



breakfree
with a software based PBX for Windows



User Manual

3CX VOIP client / Soft phone

Version 6.0

Copyright 2006-2008, 3CX Ltd.

<http://www.3cx.com>

E-mail: info@3cx.com

Information in this document is subject to change without notice. Companies' names and data used in examples herein are fictitious unless otherwise noted. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of 3CX Ltd.

3CX Phone System for Windows is copyright of 3CX Ltd.

3CX is a registered trademark, and 3CX Phone System for Windows and the 3CX logo are trademarks of 3CX Ltd. in Europe, the United States and other countries.

Version 6.0 – Last updated 11 June 2008

Table of Contents

Installing 3CX VOIP client	5
What is the 3CX VOIP client?.....	5
Installing 3CX VOIP client	5
Configuring 3CX VOIP client for use on the local LAN.....	5
Configuring a Remote Connection	6
Configuring a remote connection using the 3CX Tunnel	6
Configuring a “direct” remote connection	8
Configuring a connection to a 3 rd party VOIP provider/SIP server	9
Using the 3CX VOIP client	11
Introduction	11
Using the 3CX VOIP client as a SIP phone	11
Making calls	11
Answering Calls	12
Transferring calls.....	12
Transferring calls to voice mail	13
Recording a call	13
Call History	14
Adjusting Microphone level.....	14
Using 3CX VOIP client with a desk phone.....	15
Features common to both VOIP client and Soft phone mode	15
Status screen	15
Extension, Line & Queue Status.....	16
Specifying Away/Available status	16
Preferences.....	16
Launching calls from Microsoft Outlook	19
Introduction	19
Call Queues	21
Logging into a Call Queue	21

Installing 3CX VOIP client

What is the 3CX VOIP client?

The 3CX VOIP Client is a small Windows application that allows you to make and receive calls via your desktop phone or using a headset connected directly to your computer.

You can see the extension numbers of other users and whether they are available to take calls. Important is that you can use the 3CX VOIP client without having to use the headset - you can continue to use your desk based phone if you prefer.

The 3CX VOIP client ships with all editions of 3CX Phone System, including the Free edition. However, in the Small Business, Pro and Enterprise editions, the 3CX VOIP client allows you to see the presence of other users on the phone system. In the FREE edition, other extensions appear greyed out.

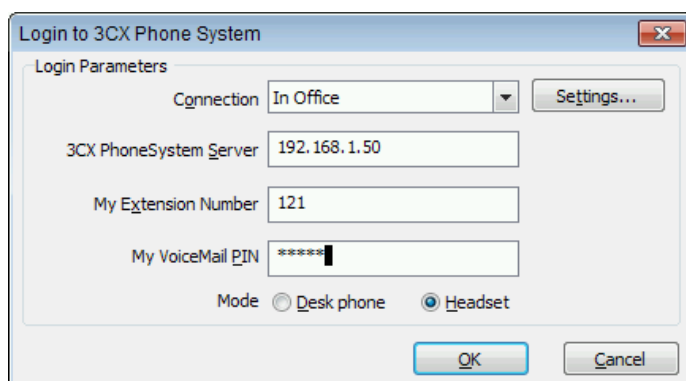
Installing 3CX VOIP client

The 3CX VOIP client is a small application and is easy install:

1. Download the latest 3CX VOIP client from <http://www.3cx.com/downloads/3CXVoipClient.msi>
2. Click 'Run' to execute the setup process. You will be prompted for your preferred interface language and to select a location.
3. The files will be copied. Click Finish to complete installation.

Configuring 3CX VOIP client for use on the local LAN

The first time you start the 3CX VOIP client, you will have to configure a number of options.



Screenshot 1 – Login to 3CX Phone System

To set-up 3CX VOIP client:

1. Start 3CX VOIP client from the 3CX VOIP Client program group or by double-clicking on the tray icon.

2. In the connection drop down, you can specify which connection/location profiles 3CX VOIP client should use. For now leave the default 'In Office' for first setup. See the following paragraph for more information on creating additional connection/location profiles.
3. In the top field enter the hostname or IP of the machine which has 3CX Phone System installed.
4. Enter your extension number and your voice mail pin number (By default the PIN is the same as your extension number) You can change this from your voice mail menu or from the user portal.
5. Now select whether you are using a desk phone, or whether you are using a headset connected directly to your computer. In this case, 3CX VOIP client will act as a soft phone.
6. Click OK to start 3CX VOIP client. Once you have logged in successfully, your extension number will be shown in the phone screen.

Configuring a Remote Connection

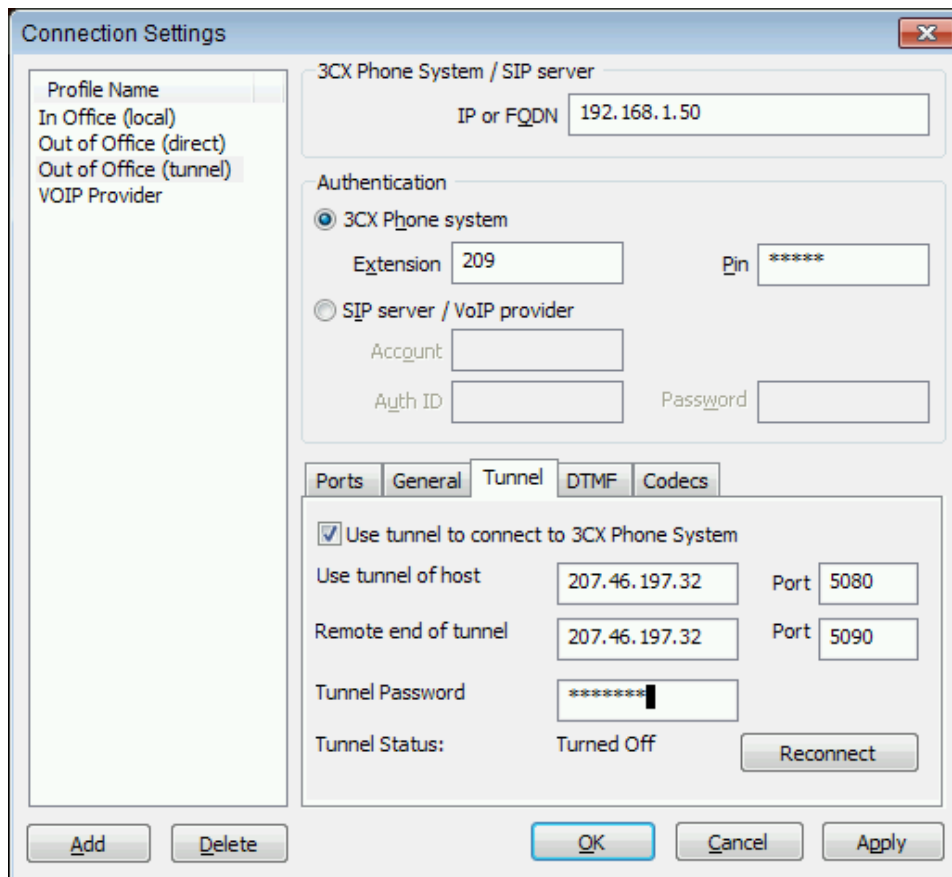
3CX VOIP client can be used both on the local network, as well as from a remote network, for example from home. In this case you will need to create different location/connection profiles, since the network connection settings are different.

This feature requires help from your administrator, who will need to give you the right network settings as well as tell you whether you should use the 3CX Tunnel feature or make a 'direct' connection.

Configuring a remote connection using the 3CX Tunnel

To simplify firewall configuration, you can use the 3CX Tunnel feature, which tunnels all SIP traffic over a single TCP Port. To set-up a connection profile using a 3CX Tunnel:

1. Select File > Connections from the menu



Screenshot 2 –Creating an Out of the Office Connection

2. In the Connection Settings dialog, click on the 'Out of Office' connection and specify the internal IP of 3CX Phone System on the right hand side.
3. In the section 'Authentication', select '3CX Phone System' and enter your extension number and pin code.
4. Click on the tab 'Tunnel'. Tick the option 'Use 3CX tunnel' and then specify the public IP and port of the 3CX Phone System machine in the field "Remote end of Tunnel". By default this is 5090.
5. Click Connect to check that the tunnel is working. The Tunnel status will show you whether connection has been successful.
6. Click on the OK button to exit the dialog. You can rename the profile by right-clicking on the profile and giving it a different name.

To switch to 'Outside the office mode' from within the phone, select 'Action > Connection > Out side the office' from the menu. The connection will be re-established with the new connection settings.

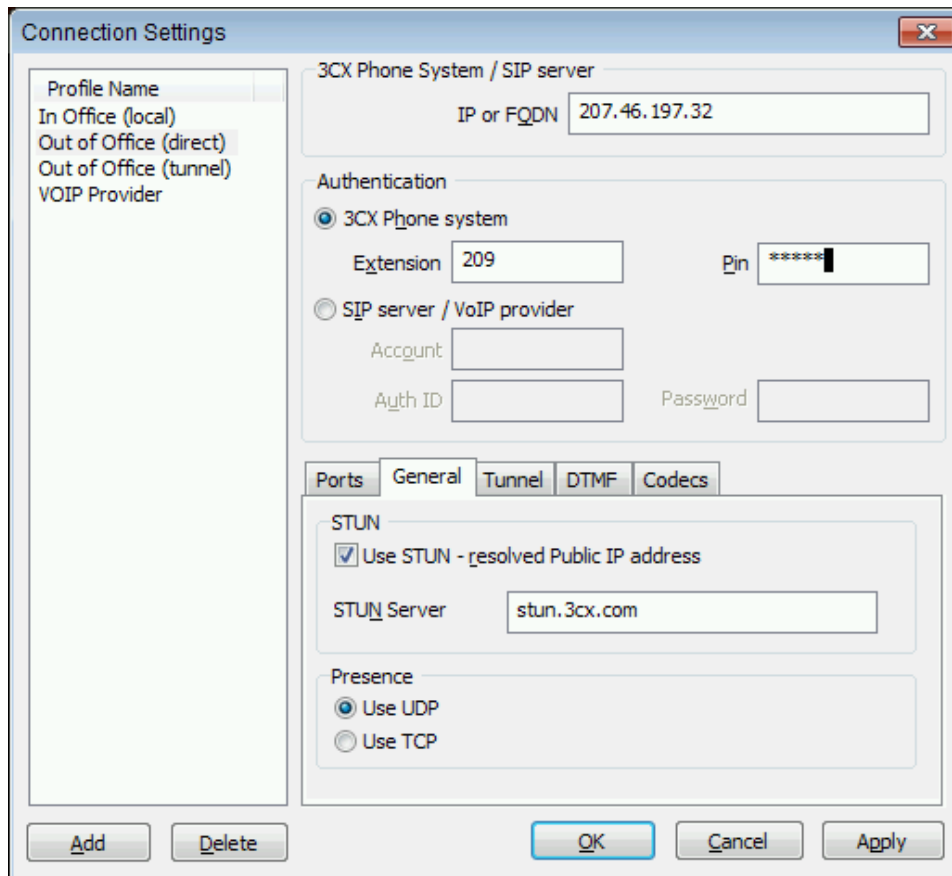
Note: If you wish to use a 3CX Tunnel installed on a different host, simply enter the IP of the host with the 3CX Tunnel service installed. In this case you must configure the Remote end of the Tunnel on the machine using the tunnel.

Configuring a “direct” remote connection

Using the ‘direct’ mode requires that your administrator has setup the firewall in front of 3CX Phone System correctly, as well as that your NAT device can handle VOIP. Most modern home routers (Linksys, Netgear and so on) are now capable of handling VOIP correctly.

To create an Out of Office connection that does NOT use a 3CX Tunnel:

1. Select File > Connections from the menu



Screenshot 3–Creating an Out of the Office Connection

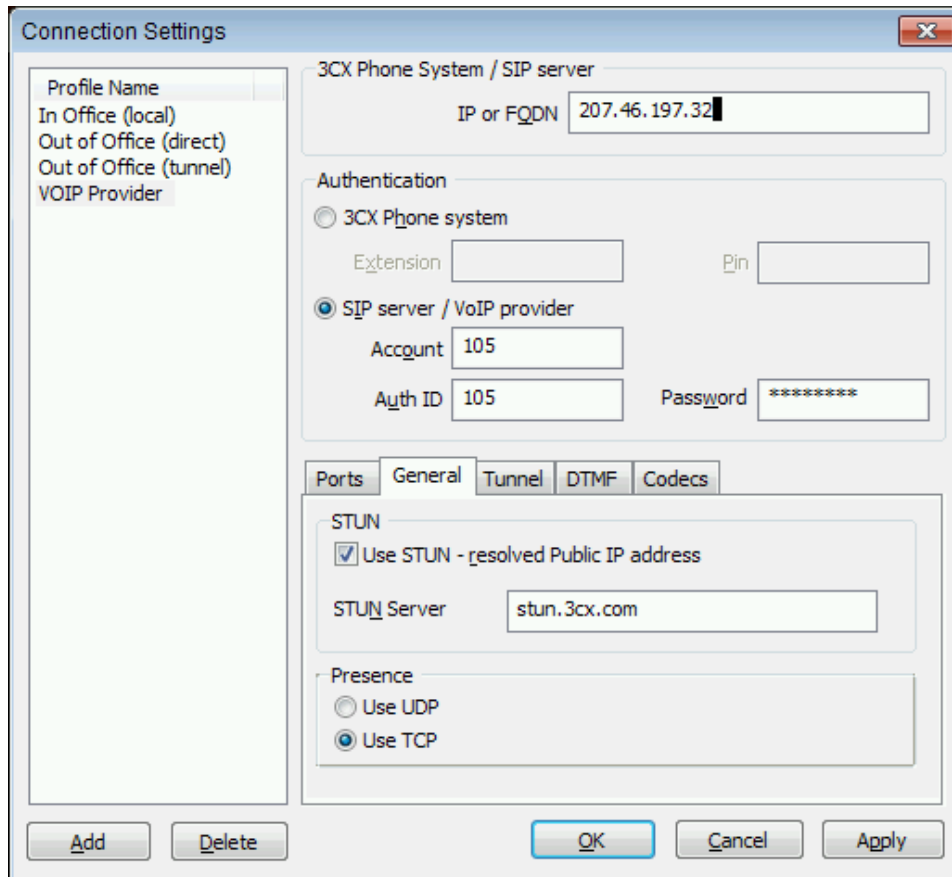
2. In the Connection Settings dialog, click on the ‘Out of Office’ connection and specify the public IP of 3CX Phone System on the right hand side.
3. In the section ‘Authentication’, select ‘3CX Phone System’ and enter your extension number and pin code.
4. Click on the tab ‘GENERAL and enable the option “Use STUN – Resolved Public IP Address’. Leave the default STUN server or enter another one.
5. Now click ‘Apply’. You can rename the profile by right-clicking on the profile and give it a different name.

To switch to ‘Outside the office mode’ from within the phone, select ‘Action > Connection > Out side the office’ from the menu. The connection will be re-established with the new connection settings.

Configuring a connection to a 3rd party VOIP provider/SIP server

If you want to create connection that must connect to a VOIP provider, or another SIP server (for example Asterisk), then create the connection as follows:

1. Select File > Connections from the menu. Click on the 'Add' button to create a new connection profile.



Screenshot 4 –Creating an Out of the Office Connection

2. Now specify the IP of the VOIP provider or SIP server on the right hand side. If in doubt, contact your administrator.
3. In the section 'Authentication', select 'SIP server / VOIP provider' and enter the Account (usually your VOIP provider number or Extension number) and your assigned Authentication ID and Password.
4. If connecting to a VOIP provider or remote SIP server, click on the tab 'STUN' and enable the option "Use STUN – Resolved Public IP Address". Leave the default STUN server or enter another one.
5. Now click 'Apply' to save the connection profile.

To switch to this connection from within the phone, select 'Action > Connection > Connection name' from the menu. The connection will be re-established with the new connection settings.

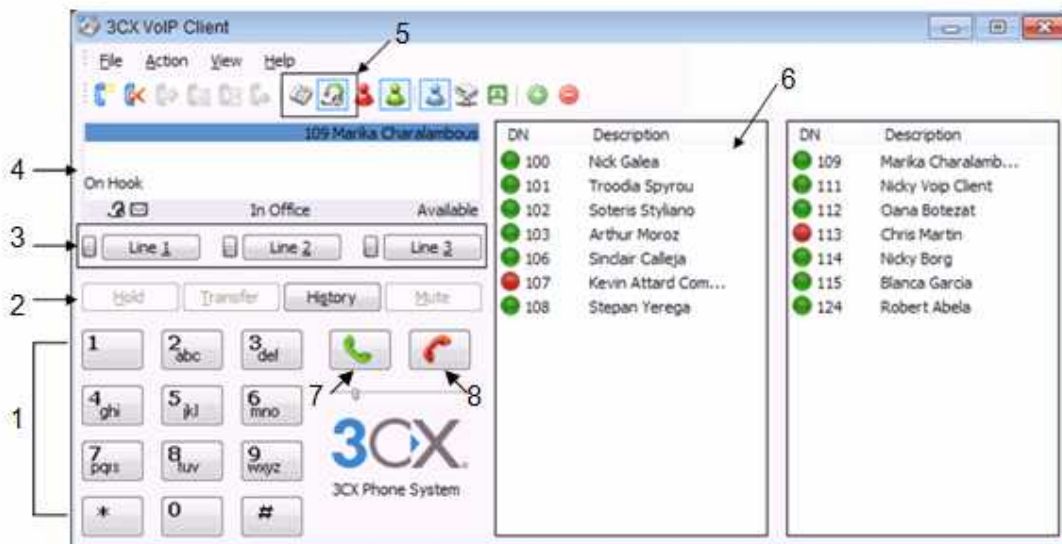
Using the 3CX VOIP client

Introduction

3CX VOIP client can work as a soft phone and it can work in combination with a desk phone. You can use a desk phone and the 3CX soft phone at the same time. (Because 3CX supports SIP forking). In this way you can make and receive calls on either the desk phone or the soft phone, whichever is more convenient at the time.

This chapter explains how to use 3CX VOIP client as a soft phone, then explains how it can be used with a desk phone and finally it discusses the common features, available in both 'modes'.

Using the 3CX VOIP client as a SIP phone




Screenshot 5 - 3CX VOIP client in SIP phone mode

- | | |
|--------------------|-----------------|
| 1. Dial Pad | 5. Phone modes |
| 2. Phone functions | 6. Status panel |
| 3. Lines | 7. Dial |
| 4. Status screen | 8. Hang up |

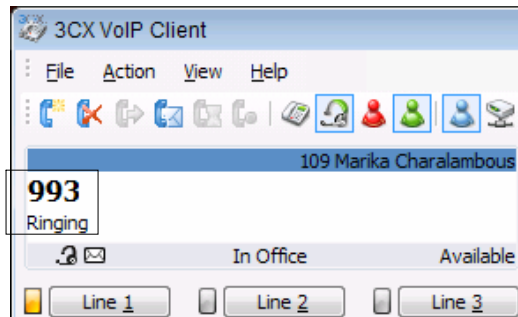
If you selected to use 3CX VOIP client with a head set, then the 3CX VOIP client will work as a SIP Phone, and the interface will resemble a phone.

Making calls

To make a call, simply dial the number on the keypad using your mouse, or enter the number using your keypad. Click the green button  or hit the enter key to instruct the phone to dial the number. 3CX VOIP client will make the call on the first available line.


Answering Calls

As soon as a call comes in, 3CX VOIP client will ring and show the incoming call on the screen of the phone. It will also pop up a small dialog in the system tray informing you of the new call.



Screenshot 6 – Answering Calls

The incoming call will light up the LED on the first available line.

To answer the call, click on the answer button  or hit the 'Enter' key.

To reject the call, click on the red hang-up button or hit the 'Escape' key. The caller will be treated as if your phone was busy. The forwarding settings for 'Call Busy' will be triggered.

You can answer a call by hitting the “Enter” key, or cancel a call by hitting the “Escape” key



Note: If you already have a call active, the call will be received on the second line, and the LED on the second line will flash. To answer this call, click on the line 2 button first. Your call on line 1 will automatically be put on hold and the LED one line 1 will flash.

Transferring calls

Blind transfer

A blind transfer transfers the call to another extension without first speaking to the target extension. There are 2 ways to perform a blind transfer:

Method 1

1. Click on the transfer button 
2. Dial the destination number or double-click on the extension in the status panel and click on the dial button  or hit the 'Enter' key.

Method 2

1. Select the 'Transfer Call' option from the Action menu
2. Enter the extension number to which you want to transfer the call and click OK

Attended transfer

An attended transfer is performed by first calling the target extension and speaking to the person who is to take the call. There are 2 ways to perform an attended transfer:

Method 1

1. Select the Attended Transfer option from the Action menu
2. Enter the extension number to which you want to transfer the call and click OK.
3. After you have introduced the caller to the user of the extension, click on the transfer button to transfer the call.

Method 2

1. Click on the 'Line 2' button and dial the number of the extension you wish to reach. Alternatively double-click on the extension in the status panel. The call on 'Line 1' will automatically be put on hold.
2. After you have introduced the caller to the user of the extension, click on the transfer button and click on 'Line 1' to connect both extensions.

Transferring calls to voice mail

If you are unable to take a call, you can transfer the call to your Voice mail. You can do this by clicking on the icon in the menu bar, or the menu item Action > Transfer to Voice mail. The caller will be transferred to your voice mail box where he can leave a message.

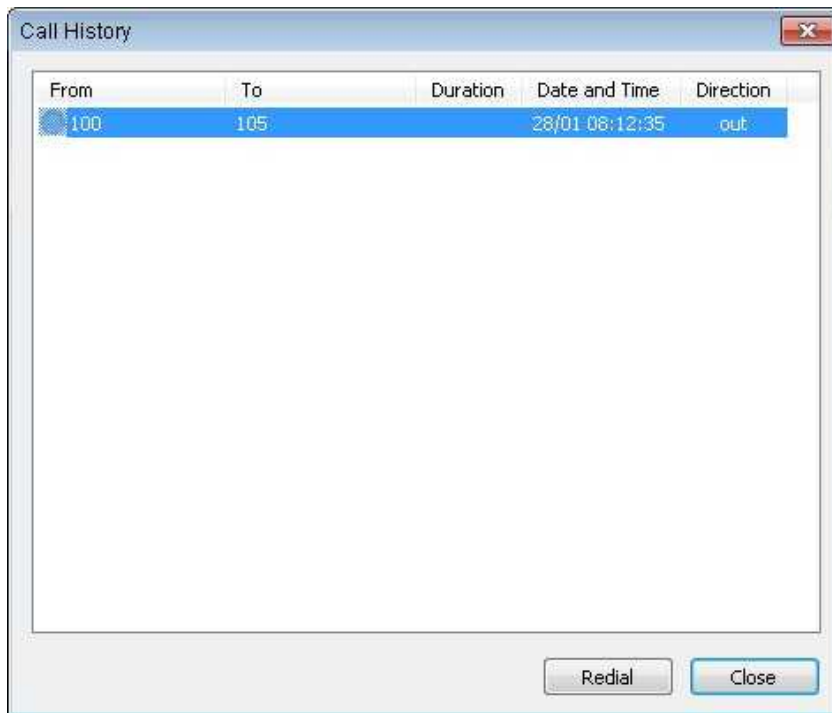
Recording a call



Screenshot 7 – Recording a call

You can record a call simply by clicking on the record call button. This will record the current call in progress and save it as a wav file on the server. To get access to the recording, contact your administrator.

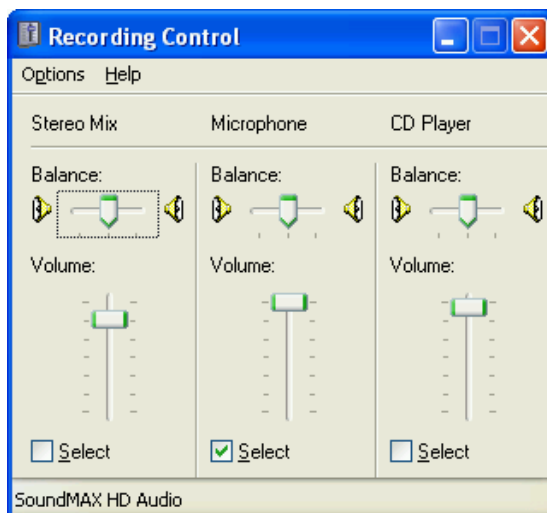
Call History



Screenshot 8 – Viewing Call History

You can view the history of calls received and placed by clicking on the 'History' button. To place a call to a number in the call history, simply double-click on the number to launch a call to that number. Alternatively select the entry and click the Redial button.

Adjusting Microphone level



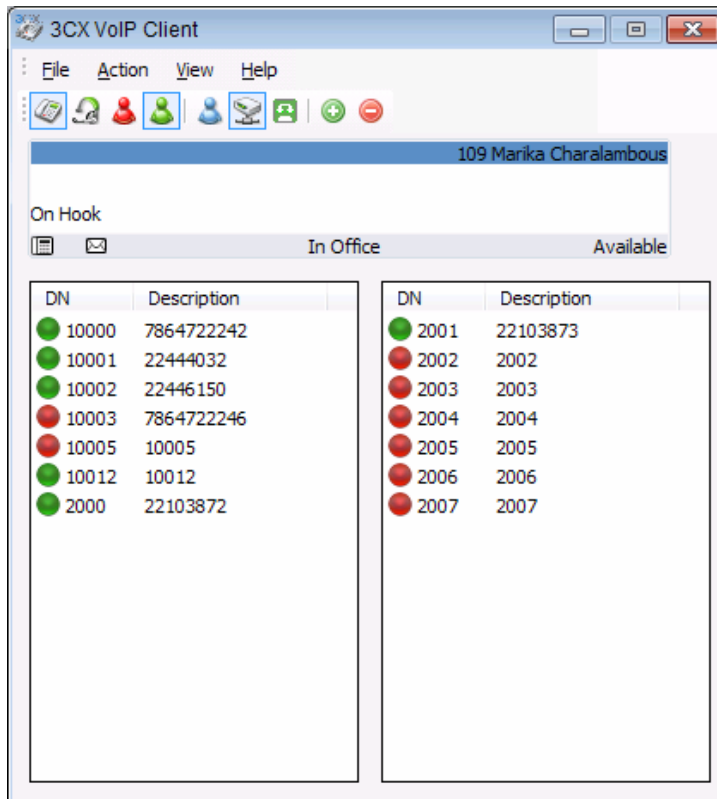
Screenshot 9 - Adjusting the Microphone level

The microphone audio level is set by the sound card driver in Windows. To adjust it:

1. Go to Windows Control Panel and double click on 'Sounds and Audio Devices'. In the Audio tab, click on the Volume button in the Sound Recording section, then use the sliders to adjust the microphone recording level.

2. Alternatively, double click the speaker icon in the Windows taskbar. Go to Properties and from the Mixer device drop down menu select an Input device, click on OK to continue. Moving the sliders up or down will adjust the microphone recording level accordingly.

Using 3CX VOIP client with a desk phone



Screenshot 10 – Using the VOIP client as a desk phone

If you selected to use 3CX VOIP client with a desk phone, the interface will not have a dial pad – all phone calls will be made and received via your desk phone. However, you can see the status of other users on the phone system, as well as monitor extension status via the status screen.

Features common to both VOIP client and Soft phone mode

Status screen



1. Extension number
2. Soft Phone/Desktop mode
3. In office/Out of office mode
4. Voicemail
5. Available/Away

Screenshot 11 – Status Screen

The status screen on the phone summarizes important information. It shows

- Your extension number and name
- If you have voice mail waiting and if so, how many
- Whether you are using a desk phone or using the client as a SIP phone
- Whether your phone is set to 'in the office' or 'out of the office' mode
- Whether your status is set to 'Available' or 'Away'

Furthermore, when you make or receive a call, the number to be dialled OR the caller ID of the caller is shown in the middle of the status screen. Just below it you will get information messages about the progress of the call.

Extension, Line & Queue Status

3CX VOIP client has an 'Operator panel' which allows you to see the status of other users. In the FREE edition, other extensions will appear as greyed out. Presence information is only available in the commercial editions.



Screenshot 12 - Presence filter buttons

By default all extensions, lines and queues are listed, however you can filter them using the tool bar buttons.



Screenshot 13 - Adding / Removing columns

If you do not want to expand the columns, and not all the extensions fit, you can click on the arrow buttons to browse the remaining extensions in the last available column.

Specifying Away/Available status



Screenshot 14 – Specifying Away status

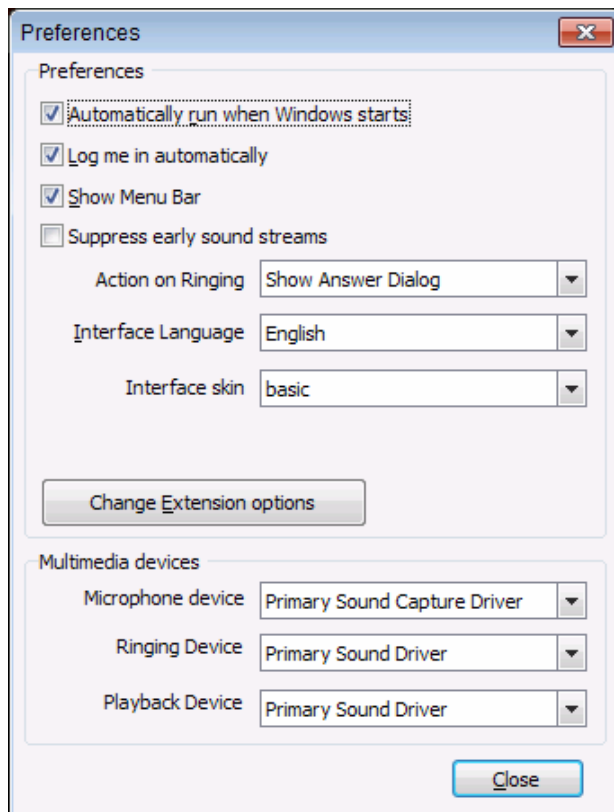
If you temporarily can not answer the phone, you can specify that you are 'Away'. This will show your colleagues that you are not in a position to answer calls.

All calls that do get sent to your extension will be handled according to the "Phone busy" setting configured for your extension.

To set your extension status, select "Available" or "Away" from the toolbar. Note that this setting will persist even if you shut down 3CX VOIP client!

Preferences

The preferences dialog allows you to set your 3CX VOIP client preferences. You can change your extension options by clicking on the 'Change Extension options' button. This will launch your default browser and connect the 3CX Phone System User portal.



Screenshot 15 - Preferences

You can also configure the following options for 3CX VOIP client:

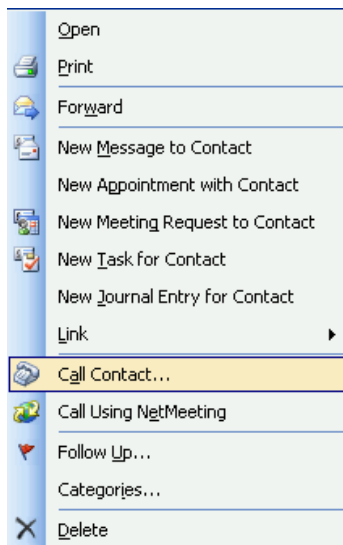
- Tick the option “Automatically start 3CX VOIP client when Windows starts”, so that 3CX VOIP client will automatically run in the System Tray each time Windows starts.
- Tick the option “Log me in automatically” so that 3CX VOIP client will use the last entered credentials to login automatically to 3CX Phone System.
- The option “Show Menu Bar” hides or shows the menu bar in the main interface.
- The option “Action on Ringing” allows you to define how you want 3CX VOIP client to notify you when you receive an incoming call:
 - a. Show answer dialog – this option will show a dialog which will allow you to answer, reject or send the call to voice mail
 - b. Show notification popup – this option shows a small popup notifying you of an inbound call.
 - c. Bring main window to front – This will bring 3CX VOIP client to the front of all dialogs.
- You can select your preferred interface language using the selector
- In the ‘Multimedia devices’ section, you can select which audio device you wish to use for speaking, ringing and listening

Launching calls from Microsoft Outlook

Introduction

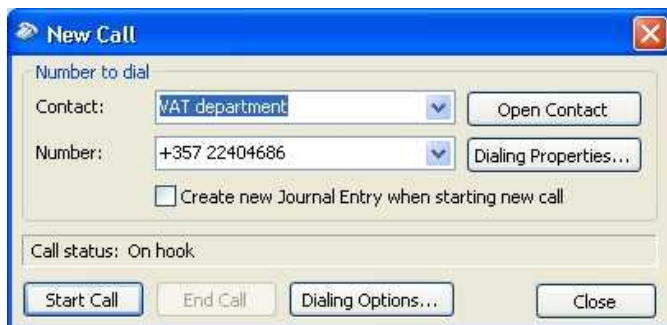
This feature requires a commercial edition of 3CX Phone System for Windows

If you use Microsoft Outlook or any TAPI compliant application, and store all your phone numbers in Outlook contacts, you can easily launch calls directly from Outlook. To do this:



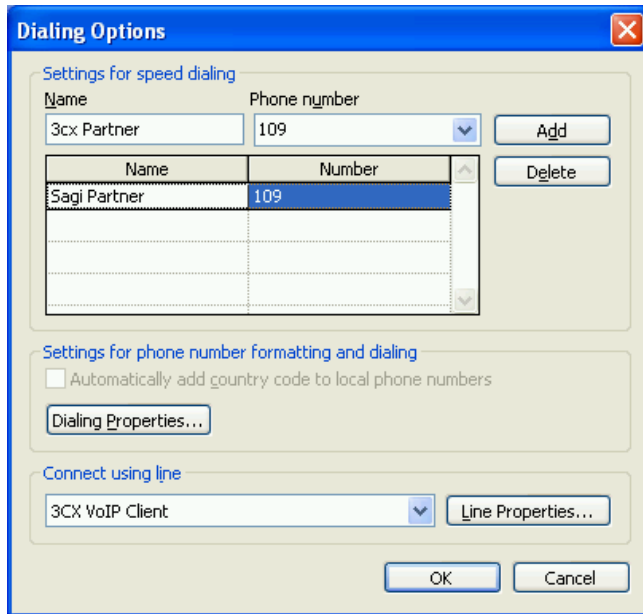
Screenshot 16 - Right click on a contact

1. Right click on the contact in Microsoft Outlook, and select 'Call contact'



Screenshot 17 - Microsoft Outlook New Call dialog

2. The Microsoft Outlook New Call dialog will appear. The first time you use the Microsoft Outlook integration, click on 'Dialing Options'



Screenshot 18 - The Dialing Options dialog

3. In the section 'Connect using line', select the entry 3CX VoIP Client. Click OK to exit the dialog.

4. Now you can click the start call button. The call will be launched using the 3CX VOIP client.

Note: If you are using the 'Desk phone mode', then the call will be set-up to your desk phone.

Call Queue integration

Introduction

3CX Phone System has a powerful feature called Call Queues, which allows callers to be queued until any of the agents can take the call. The actual configuration of who is an agent for a particular Call Queue is done from the 3CX management console

3CX VOIP Client enables you to take full advantage of this feature by allowing you to easily login and logout of the queues, as well as to monitor queue status.

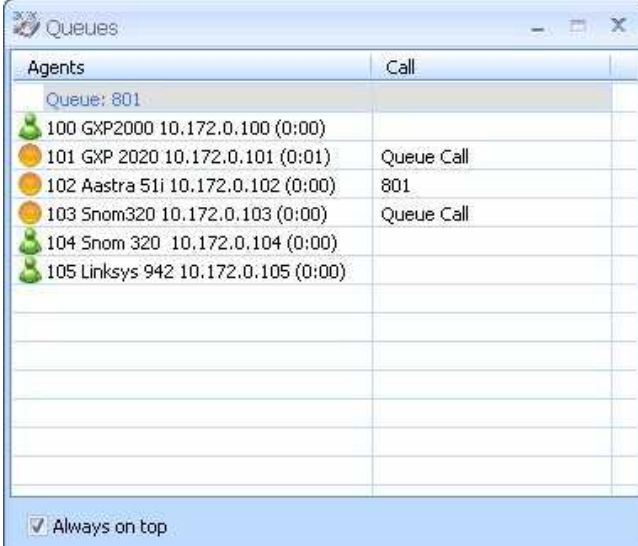
Logging into a Call Queue

If you are an agent for a particular queue, you need to login to the queue to let the phone system know that you are available to start taking calls. This avoids calls being sent to your extension without you being available.

To login to all Call Queues that you are a member of:

1. Select Action > Queue > Login to all Queues.
2. You will now be routed calls as they come into the queue.

The Queue monitor



The screenshot shows a window titled "3CX Queues" with a table of agents and their call status. The table has two columns: "Agents" and "Call". The "Agents" column lists agents with their extension, device, and IP address, along with a status icon (green for available, orange for on call). The "Call" column shows the queue name or call status. At the bottom of the window, there is a checkbox labeled "Always on top" which is checked.

Agents	Call
Queue: 801	
100 GXP2000 10.172.0.100 (0:00)	
101 GXP 2020 10.172.0.101 (0:01)	Queue Call
102 Aastra 51i 10.172.0.102 (0:00)	801
103 Snom320 10.172.0.103 (0:00)	Queue Call
104 Snom 320 10.172.0.104 (0:00)	
105 Linksys 942 10.172.0.105 (0:00)	

Screenshot 19- Monitoring the queues

The Call Queue monitor allows you to see the available queues, which agents are logged in as well as which agents are on a call in the queue. To launch the Queue monitor:

1. From the 'View' menu, select 'Show Queues'
2. If you want the dialog to remain on top, even if you minimize the VOIP client, select 'Always on top'.