

Simple setup guide for Solwise IPBX-SW VoIP PBX.



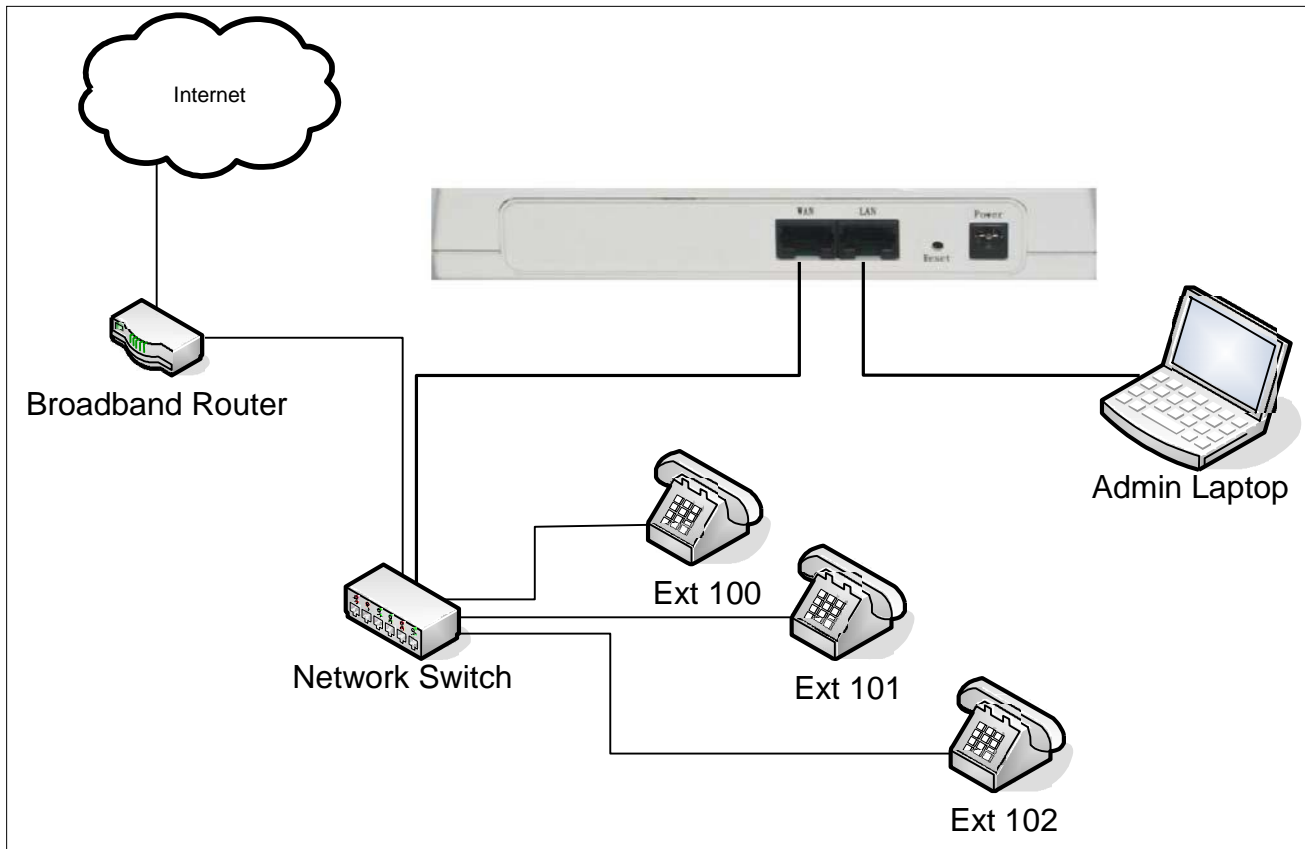
Before starting you will require the following information;

From your Internet Telephony Service Provider (ITSP);		
	Used in this example	Your settings
SIP Trunk Account Name	sip-iis-1	
SIP Trunk Account Password	secretpassword	
Phone number allocated to account	08450048101	
SIP Server Address	sip.iisupport.com	
SIP Server Port	5060	

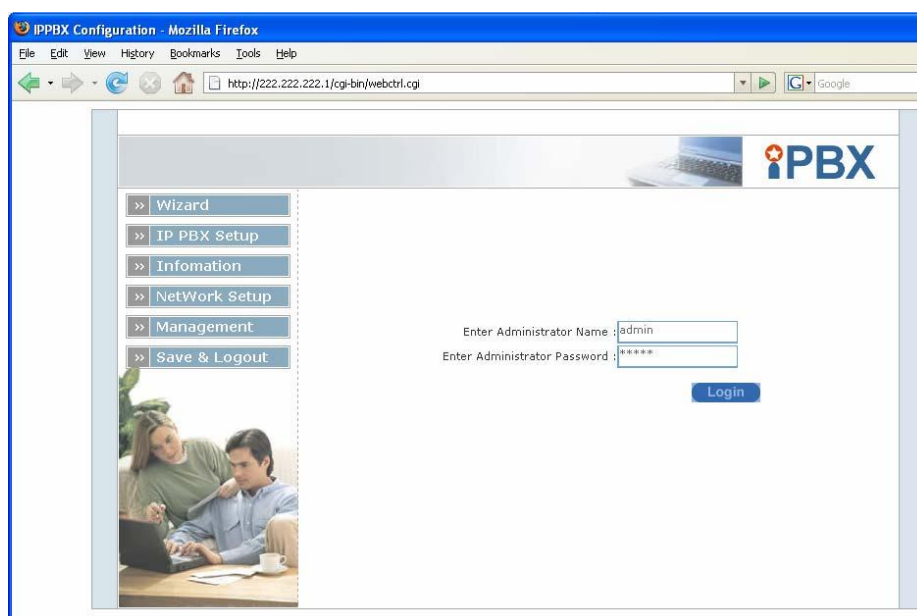
From your network administrator		
IP Address for iPBX	192.168.1.2	
Netmask for local network	255.255.255.0	
Default gateway of local network	192.168.1.1	
WAN address of your broadband line or dynamic DNS type entry configured for your line		

Decided by you		
Extension 1 – Caller ID	100	
Extension 1 – User	100	
Extension 1 – Password	secret	
Extension 2 – Caller ID	101	
Extension 2 – User	101	
Extension 21 – Password	secret	
Extension 3 – Caller ID	102	
Extension 4 – User	102	
Extension 4 – Password	secret	

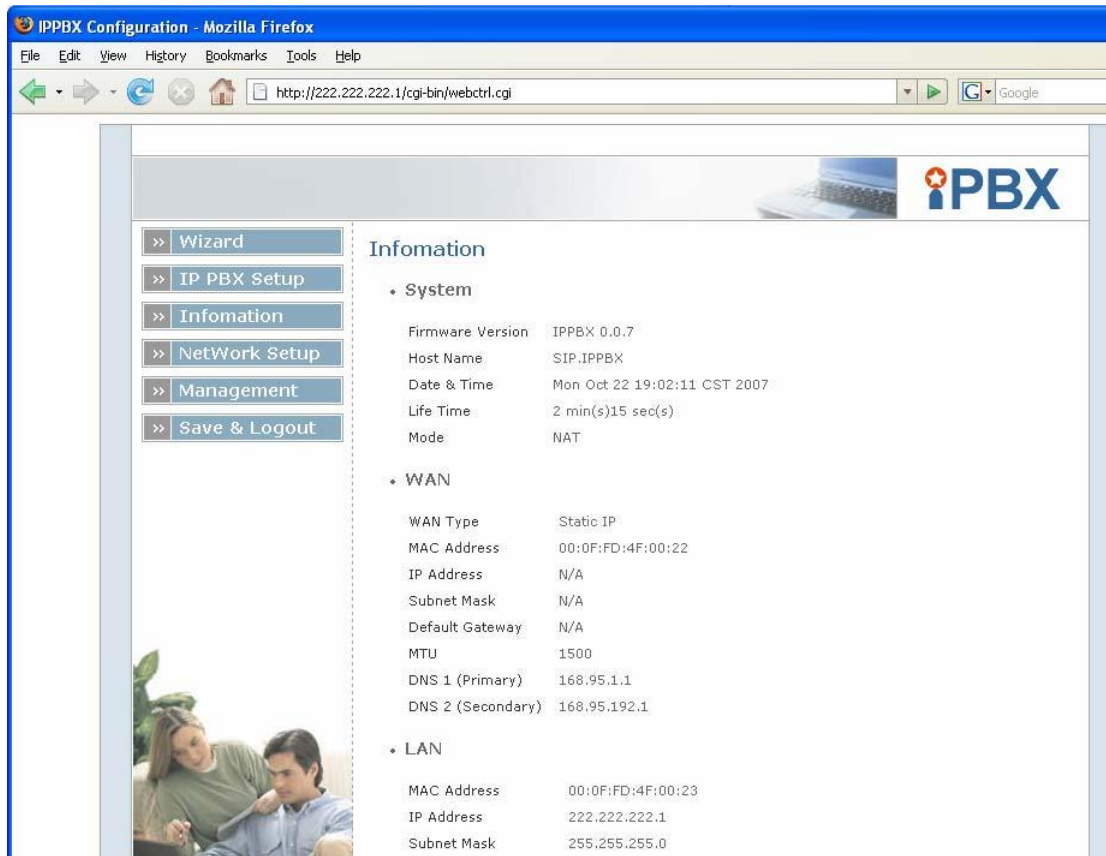
Connect the system up as shown below. For this example we will be using the LAN port for configuring the iPBX, everything else is connected to the WAN port.



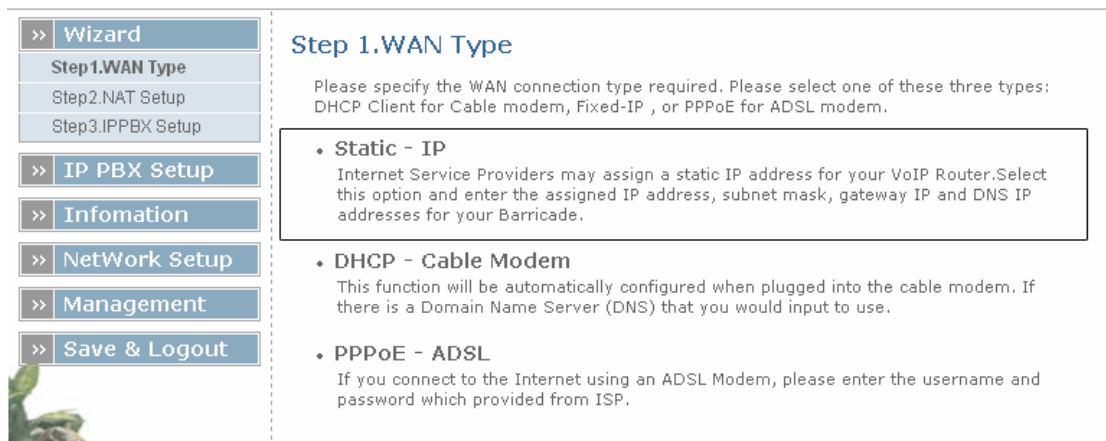
With the Admin Laptops network interface set to DHCP opening <http://222.222.222.1/> in a browser should bring up the iPBX login screen.



Sign in using the default username *admin* with a password of *admin* and you'll be presented with the main screen.



From click on “wizard” to start the setup wizard. The first question is about how the WAN interface is configured. We will be using “Static – IP” so select this.



Enter in the details given to you by your network administrator and click on *Next*

Step 1. WAN Type

- ◆ **Static - IP**

WAN IP Address: 192.168.1.2

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.1

Previous Next

You can simply leave the defaults in place and click on *Next* on the NAT Setting screen as we are not using this.

Step 2. NAT Setting

You can use NAT to allow PCs from LAN subnet for accessing Internet

- ◆ **LAN IP Setting**

LAN IP Address: 222.222.222.1

Subnet Mask: 255.255.255.0

DHCP Server: Enable

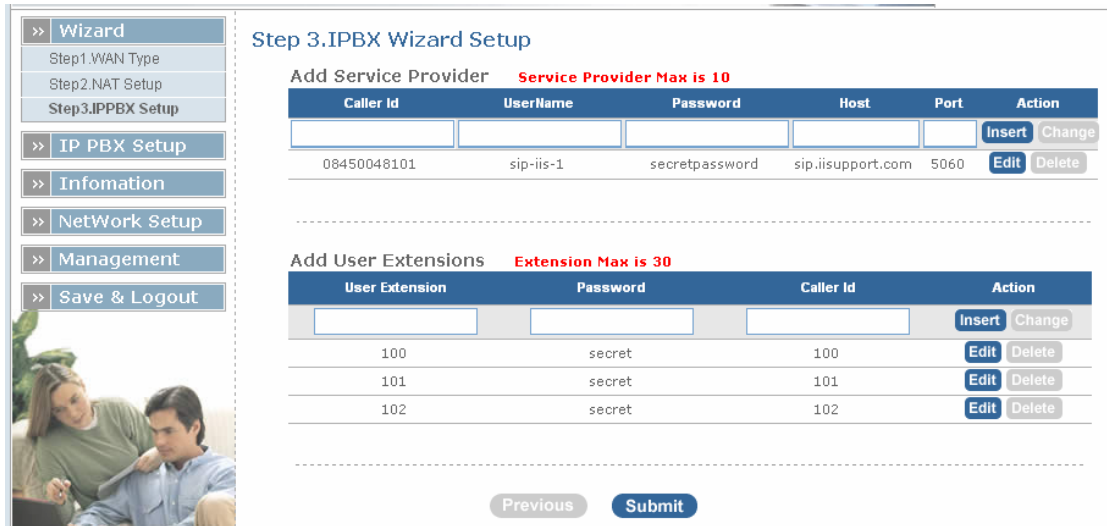
Assigned DHCP IP Address: Start IP: 222.222.222.100, End IP: 222.222.222.250

DHCP IP Lease Time: 86400 seconds (60..864000)

Previous Next

Enter the details you have from your ITSP in the “Add Service Provider” section and click on *Insert*.

Then add the details for each extension in the “Add User Extensions” section, clicking *Insert* after you enter the details of each one. When finished click *Submit* button.



The screenshot shows the 'Step 3. IPBX Wizard Setup' interface. On the left is a navigation menu with options: Wizard, Step1.WAN Type, Step2.NAT Setup, Step3.IPPBX Setup, IP PBX Setup, Information, NetWork Setup, Management, and Save & Logout. The main content area is titled 'Step 3. IPBX Wizard Setup' and contains two sections:

Add Service Provider Service Provider Max is 10

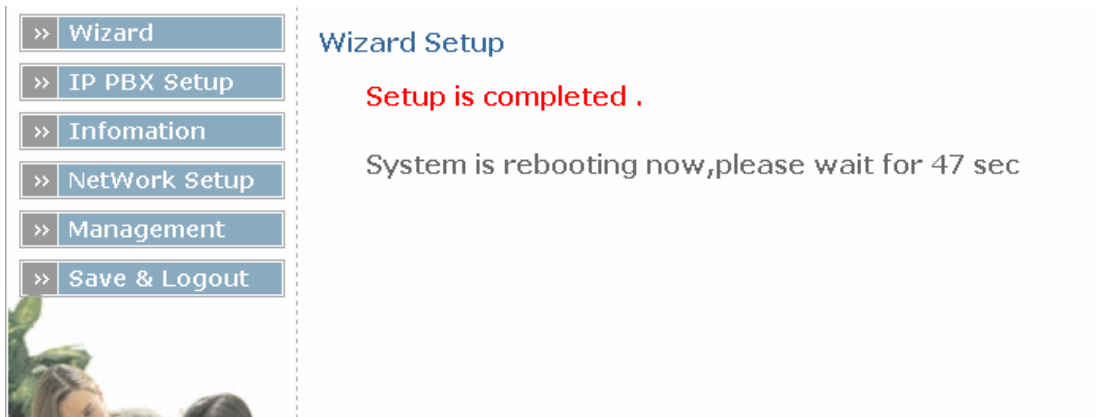
Caller Id	UserName	Password	Host	Port	Action
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Insert"/> <input type="button" value="Change"/>
08450048101	sip-iis-1	secretpassword	sip.iisupport.com	5060	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Add User Extensions Extension Max is 30

User Extension	Password	Caller Id	Action
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Insert"/> <input type="button" value="Change"/>
100	secret	100	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
101	secret	101	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
102	secret	102	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

At the bottom of the main content area are two buttons: 'Previous' and 'Submit'.

Once you submit this page the PBX will reboot.



The screenshot shows the 'Wizard Setup' interface. On the left is a navigation menu with options: Wizard, IP PBX Setup, Information, NetWork Setup, Management, and Save & Logout. The main content area is titled 'Wizard Setup' and contains the following text:

Setup is completed .

System is rebooting now, please wait for 47 sec

While this is rebooting configure your VoIP phones to point at the IP Address of the iPBX and login with the details you just added.

Once the iPBX has restarted, reboot the phones and sign in to the iPBX as admin.

Selecting *Information / PBX Extension Status* should show you that the phones have successfully connected.

The screenshot shows the iPBX web interface. On the left is a navigation menu with buttons for Wizard, IP PBX Setup, Information, System Information, PBX Extension Status, PBX Trunk Status, NetWork Setup, Management, and Save & Logout. The 'Information' section is selected, displaying 'Extension Status'. Above the table are three status indicators: 'Register OK!' (blue checkmark), 'Talk on the Telephone!' (green checkmark), and 'Register Unknown!' (red X). The table below has columns for 'Num' and 'Status' repeated three times. The first row shows extension numbers 102, 101, and 100, all with blue checkmarks in the status column.

Num	Status	Num	Status	Num	Status
102	✓	101	✓	100	✓

Selecting *Information / PBX Trunk Status* should show you that the iPBX has successfully connected to your ITSP.

The screenshot shows the iPBX web interface. On the left is a navigation menu with buttons for Wizard, IP PBX Setup, Information, System Information, PBX Extension Status, PBX Trunk Status, NetWork Setup, Management, and Save & Logout. The 'Information' section is selected, displaying 'Service Provider Status'. Above the table are two status indicators: 'Register OK!' (blue checkmark) and 'Register Unknown!' (red X). The table below has columns for 'Num' and 'Status' repeated three times. The first row shows 'sip-iis-1' in the first 'Num' column and a blue checkmark in the first 'Status' column.

Num	Status	Num	Status	Num	Status
sip-iis-1	✓				

If your internet connection is through an NAT router, and you are using the iPBX to make or receive calls from the outside then you will need to configure the iPBX to cope with this.

To use iPBX behind NAT:

1. Access web setting page
2. At Network Setting, under WAN Setting, there is an option called: NAT/ Bridge Mode, please select "NAT" mode.
3. Go to SIP Basic Setting and, under "NAT Support", please follow the instructions below.

If you use the IPBX behind a NAT device then the externip, externhost and localnet settings are used to communicate with services on the outside.

Extern IP: Address that is going to be put in outbound SIP messages if device is behind a NAT. If you are on a fixed, static external IP address for your internet account then enter here the assigned static address.

Extern Host: If you don't have a fixed address then, alternatively you can specify an external host, and the iPBX will perform a DNS query periodically. i.e. this is a domain you have setup for this DSL line (this could, for example, be a dynamicdns type domain which is updated whenever you address changes). Externip is better but this can be used instead.

Extern Refresh: How often to refresh the externhost if used.

You may also specify a local network in the field below (so the iPBX knows what is local and what is outside)

Local Network Address:

<Examples>

localnet=192.168.0.0/255.255.0.0 ; All RFC 1918 addresses are local networks

localnet=11.0.0.0/255.0.0.0 ; Also RFC1918

localnet=171.16.0.0/12 ; Another RFC1918 with CIDR notation

localnet=168.254.0.0/255.255.0.0 ; Zero conf local network

With configuration completed you should now reboot the device.

That's it, you're now ready to make calls. Dialing 100, 101 or 102 from the phone will call one of the other extensions. Dialing 9 followed by a normal phone number will get you an outside line.

Whilst you're looking through the rest of the settings you may want to configure extensions for voicemail and SMTP email so the system can take messages and email them to you.

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