



XBLUE QB Setup Guide



QB1



QB2

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Revision History		
Revision	Date Released	Changes
20180406001	May 28, 2018	Initial release
20180529002	May 29, 2018	Spelling and various corrections
20180601003	June 1, 2018	Format changes. Included IVR/AA setup section
20181127001	Nov 27, 2018	Added changed Admin Password (FW 30.10.0.17+ requires stronger password)

About This Guide

Thank you for choosing a XBLUE QB PBX (Quad-Band PBX) server. XBLUE QB Series PBX servers are a stand-alone telephone system providing the user with an on-premise, fully-featured business telephone system. Your XBLUE QB PBX is an advanced application telephone system in an IP server format connected using your local area network. QB Series PBX's are hybrids capable of PSTN (Regular Phone Lines), VoIP Phone Lines, GSM Telephone Lines, or LTE Telephone Lines/Data Circuit (for voice communications). The configuration of your server depends upon the Package you've purchased. This guide is intended to get your telephone system functioning in the quickly.

XBLUE pioneered the self-install business telephone system in 2007 and continues to deliver easy to install and administer business phone systems in a DIY fashion to save you money. However, if you need help, we are available to assist you. Call us for a conversation with a live, technically-capable person if needed at 866-925-8312. This guide will cover connection and access of the server and XBLUE IP Phones and connection of analog telephone lines.

Your QB PBX is an advanced application product that is best adapted into your network by preparing for the installation. First gather information about your office network to prepare to connect your QB PBX into that environment.

Synopsis of what follows to get your telephone system functional:

1. Find your network IP Address scheme (Subnet)...
 - a. A LAN (Local Area Network) is a Private network that cannot be navigated via the internet. Private IP Address segments begin with 192.168.x.x, or 172.16-31.x.x, or 10.x.x.x
2. Find the IP Address of your router.
3. Connect LAN port of the QB server to the existing network.
4. Connect all XBLUE IP7g telephones to the existing network.
5. Using an internet browser (Chrome, Firefox, Microsoft Edge, Safari) visit the Advanced IP Scanner website and use that utility to discover the IP Address that your network has assigned to the QB server.
6. Set that IP as RESERVED in your network router. [If you use an ISP router (Comcast, Time Warner, Frontier, etc.) you can contact them for help with this step.]
7. Using your browser, log into the QB server using the IP Address discovered.
8. Run QB Server Auto Provisioning application to set the extension numbers of each of the phones connected.

After completing these steps, the QB server and IP7g telephones will be functional for the operations most often required in business communications. There are many ways to customize your caller experiences and many features available. Enjoy your QB server, IP7g telephones and all that is possible using the guides that we have loaded on our website. Visit often as we post frequent updates.

Defaults (what is set at the factory):

- Extension range is set 101 – 599.
- All extensions have an associated voicemail box with a password that is the extension number.
- Extensions assigned are 101 – 199 depending on the server.
- All telephone lines are set to ring into Queue 6700.
- When no one answers an incoming call, after 25 seconds that caller is routed to the IVR (Auto Attendant) where they hear the default greeting for the Day answering mode.
- All outward calling is limited to numbers beginning with a 2-9 or numbers that begin with a "1" but no longer than 11-digits.
- Paging Group 6300 is set for the first 25 extensions.

- Voice CODEC usage is set for G.711u as the first choice and G.722 as the second choice

Related Documents

This Setup Guide explains the installation of XBLUE QB PBX telephony Server and getting XBLUE telephones working. The documents below should also be referenced and will aid in specific programming and user information:

Document	Description
XBLUE QB Series Datasheet	Datasheet for the XBLUE QB Series IP PBX.
XBLUE QB Series Administrator Guide	Refer to this manual for instructions on how to configure, operate, monitor, and maintain the XBLUE QBPBX.
XBLUE IPT7g User Guide	This guide is a guide to the operations of the IP7g specifically as it relates to any server environment.
XBLUE QB Extension Users Guide	The Extension Users Guide is a guide to the use of the extension as it relates to the QB server. Including the instructions on how to log into the user portal, configure the account, listen to call recordings, check voicemail messages, and other extension related operations.

Before You Start

Before you begin to install your QB PBX server, please check the package contents to verify that you have received the items below. If there are any discrepancies please contact us so that we can make it right. 866-925-8312

Package Contents

(1) QB PBX*	(1) Power Adapter*	(1) Network Cable
(2) Telephony Line	(4) Rubber Feet*	(1) Warranty Card
(1) Quick Installation Guide		

* Note that the PBX model will vary depending on the package purchased. Note also that "Rubber Feet" and "Power Adapter" apply only the QB1 PBX server. QB2,3 & 4 PBX servers include mounting hardware and power cord.

Online aids

We are continually developing online aids for installation assistance. Please check our website for updates on a regular basis.

xblue.com/customer-support-service/qb-support/

You can use your smart phone to scan this URL with a QR Scanner.

Permanent



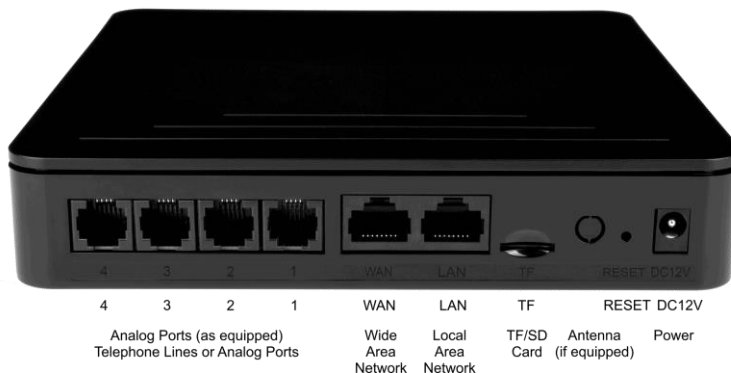
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Hardware Overview

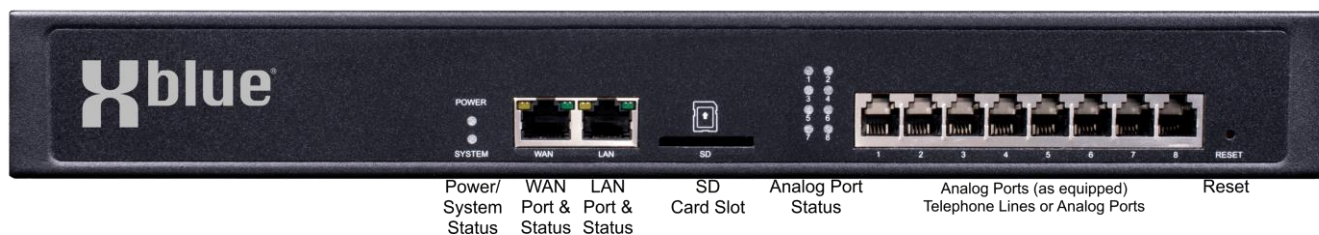
Front Panel – QB1



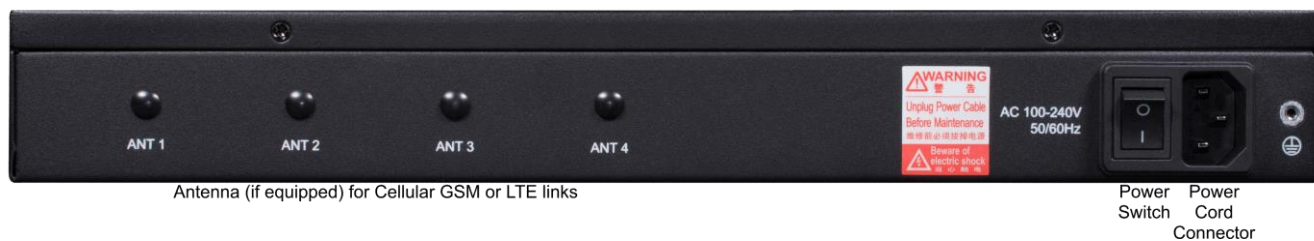
Rear Panel – QB1



Front Panel – QB2



Rear Panel – QB2



LED Indicators – Resource and Port Description/Status

LED	Status	Status	Description
POWER	Power status	On - Green	Power ON
		Off	Power OFF
System	System status	Blinking – Green	The system is running properly
		Steady/Off	The system is not running properly
WAN	WAN status	Steady – Green	Network Link is active
		Blinking – Green	Data Traffic detected (normal)
		Off	Off-line
LAN	LAN status	Steady – Green	Linked normally
		Blinking – Green	Data Traffic detected (normal)
		Off	Off-line
Analog Port Status	Analog Extension (FXS)	Green Steady Green Blinking	<ul style="list-style-type: none"> The port is idle There is an ongoing call on the port
	Analog Line (FXO)	Red Steady Red Slow Flash Red Fast Flash	<ul style="list-style-type: none"> PSTN Line is idle No PSTN line is connected to the port The PSTN line is busy
	Cellular GSM/CDMA/3G	Red Steady Red Slow Flash Red Fast Flash	<ul style="list-style-type: none"> Line is idle No SIM card detected Line is in use

Installation

Safety Precaution and Installation Warnings

To avoid personal injury or damage to the device:

Power

- Use only the power adapter/cord provided with the QB PBX.
- Keep the power OFF during installation and while installing/changing modules.
- Do not open or remove the cover of QB PBX when it is in operation.
- Remove the cover ONLY when power is disconnected.
- Before cleaning the device, turn OFF the power supply.
 - To clean; use a damp (NOT WET) soft cloth as routine maintenance.
 - Avoid contact with the port connectors. If port connections become wet allow them to dry COMPLETELY before restoring power.

Environment

- This device is intended for inside use only.
- Install the XBLUE QB PBX in a location that is clean, free from vibration, electric shock, static electricity and temperature/humidity extremes.
 - The operating temperature should be kept below 80°F (27°C).
 - The humidity should be less than 95% and NON-Condensing.
- Do NOT install in a moist or wet environment.
- Install in a location where the device is easily accessed for periodic maintenance.

Module Installation

XBLUE QB servers support various port configuration modules listed below. The optional modules are installed in Module Slots inside each server. QB3 & 4 require a module adapter (QBXP8) to install any optional module.

<u>Modules</u>	<u>Server</u>	<u>Quantity of Modules possible</u>
• QBS2 Port Module	QB1	2 Slots, 2 Module Max
• QBO2 Port Module	QB2	4 Slots, 4 Modules Max
• QBSO Port Module	QB3	8 Slots possible, 8 Modules Max. Note: QB3&4 require Module mounting boards
• QBGSM Port Module		
• QBLTE Module		
• QBXP8 (QB3&4 only)		QBXP8 which allow 4 slots each when installed.

Notes

- If the bundle you've ordered includes a XBSO Module (one line and one analog phone port) it will be installed in the first position and PORT1 of you server will be the ANALOG PHONE PORT.
- Line PORTS begin at PORT1 or 2 if the XBSO is installed.
- If port configuration is to be changed, pre-installed modules must first be removed.



Desktop Installation – QB1

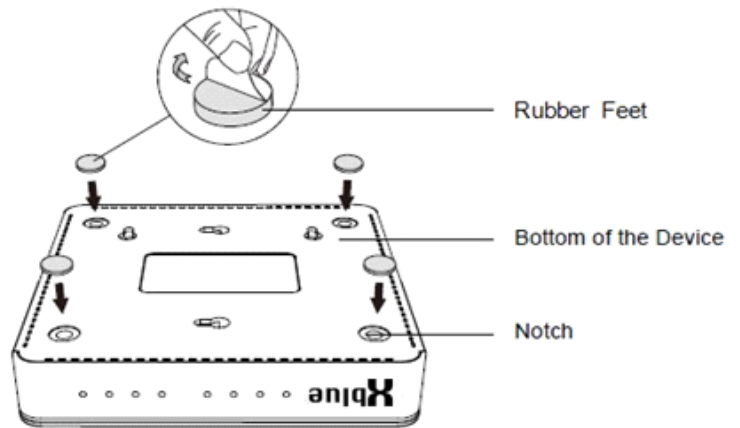


WARNING

- Ensure that a space of 5~10cm (2-4 inches) is maintained around the QB device for air circulation.
- **Do NOT stack** anything on top of the QB device.
- The QB2 and QB3 should be wall or rack mounted.

QB1 is a desk-mounted device and shipped with rubber feet to keep it stable on the desktop. The rubber feet cover the device’s assembly screws when installed. These screws are accessible when shipped to allow Module configuration changes if desired.

- **STEP 1** Place the QB1 server upside-down on a stable surface.
- **STEP 2** Remove the adhesive backing paper from the rubber feet provided.
- **STEP 3** Attach the rubber feet to the recessed areas on the bottom at each corner of the device.



Connecting the Equipment

STEP 1 Connect one end of a network cable (provided) to the LAN port of XBLUE QB1, and the other end to any LAN port of your company’s LAN data-switch or router. It must be connected to the same network to which the XBLUE IP Phones are connected.

STEP 2 Connect the telephone lines from your service provider interface to the ports of the QB (QB1: 1~4)(QB2: 1~8). Note: VoIP Lines have no cable/wire connections, they are programmed into the server.

Modules Installed	Chassis Port	Description
QBSO and QBO2	1	Connect phone cable to Analog Phone/Speakerphone/Cordless
	2	Connect phone cable to Telephone Line (Provider)
	3	Connect phone cable to Telephone Line (Provider)
	4	Connect phone cable to Telephone Line (Provider)
QBO2 (2x)	1	Connect phone cable to Telephone Line (Provider)
	2	Connect phone cable to Telephone Line (Provider)
	3	Connect phone cable to Telephone Line (Provider)
	4	Connect phone cable to Telephone Line (Provider)

STEP 3 Plug the provided power adapter into the power jack on QB1 and the other end to a standard electrical wall socket. Wait for the system to boot up which is indicated by blinking SYSTEM LED.

Configuration of QB/Get Phones Working

XBLUE QB IP Telephony Servers are administered using a web browser. When the QB is connected to your network it will obtain an IP Address from your network. To begin you must find that IP Address given to the server by your network. You may also use your router to discover the IP Address of the XBLUE QB Server. This is done using your router's Connected Device function however since there are many variations of routers we will use the network scanner approach in this guide.

Steps to logging in...

- Download a network scanner
- Find the IP Address scheme (subnet) or your network
- Use the network scanner to find the IP Address of the QB PBX Server
- Secure the QB Server IP Address on your network
- Access the QB server Web GUI
- Configure the QB server Web Desktop

To find the IP Address of the QB1

Download a network scan tool

We have successfully used a utility that is available free of charge called Advanced IP Scanner. Use your browser to download this scanner. Macintosh users will need to investigate IP Scanners that are compatible with their OS.

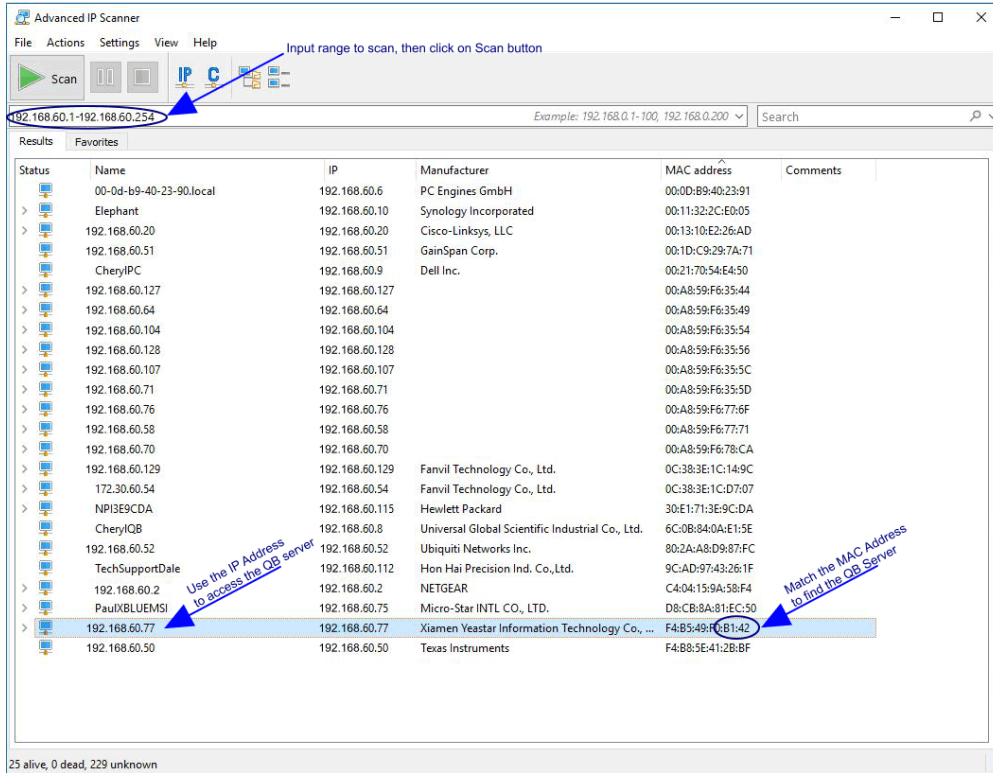
1. Go to <https://www.advanced-ip-scanner.com>
2. Click on the Free Download button
3. Use your PC's download function to save the SW on your PC and then select Run.

Advanced IP Scanner

Once the scanner is loaded it can be used to scan your network to discover all the devices connected including the XBLUE QB Server.

1. Advanced IP Scanner will normally determine your network IP Address scheme and propagate the scan range for you. If it does not you'll need to discover your network scheme using your PC's network interface discovery function.
 - a. Open the Network and Sharing Center on your PC and retrieve the Properties for IPv4 Details.
 - b. Listed there you may find that your PC is using IP Address 192.168.1.x (x=1~255). In this case your scan range will be 192.168.1.1 ~ 192.168.1.255.
2. Input into the IP scanner range bar the network range to scan (e.g. Some usual ranges are: 10.x.x.1-10.x.x.256, 192.168.x.1-192.168.x.256, 172.y.x.1-172.y.x.256 where "x" is any number between 1-255 and "y" is any number between 16-31). In the example below I found my IP Address to be 192.168.60.75 so the range I input to scan was: 192.168.60.1 – 192.168.60.255





3. Click on the Scan button.
4. Once the scan is complete find the device on the list by matching the MAC Address of the server to the MAC Address in the list.
5. Input the IP Address into the web browser address bar (where you input web pages names).
6. The first time you access the QB server you will be prompted to validate the connection as secure.
7. To do so, click the Advanced button and then Add Exception. This will avoid this prompt for all future connections to the server.

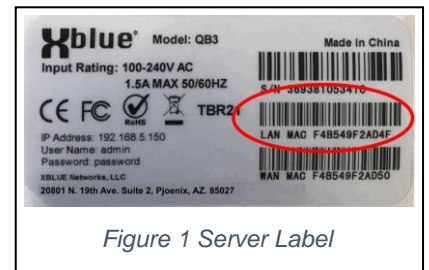
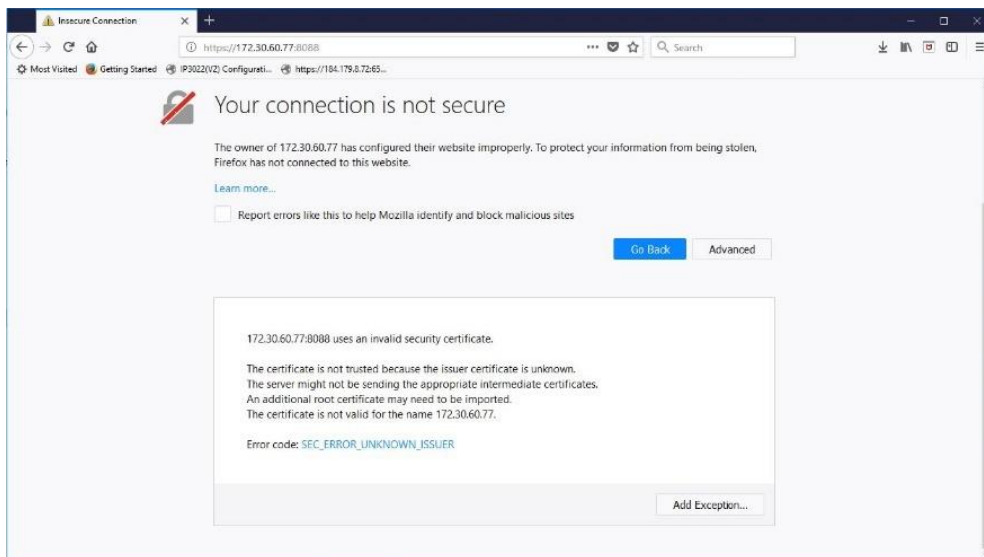


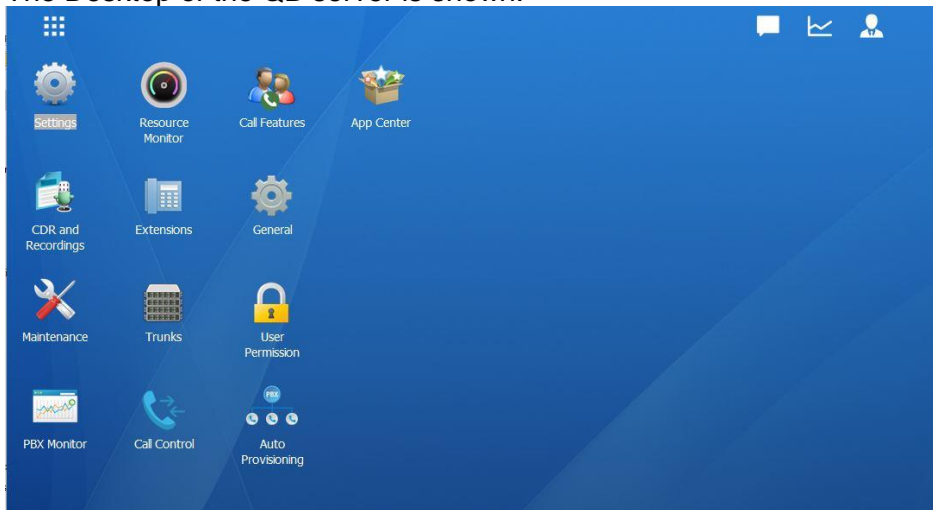
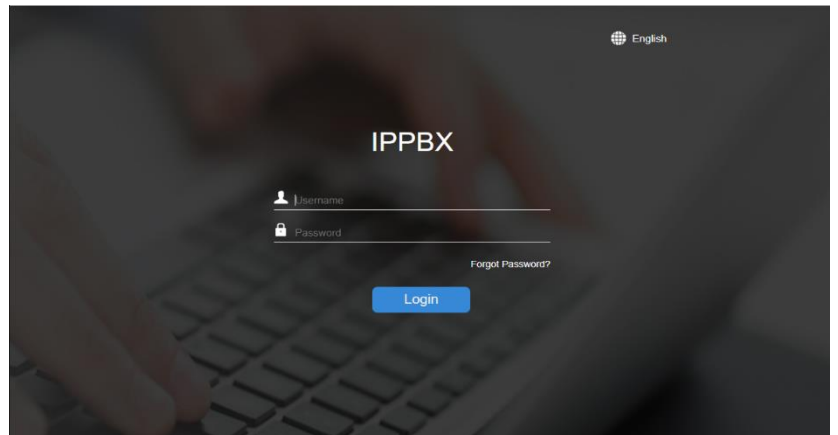
Figure 1 Server Label



Access the QB server programming interface

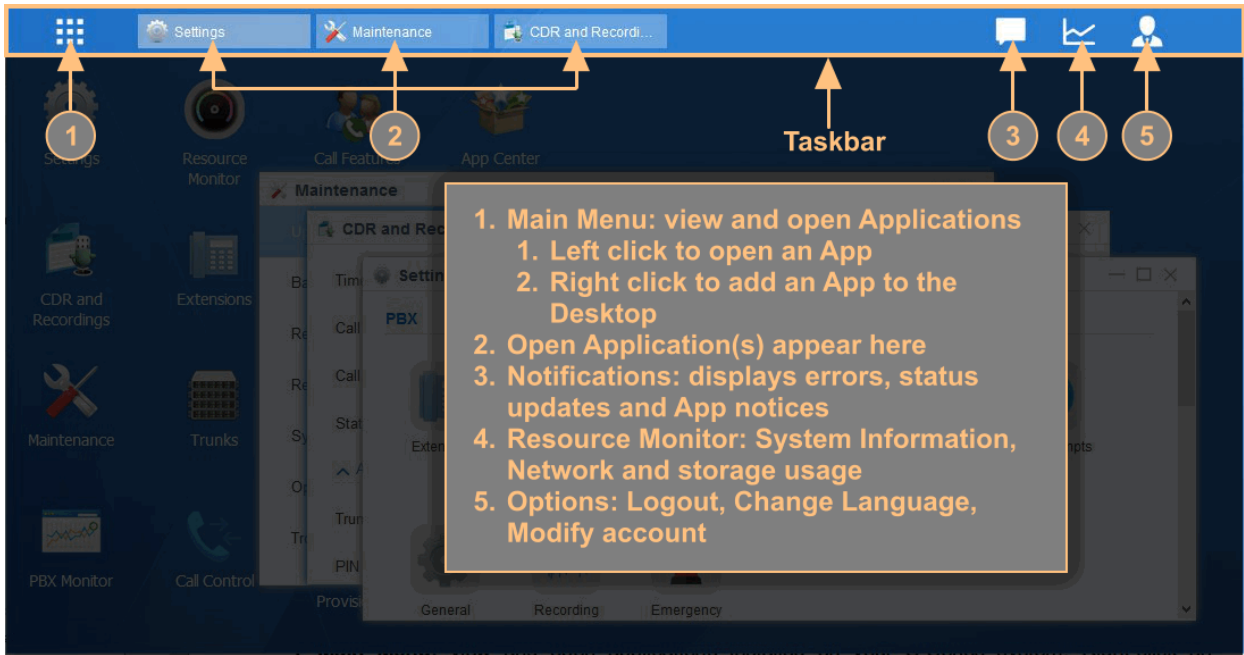
Once the IP Address of the QB server is known, input into your browser and Exception added, you will be able to access the administration of the QB server and begin setting up your XBLUE IP Telephone System.

1. QB administration is password protected.
2. At the login screen input the preloaded username and password:
 - a. Username: admin
 - b. Password: XBLUEqb12&3
(previously in versions prior to 30.10.0.17: XBLUEqb2)
3. The Desktop of the QB server is shown.



4. All of the configuration settings of your QB server can be accessed using the Settings icon. Additional applications are also available by clicking on the Main Menu (dot-cube) in the upper left of the Desktop. One such application is the Auto Provisioning icon. Any of these applications can be placed on the Desktop for quick access. Just Ring-Click on an application and select "Add to Desktop".
5. The figure at the right shows the desktop with the open Apps:
 - a. Maintenance
 - b. CDR and Recordings
 - c. Settings app open.
6. The figure below shows these Apps open in the task bar at the top. Short definitions are given.





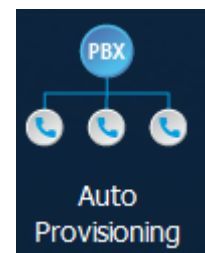
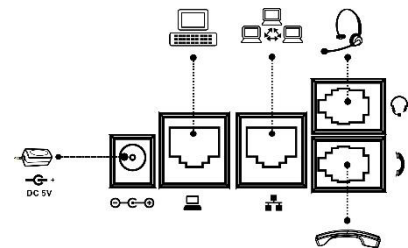
Getting your XBLUE IP Phones working

From the Main Menu or from the Desktop start the Auto Provisioning App to get your XBLUE IP Telephones functional on the QB Server. “Provisioning” is the process of loading the unique configuration for the phone for system use on the current network. The Auto Provisioning application makes finding connected telephones on the network easy. It will also allow you to assign extension numbers to the phones. Extension numbers are an ID of that telephone on the system and provide for inter-office calling between the telephones of the system.

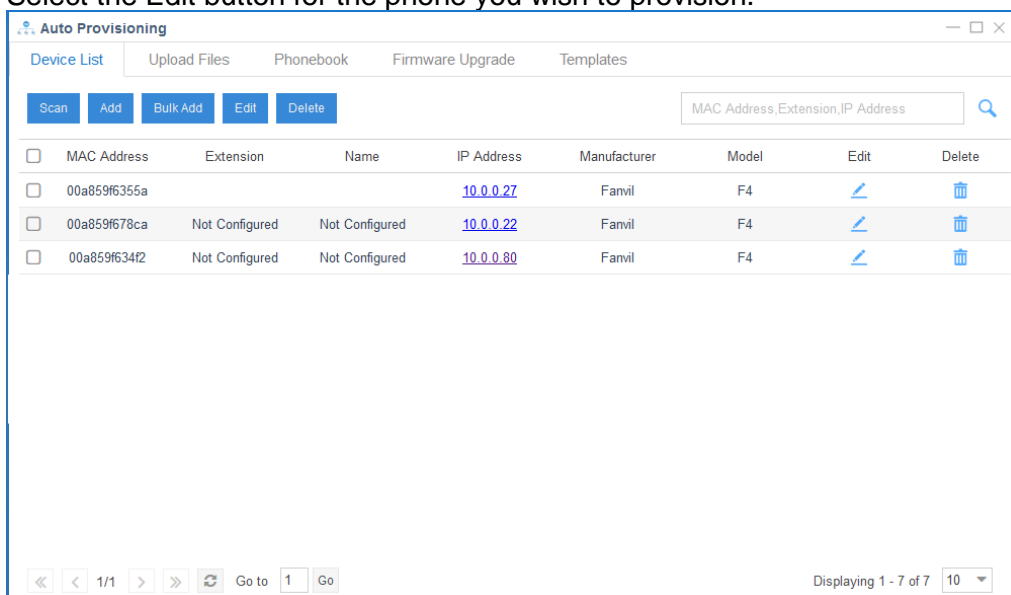


Connect your XBLUE IP Phones

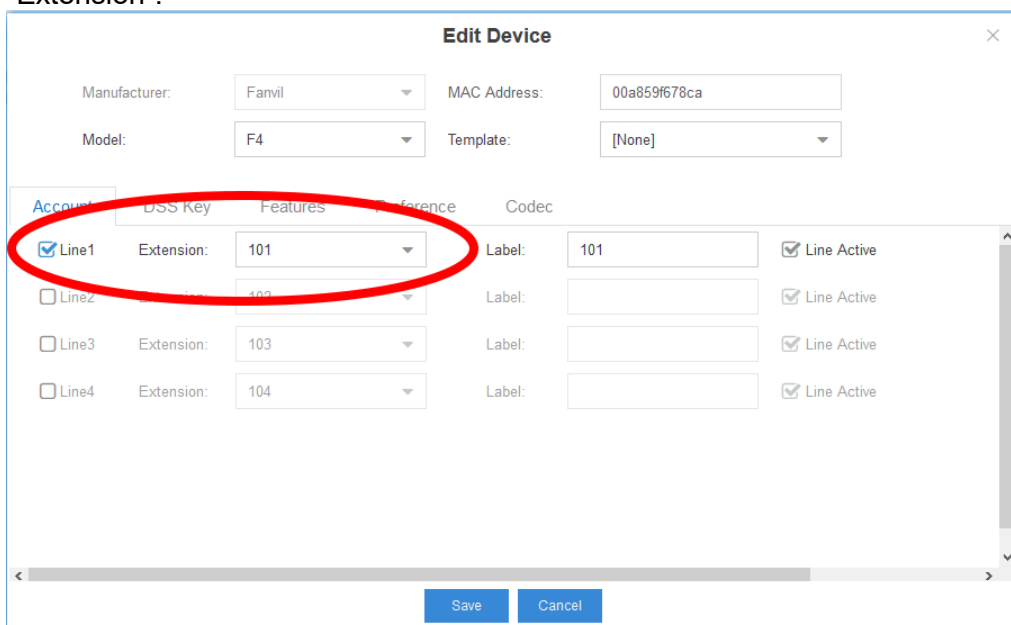
1. If your XBLUE IP Phones aren’t already connected to the network, connect them now.
 - a. Use the diagram as a guide to connect your XBLUE IP Phones to your network. The NETWORK connector is in the center and is connected to your network wall jack.
 - b. You can use the PC connector to connect your computer to the same network.
 - c. IP Phones must be connected to the same network as the QB Server. (The wall jack must go to the same data-switch and router to which the QB server is connected.)
 - d. IP7g telephones are pre-loaded with XBLUE functions to allow seamless operation with the QB server.
2. Once all telephones are connected to the network and powered up, click the Auto Provisioning icon to start the App.
3. The App will open and immediately perform a network scan to find the XBLUE IP Phones.
4. Once the scan is complete the list of phones discovered will appear. Pick any one telephone on this list to assign it an extension number and registered to the QB server.
 - a. Note: if phones are not discovered they are either on a different network or connected by a router that is isolating them form the network to which the QB server is connected.



5. Select the Edit button for the phone you wish to provision. 



6. In the edit box of the selected phone click on the Model of the phone. The IP7g XBLUE telephone is one of the “F4” family of telephones. Select “F4” from the list for the IP7g telephone.
7. Along the left column “Account” there are boxes used to assign the IP Phone an extension number. Check the first box in the upper left to assign one extension number to this telephone.
8. Select the extension desired from the available extension numbers on the Pull-Down next to “Extension”.



9. Select Preferences
10. In Preferences select:
 - a. Time Zone
 - b. Daylight Savings Time mode
 - c. Location (specific within region)
 - d. Time Format, and;

e. Date Format you desire.

Edit Device

Manufacturer: Farvil MAC Address: 00a859f634f2

Model: F4 Template: [None]

Account DSS Key Features **Preference** Codec

phone Language: English

Time Zone: (UTC-6) Canada, Chile, Mexico, United States

Primary NTP Server: time.nist.gov

Secondary NTP Server: cn.pool.ntp.org

Daylight Saving Time: Automatic

Location: United States(Central Time)

Time Format: 12 Hour

Date Format: Monday January 1

Save Cancel

11. Click Save.

12. At the prompt; "Restart Telephone" select Yes.

- a. This action will cause the phone extension configuration data to be sent to the IP Phone. Once the data is sent the phone will restart and become functional as that extension number on the QB server and on the current network.

13. Continue these Steps (form Step 5) for all the phones connected to the network.

Ensure Dedicated spot for QB on your network

The QB is shipped so that it will become operational on your network regardless of how your network is configured. It is VERY important that the QB Server (as any server) be given a dedicated position on your network to ensure that it does not get assigned a new location by chance. If this were to happen the IP Phones registered to the server would no longer function. To ensure this doesn't happen a fixed position on your network must be established. This is done using Static IP Address assignment or by RESERVING the position in your router that was given by your router. This is often the easiest technique since Static IP Address assignment requires in-depth knowledge of the network configuration and router setup. Since your server is now functional on your network we'll cover RESERVING the position on your network in your router – which can also be accomplished by contacting your ISP (Internet Service Provider) and asking them to do it for you if it is their router that you are using. The following steps are taken using a typical router on a widely known ISP.

Secure the QB Server IP Address on your network



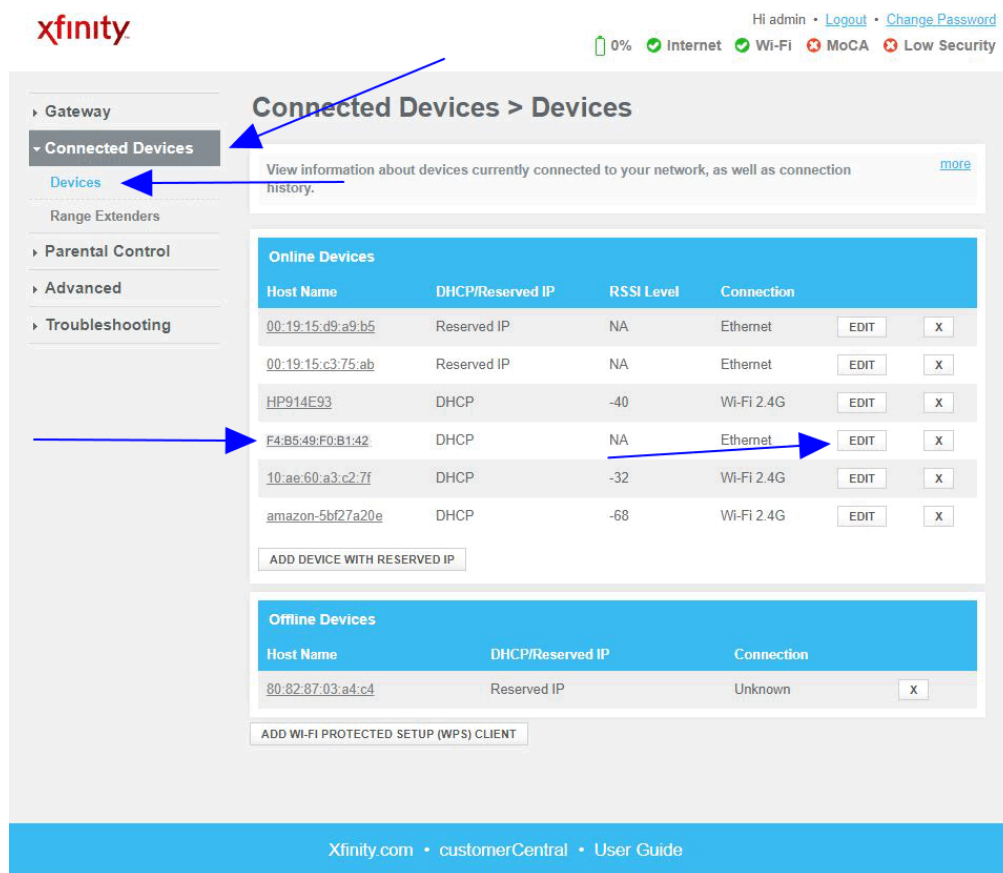
It is important that you secure the IP Address given to your QB server so that the automatic functions of your network do not change the QB Server IP Address. Your choices to do this:

- Access your network router and Reserve the IP Address
- Contact your ISP (Internet Service Provider) and request that they access your router and reserve the address for you. (This only applies if the router in use was provided by the ISP.)

Example of Reserving the IP Address

(This is one example of many possible routers.)

1. Use a browser and access your router, this is usually the IP Address listed as the “Gateway” in the network discovery. Once the credentials (Username and Password*) are input the various GUI pages of the router will be seen. Find the Connected Devices list in your router.



*If you don't know your router's UN and PSWD contact your network administrator or ISP. Often the Username and Password are listed on the router label.

2. Find the QB PBX server on the list by locating the QB Server MAC Address.
3. Click on the device MAC Address to open and view the device details.
4. Then click on Edit.

Hi admin • [Logout](#) • [Change Password](#)
0% Internet Wi-Fi MoCA Low Security

Connected Devices > Devices

View information about devices currently connected to your network, as well as connection history. [more](#)

Online Devices			
Host Name	DHCP/Reserved IP	RSSI Level	Connection
00:19:15:d9:a9:b5	Reserved IP	NA	Ethernet
00:19:15:c3:75:ab	Reserved IP	NA	Ethernet
HP914E93	DHCP	-41	Wi-Fi 2.4G
F4:B5:49:F0:B1:42	DHCP	NA	Ethernet
IPV4 Address 172.30.60.77 MAC Address 00:A8:59:F6:35:43 Comments			
10_ae:60:a3:c2:7f	DHCP	-35	Wi-Fi 2.4G
amazon-5bf27a20e	DHCP	-69	Wi-Fi 2.4G

[ADD DEVICE WITH RESERVED IP](#)

Offline Devices		
Host Name	DHCP/Reserved IP	Connection
80:82:87:03:a4:c4	Reserved IP	Unknown

[ADD WI-FI PROTECTED SETUP \(WPS\) CLIENT](#)

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5. This opens the page in your router for the QB PBX device.
6. Select Reserved IP to secure this IP Address for the QB server.
7. Make appropriate notes about the device on this page of your router for your future reference.

Hi admin • [Logout](#) • [Change Password](#)
0% ✔ Internet ✔ Wi-Fi ✘ MoCA ✘ Low Security

Connected Devices > Devices > Edit Device

Change the IP address assignment method for Online Devices. [more](#)

Edit Device

Host Name: F4:B5:49:F0:B1:42

Connection: Ethernet

Configuration: DHCP Reserved IP

MAC Address: F4:B5:49:F0:B1:42

Reserved IP Address: 172.30.60.77

Comments: XBLUE QB PBX

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8. Click Save.

Notes on IVR/Automated Attendant

IVR is Integrated Voice Response it was first introduced in phone system many years ago as Automated Attendant. It is mostly the same however the QB IVR/AA has the ability to be very effective with multiple options. This means planning though since the caller experience is very important to handle in such a way to cause their call to be as streamlined as possible. At default (the way the system is shipped to you), incoming calls are set to ring at the first 20 telephones of the system (if you have that many). If no one answers the ringing caller in 30 seconds the call will be routed to the DAY mode IVR. The Greetings of this IVR are set the generic greetings that advise the caller that they may dial the extension number they want to call. They may also dial 0 to ring the phones again.

You should make plans about what callers will experience when they dialing into your system. For example, you may choose to route callers to a voicemail box instead of to the IVR/AA. If you intend to use IVR/AA you should plan the “tree” of events that will take place. For instance, the default method rings the phones first – then goes to the IVR/AA. From there they may dial an extension or 0 to ring the phones again. This is a simple IVR/AA tree. Your tree may be more complex. For example, you may want to provide callers with an option to “Dial 1 for Sales”. If you do this you must rerecord the greeting so that callers are advised of the option available to them and you must set the destination of the dialed digit ...1.

Possible Destinations are:

Destination	Notes
Hang Up	not commonly used
Extension	e.g. “dial any extension you wish”
Voicemail	you also input the VM Box to which the caller will be routed
IVR	maybe you want to provide more options for the caller to select, to do so send this caller to another IVR when they press this digit
Ring Group	A simple grouping of phones to ring many phones at once or one then the next etc.
Queue	An advanced application of Ring Group providing many additional options in delivering callers to the phones and what the caller will hear as they wait to be answered
Conference	your QB server has conference rooms that can be set as destinations for callers to connect to other parties
DISA	this is Direct Inward System Access; the feature can invite hackers to use your system so if used it should be carefully managed
Callback	Not yet implemented
Fax to Email	
Dial by Name	This will use the programmed names for extensions to allow a caller to input the name using the corresponding dial pad digits
Custom Prompt	This plays an announcement that was recorded specifically for information conveyance. (e.g. directions to the office)

IVR Planning

Plan your IVR using the example below as a guide

IVR Name	IVR Number (assign in Admin)	IVR Prompt (WAV file) or what you'll record
	Can be 6503 ~ 6599	
Dial Extension Numbers Y / N	Dial By Name Y / N	Check Voicemail Y / N

When they press this key:	This happens (from possible destinations):
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
#	
*	
Timeout (they don't do anything)	
Invalid (undefined destination)	

NOTE about changes in the QB Server

If you have made/make changes in the QB server be sure to click on the Apply button in the upper-right of the Desktop since changes you make are simply stored in a file until loaded to the server for use. The process invoked with the "Apply" button at the top-right corner makes the changes take effect. Depending on the changes made and the activity on the server your changes may take a few seconds to load.



[END]