Communicator for Android

User Guide

Release 20.0

OFFICE COMMUNICATOR

Table of Contents

1   About Communicator for Android

Communicator for Android provides the following communication features:

- Instant Messaging and Presence (IM&P)
- Group Chat
- Voice Calling (VoIP)
- Video Calling
- Modify Call Settings
- Directory Searching
- Integrated Audio Conferencing
- Call Pull from Desk Phone

2   Getting Started

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

2.1   Installation

Android clients can be downloaded from Google Play.

2.2   Sign In

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

1) Enter your user name and password.

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

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

4) Tap **Sign In**.

> **NOTE**: If you choose automatic sign in, you are automatically signed in and taken to the *Contacts* list upon subsequent Communicator launches. Otherwise, you are presented with the *Sign In* screen.

After logging in, a pop-up dialog may appear informing you about emergency calls.

3   Main Tabs

When you start Communicator for the first time, your *Contacts* list is empty. You use the *search* field to find people and add them to your *Contacts* list. Contacts can also be added manually by tapping the **Add** button.
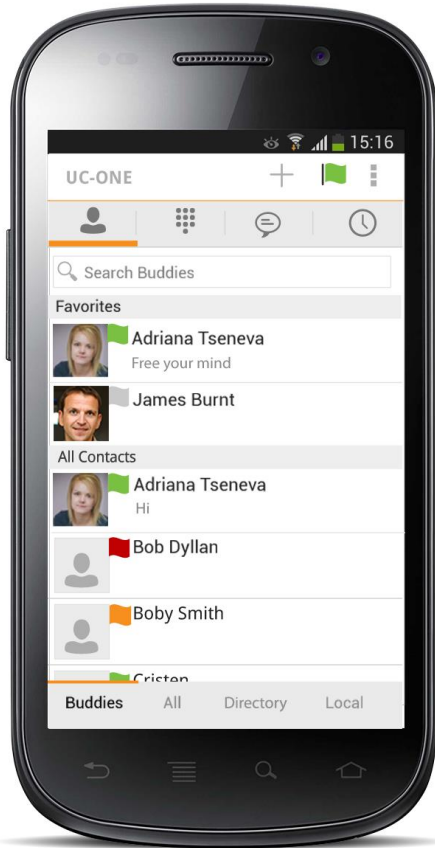
	👤	**Contacts** – View your contacts from a *Buddies* list, or a local or company directory.
	⠿	**Dial Pad** – Make calls.
	💬	**Chat** – View chat history.
	🕐	**History** – View incoming, outgoing, and missed calls.

The main view contains a number of tabs that present information about the contacts and communications options located on the top bar:

- *Contacts*
- *Dial Pad*
- *Chat*
- *History*

NOTE: *Settings* are available from the Android menu key or action bar.

4   Contacts

The *Contacts* tab can contain different types of contacts as follows:

- Presence-enabled contacts
- Non presence-enabled contacts
- Local contacts
- Directory contacts

Presence-enabled contacts are users from Communicator users or users from federated systems such as Google Talk. Non presence-enabled contacts can be phone or conference numbers.

The *Contacts* list has a filter bar at the bottom with the following options: *Buddies Directory, Local,* and *All.*

Buddies lists presence-enabled contacts with their name, presence status, as well as a space for free text. A long press on a contact opens the context menu, whereas a short press opens the contact card.

The context menu opens via a long press on a contact and provides the following options:

- Voice call
- Video call
- Join Room
- Contact details
- Add to Favorites
- Subscribe or unsubscribe
- Remove

Directory provides the company directory contacts.

4.1   Add

When you sign in for the first time, there are no contacts in your *Contacts* list. You can add a new presence-enable contact at any time by tapping the add icon $+$ from the status bar. Another way to add new contacts is to use the directory search option.

In the *Add Contact* screen, enter the contact's information and then tap **Done**. By default, your presence information is always shared with a new contact.

If you receive a buddy request invitation, you can ignore or accept it. If you ignore a buddy request, then you can always share your presence information later by selecting *Subscribe* from the buddy's contact card. Note that the contact must accept your subscription request for you to successfully establish a presence relationship.

The newly added contact appears on your *Contacts* list.

You can add a conference number using the same add icon by typing the conference number in the *Add Contact* view. You can also add a conference number from a directory search. A conference contact is a special contact used for conference bridges to avoid having to remember a PIN code and a conference number, for example, in recurring conferences.

4.2 Edit

Tap a contact from the *Contacts* list to open a contact card. This is the same for presence-enable and non presence-enabled contacts.

- *Unsubscribe* removes the presence relationship between you and that contact. This means you do not see the contact's presence information and your contact does not see yours. Select *Subscribe* to re-establish a presence relationship. An unsubscribed contact remains on the *Contacts* list and is always shown as "offline".

- *Remove* removes the contact from your *Contacts* list.

- *Edit* opens the *Contact Information* dialog box where you can add, edit, or remove information. This works for both presence-enabled and non presence-enabled contacts.

4.3 Filters

There are four contact lists available from the *Contacts* tab:

- *Buddies* – These are presence-enabled contacts.

- *Local* – These are contacts from your local phone book.

- *Directory* – These are contacts from a company directory, (which requires a search).

- *All* – This is used to search all local and company directory contacts.

5   Presence

For each contact to which you have subscribed, you can see their presence. Similarly, your contacts can see your presence on their *Contacts* list.

Presence means that your friends are able to see whether you are available, for example, "I'm available" or "I'm busy".

Icon	What does it mean?
	The green presence icon indicates that the user is online and ready for communication.
	The yellow presence icon indicates that the user is online but has been idle or away from their computer for more than ten minutes.
	The red presence icon indicates that the user is busy and does not want to be disturbed.
	The grey presence icon indicates that the user is offline and the only available contact method is calling or chatting.
	The question mark indicates that a subscription is pending and the contact has not yet approved sharing their presence.
	This icon indicates that the contact is busy on a call. This is an automated presence status.
	This icon indicates that the contact is busy in a meeting. This is an automated presence status. The *Busy – In Call* status overrides the *Busy – In Meeting* status so this one is only seen if there is a meeting but no call.

You can set your own presence by tapping on the Presence icon from the status bar in all tabs view. Tapping the Presence icon opens the *My status* screen where you can change your avatar, personal message, and presence status.

Your avatar is the picture that represents you in your friends' *Contacts* list and in chat screens. Tapping on an avatar opens a dialog with options to select an existing image, to take a new one with your phone camera, or to clear your avatar.

You can enter a status message in the area next to the avatar. This status text is shown in your friends' *Contacts* list.

If you see the error message, "Chat Unavailable", under any tab, it means that the connectivity has been lost for chat and presence; however, you can still make calls. In this case, you should contact your group administrator.

The presence update is only triggered by appointments and meetings that are either accepted by the user or made by them. Note that all-day meetings do not trigger a presence change to *Busy – In Meeting*.

6   Instant Messaging

6.1   Chat Tab
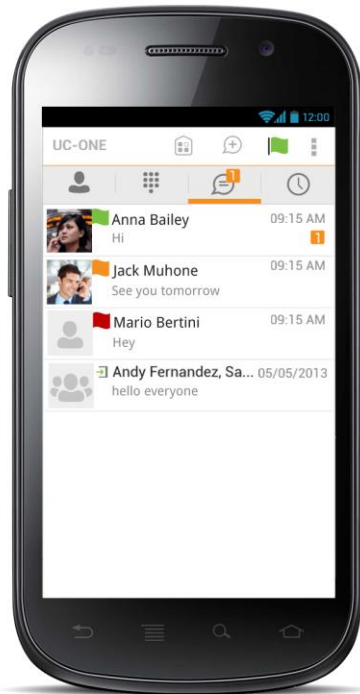
The *Chat* tab shows a list of recent chats since the user last logged in. If User A chats with User B multiple times, their discussions appear as one item in the list.

Tapping the name opens the chat view (IM view) where new messages can be typed. Old messages are also shown.

New incoming messages are indicated with a notification badge to the right of the name. The icon remains next to the name until the message is read. A long press on a contact opens the context menu with open chat and contact details (this is the same for the *Buddies* list).

Chats are listed so that newest one is always on top. Chats are not in alphabetical order and are always listed with the most recent first.

The Status bar in the *Chat* tab displays icons for

My Room ⊞ , Add Participants ⊕ ,

Presence Status 🚩, and the Overflow menu ⋮ .

Tapping the *My Room* icon opens a room view with *My Room* and a list with all the rooms in which you participate.

The Overflow menu displays the following options*:* Start group chart, Mark all as "Read", About, Settings*,* and Sign out.

6.2   Chat

Start a chat using one of the following methods:

■   Tap a contact from the *Contacts* list to open a contact card. From the contact card, choose the chat icon 💬 to start a chat.

■   From the options provided after a long press on a contact.

■   In the *Chat History* list, tap a contact entry to start a chat.

■   From search results, tap a contact to open the contact card and then choose the chat icon.

When you initiate a chat, the *Chat* screen opens. Chatting with a contact is possible only when you are both online. If your contact initiates a chat, you see a notification badge on the *Chat* tab and the entry appears at the top of the *Chat History* list.

Once a chat opens, the name of the recipient is on the top bar and there is a presence icon flag before the name. The recipient's messages are presented in the orange background and the user is presented in the white background.

Smiles can be added to messages by typing the corresponding character codes and by selecting from the smiley icons, (the smiley is displayed graphically in the message area).

6.3   Group Chat (Ad-Hoc Rooms)

Start a group chat using one of the following methods:

- In single chat session, tap the add participant icon to escalate from a single to a group chat.

- On the chat screen, tap the Overflow menu icon and then select the *start group chat* option.

- In the *Chat History* list, tap a group communication entry to start a group chat.

When you initiate a group chat, the *Chat* screen opens. More participants can be added later to the chat using the add participant icon. Anyone in the group chat can add participants. However, removing participants is currently not supported.

A group chat works the same way as a one-on-one chat. All messages from anyone are sent to everyone else. All contacts need to be online to be able to participate in a group chat. You cannot invite an offline contact.

A group chat history is saved and is available to view later from the *Chat tab*.

A user can leave a group chat by selecting the *Leave chat* option. The chat is marked as "offline" and the user no longer receives messages from the chat. When tapping on the "offline" chat, the user re-joins the room and starts receiving messages. However, the user does not receive the messages that were sent in the chat while the user was outside of the room.

The Clear History menu item behaves the same way as the corresponding option in the one-on-one chat and removes the local history.

The View Participants button opens a dialog that shows the list of participants in the group chat.

Note that deleting a chat room is not supported.

7   Audio and Video Calls

7.1   Dial Pad Tab
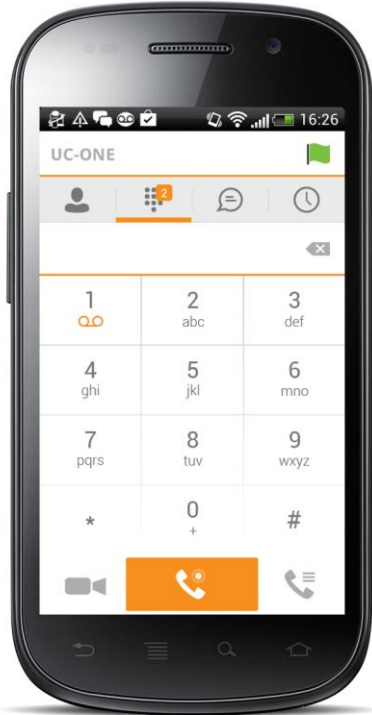
The *Dial pad* tab displays a dial pad and a text field used to enter numbers. The dial pad is one of the options used to make audio or video calls. There are three buttons below the dial pad: Call, Video call, and Dial pad menu that are configurable by the service provider. The top text field also has a delete button that, when pressed, deletes one character at a time.

On the digit 1, there is notification for voice mail .
A long press on digit one connects you with your voicemail box. When there are no voicemail messages in your voicemail box the icon is grey.

The dial pad menu can contains two options: Pull call and Retrieve call.

7.2   Make Audio or Video Calls

You can make an audio or video call using one of the following methods:

■   Tap a contact from the *Contacts* list to open a contact card. From the contact card, choose the headset icon ☎ to make an audio call or the video icon 📹 to make a video call.

■   From the options provided, after long press on a contact.

■   From the search results, tap a contact to open a contact card and choose the audio or video icon or by using the long press options.

■   Open the dial pad, enter a phone number, and tap the Call or Video button.

■   On the *Call History* list, tap a call entry.

■   On the *Chat* screen, tap the headset icon ☎ to make an audio call or the video icon 📹 to make a video call.

7.3   Answer Call

An incoming call is indicated with a ringtone. There are two options on the incoming call screen: *Accept* and *Decline.* If you decline the call, it causes the line to sound busy at the caller's end and they know that you rejected the call.

7.4 In Call Actions

From the *In Call* screen, you can perform the following actions:

- End a call
- Mute your microphone
- Place a call on hold
- Adjust the volume
- Open the dial pad
- Add more participants to the call
- Transfer a call
- Talk and then transfer a call
- Make a conference call
- Park a call
- Transfer a call to a circuit-switched call
- View participants (of a conference call)

7.5 Missed Calls and New Messages

When you miss a call, the notification bar on the Android device shows a note. By tapping the missed call, you go to the *History* screen. Notifications, for example, missed calls or new messages, are also shown as badges on the tab icons.

7.6 Message Waiting Indicator and Voice Mail Access

If you have pending voice mail messages, then the notification bar on the Android device displays an icon and the message, "You have *XX* pending voicemail messages". By clicking the voice mail notification, the application dials the voice mail access number directly and you can listen to the VM messages.

Voice mail is also accessible with a long press of the dial pad "1" key (similar to how it is on a regular mobile dial pad). If voice mail messages are available, then the "1" key changes color. In addition, a voice mail notification is displayed as a badge on the *Call* tab icon.

The number for new voice mails changes depending on how many are open or are new. The voice mail icon in the notification area has an associated badge that shows the number of new messages.

7.7 Contact Name Lookup for Incoming Calls and Call Logs

Whenever an incoming call does not have a calling name associated with it, Communicator Mobile performs a local contact search. If the number matches one of the contacts on the mobile phone's *Contacts* list, the name is shown on the incoming *Call* screen along with the alert.

When a user retrieves their call logs/history and the call log does not have a calling name associated with it, the client does a lookup in the local contacts and populates the name if a match is found.

7.8   N-Way Calling

Communicator Mobile supports network SIP-based conference calls with up to three participants. While on a two-way call, users can add a third party using the Conference button. It opens the address book on the device to search for and select the new participant.

The supported mode is *Blind Conference* calling. The third party receives a call and they are added to the conference automatically as soon as they pick up.

Once the conference is established, the participants are shown on the *Device* screen.

7.9   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.

7.10   Call Transfer

The client supports transferring VoIP calls to another party. Two modes of transfer are supported:

- *Attended Call* – Select **Talk First** from the menu and a second call is placed with the selected contact. If the call is successfully established, you can talk with the third party privately before completing the transfer by pressing the **Transfer** call button again.

- *Unattended Call* – Select **Transfer** from the menu, the second party is transferred to the selected contact, and the current user is dropped from the call.

7.11   Call Pull

Call Pull can be used in scenarios where a user has two endpoints, for example, a VoIP desk phone and a mobile phone with Communicator. If the user has an active call on the desk phone, this call can transferred seamlessly to the mobile phone via the Call Pull button. There is no interruption to the voice call.

8   Call History

Call history can be accessed from the *History* tab. Communicator saves a call history for placed, received, and missed calls. Call history makes it easy for you to redial and call back when you miss a call or when you want to dial a contact with whom you have recently spoken.
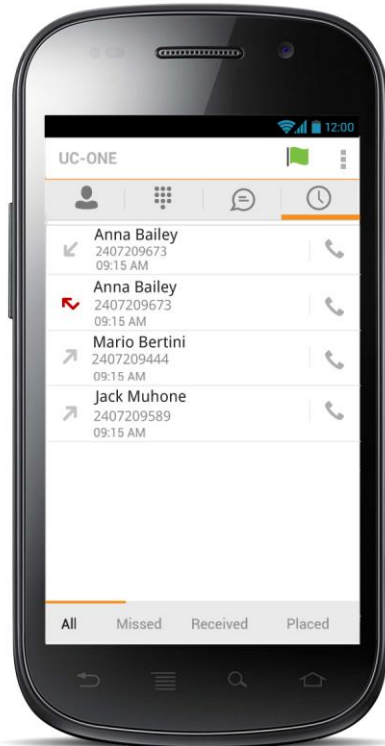
9 Settings

The *Settings* view contains the following items, which can be configured by the end user:

- Language

- Remember password

- Sign in automatically (note, that this is disabled until *Remember password* is checked)

- Call settings

- Mobility settings

- Credentials

- Help

The hard key menu contains the *Settings*, *About*, and *Sign out* options. The *Settings* option opens a new view with different settings that the user can toggle. The *About* screen shows information about the client, for example, it shows the current client version number. Sign out exits and closes the client.

9.1 Language Support

The client is prepared for localization and can be delivered in any language. Currently, the client is available in:

- U.S. English

- French

- German

- Italian

- Spanish (European)

- Korean

- Japanese

- Chinese

Additional languages are available upon request as part of a customization project.

9.2 Help Pages

The client provides web-based help that can be launched from the *Settings* view.

9.3 Automatic Sign In

The user can choose to sign in automatically with Communicator Mobile with a default account when the client is started. Together with the functionality to start Communicator automatically at system startup, this makes it easier for users to remember to sign in and be available for communication.

9.4 Call Settings

The client supports the following service management features, allowing supplementary services to be turned on or off using the native client *Preferences* window:

- Call Forwarding
- Do Not Disturb
- Remote Office
- Anywhere
- Hide Caller ID
- Simultaneous Ring Personal

9.4.1 Anywhere

Anywhere simplifies communications for on-the-go users and remote users by extending the features of a desk phone to any other fixed or mobile device, regardless of the network or handset manufacturer. Callers dial one number and can reach you on any phone the user chooses. A desk phone, cell phone, and/or a soft phone can ring simultaneously.

Voice call continuity is possible with the ability to move live calls from one device to another without hanging up.

Add locations (numbers) that can be used in the service using the Add New Location button. Use the *Alert all locations* to activate parallel ringing.

Select *Diversion inhibitor* to prevent a call ending up as a voice mail, which can be problematic, for example, in conference call situations.

Select *Answer Confirmation* to receive a separate audio prompt when answering a call from that number (location). It may be useful in cases where, for example, mobile numbers are being used to prevent incoming calls going to mobile voice mail since the call will be ended without going to voice mail if the answer confirmation is not provided.

Select *Call Control* to enable the server platform to provide mid-call services such as Call Transfer and Conferencing for that number (location).

9.4.2 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 and specify a phone number to be used as the Remote Office number.

9.4.3 Call Forwarding

By tapping on a different *Call Forward* option, you can enter a number to forward your calls as follows: Call Forward Always, Busy, or When Unreachable.

9.4.4 Do Not Disturb

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

9.4.5   Hide Number

You can hide or display your number when calling or communicating with other parties or contacts. To hide your number, set to "Enable". To show your number, set to "Disable".

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10 My Room

My Room is an always available and a permanent room that you can use to chat with anyone that joins.

My Room is accessible using the house icon in the action bar of the *Chat* tab.

You can add more participants using the add participants icon or they can join your room from your contact card. Once participants join the chat room, they can tap on the **Call** button of that screen to automatically join the conference.

My Room uses your permanent chat room, permanent collaboration room, and a conference bridge (audio or video). All *My Room* sessions start as chats but a call can be added to the session while in progress.

Others join your room by clicking your name on their *Contacts* list and by selecting *Join Room* from the contact card.

11 Search Enterprise Directory

The client supports a search of the enterprise directory. The search is performed in a separate input field in the *Contacts* tab. Tapping the search icon opens the search view and after a search, the enterprise directory search results are displayed with the names and numbers.

The default starting screen for a search shows the screen when the user has pressed the search icon. Typing in characters starts the filtering process through the contacts. The search is performed in both the contacts lists, as well as the directory list. Pressing the back key minimizes the keyboard, hides the search bar, and empties the search result.

There is no hard key menu in the directory search results listing view. A long press on a name opens the context menu and hides the keyboard but keeps the search bar with the characters. A short press opens the contact card.

The context menu contains the following options for the directory list:

- VoIP call

- Video call

- Contact card

12 Call History

The client supports the basic Call History. The bottom of the screen has filters for All calls, Received calls, Placed calls, and Missed calls.

On the list of calls, there are symbols indicating whether a call was incoming or outgoing.

The list of the call items consists of an icon showing what kind of call it was (a green arrow means incoming, a blue arrow means outgoing, and a red arrow means missed). It also shows the name, number, *Unavailable* status for the caller, and below the name, it shows the number, if available. To the right, the user can see the date of the call and the time the call was initiated.

Tapping an item on the list opens the contact card where a call can be made to that number.

13 Multi-Device

Communicator provides support for users with multiple devices. This includes several features:

- Chat invitations are sent to all devices. Before the session is accepted, messages are sent to all devices, and once answered, the chat messages go to the device that has sent a reply message.

- Retrieving one's own presence notifications, when another client updates the user's presence. The client updates its own status based on the information it receives from the server.

- Accepting a shared presence invitation in one client is also recognized by another client, and both clients start receiving presence updates.

- A new presence subscription made in one client is recognized in another. If the contact blocks the invitation, there are presence notifications from the server to all of the user's clients indicating that the subscription was terminated, and this information is shown to the user. If the client receives two presence authorization requests from two or more devices for the same user, it only shows one request to the user.

- Removing a contact from a *Contacts* list in one device is recognized in another client, and the *Contacts* list is updated (that is, the contact is removed) in the other client as well.

14 Troubleshooting

The troubleshooting function can be used if there are issues encountered with the application. It collects and sends diagnostic information to a predefined support e-mail address that is configurable via the branding process. This helps support personnel to identify the issues. The information sent consists of the application and media engine diagnostic logs.

Troubleshooting is managed by a menu entry in *Settings*. It can be accessed from two places in the client:

- From the Help button on the *Sign In* screen – This opens the *Settings* screen that contains the help and troubleshooting-related entries. This can be used before the user has signed in, which is most often for cases when a user has issues with signing in or connectivity.

- From the *General Settings* screen – Help and troubleshooting entries are available at the bottom of the Settings menu. These are accessible while the user is logged in.

15 Sign Out

You sign out at the bottom of the *Settings* tab.

16 Other Features

16.1 Version Control

Version control is supported using the Android market mechanisms. When a new release is available, the old version is removed from the market and users of the previous version are notified about the update possibility.

16.2 Firewalls and NATs

The client supports *rport* (*RFC 3581*) for Network Address Translation (NAT) traversal and using the client behind a firewall. However, it is assumed that the client is mainly used with a session border controller (SBC), which also provides support for NAT traversal for several key features, such as calling (that is, currently unlikely to work without an SBC).

16.3 Secure VoIP Communication

The client supports secure VoIP communication, using encrypted call negotiation and media streams. Mandatory, preferred, and optional secure modes are supported.

17 System Requirements

Communicator Release 20.0 for Android supports devices with Android 2.3, 3.2, and Android 4 OS or later.

The client has been validated on the following reference devices:

- Samsung Galaxy S2
- Samsung Galaxy S3
- Samsung Galaxy S4
- Samsung Galaxy Nexus
- Google Nexus 4
- Samsung Nexus S *
- Samsung Galaxy Note
- Motorola Droid 2 (Milestone)
- HTC Sensation

Communicator Release 20.0 for Android media capabilities (voice and video) require Android device with ARMv7 processor architecture.

Devices marked with an asterisk (*) have been validated but have some documented limitations related to audio or video calls.

18 Abbreviations

APN	Access Point Name
ACD	Automatic Call Distribution
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
FMC	Fixed-Mobile Convergence
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure Sockets
IM&P	Instant Messaging and Presence
IP	Internet Protocol
NAT	Network Address Translation
PBX	Private Branch Exchange
PIN	Personal Identification Number
QoS	Quality of Service
RCS	Rich Communication Suite
RTCP	Real-Time Control Protocol
SBC	Session Border Controller
SIM	Subscriber Identity Module
SIP	Session Initiation Protocol
TN	Telephone Number
ToS	Type of Service
UC	Unified Communications
UI	User Interface
URI	Uniform Resource Identifier
URL	Uniform Resource Locator
VoIP	Voice Over IP
VPN	Virtual Private Network
XMPP	Extensible Messaging and Presence Protocol
Xsi	Xtended Services Interface