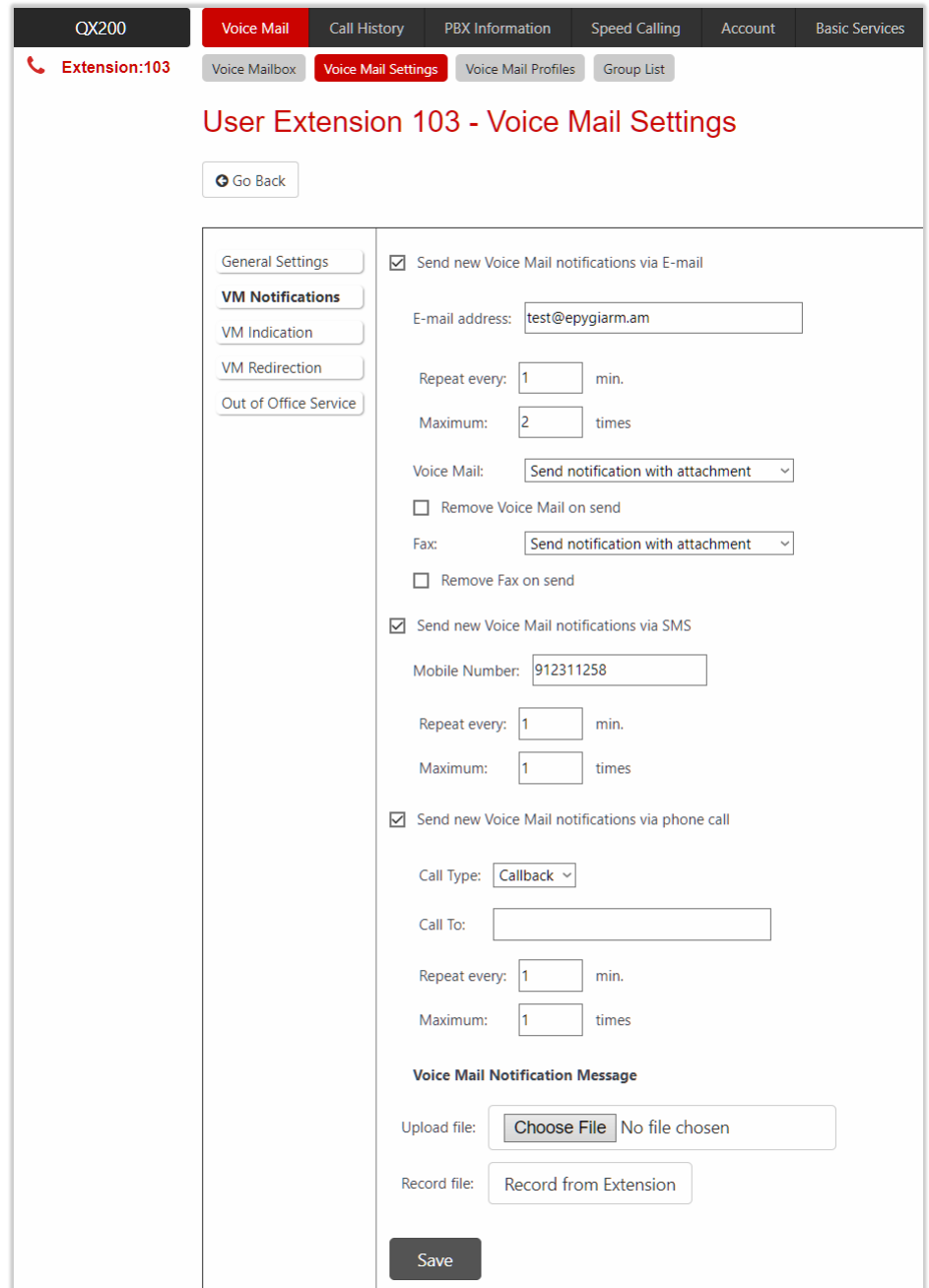
Figure 4: VM Notifications section
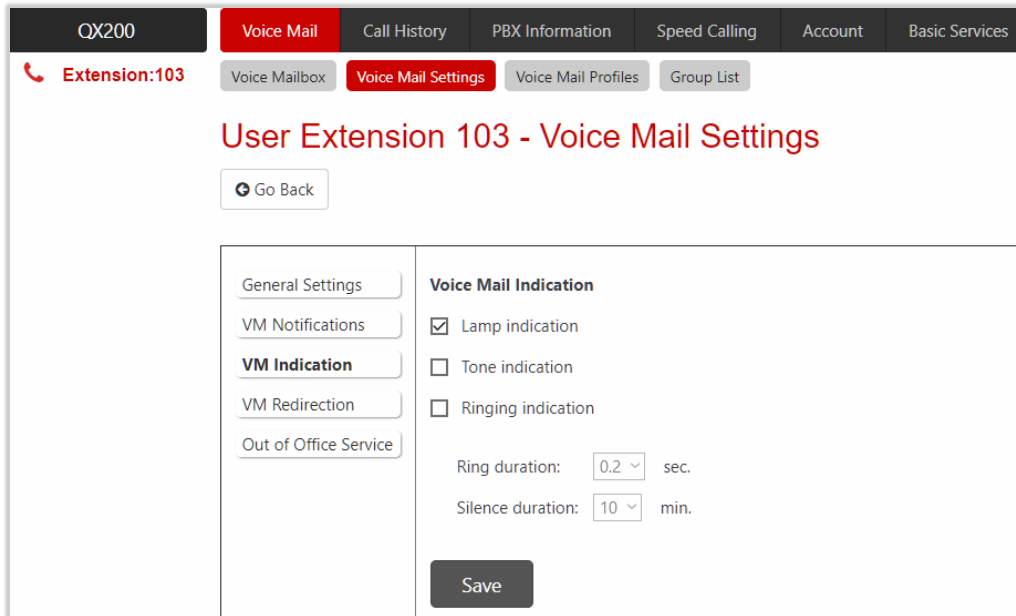
Note: The e-mail can only handle up to **5** minutes long messages when you are using **G729 codec** for recording voice mails. If the message is longer than **5** minutes, it will be truncated and only the first **5** minutes will be sent to the indicated e-mail address. However, the recipient will be notified that the attached message is truncated and will get information about the actual length in the message body. Messages longer than **5** minutes will not be removed from the **Voice Mailbox**. You can still listen to the full message from your handset or from WEB GUI. **TIP:** If you are using **G711 codec** for recording voice mails, attached message will not be truncated before being sent via e-mail.

- **Send new Voice Mail notifications via SMS** allows to send voice mail notifications via SMS to the specified mobile number. **TIP:** This service will work only when **SMS Service** is enabled on QX. The following input options are available:

  ➢ **Mobile Number** is used to set the destination's mobile number.
  ➢ **Repeat every** is used to set the interval between the retransmission attempts.
  ➢ **Maximum** is used to set the maximum number of retransmission attempts.

- **Send new Voice Mail notifications via phone call** allows to send voice mail notifications via a phone call to the defined phone number. The following input options are available:

  ➢ **Call Type, Call To** are used to redirect the call to the specified destination.
  ➢ **Repeat every** is used to set the interval between the retransmission attempts.
  ➢ **Maximum** is used to set the maximum number of retransmission attempts.

- **Voice Mail Notification Message** is used to play a notification message to the destination when answered. You can upload/record a new notification message.

VM Indication

The following indication options are available:

- **Lamp Indication** – the visual blinking signal will announce a new voice mail.

- **Tone Indication** – the user will hear a specific tone when lifting the phone handset.

- **Ringing Indication** – the user may create a specific ring pattern to announce the arrival of a new voice mail. This checkbox enables the following settings:

  ➢ **Ring Duration** is used to set the ringing duration.
  ➢ **Silence Duration** is used to set the period between the rings.

Figure 5: VM Indication section

VM Redirection

This section is used to configure voice mail redirection settings. The following settings (options) are available:

- **Enable ZeroOut Redirect** – if activated and configured, callers can be redirected to the specified destination instead of leaving a message in the **Voice Mailbox**. To activate the redirection, the caller should dial 🔴 during the voice mail greeting. The caller will then be automatically transferred to the specified destination.

- **Enable FAX Redirection** is used to redirect the incoming FAX to the specified extension when the FAX tone is detected after **Voice Mail** has been activated.

- **Automatic Fax Receiving Mode** is used to set the unified voice mail to **FAX receiving mode** without receiving initial **FAX CNG** signal from the caller side.
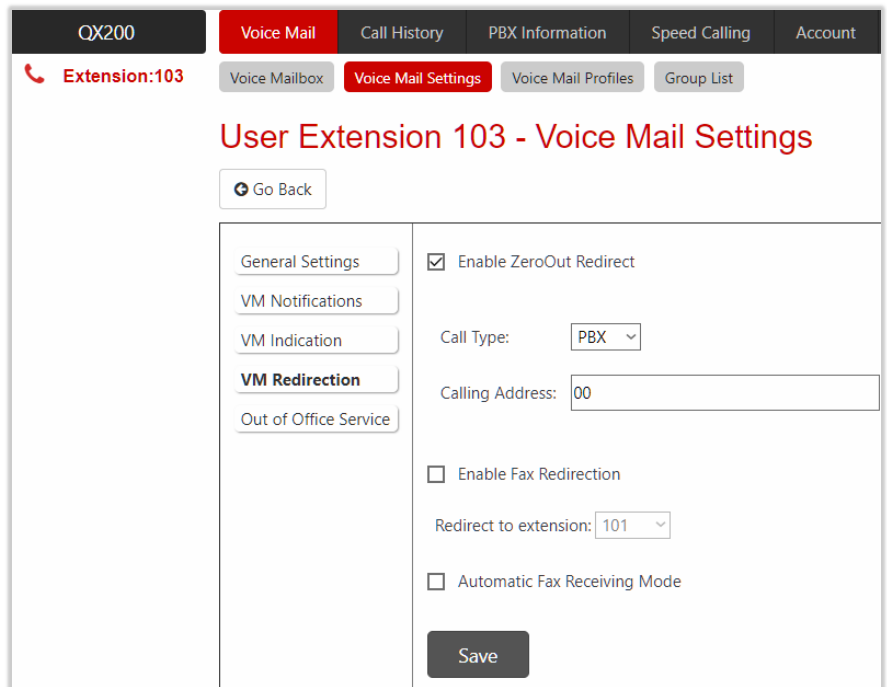
Figure 6: VM Redirection section

Out of Office Service

This section is used to configure the **Out of Office** service which supports an alternative **Voice Mail Greeting** for the period the user is out of office (i.e. on vacation, at the meeting, etc.). The following settings (options) are available:

- **Enable service** is used to activate service on QX.

- **Out of Office Message** is used to upload/record a new message.

- **Expiration Date and Time** is used to set the expiration date and time of the **Out of Office** service validity. When the expiration date/time expires, the **Out of Office** service automatically gets disabled and the regular greeting gets activated again.
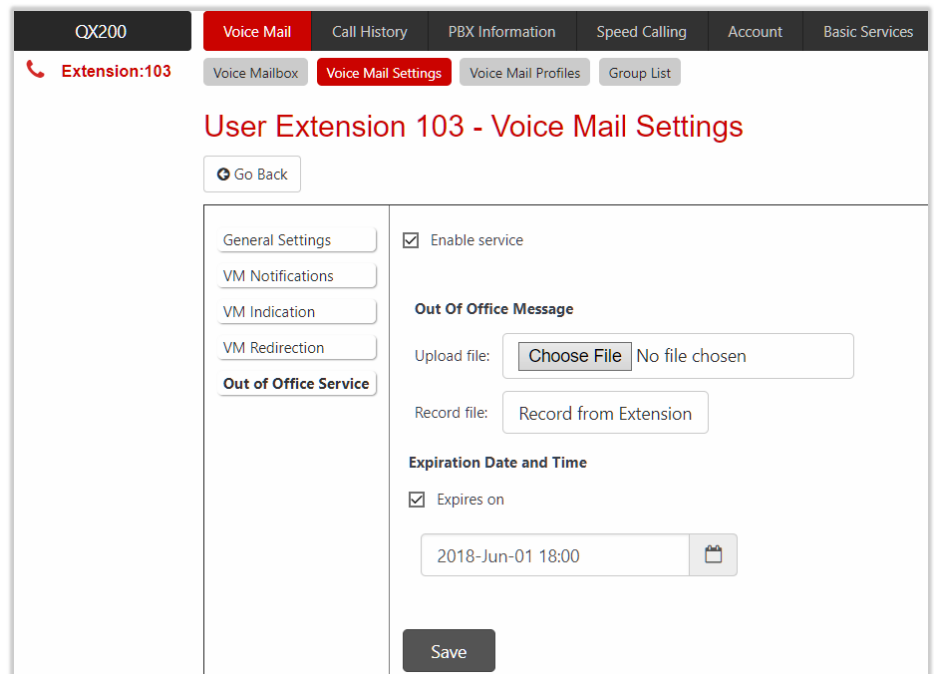

Figure 7: Out of Office section

3.1.3 Voice Mail Profiles

Voice Mail Profiles can be used to configure and activate voice mail settings for specific callers. **Voice Mail Profiles** can be activated on the call routing rule(s) for **PBX-Voicemail** call types or from <u>Caller ID Based Services</u>.

The **Profiles for Voice Mail Settings** page is used to create and configure specific voice mail settings for each profile.
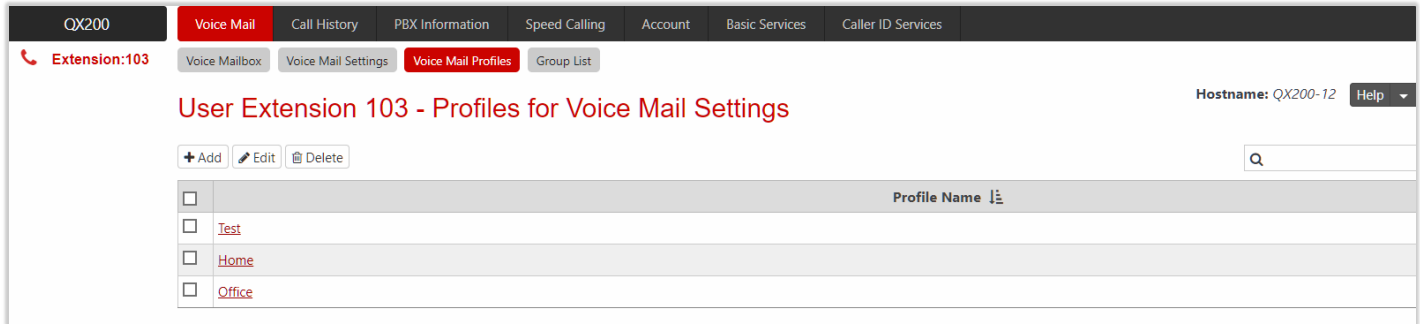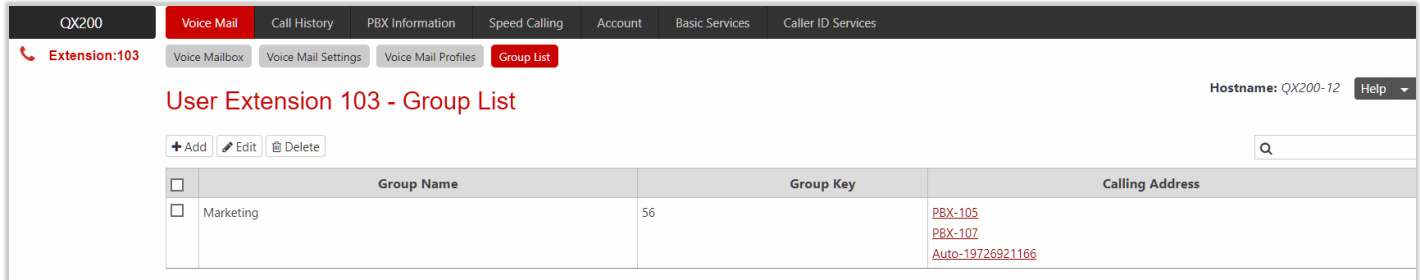
Figure 8: Voice Mail Profiles page

To configure a new **Voice Mail Profile**:

1. Click **Add** on the **Profiles for Voice Mail Settings** page. The **Profiles for Voice Mail Settings – Add Entry** page will be opened.
   ➢ Fill out the **Profile Name**.
   ➢ Click **Save** to add a new profile to the **Profiles for Voice Mail Settings** table.
2. Click the hyperlinked **Profile Name** to open the **Profiles for Voice Mail Settings – Profile Name** page to configure specific settings. The **General Settings** and **VM Notifications** sections are available for configuration. **Note:** The available settings (options) under these sections are the same as for <u>General Settings</u> and <u>VM Notifications</u> sections of **Voice Mail Settings**.
3. Remember to save changes before moving between the configuration sections.

3.1.4 Group List

Group List is used when sending or forwarding voice messages to the number of addresses simultaneously.
Group List allows to define groups with the specified calling addresses (PBX and SIP). The **Group List** table lists
all defined groups with **Group Keys**, **Group Addresses** and **Group Names** (optional).

	Group Name	Group Key	Calling Address
☐	Marketing	56	PBX-105 PBX-107 Auto-19726921166

Figure 9: Group List page

Note: **Group Keys** have higher priority over extensions. The configured destinations in the group will be used
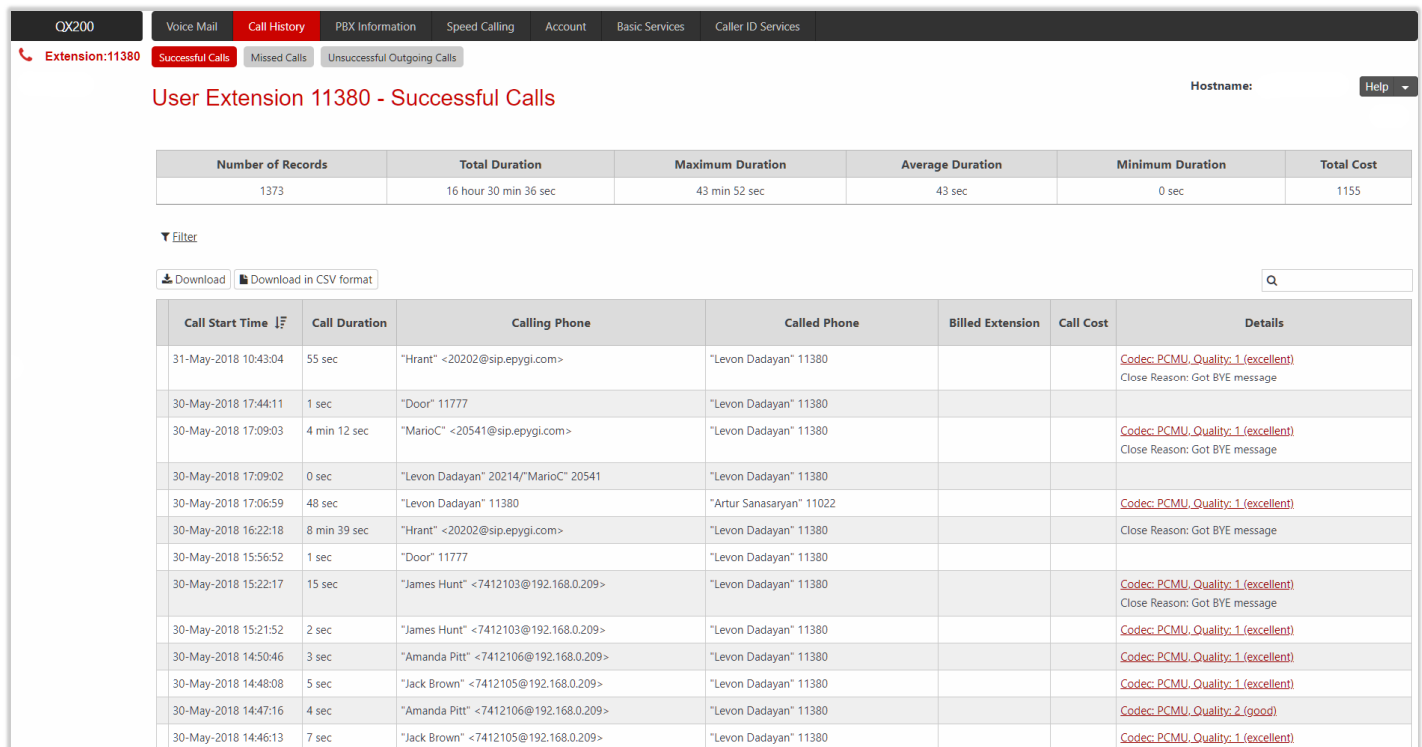while sending/forwarding voice messages.

To configure a **Group**:

1. Click **Add** on the **Group List** page. The **Group List – Add Entry** page will be opened.
   - ➢ Fill out the **Group Key** and **Group Name** (optional).
   - ➢ Click **Save** to add a new group to the **Group List** table.
2. Click the **no address is available** link. The **Address List for Group** page will be opened to add/modify the
   addresses of the selected group.
3. Click **Add**. The **Address List for Group – Add Entry** page will be opened.
   - ➢ Select **Call Type** and enter the destination number in the **Calling Address** field.
   - ➢ Click **Save** to add a new address to the **Address List for Group** table.

3.2 Call History

Call History allows to track and report Call Detail Records (CDRs) concerning inbound/outbound calls for the current extension.

The Successful Calls, Missed Calls and Unsuccessful Outgoing Calls pages list successful, missed and unsuccessful outgoing calls and their parameters. The following components are available:

- Filter allows to search for call records based on at least one of the following criteria: Call Start Time, Call Duration, Caller/Callee and Call Cost.
- Clear Filter is used to remove the filter.
- The Download and Download in CSV format buttons are used to download the displayed CDRs for each page (Successful, Missed and Unsuccessful Outgoing) in (*.log) or (*.csv) formats respectively.

Figure 10: Call History – Successful Calls page

CDRs listed in the Call History tables are characterized by the following parameters:

- Call Start Time
- Call Duration
- Calling Phone
- Called Phone
- Billed Extension shows the extension which is charged for the call.
- Call Cost shows the calculated call cost (if available).

3.3 PBX Information

The **PBX Information** page displays the following read-only information:

- Activated codecs on the extension.
- The list of extensions available in the QX **Extension Directory**.
- On-board FXO lines or ISDN Trunks.

| QX200 | Voice Mail | Call History | PBX Information | Speed Calling | Account | Basic Services |

📞 **Extension:103**

User Extension 103 PBX Information

Activated Codecs: PCMU

Extension Directory

Extension	Display Name	Information	SIP Address
00	Attendant	Auto Attendant	741200@192.168.0.209:5060
10		Auto Attendant	10
15	VXML	Auto Attendant	15
20	ACD AA	Auto Attendant	20
305		Auto Attendant	305
101	Kevin Kogler	FXS 1	101
102		FXS 2	102
103	James Hunt	IP Line 1	7412103@192.168.0.209:5060
104	Mia Gonzalez	IP Line 2	7412104@192.168.0.209:5060
105	Jack Brown	IP Line 3	7412105@192.168.0.209:5060
106	Amanda Pitt	IP Line 4	7412106@192.168.0.209:5060
107	Andrea Cavalcanti	IP Line 5	7412107@192.168.0.209:5060
110		IP Line 8	7412110@192.168.0.209:5060
117		IP Line 15	117
125	Bob Good	IP Line 23	125
126	Jill	IP Line 24	126
563	James Smith	None	563
320 (Pickup Group)	Pickup320	320 (Pickup Group)	7412320@192.168.0.209:5060
510 (Call Park)	Park510	510 (Call Park)	510
330 (Paging Group)	Paging330	330 (Paging Group)	7412330@192.168.0.209:5060
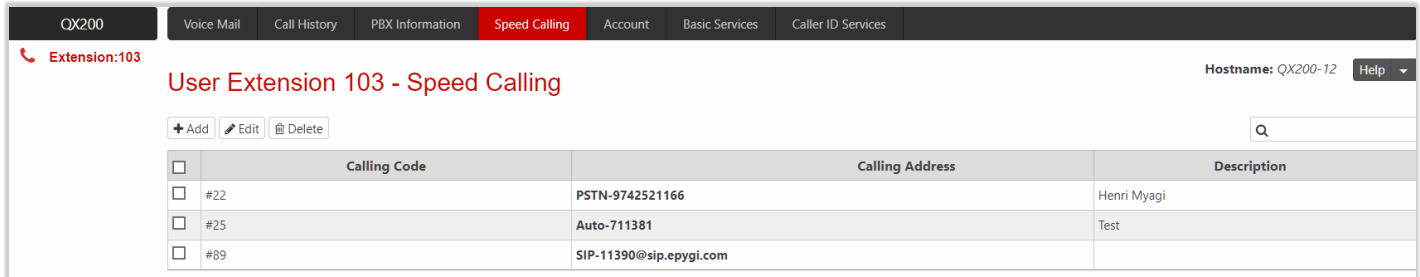
FXO Settings

FXO Lines	Enabled	Allowed Call Type	Route Incoming Call to	PSTN Number
FXO 1	Yes	Both incoming and outgoing calls	Routing	
FXO 2	Yes	Both incoming and outgoing calls	106	0738062555
FXO 3	Yes	Both incoming and outgoing calls	103	
FXO 4	No	N/A	N/A	N/A

Figure 11: PBX Information page

3.4 Speed Calling

The **Speed Calling** service aims to simplify the dialing. It provides two-digit codes for frequently dialed numbers. To call the corresponding destination using **Speed Calling** service, dial **#** + Speed Calling Code from the handset. The system will dial out the destination assigned to the **Speed Calling Code**. The **Speed Calling Codes** can be configured from the GUI, as well as from the phone handset by dialing ✱❼❻.

QX200	Voice Mail	Call History	PBX Information	Speed Calling	Account	Basic Services	Caller ID Services

Extension:103

User Extension 103 - Speed Calling   Hostname: *QX200-12*   [Help ▾]

＋Add　✎Edit　🗑Delete

	Calling Code	Calling Address	Description
☐	#22	PSTN-9742521166	Henri Myagi
☐	#25	Auto-711381	Test
☐	#89	SIP-11390@sip.epygi.com	

Figure 12: Speed Calling Settings page

To add a new **calling code**:

1. Click **Add** and enter the following information:
   ➢ Enter the **Calling Code** (two-digit number).
   ➢ Select **Call Type** and enter the destination number in the **Calling Address** field.
   ➢ Enter any **Description**, if needed.
2. Click **Save** to add the new calling code to the **Speed Calling** table.

3.5 Account

The **Account Settings** page allows to change extension display name, user password, to enable password protection for incoming/outgoing calls and to upload/record the files with the user-defined voice greetings. The following settings (options) are available (**Error! Reference source not found.**):

- **Extension** shows the current extension number.

- **Display Name** is used to modify the extension display name. The latter is displayed on the callee's phone.

- **User Permissions**
  - ➢ **Incoming Calls** – if enabled, the user password is required to accept the incoming calls.
  - ➢ **Outgoing Calls** – if enabled, the user password is required to make calls.

- **Enable Remote Extension** is used to enable the **Remote Extension** functionality. **TIP:** This option is only visible when the **Remote Extension** service has been activated on the extension.

- **User's name for Dial by Name Directory** is used to upload/record the file for a "**user name**" and also download the file. The file will be played to external callers to simplify access to the QX extensions by simply spelling the desired extension "**user name**".

- **Custom Voice Messages** is used to upload custom voice messages for the extension. It will replace already configured messages.
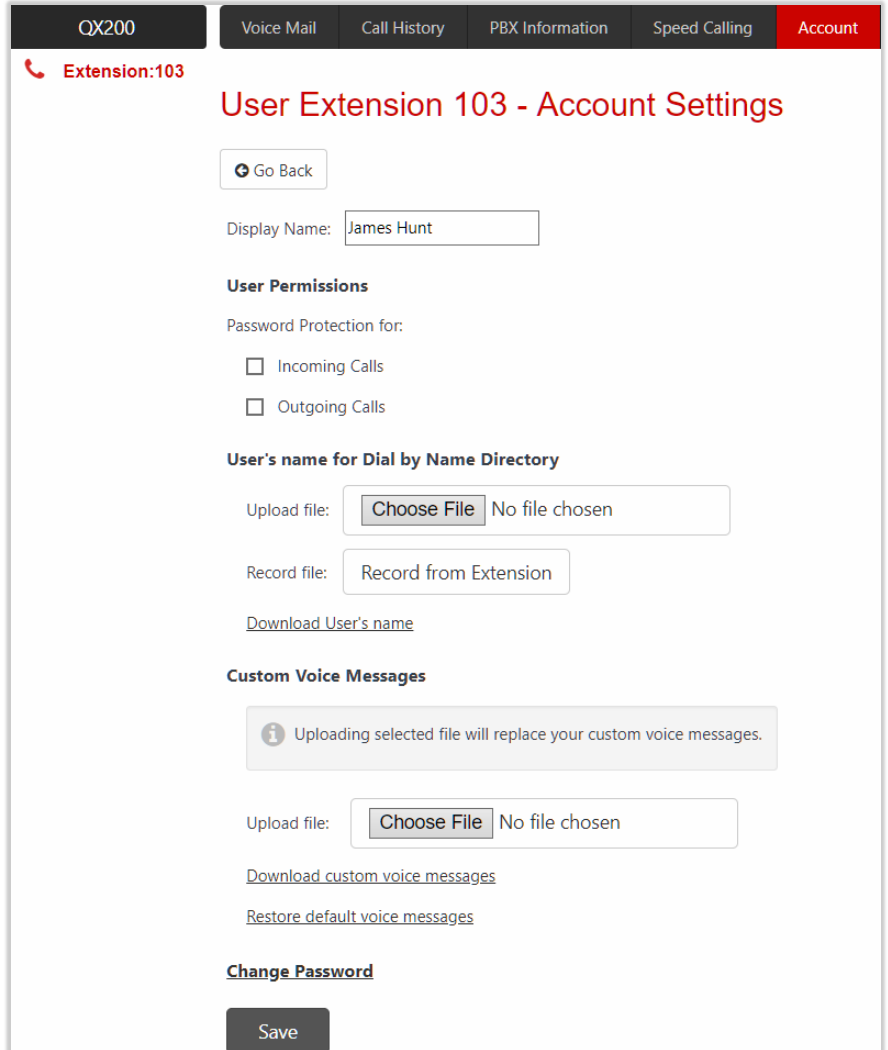
Figure 13: Account Settings page

- The **Change Password** link leads to **Change Password** page where you can change your password.

3.6 Basic Services

The **Basic Services** pages allow to configure some basic telephony services. **TIP:** Remember to save changes before moving between the configuration sections.

3.6.1 General

The following settings (options) are available:

- **No Answer Timeout** is used to configure the phone ringing maximum timeout before the call is forwarded to **Voice Mail** (if **Voice Mail** service is enabled).

- **Enable Call Waiting service** allows to receive a call when you are currently on a call. The QX user will hear a special beep on the phone when call arrives. For analog phones, to switch between the current and the new arrived call, use the appropriate calling code. For IP phones to switch between the current and the arrived call, use the **Hold** or **Line** softkey/button (for more information refer to the QX IP PBX Features on Epygi Supported IP phones).

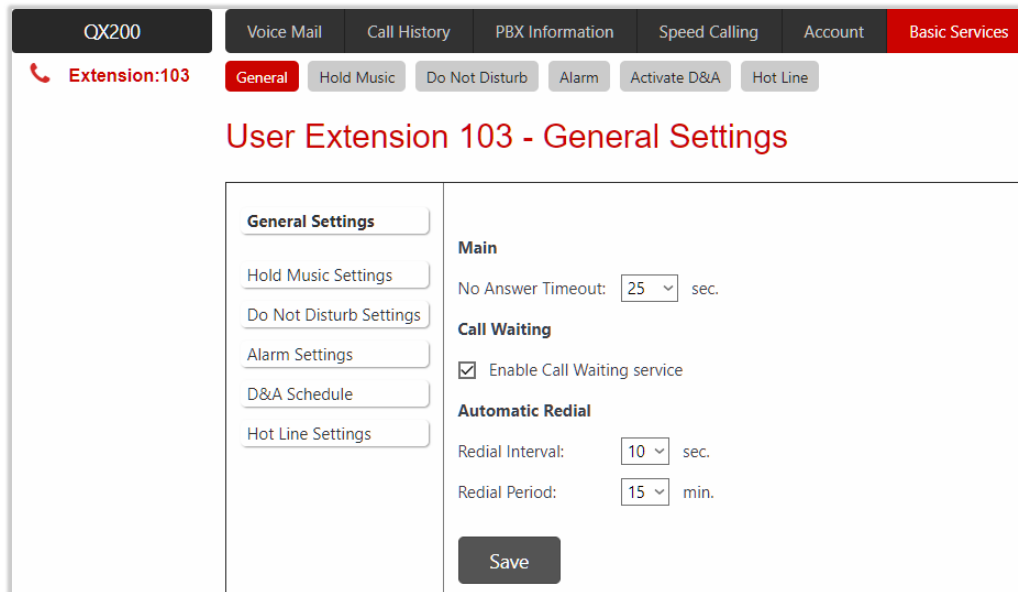
Figure 14: General Settings section

- **Automatic Redial** allows automatic redialing if the called party is currently busy. Use the appropriate feature code to enable this service with the handset. When you hang up the handset, the system will keep on trying to reach the last called destination during the specified period. As soon as the destination is reached, the caller's phone will start ringing. A voice message is played to the called party asking to wait till the caller answers. If the caller keeps the handset lifted, the system will continue to reach the last called destination and the call will be established when the destination answers the call. To specify the settings, the following options are available:
  - ➢ **Redial Interval** – the time interval between redial attempts.
  - ➢ **Redial Period** – the total duration of redial attempts.

Note: This service is functional for SIP and PBX calls only. In case of PSTN calls, this feature works as a single redial (with no multiple attempts to reach the called destination).

3.6.2 Hold Music

The **Hold Music Settings** page is used to configure hold music that is played while being on hold or putting a remote party on hold. The following settings (options) are available:

- **Send Hold Music to Remote IP Party** – if selected the specified music is sent to remote IP party whenever it is on hold and waiting, otherwise QX will not send any hold music to the remote IP party. In this case remote IP party will either hear its own hold music or the one sent by QX. **TIP:** The hold music is always sent to PBX and PSTN destinations regardless of this option.
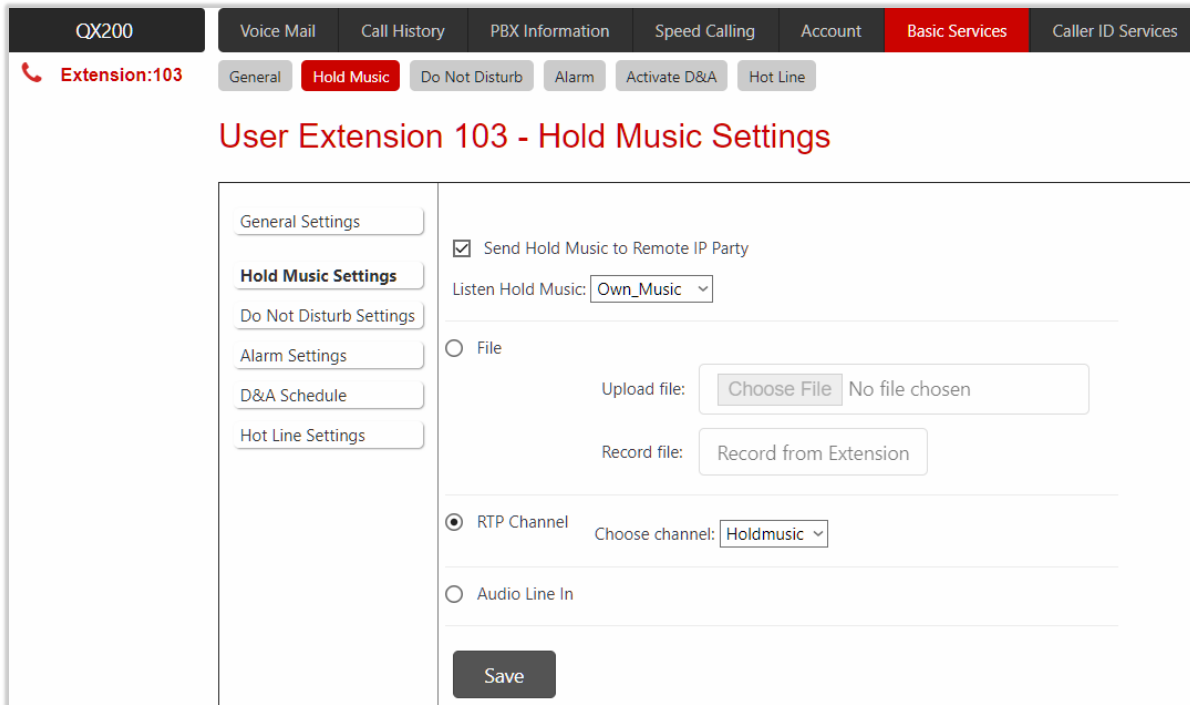

Figure 15: Hold Music Settings section

- **Listen Hold Music** is used to select the music the current user will hear while being on hold. The following options are available:
  - ➢ **Off** – no music will be played to extension while being on hold.
  - ➢ **Own Music** – the user will hear their own music (default or custom) while being on hold.
  - ➢ **Caller Music** – the user will hear the music sent by remote party (if available).

You can select the way custom hold music will be provided: uploading/recording the music as a file or streaming the music through **RTP Channel** or **Audio Line In**.

3.6.3 Do Not Disturb

The **Do Not Disturb** (DnD) service is used to turn off the phone ringer for a while. If you have the DnD service enabled along with the **Voice Mail** service, all incoming calls will directly go to the extension **Voice Mailbox**. Dial ✱❼❷ to activate/deactivate <u>Do Not Disturb</u>. The following settings (options) are available:

- **Actual Status** indicates the state of the service (active/not active) and the time left until service is deactivated automatically.

- **Expires after** is used to select the period for the phone ringer to be off.

- **Send Message to Caller** – if selected, the voice mail greeting message will be played to caller and call will be redirected to **Voice Mailbox** (if **Voice Mail** service is enabled on the extension). If selected, but the **Voice Mail** service is disabled, a voice message (called number is temporarily unavailable) will be played to caller. If not selected, incoming call will be redirected to **Voice Mailbox** (if **Voice Mail** service is enabled on the extension) or disconnected.
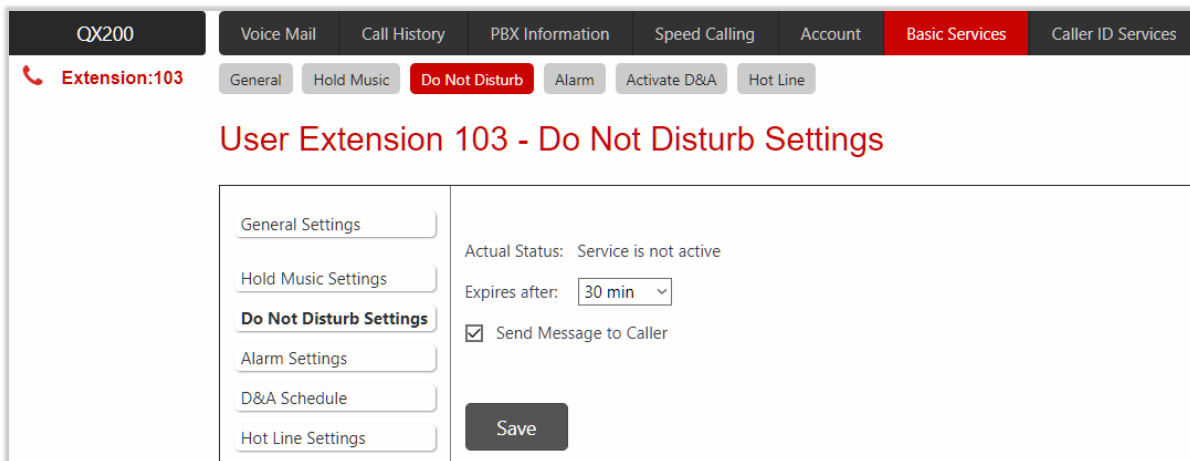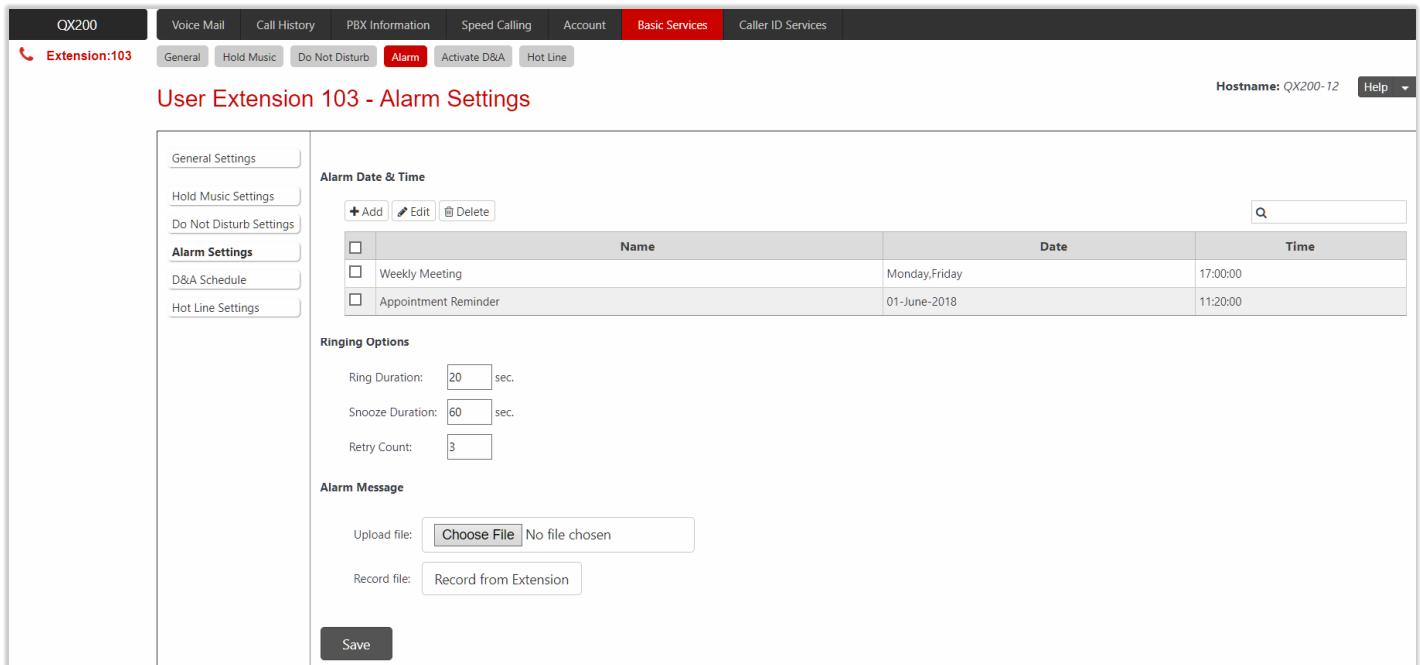
Figure 16: Do Not Disturb Settings section

The extension can be reached once again when the **Expiration** period is over or the **DnD** service is disabled manually.

3.6.4 Alarm

The **Alarm Settings** page is used to define the alarm(s) for the extension.

Figure 17: Alarm Settings section

To add a new **alarm**:

1. Click **Add** and enter the following information:
   - ➢ Enter a **Name** for the alarm.
   - ➢ Set alarm options (Date and Time). **TIP:** Use weekly option to repeat the alarm.
2. Click **Save** to add the new alarm to the **Alarm Date & Time** table.

The following options are available to control the configured alarm(s):

- **Ringing Options** is used to configure the ringing duration and retry count.
  - ➢ **Ring Duration** is used to specify the ringing duration on the extension.
  - ➢ **Snooze Duration** is used to specify the duration of the pause(s) between attempts.
  - ➢ **Retry Count** is used to specify retry count of the attempts.
- **Alarm Message** is used to upload/record a new alarm message.

Note: Once an alarm has been set up, all **Caller ID Based Services** and **DnD** will be ignored for the extension. Only extension phone will ring for the alarm announcement. In the **Parent-Child** extension scenario both parent and child(ren) phones will ring for the alarm announcement.

3.6.5 Activate D&A

The **Dial & Announce** service allows to call to the predefined list of destinations simultaneously. When answering the call, the uploaded audio message will be played. The called destinations can be local PBX extensions or SIP numbers.

The **Dial & Announce Schedule** page is used to define schedules and automatically activate Dial & Announce service on the selected extension(s).

Figure 18: Activate D&A section

To add a new **Schedule D&A**:

1. Click **Add** and enter the following information:
   ➢ Select the extension on which you want to activate **Dial & Announce** service from the drop-down list. **TIP:** This drop-down list shows only the extensions with <u>Dial & Announce</u> service configured and enabled.
   ➢ Set the scheduling options (**Date** and **Time**). **TIP:** Use weekly option to repeat the schedule.
   ➢ Enter any **Description**, if needed.
2. Click **Save** to add the new schedule to the **Schedule Dial & Announce** table.
3. Click the **Enable/Disable** button to activate/deactivate the selected schedule(s).

3.6.6 Hot Line

The **Hot Line** service is used to call the preconfigured number automatically after lifting the phone handset. This service is commonly used for emergency calls. **Note:** This service is available only on FXS lines.
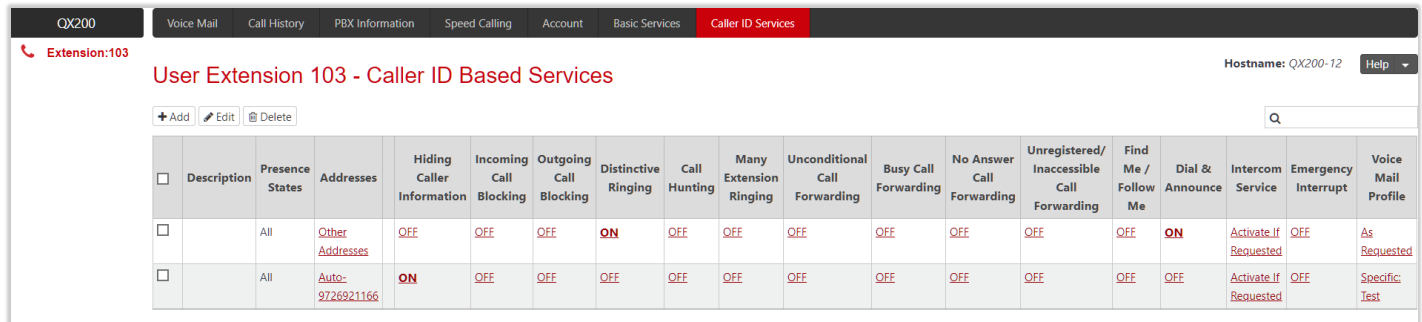
To activate **Hot Line** service:

1. Tick the **Enable Hot Line Service** checkbox.
   ➢ **Timeout** is used to configure the delay before the defined number will be dialed automatically.
   ➢ Select **Call Type** and enter the destination number in the **Calling Address** field.
2. Click **Save** to activate the service on the extension.

Figure 19: Hotline Settings section

3.7 Caller ID Services

The **Caller ID Based Services** page provides interface(s) to configure the telephony services for the extension. The configuration settings for all type of **Call Forwardings**, **Incoming** and **Outgoing Call Blocking**, **Hiding Caller Information**, **Call Hunting**, **Many Extension Ringing**, **Distinctive Ringing**, **Find Me/Follow Me**, **Dial & Announce**, **Intercom**, **Emergency Interrupt** and **Voicemail Profile** services are accessible from this page.

The **Caller ID Based Services** table lists all manually or automatically configured caller and called addresses with the **ON/OFF** status of their telephony services.

	Description	Presence States	Addresses	Hiding Caller Information	Incoming Call Blocking	Outgoing Call Blocking	Distinctive Ringing	Call Hunting	Many Extension Ringing	Unconditional Call Forwarding	Busy Call Forwarding	No Answer Call Forwarding	Unregistered/ Inaccessible Call Forwarding	Find Me / Follow Me	Dial & Announce	Intercom Service	Emergency Interrupt	Voice Mail Profile
☐		All	Other Addresses	OFF	OFF	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	Activate If Requested	OFF	As Requested
☐		All	Auto-9726921166	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Activate If Requested	OFF	Specific: Test

Figure 20: Caller ID Based Services for Any Address page

Note:

- **Any Address** – the **Any Address** entry in this page is undeletable. It is used to configure the **Caller ID Based Services** for all addresses. Adding a new entry changes the **Any Address** to **Other Addresses**.

- If the extension is also an **ACD Agent**, then all the configured (activated) **Caller ID Based Services** will be ignored for incoming ACD calls.

- If the extension receives the call through other extension's **Caller ID Based** services (e.g. **MER, Call Hunting, FM/FM**, etc.), then all configured (activated) **Caller ID Based Services** will be ignored on this extension.

- If the extension is configured as a **Child** extension (**Parent-Child** scenario), then all configured (activated) **Caller ID Based Services** will be ignored. **Caller ID Based Services** configured (activated) on the **Parent** extension will take effect.

- Remember to save changes before moving between the **Caller ID Based Services** configuration pages.
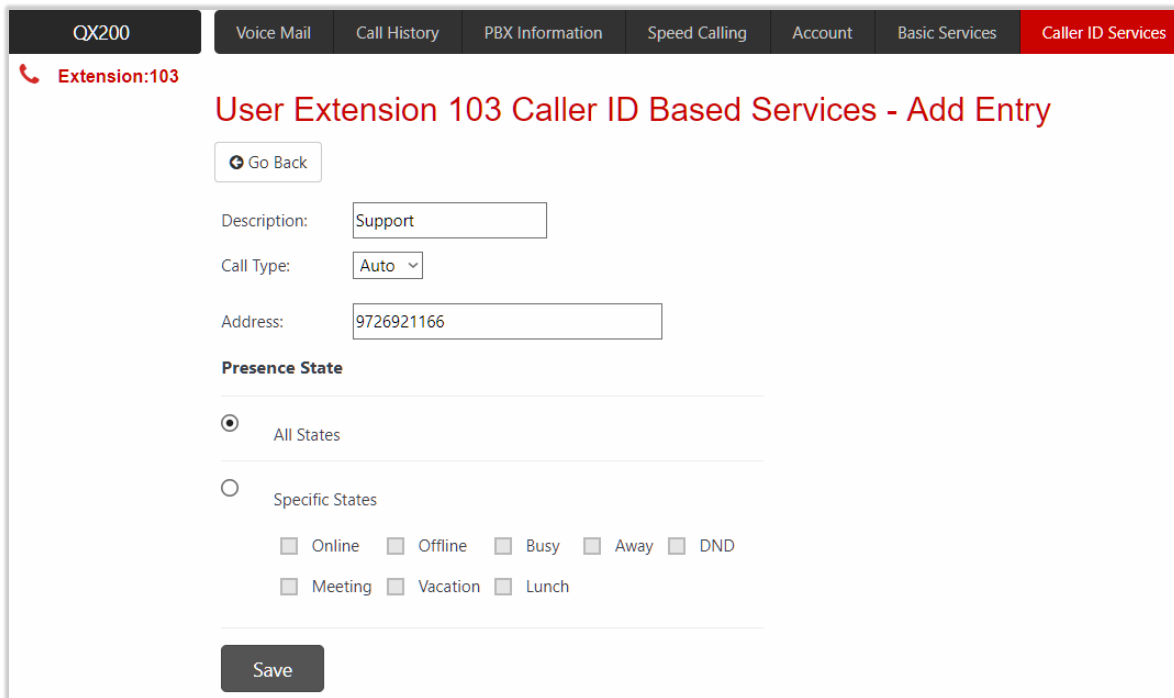
Figure 21: Caller ID Based Services – Add Entry page

To configure **Caller ID Based Services** for a specific address:

1. Click **Add** on the **Caller ID Based Services** page. The **Caller ID Based Services – Add Entry** page will open, where the address can be defined.

   ➢ Enter a **Description** for the address, if needed.
   ➢ Select **Call Type** and enter the number in the **Address** field.
   ➢ Select the **Presence State** for the extension. The **Caller ID Based Services** will be activated only when the extension is in the selected state.

2. Click **Save** to add the new address to the **Caller ID Based Services** table.

3. Click on the newly created **Address** in the **Caller ID Based Services** table to open the **Caller ID Based Services for Address** page.

4. From the left frame, choose a **Caller ID Based Services**. From the right frame, enable, configure and adjust the corresponding service. Do this for each service.

3.7.1 Hiding Caller Information

The **Hiding Caller Information** service is used to hide your Caller ID for the called destinations. If activated, **Unknown** or **Anonymous** (or similar text, depending on the type of the phone) will be displayed on the called destination. Tick the Enable Service checkbox to activate this service.
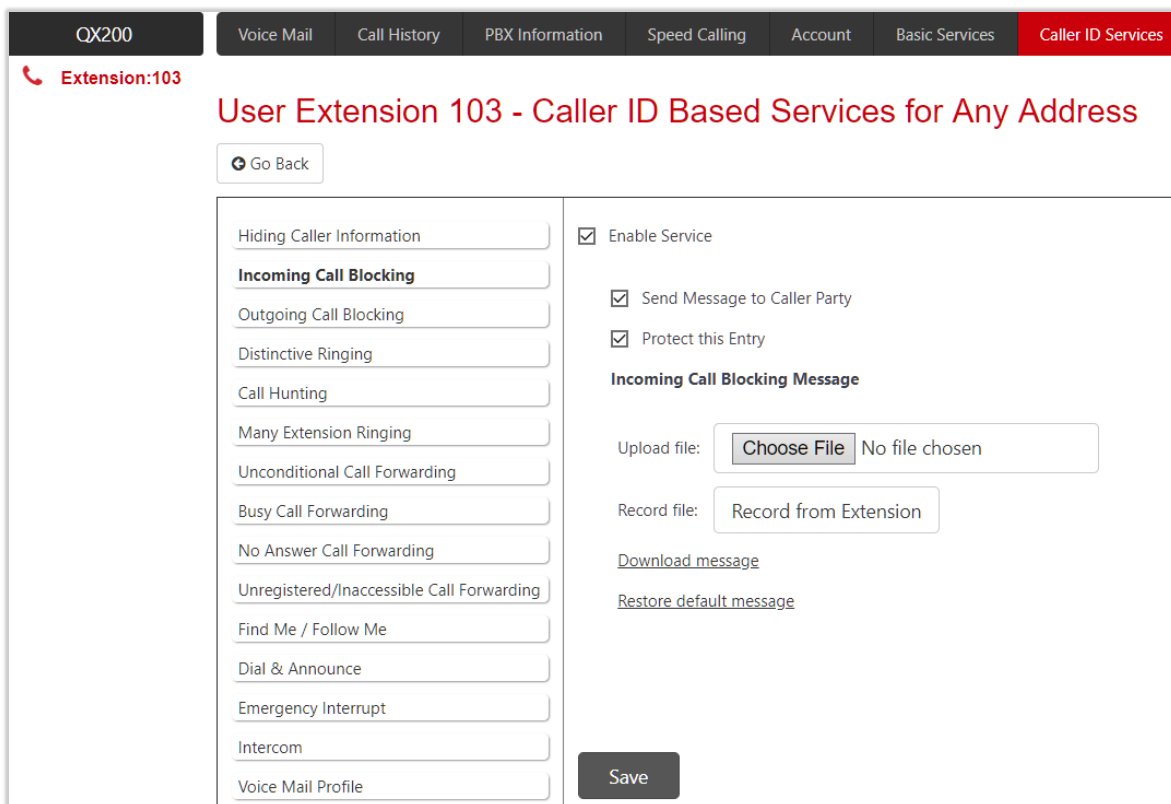
Note:

- Using Block Last Caller operation from the handset for the caller with the hidden caller ID (e.g. anonymous@anonymous or similar) may block all unknown callers.

- Even if the **Hiding Caller Information** service is enabled, it will work only for internal PBX calls and SIP calls. If you call through FXO/ISDN port to a PSTN number, the called party will still see your caller ID. To hide your caller ID for PSTN destinations, contact your PSTN operator.

3.7.2 Incoming Call Blocking

The **Incoming Call Blocking** section allows to block unwanted caller**s** and inform caller**s** that the call is blocked.

To activate Incoming Call Blocking service:

1. Tick the **Enable Service** checkbox.
   - ➢ **Send Message to Caller Party** – if selected, informs the caller via a message that the **corresponding** number is blocked, otherwise the calling party will be disconnected without notification.
   - ➢ **Protect this entry** – if selected, the user will not be able to deactivate the **Incoming Call Blocking** service for the corresponding caller. This option is available only for administrators and is used to protect **Incoming Call Blocking** service from being disabled by the user.
   - ➢ **Incoming Call Blocking Message** is used to upload/record a new incoming call blocking message, download the message, as well as restore the default one.
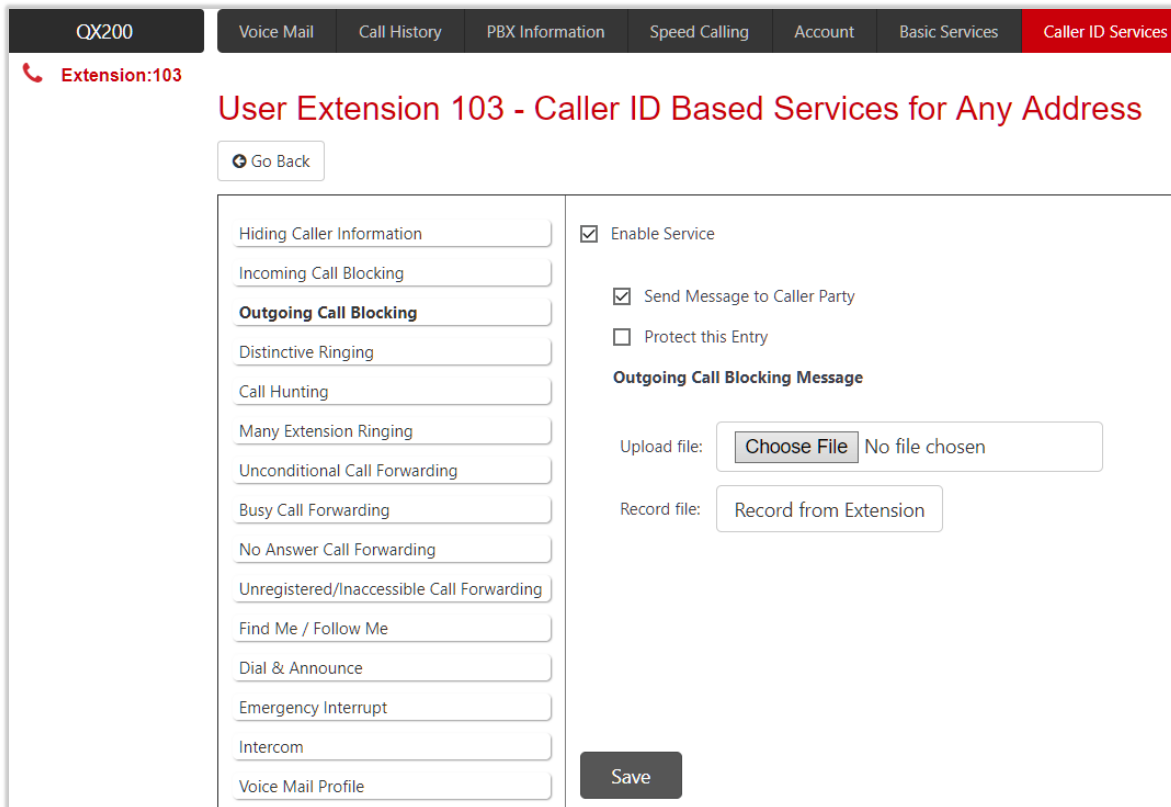2. Click **Save** to activate the service.

Figure 22: Incoming Call Blocking section

3.7.3 Outgoing Call Blocking

The **Outgoing Call Blocking** section allows to block the calls to unwanted numbers and informs the caller that the number is blocked.

To activate Outgoing Call Blocking service:

1. Tick the **Enable Service** checkbox.

   ➢ **Send Message to Caller Party** – if selected, informs the caller via a message that the called number is blocked, otherwise the caller will hear a busy tone.

   ➢ **Protect this entry** – if selected, the extension user will not be able to deactivate the **Outgoing Call Blocking**. This option is available only for administrators and is used to protect **Outgoing Call Blocking** service from being disabled by the user.

   ➢ **Outgoing Call Blocking Message** is used to upload/record a new outgoing call blocking message, download the message, as well as restore the default one.

2. Click **Save** to activate the service.

| QX200 | Voice Mail | Call History | PBX Information | Speed Calling | Account | Basic Services | Caller ID Services |

📞 **Extension:103**

User Extension 103 - Caller ID Based Services for Any Address

⬅ Go Back

| Hiding Caller Information |
| Incoming Call Blocking |
| **Outgoing Call Blocking** |
| Distinctive Ringing |
| Call Hunting |
| Many Extension Ringing |
| Unconditional Call Forwarding |
| Busy Call Forwarding |
| No Answer Call Forwarding |
| Unregistered/Inaccessible Call Forwarding |
| Find Me / Follow Me |
| Dial & Announce |
| Emergency Interrupt |
| Intercom |
| Voice Mail Profile |

☑ Enable Service

☑ Send Message to Caller Party
☐ Protect this Entry

Outgoing Call Blocking Message

Upload file: Choose File   No file chosen

Record file: Record from Extension

Save
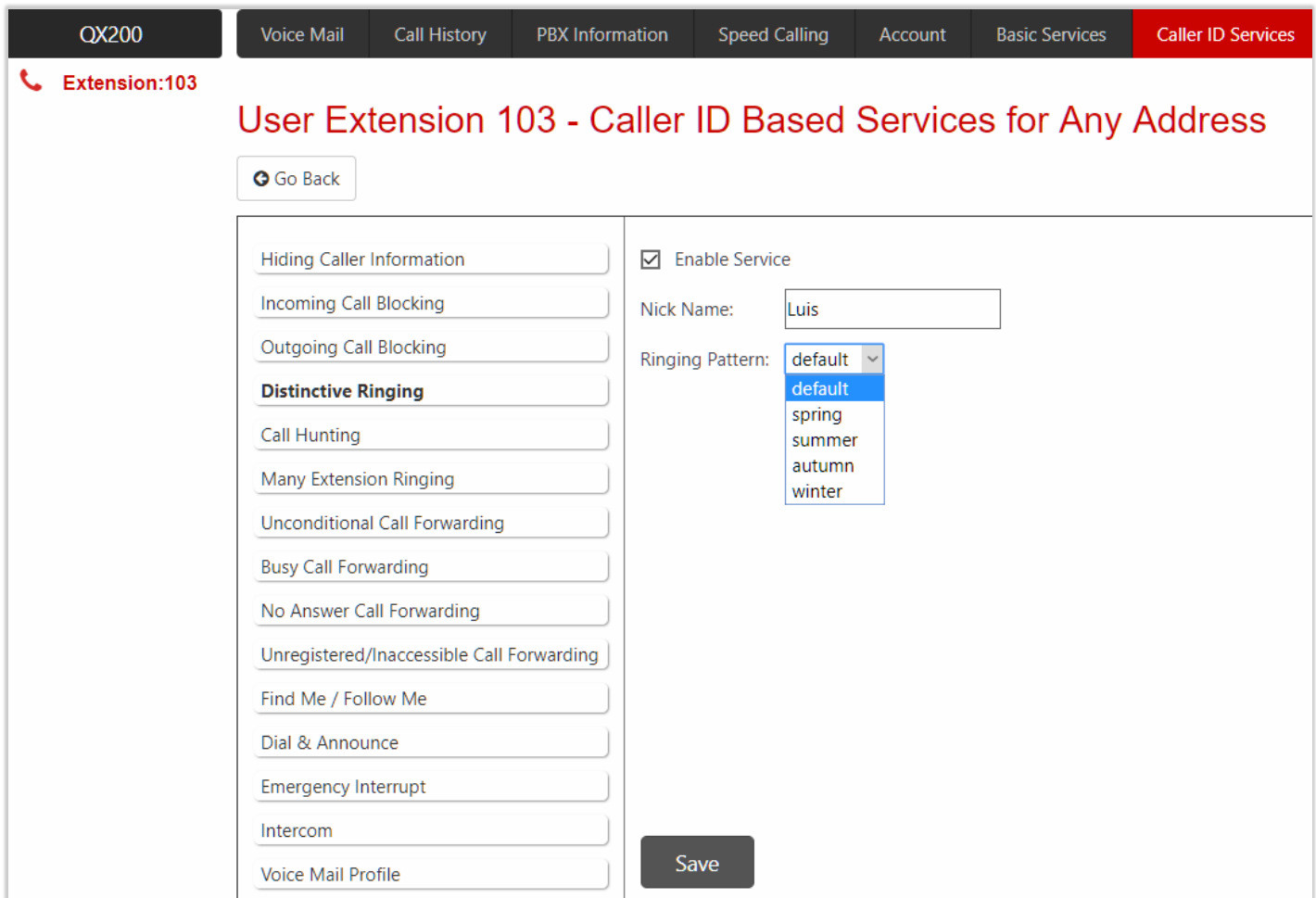
Figure 23: Outgoing Call Blocking section

3.7.4 Distinctive Ringing

The **Distinctive Ringing** service allows to assign different ringing patterns to individual callers.

To activate **Distinctive Ringing** service:

1. Tick the **Enable Service** checkbox.
   - ➢ **Nick Name** is used to set the callers nickname, if needed.
   - ➢ **Ringing Pattern** is used to select the ringing pattern.
2. Click **Save** to activate the service.

Figure 24: Distinctive Ringing section

Note:

- All phones in the **Many Extension Ringing** or **Call Hunting** lists will ring with the pattern defined for the current extension.
- For more information on the list of IP phones that support **Distinctive Ringing**, refer to the QX IP PBX Features on Epygi Supported IP Phones guide.

3.7.5 Call Hunting

The **Call Hunting** service allows the incoming call from any or a specific address to call consecutively to QX extensions in a predefined list. The system will call to each extension in sequence until a number answers or the preset **Ringing Duration** expires. The **Voice Mail** service will be activated on the originally called extension only after all extensions in the list are called at least once, regardless of the configured **No Answer Timeout**.

To activate **Call Hunting** service:

1. Click **Add** and enter the following information:
   - ➢ Select the auto attendant or user extension.
     - ♦ **Attendant** is used to call QX auto attendant.
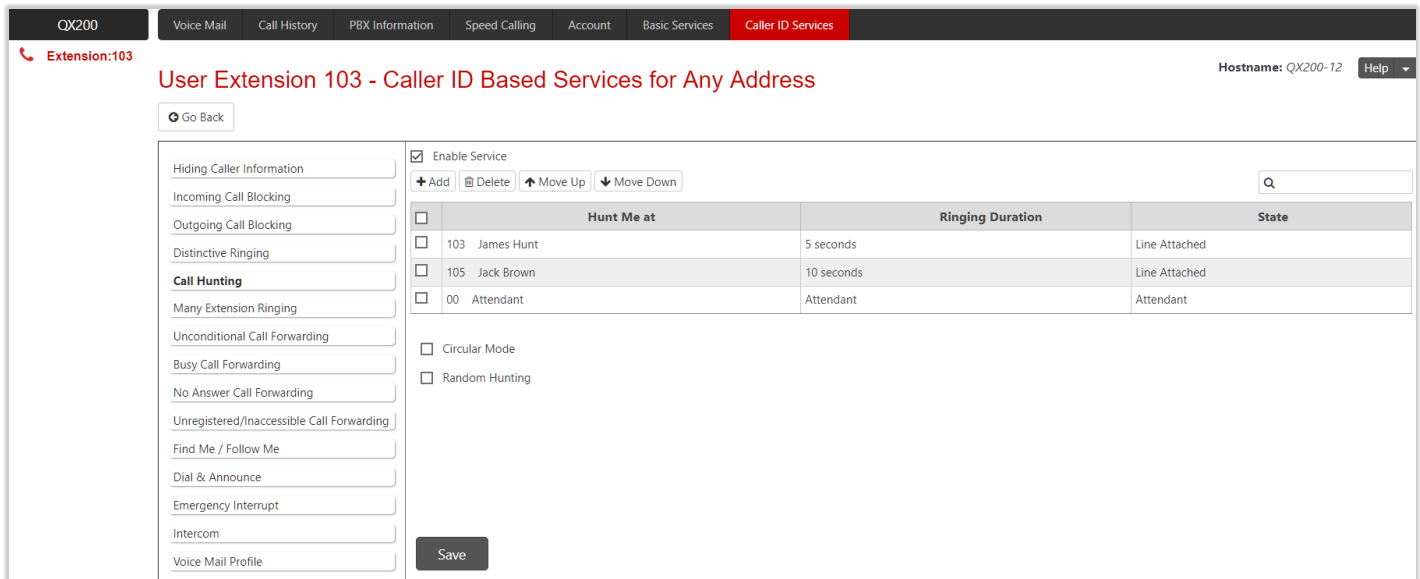   - ♦ **User Extension** is used to call QX user extension. **Ringing Duration** is used to set the ringing timeout on the user extension.
   - ➢ Click **Save** to add the new extension to the **Call Hunting** table.
2. Tick the **Enable Service** checkbox to activate service.

QX200						
Voice Mail	Call History	PBX Information	Speed Calling	Account	Basic Services	Caller ID Services

☎ **Extension:103**

User Extension 103 - Caller ID Based Services for Any Address   Hostname: *QX200-12*   Help ▾

⟲ Go Back

	Hiding Caller Information
	Incoming Call Blocking
	Outgoing Call Blocking
	Distinctive Ringing
Call Hunting
Many Extension Ringing
Unconditional Call Forwarding
Busy Call Forwarding
No Answer Call Forwarding
Unregistered/Inaccessible Call Forwarding
Find Me / Follow Me
Dial & Announce
Emergency Interrupt
Intercom
Voice Mail Profile

☑ Enable Service

✚ Add 🗑 Delete ⬆ Move Up ⬇ Move Down   🔍

	Hunt Me at	Ringing Duration	State
☐	103 James Hunt	5 seconds	Line Attached
☐	105 Jack Brown	10 seconds	Line Attached
☐	00 Attendant	Attendant	Attendant

☐ Circular Mode

☐ Random Hunting

Save

Figure 25: Call Hunting section

The following options are available to control the configured hunting list:

- **Circular Mode** enables the call hunting mechanism to start over when the last extension in the list has been called and there is still no answer. The **Circular Mode** will last until the <u>No Answer Timeout</u> configured on the originally called extension expires.
- **Random Hunting** is used to call extensions in the list in random order.

Note:

- The **Circular Mode** will not work if the list of called extensions contains at least one auto attendant, otherwise the call will be answered by the auto attendant and terminate there.
- If both the **Circular Mode** and **Random Hunting** options are selected, the cycle will restart in the same random order after calling to the last extension.
- Once the **Call Hunting** service is enabled, all types of **Call Forwardings**, **Find Me/Follow Me** and **Many Extension Ringing** services will be automatically disabled for the current extension.
- **Call Hunting** has lower priority over **Incoming Call Blocking** service. Therefore, if the **Incoming Call Blocking** service is activated on the extension, this service will take effect.

3.7.6 Many Extensions Ringing

The **Many Extensions Ringing** (MER) service allows to have multiple phones ring simultaneously when one extension is dialed. The MER table shows all available user extensions on QX with their statuses concerning the MER group.

To activate **MER** service:

1. Click the **Enable/Disable** button, to select the extensions to the MER group.
2. Tick the **Enable Service** checkbox, to activate service.

Figure 26: Many Extension Ringing section

- **Allow access to Shared Mailbox for enabled extensions** is used to share the mailbox of the current extension to all extensions enabled in the MER group. If selected, all enabled extensions in this list will have a direct access to the current extension **Voice Mailbox** without password authentication. For more information on how to access shared mailboxes, refer to Feature Codes.

Note:

- Depending on the hardware resources the system will prevent enabling extension(s) for **MER** group, if the total number of selected extensions exceeds the number allowed.
- By configuring **MER**, the **Call Forwarding**, **Find Me/Follow Me** and **Call Hunting** services will be automatically disabled on the current extension.
- The **MER** has lower priority over **Incoming Call Blocking** service. Therefore, if the **Incoming Call Blocking** service is activated on the extension, this service will take effect.

3.7.7 Call Forwarding

QX offers different types of **Call Forwardings** to choose from:

- **Unconditional** – all incoming calls will be always forwarded to the defined destination(s).
- **Busy** – all incoming calls will be forwarded when the extension is busy with another call. To activate Busy Call Forwarding service, you should disable the Call Waiting service.
- **No Answer** – all incoming calls will be forwarded when the extension is unable to answer. The call will be forwarded as soon as the No Answer Timeout configured on the called extension expires.
- **Unregistered/Inaccessible Call Forwarding** – all incoming calls will be forwarded when the called phone is not registered or unreachable, e.g. due to IP phone reboot or network problems. This type of call forwarding is available for extensions attached to IP lines.

Note: The configuration settings and steps are the same for all forwarding types.

To activate **Call Forwarding** service (e.g. Unconditional Call Forwarding):

1. Click **Add** and enter the following information:
   - ➢ Select the external party or extension to forward to the incoming calls.
     - ♦ **External Party** is used to call external number. Select **Call Type** and enter the destination number in the **Calling Address** field. **TIP:** QX allows to forward incoming calls through local **PSTN** lines. To do so, select PSTN from the **Call Type** drop down list and type **pstn** (capital and lower-case letters allowed) in the **Calling Address** field. Caller will connect to the available **PSTN** line, get the dial tone and be free to dial a number.
     - ♦ **Extension** is used to call PBX extension.
   - ➢ Click **Save** to add the new forwarding address (external party or extension) to the **Unconditional Call Forwarding** table.
2. Tick the **Enable Service** checkbox to activate service.

The following options are available to control the forwarding list:

- **Send Notification via SMS** is used to enable sending SMS notification to the specified mobile number when call forwarding takes place. If selected, the following options become available:
  - ➢ **Mobile Number** is used to enter the mobile number of the recipient. Use a space, semicolon or a comma to separate numbers in case of multiple recipients. **TIP:** This option will work when **SMS Service** is enabled on the QX.
- **Send Notification via E-mail** – if selected allows to send an e-mail notification when call forwarding takes place. If selected, the following options become available:
  - ➢ **E-mail Address** is used to set the recipient's e-mail address. Use a space, semicolon or a comma to separate e-mail addresses in case of multiple recipients. **TIP:** This option will work when **SMTP Service** is enabled on the QX.
- **Toggle from Handset** is used to enable toggling the **Unconditional Call Forwarding** for a selected entry ON/OFF from the phone handset by the appropriate feature code. Dialing the **✱❹** will toggle the **Unconditional Call Forwarding** for all entries in the **Caller ID Based Services** table that have the **Toggle from Handset** option enabled.

Figure 27: Unconditional Call Forwarding section

Note:

- Once **Unconditional call forwarding** is activated, the **Many Extension Ringing, Find Me/Follow Me** and **Call Hunting** will be automatically disabled (except when **Unconditional Call Forwarding** is enabled from the handset).

- The **Forwarding** has higher priority over other **Caller ID Based Services**, except for **Incoming** and **Outgoing Call Blocking** and **Dial & Announce**. If the **Incoming/Outgoing Call Blocking** or **Dial & Announce** services are configured on the extension, these services will take effect. If you have **Unconditional Call Forwarding** enabled along with other Caller ID Based Services, except for mentioned above, the **Unconditional Call Forwarding** service will take effect.

- PSTN destinations (with **PSTN** or **Auto** call type) have higher priority in the **Forward to** list. If there are different destinations in the **Forward to** list, the call will be forwarded to the first PSTN destination (SIP and PBX destinations will receive a short ring). If the first PSTN destination was not successful, the next PSTN destination in the list will be dialed. If there are no more PSTN destinations in the list, the call will be forwarded to any available SIP and PBX destinations simultaneously. If there are destinations only of PBX or SIP call type, then all will ring simultaneously and the call will be established with the one that will pick up the call first.

3.7.8 Find Me/Follow Me

The **Find Me/Follow Me** (FM/FM) service allows to have phones for multiple destinations ringing simultaneously or subsequently on incoming call. The ringing destinations can be PBX extensions, SIP or PSTN numbers.

To activate **FM/FM** service:

1. Click **Add** and enter the following information:
   - Select the external party or extension to forward to the incoming calls.
     - **External Party** is used to call external number. Select **Call Type** and enter the destination number in the **Calling Address** field.
     - **Extension** is used to call PBX extension.
   - **Start Ringing** is used to select the timeout before the destination will start ringing. **Immediately** selection allows the destination to start ringing immediately with incoming call.
   - **Ringing Duration** is used to select the ringing timeout on the destination. **Unlimited** selection makes the destination to ring unlimitedly until the ringing automatically terminated.
   - **Ask Confirmation Passcode** enables the password protection for the call. With this option enabled, the destination who answers the call will be prompted to enter a password to accept the call.
   - Click **Save** to add the new forwarding address (external party or extension) to the FM/FM table.
2. Tick the **Enable Service** checkbox to activate service.

The following options are available to control the FM/FM list:

- **Ring Extension Phone** – if selected, the phone attached to the originally called extension (FM/FM extension) will be called. With this option enabled, you can select the timeout before the phone will start ringing. **Immediately** selection allows the phone (attached to the original extension) to start ringing immediately with incoming call.

- **Max Active Calls** – the maximum number of allowed FM/FM calls. If $N =1$ (N is the max number of allowed calls), then only one active FM/FM call will be possible and the next calls will go to the voice mail directly. If $N >1$, then the next calls will ring the destination(s) that are not busy in a call.

- **Confirmation Passcode** is used to set the password to accept the calls with confirmation passcode activated.

- **Welcome Message** is used to upload/record a new welcome message, download the message, as well as restore the default one. This message will be played to the caller when calling to the FM/FM extension.

  - **Welcome Message Delay** is used to set the delay before playing the welcome message.
  - **Play Ringback Tone during Delay** allows to listen the default ringback tone during the welcome message delay period.

Figure 28: Find Me/Follow Me section

- **Audio Wait Options** allows to configure the audio wait option which should be played recursively after playing the welcome message. The following options are available:

  ➢ **No Audio** is used to disable any audio after the welcome message played once.

  ➢ **Default Recording** is used to enable the system default message.

  ➢ **Play Ringback Tone** is used to play default ring back tone during **Audio Wait** period.

  ➢ **Custom Recording** is used to upload/record the custom audio wait message.

  ➢ **RTP Channel** is used to stream the audio wait message(s) through the selected **RTP Channel**. This option becomes available when you configure **RTP Channel** on QX.

  ➢ **Audio Line In** is used to stream the audio wait message(s) from external audio source (PC, smartphone, etc.) through **Audio Line In**.

Note: Find Me/Follow Me has higher priority over other Caller ID Based Services, except for Incoming and Outgoing Call Blocking and Unconditional Call Forwarding. If the Incoming/Outgoing Call Blocking or Unconditional Call Forwarding services are configured on the extension, these services will take effect.

3.7.9 Dial & Announce

The **Dial & Announce** service allows to call to the predefined list of destinations simultaneously. When answering the call, the uploaded audio message will be played to the destination. If there is no answer within a defined **Ringing Timeout** the call will be terminated.
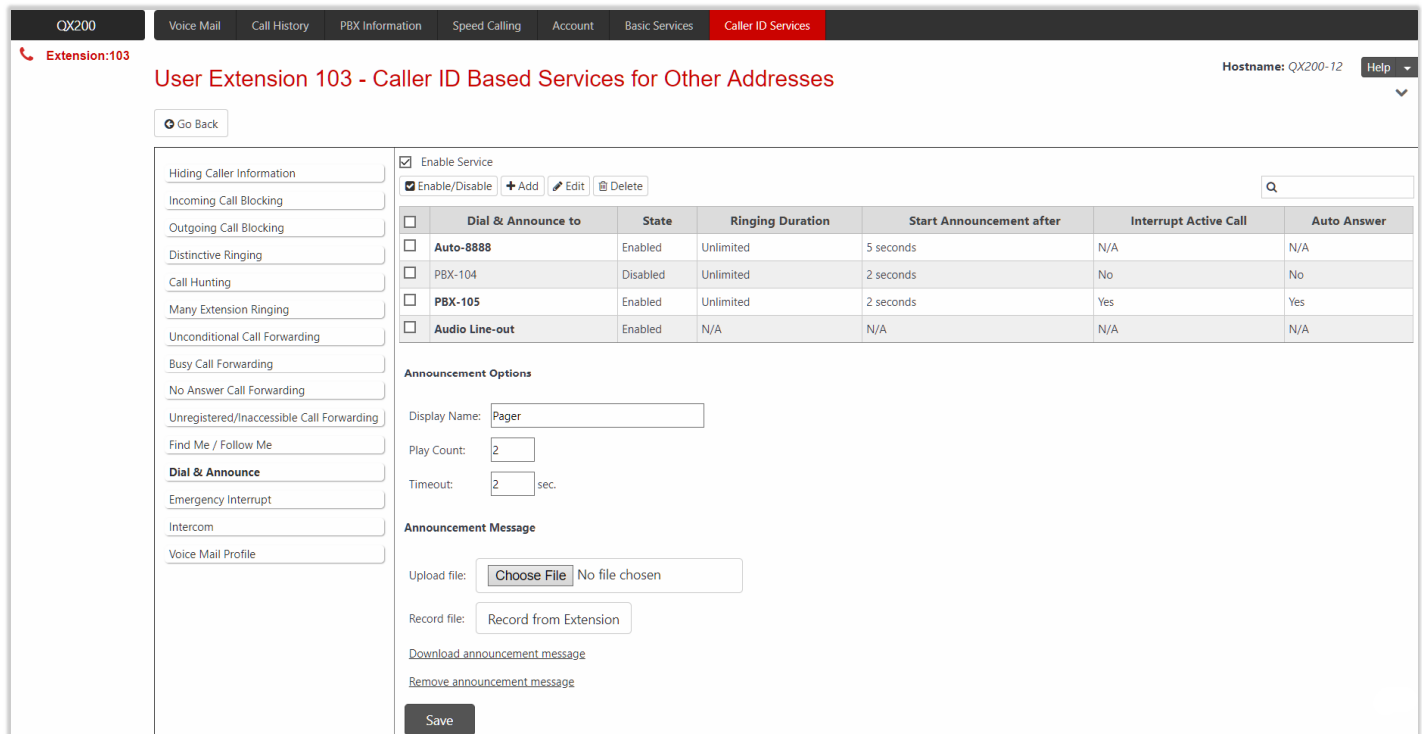
The called destinations can be local PBX extensions, SIP or PSTN numbers. The **Dial & Announce** table shows the destinations, where the calls and announcement message will be sent, with the associated settings.

To activate **Dial & Announce** service:

1. Click **Add** and enter the following information:
2. Select the external party or extension to forward the D&A announcement to.

   ➢ **External Party** is used to call external number. Select **Call Type** and enter the destination number in the **Calling Address** field.
   ➢ **Extension** is used to call PBX extension.
   ♦ **Auto Answer** is used to page the extension's IP phone by forcing the phone to go off-hook and play the announcement.
   ♦ **Interrupt active call** is used to terminate the active calls on extension. If selected, the **Dial & Announce** call will interrupt the active call and ring on the extension's phone. **TIP:** If the **Interrupt active call** option is selected a new entry with the address of **Dial & Announce** extension and <u>Emergency Interrupt</u> service activated will be added automatically under the <u>Caller ID Services</u> for the selected user extension. This option is available on IP phones only. Depending on the IP phone model, the active call interruption and the new call ringing behavior can vary.
   ➢ **Audio Line Out** is used to play the announcement through **Audio Line Out**.
3. **Ringing Duration** is used to select the ringing timeout on the destination. **Unlimited** selection makes the destination ring unlimitedly.
4. **Start Announcement after** is used to set the time interval the announcement will start playing after the call is answered.
5. Click **Save** to add the new forwarding address (external party or extension) to the **Dial & Announce** table.
6. Tick the Enable Service checkbox to activate service.

The following options are available to control the D&A list:

- **Announcement Options** are used to configure the display name, play count and timeout of the announcement.

  ➢ **Display Name** is the caller ID that will be displayed on the callee's phone.
  ➢ **Play Count** is used to set the repetition count of the **Announcement Message**.
  ➢ **Timeout** is used to set the silence duration between consecutively played **Announcement Messages**.
- **Announcement Message** is used to upload/record a new announcement message. This message will be played as soon as the call is answered. **TIP:** To activate the **Dial & Announce** service, the announcement message should be uploaded/recorded.

Figure 29: Dial & Announce section

Note: This service has higher priority over other **Caller ID Based Services**, except for **Incoming** and **Outgoing Call Blocking** and **Find Me / Follow Me**. If the **Incoming**, **Outgoing Call Blocking** or **FM/FM** services are configured on the extension, these services will take effect. However, if you have **Dial & Announce** service enabled along with other **Caller ID Based Services**, except for those three, the **Dial & Announce** service will take effect.

3.7.10 Emergency Interrupt

The **Emergency Interrupt** service is used to interrupt active calls in case of emergency. With this service activated, the call from the defined caller will take priority over the existing call and will interrupt it. Once interrupted, the priority call will ring on the phone. Select the **Enable Service** option to activate this service.

Note: This service is only working on IP phones. Depending on the IP phone model, interruption and new call arrival during off-hook may be different.

3.7.11 Intercom

The **Intercom** service is used to call an extension by forcing it to go off-hook and opening two-way communication. When the call comes in to the extension with **Intercom** enabled, the called extension's phone will ring once and then go off-hook (the phone speaker automatically becomes activated) and the caller will be able to make an announcement.

The following options are available for **Intercom** service:

- **Allow Activation on Request** – this selection enables the **Intercom** for calls that are made through a call routing rule of the **PBX-Intercom** call type.
- **Activate Always** – this selection enables the **Intercom** for all calls.
- **Disabled** – this selection disables the **Intercom**.
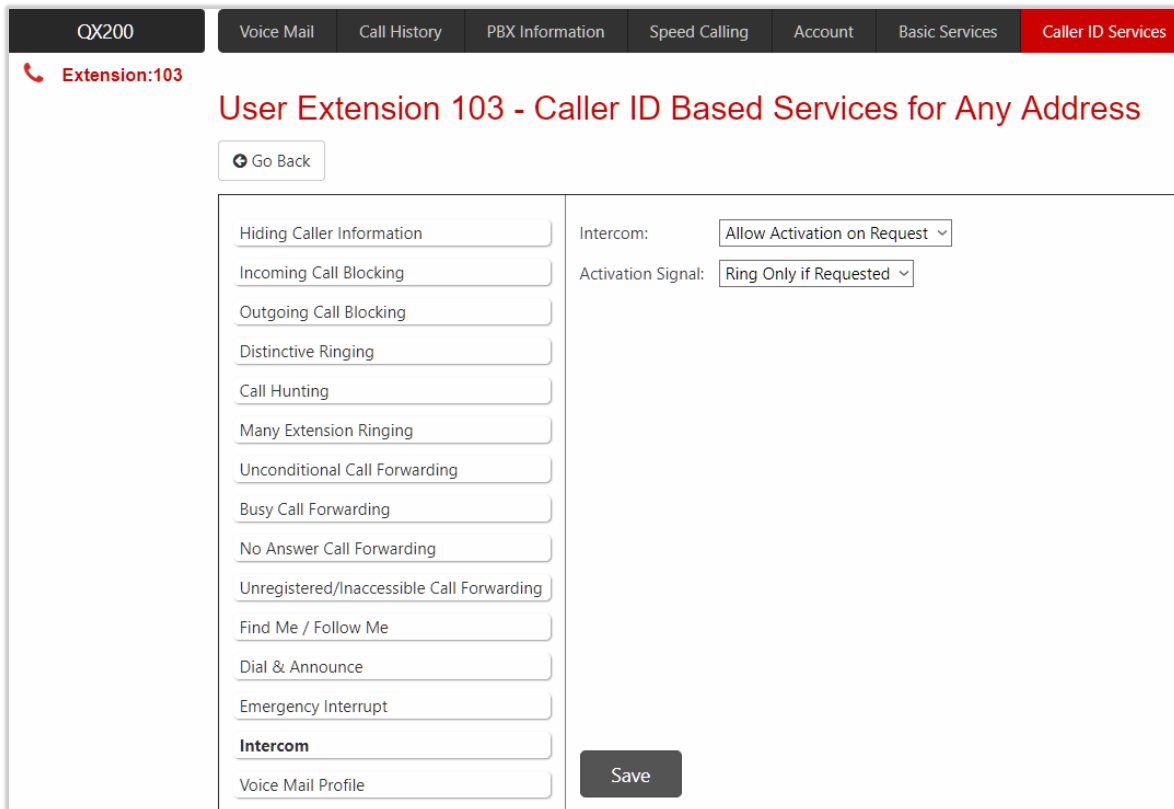
Figure 30: Intercom section

The following options are available for **Activation** signal:

- **Ring Only If Requested** is used to play audible signal if the **Play audible signal before Intercom activation** option is enabled in the call routing rule of the **PBX-Intercom** call type.
- **Ring on Activation** is used to play audible signal before **Intercom** activation no matter the **Play audible signal before Intercom activation** option is enabled or not.
- **Silent Activation** is used to activate the **Intercom** service without any audible signal.

Note:
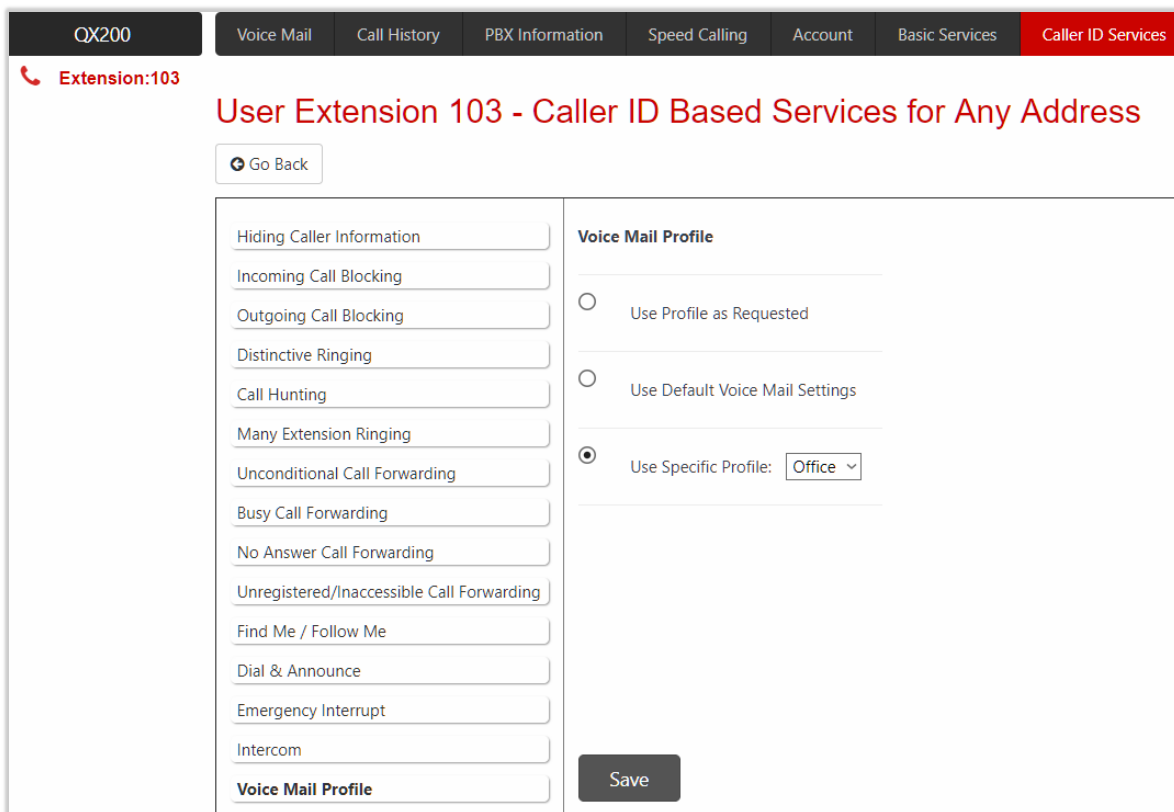
- **Intercom** will not work if the called extension is busy with another call
- **Intercom** has lower priority over other **Caller ID Based Services**. If **Intercom** is enabled along with other services (e.g. **Call Hunting, Unconditional Call Forwarding**, etc.), the **Intercom** service will not take effect.

- Intercom service requires called extension to use IP or analog phones which are able to automatically go off-hook. For Intercom service supported on IP phones, refer to the QX IP PBX Features on Epygi Supported IP Phones guide.

3.7.12 Voicemail Profile

The Voicemail Profile service allows to activate the voicemail profiles based on Caller ID. The following options are available:

- Use Profile as Requested is used to enable the voicemail profile for the calls through the call routing rule of the PBX -Voicemail type.
- Use Default Voicemail Settings is used to enable the default voicemail settings. No profile will be used, regardless of how the call has arrived to extension.
- Use Specific Profile is used to enable the preconfigured voicemail profile, regardless of how the call has arrived to extension.

Figure 31: Voicemail Profile section

4 Appendices

4.1 Feature Codes

4.1.1 PBX Services Accessible at the Dial Tone

This chapter describes the feature codes to navigate through the QX telephony services with the phone handset. These services are characterized by starting with the key ⊛:

 Voice Mail Services

The **Voice Mail Services** are divided into three parts:

- Voice Mailbox
- Change Personal Settings
- Change Password

To access **Voice Mail Services**, press ⊛ 0.

Voice Mail Services		
1 Voice Mailbox	**3** Change Personal Settings	**4** Change Password

Table 1: Voice Mail Services

When the **Voice Mail Services** are accessed for the first time, the **Voice Mail Configuration Wizard** will be activated and prompted for the phone user's essential personal settings. Below are instructions on how to proceed with the **Voice Mail Configuration Wizard** from the handset.

Voice Mail Configuration wizard	
Enter a **Password** and press #	
Reenter the **Password** and press #	
Record a **Voice Mail Greeting** and press #	
＊ Apply recorded Voice Mail Greeting and move forward to the next step	**#** Record Voice Mail Greeting again
Record a **User's name** and press #	
＊ Apply recorded User's name and exit	**#** Record User's name again

Table 2: Voice Mail Configuration wizard

The following key combinations are available to navigate through the **Voice Mail Services** menu.

Voice Mail Service		
*0 Exit Voice Mail Services	***1** Go to the top of the Voice Mail Services tree	***2** Go one level up in the Voice Mail Services tree

Table 3: Navigations keys through Voice Mail Services

Voice Mailbox

After entering the **Voice Mail Services**, press **1** to enter the **Voice Mailbox** menu.

Voice Mailbox menu		
1 Send a Message or Leave a Reminder	**2** Play First Message	**3** Get Date/Time Info for Current Message
4 Play Previous Message[1]	**5** Play Current Message	**6** Play Next Message[1]
7 Print the attached FAX (press **START** button on the FAX machine)	**8** Play Last Message	**9** Delete Current Message
	0 Reply or Forward a Message	

Table 4: Voice Mailbox menu

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[1] During the message, playback **4** and **6** keys change their functionality and are used to rewind and forward the message configured by the user from **Voice Mail Settings**.

Send a Message or Leave a Reminder

After entering the **Voice Mailbox**, press ➊ to enter the **Send a Message or Leave a Reminder** submenu.

Send a Message or Leave a Reminder submenu		
Enter a **Destination Number**		**#** Leave a self-reminder
# Record a Message	Dial an additional **Destination Number**	**#** Record a Message
# Stop recording		
Dial ➊ to mark the message as **Urgent**, or press **#** to send the message immediately		

Table 5: Send a Message or Leave a Reminder submenu

Reply or Forward a Message

When playing a voice mail, press **0** to enter the **Reply or Forward a Message** submenu.

Reply or Forward a Message submenu			
0 Call Back immediately	**➊** Reply by Voice Mail	**➋** Forward a Message (any FAX attached to the message will be also forwarded)	
	# Record a Message[2]	Enter a **Destination Number**	
		# Record a Message[2]	Dial additional **Destination Number**
	# Stop recording		
	Dial ➊ to mark the message as **Urgent**, or press **#** to send the message immediately		

Table 6: Reply or Forward a Message submenu

---

[2] Press **#** twice without pause to skip message recording before forwarding the voice mail.

Note: This service is not applicable when sending a message to **PSTN** destinations. A message will be successfully received by the destination if all of the following criteria are met:

- The connection to the destination is successful.
- The voice mail service is enabled on the destination.
- There is enough space in the voice mailbox of the destination.
- The duration of the forwarded/replied message is less than the maximum voice mail duration set up at the destination.

Change Personal Settings

After entering the **Voice Mail Services**, press ❸ to enter the **Change Personnel Settings** menu. System will notify about the messages that can be modified.

Change Personnel Settings menu					
❶ Voice Mail Greeting message	❸ Incoming Call Blocking message	❹ Outgoing Call Blocking message	❺ User Name recording	❻ Out of Office message	❼ Find Me/Follow Me message
❶ Listen to the current message	❶ Listen to the current message	❶ Listen to the current message	❶ Listen to the current message	❶ Listen to the current message	❶ Listen to the current message
❷ Record a new message	❷ Record a new message	❷ Record a new message	❷ Record a new message	❷ Record a new message	❷ Record a new message
❸ Restore system default message	❸ Restore system default message	❸ Restore system default message	❸ Restore system default message	❸ Restore system default message	❸ Restore system default message
# Stop recording or playback	# Stop recording or playback	# Stop recording or playback	# Stop recording or playback	# Stop recording or playback	# Stop recording or playback

Table 7: Change Personnel Settings menu

Change Password

After entering the **Voice Mail Services**, press **4** to enter the **Change Password** menu, where the extension's password can be changed. This password is used to login and access personal configuration settings (e.g. voice mailbox, WEB GUI, etc.).

Change Password menu
Enter the **Current Password** and press **#**
Enter a **New Password** and press **#**
Confirm the **New Password** and press **#**

Table 8: Change Password menu

Services for Incoming Calls

The following key combinations are available in some scenarios when calling to PBX extensions.

Called extension VMS activated	Calling to the extension's Voice Mailbox		Waiting in the extension's Call Queue
1 Skip the greeting message and enter the called extension's Voice Mail Services (authentication required)	**0** Calling to the ZeroOut destination (during the greeting message)	**#** Skip the greeting message and start recording a voice mail	**0** Leave the call queue and record a voice mail

Table 9: Navigation keys for Incoming Calls

Automatic Redial

For extensions attached to FXS lines, this service may be used in two ways:

- Dial ***1** and hang up. As soon as the last called destination is reached, your phone will start ringing.
- Dial ***1** and stay with the handset lifted. Connection will be established once the called destination answers the call.

  Note: A specific beep will be heard during the entire redialing period specified on the Basic Services – General Settings page. To stop the redialing, simply lift the handset and hung up again (if you keep waiting with the handset lifted, you will need to push the hook button twice on your phone to stop the redialing).

For extensions attached to IP lines:

- Dial ***1** to redial the last dialed number.
- If the called number is busy after dialing ***1** keep the handset lifted to activate the auto redialing of the last called number. Connection will be established once the called destination answers the call.

Note:

- This service is functional for SIP and PBX calls only. In case of PSTN calls, this feature works as a single redial (with no multiple attempts to reach the called destination).
- This service works when the <u>Voice Mail</u> and <u>Call Waiting</u> services are disabled on the called destination.

Call Back

Dial **✱❷** to call back the last caller.

Unconditional Call Forwarding

Dial **✱❹** to configure Unconditional Call Forwarding:

1. Press **❷** to add a forwarding number.
2. Press **❶** to toggle (enable or disable) the forwarding service.

After successful configuration, dial **✱❹** to activate/deactivate the service.

Note:

- Using the **Change the Forwarding Number** option will update the first entry in the **Unconditional Call Forwarding** table with **Auto** call type. Any other entries with **Auto** call type, as well as with other call types will not be modified.
- Besides **Any Address/Other Addresses** entry of the **Unconditional Call Forwarding** table this toggling also affects all those entries that have **Toggle from Handset** option selected. The states of those entries will be set to the same as the state of **Any Address/Other Addresses** entry after toggling.

Do Not Disturb

- Dial **✱❼❷** to activate the **DND** service. Your phone will not ring until the **DND** timeout expires. The incoming calls will be forwarded to Voice Mailbox, if the voice mail service is activated.
- Dial again **✱❼❷** to deactivate **DND**.

Note: You can configure **DND** timeout from <u>Do Not Disturb Settings</u> page.

Block Last Caller

- Dial **✱❼❸** to block the last caller. The last caller will be blocked and added to the <u>Caller ID Services</u> table. This service can be activated within **10** seconds after the call termination.
- To unblock the caller, go to the <u>Incoming Call Blocking</u> section and disable the **Incoming Call Blocking** service for the blocked address.

Line Information

Dial **✱❼❹** to get information about the IP line (FXS line), attached extension number and SIP username.

Speed Calling

Dial ✱❼❻ to configure **Speed Calling** settings:

1. Enter the two-digit speed dial code and press #.
2. Enter the destination number and press #.

This data will be automatically added in the Speed Calling table with call type option as **Auto.**

To call to destination using **Speed Calling**, dial # + **two-digit speed dial code** from the handset.

Call Routing Management

The **Call Routing Managemen**t is used to manage the routing rules in the **Call Routing** table, i.e. to enable/disable certain routing rule(s) by dialing key combinations pre-configured on each rule.

1. Dial ✱❼❼ to enable the routing rule.
2. Enter the activation code and press #.

After successful activation, the state of the routing rule will be modified (enabled).

1. Dial again ✱❼❼ to disable the routing rule.
2. Enter the deactivation code and press #.

After successful deactivation, the state of the routing rule will be modified (disabled).

Note: Enter **Phone Access Password** after the **Enabler/Disabler** key if the **Require Authorization for Enabling/Disabling** option is enabled. If the password has been entered incorrectly for **3** times, no status changes will be applied to any of the routing rule(s), even to those which have no authorization enabled.

Hot Desking

If QX has limited number of IP phones connected, but much more users wishing to make and receive calls through the QX, some of the connected phones can be announced as **public**. Public phones have no static owners; they are just connected to the IP lines. Each user that accesses the public phone should login using personal credentials (extension number and password).

To access the public phone:

1. Dial ✱❼❽ to login.
2. Enter the **extension numbe**r and press #.
3. Enter the **extension password** and press #.

After successful login, the phone becomes a full featured phone connected to the QX. You can place and receive calls and use all supplementary PBX services of the QX.

When having finished using the phone, logout.

1. Dial ✱❼❽ to logout.
2. Enter the **password** of the current logged in **extension** and press #.

When logged out, the public phone becomes available for other users.

<u>Outgoing Call Blocking</u>

Dial **✱❼❾** to configure **Outgoing Call Blocking**:

1. Enter the **extension password** and press **#**.
2. Press **❶** to block a destination.
3. Enter the **number** to be blocked and press **#**.

After successful configuration, the service will be applied.

Dial **✱❼❾** to unblock the destination:

1. Press **❷** to unblock a destination.
2. Enter the **number** to be unblocked and press **#**.

<u>Mark the Last Call as Bad</u>

Dial **✱❽❶** after terminating the call to **mark the last call as Bad** in the system logs. This can be used for diagnostics purposes only.

<u>Logs Collecting</u>

You can collect **user logs** from handset. Dial **✱❽❷** to collect the logs. The collected logs will be a part of the **System Logs** when you download them next time. This could be used to collect the logs at the exact moment when a problem occurs.

<u>ACD Login/Logout</u>

Dial **✱❽❸** to easily login/logout to/from all queues. **Note:** This feature code will work only for **ACD Agents** located on a PBX extension.

<u>No Answer Call Forwarding</u>

Dial **✱❽❹** to configure **No Answer Call Forwarding**:

1. Press **❷** to add a forwarding number.
2. Press **❶** to toggle (enable or disable) the forwarding service.

After successful configuration, dial **✱❽❹** to activate/deactivate the service.

Note: Using the **Change the Forwarding Number** option will update the first entry in the **No Answer Call Forwarding** table with **Auto** call type. Any other entries with **Auto** call type, as well as with other call types will not be modified.

<u>Shared Mailbox Access</u>

To access extension **Voice Mailbox**:

1. Dial **✱❽❺** + **extensions number** from the handset.
2. Enter the **extension password** and press **#**.

Note: If the **Voice Mailbox** is configured as shared and you have the access rights, no password will be prompted to enter.

Day/Night Switching

To check or change the state for the schedule using **Day/Night Switching** service:

Dial **✱❽❻** + **Schedule ID** and press **#**.

- Press **❶** to set the schedule state to permanently **ON** (enabled).
- Press **❷** to set the schedule state to permanently **OFF** (disabled).
- Press **❸** to set the state to **Running on Schedule**.

Listen-In, Whisper, Barge-In and Intercept

You can use the following Barge-In services:

- **Listen-In** allows to listen to the third party's call without being able to speak in the call.
- **Whisper** allows to listen to the third party's call and talk to the extension you have barge-in to.
- **Barge-In** allows to listen to the third party's call and talk to both participants in the call.
- **Intercept** allows to intercept (pickup) the incoming call.

These feature codes are only available when the extension (to whom you want **Barge-In**) you dial is in the call.

- For **Listen-In**, dial **✱❾❶**+ extension number.
- For **Whisper**, dial **✱❾❷**+ extension number.
- For **Barge-In**, dial **✱❾❸** + extension number.
- For **Intercept**, dial **✱❾❹** + extension number.

4.1.2 Auto Attendant Services

The following services are accessible when calling to QX auto attendant in default **Standard** scenario.

Call Relay

All incoming calls to auto attendant by default are limited to dialing the PBX extensions ONLY. The **Call Relay** service, accessible by feature code **✱❷** on auto attendant prompt, allows making calls using the QX call routing capabilities.

After dialing **✱❷**, an authentication will be required (an extension number and password). Once successfully authorized, the caller can use the QX routing rules having the same privileges as the extension used for login. The dialed digits will be sent to and processed by **Call Routing Table** even if the **Pass Dialed Digits through Call Routing** option is disabled in the auto attendant settings.

Note: The **Call Relay** service cannot be used, if it is not enabled on the appropriate extension on the QX. The **Allow Call Relay** option should be enabled/disabled on a per extension basis. By default, this option is disabled on all extensions.

Call Relay allows the external user to make multiple calls to different destinations without the necessity of hanging up after each call and dialing the auto attendant again.

To make a call to a new destination without getting disconnected from QX:

1. The external user has to enter **✱✱** rather than hang up.
2. Upon receiving this service code, the QX terminates the current call to destination and sends invitation to dial the new destination number.

Note:

- The ✱✱ service code is applicable at ringing and connected call stages.
- This service can only be used when accessing from PSTN to the external SIP destination through QX auto attendant or vice versa.
- This service is not available on the second QX auto attendant (calling from one auto attendant to another).

Callback

The **Callback** service allows trusted callers to save the call charges when calling through the QX to the remote destinations. You have to configure the desired list of trusted callers in the **Authorized Phones** that are allowed to make free of charge calls. The **Callback** option should be enabled and a valid callback destination should be specified for each caller.

To use the **Callback** service the caller should simply call to the QX auto attendant through SIP, let the call ring during the preconfigured timeout and then hang up. **Callback** will be instantly activated, and QX will call back to the defined **Callback** destination. By answering the incoming call, the caller will be connected to the auto attendant menu.

The predefined list of trusted callers in **Authorized Phones** page can be modified remotely as well using special calling codes on the phone. Changes may refer to caller's and/or callback numbers. Depending on the used calling code changes may be saved and permanently updated in **Authorized Phones**.

To make a permanent change in the **Authorized Phones** remotely:

1. The trusted caller should use the ✱❻ code on auto attendant prompt.
2. Then the caller should follow the voice instructions to login and configure a new entry or reconfigure an existing entry in **Authorized Phone**.
3. When the system accepts the applied data, the corresponding entry will be updated and saved in the **Authorized Phones**. The caller will then be disconnected from the QX auto attendant and the newly defined **Callback** destination will receive a call from the QX within the next few seconds.

To make an instant, non-permanent change in **Callback** configuration:

1. The trusted caller should use the ✱❺ code on the auto attendant prompt. The system will ask to login by dialing the number and password for the QX extension that is used as login extension in the **Callback** settings.
2. Then caller should follow the voice instructions to change the **Callback** number for the existing entry in the **Authorized Phone**.
3. The caller will then be disconnected from the QX auto attendant and the newly defined **Callback** destination will receive a call from the QX within the next few seconds.
4. Non-permanent **Callback** configuration allows the trusted caller to organize only one-time **Callback** to the defined destination. In this scenario, nothing will be saved and updated to the **Authorized Phones.**

Note: Both methods of remote configuration on the phone are available for PSTN calls only. At least one PSTN line must be available on the QX. There must be network connectivity and the destination must be reachable.

Extension's Directory

The **Extension's Directory** service allows external callers to access the QX extensions by simply spelling the desired extension's preconfigured username on the phone's keypad. To access **Extension's Directory**, press **#**.

Extension's Directory menu
Spell the name of the person using the keypad of your handset or press **#** to play all existing entries

# To dial out the extension	**1** Select the next matching name
* Retry/Exit the Extensions Directory	

Table 10: Extension's Directory menu

Other Services

The following services are also accessible on auto attendant prompt after passing the authentication:

- Voice Mail Services
- Unconditional Call Forwarding
- Administrator Login
- Call Routing Management
- Day/Night Switching

Note: For more information about QX services, accessible on auto attendant in default **Standard** scenario, refer to the Manual-II: Administration Guide for QX IP PBXs.

4.1.3 Recording Box

To reach the **Recording Box** from the phone handset, simply call to that **Recording Box** extension by dialing the PBX number or SIP address. **TIP:** The Recording Box extension password may be required (if configured accordingly).

Recording Box menu		
	2 Play First Recording	**3** Get Date/Time Info for Current Recording
4 Play Previous Recording[3]	**5** Play Current Recording	**6** Play Next Recording[3]
	8 Play Last Recording	**9** Delete Current Recording

Table 11: Recording Box menu

4.2 Allowed Characters and Wildcards

Below is the complete list of the characters and wildcards supported in the QX. Not all characters and wildcards are supported for all options and settings. Thus, depending on the meaning of the option some limitations can be applied.

Characters

- **Numbers** – 0…9
- **Letters** – A…Z, a…z
- **Special symbols** – =; +; -; $; / ; ~ ; _ ; – ; . ; & ; ( ) ; ' ; ! ; * ; ? ; {} ; [ ]

Note:

- The symbols (*, ?, -, ! and ,) should be prefixed with a slash (\) symbol if they are used as ordinary characters; otherwise the system will interpret them as wildcards.
- The symbols !; { }; [ ]; – and , are used to define a range of characters and cannot be used as ordinary characters.

Wildcards

- * – any number of any characters
- ? – any single character
- {} – a character or a string from the specified set of characters and strings
- [] – a character from the specified set of characters and strings
- **Note:** You can use the wildcard ? within the braces, but not *.

---

[3] During the recording, playback **4** and **6** keys change their functionality and are used to rewind and forward the message configured by the administrator from **Recording Box Settings**.

The following control symbols are used to specify a set:

- Use a comma (,) to separate the elements of a set. **For example:** The pattern is: 9{1,3,11,a}. Numbers matching the pattern will be: 91, 93, 911, 9a. **Note:** No spaces are allowed within braces.

- Use a minus sign (-) to specify a range of characters. Each successive element of the range is obtained by increasing the previous element (the element code) by one. **For example:** The pattern is: 2{11-15,a-d}5 Numbers matching the pattern will be: 2115, 2125, 2135, 2145, 2155, 2a5, 2b5, 2c5, 2d5.

- Use an exclamation point (!) to exclude a character or a string from a set. **For example:** The pattern is: 2{11-15,a-d,!14,!c}5. Numbers matching the pattern will be: 2115, 2125, 2135, 2145, 2155, 2a5, 2b5, 2d5. **Note:** The exclamation point (!) cannot be used to exclude a range of symbols.

- Use a slash (\) before control symbols (*, ?, -, ! and ,) to use them as an ordinary character. **For example:** The pattern is: 1*[1–3]. Numbers matching the pattern will be: 1*1, 1*2, 1*3

- Use an at sign (@) to indicate full SIP address (for example: 20233@sip.epygi.com). This pattern is mainly used to call back users registered on the SIP server different from the one where the called party is registered. **Note:** Patterns containing @ symbol will not be parsed among those that do not have @ symbol in the **Call Routing Table**. When calling from local extensions (the calling number for PBX extension is sip_number@ip_address_of_QX, e.g. 20233@192.168.35.25), only the sip number part of the pattern will be parsed among other entries with @ symbol in the **Call Routing Table**.

Allowed SIP Addresses

Calls over IP are implemented based on **Session Initiating Protocol** (SIP) on QX. When making a call to a destination that is somewhere on the Internet, a SIP address must be provided.

SIP address needs to be entered in one of the following formats:

- "display name" <username@ipaddress:port>
- "display name" <username@ipaddress>
- username@ipaddress:port
- username@ipaddress
- username

The display name and port number are optional parameters in the SIP address. If a port is not specified, **5060** will be set up as the default one. The range of valid ports is between **1024** and **65536**. The **SIP address** may contain wildcards. The following combinations can be used:

- *@ipaddress – any user from the specified SIP server
- username@* – a specified user from any SIP server
- *@* – any user from any SIP server

5 References

For more information about the configurations described in this guide see the recourses listed below:

- Manual-I: Installation Guide for QX IP PBXs
- Manual-II: Administration Guide for QX IP PBXs
- QX IP PBX Features on Epygi Supported IP Phones

Find the above listed documents on Epygi Support Portal.

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