Phone Manager

1 Table of Contents

2 Overview

Phone Manager is designed to make using your Mitel MiVoice Office handset as easy as possible. This document is designed to outline the features of Phone Manager and help you get the most out of the product.

Phone Manager requires an instance of Application Server to be installed and running somewhere on the network. The licensing for the product and many of the features are controlled via the Application Server so you may need to contact you IT department or phone system supplier for help.

2.1 Requirements

2.1.1 Overview

The system requires specific information and requirements to be met for any installation. Read each of the sections and ensure that the information requested is available prior to an installation.

2.1.2 System Requirements

To be able to install and run Phone Manager the client computer needs to meet the following **minimum** requirements. If installing into a multi user environment where multiple instances of the client will be running, for example Microsoft Terminal Service, Citrix etc. then see the **Multi User Computer Requirements** section.

Operating Systems

- Windows XP Pro SP3 32-bit
- Windows Server 2003 SP3 32-bit
- Windows 7 Pro/Enterprise/Ultimate 32-bit/64-bit
- Windows 8 Pro 32-bit/64-bit
- Windows 8.1 Pro 32-bit/64-bit
- Windows 2008 SP2 Standard/Enterprise/Datacenter 32-bit/64-bit
- Windows 2008 R2 Standard/Enterprise/Datacenter 32-bit/64-bit
- Windows 2012 R2 Standard/Datacenter 64-bit

> The Windows 2008 or Windows 2008 R2 Server Core installation options are not supported.
>
> The Windows 2012 Foundation and Essential versions are not supported.

Hardware Requirements

The minimum recommended hardware is dependent on the number of devices configured on the PBX and the number of clients that will be connected.

Processor	Intel Core 2 Duo 1.8GHz or faster processor (or equivalent)
Memory	Minimum: 1GB RAM Recommended: 2GB RAM or more When Phone Manager is running it will use a minimum of 70MB of RAM per client - this can be significantly more depending on configuration and number of devices and/or users on the system.
Network	IPv4
Hard Disk	Minimum: 7GB free space

Software Requirements

The following software is required to be installed.

- .NET Framework 3.5 SP1
- .NET Framework 4.0 Full
- Windows Installer 4.5

2.1.3 Multi Users & Virtual Desktop System Requirements

Phone Manager can be run in multi user and virtual desktop environments such as Microsoft Terminal/Remote Desktop Services, Citrix XenApp or VMWare Virtual Desktop Infrastructure (VDI) with the following limitations:

- The 1st Party TAPI drivers is not supported

When deploying in these environments then the amount of memory and CPU usage that Phone Manager will use needs to be determined. As the resources required are dependent on configuration and the number of devices and Users in the system then this needs to be benchmarked first to ensure the number of concurrent Users can be supported on the hardware available.

2.2 Licensing

Phone Manager is available in several different license levels. When you connect to the Application Server a license will be assigned to you based on the *Client Profile* assigned to your User account in the XCS website.

- **Standard Features (Section 3)**: Legacy support only. Provides call control features, call history & status visibility of contacts.
- **Outlook Features (Section 4)**: Provides call control features, call history & status visibility of contacts. Adds the additional functionality of screen popping and populating call history journal inside Microsoft Outlook,
- **Professional Features (Section 5)**: Provides call control features, call history & status visibility of contacts. Adds the additional functionality of integrating with many other CRM applications. Adds TAPI & .NET API access.
- **Team Leader Features (Section 6):** Provides call control features, call history & status visibility of contacts. Adds the additional functionality of integrating with many other CRM applications. Adds TAPI & .NET API access. Includes the ability to silent monitor other users and control their status.

2.3 Configuration

2.3.1   Connection Details

Phone Manager requires a basic level of configuration to get it connected to the Application Server and controlling your endpoint. The following information is required when Phone Manager starts up:

Host address	This is the IP address or hostname of the server running the Application Server software. Phone Manager will try and find this automatically on start-up. If it does not find an Application Server or it finds more than one then some user interaction is required to confirm the connection details.
User Credentials	Phone Manager needs to connect to Application Server using a user account. By default, it will use the user account you are logged into your machine with to authenticate with the Application Server. If you wish to override this you can do so in the **Connection (Section 7.1)** settings section.
Endpoint	Phone Manager requires the details of the endpoint you are using when it starts so that it can show the correct call information. There are several of ways of providing Phone Manager with this information. Please read through the **Connection (Section 7.1)** settings section for more details.

Server Connection

The first time Phone Manager starts it will broadcast to find an Application Server instance running. If it doesn't find one or finds more than one, the window below will be shown.

Either select the correct server from the **Available hosts** list or enter the IP address or hostname of the server you wish to connect to into the **Host address** area.

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When Phone Manager starts it will use the Windows account details of the current logged in user. If this is not appropriate then check the **Override login details** and enter the **Username** and **Password** to use instead.

If the User account is linked to an Microsoft Active Directory User account then enter the username in the DOMAIN\User format, otherwise use the username and password provided by your administrator.

3   Standard Features

The following section covers the standard features that are available in all versions of Phone Manager.

Call Control (Section 3.1)	How to make and transfer calls. How to handle multiple calls and tell the difference between different types of call.
Endpoint Control (Section 3.2)	Controlling the state of your endpoint. Forward states, Do Not Disturb and ACD agent control. Volume Control and Voicemail access.
Contacts (Section 3.3)	View the status of other users within the organisation. Searching for internal and external contacts and using the contacts view to manage favourites and speed up communications.
Call History (Section 3.4)	Track all calls you make on the system and optionally play them back (requires Call Recording license).
Chat (Section 3.5)	Communicate with other users inside the organisation using chat/instant messaging.

3.1 Call Control

3.1.1 Overview

Making and receiving calls is obviously the primary purpose of a telephone. Phone Manager makes this process as simple as possible, providing you with context sensitive action buttons and giving you all the information you need about the calls you are on.

Making Calls	How to dial internal and external numbers.
Highlight & Dial	Dialling from within other applications.
Toaster	Seeing details about the call you are on and performing common tasks such as putting calls on hold, retrieving calls and clearing calls.
Transferring	Performing supervised/announced or direct transfers.
Multiple Calls	How to handle multiple calls at your endpoint.
Dial Pad	Dialling out with the dial pad or dialling DTMF digits over a call to navigate through an attendant or IVR.

Making Calls

Making a call to a number is a simple process that can be achieved a number of different ways.

Dialling a number you know

If you know the number you wish to dial, whether it is another endpoint internally or an external number then simply enter the number into the dial text box and hit the enter key or press the 'Dial' button to make your endpoint dial the number.

If you are dialling an external number there is no need to worry about adding in any additional digits to get an outside line or worrying about area codes as this will be set as per the configuration of system.

Dialling from the contacts screen

If you want to dial another user with your organisation or a contact that is stored in a global or personal directory you simply need to click the dial icon next to their status icon on the contacts screen or double click the status icon itself. If the contact to dial is not currently shown start entering their name into the search window to bring up a list of matching contacts.

📋 If you dial a contact while you are already on a call with someone else, Phone manager will automatically set up a consultation/enquiry call for you.

Highlight & Dial

Dialling from another application (Highlight & Dial)

Often you will have the need to dial a number from another application. Commonly this will be a web page that you want to dial the contact details from or an email someone has sent you.

To do this you can use the Highlight & Dial features of Phone Manager. Simply highlight the number you wish to dial and then click on the Highlight & Dial button or use the Highlight & Dial hot key (See the **Hot Keys (Section 4.1)** section for details). You will find the button docked to the right-hand side of your screen.

You can move the Highlight & Dial button up or down the screen to suite your requirements.

Generally as long as the number can be copied to and pasted from the Windows clipboard then this should work. This can be tested by highlighting the telephone number and pressing Ctrl+C and then opening Notepad and pressing Ctrl+V. If the number appears then the test was successful.

⚠️ Some 3rd party applications can perform their own clipboard control causing highlight and dial to not function correctly. Testing with a Phone Manager client is recommended to ensure full compatibility.

Toaster

The toaster window will appear whenever a call is in progress at your endpoint. It is designed to give you all the details you need about the call that is in progress and provide you with context sensitive buttons to perform actions on those calls such as hold or retrieving a call.

Context Sensitive Buttons

The following buttons will appear at different times on the toaster depending on the status of the call.

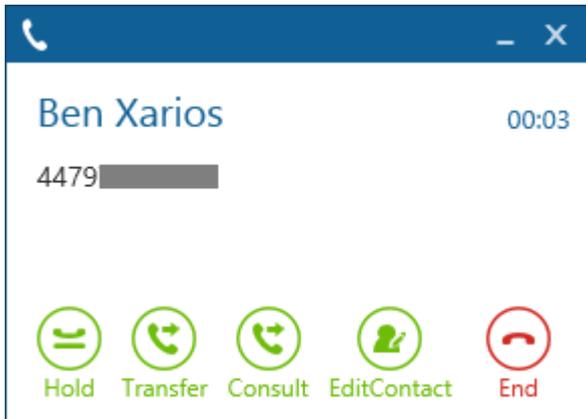|	
End	Use this button to hang up on a call. If you have the handset of the telephone in your hand you will be disconnected from the remote party but will be left with a connection to the telephone system.
Answer	Use this button to answer an incoming call.
Hold Retrieve	These hold button will appear once a call is in progress. If you hold a call by pressing the button on the toaster or on the telephone itself the hold button will be replaced with a retrieve button to allow you to pick the call back up.
Divert	This option is displayed on incoming ringing calls. Use the divert to send an unwanted call to another destination.
Send to voicemail	This option is displayed on incoming ringing calls. Use the send to voicemail option to send an unwanted call to your voicemail mailbox.
Transfer Consult	There are 2 ways of transferring a call to another location. Using the transfer option will move the call to another location immediately. The consultation option will allow you to speak to someone at the other location first before putting the call through.
Complete Cancel	These options are available if you have set up a consultation call. To complete the transfer hand up the handset of the telephone or press the complete button. To go back to the original call press the cancel button.
Add Contact EditContact	These options allow you to add or edit contact in the local or global directories.

Transferring

Transferring a call can be made via several different ways depending on if you want to transfer an answered call via a direct or announced transfer, or if the call is ringing then you can divert the call.

Transfers

When connected to a call the toaster action buttons change to reflect what you can do with this call.
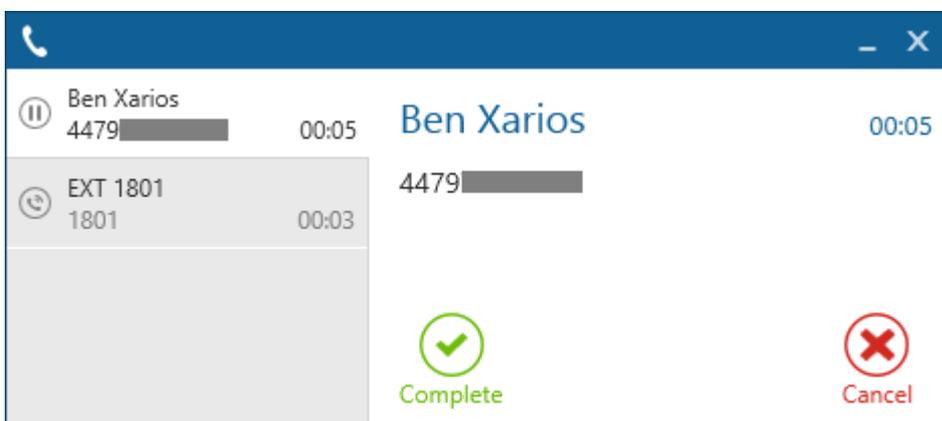

Direct Transfer

To perform a direct transfer where the call is sent to the transfer destination before the consultation call has been made click on the *Transfer* button and this will give focus to the main window with the cursor in the *Search or Dial* box. Search for the contact to transfer the call to and click on the dial button next to their icon (or highlight it and press *Enter)* or type in the number in the *Search or Dial* box and click on *Dial*. The call will then be sent straight to this contact and the call will clear from your endpoint.

Announced Transfer

To perform an announced transfer a consultation call needs to be set up before transferring the call. Whist on a call click on the *Consult* button and this will give focus to the main window with the cursor in the *Search or Dial* box, or go direct to the main window and find the contact, or use the hot key for *Directory Search*. Use any of these methods to find the contact to transfer the call to in the main contact window.

Once the contact has been found dial them and this will set up the consultation call. For example this shows a consultation call made to endpoint 1801.
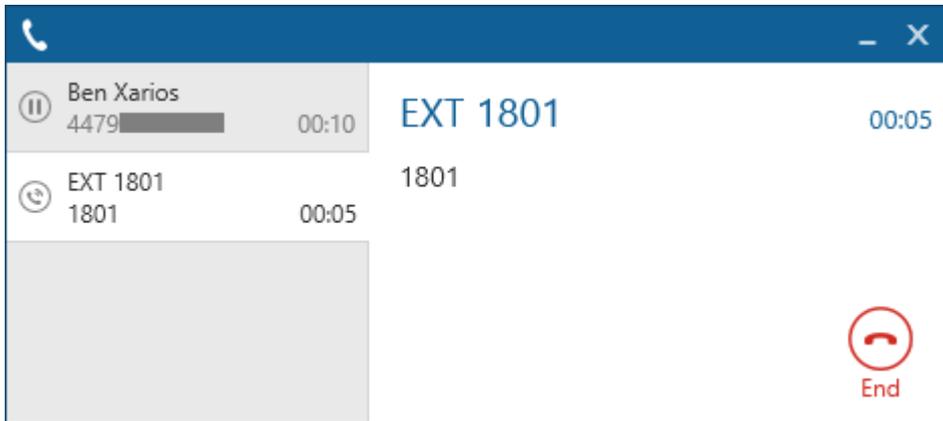

As there are multiple calls at the endpoint now the summary panel appears to the left of the toaster. This shows all the calls at the current endpoint and clicking on each call will update the details on the right hand side with the relevant information for the call selected.

The consultation call has not been answered yet but the transfer can be completed at any time by clicking on the *Complete* button.
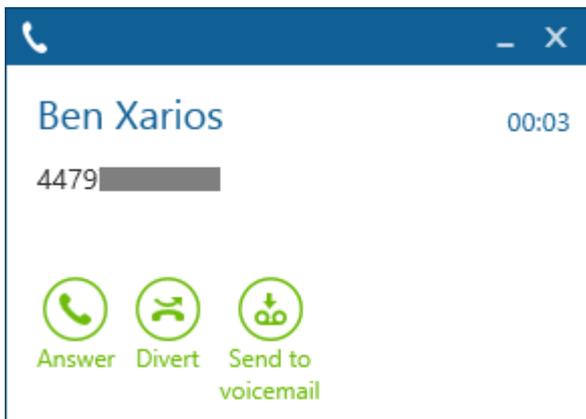
To cancel the consultation call and not perform the transfer to this contact either click on the *Cancel* button (shown above) for the original call, this will then clear the consultation call and connect the original call back.

Alternatively swap over to the enquiry call and click on the *End* button shown below. This will cause the original call to be left on hold and would need to be manually retrieved.

Divert

When a call is ringing the toaster action buttons change to reflect what you can do with this call.

To divert a call click on the *Divert* button and this will give focus to the main window with the cursor in the *Search or Dial* box. Search for the contact to divert the call to and click on the dial button next to their icon (or highlight it and press *Enter)* or type in the number in the *Search or Dial* box and click on *Dial*. The call will then be sent straight to this contact and the call will clear from your endpoint.

The toaster also provides a *Send to voicemail* button that enables a single click divert of a call to voicemail.

Multiple Calls

The toaster popup will show multiple calls at an endpoint by expanded to the left with a summary pane that lists all of the calls. Clicking on the entry for a specific call will update the details on the right hand side with the relevant information for the call selected.

For a single call the toaster will be shown without the summary pane.

If a second call comes in the then toaster will expand with the summary pane. This example shows the first call on hold and the second call is ringing.

If a third call comes in then this gets added. This example the first call is connected and the second and third calls are ringing.

Next to each call in the summary pane the icon to the left reflects the state of the call.

▶	Call connected
⟳	Call ringing
⏸	Call on hold

Dial Pad

	The dial pad can be used for dialling numbers or for navigating through attendants or interactive voice response systems. The dial pad can be loaded by clicking the dial pad icon from the main window.

The dial pad window will then load as shown.
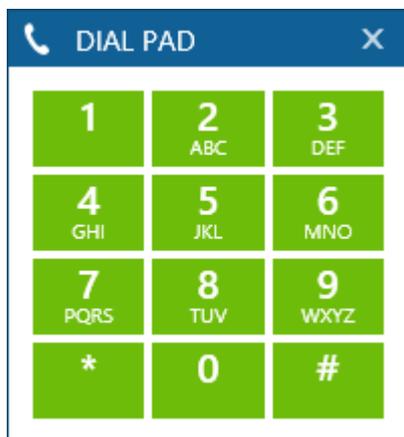
Clicking on any of the buttons will send the DTMF digit to the phone whilst on a call.

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If you know the number you wish to dial, whether it is another endpoint internally or an external number then simply enter the number into the dial text box and hit the enter key or press the 'Dial' button to make your endpoint dial the number.

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Main number:	(+44) 845 373 6880
Fax:	(+44) 845 373 6881
Email:	sales@xarios.com

You can move the Highlight & Dial button up or down the screen to suite your requirements.

Generally as long as the number can be copied to and pasted from the Windows clipboard then this should work. This can be tested by highlighting the telephone number and pressing Ctrl+C and then opening Notepad and pressing Ctrl+V. If the number appears then the test was successful.

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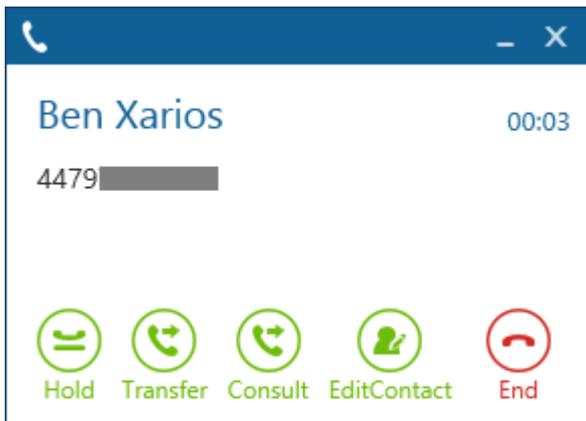| Button	Description
End	Use this button to hang up on a call. 📑 If you have the handset of the telephone in your hand you will be disconnected from the remote party but will be left with a connection to the telephone system.
Answer	Use this button to answer an incoming call.
Hold Retrieve	These hold button will appear once a call is in progress. If you hold a call by pressing the button on the toaster or on the telephone itself the hold button will be replaced with a retrieve button to allow you to pick the call back up.
Divert	This option is displayed on incoming ringing calls. Use the divert to send an unwanted call to another destination.
Send to voicemail	This option is displayed on incoming ringing calls. Use the send to voicemail option to send an unwanted call to your voicemail mailbox.
Transfer Consult	There are 2 ways of transferring a call to another location. Using the transfer option will move the call to another location immediately. The consultation option will allow you to speak to someone at the other location first before putting the call through.
Complete Cancel	These options are available if you have set up a consultation call. To complete the transfer hand up the handset of the telephone or press the complete button. To go back to the original call press the cancel button.

Add Contact **EditContact**

These options allow you to add or edit contact in the local or global directories.

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To perform a direct transfer where the call is sent to the transfer destination before the consultation call has been made click on the *Transfer* button and this will give focus to the main window with the cursor in the *Search or Dial* box. Search for the contact to transfer the call to and click on the dial button next to their icon (or highlight it and press *Enter)* or type in the number in the *Search or Dial* box and click on *Dial*. The call will then be sent straight to this contact and the call will clear from your endpoint.

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Once the contact has been found dial them and this will set up the consultation call. For example this shows a consultation call made to endpoint 1801.

As there are multiple calls at the endpoint now the summary panel appears to the left of the toaster. This shows all the calls at the current endpoint and clicking on each call will update the details on the right hand side with the relevant

information for the call selected.

The consultation call has not been answered yet but the transfer can be completed at any time by clicking on the *Complete* button.

To cancel the consultation call and not perform the transfer to this contact either click on the *Cancel* button (shown above) for the original call, this will then clear the consultation call and connect the original call back.

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The toaster also provides a *Send to voicemail* button that enables a single click divert of a call to voicemail.

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The toaster popup will show multiple calls at an endpoint by expanded to the left with a summary pane that lists all of the calls. Clicking on the entry for a specific call will update the details on the right hand side with the relevant information for the call selected.

For a single call the toaster will be shown without the summary pane.

If a second call comes in the then toaster will expand with the summary pane. This example shows the first call on hold and the second call is ringing.

If a third call comes in then this gets added. This example the first call is connected and the second and third calls are ringing.

Next to each call in the summary pane the icon to the left reflects the state of the call.

 Call

	connected
	Call ringing
	Call on hold

3.1.6 Dial Pad

	The dial pad can be used for dialling numbers or for navigating through attendants or interactive voice response systems. The dial pad can be loaded by clicking the dial pad icon from the main window.

The dial pad window will then load as shown.
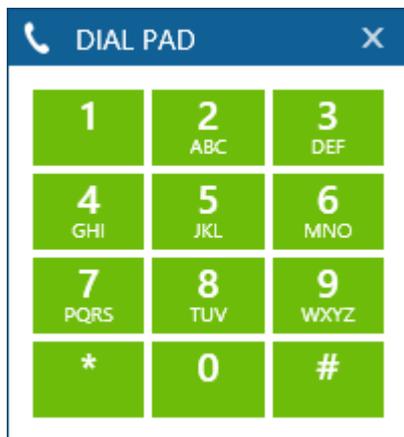
Clicking on any of the buttons will send the DTMF digit to the phone whilst on a call.

3.2 Endpoint Control

3.2.1 Overview

Phone Manager provides complete control over the status of your endpoint. This is all done through the main window using the various built in features.

Do Not Disturb	Single click access to any of the 20 do not disturb states programmed on the telephone system to ensure you aren't interrupted when busy.
ACD Agent Control	Login to all or a selected subset of the hunt groups your agent ID is a member of.
Local Forwarding	Control of the local forward state of your endpoint. For example, divert calls to voicemail or to your mobile when busy.
Voicemail Access	Visual indication of when you have voicemails and single access to dial into the voicemail system to retrieve them.
Volume Control	Increase or decrease the volume when ringing or during a call or mute the audio all together.

Do Not Disturb

When away from your desk or busy in a meeting you can set the do not disturb status on your phone to tell other users on the system.

The phone system provides 20 predefined do not disturb message for you to choose from. Simple press the do not disturb button and select 1 of the 20 messages.

Once you have selected a message you will then be presented with a text box asking you to enter the "DND Text". You can optionally enter up to 16 characters of text here to supplement the do not disturb message selected.

For example: IN MEETING UNTIL – 12.30 PM

Any user now ringing your endpoint or viewing your status on a Phone Manager client will see this message.

If you are in a do not disturb state, the do not disturb button will show in blue ⊘, click on the icon to remove the do not disturb status.

ACD Agent Control

ACD Agent IDs can be used on the telephone system to log in and out of various different hunt groups. Each hunt group would generally indicate a different type of call to be answered.

If you have an Agent ID and have been given the permission to do so you can log in and out of hunt groups using the agent icon 🧑 on the main window.

If you are logged out and press the agent icon you will be presented with a list of hunt groups that you have been assigned to. To log into all groups select the 'Login Agent (xxxx)' option from the top of the menu or select the specific hunt group you wish to log in to.

While logged in, a green tick will show against all hunt groups that you are logged into. The menu can then be used to login or out of any of the other groups at any time.

Local Forwarding

Your endpoint can have a local forward state to move calls to another destination when you don't answer them or busy doing something else. The different forward states available to choose from are:

No Answer	Forward calls when you don't answer them. The default no answer time on the PBX is 15 seconds.
Busy	Forward calls only when your handset is busy.
No Answer & Busy	This option is a combination of the first two options.
All Calls	Forward all calls that alert you endpoint.

To change the forward state on your endpoint, click the forward state icon 📲 on the main window and select 1 of the 4 options available.

A text input box will then appear to prompt you where you wish to forward your calls to. In this box you can enter an internal number like the endpoint of a User or an external number such as a mobile phone number.

If the forward state is already enabled, the forward icon will show in blue 📲, click on the icon to remove the forward status form your endpoint.

Voicemail Access

Voicemail notifications are displayed on the main window with the 📞 icon, when any new messages are left then the notification icon will show the number of messages in a red circle.
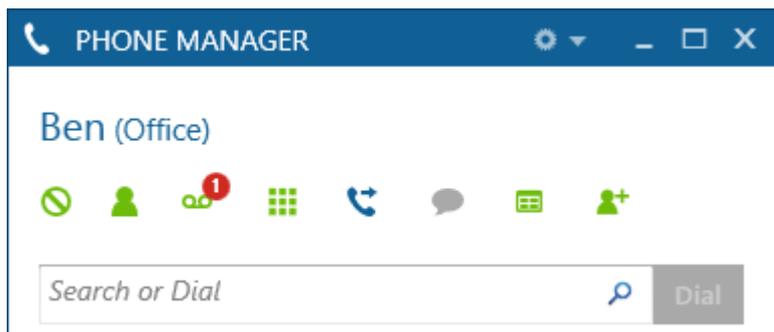
As a single endpoint can be the voicemail notification station for more than one mailbox clicking on the icon will display a list of all the mailboxes and the number of voicemails in each. Clicking on the relevant entry will dial straight into the message retrieval for that mailbox.

Volume Control

The volume functions of Phone Manager behave differently depending on whether it is controlling a MiNET endpoint or a SIP softphone.

Endpoint Volume

The volume of you endpoint can be controlled using the mute 🔇, volume increase 🔊 and volume decrease 🔉 icons at the bottom right of the main window.

Depending on the state of your endpoint the icons will do different things:

Idle or Ringing State	🔇 Mute will be disabled.
	🔉 Volume decrease will decrease the ringing volume and save it.
	🔊 Volume increase will increase the ringing volume and save it.
Call in progress	🔇 Mute will be enabled.
	🔉 Volume decrease will decrease the handset volume and save it.
	🔊 Volume increase will increase the handset volume and save it.

When the mute icon is pressed it will turn blue 🔇 to indicate that audio is now muted on the call. To turn mute off simply click on the icon again.

Softphone Volume

The volume controls are enhanced to include a slide control when connected as a softphone. This offers a greater level of control than when Phone Manager is controlling an endpoint.

> Volume control for a softphone is only available when using the built in softphone.

> When muting a call on the softphone both parties audio are muted.

3.2.1 Do Not Disturb

When away from your desk or busy in a meeting you can set the do not disturb status on your phone to tell other users on the system.

The phone system provides 20 predefined do not disturb message for you to choose from. Simple press the do not disturb button and select 1 of the 20 messages.

Once you have selected a message you will then be presented with a text box asking you to enter the "DND Text". You can optionally enter up to 16 characters of text here to supplement the do not disturb message selected.

For example: IN MEETING UNTIL – 12.30 PM

Any user now ringing your endpoint or viewing your status on a Phone Manager client will see this message.

If you are in a do not disturb state, the do not disturb button will show in blue , click on the icon to remove the do not disturb status.

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ACD Agent IDs can be used on the telephone system to log in and out of various different hunt groups. Each hunt group would generally indicate a different type of call to be answered.

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If you are logged out and press the agent icon you will be presented with a list of hunt groups that you have been assigned to. To log into all groups select the 'Login Agent (xxxx)' option from the top of the menu or select the specific hunt group you wish to log in to.

While logged in, a green tick will show against all hunt groups that you are logged into. The menu can then be used to login or out of any of the other groups at any time.

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Your endpoint can have a local forward state to move calls to another destination when you don't answer them or busy doing something else. The different forward states available to choose from are:

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To change the forward state on your endpoint, click the forward state icon 📲 on the main window and select 1 of the 4 options available.

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Voicemail notifications are displayed on the main window with the icon, when any new messages are left then the notification icon will show the number of messages in a red circle.
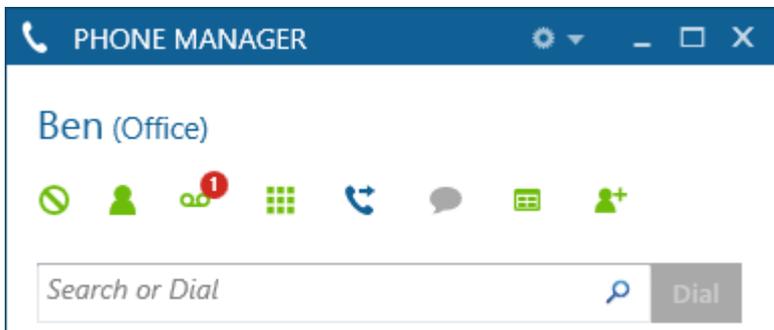
As a single endpoint can be the voicemail notification station for more than one mailbox clicking on the icon will display a list of all the mailboxes and the number of voicemails in each. Clicking on the relevant entry will dial straight into the message retrieval for that mailbox.

3.2.5 Volume Control

The volume functions of Phone Manager behave differently depending on whether it is controlling a MiNET endpoint or a SIP softphone.

Endpoint Volume

The volume of you endpoint can be controlled using the mute 🔇, volume increase 🔊 and volume decrease 🔉 icons at the bottom right of the main window.

Depending on the state of your endpoint the icons will do different things:

Idle or Ringing State	🔇 Mute will be disabled.
	🔉 Volume decrease will decrease the ringing volume and save it.
	🔊 Volume increase will increase the ringing volume and save it.
Call in progress	🔇 Mute will be enabled.
	🔉 Volume decrease will decrease the handset volume and save it.
	🔊 Volume increase will increase the handset volume and save it.

When the mute icon is pressed it will turn blue 🔇 to indicate that audio is now muted on the call. To turn mute off simply click on the icon again.

Softphone Volume

The volume controls are enhanced to include a slide control when connected as a softphone. This offers a greater level of control than when Phone Manager is controlling an endpoint.

🔇 🔉 ——|—— 🔊

📝 Volume control for a softphone is only available when using the built in softphone.

📝 When muting a call on the softphone both parties audio are muted.

3.3 Contacts

3.3.1   Overview

The contacts tab within Phone Manager provides a DSS style view to provide real-time information about other device including Users, endpoint, agents and hunt groups. This gives a single quick view of the status of these devices and call control features such as single click to dial.
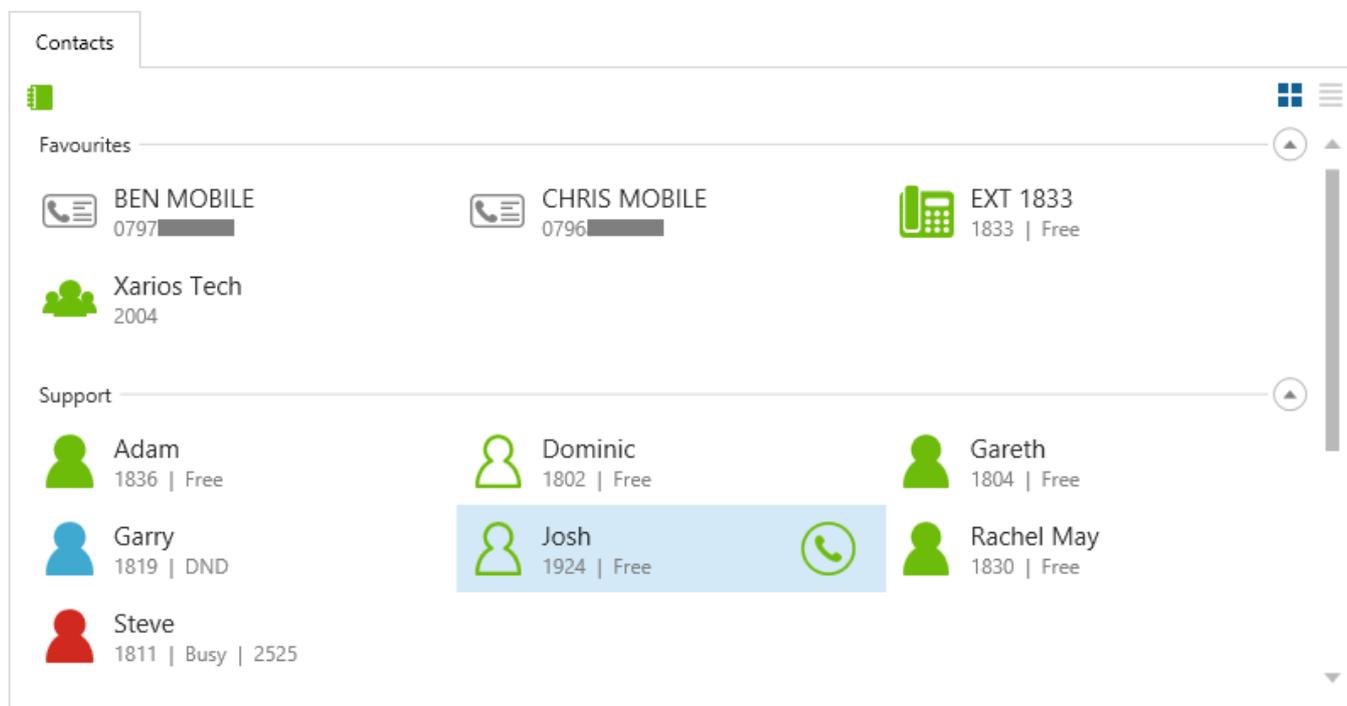
Groups

Each device that is shown is part of a group. Clicking the directory button on the top left hand corner displays the available directories and gives the User the ability to be able show or hide each one.
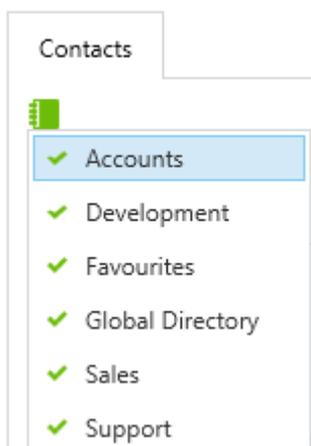
If there is a green tick next to the entry then this will be shown. Unchecking this will cause the directory to be hidden.

Each Phone Manager User has their own Favourites group which they can add and remove devices to and from and is personal to each User. They can also add items from the **Directories (Section 3.3.1)** to this, for example Speed Dials, Personal Contacts, Central Contacts or Microsoft Outlook Contacts.

The other groups are created automatically from the Business Unit structure configured on the XCS server.

Device Control

For each device there are actions that can performed on them. Right clicking on a device will display a menu of the available actions and the options available are dependent on the type of device, the state of the device and the license level of the client.
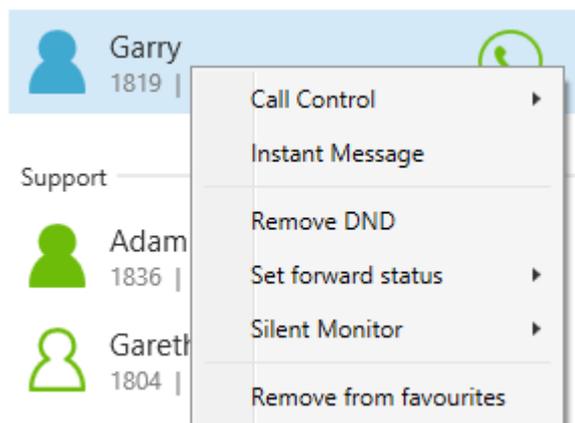
Device View

The contacts tab supports displaying the device information in either a large icon or a details view. The current view can be changed using the view selection buttons in the top right corner.
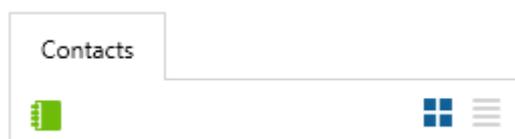
The current view is highlighted in blue, with the large icon view using the left button and the details view on the right.

Device Icons

Each type of device has a different icon and changes colour depending on the status of the device.

	Central server or personal contact, i.e. Global Directory.
	Microsoft Outlook contact.
	User who is not connected with Phone Manager and has no endpoint/agent assigned to their User account.
	User in the free state who does not have Phone Manager connected (this shows the status of the endpoint/agent assigned to their User account).
	User in the busy state who does not have Phone Manager connected (this shows the status of the endpoint/agent assigned to their User account).
	User in the DND state who does not have Phone Manager connected (this shows the status of the endpoint/agent assigned to their User account).
	User in the free state who has Phone Manager connected.

	User in the busy state who has Phone Manager connected.
	User in the DND state who has Phone Manager connected.
	Endpoint in the free state.
	Endpoint in the busy state.
	Endpoint in the DND state.
	Agent is logged out.
	Agent in the free state.
	Agent in the busy state.
	Agent in the DND state.
	Agent in the wrap-up state.
	Hunt group.

3.3.1 Directories

3.3.1.1   Overview

Contact directory information can be imported into Phone Manager to give more information about the contacts who are calling in and to provide directory search features to help find contacts to call.

There are several different sources that can be used to import contact information from. The include:

- Central contact databases, for example Microsoft Dynamics CRM, Salesforce.com etc.
- Personal contacts.
- Microsoft Outlook personal contacts.
- PBX Speed Dials.

Using the contact information Phone Manager can search the directory to find any matching contacts to dial. When an inbound call is received or an outbound call made the relevant directories are searched automatically and the matching contact information is made available and displayed on the client toaster.

Central contact databases

For central based contacts the information is stored and accessed from single location. This can include a text file in CSV format or a direct database connection using ODBC or OLE DB. The contacts from these locations can be imported into the system manually or on a pre configured schedule.

> For more information see the Contact Directories section in the XCS server help.

Microsoft Outlook personal contacts

If a User has the *Download Outlook contacts* option enabled on their *Client Profile*, then personal contacts from within Microsoft Outlook can be searched directly from Phone Manager.

> The User needs to be connected with a Microsoft Outlook license to enable this feature.

> This requires Microsoft Outlook to be running within the same session as the Phone Manager client and only local contact folders are supported. For example running Phone Manager using a runas option with a different user account.

The contacts can be searched using the Home, Telephone or Mobile/Cell numbers as well as the first, last and company name fields associated with the Outlook contact. The only user that can search and access these contacts is the local User, other Users cannot access these contacts.

PBX Speed Dials

The PBX contains its own directory in the form of system speed dials. These entries are configured from within Mitel Database Programming and the system will download them directly from the PBX when connected automatically. Each entry only has a name and number associated with them and each of these fields can be used to search.

Every user has access to search the system speed dials.

3.3.2 Searching

3.3.2.1 Overview

Searching for contacts is done from the main window in the *Search or Dial* section. Typing in a relevant search term, i.e. telephone number or name, will show any matching entries in the contacts tab.
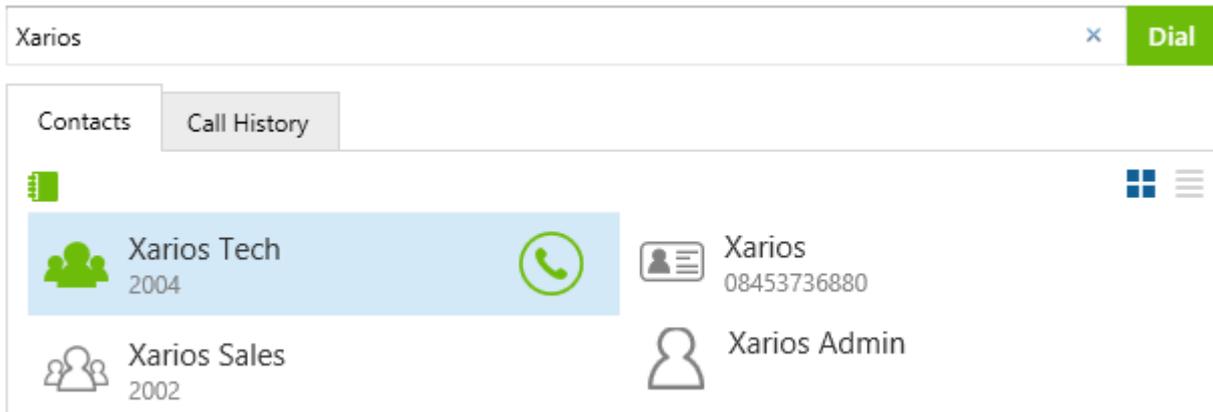
The search will try and find a match in any of the devices on the PBX or within any of the directories that have been assigned to the User.

To cancel a search click onto the X next to the *Dial* button and this will restore the contacts tab back to the DSS view.

3.4 Call History

3.4.1   Overview

The call history provides a list of all of the recent calls that have been made for the User. This includes internal calls, external inbound and outbound calls, and missed calls that were not answered. If the User has multiple devices (endpoints/agents) associated with their profile then the history will show calls for all these whilst the User was associated with them.

The history is refreshed after a call is cleared from the Users current endpoint.

> The call history does not require Phone Manager to be running to save the call information - the XCS server logs the call history.

For each call the history tab shows the following information:

- **Name** : This is either the name of the contact that has been matched to the call or if none is available then the outside number is shown.
- **Time**: The time that the call was made or received.
- **Talk Time**: The length of time that the call was connected.
- **Ring Time**: The length of time that the call was ringing.
- **CLI**: The caller id or outside number. This is only populated for external calls.
- **DDI**: The direct dial that a call came in on. This is only populated for inbound external calls.
- **Hunt Group**: The hunt that the call came in on. This is only populated for inbound external calls.
- **Account Code**: This shows any account codes that were set against the call whilst in progress.

> As the main window is resized the number of columns shown will change as there is more space to display these.

To the left hand side of each entry the icon shows what type of call this is.

↗	Outbound call
↘	Inbound call
↘	Inbound missed call

Next to each entry, on the right hand side, there are icons to dial the contact back and if the system has call recording integration enabled and the User has playback rights then they can listen to the call recording.

> The call history will show a maximum of 50 calls for each User.

3.4.1 Call Recording

3.4.1.1   Overview

Phone Manager can integrate into a Xarios Call Recorder to provide direct access to playback the recordings for the User. Call recording can also be paused/resumed to enable specific parts of a call to not be recorded, for example when credit card details are being provided.

> Xarios Call Recorder Compliance licenses are required to pause/resume call recordings.

Playback

Call recordings can be played back from the **Call History (Section 3.4)** tab within Phone Manager by clicking onto the icon next to the specific call.

This provides a direct link to the playback page for this call on the Xarios Call Recorder website. To access the recording the User must have a valid account on the Xarios Call Recorder that grants them access to the call they are trying to listen to.

Pause / Resume

Call recordings can be manually paused and resumed by configuring a **Toolbar (Section 5.2)** button. This can be on the main window integrated toolbar or on an external toolbar.
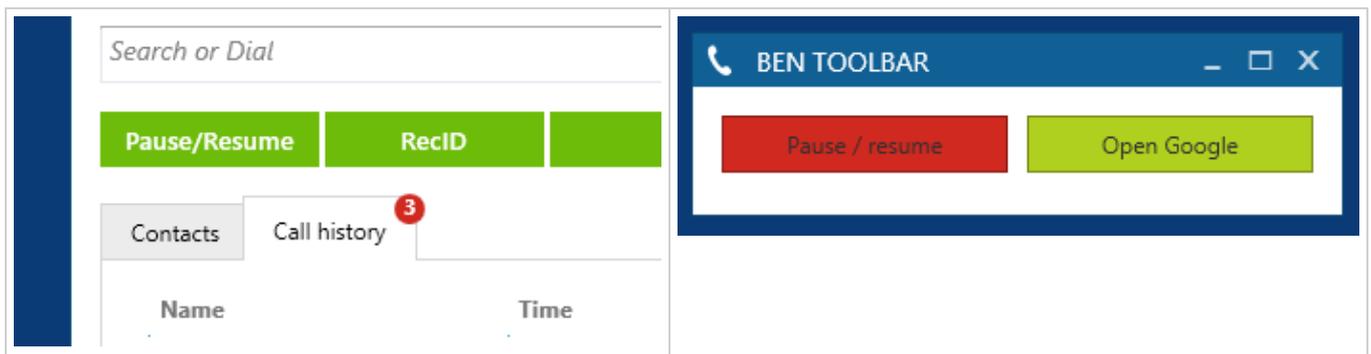
3.5 Chat

3.5.1   Overview

Chat is an instant messaging style feature that allows Users to exchange short messages with other Users. When a chat session is started a new conversation is created that groups the messages sent to this User together. If a User is offline when a chat message is sent they will be notified of new messages when they next come online.

Phone Manager will only show the messages received since it was last started. Closing the client and reopening will clear the chat history. Chat history is logged on the XCS server to provide access to past chat sessions for reporting.

> 📋 The maximum length per message is 2500 characters.
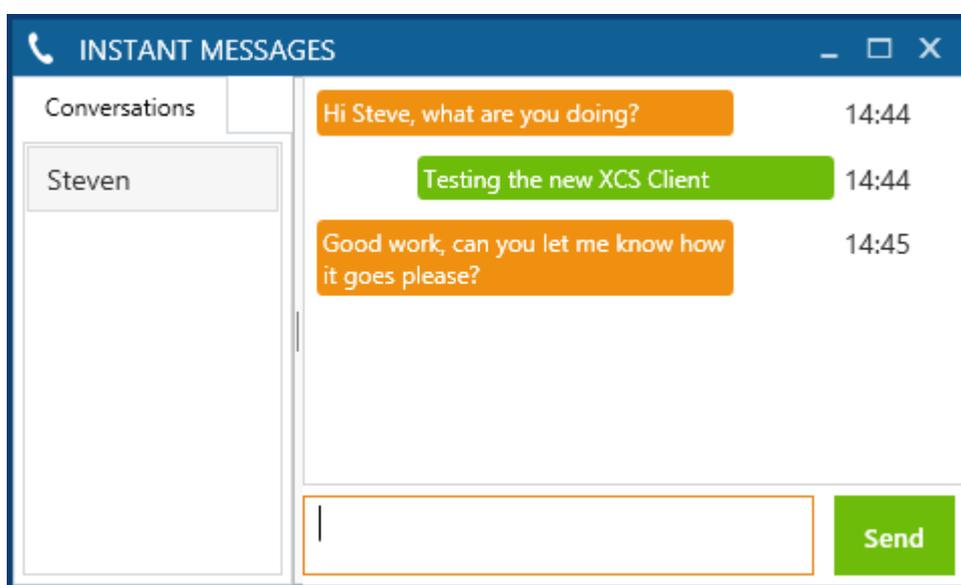
Message Notifications

When a new message is received then the icon on the start menu will flash orange.

The Chat icon on the main windows will also display a red circle with the number of new messages.
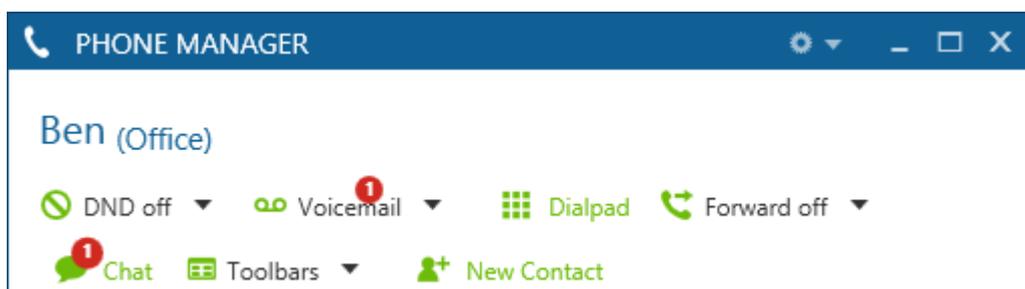
Clicking on the icon will display the new message. Messages sent from the User are shown in orange and messages received are shown in green. The time of the message is tagged to the right of the message.

Next to each conversation if there are new unread messages then the number of them will be shown against Users

conversation.
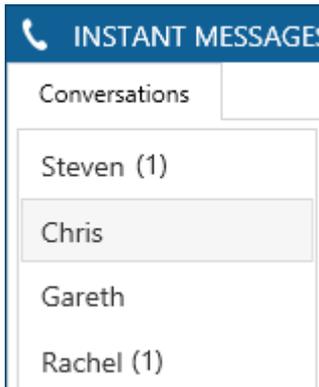
Multiple Chat Sessions

Multiple chat sessions are grouped by the User who the message is sent to or received from. Each User has the list of conversations shown on the left hand side and clicking on the name will change the right hand window to show the history.
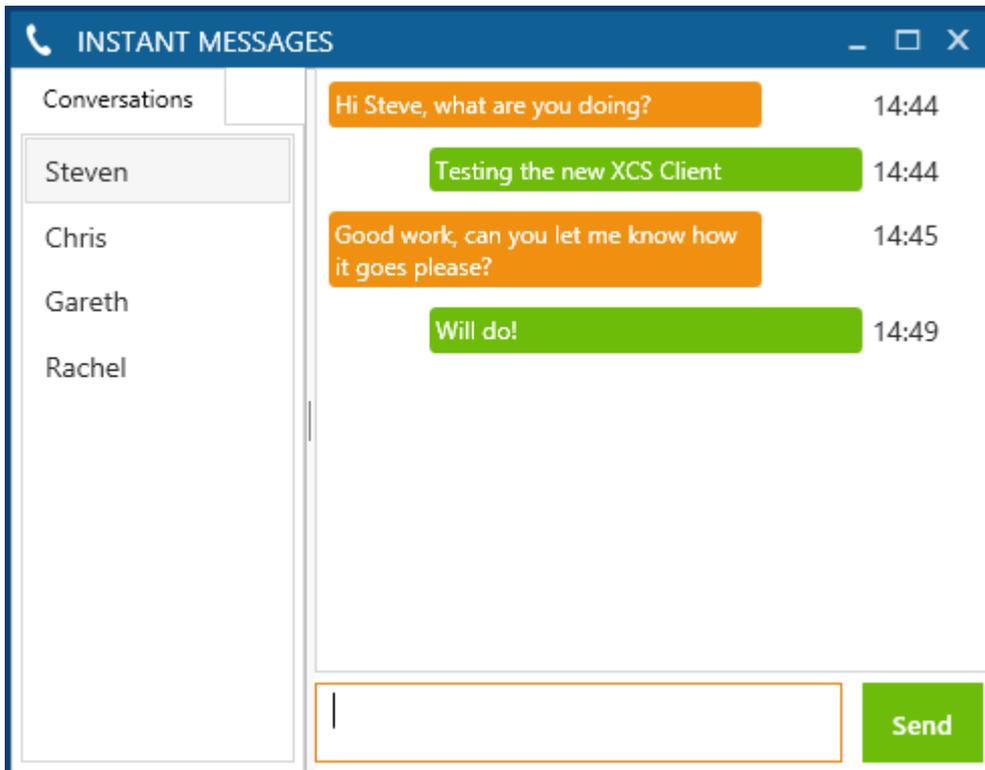
4   Outlook Features

The following section covers the features that are available in the Microsoft Outlook licensed version of Phone Manager. The specific Microsoft Outlook features that are provided are:

Directory Integration (Section 3.3.1)	Outlook contacts can be linked into the Phone Manager directory and displayed on the toaster.
Screen Popping	Outlook contacts can be screen popping.
Call History	Outlook contacts can have call history (journal entries) created.
Calendar / DND Synchronisation	Outlook calendar can be used to automatically synchronise the Users DND state with their calendar items.

This license also provides:

Hot Keys (Section 4.1)	Configure global hotkeys to automate common telephony tasks.
Call Banner Profiles (Section 4.2)	Toaster support for custom banner profiles.
Softphone (Section 7.2)	Support for connecting as a softphone. Requires a softphone license.
Integrated Toolbar (Section 4.3)	Only available when connected as a softphone. This provides 5 buttons that can be customised on the main window.

4.1 Hot Keys

4.1.1 Overview

Hot Keys enable Users to set a combination of keystrokes to access commonly used features within Phone Manager. The configuration of the hot keys is specific to each User. The following list of hot key actions are supported:
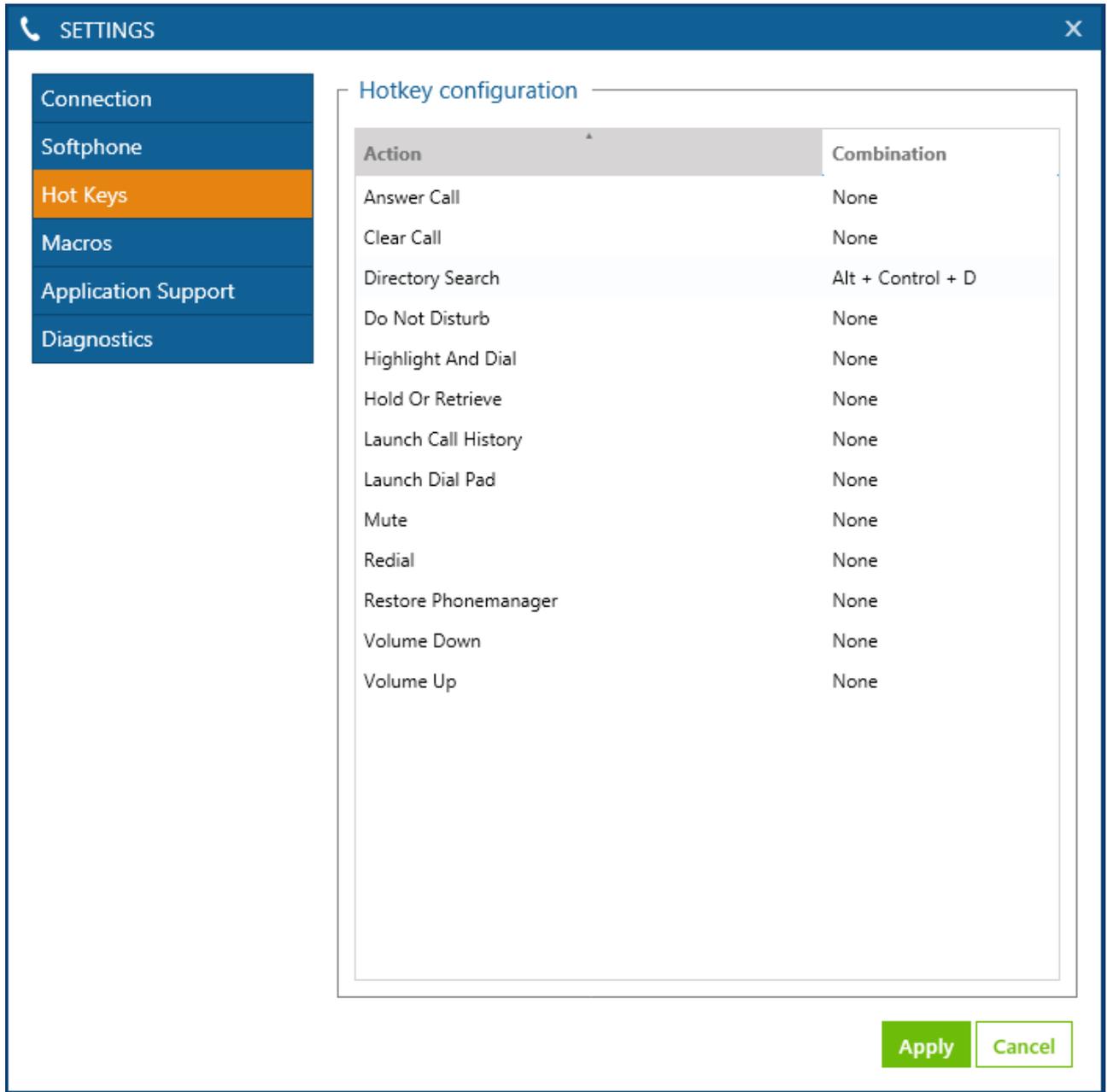
Action	Description
Answer call	Answers the call currently ringing, if there are any calls in progress then this is ignored.
Clear call	Clears the call that is connected to the endpoint.
Directory search	Brings the main window to the front and sets the focus and cursor to the *Search or Dial* field.
Do not disturb	Toggles the DND state at the endpoint. If no message is pre configured then it will prompt for the message to use.
Highlight and dial	Dials the number that is currently highlighted in other applications.
Hold or retrieve	If a call is on hold then retrieves the call otherwise puts it on hold.
Launch call history	Brings the main window to the front and sets the call history tab in focus.
Launch dial pad	Shows the dial pad window.
Mute	Mutes the audio for the current call. If this is a softphone then both sides of the call are muted otherwise only the audio from the Users endpoint is muted. See **Softphone Limitations (Section 7.2.8)**.
Redial	Redials the last number using the Mitel feature (default code 380). Not supported on softphone, see **Softphone Limitations (Section 7.2.8)**.
Restore Phone Manager	Brings the main window to the front.
Volume up	Increases the volume level. See the **Volume Control (Section 3.2.5)** section for details.
Volume down	Decrease the volume level. See the **Volume Control (Section 3.2.5)** section for details.

Configuration

To configure the hot keys:

1. Open the *Settings* window.
2. Select the *Hot Keys* tab.

3. Double click on the hot key entry to configure.

Directory Search	Alt + Control + D
Do Not Disturb	None
Hi	None
Ho	None
La	None
La	None
M	None
Re	None
Re	None
Vo	None
Vo	None

EDIT HOT KEY   ✕

Enabled	✓
Key	D ▾
Alt	✓
Ctrl	✓
Shift	☐
Win	☐

Apply   Cancel

4. Each hot key needs to be enabled, check the **Enabled** option to do this.
5. Select the **Key** to use for the hot key.
6. Check the **Alt**, **Ctrl**, **Shift** and/or **Win** checkbox's that will be used in combination to the **Key** selected.
7. Click on **Apply** to save the changes/

⚠ Always configure the hotkeys to use at least 3 combinations, for example Alt + Ctrl + D. Using simpler combinations may result in conflicts with other application that are running at the same time.

4.2 Call Banner Profiles

4.2.1 Overview

Banner profiles control how the Phone Manager toaster popup is displayed when calls are received at the client. The information that is displayed, the colour and text of the title bar can be changed depending on a specific set of conditions being met for the call.

For example, using a condition on the DDI number, support line calls could be shown with a green banner.

Support line calls shown with a green banner.	Sales line calls could be shown with a blue banner.
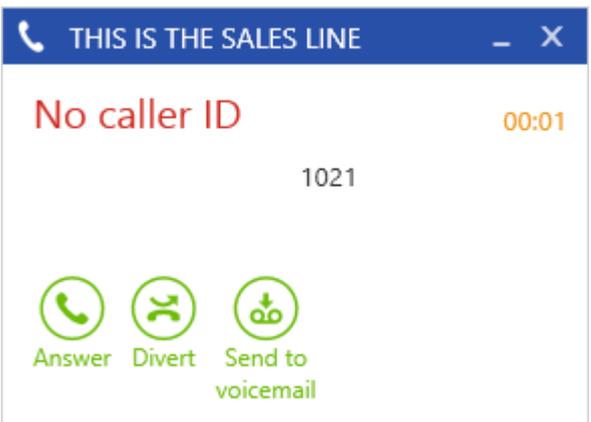
Several different profiles can be created and they can be given a priority so that if two banners have a similar condition then the one with the highest priority will be used.

> See the Call Banner Profile section on the XCS server for details on how to configure these.

4.3 Integrated Toolbar

4.3.1 Overview

The integrated toolbar provides five buttons on the main window shown underneath the *Search or Dial* field. Each button can be customised by the User to set the label shown and what action is performed when the button is clicked.

> 📝 This is only available when running with a Professional or higher license or when using the built in softphone.
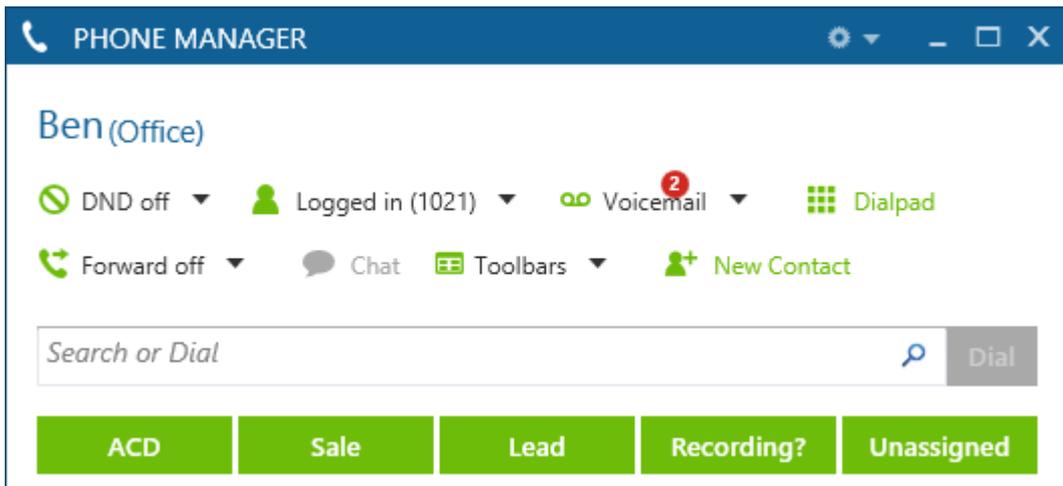
Customising Buttons

To edit the button:

1. Right click the button and select *Edit.*
2. Select the *Action* to perform from the Action drop down list. See the **Button Actions (Section 5.2.2)** section for details.
3. Enter the name that will be shown on the button in the *Name* field.
4. Configure any *Parameters* if required by the *Action* selected.

5   Professional Features

The following section covers the features that are available in the Professional licensed version of Phone Manager.

ACD Agent Control (Section 3.2.2)	Ability for the User to control their ACD status.
Integrated Toolbar (Section 4.3)	This provides 5 buttons that can be customised on the main window.
Toolbars (Section 5.2)	This give access to the full toolbars.
Application Support (Section 5.1)	Integration into 3rd party application using **API Access (Section 5.1.1)**, **Macros (Section 5.1.2)**, **TAPI (Section 5.1.4)**, **Command Line (on-line documentation)** or **Application Support Plugins (Section 5.1.3)**.

5.1 Application Support

Phone Manager can integrate into 3rd party applications in several ways depending on the requirements and features that are supported by the application. This can be using something simple like **Highlight & Dial (Section 3.1.2)** or more complex full call control and events using **API Access (Section 5.1.1)**.

The following is the list of integration options available.

Method	Description
Directories (Section 3.3.1)	Contact directory imports, to display imformation about the caller on the toaster.
Highlight & Dial (Section 3.1.2)	Dialling from other applications by selecting the number and then activating the dial by using a **Hot Keys (Section 4.1)** or double clicking on the highlight and dial icon.
Command Line (on-line documentation)	Command line arguments can be passed to the client executable to perform actions.
Macros (Section 5.1.2)	VBScript macros that can be activated on call events or manually by the User.
TAPI (Section 5.1.4)	1st Party TAPI driver for integration into 3rd party applications.
Application Support Plugins (Section 5.1.3)	Plugins provide integration to a range of well known CRM style applications.

> If the application or version is not currently supported then complete the integration request process and we can investigate the possibility of supporting this application.

5.1.1 API Access

5.1.1.1 Overview

The client provides API components that can be used to embed some of the functionality of the Phone Manager client into a 3rd party application. Unlike the other **Application Support (Section 5.1)** options the client does not have to be running to do this.

All of the call controls events and methods are available, so applications can react to call ringing events and receive the call details and then perform their own handling of what to do next, i.e. screen popping, dialling out etc.

> This does require development work to be performed by the application vendor or administrator.

> When using the API the Phone Manager client can be running at the same time and this will only consume a single license as long as the Phone Manager client and the application are running in the same user session.

> See the Phone Manager API reference for more information.

5.1.2 Macros

5.1.2.1   Overview

The client supports a scripting interface to allow VBScript macros to be developed. They can then be configured to trigger on a manual User action, i.e. a toolbar button action, or on pre-defined call events. The scripting interface provides access to the call information that can be used within the script and extra methods to control the endpoint and other features, i.e. call recording.

For example this VBScript example will display a message box when an incoming call is received and display the caller id:

```
MsgBox "Call from " & PhoneControl.CLI
```

See the Phone Manager Macro API reference for more information.

5.1.2.2   Configuration

The macro design and configuration is available for Users who have the *Allow macro editing* option enabled on their *Client Profile*. WIthout this option Users can only change the **Enable event-driven macros** option. This controls if the macros that have been assigned to the User will be triggered on the associated call events.

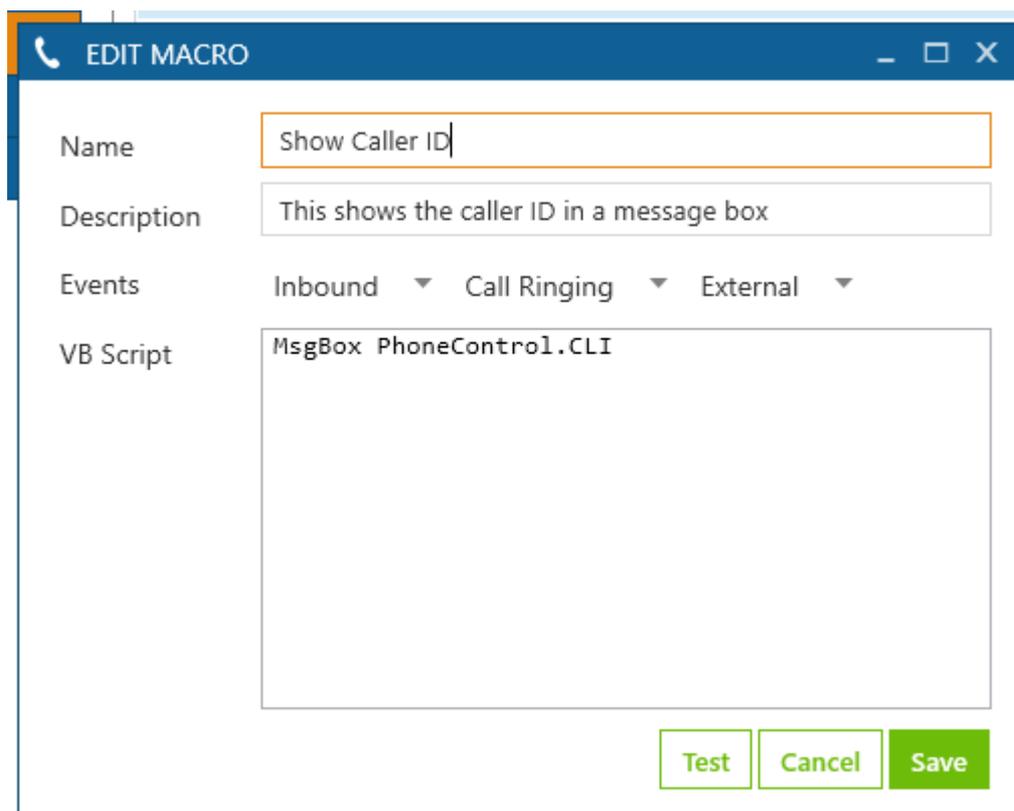('pm_settings_macros.png' in the on-line documentation)

Macros

When creating a new macro they are first designed and tested from within this section. When this is complete they can be published and this makes them available on the XCS server and can then be assigned to the relevant Users. When they are published a copy is made of the local version of the macro and this can then not be edited. Any updates would need to be made on the original local version and then re published. Users would then need to be reassigned to this new published version.

The list of macros shown in the *Macro Configuration* section only shows the local macros not published to the server for this User. To see the list of published macros see the *Macros* section on the XCS website.
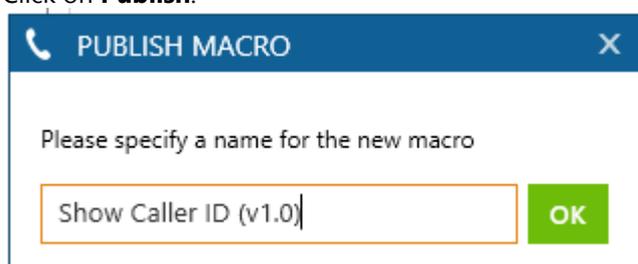
To create or edit a new macro:

1. Click on the *New* or *Edit* button.

2. Enter a **Name** that will be used on the XCS server to identify this macro.
3. Enter a **Description** that can be used to detail what this macro is for.
4. Select the call event to trigger the macro on.
   - Direction: inbound, outbound or both.
   - State: call ringing, call answered, call cleared, call cleared only when answered or user controlled (i.e. via a toolbar button).
   - Type: external, internal or both.
5. Enter the macro text in the **VB Script** section.
6. Use the **Test** button to validate the syntax. If there are any errors then a message box will be displayed indicating the error.
7. Click on **Save** to save this macro.

To publish a macro:

1. Select the macro from the list of macros available.
2. Click on **Publish**.

3. Enter a new name for the macro, it is recommend to include a version or revision number.
4. Click **Ok**
5. From the XCS server assign this to the relevant Users.

To delete a published macro:

1. From the XCS server open the Site -> Features -> Phone Manager -> Macros section

2. Select the macro and click on **Delete**.

5.1.3 Application Support Plugins

5.1.3.1 Overview

Phone Manager has plugins available that are able to directly integrate with a range of well known CRM style applications. The plugins generally provide deeper, more seamless integration than other methods as they leverage the APIs of the specific application.

For an up to date list of the supported application visit http://www.xarios.com.

Features

There are 4 features that the plugins can provide. Depending on the application that is being integrated with only some maybe available with varying levels of support and there may need to be integration work performed by the application vendor or administrator of the system. See the integration document for the specific plugin for details.

- **Dial out directly from the application**: For example having a dial button next to a telephone number field.
- **Screen popping**: Searching the application for contacts that have matching caller ids and displaying the record.
- **Call history**: Creating a call history phone call activity in the application with the call details.
- **Calendar and DND synchronisation**: Controlling the DND state of the endpoint based upon calendar entries in the application.

5.1.3.2 Configuration

To configure a plugin for one of the application support features:

1. From the Application Support Configuration section.

('pm_settings_appsupport_list.png' in the on-line documentation)
Plugins

2. Click on the **New** button.

('pm_settings_appsupport_edut.png' in the on-line documentation)
Plugin configuration

3. From the list of **Application**s select the application to integrate with.
4. This will then change configuration on the right hand side to show the specific configuration required for this plugin. See the relevant integration document for details.
5. Select the **Feature** to enable either:
   - Screen pop
   - Call history
   - Calendar / DND sync
6. Multiple features can be enabled for each plugin by repeating the process from step 1.
7. Select the event trigger that will cause the feature to be actioned (this is not applicable to Calendar / DND sync).
   - Direction: inbound, outbound or both.
   - State: call ringing, call answered, call cleared, call cleared only when answered or user controlled (i.e. via a toolbar button).
   - Type: external, internal or both.
8. Click on **Save**.

5.1.4 TAPI

5.1.4.1 Overview

The TAPI Service Provider (TSP) provides a 1st Party TAPI support for client applications, 3rd Party TAPI is not supported. Multi user environments such as Terminal Service, Remote Desktop or Citrix configurations are not supported in this release.

The TSP service supports the TAPI v2 and TAPI v3 standards.

The TSP only supports call control over the first call at a device single and limited events (new & end) for additional calls will be provided to the client application.

The TSP cannot be tested against every application that "supports" TAPI due to the different ways that it can be implemented. Additionally the features available within the client application are dependent on what the 3rd party application has implemented. Support that the TSP will work with any given application is not provided and would need to be verified to ensure proper integration.

The TSP supports the following basic telephony functions as defined by Microsoft.

http://msdn.microsoft.com/en-us/library/windows/desktop/ms725522%28v=vs.85%29.aspx#tspi.call_states_and_events_qref

5.2 Toolbars

5.2.1 Overview

Toolbar allows the application to be configured so that commonly performed actions can be performed at the touch of a button. Specific functions can be programmed under a button such as answering a call, tagging a call recording, or a macro can be executed for more advanced tasks. Toolbars are configured on the XCS server and assigned to Users.

When a toolbar is assigned they become available to the User to open in the *Toolbars* menu on the main window.
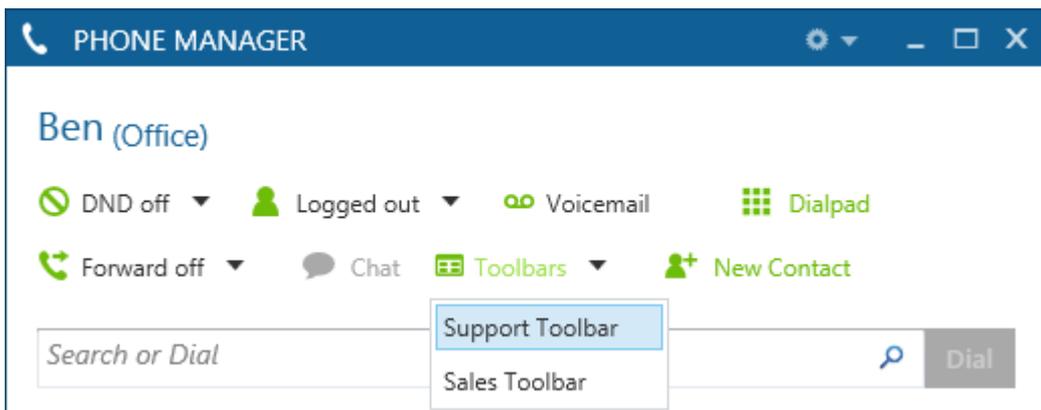
Multiple toolbars can be created with varying amounts of buttons that can have custom labels and be coloured to highlight or categorise specific types of buttons. To open a toolbar select the entry from the toolbar drop down.

5.2.1 Integrated Toolbar

5.2.1.1 Overview

The integrated toolbar provides five buttons on the main window shown underneath the *Search or Dial* field. Each button can be customised by the User to set the label shown and what action is performed when the button is clicked.

> 📄 This is only available when running with a Professional or higher license or when using the built in softphone.
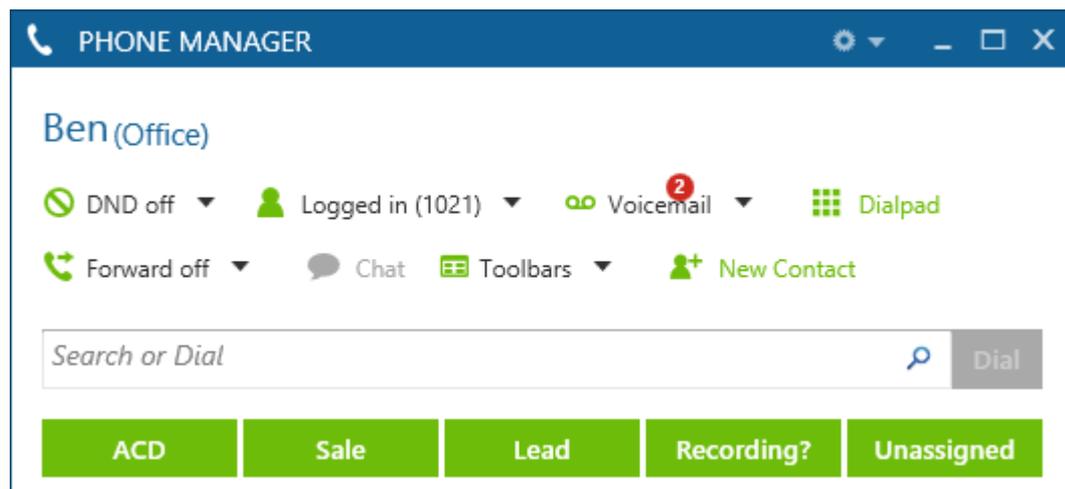
Customising Buttons

To edit the button:

1. Right click the button and select *Edit.*
2. Select the *Action* to perform from the Action drop down list. See the **Button Actions (Section 5.2.2)** section for details.
3. Enter the name that will be shown on the button in the *Name* field.
4. Configure any *Parameters* if required by the *Action* selected.

5.2.2 Button Actions

5.2.2.1 Overview

The buttons that can be used on a toolbar have different actions that can be performed when they are clicked. Depending on the action then additional parameters may need to be configured, or in some cases if they are not provided then the User will be prompted for these when they click the button.

Action	Parameters	Description
ACD end wrap	None	End the wrap state for this agent and place them into the free state.
ACD status	Optional: *Huntgroup*	Logs the agent in to the *Huntgroup*, if not provided then logs into all groups. If they are already logged in then logs out of the *Huntgroup*, if not provided then logs them out of all groups.
Answer call	None	Answers a ringing call at the endpoint.
Change caller ID	Optional: *Number*	This changes the outgoing caller ID that is presented when calls are made from this endpoint. The features needs to be enabled on the PBX and the number presented needs to be allowed by the line provider.
Clear call	None	Clears the call that is connected to the endpoint.
Dial digits	Optional: *Digits*	Sends the *Digits* to the endpoint. If not provided then prompts the User for the digits.
Do not disturb	Optional: *Number* Optional: *Text*	If the endpoint is in DND then DND is removed. If they are not in DND then the endpoint is placed into DND using the message *Number* and the message *Text*. If they are not provided then the User is prompted to enter them.
Enable event driven macros	None	Enables or disables event driven macros.
Feature code	Optional: *Code* Optional: *Parameter*	This represents any feature code that is available on the PBX. The list of feature codes available is downloaded automatically from the PBX along with the description. This will run the feature *Code* provided or prompt the User to enter the feature code number. Some feature codes can accept additional *Parameters* and this can be configured but the User cannot enter them if not provided.
Headset mode	None	Enables or disable headset mode on the endpoint.
Hold call	None	Holds the call that is connected to the endpoint.
Make call	Optional: *Number*	Makes a call from the endpoint to the *Number*. If the *Number* is not provided then the User is prompted to enter this.
Pause / resume	None	This pauses or resumes the call recording for the active call on the endpoint. (Requires call recording integration to be enabled).

call recording		
Play prompt	Optional: *CRA*	If the PBX has an IVR system connected then this will conference in the *CRA* device configured into the current call.
Record current call	Optional: *Mailbox*	This initiates a Record-A-Call for this call and stores the recording in the *Mailbox* provided. If no *Mailbox* is provided then the User is prompted to enter this.
Redial	None	Performs a redial at the endpoint using the redial feature code.
Retrieve call	None	Retrieves a held call at the endpoint.
Run executable	Required: *Path* Optional: *Arguments*	This enables any application installed on the same computer to be run. The *Path* needs to be set to the full path and file name of the file to run and if there are any *Arguments* to pass then this can be configured.
Run macro	Required: *MacroID*	Runs the published macro with the *MacroID*.
Screen-pop application	Required: *AppID*	Runs the application support screen pop for the given *AppID*.
Send to voice mail	None	Sends the call ringing at the endpoint to voicemail.
Set account code	Optional: *Code*	Sets an account *Code* against the current call at the endpoint. If not provided then the User is prompted to enter a code.
Set account code on monitor	Optional: *Code*	When a supervisor is silent monitoring a call this will set an account *Code* against the call that they are monitoring. If not provided then the User is prompted to enter a code.
Tag call	Optional: *Text*	Changes the top line display of the screen on a MiNet endpoint to the *Text* value, up to 16 characters.
Tag recording	Required: *Field* Optional: *Tag*	Tags the call recording tag *Field* with the *Tag* provided, overwriting any existing information in this tag field. (Requires call recording integration to be enabled).
Transfer call	Optional: *Destination*	Performs a direct transfer to the *Destination*. If the *Destination* is not provided then the User is prompted to enter this.
Volume down	None	Decreases the volume at the endpoint. See **Volume Control (Section 3.2.5)** section for details.
Volume up	None	Increases the volume at the endpoint. See **Volume Control (Section 3.2.5)** section for details.

6   Team Leader Features

The following section covers the features that are available in the Team Leader licensed version of Phone Manager.

Alarm Notifications (Section 6.1)	Provides notifications to the User when any alarms are triggered on the system.
Hunt Group Status (Section 6.2)	
User Control (Section 6.3)	Ability to set the status of other devices, including ACD, DND and Forward state.
Silent Monitoring	Lets the Users control silent monitoring of Users. This requires specific programming on the PBX.

6.1 Alarm Notifications

6.1.1 Overview

Alarms generated on the PBX can be sent to Team Leader clients to notify them that they have occurred. The configuration of the alarms that will be sent to the Users is configured in the Alarms section on the XCS server.

When an alarm is raised the client will display an alert window and the User can dismiss the alarm. The User may also be able to clear the alarm from the PBX if the endpoint they are associated with is programmed as an *Administrator*.
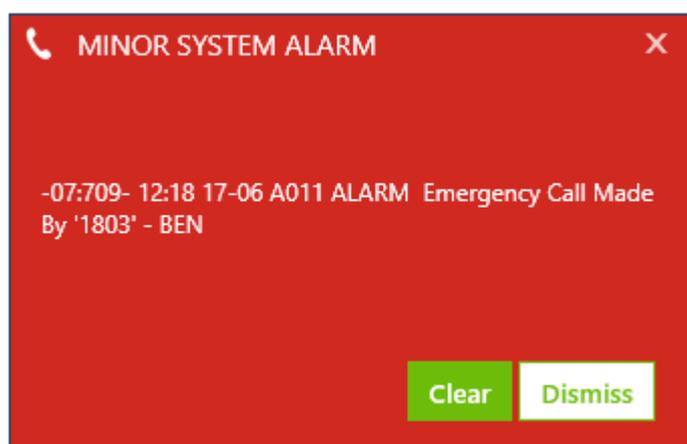
6.2 Hunt Group Status

6.2.1 Overview

Team leader provides information about hunt groups to the User. This gives the User details on the number of calls queuing and ringing at any hunt groups that they have on their contact list.

6.3 User Control

6.3.1 Overview

Team leader provides the User with the ability to able to control other Users endpoints and perform silent monitor actions. The control actions that are available are:

- DND control
  - Enabling and disabling DND
- ACD control
  - Logging agents out of ACD hunt groups
  - Logging agents into ACD hunt groups
- Forward state control
  - Setting forwarding
  - Removing forwarding
- Silent monitor (this is dependent on the PBX programming)
  - Start a silent monitor
  - Start a continuous silent monitor

To control another endpoint, from the Contacts window right click onto the device and this will display a menu where the action can be selected. Depending on the type of device and its current state the list of available actions may change.

7   Settings

7.1   Overview

The settings section on the client provides the User with the ability to be able to configure how the clients connects and interacts with the system. This includes the following options.

|	
Connection (Section 7.1)	Configuration and connection settings for how the client will connect to the XCS server from local and remote locations and how their endpoint number is assigned.
Softphone (Section 7.2)	Options to configure the audio sources, codecs and quality of speech for the softphone.
Hot Key	The hot key configuration and assignment.
Macros	Enabling event-driven macros and access the macro designer.
Application Support	Configuration of the plugins for CRM integration.
Diagnostics (Section 7.6)	Options for enabling diagnostics and troubleshooting.

7.1 Connection

7.1.1   Overview

The connection settings enables the User to configure how the client will connect back to the XCS server. The options shown here will have been pre configured during the installation process, see the **Configuration (Section 2.3)** section for more details, when the client was first installed and connected.

General

The general section configures how this computer will be used and the default options to connect.
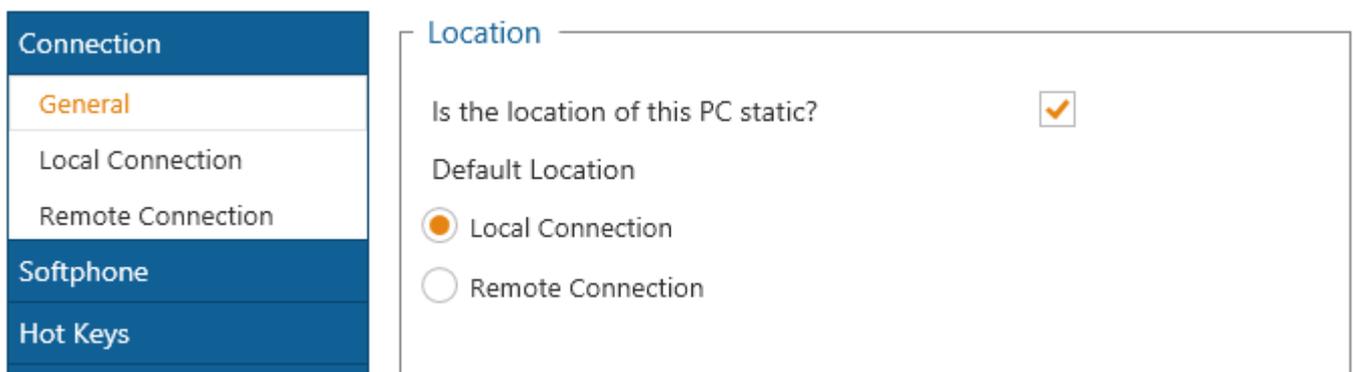
If the PC that the client is installed on remains in the same physical location and uses the same connection details all of the time then check the **Is the location of this PC static?** option. This configures the client to always use the connection settings from the **Default Location**.

If the PC does move, for example this is a laptop, then uncheck the **Is the location of this PC static?** option. This will configure the client to always prompt for the location details to connect with each time that it starts.
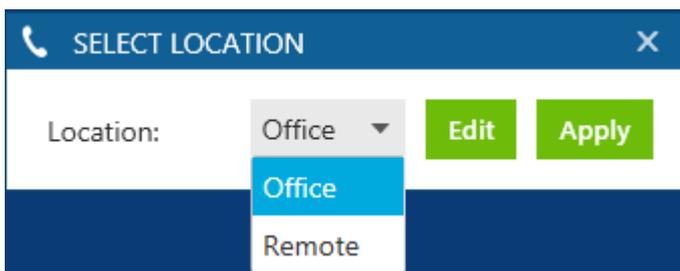
7.1.1 Local Connection

7.1.1.1   Overview

The local connections settings configures how the client will connect when they use the local / office location to connect.

('pm_settings_connection_local.png' in the on-line documentation)

Server Connection

The **Available hosts** window shows a list of all the XCS servers that the client has found by broadcasting on the local network. If the XCS server is not on the same local subnet as the client then it may not be displayed. Selecting an entry from the **Available hosts** will populate the **Host address** entry or if the server is not shown then it can be entered manually.

The client will try and connect using the credentials of the User who is logged into the PC. If this is not correct then check the **Override login details** and enter the **Username** and **Password** details to use.

> If overriding a Windows account then enter the **Username** in the format DOMAIN\User.

Endpoint details

The Endpoint details section controls what endpoint will be assigned to this client when it connects. There are 3 options available:

Always use the endpoint assigned to my user account

This will use the endpoint that has been configured against the User in the XCS server. If this is selected but the User does not have an endpoint assigned then they will be prompted when they connect. The endpoint will then be permanently associated with the User. Any calls that are made on this endpoint even when the client is not running will be associated with this User. This means that they will be shown in the call history when the User next opens the client.

Everyone who uses this computer shares the same endpoint number

This will force each User who runs the client on this PC to use the endpoint number configured in the **Endpoint** field. The endpoint will only be temporarily assigned to the User whilst the client is connected. This means that any calls made on this endpoint when the client is not open will not show up on the Users call history. Calls made on the endpoint will be assigned to the User who is client is currently running.

This should be used when there are different Users using the same computer and endpoint at different times.

Everyone who uses this computer uses a different endpoint number (i.e. TS/Citrix/PBX hot desking)

This will prompt the User each time that the client starts for the endpoint number to use. The endpoint will only be temporarily assigned to the User whilst the client is connected. This means that any calls made on this endpoint when the client is not open will not show up on the Users call history.

This should be used when the client is installed in a multi user environment, for example Microsoft Terminal/Remote Desktop Services, Citrix XenApp, VMWare Virtual Desktop Infrastructure (VDI) or when using Xarios Agent Hot Desking.

7.1.2 Remote Connection

7.1.2.1 Overview

The remote connection settings configures how the client will connect when they use the remote location to connect. The same options as the **Local Connection (Section 7.1.1)** are available except for the broadcast options.

7.2 Softphone

7.2.1 Overview

The softphone settings enable the User to configure how the built in softphone operates and integrates with Phone Manager.

Before using the softphone please read and understand the issues raised in the **E911 Warning, Emergency Calls and Security (Section 7.2.1)** section and the limitations of using a softphone in the **Softphone Limitations (Section 7.2.8)** section.

This softphone has the following configuration sections.

| General (Section 7.2.2)	Configuration of any general settings.
Audio (Section 7.2.3)	Enables the audio sources for the speakers and microphone that are used to be configured.
Codecs (Section 7.2.4)	Enables the audio codec that will be used to be configured.
Quality (Section 7.2.5)	Configures options relating to voice quality and echo cancellation.
NAT and Firewalls (Section 7.2.6)	Configures firewall and NAT configuration options when connecting remotely.

DTMF Support

The softphone only supports the RFC 2833 DTMF encoding and this needs to be configured within the Mitel Database Programming call configuration section for the endpoint as shown.
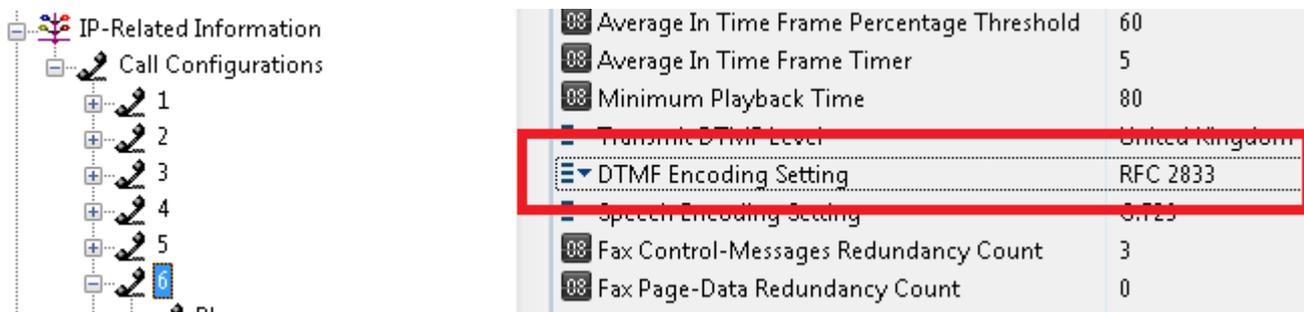
Maximum calls

The softphone supports up to 2 concurrent calls, i.e. one call connected and another on hold. The number of maximum calls needs to be configured to 2 within the Mitel Database Programming as the default value for this is 1. This can be set in the SIP Phone Groups section for the endpoint as shown.
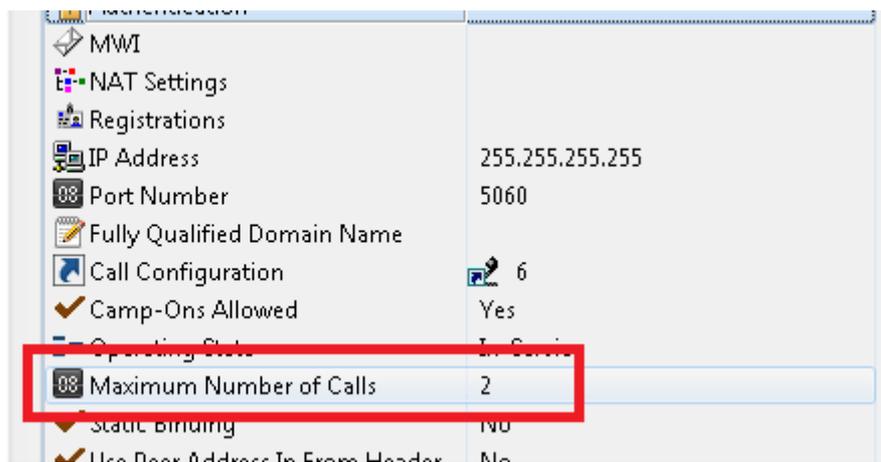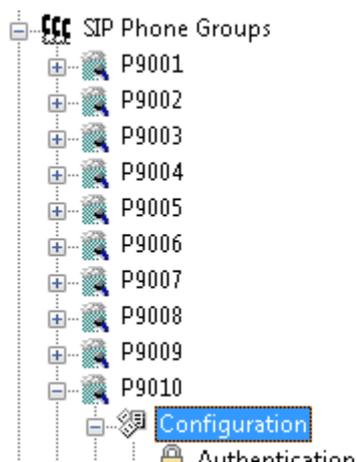
7.2.1 E911 Warning, Emergency Calls and Security

7.2.1.1 WARNING

Do not dial emergency hotline numbers from the IP SoftPhone. In the case of an emergency, dial the appropriate local emergency-service number directly, or use the nearest local public phone to dial an emergency hotline.

The IP SoftPhone communicates through a central telephone system that routes all emergency calls directly to a number that is local to the central system. If the IP SoftPhone is not at the same address as the central system, then emergency service will not be routed to the proper location.

Therefore, if the IP SoftPhone does not stay within the premises of the central system, you must configure the IP SoftPhone's programmable keys to dial the local police or fire departments directly, and you must clearly label the key icons. If the IP SoftPhone is mobile, meaning it is used in multiple locations, you must know the direct emergency-contact numbers for each location.

In the case of an emergency, you are responsible for determining the nature of the emergency and dialing the appropriate emergency-service number directly. You must provide the emergency personnel your location and telephone number because the emergency service may not receive accurate identification information automatically.

7.2.1.2 SECURITY

The implementation of SIP within the MiVoice Office like many other systems is NOT based on a secure data connection using TLS and certificates, and by definition is not secure.

With this in mind Xarios would strongly suggest, when using SIP outside of your firewall infrastructure that every care is taken to ensure that a level of security is in place in line with your internal security policy. This could involve (but may be not limited to) using NAT or establishing a secure VPN connection between remote clients and the corporate LAN.

Should you be in any doubt please consult the relevant Mitel documentation on securing your MiVoice Office installation.

7.2.2 General

7.2.2.1 Overview

The client has a built in SIP softphone but there maybe situations when a third party SIP endpoint, for example Xlite, Bria etc., needs to be used and associated with Phone Manager. When Phone Manager connects it automatically knows that the endpoint associated with the User is a SIP endpoint so will start the built in softphone. Checking the **Third Part SIP Endpoint** option will prevent this from happening when it runs.

Connection	General
Softphone	Third Party SIP Endpoint ☐
General	
Audio	
Codecs	
Quality	

Using a third party SIP endpoint instead of the built in softphone will reduce the features that are available as the built in softphone uses the CTI connection to provide a more seamless experience for the User. See the **Softphone Limitations (Section 7.2.8)** section for details.

7.2.3 Audio

7.2.3.1 Overview

The softphone uses the microphone and speakers attached to the local computer to provide audio for the calls that are made. When the softphone starts it will try and use the first microphone and speakers that it finds. To override this selection select the **Speaker** and **Microphone** from the options available.

For both the speaker and microphone the volume levels can be adjusted and using the level indications you can see what impact changing this will have. To test the speakers click on the **Play** button and a message will be played back through the speaker selected. To test the microphone just speak into the microphone.

7.2.4 Codecs

7.2.4.1   Overview

The softphone supports several different audio codecs that can be used depending on the quality of the audio required and the amount of network bandwidth available. By default the softphone supports G.711 A-Law, G.711 Mu-Law and G729. The softphone will negotiate with the PBX to determine the one to use based upon what is programmed on the PBX.

7.2.5 Quality

7.2.5.1 Overview

The softphone can be configured with different audio quality settings depending on the environment that the softphone is operating in. In most circumstances the settings should be left at the default.

Echo cancellation provides a way of automatically removing echo from the call, for example echo can occur when using a load speaker and the microphone may pick up the audio from the speaker. Removing the echo will also minimise the network bandwidth used as the silence suppression will prevent the echo from traveling across the network. The **Echo delay** configures the delay of the acoustic echo in milliseconds.

Auto gain control provides a way of balancing out the volume levels to provide an average level without excessive highs or lows. The **Max gain** setting configures the maximum volume level permitted in decibels.

Noise reduction level configures the amount of noise reduction that is used. Background noise or random white noise can be reduced using these options. The extent of reduction can be controlled from **No Reduction**, **Low**, **Medium** or **High**.

The softphone uses a dynamic jitter buffer to handle out of sequence and delayed voice packets to increase quality. This is always on and cannot be disabled.

7.2.6 NAT and Firewalls

7.2.6.1 Overview

Using a softphone remotely causes the voice traffic to have to flow through multiple switches, routers, firewalls etc. to reach its destination. This can cause audio problems as the devices that handle the voice packets may use a process called NAT traversal. NAT traversal is a standard technique for establishing and maintaining connection between remote devices on different networks, i.e. the softphone and the PBX.

Why this is important is that there is no single method for working with NAT that is successful in every scenario. There are several different options that the softphone supports. Basically each method is trying to establish what public IP address to use to send the voice packets to.

Session Traversal Utilities for NAT (STUN) is a standardised set of methods, including a network protocol, used in NAT traversal for applications of real-time voice, video, messaging, and other interactive IP communications. STUN is an acronym for Session Traversal Utilities for NAT, and is documented in RFC 5389.

Traversal Using Relays around NAT (TURN) is a protocol that allows for an element behind a Network address translator (NAT) or firewall to receive incoming data over TCP or UDP connections. It is most useful for elements behind symmetric NATs or firewalls that wish to be on the receiving end of a connection to a single peer. TURN does not allow for users to run servers on well known ports if they are behind a NAT; it supports the connection of a user behind a NAT to only a single peer.

None where no NAT traversal method is used but this can only be used for connections where the server and client are on the same local network.

Manual where the public IP address to use is manually configured.

Auto Detect where the softphone attempts to automatically determine the type of method to use but if this fails then will fall back to the configured option.

> This is not just an issue with the built in softphone but any SIP endpoint.

7.2.7 Keep-Alives

7.2.7.1 Overview

The softphone supports sending keep-alive requests back to the PBX. This prevents the network connection from being closed by any firewalls/routers that may cause the softphone when connecting via NAT.

There are three keep-alive options available that can be used depending on the network configuration.

Do not send keep alive messages: This disables any keep alive messages from being sent.

Re-register the softphone: This sends a SIP Register request to the PBX.

Send Options message: This sends a SIP Options request to the PBX.

When keep alive requests are being sent the time interval can be set to determine how often they are sent out. The default is every 300 seconds or 5 minutes.

7.2.8 Softphone Limitations

7.2.8.1 Overview

The softphone does not have access to all of the same features as a MiNet device does. The following limitations apply to the inbuilt softphone:

- No ACD support, i.e. cannot login an ACD agent.
- Redial is not supported (feature code 380).
- Mute causes both parties audio to be muted out, unlike with a MiNET device where only the current endpoint audio is muted.

In addition to this the following restrictions apply to using a third party SIP endpoint (i.e. not the in built softphone):

- Cannot make a call using Phone Manager, this means features like highlight and dial and TAPI will not work.
- Cannot place a call on hold or retrieve using Phone Manager.
- When making a call via the SIP endpoint the dial prefixes need to be set by the User, i.e. the manually have to enter the digits for an outside line.
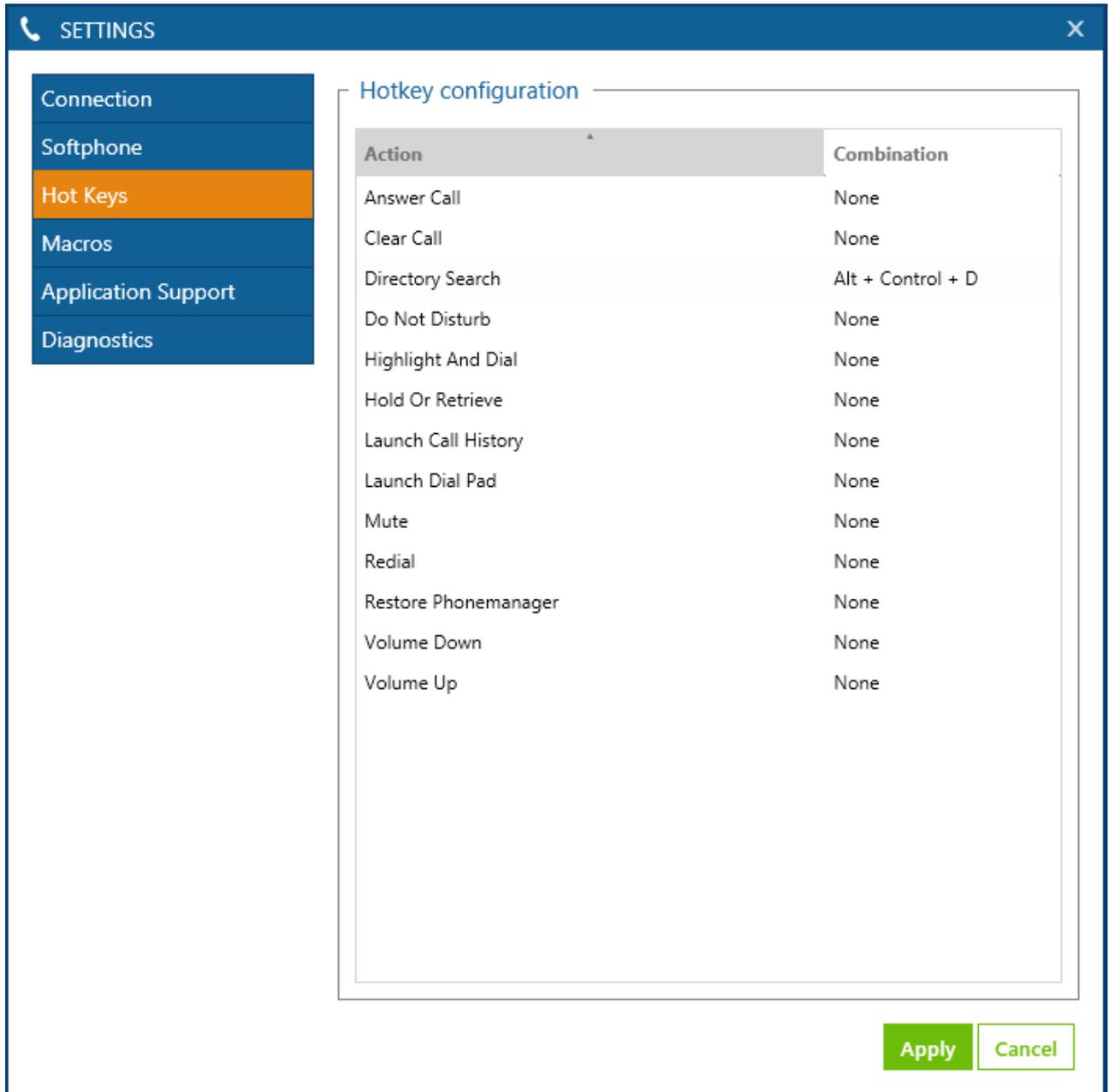
7.3 Hot Keys

7.3.1 Overview

Hot Keys enable Users to set a combination of keystrokes to access commonly used features within Phone Manager. The configuration of the hot keys is specific to each User. The following list of hot key actions are supported:

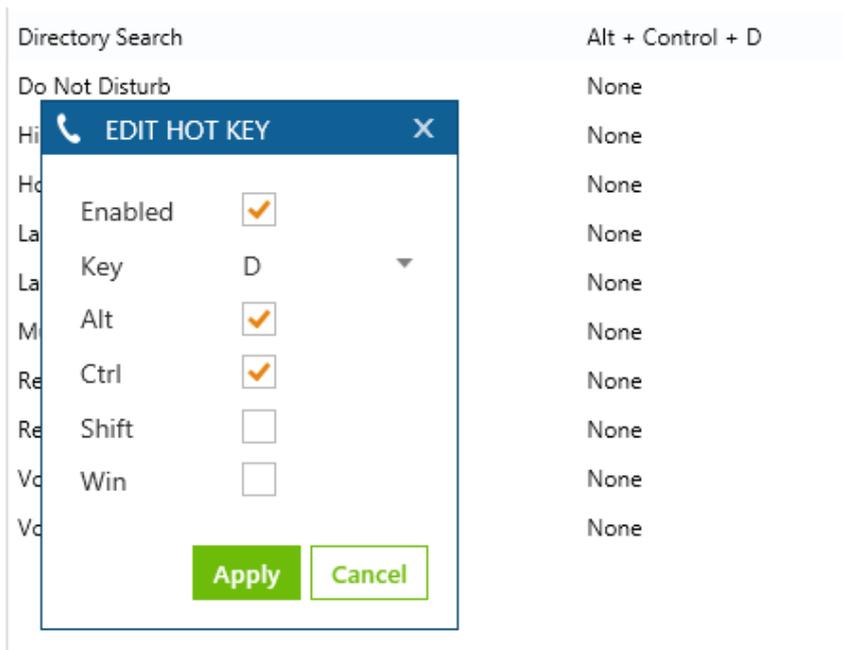| Action	Description
Answer call	Answers the call currently ringing, if there are any calls in progress then this is ignored.
Clear call	Clears the call that is connected to the endpoint.
Directory search	Brings the main window to the front and sets the focus and cursor to the *Search or Dial* field.
Do not disturb	Toggles the DND state at the endpoint. If no message is pre configured then it will prompt for the message to use.
Highlight and dial	Dials the number that is currently highlighted in other applications.
Hold or retrieve	If a call is on hold then retrieves the call otherwise puts it on hold.
Launch call history	Brings the main window to the front and sets the call history tab in focus.
Launch dial pad	Shows the dial pad window.
Mute	Mutes the audio for the current call. If this is a softphone then both sides of the call are muted otherwise only the audio from the Users endpoint is muted. See **Softphone Limitations (Section 7.2.8)**.
Redial	Redials the last number using the Mitel feature (default code 380). Not supported on softphone, see **Softphone Limitations (Section 7.2.8)**.
Restore Phone Manager	Brings the main window to the front.
Volume up	Increases the volume level. See the **Volume Control (Section 3.2.5)** section for details.
Volume down	Decrease the volume level. See the **Volume Control (Section 3.2.5)** section for details.

Configuration

To configure the hot keys:

1. Open the *Settings* window.
2. Select the *Hot Keys* tab.

3. Double click on the hot key entry to configure.

Directory Search   Alt + Control + D

Do Not Disturb   None

📞 EDIT HOT KEY   ✕   None

Hi   None

Hc   None

Enabled   ✔

La   None

Key   D   ▼

La   None

Alt   ✔

M   None

Ctrl   ✔

Re   None

Shift   ☐

Re   None

Win   ☐

Vc   None

Vc   None

Apply   Cancel

4. Each hot key needs to be enabled, check the **Enabled** option to do this.
5. Select the **Key** to use for the hot key.
6. Check the **Alt**, **Ctrl**, **Shift** and/or **Win** checkbox's that will be used in combination to the **Key** selected.
7. Click on **Apply** to save the changes/

⚠ Always configure the hotkeys to use at least 3 combinations, for example Alt + Ctrl + D. Using simpler combinations may result in conflicts with other application that are running at the same time.

7.4 Macros

7.4.1   Overview

The client supports a scripting interface to allow VBScript macros to be developed. They can then be configured to trigger on a manual User action, i.e. a toolbar button action, or on pre-defined call events. The scripting interface provides access to the call information that can be used within the script and extra methods to control the endpoint and other features, i.e. call recording.

For example this VBScript example will display a message box when an incoming call is received and display the caller id:

```
MsgBox "Call from " & PhoneControl.CLI
```

📄 See the Phone Manager Macro API reference for more information.

7.4.2   Configuration

The macro design and configuration is available for Users who have the *Allow macro editing* option enabled on their *Client Profile*. WIthout this option Users can only change the **Enable event-driven macros** option. This controls if the macros that have been assigned to the User will be triggered on the associated call events.

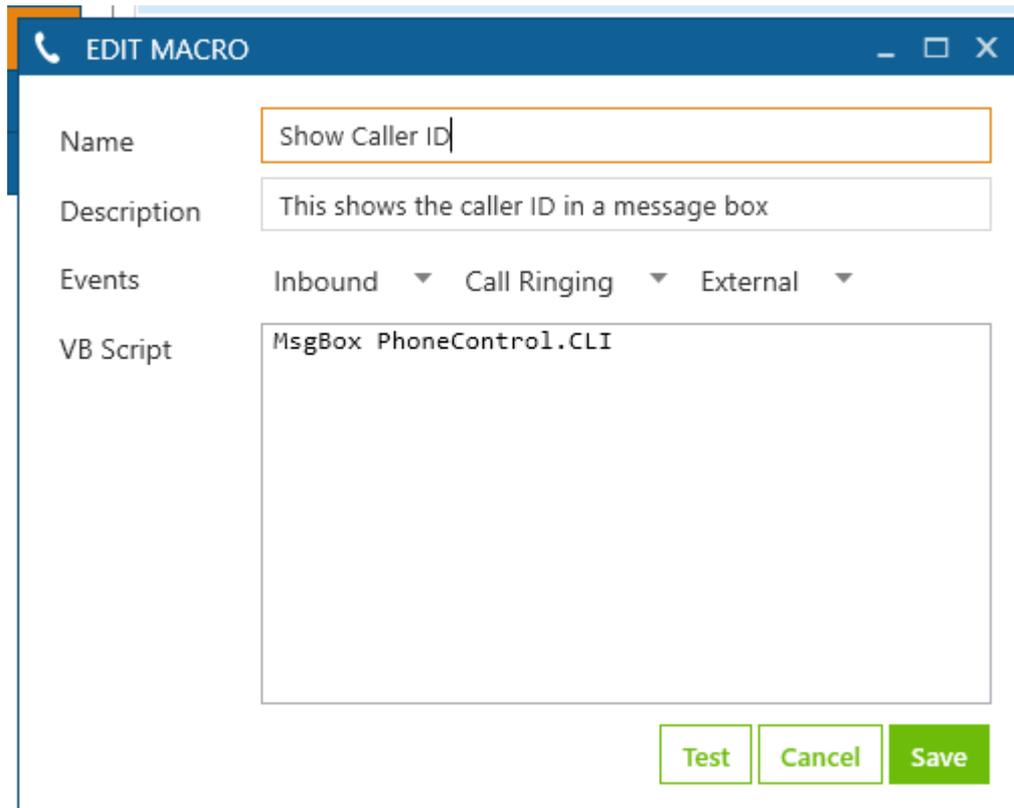| ('pm_settings_macros.png' in the on-line documentation) |
| --- |
| Macros |

When creating a new macro they are first designed and tested from within this section. When this is complete they can be published and this makes them available on the XCS server and can then be assigned to the relevant Users. When they are published a copy is made of the local version of the macro and this can then not be edited. Any updates would need to be made on the original local version and then re published. Users would then need to be reassigned to this new published version.

The list of macros shown in the *Macro Configuration* section only shows the local macros not published to the server for this User. To see the list of published macros see the *Macros* section on the XCS website.
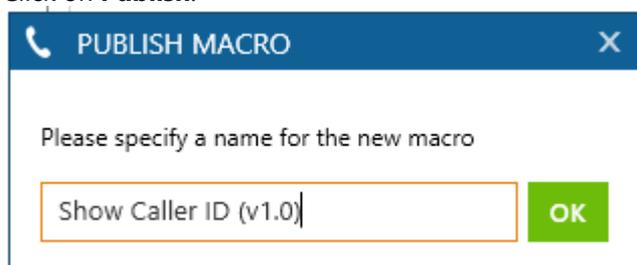
To create or edit a new macro:

1. Click on the *New* or *Edit* button.

2. Enter a **Name** that will be used on the XCS server to identify this macro.
3. Enter a **Description** that can be used to detail what this macro is for.
4. Select the call event to trigger the macro on.
   - Direction: inbound, outbound or both.
   - State: call ringing, call answered, call cleared, call cleared only when answered or user controlled (i.e. via a toolbar button).
   - Type: external, internal or both.
5. Enter the macro text in the **VB Script** section.
6. Use the **Test** button to validate the syntax. If there are any errors then a message box will be displayed indicating the error.
7. Click on **Save** to save this macro.

To publish a macro:

1. Select the macro from the list of macros available.
2. Click on **Publish**.

3. Enter a new name for the macro, it is recommend to include a version or revision number.
4. Click **Ok**
5. From the XCS server assign this to the relevant Users.

To delete a published macro:

1. From the XCS server open the Site -> Features -> Phone Manager -> Macros section

2. Select the macro and click on **Delete**.

7.5 Application Support Plugins

7.5.1   Overview

Phone Manager has plugins available that are able to directly integrate with a range of well known CRM style applications. The plugins generally provide deeper, more seamless integration than other methods as they leverage the APIs of the specific application.

For an up to date list of the supported application visit http://www.xarios.com.

Features

There are 4 features that the plugins can provide. Depending on the application that is being integrated with only some maybe available with varying levels of support and there may need to be integration work performed by the application vendor or administrator of the system. See the integration document for the specific plugin for details.

- **Dial out directly from the application**: For example having a dial button next to a telephone number field.
- **Screen popping**: Searching the application for contacts that have matching caller ids and displaying the record.
- **Call history**: Creating a call history phone call activity in the application with the call details.
- **Calendar and DND synchronisation**: Controlling the DND state of the endpoint based upon calendar entries in the application.

7.5.2   Configuration

To configure a plugin for one of the application support features:

1. From the Application Support Configuration section.

('pm_settings_appsupport_list.png' in the on-line documentation)
Plugins

2. Click on the **New** button.

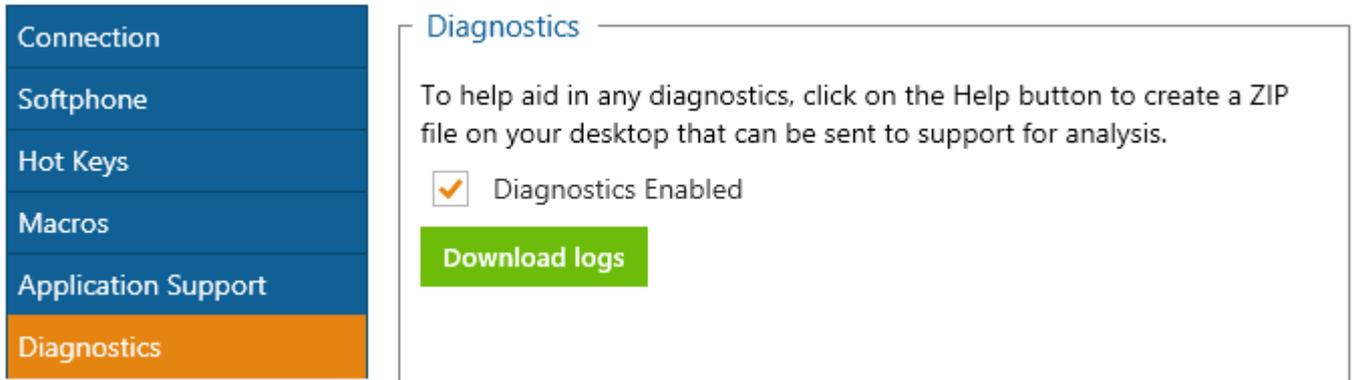 | ('pm_settings_appsupport_edut.png' in the on-line documentation) |
   |---|
   | Plugin configuration |

3. From the list of **Application**s select the application to integrate with.
4. This will then change configuration on the right hand side to show the specific configuration required for this plugin. See the relevant integration document for details.
5. Select the **Feature** to enable either:
   - Screen pop
   - Call history
   - Calendar / DND sync
6. Multiple features can be enabled for each plugin by repeating the process from step 1.
7. Select the event trigger that will cause the feature to be actioned (this is not applicable to Calendar / DND sync).
   - Direction: inbound, outbound or both.
   - State: call ringing, call answered, call cleared, call cleared only when answered or user controlled (i.e. via a toolbar button).
   - Type: external, internal or both.
8. Click on **Save**.

7.6 Diagnostics

7.6.1 Overview

The diagnostics section enables the Phone Manager diagnostic to be enabled.

Connection	Diagnostics
Softphone	To help aid in any diagnostics, click on the Help button to create a ZIP file on your desktop that can be sent to support for analysis.
Hot Keys	✓ Diagnostics Enabled
Macros	**Download logs**
Application Support	
Diagnostics	

Checking the **Diagnostics Enabled** option will after a restart of the client create logging information for this User in the folder:

> %PROGRAMDATA%\Xarios\PhoneManager\logs\%USERNAME%

> 📑 This should only be enabled on a temporary short term basis as it can affect the performance of the client and consume significant amount of disk space.

If you are requested to provide logging information for the client then use the **Download logs** button as this will create a ZIP file containing all the logs and configuration information required on the Users desktop that can be emailed.

8   What's New

v4.0 - Initial release

8.1 Known Issues

There are no known issues at this time.

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