



Manual-I: Installation Guide for QX IP PBXs

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



Notice to Users

This document, in whole or in part, may not be reproduced, translated or reduced to any machine-readable form without prior written approval. Epygi provides no warranty with regard to this document or other information contained herein and hereby expressly disclaims any implied warranties of merchantability or fitness for any particular purpose in regard to this document or such information. In no event shall Epygi be liable for any incidental, consequential or special damages, whether based on tort, contract or otherwise, arising out of or in connection with this document or other information contained herein or the use thereof.

Copyright and Trademarks

Copyright © 2003-2018 Epygi Technologies, LLC. All Rights Reserved. QX and QUADRO are registered trademarks of Epygi Technologies, LLC. Microsoft, Windows and the Windows logo are registered trademarks of Microsoft Corporation. All other trademarks and brand names are the property of their respective proprietors.

Emergency 911 Calls

YOU EXPRESSLY ACKNOWLEDGE THAT EMERGENCY 911 CALLS MAY NOT FUNCTION WHEN USING QX OR QUADRO AND THAT EPYGI TECHNOLOGIES, LLC. OR ANY AFFILIATES (AGENTS) SUBSIDIARIES, PARTNERS OR EMPLOYEES ARE NOT LIABLE FOR SUCH CALLS.

Limited Warranty

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.

This warranty shall not apply to defects caused by (i) failure to follow Epygi's installation, operation or maintenance instructions; (ii) external power sources such as a power line, telephone line or connected equipment; (iii) products that have been serviced or modified by a party other than Epygi or an authorized Epygi service center; (iv) products that have had their original manufacturer's serial numbers altered, defaced or deleted; (v) damage due to lightning, fire, flood or other acts of nature.

In no event shall Epygi's liability exceed the price paid for the product from direct, indirect, special, incidental or consequential damages resulting from the use of the product, its accompanying software or its documentation. Epygi offers no refunds for its products. Epygi makes no warranty or representation, expressed, implied or statutory with respect to its products or the contents or use of this documentation and all accompanying software, and specifically disclaims its quality, performance, merchantability or fitness for any particular purpose.

Return Policy

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.

European Limited Warranty

The European Limited Warranty is the same as the Limited Warranty above, except the warranty period is for two years from the date of purchase.

Extended Warranty

Extended Warranty Option

Epygi offers an extended warranty program available for purchase by end users. This option is available at the time of purchase, extending the users original warranty for an additional three (3) years. Combined with the original warranty, the extended warranty would offer a total of five (5) years protection for European end users and four (4) years protection for non-European end users.

Extended Warranty Statement

Epygi Technologies, LLC. extends its Limited Warranty for an additional period of three (3) years from the date of the termination of the original Limited Warranty period (proof of purchase required).

Epygi reserves the right to revise or update its products, pricing, software, or documentation without obligation to notify any individual or entity. Please direct all inquiries to:

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.

Compliance with Laws

You may not use the Epygi Materials for any illegal purpose or in any manner that violates applicable domestic or foreign law. You are responsible for compliance with all domestic and foreign laws governing Voice over Internet Protocol (VoIP) calls.



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

About Installation Guide	6
Accessories	6
Hardware Overview	6
Panels of QX50/QX200/QXISDN4+	7
Panels of QX20/QX500	9
Panels of QX2000/QX3000	10
Front Panel LEDs of QX20/QX50/QX200/QX500/QXISDN4+	10
Front Panel LEDs of QX2000/QX3000	11
QX Installation	12
Connection Scenarios for QX20/QX50/QX200/QX500/QXISDN4+	12
QX Configuration	14
Logging in to QX	14
Configuring Network Parameters	15
Configuring Extensions	24
Configuring IP Phones	26
Changing Admin Passwords	32
Configuring NAT Traversal	33
Troubleshooting	34
Registering on Epygi Support Portal	35
Registering on Epygi SIP Server	37
References	39
Software License Agreement	40
	About Installation Guide Accessories. Hardware Overview. Panels of QX50/QX200/QXISDN4+ Panels of QX200/QX500. Panels of QX2000/QX3000. Front Panel LEDs of QX20/QX50/QX200/QX500/QXISDN4+ Front Panel LEDs of QX2000/QX3000 QX Installation. Connection Scenarios for QX20/QX50/QX200/QX500/QXISDN4+ QX Configuration Logging in to QX. Configuring Network Parameters. Configuring Extensions. Configuring IP Phones. Changing Admin Passwords. Configuring NAT Traversal. Troubleshooting. Registering on Epygi Support Portal. Registering on Epygi SIP Server. References. Software License Agreement.



1 About Installation Guide

Installation guide is intended for administrators as an aid to install, configure and operate QX IP PBX (herein QX). The configuration of QXs as well as references to other guides, manuals and complementary resources are described in this guide.

This guide contains many example screen illustrations. Since QXs offer a wide variety of features and functionality, the example screenshots shown may not appear exactly the same for your particular 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 Accessories

- AC power cable should be connected to the 100-240V 50/60Hz AC power outlet.
- The CAT5, CAT5E and CAT6 ethernet cables with RJ45 connectors can be used to connect LAN/WAN ports to your network and Internet.
- The telephone cables with **RJ11** connectors can be used to connect analog (FXS) phones to QX and FXO ports to **Central Office** (CO).
- The CAT5, CAT5E and CAT6 ethernet cables with RJ45 connectors can be used to connect ISDN ports to CO.

Note: Refer to the contents sheet included in the box to verify all items have been shipped.

3 Hardware Overview

- QX20 has 1 Ethernet WAN port, 1 Ethernet LAN port and 1 Ethernet Backup port (TBD).
- QX50 has 2 FXO ports, 2 FXS ports, 1 Ethernet WAN port and 1 Ethernet LAN port.
- QX200 has 4 FXO ports, 2 FXS ports, 1 Ethernet WAN port and 1 Ethernet LAN port.
- QX500 has 1 Ethernet WAN port, 1 Ethernet LAN port and 1 Ethernet Backup port (TBD).
- QX2000 has 1 Ethernet LAN port and 1 Ethernet Backup port.
- QX3000 has 1 Ethernet LAN port and 1 Ethernet Backup port.
- QXISDN4+ has 4 ISDN ports, 1 Ethernet WAN port and 1 Ethernet LAN port.



3.1 Panels of QX50/QX200/QXISDN4+

Below are presented the front and back panels:

- 1. Ethernet WAN port is used to connect QX to company's network or Internet.
- 2. Ethernet LAN port is used to connect IP phones to QX using switch. Connect this port to PC for initial setup.
- 3. AUDIO IN port is used to connect QX to the radio or any other audio resource to be used for hold music.
- 4. AUDIO OUT port is used to connect QX to a speaker to be used for Paging Group service.
- 5. Reset pin may be used in two ways:
 - Pressing for an instant to initiate a normal restart.
 - Pressing and holding down for 5 seconds or more to carry out a factory reset. This will clear all configurations, saved data (call recordings, voice mails, call history, etc.) and license keys. The default configuration will be restored.
- 6. FXS ports are used to connect analog phones to QX.
- 7. FXO ports are used to connect QX to the PSTN network using standard analog phone service.
- 8. ISDN ports are used to connect QXISDN4+ to the PSTN network using ISDN service.

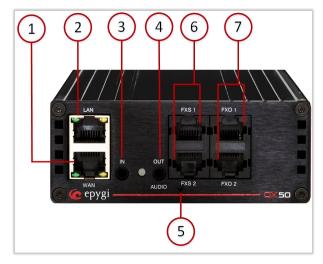


Figure 1: QX50 Front Panel

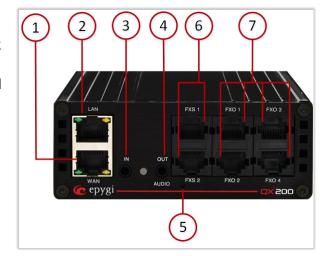


Figure 2: QX200 Front Panel

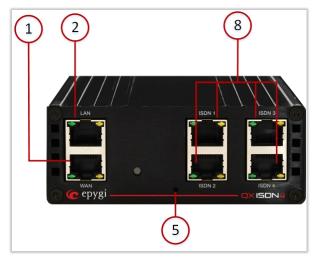


Figure 3: QXISDN4+ Front Panel



- AUX PWR (DC Power) is used to connect two units together. The first unit will power the second by using 12V DC power connector.
- 10. AC Power Supply is used to connect a power cable.
- 11. SD card slot is used to insert an SD card and expand the memory size of device for voice mails, custom messages and call recordings. Warning: Power down the QX before inserting/removing SD memory card.



Figure 4: QX50/QX200 Back Panel



Figure 5: QXISDN4+ Back Panel



3.2 Panels of QX20/QX500

Below are presented the front and back panels:

- 1. Ethernet WAN port is used to connect QX to company's network or Internet.
- 2. Ethernet LAN port is used to connect IP phones to QX using switch. Connect this port to PC for initial setup.
- 3. AUDIO IN port is used to connect QX to the radio or any other audio resource to be used for hold music.
- 4. AUDIO OUT port is used to connect QX to a speaker to be used for Paging Group service.
- 5. USB1 TBD later.
- 6. SD card slot is used to insert a micro SD card and expand the memory size of device for voice mails, custom messages and call recordings.

Warning: Power down the QX before inserting/removing the micro SD memory card.

- 7. ETH port TBD later.
- 8. USB2 TBD later.
- 9. Reset pin can be used in two ways:
 - Pressing for an instant to initiate a normal restart.
 - Pressing and holding down for 10 seconds or more to carry out a factory reset. This will clear all configurations, saved data (call recordings, voice mails, call history, etc.) and license keys. The default configuration will be restored.
- 10. AC Power Supply is used to connect a power cable.
- 11. 5V DC Power supply is used to connect a power cable.

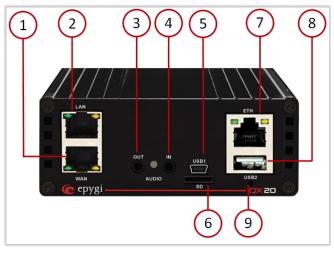


Figure 6: QX20 Front Panel



Figure 7: QX20/QX500 Back Panel



3.3 Panels of QX2000/QX3000

- 1. Two USB ports enable connectivity of a USB flash drive.
- 2. The main power switch is used to apply or remove power from the power supply to the system. Turning off system power with this button removes the main power but keeps standby power supplied to the system. Therefore, you must unplug system before servicing.
- 3. DVD-ROM is used for emergency recovery.
- 4. Two ETH RJ45 interfaces attach the QX to the router. These interfaces are placed in the back panel of the QX.



Figure 8: QX3000 Front Panel

3.4 Front Panel LEDs of QX20/QX50/QX200/QX500/QXISDN4+

System Status	LED Color	State Description
Busy	GREEN	Blinking: normal activity
Info	ORANGE	Blinking: an event occurred; details specified in the System Event section of the Management interface
Fault	RED	On: steady red, system unusable

Table 1: Front Panel LEDs

ETH Interface Status	LED Color	State Description
WAN	GREEN	On: link ok Off: no link Flickering: traffic on the link
LAN	ORANGE	On: full duplex mode Off: half duplex mode

Table 2: Interface LEDs

LED indication during firmware update or reboot

- 1. Power ON steady GREEN LED for about 3 seconds.
- 2. Bootstrap loading steady RED LED for about 3 seconds.
- 3. Steady ORANGE LED for about 15 seconds.
- 4. During Reboot RED/GREEN LEDs are blinking.
- 5. After Reboot Slow blinking GREEN LED (normal activity).



LED indication during emergency firmware update

- 1. Power ON steady GREEN LED for about 3 seconds.
- 2. Bootstrap loading steady RED LED for about 1 second.
- 3. Steady ORANGE LED for about 5 seconds.
- 4. RED LED blinking for about 1 second.
- 5. Steady ORANGE LED for about 1 minute.
- 6. Fast blinking ORANGE LED for about 5 second.
- 7. Reset the board and see the LED indication steps described for firmware update or reboot.

LED indication during emergency firmware update failure

- 1. Power ON steady GREEN LED for about 3 seconds.
- 2. Bootstrap loading steady RED LED for about 1 second.
- 3. Steady ORANGE LED for about 5 seconds.
- 4. RED LED blinking for about 1 second.
- 5. Steady **ORANGE** LED for about 1 minute.
- 6. Fast blinking RED LED for about 5 second.
- 7. Steady ORANGE LED for about 15 seconds.

3.5 Front Panel LEDs of QX2000/QX3000

LED Name	State Description
Power LED	On: power supply ok Off: no power supply or device is still booting
Hard drive activity LED	Off: no hard drive activity On or Blinking: indicates DVD-ROM drive activity when flashing
Two Network activity LEDs	On: device is booting Off: no information Blinking: indicates network activity when flashing
System Overheat LED	On: indicates an overheat condition, caused either by cables obstructing the airflow in the system or the ambient room temperature being too warm Off: no overheat Flickering: indicates a fan failure

Table 3: QX2000/QX3000 Front Panel LEDs



4 QX Installation

4.1 Connection Scenarios for QX20/QX50/QX200/QX500/QXISDN4+

Scenario 1: QX behind a router with IP phones on WAN side

QX is connected to the company's router via WAN interface. IP phones are placed on the WAN side of QX.

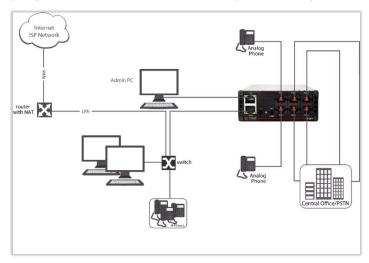


Figure 9: QX behind a router with IP phones on WAN side

In this configuration, the router typically acts as a DHCP server for the LAN and assigns IP addresses to PCs and other devices. QX is connected through its WAN port to one of the ports of the switch and will get an IP address from the router. The IP phones and PCs are also connected to the switch. The Admin PC can be connected to the QX LAN or WAN port to access the QX WEB GUI. **Note:** Since QX uses STUN by default, it will work with most basic routers without any further configuration.

Scenario 2: QX behind a router with IP phones on LAN side

QX is connected to the company's router via WAN interface. IP phones are placed on the LAN side of QX.

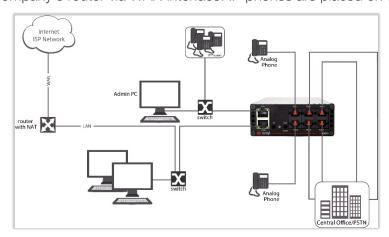


Figure 10: QX behind a router with IP phones on LAN side

This configuration is identical to the previous one, with the difference that IP phones are connected to the QX LAN port. QX can be configured as a DHCP server to provide network parameters to devices on its LAN. The Admin PC can be connected to the QX LAN or WAN port to access the QX WEB GUI.



Scenario 3: QX acting as a Router

QX is acting as a router. QX Ethernet WAN port is directly connected to ISP. The Admin PC, other devices and IP phones are connected to the switch which is connected to the QX LAN port. QX can be configured as a DHCP server to provide network parameters to devices on its LAN.

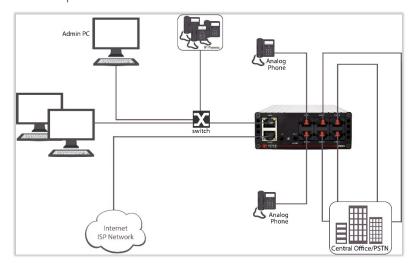


Figure 11: QX acting as a Router

4.1.2 Connection Scenario for QX2000/QX3000

QX is connected to the company's router via LAN interface (Ethernet port). IP phones are placed on the LAN side of QX. The Admin PC, other devices and IP phones are connected to the switch which is connected to the QX Ethernet port. Note: Since QX uses STUN by default, it will work with most basic routers without any further configuration.

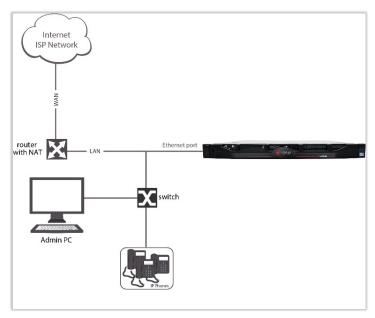


Figure 12: QX behind a router with IP phones on the same network



5 QX Configuration

5.1 Logging in to QX

- 1. Start a browser (Google Chrome, Opera, Mozilla Firefox, etc.) on PC connected to QX.
- 2. Since Firewall is disabled on QX by default, you may connect the QX WEB GUI either from WAN or LAN side of QX.
 - To access from the WAN side, enter http://xxx.xxx.xxx (the IP address assigned by company's DHCP server) in the address field of your browser.
 - To access from the LAN side, enter the default IP address in the address field of your browser.
 - ◆ 172.30.0.1 is the default LAN IP address for QX20/QX50/QX200/QX500 and QXISDN4+.
 - ◆ 192.168.0.200 is the default LAN IP address for QX2000/QX3000.
- 3. The QX Login page will be displayed.

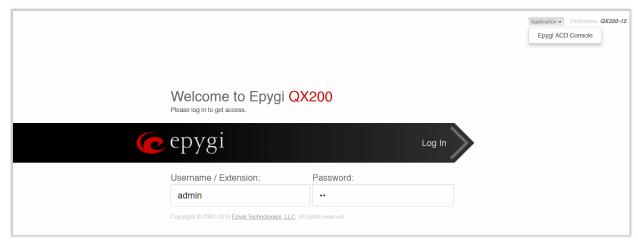


Figure 13: Login page

4. Enter the default credentials (Username: admin and Password: 19) to log into the WEB GUI as an administrator. Note: If you consecutively enter a wrong password and/or username for 5 times you will not be able to log in for five minutes.

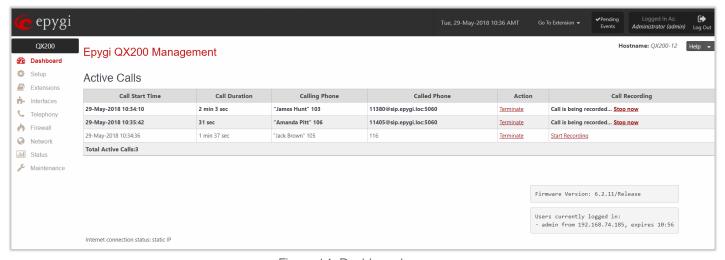


Figure 14: Dashboard menu



5.2 Configuring Network Parameters

The System Configuration Wizard and Internet Configuration Wizard are used to configure network parameters of QX. These wizards should be run upon the first startup of QX.

5.2.1 System Configuration Wizard

The System Configuration Wizard is used to adjust the network parameters for the LAN interface and configure Regional Settings. Note: It is strongly recommended to leave the factory default settings unchanged if their meanings are not fully clear to you.

The System Configuration Wizard consists of the following sections:

- System Configuration
- DHCP Settings for the LAN Interface
- Regional Settings and Preferences
- Emergency Codes and PSTN Access Code Settings
- Call Alert Settings
- Summary

System Configuration

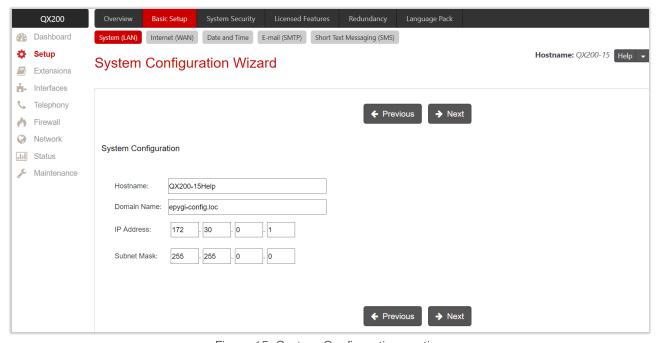


Figure 15: System Configuration section

The System Configuration section is used to configure the following settings (options):

- Hostname
- Domain Name
- IP Address
- Subnet Mask



DHCP Settings for the LAN Interface

The DHCP Settings for the LAN Interface section is used to configure the following settings (options):

- Enable DHCP Server is used to activate DHCP server on QX.
- Dynamic IP Address Range is used to set the IP address pool.
- WINS Server is used to set the IP address for the WINS server.

Note: Make sure there is only one DHCP server on the LAN, otherwise, unpredictable network behavior can occur.

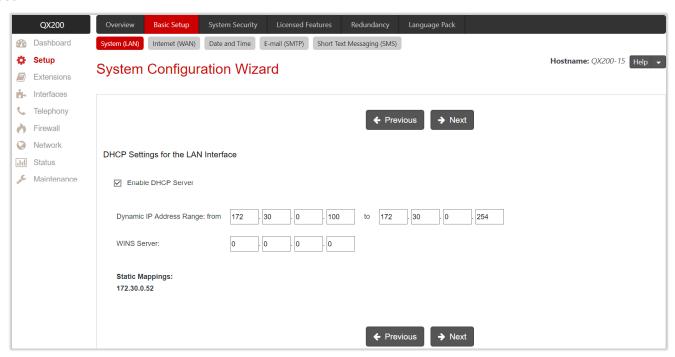


Figure 16: DHCP Settings for the LAN Interface section



Regional Settings and Preferences

Regional Settings are important for the functionality of QX voice subsystem. If your QX is located outside the United States, it is important to properly configure your line connections to the PSTN in your location.

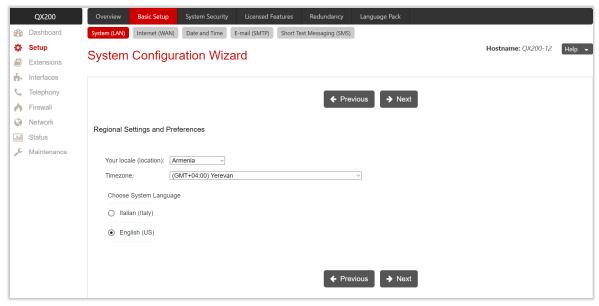


Figure 17: Regional Settings and Preferences section

The Regional Settings and Preferences section is used to configure the following settings (options):

- Your Locale (location) is used to select the location and time zone of QX.
- Timezone is used to select the proper time zone so QX can display the correct time. TIP: QX supports Daylight Savings (DST) correction if it is available for the selected time zone.
- Choose System Language is used to select the language for system voice messages: custom or default English. TIP: This selection is available when a custom Language Pack has been uploaded.



Emergency Codes and PSTN Access Code Settings

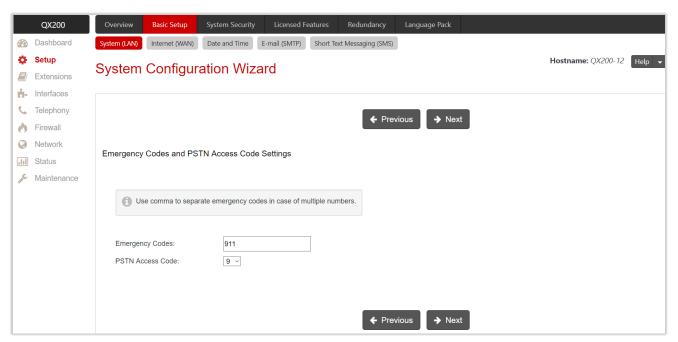


Figure 18: Emergency Codes and PSTN Access Code Settings section

The Emergency Codes and PSTN Access Code Settings section is used to configure the following settings (options):

- Emergency Codes is used to set PSTN number(s) of emergency service(s). For each emergency code, a routing pattern will be generated in the Call Routing Table, allowing faster and easier calls to emergency services. TIP: Use commas to separate emergency codes in case of multiple numbers.
- PSTN Access Code is used to select prefix code for accessing PSTN line through routing table.

Call Alert Settings

This section is used to activate the call alert service and configure settings. The **Call Alert** service is used to notify the designated personnel about emergency calls, as well as calls through the certain call routing rules. The following information will be included in the notification: the routing pattern, the user extension who placed the call, the dialed number and the call Date/Time.

The following settings (options) are available:

- Generate System Event is used to generate and display event notification in the System Events.
- Send Notification via E-mail is used to send a notification to a specified address via e-mail.
- Send Notification via SMS is used to send a notification to a specified number via SMS.
- Leave Voice Message is used to leave a voice mail on defined extension(s) with a voice message.

Note: Use commas to separate email addresses, mobile numbers and user extensions in case of multiple entries.



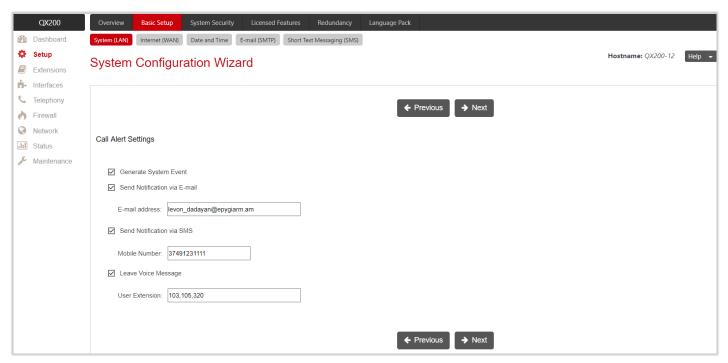


Figure 19: Call Alert Settings section

Summary

This section displays all configured settings (options) before applying them.

Note:

- Finish the wizard and click "OK" to apply the changes made in all sections of the wizard. You must confirm the settings within 20 minutes. Otherwise the device will return back to the previous configuration and reboot.
- If you do not use DHCP for your LAN and you have changed your LAN settings, make sure that the IP address of the PC connected to QX is still within the specified IP address range, otherwise your PC may not connect to QX.



5.2.2 Internet Configuration Wizard

The Internet Configuration Wizard is used to configure or adjust the network parameters for QX WAN interface. Note: It is strongly recommended to leave the factory default settings unchanged if their meanings are not fully clear to you.

The Internet Configuration Wizard consists of the following sections:

- Uplink Configuration
- WAN Interface Configuration
- DNS Settings
- Summary

Uplink Configuration

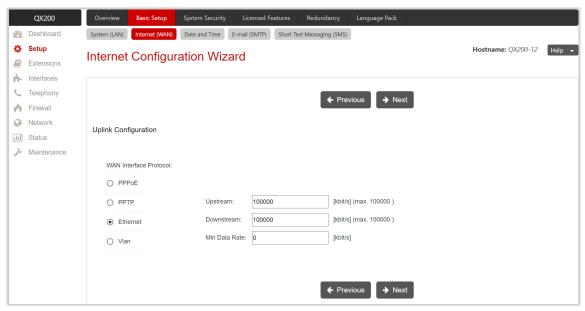


Figure 20: Uplink Configuration section

The Uplink Configuration section is used to configure the following settings (options):

- WAN Interface Protocol is used to select the protocol for the WAN interface. Based on this selection the wizard configuration sections may differ. The following protocols are available:
 - PPPoE
 - > PPTP
 - Ethernet
 - VLAN (TIP: This option becomes available only when VLAN is configured on QX.)
- WAN Interface Bandwidth is used to specify the upstream and downstream speeds in Kbit/s, helping to assure the quality of IP calls. IP call loses the voice quality if there is no available bandwidth. When the limits of a bandwidth capacity are approaching, another IP call will be rejected.
- Min Data Rate is used to set the amount of upstream bandwidth that ought to remain for data traffic even if voice applications use the entire available upstream bandwidth. The value selected here needs to be smaller than the upstream bandwidth.



PPPoE

- Keep Connection Alive is used to keep the connection alive by sending control packets for the link state verification.
- Authentication Settings is used to set the authentication parameters (Username and Password) to register
 on the ISP server.
- **Dial Behavior** is used to select the **Dial Behavior** type.
 - > Dial manually if selected, a button will be displayed on the Dashboard to switch the connection on/off.
 - ➤ Always connected if selected, the connection will always stay active and connected.
- IP Address Assignment is used to select the IP address assignment type:
- Obtain an IP Address automatically if selected, QX will get the IP address from local network or ISP automatically.
- ➤ Use the following IP Address is used to set the IP address manually.

PPTP

- Obtain an IP Address automatically if selected, QX will get the IP address from local network or ISP automatically.
- Use the following IP Address is used to set the IP address manually.

Click **Next** to continue the configuration of **PPP/PPTP** settings:

- PPTP Server is used to set the IP address of PPTP server.
- Encryption is used to select the encryption for the traffic over PPTP interface.
- Keep Connection Alive is used to keep the connection alive by sending control packets for the link state verification.
- Authentication Settings is used to set the authentication parameters (Username and Password) to register on the ISP server.
- **Dial Behavior** is used to select the **Dial Behavior** type:
 - > Dial manually if selected, a button will be displayed on the Dashboard to switch the connection on/off.
- Always connected if selected, the connection will always stay active and connected.
- IP Address Assignment is used to select the IP address assignment type:
 - Obtain an IP Address automatically if selected, QX will get the IP address from local network or ISP automatically.
 - Use the following IP Address is used to set the IP address manually.



Ethernet

- Obtain an IP Address automatically if selected, QX will get the IP address from local network or ISP automatically.
- Use the following IP Address is used to set the IP address manually.

VLAN

VLAN ID is used to select VLAN ID from the configured VLAN list.

Click **Next** to continue the configuration of the **VLAN IP Configuration** settings:

- Obtain an IP Address automatically if selected, QX will get the IP address from local network or ISP automatically.
- Use the following IP Address is used to set the IP address manually.

WAN Interface Configuration

The WAN Interface Configuration section is used to set the MAC address of QX. This might be necessary if the ISP requires a specified MAC address (e.g. for authentication).

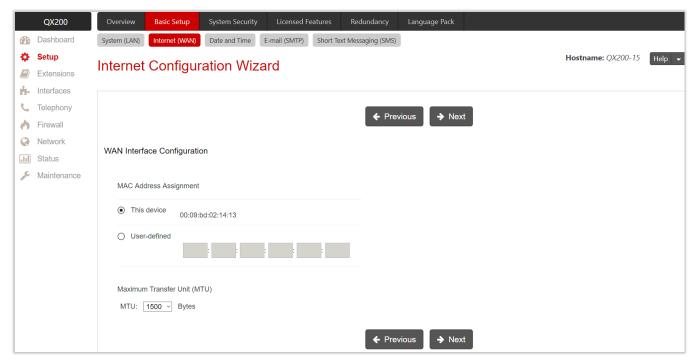


Figure 21: WAN Interface Configuration page

The following settings (options) are available:

- This device is used to select the default MAC address of the WAN interface.
- User-defined is used to set the MAC Address manually.
- MTU is used to select the maximum size of packet that can be sent in a packet or frame-based network such as the Internet. QX supports packet fragmentation. TIP: The default MTU size is 1500 Bytes for Ethernet protocol and 1400 Bytes for PPPoE.



DNS Settings

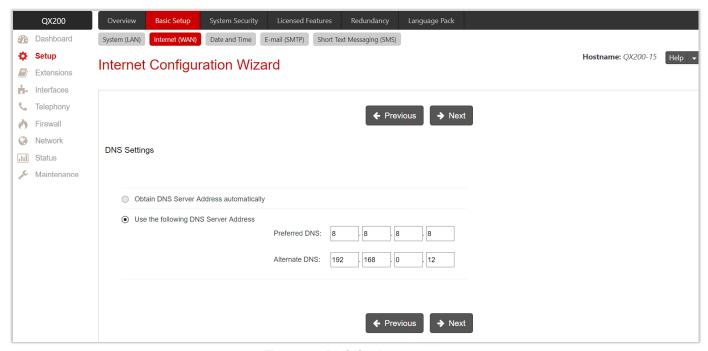


Figure 22: DNS Settings section

The DNS Settings section is used to configure the following settings (options):

- Obtain DNS Server Address automatically if selected, QX will get the IP address of DNS server from local network or ISP automatically.
- Use the following DNS Server Address is used to manually assign a name server as follows:
- > Preferred DNS is used to set the IP address of name server.
- Alternate DNS is used to set the IP address of the secondary name server that will be used if the main name server cannot be accessed.

Summary

This section displays all configured settings (options) before applying them.

Note:

- Finish the wizard and click "OK" to apply the changes made in all sections of the wizard. You must confirm the settings within 20 minutes. Otherwise the device will return back to the previous configuration and reboot.
- Internet Configuration Wizard is renamed to Uplink Configuration Wizard on QX2000 and QX3000.



5.3 Configuring Extensions

Navigating to the **Extensions Management** page for the first time after the QX initial start or configuration restore you will be prompted to choose the extensions length applicable to all QX default extensions.

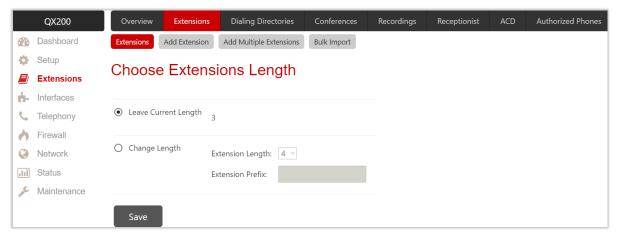


Figure 23: Choose Extensions Length page

The following options are available:

- Leave Current Length by default, the extension length is 3 on QX20, QX50, QX200, QX500, QXISDN4+ and is 4 on the QX2000 and QX3000. In front of this selection, the actual length of configured extensions is displayed.
- Change Length changes the length of extensions as follows:
 - Extension Length is used to select the length of extensions. It will be applied for all existing extensions on QX.
 - Extension Prefix is used to set the prefix the existing extensions as well as the newly created extensions should start with. The prefix cannot start with the digits 0 or 9.

Attention:

- In case of saving the settings on the Choose Extensions Length page, all existing extensions will lose the
 custom voice messages and voice mails in the mailbox. The device will be rebooted. The Choose
 Extensions Length page will not appear again unless the default configuration settings are not restored
 on QX.
- QX20 is limited to 100, QX50/QXISDN4+ to 200, QX200 to 400, QX500 to 800, QX2000 to 2400 and QX3000 to 3400 extensions in total.



To add a new Extension:

- 1. Click Add Extension.
 - Enter the extension number.
 - Select the extension type. The following types are available: Auto Attendant, User Extension, Pickup Group, Call Park, Paging Group and Recording Box.
- 2. Click Save to add the new extension to the Extension Management table.

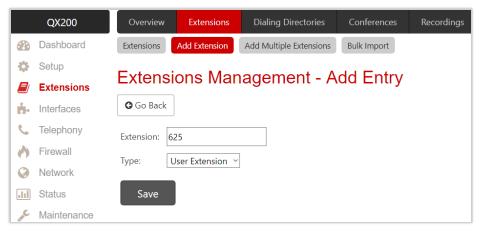


Figure 24: Extensions Management – Add Entry page

Two types of user extensions, active and inactive, can be created on QX.

- Active extensions are those that are attached to the line (IP or FXS), can place and receive calls and use available telephony services.
- Inactive extensions are those that are not attached to the line (IP or FXS), cannot place and receive calls and use only part of telephony services.

Note:

- Manually adjust the routing rules for calling extensions with custom length manually since the call routing rule(s) for calling PBX extensions will not be adjusted automatically.
- A maximum extension length is 20 digits.
- The Recording Box extension type becomes available if the Call Recording feature is activated on QX.



5.4 Configuring IP Phones

Epygi supported IP phones can be configured with QX using Plug and Play (PnP) or Auto Configuration services.

PnP Configuration

The PnP service allows the supported IP phones to be automatically configured when having a connection to QX and are in a factory default state.

To configure IP phones with QX using PnP service:

- 1. Go to the Interfaces→IP Lines→ IP Lines Settings page.
- 2. Check and configure (if needed) the following options:
 - > The Enable PnP for IP lines option should be selected, to activate PnP service.
 - ➤ Select the interface from the Configure IP phones from drop-down list which will be used for PnP service. TIP: IP phones can be connected to QX via LAN, WAN or VLAN interface. The QX will provide a configuration file to the phones that are locally connected to the same network.
- 3. Click Save to apply the changes.
- 4. Connect IP phone from selected side and factory reset it to start PnP configuration.

Note:

- For Mitel (Aastra) phones, during the PnP process the phone will ask to choose the preferred extension. For other IP phones (or if there is no input from the user) the IP phone will acquire the extension that is attached to the first free IP Line.
- The PnP service will work only if there is at least one free IP line attached to extension.
- The PnP service will not work for IP phones that have already been configured on any other IP line.

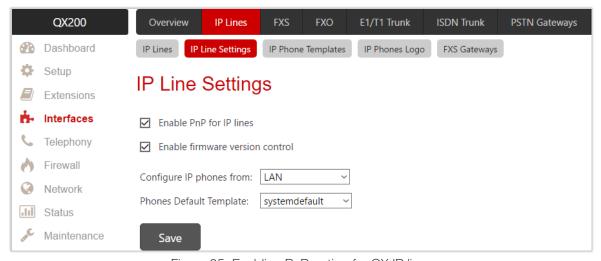


Figure 25: Enabling PnP option for QX IP lines



Auto Configuration

The **Auto Configuration** service simplifies the configuration procedure of the supported IP phones.

To configure IP phones with QX using **Auto Configuration** service:

- Go to the Interfaces→IP Lines page.
- 2. Select a free IP line which is attached to extension.
- Click on the IP Line
 hyperlink, the IP Line
 Settings IP Line# page will
 be opened.
- Select the IP Phone option to configure the line and choose the model of the IP phone from the Phone Model drop-down list.
 - Enter the MAC Address of the phone. TIP: MAC addresses of IP phones are usually printed on the back of the phone.
 - Set the number for intended simultaneous calls (the total number of active and held calls), in the Line Appearance field.
 - Username and Password are used to set the authentication parameters

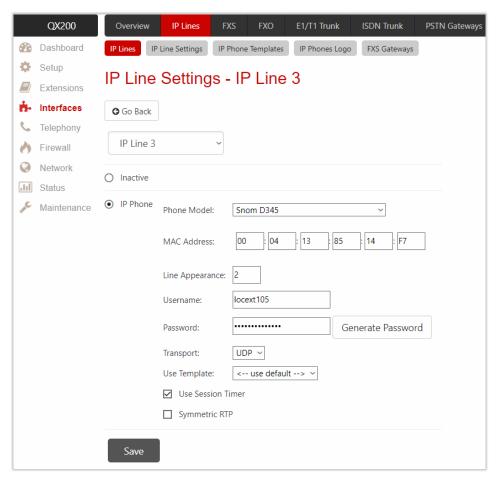


Figure 26: Configuring an IP Line on QX

to register the IP phone on QX. By default, QX assigns unique username and password to each IP line. You may either keep these values or specify new ones. **TIP:** The **Username** and **Password** should match on both QX and IP phone for the successful registration.

- Transport drop-down list is used to select the SIP transport UDP, TCP or TLS. For TLS you may activate the TLS certificate update mechanism from IP Phone to obtain the latest certificate generated by QX.
- 5. Click Save to apply the changes.
- 6. Once the **IP line** is configured, connect the IP phone to QX and factory reset it to complete auto configuration.



Supported IP Phones

Below is the list of IP phones that are officially supported by Epygi and can be configured with the QX using Plug and Play (PnP) or Auto Configuration services.

Vendor	Model	SW/FW Version	PnP Support
Akuvox	R15(P)	15.0.5.235	Yes
Akuvox	SP-R53(P)	53.0.6.115	Yes
Alcatel	IP2015 (IP15)	1.0.7A-0	No
Alcatel	Temporis IP100	1.0.6A-0	No
Alcatel	Temporis IP150	1.0.6A-0	No
Alcatel	Temporis IP200	13.60.0.89	Yes
Alcatel	Temporis IP300	1.0.7B-0	No
Alcatel	Temporis IP600	14.60.0.89	Yes
Alcatel	Temporis IP700G	1.0.7A-0	No
Alcatel	Temporis IP800	15.60.0.89	Yes
AudioCodes	310HD	1.6.0_build_37	No
AudioCodes	320HD	1.6.0_build_37	No
Cisco	SPA303	7.4.9c	Yes
Cisco	SPA501G	7.4.9c	Yes
Cisco	SPA509G	7.4.9c	Yes
Cisco	SPA525G2	7.4.9c	Yes
Fanvil	C58/C58P	2.3.233.129	No
Fanvil	C62/C62P	2.3.235.128	No
Fanvil	C400	11.20.12.2.B	No
Fanvil	C600	11.20.12.2.B	No
Fanvil	F52/F52P	2.3.123.78	No
Fanvil	H2/H2S	2.0.2.2776	Yes
Fanvil	НЗ	2.0.2.2770	Yes
Fanvil	H5	2.0.2.2770	Yes
Fanvil	X3/X3P	1.3.511.1821	Yes
Fanvil	X3S/X3G	2.0.3.3049	Yes
Fanvil	X4/X4G/X4S	2.0.2.2830	Yes
Fanvil	X5/X5G	1.3.511.1821	Yes
Fanvil	X5S	R0.7.0.1	Yes
Fanvil	X6	R0.5.3	Yes
Grandstream	GXP1100	1.0.8.6	Yes
Grandstream	GXP1105	1.0.8.6	Yes
Grandstream	GXP1160	1.0.8.6	Yes
Grandstream	GXP1165	1.0.8.6	Yes
Grandstream	GXP1400	1.0.8.6	Yes
Grandstream	GXP1405	1.0.8.6	Yes
Grandstream	GXP1450	1.0.8.6	Yes
Grandstream	GXP1615/1610	1.0.4.55	Yes
Grandstream	GXP1625/1620	1.0.4.55	Yes
Grandstream	GXP1628	1.0.4.55	Yes
Grandstream	GXP1630	1.0.4.55	Yes



Vendor	Model	SW/FW Version	PnP Support
Grandstream	GXP1760	1.0.0.48	No
Grandstream	GXP1782/1780	1.0.0.48	No
Grandstream	GXP2100	1.0.8.6	Yes
Grandstream	GXP2110	1.0.8.6	Yes
Grandstream	GXP2120	1.0.8.6	Yes
Grandstream	GXP2124	1.0.8.6	Yes
Grandstream	GXP2130	1.0.7.99	Yes
Grandstream	GXP2135	1.0.7.99	Yes
Grandstream	GXP2140	1.0.7.99	Yes
Grandstream	GXP2160	1.0.7.99	Yes
Grandstream	GXP2170	1.0.7.99	Yes
Grandstream	GXP2200	1.0.3.27	Yes
Grandstream	GXV3140	1.0.7.80	Yes
Grandstream	GXV3175	1.0.3.76	Yes
Grandstream	GXV3240	1.0.3.62	Yes
Grandstream	GXV3275	1.0.3.62	Yes
Htek	UC902	2.0.4.4.33	No
Htek	UC903	2.0.4.4.33	No
Htek	UC912G	2.0.4.4.33	No
Htek	UC912P	2.0.4.4.33	No
Htek	UC923	2.0.4.4.33	No
Htek	UC924	2.0.4.4.33	No
Htek	UC924E	2.0.4.4.33	No
Htek	UC926	2.0.4.4.33	No
Htek	UC926E	2.0.4.4.33	No
Mitel (Aastra)	6730	3.3.1.4305-SIP	Yes
Mitel (Aastra)	6731	3.3.1.4305-SIP	Yes
Mitel (Aastra)	6735	3.3.1.8140-SIP	Yes
Mitel (Aastra)	6737	3.3.1.8140-SIP	Yes
Mitel (Aastra)	6739	3.3.1.4305-SIP	Yes
Mitel (Aastra)	6753	3.3.1.4305-SIP	Yes
Mitel (Aastra)	6755	3.3.1.4305-SIP	Yes
Mitel (Aastra)	6757	3.3.1.4305-SIP	Yes
Mitel (Aastra)	9143	3.3.1.4305-SIP	Yes
Mitel (Aastra)	9480	3.3.1.4305-SIP	Yes
Mitel	6863	4.2.0.2023-SIP	Yes
Mitel	6865	4.2.0.2023-SIP	Yes
Mitel	6867	4.2.0.2023-SIP	Yes
Mitel	6869	4.2.0.2023-SIP	Yes
Panasonic	KX-HDV130	03.004	Yes
Panasonic	KX-HDV130NE, KX-HDV130X	06.101	Yes
Panasonic	KX-HDV230	03.004	Yes
Panasonic	KX-HDV230NE, KX-HDV230X	06.101	Yes
Panasonic	KX-TGP550T04	12.17	No
Panasonic	KX-UT123 (NE/RU/X)	01.302	No



Vendor	Model	SW/FW Version	PnP Support
Panasonic	KX-UT136 (NE/RU/X)	01.302	No
Polycom	SoundPoint IP 330	3.3.5.0247	Yes
Polycom	SoundPoint IP 331	4.0.13.1445	Yes
Polycom	SoundPoint IP 335	4.0.13.1445	Yes
Polycom	SoundPoint IP 450	4.0.13.1445	Yes
Polycom	SoundPoint IP 550	4.0.13.1445	Yes
Polycom	SoundPoint IP 650	4.0.13.1445	Yes
Polycom	SoundPoint IP 670	4.0.13.1445	Yes
Polycom	SoundStation IP 5000	4.0.13.1445	Yes
Polycom	SoundStation IP 6000	4.0.13.1445	Yes
Polycom	VVX 300/310	5.7.0.11768	Yes
Polycom	VVX 301/311	5.7.0.11768	No
Polycom	VVX 400/410	5.7.0.11768	No
Polycom	VVX 401/411	5.7.0.11768	No
Polycom	VVX 500	5.7.0.11768	No
Polycom	VVX 600	5.7.0.11768	Yes
Polycom	VVX 1500	5.7.0.11768	Yes
QOSIP	Q7104/Q7204	1.0.3.98	No
snom	300	8.4.35	Yes
snom	320	8.4.35	Yes
snom	360	8.4.35	Yes
snom	370	8.7.5.35	Yes
snom	720	8.9.3.60	Yes
snom	760	8.9.3.60	Yes
snom	821	8.7.5.35	Yes
snom	870	8.7.5.35	Yes
snom	D345	8.9.3.60	Yes
snom	D375	8.9.3.60	Yes
snom	D710/710	8.9.3.60	Yes
snom	D715/715	8.9.3.60	Yes
snom	D725	8.9.3.60	Yes
snom	D745	8.9.3.60	Yes
snom	D765	8.9.3.60	Yes
snom	m9	9.4.7	Yes
snom	MeetingPoint	8.7.5.35	Yes
snom	M700 (M85/M65/M25)	03.24.0007	Yes
Spectralink	KIRK Wireless Server 300	PCS14C_	No
Spectralink	KIRK Wireless Server 6000	PCS14C_	No
VTech	ErisStation VCS754	1.1.4.0-0	No
VTech	ErisTerminal VSP600 (VSP601)	1.1.4.1-0	No
VTech	ErisTerminal VSP715	1.1.4.0-0	No
VTech	ErisTerminal VSP725	1.1.4.0-0	No
VTech	ErisTerminal VSP726	2.0.3.2-0	Yes
VTech	ErisTerminal VSP735	1.1.4.0-0	No
VTech	ErisTerminal VSP736	2.0.3.2-0	Yes



Vendor	Model	SW/FW Version	PnP Support
Yealink	CP860	37.81.0.10	Yes
Yealink	CP920	78.81.0.15	Yes
Yealink	CP960	73.80.0.25	Yes
Yealink	SIP-T19P	31.72.0.1	Yes
Yealink	SIP-T19P E2	53.81.0.25	Yes
Yealink	SIP-T20P	9.72.0.1	Yes
Yealink	SIP-T21P	34.72.0.1	Yes
Yealink	SIP-T21P E2	52.81.0.25	Yes
Yealink	SIP-T22P	7.72.0.1	Yes
Yealink	SIP-T23G(P)	44.81.0.25	Yes
Yealink	SIP-T26P	6.72.0.1	Yes
Yealink	SIP-T27G	69.81.0.25	Yes
Yealink	SIP-T27P	45.81.0.25	Yes
Yealink	SIP-T28P	2.72.0.1	Yes
Yealink	SIP-T29G	46.81.0.25	Yes
Yealink	SIP-T32G	32.70.0.130	Yes
Yealink	SIP-T38G	38.70.0.125	Yes
Yealink	SIP-T40G	76.81.0.110	Yes
Yealink	SIP-T40P	54.81.0.110	Yes
Yealink	SIP-T41P	36.81.0.25	Yes
Yealink	SIP-T41S	66.81.0.25	Yes
Yealink	SIP-T42G	29.81.0.25	Yes
Yealink	SIP-T42S	66.81.0.25	Yes
Yealink	SIP-T46G	28.81.0.25	Yes
Yealink	SIP-T46S	66.81.0.25	Yes
Yealink	SIP-T48G	35.81.0.25	Yes
Yealink	SIP-T48S	66.81.0.25	Yes
Yealink	SIP VP-T49G	51.80.0.100	Yes
Yealink	SIP-T52S	70.81.0.10	Yes
Yealink	SIP-T54S	70.81.0.10	Yes
Yealink	SIP-T56A	58.80.0.25	Yes
Yealink	SIP-T58A/V	58.80.0.25	Yes
Yealink	VP-530	23.70.0.40	Yes
Yealink	W52P	25.30.0.20	Yes

Table 4: Supported IP Phones

For more information how to configure and use IP phones with QX, refer to the <u>Configuring Epygi Supported IP Phones with QX IP PBXs</u> guide.



5.5 Changing Admin Passwords

For security reasons, it is recommended to change the default passwords for admin.

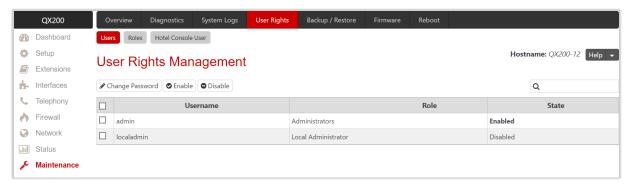


Figure 27: User Rights Management – Users page

To change the GUI Access Password:

- 1. Go to the Maintenance→User Rights→Users page.
- 2. Tick the checkbox next to the admin entry and click Change Password.
- 3. The Change Password page will be opened. Select GUI Access Password tab.
 - ➤ Enter the old password (by default 19)
 - Enter a new password and then re-enter it to confirm.
- 4. Click Save to change the password.

The Phone Access Password is used for authentication purposes (when connecting to 3PCC application using admin account) as well as for Administrator Login (*75).

To change the **Phone Access Password**:

- 1. Tick the checkbox next to the admin entry and click Change Password.
- 2. The Change Password page will be opened. Select Phone Access Password tab.
 - > Enter a new password and then re-enter it to confirm.
- 3. Click Save to change the password.

Note:

- GUI access password can consist of lowercase and uppercase alphabetic characters, digits and symbols. A maximum password length is 20 characters.
- The Phone Access Password can consist of only digits. A maximum password length is 20 characters.
- In order to keep passwords safe, make sure you write it down in a safe place and don't share it with others.



5.6 Configuring NAT Traversal

Network Address Translation (NAT) is a technology most commonly used by firewalls and routers to allow multiple devices on a LAN with **private** IP addresses to share a single **public** IP address. One of the technical challenges to implementing a SIP based VoIP solution is making everything work when a firewall and/or NAT is deployed between devices exchanging data.

If QX is kept within a private network behind a NAT router or firewall, we recommend either using **STUN** or **Manual NAT Traversal**.

Note: STUN and Manual NAT Traversal services are working on QX WAN interface only.

To configure and use STUN on QX

- Go to the Telephony→NAT Traversal→General page, select the Automatic option and click Save to apply changes.
- 2. Go to the Telephony-NAT Traversal-SIP Parameters page, select the Use STUN option and click Save to apply changes. TIP: Only SIP UDP transport is supported for STUN.
- 3. Go to the Telephony→NAT Traversal→RTP Parameters page, select the Use STUN option and click Save to apply changes.
- 4. Go to the Telephony-NAT Traversal-STUN Parameters page, configure STUN Server parameters, by default Epygi STUN Server (stun.epygi.com) is used.

Note: STUN is not a self-contained NAT traversal solution applicable in all NAT deployment scenarios and does not work correctly with all of them. STUN does work with three types of NAT: Full Cone NAT, Restricted Cone NAT, and Port Restricted Cone NAT. STUN doesn't work with Symmetric NAT.

To configure and use Manual NAT Traversal on QX

- Go to the Telephony→NAT Traversal→General page, select the Force option and click Save to apply changes.
- 2. Go to the Telephony-NAT Traversal-SIP Parameters page, select the Use Manual NAT Traversal option. Set the IP address of NAT router into the Mapped Host field. For Mapped Port, set the corresponding port number of router. Configure the manual mappings for TCP and TLS, if needed. Click Save to apply changes.
- 3. Go to the Telephony-NAT Traversal-RTP Parameters page, select the Use Manual NAT Traversal option. Set the IP address of NAT router into the Mapped Host field. For Mapped RTP/RTCP Port Range, set the corresponding port range of router. Click Save to apply changes.
- 4. Set up port forwarding on the NAT router to forward SIP and RTP traffic to the QX.

Note: Manual NAT Traversal only works with Internet connections that have static IP addresses.

For more information on how to configure and use **NAT Traversal**, refer to the **NAT Traversal** with Epygi QXs guide.



6 Troubleshooting

IP Phone Configuration

To make sure the IP phone is configured properly, do the following:

- Go to Status→System Status→IP Lines Registration tab to see if IP Line registration is successful.
- Dial ***74** to get the line information.
- Make an outgoing call and accept incoming calls.

PSTN Calls

If the QX is connected to PSTN network via the E1/T1, FXO or ISDN interface, verify the functionality of PSTN calls:

- 1. Make an outbound PSTN call by dialing 9 + PSTN number or 0 + PSTN number.
- 2. Arrange to receive an incoming call. The incoming PSTN calls will be routed to the auto attendant by default, and the caller has to enter a valid extension number, e.g., 101, followed by the # sign to reach the connected IP/analog phone of the QX.

SIP Calls

Dial 88888# and you will hear a voice message that confirms you have successfully established an IP call. If this call is not successful, check that the network cables are connected properly.

If the system doesn't seem to be working properly, even when all cables are connected properly, it may be helpful to **Start Network Diagnostics:** the WAN link, IP configuration, gateway, DNS server, and STUN-NAT will be checked.

To start diagnostics, go to the Maintenance Diagnostics page and click Start Network Diagnostics. If diagnostics is successful, but you are still unable to place a call to 88888#, then check the SIP registration status by going to Status System Status PRegistration Status page. The Detected Connection Type is shown, along with SIP registration information for the auto attendant and each connected extension.

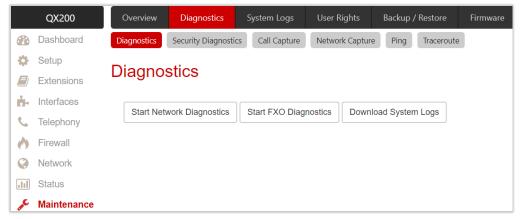


Figure 28: Diagnostics - Start Network Diagnostics page

If QX is placed behind a NAT router and STUN is enabled, the detected connection type and the IP address of this router's WAN port are displayed.



QX cannot work behind a NAT router if **Detected Connection Type** is one of the following:

- Unknown connection unexpected error
- Symmetric NAT
- Symmetric Firewall
- Blocked UDP

If you get one of the above-mentioned **Detected Connection Types**, either place QX ahead of the router, or configure Manual NAT Traversal. If you are still having issues, contact Epygi Technical Support.

7 Registering on Epygi Support Portal

It is recommended to register your QX on **Epygi Technical Support Center**. Registration with a QX valid serial number will give you access to **Epygi Support Portal** to download the QX new firmware, manuals and other supplementary information.

The **Epygi Support Portal** allows to submit requests concerning technical problems as well as refer to the **Epygi** Forum section.



Figure 29: Register Your Device in Technical Support Center page

To register your device:

- Go to Register Your Device in Technical Support Center page, which will appear when administrating the QX first time.
- 2. Fill out and complete the registration form (Figure 30):
 - Provide the serial number of your QX (located on a label on the bottom of QX), as well as the purchase date.
 - Fill out all fields and record the **Username** and **Password** in a safe place. You will need it for accessing the Epygi SIP server.

Note: If you have any issues with registering or have questions about products and services, send an e-mail to <u>sales@epygi.com</u>.



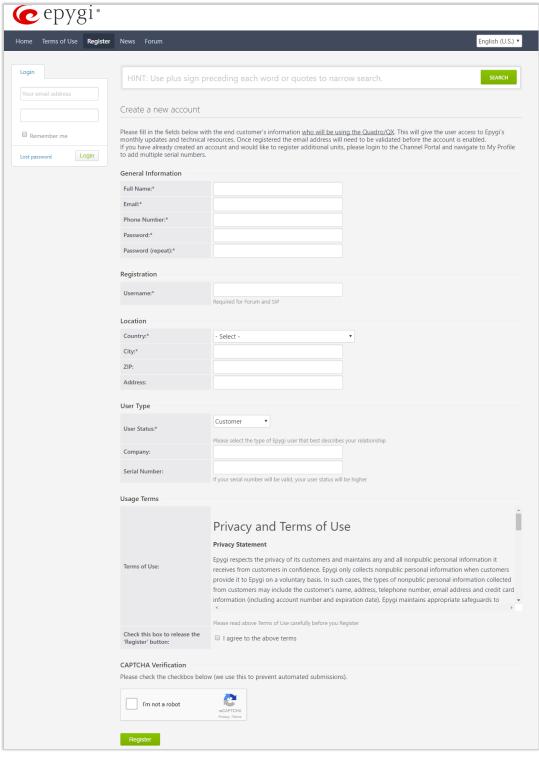


Figure 30: Account Registration form



8 Registering on Epygi SIP Server

Epygi maintains a SIP Server that can be used to call between QX devices. From SIP enabled QX devices you can make phone calls to other people owning such devices over the Internet (or local network)

Calls to subscribed SIP addresses on Epygi Server can be made by anyone! You do not need to register with us to call one of our registered customers. Simply make a call to the SIP address over Epygi Server.



Figure 31: E pygi's SIP Server

How it works: To subscribe SIP addresses at Epygi Server you need to be the owner of one (or more) of our devices. After registering them in Epygi Technical Support Center you can login to our SIP server's customer pages. There you will find more information how to create new SIP addresses (subscriptions). This service is free of charge.



Log in to the Epygi SIP Server at <u>sip.epygi.com</u>. Use the same <u>username</u> and <u>password</u> you used to access <u>Epygi Support Portal</u>.

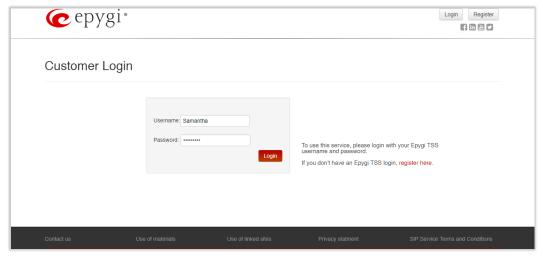


Figure 32: Customer Login page

The Extension Number is the eight-digit SIP number assigned to your extension. The first five digits are fixed by the SIP Server and cannot be changed, while the last three digits are configurable.

To add a new extension:

- 1. Click the + (Add new extension).
- 2. The Add Record window will be opened.
 - Enter the user information for registering a new extension on SIP Server.
 - Click Submit to create a new extension.

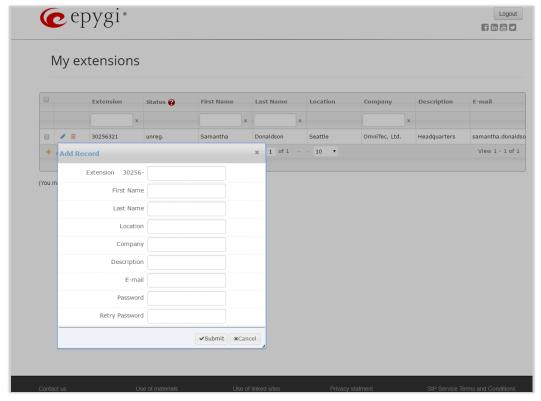


Figure 33: Add New Extension page



The My extensions table shows unreg. in the Status column. This entry will change to reg. when the required settings in the QX are complete and the QX extension successfully registers on the SIP Server.

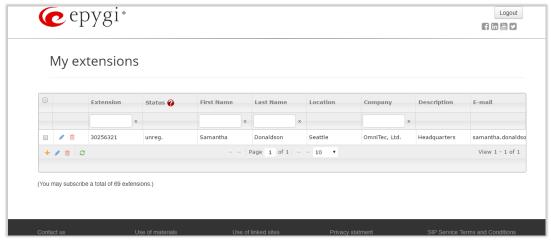


Figure 34: My extension page

9 References

Refer to the below listed recourses to get more information about the configurations described in this guide:

- Manual-II: Administration Guide for QX IP PBXs
- Manual-III: User Guide for QX IP PBXs
- System Capacity of QX IP PBXs
- Configuring Epygi Supported IP Phones

Find the above listed documents on **Epygi Support Portal**.



10 Software License Agreement

EPYGI TECHNOLOGIES, LLC. Software License Agreement

THIS IS A CONTRACT.

CAREFULLY READ ALL THE TERMS AND CONDITIONS CONTAINED IN THIS AGREEMENT. USE OF THE QX AND QUADRO HARDWARE AND OPERATIONAL SOFTWARE PROGRAM INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS. IF YOU DO NOT AGREE TO THESE TERMS AND CONDITIONS, YOU MAY NOT USE THE HARDWARE OR SOFTWARE.

- 1. <u>License.</u> Epygi Technologies, LLC. (the "Licensor"), hereby grants to you a non-exclusive right to use the QX or Quadro Operational Software program, the documentation for the software and such revisions for the software and documentation as the Licensor may make available to you from time to time (collectively, the "Licensed Materials"). You may use the Licensed Materials only in connection with your operation of your QX or Quadro. You may not use, copy, modify or transfer the Licensed Materials, in whole or in part, except as expressly provided for by this Agreement.
- 2. Ownership. By paying the purchase price for the Licensed Materials, you are entitled to use the Licensed Materials according to the terms of this Agreement. The Licensor, however, retains sole and exclusive title to, and ownership of, the Licensed Materials, regardless of the form or media in or on which the original Licensed Materials and other copies may exist. You acknowledge that the Licensed Materials are not your property and understand that any and all use and/or the transfer of the Licensed Materials is subject to the terms of this Agreement.
- 3. Term. This license is effective until terminated. This license will terminate if you fail to comply with any terms or conditions of this Agreement or you transfer possession of the Licensed Materials to a third party in violation of this Agreement. You agree that upon such termination, you will return the Licensed Materials to the Licensor, at its request.
- 4. No Unauthorized Copying or Modification. The Licensed Materials are copyrighted and contain proprietary information and trade secrets of the Licensor. Unauthorized copying, modification or reproduction of the Licensed Materials is expressly forbidden. Further, you may not reverse engineer, decompile, disassemble or electronically transfer the Licensed Materials, or translate the Licensed Materials into another language under penalty of law.
- 5. Transfer. You may sell your license rights in the Licensed Materials to another party that also acquires your QX or Quadro product. If you sell your license rights in the Licensed Materials, you must at the same time transfer the documentation to the acquirer. Also, you cannot sell your license rights in the Licensed Materials to another party unless that party also agrees to the terms and conditions of this Agreement. Except as expressly permitted by this section, you may not transfer the Licensed Materials to a third party.
- 6. Protection And Security. Except as permitted under Section 5 of this Agreement, you agree not to deliver or otherwise make available the Licensed Materials or any part thereof to any person other than the Licensor or its employees, without the prior written consent of the Licensor. You agree to use your best efforts and take all reasonable steps to safeguard the Licensed Materials to ensure that no unauthorized person shall have access thereto and that no unauthorized copy, publication, disclosure or distribution thereof, in whole or in part, in any form, shall be made.
- 7. Limited Warranty. The only warranty the Licensor makes to you in connection with this license is that the media on which the Licensed Materials are recorded will be free from defects in materials and workmanship under normal use for a period of one (1) year from the date of purchase (the "Warranty Period"). If you determine within the Warranty Period that the media on which the Licensed Materials are recorded are defective, the Licensor will replace the media without charge, as long as the original media are returned to the Licensor, with satisfactory proof of purchase and date of purchase, within the Warranty Period. This warranty is limited to you as the licensee and is not transferable. The foregoing warranty does not extend to any Licensed Materials that have been damaged as a result of accident, misuse or abuse.

EXCEPT FOR THE LIMITED WARRANTY DESCRIBED ABOVE, THE LICENSED MATERIALS ARE PROVIDED ON AN "AS IS" BASIS. EXCEPT AS DESCRIBED ABOVE, THE LICENSOR MAKES NO REPRESENTATIONS OR WARRANTIES THAT THE LICENSED MATERIALS ARE, OR WILL BE, FREE FROM ERRORS, DEFECTS, OMISSIONS, INACCURACIES, FAILURES, DELAYS OR INTERRUPTIONS INCLUDING, WITHOUT LIMITATION, TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, LACK OF VIRUSES AND ACCURACY OR COMPLETENESS OF RESPONSES, CORRESPONDENCE TO DESCRIPTION OR NON-INFRINGEMENT. THE ENTIRE RISK ARISING OUT OF THE USE OR PERFORMANCE OF THE LICENSED MATERIALS REMAINS WITH YOU.

8. LIMITATION OF LIABILITY AND REMEDIES. IN NO EVENT SHALL THE LICENSOR OR ANY OTHER PARTY WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION OR DELIVERY OF THE LICENSED MATERIALS BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, DIRECT, INDIRECT, SPECIAL, PUNITIVE OR OTHER DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF DATA, LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR OTHER PECUNIARY LOSS, ARISING OUT OF THE USE OF OR INABILITY TO USE THE LICENSED MATERIALS, EVEN IF THE LICENSOR OR SUCH OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. YOU AGREE THAT YOUR EXCLUSIVE REMEDIES, AND THE LICENSOR'S OR SUCH OTHER PARTY'S ENTIRE LIABILITY WITH RESPECT TO THE LICENSED MATERIALS, SHALL BE AS SET FORTH HEREIN, AND IN NO EVENT SHALL THE LICENSOR'S OR SUCH OTHER PARTY'S LIABILITY FOR ANY DAMAGES OR LOSS TO YOU EXCEED THE LICENSE FEE PAID FOR THE LICENSE MATERIALS.

The foregoing limitation, exclusion and disclaimers apply to the maximum extent permitted by applicable law.



- 9. <u>Compliance With Laws.</u> You may not use the Licensed Materials for any illegal purpose or in any manner that violates applicable domestic or foreign law. You are responsible for compliance with all domestic and foreign laws governing Voice over Internet Protocol (VoIP) calls.
- 10. <u>U.S. Government Restricted Rights.</u> The Licensed Materials are provided with RESTRICTED RIGHTS. Use, duplication or disclosure by the Government is subject to restrictions as set forth in subparagraphs (c)(1) and (2) of the Commercial Computer Software—Restricted Rights clause at 48 C.F.R. section 52.227-19, or subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227.7013, as applicable.
- 11. Entire Agreement. It is understood that this Agreement, along with the QX or Quadro installation and administration manuals, constitute the complete and exclusive agreement between you and the Licensor and supersede any proposal or prior agreement or license, oral or written, and any other communications related to the subject matter hereof. If one or more of the provisions of this Agreement is found to be illegal or unenforceable, this Agreement shall not be rendered inoperative but the remaining provisions shall continue in full force and effect.
- 12. No Waiver. Failure by either you or the Licensor to enforce any of the provisions of this Agreement or any rights with respect hereto shall in no way be considered to be a waiver of such provisions or rights, or to in any way affect the validity of this Agreement. If one or more of the provisions contained in this Agreement are found to be invalid or unenforceable in any respect, the validity and enforceability of the remaining provisions shall not be affected.
- **13. Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the state of Texas, without regard to choice of law provisions that would cause the application of the law of another jurisdiction.
- 14. Attorneys' Fees. In the event of any litigation or other dispute arising as a result of or by reason of this Agreement, the prevailing party in any such litigation or other dispute shall be entitled to, in addition to any other damages assessed, its reasonable attorneys' fees, and all other costs and expenses incurred in connection with settling or resolving such dispute.

 If you have any questions about this Agreement, please write to Epygi at 2233 Lee Road Suite 201 Winter Park, Florida 32789 or call Epygi at (972) 692-1166.
- 15. Free Software. Certain software utilized in the Epygi products is free software in its original form or in its modified form. Both types of free software are available to you free of charge for redistribution or modification under certain conditions. Permission is granted to copy, distribute and or/modify any free software you wish to download, whether in its original or modified forms, under the GNU General Public License or Free Documentation License, Version 1.1 or any later version published by the Free Software Foundation. BECAUSE THE FREE SOFTWARE IS LICENSED FREE OF CHARGE, THERE IS ABSOLUTELY NO WARRANTY. Please make sure you download the GNU license from www.gnu.org (link to: http://www.gnu.org/). For a list of free software go to http://www.epvgi.com/about/free-software-list.