

**i-PhoneNet**

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**X-Lite (ver 3.0)  
SoftPhone Setup**

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ver 1.0**

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# 1 Requirements and Installation

## System Requirements

This section covers the minimum hardware and software you will need to use with X-Lite softphone on a personal computer.

- Processor: Pentium II 700 or faster
- Memory: 256MB RAM or better
- Operating Systems: Windows 2000 or XP
- Online Capability: Wired or wireless broadband Internet connection
- Sound Card: Full-duplex, 16-bit
- Color Setting: 16 bit (High Color)

## Internet Connectivity

- Any kind of TCP/IP connection including wired and wireless Ethernet or wide area connection (WAN) like xDSL, Frame Relay, full or fractional E1/T1, etc
- Minimum bandwidth connection is 128K. More bandwidth is required if you intend to run data concurrently using the same access link.

## Firewall Settings

i-PhoneNet service works with or without a firewall in place.

If your computer is behind a firewall, certain ports must be open for X-Lite to be able to communicate with i-PhoneNet network. The required ports are listed below

	Feature	Instructions	Remarks
1	RTP & Signaling	Allow inside to outside UDP 2727, 5060, 8000 to 8999	Default Feature

## 2 Installing X-Lite v3.0 (One time process)

### To install X-Lite v3.0

1. Visit X-ten website ( [www.xten.com](http://www.xten.com) ) and download the following softphone client software on your PC or laptop:

**X-Lite v3.0 for Windows** - freeware SIP Softphone Download - Audio only

2. Make sure to exit any software applications that use sound, such as CD and media players.

3. Run the X-Lite setup executable file and follow the prompts from the install wizard.

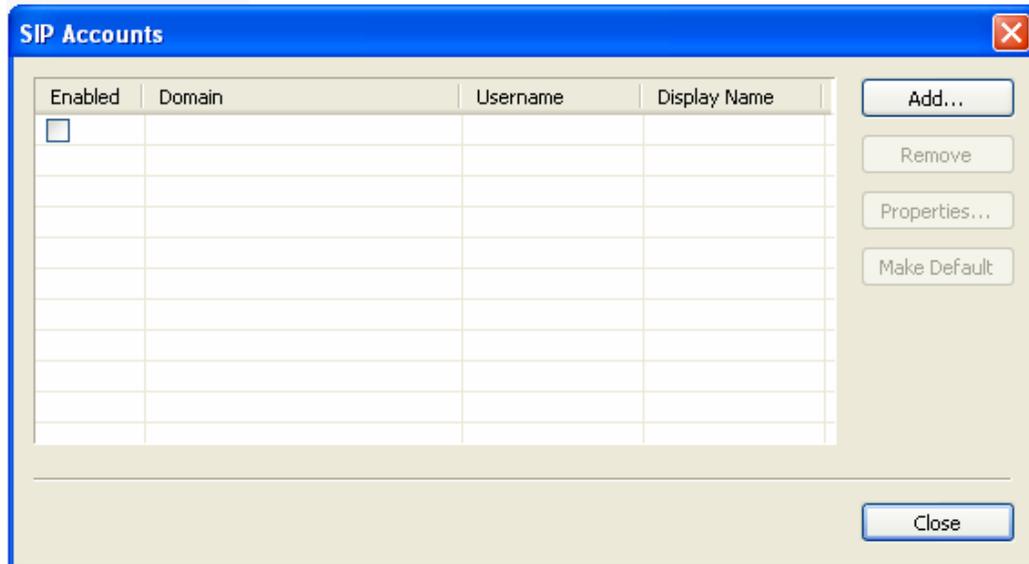
4. At the final step of the wizard, check the *Launch X-Lite* checkbox to start using the softphone.

5. Click Finish to complete the installation.

Important: To make and receive calls, you must configure the application to connect to i-PhoneNet network. This information registers you with the System; please note the Login Status line on the X-Lite display.

## 3 X-Lite v3.0 Softphone Setup

1. To setup an account, click on the 'Add' button under '**SIP Accounts**'



Under the **Account** Tab:

- (a) set the following fields in 'User Details'
- (b) remove the syntax from 'Dialing plan'

<b>Field</b>	<b>Default Values</b>	<b>Remark</b>
<b>Display Name</b>	Not required	
<b>User Name</b>	"SP_ *****" where ***** is your i-PhoneNet number	e.g <b>SP_68381234</b>
<b>Password</b>	The default value is your web portal login password for users who are receiving their web portal password for the first time; else please see Authentication Password below.	
<b>Authorization user name</b>	The default value is your web portal log-in UserID excluding the domain name	e.g. marytan
<b>Domain</b>	203.126.17.242	

Please note that the **"Authorization User"** and **"Password"** is the same as the **"Authentication User Name"** and **"Authentication Password"** under **"Utilities"** in the i-PhoneNet web portal. If you change the **"Authentication User Name"** and **"Authentication Password"**, you should also change the **"Authorization User"** and **"Password"** in the softphone. **To reset your Authentication Password, please call 1608.**

2. Under the **Topology** Tab, go to Firewall Traversal → IP address → select '*Use local IP address*'

The screenshot shows the 'Properties of Account1' dialog box with the 'Topology' tab selected. The 'Firewall Traversal' section is expanded, showing the 'IP address' options. The 'Use local IP address' radio button is selected. The 'STUN server' section has 'Discover server' selected. The 'Enable ICE' checkbox is checked. The 'Port used on local computer' section has 'Manually specify range' unchecked. The 'XTunnels' section has 'Use XTunnels' set to 'Never', 'Server address' is empty, 'Use SIP user name and password' is checked, and 'Username' and 'Password' fields are empty. The 'OK', 'Cancel', and 'Apply' buttons are visible at the bottom.

**Properties of Account1**

Account Voicemail **Topology** Presence Advanced

**Firewall Traversal**

IP address

Discover global address

Use local IP address

STUN server

Discover server

Use specified server:

Enable ICE

**Port used on local computer**

Manually specify range:  -

**XTunnels**

Use XTunnels: Never

Server address:

Use SIP user name and password

Username:

Password:

OK Cancel Apply

3. Click on 'Apply' button to save the settings.

## 4 Quick User Guide

You can start X-Lite in the familiar ways for Windows as described below.

### Starting X-Lite for Windows

1. Click the **Start** button
2. Select Programs
3. Select the X-Lite folder (or the folder specified upon install)
4. Click the X-Lite icon.  
*You can also launch X-Lite by double-clicking on the short-cut icon on your desktop*

### Place a Call

1. With X-Lite you can make a calls by dialing on the Dial Pad, by using the speed dial list, or by using the computer keyboard
2. At the **Dial Pad**, enter a phone number by clicking on the dial pad number buttons or by typing directly on your PC keyboard. Click the **Call** button, or press **Enter**.
3. You will note the **Caller ID** display line shows the actual number and domain being dialed.
4. X-Lite status line displays the *Trying* message while the system processes the number you dialed and contacts the phone dialed.
5. Once the system establishes contact, **X-Lite** starts timing the call and the status line displays the *Connected Message*. Once the call starts, just speak into the microphone.
6. When you're ready to hang up, click **Hang-up**. While dialing, you may need to clear a phone number from the display, this is done clicking on the **Clear** button found above the **Dial Pad**

### Answer a Call

When your computer receives a call, you will hear a ringing sound. Simultaneously, the line 1 button will began flashing and the Caller ID will display the identification of the calling party.

### Placing a Call on Hold

While you're on call in progress, you can place a call on hold simply by selecting another Line button. The active call is automatically placed on hold and the Line button flashes to indicate the call is on hold. To resume the call, re-select the line button where the active call is located. Alternatively, you may place a call on hold by clicking its Line button and resume the call by selecting the Line button again.

### Start a Conference

To talk with two respondents simultaneously in a conference call, the X-Lite **soft phone** supports this feature and allows mixing both Internet (IP) and regular telephone (PSTN) calls in a single conference.

You may initiate the conference by calling the parties or you may allow the conference parties to call you. As you answer and/or make the calls individually, the **Line buttons** become populated.

To initiate the conference simply click the **Conference button** above the **Dial Pad** and all active lines will be involved in the conference.

### Ending a Call

As with traditional phones, a call is brought to a close when either you or the person you are talking to actively ends the call. To end a call, simply click the red **Hang Up button** at the left of the **Dial Pad**.

## 5 Troubleshooting

The section describes some common remedies in case you experience difficulties while using **X-Lite**.

### Sound Quality Issues

There are several potential factors that can affect sound quality that are not controlled by the softphone. These include the quality of the network connection, LAN/WAN card quality, headset model, and the distance between the softphone and a wireless access point.

#### Sound has pops at loud points in voice

Popping sound is symptom of a problem with over modulation. Ask the party to decrease the microphone slider and/or adjust the microphone gain.

#### Sound has bothersome background noise

Significant background noises and sound is a symptom of a problem with the setting of the silence threshold. Have the party click on the microphone icon. Both a silence threshold slider (triangular icon to the right of the microphone meter) and meters for the microphone volume and the speaker volume will appear. The silence threshold should be set approximately 10% above the ambient noise as shown on the microphone meter.

#### Poor Sound

Poor or scratchy sound is a symptom of a problem with your network connection, network performance, or network card and access point drivers.

1. If you're using a **wireless internet connection**, you may be out of range of an access point.
2. **Radio Frequency (RF)** interference originating from multiple access points on similar channels or other devices nearby can cause sound quality problems. To prevent this, you or your network administrators must configure access points so they are separated by at least five channels. Be careful when setting up the X-Lite softphone in lab areas where there tends to be higher RF interference.
3. There may be **packet loss on the IP network**. Check the network performance, latency, and throughput. 200 millisecond round trip latency as determined from a ping should deliver good quality audio.
4. **Network cards or access points** may have performance problems. Make sure you are using the latest Drivers.

**There is an Echo**

1. Try using a headset with your sound card. Another suggestion is the use a USB-enabled headset which bypasses system sounds because it acts as a sound device. However, if you have network problem (such as an access point that is being used at or beyond its capacity), installing a USB-enabled headset will not help, and you or your network administrator needs to troubleshoot the network.
2. Are you using a boom type headset? It has been noted that some boom headset that sit on the ear can create feedback between the boom microphone and the headset.
3. You may be too close in distance to the person you're speaking to. If you're too close you will hear both the voice being delivered from their microphone, and your microphone picking up the person's voice in the same room or down a hallway. Together, it sounds like an echo.
4. The microphone balance is not muted in the playback section of Windows audio controls. When you are configuring sound, you may need to examine the volume control setting.
5. You, as the caller will hear echo if you microphone can pick up your speaker sounds, such as when not using a headset.
6. Microphone level may be too high or amplifier is turned on in the generic Windows audio controls.

END