



Configuring Epygi Supported IP Phones on QX IP PBXs

Abstract: This document describes the steps to configure Epygi supported IP phones with the QX IP PBXs.

Document Revision History

Revision	Date	Description	Valid for SW	Valid for Models
1.0	03-Sep-15	Initial release	6.1.x	QX IP PBXs
1.1	30-Oct-15	Added Yealink SIP-T19P E2, T21P E2, T23G(P), T27P IP Phones.	6.1.10 and higher	QX IP PBXs

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1 Introduction

This document describes the configuration of the Epygi supported IP phones with the QX IP PBXs (hereafter QXs) using the **PnP** or **Auto configuration** options.

The **Auto configuration** option is available for all Epygi supported IP phones. This option simplifies the IP phone configuration procedure, eliminating the need to manually configure the IP phones. The user only needs to configure an IP line on the QX and then reset the IP phone to factory default. For details on the **Auto configuration** option, please refer to Section 6.

The **Plug-and-play (PnP)** option available for the most of Epygi supported IP phones, eliminates the need to configure the IP phone and the QX. Once an IP phone connected to the QX and is reset, it automatically acquires the first available IP Line/extension on the system and auto configures itself without user's intervention. For details on the **PnP** option, please refer to Section 5.

With the **Auto configuration** option, the user should select both the IP line and the desired extension, whereas with the **PnP** option the extension is selected automatically. Therefore, the **Auto configuration** option should be used if user wishes to associate the IP phone with a certain extension or a certain IP line, since the QX will choose which extension assigned to a given phone using the **PnP** option.

IP phones can be connected to QX via LAN, WAN or VLAN interface (Figure 1: a , 1:b). The QX will provide a configuration file to the phones that are locally connected to the same network.

Please Note: The QX will not configure IP phones that are remotely connected. These phones will need to be manually configured.

The complete list of the Epygi supported IP phones can be found in the Section 3. An IP phone vendor may discontinue certain models once they become mature. These kind of IP phones are listed in the **Discontinued IP Phones**, Section 4.

Figure 1: IP Phones connection methods

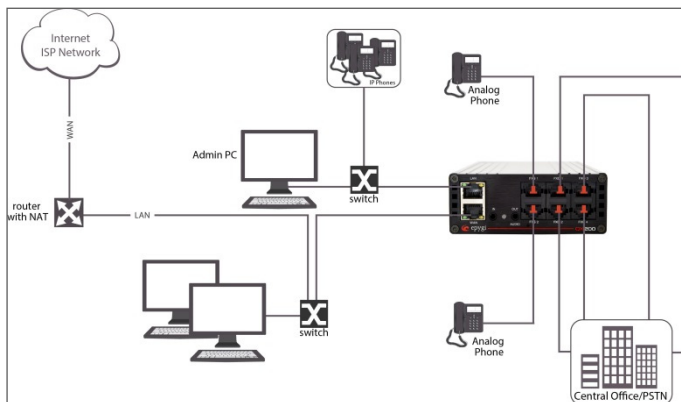


Figure 1: a IP phones connected to the QX LAN

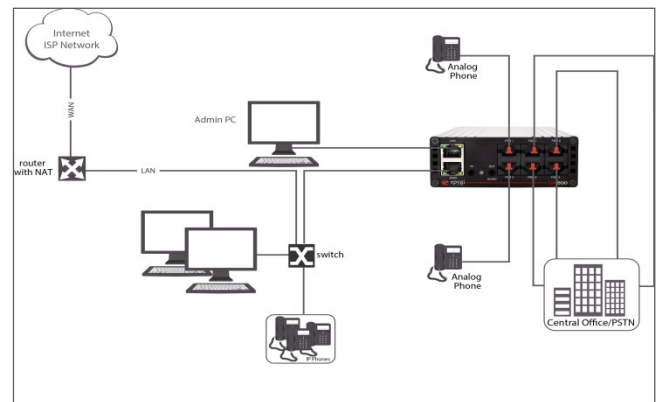


Figure 1: b IP phones connected to the QX WAN

2 Requirements and Preparations

- The QX is connected to the network and all network settings are correctly configured.
- IP phones are located in the same network as the QX as referenced in Figure 1 and the QX **Network Interface** setting is optioned for this configuration. The **Network Interface** setting is found in the **Interfaces**→**IP Lines**→**IP Line Settings** page.

3 Supported IP Phones

Below is the list of the Epygi supported IP phones that can be configured using **PnP** and/or **Auto configuration** options.

Vendor	Model	Software Version
Aastra	6757iCT(57iCT)	3.3.1.2256-SIP
Aastra	9480iCT(35iCT)	3.3.1.2256-SIP
Akuvox	SP-R53P	53.0.1.23
Alcatel	IP2015	1.0.7A-0
Alcatel	Temporis IP100	1.0.6A-0
Alcatel	Temporis IP150	1.0.6A-0
Alcatel	Temporis IP200	13.60.0.89
Alcatel	Temporis IP300	1.0.7B-0
Alcatel	Temporis IP600	14.60.0.89
Alcatel	Temporis IP700G	1.0.7A-0
Alcatel	Temporis IP800	15.60.0.89
AudioCodes	310HD	1.6.0 build 37
AudioCodes	320HD	1.6.0 build 37
Cisco	SPA303	7.4.9c
Cisco	SPA501G	7.4.9c
Cisco	SPA509G	7.4.9c
Cisco	SPA525G2	7.4.9c
Fanvil	C58/C58P	2.3.233.129
Fanvil	C62/C62P	2.3.235.128
Fanvil	C400	11.20.12.2.B
Fanvil	C600	11.20.12.2.B
Fanvil	F52/F52P	2.3.123.78
Fanvil	X3/X3P	1.3.221.1531
Fanvil	X5/X5G	1.3.115.1425
Grandstream	GXP1100	1.0.6.7
Grandstream	GXP1105	1.0.6.7
Grandstream	GXP1160	1.0.6.7
Grandstream	GXP1165	1.0.6.7
Grandstream	GXP1400	1.0.6.7
Grandstream	GXP1405	1.0.6.7
Grandstream	GXP1450	1.0.6.7
Grandstream	GXP2000	1.2.5.3
Grandstream	GXP2100	1.0.6.7
Grandstream	GXP2110	1.0.6.7
Grandstream	GXP2120	1.0.6.7
Grandstream	GXP2124	1.0.6.7
Grandstream	GXP2130	1.0.3.9
Grandstream	GXP2140	1.0.3.9
Grandstream	GXP2160	1.0.3.9
Grandstream	GXP2200	1.0.3.25
Grandstream	GXV3140	1.0.7.3
Grandstream	GXV3175	1.0.3.22
Mitel (Aastra)	6730i	3.3.1.4305-SIP
Mitel (Aastra)	6731i	3.3.1.4305-SIP

Vendor	Model	Software Version
Mitel (Aastra)	6735i	3.3.1.8140-SIP
Mitel (Aastra)	6737i	3.3.1.8140-SIP
Mitel (Aastra)	6739i	3.3.1.4305-SIP
Mitel (Aastra)	6753i	3.3.1.4305-SIP
Mitel (Aastra)	6755i	3.3.1.4305-SIP
Mitel (Aastra)	6757i	3.3.1.4305-SIP
Mitel (Aastra)	6863i	4.0.0.92-SIP
Mitel (Aastra)	6865i	4.0.0.92-SIP
Mitel (Aastra)	6867i	4.0.0.92-SIP
Mitel (Aastra)	9143i	3.3.1.4305-SIP
Mitel (Aastra)	9480i	3.3.1.4305-SIP
Panasonic	KX-TGP550T04	12.17
Panasonic	KX-UT123	01.061
Panasonic	KX-UT123NE	01.221
Panasonic	KX-UT136	01.061
Polycom	SoundPoint IP 330SIP	3.3.5.0247
Polycom	SoundPoint IP 331SIP	3.3.5.0247
Polycom	SoundPoint IP 335SIP	3.3.5.0247
Polycom	SoundPoint IP 450SIP	3.3.5.0247
Polycom	SoundPoint IP 550SIP	3.3.5.0247
Polycom	SoundPoint IP 650SIP	3.3.5.0247
Polycom	SoundPoint IP 670SIP	3.3.5.0247
Polycom	SoundStation IP 5000	3.3.5.0247
Polycom	SoundStation IP 6000	3.3.5.0247
Polycom	VWX 1500	3.3.5.0247
Polycom	VWX 300/310	4.1.7.1210
Polycom	VWX 400/410	4.1.7.1210
Polycom	VWX 500	4.1.7.1210
Polycom	VWX 600	4.1.7.1210
snom	300	8.4.35
snom	320	8.4.35
snom	360	8.4.35
snom	370	8.4.35
snom	710	8.7.3.25.9
snom	720	8.7.3.25.9
snom	760	8.7.3.25.9
snom	821	8.4.35
snom	870	8.4.35
snom	D715/715	8.7.5.17
snom	D725	8.7.5.17
snom	m9	9.4.7
snom	MeetingPoint	8.4.35
snom	M700	03.24.0007
snom	PA1	8.4.35
Spectralink	KIRK Wireless Server 300	PCS14C_
Spectralink	KIRK Wireless Server 6000	PCS14C_
Yealink	SIP-T19P	31.72.0.1
Yealink	SIP-T19P E2	53.80.0.60

Vendor	Model	Software Version
Yealink	SIP-T20P	9.72.0.1
Yealink	SIP-T21P	34.72.0.1
Yealink	SIP-T21P E2	52.80.0.60
Yealink	SIP-T22P	7.72.0.1
Yealink	SIP-T23G	44.80.0.60
Yealink	SIP-T26P	6.72.0.1
Yealink	SIP-T27P	45.80.0.60
Yealink	SIP-T28P	2.72.0.1
Yealink	SIP-T32G	32.70.0.130
Yealink	SIP-T38G	38.70.0.125
Yealink	SIP-T41P	36.72.0.1
Yealink	SIP-T42G	29.72.0.1
Yealink	SIP-T46G	28.72.0.1
Yealink	SIP-T48G	35.72.0.34
Yealink	VP-530	23.70.0.40
Yealink	W52P	25.30.0.20

Please Note: Depending on the SW version some of the SIP phone models may be missed from the Phone Model list for the IP PBX.

4 Discontinued IP Phones

As IP phones mature, the IP phone vendor may discontinue certain models. Listed below are IP phones that are no longer tested as part of Epygi's software validation testing. These phones should still work well with the Epygi IP PBXs but support is not guaranteed since they are no longer tested. They are still listed and available for configuration in the **Interfaces**→**IP Lines** page **Phone model** drop down list.

Vendor	Model	Software Version
Aastra	6751i (51i)	2.5.2.1010
Aastra	MBU400	1.0.8
Aastra	480i	1.4.3.23
Aastra	480i CT	1.4.3.23
Aastra	9112i	1.4.3.23
Aastra	9133i	1.4.3.23
Berkshire (ATL)	5000	22102154
Cisco	7960	POS3-07-4.00
Grandstream	BT100	1.1.0.3
Grandstream	BT200	1.1.6.16
Grandstream	HT286	1.1.0.26
Grandstream	HT386	1.1.0.3
IpDialog	SipTonell	1.2.0 rc Z_21
Linksys	SPA921	5.1.8
Linksys	SPA922	5.2.8
Linksys	SPA941	5.1.8
Linksys	SPA942	5.2.8
Polycom	SoundPoint IP 300SIP	2.1.3

Vendor	Model	Software Version
Polycom	SoundPoint IP 501SIP	3.1.3.0439
Polycom	SoundPoint IP 601SIP	3.1.3.0439
Sipura	SPA 841	3.1.4(a)
Snom	m3	02.02
Snom	190	3.60s
Snom	200	3.56m
Snom	220	3.56m
Snom	820	8.2.11
Swissvoice	IP 10S	IP10 SP v1.0.1 b3
Telematrix	IP550 Spectrum Plus	1.7.252.253
Telematrix	IP3300	1.7. 249.248
Telematrix	IP9600 MWD5	1.7. 249.248
Thomson	ST2030S	V2.69
Yealink	VP-2009	22.21.0.40

5 Plug-and-Play Configuration

configuration option allows the supported IP phones to be automatically configured when having a connection to the QX and reset to a factory default. Apart from enabling the **PnP** service for IP lines on the QX, which is the default state, this option, after selection, does not require any further configuration changes neither on the QX nor on the IP phone.

If the default configuration of **PnP** for IP lines has been changed, please follow these steps to enable the **PnP** option:

1. Open the IP Line Settings page (Figure 2 for Quadro IP PBX and Figure 3 for QX IP PBX products).
2. Select the Enable PnP for IP lines checkbox.
3. Click Save to submit the changes.

Once the PnP option for IP lines is enabled, factory reset the phone to start PnP configuration. For instructions on how to reset a supported IP phone, please refer to Section [7](#) and for discontinued IP Phone Section [8](#). In case of Aastra phones, during the PnP process the phone will ask to choose the preferred extension. In case of other IP phones (or if there is no input from the user in case of Aastra phones) the IP phone will acquire an extension that is attached to the first free IP Line.

Please Note: The PnP service will work only if there is at least one free IP line attached to an extension. The system considers an IP line as free if its type is set to *Inactive* and its status is not *disabled*. In addition, the IP line should be attached to an extension.

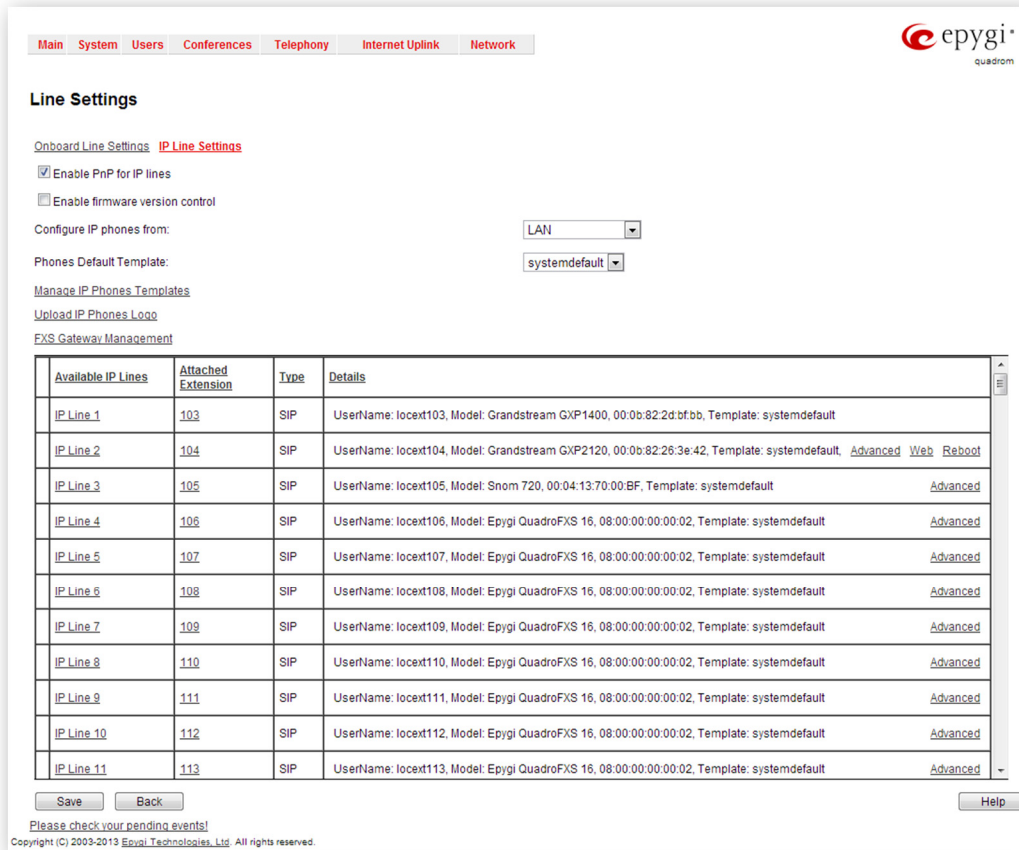
Please Note: The PnP service will not work for IP phones that have already been configured on any other IP line.

Please Note: All Aastra IP phones can be configured in a dialog mode depending on the IP phone FW version. To complete the phone configuration in a dialog mode, reset the phone to factory default settings (see Section [7](#), Section [8](#)) and follow these steps:

1. The phone will offer two options for selecting an extension: **Automatically** or **Manually**.
 - Choosing the **Automatically** option will automatically assign the phone an extension attached to the first free IP line.

- Choosing the **Manually** option will display the list of extensions with free IP lines on the phone screen enabling you to choose your desired extension.
- 2. Use the up and down navigation keys to scroll to a desired option and press the **Select** softkey. For the Manually option, also select an extension and press the **Select** softkey.

To verify the configuration, please, see Section [9](#).



The screenshot shows the 'Line Settings' page in the Epygi web interface. The 'IP Line Settings' section has the following configuration:

- Enable PnP for IP lines
- Enable firmware version control
- Configure IP phones from: LAN
- Phones Default Template: systemdefault

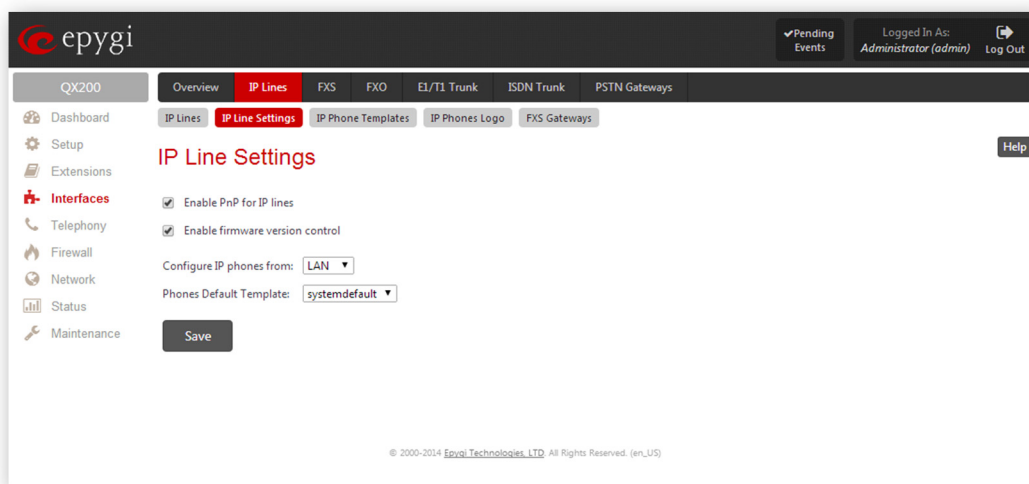
Below the settings is a table of available IP lines:

Available IP Lines	Attached Extension	Type	Details
IP Line 1	103	SIP	UserName: locext103, Model: Grandstream GXP1400, 00:0b:82:d2:bf:bb, Template: systemdefault
IP Line 2	104	SIP	UserName: locext104, Model: Grandstream GXP2120, 00:0b:82:26:3e:42, Template: systemdefault, Advanced Web Reboot
IP Line 3	105	SIP	UserName: locext105, Model: Snom 720, 00:04:13:70:00:BF, Template: systemdefault Advanced
IP Line 4	106	SIP	UserName: locext106, Model: Epygi QuadroFXS 16, 08:00:00:00:00:02, Template: systemdefault Advanced
IP Line 5	107	SIP	UserName: locext107, Model: Epygi QuadroFXS 16, 08:00:00:00:00:02, Template: systemdefault Advanced
IP Line 6	108	SIP	UserName: locext108, Model: Epygi QuadroFXS 16, 08:00:00:00:00:02, Template: systemdefault Advanced
IP Line 7	109	SIP	UserName: locext109, Model: Epygi QuadroFXS 16, 08:00:00:00:00:02, Template: systemdefault Advanced
IP Line 8	110	SIP	UserName: locext110, Model: Epygi QuadroFXS 16, 08:00:00:00:00:02, Template: systemdefault Advanced
IP Line 9	111	SIP	UserName: locext111, Model: Epygi QuadroFXS 16, 08:00:00:00:00:02, Template: systemdefault Advanced
IP Line 10	112	SIP	UserName: locext112, Model: Epygi QuadroFXS 16, 08:00:00:00:00:02, Template: systemdefault Advanced
IP Line 11	113	SIP	UserName: locext113, Model: Epygi QuadroFXS 16, 08:00:00:00:00:02, Template: systemdefault Advanced

Buttons: Save, Back, Help

Footer: Please check your pending events! Copyright (C) 2003-2013 Epygi Technologies, Ltd. All rights reserved.

Figure 2: Enabling PnP option for Quadro IP lines



The screenshot shows the 'IP Line Settings' page in the Epygi web interface. The configuration is as follows:

- Enable PnP for IP lines
- Enable firmware version control
- Configure IP phones from: LAN
- Phones Default Template: systemdefault

Buttons: Save, Help

Footer: © 2000-2014 Epygi Technologies, LTD. All Rights Reserved. (en_US)

Figure 3: Enabling PnP option for QX IP lines

Selecting the **Enable FW version control** checkbox allows the system to control the FW version running on the supported IP Phones. This service allows the system to automatically update an IP phone's FW with the version recommended by Epygi to be used with the current QX software. This can be a FW downgrade as well as an upgrade. FW version checking is executed each time an IP phone is rebooted. For more information on the FW Version Control service, please refer to the QX online help.

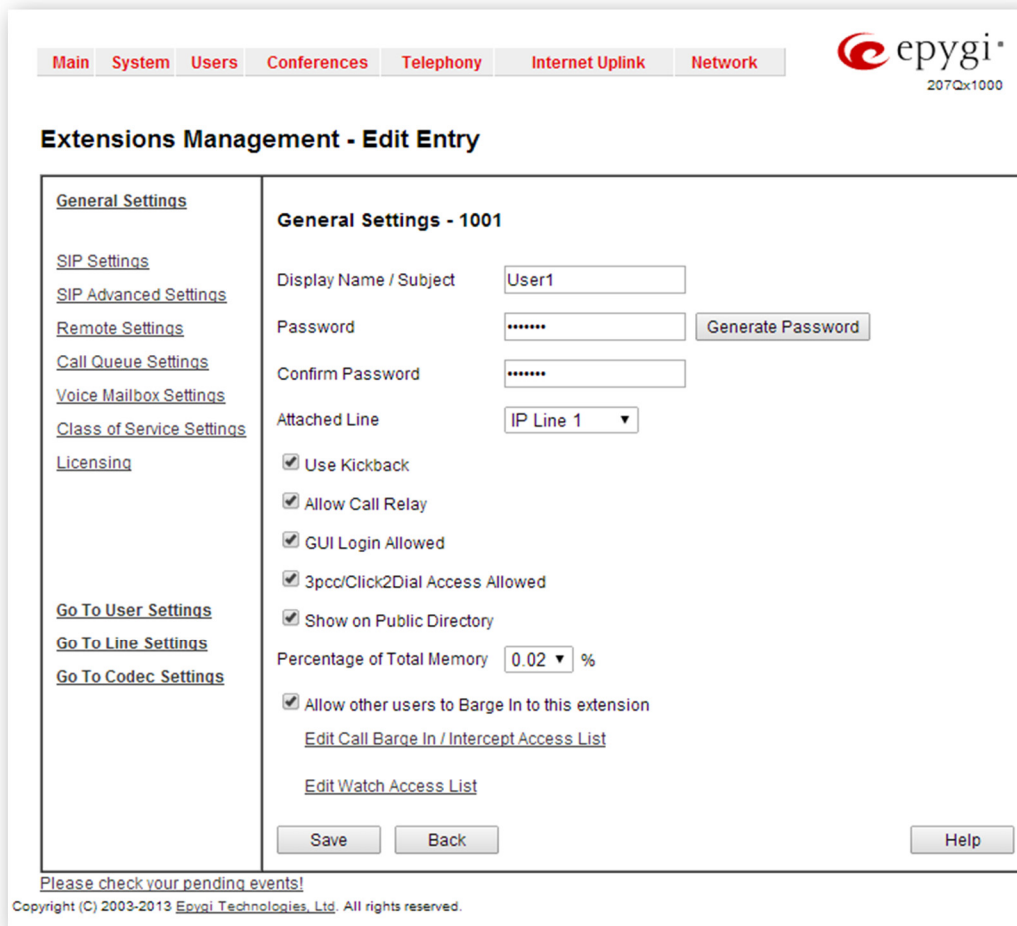
Please Note: The **FW Version Control** service doesn't work for some of the supported IP phones currently. For more details see the [QX Features on Epygi Supported IP Phones](#) document.

6 Auto configuration

Auto configuration option simplifies the configuration procedure of the Supported IP phones.

The following step-by-step instructions describe how to configure an IP line to allow supported IP phones to be auto configured.

1. Open the IP Line Settings page.
2. From the **Attached Extension** column, choose an extension to be assigned to the IP phone and click on the corresponding IP line link. Note that the table lists only the extensions attached to IP lines. If the extension is not listed on this page, open the **Extensions Management** page and attach an IP line to the extension by editing the extension settings (Figure 4 for Quadro IP PBX and Figure 5 for QX IP PBX products).



The screenshot shows the Epygi web interface for editing extension settings. At the top, there are navigation tabs: Main, System, Users, Conferences, Telephony, Internet Uplink, and Network. The Epygi logo and version number (207Qx1000) are in the top right. The main heading is "Extensions Management - Edit Entry".

On the left, there is a sidebar with the following links: General Settings, SIP Settings, SIP Advanced Settings, Remote Settings, Call Queue Settings, Voice Mailbox Settings, Class of Service Settings, Licensing, Go To User Settings, Go To Line Settings, and Go To Codec Settings.

The main content area is titled "General Settings - 1001" and contains the following fields and options:

- Display Name / Subject: User1
- Password: [masked] with a "Generate Password" button
- Confirm Password: [masked]
- Attached Line: IP Line 1 (dropdown menu)
- Use Kickback:
- Allow Call Relay:
- GUI Login Allowed:
- 3pcc/Click2Dial Access Allowed:
- Show on Public Directory:
- Percentage of Total Memory: 0.02 %
- Allow other users to Barge In to this extension:
- Links: [Edit Call Barge In / Intercept Access List](#) and [Edit Watch Access List](#)
- Buttons: Save, Back, and Help

At the bottom, there is a footer with the text: "Please check your pending events!" and "Copyright (C) 2003-2013 Epygi Technologies, Ltd. All rights reserved."

Figure 4: Quadro Extensions Management – Edit Entry page

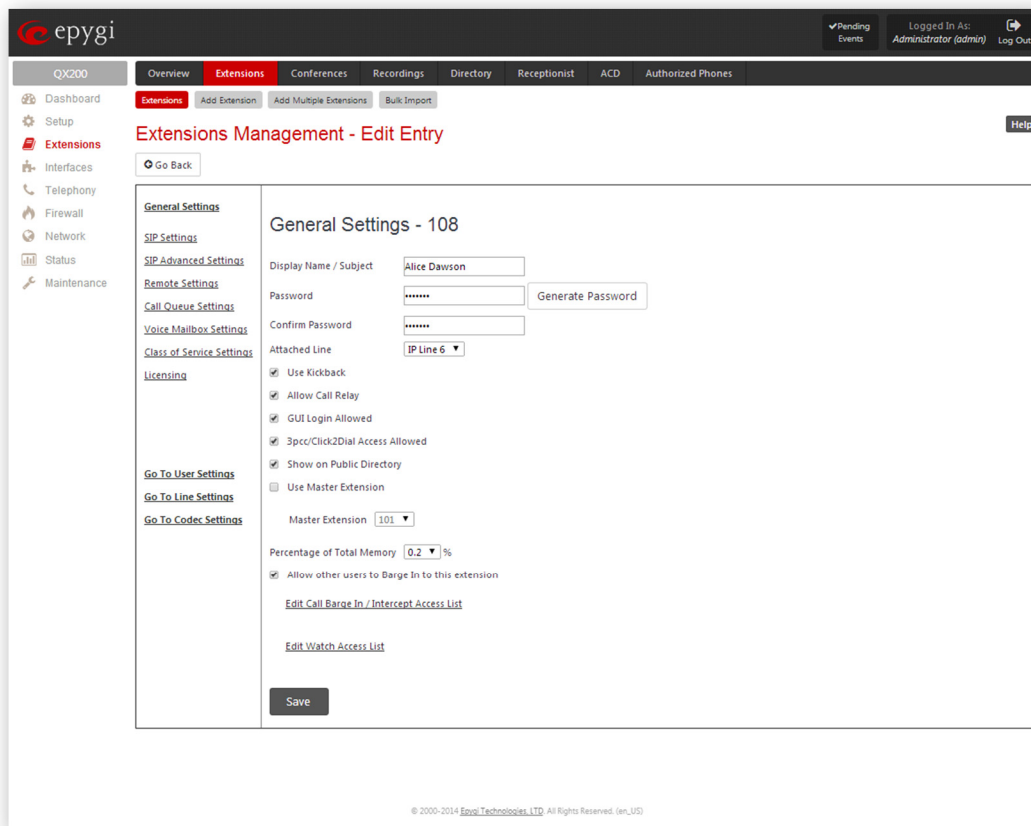
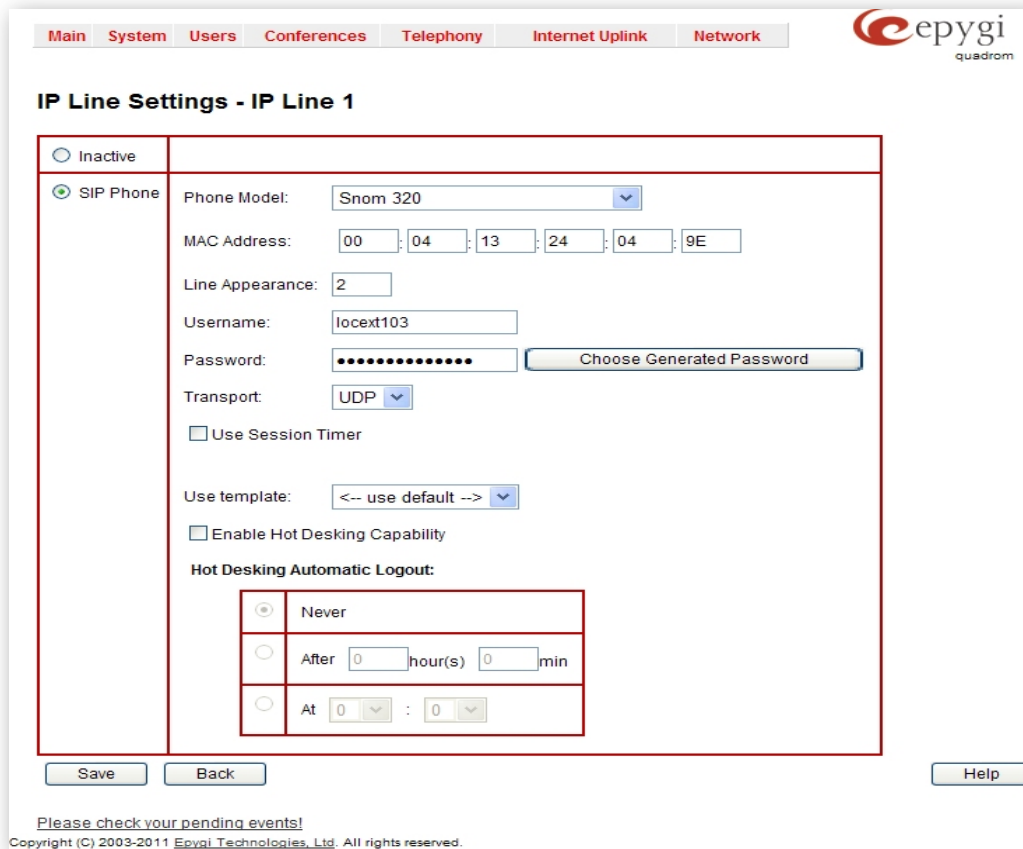


Figure 5: QX Extensions Management – Edit Entry page

3. On the **IP Line Settings – IP Line#** page (Figure 6 for Quadro IP PBX and Figure 7 for QX IP PBX products), select the IP Phone radio button to configure the line.
4. Select the model of the IP phone from the **Phone Model** drop-down list.
5. Enter the **MAC Address** of the phone into the appropriate text fields. MAC addresses of IP phones are usually printed on the back of the phone base unit.
6. Enter the number for intended simultaneous calls – the total number of active and held calls, in the **Line Appearances** text box. If this field is set to 1, only one active call will be possible on the phone. Making or accepting a second call while the other is on hold will not be allowed. Note that this maximum allowed number depends on the phone's brand and model, and cannot exceed the number of simultaneous calls supported by the phone.
7. The QX authorizes each IP phone by a unique username and a password specified on the **IP Line Settings** page. In case of auto configuration, they are specified on the QX and are automatically included in the phone's configuration file generated by the QX. By default the QX assigns a unique username and password to each IP line. The user may either keep these values or specify new ones. The **Password** field security strength is checked and displayed just below the entry. To achieve a well-protected, strong password, a minimum of 8 characters is required, consisting of letters in upper and lower case, symbols and numbers. If you are unable to define a strong password, press Generate Password to use one of the system defined strong passwords.

8. **Transport** drop down list is used to select the SIP protocol transport layer – UDP, TCP or TLS. For TLS you may activate the TLS certificate update mechanism from IP Phone to obtain the latest certificate generated by the QX.
9. Click **Save** to submit the changes.

Once a corresponding IP line is configured, factory reset the phone to complete auto configuration. For instructions on how to reset a supported IP phone, please refer to Section [7](#).



The screenshot displays the 'IP Line Settings - IP Line 1' configuration page. At the top, there is a navigation menu with tabs: Main, System, Users, Conferences, Telephony, Internet Uplink, and Network. The Epygi logo and 'quadro' text are in the top right corner. On the left, a sidebar shows 'Inactive' (unselected) and 'SIP Phone' (selected). The main content area contains the following fields and options:

- Phone Model:** Snom 320 (dropdown menu)
- MAC Address:** 00 : 04 : 13 : 24 : 04 : 9E (text input)
- Line Appearance:** 2 (text input)
- Username:** locext103 (text input)
- Password:** [masked] (text input) with a 'Choose Generated Password' button
- Transport:** UDP (dropdown menu)
- Use Session Timer
- Use template:** <-- use default --> (dropdown menu)
- Enable Hot Desking Capability
- Hot Desking Automatic Logout:**
 - Never
 - After 0 hour(s) 0 min
 - At 0 : 0

At the bottom of the form are 'Save', 'Back', and 'Help' buttons. A footer message reads: 'Please check your pending events! Copyright (C) 2003-2011 Epygi Technologies, Ltd. All rights reserved.'

Figure 6: Configuring an IP Line on Quadro

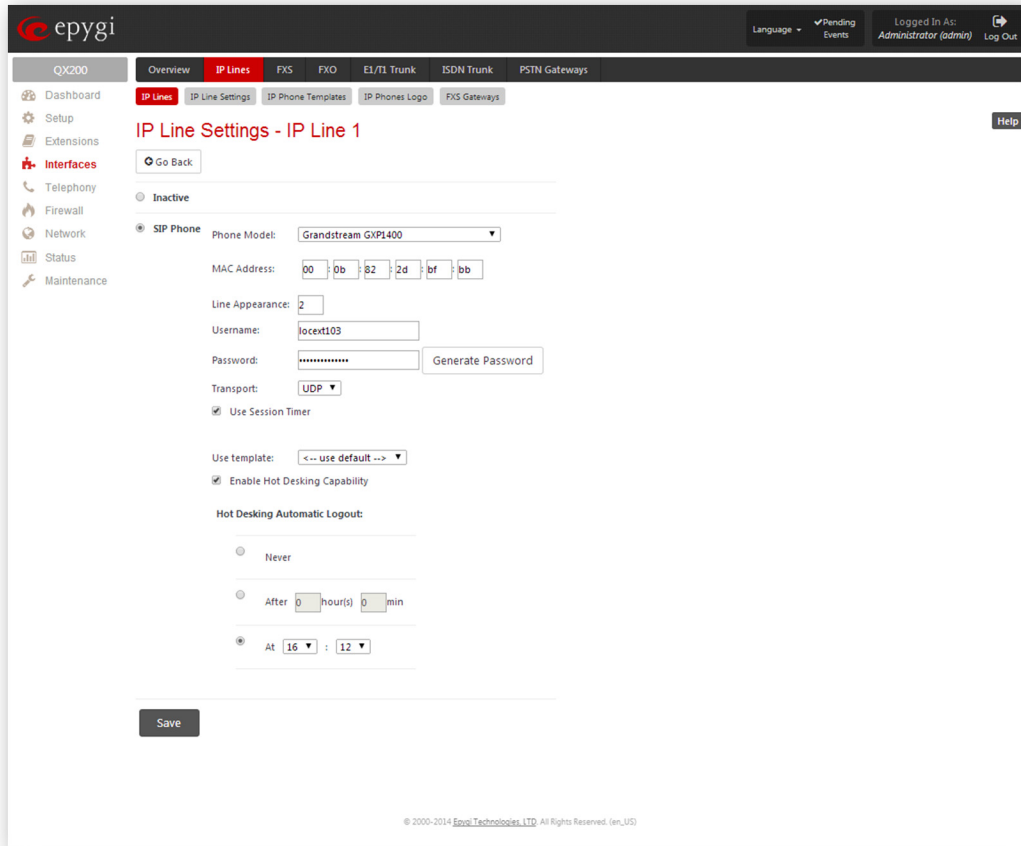


Figure 7: Configuring an IP Line on QX

7 Completing Supported IP Phones Configuration

To complete IP phones configuration using PnP and/or auto configuration options, reset the phone to factory default settings to initiate the configuration file download. Please see the instructions below that describe how to restore the default configuration of different supported IP phones.

Please Note: If an IP phone obtains its basic network parameters from a DHCP server rather than the QX's built-in DHCP server, when it is connected on the LAN network or when the phone is located in the WAN network, certain configuration changes will be required on the DHCP server in use. Please refer to Section [13](#).

Please Note: Except for the **Polycom SoundPoint IP 300SIP/501SIP/601SIP** and **IP Dialog SIP Tone II (ST201)** phones, no additional steps are required on the supported IP phones. For more information on how to complete the PnP and/or auto configuration on a supported IP phone, please refer to the corresponding sections below.

Please Note: For the instructions on how to factory reset the **Panasonic** IP phones and access to the phone GUI, please refer to your phone distributor.

7.1 Resetting Akuvox SP–R53P

To complete the automatic configuration on Akuvox SP–R53P, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Navigate to **Settings** and press the **Enter** softkey or the **OK** button.
3. Choose **Advanced Setting** and press the **Enter** softkey or the **OK** button.
4. You are prompted to enter the required password, the default one is admin and press the **Enter** softkey or the **OK** button.
5. Scroll to **Reset** to factory and press the **Enter** softkey or the **OK** button.
6. When the confirmation message appears, press the **OK** softkey or the **OK** button to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.2 Resetting Alcatel Temporis IP2015

To complete the automatic configuration on Alcatel Temporis IP2015 Base System, reset the base system to factory default settings:

1. Connect Alcatel Temporis IP2015 to your network.
2. Press **Reset** button on base system.
3. After successful reset, the base system and headset will get configuration from QX.

7.3 Resetting Alcatel Temporis IP100

To complete the automatic configuration on Alcatel Temporis IP100, reset the phone to factory default settings:

1. Connect the IP Phone and give IP address from DHCP.
2. Dial ***123456#** and check the received IP address.
3. Enter the spelled IP address, to access WEB GUI of the IP phone.
4. You are prompted to enter the required username and password, the default login information is admin/admin.
5. After successful login, navigate to **Servicing**→**Provisioning** page.
6. Press **Reset** button, to reset the phone to factory default settings.

7. When the confirmation message appears, press the **OK** to confirm or press the **No** to close the message without resetting the phone.


7.4 Resetting Alcatel Temporis IP150 and Temporis IP300

To complete the automatic configuration on Alcatel Temporis IP150 and Temporis IP300, reset the phone to factory default settings:

1. Press the **Menu** key.
2. Scroll to **Admin Settings** and press the **OK** key.
3. You are prompted to enter the required password, the default one is **admin** and press the **Enter** softkey.
4. Scroll to **Reset** to default and press the **OK** key.
5. When the confirmation message appears, press the **Yes** softkey to confirm or press the **No** softkey to close the message without resetting the phone.

7.5 Resetting Alcatel Temporis IP200

To complete the automatic configuration on Alcatel Temporis IP200 IP Phone reset the phone to factory default settings:

1. Press the  key.
2. Scroll to **Settings** and press the **Ok** key.
3. Choose **Advanced Setting** and press the **Ok** key.
4. You are prompted to enter the required password, the default one is **admin** and press the **Ok** key.
5. Scroll to **Reset Factory** and press the **Ok** key.
6. When the confirmation message appears, press the **Ok** key to confirm.

Please Note: The **Reset Factory** option must be done in the admin mode.

7.6 Resetting Alcatel Temporis IP600 and Temporis IP800

To complete the automatic configuration on Alcatel Temporis IP600 and Temporis IP 800 IP Phones reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Scroll to **Settings** and press the **Enter** softkey or the **OK** key.
3. Choose **Advanced** and press the **Enter** softkey or the **OK** key.
4. You are prompted to enter the required password, the default one is **admin** and press the **Confirm** softkey or the **OK** key.
5. Scroll to **Reset to factory** and press the **Enter** softkey or the **OK** key.
6. When the confirmation message appears, press the **Ok** softkey or the **OK** key to confirm or press the **Cancel** softkey to close the message without resetting the phone.

Please Note: The **Reset to Factory** option is available only in the admin mode.

7.7 Resetting Alcatel Temporis IP700G

To complete the automatic configuration on Alcatel Temporis IP700G Phones reset the phone to factory default settings:

1. Press the **Menu** key.
2. Scroll to **Admin Settings** and press the **Select** softkey or the **OK** key.
3. You are prompted to enter the required password, the default one is admin and press the **Enter** softkey.
4. Scroll to **Reset to default** and press the **Select** softkey or the **OK** key.
5. When the confirmation message appears, press the **Yes** softkey to confirm or press the **No** softkey to close the message without resetting the phone.

7.8 Resetting AudioCodes 310HD

To complete the automatic configuration on AudioCodes 310HD, reset the phone to factory default settings:

1. Press the **Menu** key.
2. Scroll to **Administration** and press the **Enter** key.
3. You are prompted to enter the required password, the default one is 1234 and press the **Enter** key.
4. Scroll to **Restore Defaults** and press the **Enter** key.
5. When the confirmation message appears, press the **Yes** softkey to confirm or press **No** to close the message without resetting the phone.

7.9 Resetting AudioCodes 320HD

To complete the automatic configuration on AudioCodes 320HD, reset the phone to factory default settings:

1. Press the **Menu** key.
2. Scroll to **Administration** and press the **Enter** key or the **Select** softkey.
3. You are prompted to enter the required password, the default one is **1234** and press the **Enter** key or the **OK** softkey.
4. Scroll to **Restore Defaults** and press the **Enter** key or the **Select** softkey.
5. When the confirmation message appears, press the **Yes** softkey to confirm or press **No** to close the message without resetting the phone.

7.10 Resetting Cisco IP Phone SPA303, SPA509G

To complete the auto configuration on the Cisco SPA303, SPA509G, reset the phone to factory defaults:

1. Press the **Setup** key.
2. Scroll to **Factory Reset** and press the **Select** softkey.
3. When the confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone. Wait until the phone reboots.

7.11 Resetting Cisco IP Phone SPA501G

To complete the auto configuration on the Cisco SPA501G, reset the phone to factory defaults:

1. Press the **Setup** key and follow the voice instructions.

2. Press **9** for help, then press **3**.
3. Press **4** to select the **Factory Reset** option.
4. Press **1** to confirm.

7.12 Resetting Cisco IP Phone SPA525G2

To complete the auto configuration on the Cisco SPA525G2, reset the phone to factory defaults:

1. Press the **Setup** key.
2. Scroll to **Device Administration** and press the **Select** softkey.
3. Scroll to **Factory Reset** and press the **Select** softkey.
4. When the confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone. Wait until the phone reboots.

7.13 Resetting Fanvil F52/F52P

To complete the automatic configuration on Fanvil F52/F52P, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Scroll to **Settings** and press the **Enter** softkey.
3. Choose **Advanced Settings** and press the **Enter** softkey.
4. You are prompted to enter the required password, the default one is **123** and press the **Enter** softkey.
5. Scroll to **Factory Reset** and press the **Enter** softkey.
6. When the confirmation message appears, press the **Yes** softkey to confirm or press the **No** softkey to close the message without resetting the phone.

7.14 Resetting Fanvil C58/C58P

To complete the automatic configuration on Fanvil C58/C58P, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Scroll to **Settings** and press the **Enter** softkey or the **OK** key.
3. Choose **Advanced Settings** and press the **Enter** softkey or the **OK** key.
4. You are prompted to enter the required password, the default one is **123** and press the **Enter** softkey or the **OK** button.
5. Scroll to **Factory Reset** and press the **Enter** softkey or the **OK** key.
6. When the confirmation message appears, press the **Yes** softkey or the **OK** key to confirm or press the **No** softkey to close the message without resetting the phone.

7.15 Resetting Fanvil C62/C62P



To complete the automatic configuration on Fanvil C62/C62P, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Scroll to **Settings** and press the **Enter** softkey or the **OK** key.
3. Choose **Advanced Settings** and press the **Enter** softkey or the **OK** key.
4. You are prompted to enter the required password, the default one is **123** and press the **Enter** softkey or the **OK** key.
5. Scroll to **Factory Reset** and press the **Enter** softkey or the **OK** key.

- When the confirmation message appears, press the **Yes** softkey or the **OK** key to confirm or press the **No** softkey to close the message without resetting the phone.









7.16 Resetting Fanvil C400, C600

To complete the automatic configuration on Fanvil C400, C600, reset the phone to factory default settings:

- Press onscreen  **Settings** softkey.
- Scroll to  **Maintain** and press it.
- Press ... onscreen button and navigate to **Phone Reset**.
- You are prompted to enter the required password, the default one is **123456** and press the **Enter** softkey.
- Choose **Clear All** radio button and press the **Reset** softkey.
- When the confirmation message appears, press the **Ok** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.17 Resetting Fanvil X3/X3P

To complete the automatic configuration on Fanvil X3/X3P, reset the phone to factory default settings:

- Press the  [More] softkey till you will find the  [Settings] softkey.
- Press the  [Settings] softkey and  [More] till you will find the  [Reset to Factory Default] softkey.
- Press the  [Reset to Factory Default] softkey.
- When the confirmation message appears, press the  [OK] softkey to execute the reset command, or press the  [Cancel] softkey to close the message without resetting the phone.

7.18 Resetting Fanvil X5/X5G

To complete the automatic configuration on Fanvil X5/X5G, reset the phone to factory default settings:

- Press the **Menu** softkey.
- Scroll to the **Settings** option and press the **Enter** softkey or the **OK** key.
- Choose the **Advanced Settings** option and press the **Enter** softkey or the **OK** key.
- You are prompted to enter the required password, the default one is **123** and press the **Enter** softkey or the **OK** button.
- Scroll to the **Reset to Default** option and press the **Enter** softkey or the **OK** key.
- When the confirmation message appears, press the **Yes** softkey or the **OK** key to confirm or press the **No** softkey to close the message without resetting the phone.

7.19 Resetting Grandstream GXP1100, GXP1105

To complete the automatic configuration on Grandstream GXP1100, GXP1105, reset the phone to factory default settings:

- Pick up the handset, press *** to access the phone's IVR menu.
- Enter 99 and get the voice prompt **Reset**.

3. Then enter the MAC address printed on the bottom of the sticker.

Encode the MAC address. Please use the following mapping:

0–9: 0–9

A: 22

B: 222

C: 2222

D: 33

E: 333



F: 3333

If there are digits like "22" in the MAC, you need to wait for 4 seconds to continue to key in another "2"; for example, if the MAC address is 000b8200e395, it should be encoded as 0002228200333395.

4. Once the MAC address is correctly input, the phone will reboot. Otherwise, it will announce "Invalid Entry" and exit to the main menu.



7.20 Resetting Grandstream GXP1160, GXP1165

To complete the automatic configuration on Grandstream GXP1160, GXP1165, reset the phone to factory default settings:

1. Press the menu  key to bring up the key pad configuration UI menu.
2. Select the **Config** option and then press the menu  key.
3. Select the **Factory Reset** option.
4. When the confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.



7.21 Resetting Grandstream GXP1400, GXP1405, GXP1450

To complete the automatic configuration on Grandstream GXP1400, GXP1405, GXP1450, reset the phone to factory default settings:

1. Press the menu  key to bring up the key pad configuration UI menu.
2. Select the **Config** option and then press the menu  key.
3. Select the **Factory Reset** option.
4. When the confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.



7.22 Resetting Grandstream GXP2000, GXP2100, GXP2110, GXP2120

To complete the automatic configuration on Grandstream GXP2000, GXP2100, GXP2110, GXP2120, reset the phone to factory default settings:

1. Press the menu  key to bring up the key pad configuration UI menu.
2. Select the **Config** option and then press the menu  key.
3. Select the **Factory Reset** option.
4. When the confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.




7.23 Resetting Grandstream GXP2124

To complete the automatic configuration on Grandstream GXP2124, reset the phone to factory default settings:

1. Press the menu  key to bring up the key pad configuration UI menu.
2. Select the **Config** option and then press the menu  key.
3. Select the **Factory Reset** option.
4. When the confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.




7.24 Resetting Grandstream GXP2130

To complete the automatic configuration on Grandstream GXP2130 reset the phone to factory default settings:

1. Press the menu  key to bring up the key pad configuration UI menu.
2. Navigate to the page 2, select the **1 System** option and then press the menu  key.
3. Scroll to the **Factory Reset** option and then press the menu  key or the **Select** softkey.
4. When the confirmation message appears, press the **Yes** softkey to confirm or press the **No** softkey to close the message without resetting the phone.



7.25 Resetting Grandstream GXP2140, GXP2160

To complete the automatic configuration on Grandstream GXP2140, GXP2160, reset the phone to factory default settings:

1. Press the menu  key to bring up the key pad configuration UI menu.
2. Select **7 System**, and then press the menu  key.
3. Scroll to the **Factory Reset** option, and then press the menu  key or the **Select** softkey.
4. When the confirmation message appears, press the **Yes** softkey to confirm or press the **No** softkey to close the message without resetting the phone.




7.26 Resetting Grandstream GXP2200

To complete the automatic configuration on Grandstream GXP2200, reset the phone to factory default settings:

1. Press the menu  key or press the onscreen menu  icon and tap on the **Settings** option.
2. Tap on the **Advanced** settings option.
3. Tap on the **Factory Reset** option.
4. When a confirmation message appears, tap on the **Factory Reset** option to continue resetting the phone.
5. When a confirmation message appears, tap on the **OK** to confirm or press the **Cancel** to close the message without resetting the phone.

7.27 Resetting Grandstream GXV3140

To complete the automatic configuration on Grandstream GXV3140, reset the phone to factory default settings. The steps to restore the phone to factory default settings through the LCD menu are as follows:

1. Select the menu  key or **Menu (F1)** softkey to access the phone menu.
2. Select the **Settings** option and press the menu  key or the **Select (F1)** to access the phone settings menu.
3. Select the Maintenance option and press the **Select (F1)** or the **OK** button to access the maintenance page.
4. In the **Upgrade** tab, press the **Down** arrow twice to select the **Factory Reset** option.
5. Press the **OK** button, the phone will display a warning message.
6. When a warning message appears, press the menu  key to confirm or press the **Cancel** to close the message without resetting the phone.

7.28 Resetting Grandstream GXV3175

To complete the automatic configuration on Grandstream GXV3175, reset the phone to factory default settings: The steps to restore the phone to factory default settings through the LCD menu are as follows:

1. Select **MENU** to access the phone menu and select **System Settings**.
2. Select **Maintenance** and navigate to **Upgrade** page.
3. Select the **Factory Reset** option.
4. Press the **OK** button. The phone will reboot and perform a factory reset.

7.29 Resetting Mitel (Aastra) 6730i and 6731i

1. Press the **Options** key on the keypad of the phone to enter the **Options List**.
2. Scroll to the **5 Admin Menu** option (or simply press 5) and press the **Enter** softkey.
3. Enter the **Admin Password** (22222 by default) and press the **Done** softkey.
4. Choose the **4 Factory** default option (or simply press 4) and press the **Enter** softkey.
5. When a confirmation message appears, tap on the **Yes** to confirm or press the **Cancel** to close the message without resetting the phone.

7.30 Resetting Mitel (Aastra) 6735i and 6737i


1. Press the **Options** key on the phone to enter the **Options List**.
2. Scroll to **5 Admin Menu** option (or simply press 5) and press the **Select** softkey.
3. Enter the **Admin Password** (22222 by default) and press the **Enter** softkey.
4. Scroll to **4 Factory Default** option (or simply press 4) and press the **Select** softkey.
5. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.31 Resetting Mitel (Aastra) 6739i


1. Press the **Options** key on the phone to enter the **Options List**.

2. Tap on the **Advanced** option.
3. Enter the **Administrator Password** (22222 by default) either touch screen keypad or the keypad on the phone and then press the **Enter** key on the display.
4. Tap on the **Reset** option.
5. The phone will ask for confirmation to reset to factory default, tap on the **Factory Default** option. The phone will restart automatically.


7.32 Resetting Mitel (Aastra) 6753i

1. Press the options  key on the keypad of the phone to enter the **Options List**.
2. Scroll to the **5 Admin Menu** (or simply press 5) and press the **Enter** softkey.
3. Enter the **Admin Password** (22222 by default) and press the **Enter** softkey.
4. Scroll to the **4 Factory Default** (or simply press 4) and press the **Enter** softkey.
5. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.


7.33 Resetting Mitel (Aastra) 6755i/6757i and Aastra 6757iCT (57iCT)

1. Press the options  key on the keypad of the phone to enter the **Options List**.
2. Scroll to the **5 Admin Menu** option (or simply press 5) and press the **Select** softkey.
3. Enter the **Admin Password** (22222 by default) and press the **Enter** softkey.
4. Scroll to the **4 Factory Default** (or simply press 4) option and press the **Select** softkey.
5. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.34 Resetting Mitel (Aastra) 6863i and 6865i

1. Press the options  key on the phone to enter the **Options List**.
2. Navigate to the **6 Admin Menu** option (or simply press 6) and press the **Enter** key.
3. Enter the **Admin Password** (22222 by default) and press the **Done** key.
4. Navigate to the **4 Factory Default** (or simply press 4) and press the **Enter** key.
5. When a confirmation message appears, press the **Yes** key to confirm or press the **Cancel** key to close the message without resetting the phone.

7.35 Resetting Mitel (Aastra) 6867i

1. Press the options  key on the phone to enter the **Options List**.
2. Press the **Advanced** softkey.
3. Enter the **Administrator Password** (22222 by default) and press the **Enter** softkey.
4. Navigate to the **Reset** option and press the **Select** softkey.
5. Navigate to the **Factory Default** option and press the **Select** softkey.
6. When a confirmation message appears, press the **Reset** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.36 Resetting Mitel (Aastra) 9143i



1. Press the **Options** key on the keypad of the phone to enter the **Options List**.
2. Scroll to the **5 Admin Menu** option (or simply press 5) and press the **Enter** softkey.
3. Enter the password (22222 by default) and press the **Enter** softkey.
4. Scroll to the **4 Factory Default** option (or simply press 4) and press the **Enter** softkey.
5. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.37 Resetting Mitel (Aastra) 9480i and Aastra 480iCT (35iCT)

1. Press the **Options** key on the keypad of the phone to enter the **Options List**.
2. Use the up and down navigation keys to scroll to **11.Phone Status**. Press the **Show** softkey or button.
3. Scroll to **4.Factory Default** and press the **Show** softkey or button. (Pressing 4 will select this option).
4. The requirement to enter the password will appear. Enter the password (22222 by default) and press the **Enter** softkey.
5. Choose the **1.All default** and press the **Show** softkey or button.
6. The phone will ask for confirmation to reset to factory default. Press the **Defaults** softkey.
7. In a few seconds a question for confirmation for restarting the phone will appear.
8. Confirm the restart by pressing the **Restart** softkey.


7.38 Resetting Polycom SoundPoint IP Models







To complete the auto configuration on the Polycom SoundPoint IP models, reset the phone to factory default settings and change the server type from FTP, the default server type, to Trivial FTP.

1. Press the **Menu** key on the keypad of the phone to enter the **Options List**.
2. Scroll to the **3 Settings** option (or simply press 3) and press  key.
3. Select the **2 Advanced** option (or simply press 2) and press  key.
4. Enter the **Password** (456 by default) and press the **Enter** softkey.
5. Select the **Admin Settings** option.
6. Scroll to the **5 Rest to Defaults** option and press the **Enter** softkey.
7. Select the **Reset to Local Config** and press the **Enter** softkey.
8. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.39 Resetting Polycom SoundStation IP 5000 and SoundStation IP 6000


To complete the automatic configuration on Polycom SoundStation IP 5000 or SoundStation IP 6000, reset the phone to factory default settings:

1. Press the **Menu** key  .
2. Choose **Settings...** ( Scroll keys for scrolling) and press the **Select** key  .

3. Choose **Advanced** and press the **Select** key  .
4. Enter password 456 (by default) and press the **Select** key  .
5. Choose **Administration Settings...** and press the **Select** key  or press **Enter**.
6. Choose **Reset to Default...** and press the **Select** key  .
7. Choose **Reset Device Setting** and press the **Select** key  .
8. You may be asked to confirm, press the **Select** key  (Yes) to confirm. Wait until the phone reboots (it can be done two times).


7.40 Resetting Polycom VVX 300/310

To complete the automatic configuration on Polycom VVX 300/310, reset the phone to factory default settings:

1. Press the home  key.
2. Select the **Settings** option and press the **OK** key.
3. Select the **Advanced...** option and press the **OK** key.
4. Enter the **Password** (456 by default) and press the **OK** key or the **Enter** softkey.
5. Select the **Administration Settings...** and press the **OK** key or the **Select** softkey.
6. Scroll to the **Reset to Defaults...** option and press the **OK** key or the **Select** softkey.
7. Select the **Reset To Factory...** option and press the **OK** key or the **Select** softkey.
8. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.


7.41 Resetting Polycom VVX 400/410

To complete the automatic configuration on Polycom VVX 400/410, reset the phone to factory default settings:

1. Press the home  key.
2. Select the **Settings** option and press the **OK** key.
3. Select the **Advanced...** option and press the **OK** key.
4. Enter the **Password** (456 by default) and press the **OK** key or the **Enter** softkey.
5. Select the **Administration Settings...** option and press the **OK** key or the **Select** softkey.
6. Scroll to the **Reset to Defaults...** option and press the **OK** key or the **Select** softkey.
7. Select the **Reset To Factory...** option and press the **OK** key or the **Select** softkey.
8. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.42 Resetting Polycom VVX 500 and VVX 600



To complete the automatic configuration on Polycom VVX 500/600, reset the phone to factory default settings:

1. Press the home  key.
2. Tap the **Settings** option.
3. Tap on the **Advanced** option.
4. Enter the **Password** (456 by default) and press the **Enter** softkey.

5. Tap on the Administration Settings option.
6. Tap on the Reset to Defaults... option.
7. Tap on the Reset To Factory... option.
8. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.



7.43 Resetting Polycom VVX 1500

To complete the automatic configuration on Polycom VVX1500, reset the phone to factory default settings:

1. Press the menu  key.
2. Tap on the **Settings...** option.
3. Tap on the **Advanced...** option.
4. Enter the **Password** (456 by default) and press the **Select**  key.
5. Tap on the Administration Settings....
6. Scroll to the **Reset to Defaults...** and tap on it.
7. Tap on the Reset Local Configuration....
8. When a confirmation message appears, press the **Yes** softkey to confirm or press the **Back** softkey to close the message without resetting the phone.


7.44 Resetting snom300

To complete the automatic configuration on snom 300, reset the phone to factory default settings:

1. Press the **Navigation** key above the keypad of the phone.
2. Scroll to the **Configuration** option.
3. Right scroll to the **Reset** option and press  key.
4. Enter the password (0000 by default).
5. Press  key.



7.45 Resetting snom320

To complete the automatic configuration on snom 320, reset the phone to factory default settings:

1. Press the **Settings** key on the keypad of the phone.
2. Scroll to the **Configuration** option. Press the **Reset** softkey.
3. Enter the password (0000 by default).
4. Press  key to reset the configurations and reboot the phone.

7.46 Resetting snom360

To complete the automatic configuration on snom 360, reset the phone to factory default settings:

1. Press the **Settings** key on the keypad of the phone.
2. Scroll to the **5 Maintenance** option and press  key (or simply press 5).
3. Scroll to the **4 Reset Values** option and press  key (or simply press 4).
4. Enter the password (0000 by default).

5. Press ✓ key to reset the configurations and reboot the phone.

7.47 Resetting snom370

To complete the automatic configuration on snom 370, reset the phone to factory default settings:

1. Press the **Settings** key on the keypad of the phone.
2. Scroll to **10 Maintenance** then press the **OK** (or ✓ key)
3. Scroll to **5 Reset Values** and press **OK** (or ✓ key).
4. Enter the password (0000 by default).
5. Press the ✓ key to reset the configurations and reboot the phone.

7.48 Resetting snom710

To complete the automatic configuration on snom 710, reset the phone to factory default settings:

1. Press the **Settings** key.
2. Scroll to the **5 Maintenance** option and press the ✓ key (or simply press 5).
3. Scroll to the **4 Reset Values** option and press the ✓ key (or simply press 4).
4. Enter the password (0000 by default).
5. Press ✓ key to reset the configurations and reboot the phone.

7.49 Resetting snom720 and 760

To complete the automatic configuration on snom 720 and 760, reset the phone to factory default settings:

1. Press the **Menu** key.
2. Scroll to the **5 Maintenance** option then press the ✓ key (or simply press 5).
3. Scroll to the **4 Reset Values** option and press the ✓ key (or simply press 4).
4. Enter the password (0000 by default).
5. Press ✓ key to reset the configurations and reboot the phone.


7.50 Resetting snom820 and 821


To complete the automatic configuration on snom 820 and 821, reset the phone to factory default settings:

1. Press the **Menu** key on the keypad of the phone.
2. Scroll to the **5 Maintenance** option and press ✓ key (or simply press 5).
3. Scroll to the **4 Reset Values** option and press ✓ key (or simply press 4).
4. Enter the password (0000 by default).
5. Press ✓ key to reset the configurations and reboot the phone.

7.51 Resetting snom870




To complete the automatic configuration on snom 870, reset the phone to factory default settings:

1. Press the  **Menu** key on the keypad of the phone.
2. Press **5 Maintenance**, or press 5.
3. Press **4 Reset Values**, or press 4.

4. Enter the administrator password (the default is 0000).
5. Press  OK to reset the configurations and reboot the phone.





7.52 Resetting snom D715/715

To complete the automatic configuration on snom D715/715, reset the phone to factory default settings:

1. Press the **Settings** softkey.
2. Scroll to the **5 Maintenance** option and press  key (or simply press 5).
3. Scroll to the **4 Reset Values** option and press  key (or simply press 4).
4. Enter the password (0000 by default).
5. Press  key to reset the configurations and reboot the phone.






7.53 Ressetting snom D725

To complete the automatic configuration on snom D725, reset the phone to factory default settings:

1. Press the **Menu**  key on the keypad of the phone.
2. Scroll to the **5 Maintenance** option and press  key (or simply press 5).
3. Scroll to the **4 Reset Values** option and press  key (or simply press 4).
4. Enter the password (0000 by default).
5. Press  key to reset the configurations and reboot the phone.

7.54 Resetting snomMP

To complete the automatic configuration on snom MP, reset the phone to factory default settings:



1. Press the **Menu**  key.
2. Scroll to the **5 Maintenance** option and press the  softkey (or simply press 5).
3. Scroll to **4 Reset Values** and press the  softkey (or simply press 4).
4. Enter the administrator password (the default is 0000).
5. Press  or  to reset the configurations and reboot the phone.

7.55 Resetting snom M700

To complete the automatic configuration on snom M700 Base Station, reset the base station to factory default settings:

1. Connect snom M700 to your network.
2. Login into snom M700 Web GUI, with the IP address it has received from QX's DHCP Server or third party DHCP Server.
3. Navigate to Management, press Default Base Station button.
4. Press the **OK** button when it is asked to reset. The **Base Station** will restart with the new configuration from the QX.

To connect supported snom headset(s) to snom M700 Base Station:

1. Press the menu key  on the headset.
2. Navigate to Connectivity→Register.
3. Select an **Empty** line and press the center of the navigation key .
4. Enter the default **Access Code** – 0000 and press Ok.
5. The phone will be connected to the snom M700 Base Station and would get corresponding configured Extension.

7.56 Resetting snom m9

To complete the automatic configuration on snom m9, reset the phone to factory default settings:

1. In the **Main** menu, choose **Settings** and then press the **OK** softkey.
2. Choose **Handset** and press the **OK** softkey.
3. Choose **Reset Handset** and press the **Ok** softkey.
4. Press the **Yes** softkey when it is asked to reset. The **Gateway** will restart with the new configuration.

7.57 Resetting snom PA1

To complete the auto configuration on the snom PA1, reset the phone to factory defaults:

- Press the **IP/Reset** button for a few sec. (pressing the **IP/Reset** button briefly will announce the current IP address of the snom PA1 in English over the connected loudspeaker or in the handset).

7.58 Resetting Spectralink KIRK Wireless Server 300 and Spectralink KIRK Wireless Server 6000

To complete the automatic configuration on Spectralink KIRK Wireless Server 300 and KIRK Wireless Server 6000 IP Phones reset the phone to factory default settings:

- Press the **Reset** button (5 to 9 sec) on Base Station. This will reset the system to factory default settings (original IP settings and empty user data base) and restart the system. The FW version is not affected.

7.59 Resetting Yealink SIP–T19,T19PE2,T20P,T21P,T21PE2,T22P,T26P,T28P,T41P

To complete the automatic configuration on Yealink SIP– T19,T19PE2,T20P,T21P,T21PE2,T22P,T26P,T28P, T41P, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Scroll to the **Settings** option and press **✓** key or the **Enter** softkey.
3. Select the **Advanced Settings** option.
4. Enter the password (admin by default) and press the **Confirm** softkey or press **✓** key.
5. Scroll to the **Reset to Factory** option and press **✓** key.
6. When a confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.60 Resetting Yealink SIP–T23G (P) and T27P

To complete the automatic configuration on Yealink SIP–T23G(P) and T27P, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Scroll to the **Settings** option and press **OK** key or the **Enter** softkey.
3. Select the **Advanced Settings** option.
4. Enter the password (admin by default) and press the **OK** softkey or press **OK** key.
5. Scroll to the **Reset to Factory** option and press **OK** key or the **Enter** softkey.
6. When a confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.61 Resetting Yealink SIP–T32G, T38G, T42G

To complete the automatic configuration on Yealink SIP–T32G, T38G, T42G, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Scroll to the **Settings** option and press the **Enter** softkey.
3. Select the **Advanced Settings** option and press the **Enter** softkey.
4. Enter the password (admin by default) and press the **Confirm** softkey or press **✓** key.
5. Scroll to the **Reset to Factory** option and press **Enter** softkey.
6. When a confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.62 Resetting Yealink SIP–T46G

To complete the automatic configuration on Yealink SIP–T46G, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Select the **Advanced** option and press the **Enter** softkey.
3. Enter the password (admin by default) and press the **OK** softkey or press **OK** key.
4. Scroll to the **Reset & Reboot** option and press the **Enter** softkey.
5. Select the **Reset to Factory** option and press the **Enter** softkey
6. Select the desired type from the **Reset Option** drop down list and press the **Save** softkey.
7. When a confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.63 Resetting Yealink SIP–T48G


To complete the automatic configuration on Yealink SIP–T48G, reset the phone to factory default settings:

1. Tap on the **Menu** softkey.
2. Tap on the **Advanced** option.
3. Enter the password (admin by default) and tap on the **OK** softkey.
4. Scroll to the **Reset to Factory** option and tap on it.
5. Select the desired type from the **Reset Option** drop down list and press the **Reset** softkey.

6. When a confirmation message appears, press the **OK** softkey to confirm or press the **Cancel** softkey to close the message without resetting the phone.

7.64 Resetting Yealink VP530

To complete the automatic configuration on Yealink VP530, reset the phone to factory default settings:

1. Press the **Menu** softkey.
2. Tap on the **Advanced** option.
3. Enter the password (admin by default) and tap on the **OK** softkey or press the **OK** key.
4. Tap on the **Reset & Reboot** option.
5. Select the desired type from the **Reset Option** drop down list.
6. Press  in the **Reset** now field and tap on the **Save** softkey.
7. When a confirmation message appears, tap on the **OK** softkey to confirm or tap on the **Cancel** softkey to close the message without resetting the phone

7.65 Resetting Yealink W52P

To complete the automatic configuration on Yealink W52P, reset the phone to factory default settings:

1. Press the **OK** key to enter the main menu.
2. Select the **Settings** option.
3. Scroll to the **System Settings** option and press the **OK** softkey.
4. Scroll to the **Base Reset** option and press the **OK** softkey.
5. Enter the password (0000 by default) and tap on the **Done** softkey.

8 Completing Discontinued IP Phones Configuration

8.1 Resetting Aastra 6751i (51i)

1. Press the **Services** button on the phone
2. Scroll to **5 Options** (or Press **5** to jump to this option) and press the **Enter** softkey.
3. Scroll to **5 Admin Menu** (or Press **5** to jump to this option) and press the **Enter** softkey.
4. The requirement to enter the password will appear. Enter the password (22222 by default) and press the **Enter** softkey.
5. Choose the **4 Factory default** and press the **Enter** softkey.
6. The phone will ask for confirmation to reset to factory default press # to confirm.
7. In a few seconds the question "Restart phone?" will appear. Confirm the restart by pressing #.

8.2 Resetting Aastra 9112i

1. Press the **Options** key on the keypad of the phone to enter the **Options List**.
2. Use the up and down navigation keys to scroll to **11. Phone Status**. Press the **Enter** softkey.
3. Scroll to **4. Restore Default** (or Press **4** to jump to this option) and press the **Enter** softkey.
4. The requirement to enter the password will appear. Enter the password (22222 by default) and press the **Enter** softkey.
5. Choose the **1. All default** and press the **Enter** softkey.
6. The phone will ask for confirmation to reset to factory default press # to confirm.
7. The phone will ask for confirmation to restart the phone, confirm the restart by pressing #.

8.3 Resetting Aastra 9133i

1. Press the **Options** key to enter the **Options List**.
2. Use the up and down navigation keys to scroll to **11 Phone Status**. Press the **Enter** softkey.
3. Scroll to **5 Restore Default** (or Press **5** to jump to this option) and press the **Enter** softkey.
4. The requirement to enter the password will appear. Enter the password (22222 by default) and press the **Enter** softkey.
5. Choose the **1 All default** and press the **Enter** softkey.
6. The phone will ask for confirmation to reset to factory default press # to confirm.
7. The phone will ask for confirmation to restart the phone, confirm the restart by pressing #.

8.4 Resetting Aastra MBU400

To complete the automatic configuration on Aastra MBU400, reset the phone to factory default settings:

1. Press and release the **RESET** button on the rear of the MBU (do not hold it down).
2. On the front of the MBU, **POWER** lights steadily during a reset and **I-NET** flashes.
3. When the reset is complete **I-NET** lights steadily, indicating the MBU is ready to use.
4. The phone will restart with the new configuration.

8.5 Resetting ATL (Berkshire) 5000

To complete the automatic configuration on ATL (Berkshire) 5000, reset the phone to factory default settings:

1. Press the **Menu** key.
2. Use **Up** and **Down** keys to scroll to **4. Settings** press **OK**.
3. Enter the **Admin Password** by default 1111 press **OK**.
4. Enter to **Phone** press **OK** and navigate to **Restore Defaults** press **OK**.
5. Enter Reset Default and press OK.

8.6 Resetting Cisco IP Phone 7960

To complete the auto configuration on Cisco 7960 reboot the phone by pressing the *****, **6**, and **settings** keys simultaneously. Wait until the phone reboots downloading configuration files anQX.

8.7 Resetting Grandstream BT100, BT200

To complete the automatic configuration on Grandstream BT100, BT200, reset the phone to factory default settings:

1. Press the **Menu** button on the phone for **Key Pad Menu** options.
2. Press the **Up** or **Down** button to see **Reset**.
3. Just after the **Reset** is seen on the phone LCD, enter the MAC address of the phone using the key pad (It is a 12 digits HEX number located on the bottom of the unit).
4. Press the **Menu** button again to confirm the **Reset**.
5. Wait for phone reboot and the LCD backlight finish flashing.

8.8 Resetting Grandstream HT286

To complete the automatic configuration on Grandstream HT286, reset the phone to factory default settings:

1. Press **Pick up the headset**. Dial ******* or press the LED button for voice prompt.
2. Enter 99 and get the voice prompt **Reset**.
3. Enter the encoded MAC address of the device. Encode the MAC address. Please use the following mapping:

0–9: 0–9

A: 22

B: 222

C: 2222

D: 33

E: 333

F: 3333

If there are digits like "22" in the MAC, you need to wait for 4 seconds to continue to key in another "2"; for example, if the MAC address is 000b8200e395, it should be encoded as 0002228200333395.

4. Wait for 15 seconds. The device will reboot automatically and restore to factory default setting.

8.9 Resetting Grandstream HT386

To complete the automatic configuration on Grandstream HT386, reset the phone to factory default settings:

1. Locate a needle-sized hole on the back panel of the HT-386 unit next to the power connection.
2. Insert a pin in this hole, and press for about 7 seconds. The back LEDs for LAN and WAN will be solid on to indicate the reset.
3. Take out the pin. All unit settings are restored to factory settings.

8.10 Resetting IPDialog SIP Tone II (ST201)

To complete the auto configuration on IP Dialog SIP Tone II, reset the phone to factory default settings and enable the auto configuration via the built-in web server. By default, the phone is not in auto provisioning mode). To perform a factory reset, follow these steps:

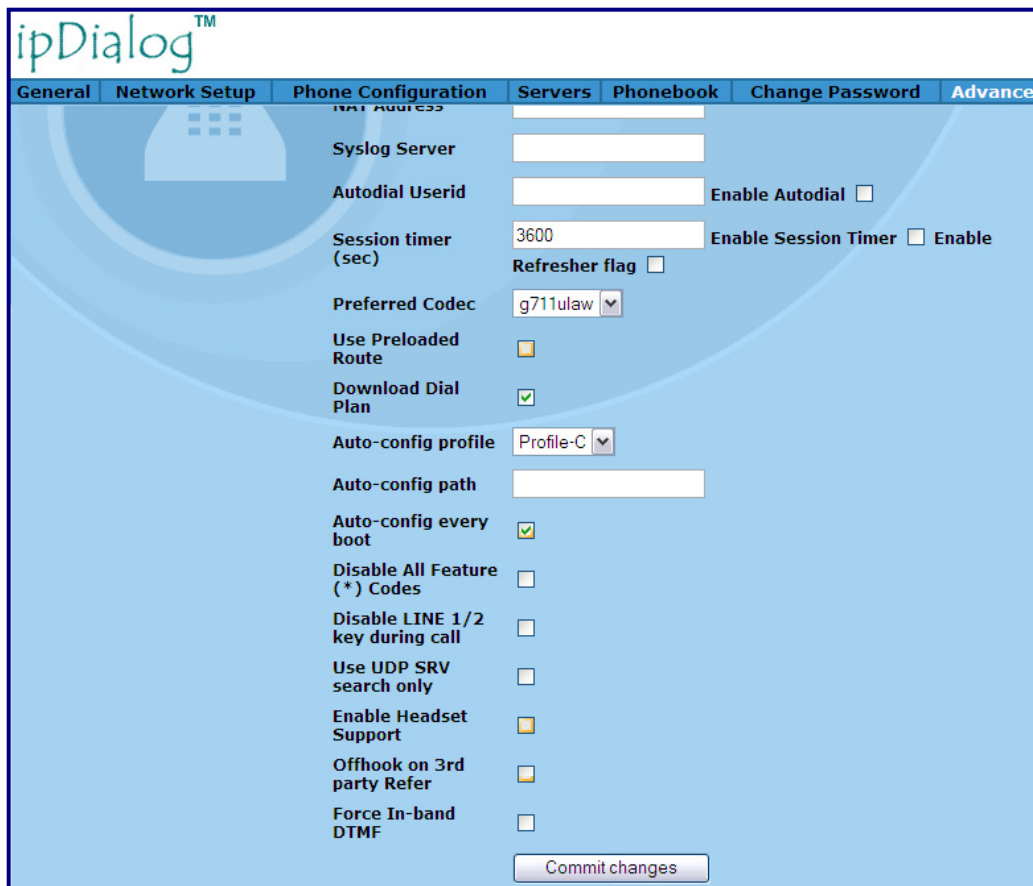
1. Press the MENU/HANGUP key on the keypad of the phone to access the main configuration menu.
2. Press 3, then 2 to enter the **Settings** and the **Phone Settings** menus, respectively.
3. Press 2 to select the **Config** phone menu.
4. Press 4, then 2 to enter the **Reset** and **Defaults** menus, respectively.
5. Press 1 to select the **Restore Defaults** item and confirm the restore by pressing **1**.

Please Note: Use the VOL keys to navigate within the menus. To select the menu item, dial the number associated with it. For example, the short way to perform the factory reset is to consecutively dial: **3→2→2→4→2→1→1**. The detailed way to perform the factory reset is:

3) Settings→2) Phone Settings→2) Config Phone→4) Reset→2) Defaults→1) Restore Defaults→1) Yes.

To enable the auto configuration on the phone, follow these steps:

1. Access the configuration web site on the phone's built-in web server. To do this, open a browser on a computer that is on the LAN of the QX and enter the phone's IP address into the address bar of the browser. The IP address of the phone may be viewed by pressing the INFO/MUTE key on the keypad of the phone. The phone will require the username and the password to allow access to its configuration. Enter the username *admin* and the password (the default is *admin*) and press **OK**. The configuration web site of the phone can also be accessed from the QX's IP Line Settings page. Click on the Web link corresponding to the IP line attached to the extension.
2. On the configuration web site of the phone's built-in web server (Figure 8), click on the **Advanced** tab to access the advanced settings.
3. Scroll to **Auto-config** profile and select **Profile-C** from the list to enable auto configuration.
4. Select the **Download Dial Plan** checkbox to allow the download of the dial plan from QX.
5. Select the Auto config every boot checkbox to allow the automatic download of the configuration files every time the phone boots. This is recommended otherwise it will load the file when the commit button on the web page is clicked on.
6. Press the **Commit** changes button and wait until the phone downloads the configuration settings. The LCD of the phone will display the username of the extension, but the status will still be unregistered.
7. Click on the **Servers** tab, select the **Register** through proxy checkbox (Figure 9), and press the **Commit** changes button. Wait until the phone is registered.

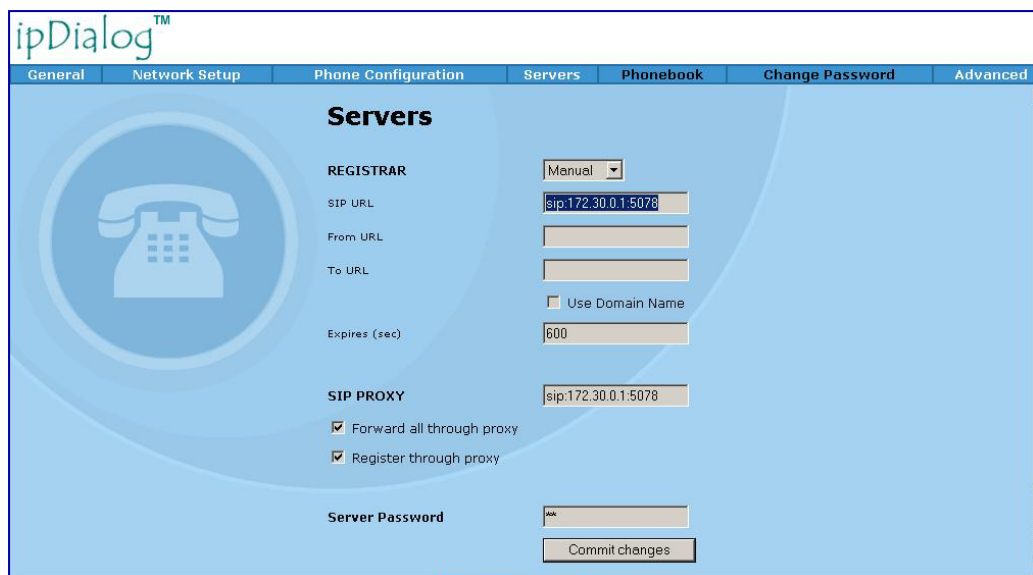


The screenshot shows the 'Advanced' configuration page in IPDialog. The navigation tabs at the top are: General, Network Setup, Phone Configuration, Servers, Phonebook, Change Password, and Advance. The main content area contains the following settings:

- IP Address:** [Empty text box]
- Syslog Server:** [Empty text box]
- Autodial Userid:** [Empty text box] **Enable Autodial:**
- Session timer (sec):** 3600 **Enable Session Timer:** **Enable Refresher flag:**
- Preferred Codec:** g711ulaw (dropdown)
- Use Preloaded Route:**
- Download Dial Plan:**
- Auto-config profile:** Profile-C (dropdown)
- Auto-config path:** [Empty text box]
- Auto-config every boot:**
- Disable All Feature (*) Codes:**
- Disable LINE 1/2 key during call:**
- Use UDP SRV search only:**
- Enable Headset Support:**
- Offhook on 3rd party Refer:**
- Force In-band DTMF:**

A 'Commit changes' button is located at the bottom right of the form.

Figure 8: IPDialog – Advanced Page



The screenshot shows the 'Servers' configuration page in IPDialog. The navigation tabs at the top are: General, Network Setup, Phone Configuration, Servers, Phonebook, Change Password, and Advanced. The main content area is titled 'Servers' and contains the following settings:

- REGISTRAR:** Manual (dropdown)
- SIP URL:** sip:172.30.0.1:5078
- From URL:** [Empty text box]
- To URL:** [Empty text box]
- Use Domain Name:**
- Expires (sec):** 600
- SIP PROXY:** sip:172.30.0.1:5078
- Forward all through proxy:**
- Register through proxy:**
- Server Password:** [Empty text box]


A 'Commit changes' button is located at the bottom right of the form.

Figure 9: IPDialog – Servers page

8.11 Resetting Linksys SPA922, 921, 941, 942

To complete the automatic configuration on Linksys SPA9x2, reset the phone to factory default settings:



1. Press the  **Setup** button on the keypad of the phone to enter the setup menu.
2. Press 14, or scroll down until **Factory Reset** is highlighted and then press the **Select** softkey.
3. The phone will ask for confirmation before doing a factory reset.
4. Press the **Ok** softkey (the left softkey) and wait until the phone restarts.

8.12 Resetting Sipura SPA–841 IP

To complete the automatic configuration on Sipura SPA–841, reset the phone to factory default settings and reboot it using these steps:

1. Press the **i** key on the keypad of the phone to enter the main menu.
2. Use the up or down arrow keys to scroll down to **14. Factory Reset**. Press the **Select** softkey, or dial **14** to immediately select this option. The phone will ask for confirmation before doing a factory reset. Press the **ok** (the left softkey) softkey and wait until the phone restarts.
3. Press the **i** key on the keypad of the phone and scroll to **12. Reboot** or dial **12** to immediately select this option. The phone will ask for confirmation to reboot. Press **ok** (the left softkey) to continue.

8.13 Resetting snom m3

To complete the automatic configuration on snom m3, reset the phone to factory default settings:

1. In the **Main** menu, choose **Settings**, and then press the **OK** key.
2. Choose **System** settings, press **OK**, enter the PIN code (default: 0000), press the **OK** key.
3. Choose **Reset Gateway**. Press the **Ok** key.
4. Press the **Yes** softkey when it is asked to reset. The Gateway will restart with the new configuration.

8.14 Resetting Swissvoice IP 10S

To complete the auto configuration on the Swissvoice IP 10S, reset the phone to factory defaults:

1. Press the **Menu** softkey on the keypad of the phone and scroll to the User settings menu by using the navigation keys. Press **OK** to enter the menu.
2. Scroll to **Other** settings and select it by pressing **OK**.
3. Select **Reset** and press **OK**. The phone will require the user password.
4. Enter the password and press **OK** (the default is 0000).
5. Select the **Factory** settings by pressing **OK**. The phone will ask confirmation to reset the phone.
6. Confirm the reset by selecting **Yes** and pressing **OK**. Wait until the phone reboots.

8.15 Resetting Telematrix IP550 Spectrum Plus

To complete the automatic configuration on Telematrix IP550 Spectrum Plus, reset the phone to factory default settings:

1. Press the **Menu** key (yellow button) **OK** key, enter the PIN code (default: 123) and press the **Enter** key.
2. Use **Up** or **Down** keys to scroll until **Config System** is highlighted, then press the **Enter** key.
3. Use **Up** or **Down** keys to choose **System Set Default**, then press the **Enter** key.
4. Use **Up** or **Down** keys to choose **ALL** (there are two types of setting system default), then press the **Enter** key; press the **Enter** key again to confirm.

5. It will be asked to **Reboot the Phone**, press the **Exit** key twice then choose **System Reboot** (using **Up** or **Down** keys), then press the **Enter** key, press the Enter key again to confirm the **Reboot**.
6. After rebooting you will be asked to Enter ConfigID, enter the IP line number (from the QX IP Line Settings page) on which you are going to configure the phone and press the (#) key. The phone will restart with the new configuration.

8.16 Resetting Telematrix 3300IP, 9600IPMWD5

To complete the automatic configuration on Telematrix IP3300, 9600IPMWD5, reset the phone to factory default settings:

1. Physically disconnect the power line from IP Phone (WAN socket) and connect it again.
2. Press # during the start-up procedure (At power up you can see a black progress bar). The phone will enter into post mode, then input * # 1 6 8. Then you will see clearing conf on the screen, next you see conf reset. Now you have reset to the default settings.
3. Physically disconnect the power line from IP Phone (WAN socket) and connect it again (in order to reboot).
4. After rebooting you will be asked to Enter ConfigID, enter the IP line number (from the QX IP Line Settings page) on which you are going to configure the phone and press the (#) key. The phone will restart with the new configuration.


8.17 Resetting Thomson ST2030S

To complete the automatic configuration on Thomson ST2030S, reset the phone to factory default settings:

1. Press the **Menu** button.
2. Press the **Admin** softkey.
3. To enter the password press the A>a>1 softkey to shift between upper case, lower case and digits.
4. Enter the Admin password (by default 784518) and press **OK**.
5. Using the navigation keys scroll down to **Reset Default**.
6. Press the Select softkey and press **OK** to confirm the **Reset**.

8.18 Resetting Yealink VP–2009

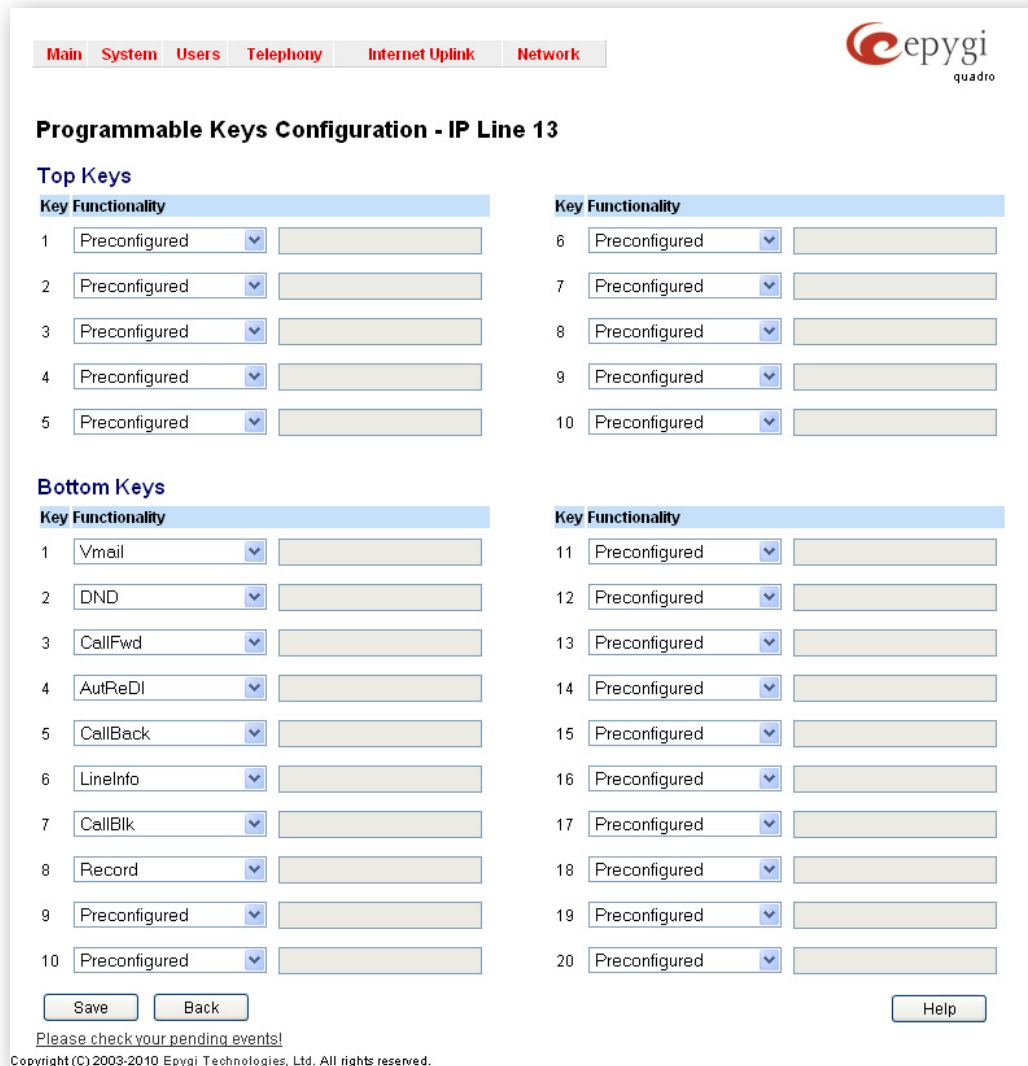
To complete the automatic configuration on Yealink VP–2009, reset the phone to factory default settings:

1. Select **Setting** and press **Factory** to enter the configuration page.
2. You are prompted to enter the required password, the default one is admin.
3. You are prompted to confirm the change, press  softkey to reset to factory settings. The phone will restart with the new configuration.

9 Programmable Keys Configuration

The **Programmable Keys Configuration** page is used to assign a function to the programmable keys of the IP phone. The design of this page depends on the IP phone model.

Independently on the IP phone model, this page contains a number of the programmable keys and **Functionality** drop down list assigned to each of them.



Main System Users Telephony Internet Uplink Network

epygi
quadro

Programmable Keys Configuration - IP Line 13

Top Keys

Key	Key Functionality
1	Preconfigured
2	Preconfigured
3	Preconfigured
4	Preconfigured
5	Preconfigured

Bottom Keys

Key	Key Functionality
1	Vmail
2	DND
3	CallFwd
4	AutReDI
5	CallBack
6	LineInfo
7	CallBlk
8	Record
9	Preconfigured
10	Preconfigured

Save Back Help

Please check your pending events!
Copyright (C) 2003-2010 Epygi Technologies, Ltd. All rights reserved.

Figure 10: Configuration of Programmable Keys on Quadro (the preview is individual for different IP phone model)

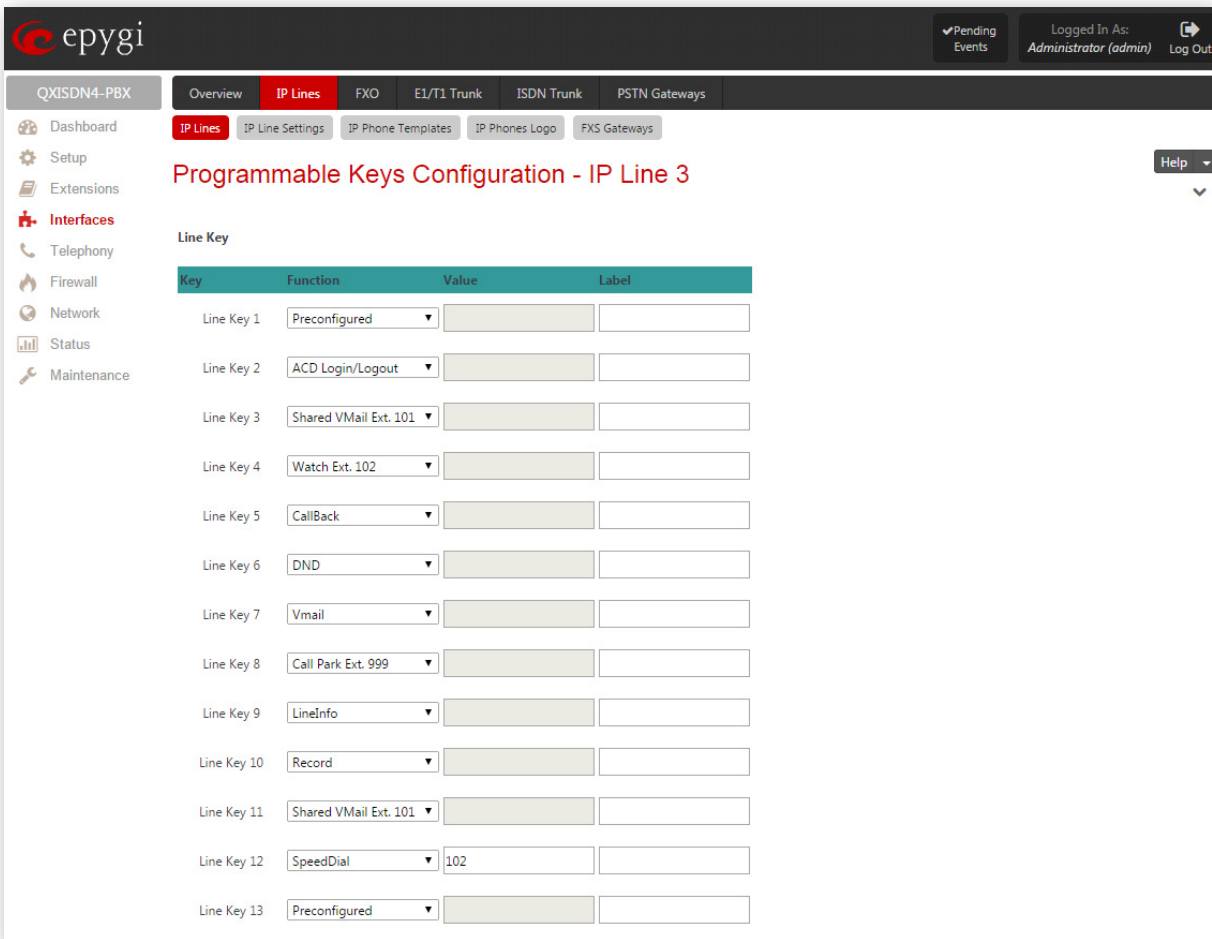


Figure 11: Configuration of Programmable Keys on QX (the preview is individual for different IP phone model)

The following options are available in the **Functionality** drop down list:

- **Preconfigured** – this option will not change anything for the key functionality. Actually it will keep the function previously configured for that key.
- **None** – this option eliminates any functionality for that key; actually it is disabling the key.
- **IP Line** – this will assign the corresponding IP line to the key. With this option configured the key will blink in case of incoming calls, will provide dial tone for outgoing calls and will be lit when the IP line is on a call.
- **SLA** – use the functionality of the SLA line as configured in the Key System Emulation page. This option is Quadro6L, Quadro4L and Quadro4Li product limited.
- **Watch Ext. #** – watch the extension on the QX and a possibility to pick up the call addressed to that extension.
- **Call Park Ext #** – watch the calls parked to the corresponding extensions and a possibility to retrieve the calls parked to that extension.
- **Record** – records the call (in case if manual call recording is allowed for the call, configured from Call Recording Settings).

This list also contains a number of PBX services available on the QX and accessible with the * key combination (see Manual III: Extension User's Guide for the corresponding product). When configured from this page, the key combinations become transparent for the IP phones too.

- **Vmail** – accesses the voice mailbox of the extension to which the receptionist IP line is attached to.
- **DND** – enables/disables the Do Not Disturb service on the extension to which the IP line is attached to.
- **CallFwd** – accessed Forwarding Management of the extension to which the IP line is attached to.
- **AutoReDI** – auto redials the last dialled call.
- **CallBack** – calls back to the last caller.
- **LineInfo** – gets the IP line information from the QX.
- **CallBlk** – blocks the last caller.
- **ACD Login/Logout** – allows the corresponding ACD agent to login or logout of all groups assigned to this agent. Once logged in, the key will be lit. This option is available for QuadroM32x, QuadroM8L/M26x/M12Li/M26xi, QX1000 and QX50/QX200/QX2000 products.

For **Aastra** phones (except the 6751i (51i) and 9112i models), the **Hard Keys** drop down is available to give a possibility for configuring the Hard Keys of the IP phone for using them either for SLA functionality or as a general IP Line. You may select the SLA line to which the Hard Key of your Aastra phone will be assigned. The Hard Keys assigned to an SLA line will work exactly the same way like the programmable key does.

Please Note: The **Hard Keys** configuration is available only on Quadro6L, Quadro4L and Quadro4Li products.

Please Note: When saving changes on this page, the system asks for a confirmation to remotely reboot the IP phone. It is required to reboot the IP phone after configuration changes on this page in order to make the new configuration effective on the IP phone.

10 Verifying Configuration

This section describes how to verify the IP phone successful configuration:

- Go to **QX System Status→IP Lines Registration Status** page to see if the IP Line registration is successful.
- Dial ***74** to get the line information.
- Make outgoing and accept incoming calls.
- Make sure the default (or newly specified) username set for an assigned IP line is displayed on the phone display (by default it has the '*locextNumber*' format).

11 Restrictions and Limitations

- The auto configuration of the IPDialog ST201 is not possible in the network configurations if the IP phone is using a DHCP server other than the QX's built-in DHCP. Please use the manual configuration for the IPDialog ST201.
- There is a licensing limitation for G.729 codec on the Grandstream phones (only 2 G.729 codec channels are supported). It is impossible to initiate a conference on the phone when all participants are using the G.729 codec. To initiate a conference use other codec than G.729.

12 Troubleshooting

The IP phone fails to reboot/restart

Some IP phones may fail to reboot when the reboot is initiated from the phone's LCD-based interface. The only way to recover the phone from the permanent reboot is to unplug the power cable from the base of the phone and plug it in again.

If there is a problem with auto configuration of Grandstream BT100 phones, after resetting the phone there is a need to set the configuration server manually from the GUI of the phone.

Advanced Settings→FW Upgrade and Provisioning:

FW Server Path: should be changed from *fm.grandstream.com/gs* to QX LAN IP (e.g. 172.30.0.1).

Config Server Path: should be changed from *fm.grandstream.com/gs* to QX LAN IP (e.g. 172.30.0.1).

13 IP Phone Uses a Third Party DHCP Server

To allow an IP phone to be configured using PnP or auto configuration options, the phone should be able to download the configuration file from the QX's HTTP/TFTP server. This requires that the boot server address of the phone be set to the IP address of the QX's Network interface. In network configurations where the IP phone obtains its network parameters from the QX's DHCP server (recommended in case when the IP phones are from LAN side, Figure 12), the boot server address is set automatically by the QX. For this configuration, no additional steps are required to complete the IP phone configuration except those mentioned in Sections [7](#) and [8](#).

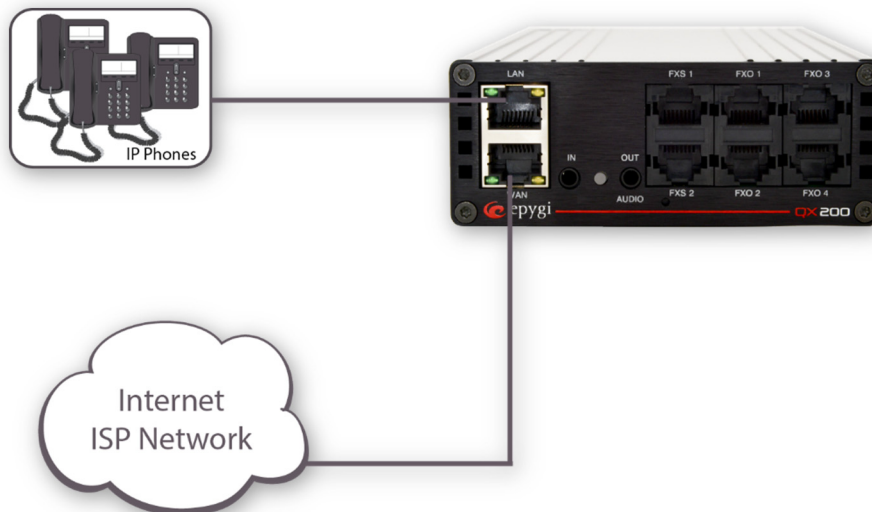
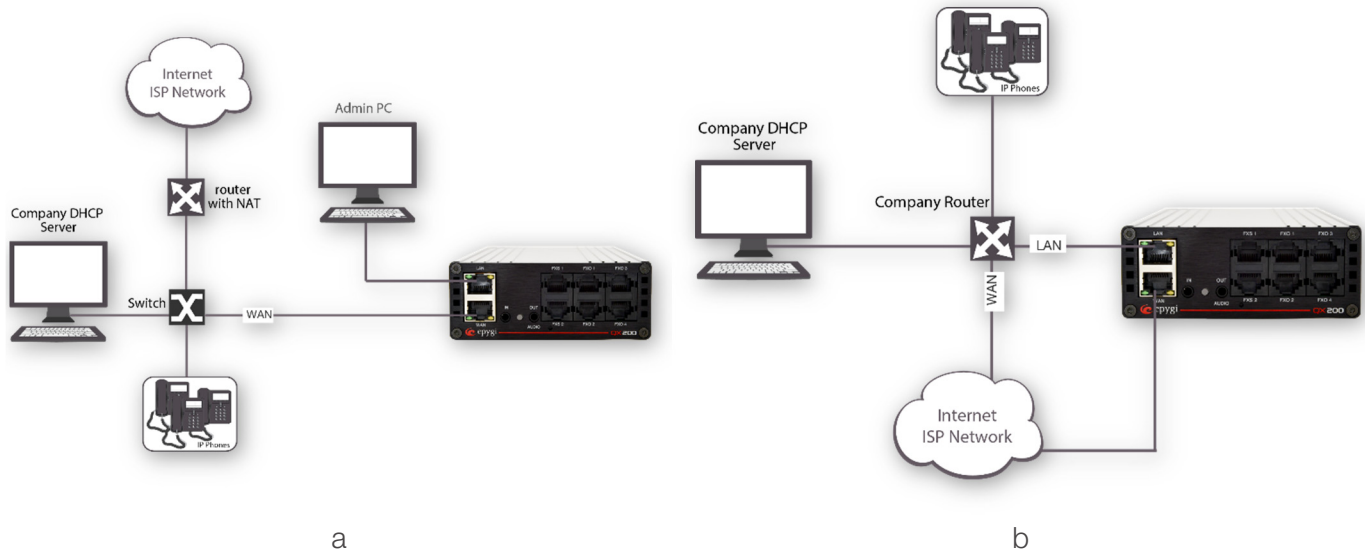


Figure 12: Recommended configuration for IP phone setup

If the IP phone uses a third party DHCP server, the DHCP server should be configured to notify the phone of the QX's IP address. An example of such network configuration is shown in a in case the phones are connected on the LAN side and b in case the phones are connected on the WAN side. In this example, the LAN or WAN of the QX, the dedicated DHCP server, and IP phones are in the same subnet. For the instructions on how to make appropriate changes to a third party DHCP server, please see Section [13.1](#).



IP phone uses a dedicated DHCP server

Please Note: If your company's LAN configuration is similar to the one shown in a make sure the DHCP server is disabled on the QX LAN. If it is not, unpredictable network behaviour may occur since two DHCP servers will be active on the same network.

13.1 Configuration Changes to a DHCP Server

The steps below describe how to correctly configure a third party DHCP server. These steps also apply to networks that consist of several logical subnets with the DHCP server and an IP phone on one subnet, and the QX on another.

- Set the options listed in Table 1 to the values shown in the right column.
- Create a DHCP record for each IP phone connected to the QX LAN.
- Reset the phone to its default settings and then reboot.

Please Note: For snom IP phones also configure the options listed in [Table 3](#). The DHCP configuration file for snom IP Phones should also contain the following section:

```
if substring(hardware, 1, 3) = 00:04:13
{
    option bootfile-name "snom.cgi?mac={mac}";
    option tftp-server-name "http://172.30.0.1";
    allow unknown-clients;
}
```

Option Name	Value	Example
003 Router*	QX LAN IP	172.30.0.1
004 Time Server*	QX LAN IP	172.30.0.1
006 DNS Servers*	QX LAN IP	172.30.0.1
015 DNS–Domain Name*	Epygi–config.loc	epygi-config.loc
066 TFTP Server Name	QX LAN IP	172.30.0.1

Table 1: Global scope options to configure – a) Phones are on the LAN side

Option Name	Value	Example
003 Router*	Network router’s IP	192.168.1.1
004 Time Server*	QX WAN IP	192.168.1.10
006 DNS Servers*	Network DNS server’s IP	192.168.1.1
015 DNS-Domain Name*	Epygi–config.loc	epygi-config.loc
066 TFTP Server Name	QX WAN IP	192.168.1.10

Table 2: Global scope options to configure – b) Phones are on the WAN side

*- It is optional to configure this parameter to point to the QX. It specifically depends on the network and can vary on network requirements.

Option Name	Value	Example
067 Boot file name	"snom.cgi?mac={mac}"	"snom.cgi?mac={mac}"

Table 3: snom IP Phones configuration

Once the appropriate changes to the DHCP server configuration are completed, reset the phone to start the phone configuration. Please see in Sections [7](#) and [8](#).

14 Appendix Linux–based DHCP configuration file

Below is an example of a Linux–based DHCP configuration file for different supported IP phones. The following settings are used in the example:

- QX LAN IP: 172.30.0.1
- Router IP: 172.30.0.2
- MAC addresses of IP phones.

```

subnet 172.30.0.0 netmask 255.255.0.0
{
    range 172.30.255.1 172.30.255.254;
    option routers 172.30.0.2;
    option subnet-mask 255.255.0.0;
    option domain-name-servers 172.30.0.1;
    option ntp-servers 172.30.0.1;
    option domain-name "epygi-config.loc";
    option tftp-server-name "172.30.0.1";
    if substring(hardware, 1, 3) = 00:04:13
    {
    
```

```

        option bootfile-name "snom.cgi?mac={mac}";
        option tftp-server-name "http://172.30.0.1";
        allow unknown-clients;
    }

    host Polycom_0004f200e90b
    {
        hardware ethernet 00:04:f2:00:e9:0b;
    }

    host Cisco7960_00059BB46B5A
    {
        hardware ethernet 00:05:9B:B4:6B:5A;
    }

    host Snom_00041321014A
    {
        hardware ethernet 00:04:13:21:01:4A;
        option bootfile-name "ipeconfig/snom-00041321014A.htm";
        option tftp-server-name "http://172.30.0.1";
    }
    host Aastra480i_00085D03067C
    {
        hardware ethernet 00:08:5D:03:06:7C;
    }
    host SwissVoice_000501010101
    {
        hardware ethernet 00:05:01:01:01:01;
    }

    host Sipura841_000601010101
    {
        hardware ethernet 00:06:01:01:01:01;
    }
}

```

15 References

- Manual II: Administrator's Guide for the corresponding release.
- QX Features on Epygi Supported IP Phones List.
- IP Phones and IP Lines Configuration Guide.

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