AVALLE
4business

Smart UC-One

Smart UC-One for Android

User Guide

Release 22.1.2

Document Version 1

Table of Contents

1   About Smart UC-One for Android

Smart UC-One for Android provides the following communication features:

- Instant Messaging and Presence (IM&P)
- Voice Calling (VoIP)
- Voice Calling (Mobile)
- Video Calling
- BroadWorks Call Settings

2 Get Started

This section contains the essential information for getting started with Smart UC-One.

2.1 Installation

Android clients can be downloaded from Google Play.

https://play.google.com/store/apps/details?id=com.smartucone.android&hl=en

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 Smart UC-One to remember your password.

3) Tap **Sign In**.

3   Main Tabs

When you start Smart UC-One 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.
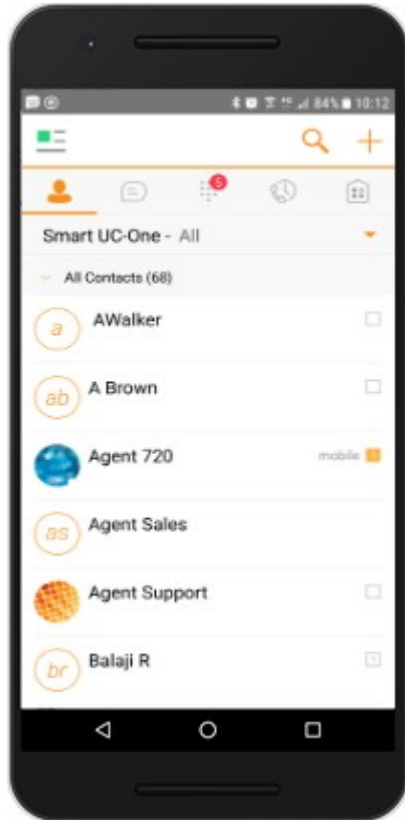
Icon	Description
	Contacts – View your contacts from a *Buddies* list, or a local or company directory.
	Chat – View Chat History.
	Dial Pad – Make calls.
	History – View incoming, outgoing, and missed calls.
	My Room – Join your personal room.

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

- *Contacts*
- *Chat*
- *Call*
- *History*
- *My Room*

4　Contacts

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

■　Presence-enabled contacts

■　Non-presence-enabled contacts

Any contact can be marked as a favorite, which then appears at the top of the *Contacts* list in the *Favorites* section.

Presence-enabled contacts are users with the BW – UC One IM&P service. These can also be users from federated systems such as Google Talk. Non-presence-enabled contacts can be phone or conference numbers. These are also stored on the server and available on all client instances of the user.

The Android Mobile client shows contact groups created from the desktop. Contact groups cannot be created or edited from the Mobile client.

The *Contacts* tab contains the following:

■　UC-One Contacts

−　All

−　Online

■　Contact Directories

−　Phone Contacts

−　Directory

Local Address Book provides contacts from the local contacts. Directory provides contacts from the company directory.

4.1　Contact Card

The contact card displays information about a contact based on the contact type. This includes Smart UC-One contacts, Local Address Book contacts, and contacts from directory search results.

The user can initiate a call or chat session directly from the contact card. This includes joining other contact's My Room or dialing a My Room audio bridge from a directory contact search result.

If the contact has an associated email address, then the application supports sending an email to the contact by launching the native email client on the mobile device.

4.2　Add Contacts

When you sign in for the first time, there are no contacts on your *Contacts* list. Add a new presence-enable contact at any time by selecting the option *Add Contact* from the plus icon in the left bottom bar. Another way to add new contacts is to use the directory search option from the *Contacts* tab.

In the *Add Contact* screen, enter the contact's information and then select **OK**. By default, your presence information is always shared with a new contact if an XMPP address is provided.

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

Add a conference number by selecting the option *Add Conference* from the plus icon in the left bottom bar. In the *Add Conference* screen, enter the conference information and then select **OK** 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, for a recurring conference.

Add a local contact by selecting the *Add Phone Contact* option using the plus icon in the left bottom bar. The *Add Phone Contact* option opens the native Address Book for adding a new contact in the local phone book.

4.3 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.

■   Select *Edit* from action overflow button to open the *Contact Information* dialog box where you can edit information. This works for both presence-enabled and non-presence-enabled contacts.

■   Select *Unsubscribe* from action overflow button to remove 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".

■   Select *Remove* from action overflow button to remove the contact from your *Contacts* list.

4.4 Filters

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

■   *All* – Shows all presence-enabled and non-presence-enabled contacts.

■   *Online* – Shows only the presence-enabled contacts that are currently online.

■   *Phone Contacts* – Shows the contacts from your local phone book.

■   *Directory* – Shows the contacts from a company directory (requires a search).

5   Availability

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

> **NOTE**: *Availability* can also be referred to as *presence status*, which was the term used in previous releases of Smart UC-One.

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

Icon	What it means
available	The green availability icon indicates that the user is online and is ready for communication.
mobile	The green availability icon indicates that the user is online on the Smart UC-One Mobile client and is ready for communication. The icon is accompanied by the text "mobile".
away	The yellow availability icon indicates that the user is online on their Smart UC-One client but has been idle or away from their computer for more than 10 minutes.
mobile	The yellow availability icon indicates that the user is online on their Smart UC-One Mobile client but has been idle or away from their computer for more than 10 minutes.
offline	The grey availability icon indicates that the user is offline in a call and the only available contact method is calling or leaving a chat message.
call	The grey availability icon indicates that the user is offline and the only available contact method is calling or leaving a chat message.
pending	The question mark indicates that a subscription is pending and the contact has not yet approved sharing their availability.
busy	The red availability icon indicates that the user is busy and does not want to be disturbed.
call	This icon indicates that the contact is busy due to a call. This is an automated availability status.
meeting	This icon indicates that the contact is busy due to a meeting. This is an automated availability status. The Busy – In Call status overrides the Busy – In Meeting status so this icon is only seen when there is a meeting but no call.

You can manually set your own availability by tapping on the availability icon from the status bar in all tabs view. Tapping the availability icon opens the *My status* screen where you can change your avatar, personal message, and availability 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 XMPP connectivity has been lost for chat and availability; however, you can still make calls. In this case, you should contact your service provider.

The availability 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 an availability change to *Busy – In Meeting*.

6 Instant Messaging

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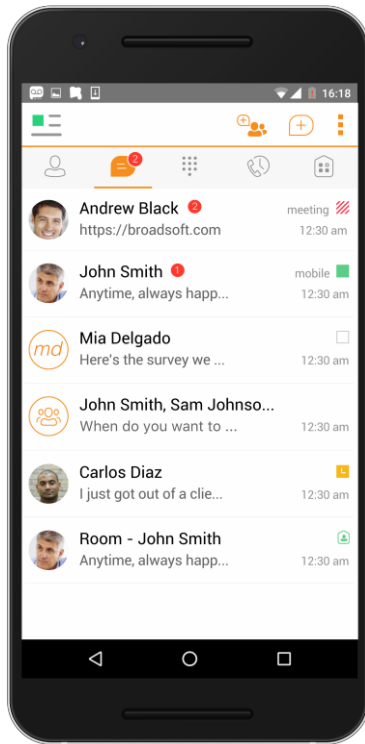
The *Chat* shows the list of recent chats since the last login. If User A chats with User B multiple times, their discussions appear as one item in the list.

Tapping the name from the *Chat* list opens the *Chat* view (IM view) in the right pane 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.

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

Tapping the menu button in the navigation bar displays the Start Group Chat and Mark all read options. The second one removes all notification badges from the *Chat History* list.

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.

■   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.

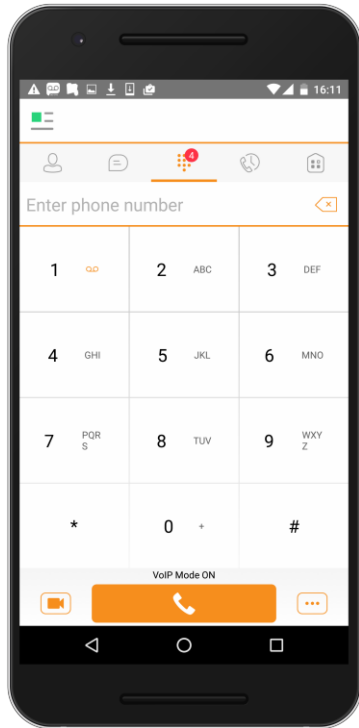The **View Participants** button opens a dialog that shows the list of participants in the group chat.

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.

A badge notification appears on the *Dial Pad* tab when there are messages in the voice mail box. The voice mail icon under digit one becomes orange when there are voice mail messages. A long press on digit one connects you with your voice mail box. When there are no voice mail messages in your voice mail box, the icon is grey.

The *Dial Pad* menu can contain three options: VoIP Mode, Pull Call, and Retrieve Call.

7.1.1 VoIP Calling Mode

Smart UC-One Mobile supports an option that allows a user to switch easily between VoIP and Mobile calling modes.

- VoIP calls use WiFi or the carrier data network.

- Mobile calls use the mobile network. Mobile calls leverage BroadWorks Anywhere or BroadWorks Mobility to present the business identity of the user (for more information, see section *7.7 Call Back and Call Through*).

Users can switch between VoIP and Mobile through the *Dial Pad* menu. An indication of the currently selected mode is displayed on the dial pad.

- VoIP Mode On:

  – Outgoing and incoming calls use VoIP over WiFi or data network.

  – BroadWorks Anywhere or Mobility location for the device is disabled.

- VoIP Mode Off:

  – Outgoing and incoming calls use the mobile circuit-switched network.

  – BroadWorks Anywhere or BroadWorks Mobility location for the device is enabled. Outgoing calls are performed with Call Through or Call Back. Incoming calls are delivered via the BroadWorks Anywhere or BroadWorks Mobility location.

VoIP calls over the carrier data network are dependent on the quality of the network and may incur additional charges. As such, there are options for an operator or end user to disable VoIP calls over the carrier data network (3G, 4G, or Long Term Evolution [LTE]), if needed. Users can control this behavior in *Call Settings → VoIP Calls*. There are two options:

- WiFi only: VoIP calls are allowed only on WiFi.

- All Networks: VoIP calls are allowed only on any data network.

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.

If a user is in the middle of a VoIP call and receives an incoming cellular call, the VoIP call continues while the phone is alerting. Once the mobile call is answered, the VoIP call is put on hold.

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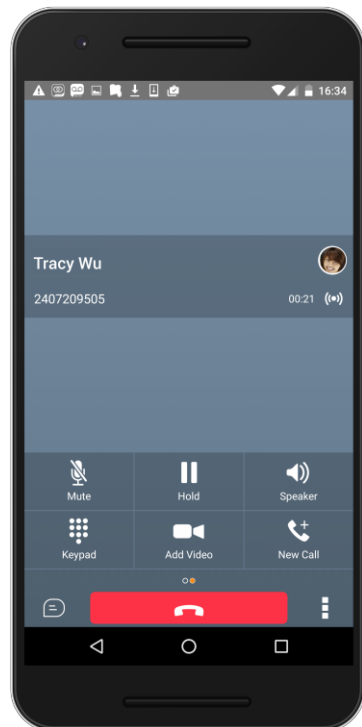
From the *In Call* screen, you can perform the following actions:

- End a call

- Mute the microphone

- Place a call on hold

- Adjust the volume

- Escalate from audio to video call and downgrade from video to audio call

- Open the dial pad

- Make a new call

- Transfer a call – Attended

- Transfer a call – Unattended

- Make a conference

- Park a call

- Add more participants (in conference call only)

- Merge two separate calls

- Swap two separate calls

- View participants (on a conference call)

In addition, the user can use the Android back button to leave the *In Call* screen and navigate through the other application screens. Returning to the *In Call* screen is possible through the active call toolbar in Smart UC-One or the active call notification entry in the Android notification center.

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 voice mail messages". By tapping the voice mail notification, the application dials the voice mail access number directly and you can listen to the voice mail 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 Call Back and Call Through

Smart UC-One allows you to originate a circuit-switched call using your business line identity. This is done using the basic Call Back functionality on BroadWorks or the Call Through functionality available with BroadWorks Anywhere.

Call Back is available if you have BroadWorks Anywhere, or Remote Office assigned. The application checks to see whether one of these services is provisioned with a phone number that matches the mobile number. If it is provisioned this way, it provides the option to make calls using the Call Back feature.

Call-Through functionality is available if the BroadWorks Anywhere service is assigned to the user and configured with at least one location. Call Through provides a more natural dialing experience. When a call is placed in this mode, the client communicates transparently with BroadWorks to obtain a temporary IP Multimedia Routing Number (IMRN). The client then calls the IMRN and connects the user directly to the destination identifying the call with their business line identity.

Note that Call Through requires "My Phone number" on iOS or "Own phone number" on Android local setting to be set to the phone number of the mobile device. This number must be set and must also match the number configured in BroadWorks Mobility or BroadWorks Anywhere in order for Call Through to work.

7.8 Contact Name Lookup for Incoming Calls and Call Logs

When receiving a call, Smart UC-One searches for the name in the following sources and in the following order: XMPP contact name, Enterprise Directories, Local Contact List, *P-Identifier* header (SIP), and *From* header (SIP). If the number matches one of the contacts, the name is shown on the *Incoming Call* screen.

7.9 N-Way Calling (Conference)

Smart UC-One Mobile supports network SIP-based conference calls. While on a two-way audio or video call, you can add more participants by using the **Conference** button. It opens the Address Book on the device to search for and select the new participant. Once the conference is established, the participants are shown on the *Device* screen.

The other way to create conference call or to add participants in an existing conference is to make a *new* second call and select the *merge* option.

7.10 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.

7.11 New Call

The client supports starting a new call while in an ongoing call. The steps are as follows:

1) Establish call with remote party.

2) Initiate second call using the new call button.

3) Select a contact then choose a number. After the new call is established, the first call is put on hold. You can swap the two calls or to merge it in conference.

7.12 Call Transfer

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

- Attended Transfer – Establish a call with remote party. Select a contact then choose a number. Select the *call first* option. If the call is successfully established, you can talk with the third party privately before completing the transfer by pressing the **Complete** button.

- Unattended Transfer – Establish a call with remote party. Select a contact then choose a number. Select the *Transfer* option and the transfer is completed.

7.13 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 Smart UC-One. 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. Depending on the application, dialing settings, and service configuration, the call can be pulled as a VoIP or circuit-switched call to the mobile phone. There is no interruption to the voice call.

Call Pull button pulls audio only. Users can pull video calls directly by dialing the feature access code *11 and then selecting the video call button.

7.14 Call Park

The Call Park service allows a "parking" user to park a call against a "parked against" extension. The "parked" user is placed on hold until a user retrieves the parked call. If the call is not retrieved within the provisioned recall time, then the parked call is reverted and presented to the "recall" user.

7.15 Call Recording

The Smart UC-One client provides the ability for users to start, stop, pause, and resume call recordings. Call recording controls depend on user's call recording mode configured on the server. The client supports the option to record a call before it begins or during the call itself.

Recorded calls are accessed outside of Smart UC-One; you cannot view them using the client. Depending on your service provider settings, call recording behavior is one of the following (this cannot be controlled in the client but in the self-provisioning portal):

■ Always – recording indication (icon) in the *In Call* screen.

■ Always with pause/resume – recording indication (icon) in the *In Call* screen. Only pause/resume menus are available in this mode.

■ On demand – recording indication (icon) in the *In Call* screen. No stop menu is available, only start and pause/resume. After a call is established, call recording starts on the server. If the user presses the **Start Recording** button during the call, the call recording is stored and the server keeps the recording of the whole call regardless of when the recording was started (except for pauses). Otherwise, if no start recording is initiated from the user, the call recording is deleted from the server.

■ On demand with user-initiated start – recording indication (icon) in the *In Call* screen. Menu options available for start, stop, and pause. Call recording can be initiated at any time and several times during a call. There are separate call recordings for each call recording startup.

■ Never – no indicators or menu options present. Pause/resume audio indication depends on your service provider settings. It is recommended to re-login after changing the call recording mode in the self-provisioning portal.

7.16 Bluetooth Support

You can control incoming and ongoing calls from a compatible Bluetooth headset.

The *System Requirements* section in the *Smart UC-One for Desktop and Mobile Product Guide* lists the headsets that have been tested, although other Bluetooth devices should also work.

Smart UC-One Mobile Android supports mute and volume control from the Bluetooth headset; however, answer and hang up are supported only from the application.

7.17 Swipe Between Chat and Audio/Video Communication Views

Smart UC-One provides the ability to switch between Chat and Audio/Video communications sessions for own My Room, other users' My Room, and two-way chat. The ability to switch between sessions is indicated by the presence of dots at the bottom of the screen. The user can perform a swipe to switch between the sessions.

8   Call History

Call history can be accessed from the *History* tab. Smart UC-One saves a call history for all and missed calls.

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

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, is the date of the call and the time the call was initiated.

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.
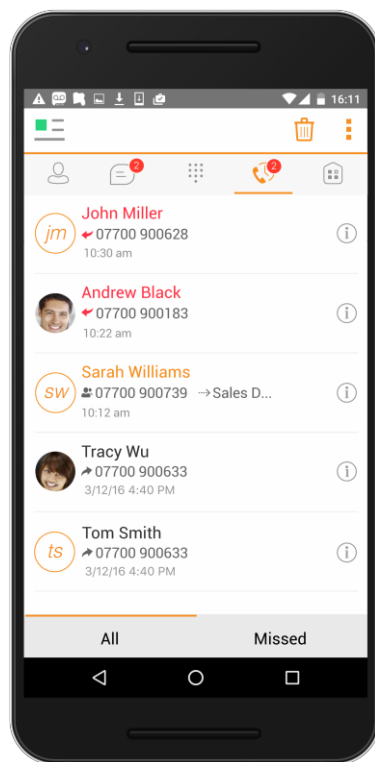
9 Side Navigation

The side navigation contains the following items:

■   My status

■   Call settings

■   Preferences

■   About

■   Help

■   Sign Out
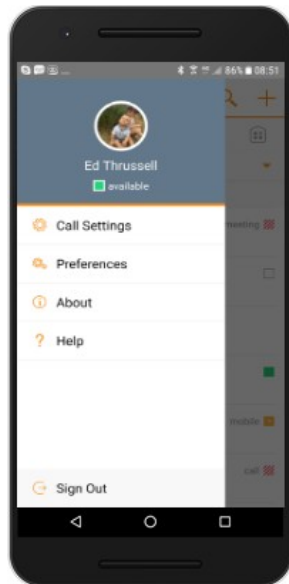
9.1 My Status

You can set your own availability by tapping on your personal status from the side navigation. It opens the *My status* screen where you can change your avatar, personal message, and presence status.

> **NOTE**: *Availability* can also be referred to as *presence status*, which was the term used in previous releases of Smart UC-One.

Your avatar is the picture that represents you in your friends' *Contacts* lists 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 device's camera, or to clear your avatar.

> **NOTE**: In order to set an avatar when Smart UC-One is working inside an Android for Work profile, a camera application inside the Work profile should be installed on the device. The system administrator should provision such an application for the given Work profile and the user should install it prior to initiating an avatar change action.

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

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

9.2 Call Settings

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

- Do Not Disturb
- Always forward
- Forward when busy
- Forward when no answer
- Forward when not reachable
- Remote Office
- Call From
- Block My Caller ID
- BroadWorks Anywhere
- Dialing Service
- VoIP Calls
- Simultaneous Ring
- Call Waiting
- This phone number

9.2.1 Do Not Disturb

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

Select "None" for Presence to disable Personal Assistant.

9.2.2 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.

9.2.3 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.

9.2.4 Block My Caller ID

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".

9.2.5   BroadWorks Anywhere

BroadWorks Anywhere allows service providers to offer fixed-mobile convergence (FMC) services without additional equipment.

BroadWorks 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 from 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).

9.3 Preferences

The client supports the following Preferences:

- Language
- Sign in automatically
- Troubleshooting

9.3.1   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
- French (Canadian)
- German
- Italian
- Netherlands
- Spanish (European)
- Spanish (Latin America)
- Korean
- Japanese
- Chinese

9.3.2 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 email 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 Settings button on the *Sign In* screen – This opens the 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 with connectivity.

- From the *Preferences* screen, accessible from the side navigation. These are available while the user is logged in.

9.4 About

The *About* screen includes three sub views:

- Info – The Info view contains short information text, version, copyright, website URL, app ID, and build version.

- License – The License view contains the End User License Agreement.

- Legal Notices – The Legal Notices view contains third parties used by the application.

9.5 Help Page

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

9.6 Sign Out

You can sign out at the bottom of the left-side navigation drawer.

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 My Room icon 🏠 in the Tab bar.

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 and a conference bridge. 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 selecting *Join Room* from the contact card.

You can dial into other contact's My Room audio bridge from the directory contact card.

11 Search

Smart UC-One supports search in Smart UC-One Contacts and Contact Directories. The search is performed in a separate input field in the *Contacts* tab. Depending on the selected filter (All, Online, Local Address Book, or Directories), search results display contacts only from the current selected category.

In addition to results from the Enterprise Directory, the search is also performed in several more search sources:

■ User's Personal Phone List

■ Group's Common Phone List

■ Enterprise's Common Phone List

The enhanced search is applied for both contacts searching initiated by the user and when receiving an incoming call, at which point the application performs a search for a display name corresponding to caller's number.

12 Push Notifications for Calls

Smart UC-One supports Push Notifications for Incoming Calls.

The feature leverages support on the BroadWorks Application Server to send Push Notifications to mobile applications over Google Cloud Messaging services.

Mobile client applications use Push Notifications to be alerted about incoming calls and accept the call as VoIP.

When there is new call, BroadWorks sends a push notification to the client, which is presented to the user as either OS-specific visual notification or in the user interface of the client application.

From a user experience standpoint, accepting a call works in the same way for both push-enabled clients and non-push-enabled clients. On Android, the call is presented to the user with an application-specific *Incoming Call* screen with Answer and Decline buttons.

Outgoing VoIP calls are performed with SIP registration on demand, which is transparent to the user. The SIP registration is done only when the user initiates the VoIP call.

In addition to Push Notifications for new calls, the solution also supports Push Notifications for new oice mail.

13 Multi-Device Support

Smart UC-One 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 Other Features

14.1 Deployment Configurations for IM&P, Audio, and Video

The mobile client can be deployed in several different configurations, based on configuration file parameters as follows:

- Primarily as an IM&P client only (no audio or video support)

- Primarily as a soft client with audio only (no IM&P or video)

- Primarily as a soft client with audio and video (no IM&P)

- Primarily as a Unified Communications (UC) client with audio only (that is, IM&P and audio but no video)

- Primarily as a UC client with audio, video, and IM&P

- Click To Dial (Call Back and Call Through with the native dialer)

For more information regarding which functionalities are available in your version of the client, contact your service provider.

15 Acronyms and Abbreviations

APN	Access Point Name
ACD	Automatic Call Distribution
CC	Country Code
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
CS	Circuit Switched
DSCP	Differentiated Services Code Point
ECACS	Emergency Call Address Change Service
FMC	Fixed-Mobile Convergence
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure Sockets
IM&P	Instant Messaging and Presence
IMRN	IP Multimedia Routing Number
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
VM	Voice Mail
VoIP	Voice Over IP

VPN	Virtual Private Network
XMPP	Extensible Messaging and Presence Protocol
XR	Extended Report
Xsi	Xtended Services Interface

16 Appendix A: Third-Party Software

This software uses Smack (http://www.igniterealtime.org/projects/smack/), license:
http://www.igniterealtime.org/projects/smack/

This software uses DNSJava (http://www.dnsjava.org/), license:
http://www.dnsjava.org/dnsjava-current/README

This software uses libphonenumber (https://code.google.com/p/libphonenumber/), license:
https://code.google.com/p/libphonenumber/

This software uses OpenSSL (http://www.openssl.org/), license:
http://www.openssl.org/source/license.html

This software uses libjpeg (http://sourceforge.net/projects/libjpeg-turbo/files/1.4.0/),
license: https://github.com/libjpeg-turbo/libjpeg-turbo/blob/master/LICENSE.md

This software uses libpng (http://sourceforge.net/projects/libpng/files/libpng16/1.6.17/),
license: http://www.libpng.org/pub/png/src/libpng-LICENSE.txt

This software uses libwebp (https://developers.google.com/speed/webp/downloa/),
license: https://github.com/webmproject/libwebp/blob/master/PATENTS

This software uses libwebsockets (http://git.libwebsockets.org/cgi-bin/cgit/libwebsockets/),
license: http://git.libwebsockets.org/cgi-bin/cgit/libwebsockets/tree/LICENSE

This software uses libjson (http://sourceforge.net/projects/libjson/), license:
https://github.com/GerHobbelt/libjson/blob/master/License.txt

This software uses WebRTC (http://www.webrtc.org/), license:
http://www.webrtc.org/license-rights/license

This software uses OpenH264 (https://github.com/cisco/openh264), license:
https://github.com/cisco/openh264/blob/master/LICENSE

This software uses SQLCipher (https://www.zetetic.net/sqlcipher/), license:
https://www.zetetic.net/sqlcipher/license/