

X-Lite 5 for Windows

User Guide

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This manual corresponds to version 5.0 of X-Lite 5 *for Windows*.

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1 Introduction

Standard Telephone Features

The CounterPath X-Lite *for Windows* softphone has all standard telephone features, including:

- Call display and Message Waiting Indicator (MWI).
- Speakerphone and Mute.
- Redial, Hold.
- Call history – list of received, missed, and dialed calls.
- Three-party conferencing.

Enhanced Features and Functions

X-Lite *for Windows* also supports the following features and functions:

- Video.
- Managed contact list.
- Automatic detection and configuration of audio and video devices.
- Acoustic echo cancellation, automatic gain control, voice activity detection.
- Support for the following audio codecs:
Broadvoice-32, Broadvoice-32 FEC, DVI4, DVI4 Wideband, G.711aLaw, G.711uLaw, GSM, iLBC, L16 PCM Wideband, Speex, Speex FEC, Speex Wideband, Speex Wideband FEC.
- Support for the following video codecs:
H.263, H.263+ 1998.
- Automatic selection of the best codec based on the other party's capability, the available bandwidth, and network conditions. X-Lite switches the codec within a call in response to changing network conditions.
- Compliance to 3261 SIP standard.
- STUN and ICE NAT traversal.
- Support for DTMF (RFC 2833, inband DTMF).

SoftPhone.com Features

If you have a SoftPhone.com account, the following features are also available:

- Presence via your Softphone account. You can see the presence of any contact who also has a SoftPhone.com account.
- IM via your Softphone account. You can send IMs to any contact who has a SoftPhone.com account.

For more information on SoftPhone.com and its features, see www.softphone.com.

2 Installation and Setup

2.1 Getting Ready

Hardware and Other System Requirements

For information on the supported hardware and other system requirements, see <https://support.counterpath.com/default.asp?W336>.

Multimedia Device Requirements

X-Lite requires both speakers and a microphone to make calls. Any of the following configurations are acceptable:

- External speakers and microphone
- Built-in speakers and microphone
- Dual-jack multimedia headset
- USB multimedia headset
- USB phone.

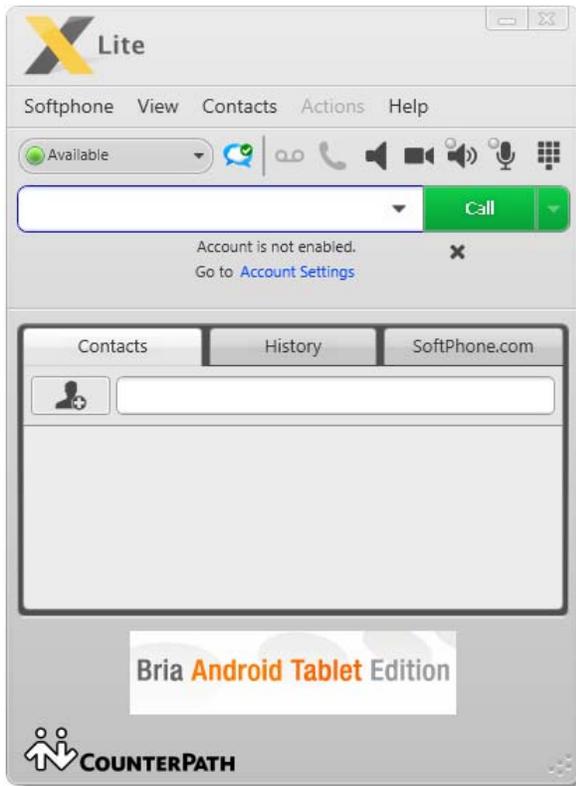
Video Cameras

Calls made with X-Lite will work without a video camera, but a video camera is necessary to allow other parties to see your image. X-Lite will work with most USB video cameras.

2.2 Installing X-Lite

Run the X-Lite installer and follow the prompts in the install wizard.

If you want to configure X-Lite immediately, then at the final step of the wizard, select Launch X-Lite. The first time you start X-Lite, a video about SoftPhone.com appears. Then the X-Lite softphone appears.



You can use X-Lite without signing up for SoftPhone.com , but if you do sign up for SoftPhone.com you will be able to make free phone calls to people outside your enterprise and you will have access to IM and presence features. For more information, see www.softphone.com.

2.3 Configuring X-Lite

If X-Lite is not already running, start it as you would any other program: Use the Windows Start menu or double-click the desktop icon. X-Lite appears.



You can set up X-Lite in one of these ways:

- With your PBX account (in other words, your office phone number).
- With your PBX account *and* with SoftPhone.com .
- With a SoftPhone.com account only.

This guide explains how to set up your PBX account. For information on the SoftPhone.com account, see www.softphone.com.

Setting up your PBX Account

To use your PBX account, you must have network access to your enterprise LAN, which means you must be using a computer on the LAN or using a computer that has VPN access to the LAN.

1. Obtain your PBX account credentials from your IT administrator or VoIP service provider:
 - User name and password
 - Authorization Name (if applicable)
 - Domain
 - Firewall traversal and other network information; see “Configuring X-Lite” on page 25.
2. From the X-Lite menu, choose Softphone > Account Settings. The SIP Account window appears.
3. In the Account tab, complete the User Details area with your account credentials.

SIP Account

Account | Voicemail | Topology | Transport | Advanced

Account name: My PBX

Protocol: SIP

User Details

* User ID: 1331

* Domain: yournormalpbx.com

Password: ••••••

Display name: Joseph Santos

Authorization name:

Domain Proxy

Register with domain and receive calls

Send outbound via:

Domain

Proxy Address:

OK Cancel

4. Complete the remaining tabs as specified by your IT administrator or VoIP service provider, or to suit your setup. Settings that you may need to change immediately include:
 - Account tab, Domain Proxy area.
 - Topology tab, if your computer is on a network and/or behind a firewall.For more information, see “Configuring X-Lite” on page 25.

Setting up for Voicemail

Your enterprise or VoIP service provider may offer voicemail. If it does, then you can set up some voicemail features in X-Lite. See page 27.

Setting up a Contact List

Typically, you will want to create contacts in order to easily make calls. See page 22.

2.4 Troubleshooting

X-Lite includes three tools for helping you troubleshoot problems. Choose Help > Troubleshooting and display the appropriate tab:

- **Devices tab:** You can verify that your microphone, speakers and camera are working and can set the volume to a comfortable level without having to actually place a phone call.
- **Audio tab:** While you are on a phone call, you can test the quality of the audio. Note that to perform a valid test, you should be on an established call (not a call attempt).
- **Diagnostics tab:** You can troubleshoot other problems using diagnostics logging.

See page 47.

2.5 Checking for X-Lite Updates

To check for updates to X-Lite, choose Help > Check for Updates. The Auto Update window appears.

- If a new version of the software is available, you can download it from this window.
- If no newer version is available, this window informs you that your version is up to date.

3 Using X-Lite

3.1 Starting X-Lite

If X-Lite is not already running, start it as you would any other program: Use the **Windows Start** menu or double-click the desktop icon. X-Lite appears.



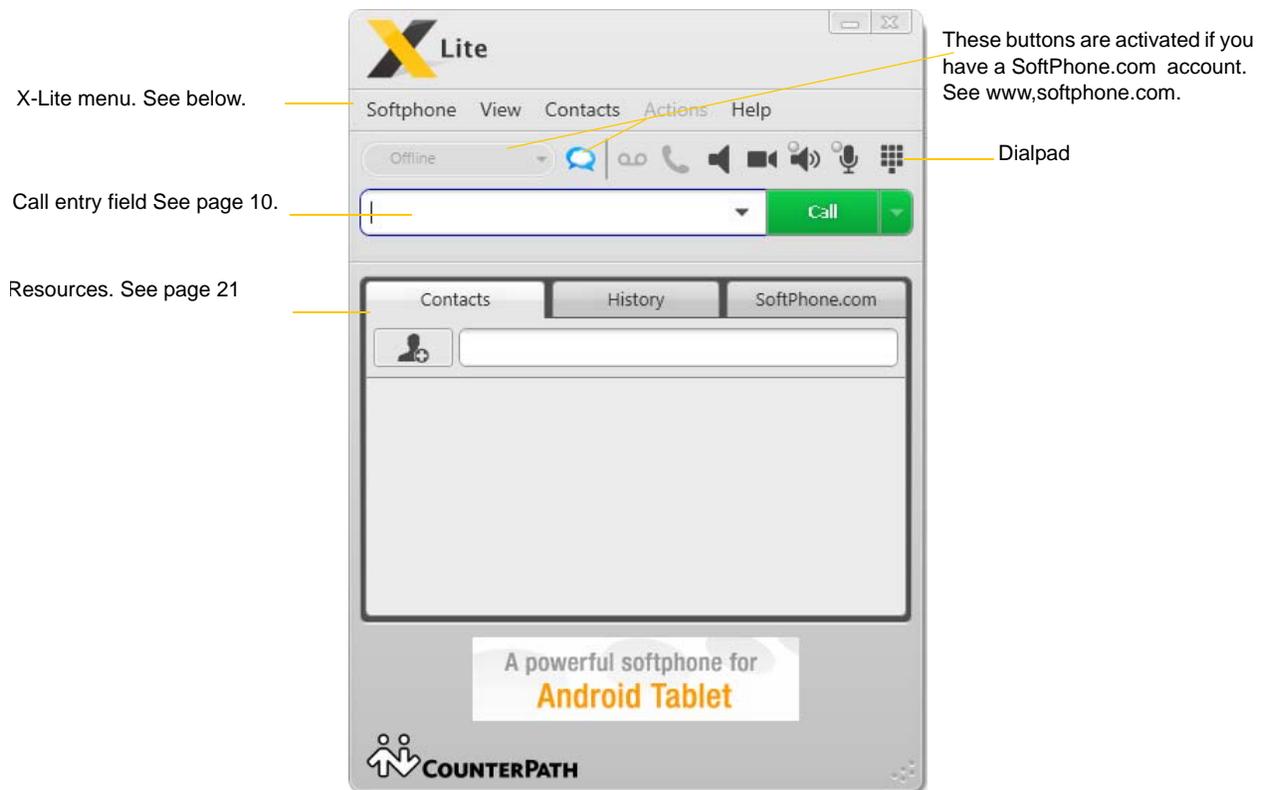
USB Device Alert

If your headset is a “HID-compliant device”, the USB Device alert may appear the first time you start X-Lite. You can assign functions to the headset. For example, you can set the green button so that it answers an incoming call.

If you click Yes, the USB Device Button Setup window appears; see page 37.

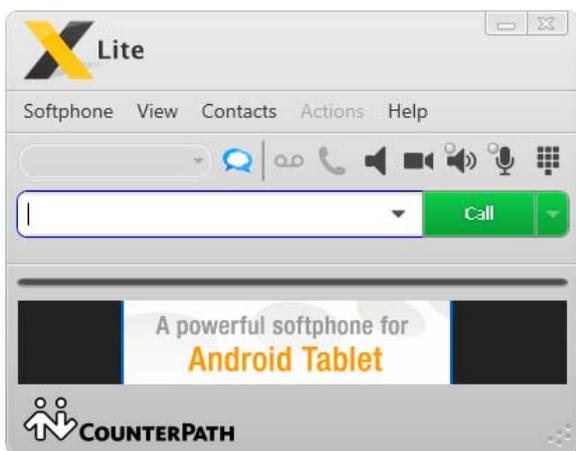
If you click No, you can still access this window from the Preferences > Devices panel (page 35).

3.2 The Onscreen Softphone



Compact View

To display a compact view of the softphone, hide the dialpad and hide all the resources tabs (View > Hide).



The X-Lite Menu

Softphone

- Sign in to SoftPhone.com . For information on this menu, see www.softphone.com.
- Share with Contacts. For information on this menu, see www.softphone.com.
- Account Settings. These settings control how X-Lite interacts with your PBX and network. See “Configuring your Account” on page 25.
- Preferences. These settings control the way that you work with X-Lite. See “Configuring Preferences” on page 33.
- Exit. To shut down X-Lite. You can also exit by pressing Ctrl+Q.

View

- Change how X-Lite looks.

Contacts

Lets you work with contacts. Everything in this menu can also be performed directly in the contact list.

For information on the Find contacts menu item, see www.softphone.com.

Actions

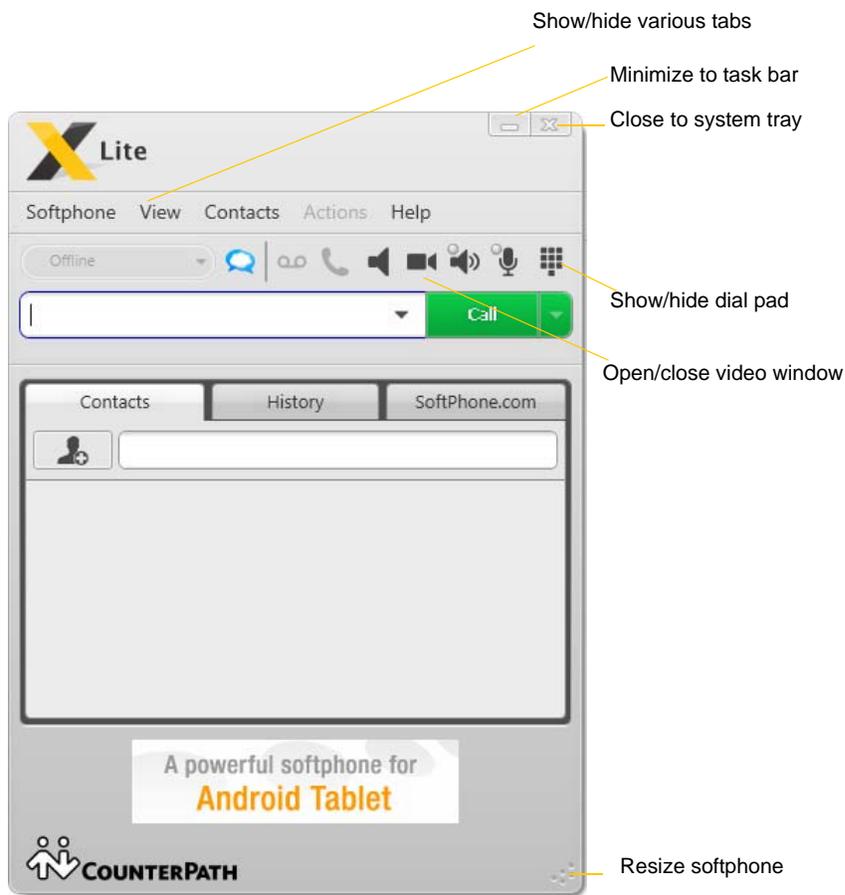
Lists the actions that you can perform, depending on the current “state” of X-Lite. For example, if a contact is selected, it lists all the actions that can be performed on that contact.

For information on the Invite to SoftPhone.com menu item, see www.softphone.com.

Help

Provides access to various features.

Showing and Hiding Parts of the Softphone

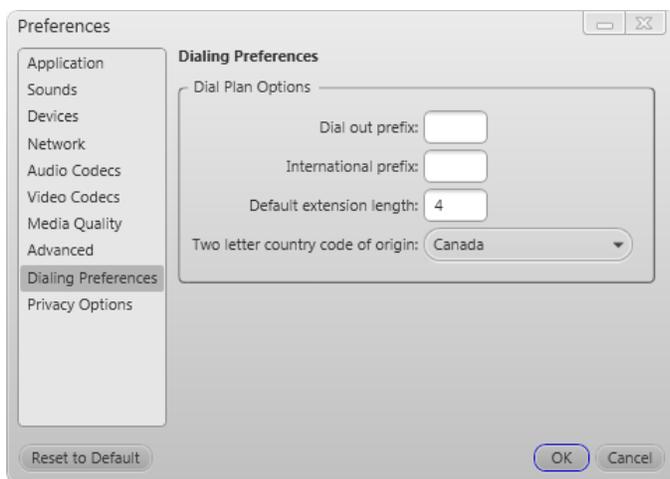


You can still receive calls when X-Lite is hidden or minimized. If you exit when X-Lite is minimized, X-Lite will start next time as minimized.

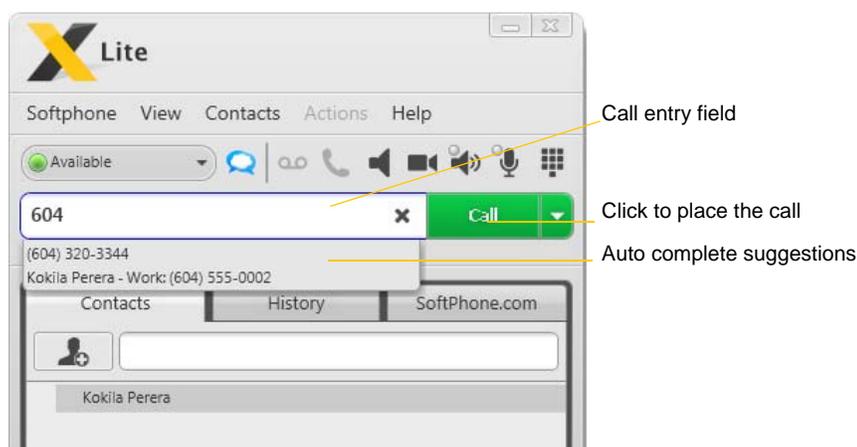
3.3 Placing a Call

You can place one more call when another call is already in progress.

The first time you make a call, select Softphone > Preferences and set your dialing preferences. See page 45.



Place the call. See below for different ways to specify the number.



The outgoing call opens in its own call panel, below any other existing call panels. You will hear a ringing tone while X-Lite attempts to make a connection.

You can specify the number to call by:

- Typing the number on the dialpad or computer keyboard, then clicking Call or Enter.
- Dragging and dropping an entry in the Contacts or History tab. You can control whether the phone call gets placed immediately or only after you click Call; choose Softphone > Preferences > Application.
- Right-clicking an entry in the Contacts or History tab.
- Redialing: click Call or click the down arrow and select a recent call and click Call.

The number can be in several formats:

- An extension such as 390 or 1300. X-Lite will place the call without going through your PBX.
- A phone number outside your PBX. See page 45 to set up correctly to place these calls.

- A phone number and extension with a separator in between. For example, 6045551222x1300. X-Lite will dial the phone number, wait for the call to get established, then dial the extension.

Valid separators are: x extension ext ; (semi-colon) , (comma)

If X-Lite sees that the phone number is actually your own PBX, it drops the phone number and dials the extension directly.

- A SIP address ((for example, kperera@yourNormalPBX.com) Speak to your IT administrator or VoIP service provider about whether you can phone someone with a different domain from your own.

Dealing with an Auto Attendant

If you know that your call will be answered by an auto attendant and you know what menu items you will choose, you can include those menu items (DTMF) in the phone number when you dial it:

- Before the first DTMF number, include at least one capital P.
- You can include other Ps. Each P causes X-Lite to wait one second before sending the next character.
- At the end of the input, you must include a ; character.

Example: To dial a number, add a 3-second delay and then press 44, enter this in the call entry field:

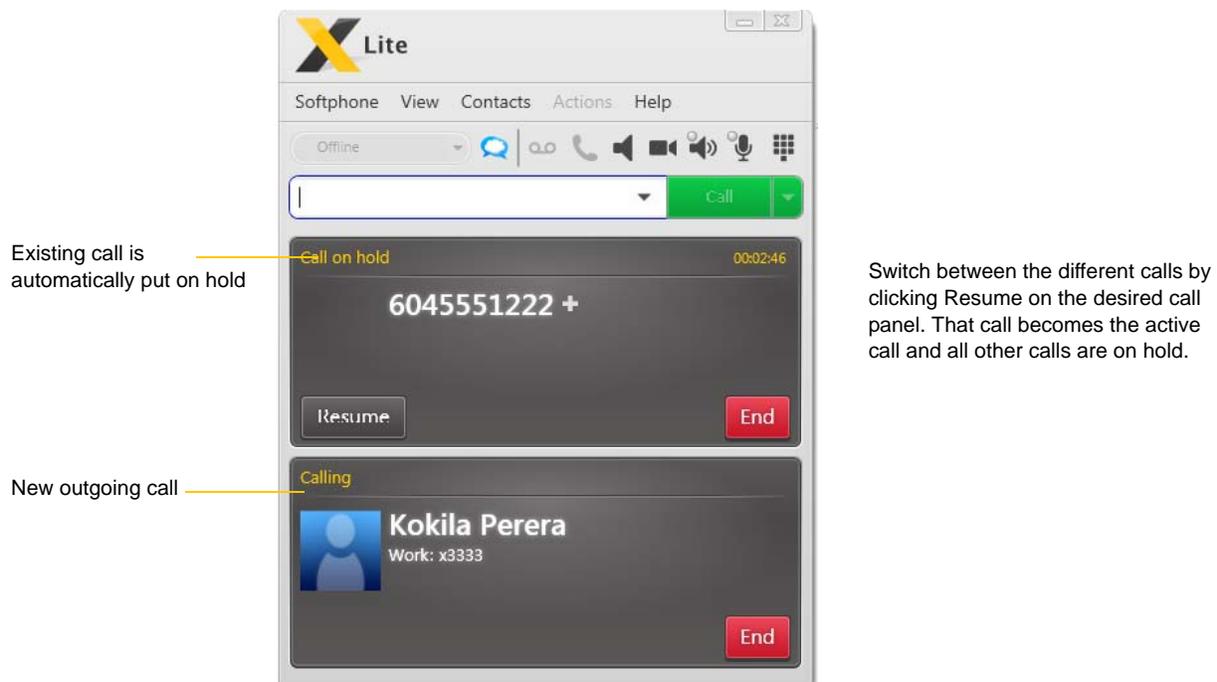
```
604551212PPP44;
```

Example: To dial a number, add a 6-second delay, then press 1 then 3 then 2, each with a two second delay:

```
604551212PPPPPP1PP3PP2;
```

Placing another Call

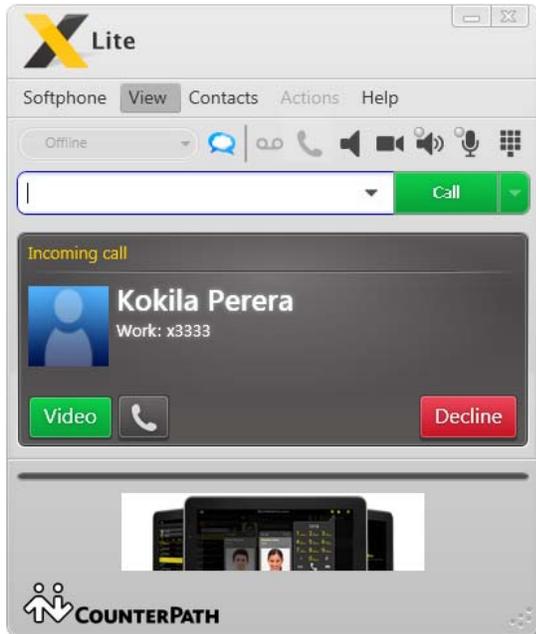
To place a new call (without hanging up on the current call), simply place the call in the normal way. A second call panel opens below the current call. The first call is automatically put on hold.



3.4 Handling Incoming Calls

X-Lite must be running to answer incoming calls. (If X-Lite is not running, incoming calls may be directed to voicemail; check with your IT administrator or VoIP service provider.)

As soon as an incoming call is received, a call panel appears, showing information about the call.



Action	Description
Answer or 	Click Answer. If you are on another call, that first call is automatically put on hold. You are now talking to the new caller. Or press Enter (on the keyboard), if X-Lite is the active application.
Video	The caller wants to include video. Click to answer a video call and start sending your video immediately
Decline	Click Decline. There will be a busy signal. The call may be directed to voicemail (if you have this service).

3.5 Handling an Established Call

Place another call (current call is automatically put on hold). See page 11

Open or close the video window. If you close it, X-Lite stops sending your video to the other party.

Volume control and

Speakerphone (this button is enabled if your computer has a speakerphone)

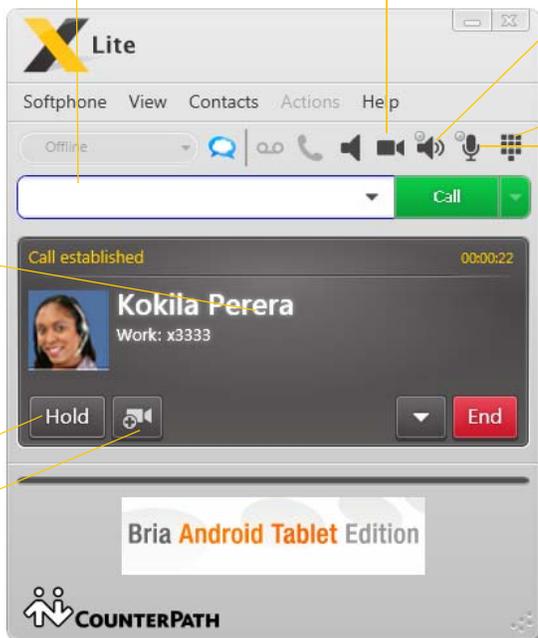
Show/hide dialpad

Mute

If a plus symbol appears here, you can add the current caller as a contact.

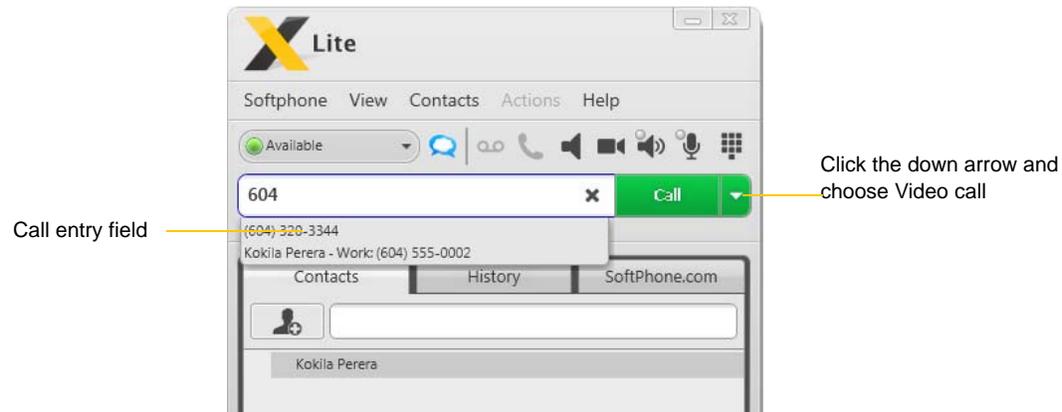
Hold or resume the call

Start your video. Even if you did not originally place a video call, you can add video at any time (if you have a camera).



3.6 Handling Video Calls

Placing a Video Call

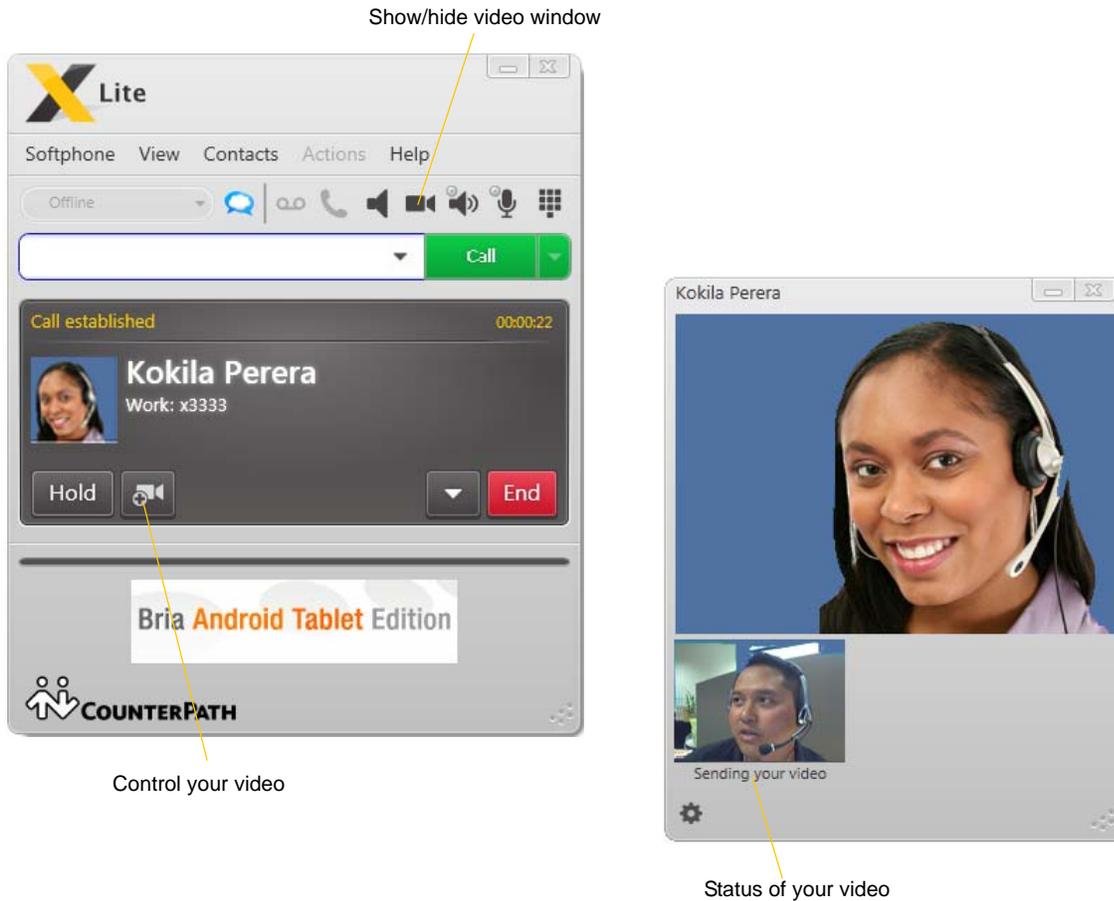


Specify the number by:

- Typing the number on the dialpad or computer keyboard, then clicking the arrow beside the Call button and choose Video call.
- Right-clicking an entry in the Contacts or History tab and choosing Video Call
- Redialing: click the down arrow and select a recent call and choose Video call.

Adding Video

If you have a camera, you can click Start Video to add video to an established call. When you add video, the other party may (or may not) start sending their video to you.



Other Party Adds Video

If the other party starts their video, your video window automatically opens and the video is played. You can start sending your own video, if desired (and assuming you have a camera) by clicking Start Video.

Pausing and Resuming Video

Click Stop Video or close the video window to pause sending your video.

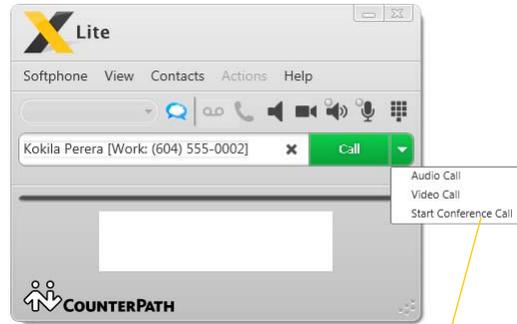
Click Start Video to resume sending your video; the video window will open.

3.7 Three-way Calls (Conference Calls)

Starting a Conference Call

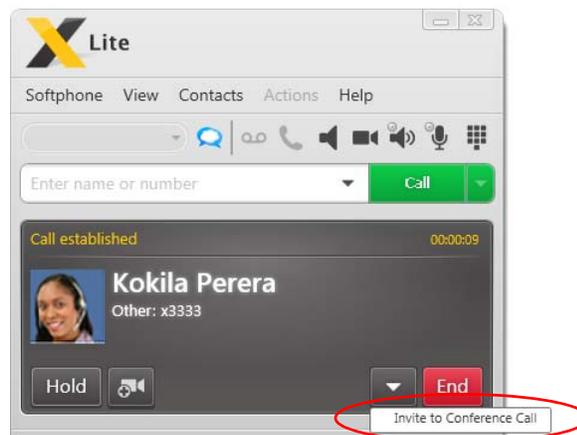
From the Dashboard

- Enter the number or address by typing
- Or drag a contact or history item
- Or select from the redial list

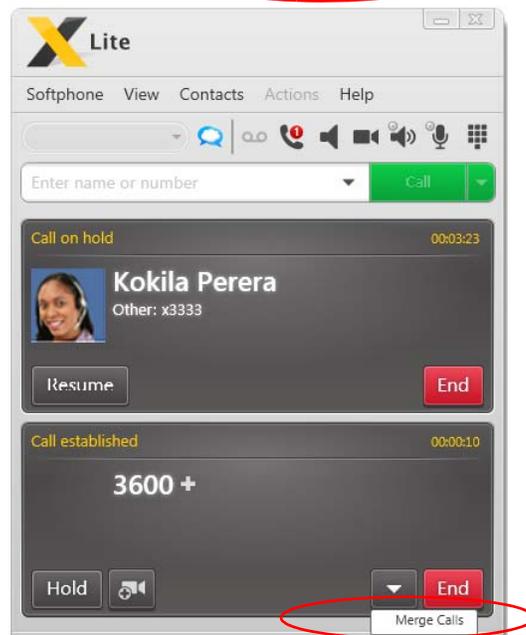


Then choose Start Conference Call

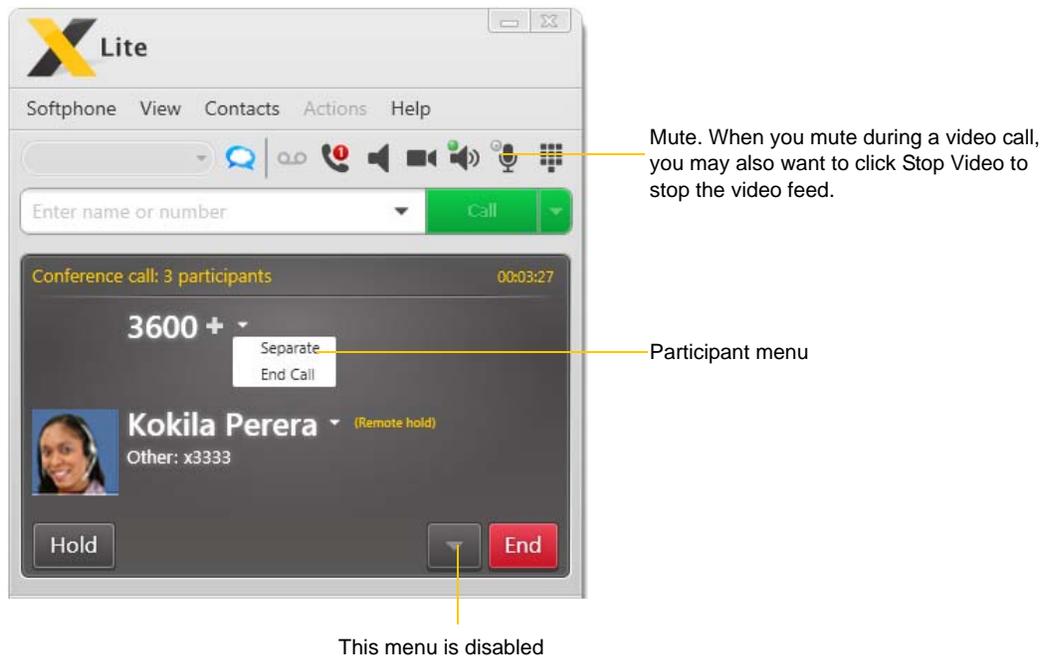
From an Existing Call From One Established Call



From Two Established Calls



Managing the Conference



Removing a Participant

To remove one call from the conference, click the down arrow beside a participant name and choose Separate. The call becomes a separate call.

Ending the Conference

To hang up on everyone, choose End conference from the conference menu.

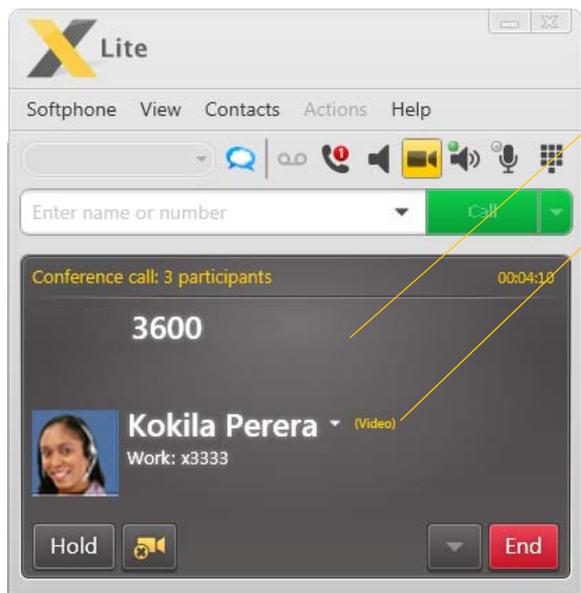
Suspending the Conference

To suspend the conference, choose Hold from the conference menu. All participants are put on hold.

If you need to speak to one participant separately, put the conference on hold, separate the one participant from the conference, take that person off hold. When done, merge the participant back into the call.

Video Conference Calls

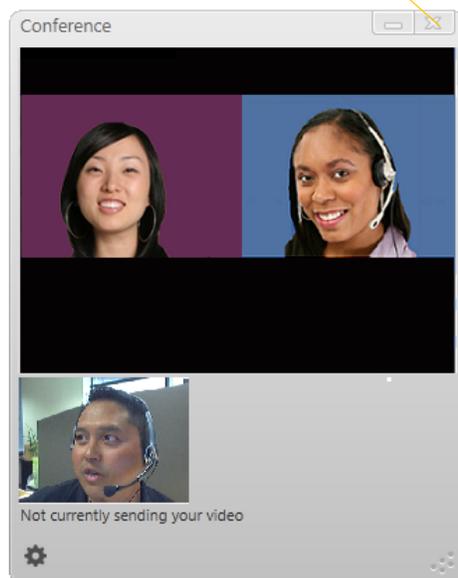
Calls made with X-Lite will work without a video camera, but a video camera is necessary to allow other parties to see your image. X-Lite will work with most USB video cameras.



This person does not have video. To remedy this situation, stop video and start it again. Video will be sent to all the current participants.

This person has video.

Closing the video window stops sending video.



Including Video in a Conference

When you start a conference from established calls, video is automatically included if at least one of the calls already includes video and is sent to all the participants.

When you start a conference from scratch, video is not included. You can open your video window and choose to add video at any time. Video is sent to all the participants.

How Video Is Shared

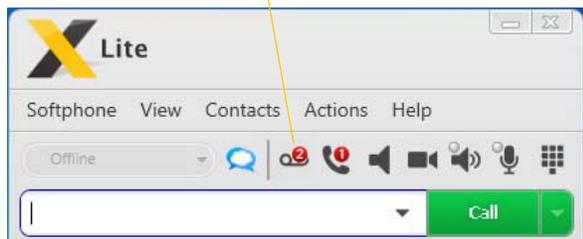
The conference host (the person who starts the conference) serves as the host for other video. Whatever the conference host is receiving will automatically be sent to the other parties.

If the conference host pauses or stops video, other participants will no longer receive video.

3.8 Voicemail

If your service includes voicemail and you have set up voicemail options (page 27), then when you have voicemail messages, a number appears beside the voicemail icon at the top of the phone. You can click the icon to automatically connect to voicemail and listen to your messages.

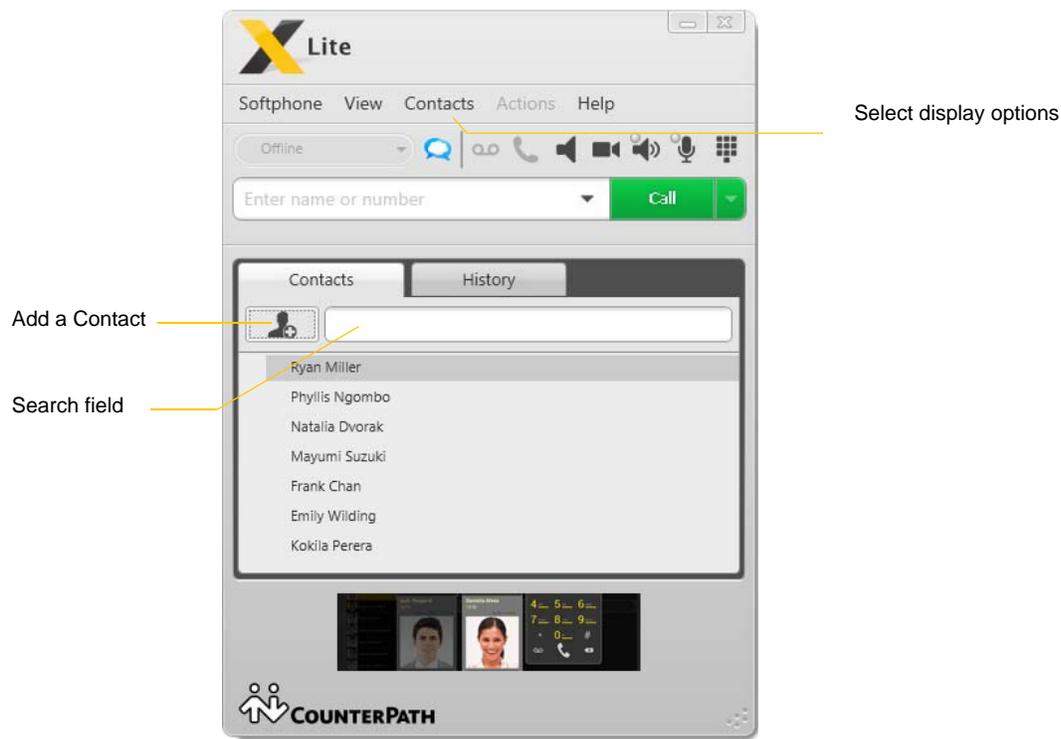
Voicemail icon is dark gray when you have a message waiting



4 Using Resources

4.1 Contacts Tab

If the Contacts tab is not showing, go to the menu bar and choose View > Show Contacts.

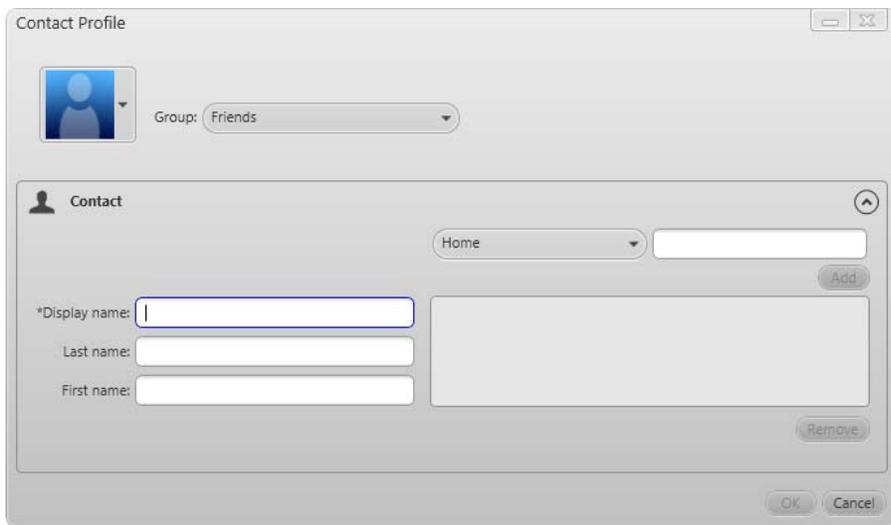


The Contacts tab displays your contacts and lets you specify multiple contact methods for them.

Managing Contacts

Adding a Contact

Click . The Contact Profile dialog appears. Complete the details and click OK.



Adding a Contact using an Existing Address

You can add a contact by capturing existing information. On the History tab, select an entry that is not a contact. Right-click and choose Add as Contact.

Changing Contact Information

To change the information for a contact, right-click the contact and choose Edit Profile.

Deleting a Contact

To delete one or more contacts, select them, right-click, and choose Delete.

Exporting Contacts

You can export a contact list to a CSV, vCard or PST file. This is useful, for example, if you later upgrade to Bria 3 and want to move over your contacts.

1. From the main menu choose Contacts > Export Contacts. The Export Contacts wizard starts.
2. When you click Next, the export starts. The result is:
 - For a PST export, the existing .pst file is updated to include the entries from the X-Lite contact list. If Outlook is open, the entries immediately appear in the Outlook contacts.
All information in the X-Lite contact list is exported to Microsoft Outlook. Only information that can be displayed in Outlook actually appears in the Outlook Contacts window. Typically this means that all softphone addresses are exported (and stored in custom fields) but not displayed in Outlook.
 - For other formats, a new file of the specified type is created.

Using Contacts

Phone the person

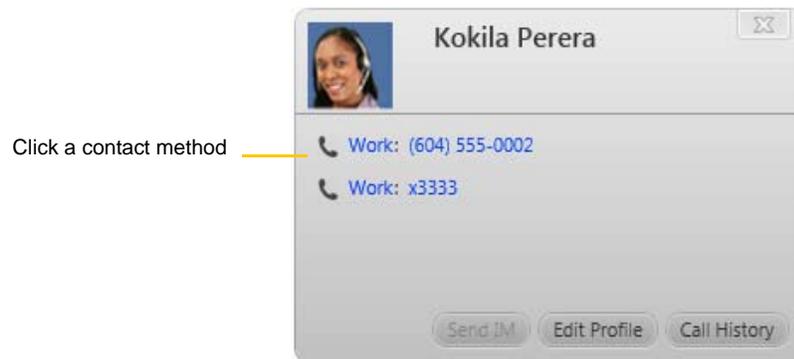
Drag the contact to the call entry field to start a phone call.

Phone the person

Right-click and choose Call, then click the desired number.

Contact Flyout

Single-click on a contact to show the Contact flyout. This flyout shows all the contact methods set up for the contact. You can click a contact method to perform its action.



4.2 History Tab

Outgoing call, either attempted or established

Incoming call that was answered

Incoming missed call

Filter list

Status	Call	Date
	8500	Today 4:05 PM
	3210	Today 9:29 AM
	Kokila Perera	30/05/2012 5:29 PM
	Kokila Perera	30/05/2012 5:13 PM
	6045550777	30/05/2012 5:12 PM

Managing the Lists of Calls

You can right-click on an entry in a list to:

- Delete the call.
- Delete all entries in this list.
- Edit the profile if the entry is a contact.
- Add as contact. The Add a Contact dialog appears.

Phoning from History

You can right-click on an entry to place a call to this person, using the contact method that was used for this call. You can also double-click to place an audio call.

5 Configuring X-Lite

You can configure X-Lite in several ways:

- Configure global behavior. See “Configuring Preferences” on page 33.
- Configure the behavior on a per-account basis. See “Configuring your Account” on page 25.

5.1 Configuring your Account

Choose Softphone > Accounts. The Account Settings window appears.

SIP Account Properties – Account

The red dot indicates that these fields are required

The screenshot shows the 'SIP Account' configuration window with the 'Account' tab selected. The 'Account name' field contains 'My PBX' and the 'Protocol' is set to 'SIP'. The 'User Details' section contains several fields: 'User ID' (1331), 'Domain' (yournormalpbx.com), 'Password' (masked with dots), 'Display name' (Joseph Santos), and 'Authorization name' (empty). The 'Domain Proxy' section has a checked checkbox for 'Register with domain and receive calls' and radio buttons for 'Domain' (selected) and 'Proxy' (with an 'Address' field). Red asterisks are placed to the left of the 'User ID' and 'Domain' fields, and a red dot is placed to the left of the 'Password' field. A yellow arrow points from the text above to the red asterisks.

Field	Value	Required
Account name	My PBX	No
Protocol	SIP	No
User ID	1331	Yes
Domain	yournormalpbx.com	Yes
Password	Yes
Display name	Joseph Santos	No
Authorization name		No

Domain Proxy

Register with domain and receive calls

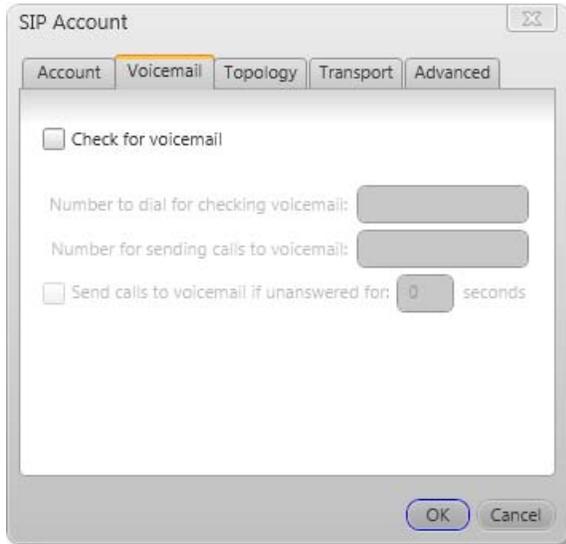
Send outbound via:

Domain

Proxy Address:

Field	Description
Account name	Always "My PBX"
Protocol	Read-only. Always specifies SIP.
User Details	
User ID	Typically the account number for the account. For example, kperera. Provided by your IT administrator or VoIP service provider.
Domain	For example, yourNormalPBX.com. Provided by your IT administrator or VoIP service provider.
Password	Provided by your IT administrator or VoIP service provider.
Display name	This name is displayed in the X-Lite title bar. Other people will see you as this name.
Authorization name	May not be required. If it is required, it will be provided by your IT administrator or VoIP service provider.
Domain Proxy	
Register with domain and receive calls	Check this box if you want to receive incoming calls. Typically, this field is checked.
Send outbound via	Choose the setting specified by your IT administrator or VoIP service provider: <ul style="list-style-type: none">• Domain: If your VoIP service provider requires that traffic be directed to proxies that are discovered via the domain.• Proxy Address: If your VoIP service provider has an outbound proxy address and requires that you provide the address to X-Lite. For the address enter a domain name (for example, domain.com) or an IP address (for example, 123.456.789.012).

SIP Account Properties – Voicemail



These settings let you set up to interact with your VoIP service provider’s or enterprise’s voicemail service. .

Your service provider may provide the ability to set up for voicemail outside of X-Lite, for example, by phoning a number and following the voice prompts, or by accessing a website.

Check with your service provider or IT administrator to determine if another setup mechanism is available. If so, check what the settings are in that setup, and make sure you enter compatible information in X-Lite.

Field	Description
Check for voicemail	<p>Set the checkbox in one of these ways:</p> <ul style="list-style-type: none"> • Check the box if X-Lite must subscribe to be notified when there is a voicemail for you. In other words, to configure for “subscribe for message waiting”. • Clear the checkbox if the service provider’s voicemail server sends notifications without X-Lite subscribing. In other words, to configure for “implicit subscription”. • Clear the checkbox if the service provider does not support voicemail. <p>Check with your IT administrator or VoIP service provider for the correct configuration.</p> <p>Voicemail is offered by your enterprise or VoIP service provider; it is not part of X-Lite. Contact your service provider for information on using voicemail.</p>
Number to dial for checking voicemail	<p>Optional, but complete this field only if your VoIP service includes voicemail.</p> <ul style="list-style-type: none"> • Completing this field activates the  icon on the softphone. When you click the icon, X-Lite will dial this number. You will be connected to your service provider’s voicemail and can listen to your messages. • If you leave this field empty, then this icon will not work; you will have to manually dial this number in order to connect to voicemail. <p>Enter the number or SIP address provided by your IT administrator or VoIP service provider.</p>
Number for sending calls to voicemail	<p>Complete only if your VoIP service includes voicemail. Optional, but you must complete it if you check “Send calls to voicemail if unanswered”.</p> <p>This is the number that incoming calls will be forwarded to if they are unanswered after the specified interval (below).</p> <p>If you leave this field empty, then X-Lite will never forward calls to your service providers’ voicemail. However, most enterprises or VoIP service providers have their own mechanism for sending unanswered phone calls to voicemail. So leaving this field blank does not mean that forward-to-voicemail does not work.</p> <p>Enter the number provided by your IT administrator or VoIP service provider.</p>

Field	Description
Send calls to voicemail if unanswered	<p>Complete only if your VoIP service includes voicemail.</p> <p>To send to voicemail after the specified number of seconds.</p> <p>Your service provider may also provide a similar feature that is set up outside of X-Lite. If so, make sure you do not enter competing information in X-Lite and in the service provider's user interface. For example, if you turn off this field, make sure the same feature at your service provider is also turned off. Otherwise, all your calls will continue to be forwarded.</p>

SIP Account Properties – Topology

SIP Account

Account Voicemail **Topology** Transport Advanced

Firewall Traversal

Firewall traversal method:

- Auto-detect firewall traversal method using ICE (recommended)
- Discover public IP address (STUN)
- Use media relay (TURN)
- None (use local IP address)

Server address:

(To use domain server, leave Server Address blank)

User name:

Password:

Range of ports used on local computer: -

OK Cancel

Field	Description
Firewall traversal mode	<p>Leave the default (Auto detect). Or if you have problems making phone calls, contact your IT administrator or VoIP service provider for information on the firewall traversal solution.</p> <ul style="list-style-type: none"> • Auto detect using ICE: Automatically determine the contact address for signaling traffic. Advertise the local IP, public IP (discovered via STUN, if available), and media relay IP (discovered via TURN, if available), and use these to automatically determine the best route for media traffic during calls. • Discover public IP address: Advertise the public IP address (discovered via STUN) for the contact address for signaling traffic, and for the connection address for media traffic. • Use media relay (TURN): Advertise the public IP address (discovered via STUN) for the contact address for signaling traffic. Advertise the address of a media relay server (discovered via TURN) for the connection address for media traffic. • None: Advertise the local IP address only for both signaling and media traffic.
Server address	<ul style="list-style-type: none"> • Empty: Discover the address of the firewall traversal server (the STUN or TURN server), if available, using DNS SRV. • Specified: Use the firewall traversal server specified as either an IP address or a fully qualified hostname.

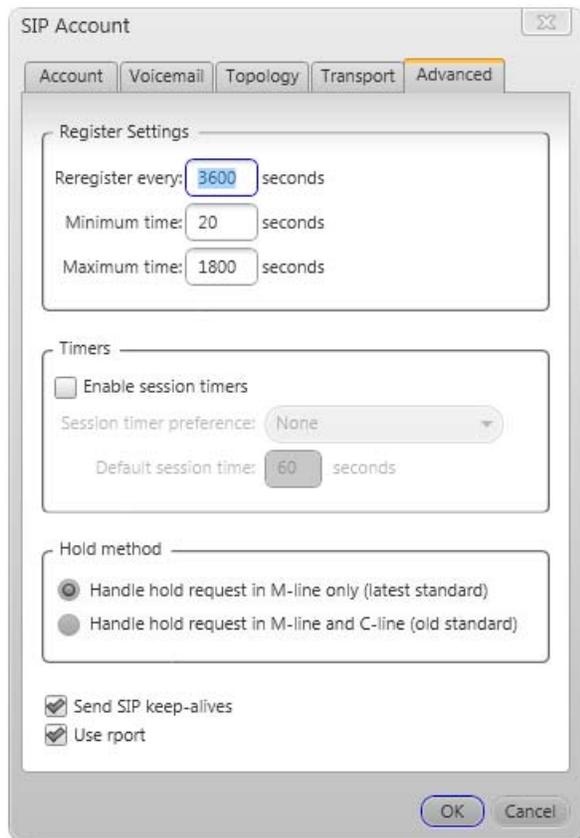
Field	Description
Range of ports used on local computer	<p>The appropriate setting depends on your computer setup:</p> <ul style="list-style-type: none">• Checked: If your computer is behind a restrictive firewall that only allows specific port ranges to be used. Enter the range of ports to use for your SIP account. (You must also open those ports on your firewall; refer to applicable firewall documentation for information.)• Unchecked: If your computer is not behind a restrictive firewall.

SIP Account Properties – Transport



Field	Description
Signaling Transport	<p>Contact your IT administrator or VoIP service provider to identify the types of transport that are supported. Then choose a supported transport:</p> <ul style="list-style-type: none"> • Automatic: X-Lite sets up the transport based on the capabilities of the network and the X-Lite computer. Choose this option if you do not care which transport is used. • TCP: This transport provides no signaling security. • UDP: This transport provides no signaling security. • TLS: Choose this option to request signaling encryption or both signaling and media encryption.
Encryption	<p>Call encryption is supported only if you have a SoftPhone.com account. See www.softphone.com.</p>

SIP Account Properties – Advanced



Field	Description
Register Settings	
Reregister every	The time interval between X-Lite's attempts to reregister in order to refresh the account registration for this account. A value of zero means not to reregister after the initial registration. This value is placed in the "Expires" header field of the REGISTER message.
Minimum time	If the reregistration fails, X-Lite will wait this amount of time, then attempt to reregister. If the second attempt fails, X-Lite will wait twice this time and try again, then four times this time, and so on, until reregistration succeeds.
Maximum time	This is the maximum wait time between attempts to reregister. Once this maximum is reached, X-Lite will wait this time for all subsequent attempts. For example, the min. time is 20 secs, the maximum time is 120 secs. X-Lite will attempt to reregister as follows: Wait 20 secs; Attempt to connect; If fail, wait 40 secs; Attempt to connect; If fail, wait 80 secs; Attempt to connect; If fail, wait 120 secs (the maximum); Attempt to connect; If fail, wait 120 secs, and so on.
Timers	
Enable session timers	A session timer is a mechanism to detect whether a call session is still active from the signaling point of view. When the timer expires, a refresh is sent from one party to the other. The timer is then reset. <ul style="list-style-type: none"> • Turn on to enable session timer. Enter a value in Default session time. • Turn off to disable session timer; refreshes will never be sent.
Default session time	

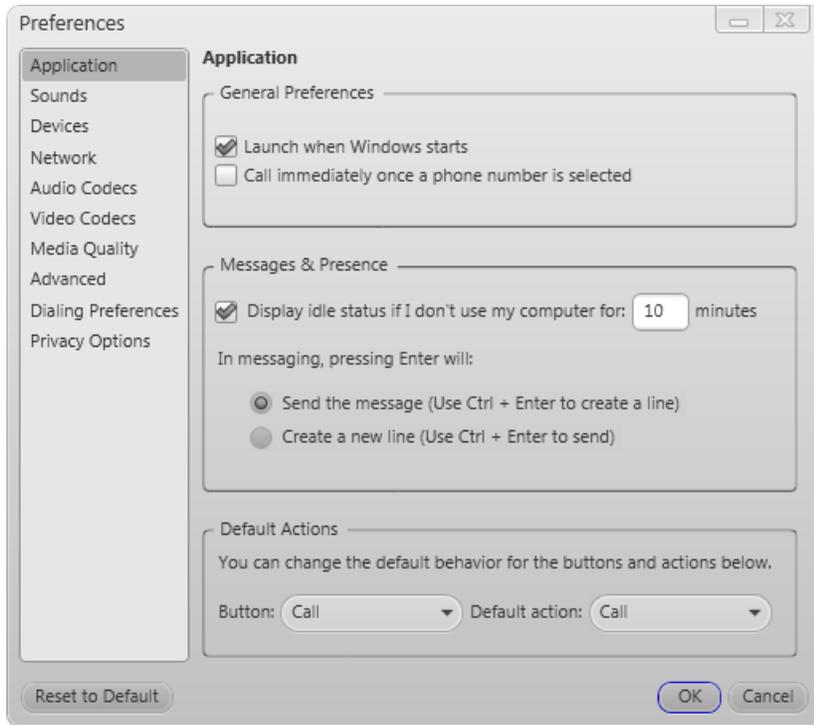
Field	Description
Session timer preference	This field specifies your preference for which party should send the refresh. The preference is not a guarantee that the refresh will be performed by the specified party. The choices are: <ul style="list-style-type: none">• None: No preference.• Local refreshes: Your computer sends.• Remote refreshes: The other party sends.• UAC refreshes: The user agent client (the party that initiated establishment of the communications) sends.• UAS refreshes: The user agent server (the other party) sends.
Hold Method	Change this setting only if your IT administrator or VoIP service provider advises you to do so.
Send SIP keep-alives	Typically on, to instruct X-Lite to send SIP keep-alive messages in order to maintain a “pinhole” through your firewall for SIP messaging.
Use rport	Typically on.

5.2 Configuring Preferences

Choose Softphone > Preferences. The Preferences window appears.

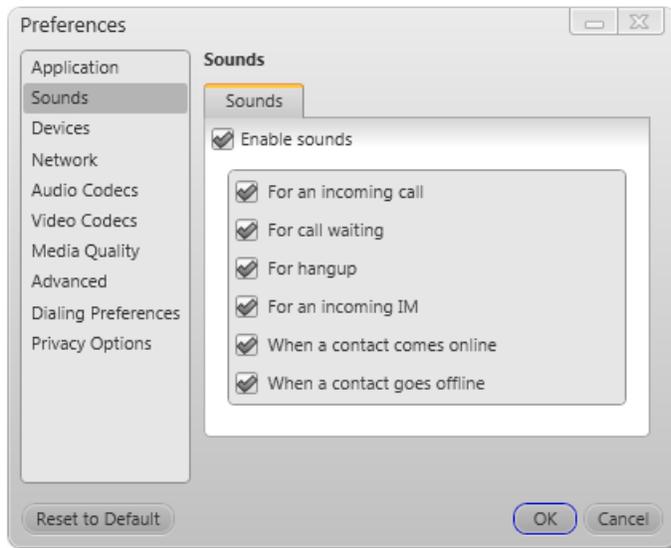
The Preferences panels let you control the way that you work with X-Lite.

Preferences – Application



This panel lets you set your preferences for general GUI behavior.

Preferences – Sounds

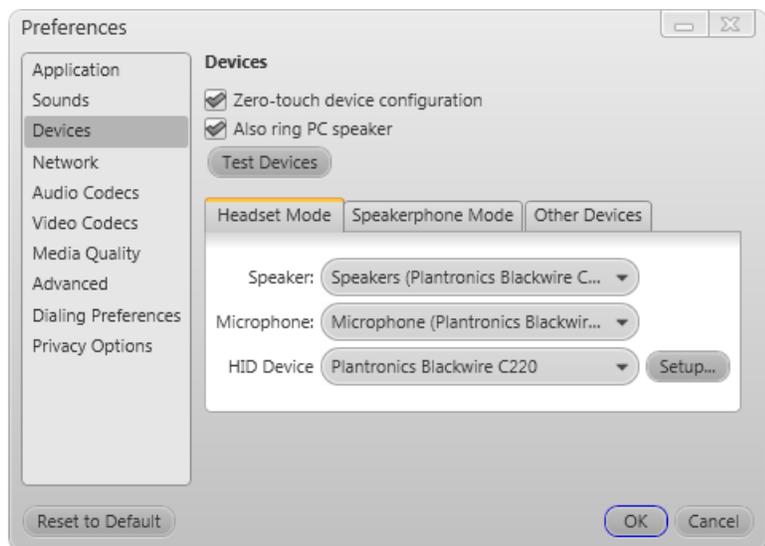


You can assign specific sounds to a variety of actions or “events”.

1. Select the Enable sounds check box and select the check boxes for each desired event, or clear the Enable sounds check box to disable all sounds.
2. If enabling sounds, you can change the sound for each event: select the individual event. The value in Sound preference will change. Select the desired sound.

You can import sounds; these will be added to the list of sounds you can choose from when assigning a sound to an event.

Preferences – Devices



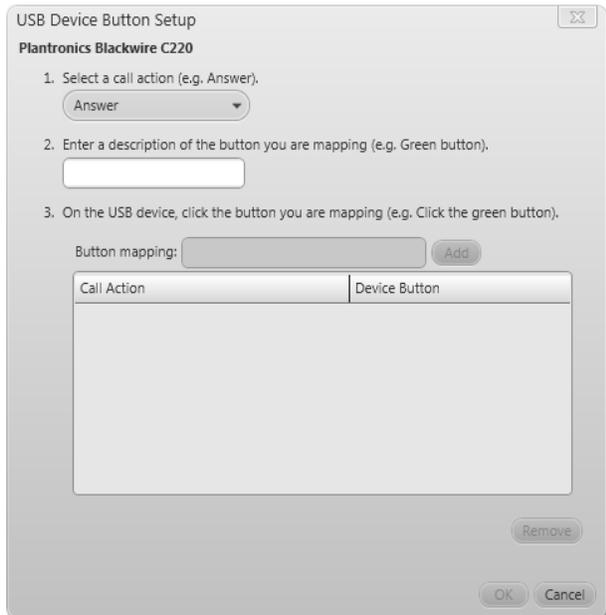
X-Lite automatically detects devices at each startup, and selects the most appropriate device for each purpose. If you do not like this selection, you can override it on this panel.

If you override a selection, it will apply the next time you start X-Lite, unless the device is no longer available, in which case X-Lite will again select the device to use.

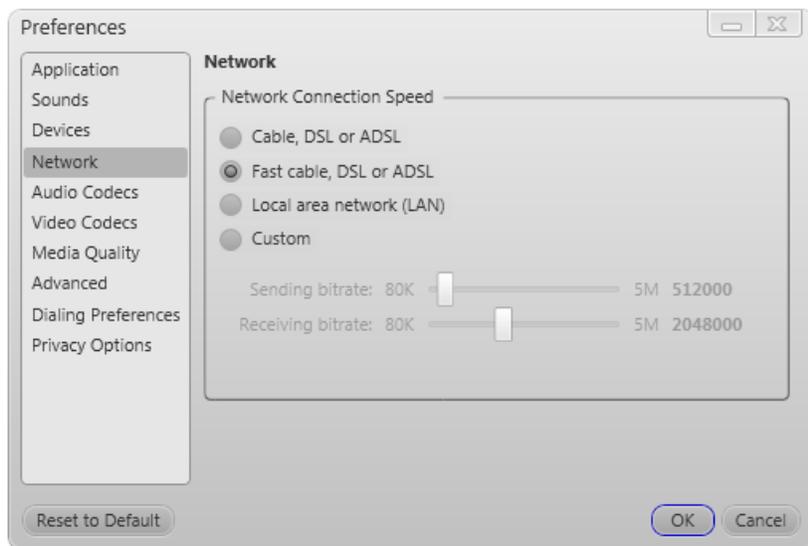
Field	Description
Headset Mode	
Speaker Microphone	<p>Change these fields only if you want to override the devices that X-Lite automatically selected.</p> <p>In both these fields, select the headset you are using.</p> <p>The headset is the device that is usually used for audio out (the sound you hear) and audio in (capturing your voice). The only situation in which the headset is not used is when the Speaker Phone button on the dialpad is pressed.</p> <p>Therefore, unless you will always be using X-Lite in speakerphone mode, you must make a selection here.</p> <p>Select the headset in both the Speaker device field and Microphone device field.</p>
HID Device	<p>If the selected headset device is a HID-compliant device, this field specifies that device. You can click Setup in order to assign functions to the device. For example, you can set the green button so that it answers an incoming call.</p>
Speakerphone Mode	
Speaker	<p>Change this field only if you want to override the devices that X-Lite automatically selected.</p> <p>Make the appropriate choice:</p> <ul style="list-style-type: none"> • Select the device that you want to use for audio out (the sound you hear) when the Speaker Phone button is pressed. Make sure you select a speaker device (not the headset). • Select None if you do not have a speaker phone. The Speaker Phone button on the dialpad is disabled.
Microphone	<p>Change this field only if you want to override the devices that X-Lite automatically selected.</p> <p>Make the appropriate choice:</p> <ul style="list-style-type: none"> • Select the device that you want to use for audio in (capturing your voice) when the Speaker Phone button is pressed. <p>It can be any microphone: it does not have to be the microphone on the device you specified as the speaker device. For example, it can be the microphone on your camera.</p> <ul style="list-style-type: none"> • Select None if you do not have a speaker phone. The Speaker Phone button on the dialpad is disabled.
HID Device	<p>If the selected speakerphone device is a HID-compliant device, this field specifies that device. You can click Setup in order to assign functions to the device. For example, you can set the green button so that it answers an incoming call.</p> <p>(If the speakerphone device is the same as the headset device and you have already configured the device, there is no need to click Setup again.)</p>
Other Device	
Ring On	<p>Change this field only if you want to override the devices that X-Lite automatically selected.</p> <p>The device where you want to hear the phone ringing: the headset, the speakerphone, or none.</p>
Camera	<p>Change this field only if you want to override the devices that X-Lite automatically selected.</p> <p>Select the camera model.</p>

USB Device Button Setup

You can assign functions to a USB-compliant device. For example, you can set the green button so that it answers an incoming call.



Preferences – Network



Field Description

Select the type of network connection for your computer.

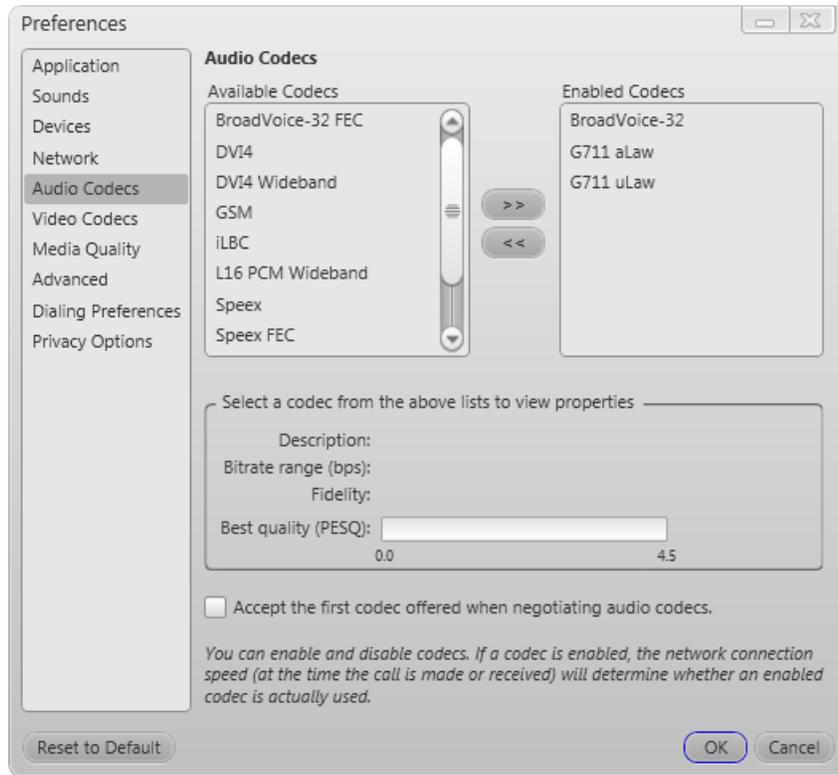
The sliders move to show the bitrate that will be used for sending and receiving. These rates are typical rates for the selected configuration.

If you know that your computer and network can handle a faster sending speed, click Custom and move the slider. It is recommended that you not change the receiving speed.

You will know that you have set the sending speed too high if:

- The remote video shows black areas or is slow or jerky.
- The remote audio is garbled.
- You will know that you have set the sending speed too low if the audio is good but the video is of poor quality (grainy).

Preferences – Audio Codecs



This panel shows all the codecs that are included in X-Lite. You can enable or disable codecs as desired.

With only one codec enabled, all calls made will use that codec. With more than one codec enabled, X-Lite automatically chooses the best codec based on the other party's capability, the available bandwidth, and network conditions.

You cannot change the properties of any codecs.

About Codecs

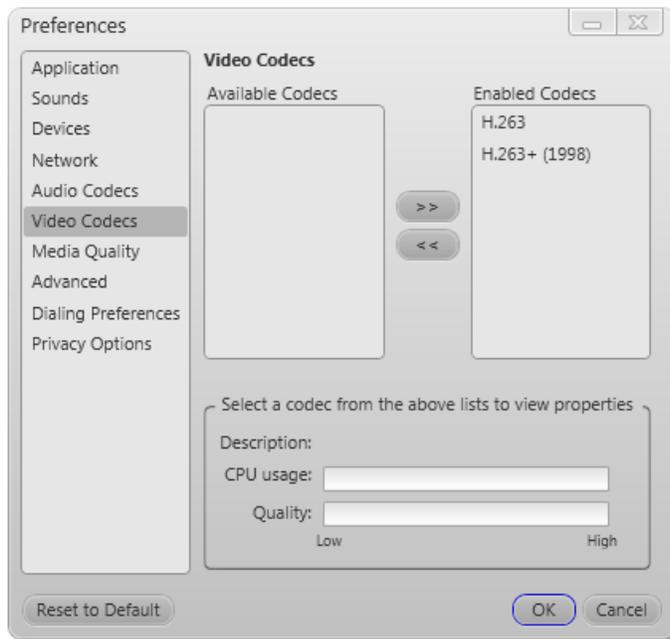
Audio codecs describe the format by which audio streams are compressed for transmission over networks. Codecs can be categorized as either narrowband or wideband:

- Narrowband codecs work with low bandwidth such as a dialup internet connection. These codecs have a sampling rate of 8 kHz.
- Wideband codecs work with high bandwidths and result in better audio quality. However, they do not work with PSTN. These codecs have a sampling rate of 16 kHz.

Supported Codecs

Codec	Narrowband	Wideband
Broadvoice-32		✓
Broadvoice-32 FEC		✓
DVI4	✓	
DVI4 Wideband		✓
G.711aLaw *	✓	
G.711uLaw *	✓	
GSM	✓	
iLBC	✓	
L16 PCM Wideband	✓	
Speex	✓	
Speex FEC	✓	
Speex Wideband		✓
Speex Wideband FEC		✓
* Generally, at least one of these codecs must be enabled in order to place a PSTN (land line) call.		

Preferences – Video Codecs



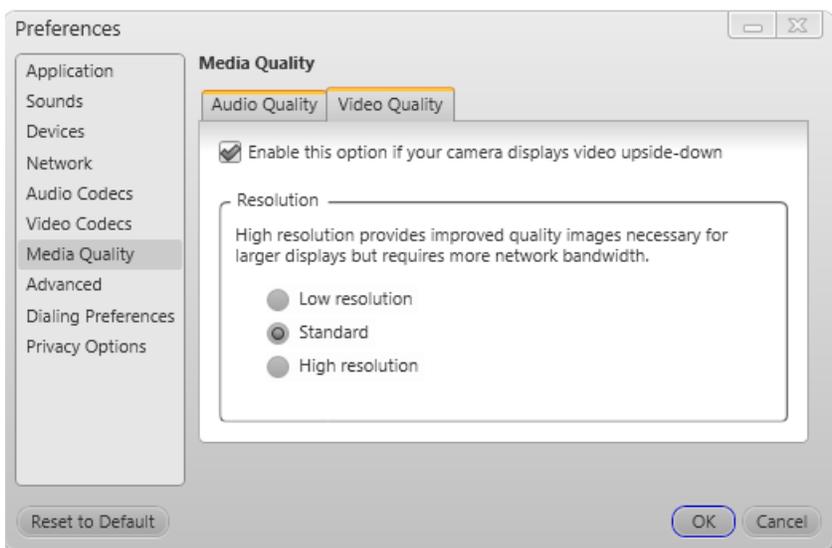
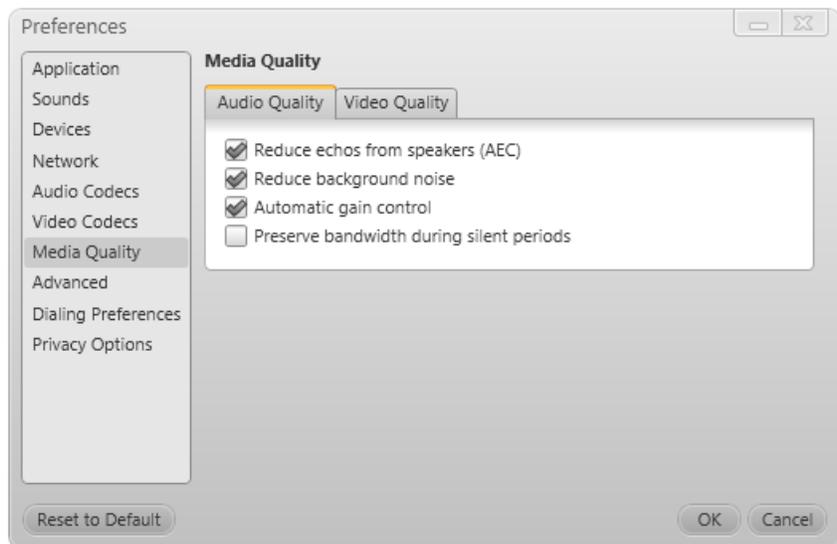
Video codecs describe the format by which video streams are compressed for transmission over networks. Some codecs require less bandwidth than others, but may result in lower video quality.

You can enable or disable codecs as desired. You may decide to disable a codec even though your enterprise or VoIP service provider supports it.

With only one codec enabled, all calls made will use that particular compression format. With more than one codec enabled, X-Lite automatically chooses the best codec based on the other party's capability, the available bandwidth, and network conditions.

You cannot change the properties of any codecs.

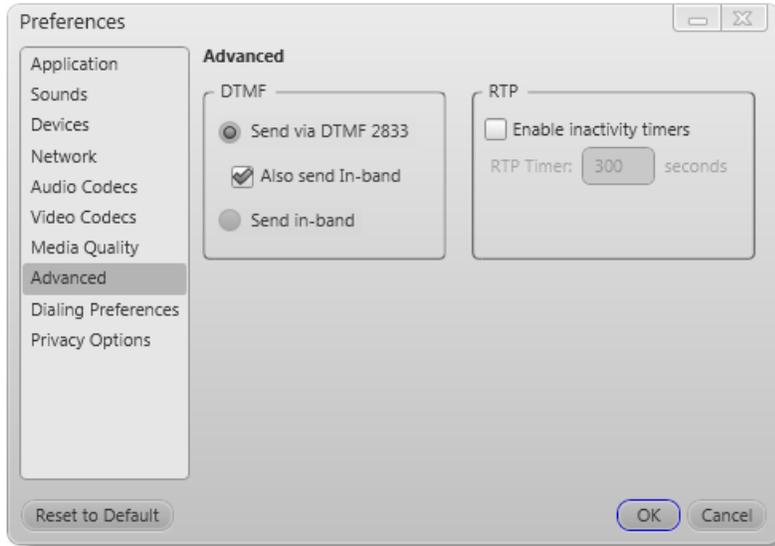
Preferences – Media Quality



Audio Quality	
Reduce echos	Turning this feature on improves sound quality. This feature is typically on.
Reduce background noise	Automatically attempts to remove background noise. Typically on for the speakerphone.
Automatic gain control	This feature is typically on.
Preserve bandwidth	When this feature is on, X-Lite stops sending audio when you are not talking. When this feature is off, X-Lite always sends audio, which uses more bandwidth but may result in better call quality. Typically off. However, if you are using a slow (dial-up or ISDN) connection, you may want to turn it on.
Video Quality	
Enable this option	Check or uncheck to flip the video image.
Resolution – Limit available resolution	If you enable this field, X-Lite will determine the maximum quality that your computer can handle and will disable unapplicable options in the list of possible resolutions

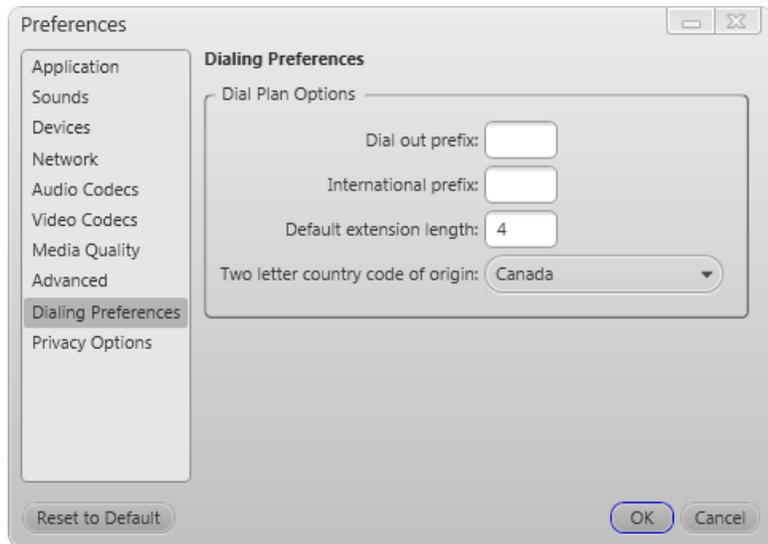
Resolution	<p>Leave at standard, or change the size as follows:</p> <ul style="list-style-type: none">• Set it to high if you have a good camera and a computer with a fast CPU. You will know that you have set the size too large if: Your computer slows down (the video is using too much CPU) The video shows black areas or is slow or jerky.• Typically set it to low only in special situations, for example, when using wi-fi in a hotel. You will know that you have set the size too small if the video is fuzzy.
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Preferences – Advanced



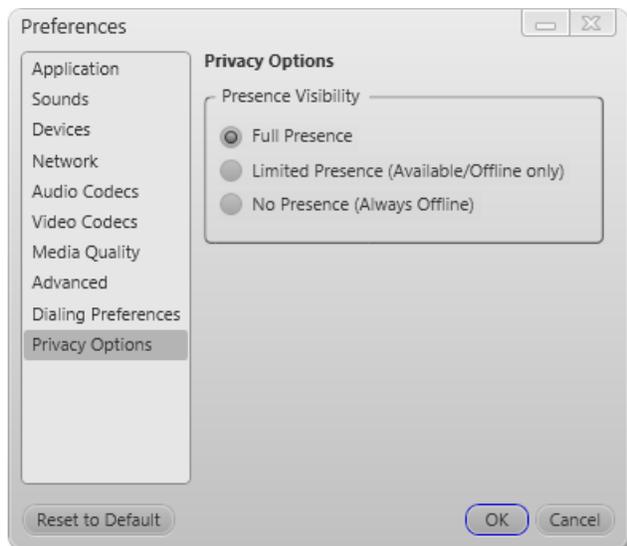
Field	Description
DTMF	You may need to change the DTMF configuration if you cannot interact with interactive voice response systems (auto attendants, voice-activated menus, and so on).
RTP	This timer controls how calls are disconnected when X-Lite determines that there is a problem with the call and the other party has probably disappeared (assuming that you have not yourself detected the problem and hung up manually). Typically, the timer is enabled. It is recommended that you not disable it. You can change the length of the timer, but do not set it to less than 30 seconds.

Preferences – Dialing Preferences



Field	Description
Dial out prefix	The number to dial out of your enterprise. For example, 9.
International prefix	<p>The prefix required on a phone number in order to handle this number as an international phone call. For example, +43. X-Lite handles international calling as follows:</p> <ul style="list-style-type: none"> • It looks at the phone number for this international prefix. • If it finds this prefix, the phone number is transformed so that the number can be successfully placed according to the phone rules for the country specified in the country code. <p>For example, if the phone number is +438901234 (meaning the number is a Swiss phone number) and the country code is Canada, then X-Lite replaces the + with 011 (the international dialing code for Canada), adds the dial out prefix (9) and places the call.</p>
Default extension length	The maximum length of extensions in your enterprise. This information must be correct to ensure that X-Lite can distinguish between a phone number that can be made without leaving your PBX and one that requires going through the PBX.
Country code	<p>The country your phone system works in. Change this code if you go to another country, but only if your enterprise has an office in that country that has its own PBX.</p> <p>For example, if you go to your Geneva office and that office has its own PBX, change the country code to Switzerland. In this way, phone calls made to a Swiss phone number will be correctly placed (that is, as being placed from within Switzerland).</p> <p>Do not change your country code if you go to another country but you are still connecting to the PBX in your home country. Speak to your IT administrator or VoIP service provider.</p>

Preferences – Privacy Options



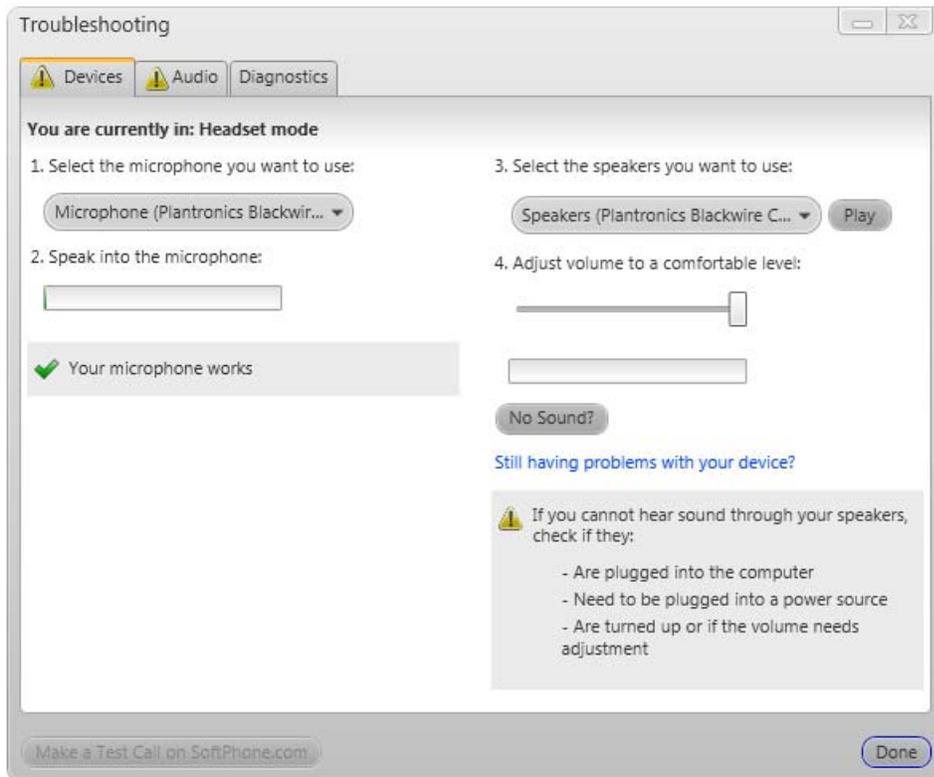
This panel applies only if you have a SoftPhone.com account. See www.softphone.com.

A Troubleshooting

Choose Help > Troubleshooting to display the Troubleshooting window.

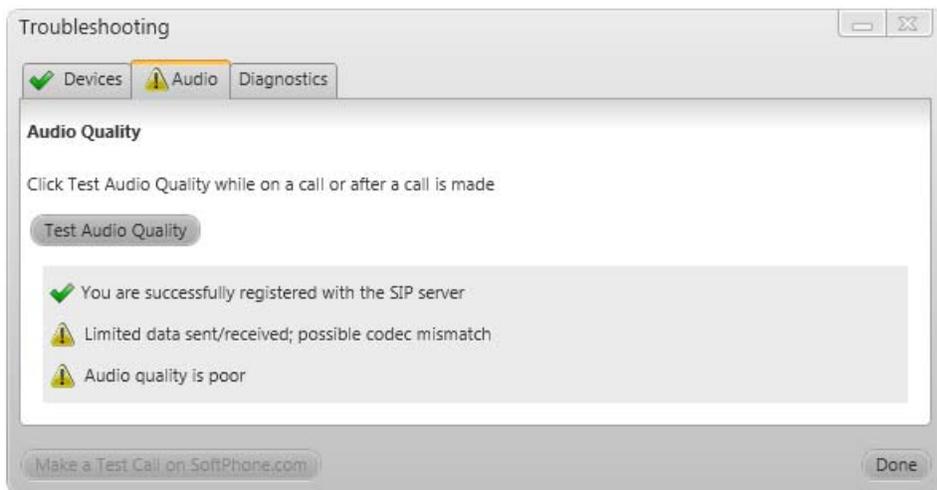
Testing Audio and Video Devices

You can verify that your microphone, speakers and camera are working and can set the volume to a comfortable level without having to actually place a phone call.

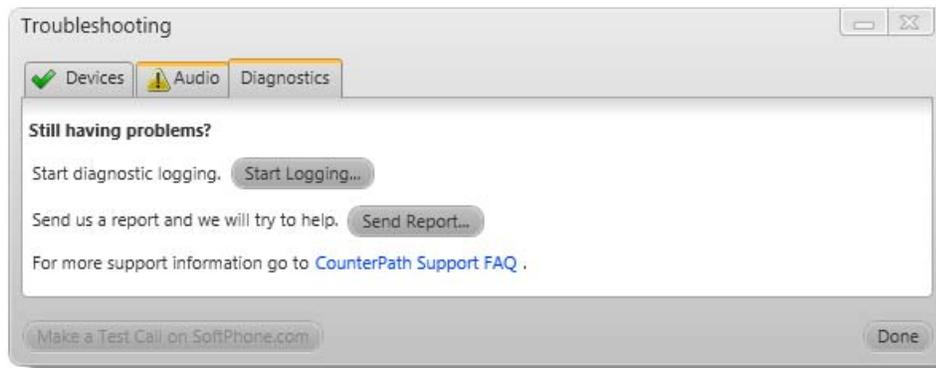


Testing Audio Quality

While you are on a phone call, you can test the quality of the audio. Note that to perform a valid test, you should be on an established call (not a call attempt).

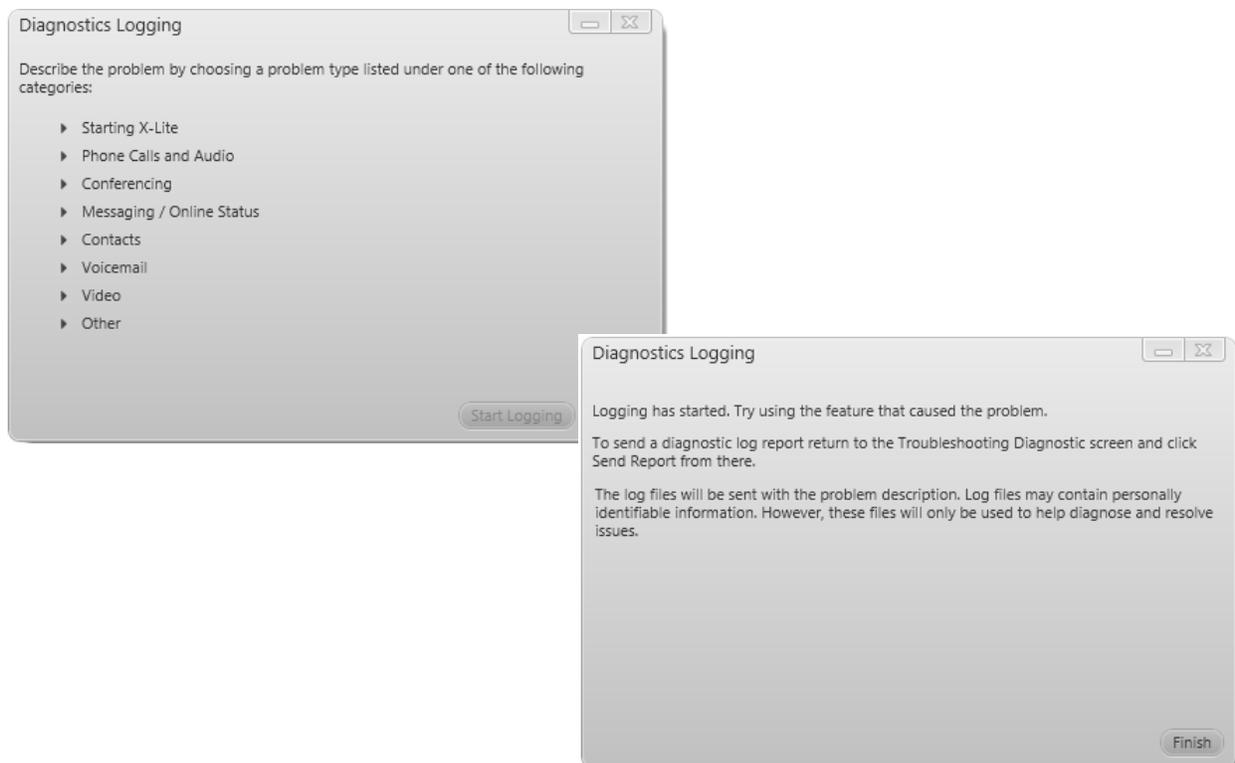


Diagnostics



To start logging X-Lite activity and send a logging report to customer support:

1. Click Start Logging. The first Diagnostics Logging window appears.
2. Select the problem you are experiencing and click Start Logging.
3. On the second Diagnostics Logging screen, click Finish. Logging will start.
4. Perform the actions you want to capture; for example, attempt to make a phone call.
5. When done, choose Help > Troubleshooting > Diagnostics again and click Send Report. Select the report and send it.
6. When the report has been sent, click Stop Logging. Click Done to close the Troubleshooting window.



B Glossary

AEC	Acoustic echo cancellation. Processing of the audio or video signal to reduce the echo effect that can arise with a speakerphone or that can arise if the sound from the speakerphone or headphone leaks into the microphone.
AGC	Automatic gain control. Processing of the audio or video signal to adjust the microphone volume level so that the other party does not hear the distortion that might be caused by too high a microphone input or too low volume (due to too low input level).
Broadband	Broad or wide bandwidth. In data transmission, the wider the band, the more data it is possible to transmit in a given time span. A cable, DSL and ADSL connection to the network provide broadband for data transmission. A dialup or ISDN connection typically provide a narrow bandwidth for data transmission.
Codec	The format by which audio or video streams are compressed for transmission over networks.
Dial plan	The rules that X-Lite follows in order to interpret the phone number that the user has entered and to modify the number or address, as required, to ensure that the call will be placed successfully.
DTMF	Dual-tone multi frequency. DTMF is the system that is used in interactive voice-response menu systems such as the menu system for accessing voicemail messages. The DTMF system allows the user to interact with the menu by pressing keys on a dialpad or keyboard.
HID	Human interface device. In X-Lite, if the headset is HID-compliant, the user can configure the buttons on the device to invoke functions on X-Lite such as answering an incoming call.
IP	Internet Protocol. A data-oriented protocol used for communicating data across a network. IP is the most common protocol used on the internet.
IP address	A unique number that devices use in order to identify and communicate with each other on a computer network using the IP standard.
Media	In a VoIP phone call, the audio and video portion of the information in a call. Compare to “Signaling”.
MWI	Message Waiting Indicator. An indicator that there is a voicemail message for the owner of an account.
Narrowband	In data transmission, the wider the band, the more data it is possible to transmit in a given time span. A cable, DSL and ADSL connection to the network provide broadband for data transmission. A dialup or ISDN connection typically provide a narrow bandwidth for data transmission.
Proxy	See SIP account.
PSTN	Public Switch Telephone Network. The traditional land-line phone network.
RTP	Real-time Transport Protocol. A protocol for delivering the media portion of a data transmission over an IP network. SRTP is another media protocol.
Signaling	In a VoIP phone call, the information in a call that deals with establishing and controlling the connection, and managing the network. The non-signaling portion of the call is the Media.
SIP account	An account that provides the user the ability to make VoIP phone calls. The account encapsulates the rules and functions the user can access.
SRTP	Secure Real-time Transport Protocol. A protocol for delivering the media portion of a

	data transmission over an IP network. SRTP is a secure protocol, which means that the media is encrypted. RTP is another media protocol.
TCP	Transmission Control Protocol. A transport protocol for delivering data over an IP network. Other transport protocols are TLS and UDP.
UDP	User Datagram Protocol. A transport protocol for delivering data over an IP network. Another transport protocol is TCP.
VAD	Voice Activity Detection. A technology that detects if audio is a human voice or background noise. X-Lite includes a feature (Preserve bandwidth on the Network panel of the Preferences window) that controls whether audio is transmitted when VAD determines that no one is actually speaking.
VoIP service provider	A business that provides a VoIP service, allowing a user to connect to the internet in order to make VoIP phone calls using X-Lite. The VoIP service provider sets up a SIP account for the user.

