ORGALOGIC

OmniSession

more than a softphone

User Manual

FEB 2006

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www.omnisession.com

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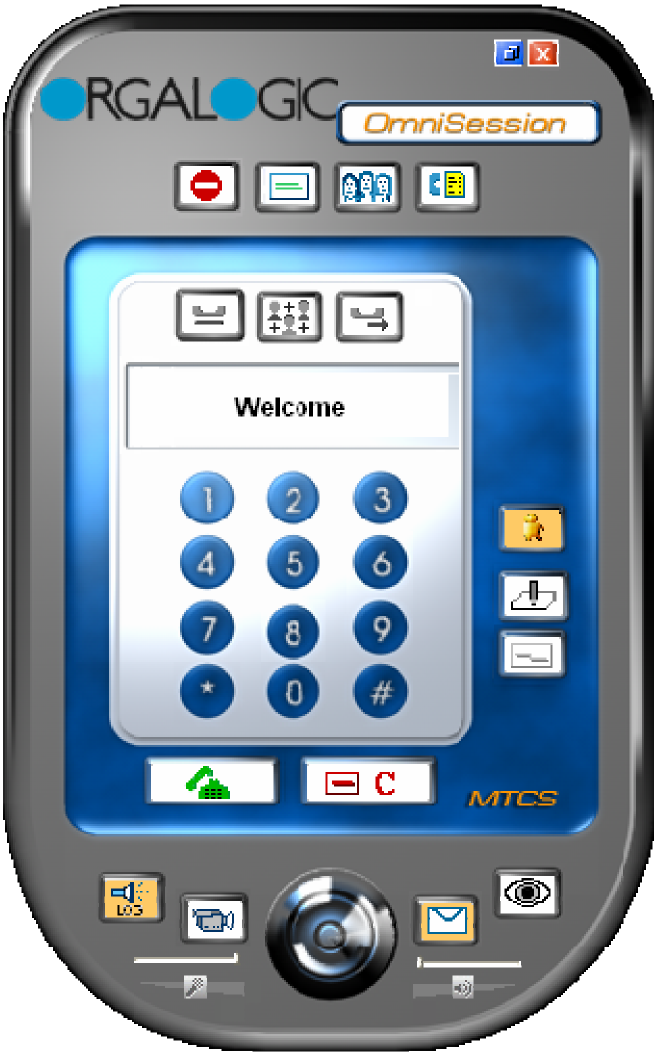
1 Installation and Setup

1.1 Installation Wizard

To install *OmniSession* and all its components on your computer, simply run the installation program *OmniSessionInstall.msi*. At the end you should see the following icon on your desktop and in your System Start-up Folder:

OmniSession.lnk

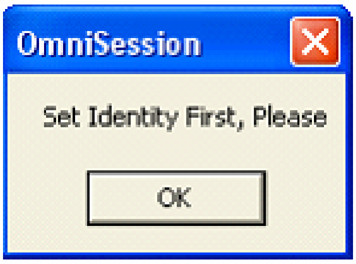
Clicking on this icon will bring up your *OmniSession* graphical representation onto your desktop.



In this image your *OmniSession* is still not registered which is indicated by ⛔

Once you have successfully registered your *OmniSession* it will change to: ☑

For registration, note that the start-up automatically asks you to open the SIP Identity window described in the next Section 1.2. You can register now or call this window up later, but for full operation of your *OmniSession*, these settings are mandatory.

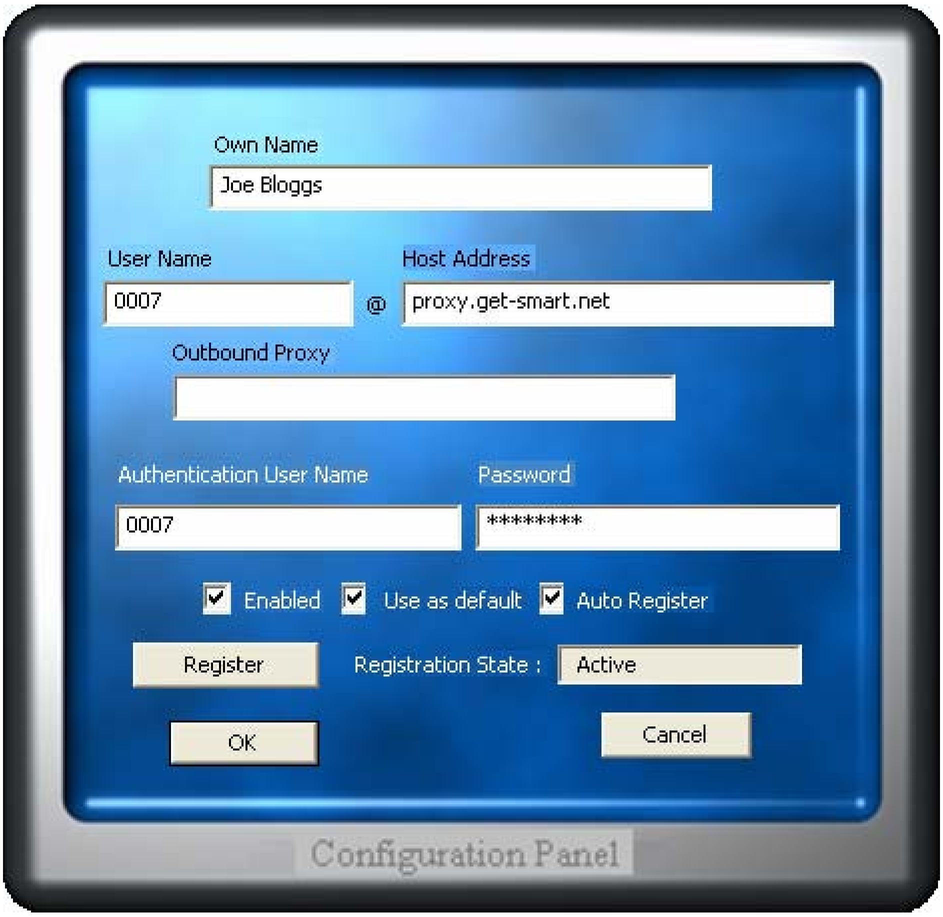


Set Identity First, Please

If you rather want to learn about *OmniSession*'s functionality first, skip to Section 2 or Section 3.1 for an overview.

1.2 Setup: SIP Identity

On start-up, the following window pops up. This will set up your *OmniSession* for registration and consequent operation. This window can also be called by right-clicking on the *OmniSession* main panel and choosing *SIP Identity*.



Own Name: Joe Bloggs

User Name: 0007 @ Host Address: proxy.get-smart.net

Outbound Proxy:

Authentication User Name: 0007

Password: ********

☑ Enabled ☑ Use as default ☑ Auto Register

Registration State : Active

The first 3 text fields contain the identity as sent in the SIP Message:

“full name” <sip:userid@hostname>

Authentication User Name and Password have to be filled in if this is required by the proxy-server.

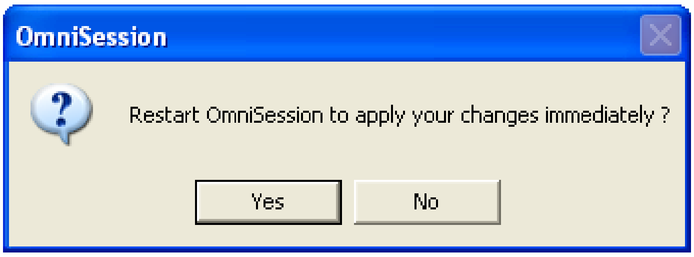
- *Own Name:* Name of User (full name)
- *User Name:* User Part of SIP-Address (UserId)
- *Host Address:* Host Part of SIP-Address (IP-address of Proxy Server or its Domain Name)
- *Outbound Proxy*: If set, SIP-packets will always be sent to this address and this address part will be added to addresses consisting only of a User Part. If not set, one has to use complete addresses, e.g., sip: userid@differenthostaddress. An Outbound Proxy is used for NAT Traversal, if you are behind a NAT router or firewall. For example, you have to enter your Session Border Controller’s address here to be reachable.

- *Authentication Use Name:* has to be set if authentication is required.
- *Password*: Password for Authentication
- *Enabled:* mark this to make the current settings effective
- *Use as Default:* mark to use theses values if different (multi-proxy-)settings are available
- *Auto Register:* should be marked to activate automatic registration on start-up.

You can UNREGISTER here and check your *Registration State* (active/inactive). Confirming changes with "OK" will cause the application to restart automatically and enforce the current settings.

The SIP identities can be modified by calling up its panel via right-click on the *OmniSession* main panel. Here one can enter up to three different SIP identities for three different SIP proxies.

After a change of the SIP Identity settings a restart of OmniSession will be necessary. To announce this, the following Message Box pops up



Restart OmniSession to apply your changes immediately ?

.

While performing the acknowledged Restart the following reminder appears:

...restarting. Please wait !

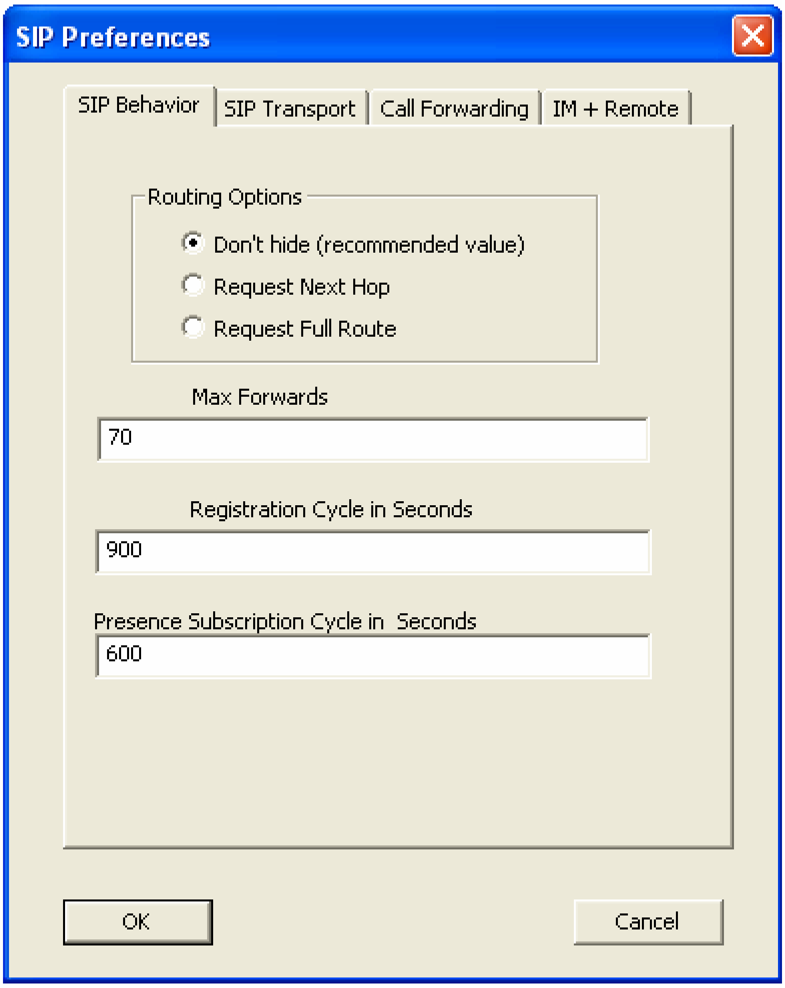
If you have an active connection to the SIP Proxy server (set by *Host Address* above) for registration, *OmniSession* should be able to register which is indicated by the Registration button change: ⛔ ⇨ ☑

If this change does not occur, please check your connection and your SIP identity settings.

1.3 Setup: SIP Preferences

SIP Preferences have four panels for setting up SIP Behavior, SIP Transport, Call Forwarding and IM (Instant Messaging) Preferences. They come with default values you can change for optimal performance or additional features.

1.3.1 SIP Preferences – SIP Behavior



Routing Options

● Don't hide (recommended value)
○ Request Next Hop
○ Request Full Route

Max Forwards: 70

Registration Cycle in Seconds: 900

Presence Subscription Cycle in Seconds: 600

This panel lets you set the Routing options and some timers:

Don't hide = Displays routed hops in SIP Message Header: from - via - to
Request Next Hop = Determines route to destination hop by hop
Request Full Route = Determines full route to destination in advance

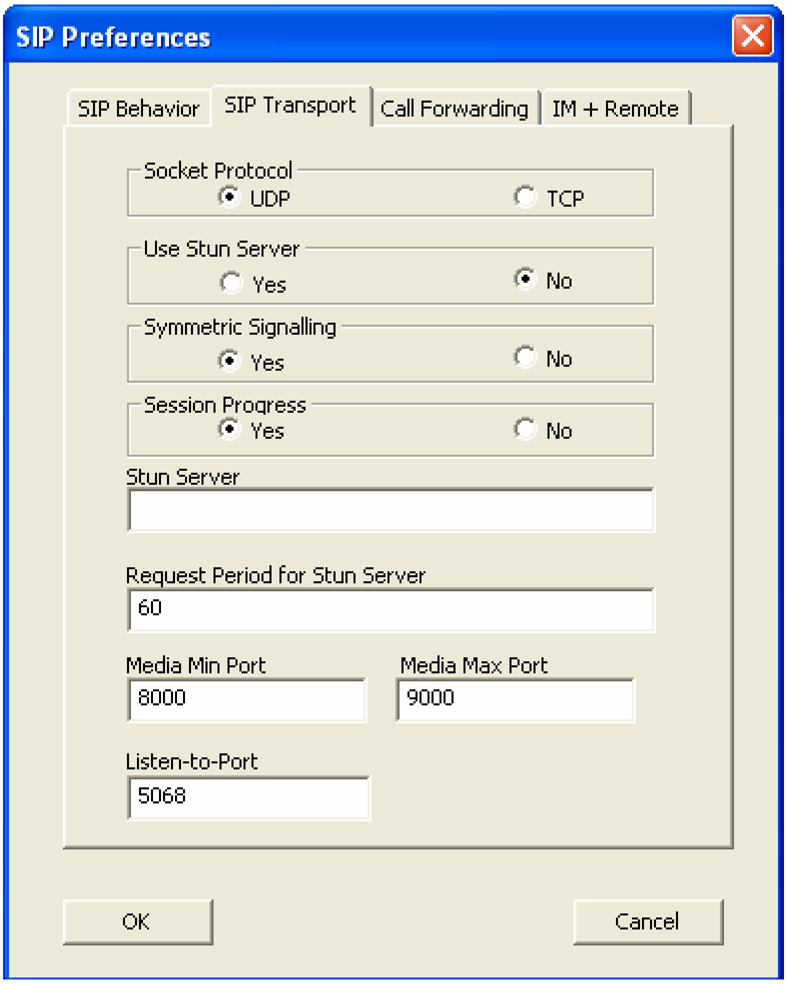
The following fields are shown with their minimum values.

Max Forwards = Maximal number of hops a request can make on the way to its destination; decremented by one at each hop.

Registration Cycle / Presence Subscription Cycle in Seconds
The *Registration Cycle in Seconds* field lets you set the number of seconds that pass before *OmniSession* re-registers itself automatically. *OmniSession* registers itself periodically with its associated proxy server, so that in case of a disabled *OmniSession*, resources are no longer held.

The *Presence Subscription Cycle in Seconds* field does the same for presence subscription to the available partners.

1.3.2 SIP Preferences – SIP Transport

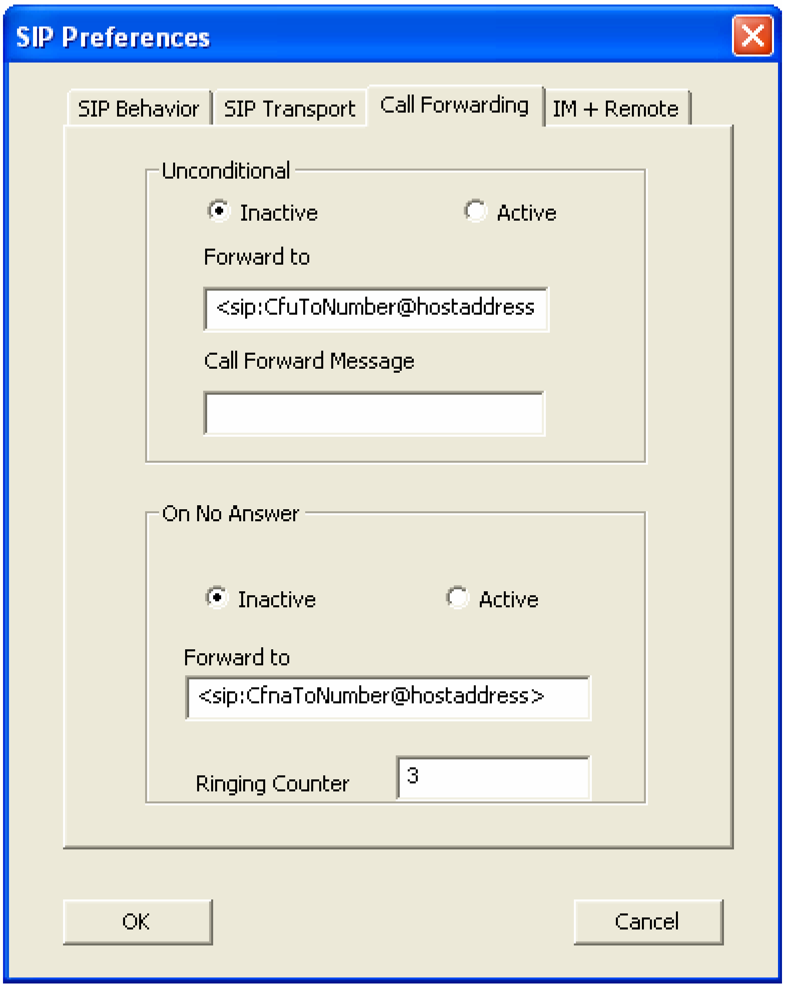


Socket Protocol: ● UDP ○ TCP
Use Stun Server: ○ Yes ● No
Symmetric Signalling: ● Yes ○ No
Session Progress: ● Yes ○ No
Stun Server:
Request Period for Stun Server: 60
Media Min Port: 8000
Media Max Port: 9000
Listen-to-Port: 5068

This panel lets you specify:

- which Socket Protocol is preferred (UDP or TCP)
- to use a STUN Server for users behind a NAT and/or Firewall Server; In that case you have to specify further below:
  - the respective server in the *STUN Server* field
  - the requested period to refresh UDP binding in case of silence suppression
  - the range of ports for RTP Media stream
  - the SIP Signaling port (Listen-to-Port)
- whether Symmetric Signaling or Asymmetric Signaling is preferred
- whether the media stream is routed via the SBC (*Session Progress yes*) or not (*no*).

1.3.3 SIP Preferences – Call Forwarding



Unconditional

● Inactive ○ Active

Forward to: <sip:CfuToNumber@hostaddress

Call Forward Message:

On No Answer

● Inactive ○ Active

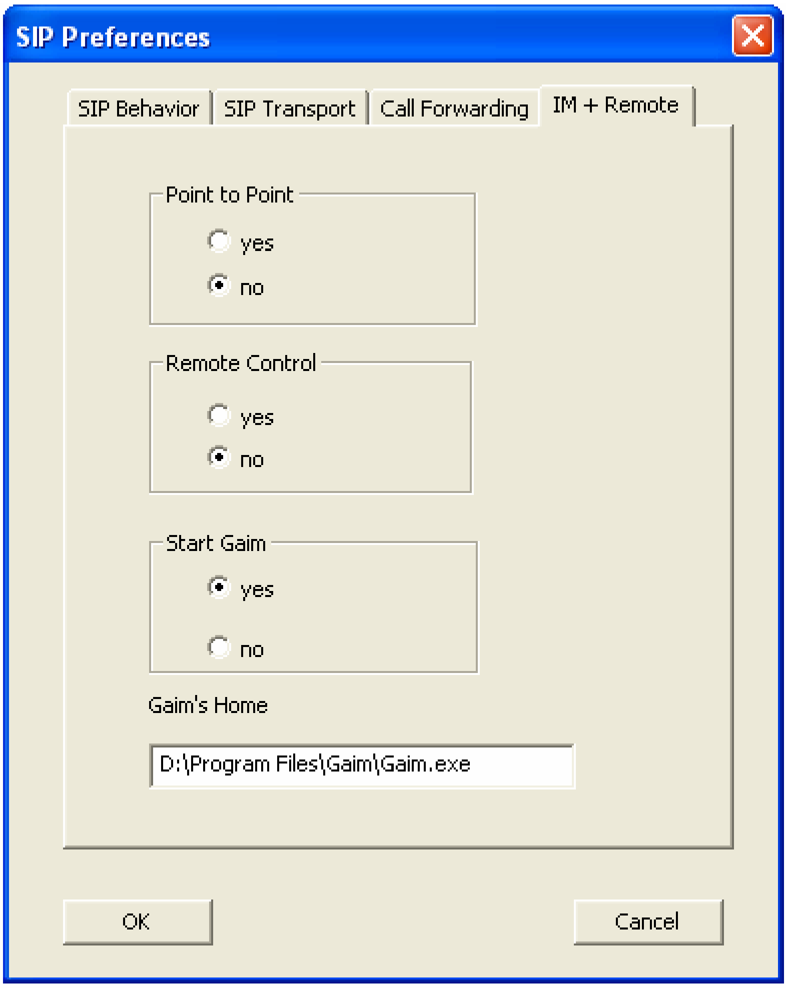
Forward to: <sip:CfnaToNumber@hostaddress>

Ringing Counter: 3

This panel activates Call Forwarding in your *OmniSession*. Call Forwarding to a specific number, e.g., an answering machine, can be set in two ways, unconditionally or if you do not accept the incoming call only after a certain number of ring tones.
To enforce Call Forwarding you have to set the Radio Buttons to “Active”.

For more details see section 5.1.

1.3.4 SIP Preferences – IM Preferences



SIP Preferences

Point to Point
○ yes
● no

Remote Control
○ yes
● no

Start Gaim
● yes
○ no

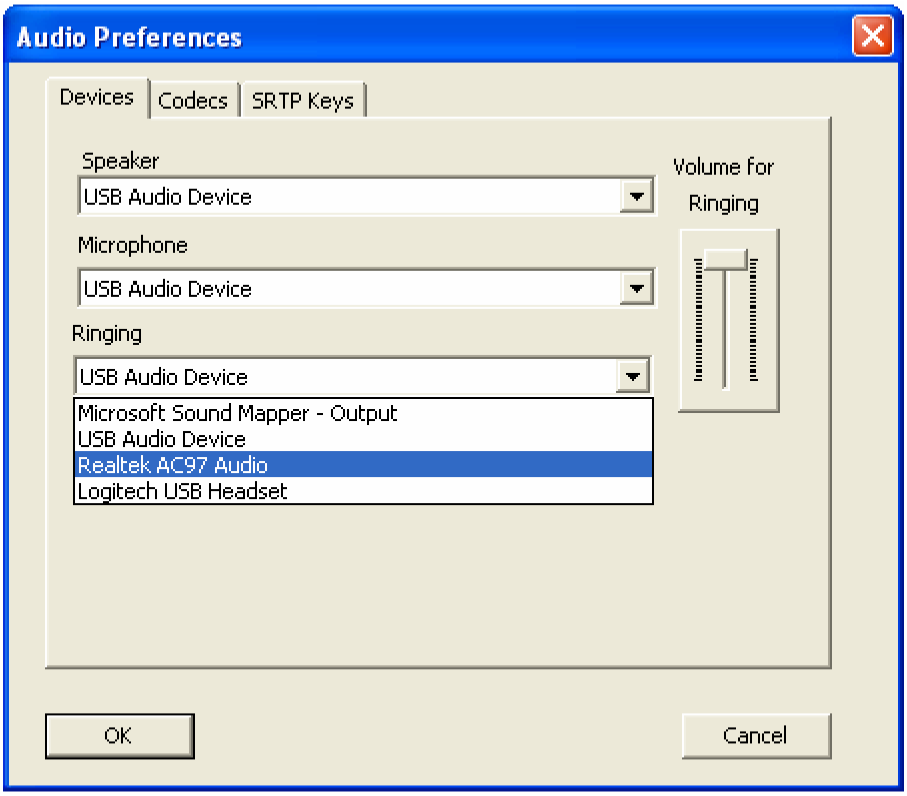
Gaim's Home

D:\Program Files\Gaim\Gaim.exe

Here you can decide whether to use ordinary Instant Messaging (short messages as SIP messages) or Point-to-Point-Instant Messaging (as RTP data). The Point-to-Point IM is treated as a private session IMP2P.

Moreover, you can decide whether to start the UIMP Gaim on Star-tup of *OmniSession* rather than via the UIMP button.

1.4 Setup: Audio Preferences

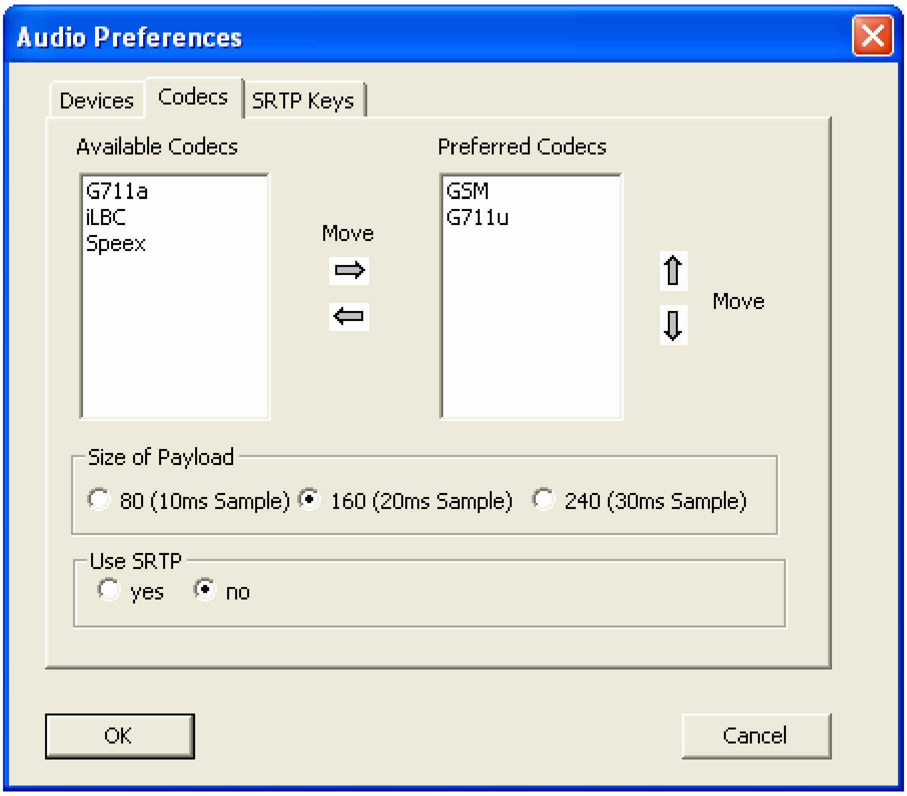


Speaker: USB Audio Device

Microphone: USB Audio Device

Ringing: USB Audio Device

Audio Devices:
Depending on your hardware (available audio devices) you can select the appropriate Sound System for your audio sessions. When clicking on the text field a slider pops up that allows for tuning the volume of the speaker, microphone or ringing tone, respectively. The slider for loudspeaker and microphone is connected to the corresponding slider on the *OmniSession* graphical desktop representation, which synchronize each other accordingly.



Available Codecs
G711a
iLBC
Speex

Preferred Codecs
GSM
G711u

Size of Payload
○ 80 (10ms Sample) ● 160 (20ms Sample) ○ 240 (30ms Sample)

Use SRTP
○ yes ● no

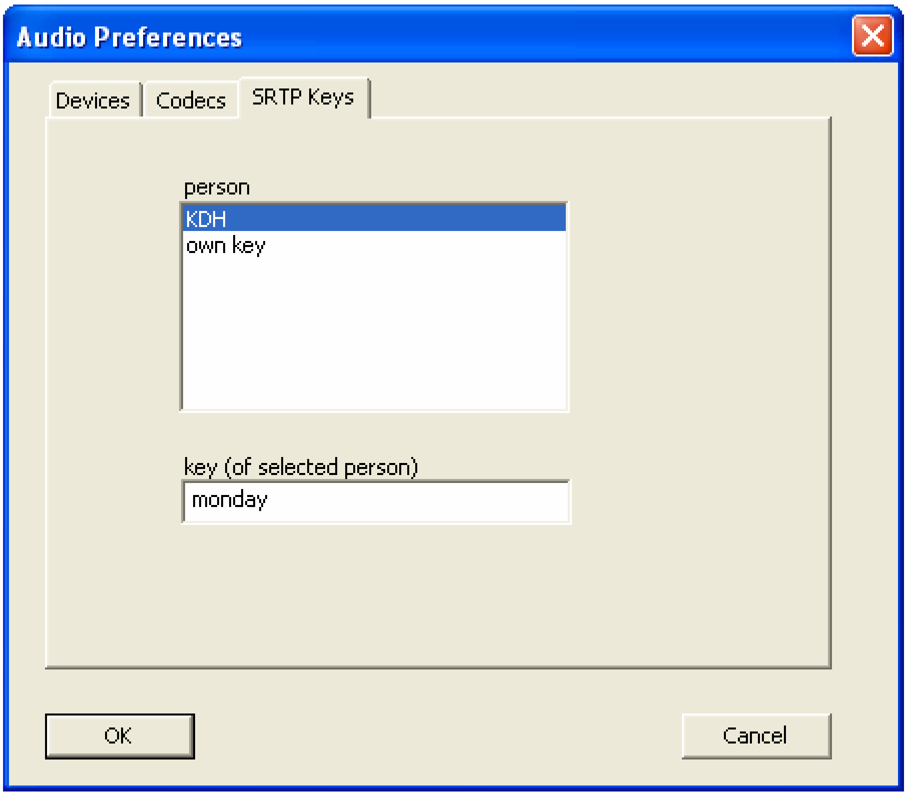
Preferred Codecs:
OmniSession currently supports the following codecs.

Codec	**Bandwidth**	**Quality (MOS)**
G.711	80Kbit	4.4
GSM	13Kbit	3.7
iLBC	15Kbit	4.0
Speex	Up to 44Kbit	4.1

Best quality will be achieved with the uncompressing G711u-Codec.

You can choose among three different *payload sizes* for the codecs.

For encrypted Audio Transmission one can use the Secure Real Time Protocol (SRTP), which has to be enforced on both sides with the same Key Value (consisting of up to 30 characters).



person: KDH (selected), own key

key (of selected person): monday

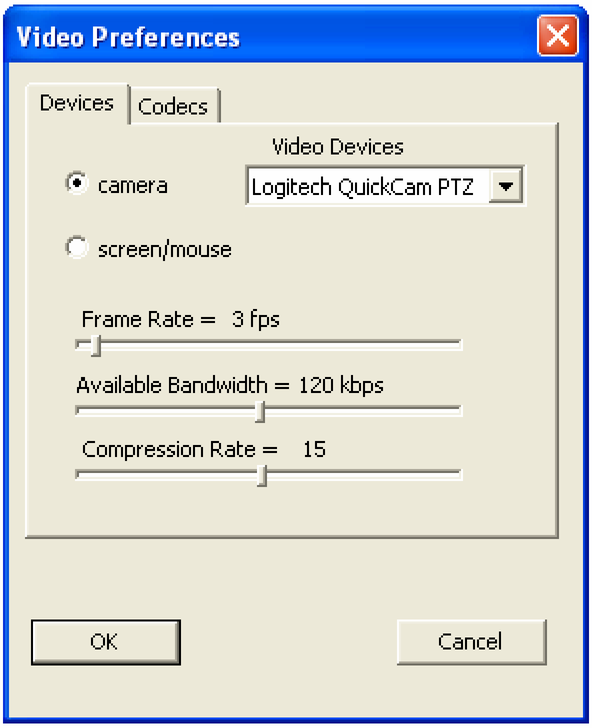
In this separate panel you can store the personal encryption (Secure RTP) keys for each partner as well as your own key, which you have to make known to your partner.

Please note that this Protocol comes with courtesy of Cisco Systems; cf. http://srtp.sourceforge.net/license.html

1.5 Setup: Video Preferences

Here you can

- select your preferred codec – currently h261, h263 or h263+ are supported, but further codecs will soon be provided. Codecs to be preferred can be moved to the right using the right arrow (or back with the left arrow if no longer preferred).
- fix start values for frame rate and bandwidth and compression rate



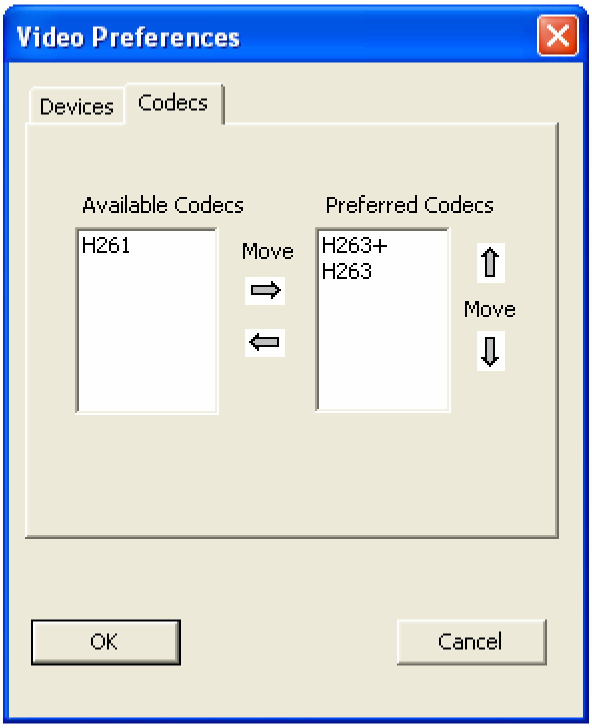
● camera: Logitech QuickCam PTZ

○ screen/mouse

Frame Rate = 3 fps

Available Bandwidth = 120 kbps

Compression Rate = 15



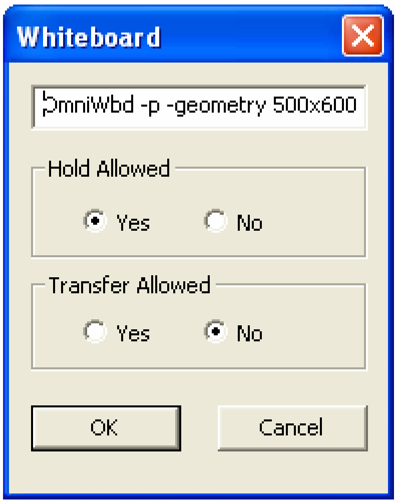
Available Codecs: H261

Preferred Codecs: H263+, H263

- decide whether to use a camera or convey the image of your desktop. If “camera” is marked, the default device is a camera connected to the computer. If this is not connected, e.g., if no camera is available, the default device is a screen capture. It is a cursor dependant screen capture that selects an area of the desktop (352x288 pixels), which can be moved with your mouse cursor.

For more details on *OmniSession*’s Video see section 7.

1.6 Setup: Whiteboard Preferences



Whiteboard

OmniWbd -p -geometry 500x600

Hold Allowed
● Yes ○ No

Transfer Allowed
○ Yes ● No

Most of the Application Parameters of the Whiteboard Application are hardcoded, but you can add further parameters in a command line manner as displayed:
Following the Application Command “OmniWbd” the Orientation is set to Portrait [-p] and the Window is scaled and positioned according to the given Geometry [-geometry 500x600+0+0], i.e., it is of width 500 and height 600 pixels with upper left corner at x=0 and y=0 (not fully displayed).

Other options for the Whiteboard application are as follows:

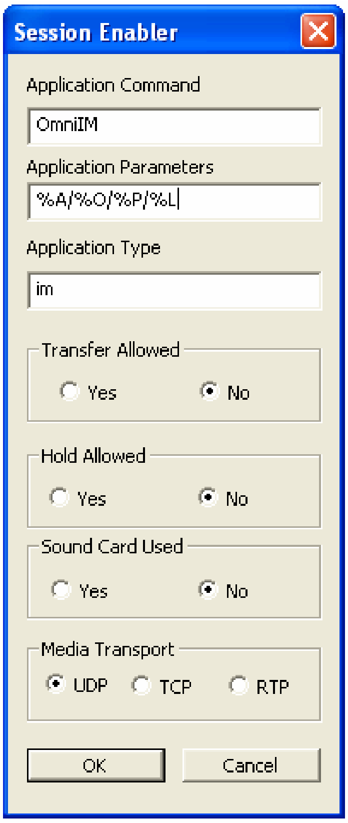
−N *username*	Sets the announced username.
−C *confname*	Sets the conference window name.
−maxhops *n*	Sets the TTL of the multicast packets to *n*.
−p | −l | +l	Portrait/landscape mode.
−r | +r	Disable/enable writing to the whiteboard.
−geometry *wxh+x+y*	Sets the window’s geometry to *wxh+x+y*.
−P *filesize*	Sets the PostScript filesize limit to *filesize*.
−R *bandwidth*	Sets the bandwidth limit to *bandwidth* bits per second.
−help	Display a help message.

Hold Allowed (Yes) and Transfer Allowed (Yes) are still ***experimental***, i.e., in case of Hold/Unhold the application will be restarted, however, with loss of data.

For more details on OmniWbd see section 8.

1.7 Setup Session Enabler Preferences

This window installs an additional session type, which is started with the button *User-Defined Session Enabler*“ (see main window in chapter 3.1). Details can be found in Section 9.



Application Command: OmniIM

Application Parameters: %A/%O/%P/%L

Application Type: im

Transfer Allowed: ○ Yes ● No

Hold Allowed: ○ Yes ● No

Sound Card Used: ○ Yes ● No

Media Transport: ● UDP ○ TCP ○ RTP

With this Preferences Box you can configure a customized application that you want to start on the partner’s computer.

Shown here are the settings for a point-to-point Instant Message Application with:

Application Command: “OmniIM.exe”

Placeholders for: Application Parameters

of Application Type: im.

The radio buttons are self-explaining.

2 Phonebook

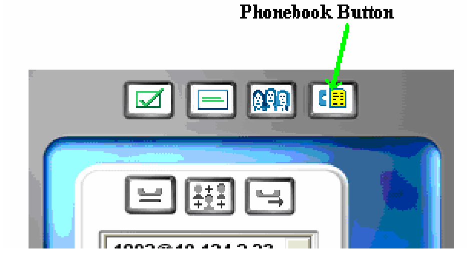
The *OmniSession* Phonebook contains entries of all your partners in the system as well as entries you manually enter or enter via the Integrate function from other desktop phonebooks.

2.1. Manual Entry

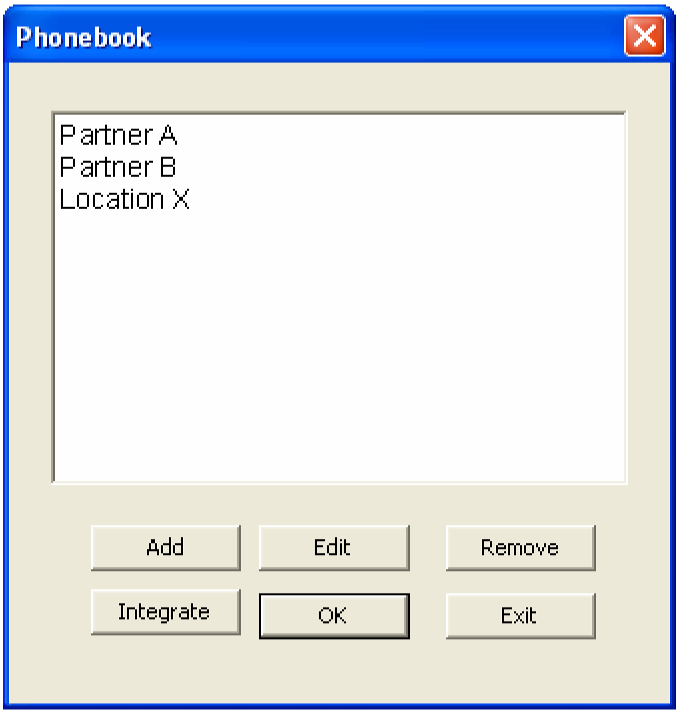
Phonebook entries can be manually

- Selected (Click on entry)
- Added (Click on *Add* button)
- Edited (Click on *Edit* button)
- Removed (Click on *Remove* button)
- Integrated (Click on *Integrate* button)

To call the Phonebook function, press the Phonebook button:

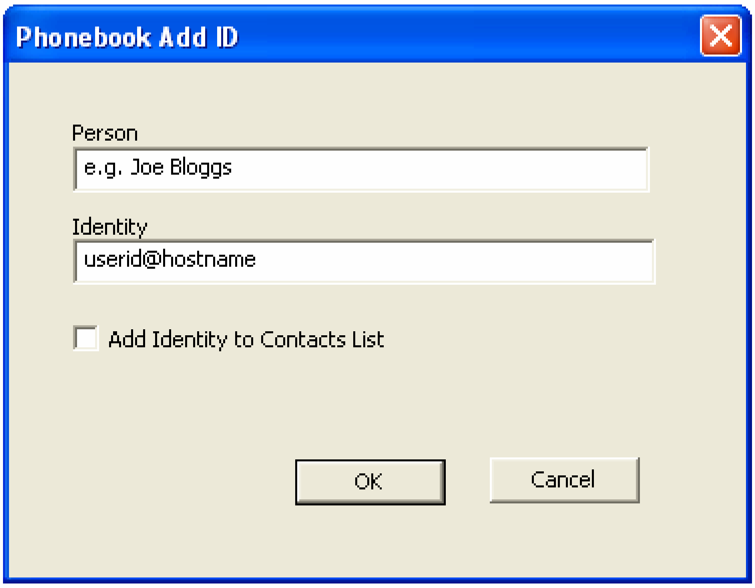


The following Window will pop up:



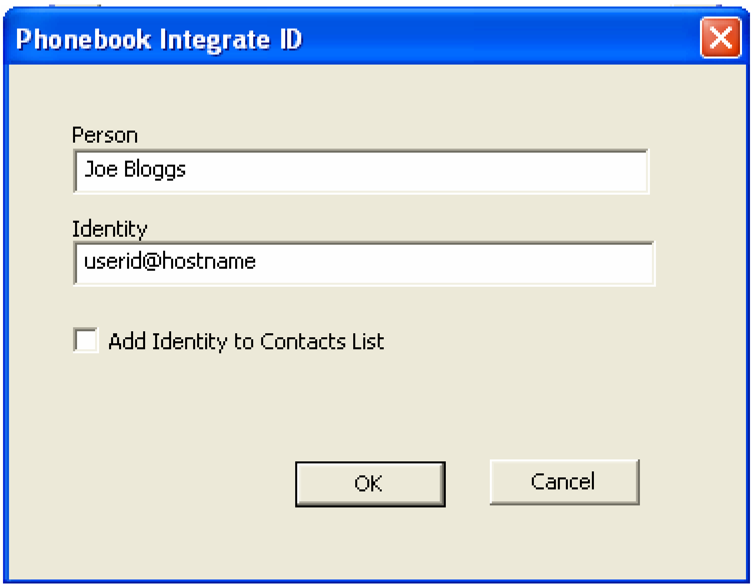
Partner A
Partner B
Location X

2.1.1. Add Identity



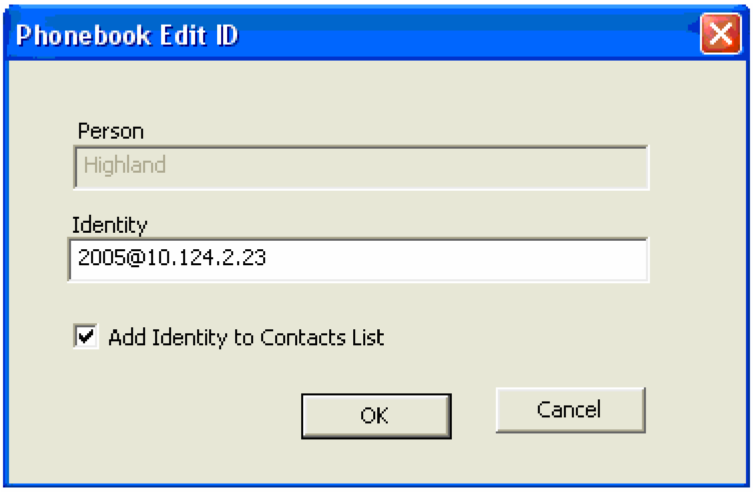
New entries can be added to the Phone Book by hand. Here you have to fill in both items, Person's name and corresponding Identity. Adding an Identity to the Contacts List is optional.

2.1.2. Integrate Entry



This Window is the same as the *Add Id* Window (and retains its functionality), but it is used to add an Id from an externally selected and copied entry. It should have the previously copied entry automatically populated in its field, upon which you can enter it in your Phonebook and add it to your Partner List if desired.

2.1.3. Edit Identity



You can edit an existing Identity entry, however, not the Person's name. Checking the "Add Identity to Contacts List" Box includes the Person in the Available Partners List.

2.1.4. Common Buttons

OK button:

With the *OK* button, you confirm the changes made and exit the Phonebook function.

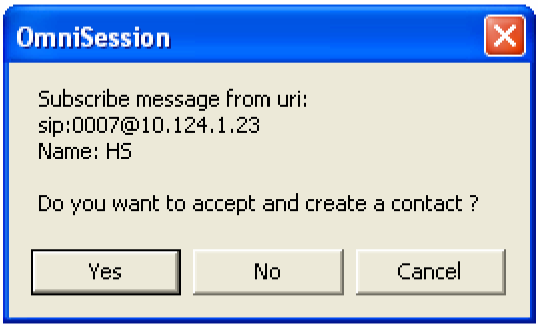
Cancel button:

With the *Cancel* button, you exit the Phonebook function without the changes taking effect..

2.2. Automatic Entry

You are prompted automatically for entries in Phonebook and Partner List when subscribers to your proxy that know your Identity but are currently not in your Partner List start their *OmniSession*

In this case the following window will pop up on your desktop:



Subscribe message from uri:
sip:0007@10.124.1.23
Name: HS

Do you want to accept and create a contact ?

If you enter *Yes*, the Phonebook Add ID Window (see above) pops up from where you can add the contact to the phonebook.

2.3. Miscellaneous

In Dial mode, i.e., after pressing a Button to select a Call or Session one can open the Phonebook and select an entry from the list. A double-click on a phonebook entry automatically moves the SIP Address to the Dial Display.

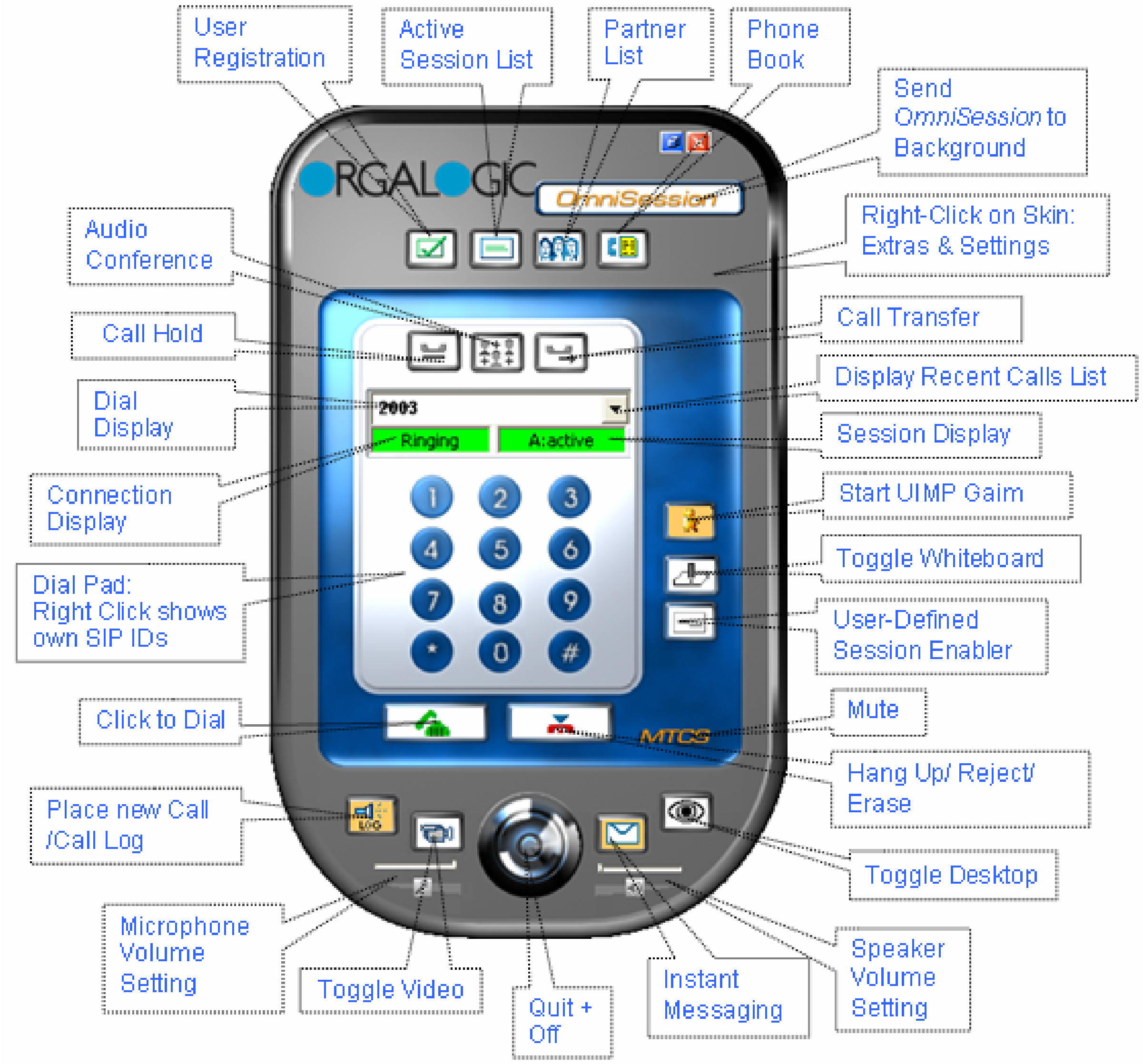
The partner list is being populated with entries that can be loaded from the Phonebook by checking the *Add Identity to Contact List* field or by accepting the incoming Subscribe Messages when a partner starts *OmniSession*.

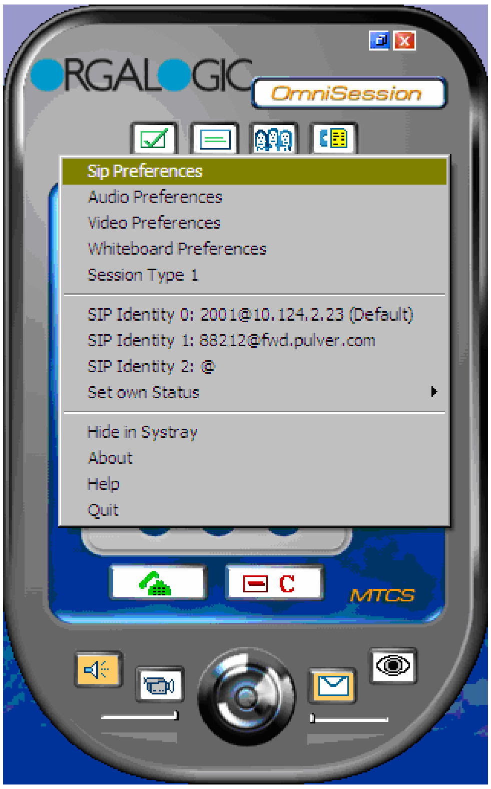
3. General Usage

3.1 Main panel

The *OmniSession* main panel has the following layout.

The OmniSession Softphone comes with a standardized graphical user interface as shown below.





The main panel contains:

- **Right-Click Pulldown menus**

A right-click on the general panel frame (except the dial pad) shows a menu that includes the SIP Preferences and SIP Identity menus addressed in Section 1 (Installation and Setup) as well as *Hide in Systray* (which can be effected also by clicking on the *OmniSession* button or the blue *Minimize* button), *About* (information about *OmniSession*), *Help* (see Section 10), and *Quit* (see the *Quit+Off* Button explanation below, the same function is fulfilled by the red *Close* button).

Another pull-down menu appears after right-clicking on the dial pad panel. It displays the user's SIP-addresses (up to 3 in multi-proxy-mode).

Top button bar:

- OmniSession

Clicking on *OmniSession* hides the *OmniSession* graphical representation in your systray. The same function can be effected by the respective Right-Click option, or clicking the blue *Minimize* button on the top right. Note that the application remains active, i.e., comes to the foreground, if you receive an Invitation to a Call, Whiteboard, or Private Session or receive an Instant Message. To restore the Main Panel you can double-click with the left mouse button on the icon in the systray or click with the right mouse button to open the Systray Controls Menu.

- **User Registration**

The button indicates that *OmniSession* is registered or is not registered. By pressing the button you can register or unregister yourself.

Registered: ☑ Not Registered: ⛔

- **Available Partners List (Buddy List)**

Lists all available partners with presence indication
(**On** = online, **Busy**, **Away**, or **BRB** = Be right back)

When clicking this button, the dial pad is replaced by a window that lists all your partners. This Partner List is generated by *OmniSession* automatically by prompting an entry at the time of subscriber registration. This prompt asks the subscriber whether to enter the newly registered subscriber into the Partner List.

The availability of the partners is indicated by their presence status. You can initiate a session to a partner via right-click on their name.

By pressing one of the dial mode buttons, the dial pad returns.

- **Active Session List**

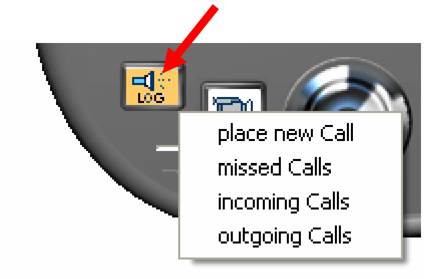
  Displays all active sessions with corresponding Session Type (A = audio, AV = audio + video, P = private session) and Session Status (ac = active connected, hd = held or holding, qd = queued, rg = ringing)

- **Phone Book**

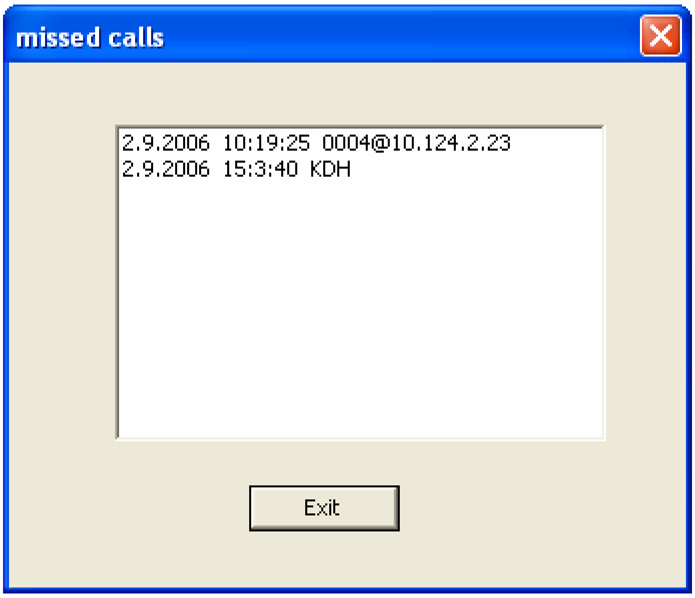
  See Section 2

Bottom button bar:

- **Place New Call/ Call Log**



With this button you can place a new Audio Call or choose among lists of missed, incoming or outgoing calls.
The displayed list being displayed by mouse click is populated with, e.g., recently missed calls.



2.9.2006 10:19:25 0004@10.124.2.23
2.9.2006 15:3:40 KDH

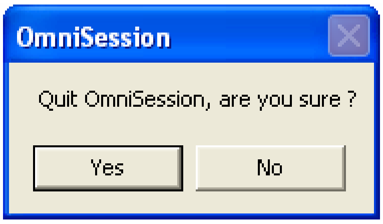
You can see date time and number (or name) of the corresponding contact.

- **Toggle Video**

  Adds or Pauses Video for an existing Audio Call. See section 7 for more details

- **Quit+Off Button**

Shuts down the application. Note that a message box pops up that asks you whether you really want to terminate the application:



OmniSession

Quit OmniSession, are you sure ?

The same function is handled by the *Quit* function on Right-Click and by the red *Close* button.

- **Instant Messaging**

Toggles the Instant Message Window that allows to write and send short messages. See section 6 for more details.

- **Toggle Desktop**

Adds or Pauses the Desktop Screen image to/from an existing Audio Call. See section 7 for more details

More actions/sessions/calls can be started with the Buttons in the column on the right hand side:

- **Start UIMP Gaim**

Starts the Universal Instant Messaging Platform based on Gaim. Notice that before you can start the Universal Instant Messaging Platform Gaim, this external application has to be installed on your PC (see section 1.3.4).

There are two ways to start the UIMP:

1. On *OmniSession* Startup, if the Radio Button is set to Yes in the IM Settings of the SIP Preferences (section 1.3.4). Note that the path where to find the Gaim application has to be provided in the appropriate Text field “Gaims Home” (section 1.3.4).

2. By Pressing the Launch Gaim Button .

When activated the Button changes its color and displays as follows .

- **Whiteboard**

  Starts a whiteboard session: with this external application you can interact with your partner by drawing pictures and writing text. (See Section 8)

- **User-Defined Session Enabler**

  This button starts a user-defined Session that has been specified before via general Right-Click and the selection “Session Type 1” in the Session Enabler window. The application has to be defined in your partner’s *OmniSession* as well to become effective as a call/session. (see Section 9)

Other buttons and displays will be explained in the next sections since they are directly linked to the call procedure.

3.2 Calls and Sessions

3.2.1 Starting a Session

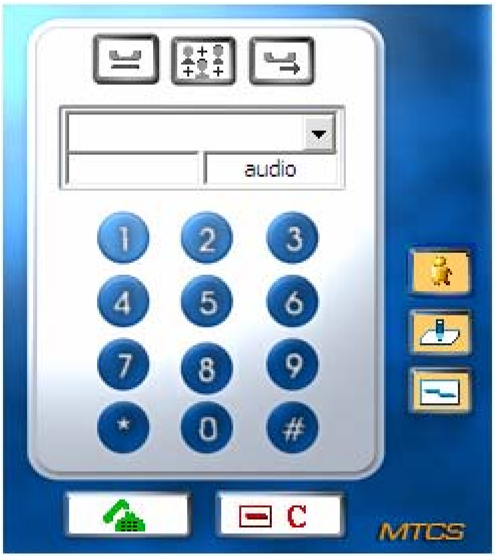
Notice that before you can start a session, the SIP Identity has to be set and *OmniSession* has to be registered with your SIP Registrar. Moreover, the various Preferences of Section 1 may have to be set appropriately.

To start a session you can either press the corresponding Button or select an entry in the Available Partners List (left mouse click) open the pull-down menu (right mouse click) and choose the appropriate action.

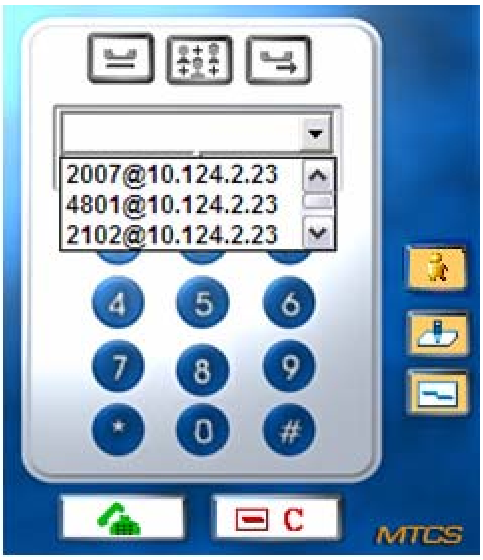
In any case a Dial Pad will show up that displays the session you chose in the Session Display field (*audio, audio+video, whiteboard*, name of your private session if defined, *private 1* if not defined)).

3.2.2 Properties of the Dial Pad

After choosing a session the Call Widget (Dial Pad) belonging to this session will appear (if not already there). The text fields are still empty and editable.



audio



2007@10.124.2.23
4801@10.124.2.23
2102@10.124.2.23

We have selected to make an audio call and pressed the Place new Call button, therefore *audio* is displayed in the Session Display field on the right hand side below the dial entry field.

You can now type in a number or address into the Dial Display field using the keyboard or the number field of the Dial Pad. Addresses can be typed in one of the followings forms:

(1) <SIP number> (SIP userid), e.g., 2001
(2) <SIP number@host address>, e.g., 2001@10.124.1.23
(3) <SIP gateway number>,<external number>, 2001, 476070
(4) <SIP gateway number@host address>,<external number>, e.g.,

2001@10.124.1.23, 47607

In Case (1) and (3) the number will be completed automatically with the host address, if the Outbound proxy has been set in the SIP Identity panel (cf. Section 1.2).

With Type (3) and (4) you can address a telephone-gateway to reach subscribers of a public network. This applies if your proxy supports the corresponding numbering plan.

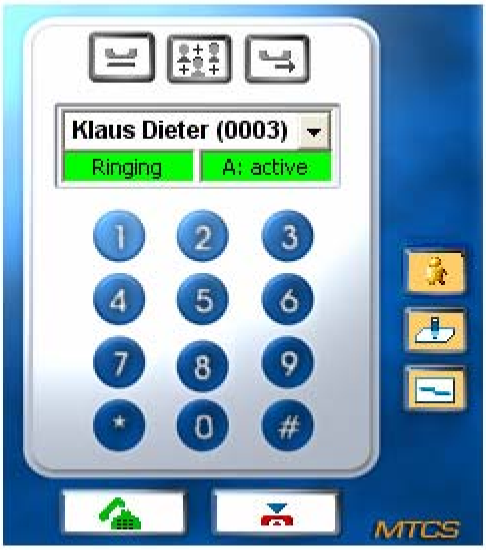
You can also select a number from the Recent Calls List (shown on the right above). Mistakes may be corrected with the Cancel Button which erases Dial Display entries.

The Buttons on top are disabled at this point.

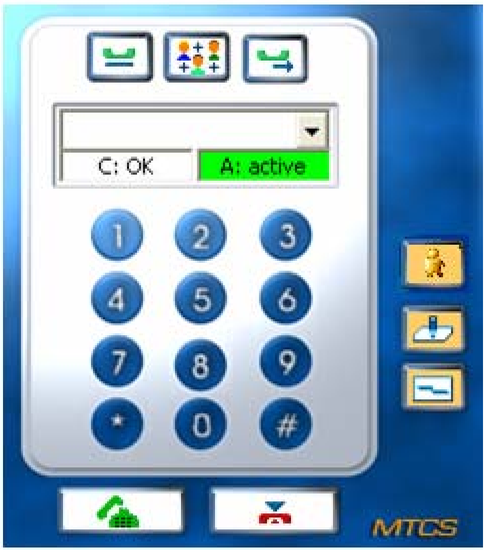
3.2.3 Dialing, Receiving and Connecting

To dial a number you can proceed as follows:

- Manually (as described in the previous section)
- Selecting from the Recent Calls List (as described in the previous section)
- Selecting from the Phonebook (see Section 2.)
- Use OmniSession TAPI, the telephony interface, to import a number from the MS Outlook Express Address book

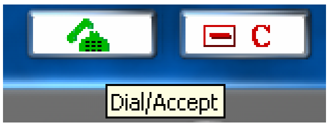


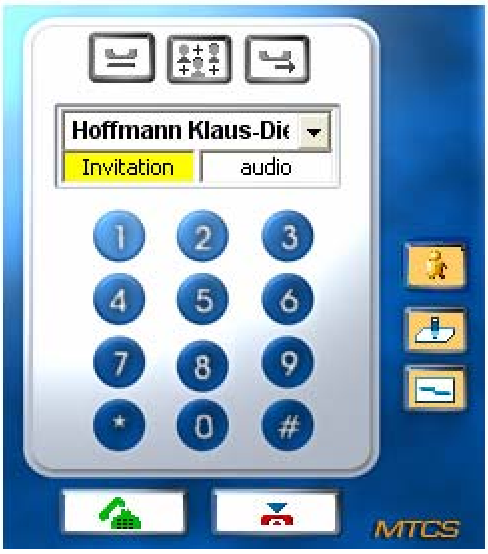
Klaus Dieter (0003)
Ringing
A: active

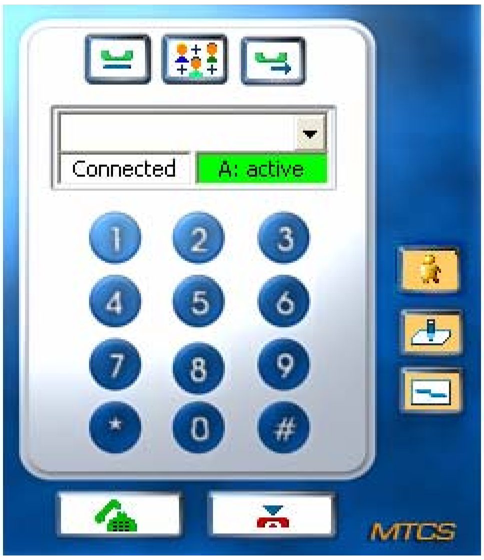


C: OK
A: active

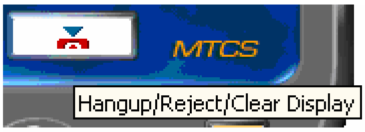
To make your choice effective you have to press the green Dial Button or hit the Enter key on your keyboard. If the number/address you selected is valid, the *Session Display* will show *A: active* and the *Connection Display* shows *Ringing*. If the partner accepts the call, the *Connection Display* will change to *C: OK*.







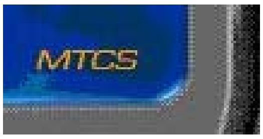
On the partner's side a Dial Pad pops up showing *Invitation* in the *Connection Display* for this Audio Call. The partner can accept the call (press the Dial Button) or reject the call (press the red Hang Up Button)



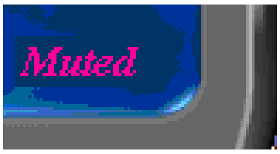
When the Call is accepted, the partners are connected and have an active Audio Session.

Now you can proceed to perform further actions. The Active Call is shown in the Active Calls List (see section 3.3) and the buttons on top are activated.

By clicking on the *MTCS* symbol

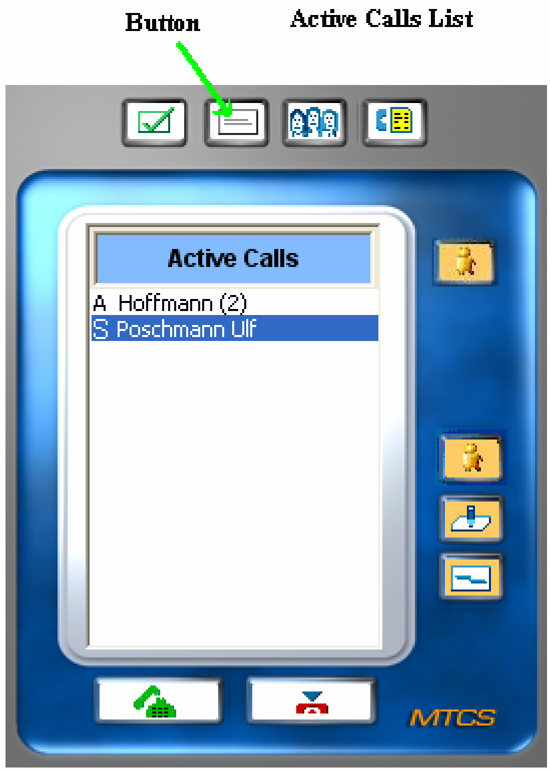


you effect a muting for your audio portion of a session (*Muted)*, so that your partners can no longer hear you. Clicking again on *Muted* gets you back.



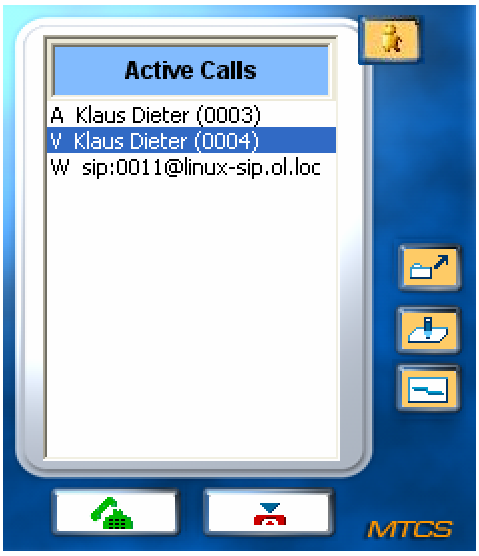
3.3 Active Calls List

Pressing the second Button in the Top Bar, the Active Calls List will show up. It displays all active Sessions, e.g., as shown in the example below, a combined Audio/Video Call on the left (AV) and an Audio Call (A), and a Whiteboard Session (W) all with different partners. Furthermore a Private Session call (PV) may be displayed. Selecting a specific Call/Session and pressing the Hang Up Button will end this Call/Session. Pressing the Quit Button will end all Calls/Sessions.



Active Calls

A Hoffmann (2)
S Poschmann Ulf



Active Calls

A Klaus Dieter (0003)
V Klaus Dieter (0004)
W sip:0011@linux-sip.ol.loc

Double-click on an entry will have pop up the corresponding Dial Pad.

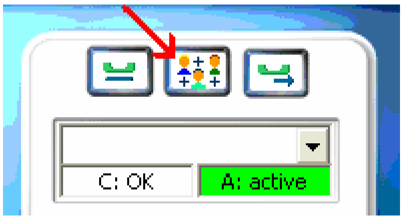
3.4 Audio Conferencing

OmniSession allows for audio conferences of up to 5 users.

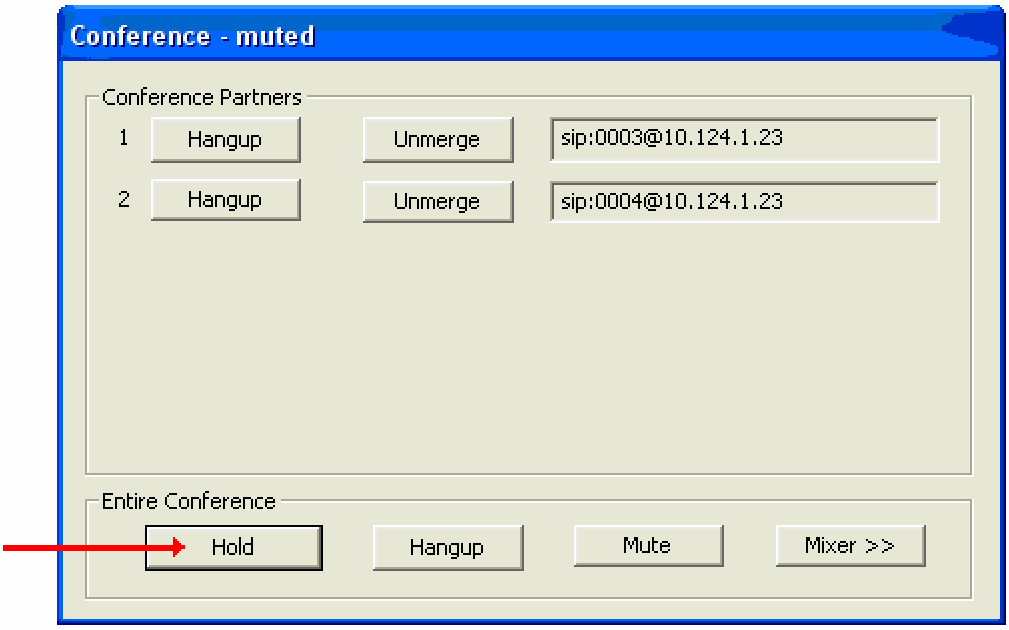
3.4.1 Starting an Audio Conference

You start an audio conference from an existing audio call with one partner and gradually add more parties to your session.

To do this, you press the *Audio Conference* button. This puts your partner on hold and takes her/him out of the Active Call List.



A *Conference* window will pop up that shows your current audio partner with the number/address and a *Hangup* and *Unmerge* button. At the bottom of the window under *Entire Conference*, the buttons *Start Conference*, *Hangup*, *Mute*, and *Mixer* are shown.


Conference - muted

Conference Partners

1 Hangup Unmerge sip:0003@10.124.1.23

2 Hangup Unmerge sip:0004@10.124.1.23

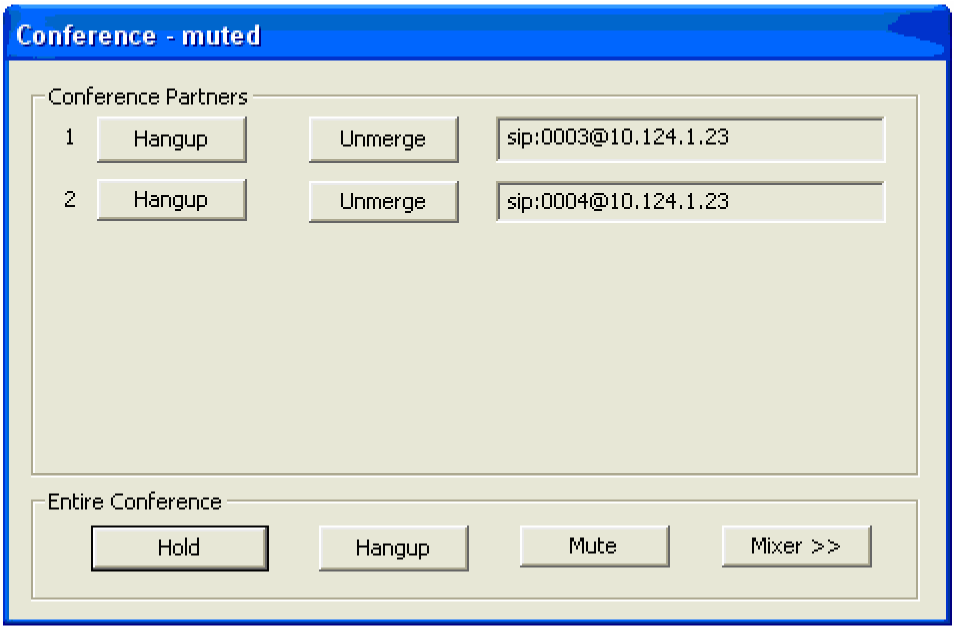
Entire Conference

Hold Hangup Mute Mixer >>

You can now start another audio call to add a conference participant (see Sections 3.2.2 and 3.2.3). When the participant answers the call, you press the *Audio Conference* button again, and the participant will be added to the Conference window (see above).

3.4.2 Conducting an Audio Conference

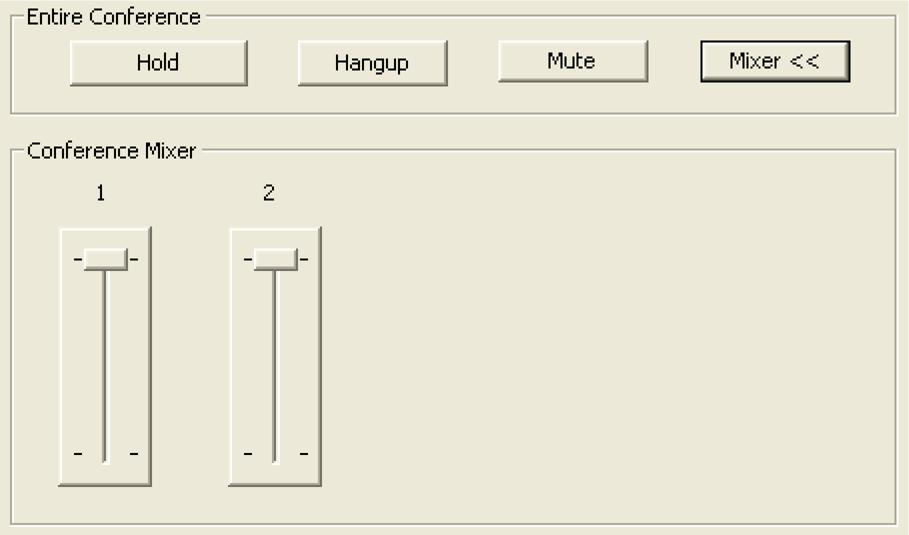
You can also successively call partners, put them on hold and press the *Audio Conference* button only once at the end to merge all partners that are on hold up to now into the conference. The buttons in the Conference Panel allow to hangup or unmerge single participants and/or to hangup or put on hold the entire conference. In case, the *Hold* button changes to *Unhold*. You can use it to add more participants if necessary and hold all other participants. The *Mute* button silences your microphone for all other participants, who still can talk amongst themselves. With the *Unmerge* button you can remove single participants from the conference, but keep them on hold.



sip:0003@10.124.1.23

sip:0004@10.124.1.23

The *Mixer* button expands the window to regulate the audio volume for each participant separately:



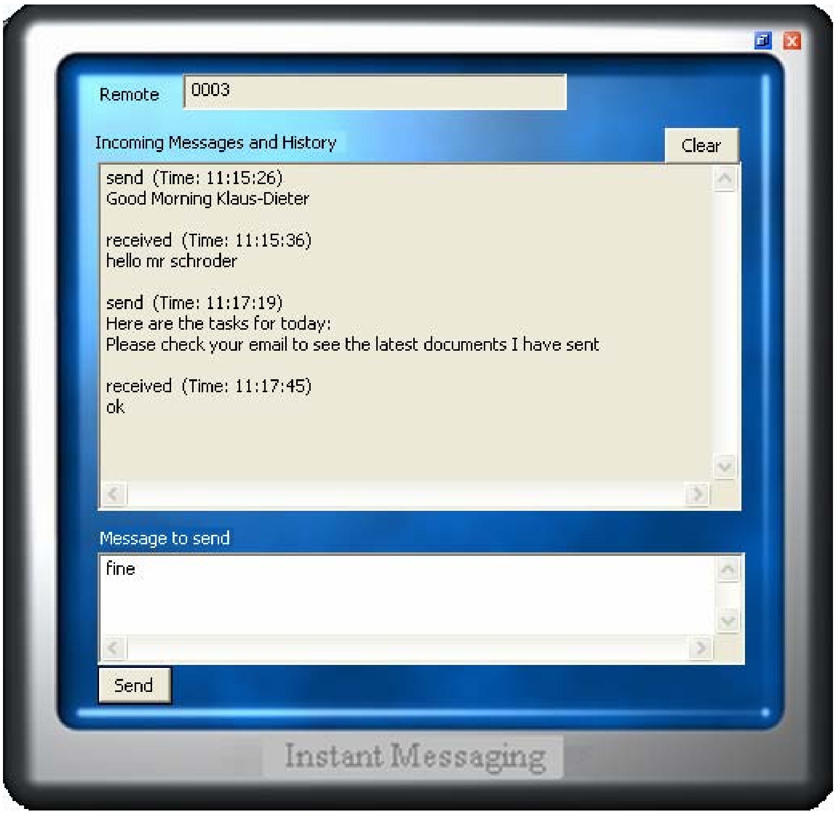
4 Instant Messaging Functionality

There are two ways to start an Instant Message session with *OmniSession*:

1. Press Button *Instant Messaging*,

2. Select a person from the Available Partners List (left mouse click) and open the *Right-Click* menu (right mouse click). Select *Instant Message* from the *Right-Click* menu.

In both cases the *Instant Messaging* window will pop up.



Remote 0003

send (Time: 11:15:26)
Good Morning Klaus-Dieter

received (Time: 11:15:36)
hello mr schroder

send (Time: 11:17:19)
Here are the tasks for today:
Please check your email to see the latest documents I have sent

received (Time: 11:17:45)
ok

fine

The field named *Remote* contains the address which you either type in, fill in by displaying and clicking the entries of previous users (arrow to the right of the *Remote* field), or it is preset (if you used the Partner List).

You can also load an address from your Phonebook by pressing the button to the right of the field. Double-clicking the respective entry populates the *Remote* field accordingly.

The large window *Incoming Messages and History* shows you the messages as they are entered with the respective Partner's name. With the *Clear* button you can clear this window.

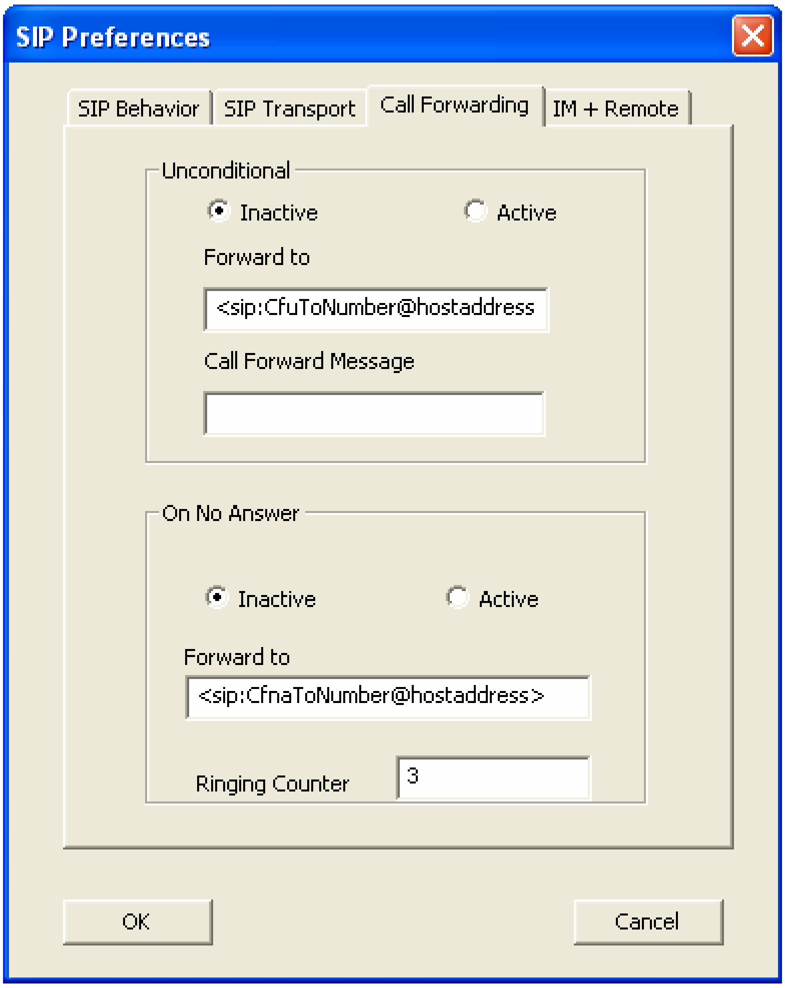
In the *Message to send* window below, you can enter your own message. It will be sent when you hit the *Send* button or hit the *Enter* key on your keyboard.

The *Exit* button to the lower right terminates the Instant Messaging session.

5 Set Services

5.1 Call Forwarding

Call Forwarding is set up via its own panel under *SIP Preferences* (see Section 1.3):



Unconditional

● Inactive ○ Active

Forward to

<sip:CfuToNumber@hostaddress

Call Forward Message

On No Answer

● Inactive ○ Active

Forward to

<sip:CfnaToNumber@hostaddress>

Ringing Counter 3

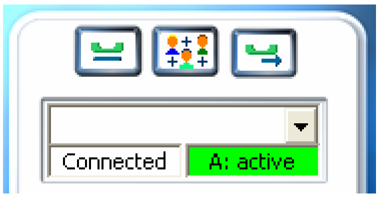
Here you have two options: Call Forwarding *Unconditional* or *On No Answer.* In any case you have to mark the checkbox "Active", and insert a valid number/address. For *Unconditional* one can optionally add a Call Forward Message that will be included in the SIP message. For *On No Answer* you can set the number of ring tones under *Ringing Counter* after which the call will be forwarded. Incoming Calls will be directed immediately to the Forward Address.

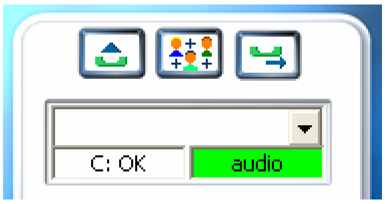
5.2 Call Hold

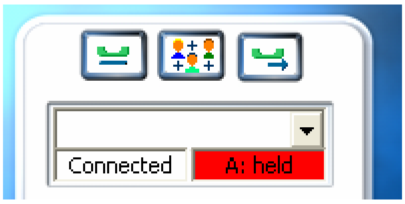
Call Hold is only possible for a connected active Call! It cuts a partner off temporarily from a call, to be able to do some other activities in the meantime.

It will become effective if one of the partners presses the Hold Button:

which changes its appearance to “Unhold”.







In this case the partners’ status fields display the situation as shown above.

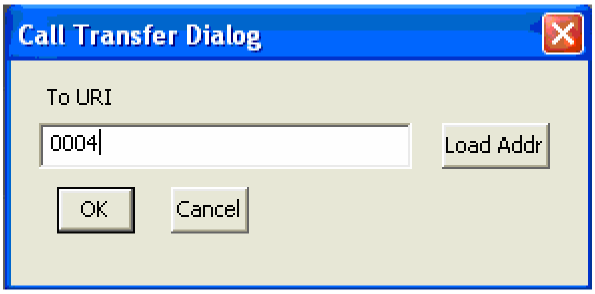
To get back to an active connection, both partners have to have their Buttons in “Hold” Position.

5.3 Call Transfer

Call Transfer only applies in case of an active connection: One of the partners initiates the Call Transfer by pressing the Call Transfer Button:

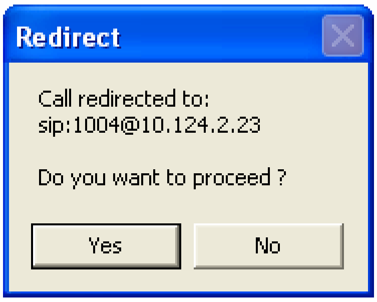
and filling in the destination address (e.g. 0004 as shown below). The other partner will be informed about this transfer action and can either accept or reject it.

Partner A:



To URI: 0004

Partner B:

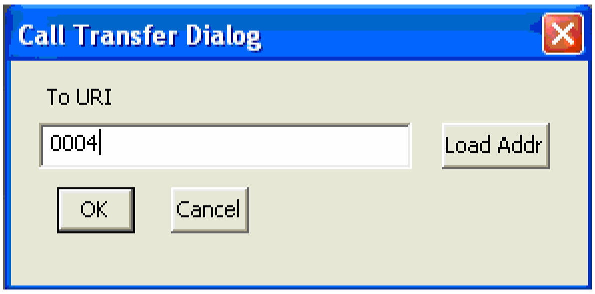


Call redirected to:
sip:1004@10.124.2.23

Do you want to proceed ?

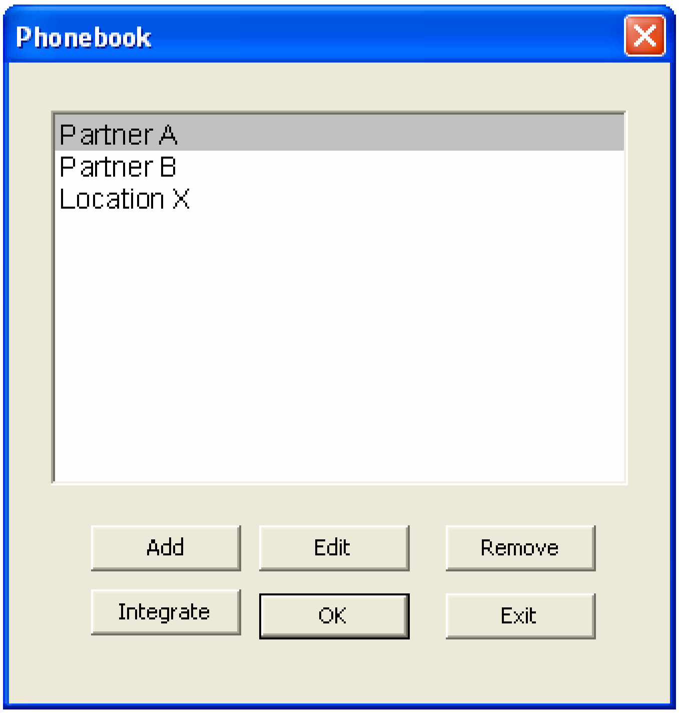
The new partner (0004 in the example) obtains a normal call invitation. If he accepts the Call, the connection between the original calling partners will be released. If he rejects, all previous calls will be disconnected.

Instead of manually entering the new destination address for the partner, Partner A can load the address via pressing the *Load Addr* button.



To URI: 0004

This brings up the Phonebook window:



You now can double-click the desired forwarding partner which is automatically entered as forwarding address into your Call Transfer Dialog box.

6 Available Partners List

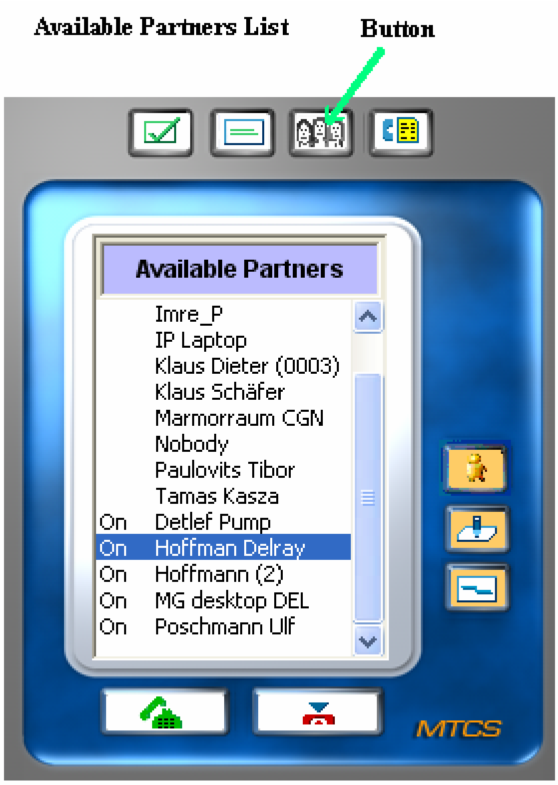
Entries in the Available Partners List (possible contacts) are initiated by marking *Add Identity to Contact List* in the Phone Book.

They are displayed with the name given to them in the *Person* field of the *SIP Identity* window and, if online, with their Presence Indication (On = online, Busy, Away, or BRB = Be Right Back).

The Presence Status "On" is set automatically when you activate your *OmniSession* for the first time. Otherwise the Presence Status that was previously set will re-appear. Presence indications can be set manually by right-clicking on the *OmniSession* surface and selecting *Set Own Status.*

By right-clicking on an entry in the Partner List you can initiate any session with your selected partner. The *File Share/Transfer* function works only in a VPN Intranet such as ORGALOGIC's MTCS. To effect a File Share/File Transfer, a partner has to create the folder "MTCS Shared" with sub-folders "IN" and "OUT" and share these folders on the network. With *File Share*, you can access the IN and OUT directories of your partner, with *File Transfer,* the files in your OUT directory are transferred to your partners IN directory.

Entries in the Partner List are removed by removing the corresponding entry in the phonebook and then quitting and restarting *OmniSession*.



	Imre_P
	IP Laptop
	Klaus Dieter (0003)
	Klaus Schäfer
	Marmorraum CGN
	Nobody
	Paulovits Tibor
	Tamas Kasza
On	Detlef Pump
On	Hoffman Delray
On	Hoffmann (2)
On	MG desktop DEL
On	Poschmann Ulf

7 Video Calls

Notice that before you can make a call or start a session the SIP Identity has to be set and *OmniSession* has to be registered with your SIP Registrar. Moreover, the Audio and Video Preferences have to be set appropriately.

To make a video call you have to start an ordinary audio call as described in Section 3.2. Once connected to your partner you

press the button *Toggle Video*. 📹

On your own desktop your own camera picture comes up as a video window, on your partner's screen both camera pictures will come up. To see your partner, he/she has to press his/her Toggle Video button as well. This establishes a full video call with audio. The video windows show dynamically the current bandwidth and the frame rate. You can size your window via your cursor. You can minimize it or cancel it as well. Your own picture on your partner's screen is not affected by sizing, minimizing or canceling. To get it back after cancellation, press the HOLD button briefly and use the Toggle Video button again.

Your Toggle Video button should be green, having pressed it once. If your partner did not press the button, it should have turned red. Pressing the button again pauses (freezes) your picture for your partner and turns it red, press again to restart the image.

If you want to send a section of your desktop you have to

press the button *Toggle Desktop*. 👁

This switches your camera off and sends a section of your screen instead. You can influence the section by moving your cursor over the screen; the section will move with your cursor. You can freeze your screen section by pressing the Toggle Desktop button again.

Here is a summary of the four states for each Toggle Button:

1. 👁 📹 state "disabled", no Audio Call present
2. 👁 📹 state "inactive" while Audio Call is present
3. 👁 📹 state "active" after toggling
4. 👁 📹 state "paused" after toggling from green (you are sending a still image) or
   after your partner has toggled (but you have not)

To start a video conference you have to follow the steps in section 3.4 but do not forget to toggle video for each single audio call – your partner has to toggle, too.

8 Whiteboarding

Notice that before you can start a Whiteboard session, the SIP Identity has to be set and *OmniSession* have to be set appropriately.

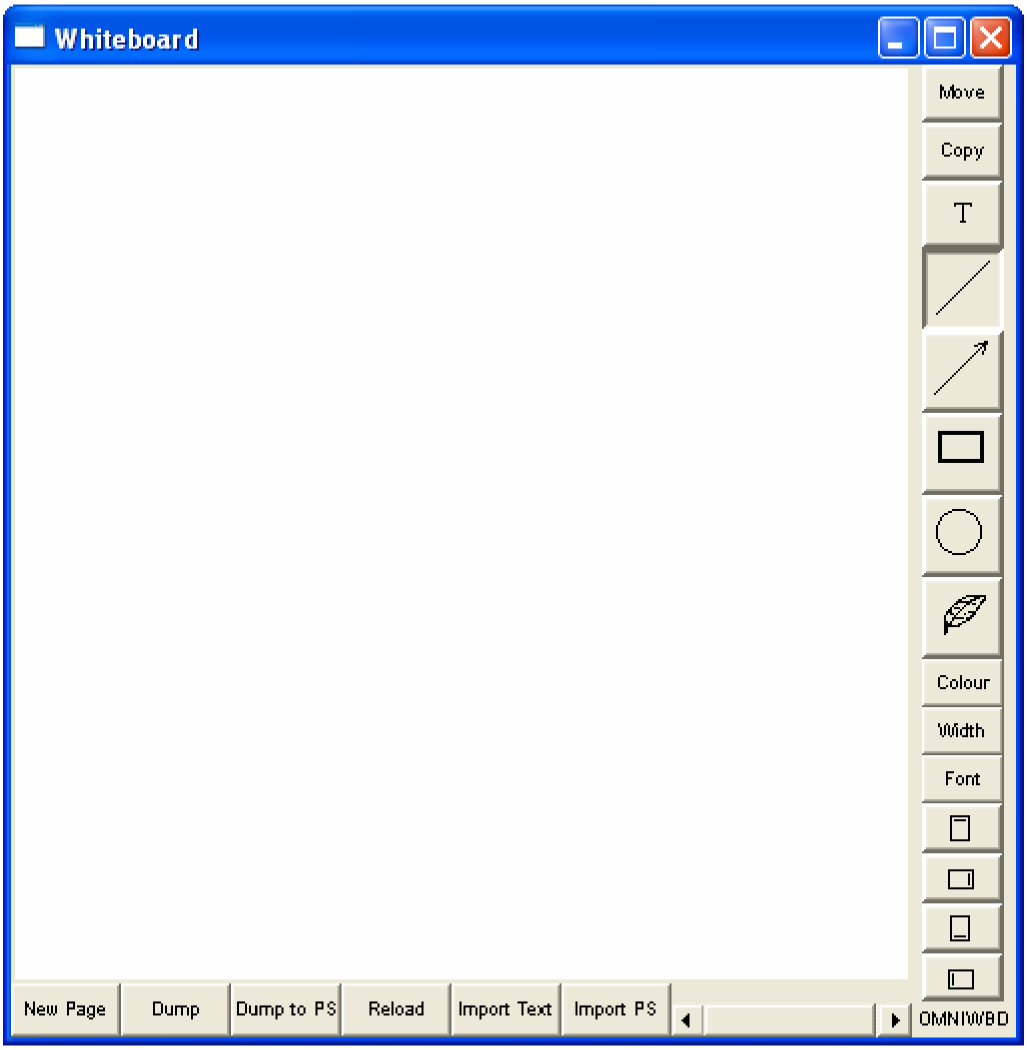
Now to make an audio (+ video) + whiteboard call you have to start an ordinary audio (+ video) call as described and then:

Press button *Toggle Whiteboard*

When connected the Whiteboard Panel turns up on your and your partner’s screens.

8.1 The Whiteboard Panel

You are presented with a page where you can see the drawings of others, and you can add your own drawing. The toolbar allows you to draw lines, boxes, circles, freehand, add text and include text and PostScript files.



This screen gives you the following options:

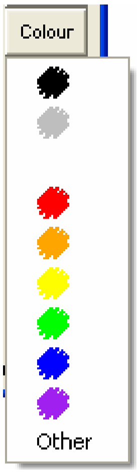
Mouse use

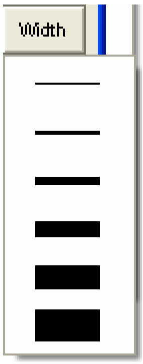
–Button-1 (left)	Pointer
–Shift-Button-1	Delete
–Double-Button-1	Call Control Panel

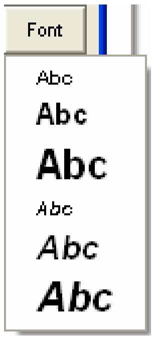
Sidebar Task Buttons

- Move moves a selected item (drag with the mouse)
- Copy copies a selected item (drag with the mouse)
- T allows to write text at the pointer's coordinates
- ╱ ↗ □ ○ allow to draw lines, arrows, rectangles, and circles

  ✎ allows free-hand drawing
- Color allows to select colors
- Width allows to select pencil widths
- Font allows to select different fonts







- with the remaining four buttons you can rotate the whole drawing plane

Bottom Tasks:

- **New Page** - Opens a fresh page, you can back and forth with the slider at the Bottom
- **Dump** - Export your input to a dmp-file
- **Dump to PS** - Export your input to a Postscript file
- **Reload** - Imports a dmp-file
- **Import Text** - Imports any text
- **Import PS** - Imports a Postscript file

Windows caveats:

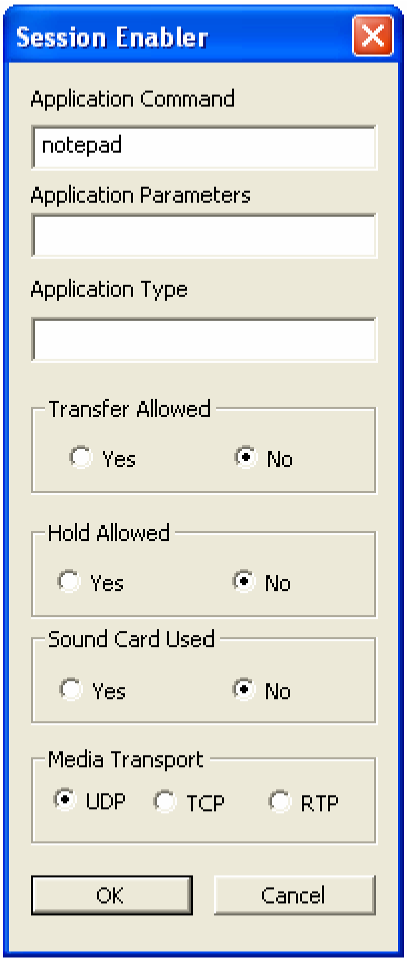
If you use omniwbd with Windows, please install GhostScript and include gswin32.exe into your PATH to use the Import PS function.

9 User-Defined Session

Notice that before you can start a User-Defined session, the SIP Identity has to be set and *OmniSession* has to be registered with your SIP Registrar. Moreover, the Session Enabler Preferences have to be set appropriately.

9.1 Overview

One of the *OmniSession* specialties is the *Session Starter* functionality. This allows to start any application on your and your partner's PC.



Session Enabler

Application Command: notepad

Application Parameters:

Application Type:

Transfer Allowed ○ Yes ● No

Hold Allowed ○ Yes ● No

Sound Card Used ○ Yes ● No

Media Transport ● UDP ○ TCP ○ RTP

Examples for such applications are:

1. OmniVIC (to process Video and Audio+Video Calls)
2. OmniWbd (to establish a Whiteboard session)
3. OmniIM (a Peer-to-Peer Instant Message Application).

Setting for private sessions are as follows:

- Application Command (e.g. OmniVIC)
- Application Parameters (e.g. as displayed in the case of OmniVIC, cf. below)
- Hold Allowed
- Transfer Allowed
- Sound Card used (Yes) reserves the sound card of the PC for this specific session
- Use TCP for Media or UDP otherwise

Variables in the field of Parameters include:

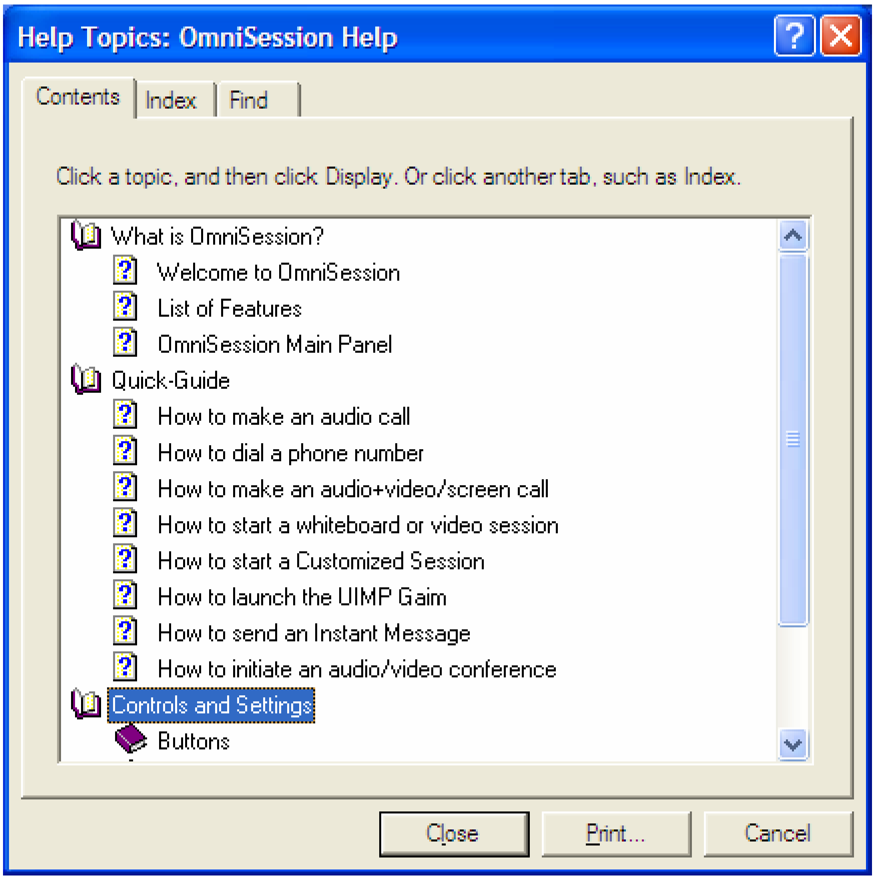
%A	IP-Address of peer	
%P	Media Port Number of peer	
%O	Own Media Port Number	
%I	Direction Flag	With I = **o** or I = **i** for outgoing or incoming
%T	Use TCP for Media	
%D	Call-ID	

10 Help Functions

OmniSession Help functions are brought up by right-click on the general *OmniSession* graphical area, selecting *Help.*

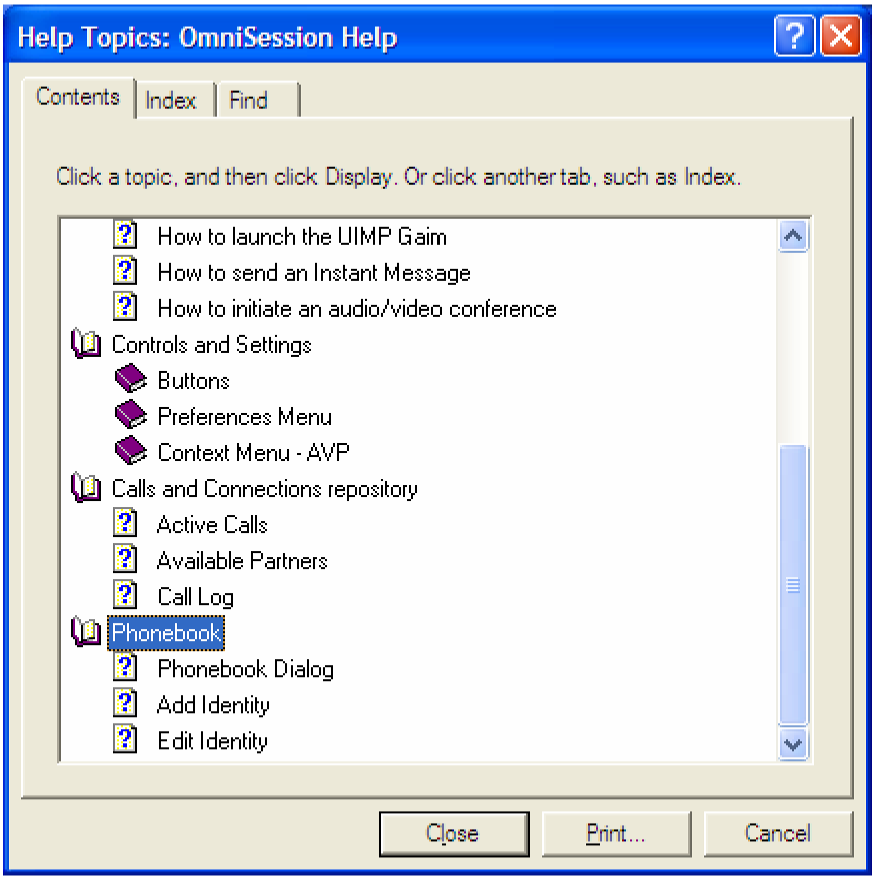
Help Functions are distributed in three folders *Contents, Index* and *Find.*

Contents sorts the Help functions by functionality and gives a general definition, a quick guide, a look into controls and settings, calls and connections repository and the Phonebook functionality. This panel has a *Print* function that prints a selected entry.



Click a topic, and then click Display. Or click another tab, such as Index.

- What is OmniSession?
  - Welcome to OmniSession
  - List of Features
  - OmniSession Main Panel
- Quick-Guide
  - How to make an audio call
  - How to dial a phone number
  - How to make an audio+video/screen call
  - How to start a whiteboard or video session
  - How to start a Customized Session
  - How to launch the UIMP Gaim
  - How to send an Instant Message
  - How to initiate an audio/video conference
- Controls and Settings
  - Buttons

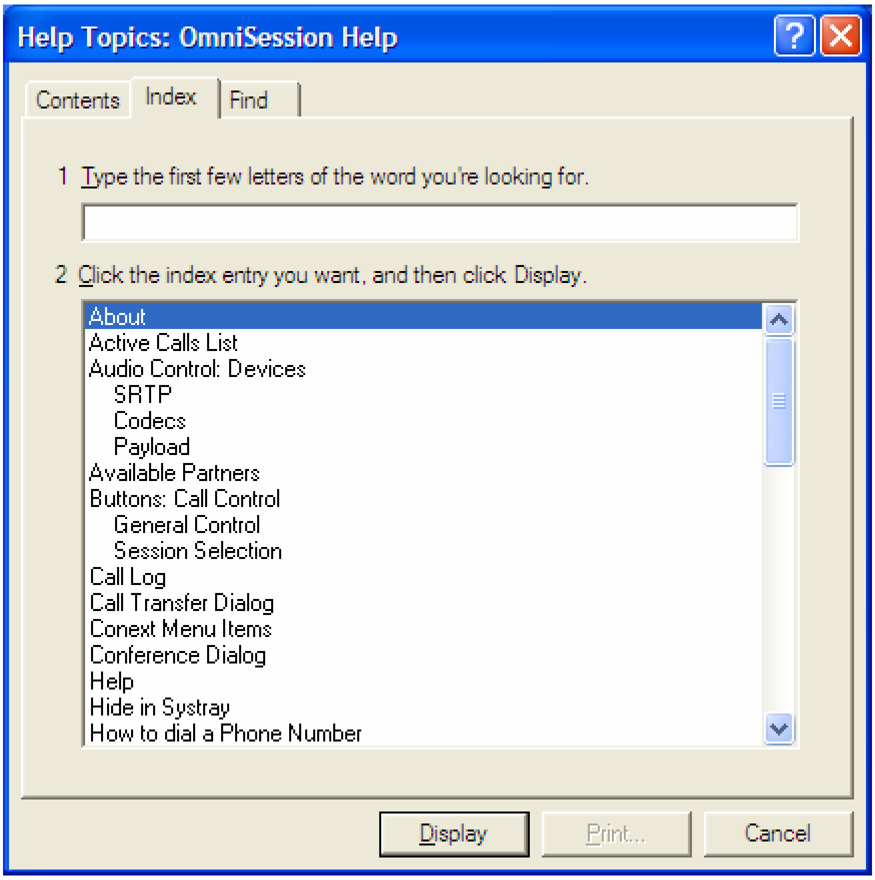


Help Topics: OmniSession Help

Click a topic, and then click Display. Or click another tab, such as Index.

- How to launch the UIMP Gaim
- How to send an Instant Message
- How to initiate an audio/video conference
- Controls and Settings
  - Buttons
  - Preferences Menu
  - Context Menu - AVP
- Calls and Connections repository
  - Active Calls
  - Available Partners
  - Call Log
- Phonebook
  - Phonebook Dialog
  - Add Identity
  - Edit Identity

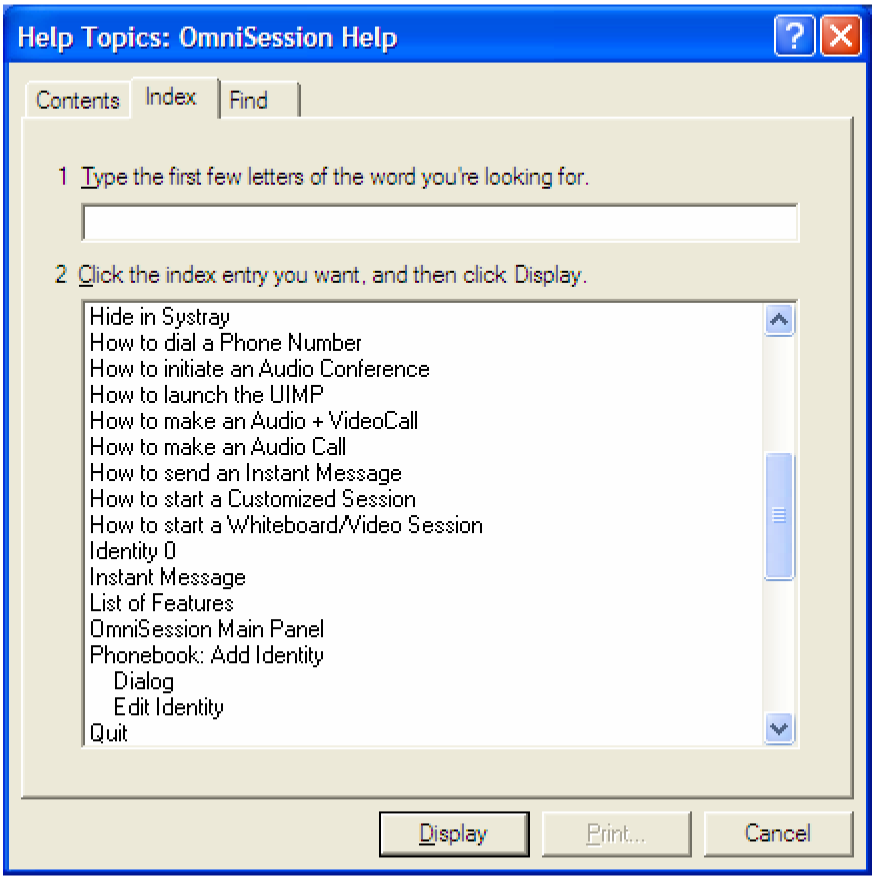
The index lists all help topics alphabetically. Selecting an entry and clicking *Display* displays the selected topic.



1 Type the first few letters of the word you're looking for.

2 Click the index entry you want, and then click Display.

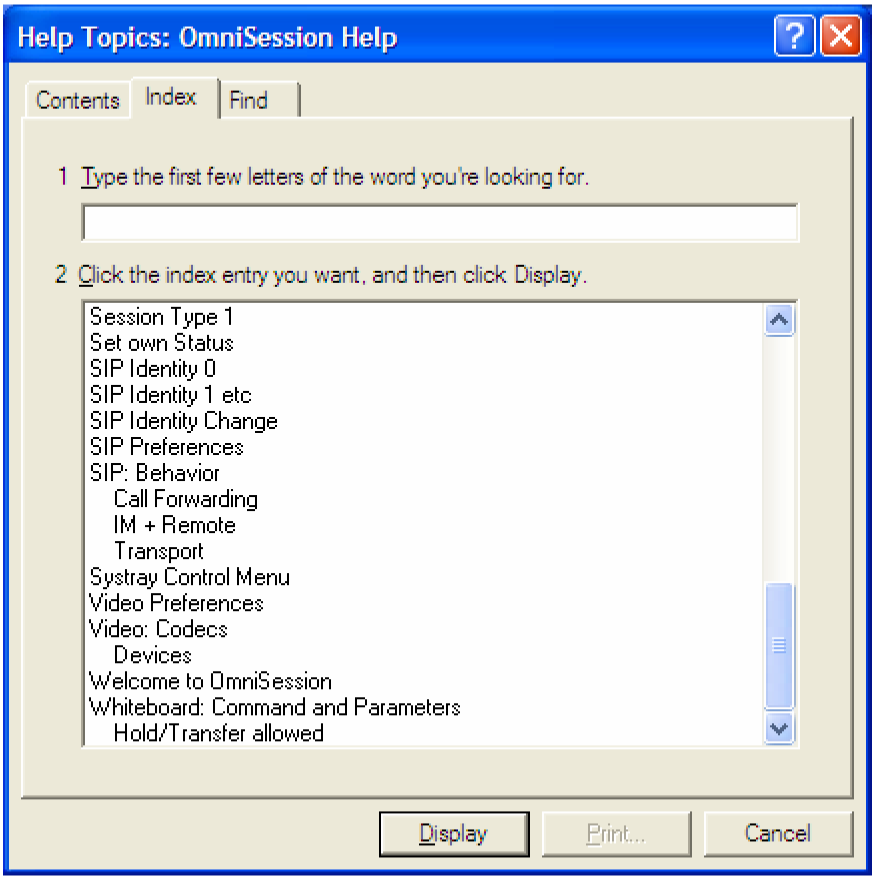
About
Active Calls List
Audio Control: Devices
    SRTP
    Codecs
    Payload
Available Partners
Buttons: Call Control
    General Control
    Session Selection
Call Log
Call Transfer Dialog
Conext Menu Items
Conference Dialog
Help
Hide in Systray
How to dial a Phone Number



1 Type the first few letters of the word you're looking for.

2 Click the index entry you want, and then click Display.

Hide in Systray
How to dial a Phone Number
How to initiate an Audio Conference
How to launch the UIMP
How to make an Audio + VideoCall
How to make an Audio Call
How to send an Instant Message
How to start a Customized Session
How to start a Whiteboard/Video Session
Identity 0
Instant Message
List of Features
OmniSession Main Panel
Phonebook: Add Identity
    Dialog
    Edit Identity
Quit

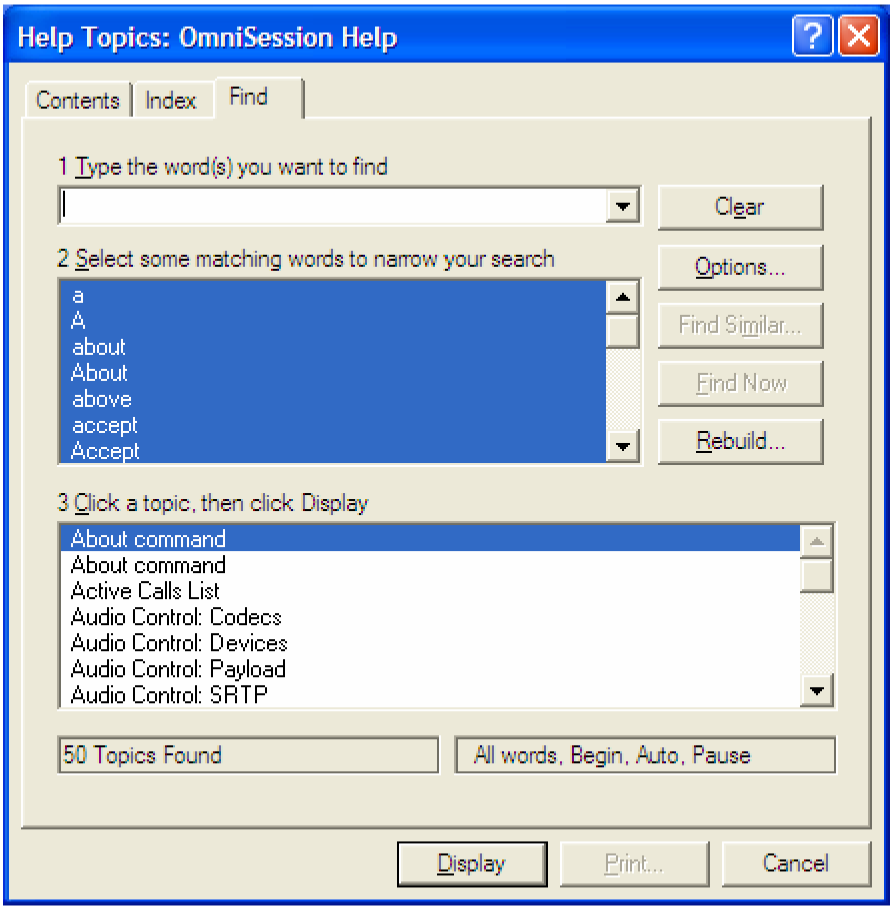


1 Type the first few letters of the word you're looking for.

2 Click the index entry you want, and then click Display.

Session Type 1
Set own Status
SIP Identity 0
SIP Identity 1 etc
SIP Identity Change
SIP Preferences
SIP: Behavior
  Call Forwarding
  IM + Remote
  Transport
Systray Control Menu
Video Preferences
Video: Codecs
  Devices
Welcome to OmniSession
Whiteboard: Command and Parameters
  Hold/Transfer allowed

The *Find* function lets you search for a specific topic and contains a full set of Search options and an option to rebuild a list of Search topics:



1 Type the word(s) you want to find

2 Select some matching words to narrow your search

a
A
about
About
above
accept
Accept

3 Click a topic, then click Display

About command
About command
Active Calls List
Audio Control: Codecs
Audio Control: Devices
Audio Control: Payload
Audio Control: SRTP

50 Topics Found

All words, Begin, Auto, Pause

11 Possible Fault Scenarios and their Remedy

We need a list of possible error messages popping up with their windows??

11.1 I cannot open *OmniSession*

Possible reason: missing DLL's (when your PC does not 'speak' English by default)
Fix: Copy the DLL's MFC71.dll, MSVCP71.dll and MSVCR71.dll into the \WINDOWS\system32 Subfolder.

11.2 I cannot register my *OmniSession*

Possible reason: Internet access, Proxy, Registrar and/or Tunnel are down
Fix: Wait until everything is up again. In doubt inform **xyz**…

Possible reason: wrong or missing Configuration entries
Fix: Go to the Configuration panel (right click the mouse and select your Default SIP Identity) and check if the entries for your **Own Number**, **Host Address** and **Outbound Proxy** are valid.

Possible reason: Auto Register not activated
Fix: Go to the Configuration panel (right click the mouse and select your Default SIP Identity) and checkmark the Auto Register entry.

Possible reason: Auto Register Failed
Fix: Go to the Configuration panel (right click the mouse and select your Default SIP Identity) and if the button directly above the OK-button shows **Register** then hit it. It should switch to **Unregister** (with Registration State: Active now.

11.3 I cannot make a call to somebody

Possible reason: The user is not reachable
Fix: When you get the message **Call Failed: Temporarily Unavailable** then the user has not started his *OmniSession* application or he is not registered (see Chapter: I cannot register).

Possible reason: The user is busy
Fix: When you get the message **Call Failed: Busy Here** then the user has modified his own status (with right mouse click and "Set own Status") to "Busy". Nobody can call him now until he is undoing his modification or is restarting his *OmniSession*.

Possible reason: You entered a wrong number
Fix: When you get the message **Call Failed: Not Found** then a user with this number is unknown. Please recheck the entered number.

Possible reason: The called party has a different Default SIP Identity than you have
Fix: First you need to have an own SIP Id on the same Proxy as the Default of the called party. When you use a different proxy as default you have to type a "**#n:"** *before* entering the dialed number (n = 0, 1 or 2, depending on your SIP Identities).

11.4 I cannot be called by somebody

See Chapter **I cannot make a call to somebody** and check the possible reasons from the perspective of the called party.

11.5 I don't see the status from somebody in my Available Partners list

Possible reason: Partner rejected to Subscribe your number.
Fix: Partner must (momentary) edit his MTCS.ini-File and remove your once rejected number from the *[MTCS/presence* section.

Possible reason: the administrator of the proxy has enabled your *Call Return* feature. In this case no Notifications about active states for your Default proxy will reach your Available Partners list (this unwanted behavior of the proxy is under investigation).
Fix: Ask the administrator to remove the *Call Return* feature.

11.6 I cannot hear anything

Possible reason: defect or missing soundcard or headset
Fix: make sure your hardware is ok

Possible reason: low Speaker Volume on your side
Fix: Raise the volume of the Speaker either by using the control at the right bottom of the skin of the *OmniSession* or in the *Audio Preferences* Menu.
In the Audio Preferences also make sure that you selected a valid sound device as Speaker.

Possible reason: low Micro Volume on your partners side
Fix: Your partner must raise the volume of his Micro either by using the control at the left bottom of the skin of the *OmniSession* or in the *Audio Preferences* Menu.
In the Audio Preferences he also must make sure that he selected a valid sound device as Microphone.

Possible reason: On Hold
Fix: Maybe either you or your partner are set on Hold. In this case the originator of the Hold must hit the Hold Button once again.

Possible reason: Your partner hit the MUTE button
Fix: Your partner must hit the MTCS/MUTE at the lower right of the *OmniSession* once

more.

Possible reason: No Audio call
Fix: When you are in a Video Only call or a Whiteboard call you only can hear the ringing but no voice. If you want to talk as well, you have to establish an additional Audio call.

Possible reason: Conference
Fix: When you are invited into a Conference then you will be automatically set on Hold until the Conference Leader is ready to start and open the conference. Just wait.

11.7 Nobody can hear me

See Chapter **I cannot hear anything** and check the possible reasons from the perspective of the called party.

11.8 I cannot hear my *OmniSession* ringing

Possible reason: Ringing Volume too low
Fix: In the *Audio Preferences* Menu check the Popup Menu below **Ringing**. On the right side appears a control where you can raise the Volume for Ringing.

11.9 I get an error message from my Cam

Possible reason: Multiple tasks for your Cam
Fix: You can use your Cam for **one** Video call with *OmniSession*. If you are running other tasks for your Cam then close them before making a Video Call.

Possible reason: Cam not supported
Fix: Please contact *OmniSession* support to find out compatible Cam types,e.g.,:

- Logitech QuickCam

11.10 The video images are frozen

Possible reason: bandwidth too high
Fix: In the window with the Videos hit the *Menu* button and lower the frame rate with the Rate Control slider.
Alternately hit the Hold button twice to reanimate the Videos.

11.11 Instead of a video image I see a screen section

Possible reason: Camera checkbox not selected

Fix: In the *Video Preferences* (right mouse click) mark the checkbox named **“with camera”**.

Possible reason: You selected *screen* instead of *camera*
Fix: At the bottom of the window with the Videos mark the radio button for **camera** instead of that one for **screen**.

11.12 Calls to me are not forwarded to the expected SIP number

Possible reason: Call Forwarding not activated
Fix: In the SubMenu *Call Forwarding* of the SIP Preferences (right mouse cklick) mark the radio button for **Active** either for Call Forwarding Unconditional or Call Forwarding on No Answer.

Possible reason: wrong syntax of the Forward to Number
Fix: Modify the syntax to **<sip:(forward to number)@(IP address)>** (example: <sip:4711@10.100.1.99>)

11.13 My Instant Message does not reach the addressee

Possible reason: Partner is not reachable
Fix: Make sure that the addressee is registered and online.

Possible reason: The addressee has a different Default SIP Identity than you have
Fix: First you need to have an own SIP Id on the same Proxy as the Default of the called party. When you use a different proxy as default you have to type a “**#n:” in front of** the Remote address (n = 0, 1 or 2, depending on your SIP Identities) before sending your Instant Message.

11.14 File Sharing does not work

Possible reason: Partner not online
Fix: Make sure that you partner was reachable and online at least once after the last start of your *OmniSession*.

Possible reason: Shared Folders missing
Fix: Make sure that your partner created a Folder named **\MTCS Shared** with the two Subfolders named **\In** and **\Out** and that all three folders are marked as **Shared Folders**.

11.15 File Transfer does not work

Possible reason: Partner not online
Fix: Make sure that you partner was reachable and online at least once after the last start of your *OmniSession*.

Possible reason: Shared Folders missing
Fix: Make sure that you also have the Shared Folder named **\MTCS Shared** with the two Subfolders named **\In** and **\Out** and that all three folders are marked as **Shared Folders**.

Possible reason: Files in wrong Subfolder
Fix: Make sure that the files you want to transfer are copied into the **\Out** folder. After the File Transfer they are transferred into the **\In** folder of the addressee.

11.16 The Whiteboard does not pop up

Possible reason: missing Whiteboard Preferences
Fix: Make sure that you have a valid entry in the *Whiteboard Preferences* (right mouse click), for example this one:
OmniWbd -p -geometry 500x600+200+50

Possible reason: Missing file
Fix: Make sure that the file **OmniWbd.exe** is not missing in the same folder where you installed your *OmniSession*.

11.17 My *OmniSession* crashes

Possible reason: Software fault
Fix: Crashes should not happen. But if they do then please contact immediately **xyz** and provide us with

- A detailed description on what you were doing (as exact as possible)
- Your MTCS.INI file
- The MTCS.INI file from your partner (if applicable)

11.18 Miscellaneous

Please use the form under *Support* on the *OmniSession* Website to point out more troubles with *OmniSession*.