



# ***X-lite 3.0***

***User Guide***

## CounterPath X-lite 3.0

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This manual corresponds to X-Lite version 3.0

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# 1 Introduction

## 1.1 What is X-Lite?

CounterPath's next generation telephony client, X-lite 3.0 lets you integrate your telephony experience with your desktop and mobile computer solutions. With the click of a button or the tap on the keyboard you can dial, answer, or choose how you want to personally manage your calls and availability. And whether you prefer wired or wireless, X-Lite lets you use a multitude of headset devices to maximize your telephony experience, rather than being restricted by a traditional telephone receiver.

Designed to work over internet-based phone systems, X-Lite provides Voice over Internet Protocol (VoIP) solutions using an internet-based telephony server within your company's local area network and/or over your local internet VoIP service provider.

## Standard Telephone Features

The X-lite 3.0 softphone has all the standard telephone features, including:

- Two lines.
- Call display and Message waiting indicator (MWI).
- Speakerphone.
- Mute.
- Redial.
- Hold.
- Do not disturb.
- Call ignore.
- Call history – list of received, missed, dialed and blocked calls.
- Call forward.
- Call record.
- Three-way audio and video conferencing.

## Enhanced Features and Functions

The X-lite 3.0 softphone also supports the following VoIP features and functions:

- Instant messaging and presence using the SIMPLE protocol.
- Managed contact list – importing and exporting contacts between X-Lite and other applications.
- Support for Intel® Centrino® Mobile technology, allowing X-Lite to provide more consistent quality of service across both wired and wireless networks using industry standards such as 802.11e.
- Log in with one or two VoIP service providers.
- Zero-touch configuration of audio and video devices; no tuning wizard is required.
- Acoustic echo cancellation, automatic gain control, voice activity detection.
- Support for the following audio codecs:  
Broadvoice-32, Broadvoice-32 FEC, G.711aLaw, G.711uLaw, GSM, iLBC, L16 PCM Wideband. For more information on audio codecs, see page 38.
- 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.
- SIP compliance to 3261 SIP standard.
- STUN and ICE NAT traversal. XTunnels for firewall traversal.
- Support for DTMF (RFC 2833, inband DTMF or SIP INFO messages).

## CounterPath X-lite 3.0

### CounterPath X-Lite Service

X-Lite supports up to two accounts, one account with a service provider of your choice, the second through CounterPath X-Lite.

The CounterPath X-Lite service includes the following features:

- Automated account request and setup.
- Presence (the ability to see the availability of your contacts) through the peer-to-peer protocol.
- Automated upgrades.
- XTunnels and STUN as the firewall traversal solutions.
- An echo test to test the quality of your audio and video.

## 2 Installation and Setup

### 2.1 Getting Ready

If you plan to set up an account through a VoIP service provider other than CounterPath X-Lite, you will need the following information:

- User name
- Password
- Authorization Name
- Domain
- Proxy address and port \*
- STUN server address and port\*
- XTunnels server address and port\*

\* not all VoIP service providers use this information

There is no advance setup required before setting up the CounterPath X-Lite account.

### System Requirements

	Audio Only		All Features	
	Minimum	Optimal	Minimum	Optimal
Processor	Intel® Pentium II 400 MHz or equivalent	Pentium III® 1.3 GHz or equivalent	Intel Pentium III 700 MHz or equivalent	Pentium 4® 2.0 GHz or equivalent
Memory	128 MB RAM	128 MB RAM	256 MB RAM	256 MB RAM
Hard Disk Space	15 MB	30 MB	30 MB	30 MB
Operating System	Windows® 98 Second Edition Windows NT® Windows® 2000 Windows® XP		Windows 2000 Windows XP	
Connection	IP network connection (broadband, LAN, wireless)			
Sound Card	Full-duplex, 16-bit			

### 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
- Bluetooth® multimedia headset
- USB multimedia headset
- USB phone.

### Optimized Devices

X-Lite is optimized to work with the following:

- Actiontec Internet Phone Wizard
- Clarisys Claritel i750

## CounterPath X-lite 3.0

- GN Netcom GN 8120 USB and GN Netcom 8110 USBXP
  - Plantronics CS50-USB Wireless Office Headset System
  - TigerJet RJ11 to USB Phone Adaptor (incorporating the Tiger560C)
  - TigerJet USB Phone Set (incorporating the Tiger560C)
  - VoIP Voice Cyberphone (V550MLR USB Phone)
  - VoIP Voice Cyberphone K (V652VVMLR USB Phone)
  - Yealink USB-P1K USB hand phone
- 
- Legerity PhonePort™ PCI card
  - Intel® 600SM PCI card.

### **Video Cameras**

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

## 2.2 Installing X-Lite

1. Run the X-Lite setup executable file and follow the prompts in the install wizard.
2. At the final step of the wizard, select **Launch X-Lite** to start using the softphone.
3. Click **Finish** to complete the installation. The Log In dialog box appears. You can press **Cancel** to exit for now, or you can set up your CounterPath X-Lite account immediately; see “Configuring X-Lite and Creating an Account” on page 5.

## Uninstalling X-Lite

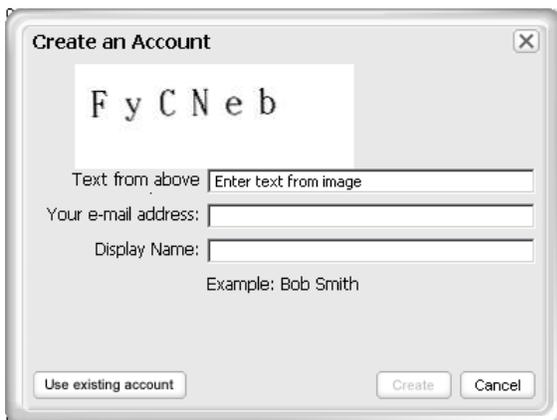
Uninstall X-Lite as you would uninstall any other program: launch the Windows Control Panel, and select **Add or Remove Programs**. Follow the prompts.

## 2.3 Configuring X-Lite and Creating an Account

1. 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. The Login dialog box appears to let you log into the CounterPath X-Lite service. You must always log into this service in order to use the phone, even if you do not want to use your CounterPath X-Lite account.



2. Click **Create Username**. The Create an Account dialog box appears.



3. Complete all fields.
4. Press **Create**. The Log In dialog box reappears, with the fields populated.

5. Set the two check boxes as desired:
  - Remember these settings: If checked, the next time the dialog box appears when you start X-Lite at this computer, the fields will already be filled in. If unchecked, you must complete the fields; this information has been sent to your email address.
  - Do not ask again: If checked, then the next time you start X-Lite, this dialog box will be skipped and you will be logged in automatically.
6. Press **Log In**. The softphone appears with your account ID (which is identical to your user name). Your CounterPath X-Lite account is automatically enabled. For information on enabled accounts, see page 44.

### Setting up Accounts

If you have established an account with another VoIP service provider, you can set it up in X-Lite now. Or you can set it up later.

1. Create the account: Click  at the top of the phone and choose SIP Account Settings. Click Add. The Properties of Account window appears.
2. In the Account tab, complete the User Details area with the information obtained from the VoIP service provider.
3. Complete the remaining tabs as specified by the service provider. If the service provider did not give you any special instructions, then leave the default values.

If the VoIP service provider offers voicemail, then you can set up some voicemail features in X-Lite. In particular:

- If you want to be able to connect to voicemail by clicking  on the Call display, you must complete the **Number to dial for checking voicemail** field.
- If you want to be able to send incoming calls to voicemail by clicking **SEND TO VOICE MAIL**  on the Call display, you must complete the **Number for sending calls to voicemail** field.

For complete details on the Account Settings window, see “SIP Account Settings” on page 44.

### 2.4 Setting up a Contacts List

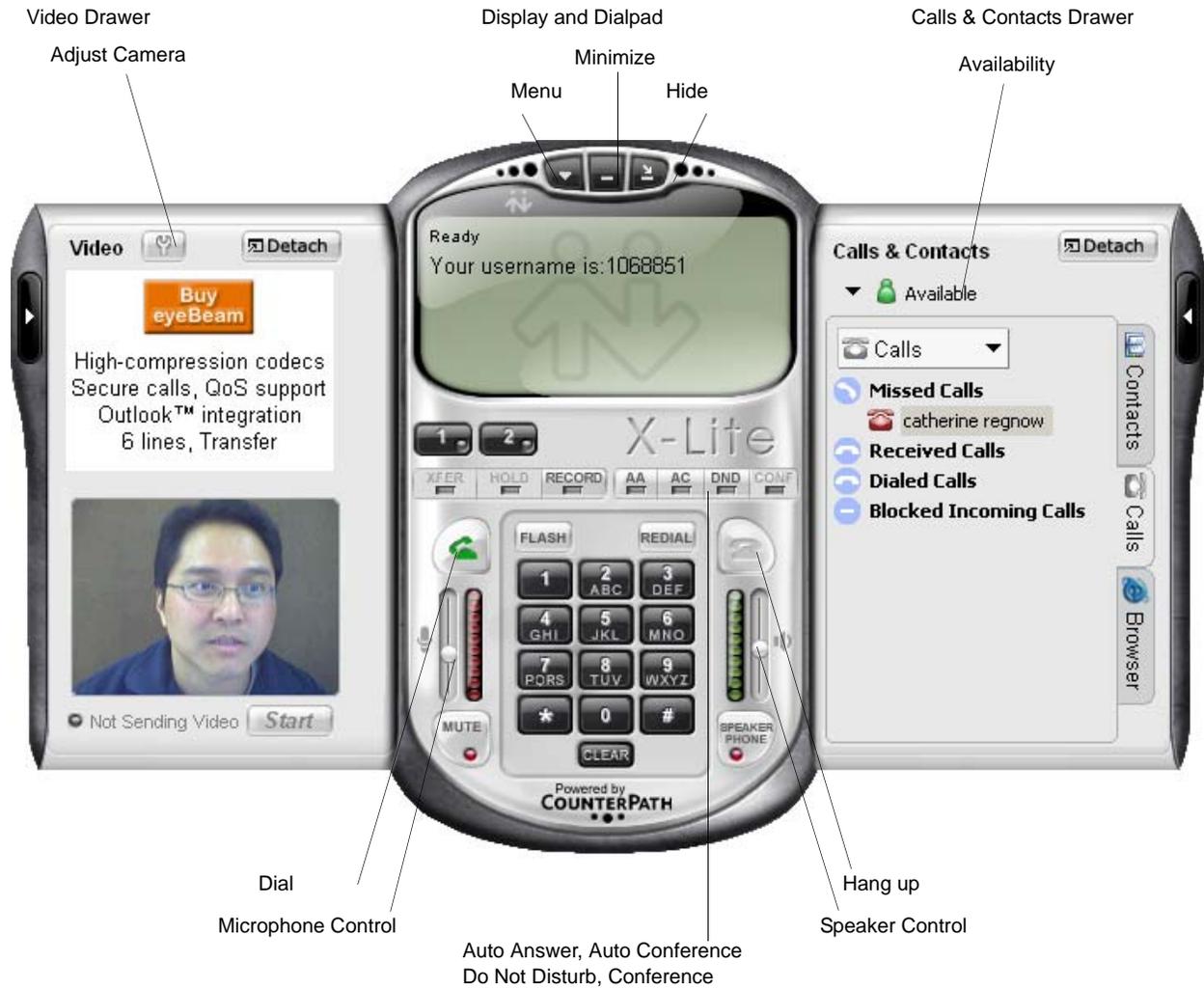
Use of a Contacts list is optional, but is the most efficient way to make calls. You can set up contacts in several ways:

- During a call that you place or receive, you can add the other party to your contact list. See “Add to Contacts List” on page 12.
- You can add numbers to the Contacts list one by one. See “Adding a Contact” on page 19.
- You can import a contact list from a file or from another application. See “Importing Contacts” on page 21.
- You can retrieve a remotely stored contact list using WebDAV or XCap. See “” on page 21.

For general information on contacts, see “Contacts Tab” on page 18.

### 3 Using the Softphone

#### 3.1 The Onscreen Phone



## Display

The following information and icons may appear on the Call display:

When the phone is ringing with an incoming call, click here to ignore. A message appears to the caller advising that the call could not be made. The phone stops ringing.



When the phone is ringing with an incoming call (on your non-CounterPath X-Lite account), click here to send the call immediately to voicemail. Information on voicemail is provided by your VoIP service provider. If this icon does not appear for an incoming call, then you have not set up a number for sending calls to voicemail. See "Account Properties – Voicemail" on page 47. The CounterPath X-Lite service does not include voicemail, so this icon never appears for an incoming call on that account.

You have new voicemail. Click this icon to access your voicemail messages. If clicking this icon does not connect to voicemail, then you have not set up for that number. See "Account Properties – Voicemail" on page 47.

You have missed an incoming call. To clear the icon, click on the icon. The Calls tab opens in the Calls & Contacts drawer. Click on each red icon (calls you have not yet acknowledged).

The duration of the current or last call.



Security: means the current call has signaling and media encryption.

means the call has only signaling encryption or no encryption.

Click to add this caller to your Contacts list. For information on contact lists, see page 17.

When a call is in progress, mute is on () , you are talking () , you are not talking ().

## Video Drawer

To display this drawer, click the black button toward the extreme left edge of the softphone application. You can open (display) and close (hide) this drawer at any time. You can click the to display the standard window for setting camera properties; this is not an X-Lite window.

You can detach this drawer, then reattach it, if desired.

This drawer has two panels. The top panel shows incoming video (video from the other party). The lower panel shows outgoing video. The **Start** button lets you start and stop video.

Advertising Window. When a video call is not in progress and the Video Drawer is open, an advertisement is displayed in the top panel.

## Calls & Contacts Drawer

This drawer displays your Contacts list, lists of recent calls, availability information for you and your contacts, and the browser tab. For more information, see page 17.

### 3.2 Starting X-Lite

You can run X-Lite at the same time as eyeBeam. eyeBeam is CounterPath's retail softphone, available for purchase at <http://counterpath.com>.

1. Start X-Lite as you would any other program: Use the **Windows Start** menu or double-click the desktop icon. The softphone appears. 
2. At startup, X-Lite will check for software updates. If one is found, you will be prompted to install it.
3. The Login dialog box appears (unless you check the Do Not Ask field). Complete the fields if they are blank and press **Log in**. The softphone appears with your account ID.

When you are logged in, the Call display shows *Ready - Your username is*. If two accounts are enabled, the name is that belonging to the default account.

For general information on enabling and default accounts, see page 44.



### Showing and Hiding the Softphone

Click  to hide the softphone. Show it again by clicking in the system tray.

Click  to minimize the softphone. Show it again by clicking in the system tray or or the Task bar.

You can still receive calls when the phone is hidden or minimized.

If you exit when X-Lite is hidden or minimized; X-Lite wil start next time as hidden or minimized.

You can set up X-Lite so that when the softphone is completely or partially covered, hidden, or minimized, you will be notified when a call comes in. See “Options – General – Alerts and Sounds” on page 34.

### Receiving a New Contact Request

If availability is enabled, then at any time, you may get a New Contact Request dialog box on your softphone. For information on this request, see “Availability” on page 25.



### 3.3 Placing a Call

You can contact someone using:

- The SIP address (kpereira@domain.com)
- A traditional phone number, if supported by your VoIP service provider

You will hear a ringing tone while X-Lite attempts to make a connection.

How	Description
Keying	<ol style="list-style-type: none"> <li>1. Enter the SIP address or number in the Call display using the softphone keypad or the computer keyboard. <ul style="list-style-type: none"> <li>• For the name, you can enter the entire name (kpereira@domain.com) or just the name (kpereira).</li> <li>• If you start to enter a name and the Turn Letters feature is on, then these letters are converted to numbers. Press Clear, then press spacebar and try again. See “Options – General – Application” on page 33 for details on the Turn Letters feature.</li> </ul> </li> <li>2. Click  or press <b>Enter</b>.</li> </ol>
Partial keying	As you key in an entry, a suggestion for completing the entry may appear. Press Tab to accept the suggestion. Then click  or press <b>Enter</b> .
Drag-and-drop	<p>Drag an entry from the Contacts tab or any of the lists in the Calls tab to the Call display. (For information on this drawer, see page 17.)</p> <p>If the Contacts list contains lots of contacts, use the  field to filter the list. Then drag the entry.</p>
Right clicking	<p>Right-click an entry on the Contacts tab or any of the lists in the Calls tab, and choose Phone this Person. (For information on this drawer, see page 17.)</p> <p>If the Contacts list contains lots of contacts, use the  field to filter the list. Then right-click the entry.</p>
Redialing	Press <b>Redial</b> .
From Outlook	<p>If you have set up contacts in Microsoft® Outlook®, you can place a call from there.</p> <ul style="list-style-type: none"> <li>• Double-click the contact in the Contacts list in Outlook. The Contact dialog box appears.</li> <li>• Click the  in the top left corner and select the phone number to dial. As soon as you release, X-Lite will be brought to the front (or will be started) and the call will be placed.</li> </ul> <p>For information on how X-Lite and Outlook contacts work together, see “Exporting Contacts” on page 21.</p>

#### Which Account Is Used?

If you have more than one account enabled, the account that is used for the call depends on several factors:

- If you enter the account prefix before the number (#1 for the first account or #2 for your Counterpath X-Lite account) then that account is used.
- If you have set up a dial plan for your non-CounterPath X-Lite account, then the rules of the dial plan determine which account is used. See “Dialing Plan” on page 58.
- If you have not set up any dial plans, the default account will be used. (To check or change the default, right-click and choose SIP Account Settings.)

#### Ending a Call

Click  on the Call display or right-click in the System Tray and choose End Call. Details of the call remain on the Call display. To clear the Call display, click **Clear**.

Note that selecting another line does not hang up; it puts the call on hold.

### 3.4 Answering a Call

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

The softphone rings and the line of the incoming call is lit. If you have Call Alerts on, the Call Alert box may appear. If you have the popup phone feature on, the phone comes to the front. For information on call alerts and the popup phone feature, see page 34.

The SIP address of the person calling you is displayed. If the SIP address for this person appears in your Contacts list, the SIP address is converted to the display name for that address. For example, sip:kpereira@domain.com appears as “kokila”.

You can answer the call in any of these ways:

- Click  on the softphone or click Answer on the Call Alert box.
- Click the line number on the softphone.
- Press Enter (on the keyboard), if the softphone is the active application.

You can ignore the call in any of these ways:

- Click  **IGNORE** on the Call display; a message appears to the caller advising that the call could not be made. The phone stops ringing. The call is added to the Received Calls list.
- Click **SEND TO VOICE MAIL**  on the Call display, to send the call immediately to voicemail. Information on voicemail is provided by your VoIP service provider; it is not part of X-Lite.
- Leave it and allow it to eventually go to voicemail .

You can permanently ban the caller:

- Click  **IGNORE** on the Call display; the call is added to the Received Calls list
- In the Received Calls list, click the entry, right-click, and choose **Ban this Person**.

### Ending a Call

Click  on the Call display or right-click in the System Tray and choose End Call.

Details of the call remain on the Call display. To clear the Call display, click *Clear*.

Note that selecting another line does not hang up the current call; it puts the call on hold.

## 3.5 Handling a Call

### While the Call Is in Progress

#### Get Information on Calls

Hover over any line that is in use to see the status of the call (for example, “on hold” or “in conference”) and the name or number of the caller.

#### Video

If your VoIP service provider supports video, click **Start** on the Video drawer to send video to the other party. You will see the other party in the top video panel if they have enabled video at their end.

#### Adjusting Volume

Use the microphone slider (on the left) to adjust the volume of your voice for your listeners.

Use the speaker adjustment (on the right) to adjust the sound you are hearing.

#### Mute

Click  on the dial pad to prevent the other party (or parties for a three-way call) from hearing you. The  icon appears on the Call display. When you mute, you may also want to stop video feed, if any.

#### Speakerphone

Click  on the dial pad to put the caller (or callers for a three-way call) on the speaker phone. You must have a speakerphone device.

#### Call Record

Click **REC** at any time during the call. Click again to stop recording. Recordings are saved as WAV files (for audio) AVI files (for video), in the location specified in the Options window. (Click  near the top of the Call display and select **Options**, then display the Application pane.)

#### Call Information

To view information such as the current codecs, hover over the line button (for example, line 1) that the call is being made on. Information appears in the tool tip.

#### Add to Contacts List

At any time during a call, you can click  on the Call display to add the other party to your Contacts list. For information on the fields on the dialog box and on contacts list in general, see page 18.

### Placing a Call on Hold

Click **Hold** or click the line or click another line.

To resume a call that is on hold, click the line.

### AA – Auto Answer

Click AA on the dialpad to automatically answer calls as they come in.

### Flash

The Flash button on X-Lite works the same way as Flash or Link works on a traditional telephone.

Click *Flash* on the dialpad.

- If you are on an active call, clicking *Flash* will provide a new line. The active calls is put on hold.
- If a call is coming in, clicking *Flash* will pick up the call.
- If a line is on hold, clicking *Flash* will pick up the line.

The exact functionality depends on how your VoIP service provider supports Flash.

### Sending to Voicemail, DND, and Forwarding Calls

#### Send to Voicemail

When a call comes in, you can send it to voicemail by clicking **SEND TO VOICE MAIL**   on the Call display.

You can access your voicemail messages by clicking the  on the Call display (this icon is only displayed if you have new messages).

For important information on how voicemail works, see “Setting up Accounts” on page 6.

#### DND – Do Not Disturb

Click *DND* on the dialpad. All incoming calls will be sent to voicemail or given an audible “busy” indication, depending on how the VoIP service provider has set up this feature.

#### Forwarding Calls

You can enable or disable forwarding. When forwarding is enabled, every call comes in will be forwarded to another phone number (other than voicemail). To enable forwarding, click  at the top of the phone and choose SIP Account Settings. Click Properties, click the Voicemail tab, and complete the Forwarding section. For complete details, see “Account Properties – Voicemail” on page 47.

### 3.6 Three-way Calls

There are three ways to set up a three-way call:

- “Manual Setup: AA Off and AC Off”, below
- “AA Off and AC On” on page 14
- “Conference Server Mode: AA on and AC On” on page 15

#### Manual Setup: AA Off and AC Off

You can host a three-way by calling the other parties involved, or by allowing them to arrange the call themselves.

#### Starting a Three-way Call

To host a call with two other callers:

1. With one active call on one of the lines, place the call on hold by either:
  - selecting another line and dialing a third party, or
  - clicking an incoming call.
2. To bring in both lines, click **CONF**. Both lines will be part of the call – both the lines on and the line you are speaking to (if any).
3. To suspend the three-way call, click **CONF** again to place both parties on hold. The other participants cannot speak to one another.

You can talk privately to one line by clicking the appropriate line.

If another call comes in while the three-way call is on hold, you can choose to answer this line. If you then click **CONF** again, all lines (including the new line) will be added to the three-way call.

4. To restart the three-way call, click **CONF** again.

Note that you can be the host even if you did not initiate the call to the first person. For example, one person can phone you, then you can place and accept the other call, and establish the three-way call.

#### Get Information on Calls

Hover over any line that is in use to see the status of the call (for example, “on hold” or “in conference”) and the name or number of the caller.

#### Removing a Party during an Active Three-way

1. Suspend the three-way call by clicking **CONF**.
2. Select the line of the participant who will be leaving the three-way call.
3. Say goodbye to the party then click .
4. The three-way call no longer exists. The remaining call is now on hold.
5. A party can also leave a three-way call on their own by simply hanging up.

#### Removing all Parties

If the three-way call is in progress (not on hold), you can hang up on all parties and end the three-way call by clicking .

#### AA Off and AC On

“You answer calls manually and X-Lite adds each to the three-way call automatically”

1. Click **AC** on.
2. Manually answer the first call. There is no need to put the call on hold.

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3. When the next call comes in, on another line, answer the call. As soon as you answer the call, a three-way call will be set up.
  - The three-way call is established even if you had the other line on hold.

### Conference Server Mode: AA on and AC On

“X-Lite acts as a fully-automated three-way call server”

1. Click **AC** on and **AA** on.
2. When the first call comes in, X-Lite will automatically answer. You can speak to this person.
3. As new calls come in, X-Lite will automatically answer them and add them to the three-way call.

### While the Call Is in Progress

#### Video in Conference Mode

If your VoIP service provider supports video, click **Start** on the Video drawer to send video to the other parties. You will see the other parties in the top video panel (each in a separate tile) if they have enabled video at their end.

#### Adjusting Volume and Muting

Use the microphone slider (on the left) to adjust the volume of your voice for your listeners

Use the speaker adjustment (on the right) to adjust volume of the sound you are hearing.

#### Mute

Click  on the dial pad to prevent the other parties from hearing you. The  icon appears on the Call display. When you mute, you may also want to stop video feed, if any.

#### Speakerphone

Click  on the dial pad to put the callers on the speaker phone. You must have a sound device such as a sound card or USB device.

#### Call Record

Click **REC** at any time during the call. Click again to stop recording. Recordings are saved as AVI files.

If you have not yet set up for recording, do so before recording: Click  near the top of the phone and select **Options**. Display the Application pane. In the Media area, enter the folder where you want the recording file to be saved.

#### Call Information

To view information such as the current codecs, hover over the line button (for example, line 1) that the call is being made on. Information appears in the tool tip.

#### Add to the Contacts List

At any time during a call, you can click  on the Call display to add the other party to the Contacts list. For information on contacts lists, see page 17.

### **Multiple Conference Hosts**

An X-Lite conference call may include up to seven individuals—the conference host plus a participant on each of the two lines. You can establish multiple conference hosts in order to “daisy chain” together a conference call with more than three participants.

For example, one person may host two other parties (to occupy all of its available lines) with one of those parties being a conference of their own containing five other parties. This would bring the total number in the aggregate conference call to eight.

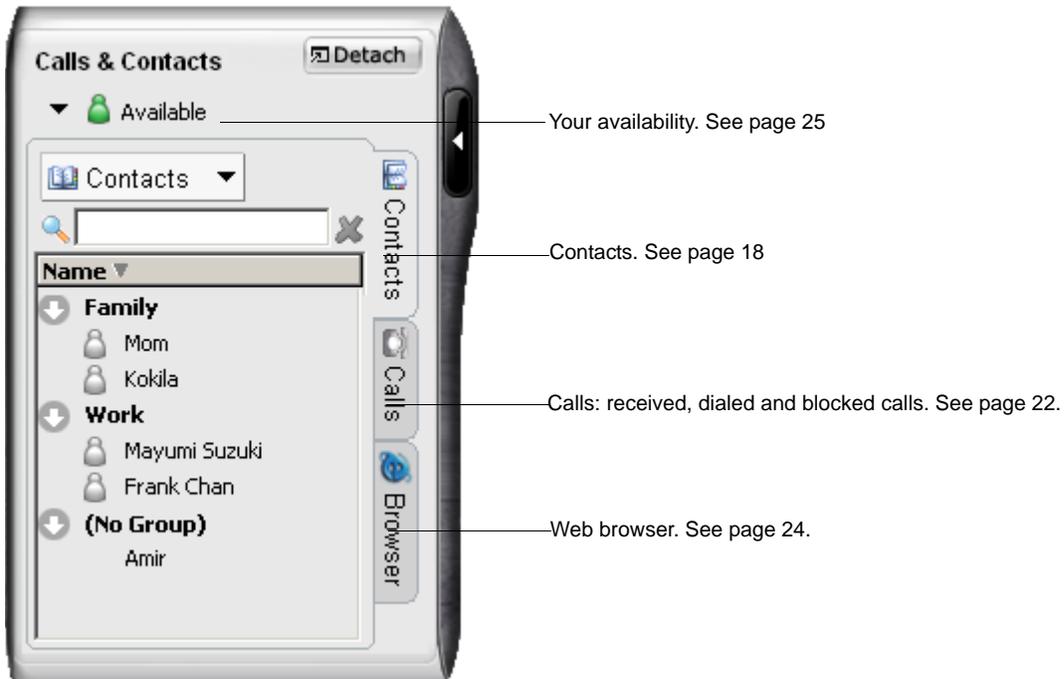
In theory, such “daisy chains” would allow for an unlimited number of parties in a conference call. However, in a real scenario, the number of participants is limited by bandwidth constraints at each of the conference host’s computers, causing audio quality to degrade more and more as new participants are added.

X-Lite will automatically switch to the best codecs available, as required (as participants are added). (For information on codecs, see “Options – Advanced – Audio Codecs” on page 38.) If the audio on the conference call is of poor quality, then your conference is probably beyond the limits of your very best codec: the conference is too big.

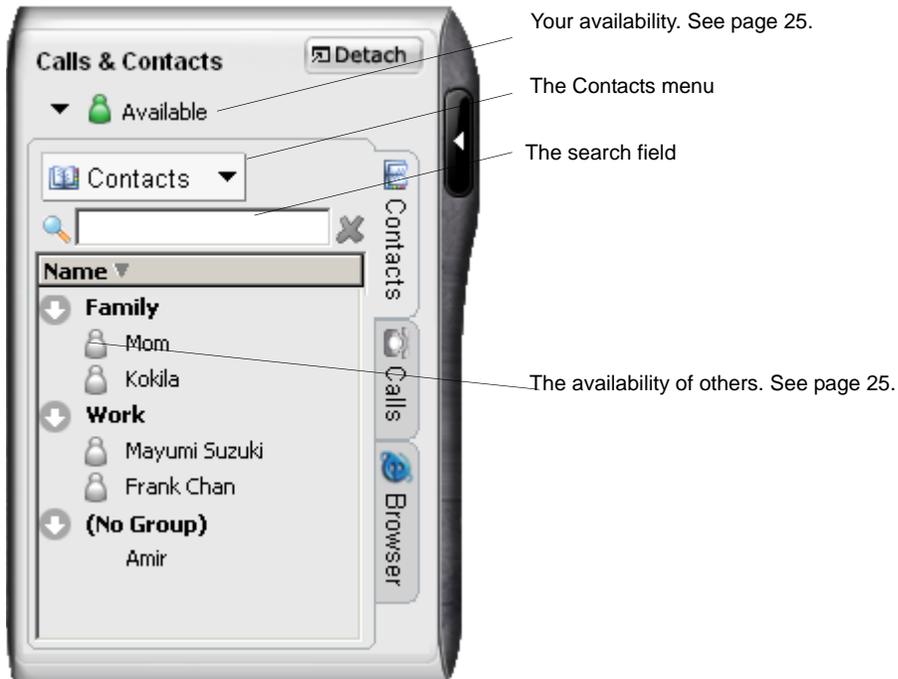
## 4 Managing Calls and Contacts

### 4.1 Calls & Contacts Drawer

To display the X-Lite Calls & Contacts drawer, click the black button toward the extreme right edge of the softphone application. You can open (display) and close (hide) this drawer at any time.



## 4.2 Contacts Tab



The Contacts tab displays your contacts and lets you specify multiple contact methods for them, including:

- SIP address (softphone)
- Home phone number
- Cellphone number
- E-mail.

You can identify one of these contacts as the primary contact method.

You can phone any contact. If the contact has a SIP address, you can also send instant messages, watch their availability, and let them watch your availability. If the contact has an e-mail address, you can send an e-mail from X-Lite.

Contacts are typically organized into groups. X-Lite includes three built-in groups: “Friends”, “Home”, “Work”. You can add more groups, as desired.

### Changing the Contacts List View

- To display the drawer in a resizeable window, detach the Calls & Contacts drawer.
- To show contacts organized into groups, click the Contacts menu and choose **Show Categorized**.
- To show only the contacts who are set up for Available and who are currently online, click the Contacts menu and choose **Show only contacts with availability**.
- To sort contacts, click the Contacts menu and choose the desired sort rule.

### Using Contacts

Call a contact	To use the person's primary number, double-click or drag the contact to the Call display. To choose the number to use, right-click and choose <b>Call</b> , then click the desired number.
E-mail a contact who has an e-mail address	Right-click and choose <b>Send E-mail</b> .
Send an IM to a contact who has a SIP address	Right-click and choose <b>Instant Message</b> .
You can watch the contact's availability, if the contact has a SIP address	See Table 2 on page 28 for the meaning of the availability icons. See "Availability" on page 25 for information on obtaining availability information.

### Managing Contacts

#### Adding, Deleting or Renaming Groups

Click the Contacts menu and choose **Manage Groups**. The Manage Groups dialog box appears.

- To create a new group, click **New Group**, type a name, and press Enter.
- To rename, click on the group so that only the text is selected. Type the new text and press Enter.
- To delete a group, select the group and choose **Delete Group**. The group is deleted. The contacts in that group are moved to No Group.

#### Adding a Contact

Click the Contacts menu and choose **Add Contact**. The Contact Properties dialog box appears, see below.

#### Finding a Contact

If the contacts list is long, use the  field to filter the contacts that are displayed. To clear the filter and redisplay all contacts, clear the  field.

#### Changing Contact Information

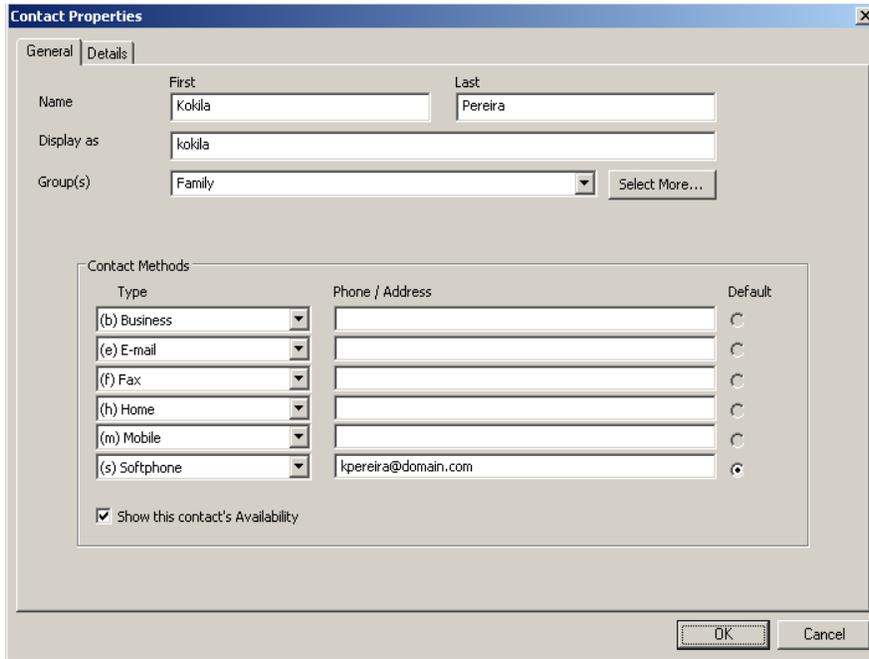
To change the information for a contact, right-click the contact and choose **Edit**. The Contact Properties dialog box appears, see below. Some of the changes you can make are:

- Change any contact details.
- Add, delete or change a contact method.
- Change the primary contact method.
- Move a contact to another group by selecting a different group.
- Add an existing contact to more groups by selecting one or more extra groups.
- Change the **Show this contact's Availability** checkbox to enable or disable availability information for this contact. For information on availability, see page 25.

#### Moving or Deleting a Contact

- To drag a contact to a different group, select it and drag it to the new Group name.
- To delete a contact, right-click the contact and choose **Delete**. The contact is removed from this group.

### Contact Properties Dialog Box



1. Enter the desired information on the two tabs.
2. When you click OK, the contact is added to the specified group or groups, with the specified primary contact method displayed in the list.

Table 1: Contact Properties Dialog Box

Field	Description
Name	Complete as desired.
Display as	Required. This is the name that will appear in the Call display and the Call Alert when this person phones you.
Group(s)	Either: <ul style="list-style-type: none"> <li>• Choose one group.</li> <li>• Click <b>Select More</b> and select several groups. The new contact will be added to each group.</li> <li>• Create a new group by clearing the field and typing in a new name. The new contact will be added to this new group.</li> <li>• Clear the displayed group in order to add the contact to No Group</li> </ul>
Contact Methods	Enter as many contact methods as you want. E-mail and SIP entries must have the format <name>@<domain> If necessary, change the primary Contact Method.
Show this contact's Availability	Click <input type="checkbox"/> in order to obtain this contact's availability and display it on the Contacts list. This field is only enabled when a SIP address is specified.  This contact will have a  beside their name in the Contacts list. Initially this icon will be gray, later its color will change to indicate the current availability.  For details on availability, see page 25.
Details tab	Complete as desired.

### Importing Contacts

You can import a contacts list from:

- A comma-separated file. Use this method to import from a Microsoft® Excel® file. You will first have to set up the file; see below.
- A Microsoft® Outlook® or Microsoft® Exchange contacts list (a \*.pst file).
- A vCard file (\*.vcf file). A vCard is an electronic business card that is often attached to an email.

The new contacts will be added to the existing contacts.

1. Click the Contacts menu and choose **Import**. The Import Contacts wizard starts.
2. As soon as you click **Finish** on the wizard, the Contacts tab in X-Lite is updated to show the imported entries. Note that none of the entries are set up with availability turned on; in order to view availability of contacts, you must modify the appropriate entries by changing the **Show this contact's Availability** checkbox. See above for details.

### Setting up an Excel File for Import

1. Remove any introductory text or headings from the top of the file. (You can keep text at the end of the file; it will be ignored during the import.)
2. Insert a blank row as the first row, then insert the headings that X-Lite will use to interpret the meaning of each column. The columns can be in any order. The most popular headings are:
  - display-name
  - entry\_id
  - given\_name
  - surname
  - postal\_address.For a complete list of headings, see “Contact List Headings” on page 63.
3. Save the file as \*.csv.

### Exporting Contacts

You can export a contacts list to a comma-separated file, a pst file or a vcf file.

1. Click the Contacts menu and choose **Export**. The Export Contacts wizard starts.
2. When you click **Next**, the export starts. The result is:
  - For an Outlook export, the existing .pst file is updated to include the entries from the X-Lite contacts list. If Outlook is open, the entries immediately appear in the Contacts list. All information in the X-Lite contacts 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 SIP 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.

### 4.3 Calls Tab



There are three lists that show calls you have made and received:

- Missed Calls: incoming calls that you missed.
- Received Calls: incoming calls, both answered and missed.
- Dialed Calls: outgoing calls, both answered, unanswered and hung up.

### Managing the Lists of Calls

You can open and close each list to show or hide its contents.

Icon	Meaning
	This group is currently empty.
	There are entries in this group.
	There are calls in this group, and at least one is an unanswered call.
	This group is currently expanded to show the contents.
	This group is currently expanded to show the contents. At least one call is an unanswered call.
	This call was answered.
	This call was missed (unanswered).

You can select a list and click **Calls** in order to:

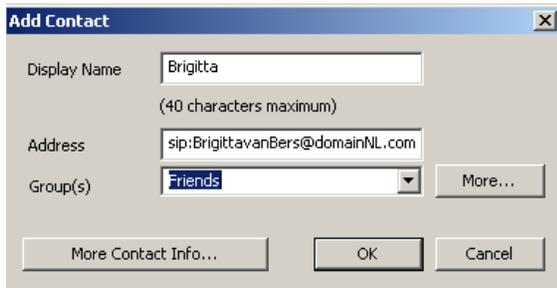
- Delete all entries from the list.

You can right-click on an entry in the Received or Dialed list to:

- Ban this person. This person will not be able to send you phone calls or instant messages, and will not be able to see your online availability. You can change these privacy rules at any time; see page 29.
- Delete the call.

## CounterPath X-lite 3.0

- Add to contacts. The Add Contact dialog box appears. Complete the dialog box and press OK. For more information on the fields, see “Managing Contacts” on page 19.



The screenshot shows a standard Windows-style dialog box titled "Add Contact". It features a title bar with a close button (X). The main area contains three labeled input fields: "Display Name" (containing "Brigitta" with a "(40 characters maximum)" note below it), "Address" (containing "sip:BrigittavanBers@domainNL.com"), and "Group(s)" (a dropdown menu currently showing "Friends" with a "More..." button to its right). At the bottom, there are three buttons: "More Contact Info...", "OK", and "Cancel".

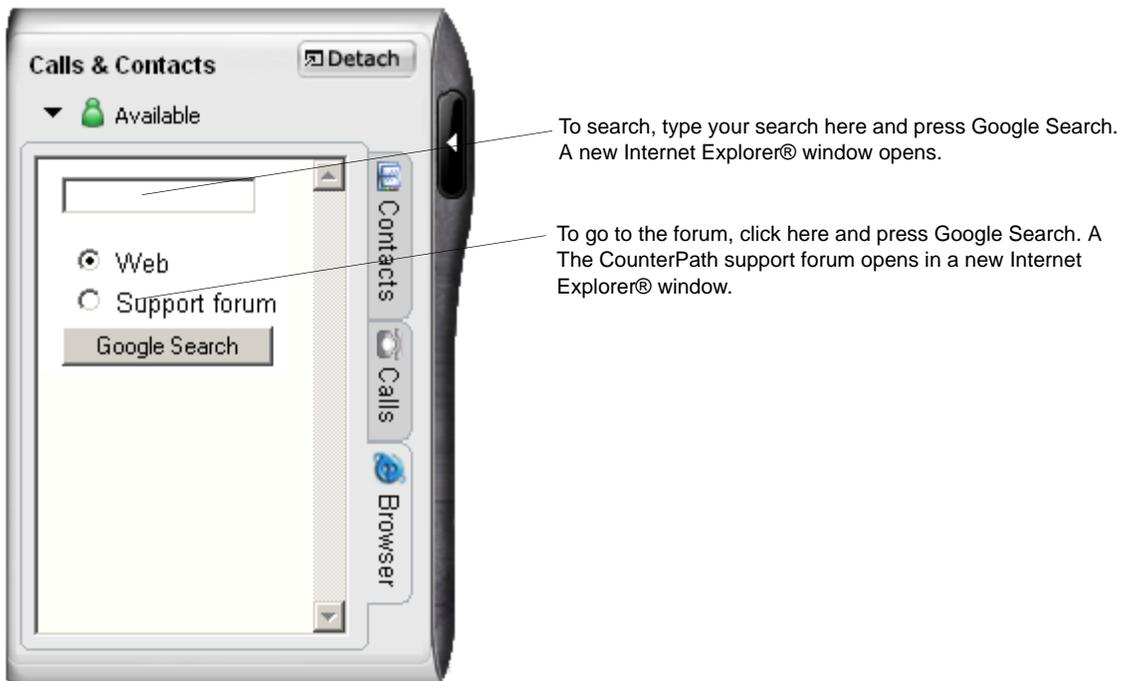
### Phoning and Sending IM from a List

You can right-click on an entry in the Received or Dialed list to:

- Phone this person.
- Phone this person and add them to a three-way call that is in progress. For more information on three-way calls, see “Three-way Calls” on page 14.
- Send an instant message. For details, see page 31.

## 4.4 Browser Tab

The Browser tab lets you perform a Google search or connect to the X-Lite support forum.



## 4.5 Availability

Availability refers to the ability to see whether a person is available or not: online, on phone, busy, and so on. Availability information is displayed in the Calls & Contacts drawer.

You can publish your availability to contacts who have SIP addresses, and you can set up X-Lite to view the availability of other contacts. These contacts can be contacts on your Counterpath X-Lite account or your other account (if you are using it).



## Sharing Availability

### Watching Others' Availability

To be able to see the availability of another person, either add that person to the Contacts list with the “Show this contact’s Availability” field checked, or modify the existing contact information so that this field is checked. For more information, see page 19.

As soon as the person is set up in this way in your Contacts list, X-Lite sends them a notification request. The request asks that you be able to see that person’s availability. If the person allows this request, then the icon beside their name (in your Contacts lists) becomes color coded (see below for details), so you can determine their availability.

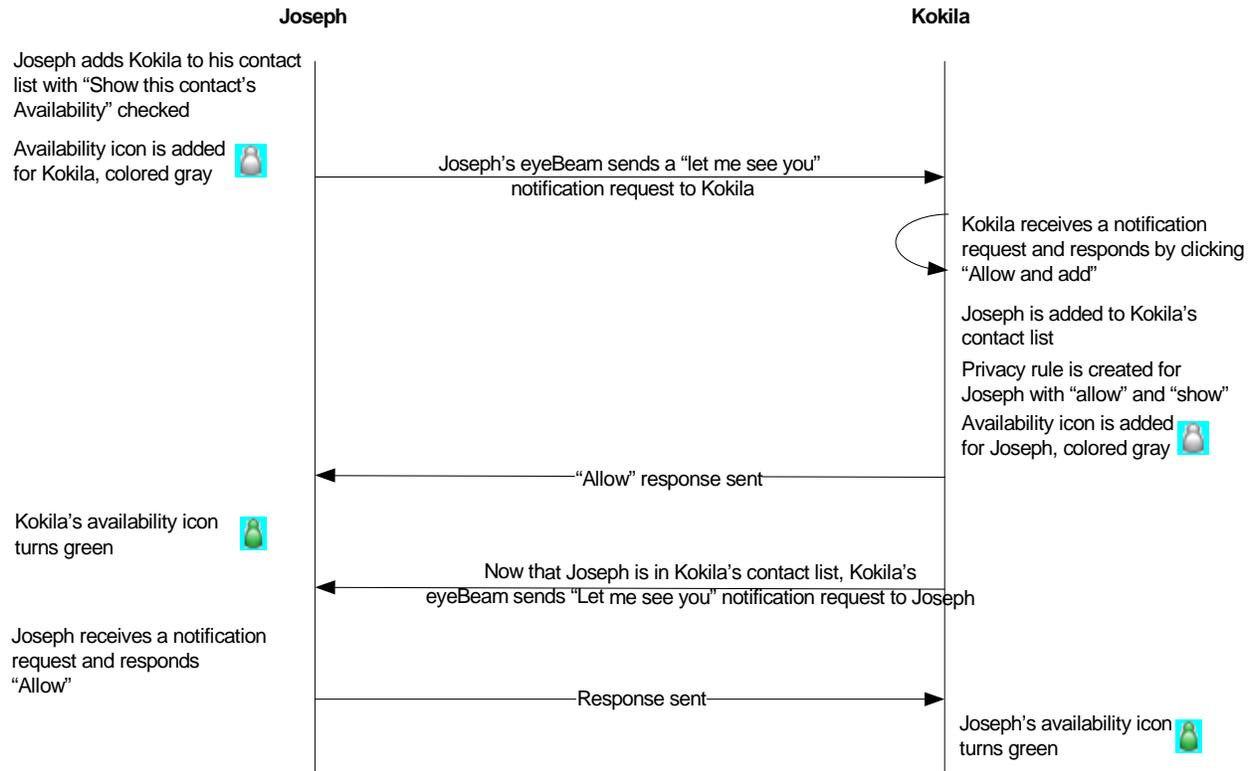
### Allowing Other Parties to See your Availability (Publishing your Availability)

Continuing from above, when the other person allows the notification request, your name is added to their Contacts list. As soon as you are added to their list, a request is sent back to you requesting that that they be able to see you. You can reply to this request to complete the sharing loop.

If you have two accounts set up, icons may remain gray when you expect them to be color coded. For information on how this can happen, see “Account Properties – Presence” on page 51.

## CounterPath X-lite 3.0

The following chart illustrates how the sharing of availability occurs.



### Receiving a New Contact Request



Your X-Lite receives a new contact request when you add a contact to your list (with "Show this contact's Availability" checked) or when another person adds you as a contact at their end.

The request is handled in one of two ways:

- If you set up a privacy rule before this person has a chance to contact you, then you will never see this request. X-Lite will automatically reply to the request according to the rule. See "Privacy Rules" on page 29.
- If you do not yet have a privacy rule set up for this person, this request appears to you as a New Contact Request.

Respond to the request:

Button	Next Action	Result
Allow		The other person will be able to see your availability. The other person will be added to your privacy rules with “Show my Availability” set to Yes.
Allow and add	<p>This button appears only if the other person is not already on your contact list.</p> <p>When you click Allow and add, the Add Contact dialog box appears. Complete the dialog box and press OK. For more information on the fields, see “Managing Contacts” on page 19.</p>	<p>The other person will be able to see your availability. The other person will be added to your Contacts list. The other person will be added to your privacy rules with “Show my Availability” set to No. (You can later change this rule; see page 29.)</p> <p>In the future, you will not receive this request from this person, because you have set up a rule to allow or ban that person from seeing your availability.</p> <p>In addition, this same request will be sent to the other person, so that you can see their availability.</p>
Deny		The other person will not be able to see your availability. The other person will be added to your privacy rules with “Show my Availability” set to No.
Close the window		The other person will not be able to see your availability. The other person will not be added to your privacy rules.

**Changing Availability Permissions**

- If you no longer want another person to be able to see your availability, change the Show My Availability field for that person on the Privacy Rules. See page 29. The icon for that person in the Contacts tab changes to Offline.
- If you no longer want to watch another person’s availability, uncheck the **Show this contact’s Availability** field on the Contact Properties dialog box (see page 18).

## Setting your Availability

### Changing your Availability

Click the down arrow beside the availability indicator, and select the desired availability. See Table 2, below.

When your availability changes, the new availability is sent to everyone who has permission to see your availability.

### Setting up Availability Indicators

You can create custom availability indicators, or edit or delete custom or built-in indicators: In the Calls & Contacts drawer, click the down arrow beside your availability, and choose **Availability Settings**. See page 35 for details.

Table 2: Availability Indicators

	Indicator	Meaning for your Availability	Meaning for Others' Availability
	Auto-detect	The availability will automatically be set as appropriate <ul style="list-style-type: none"> <li>• Available: You are logged on but not on the phone or idle.</li> <li>• On the phone: As soon as you start a call or answer a call.</li> <li>• Idle: You have not moved or clicked the mouse or pressed a keyboard key for the Idle period. Set the Idle period in Options - General - Availability. See page 35.</li> </ul>	Not applicable
	Available	Either: <ul style="list-style-type: none"> <li>• You have set your availability to this status</li> <li>• You have set your availability to Auto-detect and X-Lite has determined that you are logged on but not on the phone or idle.</li> </ul>	
	Busy	You have set your availability to this status.	
	On the phone	Either: <ul style="list-style-type: none"> <li>• You have set your availability to this status</li> <li>• You have set your availability to Auto-detect and you are on a call.</li> </ul>	
	Idle	Either: <ul style="list-style-type: none"> <li>• You have set your availability to this status</li> <li>• You have set your availability to Auto-detect and you have not moved or clicked the mouse or pressed a keyboard key for the Idle period. To set the Idle period see “Options – General – Availability” on page 35.</li> </ul>	
	Away	You have set your availability to this status.	
	Offline	Not applicable	The contact is either not logged on or else is not set up for availability.
no icon		Not applicable	You are not watching this contact's availability. To start watching, see “Sharing Availability” on page 25.

## 4.6 Privacy Rules

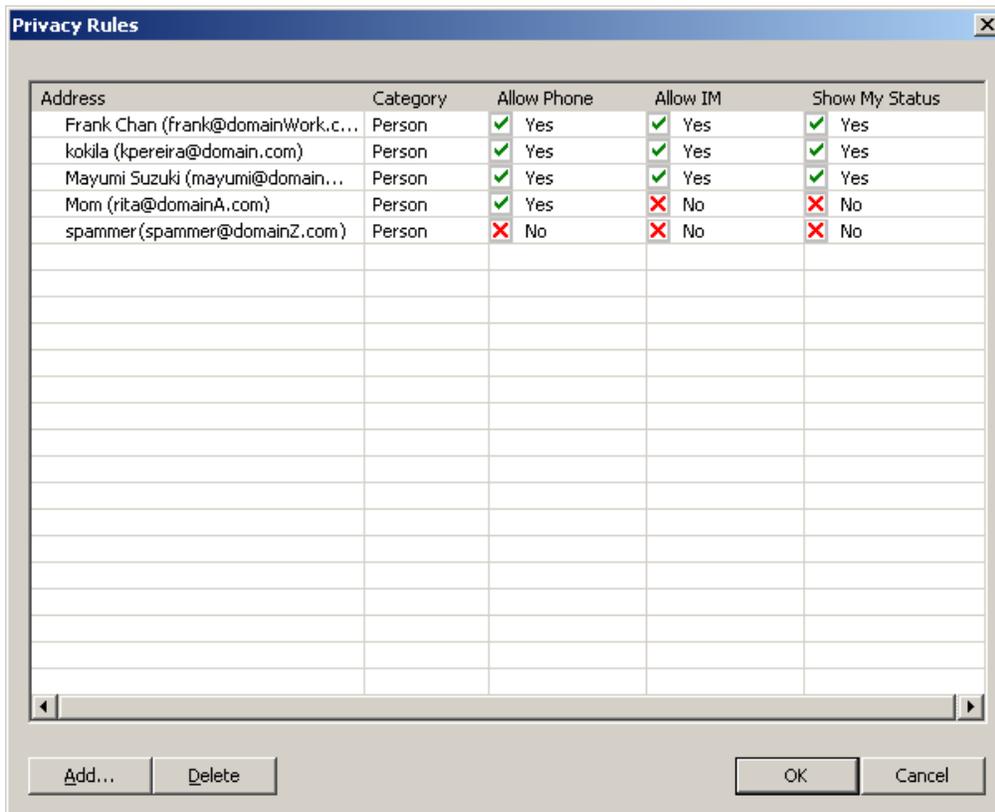
You can allow or ban another person from contacting you. There are separate rules for incoming phone calls, incoming instant messages, and availability detection. You can ban or allow an individual person, or an entire domain.

You can also ban a person in the Received, Dialed or Blocked list. Right-click on the name and choose Ban this Person.

### Privacy Rules Window

Click  at the top of the phone and choose Privacy Rules. The Privacy Rules window appears.

The window may already show some rules; these rules were added during the availability exchange. See “Sharing Availability” on page 25.



### Adding a Name or Domain

1. Click Add. The Add new privacy rules dialog box appears.
2. Complete the dialog box. If you click “Add rule for a person”, enter a SIP address. If you omit the domain, your domain is automatically added when you click Add. If you click “Add rule for a domain”, enter just the domain.

The new name is added to the Privacy Rules list with all groups set to Yes or No.

If a new contact request is received from this person, X-Lite automatically responds according to the rule: the New Contact Request dialog box will not be displayed.

The screenshot shows a dialog box titled "Add new privacy rule" with a close button in the top right corner. The dialog is divided into three sections. The first section, "Rule Category", contains two radio buttons: "Add rule for a person" (which is selected) and "Add rule for a domain". The second section, "Person or domain address:", contains a single-line text input field. The third section, "Rule Status", contains two radio buttons: "Add as blocked" (which is selected) and "Add as allowed". To the right of the dialog, there are two buttons: "Add" and "Cancel".

### Changing Settings

To change the settings for an existing name, click in the cell you want to change; the value changes, for example from No to Yes.

### Deleting an Entry

Click on the entry and click Delete. The entry is immediately deleted.

- If the rule is for a person: If you are in the other person's contact list or if the other person is in your contact list, then you will receive a New Contact Request for that person, requesting to share availability. Therefore, you should only remove the privacy rule for a person when the address is no longer valid.
- If the rule is for a domain: If you are in the contact list of anyone in that domain or if people in that domain are in your contact list, you will receive a New Contact Request from each of those people, because you no longer have a rule for any of them. Therefore, in general, you should not remove the privacy rule for a domain. Instead, you may want to set up several rules. For example, an allow rule for the domain and ban rules for some people in that domain. Or a ban rule for the domain and allow rules for some people in that domain.

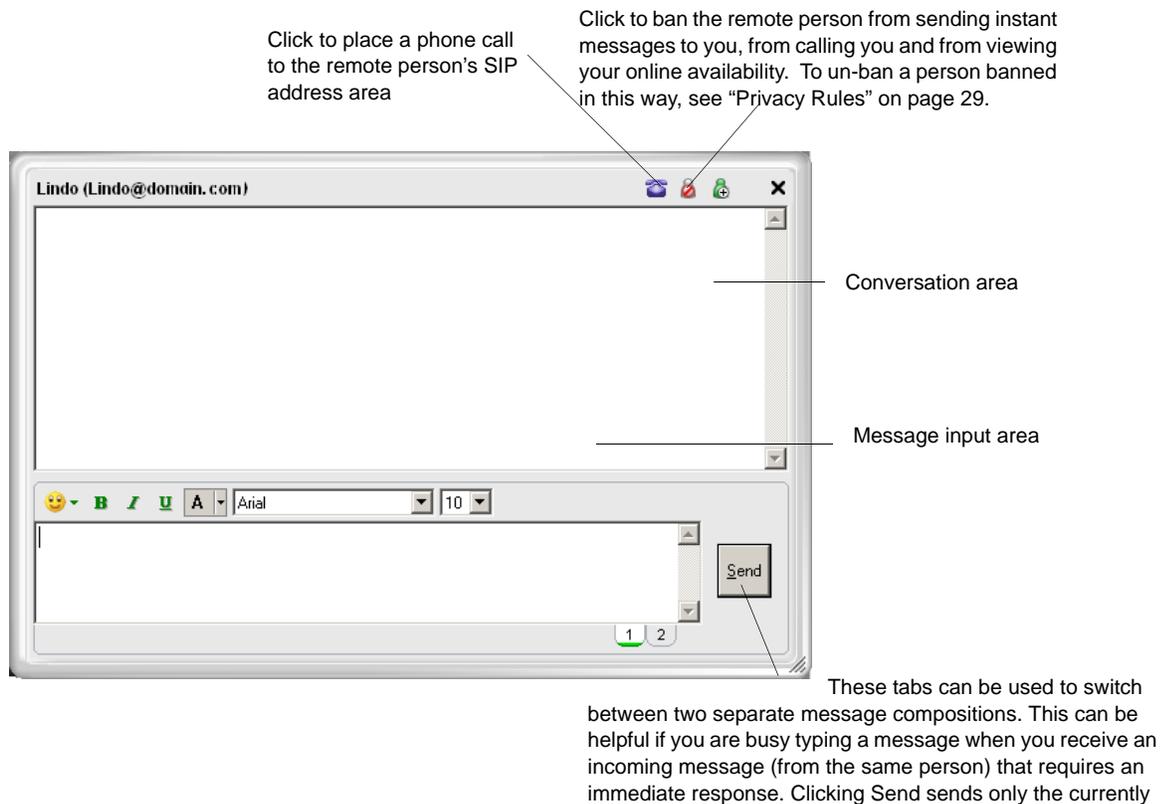
## 5 Instant Messaging (IM)

### Sending and Receiving an IM

To display the IM window, right-click any entry in the Calls & Contacts drawer and select **Instant Message**.

1. Type the message. Include emoticons and formatting, as desired.
2. Press Send.

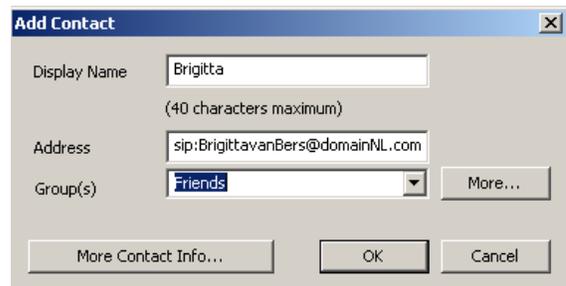
You can press Ctrl-F to search for text in the large message area.



### Adding the Remote Party to your Contacts List

You can click  in order to add that person to the Contacts list.

The Add Contact dialog box appears. Complete the dialog box and press OK. For more information on the fields, see "Managing Contacts" on page 19.



## 6 The X-Lite Menu

Access the X-Lite menu by clicking  at the top of the phone. The menu items are:

- Options. Options control the way that you work with X-Lite . See “Options – General – Application” on page 33.
- SIP Account Settings. These settings control how X-Lite interacts with your VoIP service provider. See page 44.
- Privacy Rules. See page 54.
- Open Diagnostic Log. Customer support may ask you to open this log if you are experiencing problems with X-Lite. For information, see “Options – Advanced – Diagnostics” on page 43.
- Open Diagnostic Folder. Customer support may ask you to open the diagnostics log if you are experiencing problems with X-Lite. For information, see “Options – Advanced – Diagnostics” on page 43.
- Help. This menu item takes you to <http://support.counterpath.net>.
- About.
- Exit. To exit X-Lite. You can also exit by pressing Ctrl-Q.

## 6.1 Options

### Options – General – Application

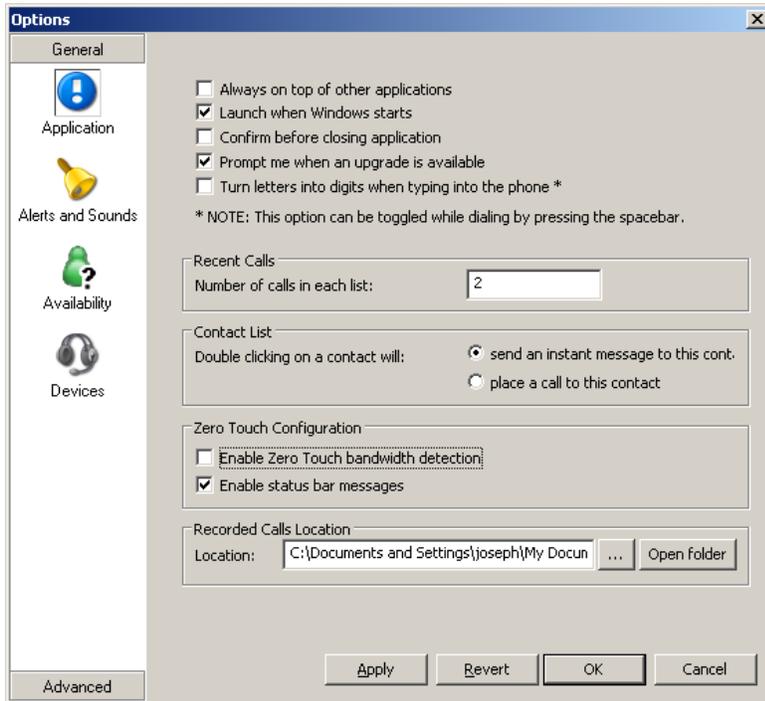
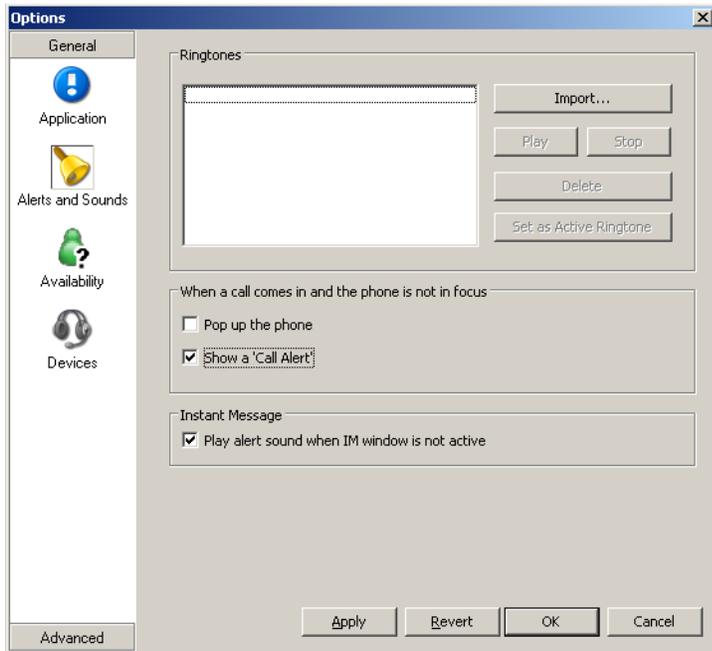


Table 3: Options – General – Application

Field	Description
Always on top of other applications	Click on or off, to suit your preference.
Launch when Windows starts	Click on or off, to suit your preference.
Confirm before closing application	Click on or off, to suit your preference.
Prompt me when an upgrade is available	Click on or off, to suit your preference.
Turn letters into digits when typing into the phone	Click on or off, to suit your preference. You can also turn this feature on and off at any time by pressing the spacebar.
Number of calls in each list	Enter number to suit your preference.
Double clicking	Choose the action that suits your preference.
Enable Zero Touch bandwidth detection	When clicked on, X-Lite detects the speed of your network connection and hence the potential bandwidth. If you move your computer to a different IP address, X-Lite automatically detects the new speed. When clicked off, you must specify the network connection . See “Options – General – Devices” on page 36. The recommended setting is On.
Enable status bar messages	When clicked on, messages relating to zero touch configuration will appear in a notification balloon at the lower right corner of the screen, whenever the configuration automatically changes. (Notification balloons are supported in newer versions of Windows.)
Recorded calls location	Specify a location for saving files when you record your conversations.

## Options – General – Alerts and Sounds

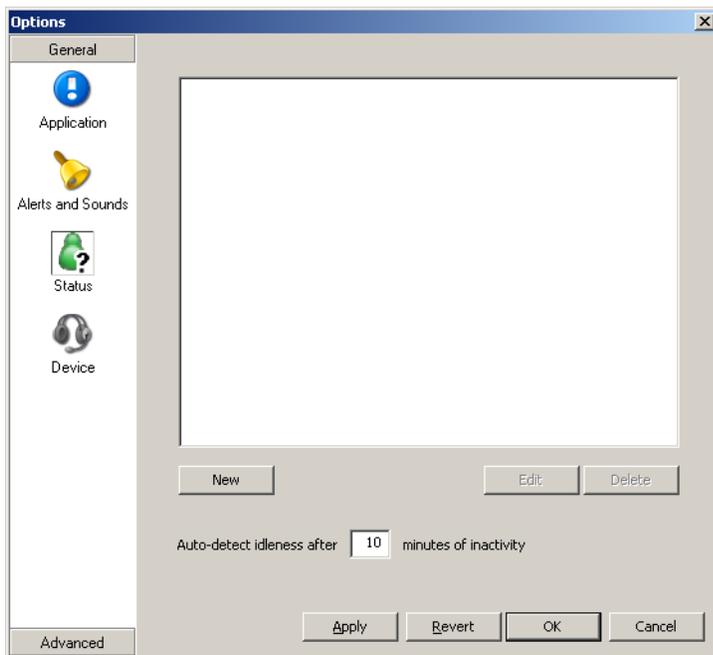


On this page you can:

- Work with ringtones. You can import a ringtone (a .WAV file). You can play to try it out. You can activate one ringtone. You can delete a ringtone.
- Set up X-Lite to bring the softphone to the front automatically when a call comes in.
- Set up X-Lite to display the Call Alert box (see right) when a call comes in and the softphone is minimized, or covered, or revealed but not in focus.



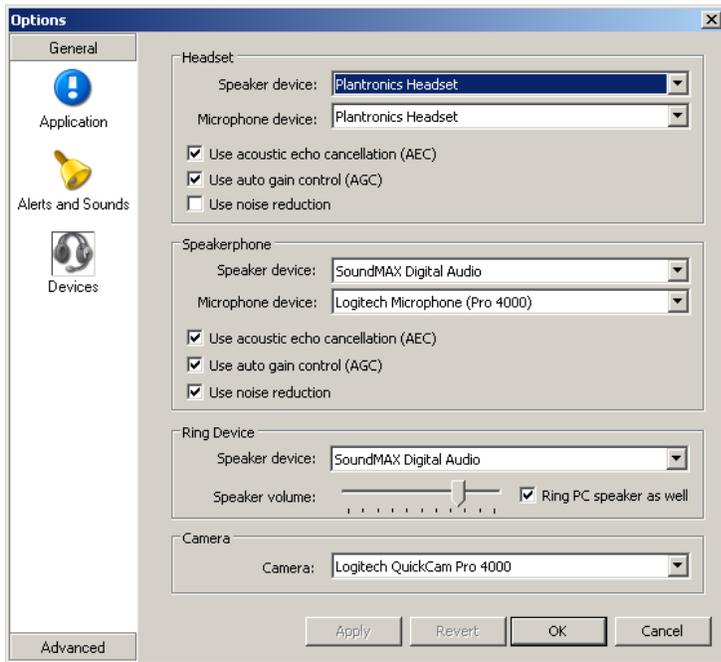
## Options – General – Availability



This screen lets you add indicators to the standard Availability indicators built into X-Lite. For more information on availability, see page 25.

- You can set the Idle timer. This is the time since you last moved or clicked the mouse or pressed a keyboard key, after which X-Lite will automatically change your Availability to Idle, but only if your current Availability is “Auto-detect”.
- You can add a custom indicator, click New, type in the availability description, and assign an icon. For example, you might create an indicator called “Client meeting” with the Away icon.
- You can edit or delete a custom indicator.

## Options – General – Devices



This panel lets you specify the devices you are using and then enable features for those devices.

There are two ways to specify devices:

- Automatically. X-Lite automatically detects the devices attached to your computer and chooses which ones to use for audio and video. These choices are shown on this panel.
- Manually. If you do not like the selections made by X-Lite, you can override them on this panel.

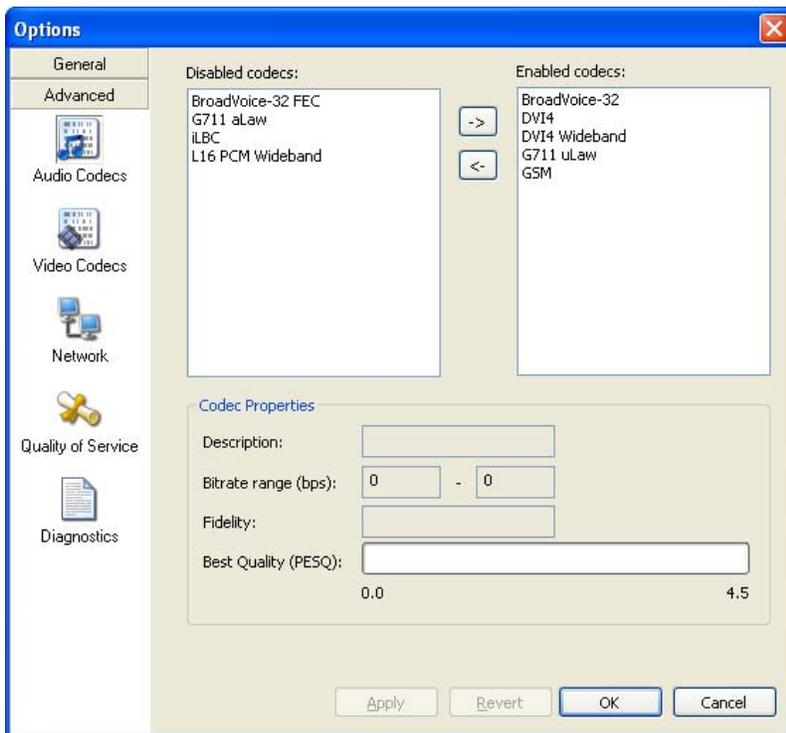
Table 4: Options – General – Devices

Field	Description
<b>Headset</b>	
Speaker device Microphone device	Change these fields only if you want to override the devices that X-Lite automatically selected. In both these fields, select the headset you are using. The headset is the device that is usually used for audio out (the sound you hear) and audio in (recording your voice). The only situation in which the headset is not used is when the Speaker Phone button on the dialpad is pressed. Therefore, unless you will always be using X-Lite in speakerphone mode, you must make a selection here. Select the headset in both the Speaker device field and Microphone device field.
Use acoustic echo cancellation (AEC)	Reduces 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. Turning this feature on improves sound quality. Typically on.
Use auto gain control (AGC)	Automatically adjusts 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). Typically on.
Use noise reduction	Automatically attempts to remove background noise. Typically off for the headset.

Table 4: Options – General – Devices

Field	Description
<b>Speakerphone</b>	
Speaker device	<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"> <li>• 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).</li> <li>• Select None if you do not have a speaker phone. The Speaker Phone button on the dialpad is disabled.</li> </ul>
Microphone device	<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"> <li>• Select the device that you want to use for audio in (recording your voice) when the Speaker Phone button is pressed.</li> </ul> <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"> <li>• Select None if you do not have a speaker phone. The Speaker Phone button on the dialpad is disabled.</li> </ul>
Use acoustic echo cancellation (AEC)	<p>Reduces 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. Turning this feature on may . However, the drawback is that it uses more processing power, which may slow down your applications.</p> <p>Typically on.</p>
Use auto gain control (AGC)	<p>Automatically adjusts 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).</p> <p>Typically on.</p>
Use noise reduction	<p>Automatically attempts to remove background noise.</p> <p>Typically on for the speakerphone.</p>
<b>Ring Device</b>	
Speaker device	<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>
Speaker volume	<p>The volume of the ringer.</p> <p>This field is disabled if the same device is being used for the headset speaker and the ring device. In this case, the volume control on the dialpad controls both the volume of both the headset and the ringer .</p>
Ring PC Speaker as well	<p>Click on or off, to suit your preference.</p>
<b>Camera</b>	
Camera	<p>This field appears only on version of X-Lite that include video functionality.</p> <p>Change this field only if you want to override the devices that X-Lite automatically selected.</p> <p>Select the camera model.</p>
Disable hardware acceleration	<p>Change this field only if you cannot see your own video. Disabling hardware acceleration may solve this problem.</p> <p>Typically off.</p>

## Options – Advanced – Audio Codecs



This tab shows all the codecs that X-Lite supports. You can enable or disable codecs as desired. You may decide to disable a codec even though X-Lite supports it.

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.

## CounterPath X-lite 3.0

### Supported Codecs

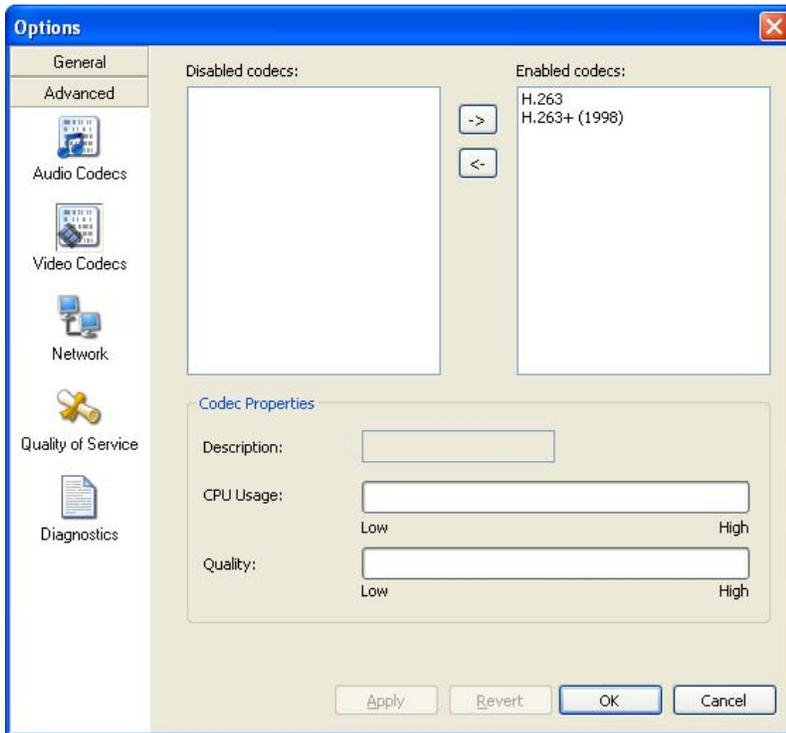
X-Lite supports a wide range of codecs. See the table.

Table 5: Audio Codecs Supported in X-Lite

Codec	Narrowband	Wideband	Royalty-bearing	Included in Retail X-Lite
Broadvoice-32		✓		✓
Broadvoice-32 FEC		✓		✓
G.711aLaw *	✓			✓
G.711uLaw *	✓			✓
GSM	✓			✓
iLBC	✓			✓
L16 PCM Wideband	✓			✓

\* Generally, at least one of these codecs must be enabled in order to place a PSTN (land line) call.

## Options – Advanced – Video Codecs



This pane appears only on versions of X-Lite that include video functionality.

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 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.

### Supported Codecs

Table 6: Audio Codecs Supported in X-Lite

Codec	Narrowband	Wideband	Royalty-bearing	Included in Retail X-Lite
H.263		✓		✓
H.263+ 1998		✓		✓

## Options – Advanced – Network

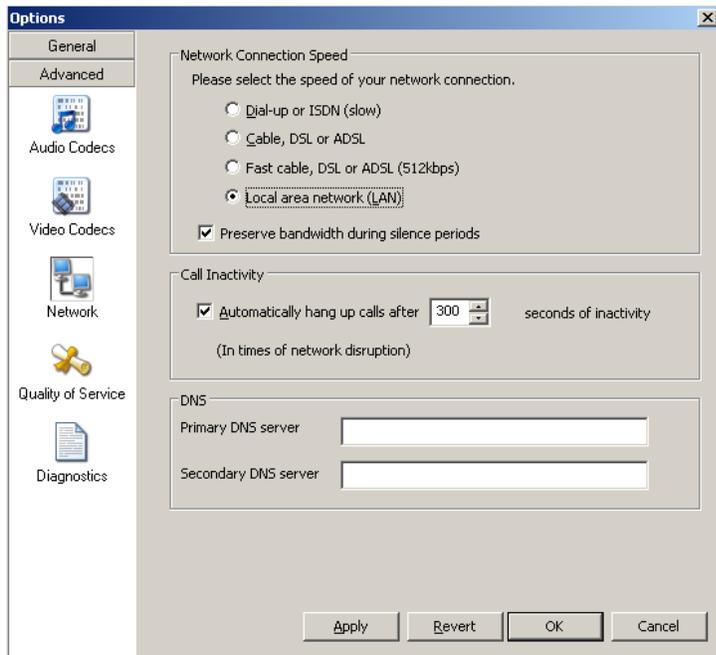
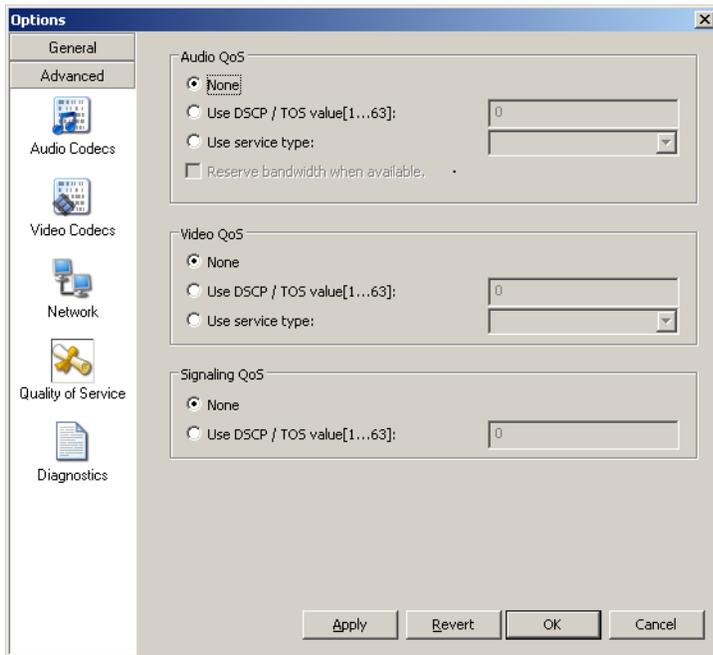


Table 7: Options – Advanced – Network

Field	Description
Network connection speed	Complete this field only if you have disabled zero-touch bandwidth detection (see page 33). Select the type of network connection for your computer.
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.
Call inactivity	When this feature is on, X-Lite automatically hangs up a call when it detects the specified period of inactivity. In other words, if you are on a call and the call gets disconnected (the call session ends) because of network problems (rather than because of one of the parties hanging up), then X-Lite ends the call after the specified period. Typically on. This feature might be turned off if, for example, a PBX server already handles inactivity issues.
DNS	Optionally, enter addresses for up to two DNS servers. <ul style="list-style-type: none"> <li>• If these fields are completed, X-Lite uses these servers.</li> <li>• If they are blank, X-Lite uses the servers specified by the operating system.</li> </ul>
Call Statistics	When clicked on, X-Lite will send call quality information to CounterPath, to allow to continually improve call quality. When clicked off, no statistics are sent.

## Options – Advanced – Quality of Service



The Quality of Service pane lets you request a specific transport service for audio, video and signaling traffic.

There are two types of services. The service to use depends on what your internet service provider supports:

- GQoS, which is available for audio and video.
- DSCP (also known as ToS), which is available for audio, video and signaling.

In a network that has the default configuration, the recommended value for audio is 46, because “46” is the standard marking for audio.

In addition, if you are running X-Lite on Windows on an Intel® Centrino® Duo mobile-technology-based laptop, you can request to reserve bandwidth for audio traffic on wireless networks using 802.11e. If bandwidth is available when the call is placed, it will be reserved for the call, possibly resulting in better audio service.

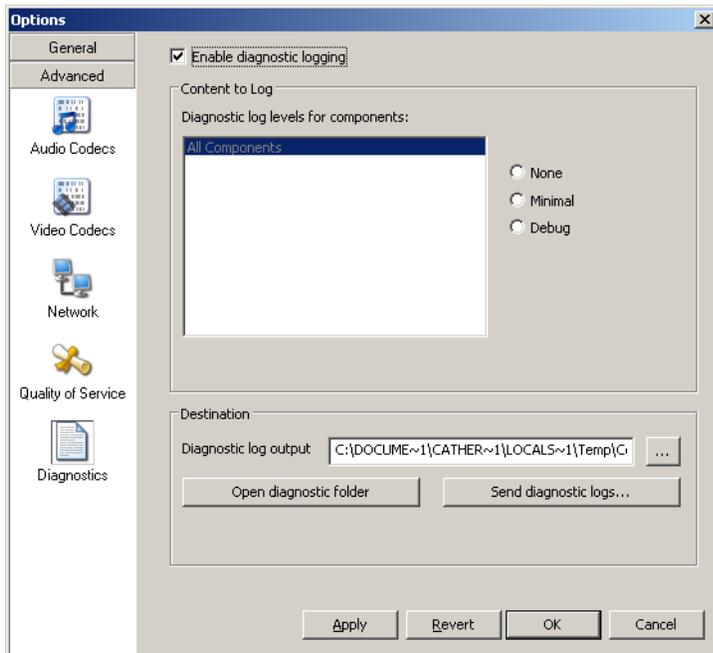
For Windows installations, there are restrictions on the service you can use, based on your version of Windows:

Table 8: Windows Support for QoS

	Windows 98 Second Edition	Windows NT	Windows 2000	Windows XP
GQoS	Yes	Yes	Yes	Yes
DSCP	No	No	Yes	Yes

X-Lite supports 802.1p QoS packet tagging. If you set up for QoS, X-Lite will include the specified information in the packets that it sends to the network provider. Whether the packet is delivered with the specified service depends on whether your broadband router and the network provider between you and the other party supports multiple transport services. In other words, whether each network provider reads the QoS information and prioritizes packet delivery based on the requested service.

## Options – Advanced – Diagnostics



This screen lets you enable logging to files. Logging uses computer resources, so you should only enable it when instructed by your VoIP service provider.

To set up logging:

1. Click **Enable logging**.
2. Set the logging level.
3. Specify the folder where logs will be saved.
4. Click **Apply**.

Activity on X-Lite will be logged to .csv files in the specified folder. A new set of files is started each time you log on. In order not to create large files when logging (which may create computer problems), you must not remain logged on indefinitely when logging. You should occasionally exit and restart X-Lite.

If requested by your VoIP service provider, you can:

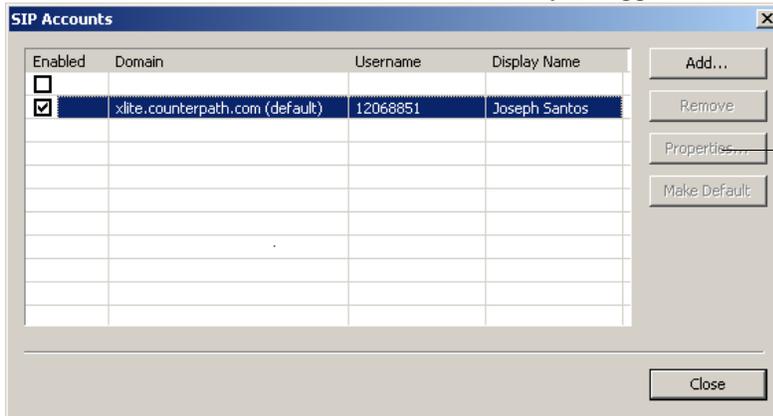
- Open the logging folder and then open a log file using a text editor. Note that the log contents may be encrypted, so that only your service provider can read them.
- E-mail the logs in the specified folder to customer support: Click *Send logs to customer support*. A dialog box appears showing all the logs. Select files and click *Open*; the selected files are sent and the dialog box closes.

You can delete log files from the specified folder as you would delete any file on your computer.

## 6.2 SIP Account Settings

### SIP Accounts

To work with accounts, click  at the top of the phone and choose SIP Account Settings. The SIP Account window appears. On a newly installed X-Lite, the first account is blank; you can set up an account through a VoIP service provider other than CounterPath X-Lite. The second account is already set up as your CounterPath X-Lite account, which was created the first time you logged on.



This button is always disabled for the CounterPath X-Lite account; you cannot view or modify the properties of this account.

You can:

- Resize the columns in this window.
- Add one account (Account 0) through a VoIP service provider other than CounterPath X-Lite.
- Remove Account 0 (erasing all the properties). Set or change the properties of your non-CounterPath X-Lite account. Click the **Properties** button, then see the following pages for details.

You cannot change the properties of your CounterPath X-Lite account You cannot delete this account.

### Enabling Accounts

You must enable an account in order to make and receive calls on that account. You can enable as one or both accounts. Click the **Enable** box beside each account.

The rules for enabled accounts are:

- When both accounts are enabled, you will be able to receive calls on all those accounts.
- You can never place a call on a disabled account (even if you enter the account prefix). If you place a call that is only “known” to the service provider of a disabled account, it will fail with a “Not found” message.
- You can never receive a call on a disabled account. If another party phones you on a number that is only known to a disabled account, the call will never appear on your phone.
- When both accounts are enabled, the account to use for an outgoing call is determined as follows:
  - If you enter the account prefix before the number (#1 for the first account or #2 for your Counterpath X-Lite account) then that account is used.
  - If you have set up a dial plan for your non-CounterPath X-Lite account, then the rules of the dial plan determine which account is used. See “Dialing Plan” on page 58.
  - If you have not set up any dial plans, then the default account is used.

### Setting the Default Account

When both accounts are enabled, one account is always the default. You can set any account as the default account: click on the account and click the **Make Default** button.

The dial plan rules may select the default account may be selected by X-Lite to use to place an outgoing call, as described above.

The choice of default account may affect how presence (availability) works; for details, see “Account Properties – Presence” on page 51.

### Account Properties – Account

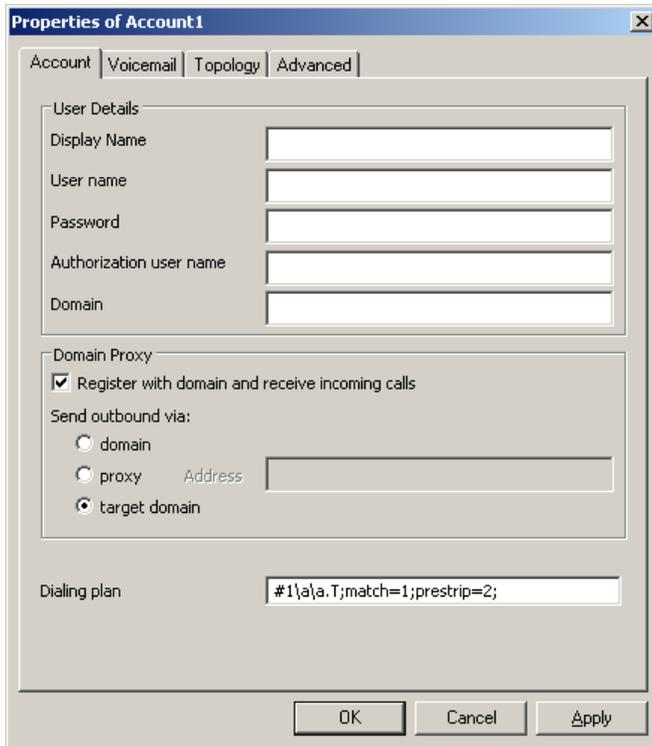


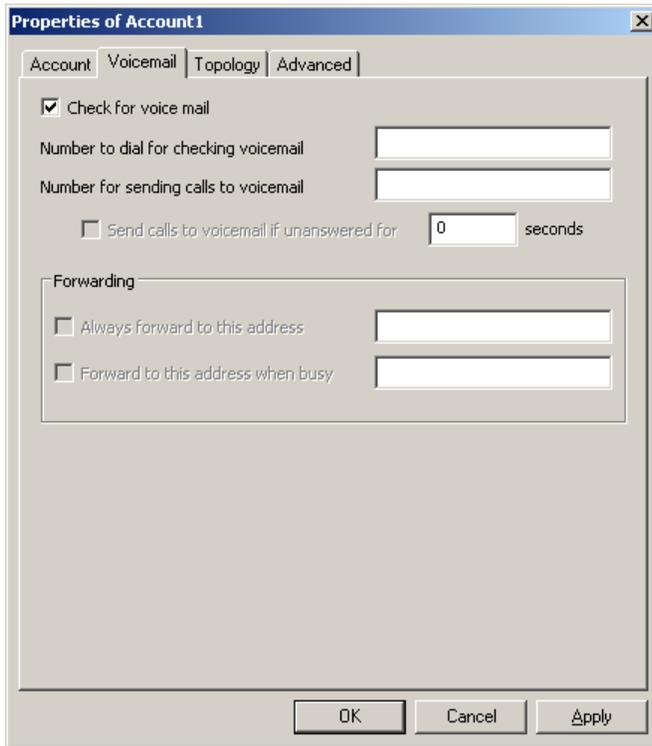
Table 9: Account Properties – Account

Field	Description
<b>User Details</b>	
Display name	This name is displayed in the X-Lite display. Other parties will see this name they are when connected to you. For your CounterPath X-Lite account, this is the name you specified when you requested the account.
User name	Typically the account number for the SIP account. For example, in kpereira@domain.com, the user name is “kpereira”. Provided by your VoIP service provider. For your CounterPath X-Lite account, this is a seven-digit number.
Password	Provided by the service provider. For your CounterPath X-Lite account, this was sent to your in your welcome email when you created your account.
Authorization user name	May not be required. If it is required, it will be provided by your VoIP service provider.

Table 9: Account Properties – Account

Field	Description
Domain	<p>For example, in kpereira@domain.com, the domain is “domain.com”. Provided by your VoIP service provider.</p> <p>For your CounterPath X-Lite account, this is xlite.counterpath.com.</p>
<b>Domain Proxy</b>	
Register with domain and receive incoming calls	<p>Check this box if you want to register with your VoIP service provider, so that you can receive incoming calls.</p> <p>Typically, this field is checked.</p> <p>A situation in which this field is unchecked is, for example, if your level of service does not include the ability to receive incoming calls. In this case, turning this field on may cause registration to fail (when you close the Account Properties window), meaning that your X-Lite cannot register with your VoIP service provider.</p> <p>For your CounterPath X-Lite account, this box is checked.</p>
Send outbound via	<p>Choose the setting specified by your VoIP service provider:</p> <ul style="list-style-type: none"> <li>• Domain: If your VoIP service provider requires that traffic be directed to proxies that are discovered via the domain.</li> <li>• Proxy: 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).</li> <li>• Target domain: To send directly to the other party’s domain.</li> </ul> <p>For your CounterPath X-Lite account, this field is set to Domain.</p>
Dialing Plan	<p>Information about the syntax of the numbers used by this VoIP service provider.</p> <p>Provided by the service provider. The default plan is: #1\a\a.T;match=1;prestrip=2;</p> <p>It is possible that this plan will work for you. If you can place a successful call, then the dialing plan is suitable. If you cannot make a call, or if you want to set up a dialing plan for you own reasons, see “Dialing Plan” on page 58.</p> <p>Your CounterPath X-Lite account uses the default.</p>

## Account Properties – Voicemail



These settings let you set up X-Lite to forward calls in several situations.

Your CounterPath X-Lite account does not support voicemail or call forwarding

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

Check with your service provider to determine if another setup mechanism is available. If so, check what the settings are in that setup, and make sure you do enter compatible information in X-Lite. In particular, if your service provider has a mechanism for call forwarding, find out if you should leave the Forwarding settings on this Voicemail tab blank.

Table 10: Account Properties – Voicemail

Field	Description
Check for voicemail	<p>If your VoIP service includes voicemail, choose the setting specified by your VoIP service provider:</p> <ul style="list-style-type: none"> <li>• On: X-Lite will subscribe to be notified when there is a voicemail for you.</li> <li>• Off: the service provider may be set up to advise X-Lite when there is a voicemail for you; check with your service provider for details.</li> </ul> <p>If your VoIP service does not include voicemail, choose Off.</p> <p>Voicemail is controlled by your VoIP service provider, not by X-Lite. Contact your service provider for information on using voicemail.</p>

Table 10: Account Properties – Voicemail

Field	Description
Number to dial for checking voicemail	<p>Complete only if your VoIP service includes voicemail.</p> <p>This is the number that will be called when you click the  icon on the Call display, in order to connect to voicemail and listen to your messages.</p> <p>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> <p>Enter the number provided by your VoIP service provider.</p>
Number for sending calls to voicemail	<p>Complete only if your VoIP service includes voicemail.</p> <p>This is the number that incoming calls will be forwarded to if they are unanswered after the specified interval (below), or when you click the <b>SEND TO VOICE MAIL</b>  icon on the Call display.</p> <p>If you leave this field empty, then this icon will not be displayed. However, leaving this field does not mean that voicemail does not work. It only means that this icon cannot be used to send to voicemail immediately.</p> <p>Enter the number provided by your VoIP service provider.</p>
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>
Always forward to this address	<p>You can use this feature even if your VoIP service does not include voicemail.</p> <p>To forward calls to another number instead of sending them to voicemail. For example, when you are on vacation and want another person to take your calls.</p> <ul style="list-style-type: none"> <li>• To enable forwarding, click the checkbox and enter the number to forward to.</li> <li>• To disable forwarding, clear the checkbox.</li> </ul> <p>(To send calls to voicemail while you are at your desk, use the <i>DND</i> button on the dial pad.)</p>
Forward to this address when busy	<p>You can use this feature even if your VoIP service does not include voicemail.</p> <p>To forward only when your are busy on another line.</p> <ul style="list-style-type: none"> <li>• To enable forwarding, click the checkbox and enter the number to forward to. If your VoIP service service includes voicemail, you can enter your voicemail number in this field.</li> <li>• To disable forwarding, clear the checkbox.</li> </ul> <p>Your service provider may also provide similar features 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 your 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>

## Account Properties – Topology

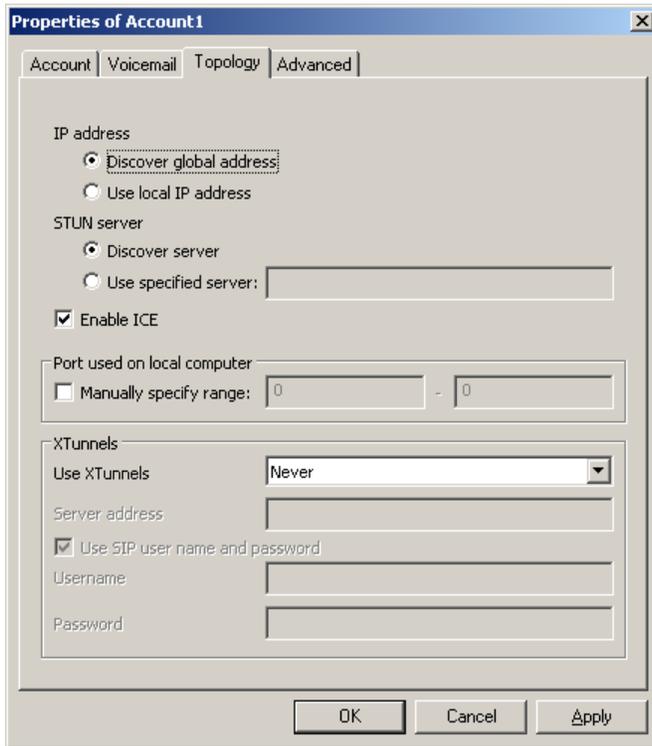


Table 11: Account Properties – Topology

Field	Description
<b>Firewall Traversal</b>	
IP Address	<p>This setting controls how your IP address is presented.</p> <ul style="list-style-type: none"> <li>Discover global address: Let X-Lite determine your public IP address. This is the recommended setting unless your VoIP service provider advises otherwise.</li> <li>Use local IP address: use the IP address of the X-Lite computer.</li> </ul> <p>The recommended setting is Discover global address. For your CounterPath X-Lite account, this field is set to Discover.</p>
STUN Server	<p>This setting specifies the STUN server to use.</p> <ul style="list-style-type: none"> <li>Discover the server: Choose this option to let X-Lite find the address of a STUN server.</li> <li>Use specified server: To use a different STUN server. For the address enter a domain name or an IP address.</li> </ul> <p>The recommended setting is Discover server. For your CounterPath X-Lite account, this field is set to Discover.</p>
Enable ICE	<p>ICE optimizes traffic and may help with firewall traversal.</p> <p>Typically, ICE is enabled. However, it may need to be disabled if your VoIP service provider has implemented a firewall traversal solution that is not compatible with ICE enabled.</p> <p>If you have problems with calls, contact your service provider for information on their firewall traversal solution</p> <p>For your CounterPath X-Lite account, ICE is enabled.</p>

Table 11: Account Properties – Topology

Field	Description
<b>Port Used on Local Computer</b>	
Manually specify range	<p>The appropriate setting depends on your computer setup:</p> <ul style="list-style-type: none"> <li>• 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.)</li> <li>• Unchecked: If your computer is not behind a restrictive firewall.</li> </ul> <p>For your CounterPath X-Lite account, this field is unchecked.</p>
<b>XTunnels</b>	
Use XTunnels	<p>The appropriate setting for XTunnels depends on whether your VoIP service provider has an XTunnels server.</p> <ul style="list-style-type: none"> <li>• Automatic: Use XTunnels when X-Lite detects a firewall that prohibits communications. This is the recommended setting if your service provider has an XTunnels server.</li> <li>• Always: Always use XTunnels.</li> <li>• Never: Do not use XTunnels. This is the correct setting if your service provider does not have an XTunnels server.</li> </ul> <p>For your CounterPath X-Lite account, this field is set to Automatic.</p>
Server address	<p>Optionally, specify the name or IP address of the XTunnels server to use.</p> <ul style="list-style-type: none"> <li>• If the field completed, X-Lite will use that server.</li> <li>• If it is blank, X-Lite will perform a DNS lookup to discover the server.</li> </ul> <p>For your CounterPath X-Lite account, this field is blank.</p>
Use SIP user login and password	<p>Check this box to use the username and password from your SIP account in order to log into the XTunnels server.</p> <p>Otherwise, uncheck this box and complete the Username and Password fields.</p> <p>For your CounterPath X-Lite account, this field is unchecked</p>

## Account Properties – Presence

Presence allows other softphone users to see your online availability, and also allows you to see the online availability of others.

### How Availability Works for Single Accounts

If you have only a CounterPath X-Lite account, this tab does not appear. Peer-to-peer presence is always enabled.

### How Availability Works for Multiple Accounts

If you have two accounts, this tab only appears for the non-CounterPath X-Lite account, and then only if that other account is the default account.

Presence information is always routed through the service provider for the default account. The following rules apply:

- If the service provider for the non-CounterPath X-Lite account does not support presence, then if you make this account your default account, you will not be able to see users' presence. However, there may be drawbacks to making your CounterPath X-Lite account the default. See “Dialing Plan” on page 58 to determine if this is the case.
- If the non-CounterPath X-Lite account is the default account, then this service provider will always route presence information for users who use their service. They may or may not route information for your CounterPath X-Lite buddies. If information is not routed, then these buddies will always appear as gray.
- When the CounterPath X-Lite account is the default account, X-Lite will always route information for all users. However, when the other VoIP service provider gets the presence information, they may not forward it. In this case, your buddies from this service provider will always appear as gray.

Table 12: Account Properties – Presence

Field	Description
Presence Mode	Choose the setting specified by your VoIP service provider: <ul style="list-style-type: none"> <li>• Disabled: Presence is not supported.</li> <li>• Presence Agent.</li> <li>• Peer-to-Peer.</li> </ul> For your CounterPath X-Lite account, this field is set to Peer-to-Peer.
Poll Time	Enter the value specified by your VoIP service provider. The factory setting is 300. For your CounterPath X-Lite account, this field is set to 300.
Refresh Interval	Enter the value specified by your VoIP service provider. The factory setting is 3600. For your CounterPath X-Lite account, this field is set to 3600.

## Account Properties – Advanced

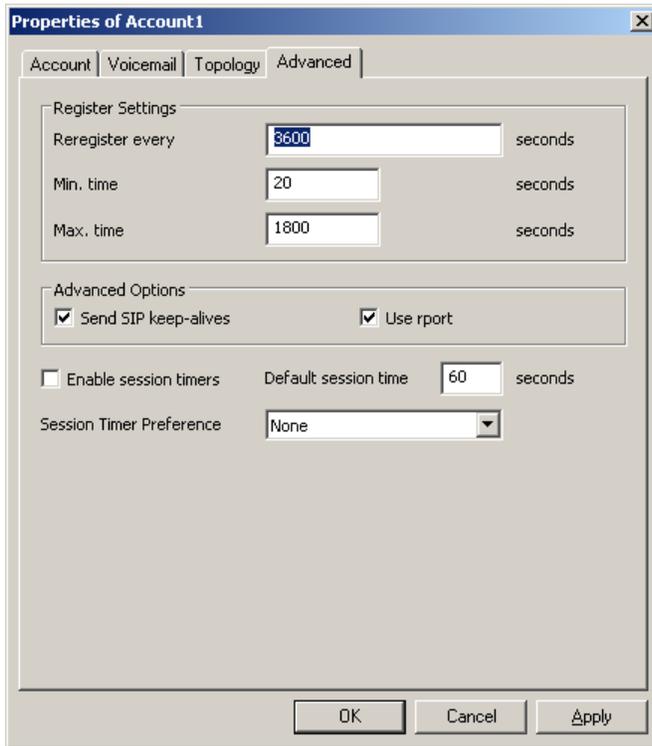


Table 13: Account Properties – Advanced

Field	Description
Reregister every	<p>The time interval between X-Lite’s attempts to reregister in order to refresh the account registration with the VoIP service provider for this account. A value of zero means not to reregister after the initial registration.</p> <p>This value is placed in the “Expires” header field of the REGISTER message.</p> <p>The factory setting is 3600.</p> <p>For your CounterPath X-Lite account, this field is set to 3600.</p>
Min. time	<p>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.</p> <p>The factory setting is 20.</p> <p>For your CounterPath X-Lite account, this field is set to 20.</p>

Table 13: Account Properties – Advanced

Field	Description
Max. time	<p>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.</p> <p>For example, the min. time is 20 secs, the maximum time is 120 secs. X-Lite will attempt to reregister as follows:</p> <ul style="list-style-type: none"> <li>• Wait 20 secs.</li> <li>• Attempt to connect.</li> <li>• If fail, wait 40 secs.</li> <li>• Attempt to connect.</li> <li>• If fail, wait 80 secs.</li> <li>• Attempt to connect.</li> <li>• If fail, wait 120 secs (the maximum)</li> <li>• Attempt to connect.</li> <li>• If fail, wait 120 secs, and so on.</li> </ul> <p>The factory setting is 1800.</p> <p>For your CounterPath X-Lite account, this field is set to 1800.</p>
Send SIP keep-alives	<p>Typically on, to instruct X-Lite to send SIP keep-alive messages in order to maintain a “pinhole” through your firewall for SIP messaging.</p> <p>For your CounterPath X-Lite account, this field is on.</p>
Use rport	<p>Typically on.</p>
Enable session timers	<p>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.</p> <ul style="list-style-type: none"> <li>• Turn on to enable session timer. Enter a value in Default session time. The factory setting is 60.</li> <li>• Turn off to disable session timer; refreshes will never be sent.</li> </ul> <p>For your CounterPath X-Lite account, this field is set to 60.</p>
Session timer preference	<p>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:</p> <ul style="list-style-type: none"> <li>• None: No preference.</li> <li>• Local refreshes: Your computer sends.</li> <li>• Remote refreshes: The other party sends.</li> <li>• UAC refreshes: The user agent client (the party that initiated establishment of the communications) sends.</li> <li>• UAS refreshes: The user agent server (the other party) sends.</li> </ul> <p>For your CounterPath X-Lite account, this field is set to None.</p>



## 6.4 Open Diagnostic Log and Folder

For information on these menu items, see “Options – Advanced – Diagnostics” on page 43.

## Appendix A: Echo Test

You can perform an echo test at any time on the outgoing audio or the outgoing video.

1. Dial `echo` (with digits-to-letters turned on, so that `echo` appears on the display). As soon as you connect, the video test is performed: the video that X-Lite is sending is displayed on the top pane on the Video drawer. X-Lite uses the codec H.263+ 1998.
2. Follow the spoken instructions to perform the audio test.

The audio that you hear is the audio that is being sent out of X-Lite.

The audio test can help troubleshoot the following problems:

- Another party has commented that your audio quality is bad. If the audio quality on the echo test is acceptable, then you know that the problem is not on your side.
- You seem to have one-way audio (the other party cannot hear you). If you can hear yourself on the echo test, then you know that the problem is not on your side.

The video test can help troubleshoot the following problems:

- Another party has commented that your video quality is bad. If the video quality on the echo test is acceptable, then you know that the problem is not with your camera or with X-Lite.
- The other party cannot see you. If you can see yourself on the top pane, then you know that the problem is not on your side.

## Appendix B: Application Hot Keys

Table 14: Application Hot Keys

Function	Keyboard Shortcut
Select Line 1	F1 or Ctrl + 1
Select Line 2	F2 or Ctrl + 2
Select Line 3	F3 or Ctrl + 3
Select Line 4	F4 or Ctrl + 4
Select Line 5	F5 or Ctrl + 5
Select Line 6	F6 or Ctrl + 6
Options window	F8 or Ctrl + 8
View Diagnostic File	F9 or Ctrl + 9
Toggle Letters-to-Digits	Space bar (Windows only)
Clear	Backspace
Dial	Enter
Display Help	Ctrl + F1
Turn Auto-Answer on/off	Ctrl + a
Open Calls & Contacts drawer	Ctrl + b
Turn Do Not Disturb (DND) on/off	Ctrl + d
Turn Auto-Conference on/off	Ctrl + f
Hang up	Ctrl + h or Esc
Call Ignore	Ctrl + i
Mute	Ctrl + m
Hold	Ctrl + o
Display SIP Account Status window	Ctrl + p
Exit	Ctrl + q
Redial	Ctrl + r
Send to voicemail	Ctrl + s
Transfer	Ctrl + t
Paste	Ctrl + v
Display voice statistics notification balloon	Ctrl + F9
Increase/Decrease Speaker Volume	Up/Down Arrows
Increase/Decrease Microphone Volume	Right/Left Arrows

## Appendix C: Dialing Plan

When a call attempt is made, the call input (what you type, select or drag onto the Call display) is processed to select the account to use and to modify the input if that is required to ensure that the call gets placed successfully. This ability to select an account and modify the input relies on the existence of a “dialing plan” for each account.

The input is processed as follows:

- **Cleanup:** Input is cleaned up by removing spaces, dashes, open brackets, and close brackets. Cleanup allows X-Lite to support calls placed using contacts from a contact list, including Microsoft® Outlook®.
- **Matching:** The input is compared to the patterns defined by the dialing plan for each enabled account. Each account has one dialing plan, and each dialing plan has one or more patterns.  
When a match is found between the input and the pattern, the account that this pattern belongs to is selected and the transformation for this pattern is performed.  
If no match is found, the default account is selected and no transformation is performed.  
For details on matching see “How the Input Is Processed” on page 60.
- **Transformation:** The selected transformation is performed.
- Then the call is placed using the transformed input.

### The Default Dial Plan

The default dial plan is:

```
#n\a\a.T;match=1;prestrip=2;
```

where #n is the account prefix (#0 for Account 0, and so on)

If the input is the account prefix and the number, then the Account for this dial plan is selected. The account prefixed is stripped from the number before the call is placed.

If all Accounts use this dial plan, then the behavior is as follows: if the input includes the account, then that account is used. In other words, you can force selection of a specific account by including the account prefix. If the input does not include #n, then the default account is used.

### Do You Need to Read this Information?

You do not have to read this dial plan information if the default dial plan behavior (above) is acceptable.

If you want to be able to place calls on a specific account without including the account prefix, then you must create a dial plan for your non-CounterPath X-Lite account. At the very least, the dial plan must include the pattern or patterns that will allow the correct account to be selected (the use of transformations is optional).

You cannot modify the dial plan for your CounterPath X-Lite account; it uses the default plan. You must ensure that the dial plan for your non-CounterPath X-Lite account is designed to work correctly with the default dial plan to achieve the desired behavior.

### C.1 Dialing Plan Syntax

In X-Lite, the dialing plan establishes the expected patterns of characters for a telephone number or SIP address, and allows for modification (transformation) of input based on the match to a pattern.

The dialing plan has the following syntax:

```
pattern [ |pattern] ;match=1;<transformation>=<value>; [match=2;  
<transformation>=<value>;]
```

Where:

- Items in [ ] are optional.

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- **Pattern:** the pattern that will be matched. One or more patterns. Each pattern is separated by a | pipe. The pipe is optional after the last pattern. Each pattern is implicitly numbered, starting from 1.
- **Match; Transformation:** A pair that identifies the pattern number to compare with the input, and the transformation to perform on the input when a match is obtained. The transformation is optional (meaning that if there is no transformation for a pattern, then the input that matches this pattern is not transformed). One or more pairs.  
“match=” is a literal. “n” identifies the pattern. “transformation=” is replaced by a keyword, see below.  
“value” is replaced by a value.  
Spaces are allowed only in the <value> items.

### Example

```
\a\a.T|xxxxxxxxxx;match=1;prestrip=2;match=2;pre=8;
```

where:

- \a\a.T is the first pattern.
- xxxxxxxxxxxx; is the second pattern.
- match=1;prestrip=2; is the first match-transformation pair.
- match=2;pre=8; is the second match-transformation pair.

### Pattern

#### Valid Content

The content for a pattern follows the digit map rules of RFC 2705, supplemented by the rules for regular expressions. Where there is an overlap between the digit map and regular expression rules, the digit map rules apply. For this reason, there are some special cases, included in the table below.

The following table describes the most common elements. As mentioned, all regular expression elements are supported.

Element	Origin	Description
0 1 2 3 4 5 6 7 8 9	Literals	Literal digits, used as is.
# * a to z	Literals	Literal characters, used as is. Special cases: <ul style="list-style-type: none"><li>• The literal x character is represented by \x.</li><li>• The literal t character is represented by \t.</li></ul>
x	Digit map rules	Wildcard for any single digit, 0 to 9.
\a	Regular expression rules	Wildcard for any single alphanumeric character.
[digit-digit]	Regular expression rules	A digit within the specified range.
[character-character]	Regular expression rules	A character within the specified range.
[digit1, digit2, digit3]	Regular expression rules	One of the characters in the collection.
.	Digit map rules	Repeat the last element 0 or more times. For example, xxxx. means repeat the last x 0 or more times, which means this pattern matches three or more digits (not four or more digits)! Use of this element results in a pattern with “minimum requirements”.

Element	Origin	Description
T	Digit map rules	<p>A timeout period will take place before automatic dialing starts.</p> <p>The T timer forces X-Lite to wait after a match is made. This timer should always be included in , and situations:</p> <ul style="list-style-type: none"> <li>Any pattern that uses the . (dot). For example, if the pattern is xxxx. then adding a timer lets you type three or more digits. If there is no timer, then as soon as you type three digits, X-Lite makes the match as soon as you type three digits.</li> <li>Any dialing plan that has two patterns that are similar in elements but different in length. For example, if one pattern is xxx and the other pattern is xxxxxxx, then adding the timer lets you continue typing past three digits, in order to get a match on the second pattern.</li> </ul> <p>In this situation, the T timer should be included in the shorter pattern.</p>

### Timers

There are two timers:

- T timer is 4 seconds.
- The long timer is 20 seconds.

These timers are used in input comparison, as described in “How the Input Is Processed” on page 60.

### Transformation Keywords

Keyword	Description
prestrip	Strip the first n characters from the input before placing the call.
poststrip	Remove n number of characters from the end of the input before placing the call.
pre	Add the specified account prefix to the input before placing the call.
post	Attach the specified postfix to the input before placing the call.
replace	Replaces the input with the specified string before placing the call.

### Order of Transformations

These transformations are always performed in the following order (the order in which the transformations are entered in the dialing plan is not significant):

prestrip > poststrip > pre > post > replace

## C.2 How the Input Is Processed

### Comparing Input to the Dialing Plan Patterns

The input is compared to each dialing plan in turn, starting with the first listed account. The process is slightly different depending on how the call is placed:

- If the input was dragged or selected, then the entire input is compared to each dialing plan. If a complete match is found, then that account is selected and the associated transformation is performed. If no match is found, the default account is selected and no transformation is performed.
- If you are typing the input, the digits are compared one by one as they are entered. The comparison will result in one of the types of matches described in the table below.

It is possible for the same input to get matched to different dialing plans depending on whether the input is entered on the fly or dragged. It is important to keep this in mind when designing dialing plan patterns.

## Results of the Comparison

Type of Match	Conditions	Result if You Press Enter or Dial	Result if You Stop Typing
Partial match	The characters typed so far follow the pattern but there are not yet enough characters for a pending or complete match.	The default account is selected. No transformation is performed.	If you stop typing for the long timer length (20 seconds), then the default account is selected. No transformation is performed on the characters typed so far.
Pending match	<ul style="list-style-type: none"> <li>The pattern has no . (dot) but does have the T timer. There is a perfect match.</li> <li>The pattern has a . (dot) and the T timer. The minimum requirements are met.</li> </ul>	This pattern's account is selected and the transformation is performed.	If the T timer expires, this pattern's account is selected and the transformation is performed.
Complete match	<ul style="list-style-type: none"> <li>The pattern has no . (dot) and no T timer. There is a perfect match.</li> <li>The pattern has a . (dot) but does not have the T timer. The minimum requirements are met.</li> </ul>	This pattern's account is selected and the associated transformation is performed.	This pattern's account is selected and the associated transformation is performed.
No match	The characters typed do not match the patterns for any dialing plan.	The default account is selected and no transformation is performed.	Nothing happens even after the T timer and long timer have expired.

### C.3 Examples

#### Example 1

```
\a\a.T|xxxxxxx.T;match=2;pre="9"
```

This simple example shows how to differentiate between a PSTN number and a SIP address, and how to add a “9” dialing prefix only to the PSTN number.

#### Example 2

```
3xxT|1xxxxxxxxxx|[2-9]xxxxxxxx|+x.T;match=2;pre="9";
match=3;pre="91";match=4;prestrip=1;pre="9011"
```

3xxT	The first pattern is any three-digit number beginning with 3. No transformation. The assumption is that this is an internal extension. The timer forces X-Lite to wait after detecting a three-digit number beginning with 3, in case you are actually dialing a local call starting with 3.
1xxxxxxxxxx	The second pattern is any eleven-digit number beginning with 1. Prefix with 9 and dial as is. The assumption is that this is a long-distance PSTN call within North America (within North America, all long-distance calls start with 1).
[2-9]xxxxxxxx	The third pattern is any ten-digit number beginning with a number other than 1. The assumption is that this is a local PSTN call within a ten-digit dialing zone.
+x.T;	The fourth pattern is a number of any length that begins with +, to indicate an international PSTN call from North America. Delete the +, prefix with 9011 (011 is the number to access an international line from North America).
match=2;pre="9";	For the second pattern, prefix 9 to access an outside line.
match=3;pre="91";	For the third pattern, prefix 9 and 1 to access an outside line and enter the long-distance code.
match=4;prestrip=1;pre="9011"	For the fourth pattern, remove the + and prefix 9011 to access an outside line and enter the international code.

### Example 3

```
#1xxxxxxxT | #19xxxxxxx | xxxxxxxT | 9xxxxxxx | ;match=1;prestrip=2;pre=9;match=2;prestrip=2;match=3;pre=9;
```

Table 15:

#1xxxxxxxT	The pattern is an account prefix followed by seven digits. The timer forces X-Lite to wait to allow a match to the second pattern. The #1 is stripped off and 9 is prepended to access an outside line.
#19xxxxxxx	The pattern is an account prefix followed by a 9 and seven digits. The #1 is stripped off.
xxxxxxxT	The pattern is seven digits. The timer forces X-Lite to wait to allow matching to the fourth pattern. 9 is prepended to access an outside line.
9xxxxxxx	The pattern is a 9 and seven digits. The input is not transformed.

This example assumes that the dialing plan belongs to the first account.

The dialing plan is slightly trivial, because it does not cover all the situations that a dialing plan should be designed for (local calls, long-distance calls, international calls, and so on for the locale).

However, the example does illustrate two ideas:

- Handling of the account prefix (#1), if you are upgrading from X-Lite 1.1 and are accustomed to entering the account number.  
Use of # to identify the account is now deprecated. The dialing plan should be capable of determining the account to use for this number. However, since users may still be in the habit of entering the account prefix, you may want to include this pattern to handle such a scenario.
- Distinguishing between a local seven-digit call in which 9 is not dialed (to access an outside line) and one in which 9 is dialed to access an outside line.

## Appendix D: Contact List Headings

Following is a list of all the headings that are used in the X-Lite contacts list. This list can be useful when formatting a contacts list in order to import it into X-Lite. For details, see “Importing Contacts” on page 21

uri	business_number	sms_address
display-name	business_number2	ms_address2
entry_id	business_number3	sms_address3
given_name	business_number4	sms_address4
surname	business_number5	sms_address5
email_address	business_number6	sms_address6
email_address2	mobile_number	custom_fields
email_address3	mobile_number2	custom_fields2
email_address4	mobile_number3	custom_fields3
email_address5	mobile_number4	custom_fields4
email_address6	mobile_number5	pres_subscription
sip_address	mobile_number6	
sip_address2	fax_number	
sip_address3	fax_number2	
sip_address4	fax_number3	
sip_address5	fax_number4	
sip_address6	fax_number5	
home_number	fax_number6	
home_number2	groups	
home_number3	comment	
home_number4	postal_address	
home_number5	default_address	
home_number6	default_address_type	

### Appendix E: Location of Files

System files get copied to the installation directory specified when installing X-Lite. The default installation directory is:

C:\Program Files\CounterPath\X-Lite n.n

The directory contains:

- the executable (X-Lite.exe)
- emoticons\\*.\*
- eyeCall.dll, used to make calls from Microsoft Outlook.
- other dll files, including dll files for supported codecs.
- unins000.dat, which contains information about uninstalls of X-Lite.
- \*.ico
- \*.cat
- \*.inf
- \*.sys

Data files are saved in the Counterpath folder in the standard location for application data, as defined in Windows. This location is typically:

C:\Documents and Settings\\Local Settings\Application Data\CounterPath\X-Lite n.n\\

## Appendix F: Alternative Ways of Running X-Lite

### F.1 From a Hyperlink

You can attach a hyperlink to a phone number or SIP address that, when clicked, starts X-Lite and dials the number. Attach a hyperlink with this format:

```
<a href="sip:<address or number>">dial <address or number></a>
```

For example:

```
<a href="sip:1068851@xlite.counterpath.com">dial  
1068851@xlite.counterpath.com</a>
```

### F.2 From the Command Line

You can start X-Lite from a DOS prompt. You may need to add X-Lite.exe to the PATH. Then type:

```
X-Lite.exe
```

To start X-Lite from a DOS prompt and immediately dial a number, type:

```
X-Lite.exe -dial=sip:<number>
```

## Appendix G: Glossary

AEC	Acoustic echo cancelation. 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).
AVI	Audio Video Interleave. A multimedia container format. AVI files contain both audio and video data in a standard container that allows simultaneous playback.
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.
Default account	The SIP account that will be used when placing an outgoing call, if X-Lite does not determine that another account should be used. X-Lite uses the dialing plan to determine the account to use. You can mark one account as the default account; see “Setting the Default Account” on page 45.
Dialing plan	The rules that X-Lite follows in order to interpret the SIP address or 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 multifrequency. 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.
IM	Instant Messaging. A technology that lets users send text message and files for near instantaneous delivery and display on each others’ computers.
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.
Presence	An instant messaging feature that allows users to share information about their availability, mood, location and so on.
Proxy	See SIP account.
PSTN	Public Switch Telephone Network. The traditional land-line phone network.

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RFC	Request for Comment. A document that describes an aspect of an internet technology. An RFC may be a proposed, draft or full internet standard.
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.
SIMPLE protocol	Session Initiation Protocol for Instant Messaging and Presence Leveraging Extensions. The instant messaging (IM) protocol followed by X-Lite. It encapsulate the rules for exchanging instant messages.
SIP	Session Initiation Protocol. The signaling protocol followed by X-Lite for handling phone calls.
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.
SIP address	The address used to connect to a SIP endpoint. In other words, the “phone number” used in a VoIP phone call. For example, sip:joseph@domainA.com.
TCP	Transmission Control Protocol. A transport protocol for delivering data over an IP network. .
UDP	User Datagram Protocol. A transport protocol for delivering data over an IP network. Other transport protocols are TCP and TLS.
URI	Uniform Resource Identifier. A name or address that identifies a location on the world wide web. A SIP address is a type of URI.
URL	Uniform Resource Locator. A URI that both identifies a name or address and indicates how to locate it.
USB device	Universal Serial Bus device. A device that follows a specific communications standard. A headset may be a “USB type” of headset.
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 pane of the Options window) that controls whether audio is transmitted when VAD determines that noone is actually speaking.
vCard	An electronic business card that is often attached to an email. It often appears as a “signature” block that identifies the person, their title, and their business.
VoIP	Voice over Internet Protocol. A variation of IP used for sending voice data over the internet, in other words, used for making phone calls over the internet.
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.
WAV	Or WAVE. A file format standard for storing audio on PCs.