Communicator for Desktop

User Guide

Desktop Release 21.5.0

Document Version 1

broadsoft

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1 About Communicator for Desktop

Communicator for Desktop is a native Windows and Mac client for Unified Communications, providing the following communication features:

- Voice Calling (VoIP)
- Voice Calling (Desk phone)
- Desktop Sharing
- BroadWorks Call Settings

2 Get Started

This section contains the essential information for getting started with Communicator.

2.1 Installation

Your service provider provides the download of the installer.

Windows

- Double-click the installer executable and follow the installation instructions.
- Launch Communicator

OS X

- Double-click the disk image.
- Copy the application into the *Applications* folder.
- Launch Communicator.

2.2 Sign In

When you first launch the application, you are prompted to sign in.

1) If displayed, enter the login Uniform Resource Locator (URL) provided by the service provider.

2) Enter your BroadWorks user name and password.

3) Select whether you would like Communicator to remember your password.

4) Select whether you would like Communicator to sign you in automatically on subsequent launches.

5) Click **Sign In**.

You can also access *Help* and *Preferences* directly from the login window.

> **NOTE**: If you choose automatic sign in, you are automatically signed in and taken to the *Main* window upon subsequent Communicator launches. Otherwise, you are presented with the *Sign In* screen when launching the application. In the *Main* window, your default tab when signing in depends on service provider configuration; otherwise, Communicator remembers the tab you were on at sign out and opens that same tab at sign in.

The *Login* window offers the last used username, but the password shall be automatically filled in only if you have checked the **Save password** checkbox. If multiple people use the same machine, only the last password is entered as a security measure. If you change the username in the *Login* window through editing it, or using the drop-down list to pick another one, Communicator will not fill in the password; you are always expected to type it in. This also applies when re-selecting or re-entering the last used username.

2.3 Main Window

When you start Communicator for the first time, your *Contacts* list is empty. Use the *Search and Dial* field to find people and add them to your *Contacts* list. Contacts can also be added manually by clicking the **Add** button. Client windows can also be set to be always using the *Main* window menu option. Note also, that depending on your service provider settings, the order of the left pane icons may vary. The left pane call settings icon and menus are visible depending on your service provider settings. The dial pad is also integrated with the *Main* window.

Communicator windows open up in a cascaded fashion in the middle of the. The *Search and Dial* field allows searching for contacts as well as making calls using phone numbers or SIP URIs (native desktop only). SIP URIs must use the format user@domain or sip:user@domain.

Figure 1 Main Window

Icon	Usage
👤	**Contacts** – View your contacts.
🕐	**Communications History** – View previous calls.
🌐	**Full Enterprise Directory** – Show all contacts of the directory.
⠿	**Dial Pad** – Make calls (it is integrated with the *Main* window).

Icon	Usage
⚙	**Preferences** – Use for quick access to preferences and call settings such as Call Forwarding.
📞	**Call** – Make an IP audio call to a selected contact.
☎	**Call from Phone** – Make a Click To Dial call from your desk phone (or secondary device).
➕	**Add** – Add a contact, group, or conference.

2.4 Communications Window

After starting communication with one or more contacts, a *Communications* window may be displayed for calls depending on your service provider settings (native desktop only). The call window can also be integrated with the *Main* window.

From this window, you can perform the following actions:

- End an audio call
- Open the dial pad
- Mute your microphone
- Adjust your speaker volume
- Place a call on hold
- Transfer a call

If you are using several monitors, Communicator opens the *Communications* window as well as notifications on the same monitor as the *Main* window.

As of Release 21.2.0, Communicator limits the number of active communications to spare resources. The limit is 20 active communications on Windows and on OS X. If the maximum is reached, the main window's top section warns user with the following message: "*The maximum amount of communication windows has been reached. Please close some to open new ones.*"

2.5 Make Audio

Make an audio using one of the following methods:

- Left-click one or more contacts from the *Contacts* list or search results and click the **Call**, **Call from Phone** button.
- Right-click one or more contacts from the *Contacts* list or search results and click the **Call**, **Call from Phone**.
- Enter a phone number in the *Search and Dial* field.
  - Press **ENTER** to start a VoIP call.
  - Click the **Call**, **Call from Phone** button.
- Open the dial pad, enter a phone number, and then click the **Call**, **Call from Phone** button.
- On the *Communications History* list, double-click a call entry.

- In the *Communications* window, click the **Call**, **Call from Phone** button.

- When viewing a contact's profile, click the **Call**, **Call from Phone** button.

> **NOTE**: If dialing a phone number that requires additional dual-tone multi-frequency (DTMF) tones (for example, a conference bridge), you can type the numbers on your keyboard while the *Communications* window has focus or open the dial pad in the *Communications* window.

2.6 Active Communications

Active communications appear at the top of the *Contacts* list in the *Main* window (native desktop only). This area provides an easy view to see the people with whom you are communicating. By default starting in Release 20.1.0, the call window is shown in the *Active Communications* area in the *Main* window (where the call can be fully controlled in the desktop client). It reduces the number of communications windows; however, a separate call window can still be opened using an *Active Communications* menu. The following is also available in this area:

- Double-click an active communication item to bring this *Communications* window to focus if the call window is separately shown. If the call window is integrated, you can use a menu option to show it separately.

- End a call.

- Mute the microphone.

- Place a call on hold.

- Merge two calls or transfer by dragging and dropping calls onto each other.

- Transfer a call.

- Make conference calls.

- Park and retrieve calls.

3 Contacts

Contacts are the people with whom you communicate.

There are three types of contacts:

- *Contacts* – Actual people with whom you communicate.
- *Groups* – Containers of contacts and/or conferences.

There is no hard coded limit on the number of contacts. The more contacts are added the more memory and processing is needed. The more contacts are added, the more difficult it is to find people without searching. Live search can be used instead of a very large local contact list while keeping memory and processing requirements to a minimum.

3.1 Add

When you sign in for the first time, there are no contacts on your contact list. Add a new contact at any time by selecting the *Add Contact* item from the menu or choose the **Add Contact** button from the Main window.

In the *Add Contact* dialog box, enter the contact's information and then click **Add Contact**.

The newly added contact appears on your contact list.

Choose the *Add Group* menu option to add a new group to the contact list.

3.2 Edit

Edit a contact by selecting the contact first. After you select the contact, right-click anywhere in the area of the selected contact and a menu of options appears which allows you to either view or edit the contact profile. In *View* mode, click the **Edit** button to go to *Edit* mode. This base principle is the same for normal contacts, conference contacts, and groups. Note that depending on your service provider settings all or no contact card fields may be editable. Depending on your service provider settings, you may also see a button for synchronizing the contact card with the Telephony Directory or the synchronization may take place automatically (native desktop only). When the manual synchronization button (cloud icon) is visible, there is no automated syncing of the contact card details with server information. To synchronize the contact card data, click on the cloud icon.

- *Delete contact* removes the contact from your contact list.
- *View Profile* opens the *Contact Information* dialog box where you can add, edit, or remove information. This works for both normal and conference contacts.
- For groups, choose the *Edit* menu option to rename a group.

Once done with all changes, click the **Save** button.

4 Audio Calls

The following table describes additional *Communications* window icons and explains what you can do with them, for voice calls.

Icon	What you can do
⠿	Enter additional digits using the dial pad at any time during the call (for example, to insert a conference number). The dial pad is not movable.
🎤	Mute your microphone by clicking the mute icon.
🔇	Adjust the volume bar to adjust the volume. Dragging it all the way to the left mutes your speakers.
≡	Use this icon to access the *Call Options* menu. In the *Call Options* menu, you can find different actions to use for a call depending on your settings and your service provider.

In the *Options* menu, there are the following options:

■ Transfer a call to a third party (native desktop only).

■ Put the call on hold. Note that if you hold the call, the other party cannot "unhold".

■ Add participants to the call (native desktop only).

When establishing a call to a contact, you can choose several ways to call. Select the contact you wish to call and press the *Call* icon. This calls the default number. If you right-click on the contact you wish to call, you can choose the number to call from a right-click menu. There can be several phone numbers available in the menu. The work phone is the default and top most number is followed by mobile and other numbers. This also applies to the transfer and conference windows. However, in certain cases the transfer/conference default number can differ from other call options in other menus.

The default call type can also be selected using accessibility menus (Calls → Dialing service). This controls the default call type when using call buttons.

Dial a number in the combined *Search and Dial* field to make a call (native desktop only). Once you type your numbers, Communicator searches for contacts on both the local contact list and the enterprise directory.

4.1 Call From Computer

Select a contact from your contact list to start communication and click the desired communication button. Type a phone number in the *Search and Dial* field at the top of Communicator window (search or communicate) to communicate with someone who is not on your contact list.

4.2 Call From Phone

The second option to communicate in the row of communication buttons is the **Call from Phone**. When you click this button, the desk phone instantly starts ringing and the call is established from your desk phone. This depends on your service provider configuration as other devices may also ring.

For remote calls initiated using Communicator, you can also have mid-call controls such as hold/resume, transfer, and add participant.

Depending on your service provider settings, it is also possible to control calls initiated without Communicator in the *Active Communications* view. The same mid-call controls are also available in this case. In case of an incoming call, the actual answering action must happen with the other device.

4.3 Answer Call

When someone is calling you, you see a pop-up notification on your screen. You can choose to answer, silence the incoming call, and then reject the call, or silence the incoming call by closing the pop-up notification window. If you silence the call, the ringtone is silenced but the caller does not see anything on their end. If you close the incoming call pop-up notification to silence an incoming call, then you do not have an option to answer or reject it any more.

If you reject the call, it causes the line to sound busy at the caller's end and they know that you rejected the call.

4.4 Contact Name Lookup for Incoming Calls

Communicator performs a local contact search for incoming calls. If the number matches one of the contacts on the Communicator contact list, the name is shown on the incoming call screen along with the alert. Both the display name and phone number are shown when available.

If there is no match to a local contact, Communicator looks for a match in the Telephony Directory, and if a match is found, the available information is shown for the incoming call. If there is no match in the Telephony Directory, the display name is taken from the available information in the incoming call.

Whenever you retrieve your call logs/history, Communicator does a lookup in the local contacts and populates the name if a match is found.

4.5 Missed Call or Communication

When you have one or more missed calls or other types of communications, there is a notification on the left-hand side of the navigation pane in the Main window. Clicking the icon takes you to the missed communication in the *Communications History* view.

4.6 Call Waiting

You can have one active call at any one time if you receive a new incoming call and accept it. The existing call is put on hold and you can change between these two calls by using the **Hold** and **Unhold** buttons.

4.7 Call Transfer

Blind call transfer is available in the *Communications* window; choose the Transfer Call menu item to transfer the call to someone else (native desktop only). Attended call transfer is also available in the same window, first call someone to check if the called party can take the incoming call and then transfer the incoming call to the desired called party.

4.8 Message Waiting Indication and Visual Voice Mail (Preview)

Depending on your service provider settings, you can have either Visual Voice Mail (preview feature) or Message Waiting Indication (MWI) view in your client.

The MWI service allows you to receive a notification for a waiting voice mail.By clicking on the message icon in the upper part of the Main window, Communicator calls the predefined mailbox number to allow the user to listen to the voice mail.

It is also possible to call voice mail from the dialer by long pressing the "1" icon in the dialer.

When visual voice mail is enabled, a third tab is available, showing visual voice mails. Click on individual mails to listen to them.

Missed calls are indicated by an icon in the *Main* window. Missed audio calls are indicated with a different icon. Note that the MWI icon is in the same place when it indicates a new voice mail.

Visual voice mail is also supported when enabled by your service provider. You can see all voice mails in a list and play them inside the *Main* window.

The following settings are needed on CommPilot portal to have visual voice mail:

- Voice messaging enabled

- "When message arrives, use unified messaging" option enabled

- "Use Phone Message Waiting Indicator" option enabled

4.9   Call Park and Retrieve

Call Park is particularly suited for shared environments where one person can answer the call, park it, do something else for a while and continue the call from another device or let somebody else continue the call (supported on native desktop only).

Transfer an ongoing VoIP call to a Call Park server and then retrieve it when needed. An ongoing call can be parked against your own number or another number (an extension). Call Retrieval works in the same way, the parked call can be retrieved from your own number (an extension) or another number (an extension) to provide flexibility for who is picking up the parked call.

A parked call is visible on your desktop in the Active Communications area so that you can easily retrieve it, but only for the duration of the BroadWorks Call Park announcement. After the announcement is over, the parked call disappears from the Active Communications area (since the triggering call is disconnected). After the call disappears from the Active Communications area, the user must remember the extension to which the call has been parked to retrieve it using the Main window menu (or feature access code), unless the call was parked to the one's "own" extension. If the call is not retrieved after a certain time, then the server calls the parking user.

4.10   Forced Logout

Depending on your service provider settings, you may see a pop-up saying that you have been logged out due to another instance of the client logging in (native desktop only). This feature allows BroadWorks to track similar online client instances and only allow one of them to be online at the same time. When BroadWorks notifies the client to log out, all connections are terminated and client returns to the login window.

4.11   Headset Support

You can control incoming and ongoing calls from a compatible headset. The feature set supported is answer/hang up as well as mute/unmute. Volume control operations are not reflected in the Communicator UI. The following is a list of tested example devices, although other devices should also work:

- Plantronics Voyager Edge UC

- Plantronics Savi 700 series

- Plantronics Blackwire C3xx, C4xx, C5xx, and C7xx

- Plantronics Calisto 620
- Plantronics Voyager Legend UC
- Logitech H570e Mono
- Logitech BCC950
- Logitech Conference Cam Connect
- Jabra Biz 2300/2400
- Jabra Speak 510
- Jabra Pro 930 (wireless)
- Sennheiser SC 230/260
- Sennheiser SP 20
- Sennheiser MB Pro1 UC

Headsets typically use an add-in of some kind to communicate with the rest of the client while calls are made. Currently, installed add-ins are visible in *Preferences Add-ins* tab.

In addition to the standard HID add-in developed by BroadSoft, headset vendors may develop their own add-ins that will replace the standard HID add-in for all devices. These vendor-specific add-ins would be installed during new headset installation; however, the standard HID add-in should remain in the preferences list. If for some reason it has disappeared, adding the respective .dll file back to the add-in folder should make it visible again in the preferences. If later on you would like to change to another headset, the vendor-specific add-in could be disabled from preferences to again use the standard HID or some other new add-in by another headset provider.

The following is the default Add-in folder location (note that it is not possible to write to this location in all systems):

- Windows 7/Windows 8/8.1/10: C:\Program Files (x86)\BroadSoft\UC-One\connectors

4.12 Team Telephony

Team telephony is comprised of a team telephony window showing the predefined team members and their related call states (native desktop only). For a ringing call, the only action is to pick it up.

Each team telephony member can have four call states: *available*, *busy in call*, *ringing*, and *offline*. The status for a team telephony member is shown in the team telephony window. When a line is ringing, you can see the caller ID in the respective lines tooltip if configured by your service provider. All team members can see the full list of team members in the team telephony window. A double-click on the team member performs the default action towards the contact. You can drag and drop people from the contact list to the team telephony window or vice versa to transfer or conference calls.

The corresponding server side service must be provisioned and assigned by the service provider for the client to work. Usual call management options are available once the call has been answered.

5   Search

Communicator supports a search of the enterprise directory as well as the personal directory, enterprise common directory, and group common. This takes place in the same *Search* field that is used for both a local contact list search. The various directories have different purposes with the enterprise directory having the most data, and not all directories may be used in all deployments. All search results are combined into one common set of results.

Personal directory, enterprise common, and group common directories cannot be modified from the client side. Only read access is provided.

Personal directory provides your own special contacts that are not in the enterprise directory, for instance, partner company's numbers while group common contains, for example, the group's contacts such as favorite pizza taxi.

Communicator automatically searches the local contacts in addition to the enterprise and other directories at the same time. As soon as there are results from the enterprise and other directories, these results are shown on a separate list in the Main window. Additionally, there may be other search result groups from other search sources such as Lightweight Directory Access Protocol (LDAP) (native desktop only).

Search results are displayed differently depending on the results of the contact list and directory search:

- If LDAP search (Corporate directory) is enabled, there are more result groups.

- If there are no results for a certain search source (for example, local contacts, LDAP, or BroadWorks Telephony Directory), then that group is different in the UI.

The enterprise directory searches all available fields for the search string. By default, it waits for 1.5 seconds before it sends the search request to the server to minimize unnecessary load on the server.

Release 21.5.0 introduced support for showing phone number in the search results to better distinguish similar search results. In addition, tooltips are provided for search results.

Typically, when adding a contact using directory search results, there are phone numbers and first names in addition to last names available

LDAP search (Corporate directory) needs to be enabled by your service provider. In addition, you must manually provide your LDAP credentials in the *Preferences → Security* tab. LDAP search results are provided in the corporate directory group in the search results.

6 Full Enterprise Directory

Communicator allows for browsing of an entire BroadWorks enterprise directory.

To view the BroadWorks enterprise directory, click the **Directory** button on the left-hand side of the navigation pane (if available). This feature depends on the service provider configuration so it may not be visible in all clients.

7 Communications History

The fourth icon from the top in the *Main* window on the left-hand side of the navigation pane displays your messaging history. History view is divided into one, two, or three tabs depending on your service provider settings. Possible tabs are:

- Calls
- Visual voice mail

Double-clicking a call history item calls that number. Clicking a visual voice mail downloads the message so you can play it.

Communicator saves a call history for placed, received, and missed calls. The call history makes it easy for you to redial and call back when you have missed a call or you want to easily dial a contact with whom you have recently spoken. Each call has a separate entry in the list.
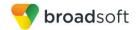
8 Click-to-Call (Highlight Text)

Release 21.5.0 of Communicator for Desktop introduced support for Click-to-Call using highlighted text and global keyboard shortcuts. Users can highlight text anywhere in the desktop machine to make a call and define the default call type used for making the call using the shortcut defined in *Preferences.* On OS X, you need to define the shortcuts on your own using the instructions provided in *Preferences.*

9   Security Classification

Communicator supports security classifications, which are typically used in government deployments where users are divided into security clearance categories (native desktop only). The security classification is displayed based on the security classification of all session participants. The security classification is displayed in audio calls. Security classification has to be set by your service provider; the client checks the assigned security classification at login.

For calls, the security classification can be changed during a call by a user and it works with supplementary services such as Call Transfer and Conference.

10 UC-One Add-In for Microsoft Skype for Business

Communicator for Desktop supports integrating with Microsoft Skype for Business (S4B) (native desktop only). The intended main use case is using Communicator for non-S4B calls such as calls to mobile and S4B-to-S4B calls still take place via S4B.

Existing S4B integration with, for example, SharePoint, Office 365, and Internet Explorer can be used so that calls can be made from those applications.

Usual Communicator call control features such as hang up, mute, transfer, conference, and Call Park are supported. Communicator call logs and call settings are also available in this configuration.

Communicator must be started after S4B for calling to work smoothly.

For detailed calling examples, see *Appendix C: Skype for Business Integration*. For a general overview of this feature, see the *UC-One Add-in for Microsoft S4B Product Guide.*

11 Password Change

A dialog box automatically opens when your login password must be changed (native desktop only). You must provide the password two times for verification purposes. Using a menu in either the bottom right-hand corner or the top of the *Main* window, your password can be changed at any time.

12 Preferences

Preferences provide access to available settings for Communicator. Follow these steps to access *Preferences*.

Windows and OS X

1) Click the *Preferences* logo in the *Main* window left pane.

2) Select the desired view from the drop-down*.*

or

Windows and OS X

1) Go to the Communicator accessibility menu.

2) Select *Preferences.*

3) Select the desired view from the drop-down.

12.1 General

Language

Select your language then click **OK** or **Apply** and the change takes effect immediately. Note that the number of languages depends on your service provider.

Login

Enable or disable automatic login when starting the application and control the remember password feature as well as enable the *Update Password* feature.

Notifications

Usually there is a confirmation pop-up notification each time you remove a contact. By selecting one or all of the check boxes, you can disable the confirmations when deleting information.

12.2 Media

Audio

Output Device (Voice Playback)

Choose a headset, PC-integrated speakers, or external speakers for audio output. Your external playback device is selected by default (if you have one connected).

Microphone

Ring Device (Alert Signal)

Select the audio device that is played when you receive an incoming call.

Ring Signal

You can select your own ring signal. The same signal is used for both voice calls.

You can also select an icon to play a tone for incoming messages. To disable the tone, uncheck the icon. Select a sound event and then click **Play** to hear the sound.

Click **Test Call** to make a test call to test voice quality.

12.3 Extensions

Select how incoming add-in requests are handled, whether they are automatically accepted or not or if incoming requests are allowed at all.

12.4 Advanced

The *Advanced* view contains three different subsections:

- Logging
- Proxy
- Credentials

Logging

Logging is used for troubleshooting. You may be asked by your service provider to turn on logging and then send a log file directory contents. You can choose basic logging or more detailed logging to be enabled. Detailed logging may consume memory resources so it is not recommended to have it enabled for a long period of time.

You can also clear the logs and open the logging folder.

Proxy

Select how to handle HTTP proxies. By default, the system settings are used but you can also choose not to use an HTTP proxy or to use the Communicator (client) proxy settings.

Credentials

Configuration URL

If the Device Management configuration URL is available to be viewed, it appears here.

BroadWorks ID

This is the username you use to log in.

13 Call Settings

Communicator supports the following service management features allowing supplementary services to be managed using the *Preferences* and *Call Settings* view available in the *Main* window left pane by selecting the appropriate sub-view in the drop down:

- Incoming calls
  - BroadWorks Remote Office
  - Forward Calls
  - Do Not Disturb
  - Simultaneous Ring Personal
  - Anonymous Call Rejection
  - Call Waiting
- Voice Messaging
- Outgoing Calls
  - Block My Number (Calling Line Identification Presentation [CLIP]/Calling Line Identification Restriction [CLIR])
  - Automatic Callback
  - Highlight to call

You can also use the call settings with a *Main* window toolbar on the top of the window, if this feature is enabled. When enabled, this feature allows Do Not Disturb, Remote Office, and Call Forwarding to be managed in the *Main* window using single clicks or right clicks. From Release 20.2 onwards, the *Call Settings* toolbar is an icon in the left pane with right-click menus.

13.1 BroadWorks Remote Office

This service allows the use of any phone as the office phone from a charging and numbering perspective. For instance, a hotel room phone can be used as the office phone.

Enable Remote Office by clicking the service icon and specifying a phone number to be used as the Remote Office number.

13.2 Forward Calls

Enter a number to which your calls should be forwarded. Different variants of Call Forwarding are supported, such as forwarding always, forwarding when busy, and forwarding when you cannot answer or when you are unreachable. In addition, you can specify the number of rings before call forwarding is triggered.

13.3 Do Not Disturb

When you activate this service, all calls are typically blocked by the server and are sent to voice mail. Enable this service by enabling the service icon.

13.4 Hide Number

You can hide or display your number when calling or communicating with other parties or contacts. Hide your number by enabling the service icon. To show your number, set this to "Disable".

13.5 Simultaneous Ring Personal

Add up to 10 additional numbers or Session Initiation Protocol Uniform Resource Identifier (SIP-URI) addresses that you would like to ring in addition to your primary number when you receive a call. In addition, specify whether you want answer confirmations and if you would like to receive calls when already on another call.

13.6 Voice Messaging

You can enable or disable voice messaging in the *Preferences* and *Incoming Calls* tab. A number of settings are available:

- Send all calls to voice mail.

- Send busy calls to voice mail.

- Send unanswered calls to voice mail.

- Specify how voice mail messages are handled using an indicator in Communicator or forwarding to e-mail.

- Enable notifications of new messages via e-mail.

- E-mail a carbon copy of new voice mail.

- Transfer incoming calls to a specified number using "0" DTMF.

- Specify how many rings are used before sending an incoming call to voice mail.

- Allow/disallow callers to leave a message.

13.7 Anonymous Call Rejection

The Anonymous Call Rejection service allows you to reject calls from parties who have explicitly restricted their identities.

You can enable or disable anonymous call rejection in the *Preferences* and *Incoming Calls* tab.

13.8 Automatic Callback

The Automatic Callback (ACB) service allows you to be notified when the previously called busy party becomes idle and is connected without having to redial the phone number.

When you call another party and the call cannot be connected because the line is busy, you are prompted to make an automatic callback request (for example, "The line you are calling is busy. Press 1 if you would like to be notified when the line becomes available").

If you select Automatic Callback, the system monitors the busy party and automatically establishes a call when the busy party becomes available.

You can enable or disable Automatic Callback in the *Preferences* and *Incoming Calls* tab.

13.9 Call Waiting

The Call Waiting service allows you to answer a call while already engaged in another call.

You can enable or disable server-based call waiting in the *Preferences* and *Incoming Calls* tab. If you disable Call Waiting, the second incoming call will not be connected and the caller hears an announcement that the call cannot be completed.

Sign Out

Signing out of Communicator sets your status to "Offline" for your contacts and displays the *Sign In* screen.

13.10 Sign Out of Communicator

To sign out, follow these steps.

Windows

1)   Click the Communicator logo in the *Main* window title bar.

2)   Select **Sign Out**.

OS X

1)   Select *Actions* from the main menu.

2)   Select **Sign Out**.

13.11 Exit Application

To exit the application completely, follow these steps.

Windows and OS X

Close the *Sign In* window.

Windows

1)   Select the Communicator logo in the *Main* window title bar.

2)   Click **Exit** (a keyboard shortcut can also be used).

OS X

1)   Select *Communicator* from the main menu.

2)   Select *Quit Communicator* (a keyboard shortcut can also be used).

NOTE: Closing the *Main* window (not the *Sign In* window) does not exit the application but rather minimizes the application to the system tray (Dock). This allows you to continue to receive calls and messages without having the *Contact List* window appearing on the desktop.

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14 Installation

Installer supports a number of options on Windows (native desktop only):

- Agree to the license agreement.

- Run when system starts (can be changed later in *Preferences* window).

- Create a desktop icon.

- Select destination folder for installation.

- Select name of the software in *Program* menu.

- Launch client after installation.

When installer has been run on an end user's behalf by an administrator, the "Run program when system starts" option cannot be changed that end user.

If you disable startup, for example, in the Task Manager's *Startup list* (on Windows 8 and 10) or from *msconfig.exe* on Windows 7, the change is not reflected in *Preferences*. The checkbox remains checked and grey even though the client is not actually started automatically when the system starts.

When Communicator is installed for the first time, you can choose the language if many languages are supported in the installer. The default language is the language of the operating system; if that cannot be found, English is used as the fallback.

15 Uninstallation

The uninstallation procedure is different for Windows and OS X.

Windows

Uninstallation is performed by launching the Windows uninstaller via the Start menu or by using the Windows "Remove programs" view inside the Control Panel. Windows uninstallation does not require you to select any options.

All files are deleted at uninstallation, except for the following files:

- Registry entries
- Account files are only deleted when explicitly allowed by the end user on Windows.

OS X

Uninstalling is performed by simply dragging the application folder from the Applications directory to the trash can; however, account files are not deleted. If you want to remove account files, they must be manually deleted.

16 System and Software Version Requirements

System requirements are as follows on native desktop:

- Operating system: Mac OS 10.9 Mavericks, Mac OS 10.10 Yosemite, Mac OS 10.11 El Capitan, Windows 7, Windows 8/8.1, or Windows 10 (Classical view only).

- The installation footprint is approximately 125 megabytes (MB) on OS X and 215 MB on Windows.

- For voice calls, a sound card, speakers, and a microphone or a headset are required.

Minimum system requirements for respective operating systems need to be fulfilled, with the following additions:

- A minimum of 2 GB random access memory (RAM) is required.

- A minimum 1.5 GHz CPU is recommended.

- Open Graphics Library (OpenGL) 1.5 or higher is recommended.

The following are additional requirements for the UC-One Add-in for S4B.

- Windows

    - Windows 7

    - Windows 8

    - Windows 8.1

    - Windows 10

- Lync/S4B

    - Lync 2010 32-bit

    - Lync 2013 Basic 32 and 64-bit

    - Lync 2013 Standard 32 and 64-bit

    - S4B 2015 32 and 64-bit

    - S4B 2016 32 and 64-bit

- Communicator 21.2.0 or later (21.4.0 is recommended)

- Windows administration rights (due to required registry entry)

17 Troubleshooting

Why am I offline?

If you have selected "Offline" status, you are shown as offline to others. Another possibility is that you may have lost your Internet connection. In this case, the client does not log out, but rather enters an offline mode where a contact list is available but communication is not possible.

Why can't I change my user name and password?

User name and password editing is not supported in the client. To edit your user name or password, contact your service provider. The exception is login password expiry. When it expires, you can change the password in a separate dialog window.

In the preferences, the client only supports changing LDAP credentials. Desktop sharing credentials may also be changed, depending on your service provider settings.

I have a USB headset and the call control features are not working. Is there anything special I need to do to enable call control support?

In order to use headsets on Windows (not supported on OS X), several steps are needed:

1) When the client is started, you must accept the API connection request from the connector/add-in device.

2) Additionally, your client must have the feature enabled by your service provider.

Appendix A: Keyboard Shortcuts for Desktop

The following table lists the currently supported keyboard shortcuts (native desktop only). You can use these keyboard shortcuts to quickly perform frequently used actions. The characters used are lower case. The shortcuts are also indicated in the accessibility menus.

Shortcuts for Windows	Shortcuts for Mac	What it does
CTRL-Q	Cmd-Q	This quits the application.
Alt+F4	Cmd-W	This closes the selected window (except for a contact card and the *About* window).
CTRL+C	Cmd-C	This copies selected text from Communicator to the clipboard.
CTRL+V	Cmd-V	This pastes text from the clipboard to the location selected using the cursor in Communicator.
CTRL-X	Cmd-X	This cuts the selected text to clipboard.
-,	Cmd-,	This opens *Preferences*.
F1	Cmd-?	This opens *Help*.
-	Cmd-H	This hides Communicator.
-	Alt-Cmd-H	This hides other windows other than Communicator.
CTRL-N	Cmd-N	This opens the *Add Contact* window.
Shift-CTRL-N	Shift-Cmd-N	This opens the *Add Group* window.
CTRL -2	Cmd-2	When a contact is selected, this calls the contact with audio.
CTRL -3	Cmd-3	When a contact is selected, this calls the contact using call from phone.
CTRL -I	Cmd-I	When a contact is selected, this opens the contact card for the contact.
Shift-CTRL-F	Shift-Cmd-F	When a contact is selected, this makes the contact a favorite.
CTRL-delete	Cmd-delete	This deletes the selected contact.
CTRL-arrow down	Cmd-arrow down	This decreases the volume.
CTRL-arrow up	Cmd-arrow up	This increases the volume.
CTRL-space	CTRL-space	This mutes the client (while in a call).
CTRL-D	Cmd-D	This turns on the Do Not Disturb service.
CTRL-P	Cmd-P	This pulls an ongoing call from your other device to Communicator.
Alt-shift-CTRL-P	Alt-shift-Cmd-P	This retrieves your parked call.
-	Alt-Cmd-2	This calls your voice mail with audio.
-	Alt-Cmd-3	This calls your voice mail with audio using call from phone.
Shift-CTRL-R	Shift-Cmd-R	This opens your My Room.

Shortcuts for Windows	Shortcuts for Mac	What it does
CTRL-M	Cmd-M	This minimizes the window on OS X. On Windows, it only is used for the *Team Telephony* window.
CTRL-T	Cmd-T	This enables always on top.
-	Shift-Cmd-M	This opens the *Main* window.
Shift-CTRL-C	Shift-Cmd-C	This opens contacts.
Shift-CTRL-F2	Shift-Cmd-F2	This opens call history.
Shift-CTRL-F3	Shift-Cmd-F3	This opens visual voice mail.
Shift-CTRL-D	Shift-Cmd-D	This opens the dial pad view.

Appendix C: Skype for Business Integration

This section provides more hands-on information about Skype for Business (S4B) integration usage.

The required startup procedure is as follows (reversing the order in which S4B and Communicator are started will not work):

1) Start S4B.

2) Start Communicator. You can have it minimized or in the foreground. Your service provider may also choose an automatic "Minimize after login" feature that automatically minimizes Communicator after login.

The original intended use case for S4B integration was to use S4B for on-net (VoIP) calls while Communicator would be used for off-net calls.

The following sections describe the ways to make various kinds of calls.

On-Net Calling

To make an on-net call:

1) Select a S4B contact and click the call button. Alternatively, right-click a contact and select an on-net number.

2) Both the S4B main window and communications window are visible (as shown in the following figures).
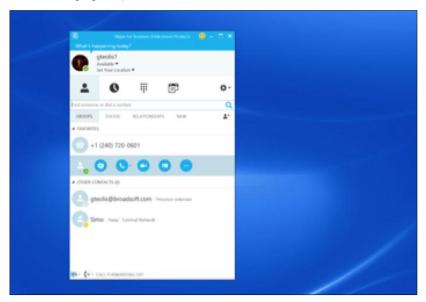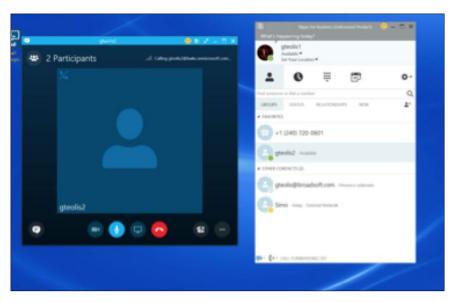

Figure 2 Making an On-Net Call

Figure 3 Ongoing On-Net Call

Off-Net Calling

Off-net calling has more variations due to S4B remembering the last number used to call a contact when clicking the call button (default action). As a result, when in S4B calling another S4B contact who is, for example, offline or in DnD status, using the call button (where the default action is to call an S4B address) will fail and the S4B call will not complete.

Your service provider can configure Communicator to make the call instead in these cases.

To make an off-net call:

1) Select a contact, right-click and select an external number (see the following list for the possible selections. Selecting a particular number from the right-click menu will call that number, while using the call button only selects the number to be called. The order in which the number is selected in this case is listed as follows and cannot be changed:

   – Work phone

   – Mobile phone (can also be two mobile numbers)

   – Home phone

   – Other phone

   – S4B voice mail

2) Communicator attempts to make the call instead of S4B. Both the S4B main window and Communicator communications window are visible.
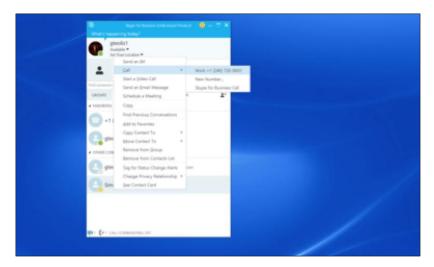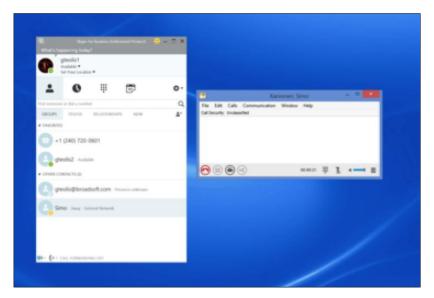
Figure 4 Making an Off-Net Call

Figure 5 Ongoing Off-Net Call

Appendix D: Configure USB Headsets

This section provides more information on configuring USB devices to function with Communicator.

In general on Windows, if "Default Communication Device" is defined in Windows settings, it is selected over the "Default Device" by Communicator for calls when several audio devices are available (for example, USB headset and the integrated audio device on the PC). However, when using headsets, you can select a separate device than the headset for alerting incoming calls.

The following examples provide more information on how to define a default communications device when a USB headset is available on the PC.

It is recommended to select "Use Default" in the *Audio* tab of Communicator *Preferences* for both input and output devices (as shown in the following figure).
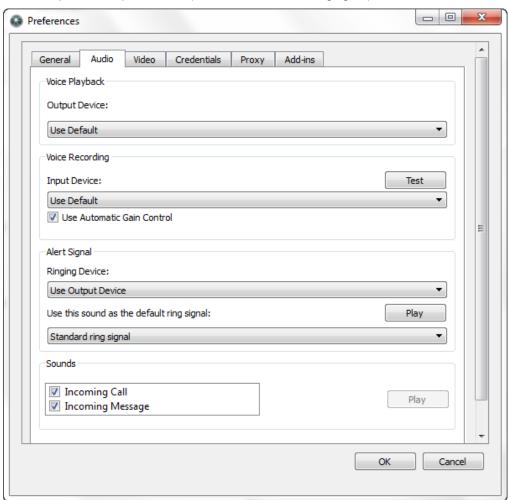

Figure 6 Preferences Window

1) To define the default communications device, make sure that the Sound settings in Windows pertaining to "Playback" devices are correctly configured. From the *Sound* applet, select the *Playback* tab.
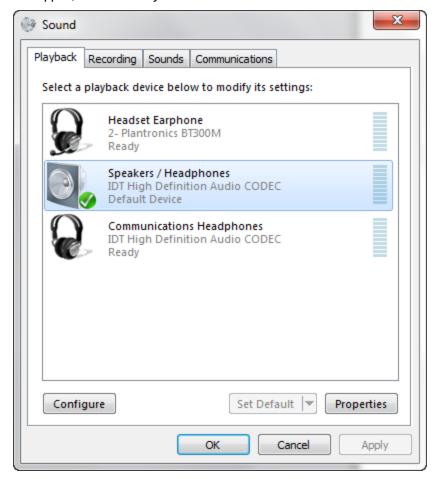
Figure 7 Sound Window – Playback Tab

In this example, the user has a Plantronics BT300M (the USB dongle accompanying a Voyager Legend UC) connected to their PC.

2) Click **Headset Earphone** to highlight the device and click on the drop-down arrow next to the **Set Default** button.
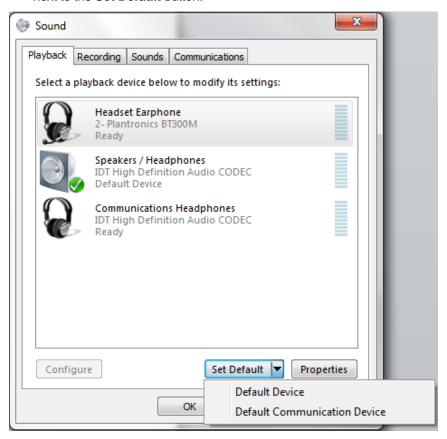

Figure 8 Sound Window – Playback Tab – Set Default

3) Select *Default Communication Device*. The following screen is displayed.

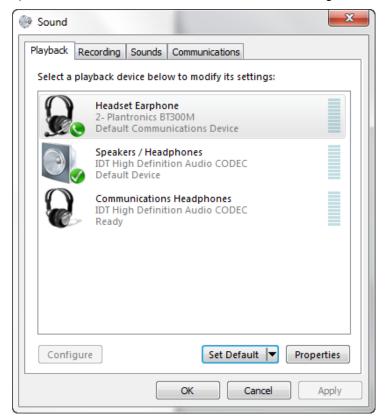Figure 9 Sound Window – Playback Tab – Default Set

4) Again, click on **Headset Microphone**, which represents the connected Plantronics BT300M device, and click on the drop-down arrow next to the **Set Default** button.

5) Select Default Communication Device.

6) Click **OK** to save the changes. The *Sound* window is dismissed and your device is now ready to be used by Communicator.

Appendix E: Third-Party Software and Copyright

The following third-party software is used in Communicator.

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Blowfish

Based on a C implementation of the Blowfish algorithm by Paul Kocher

UUID - RFC4412

/*

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MD5

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SHA-1

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SQLCipher

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Appendix F: Acronyms and Abbreviations

ACB	Automatic Callback
API	Application Programming Interface
CPU	Central Processing Unit
DTMF	Dual-tone multi-frequency
EULA	End-User License Agreement
FAC	Feature Access Code
FAQ	Frequently Asked Question
FMC	Fixed-mobile convergence
HD	High Definition
HID	Human Interface Device
LDAP	Lightweight Directory Access Protocol
LGPL	Lesser General Public License
MWI	Message Waiting Indication
RAM	Random Access Memory
SIP	Session Initiation Protocol
UC	Unified Communications
UI	User Interface
URL	Uniform Resource Locator
VoIP	Voice over IP
WebRTC	Web Real-Time Communication
Xsi	Xtended Services Interface