

LANCOM

Systems

LANCOM Advanced VoIP Client - User Documentation

LANCOM Advanced VoIP Client The Ultra
Flexible Telephony Software for
Your Windows PC

As of: January 2007

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Table of Contents

New Functions	1
Preface	3
1 What is meant by...?	
1.1 Subscriber	7
1.2 Number (Telephone Number).....	7
1.3 Line.....	7
1.4 User	8
1.5 Active Connection.....	8
1.6 Connection on Hold	8
1.7 Call Waiting	8
1.8 Call Swap	9
1.9 Acoustic Signals	9
1.10 Skin	9
1.11 Call Forwarding	10
1.12 Wrap Up Time.....	10
2 How does LANCOM Advanced VoIP Client work?	
3 Logon and Logoff	
3.1 Start, logon and logoff.....	15
3.2 Show Message Log	17
4 The Layout of the LANCOM Advanced VoIP Client Interface	
4.1 Menus	19
4.2 The Toolbar.....	22
4.3 Background	24
4.4 Display.....	25
4.5 Numeric Keypad.....	26
4.6 Lines	27
4.7 Function Keys	28
5 Telephoning with LANCOM Advanced VoIP Client	
5.1 Starting LANCOM Advanced VoIP Client.....	31
5.2 How do I call a subscriber?	32

5.3	Dial from Every Application	33
5.4	How do I use the Phonebook?	34
5.5	How do I answer a call?	35
5.6	How do I end a call?	36
5.7	How do I start an inquiry call?	37
5.8	How do I switch between several subscribers (Call Swap)?	37
5.9	How do I connect two subscribers to one another?	38
5.10	How do I transfer a call without Inquiry?	39
5.11	Transfer without accepting	40
5.12	How do I telephone with several subscribers simultaneously (Conference)?	40
5.12.1	Starting a Conference	40
5.12.2	Inquiry Calls and Add.....	41
5.12.3	Leaving or Ending a Conference	43
5.13	How do I forward a call?	43
5.13.1	Enable Call Forwarding Unconditional	44
6	Microsoft Outlook – Telephoning with LANCOM Advanced VoIP Client	
6.1	Telephone Number Formats in Outlook	45
6.2	LANCOM Advanced VoIP Client and Microsoft Outlook 2000/XP	45
6.2.1	Configuration	46
6.2.2	Calling Subscribers Directly from Outlook Contacts	50
6.2.3	Call from an e-mail	52
6.2.4	Call from a Calendar entry	52
6.2.5	Using Outlook Contacts for Incoming Calls	53
6.2.6	Displaying and creating Outlook Contacts during a call	54
6.2.7	Displaying and creating Outlook Contacts from lists	54
6.2.8	Creating and displaying Outlook journal entries	55
6.2.9	Creating a journal entry during a call	56
6.3	Selecting a number from Outlook Contacts	56
7	LANCOM Advanced VoIP Client in Detail	
7.1	Summary of the Functions of LANCOM Advanced VoIP Client.....	59
7.2	LANCOM Advanced VoIP Client Menus	61
7.2.1	The File Menu	61
7.2.2	The Edit Menu	63
7.2.3	The Lines Menu	64
7.2.4	The Functions Menu	64
7.2.5	The Lists Menu	66
7.2.6	The Settings Menu.....	67

7.2.7	The Help Menu	67
7.2.8	Minimize	68
7.2.9	Exit	69
7.2.10	About LANCOM Advanced VoIP Client... ..	69
7.2.11	Tip of the day.....	69
7.3	The LANCOM Advanced VoIP Client Toolbar.....	70
7.4	LANCOM Advanced VoIP Client Functions	72
7.4.1	Numeric Keypad	72
7.4.2	Backspace	72
7.4.3	Handset	72
7.4.4	Redial	73
7.4.5	Automatic Redial	77
7.4.6	Disable Secondary Call	79
7.4.7	Hide Number	79
7.4.8	Line button	80
7.4.9	Disabling Lines (Wrap-up Time)	94
7.4.10	Speed dial	96
7.4.11	The Shortcut Button	98
7.4.12	Importing and Exporting Speed Dials and Shortcuts	100
7.4.13	Phonebook	101
7.4.14	Caller List.....	106
7.4.15	Forwarding	109
7.4.16	Call Swap.....	110
7.4.17	Hold	111
7.4.18	Call Transfer	111
7.4.19	Blind Call Transfer	112
7.4.20	Conversation Recording	113

8 LANCOM Advanced VoIP Client Configuration

8.1	Speaker and Microphone.....	120
8.1.1	Adjust Volume.....	120
8.1.2	Mute Speakers	121
8.1.3	Mute Microphone	122
8.2	Forwardings	122
8.3	Sound Wizard	124
8.4	User Profile.....	125
8.4.1	General.....	126
8.4.2	Lists	128
8.4.3	Speed Dials	130
8.4.4	Shortcut Buttons	131
8.4.5	Line Buttons.....	133
8.4.6	Skin	134
8.4.7	Ringng.....	135
8.4.8	Keyboard	138
8.4.9	SIP Account / Audio	140
8.5	Call from the command line	145

9	Installing and Uninstalling LANCOM Advanced VoIP Client	
9.1	Requirements	147
9.2	Preparation for Installation	148
9.2.1	Install LANCOM VoIP USB Handset	148
9.2.2	Install LANCOM VoIP Client Headset	148
9.2.3	Operating the LANCOM VoIP USB Handset / LANCOM VoIP Client Headset without Additional Speakers ..	148
9.3	LANCOM Advanced VoIP Client - Installation of the Software	149
9.3.1	Installation	149
9.3.2	User-defined Installation	150
9.3.3	License Keys	151
9.3.4	Installation from the Command Line	152
9.3.5	Update	153
9.3.6	Uninstall	154
9.4	Configuration of a SIP account.....	154
9.4.1	Configuration of Peer-to-peer/ENUM.....	157
App. A:	Symbols on the Taskbar and in the Tray	
App. B:	Telephoning from Third Party Applications	
B.1	Installation of the TAPI 2.x.....	163
B.2	Configuring Third Party Applications for LANCOM Advanced VoIP Client Based on the Example of Microsoft Phone Dialer 1.0	164
App. C:	Overview of Drag & Drop	
App. D:	Devices	
D.1	Overview of the Available Devices.....	167
D.2	Configuration of the Terminal Devices in LANCOM Advanced VoIP Client.....	167
D.3	Operation of the LANCOM VoIP USB Handset	168
D.3.1	Standard Behaviour of LANCOM VoIP USB Handset	169
D.3.2	Functions of the LANCOM VoIP USB Handset in Detail	170
D.4	USB Headset Adapter without Keys.....	172
D.5	Swyx Headset Cable K411	173
D.6	Headset Cable GN8120.....	173
D.7	Plantronics CS60-USB Headset	174
App. E:	Technical Terms	

New Functions

This section provides an overview of the new features presented by LANCOM Advanced VoIP Client.

LANCOM Advanced VoIP Client vR.1.20

Function	Explanation
Support of Windows Vista	The operating system Windows Vista is supported.
Conference	In this version you can speak to several subscribers at the same time (conference). For further information please refer to chapter 5.12, <i>How do I telephone with several subscribers simultaneously (Conference)?</i> , page 40.
Detection of special VoIP Routers	When you configure your SIP accounts you can now use the option "Automatic" when you select a provider. LANCOM Advanced VoIP Client logs on to any available any properly configured VoIP router in the system. For further information please refer to chapter 9.4, <i>Configuration of a SIP account</i> , page 154.

LANCOM Advanced VoIP Client vR.1.10

Function	Explanation
Automatic device detection	Many devices are automatically detected by LANCOM Advanced VoIP Client - as a rule, no further configuration is necessary for these.
New skin	LANCOM Advanced VoIP Client offers a revised standard skin LANCOMclassicXT.
Manual start of logon to SIP accounts	You can now start a renewed logon to all activated SIP accounts if necessary. For further information please refer to chapter 7.2.1, <i>The File Menu</i> , page 61.
Definition of own location	You can now define location particulars. This is necessary for correct resolution of Outlook contacts, for example. For further information please refer to chapter 8.4.9, <i>SIP Account / Audio</i> , page 140.
Definition of a public line access	You can input a public line access if necessary. This is needed, for example, when using a SIP gateway for external calls. For further information please refer to chapter 8.4.9, <i>SIP Account / Audio</i> , page 140.
More options for compression	You can use additional options for applying voice compression. By using the options "Prefer uncompressed" and "Prefer compressed", you can change the setting so that your compression setting is only used if your call partner's system also supports it. For further information please refer to chapter 8.4.9, <i>SIP Account / Audio</i> , page 140.
Num key no longer activated as default	Until now, the Num key on the keyboard has been activated by default when LANCOM Advanced VoIP Client is on top. You now have to set this option if you want it. The Num key is deactivated as default. For further information please refer to chapter 8.4.8, <i>Keyboard</i> , page 138.

Preface

What is “LANCOM Advanced VoIP Client”?

Free-of-charge Internet telephony services and the widespread use of Voice over IP technologies have aroused tremendous interest in private and business customers alike. With the popularity of broadband services in the private and public domain, the obvious appeal of cheap or even free telephone calls via the Internet or public IP telephony services is rapidly growing. LANCOM Advanced VoIP Client is an innovative, PC-based telephony application which can be used equally by private and business customers for simple and fast utilization of Internet telephony. The software uses the SIP protocol and offers users an independent PC application with extensive service features, such as are otherwise only known in company telephone systems.

■ About This Documentation

Who is this Documentation written for?

This documentation contains important information for the installation and use of LANCOM Advanced VoIP Client. The topics have been chosen in such a way that even inexperienced PC users will find it easy to begin using this program. Please note that elementary knowledge of Windows systems is required for understanding this documentation and the operation of the help system. If you have not been working with one of these operating systems for very long, we also recommend that you refer to the Windows help system.

Brief operating instructions (Quickstart) are available in PDF form for printout in the Start menu.

■ Conventions for the Descriptions

Description of the Operating Steps in this Documentation

In this documentation, *click* always means: you click the **left** mouse button once.

Double-click: you quickly click **twice** with the **left** mouse button.

If the right mouse button is required for an operating step, it will be indicated explicitly in the text.

“Click with the **right** mouse button...”

Instructions for Menu Operation

Instructions, which refer to the selection of certain menu entries, will be presented as follows:

Lists | Show Phonebook...

refers to the menu item "Show Phonebook...", which is located in the "Lists" menu.

The shortcut menu for an element opens when you click with the right mouse button on the element.

■ The Layout and Organization of this Documentation

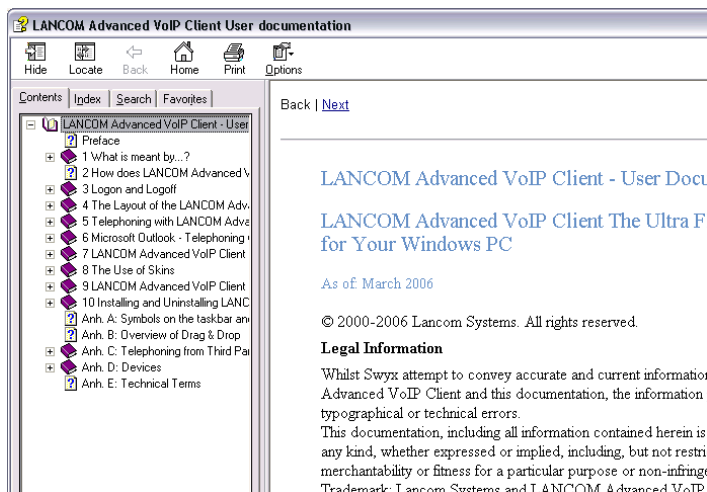
- Chapter 1 - This chapter defines in detail the terminology commonly used throughout the LANCOM Advanced VoIP Client documentation.
- Chapter 2 - This chapter introduces the basic technical concepts of LANCOM Advanced VoIP Client.
- Chapter 3 - This chapter describes how to start and logon to or logoff from LANCOM Advanced VoIP Client.
- Chapter 4 - This chapter will familiarize you with the elements of the LANCOM Advanced VoIP Client user interface.
- Chapter 5 - Here you will find descriptions of the basic telephone functions of LANCOM Advanced VoIP Client.
- Chapter 6 - In this chapter, you will find out how you can use LANCOM Advanced VoIP Client directly in Microsoft Outlook.
- Chapter 7 - This chapter provides a detailed description of the LANCOM Advanced VoIP Client functions.
- Chapter 8 - This chapter describes how to change LANCOM Advanced VoIP Client behavior and settings.
- Chapter 9 - This chapter describes how to both install and uninstall LANCOM Advanced VoIP Client and the corresponding output devices (LANCOM VoIP USB Handset or LANCOM VoIP Client Headset).
- Appendix A - Certain states and processes for LANCOM Advanced VoIP Client are signaled on the Windows taskbar or in the tray. You will find an overview here of the symbols used, and their significance.

- **Appendix B** - This appendix describes how you can use LANCOM Advanced VoIP Client to start calls in third party applications.
- **Appendix C** - This chapter provides an overview of the options for using Drag & Drop to handle buttons on the LANCOM Advanced VoIP Client interface.
- **Appendix D** - In this appendix you will find information on the different devices (Handsets and Headsets), which are suitable for use with LANCOM Advanced VoIP Client.
- **Appendix E** - Here you will find more detailed explanations of technical terms used in connection to the "Voice over IP" technology.
- The detailed **Index** gives you some orientation to help you find topics quickly.

Online Help

At almost every point in the program a high-performance online help is provided: You have access to instructions and information directly on the screen and you don't necessarily need printed operating instructions.

To start the Help system, go to the menu bar and click on "Help | Help Topics...". Many dialogs contain a "Help" button. To receive help for the respective dialog, just click on "Help".



If the **Contents**, **Index** and **Search** tabs are not shown, click on "Show".



Click on one of the tabs in the Help window:

Tab	Purpose
Contents	Showing the Help Table of Contents
Index	Searching or selecting specific words or expressions from a list of keywords.
Search	Searching for Keywords in Online Help
Favorites	Defining Favorites

1 What is meant by...?

This chapter defines in detail the terminology commonly used throughout the LANCOM Advanced VoIP Client documentation.

You will find additional technical terms used in connection with the “Voice-over-IP” technology in App. E., *Technical Terms*.

1.1 Subscriber

Persons, who take part in a telephone conversation, are called subscribers.

1.2 Number (Telephone Number)

A number is a sequence of digits or a symbolic name.

Examples of Valid Numbers

Number	Meaning
02319776123	The number of a subscriber who can be reached via the public telephone network. Please note that you must always use the area code in order for the call to be delivered.
TOMMY	Alias name of a subscriber, which is assigned for a subscriber with the same provider. The subscriber, who is being called, must be known there under the user name TOMMY.
carol.jones@company.com	SIP-URI. This is constructed similarly to an e-mail address, and consists of a user name and the realm (name range, rather like a domain).

1.3 Line

The term “Line” refers to a potential telephone connection, which can be used to place your telephone calls. Due to the fact that LANCOM Advanced VoIP Client uses the IP protocol or SIP protocol to transmit telephone calls, this new IP telephony is not connected to an actual “cable connection” for each telephone call. On the contrary; it enables you to carry out several independent calls simultaneously via your network connection. LANCOM Advanced VoIP Client continues to use the familiar term “Line” for the “logical” connection option for a telephone call, even though a “physical” line is no longer required for this connection. This concept allows you, on the one hand, to continue to use the practical and simple term “Line” – a subscriber

can still “be on hold on the other line” – and, on the other hand, you can profit from the new line flexibility:

Thus for example, you can now determine in a few operating steps how many lines you need at your workstation.

1.4 User

A user is a person, for whom an account has been set up.

1.5 Active Connection

An active connection is the period during a telephone call in which you can hear your conversation partner and your partner can hear you.

1.6 Connection on Hold

A connection on hold is a telephone call you have placed but which you have interrupted for a short time.

The connection on hold can be reactivated with the help of the corresponding Line button. If you have a second call on another line at the same time, the connection that was active until now will become a connection on hold.

In this way, you can conveniently take several calls “simultaneously” and easily switch between the individual callers (Call Swap).

Example:

Another call comes in for you while you are having a telephone conversation. The new call is shown on your telephone display. If you take this call, the call which was just active will be put on hold and the incoming call becomes active.

1.7 Call Waiting

If you are in the middle of a telephone conversation and another call comes in, this call will be shown on your display and an incoming call tone (not actually a ringing tone) will be played in the active conversation. This procedure is known as Call Waiting.

You can now decide whether you would like to put the current call on hold in order to take the second call or whether you would like to continue your call without interruption.

1.8 Call Swap

Call swapping is when you switch between an active call and one or more calls on hold. When you do this, the currently active call will be put on hold and the call previously on hold will become active.

1.9 Acoustic Signals

The following table provides a brief overview of the most important acoustic signals and their meaning.

Signal Sound	Meaning
Ringing	This sound is produced for incoming calls. You can choose various different ring tones for different calls (e.g. for certain numbers).
Idle tone	This sound is heard before a connection is made.
Busy Signal	Produced after dialing a subscriber whose line is busy.
Call Waiting Signal	Generated for a subscriber whose line is busy, who is telephoning when a further call is received which can be picked up on another line.

1.10 Skin

Skin is the name for your telephone display on the screen (Desktop). You can design the appearance of your LANCOM Advanced VoIP Client software on the computer screen (shape, background image and texts) according to your own personal tastes (modifiable user interface).

Using Drop & Drag, you can combine exactly those telephone functions which you need for your every-day work. You can add new Speed Dials or change the configuration or the labels of these buttons with just a click of the mouse. All elements of the user interface can be arranged to fit your individual way of working. LANCOM Advanced VoIP Client is, therefore, the customized telephony solution for a wide variety of different workplaces.

In addition to flexibility in the functional design, LANCOM Advanced VoIP Client provides the option of customizing the interface according to your personal tastes. The color, size and appearance of the "buttons" can be changed, or you can add any background image you want. The Skin can be designed to include corporate identity aspects or according to your own individual ideas. These changes can be quickly and easily implemented using the integrated Skin Editor.

1.11 Call Forwarding

Call Forwarding enables incoming calls to be handled according to preset rules, for example the diversion of incoming calls to other subscribers.

1.12 Wrap Up Time

You can specifically block a line for further incoming calls, for example, in order to have enough time to process a customer inquiry after a call from a customer.

2 How does LANCOM Advanced VoIP Client work?

This chapter introduces the basic technical concepts of LANCOM Advanced VoIP Client.

LANCOM Advanced VoIP Client - the Telephony of the Future Available Today
LANCOM Advanced VoIP Client is a telephony system equipped with comprehensive functions, which is installed as independent software on your PC or laptop. In conjunction with a provider of Internet telephony, you can make efficient use of the Internet for telephone calls, based on the SIP technology. After you have obtained the access data for your LANCOM Advanced VoIP Client from your SIP provider, you use your existing broadband IP connection together with the software on your PC or laptop for your telephone calls. This is even possible while traveling, as the service recognizes you everywhere, if an Internet or network connection is available. Since LANCOM Advanced VoIP Client is based on LANCOM Advanced VoIP Client, the leading telephony software for companies, you can rely on the high speech quality when telephoning.

Many of the functions you are offered by LANCOM Advanced VoIP Client, such as a personal address book, redial, call forwarding and individual ring tones, may already be familiar from your mobile phone. The familiar functions, together with a clearly structured, intuitive software interface, enable you to get used to your LANCOM Advanced VoIP Client in no time. So: after an easy installation, establish a connection and away you go with your calls!

Each User Has His Own Individual LANCOM Advanced VoIP Client (Skin Concept)

One impressive characteristic of LANCOM Advanced VoIP Client is the fact that you can design the user interface to completely meet your requirements. This type of freely-configurable "interface" or external design is called a Skin. You can change all of the telephone interface components. For example, you can change

- the number and functions of the buttons, or
- give the buttons a new form and color, or
- modify the form, size, and background of the interface.

Therefore, there are almost no limits to your imagination. For example, buttons which are frequently used can be optically highlighted and moved to a specific location in LANCOM Advanced VoIP Client - seldom or never used buttons can be removed completely. However, in case you do need the functionality of a deleted button, you can find these at any time in the menus provided.

For further information please refer to the "LANCOM Advanced VoIP Client Skin Editor" documentation.

Two, Four or More Lines for Every User (Line Concept)

Common telephones provide the user with one, sometimes two lines. With LANCOM Advanced VoIP Client, you can have access to two (default setting) or even more lines. These lines are also referred to as "virtual lines" because, technically, they are created as parallel "IP connections" for simultaneous calls on your PC network connection. The "virtual lines" allow you to telephone comfortably, and they simplify operation. "Virtual lines" are represented by Line buttons on the telephone interface. With just a click of the mouse, you can easily

- select the line you want to speak on, or
- switch between lines, or
- "join" lines in order to connect two subscribers, for example.

Operating Your LANCOM Advanced VoIP Client Using Drag & Drop

With the help of Drag & Drop technology, you can operate your LANCOM Advanced VoIP Client in a completely new way. You can use the mouse to direct telephone calls to a specific line, to connect phone calls, to start conferences and to add more subscribers to the conference. Furthermore, you can use the mouse to drag telephone numbers and symbolic names from other applications into your LANCOM Advanced VoIP Client in order to establish the appropriate connection.

Microsoft Outlook and Exchange Work Hand-in-Hand with LANCOM Advanced VoIP Client

LANCOM Advanced VoIP Client uses the Internet Protocol and interacts excellently with Microsoft Outlook, Microsoft Exchange and Lotus Notes. For example, you can call a subscriber directly from the Contacts, or configure LANCOM Advanced VoIP Client in such a way that the the associated contact for an incoming call is displayed immediately, or a journal entry is created.

Using Internet Protocol (IP)

IP is the technology behind LANCOM Advanced VoIP Client and it is the name for a specific type of data transfer. This new type of technology for voice transmission (“Voice over IP”) provides the user with a high degree of flexibility. It makes it possible to place telephone calls via the company’s internal LAN (Local Area Network) as well as via the Internet. In this way, you can reach colleagues at other distant company locations using the same telephone and exchange functionalities you use to contact colleagues in the same building.

In this case, however, a sufficiently dimensioned long-distance connection is necessary in order to guarantee consistent voice quality.

- *How does LANCOM Advanced VoIP Client work?*

3 Logon and Logoff

This chapter describes how to start and logon to or logoff from LANCOM Advanced VoIP Client.

3.1 Start, logon and logoff

When you call LANCOM Advanced VoIP Client, a logon to your provider is automatically executed. You must have configured LANCOM Advanced VoIP Client appropriately for this (see chapter 9.4, *Configuration of a SIP account*, page 154).

If you are working in a network, you must already have logged on as a user in your Windows network. This usually takes place as soon as you start your PC when you enter your user name and password. You can start LANCOM Advanced VoIP Client after logging on to the network, provided that a valid user license exists. LANCOM Advanced VoIP Client will first log you on to your provider.



It is urgently recommended that you configure your LANCOM Advanced VoIP Client in such a way that LANCOM Advanced VoIP Client is automatically started together with the system start of your PC, in order to ensure that you are directly available via LANCOM Advanced VoIP Client as soon as possible. This is done by entering LANCOM Advanced VoIP Client in your PC's "Startup" directory. This takes place during the installation of LANCOM Advanced VoIP Client, if you use the standard settings.

If you have a screen saver activated on your PC, this will disappear when an incoming call is received. If your screen saver is linked to the entry of a password, then when an incoming call is received, you must first enter the password before you can take the call on the LANCOM VoIP Client Headset or via the speakers in combination with the microphone. If you have installed a LANCOM VoIP USB Handset and the telephone rings, then all you have to do is pick up the handset and proceed with the telephone call without having to enter the password. The LANCOM Advanced VoIP Client user interface is naturally only available to you on your PC after you have entered the password.

This is how you start LANCOM Advanced VoIP Client

Start LANCOM
Advanced VoIP
Client and log on

- ① In the Start menu under "Programs", select the option "LANCOM Advanced VoIP Client".

LANCOM Advanced VoIP Client will be started. The logon to your configured provider will be executed. If you have configured several user accounts, you will be logged on for all available accounts.

After registration with the provider, the full scope of LANCOM Advanced VoIP Client is available to you. It is now possible for you to receive incoming calls and to make outgoing calls.

If you have not configured an active account, the configuration dialog will be called directly after LANCOM Advanced VoIP Client is started. For further information please refer to chapter 9.4, *Configuration of a SIP account*, page 154.

To check whether your logon was successful, you can call up the message log (see *Show Message Log*, page 17).



If you are not logged on with any provider (because of incorrect logon data or network problems, for example), the LANCOM Advanced VoIP Client symbol will be grayed out in the taskbar.

When you quit LANCOM Advanced VoIP Client, you will automatically be logged off from your provider. Incoming calls will then no longer be transferred to you. The treatment of calls coming in for you while you are logged off depends on the procedure of your provider.

You will find information on how to start LANCOM Advanced VoIP Client from the command line in Chapter 8.5, *Call from the command line*, page 145.

■ Reregister

Your accounts will be registered automatically when LANCOM Advanced VoIP Client is started. You can start the logon process manually, e.g. after you have changed your configuration. In the "File" menu, select the option "Reregister SIP Accounts".

This is how you reregister your accounts

Reregister
LANCOM
Advanced VoIP
Client

- ① In the "File" menu, select the option "Reregister SIP Accounts".

LANCOM Advanced VoIP Client will be registered at all your available accounts.

To check whether your logon was successful, you can call up the message log (see *Show Message Log*, page 17).

3.2 Show Message Log

The message log contains messages about successful or unsuccessful logons. You can check here whether the logon was successful, especially when you have several accounts with different providers.

This is how you call the message log

- Call message log
- ① In the "Help" menu, choose the option "Show Message Log".
The window with the messages is opened. You can see successful or failed logon attempts here.
 - ② You have the following options:
You can use the "Reload" button to refresh the messages.
You can use the "Delete" button to delete the displayed messages.

4 The Layout of the LANCOM Advanced VoIP Client Interface

This chapter will familiarize you with the elements of the LANCOM Advanced VoIP Client user interface.

In this documentation the standard user interface (Skin "LANCOMclassicXT"), which is installed during the initial installation of LANCOM Advanced VoIP Client, is used as an example.

Later, you may also choose to work with one of the other supplied interfaces or an interface (Skin) which you have customized yourself to meet your requirements. However, in order to become acquainted with LANCOM Advanced VoIP Client, you should first try out this Standard Skin, which contains all of the important control options.

4.1 Menus

You can control and configure LANCOM Advanced VoIP Client using the menus. For further information please refer to chapter 7.2, *LANCOM Advanced VoIP Client Menus*, page 61.

The way you call the menus depends on the type of Skin (user interface) you implement.

If the Skin used is in "non-transparent" mode, it will be framed by a window and it will have a menu bar on the upper border of the window.



Fig. 1 Non-Transparent Standard Skin of LANCOM Advanced VoIP Client with Menu Bar

If you use a Skin with a transparent background, LANCOM Advanced VoIP Client will be displayed without a window frame and without a menu bar. In this case, you must always call the general shortcut menu in order to use the menu elements.



Fig. 2 Transparent Standard Skin for LANCOM Advanced VoIP Client

This is how you call the general shortcut menu

- ① **Call Shortcut Menu** Click with the right mouse button in the user interface of LANCOM Advanced VoIP Client on a free space which is not occupied by a button or a display (information area).

The shortcut menu will appear.

You will find a detailed description of the menus in Chapter 7.2, *LANCOM Advanced VoIP Client Menus*, page 61.

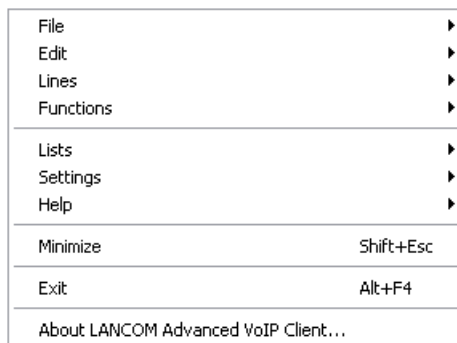


Fig. 3 Shortcut Menu



If you work with a transparent Skin, you may sometimes notice that LANCOM Advanced VoIP Client “doesn’t react” to your button entries, for example. This is due to the fact that although LANCOM Advanced VoIP Client may appear to be the first Windows application displayed in the foreground, it has not been activated (which is usually indicated by a change in color in the respective title bar). To activate LANCOM Advanced VoIP Client - as with any Windows application - you just have to click anywhere in the LANCOM Advanced VoIP Client user interface.

4.2 The Toolbar

You can control and configure LANCOM Advanced VoIP Client using the toolbar. All the functions in the toolbar are available in the menus too. Please note that the toolbar is only available on certain skins. For further information please refer to chapter 7.3, *The LANCOM Advanced VoIP Client Toolbar*, page 70.



Fig. 4 Non-Transparent Standard Skin of LANCOM Advanced VoIP Client with Toolbar

You can use the Skin Editor to store additional functions on buttons. For further information please refer to the "LANCOM Advanced VoIP Client Skin Editor" documentation.

4.3 Background

The LANCOM Advanced VoIP Client Skin is made up of a background, buttons (action areas), and displays (information areas). You can change this background. For further information please refer to the "LANCOM Advanced VoIP Client Skin Editor" documentation.

The shortcut menu will appear when you click the right mouse button on a free space in the background.



Fig. 5 Standard Skin Background

4.4 Display

The LANCOM Advanced VoIP Client interface may contain one or more display elements (information areas). The following information for example can be shown in a display:

- The telephone number and name of the caller,
- Current connection duration, the state of the connection and the current charges
- Active user account
- Forwarding status
- Call History
- The current time and date.

Depending on the Skin in use, it is also possible to show several types of information in a single display area. In doing so, the most important information is shown at all times (time) and other types of information are only shown if they change (telephone number).

You can also create a display to meet your needs. For further information please refer to the "LANCOM Advanced VoIP Client Skin Editor" documentation.



Fig. 6 The Standard Skin Includes Several Information Areas (Displays)

4.5 Numeric Keypad

The numeric keypad is used to enter a telephone number. Regardless of whether or not the Skin you use has a numeric keypad, you can always use the numeric keypad on your keyboard.



You can also configure LANCOM Advanced VoIP Client in such a way that the Num key on your keyboard is automatically activated, when the LANCOM Advanced VoIP Client window is in the foreground. Thus you can enter numbers directly - when the LANCOM Advanced VoIP Client window is minimized, the original state is restored (see chapter 8.4.8, *Keyboard*, page 138).

Numeric Keypad



Fig. 7 The Standard Skin Contains a Numeric Keypad

4.6 Lines

With LANCOM Advanced VoIP Client, you have access to two (default setting) or more lines. These lines are shown on the interface as Line buttons. For example, with a click of a mouse you can select the line you want to speak on, switch between lines, and “join” lines by Drag & Drop in order to connect two subscribers.

To select a specific line, just click on it. The line which is now *active* is highlighted. When you then call a subscriber, the selected line will be used for this call.

You will find detailed information about Line buttons and their status in Chapter 7.4.8, *Line button*, page 80.



Fig. 8 The Standard Skin contains two Line buttons

4.7 Function Keys

You can use the function keys to operate LANCOM Advanced VoIP Client: you can call practically all functions with these function keys. The meaning of the individual buttons can be found in Chapter 7.4, *LANCOM Advanced VoIP Client Functions*, page 72.

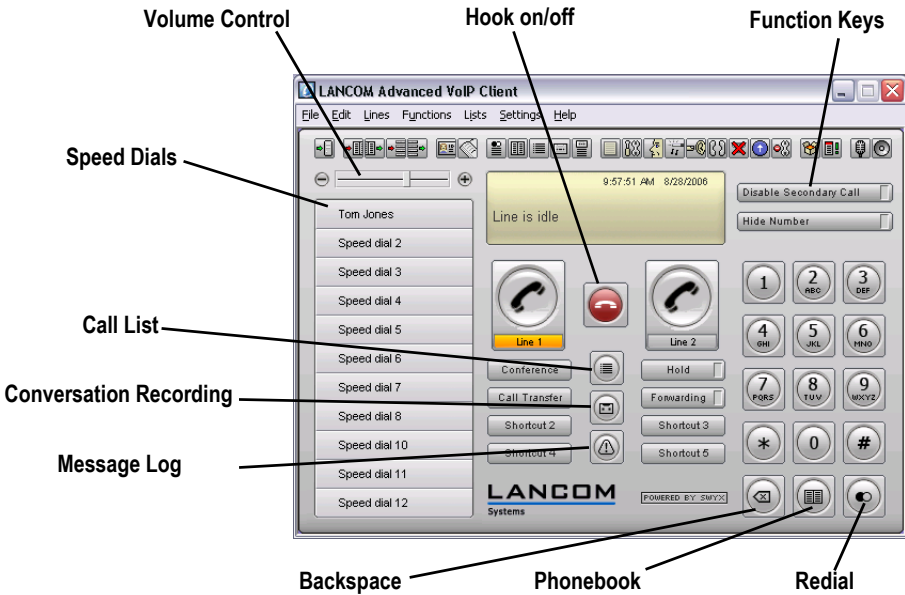


Fig. 9 The Standard Skin Function Keys

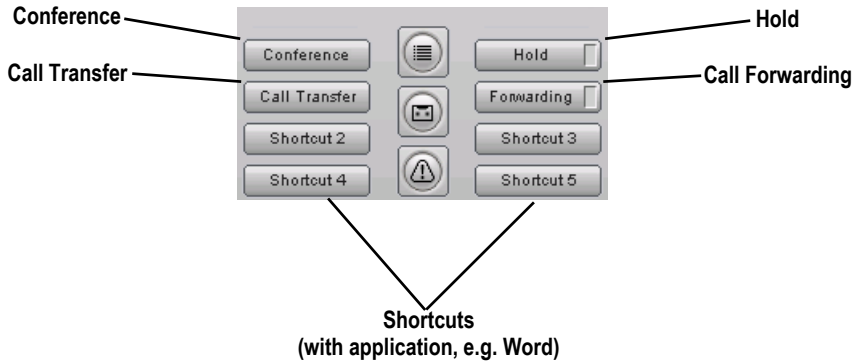


Figure 4-1 The Standard Skin Function Keys

5 Telephoning with LANCOM Advanced VoIP Client

Here you will find descriptions of the basic telephone functions of LANCOM Advanced VoIP Client.

- Starting LANCOM Advanced VoIP Client (page 31)
- How do I call a subscriber? (page 32)
- How do I use the Phonebook? (page 34)
- Dial from Every Application (page 33)
- How do I end a call? (page 36)
- How do I start an inquiry call? (page 37)
- How do I switch between several subscribers (Call Swap)? (page 37)
- How do I connect two subscribers to one another? (page 38)
- How do I transfer a call without Inquiry? (page 39)
- How do I telephone with several subscribers simultaneously (Conference)? (page 40)
- How do I forward a call? (page 43)

5.1 Starting LANCOM Advanced VoIP Client

If LANCOM Advanced VoIP Client was not automatically called together with the start of your PC, then you can start LANCOM Advanced VoIP Client as follows.

This is how you start LANCOM Advanced VoIP Client

- ① You have several options:
 - Double-click on on the LANCOM Advanced VoIP Client symbol on the desktop or
 - Click on "Start | Programs | LANCOM Advanced VoIP Client | LANCOM

Starting
LANCOM
Advanced VoIP
Client



Advanced VoIP Client" in the taskbar.

When you start LANCOM Advanced VoIP Client for the first time, the Sound Wizard will appear. The Sound Wizard makes certain that LANCOM Advanced VoIP Client is optimally adjusted to the audio equipment in order to guarantee the best possible speech quality. You will find further information concerning the dialog which then follows in Chapter 8.3, *Sound Wizard*, page 124.

You will automatically be logged on to your configured and activated user account with your provider.

The LANCOM Advanced VoIP Client user interface will appear.

5.2 How do I call a subscriber?

There are several options for initiating a dialing procedure:

- You can use the Handset to dial just like you would with a traditional telephone or
- You can use a handsfree telephone to dial just like you would with a traditional telephone or
- You dial as you would with a mobile phone.

This is how you call a subscriber (classical telephoning with a LANCOM VoIP USB Handset)

Calling using a
LANCOM VoIP
USB Handset

- ① Simply take the LANCOM VoIP USB Handset out of its holder.
You will hear the idle tone.
- ② Enter the number of the subscriber you would like to call on your keyboard or by using the numeric buttons on the LANCOM Advanced VoIP Client user interface.
The numbers you have entered will appear in the telephone display. The subscriber is then called.

This is how you call a subscriber (classic telephoning with a handsfree telephone)

Calling using a
handsfree
telephone

- ① Click on the handset button or on a line button of the LANCOM Advanced VoIP Client user interface.
You will hear the idle tone.
- ② Enter the number of the subscriber you would like to call on your keyboard or by using the numeric buttons on the LANCOM Advanced VoIP Client user interface.
The numbers you have entered will appear in the telephone display. The subscriber is then called.

This is how you call a subscriber (dialing as you would with a mobile telephone)

Calling as you would with a mobile phone

- ① Enter the number or SIP-URI of the subscriber you would like to call on your keyboard or by using the numeric buttons on the LANCOM Advanced VoIP Client user interface. You can also enter a symbolic name, for example, the user name.

The numbers you have entered will appear in the telephone display. The backspace key can be used to correct your entry or to add other numbers as long as the handset is not on hook.

- ② To initiate the dialing procedure,
 - simply take the LANCOM VoIP USB Handset out of its holder or
 - press Enter on your keyboard or
 - click on the handset button or on a line button of the LANCOM Advanced VoIP Client user interface.

As with normal telephones, you will now hear either ringing or, if the subscriber you are calling is telephoning at this time, the busy signal. If your call is connected, you will then be able to speak with the subscriber.

5.3 Dial from Every Application

You can dial directly from any Microsoft Windows application. Highlight the number you want (e.g. by pressing the shift key and moving with the arrow key to the right). If the entire number is highlighted, press the "F11" key on your keyboard. LANCOM Advanced VoIP Client will be activated and the number will be dialed immediately. Lift the handset in order to speak.

The highlighted text is dialed as follows by LANCOM Advanced VoIP Client:

- Canonical number (e.g. +123 4567-890)
will be directly dialed.
- SIP-URI (e.g. carol.jones@company.com)
will be directly dialed. The connection will usually be established completely via the Internet.
- Number sequence
will be directly dialed. We recommend dialing numbers in the public telephone network in canonical format, as a simple number (e.g. a line in the "local" telephone network without the relevant prefixes) cannot be uniquely associated.

To find out how to assign another button with this function, please see Chapter 8.4.8, *Keyboard*, page 138.

5.4 How do I use the Phonebook?

Frequently used numbers are stored in the Phonebook. You can then dial these numbers directly from the Phonebook. You can store, edit or delete your personal numbers in your Phonebook. This Phonebook can contain any number of entries. You are the only person with access to this Phonebook. You can also export or import these entries.

Wherever possible, store the numbers in the public network in your phonebook in the “canonical telephone number format” (Example: +49 (89) 12345-67), or as a SIP-URI for VoIP numbers (Example: thomas.meier@firma.de).



These Phonebook functions are provided in addition to the telephone directories which you may have set up in your Outlook “Contacts” folder. You can also display your contacts directly from the phonebook, or create new contacts.

For information on how to use your Outlook Contacts with LANCOM Advanced VoIP Client, please see Chapter 6, *Microsoft Outlook – Telephoning with LANCOM Advanced VoIP Client*, page 45.

This is how you call the Phonebook

Calling the Phonebook

- ① You have several options:
 - Click on the button “Phonebook” or
 - go to the menu bar and click on “Lists | Phonebook...” or
 - Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on “Lists | Phonebook...” in the shortcut menu.

The following window appears: “Phonebook”.

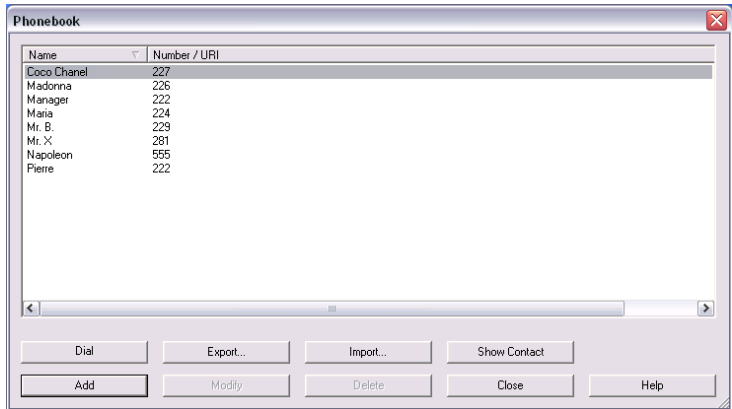


Fig. 1 Phonebook

This is how you call a subscriber from the Phonebook

Calling a Subscriber from Phonebook

- ① You have several options:
 - Click on the "Phonebook" button or
 - go to the menu bar and click on "Lists | Phonebook..." or
 - Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on "Lists | Phonebook..."

The following window appears: "Phonebook".

- ② In the list, click on the subscriber you would like to call.
- ③ Click on "Dialing".

The number will be dialed.

To learn more about editing and making additions to the Phonebook, please see Chapter 7.4.13, *Phonebook*, page 101.

5.5 How do I answer a call?

If a call comes in directly for you, or a call is forwarded to you, then

- a call symbol will appear in the taskbar with a "New Call" information balloon, which contains the number and the name of the caller,
- the number or the name of the caller will appear in the display,
- a ringing sound will be produced
- the Line button, on which the call is received, will blink.



If the number of the caller is known, LANCOM Advanced VoIP Client will attempt to associate the number. This means that if a name is listed in the phonebook or in the Outlook Contacts, or if a Speed Dial has been assigned to this number, the name will appear in the display. Otherwise, only the number will be displayed (see chapter 6.3, *Selecting a number from Outlook Contacts*, page 56).



If "XXX" appears in the display, the caller's number was not transmitted, e.g. because the caller has suppressed his number.

This is how you accept a telephone call

Picking Up a Call

- ① To pick up the call,
 - simply lift the Handset.
 - or
 - double-click on the call symbol in the tray (taskbar)
 - or
 - click either on the handset button or on the line button which is animated.

The speakers and the microphone are cleared or the Handset or the Headset is activated so that you can speak with the caller.



If, when a call comes in, the screen saver is activated or if LANCOM Advanced VoIP Client is minimized in the taskbar, you can take the call by simply picking up the handset. When you do this, LANCOM Advanced VoIP Client will usually be put in the foreground, depending on the operating system. If this does not happen automatically, you can activate LANCOM Advanced VoIP Client with the mouse.

5.6 How do I end a call?

You have been speaking to a caller and now you would like to end the call.

This is how you end a telephone call

End Call

- ① To disconnect the call,
 - Simply put the Handset on hook.
 - or
 - click on the handset button on the LANCOM Advanced VoIP Client interface (this will end the call; the line will retain the state of "Off Hook")
 - or
 - click with the right mouse button on the Line Button and then on "Disconnect Call" in the shortcut menu which appears.



If you end a call and you have a second call on hold, a single telephone ring will be produced after 5 seconds have passed. Pick up the handset once again in order to directly connect to the caller on hold.

5.7 How do I start an inquiry call?

You are having a telephone conversation and you would like to call another subscriber (Inquiry Call). Then you would like to alternately speak to both subscribers (Call Swap).

Example:

- You are speaking to a customer (subscriber A) and you would like to ask someone in the warehouse (subscriber B), whether a certain article is on stock.
- You begin a second call at the same time with subscriber B. Then you can alternately speak with subscriber A and subscriber B.
- When you end the call with one subscriber, the corresponding line becomes free again. You can then switch to the line on hold.



If you were the initiator of the call on the active line and you place the handset on hook, the callers will be connected to each other.

This is how you call an additional subscriber

Inquiry Calls

- ① Activate a free Line button during an active connection.
You will hear the dial tone and you can now call a second subscriber.
- ② Enter the number (manually or via your Speed Dial or the Phonebook) and wait until the connection is made.
While you do this, the first call will be placed on hold. The state of the line on hold is shown appropriately by the animation. (For further information please refer to *Line State*, page 81.)

5.8 How do I switch between several subscribers (Call Swap)?

You are having conversations with several subscribers at the same time. The *active* connection is the connection to the person you are currently talking to. All other subscriber connections are *on hold*. Switching between callers is called "Call Swap".

This is how to swap between an active call and a call on hold

Assumption: You have one active line and at least one other line on hold.

Switch between
Calls

- ① To switch from one call to another,
 - click on the appropriate Line button or
 - from the "Functions" Menu, click the option "Call Swap" until the line you want is active.

The activation of the corresponding line will be delayed. The subscriber data will appear on the display first, so that you can quickly "run through" all of the subscribers. Alternatively, you can immediately press the corresponding Line button. The line currently active is highlighted.



You can have as many calls simultaneously as you have lines. This means, however, that you have several calls on hold and one active line at the most.

5.9 How do I connect two subscribers to one another?

You are connected with two subscribers simultaneously. While you are talking to one of the subscribers, the other is *on hold*. You can now connect these two subscribers to each other.

Example:

You are talking to Subscriber A on Line 1. Line 2 has a connection on hold with Subscriber B. You connect Subscriber A with Subscriber B. Then both of your lines are free again (inactive).

This is how you connect two subscribers

Connecting
Subscribers

- ① Click on the button "Call transfer".
- Or
- ① Use Drag & Drop to move the active line to the line on hold.

The subscribers are now connected to one another. Both lines become inactive.



If you have created a second line (active line), for example for an Inquiry Call, you can connect these two lines by putting the handset on hook or by pressing the Speaker button. If you were called on this line, this connection will be terminated if you put the handset on hook or press the Speaker button. The line previously on hold will once again be active.

If you are connected with three or more subscribers at the same time and you activate the “Call Transfer” button, you will be asked which of the calls on hold you would like to connect to the currently active caller. You can also use the shortcut menu of the active line to connect the lines.



When you directly connect subscribers, you may still be charged, even though you are no longer involved in their telephone call. This will only occur if you set up one or both of the connections. If, for example, Subscriber A called you and you called Subscriber B to inquire about something, you will only be charged for the connection to Subscriber B. No costs will be charged if you are called by both Subscriber A and Subscriber B. However, if you have called both subscribers, you will be charged for both connections.

5.10 How do I transfer a call without Inquiry?

Your LANCOM Advanced VoIP Client can be used to accept incoming calls and then to transfer these calls to another subscriber, without waiting for the new subscriber to answer. This means you can connect two subscribers even though there is not yet an active connection to one of the subscribers.

This is how you transfer a call without inquiry

You currently have a call (e.g. with Subscriber A) and the line is active.

Transferring a
Call Without
Inquiry

- ① Click on a free Line button.
Your caller (subscriber A) will thus be put on “Hold”.
 - ② Now select the number of the subscriber, to whom you would like to transfer the call (Subscriber B).
 - ① Click on the button “Call transfer”.
- or
- ① Drag the Line button per Drag & Drop onto the Speed Dial, if one exists.
Your caller (Subscriber A) will then hear ringing and “Call Transfer” appears on your display. The line on which you initiated the second call will become free and the first line will change its status from “Hold” to “Transferring”. Your previous caller (Subscriber A) hears the telephone ring.
 - ② The person called (subscriber B) will hear “Your call will be connected” when he picks up the phone and before he can speak to the forwarded caller (subscriber A).
If the call is not accepted within 20 seconds, the call attempt will be terminated and the caller will once again be placed on “Hold”.
 - ③ You can then pick up the call again by clicking on “Hold” or by activating the Line button.

5.11 Transfer without accepting

If you are receiving a call, you can transfer this call to another subscriber without accepting the call. You can use the functions in the line's shortcut menu for this, or the Drag & Drop function if a corresponding speed dial has been configured.

This is how you transfer a call without accepting

You receive a call, the line is ringing.

Transfer call
without
accepting

- 1 Click with the right mouse button on the Line.

A shortcut menu will open.

- Click on "Transfer to Number" to transfer the call to another subscriber. You can then enter the number of the subscriber or dial from the LANCOM Advanced VoIP Client phonebook.

The call is then immediately transferred.

Or

- 1 Drag the line button with the incoming call by Drag & Drop to a configured speed dial.

The call is then immediately transferred.

5.12 How do I telephone with several subscribers simultaneously (Conference)?

LANCOM Advanced VoIP Client allows you to speak to several subscribers at the same time in a conference.

5.12.1 Starting a Conference

If you have at least two lines with the state "Active" or "On Hold", you can start a conference between yourself and both of these subscribers.

This is how you start the conference

Requirement: You have at least two lines with the state of "Active" or "On Hold".

Starting a
Conference
or

- 1 Click on the button "Conference".

- ② In the shortcut menu, select the Line button “Functions | Conference (All Lines)”.

All of the individual calls which you are currently having, both the active and held calls, will be joined into one conference. All lines, except for the conference line, will be free again. The “Conference” button is activated and the message “Conference” appears in the display. A welcome signal will be produced for all conference participants.

or

- ① In the shortcut menu, select for the Line button “Functions | Start Conference on this Line”.

In this case, the conference will only be started with this line and you can add the other lines stepwise per Drag & Drop.

or

- ① Move per Drag & Drop the line on hold onto the active line.

The active line becomes the Conference line and the line on hold is free again.

or

- ① Move per Drag & Drop the lines onto the “Conference” button.

The active line becomes the Conference line and the line on hold is free again.

In the last three cases, you can choose the lines which are to be added to the conference.



Please remember that you can only start **one** conference at a time. However, you can participate in other conferences. These conferences must have been started by other subscribers.

5.12.2 Inquiry Calls and Add

If you are a participant of a conference, you can start an Inquiry Call to another subscriber during this conference. You can add further conference participants during such an Inquiry Call.

This is how you start an Inquiry Call from a conference

Assumption: You are a participant of a conference.

Inquiry Call from
a Conference

- ① Click on a free Line button.

or

- ① Click on the Speed Dial, if available.

- ② In each case the line with the conference will be put on “Hold”. You can now enter the phone number for the Inquiry Call on the next free line.

- ③ Complete the inquiry and switch back to the conference by clicking on the appropriate Line button (the call to the subscriber you made the inquiry call to is put on "Hold").
- ④ If you would like to end the call to the subscriber you made an inquiry call to, put the handset on the hook or press the corresponding Line button.

This is how you add an additional subscriber to a conference

Assumption: You are a participant of a conference.

Add Subscriber

- ① Switch to a free line and call the new subscriber.
You can enter the number directly or select it from the Phonebook or your lists.
- ② If you have reached a new subscriber, i.e. the connection exists, press the "Conference" button or confirm the menu item "Functions | Start / Add to Conference". Alternatively, you can drag the second line per Drag & Drop onto the conference line or onto the "Conference" button.
You will then find yourself in a conference with the new subscriber; the other line will once again be free. A welcome signal will be produced for all conference participants because a new subscriber has been added to the conference.



If one conference participant puts his conference line on "Hold" and then returns to the conference, **no** welcome signal will be produced.

If you have several calls on hold and you do not wish to add all calls to a conference, it is possible to select a single line, which is then added to the conference.

This is how you select a single subscriber to be added to a conference

Assumption: You have one conference line and at least two other calls.

Adding a Selected Subscriber

- ① Move per Drag & Drop the Line button of the subscriber onto the Line button of the conference or onto the "Conference" button.
or
- ① Click with the right mouse button on the "Conference" button.
or
- ① Click with the right mouse button on the line button of the conference.
In each case, the shortcut menu will appear.
- ② In the shortcut menu, select "Start / Add to Conference".
- ③ Click on the line, which you would like to add to the conference.
The selected line is then added to the conference.

5.12.3 Leaving or Ending a Conference

When going on hook, there are two different situations:

- You started the conference.

In this case, the conference will be ended for all participants if you put the handset on the hook.

- Another subscriber started the conference.

If you put the handset on the hook, you will leave the conference. A goodbye signal will be produced for all other subscribers and the remaining subscribers can continue to speak to one another.



All those subscribers, who **you** added to this conference, will leave the conference with you. The conference will continue for all other subscribers.

This is how you leave a conference

Assumption: Another subscriber started the conference.

Leave
Conference

- ① Simply go on hook.

If a subscriber leaves a conference, a goodbye signal will be produced for all other subscribers.

This is how you end a conference

Ending a Conference

Assumption: You started the conference.

- ① You have several options:
 - If the conference line is active, simply go on hook.
 - If the conference line is on hold, click with the right mouse button on the Line button and select the entry "Terminate Conference".

The conference is ended. The line is free again and the "Conference" button is deactivated.



If Subscriber A of the original conference added other subscribers, e.g. B and C, to this conference, a second conference between A, B and C will continue to exist until Subscriber A, as initiator of the second conference, terminates the connection and thus ends the conference.

5.13 How do I forward a call?

You can forward incoming calls to another number.

There are several different methods for forwarding incoming calls:

- Call Forwarding Unconditional: The call is immediately forwarded ("Do Not Disturb").

- Redirection if busy: Your line is busy, which means that you are currently telephoning and you have not allowed a secondary call or you are telephoning on all configured lines.
- Delayed Call Redirection: The telephone rings several times at your desk but you do not pick up the call.

The "Forwarding" button fulfils two functions:

- You can configure the forwarding by clicking on the "Forwarding" button with the right mouse button and then selecting "Properties".
- Once you have configured the forwarding as you want, unconditional call forwarding can be activated by clicking on the "Forwarding" button.

The various configuration options are described in detail in Chapter 8.2, *Forwardings*, page 122.

5.13.1 Enable Call Forwarding Unconditional

If this function is activated (indicated by the activation or the check mark ✓ in the shortcut menu for the Forwarding button), all calls will be forwarded (see chapter 8.2, *Forwardings*, page 122).

This is how you activate Call Forwarding Unconditional

You have several options:

Forward Calls
Immediately

- ① Go to the menu bar and click on "Settings | Enable Call Forwarding Unconditional".

or

- ① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

The shortcut menu will appear.

- ② Click on "Settings | Enable Call Forwarding Unconditional".

or

- ① Click on the button "Forwarding".

If you have returned to your desk, call this function again in order to permit calls again. The check mark will be removed.

If the information entered for the forwarding destination is not precise enough (the number is missing, for example), LANCOM Advanced VoIP Client will inform you of this and will open the „Call Forwarding Unconditional" dialog.

6 Microsoft Outlook – Telephoning with LANCOM Advanced VoIP Client

In this chapter, you will find out how you can use LANCOM Advanced VoIP Client directly in Microsoft Outlook.

You now have significant support when making and receiving calls. The settings which are necessary for this will be dealt with in detail in this section.

6.1 Telephone Number Formats in Outlook

To be able to effectively use Outlook together with LANCOM Advanced VoIP Client, the external numbers in Outlook Contacts must be saved – as recommended by Microsoft – in the so-called “canonical telephone number format”. A canonical number always begins with a plus sign. This is followed by the country code (‘49’ for Germany), the local area code without the preceding zero in parentheses, and then the number.

Example of a number in Munich, Germany:

+49 (89) 12345678

You can add spaces to improve the clarity of the number, however, it is not necessary. Extension numbers, in the case of private branch exchanges, can also be separated from the subscriber number by a hyphen.

Example:

+49 (89) 12345-67

6.2 LANCOM Advanced VoIP Client and Microsoft Outlook 2000/XP

With Outlook 2000/XP, you can use LANCOM Advanced VoIP Client not only as a dialing aid but also to identify incoming calls. If the number of the incoming call can be identified in Outlook-Contacts, the assigned name will appear in the LANCOM Advanced VoIP Client display, and it will be added to the Caller List and the Redial List. In doing so, LANCOM Advanced VoIP Client searches all of the contact folders which are available to you (see chapter 6.3, *Selecting a number from Outlook Contacts*, page 56).

Furthermore, you can indicate in your Outlook that the corresponding contact from your Outlook Contacts should be opened automatically. The Outlook folders to be used can be selected in the Outlook configuration.

A new contact can be displayed or created from various lists in LANCOM Advanced VoIP Client (see chapter 6.2.7, *Displaying and creating Outlook Contacts from lists*, page 54).

You can also customize the journal functionality as you like. In this case, a differentiation is made between incoming and outgoing calls.

- You can define, if you want to create a Journal entry for incoming calls and if you want it to be displayed directly.
- The behavior in the case of outgoing calls can be configured for calls made from Outlook Contacts and for calls made from other applications. Depending on whether the calls were successful or not, you can indicate whether journal entries should only be created or also displayed.



It is only possible to associate the number of an incoming call to an Outlook-Contact if Outlook has already been started.

6.2.1 Configuration

You can customize the behavior of Outlook 2000/XP for incoming and outgoing calls to meet your requirements. For this, however, the component "MS Outlook AddIn" must be installed on your PC during the installation of LANCOM Advanced VoIP Client. Outlook AddIn is automatically installed along with the standard installation. You can tell from the LANCOM Advanced VoIP Client symbol in the Outlook toolbar of the Contacts folder, for example, whether this component is present.

This is how you define the behavior of Outlook Contacts and the Outlook Journal

- Configure Outlook
- ① Start Outlook 2000/XP.
 - ② Then, under “Tools | Options...”, select the “LANCOM Advanced VoIP Client” tab.

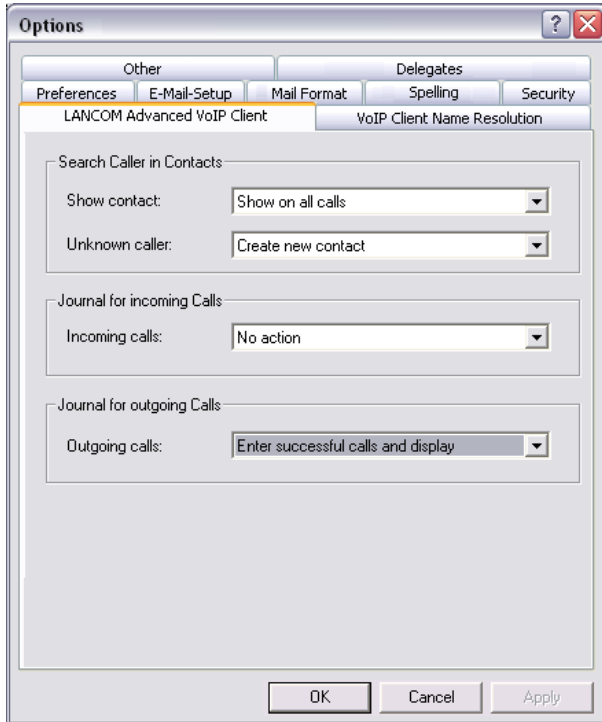
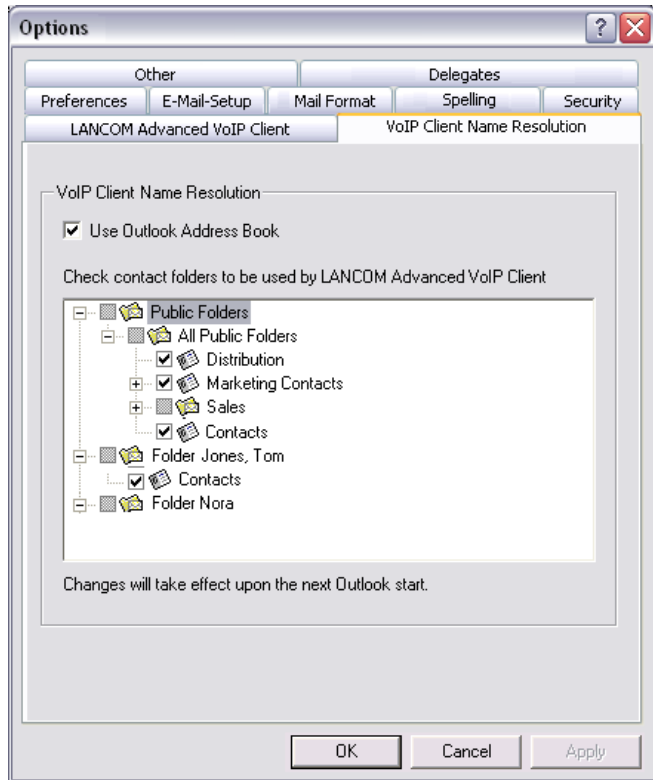


Fig. 1 Microsoft Outlook 2000/XP Configuration

- ③ From the dropdown list “Show contact” select the option
 - “Do not show” to disable notification by Outlook Contacts, or
 - “Show on all calls” to search in Contacts for all incoming calls and, if necessary, to display them.
- ④ From the dropdown list “Unknown caller” select the option
 - “No action” in order not to create an Outlook Contact for the caller, or
 - “Create new contact” to create a new contact in Outlook Contacts.
- ⑤ To configure the Journal for incoming calls, select the option
 - “No action” in order not to create journal entries in the Outlook Journal for

- incoming calls, or
 - “Enter in journal” to enter incoming calls in the Outlook Journal. Available information is then noted in the journal entry, or
 - “Enter in journal and display” to enter incoming calls in the Outlook Journal and to display them immediately. With this option you can edit the journal entry directly during the phone call - though certain details of the call, such as the call duration or charging information, are not noted in the journal entry.
- ⑥ To configure the Journal for outgoing calls, go to the drop-down list and select the option
 - “No action” if you do not wish to create a journal entry while you telephone from Outlook 2000/XP, or
 - “Enter successful calls in journal” to create an entry in the Outlook Journal if the telephone call is successfully connected, or
 - “Enter all calls in journal” to create an entry for every call which is initiated, or
 - “Enter successful calls and display” to create and save an entry in the Outlook Journal if the telephone call is successfully connected, or
 - “Enter all calls in journal and display” to create and save an entry for every call which is initiated.

- ⑦ Select the "LANCOM Advanced VoIP Client Name Resolution" tab.



You will see all Contacts folders, which you can select in your Outlook.

- ⑧ Select the folder to be searched for contacts when calls are received. In the default setting, all available folders are selected.
- ⑨ Click on "OK".

Depending on the settings you have chosen, incoming calls will be signaled by showing Outlook – Contacts.



The correct telephone number format is also required in Outlook 2000/XP – as described in detail in Chapter 6.1, *Telephone Number Formats in Outlook*, page 45 – in order for LANCOM Advanced VoIP Client to be able to support you when placing and receiving calls.

6.2.2 Calling Subscribers Directly from Outlook Contacts

You use the “Contacts” you manage in Outlook to call subscribers directly from Outlook.

This is how you call a subscriber from Outlook

- ① Open the Outlook “Contacts” folder.
The list of your contacts is then displayed.
- Calling a Subscriber

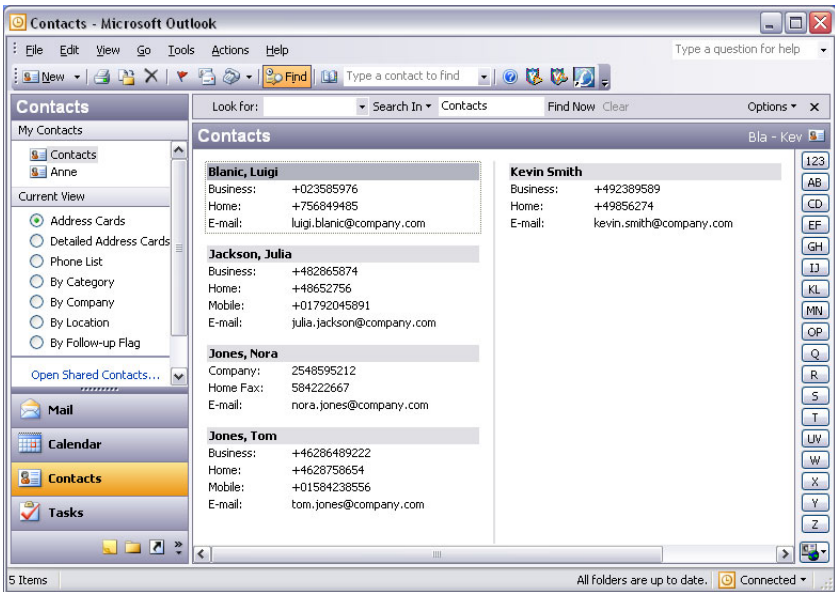


Fig. 2 List of the Contacts in Outlook

- ② Highlight the contact of the person you would like to call by clicking on it and
 - go to the menu bar and click on the LANCOM Advanced VoIP Client symbol or
 - open the contact of the person you would like to call by double-clicking it and then click on the LANCOM Advanced VoIP Client symbol in the opened Outlook Contact.

The following Outlook window will appear: "LANCOM Advanced VoIP Client Phone Dialer".

- ③ If the selected contact has more than one number, all available numbers will be displayed

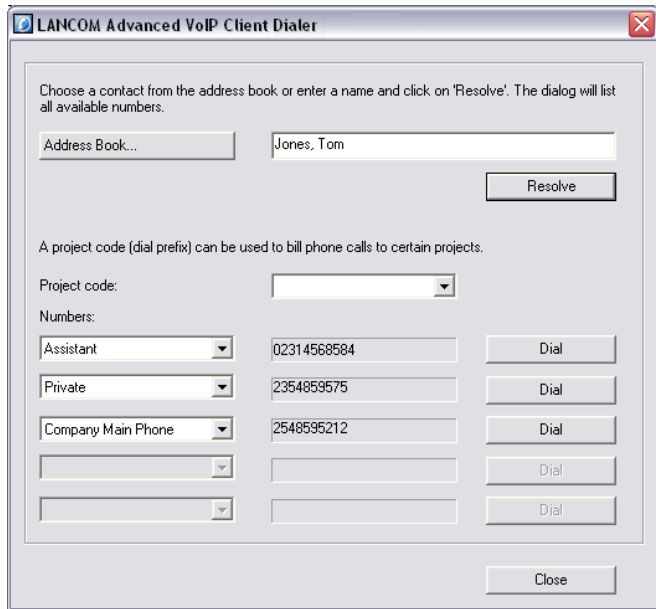


Fig. 3 Settings for Calling

- ④ Click on the "Dial" button assigned to the desired number.

The LANCOM Advanced VoIP Client window will move to the foreground and the number will be dialed by LANCOM Advanced VoIP Client. The selected number will be shown in the telephone display.

If you have enabled the option "Enter all calls in journal and display" under "Tools | Options | LANCOM Advanced VoIP Client in Outlook, the window with the journal entry is displayed.

Now you can make your telephone call as usual using LANCOM Advanced VoIP Client.



In order for LANCOM Advanced VoIP Client to be able to use the numbers entered in Outlook, the Outlook number must be recorded in the correct format. For further information please refer to chapter 6.1, *Telephone Number Formats in Outlook*, page 45.

■ End Telephone Call

You are telephoning directly from Outlook and you would now like to end this call.

This is how you end the telephone call in LANCOM Advanced VoIP Client

- Ending a Call in LANCOM Advanced VoIP Client
- ① To end a connection,
 - Simply put the Handset on hook.
 - or
 - click on the handset button on the LANCOM Advanced VoIP Client interface (this will end the call; the line will retain the state of "Off Hook")
 - or
 - click with the right mouse button on the Line Button and then on "Disconnect Call" in the shortcut menu which appears.

The call is then ended.

6.2.3 Call from an e-mail

You can call the sender of an e-mail directly from the e-mail. LANCOM Advanced VoIP Client Phone Dialer provides the numbers found in the address book or Contacts.

This is how you call the sender from an e-mail

- Call E-mail sender
- ① Open an e-mail or highlight the e-mail in your mail inbox.
 - ② Click on the LANCOM Advanced VoIP Client symbol in the menu bar of the e-mail.
LANCOM Advanced VoIP Client Phone Dialer opens and provides you with all available numbers for this subscriber.
 - ③ Click on "Dial" next to the number to which you want to connect a call.
Alternatively you can open the available address books or search for a name.

6.2.4 Call from a Calendar entry

You can call the sender of an invitation directly from a Calendar entry. LANCOM Advanced VoIP Client Phone Dialer provides the numbers found in the address book for this.

This is how you call the sender of a Calendar entry

- Call sender of an invitation
- ① Open your Calendar.
Highlight this Calendar entry.

- ② Click on the LANCOM Advanced VoIP Client symbol in the menu bar of the e-mail.
LANCOM Advanced VoIP Client Phone Dialer opens and provides you with all available numbers for this subscriber.
- ③ Click on "Dial" next to the number to which you want to connect a call.
Alternatively you can open the available address books or search for a name.

6.2.5 Using Outlook Contacts for Incoming Calls

You work with Outlook 2000/XP and you would like to use the name display in LANCOM Advanced VoIP Client to match incoming calls to your Outlook Contacts and, perhaps, to be able to create new contacts.

This is how you deal with Outlook - Contacts for incoming calls

Pick up Call "Tools | Options | LANCOM Advanced VoIP Client" tab and changing the option "Search Caller in Contacts". For further information please refer to chapter 6.2.1, *Configuration*, page 46.

- ① You hear a telephone ring and, for "Search Caller in Contacts", you have selected the options "Show on all calls" and
 - "Create new contact" or
 - "No action".

If a contact already exists in Outlook for this caller, it will now be opened. If no contact exists for this number, depending on the options selected, a new contact will be created or no further action will be taken.

- ② You telephone as usual with LANCOM Advanced VoIP Client and, if necessary, you can update the data for the contact, e.g. add notes in the open Contacts window.



If you have write authorization for the contacts folder in which this contact has been identified, your changes will be saved there. If the contact originates from a folder for which you have read only rights, you must then save the contact in another folder.



In order for Outlook Contacts to be opened, the caller must transmit his number. The contact entry can only be opened correctly, if the caller actually uses a number which has been previously stored especially for him.

6.2.6 Displaying and creating Outlook Contacts during a call

You can configure Outlook in such a way that an Outlook Contact is automatically displayed and/or created for telephone calls (see chapter 6.2.5, *Using Outlook Contacts for Incoming Calls*, page 53).

If you have disabled this function in general or enabled it for certain calls only, you can display and/or create an Outlook Contact for the respective caller during a call (or even during the ringing tone). If no contact is present, a new Contact is created, but not yet saved directly. You can then process the new Contact as necessary in Outlook and save it.

This is how you open an Outlook Contact during a call

You receive a call or have just dialed a subscriber or you are currently on a call, and you want to create or display an Outlook Contact for this call.

- ① In the "Functions" menu or the shortcut menu of the relevant line button, select the option "Show contact".

An existing Outlook Contact is opened, or a new contact is created. A call is correlated to a contact by means of the number.

- ② When you have created a new contact, adjust it as necessary and save it in Outlook.

6.2.7 Displaying and creating Outlook Contacts from lists

You can create or open your Outlook Contacts directly from various lists (e.g. the Phonebook) in LANCOM Advanced VoIP Client. You are provided with this function in the following lists:

- CallList
- Redial list
- List of the Recorded Conversations
- Phonebook

The call number is used for checking whether a Contact is already present. If a corresponding contact is found, it is displayed.

If no contact is present, a new Contact is created, but not yet saved directly. You can then process the new Contact as necessary in Outlook and save it.

This is how you open an Outlook Contact from a list

- ① Start Outlook 2000/XP.
- ② Open the list (e.g. the Caller List) from which you want to open the Contact.

Open Outlook
Contact from list

- ③ Highlight the Contact and click on "Show contact".
An existing Outlook Contact is opened, or a new contact is created. A call is correlated to a contact by means of the number.
- ④ When you have created a new contact, adjust it as necessary and save it in Outlook.

6.2.8 Creating and displaying Outlook journal entries

You can manage your telephone calls in the Outlook journal, so that you have an overview of telephoning activities and can take notes for telephone calls. If you use the journal function, your telephone calls are automatically entered in the journal. You can define which telephone calls (incoming or outgoing) are generally entered in the Outlook journal. You can create journal entries as necessary during a call. (See Chapter 6.2.9, *Creating a journal entry during a call*, page 56).

This is how you use Outlook Journal

Outlook Journal "Tools | Options | LANCOM Advanced VoIP Client" tab and changing "Journal for incoming Calls" and "Journal for outgoing Calls". For further information please refer to chapter 6.2.1, *Configuration*, page 46.

- ① If, for example, you have selected the options
 - "Enter in journal and show", then a journal entry will be created for all incoming calls and immediately displayed. You can now enter notes during the call.
 - "Enter in journal", then journal entries will be created for incoming calls, but they will not be displayed.
- ② You have selected, for example, the options
 - "Enter successful calls in journal" and "Enter all calls in journal". This will result in journal entries being created for calls made from Outlook, in which you have successfully reached the desired subscriber, and for calls made from LANCOM Advanced VoIP Client, however, these journal entries will not be displayed.
- ③ Depending on the settings you have made, you will find journal entries for telephone calls in the Outlook Journal directory. In the subject line, these calls are labeled with "LANCOM Advanced VoIP Client Call <to/from> <Number or Name>" and with the entry type "Phone call". Double-click on the journal entry you want and add your notes.

6.2.9 Creating a journal entry during a call

You can configure Outlook so that a journal entry is automatically created and if necessary displayed (see chapter 6.2.8, *Creating and displaying Outlook journal entries*, page 55).

If you have disabled this function in general or enabled it for certain calls only, you can create a journal entry for a call during the call (or even during the ringing tone).

This is how you create a journal entry during a call

You receive a call or have just dialed a subscriber or you are currently on a call, and you want to create a journal entry for this call.

Create journal entry

- ① In the "Functions" menu or the shortcut menu of the relevant line button, select the option "Create Journal Entry".

The phone call will be noted in the Outlook journal.

6.3 Selecting a number from Outlook Contacts

If the number of a caller is known (e.g. in Outlook Contacts or in the Phonebook), LANCOM Advanced VoIP Client will immediately show the name of the caller instead of the number. You can indicate which Contact folder should be searched in the case of an incoming call in order to resolve the number. You have the choice of all those Contacts folders that you already see listed in your Outlook.

This is how you select the Outlook Contacts for name resolution

Defining Contacts Folders

- ① In your Outlook under “Tools | Options...”, select the “LANCOM Advanced VoIP Client Name Resolution” tab.

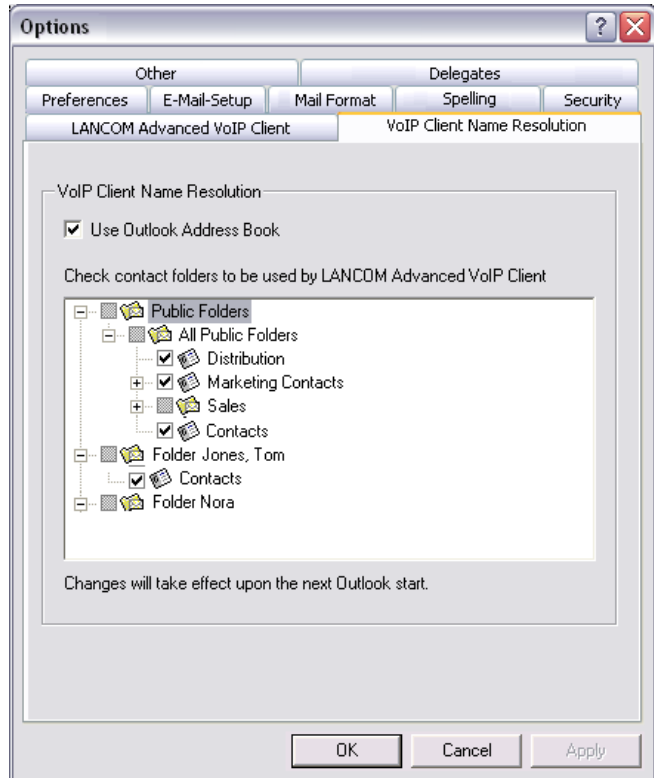


Fig. 4 Configuration of Name Resolution

Select the “LANCOM Advanced VoIP Client Name Resolution” tab. You will see all Contacts folders, which you can select in your Outlook.

- ② Select the folder to be searched for contacts when calls are received. In the default setting, all available folders are selected.

7 LANCOM Advanced VoIP Client in Detail

This chapter provides a detailed description of the LANCOM Advanced VoIP Client functions.

In the following list you will find a brief summary of the functions, in addition to a detailed description of the menus and all functions.

7.1 Summary of the Functions of LANCOM Advanced VoIP Client

Function	Explanation
Lines	Line buttons symbolize the virtual lines – with just a click of the mouse you can switch between individual lines or subscribers, connect subscribers, etc. You can assign different numbers to Line buttons and define a wrap up time for each line (see chapter 7.4.8, <i>Line button</i> , page 80).
Speed Dials	Freely configurable Speed Dials enable you to quickly select frequently called communication partners (see chapter 7.4.10, <i>Speed dial</i> , page 96).
Shortcuts	Shortcuts help you to quickly execute frequently used programs, e.g. a link to a frequently used web page (see <i>The Shortcut Button</i> , page 98).
Key Configuration import/export	In order to make the handling as simple as possible, the <i>properties of Speed Dials and Shortcuts</i> can be imported or exported (see chapter 7.4.12, <i>Importing and Exporting Speed Dials and Shortcuts</i> , page 100).
Call List	The Caller List stores the numbers of all incoming calls (see chapter 7.4.14, <i>Caller List</i> , page 106).
Redial	The Redial function contains a list of the numbers called most recently (see chapter 7.4.4, <i>Redial</i> , page 73).
Automatic Redial	Automatic Redial redials a desired number (see chapter 7.4.5, <i>Automatic Redial</i> , page 77).
Disable Secondary Call	For example, you can disable a further calls during a telephone call. These are then handled according to your settings (see also chapter 7.4.6, <i>Disable Secondary Call</i> , page 79).
Call Swap	Call Swap allows you to switch between different callers (see chapter 7.4.16, <i>Call Swap</i> , page 110).
Inquiry Call / Hold	You can call another subscriber during a call and the original connection will not be not be disconnected (see chapter 7.4.17, <i>Hold</i> , page 111).

Function	Explanation
Call Transfer	You can transfer a call to another subscriber (see chapter 7.4.18, <i>Call Transfer</i> , page 111).
Call Transfer without Inquiry	You can forward calls without making an Inquiry Call first (see also chapter 5.10, <i>How do I transfer a call without Inquiry?</i> , page 39).
Call Forwarding	The function for Forwarding to another number is used to define whether you want to forward incoming calls and, if so, what number they should be forwarded to. You can define immediate or delayed call forwarding for all calls. For when you are on the phone, you can define "Call Forwarding Busy". For further information please refer to chapter 7.4.15, <i>Forwarding</i> , page 109.
Editing an Entry	You can edit the telephone number before it is dialed (see also chapter 5.2, <i>How do I call a subscriber?</i> , page 32)
Outlook Integration	LANCOM Advanced VoIP Client provides you with extensive Outlook integration so that you can use Contacts and the Journal function. (see also chapter 6, <i>Microsoft Outlook – Telephoning with LANCOM Advanced VoIP Client</i> , page 45)
Phonebooks	You can store numbers in the phonebook, and dial them directly from it (see also chapter 7.4.13, <i>Phonebook</i> , page 101).
Number suppression	It is possible to hide your own telephone number when placing a call. Then the person you are calling cannot see where the incoming call is coming from based on your telephone number (see also chapter 7.4.7, <i>Hide Number</i> , page 79).
Conversation Recording	You can record calls and listen to the recording later and, if necessary, send it as an e-mail (see chapter 7.4.20, <i>Conversation Recording</i> , page 113).
Conference	Conference is used to carry on a conversation with several subscribers at the same time (see chapter 5.12, <i>How do I telephone with several subscribers simultaneously (Conference)?</i> , page 40).
Skin	LANCOM Advanced VoIP Client, with its Skin concept, provides you with the option of individually designing the interface. For further information please refer to the "LANCOM Advanced VoIP Client Skin Editor" documentation.

Table 7-1 Summary of the LANCOM Advanced VoIP Client Functions

7.2 LANCOM Advanced VoIP Client Menus

This section will familiarize you with the LANCOM Advanced VoIP Client menus.

If the Skin used is in “non-transparent” mode, it will be framed by a window and it will have a **menu bar** on the upper border of the window.

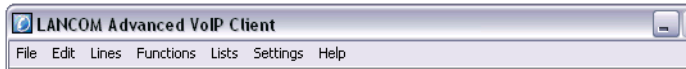


Fig. 1 Menu Bar

If you use a Skin with a transparent background, LANCOM Advanced VoIP Client will be displayed without a window frame and without a menu bar. In this case, you must always call the general shortcut menu in order to use the menu elements.

The **general shortcut menu** will appear if you click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

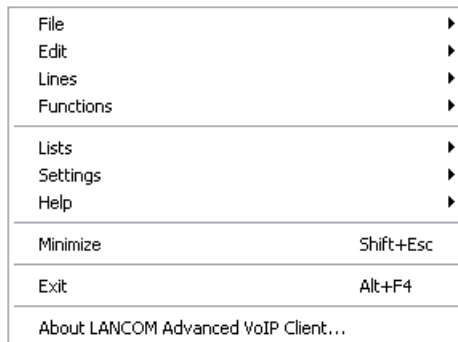


Fig. 2 Shortcut Menu

The following is a description of the menu commands.

7.2.1 The File Menu

The commands in this menu are used for

- reregistering with the SIP accounts,
- designing the LANCOM Advanced VoIP Client user interface (Skin),
- importing and exporting phonebook entries,
- importing and exporting Speed Dials and Shortcuts, and

■ exiting LANCOM Advanced VoIP Client.

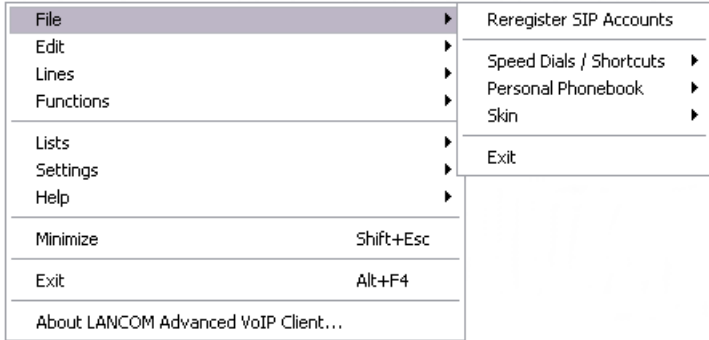


Fig. 3 The File Menu

Menu Command	Explanation
Reregister SIP Accounts	Renewed logon to all SIP accounts.
Speed Dials / Shortcuts	<p>Import... The external loading of Speed Dials / Shortcuts, which have already been defined. Buttons currently occupied will be overwritten.</p> <p>Export... The external storage of those Speed Dial / Shortcut assignments, which you have created. For further information please refer to chapter 7.4.12, <i>Importing and Exporting Speed Dials and Shortcuts</i>, page 100.</p>
Personal Phonebook	<p>Import... Importing a comma-separated file (CSV) with phonebook entries. The import file is checked for faulty entries, and you have the chance to make corrections. You can also specify whether previously existing entries should be overwritten or preserved.</p> <p>Export... External storage of all or certain entries in the phonebook as a comma-separated file (.csv). For further information please refer to <i>Importing and Exporting Phonebook Entries</i>, page 103.</p>

Menu Command	Explanation
Skin	<p>Load... Loading another existing Skin for your LANCOM Advanced VoIP Client.</p> <p>Edit Changing the Skin of your LANCOM Advanced VoIP Client. For further information please refer to the "LANCOM Advanced VoIP Client Skin Editor" documentation.</p> <p>Save... Saving a Skin which you have changed for your LANCOM Advanced VoIP Client.</p>
Minimize	Minimizing LANCOM Advanced VoIP Client. Depending on the setting in the user profile, LANCOM Advanced VoIP Client will be found in the taskbar or only as a symbol in the tray.
Exit	Exits LANCOM Advanced VoIP Client.

7.2.2 The Edit Menu

This menu contains standard functions such as Copy, Paste, and Delete.

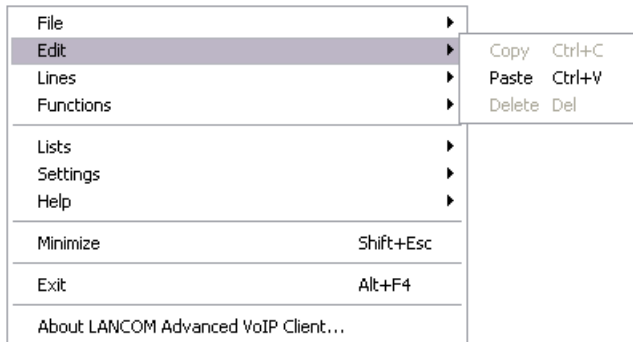


Fig. 4 The Edit Menu

Menu Command	Explanation
Copy	Copies the highlighted Text/Element onto the Clipboard.
Paste	Inserts the Text/Element from the Clipboard.
Delete	Removes the highlighted Text/Element.

7.2.3 The Lines Menu

The commands in this menu are used for switching between your lines.

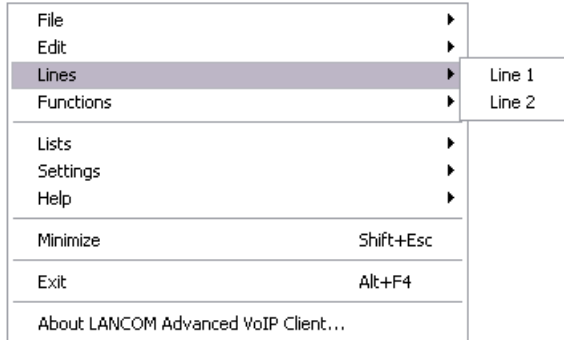


Fig. 5 The Lines Menu

To switch to a different line, click on the line you want.

7.2.4 The Functions Menu

This menu includes all of the functions you can call from the standard user interface or by clicking the buttons.

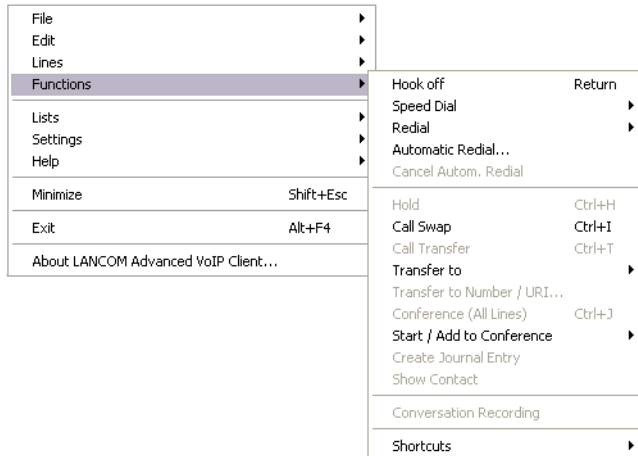


Fig. 6 The Functions Menu

Menu Command	Explanation
Hook Off/ Disconnect Call	Hook Off/Disconnect Call.
Speed Dials	Abbreviated dialing, i.e. dialing a subscriber whose number/name you have assigned to a Speed Dial. Click on the arrow to list your Speed Dials. Click on the name you want in order to call this subscriber. Or: Click on "Add/Change..." to reassign a Speed Dial or to change an existing Speed Dial (see chapter 7.4.10, <i>Speed dial</i> , page 96).
Redial	Dials a number you have already used. Depending on the key configuration, the number will be redialed immediately or it will be redialed after you have selected it from a list and clicked on the Line Button.
Automatic Redial...	A number is redialed. You can enter a destination number and the interval between redials. The target number is dialed automatically until the line called is no longer busy or until you cancel the automatic redial.
Cancel Autom. Redial	Cancels an Automatic Redial.
Hold	Puts the active call on hold. Click once again on this menu command to re-activate a connection on hold.
Call Swap	Switches to the next line. The active connection is put on hold and you are switched to the next line. This could be either a free line or another connection, previously on hold, which now becomes active. When you switch to a free line, you will hear the idle tone and you can then place your call. Keep clicking on the menu command until you have selected the line you want (see chapter 5.8, <i>How do I switch between several subscribers (Call Swap)?</i> , page 37).
Transfer / Call Transfer	Connects two subscribers to one another. The active call is transferred to the call on hold. Both of your lines will become inactive.
Transfer to	Transfers the currently active line to one of the lines on hold. This option is only available if at least one line is on hold.
Connect to number/URI	You can enter a new number and the call will then be transferred to this number.
Conference (All Lines)	If you have at least two connections, you can join all of your lines into a Conference.

Menu Command	Explanation
Start / Add to Conference	If you have at least two connections, you can select here the line with which the Conference should be started. If you have already started a Conference, you can select the lines to be added to the Conference here.
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Conversation Recording	Records a conversation. The current conversation will be recorded. The short tone signals to the conversation partner that recording has been initiated. The administrator must have granted the right to record conversations. You can export the recordings later.
Shortcuts	Those Shortcuts which have been linked to frequently used programs will be shown. Click on "Add/Change..." to reassign a Shortcut or to change an existing Shortcut (see chapter 7.4.11, <i>The Shortcut Button</i> , page 98).

7.2.5 The Lists Menu

In this menu you can

- display those lists which are managed in LANCOM Advanced VoIP Client,
- display your recorded calls and
- call the Phonebook.

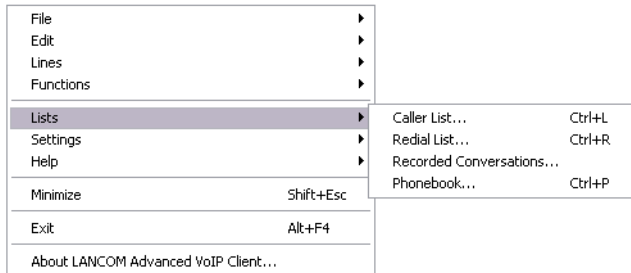


Fig. 7 The Lists Menu

Menu Command	Explanation
Caller List...	Shows a list of the calls received (see chapter 7.4.14, <i>Caller List</i> , page 106).
Redial List...	Shows a list of the last numbers you called (see chapter 7.4.4, <i>Redial</i> , page 73).
Recorded Calls...	Displays the list of the conversations you have recorded (see chapter 7.4.20, <i>Conversation Recording</i>).
Phonebook	Calls the Phonebook
...	

7.2.6 The Settings Menu

This menu is used to customize the LANCOM Advanced VoIP Client settings and behavior.

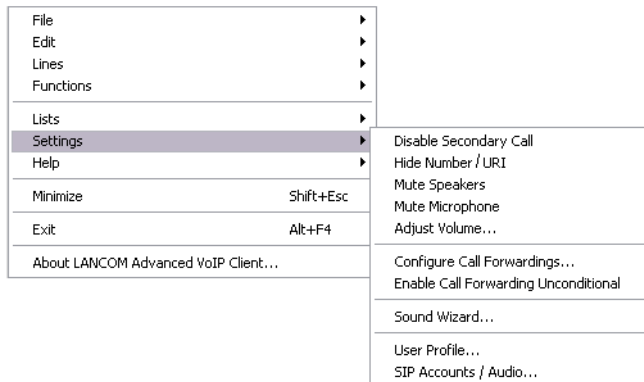


Fig. 8 The Settings Menu

You will find a detailed description of these menu functions in chapter 8, *LANCOM Advanced VoIP Client Configuration*.

7.2.7 The Help Menu

This menu is used to

- call Online Help for LANCOM Advanced VoIP Client,
- enter your license key if necessary, and
- show information about LANCOM Advanced VoIP Client.

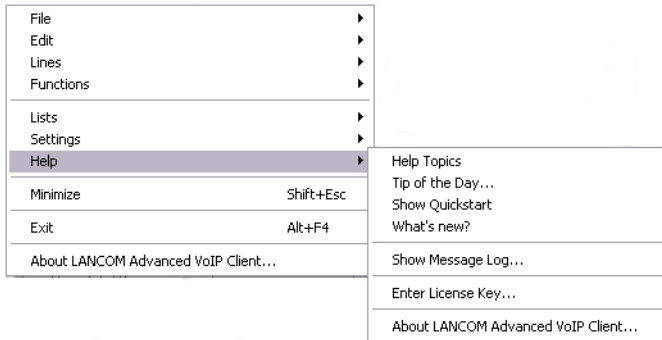


Fig. 9 The Help Menu

Menu Command	Explanation
Help Topics	Calling Online Help.
Tip of the day...	Shows the tip of the day (see chapter 7.2.11, <i>Tip of the day...</i> , page 69).
Show Quickstart	Displays the Quickstart document, which contains basic functional descriptions to assist you in your initial use of the LANCOM Advanced VoIP Client functions.
What is new?	Calls the Online Help - the chapter with the new features of the current version is displayed directly.
Show Message Log	Displays messages, such as logging on or logging off with a service provider. For further information please refer to chapter 3.2, <i>Show Message Log</i> , page 17.
Enter License Key	Here, you can enter your license key, if necessary.
About LANCOM Advanced VoIP Client...	Shows version and copyright information.

7.2.8 Minimize

Click on “Minimize” to minimize LANCOM Advanced VoIP Client in the Windows taskbar. For more details, please read Chapter 8.4.1, *General*, page 126.

7.2.9 Exit

With this option you exit LANCOM Advanced VoIP Client.

If there are calls which are still being processed when you begin the logoff procedure, LANCOM Advanced VoIP Client will ask you whether these calls should be disconnected.

7.2.10 About LANCOM Advanced VoIP Client...

You can have LANCOM Advanced VoIP Client show version and copyright information.

7.2.11 Tip of the day...

After the installation of LANCOM Advanced VoIP Client you can have a new tip displayed every day (when LANCOM Advanced VoIP Client is started). You will be presented with a brief description of new properties and improvements, and interesting functions are explained.



























Fig. 10 Tip of the day

Alternatively you can page through these tips. To do so, click on "Next Tip". If you do not wish display any more tips, deactivate the checkbox "Show tips on startup". You can reactivate the tips at any time via the menu bar under "Help | Tip of the Day".

7.3 The LANCOM Advanced VoIP Client Toolbar

As well as being able to reach important functions through the menu structure, you can also call certain functions conveniently from the toolbar. Below is an overview of the functions in the toolbar of the default skin, LANCOMclassicXT. You also have the option of creating more buttons yourself with the Skin Editor.

Symbol	Function	Explanation
	Reregister SIP Accounts	Renewed logon to your SIP accounts. This allows you to start a renewed logon attempt, for example after a logon error. For further information please refer to chapter 3.1, <i>Start, logon and logoff</i> , page 15.
	Import Phonebook	Importing a comma-separated file (CSV) with phonebook entries. The import file is checked for faulty entries, and you have the chance to make corrections. You can also specify whether previously existing entries should be overwritten or preserved.
	Export Phonebook	External storage of all or certain entries in the phonebook as a comma-separated file (.csv).
	Export Button Assignment	The external storage of those Speed Dial / Shortcut assignments, which you have created.
	Import Button Assignment	The external loading of Speed Dials / Shortcuts, which have already been defined. Buttons currently occupied will be overwritten.
	Show Contact	You can show an Outlook Contact or create a new one for the current call.
	Journal entries	You can create a journal entry in Outlook for the current call.
	Redial List	Shows a list of the last numbers you called.
	Phonebook	You can store numbers in the phonebook, and dial them directly from it (see chapter 7.4.13, <i>Phonebook</i> , page 101).
	Call up caller list	The Caller List stores the numbers of all incoming calls (see chapter 7.4.14, <i>Caller List</i> , page 106).
	Conversation Recording	You can record calls and listen to the recording later and, if necessary, send it as an e-mail (see chapter 7.4.20, <i>Conversation Recording</i> , page 113).
	Recorded Calls...	Displays a list of your recorded calls. You can listen to recordings in this list, and execute various actions.

Symbol	Function	Explanation
	Messages	Displays a list of the SIP messages. You can see information about your logon status, for example (see also chapter 3.2, <i>Show Message Log</i> , page 17).
	Local Settings	You will find information for setting up the SIP Options under Chapter 9.4, <i>Configuration of a SIP account</i> , page 154
	User Profile	Here you will find all other settings, which can be assigned to a user. For further information please refer to chapter 8.4, <i>User Profile...</i> , page 125.
	Sound Wizard...	Here you can optimize the settings of your telephone terminal (Handset or Headset). For further information please refer to chapter 8.3, <i>Sound Wizard</i> , page 124.
	Disable Secondary Call	This button lets you specify whether you want to permit secondary calls during an active phone call.
	Hide Number	It is possible to hide your own telephone number when placing a call. Then the person you are calling cannot see where the incoming call is coming from based on your telephone number (see also chapter 7.4.7, <i>Hide Number</i> , page 79).
	Call Forwarding	You can use this button to activate call forwarding. Calls are no longer put through directly to you, but instead are handled according to configured default forwarding. For further information please refer to chapter 7.4.15, <i>Forwarding</i> , page 109.
	Configure Forwarding	Use this button to call the dialog for configuring and activating your call forwarding. For further information please refer to chapter 7.4.15, <i>Forwarding</i> , page 109.
	What is new?	This button calls the Online Help with the chapter of new functions in this version.
	Show Quickstart	This button calls up brief operating instructions for the most important functions of LANCOM Advanced VoIP Client.
	Microphone	You can activate or deactivate the microphone with this button.
	Speaker	You can activate or deactivate the loudspeaker with this button.

7.4 LANCOM Advanced VoIP Client Functions

In this chapter you will find a detailed description

- of all the LANCOM Advanced VoIP Client functions and
- the configuration of the buttons and lists.

7.4.1 Numeric Keypad

The numeric keypad is used to enter a telephone number. It doesn't matter whether or not the interface you use has a numeric keypad, you can, of course, always use the numeric keypad on your keyboard.

The asterisk and hash buttons are used for transmitting DTMF sound signals, so that you can check your answering machine at home, for example.

As long as the handset is on the hook, you can still edit your entry by moving the cursor with the arrow buttons and inserting new numbers - in the Insert mode (the "Insert" button on your keyboard) - or by overwriting the existing numbers. You can remove individual numbers using the backspace button or the "Delete" button.

7.4.2 Backspace



The Backspace can be used to make corrections while you are entering numbers. It is the equivalent of the Backspace on a computer keyboard. It is only possible to make corrections as long as the handset has not been lifted because, as soon as the handset is lifted, the numbers entered will immediately be dialed. The Backspace deletes the character to the left of the cursor.

7.4.3 Handset



The handset button shows the telephone handset of a classical telephone. This button is used to initiate, pick up, and end telephone calls. One click on the handset button is the same as going on or off the hook.

The Shortcut Menu for the Handset Button

If you click with the right mouse button on the handset button, the shortcut menu will appear. The shortcut menu depends on the state of the connection.



The handset is on hook

Menu Command	Explanation
Hook off	Hook off. Then enter the telephone number.
Paste	The Clipboard contents are used as the telephone number.
Help	Calling Online Help.
<i>Click on the handset button</i>	Hook off. Then enter the telephone number.



The handset is off hook

Menu Command	Explanation
Disconnect Call	Ends the telephone call on the active line.
Paste	The content of the Clipboard is pasted and, <ul style="list-style-type: none"> if no other connection exists, it will be dialed as the telephone number if you are already having a telephone conversation, then it will be transferred by inband signaling (DTMF).
Help	Calling Online Help.
<i>Click on the handset button</i>	Ends the telephone call on the active line.

7.4.4 Redial



The numbers you have dialed up until now are stored in the Redial List. By clicking on the Redial Button, you can select and redial one of the last numbers dialed, or you can immediately dial the last number dialed, depending on whether, in the configuration of the Redial List, the option "Dial immediately" has been activated or not.

If Automatic Redial is enabled (the option "Always use automatic redial" is enabled), this Redial Button is used to initiate the Automatic Redial of the

last number. This option is enabled in the Properties of the Redial List (see *Configure Redial*, page 76).

If you click with the right mouse button on the Redial button, the numbers last dialed and, if they are known, the names corresponding to these numbers will be listed in the shortcut menu. Click on an entry to call a subscriber again.

Shortcut Menu for the Redial Button

If you click with the right mouse button on the Redial button, the shortcut menu will appear.

Menu Command	Explanation
<Numbers Previously Dialed>	Depending on the key configuration, the number will be redialed immediately or it will be redialed after you have selected it from a list and clicked on the Line Button.
Redial List...	Shows the list of numbers which you have previously dialed.
Automatic Redial...	A number is redialed. You can enter a target number and the interval between redials. The target number is dialed automatically until the line called is no longer busy or until you cancel the automatic redial.
Autom. Redial	Cancels a previously initiated Automatic Redial.
Help	Calling Online Help.
Properties	Configures the Redial List (see <i>Configure Redial</i> , page 76).
<i>Click on the "Redial" button</i>	Depending on the key configuration, the number will be redialed immediately or it will be redialed after you have selected it from a list and clicked on the Line Button. For further information please refer to <i>Configure Redial</i> , page 76. If you don't dial immediately, you can call the numbers of the redial list one after another by clicking once again.

This is how you display the Redial List

The list contains all of the numbers which you have previously dialed.

Show Redial List You have several options:

- ① Go to the menu bar and click on "Lists | Show Redial List..."
- or
- ① Click with the right mouse button on the Redial button.
The shortcut menu will appear.
 - ② Click on "Show Redial List...".

or

- ① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

The shortcut menu will appear.

- ② Click on "Lists | Show Redial List..."

The following window appears in every case: "Redial List".

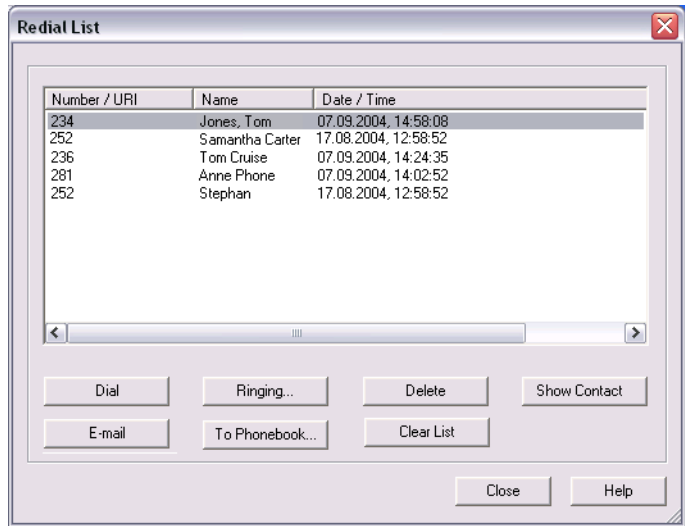


Fig. 11 Redial List

To react to an entry, highlight this entry and then click on a button.

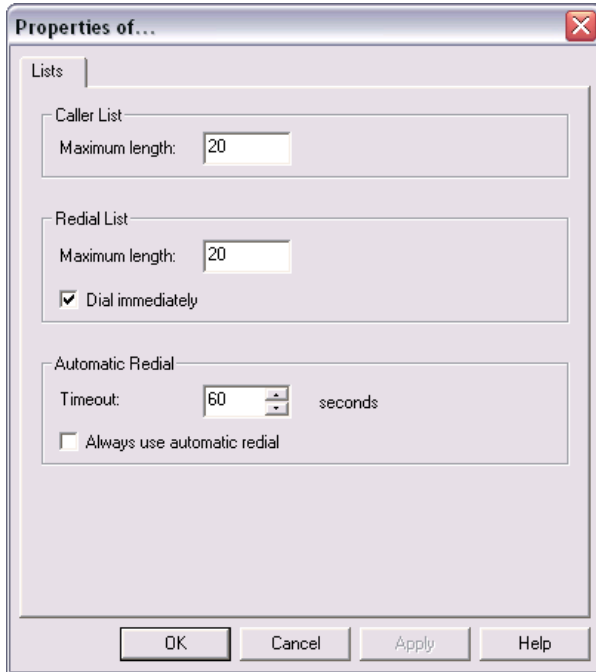
Button	Function
Dial	The number selected will be dialed again.
Ringing...	The number of the highlighted entry can be assigned a ringing tone
Delete	The highlighted entry will be deleted.
E-Mail	A new e-mail message containing information of the call (name of the person called, number, time of the call) will be created.
To Phonebook. ..	The selected list entry is provided for editing in the "Phonebook Entry" window. Click on "Add" and confirm the message which follows by clicking on "OK" in order to add the entry to the Phonebook.
Clear list	The entire list will be deleted.
Show Contact	You can show an Outlook Contact or create a new one. For further information please refer to chapter 6.2.7, <i>Displaying and creating Outlook Contacts from lists</i> , page 54.

■ Configure Redial

Here you can configure the length of the Redial list, the dialing mode and Automatic Redial.

This is how you define the properties of Redial

- Configure Redial
- 1 Click with the right mouse button on the Redial button.
The shortcut menu will appear.



- 2 Click on "Properties".
The "Properties of..." window will appear.
- 3 Enter the maximum number of entries to be included in the Redial List in the field "Maximum length" located under "Redial List".
- 4 Activate the option "Dial immediately" if the number or subscriber selected should be dialed immediately.
If this option is deactivated, you can still change the telephone number before the actual dialing procedure takes place.

- ⑤ Under “Automatic Redial”, activate the option “Always use automatic redial”, if you would like to directly initiate the Automatic Redial of the last number using the Redial button.

If this option is deactivated, only a single Redial of the number dialed last will be started.

- ⑥ Click on “OK” to close the window.

7.4.5 Automatic Redial

Automatic Redial offers you the option of redialing a target number until the selected line is no longer busy. You are free to define the time period between two dial attempts. If Automatic Redial is activated, the Redial button is animated. The selected number is shown in the display during the dialing procedure and the state of the line changes; no ringing is produced. If the connection is made, you will then hear a ringing signal.

Automatic Redial starts with the line used last. If a telephone conversation is held during Automatic Redial, the redial procedure will be interrupted and then continued after the call has been completed. If you are called by the target number and you pick up this call, the Automatic Redial will be cancelled.

If you call Automatic Redial again using a different number, before the connection is made, then the first order expires. Automatic Redial always exists for one target number only.

You can cancel a running Automatic Redial operation at any time.

This is how you start Automatic Redial

You have several options:

Starting
Automatic Redial

- ① Go to the menu bar and click on “Functions | Automatic Redial...”.

or

- ① Click with the right mouse button on the Redial button.

The shortcut menu will appear.

- ② Click on “Automatic Redial...”.

or

- ① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

The shortcut menu will appear.

- ② Click on "Functions | Automatic Redial...".
- The following window appears in every case: "Automatic Redial".

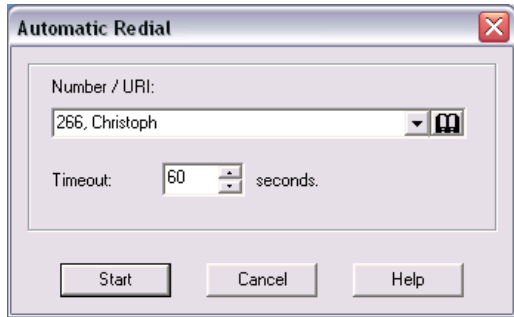


Fig. 12 Automatic Redial

- ③ Enter the target number here, to which you would like to set an Automatic Redial.
- ④ Enter the time period in seconds, which should pass between two dial attempts.
- ⑤ Click on "Start".

The number you have entered will now be dialed until the line is no longer busy, until you cancel Automatic Redial, or until you begin again with another target. When dialing, the symbol in the tray will change and you will hear a dial tone.



The state of the Line button when using Automatic Redial only changes from "Free" to "Dialing" if LANCOM Advanced VoIP Client is dialing the desired number.

This is how you end Automatic Redial

You have several options:

Canceling Automatic Redial

- ① Click on on the Redial button.
- ① Click with the right mouse button on the Redial button. The shortcut menu will appear.
- ② Click on "Cancel Redial".

or

- ① Go to the menu bar and click on "Functions | Redial".

or

- ① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface. The shortcut menu will appear.

- ② Click on "Functions | Redial".

The Automatic Redial will be cancelled.

7.4.6 Disable Secondary Call

If you are telephoning, incoming calls will normally be signaled by a call-waiting tone. Activate "Disable Secondary Call" in order to prevent the signaling of further calls.

If this function is activated (indicated by the activated button), the caller will either hear the busy signal or his call will be forwarded, if Forward if busy has been defined (see also chapter 7.4.15, *Forwarding, page 109*).

This is how you prevent a secondary call

You have several options:

Disable
Secondary Call

① Click on the button "Disable Secondary Call".

or

① Go to the menu bar and click on "Settings | Disable Secondary Call".

or

① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

The shortcut menu will appear.

② Click on "Settings | Disable Secondary Call".

Call this function again in order to permit secondary calls once again. The check mark will then disappear.

7.4.7 Hide Number

When you call a subscriber, your telephone number will be displayed there (if the opposite terminal supports this capability).

If Hide Number is activated (indicated by the activated button), your telephone number will not be transmitted to the person being called.

This is how you prevent your number from being transmitted

You have several options:

Hide Number

① Click on the button "Hide Number".

or

① Go to the menu bar and click on "Settings | Hide Number".

or

① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

The shortcut menu will appear.

② Click on "Settings | Hide Number".

Call this function again in order to resume the transmission of your telephone number. The check mark will then disappear.

7.4.8 Line button

The Line buttons represent the available lines. You can assign a number to every line to be used for incoming and outgoing calls. Furthermore, you can define a time period for each line in which this line is blocked for further incoming calls (see chapter 7.4.9, *Disabling Lines (Wrap-up Time)*, page 94).

Example:

You assign the number "100" to Line 1 and when outgoing calls are made on this line, the number "100" will be transmitted, i.e. the person being called will see the number "100" on his telephone display. If you are being called on "100", then you will receive the call on Line 1.

This is how you call a subscriber using a specific line

- Selecting a Line
- ① Click on the Line Button of the line you would like to use to place a call.
 - ② Enter the destination number you want.

For further information please refer to *This is how you call a subscriber (classical telephoning with a LANCOM VoIP USB Handset)*, page 32.

This is how you accept a telephone call

An incoming call is indicated by an animation on a Line Button.

- Pick up Call
- ① Click on this Line button.

For further information please refer to *This is how you accept a telephone call*, page 36.

This is how you reject a telephone call

An incoming call is indicated by an animation on a Line Button.

- Rejecting a Call
- ① Click with the right mouse button on this Line button.
 - ② Click on "Reject Call".

This is how you switch between lines (Call Swap)

- Swapping a Call
- If you have two or more connections, you can switch between the active connection and the connection(s) on hold.

- ① To do so, click on the line you want to switch to.

The active connection is now put on hold and the call previously on hold becomes active.

For further information please refer to *This is how to swap between an active call and a call on hold*, page 38.

This is how you connect two subscribers

Connecting Subscribers You are having a telephone conversation with a subscriber. You want to connect this subscriber with a further subscriber, whom you have put on "Hold" on another line.

- ① Click on the Line button of the active connection and keep the mouse button pressed.
- ② Drag the mouse onto the Line button of the subscriber who you would like to connect to the subscriber of the active telephone call.
- ③ Release the mouse button (Drag & Drop).

The subscribers are now connected to one another. Both lines become inactive.

For further information please refer to chapter 5.9, *How do I connect two subscribers to one another?*, page 38.

This is how you start a conference

Start Conference Requirement: You have at least two lines with the state of "Active" or "On Hold".

- ① Move per Drag & Drop the line on hold onto the active line.

The active line becomes the Conference line and the line on hold is free again.















Please make sure that you drag the line on hold to the active line - if you drag the active line to the line on hold, the lines will be connected, and no conference will be started.



For further information please refer to chapter 5.12, *How do I telephone with several subscribers simultaneously (Conference)?*, page 40.

■ Line State

A line can have different states. You can call certain functions depending on the state. Each state is indicated on the default user interface by an animated graphic.

Line State	Anima- ted Gra- phic	Explanation
Idle		No active Call.
Handset Is Off the Hook, Dial Tone		You hear the idle tone and you can begin dialing the numbers.

Line State	Animated Graphic	Explanation
Dial, No Dial Tone		You are in the process of dialing. You have already entered several digits of the number and, therefore, you no longer hear the dial tone.
Incoming Call		You are being called. The call on this line is signaled by ringing.
Ringing		You call a subscriber. The telephone rings there.
Outgoing call, Call Waiting		The subscriber you are calling is presently on the telephone. Your call is signaled there by a call waiting tone.
Busy		The connection you are calling is busy or the subscriber cannot be reached.
Active		The connection is completed. You can now speak with the subscriber.
On Hold		The telephone call is put on hold.
Blind Call Transfer		A call is transferred without making an inquiry call beforehand.
Conference Active		You are actively participating in a conference, i.e. you can talk with all conversation partners.
Conference On Hold		You are participating in a conference but you leave the conference temporarily (on hold). The other conference participants continue to communicate with each other.

Line State	Anima- ted Gra- phic	Explanation
Disconnected		The telephone conversation has been disconnected by the other party. You hear the busy signal.
Disabled Line		The line is disabled for incoming calls during a wrap-up time.

■ Shortcut Menu for the Line button

If you click with the right mouse button on the Line button, the shortcut menu will appear. The shortcut menu depends on the state of the line.



Free - line is inactive (no existing call)

Menu Com- mand	Explanation
Hook off and Dial	The handset is lifted. You can enter the number of the subscriber you would like to call, using the keyboard or the numeric keypad.
Disable line	The line is disabled for incoming calls during a wrap-up time (see chapter 7.4.9, <i>Disabling Lines (Wrap-up Time)</i> , page 94).
Paste	The Clipboard contents are used as the telephone number and this number is dialed.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92).
<i>Click on the Line button</i>	Switching to the "Hook Off" state.



Hook off – you hear either an idle tone or a stuttered dial tone and you can begin dialing

Menu Com- mand	Explanation
Cancel Call	The line is once again free (inactive).
Paste	The Clipboard contents are used as the telephone number and this number is dialed.

Menu Command	Explanation
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Disconnect Call. The line is once again free (inactive).



Dialing - the dialing procedure is executed

Menu Command	Explanation
Cancel Call	The line is once again free (inactive).
Paste	The contents of the Clipboard are attached to the previously entered number.
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Disconnect Call. The line is once again free (inactive).



Incoming Call – it is ringing on this line

Menu Command	Explanation
Pick up Call	You pick up the call. The line becomes active.
Reject Call	The call is rejected without being picked up first. The line is once again free (inactive).

Menu Command	Explanation
Transfer to Number/ URI...	The call will be forwarded to the number/URI to be entered.
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Picking up a call. If you currently having a telephone conversation, this call will be held.



Outgoing Call (Ringing) - the telephone of the subscriber being called rings

Menu Command	Explanation
Cancel Call	The line is once again free (inactive).
Call Transfer	The call will be forwarded to the line on hold (Connect without Inquiry).
Transfer to	Transfers the line currently active to the line on hold.
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Disconnect Call. The line is once again free (inactive).



Outgoing Call (Call Waiting) – call waiting is signaled at the subscriber

Menu Command	Explanation
Cancel Call	The line is once again free (inactive).
Call Transfer	The call will be forwarded to the line on hold (Connect without Inquiry).
Transfer to	Transfers the currently active line to one of the lines on hold. This option is only available if at least one line is on hold.
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Disconnect Call. The line is once again free (inactive).



Outgoing Call (Busy) - you hear the busy signal

Menu Command	Explanation
Cancel Call	The line is once again free (inactive).
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Disconnect Call. The line is once again free (inactive).



The connection is active – you can speak

Menu Command	Explanation
Hold	The connection is put on hold.
Disconnect Call	The line is once again free (inactive).
Transfer / Call Transfer	Connects two subscribers to one another. The active call is transferred to the call on hold. Both of your lines will become inactive.
Transfer to	Transfers the currently active line to one of the lines on hold. This option is only available if at least one line is on hold.
Transfer to Number/ URI...	You can enter a new number and the call will then be transferred to this number.
Conference (All Lines)	All lines (the active one and all lines on hold) are added to a conference.
Start Conference on this Line	The active line becomes the Conference line. Other lines can then be added to this conference.
Paste	Transfers Clipboard contents. You can use this method, for example, to transmit your PIN in order to listening to your home answering machine messages.
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Puts a telephone call on hold.



Connection On Hold

Menu Command	Explanation
Pick up Call	Re-activates a telephone call on hold.
Disconnect Call	The line is once again free (inactive).
Transfer / Call Transfer	Connects two subscribers to one another. The active call is transferred to the call on hold. Both of your lines will become inactive.
Transfer to	Transfers the currently active line to one of the lines on hold. This option is only available if at least one line is on hold.
Transfer to Number/ URI...	You can enter a new number and the call will then be transferred to this number.
Start Conference on this Line	The active line becomes the Conference line. Other lines can then be added to this conference.
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Re-activates a telephone call on hold.



Call Transfer (Blind Call Transfer)

Menu Command	Explanation
Pick up Call	Re-activates a transferred telephone call.
Disconnect Call	The line is once again free (inactive). The forwarded connection will be created.

Menu Command	Explanation
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	Re-activates a transferred telephone call.



Conference - you are participating in the conference

Menu Command	Explanation
Hold	The Conference line is on hold, all other conference participants can continue to speak to one another.
Terminate Conference	You end the conference for all participants. This is only possible if you initiated the conference.
Conference (All Lines)	All lines (the active one and all lines on hold) are added to a conference.
Add to Conference	You can select the line, which you would like to add to the existing conference.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	The Conference line is put on hold.



Conference on Hold - The conference is on hold, the other participants can continue to speak to one another

Menu Command	Explanation
Pick up Call	Re-activates a conference on hold.
Terminate Conference	You end the conference for all participants. This is only possible if you initiated the conference.

Menu Command	Explanation
Conference (All Lines)	All lines (the active one and all lines on hold) are added to a conference.
Add to Conference	You can select the line, which you would like to add to the existing conference. The Conference line is then active.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	The Conference line is activated again.



Disconnected - The conversation partner has gone on hook

Menu Command	Explanation
Hook On	The handset is put on the hook. The line is once again free (inactive).
Show Contact	You can show an Outlook Contact or create a new one for the current call.
Journal entries	You can create a journal entry in Outlook for the current call.
Help	Calling Online Help.
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	The handset is lifted. You can enter a number/URI via the keyboard or the numeric keypad.



Disabled - The line is temporarily disabled for incoming calls

Menu Command	Explanation
Hook off and Dial	The handset is lifted. You can enter the number of the subscriber you would like to call, using the keyboard or the numeric keypad.
Enable Line	Releases the line once again for incoming calls.
Paste	The Clipboard contents are used as the telephone number and this number is dialed.
Help	Calling Online Help.

Menu Command	Explanation
Properties	Configuring this Line Button (see <i>Configure Line Button</i> , page 92)
<i>Click on the Line button</i>	The handset is lifted. You can enter a number/URI via the keyboard or the numeric keypad.

■ Configure Line Button

You can define the label for each Line button individually. Since you can also have several numbers, you indicate here which of your numbers or accounts are assigned to lines for incoming and outgoing calls.

Example:

You have assigned line 1 the SIP account `thomas.meier@co1.de`, and line 2 the account `th.meier@co2.de`. According to which provider (Co1 or Co2) the call comes in from, it is assigned to the appropriate line. For outgoing calls, the call is handled via the provider who is assigned to the line. However, you can also choose automatic assignment of the optimal SIP account.

This is how you define the properties of a Line button

- ① Click with the right mouse button on the Line button.

Configuring a Line Button

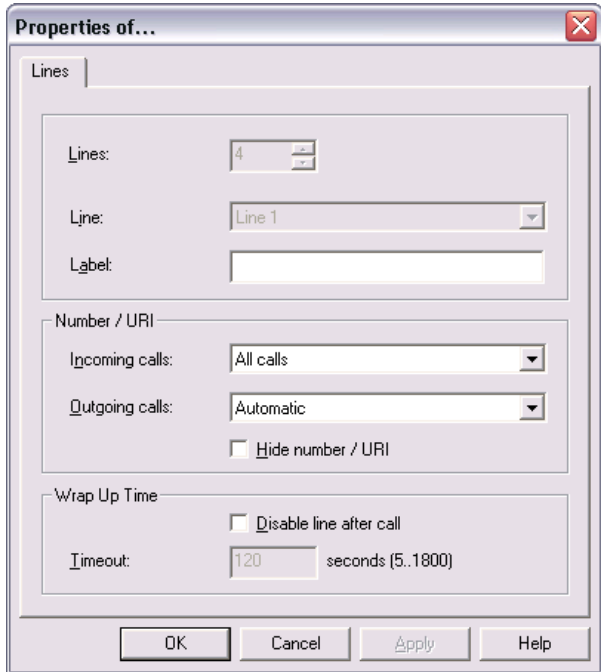


Fig. 13 Line Button Properties

The shortcut menu will appear.

- ② Click on "Properties".
The "Properties of..." window will appear.
- ③ Enter the text to be shown on the Line Button in the "Label" field.
- ④ Click in the drop-down list on the number(s) which should be used for this line.
 - <Number> or <SIP account>
Only calls with this number or for this account go on this line.
 - All Calls
All calls for your number(s).



If you have not configured **any** Line buttons with "All calls", certain calls will be signaled on the first free Line button in spite of any configuration to the contrary. This is done to ensure that calls are connected even if there is a misconfiguration of the Line button.

- ⑤ Click in the drop-down list on "Outgoing calls" on the number or the SIP account you would like to use for calls from this line.

This number

- will usually be shown to the subscriber called and
- can be used for invoicing.

If you choose the option "Automatic", the most suitable SIP account is always used.

If you only have one number, this number will automatically be used for outgoing calls on this line.

Define here whether the number should always be suppressed for outgoing calls.

- ⑥ If this line should be temporarily busy (disabled) after every call, activate the option "Disable line after call".

Define the time period for which this line should be disabled after a call (default value: 100 seconds).

- ⑦ Click on "OK".



The number of Line buttons is defined in the User Profile. There you can configure all Line buttons at once (see chapter 8.4.5, *Line Buttons*, page 133).

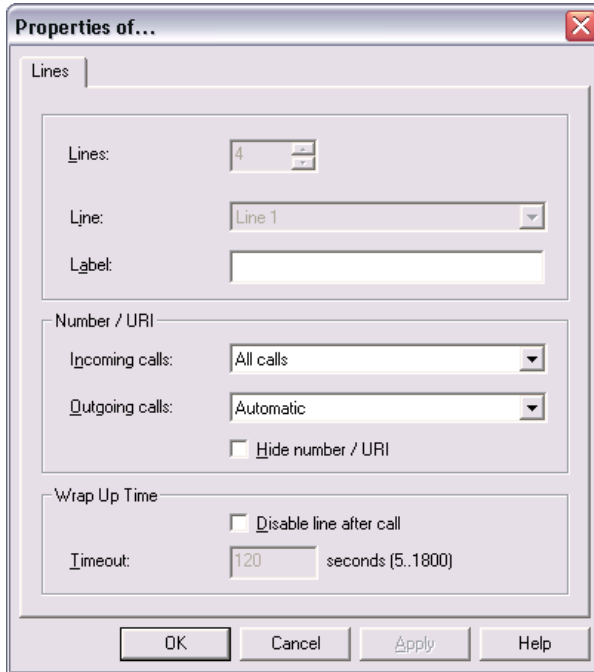
7.4.9 Disabling Lines (Wrap-up Time)

You can specifically block a line for further incoming calls, for example, in order to have enough time to process a customer inquiry after a call from a customer. Your LANCOM Advanced VoIP Client is then busy for further incoming calls. If you would always like to have a wrap-up time configured for a line, you must define this when configuring the line.

This is how you disable a line after every call

- 1 Click with the right mouse button on the selected Line button.

Disable line



The shortcut menu will appear.

- 2 In the shortcut menu, select "Properties".
The "Properties of..." window will appear.
- 3 Activate the option "Disable line after call".
- 4 Define a time period (5 – 1800 seconds).
- 5 Confirm your input by clicking on "OK".

The line will now be disabled after every call for the time period defined.



If you start an outgoing call on the disabled line, this line will once again be cleared for incoming calls when you go on hook.

This is how you disable a line

- 1 Click with the right mouse button on the selected Line button.

Disable line

The shortcut menu will appear.

- ② In the shortcut menu, select the option “Disable Line”.

The line is disabled until this line is enabled again.



Incoming calls to a disabled line will be forwarded according to Forwarding if busy.

This is how you enable a disabled line

- ① To enable a disabled line, call up the context menu and select the option “Enable Line”.

Enable Line

You can also start a call in the normal way on the disabled line.

7.4.10 Speed dial

The numbers of frequently called conversation partners can be assigned to Speed Dials. The Speed Dials make it possible to dial quickly: Just click on the Speed Dial to call a subscriber.

■ The Shortcut Menu for Speed Dials

If you click with the right mouse button on the Speed Dial, the shortcut menu will appear.

Menu Command	Explanation
<Label of the Speed Dial>	According to the configuration of the Speed Dial, the number will either <ul style="list-style-type: none"> • be dialed immediately or • it will be transferred to the telephone display.
Help	Calling Online Help.
Properties	Configures the Speed Dial (see <i>Configuring the Speed Dial</i> , page 96).
<i>Click on the Speed Dial</i>	According to the configuration of the Speed Dial, the number will either <ul style="list-style-type: none"> • be dialed immediately or • it will be transferred to the telephone display.

■ Configuring the Speed Dial

Configure the Speed Dial as described in the following.

This is how you define the properties of a Speed Dial

- ① Click with the right mouse button on the Speed Dial.

Configuring a Speed Dial

The shortcut menu will appear.

- ② Click on “Properties”.

The “Properties of...” window will appear.

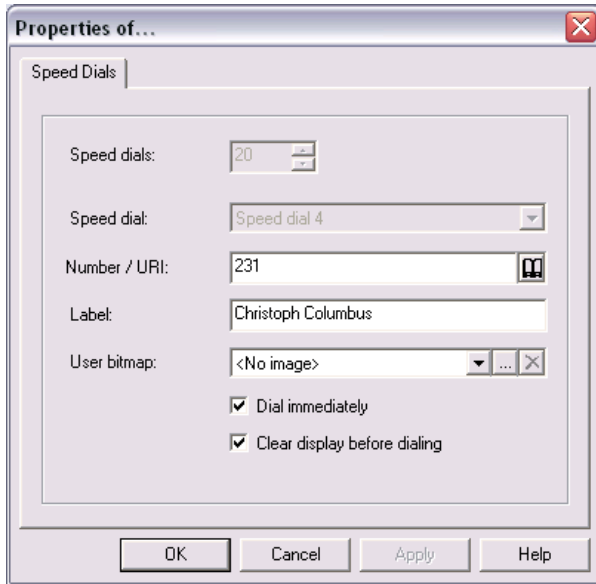



Fig. 15 Configuration of the Speed Dial

- ③ Then, in the “Number/URI” field, enter the number to be dialed using the Speed Dial. Valid numbers include, for example, numeric sequences or SIP URIs.
- ④ Enter the text for the label of the Speed Dial in the “Label” field.
- ⑤ Enter the file name of a graphic, in bitmap format, into the “User Bitmap” field. This image will be displayed on the Speed Dial.

Here, for example, you can include a small portrait of the subscriber. Click on , to search for the appropriate files.

You can only select a graphic if the Skin you use allows a user-defined image.

- ⑥ Activate the option “Dial immediately” in order to dial the subscriber immediately by clicking on the Speed Dial.
- If this option is deactivated, you can still change the telephone number before the actual dialing procedure takes place.
- ⑦ Activate the option “Clear display before dialing” so that the contents of the display only contain this number.
- If this option is deactivated, the assigned number will be added to the display contents.

- ⑧ Click on "OK".

You can export or import speed dials and shortcuts.

For further information please refer to chapter 7.4.12, *Importing and Exporting Speed Dials and Shortcuts*, page 100.

■ Moving/Copying Speed Dials

You can also copy or move Speed Dials by Drag & Drop within the area of the Speed Dials. You can conveniently rearrange your configured Speed Dials by moving them. The Speed Dial (with corresponding number, e. g. no. 3) is not only moved: the assignment and settings are assigned to another Speed Dial (e. g. no. 6).



Remember that any previously existing configuration of the target button (here no. 6) will be overwritten.

This is how you move/copy a Speed Dial

Move/copy
Speed Dial

- ① To move a Speed Dial, simply drag & drop the Speed Dial to the desired position within the area of the Speed Dials.

Please note the tooltips when doing this - they indicate whether you have selected a valid destination position.

- ② Confirm the operation in the next message dialog with "OK".

To copy a Speed Dial, proceed in the same way as for moving it. But hold down the Ctrl key during the drag & drop action.

7.4.11 The Shortcut Button

Shortcuts are used to create links to frequently used programs and web pages. This allows you to call, for example, an Internet search machine or start a customer database with just one click on the button.

■ The Shortcut Menu for the Shortcut

If you click with the right mouse button on the Shortcut, the shortcut menu will appear.

Menu Command	Explanation
Help	Calling Online Help.
Properties	Assigns a program or an Internet address to a Shortcut.

This is how you link a program or an Internet address to a Shortcut button

- Assigning a Shortcut
- ① Click with the right mouse button on the Shortcut button.
The shortcut menu will appear.
 - ② Click on "Properties".
The "Properties of..." window will appear.

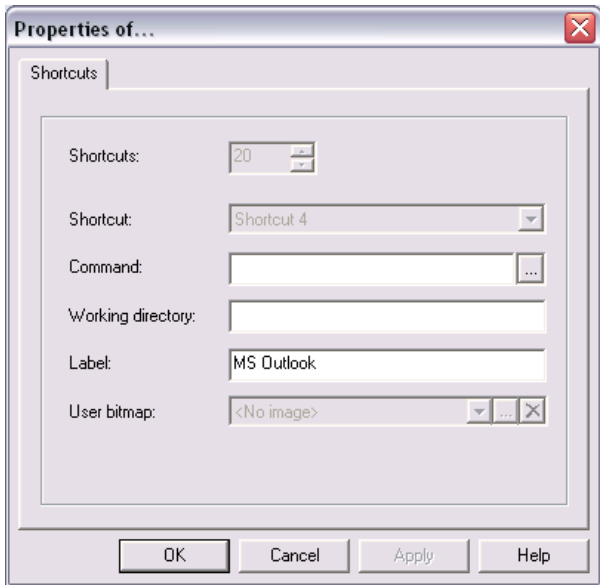



Fig. 16 Shortcut Button Properties

- ③ Enter the name and the path of the program to be run or the web page you want in the "Command" field.
Examples:
 - www.LANCOM Advanced VoIP Client.com
 - Outlook:

//Public Folder/All Public Folders/Lancom Systems Employees


□ C:\Programme\Microsoft Office\Office\winword.exe

Click on , to search for the appropriate files.

- ④ Then, in the field “Working directory”, you have the option of entering the path to the working directory you want.

Programs sometimes require files which are stored in another location. For this reason, you enter the path to the working directory here so that these file can be located.

- ⑤ Enter the text to be shown on the button in the “Label” field.
 ⑥ Enter the file name of a graphic, in bitmap format, into the “User Bitmap” field. This image will be displayed on the Shortcut.

Here, for example, you can include the logo of a program or of a company. Click on , to search for the appropriate files.

You can only select a graphic if the Skin you use allows a user-defined image.

- ⑦ Click on “OK”.

You can export or import speed dials and shortcuts.

For further information please refer to chapter 7.4.12, *Importing and Exporting Speed Dials and Shortcuts*, page 100.

7.4.12 Importing and Exporting Speed Dials and Shortcuts

It is possible to import or export the numbers of frequently called conversation partners, as well as shortcuts to frequently used programs.

This is how you export all Speed Dials and Shortcuts

- Export Speed Dials / Shortcuts
- ① Click on “File | Speed Dials / Shortcuts | Export...”
The following window appears: “Save File As...”.
 - ② Select the directory in which you would like to store the configuration of your Speed Dials and Shortcuts.
 - ③ Enter a file name and confirm this step with “Save”.
All configured Speed Dials and Shortcuts will be saved in the defined file.

This is how you import Speed Dials and Shortcuts



Importing Speed Dials and Shortcuts will overwrite buttons which you have already assigned.

- Import Speed Dials / Shortcuts
- ① Click on “File | Speed Dials / Shortcuts | Import...”.
 - ② Confirm the warning message by clicking on “OK”, or click on “Cancel”.
The following window appears: “Open”.

- ③ Select the directory containing a Speed Dial and Shortcuts file “*.key”.
- ④ Highlight the file you want and confirm this selection by clicking on “Open”.
The Speed Dials and Shortcuts defined in the selected file will be imported. The buttons are assigned according to their label (e.g. “Speed Dial 1” is assigned to “Speed Dial 1” again). The number of buttons visible on the Skin of your LANCOM Advanced VoIP Client is not modified by the import.

7.4.13 Phonebook

Frequently used numbers are stored in the Phonebook. You can then dial these numbers directly from the Phonebook. You can store, edit or delete your personal numbers in your Phonebook. This Phonebook can contain any number of entries. You are the only person with access to this Phonebook. You can also export or import these entries.

Wherever possible, store the numbers in the public network in your phonebook in the “canonical telephone number format” (Example: +49 (89) 12345-67), or as a SIP-URI for VoIP numbers (Example: thomas.meier@firma.de).



These Phonebook functions are provided in addition to the telephone directories which you may have set up in your Outlook “Contacts” folder. You can also display your contacts directly from the phonebook, or create new contacts.

For information on how to use your Outlook Contacts with LANCOM Advanced VoIP Client, please see Chapter 6, *Microsoft Outlook – Telephoning with LANCOM Advanced VoIP Client*, page 45.

This is how you call the Phonebook

Calling the Phonebook

- ① You have several options:
 - Click on the button “Phonebook” or
 - go to the menu bar and click on “Lists | Phonebook...” or
 - Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on “Lists | Phonebook...” in the shortcut menu.

The following window appears: “Phonebook”.

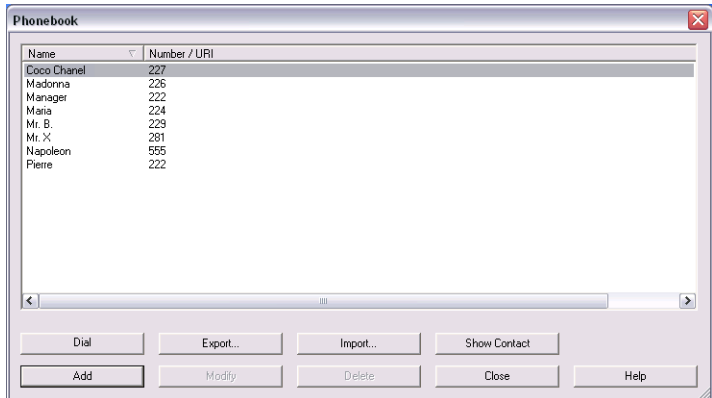


Fig. 17 Phonebook

This is how you call a subscriber from the Phonebook

Calling a
Subscriber from
Phonebook

- ① You have several options:
 - Click on the “Phonebook” button or
 - go to the menu bar and click on “Lists | Phonebook...” or
 - Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on “Lists | Phonebook...”.

The following window appears: “Phonebook”.

- ② In the list, click on the subscriber you would like to call.
- ③ Click on “Dialing”.

The number will be dialed.

This is how you add a subscriber to the Phonebook

Adding a
Subscriber to a
Phonebook

- ① You have several options:
 - Click on the “Phonebook” button or
 - go to the menu bar and click on “Lists | Phonebook...” or
 - Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on “Lists | Phonebook...”.

The following window appears: “Phonebook”.

- ② Click on the “Add” button

The following window appears: “Add entry”.

- ③ Enter the name and number of the subscriber.
- ④ Click on “Add”.

The “Phonebook Entry” window will be closed.

- 5 Click on "Close"

The Phonebook will be closed.

This is how you change an entry in the Phonebook

Change Entry in Phonebook

- 1 You have several options:
 - Click on the "Phonebook" button or
 - go to the menu bar and click on "Lists | Phonebook..." or
 - Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on "Lists | Phonebook..."

The following window appears: "Phonebook".

- 2 Click in this list on the entry you would like to change.
- 3 Click on "Modify".

A window opens: "Modify Entry".

- 4 Enter the changes.
 - 5 Click on "Modify".
- The "Phonebook Entry" window will be closed.

- 6 Click on "Modify".
- 7 The Phonebook will be closed.

This is how you delete an entry in the Phonebook

Delete Entry in Phonebook

- 1 You have several options:
 - Click on the "Phonebook" button or
 - go to the menu bar and click on "Lists | Phonebook..." or
 - Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on "Lists | Phonebook..."

The following window appears: "Phonebook".

- 2 In the list, click on the subscriber you would like to delete.
- 3 Click on "Delete".
- 4 Click on "Yes" to confirm the deletion.
- 5 Click on "Close" to close the window.

■ Importing and Exporting Phonebook Entries

You can export entries from the Phonebook into a comma-separated file (CSV), or import entries from a comma-separated file.

This is how you export your entries from the Phonebook

Export entries

① You have several options:

- Click on the "Phonebook" button or
- go to the menu bar and click on "Lists | Phonebook..." or
- Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on "Lists | Phonebook...".

The following window appears: "Phonebook".

② Click on "Export...".

The Export Wizard will appear. It supports you as you export the entries from the Phonebook.

③ Click on "Next >".

The following window appears: "Select the Phonebook entries to be exported".

④ Deactivate the checkbox in front of the entries that you do **not** want to export.



Tip: If you would like to deactivate/activate several entries at once, highlight them by clicking on one entry and then click on the other entries while pressing the CTRL key. All highlighted entries appear with a colored background. You can then switch the activation of the highlighted entries by pressing the space bar.

⑤ Click on "Next >".

The following window appears: "Select the destination file".

⑥ Select the directory and a file name under which the exported file should be saved.

⑦ You can also define whether the entries should be added to an existing file or whether an existing file should be overwritten.

⑧ If the column names (Name, Phone Number) should appear in the first line of the file, activate the corresponding checkbox.

⑨ Click on "Next >".

Before the export takes place, you will be shown an overview of the export parameters.

If you would like to make additional changes, click on "Back" and change the parameters.

⑩ Begin the export by clicking on "Next >".

⑪ The following window appears: "End the Export Wizard for the Phonebook".

⑫ Click "Finish".

The export wizard will be closed

⑬ Click on "Close" to close the window.

This is how you import entries into your Phonebook

- Import entries
- 1 You have several options:
 - Click on the "Phonebook" button or
 - go to the menu bar and click on "Lists | Phonebook..." or
 - Click with the right mouse button on the LANCOM Advanced VoIP Client user interface and then on "Lists | Phonebook..."

The following window appears: "Phonebook".

- 2 Click on "Import..."

The Import Wizard will appear. It supports you as you import the entries into the Phonebook.

- 3 Click on "Next >".

The following window appears: "Select the Source File".

- 4 Enter the file from which the entries should be imported.

Once the file is selected, the entries will be checked and displayed in the window. In addition, you will be shown how many entries (lines) this file contains and whether any damaged entries exist.

Damaged entries will be indicated with "**** Invalid lines! ****".

You can edit the file here before importing.

- 5 To do so, click on "Edit...". A word processing program will open. You can then change or delete your entries or add new ones. Save and close the file.

- 6 If you have made changes in the import file, click on "Reload...".

The file will be checked again.

- 7 Click on "Next >".

The following window appears: "Select the Phonebook entries to be imported".

Deactivate the checkbox in front of the entries that you do **not** want to import.



Tip: If you would like to deactivate/activate several entries at once, highlight them by clicking on one entry and then click on the other entries while pressing the CTRL key. All highlighted entries appear with a colored background. You can then switch the activation of the highlighted entries by pressing the space bar.

- 8 Click on "Next >".

- 9 The following window appears: "Delete existing Phonebook before import".

Activate the checkbox "Delete existing Phonebook before import" if you would like to replace the existing Phonebook with the imported one.



The entries from the existing Phonebook will be lost.

Leave the checkbox deactivated if the imported entries should be added to the existing Phonebook.

In this case, define

- whether existing Phonebook entries with the same number/URI but another name should be updated or
- whether existing Phonebook entries with the same number/URI but another name should be skipped.

Before the import takes place, you will be shown an overview of the import parameters.

If you would like to make additional changes, click on "Back" and change the parameters.

⑩ Click on "Next >".

The following window appears: "End the Import Wizard".

This will show how many and which entries have been added or updated or skipped.

⑪ Click "Finish".

The import wizard will be closed.

⑫ Click on "Close" to close the window.

7.4.14 Caller List

The "Caller List" button is used to gather information about the calls you have received. The Caller List contains the callers' numbers, names (if known), the time of their call and what has happened to the call (status). If a new entry has been added to the Caller List, you will know this by the animation of the "Caller List" button. The Caller List symbol will also be displayed in the tray (see also App. A.; *Symbols on the Taskbar and in the Tray*, page 161).

In the Caller List under "Call for", you will also see which number the caller dialed: i.e. whether the call was forwarded to you, for example.

■ The "Caller List" Button

The "Caller List" button shows whether calls were received while you were absent:

- no new call has been received or
- at least one new call has been received (the button blinks.)

■ The “Caller List” Shortcut Menu

If you click with the right mouse button on the “Caller List” button, the shortcut menu will appear.

Menu Command	Explanation
Caller List...	The Caller List will be displayed.
Help	Calling Online Help.
Properties	Configures the Caller List.
<i>Click on button “Caller List”</i>	The Caller List will be displayed.

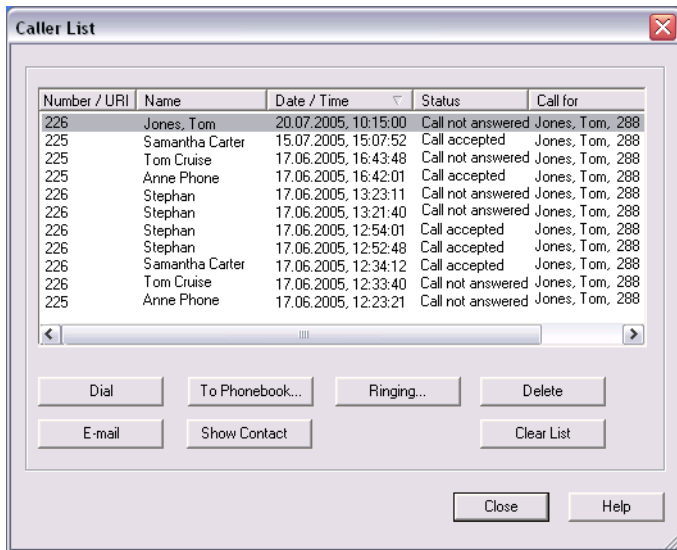


Fig. 18 Caller List

The calls in the Caller List may have a variety of states (status), depending on what has happened to the call received.

Status	Explanation
Call accepted	You picked up the call.
Call not answered	You did not pick up the call. The call was terminated before it was forwarded.

Status	Explanation
Call forwarded / accepted	The call has been forwarded.

To react to an entry, highlight this entry and then click on a button.

Button	Function
Dial	The number selected will be called.
E-Mail	A new e-mail message containing information of the call (name of the person called, number, time of the call) will be created.
Ringing	You can assign a phone number to the number of a caller (see also chapter 8.4.7.1, <i>Number Dependent Ringing Sounds</i> , page 135).
Delete	The highlighted entry will be deleted.
To Phonebook..	The selected list entry is provided for editing in the "Phonebook Entry" window. Click on "Add" and confirm the message which follows by clicking on "OK" in order to add the entry to the Phonebook.
Clear list	The entire list will be deleted.
Show Contact	You can show an Outlook Contact or create a new one. For further information please refer to chapter 6.2.7, <i>Displaying and creating Outlook Contacts from lists</i> , page 54.

■ Configure Caller List

The following describes how to configure the Caller List.

This is how you define the length of the Caller List

- 1 Click with the right mouse button on the "Caller List" button.

Configuring the Caller List

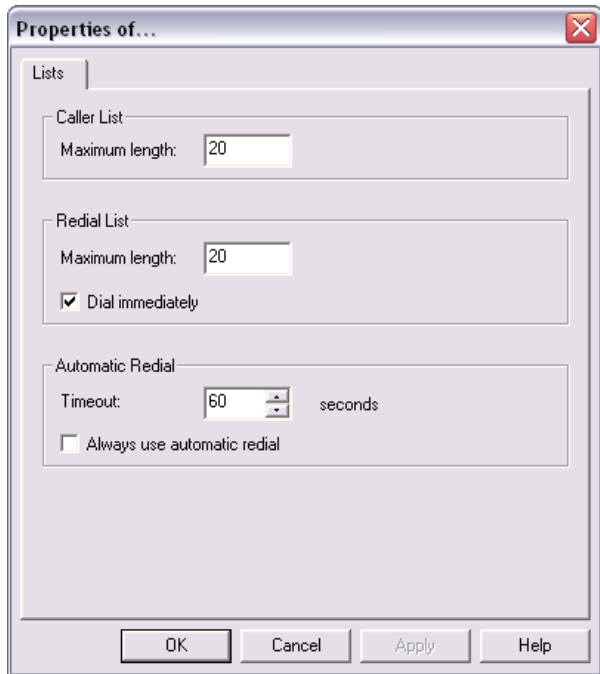


Fig. 19 List Properties

The shortcut menu will appear.

- 2 Click on "Properties".
The "Properties of..." window will appear.
- 3 Enter the maximum number of entries to be included in the Caller List in the field "Maximum length" located under "Caller List".
If this length limitation is exceeded, the oldest entry in the list will be deleted.
- 4 Click on "OK".

7.4.15 Forwarding

Incoming calls can be redirected specifically to another subscriber using the "Redirection" button.

You can indicate **when** the forwarding should take place:

- Call Forwarding (directly) Unconditional

- Call Forwarding No Reply
- Call Forwarding Busy

All three types of forwarding can be enabled simultaneously. The appropriate forwarding will be automatically used in each case.

If you define unconditional forwarding for your calls, a note will appear in the display which includes the forwarding target, and the "Forwarding" button on the default user interface will glow green. If you click on the "Forwarding" button again, the direct forwarding will be switched off and the "Forwarding" button will stop glowing.

If the information entered for the forwarding destination is not precise enough (the number/URI is missing, for example), LANCOM Advanced VoIP Client will inform you of this if you activate the "Forwarding" button and will open the dialog for configuration of the forwarding.

■ The Shortcut Menu for the "Forwarding" Button

If you click with the right mouse button on the "Forwarding" button, the shortcut menu will appear.

Menu Command	Explanation
Enable Call Forwarding Unconditional	Activate / Deactivate Call Forwarding Unconditional. For further information please refer to <i>This is how you redirect calls</i> , page 123.
Help	Calling Online Help.
Properties	Configure Redirections.
<i>Click on button "Forwarding"</i>	Activates Unconditional Call Forwarding.

For detailed information on how to configure Forwarding, please see Chapter 8.2, *Forwardings*, page 122.



If a connection subject to costs is set up for the Call Forwarding, then these costs will be charged to you.

7.4.16 Call Swap

„Call Swap" allows you to switch between different lines. To swap a call, click directly on the line with the call you want to activate. For further information please refer to *This is how you switch between lines (Call Swap)*, page 80.

7.4.17 Hold

The “Hold” button is used to put the currently active call on hold. (see chapter 1.6, *Connection on Hold*, page 8). To re-activate the connection, click once again on the “Hold” button.

7.4.18 Call Transfer

The “Call Transfer” button can be used to connect the currently active call to a call which is on hold (see chapter 5.9, *How do I connect two subscribers to one another?*, page 38).

Here you must differentiate between two situations:

- If you only have one connection on hold, both callers will be connected directly to each other.
- If you have several connections on hold, a select list will appear from which you can choose the line to be connected.

After the subscribers have been connected, both of your lines will automatically become inactive.

This is how you transfer calls

You are currently talking to a caller and you have at least one other connection on hold.

Connecting Subscribers

- ① Click on the button “Call transfer”.
- ② If you have several connections on hold, select now the line to be transferred.

The two subscribers are connected to one another and both of your lines become inactive.



When you directly connect subscribers, you may still be charged, even though you are no longer involved in their telephone call. This will only occur if you set up one or both of the connections. If, for example, Subscriber A called you and you called Subscriber B to inquire about something, you will only be charged for the connection to Subscriber B. No costs will be charged if you are called by both Subscriber A and Subscriber B. However, if you have called both subscribers, you will be charged for both connections.

■ The Shortcut Menu for the “Call Transfer” Button

If you click with the right mouse button on the “Call Transfer” button, the shortcut menu will appear.

Menu Command	Explanation
Transfer / Call Transfer	Connects two subscribers to one another. The active call is transferred to the call on hold. Both of your lines will become inactive. If you only have one connection on hold, both callers will be directly connected. If you have several connections on hold, a select list will appear. Click on the line to be connected to the active line.
Transfer to	Transfers the currently active line to one of the lines on hold. This option is only available if at least one line is on hold.
Help	Calling Online Help.
<i>Click on button "Call transfer"</i>	Transfers the currently active line to a line with a call on hold.

7.4.19 Blind Call Transfer

You can also transfer a call before the second connection has been made.

This is how you make a blind call transfer

You are actively telephoning with a conversation partner.

Connecting Subscribers without an Inquiry Call

- ① If you have assigned a destination subscriber to a Speed Dial, and you would like to transfer this call to this subscriber, just use Drag & Drop to drag the Line button onto the Speed Dial.

Or

- ① Click on the button "Call Swap" or on a free Line button.
The new line will be activated and the first call will be put on hold.
- ② Enter the number of the destination to which you would like to transfer the first call.
- ③ Now, without waiting to find out whether the second connection has been successful, you can
 - click on the "Call Transfer" button or
 - open the shortcut menu for the Line button and select "Call / Transfer".

The call that was received will now be shown in your display together with "Call Transfer", and the state of the line will change.

If the connection is not successfully made within 20 seconds, the call originally received will appear as a call on hold in your LANCOM Advanced VoIP Client. You can either pick up this call or, if necessary, transfer it to another number.

If calls, that have been transferred to you without inquiry, should not be forwarded, a waiting period of at least 20 seconds should be defined for this Call Forwarding. Within this period the "Call transfer without inquiry" is then returned and can now be transferred to another colleague..

7.4.20 Conversation Recording

LANCOM Advanced VoIP Client makes it possible to record telephone conversations. When recording conversations, you can record the entire conversation or only individual parts of the conversation. The caller is made aware of the recording by a beep. You can switch recording on or off a number of times during a call. The individual parts of the conversation will be stored together in one file - this results in only one entry per call being added to the list of recorded conversations.

The recorded calls will be stored in your user directory (e. g. C:\Documents and Settings\\Application Information\LANCOM Advanced VoIP Client\LANCOM Advanced VoIP Client\PhoneClient\Recording) as a WAV file.

You can edit the calls in the list of recorded conversations. You have the following options:

- display the recordings and listen to them (see *Listening to and Editing Recorded Conversations*, page 114)
- dial the conversation partner
- send an e-mail to the call partner, with information on the call (e.g. the date, time and number) automatically copied into the e-mail
- export the recording (*This is how you export recorded conversations*, page 116)
- assign a ringing tone to the number of the call partner
- copy the caller's number into the Phonebook
- display the call partner's Outlook Contact or create a new contact
- delete individual recordings or the entire list.

■ The "Conversation Recording" Button

During a call, you can click on the "Conversation Recording" button to record the conversation which follows. A start signal and the animated button signal that the conversation is being recorded. Clicking once again on the "Conversation Recording" button will interrupt the recording.

■ The Shortcut Menu for the “Conversation Recording” Button

If you click with the right mouse button on the “Conversation Recording” button, a shortcut menu will appear:

Menu Command	Explanation
Recorded Calls...	The list of the recorded conversations will be displayed.
Help	Calling Online Help.
<i>Click on button “Conversation Recording”</i>	The recording of the current conversation is switched on or off.

This is how you record a telephone call

You are having a telephone conversation.

Record
Conversation

- Click on the button “Conversation Recording”.
Your conversation partner will hear a sound signal and the “Conversation Recording” button blinks during the recording.
To record individual parts of the conversation, switch the recording function on or off repeatedly during the call.

This is how you end the recording of a telephone call

Ending
Conversation
Recording

- Click on the animated “Conversation Recording” button in order to stop or interrupt recording; or end the call.
If you deactivate Conversation Recording, no other sound signal will be produced.
To record individual parts of the conversation, switch the recording function on or off repeatedly during the call.

■ Listening to and Editing Recorded Conversations

All of your recorded conversations will be shown in the list of recorded conversations. This list contains all recorded conversations as well as additional information, e.g. date and time of the call, the telephone number of the conversation partner, and the extension used. Furthermore, an arrow signals whether it was an outgoing call (green arrow) or an incoming call (red arrow).

You can call the conversation partner again, write him an e-mail, assign a special ringing sound to his phone number or add his number to your Phonebook.

■ Playing a recording in a conversation

You can play a recorded conversation to your call partner during a telephone call.

This is how you play a recorded conversation in an active phone call

- Play recording
- ① Click on the "Record" key with the right mouse button during a phone call, and then select the option "Recorded Conversations" in the shortcut menu.
- Or
- ① Click during a phone call on the symbol for calling the Recording List.
 - ② Click on the recording you want to play, then click on "Play".
The recording will be played into the current conversation.

■ List of the Recorded Conversations

To react to an entry, highlight this entry and then click on a button.

Button	Function
Dial	The number selected will be called.
E- Mail	A new e-mail message containing information of the call (name of the person called, number, time of the call) will be created.
Ringing...	You can assign a ringing tone to the caller's number (see also chapter 8.4.7.1, <i>Number Dependent Ringing Sounds</i> , page 135).
Play	The highlighted entry will be played. If you select this option during a call, your conversation partner can listen to the recording too.
Stop	The output of the highlighted section will be stopped.
Delete	The highlighted entry will be deleted.
To Phonebook..	The selected list entry is provided for editing in the "Add Entry" window. Click on "Add" and confirm the message which follows by clicking on "OK" in order to add the entry to your Personal Phonebook.
Clear list	The entire list will be deleted.
Export...	The highlighted entry will be saved as a WAV file (see <i>This is how you export recorded conversations</i> , page 116).
Show Contact	You can show an Outlook Contact or create a new one. For further information please refer to chapter 6.2.7, <i>Displaying and creating Outlook Contacts from lists</i> , page 54.

This is how you display the list of recorded conversations

View Recorded
Conversations

- 1 Go to the menu bar and click on "Lists" and select the option "Recorded Conversations...".

or

- 1 Click with the right mouse button "Conversation Recording".
- 2 In the shortcut menu, click on the option "Recorded Conversations...".

A list of the recorded conversations will be displayed.

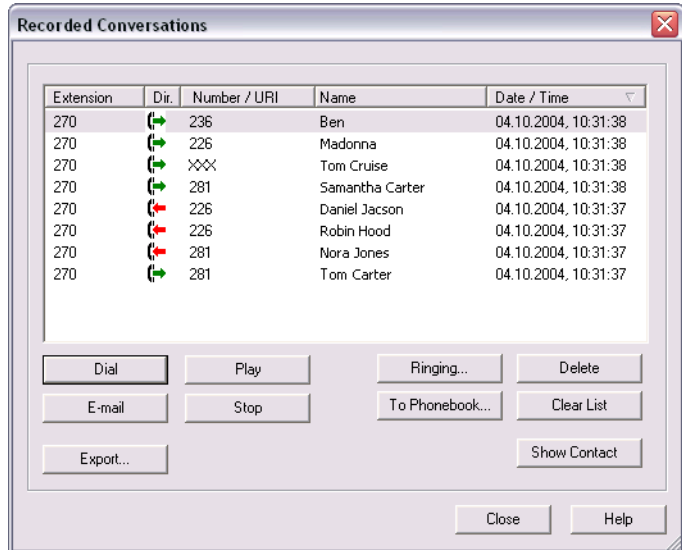


Fig. 20 A List of the Recorded Conversations

This is how you play a recorded conversation

Displaying the
List of
Recordings

- 1 Go to the menu bar and click on "Lists" and select the option "Recorded Conversations...".

A list of the recorded conversations will be displayed.

- 2 Highlight the conversation you want.
- 3 Click on "Play" to listen to the selected file. Click on "Stop" to discontinue the output.

You will now hear the conversation via your PC's speakers or in the handset.

This is how you export recorded conversations

Export
Recordings

- 1 Go to the menu bar and click on "Lists" and select the option "Recorded Conversations...".

A list of the recorded conversations will be displayed.

- ② Click on the "Export..." button.
The Export Recorded Conversations wizard will appear.
- ③ Click on "Next >". A list of the recorded conversations will appear. This contains all recorded conversations. As default, all recordings are highlighted for export.
- ④ In the first column, deactivate as necessary any recordings that you don't want to export.
- ⑤ Click on "Next >".
- ⑥ Select the directory into which the recording should be exported.
You can also say here whether an existing file should be overwritten, or whether this recording should not be exported.
- ⑦ The recordings will be saved as WAV files. In the process, the name of an exported file will be created as follows:
 - <Direction of the call>#
A differentiation is made between outgoing calls (OUT) and incoming calls (IN).
 - <Number of the user>#
This is the called extension (IN), or the extension from which the call was started (OUT).
 - <Name of the conversation partner>#
The name can only be given if the number has been assigned to a name.
 - <Number of the conversation partner>#
Will be displayed if one exists.
 - <Date of the call>#
Date in the format <yyyymmdd>
 - <Time of the call>
Time in the format <hhmmss>

Example:

The name

Out#123#Schulz, Eva#0012345678#20050217#155844.wav

means that an outgoing call from the number "123" to Eva Schulz with the number "0112345678" was recorded on February 17, 2005 at 15:58:44.

8 LANCOM Advanced VoIP Client Configuration

This chapter describes how to change LANCOM Advanced VoIP Client behavior and settings.

In the menu bar or in the shortcut menu click on "Settings".

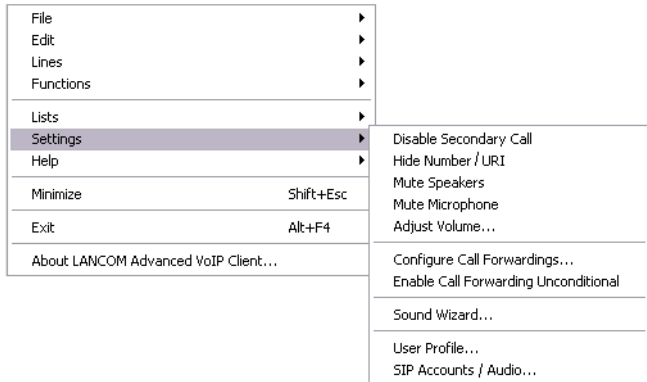


Fig. 1 Settings

Menu Item	Explanation
Disable Secondary Call	This function is used to avoid the signaling of other calls during a telephone conversation. For further information please refer to chapter 7.4.6, <i>Disable Secondary Call</i> , page 79.
Hide Number/URI	If Hide Number is activated, your external conversation partner will not receive your number on his display. For further information please refer to chapter 7.4.7, <i>Hide Number</i> , page 79.
Mute Speakers	You can switch the speaker on or off during a call. For further information please refer to chapter 8.1.2, <i>Mute Speakers</i> , page 121.
Mute Microphone	You can switch the microphone on or off during a call. For further information please refer to chapter 8.1.3, <i>Mute Microphone</i> , page 122.
Adjust Volume...	A slider for adjusting the volume will appear. For further information please refer to chapter 8.1.1, <i>Adjust Volume</i> , page 120.

Menu Item	Explanation
Configure Call Forwarding...	Configure Call Forwarding Unconditional, Call Forwarding No Reply and Call Forwarding Busy here.
Enable Call Forwarding Unconditional	Immediate Redirection is switched on or off here. For further information please refer to chapter 5.13, <i>How do I forward a call?</i> , page 43.
Sound Wizard...	Here you can optimize the settings of your telephone terminal (LANCOM VoIP USB Handset or LANCOM VoIP Client Headset). For further information please refer to chapter 8.3, <i>Sound Wizard</i> , page 124.
User Profile...	Here you will find all other settings, which can be assigned to a user. For further information please refer to chapter 8.4, <i>User Profile...</i> , page 125.
SIP Accounts / Audio	You will find all settings for your SIP accounts here, and also the audio settings. Further information about the audio settings can be found under <i>SIP Account / Audio</i> , page 140. You will find information for setting up the SIP Options under <i>Configuration of a SIP account</i> , page 154

8.1 Speaker and Microphone

You can switch the speaker and the microphone on or off and you can also regulate the volume.



Please note that you must start the Sound Wizard after installation in order to optimize the voice quality.

8.1.1 Adjust Volume

You can adjust the volume of the speakers at any time, even during a call. In general, the output that you currently hear is adjusted. This means, for example, that if there is an incoming call for you, you adjust the volume of the ringing; if you are having a conversation and are using the handset, this volume will be adjusted.

This is how you adjust the volume

You have several options:

Adjust Volume

- ① Use the slider on the interface (Skin).



or

- ① Go to the menu bar and click on "Settings | Adjust Volume...".

or

- ① Click with the right mouse button the loudspeaker symbol on the toolbar.
The shortcut menu will appear.

- ② Click on "Adjust Volume...".

or

- ① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

The shortcut menu will appear.

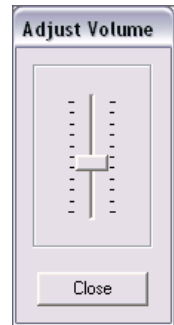
- ② Click on "Settings | Adjust Volume...".

The following window appears: "Volume".

- ③ You can change the volume of the speakers by moving the slider.

The changes go into effect immediately.

- ④ Click on "Close" to close the window.



To adjust the microphone volume during a call, open in Windows the volume mixer (Settings | Control Panel | Sounds and Multimedia) and adjust the volume there.



If you have configured different audio equipment for the call and for the ringing sounds, only the settings for the call are affected by this adjustment.

8.1.2 Mute Speakers

This function switches the speakers on or off.



If the speaker is set to mute (indicated by the grayed-out loudspeaker symbol on the LANCOM Advanced VoIP Client Skin or by the check mark ✓ in the menu), you can no longer hear your conversation partner.

This is how you mute the speaker

You have several options:

Mute Speakers

- ① Click on the loudspeaker symbol on the LANCOM Advanced VoIP Client Skin.

or

① Click on “Settings | Mute speakers”.

or

① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

The shortcut menu will appear.

② Click on “Settings | Mute speakers”.

Call this function again if you would like to hear your conversation partner again. The check mark and the cross will disappear.

8.1.3 Mute Microphone

This function switches the microphone on or off.

If the microphone is set to mute (indicated by the grayed-out microphone symbol on the LANCOM Advanced VoIP Client Skin or by the check mark ✓ in the menu), your conversation partner can no longer hear you.

This is how you mute the microphone

Mute Microphone

You have several options:

① Click on the Microphone symbol in the LANCOM Advanced VoIP Client display.

or

① Go to the menu bar and click on “Settings | Mute microphone”.

or

① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.

The shortcut menu will appear.

② Click on “Settings | Mute microphone”.

Call this function again if you would like to speak to your conversation partner again. The check mark and the cross will disappear.

8.2 Forwardings

Incoming calls can be redirected specifically to another number/URI using the “Forwarding” button.

You can indicate **when** the forwarding should take place:

- Call Forwarding (directly) Unconditional

Call Forwarding Unconditional redirects any call directly to the specified destination.

- Call Forwarding No Reply

Call Forwarding No Reply redirects calls delayed, i.e. after you have allowed the telephone on your desk to ring for a certain period of time.

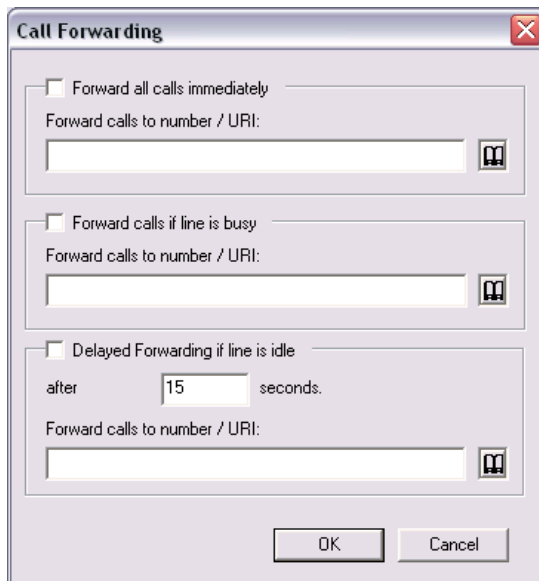
- Call Forwarding Busy.

This forwarding helps you to define whether telephone calls should be forwarded if your line is busy (i.e. you are on the telephone).

All three types of forwarding can be enabled simultaneously. The appropriate forwarding will be automatically used in each case.

This is how you redirect calls

- Forward Calls
- ① Open the Properties dialog, e.g. in the menu "Settings | Configure Forwarding...".
 - ② To activate unconditional forwarding, select the "Forward all calls immediately"



checkbox and specify the destination. This is the equivalent of activating the "Forwarding" button on the user interface.

The Call Forwarding destination can be

- entered directly
- or
- you can select it from the Phonebook.

or

- ③ Select the "Forward calls if line is busy" checkbox to activate a delayed forwarding (Call Forwarding No Reply), and specify the destination.

or

- ④ Activate the "Delayed forwarding if line is idle" checkbox in order to forward calls if you do not pick up the incoming call within this time period. Enter the time period and the destination.

Both types of Call Forwarding (No Reply or if the line is busy) can be active at the same time. When a call is received, LANCOM Advanced VoIP Client automatically recognizes whether the line is free or busy and it applies the appropriate type of Call Forwarding. However, one requirement for Call Forwarding Busy is that the function "Disable Secondary Call" is activated or all of your lines must be busy.



If a connection subject to costs is set up for the Call Forwarding, then these costs will be charged to you.

8.3 Sound Wizard

This function is used to call the Sound Wizard. The Sound Wizard makes certain that LANCOM Advanced VoIP Client is optimally adjusted to the audio equipment in order to guarantee the best possible speech quality. The Sound Wizard will be started automatically. Follow the instructions of the Sound Wizard to optimize the voice quality. If you would like to use other audio equipment, call the Sound Wizard again in order to adjust the new audio equipment.

This is how you start the Sound Wizard

- ① Go to the menu bar and click on "Settings | Sound Wizard...".
The Sound Wizard will appear.
- ② Please follow these instructions.
Click on "Next >".

Sound Wizard
Starting

- ③ Voice (Handset / Headset)

Select the audio device for the voice from the drop-down list. Use a "Direct Sound" device.

Play the test announcement and adjust the volume using the slider.

Click on "Next >".
- ④ Connection for hook off function

Select the device here that should signal hook on or hook off.

Click on "Next >".
- ⑤ Microphone Adjustment

Lift the handset or put on the headset.

Click on "Next >".
- ⑥ Microphone Adjustment

Speak a text in normal telephoning volume until the progress display has reached the end.

The Sound Wizard calibrates the microphone according to your speech. If an error occurs while recording, e.g. if you see no display of the voice volume, return to the previous page and select a different device.

Click on "Next >".
- ⑦ Ringing

Select the audio device for the ringing sounds from the drop-down list.

Play the test announcement and adjust the volume using the slider.

Click on "Next >".
- ⑧ Click "Finish".

The Sound Wizard is ended, and your changes will take effect immediately.



The volume can be adjusted directly from the interface - even during a call - (see chapter 8.1.1, *Adjust Volume*, page 120).

8.4 User Profile...

The User Profile contains user-specific information, such as the assignment of numbers to lines, the assignment of Speed Dials, and much more.

This is how you display your User Profile

You have several options:

Show User Profile

- ① Go to the menu bar and click on "Settings | User Profile...".

or

- ① Click with the right mouse button on the LANCOM Advanced VoIP Client user interface.
The shortcut menu will appear.
- ② Go to the menu bar and click on "Settings | User Profile...".
The "Properties of..." window will appear. It contains several tabs with your settings.

8.4.1 General

The basic telephoning behavior of LANCOM Advanced VoIP Client is defined on this tab.

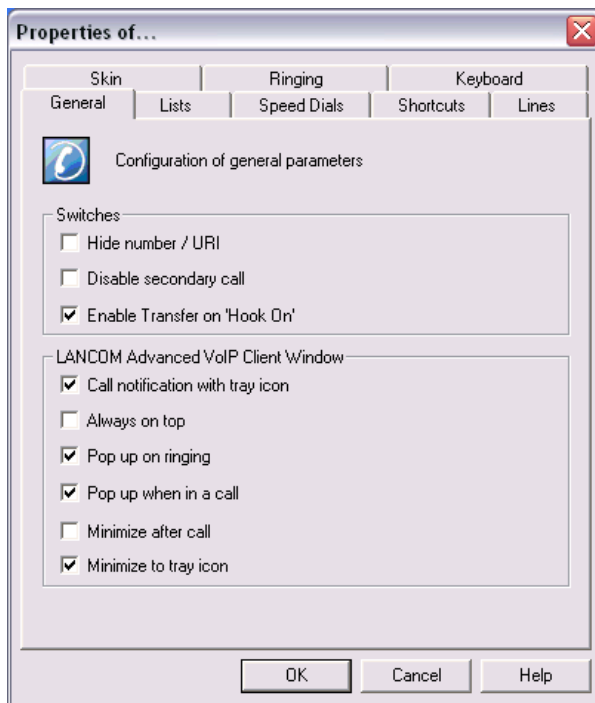


Fig. 2 General Settings

Switches

Under **Switches**, you can define the basic behavior of your LANCOM Advanced VoIP Client:

■ Hide Number/URI

Activate this option in order not to signal your own telephone number when making outgoing external calls.

Enabling this option is the equivalent of clicking on the “Hide Number” button. For further information please refer to chapter 7.4.7, *Hide Number*, page 79.

■ Disable Secondary Call

If you activate this option, no other calls will be displayed while you are on the telephone. A subscriber trying to call you will hear the busy signal or his call will be forwarded depending on your setting for *Call Forwarding if busy*. For further information please refer to chapter 7.4.15, *Forwarding*, page 109.

Enabling this option is the equivalent of clicking on the “Disable Secondary Call” button. For further information please refer to chapter 7.4.6, *Disable Secondary Call*, page 79.

■ Connect by going on hook

If this option is activated, you can automatically connect to calls to one another by going on hook:

This requires that you have two calls. If the call you have initiated is active, you can connect the two callers to one another by simply placing the handset on hook. You can activate this property “Transfer on Hookon”. If you did not initiate the active call (i.e. you received the call), the connection will be terminated by hook on. The second call will remain on hold.

Example:

Subscriber A is called by C. Then subscriber A begins a second call on another line to subscriber B (e.g. for an Inquiry Call). If A goes on hook, subscribers B and C are then connected to one another.



You must place the handset on hook. If you click on the LANCOM Advanced VoIP Client interface to end the connection, the two lines will **not** be connected to one another.

If this option is not activated, the active call will be ended and the other one will be kept on hold.

LANCOM Advanced VoIP Client Window

These settings only affect the behavior of the LANCOM Advanced VoIP Client window.

- Call notification with tray icon

In this case, a call is indicated by an information balloon, i.e. the active window does not change. You can then pick up the call by lifting the handset or by double-clicking on the tray icon.

- Always on top

If this option is activated, the LANCOM Advanced VoIP Client window will always be shown on top.

- Pop up on ringing

Activate this option in order have the LANCOM Advanced VoIP Client window pop up and be immediately ready for entries when a call is received.

- Pop up when in a call

If you activate this option, the LANCOM Advanced VoIP Client window will appear in the foreground if you lift the handset.

- Minimize after call

If this option is activated, the LANCOM Advanced VoIP Client window will be closed automatically after all calls have been completed, and will be shown as a tray icon.

- Minimize to tray icon

Activate this option in order to display LANCOM Advanced VoIP Client as a symbol (Tray Icon) only in its minimized state. Otherwise LANCOM Advanced VoIP Client will be shown as a Tray Icon **and** as a button in the taskbar.

8.4.2 Lists

This tab is used to configure the Caller List and the behavior of Redial.

All of your incoming calls, including information about how the call was handled, are saved in the Caller List. The Redial List contains information about your most recent calls or connection attempts. Furthermore, you can also define the behavior of Automatic Redial here.

- **Configure Caller List and Redial**

Here you define how many entries may be contained in your Caller List and in your Redial list, in addition to setting the Redial mode.

This is how you define the properties of the Caller List and Redial

Configure Caller List and Redial

- ① Enter the maximum number of entries to be included in the Caller List in the field "Maximum length" located under "Caller List".



Fig. 3 List Settings

- If this length limitation is exceeded, the oldest entry in the list will be deleted.
- ② Enter the maximum number of entries to be included in the Redial List in the field "Maximum length" located under "Redial List".
 - ③ Select the check box "Dial immediately" if the number or subscriber selected should be dialed immediately.
If this option is deactivated, you can still change the telephone number before the actual dialing procedure takes place.
 - ④ Under "Automatic Redial", activate the option "Always use automatic redial", if you would like to directly initiate the Automatic Redial of the last number using the Redial button.
 - ⑤ If this option is deactivated, only a single Redial of the number dialed last will be started.
 - ⑥ Click on "OK".

8.4.3 Speed Dials

This tab is used to configure all your Speed Dials.

This is how you define the properties of Speed Dials

- ① In the first field, you define the maximum number of Speed Dials to be displayed.
- Configuring a Speed Dial

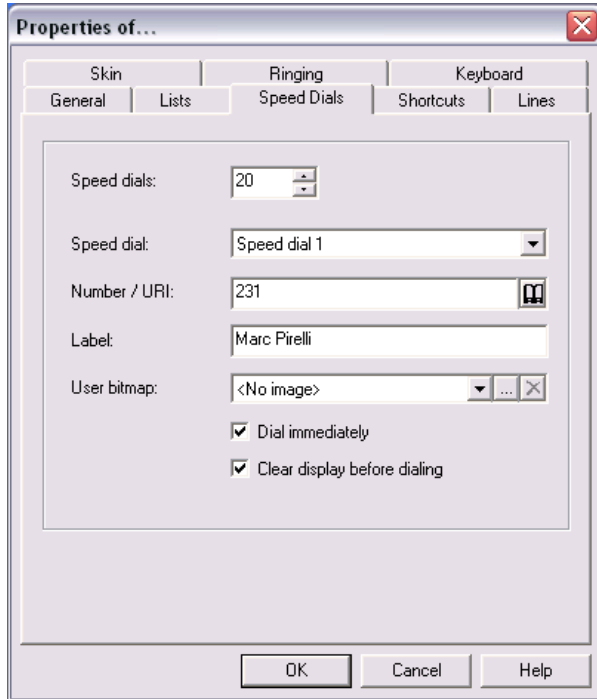


Fig. 4 Configuration of the Speed Dial

- ② Open the "Speed Dial" drop-down list and select the Speed Dial to be configured.
- ③ Enter the properties of this Speed Dial, such as the number, the label, an associated picture (if the Skin allows this) and the dialing mode.
- ④ Define whether
- you would like to dial the number immediately. This means that with one click on the button, the connection will be immediately initiated.
 - the display should be deleted before dialing. This means that only the number configured here will be shown in the display. No code will precede the number.

You can directly configure all of the Speed Dials you use, one after another. For further information please refer to chapter 7.4.10, *Speed dial*, page 96.



Only those buttons, which have been defined according to the Skin definition (e.g. Buttons 1-5 and Button 7), will be shown on the Skin.

8.4.4 Shortcut Buttons

This tab is used to configure your Shortcuts.

Shortcuts are used to create links to frequently used programs and web pages. This allows you to call, for example, an Internet search machine or start a customer database with just one click on the button.

This is how you link a program or an Internet address to a Shortcut button

Assigning a Shortcut

- ① In the first field, you define the maximum number of Shortcut buttons to be displayed.

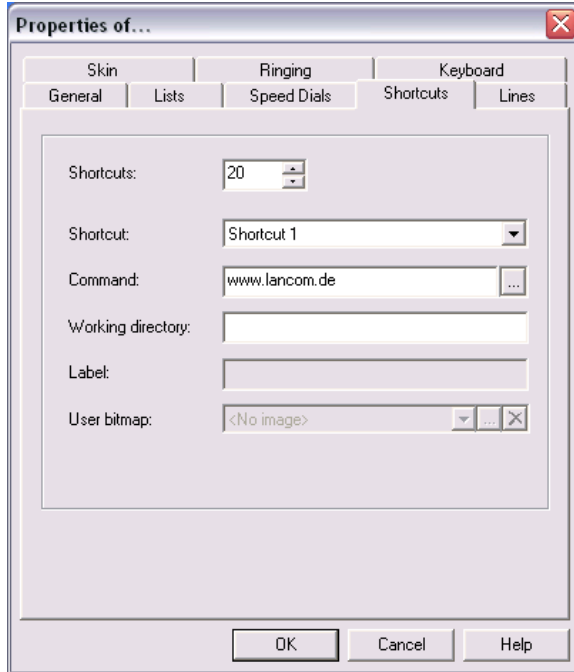


Fig. 5 Shortcut Properties

- ② Open the "Shortcut" drop-down list and select the Shortcut button to be configured.
- ③ Then enter all of the necessary parameters, such as the command line, the working directory and the label of the button.

For further information please refer to chapter 7.4.11, *The Shortcut Button*, page 98.



Only those buttons, which have been defined according to the Skin definition (e.g. Buttons 1-5 and Button 7), will be shown on the Skin.

8.4.5 Line Buttons

This tab is used to configure your Lines.

This is how you define the properties of the Line buttons

- ① In the first field, you define the maximum number of Line buttons to be displayed.
- Configuring a Line Button

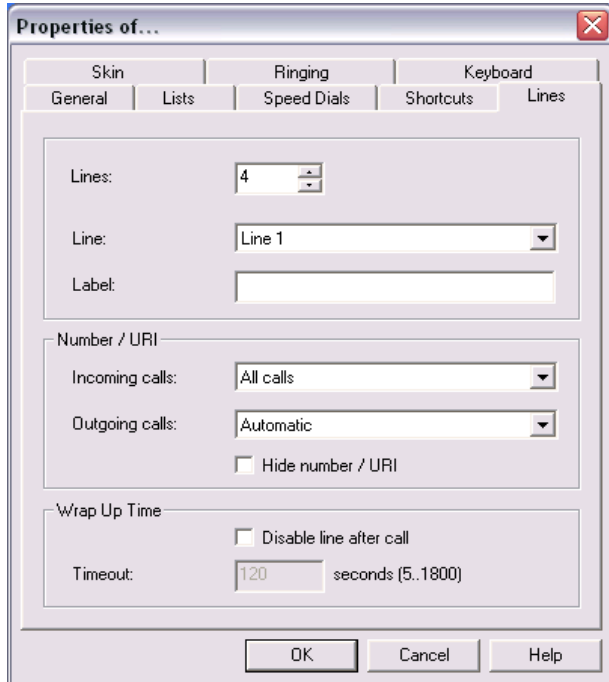


Fig. 6 Line Button Properties

- ② Open the "Line" drop-down list and select the Line to be configured.
- ③ Then enter the properties of the Line button, such as the label, the associated incoming and outgoing numbers and if necessary a wrap-up time.

For further information please refer to chapter 7.4.8, *Line button*, page 80.



Only those buttons, which have been defined according to the Skin definition (e.g. Buttons 1-5 and Button 7), will be shown on the Skin.

8.4.6 Skin

On this tab you can load another Skin.

This is how you load another Skin

- ① Select the Skin you want from the “Skin” drop-down list.

Load Skin

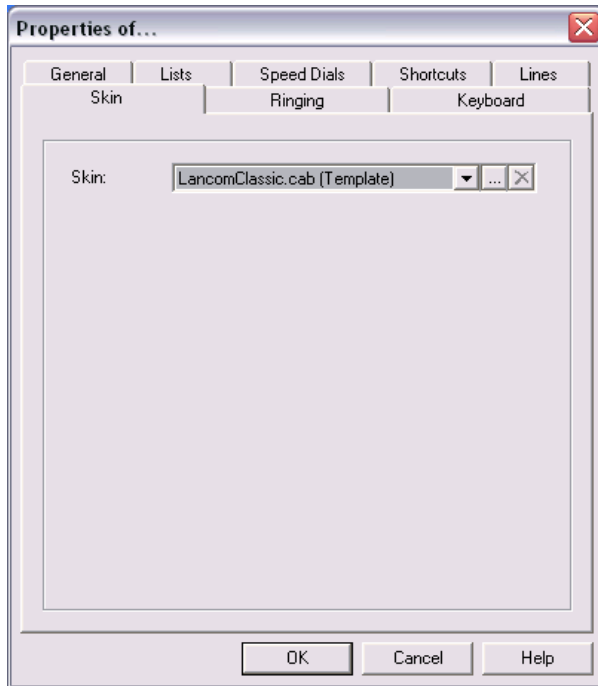


Fig. 7 Skin Properties

- ② Click on “OK”.



If you have loaded a Skin, which has fewer Line buttons than your previous Skin, your Line configuration will remain the same. All Lines which are not visible on the current Skin are assigned to the first available Line button, so that none of your calls will be lost. If you later use a Skin with more available Line buttons, then the old line configuration will be used again.

8.4.7 Ringing

You can define the telephone ring for calls on the “Ringing” tab.

It is now possible to select ringing tones which are dependent on the caller or on the extension dialed (see chapter 8.4.7.1, *Number Dependent Ringing Sounds*). Otherwise you can only configure a signaling via the interface (see chapter K, *Silent “Ringing”*). The call waiting tone for the secondary call can be switched off (see chapter K, *Secondary Call Signaling Only Visually*).

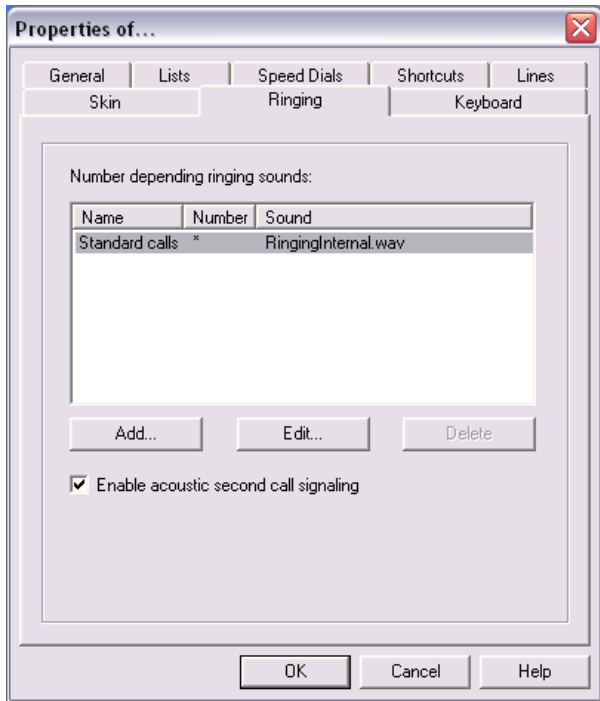
You can use any type of files that are supported by Windows Media Player (e.g. WAV, MP3, WMA) as a ringing signal or record new ringing sounds using LANCOM Advanced VoIP Client.

8.4.7.1 Number Dependent Ringing Sounds

Depending on the number of the caller, LANCOM Advanced VoIP Client can select different ringing sounds. Alternatively you can also enter your extension here. In this case it will ring differently depending on the extension called.

This is how you define different ringing soundsConfiguring
ringing sounds

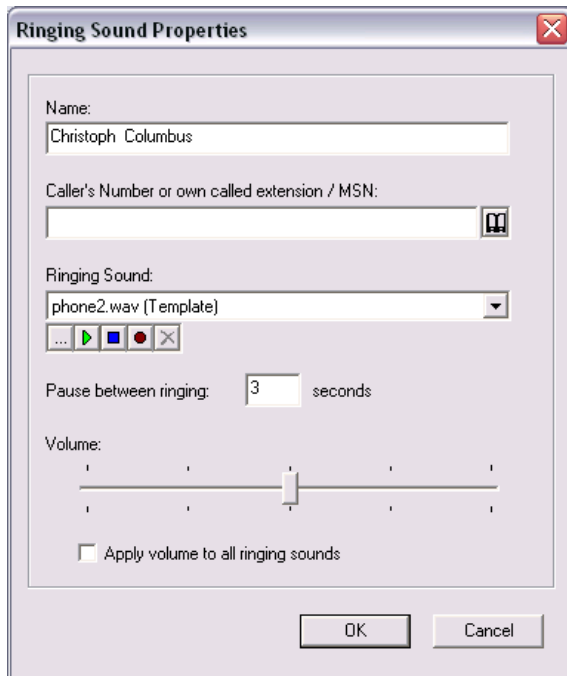
- ① Go to the menu bar and click on "Settings | User Profile...".



The "Properties of..." page opens.

- ② Select the "Ringing" tab.
- ③ On this tab you will find all numbers or number masks with the ringing sounds assigned to them. You can change or delete the existing entries or add new entries.

- Click on "Add..." to define a special ringing sound.



- Define the name and number of the caller.
You can use the dummies "*" for more than one character, "?" for exactly one character.
The ringing sound selected is always the one providing the best possible match.
- Define the ringing sound. To do this select a file from the drop-down list, look for a sound or record a sound here.
- Define the interval between the two rings.
- Define the volume of the ringing sound.
- If you would like to apply this volume to all ringing sounds, activate the option "Apply volume to all ringing sounds".
- Click on "OK".
Return to the "Ringing" tab.

- ⑪ Define whether you would like to hear a call waiting tone in the handset when a second call is received.
If the checkbox is not activated, a secondary call will only be signaled on the PC interface (silent secondary call signaling).
- ⑫ Click on "OK".

■ Secondary Call Signaling Only Visually

You can indicate whether a secondary call is only signaled optically (on the LANCOM Advanced VoIP Client Skin) or whether a call waiting tone should be audible in the handset. In the default setting the call waiting tone is on. To do this, open the "Ringing" tab and deactivate the option "Call Waiting for Secondary Calls" (see *This is how you define different ringing sounds*, page 136).

■ Silent "Ringing"

If you do not wish to have any acoustic signal when a call is received, select from the drop-down list "Ringing sound" the option "no sound" for this number (see *This is how you define different ringing sounds*, page 136). LANCOM Advanced VoIP Client will then signal an incoming call via the interface, e.g. animation of the line or – if it has been configured in the user settings – by a LANCOM Advanced VoIP Client window in the foreground or an information balloon.

8.4.8 Keyboard

The "Keyboard" tab will help you to define individual Hotkeys for the most important LANCOM Advanced VoIP Client functions.

- Bring LANCOM Advanced VoIP Client to Foreground
- Hook off / hook on
- Numbers 0-9, hash button, star, backspace
- Redial, Hold, Phonebook, Call Swap, Call Transfer
- Minimize window
- Dial highlighted number
- Personal Phonebook
- Quieter, Louder
- All Speed Dials



These Hotkeys will then be valid for all programs. For example, if you define the F5 key as a Hotkey for a LANCOM Advanced VoIP Client function, the standard Windows function "Refresh" (e.g. for the view) will no longer work; the corresponding LANCOM Advanced VoIP Client function will be called instead. If you would like to restore the original function, just delete the Hotkey defined for LANCOM Advanced VoIP Client.

This is how you define a Hotkey

- ① Go to the menu bar and click on "Settings | User Profile...".

Behavior of
Return Key and
Num Key

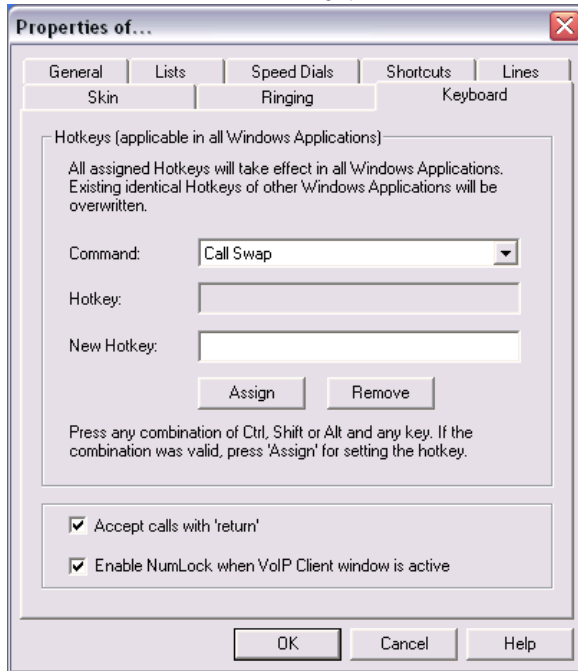


Fig. 8 Hotkey Definition

The "Properties of..." page opens.

- ② Select the "Keyboard" tab.
- ③ From the dropdown list select a function.
If one Hotkey has already been assigned, this will be indicated in the field "Hotkey".
- ④ Click on the field "New Hotkey".
You can now enter a Hotkey by pressing the key sequence.

- ⑤ Click on "Assign" to assign the Hotkey you have chosen.
LANCOM Advanced VoIP Client will now check whether the Hotkey you have chosen has already been assigned elsewhere. If it has, you will receive a message.
You must then repeat step 4.
- ⑥ If you activate "Accept calls with 'Return'", you can pick up the call by pressing the 'Return' button. If you are telephoning with a headset, this will be activated. If you are telephoning with a handset, handsfree telephoning will be activated - if it is available. Otherwise only the speakers will be activated.
- ⑦ If you activate "Switch on Num key when LANCOM Advanced VoIP Client window is active", you can immediately enter the number using the numeric keypad in the case of an **activated** LANCOM Advanced VoIP Client window. If this checkbox is not activated, you can still enter a number after pressing the Num key, even if the LANCOM Advanced VoIP Client window is not active. The LANCOM Advanced VoIP Client window will open with the entered number in the display.
- ⑧ Click on "OK".

This is how you delete a Hotkey

- Delete Hotkey
- ① If you would like to delete a Hotkey, select the associated function from the drop-down list.
 - ② The assigned Hotkey will be shown under "Hotkey".
 - ③ Click on "Remove" to delete the entered Hotkey.
 - ④ Click on "OK".



When you delete a LANCOM Advanced VoIP Client Hotkey, the original Windows Hotkey function is restored.

8.4.9 SIP Account / Audio

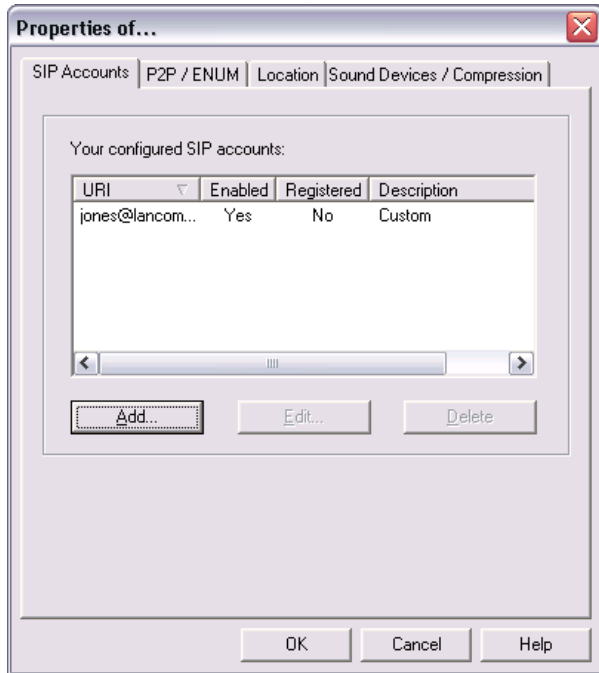
Here you can define all local settings.

This includes e.g. the definition of the SIP account, or settings for the speech quality.

This is how you define the settings for your LANCOM Advanced VoIP Client computer

- ① Go to the menu bar and click on "Settings | SIP Accounts / Audio".
The "Properties of..." page opens.
Select the "SIP Accounts" tab

Configure
LANCOM
Advanced VoIP
Client locally



Here you will see your configured SIP accounts with the current state (registered or not registered). You have the option of configuring further accounts, or of deleting or changing existing accounts.

You will find detailed information for setting up a SIP account under Chapter 9.4, *Configuration of a SIP account, page 154*

- Switch to the " Sound Devices/Compression" tab.

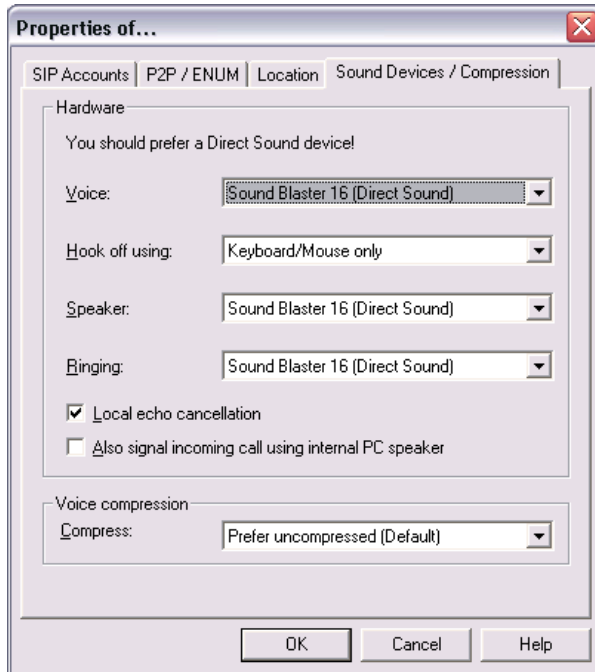


Fig. 9 Local Settings for the Sound Devices for LANCOM Advanced VoIP Client

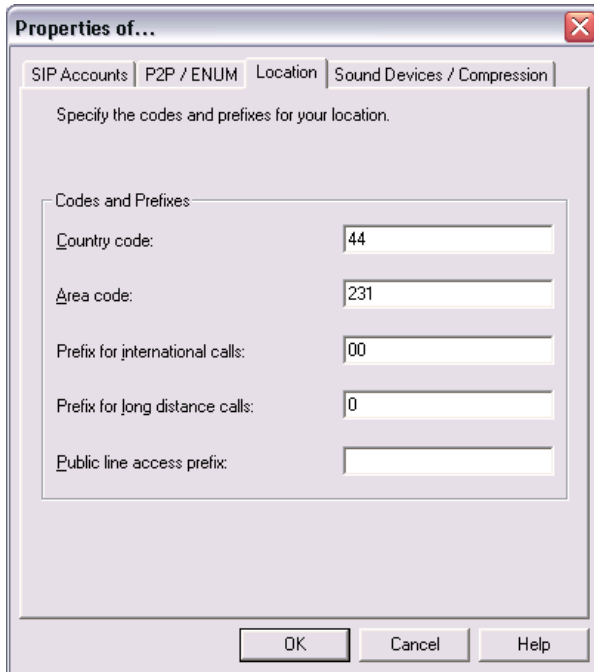
- Under "Hardware", select the sound device to be used for voice from the "Voice" drop-down list.
- In the field "Hook off using", you can enter which interface should be signaled for handset hook on and hook off.
- In the field "Ringing", you enter the output device to be used for signaling the ringing.

You can, for example, carry out a call via a headset, which is connected to USB, and the signaling of the ringing can still be produced via the soundcard to the connected speakers.

- Define here whether the local echo cancellation should be activated. (Default setting: on) Only deactivate echo cancellation if it interferes with the computer capacity of your PC.

- ⑦ When you switch on the option “Also signal incoming call using internal PC speaker”, a signal will also be produced over the PC speakers, in addition to the telephone ring for incoming calls which is played using the soundcard. This is particularly helpful if you use a LANCOM VoIP Client Headset but you do not constantly wear it.
- ⑧ Under „Voice Compression”, you can select the compression type. If you use compression, the amount of data to be transmitted is reduced - however, this can lead to lesser quality. The following voice compression settings are available:
- Never: No compression will be used.
 - Always (Home Office): Compression is always used.
 - Prefer uncompressed (Default): No compression, if possible. Compression is only used, if the opposite terminal supports compressed calls only, or if the caller prefers compression.
 - Prefer compressed (Low bandwidth): Compression is used, if possible. Compression is not used, if the opposite terminal supports uncompressed calls only, or if the caller prefers no compression.

- ⑨ Move to the „Location“ tab.



- ⑩ Enter the codes and prefixes for your location. These are necessary for a correct telephone number resolution for your Outlook contacts, for example.
- ⑪ Define a public line access, if necessary. This is only required in certain scenarios, such as in connection with a VoIP gateway.
- ⑫ Click on "OK".



If a sound device for voice was selected that is not supported by LANCOM Advanced VoIP Client, the Sound Wizard will automatically start as soon as the dialog "LANCOM Advanced VoIP Client - Sound Devices" is closed by clicking on "OK".



We recommend running the Sound Wizard in order to guarantee the optimal configuration of the audio equipment.

8.5 Call from the command line

You can also start LANCOM Advanced VoIP Client from the command line. In this case you can use the following parameter to start LANCOM Advanced VoIP Client minimized.

Parameters	Explanation
-M or -m	Minimize to tray icon Activate this option in order to display LANCOM Advanced VoIP Client in the taskbar as a symbol (Tray Icon) only in its minimized state. Otherwise LANCOM Advanced VoIP Client will be shown as a Tray Icon and as a button in the taskbar.

Example:

```
LANCOM Advanced VoIP Client.exe -M
```



If LANCOM Advanced VoIP Client has already been started, any additional calls will be ignored.

9 Installing and Uninstalling LANCOM Advanced VoIP Client

This chapter describes how to both install and uninstall LANCOM Advanced VoIP Client and the corresponding output devices (LANCOM VoIP USB Handset or LANCOM VoIP Client Headset).

After the installation has been successfully completed, you will find a link to LANCOM Advanced VoIP Client on your desktop, LANCOM Advanced VoIP Client in the Windows Start menu, and in the Windows StartUp menu.

9.1 Requirements

LANCOM Advanced VoIP Client

Your PC must fulfill certain requirements in order for you to be able to use LANCOM Advanced VoIP Client:

- Intel Pentium III 700 MHz processor or higher
- 512 MB RAM
- at least 25 MB of free disk space
- A graphics adapter with a minimum resolution of 800 x 600 pixels and with at least 15 bit color depth (32767 colors)
- DirectX 8
- a full duplex capable sound card with one of the following sound devices connected: LANCOM VoIP USB Handset, LANCOM VoIP Client Headset, headset from another manufacturer
- Network Adapter
- Operating system: Windows 2000, Windows XP Professional or Windows Vista with installed TCP/IP protocol (for data transfer)

SIP provider

In order to telephone with LANCOM Advanced VoIP Client, you need a SIP account with a VoIP provider. Alternatively, you can also via peer-to-peer/ENUM.

For further information please refer to *Configuration of a SIP account*, page 154.

9.2 Preparation for Installation

The LANCOM Advanced VoIP Client installation program automatically checks whether the installation requirements have been fulfilled. If not, a message indicating this will be displayed and the installation will be cancelled.

9.2.1 Install LANCOM VoIP USB Handset

Connect the USB plug on the LANCOM VoIP USB Handset to a USB port of the PC. The handset will be recognized by the operating system and is available in LANCOM Advanced VoIP Client as a sound device.

9.2.2 Install LANCOM VoIP Client Headset

The LANCOM VoIP Client Headset enables you to telephone comfortably and, for example, lets you type with both hands at the same time.

■ Connection via USB

If a LANCOM VoIP Client Headset is connected to the PC via USB, the adapter will be recognized by the operating system and is directly available to you in LANCOM Advanced VoIP Client.

■ Connection via the soundcard

If a LANCOM VoIP Client Headset is connected via USB to the PC, after the connection is made please start the Sound Wizard in the menu bar of LANCOM Advanced VoIP Client under "Settings" in order to optimize the sound quality.

The Sound Wizard can be called again when necessary. For further information please refer to chapter 8.3, *Sound Wizard*, page 124.

9.2.3 Operating the LANCOM VoIP USB Handset / LANCOM VoIP Client Headset without Additional Speakers

If you use the LANCOM VoIP Client Headset or if you operate the LANCOM VoIP USB Handset without additional speakers, you will not have an output device for the ringing sounds. However, in this situation you can activate an option to have incoming calls signaled using the internal PC speakers. You can activate this option on the "Sound Devices" tab under the menu item "Settings | SIP Accounts / Audio".

9.3 LANCOM Advanced VoIP Client - Installation of the Software

LANCOM Advanced VoIP Client is distinguished by easy and user-friendly install and uninstall processes, which can be carried out quickly with basic knowledge of Windows.

9.3.1 Installation

The installation is carried out with the help of the standard buttons “< Back”, “Next >” and “Cancel”. If you would like to change entries in a previous window, click on “< Back” until you come to the window you want, change your entries, and then continue by clicking on “Next >”. If you would like to stop the installation, click on “Cancel”.



For the installation of LANCOM Advanced VoIP Client using the Windows 2000/XP Professional operating system, you will need administrator rights on the PC.

This is how you install LANCOM Advanced VoIP Client

Install LANCOM
Advanced VoIP
Client

- ① Close Microsoft Outlook before beginning the installation.
If Outlook is not closed, it is possible that not all components will be correctly installed.
- ② Start the installation by inserting the installation CD, or double-click in the installation directory on the file "LANCOM Advanced VoIP ClientEnglishUK.msi". If you carry out the installation from the CD, a start page appears, from which you can start the installation. If you start the MSI file directly, the installation wizard is started at once.
- ③ Please follow these instruction and then click on "Next >".
- ④ License agreement:
You have several options:
 - Activate the checkbox "I accept the license agreement." And click on "Next >".
 - If you do not accept the license agreement, stop the installation by clicking on "Cancel".
- ⑤ User Information:
Note the current information for this version.
Click on "Next >".
- ⑥ Installation type:
You have several options:
 - Click on the option "Typical" to run the LANCOM Advanced VoIP Client

- default installation. Then click on "Next >" and proceed with step 8.
- Click on the option "Custom". With this option, you can specify the installation directory and the components to be installed. You should only choose this option if you are familiar with the LANCOM Advanced VoIP Client components. Then click on "Next >" and proceed with step 7.
 - Click on the option "Complete". With this option, you install all available components of LANCOM Advanced VoIP Client. Then click on "Next >" and proceed with step 8.
- ⑦ If you have chosen "Custom", you can now select further installation options. For further information please refer to *User-defined Installation*, page 150.
- If you don't want to install LANCOM Advanced VoIP Client in the given directory, you can change the installation directory using the "Browse" button. You can use the "Disk space" button to find out the available memory space on your computer. All local drives and all linked network files are taken into account. This allows you to determine whether there is sufficient memory available for the components you have selected.
- You can restore the standard settings for the components (corresponding to installation type "Typical") with the "Reset" button.
- Click on "Next >".
- ⑧ Start installation
- With "< Back" you can check or correct your entries.
- Click on "Install" to start the installation of LANCOM Advanced VoIP Client.
- ⑨ After the installation has been successfully completed, this is indicated in the installation wizard. You can then close the wizard with the "Exit" button.

9.3.2 User-defined Installation

The following functions and components can be installed in the LANCOM Advanced VoIP Client installation:

Components:

■ MS Outlook AddIn

This component allows you to telephone from Outlook (see also chapter 6, *Microsoft Outlook – Telephoning with LANCOM Advanced VoIP Client*, page 45).

■ Lotus Notes AddIn

This component allows you to telephone from Lotus Notes.

■ TAPI Service Provider

You can telephone from third party applications with TAPI (see also App. B.; *Telephoning from Third Party Applications*, page 163).

If you select the "Typical" setting during "LANCOM Advanced VoIP Client" installation, only the component "MS Outlook AddIn" will be installed.

Functions:

■ Desktop link

A link is automatically created on the desktop during installation.

■ Add LANCOM Advanced VoIP Client to Startup group

LANCOM Advanced VoIP Client is automatically added to the Startup group during installation, i.e. it is automatically started each time Windows is started.

■ Quickstart documentation

A link to the abridged documentation "Quickstart" is created in the Start menu during installation. This document consists of a PDF file that you can print out for speedy reference.

If you choose "Typical" when installing LANCOM Advanced VoIP Client, all three functions will be installed.

If you want to modify the scope of the LANCOM Advanced VoIP Client functions later, proceed as for an update and change the settings accordingly.

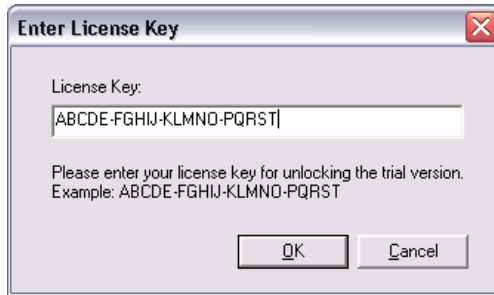
9.3.3 License Keys

Before you can use LANCOM Advanced VoIP Client, you may have to enter a license key. Depending on the product variant, a license key may be required (possibly after expiry of a test mode period). This will be indicated by a corresponding message.

This is how you enter the license key

- ① In the "Help" menu, choose the option "Enter License Key".
- ② Enter your license key in the dialog field, and confirm the dialog with "OK".

Entering the
License Key



9.3.4 Installation from the Command Line

You can also start the installation of LANCOM Advanced VoIP Client via a call from the command line. Start the installation with the command "msiexec /i". You can control the scope and the progress of the installation with certain parameters.

Example 1:

You want to install LANCOM Advanced VoIP Client without additional functions, along with the Quickstart documentation. The installation should take place without user intervention (silent installation):

```
msiexec /i "LANCOM Advanced VoIP Client.msi" /qb+
ADDLOCAL="PhoneClient,Quickstart"
```

Example 2:

You want to install LANCOM Advanced VoIP Client with all available functions, along with the Quickstart documentation. The user should have the chance to alter these parameters through the installation wizard's interface during installation:

```
msiexec /i "LANCOM Advanced VoIP
ClientEnglishUK.msi" ADDLOCAL="All"
```

You can use the following parameters:

Parameters	Explanation
msiexec /i	Start of installation
LancomVoIPClient-English.msi	Name of installation file Please check that the name of the MSI installation file is correct.

Parameters	Explanation
/qbs+	Silent installation The installation of LANCOM Advanced VoIP Client does not require any user entries. If you don't use this parameter, the installation wizard is started as for the normal installation. Each separate step must then be confirmed with the "Next" button, and the predefined options can be changed.
ADDLOCAL	Definition of the functions You will find the available features and components in the following table.
/help	Help function This option displays further parameters of the Windows Installer, which you may be able to use.

The following table contains the features valid for ADDLOCAL:

Parameters	Component name
All	All available options are installed.
PhoneClient	LANCOM Advanced VoIP Client, this option MUST be specified, unless you use the parameter "All".
ODialer	MS Outlook AddIn
NotesAccess	Lotus Notes AddIn
CLMgrTSP	TAPI Service Provider
DesktopShortcut	Desktop link
StartupShortcut	LANCOM Advanced VoIP Client added to Startup group
Quickstart	Quickstart documentation

Further information about the components/features can be found under Chapter 9.3.2, *User-defined Installation*, page 150.

9.3.5 Update

If you are using LANCOM Advanced VoIP Client in an older version, or want to modify the scope of the installation, you can update your version.

This is how you update your LANCOM Advanced VoIP Client version

- ① If LANCOM Advanced VoIP Client is currently active, quit LANCOM Advanced VoIP Client.
- ② Close Microsoft Outlook if necessary.

- ③ Start the update by inserting the installation CD, or double-click in the installation directory on the file "LancomVoIPClientEnglishUK.msi". If you carry out the installation from the CD, a start page appears, from which you can start the installation. If you start the MSI file directly, the installation wizard is started at once.
- ④ Select the option "Install / Update LANCOM Advanced VoIP Client".
The Setup will now update your LANCOM Advanced VoIP Client.
- ⑤ Follow the familiar instructions to execute the update.
Your personal settings will remain unchanged.

9.3.6 Uninstall

The uninstall of LANCOM Advanced VoIP Client is carried out in a user-friendly manner via the Control Panel.

How to uninstall LANCOM Advanced VoIP Client



To uninstall LANCOM Advanced VoIP Client, you will need administrator rights on this PC .

LANCOM
Advanced VoIP
Client Uninstall

- ① Close Microsoft Outlook if necessary.
- ② Open the Windows Control Panel ("Start | Settings | Control Panel").
- ③ Double-click on "Software".
- ④ In the select list, highlight LANCOM Advanced VoIP Client and click on "Remove".
- ⑤ Confirm the message asking whether you really want to uninstall LANCOM Advanced VoIP Client with "Yes".
The uninstall process will be carried out automatically.
- ⑥ Click on "OK" to close the "Program Properties" window.

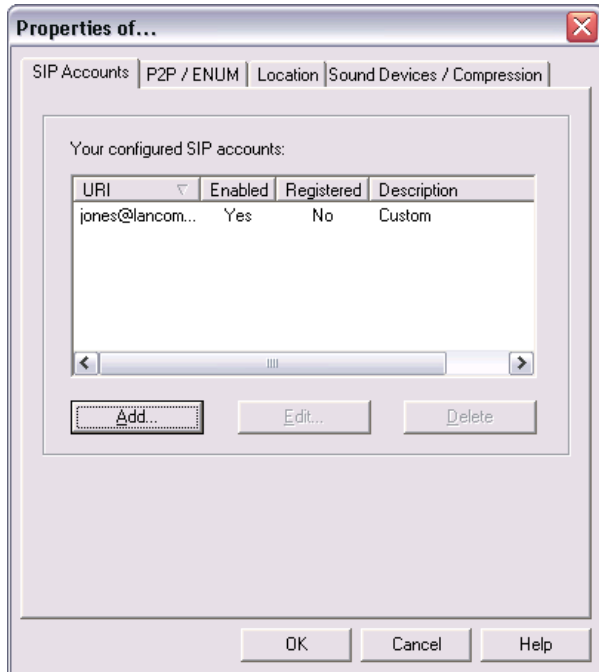
9.4 Configuration of a SIP account

In order to telephone with LANCOM Advanced VoIP Client, you need a SIP account with a VoIP provider. Alternatively, you can also via peer-to-peer/ENUM.

In LANCOM Advanced VoIP Client, various SIP providers are pre-configured, so that you only have to enter here the user data that you receive from your SIP provider. You can also configure other provider data.

This is how you configure a SIP account

- ① In the "Settings" menu, select the option "SIP Accounts/Audio".
- Set up SIP account



- ② Select the "SIP Accounts" tab. All your configured SIP accounts are listed on this tab with their state (registered or not registered).

- ③ To create a new account, click the "Add" button.

The dialog field "Edit SIP Account" is opened. Please note that the names given here can vary according to the provider.

The screenshot shows the "Edit SIP Account" dialog box. It has a title bar with a close button (X). The dialog is divided into two main sections: "SIP Account" and "Authentication".

SIP Account section:

- Provider:** A dropdown menu currently showing "Custom".
- Enable account:** A checkbox that is checked.
- Details...:** A button to the right of the "Enable account" checkbox.
- User ID:** A text input field containing "christoph.columbus".
- Description:** An empty text input field.

Authentication section:

- User name:** A text input field containing "Columbus".
- Password:** An empty text input field.
- Confirm password:** An empty text input field.

At the bottom of the dialog are two buttons: "OK" and "Cancel".

Select a pre-configured provider from the list of providers, or choose the option "Custom" if you want to enter the details yourself.

Choose the option „Automatic“, if your system has a configured VoIP router. LANCOM Advanced VoIP Client logs on directly to this after you have entered your user data (see **(d)**), and you do not need to specify the server name.

- ④ In the field "User ID", please enter your user ID. You are given this ID by your provider, and it is the first component of your SIP-URI (e.g. "Jones" in Jones@Lancom.com).
- ⑤ Enter a label for the account in "Description". This entry is optional.
- ⑥ In the lower half, you must enter your authentication data for logging on to the SIP provider. Your provider gives you the user name and the password for the logon.
- ⑦ You can use the "Enable account" button to specify that this account can be used. If this option is activated, LANCOM Advanced VoIP Client logs on to the relevant provider with this account each time it starts.

- ⑧ Click on the "Details" button to configure the particulars of the provider. If you have not selected a predefined provider from the list, you must enter this information here. If you have selected a predefined provider, you can display the predefined settings here. In this case, however, it is not possible to edit them.

SIP Provider Settings

Enter the parameters you got from your provider. At least the SIP Proxy address must be specified.

	Server name:	Port:
SIP Proxy:	<input type="text" value="server.lancom.de"/>	: <input type="text" value="5060"/>
Registrar:	<input type="text" value="server.lancom.de"/>	: <input type="text" value="5060"/>
Realm:	<input type="text" value="lancom.de"/>	
STUN server:	<input type="text"/>	: <input type="text" value="3478"/>
DTMF mode:	<input type="text" value="RFC 2833 Event"/>	

OK Cancel

- ⑨ In the fields "SIP Proxy", "Registrar" (logon server), "Realm" (domain, name range) and STUN server, enter the corresponding information, which you have received from your SIP provider. At least the SIP Proxy address must be specified. These ports are preset with standard values, and need not normally be adapted.
- ⑩ In the field "DTMF mode", select the DTMF mode to be used. The correct mode in the individual case depends on the provider.
- ⑪ Confirm your entries with "OK".

If the account is enabled, LANCOM Advanced VoIP Client logs on directly to the relevant provider. You can also start a new logon to all enabled accounts manually, from the menu "File | Reregister SIP Accounts".

9.4.1 Configuration of Peer-to-peer/ENUM

You can use peer-to-peer (P2P) to reach a conversation partner directly via the Internet, without the more circuitous path through a VoIP provider or even a telephone line. If you know the "Internet number" (SIP-URI) of the person you wish to speak to, the connection can be established directly via the Internet.

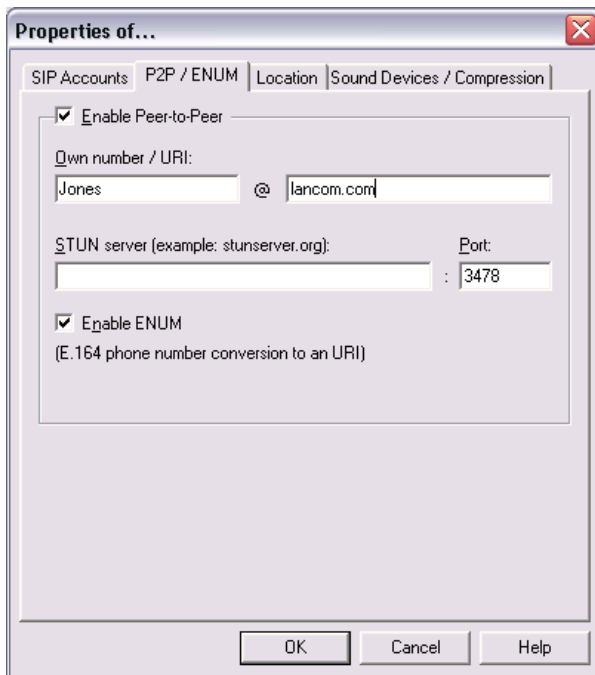
ENUM stands for "TElephone **N**umber **M**apping", and is based on the Internet's Domain Name System (DNS). This is a system that maps phone numbers on a domain globally. ENUM is thus a form of "phonebook", in which actually existing numbers are transferred to the Internet. You can register a normal telephone number in the classic number format (according to E.164, e.g. 49231999888) with ENUM. This number is associated with a SIP-URI by querying ENUM. You can then be reached directly via the Internet with a normal telephone number.

If you activate the ENUM query, LANCOM Advanced VoIP Client searches for the dialed number in the ENUM directory, and can then forward the call directly to the correct address. The telephone connection is established directly between the two telephony terminals.

This is how you configure peer-to-peer/ENUM

- ① In the "Settings" menu, select the option "SIP Accounts/Audio".

Configuring
P2P/ENUM



- ② Select the "P2P/ENUM" tab. On this tab you can enter the necessary details for peer-to-peer and ENUM, and activate these options.
- ③ Activate the checkbox "Enable Peer-to-Peer".

- ④ Enter your SIP-URI (e.g. Jones@Lancom.com) in the fields "Own Number (URI)".
- ⑤ If necessary, enter the STUN server and the corresponding port.
It is only necessary to give a STUN server if a firewall has to be bypassed.
- ⑥ If you want to use ENUM, activate the checkbox "Enable ENUM".

If peer-to-peer and ENUM are enabled, an attempt is made to associate a number to a SIP-URI. If this association is not possible, the call is set up via one of your configured SIP accounts.

If the association with a SIP-URI is successful, or if a SIP-URI was used instead of a "classic" call number, the call is set up via a SIP account with a matching realm (usually the same provider) if possible. A precondition for this is that you have used the option "Automatic" in the line configuration for outgoing calls.

If you have configured a specific SIP account on the line for outgoing calls, the defined account is always used.

■ Selection of a provider (SIP account)

If you have more than one SIP account, the SIP account for outgoing calls is selected according to your line configuration and ENUM and peer-to-peer configuration, by the following criteria:

A) Peer-to-peer and ENUM are enabled:

Line for outgoing calls configured to "Automatic"

A1) Input of a number (canonical or non-canonical)

- ENUM resolution to URI successful? > continue with A2) "Input of a URI"
- ENUM resolution not successful? > number is dialed via any (the first) registered account. If no account is registered, the number is not dialed, and there is a corresponding error message.

A2) Input of a URI

- There is a registered account with matching realm? > Dial via matching account
- There is no registered account with matching realm? > Direct connection setup via proxy of the realm included in the URI.

Line for outgoing calls configured to the peer-to-peer number/URI

A3) Input of a number (regardless of whether canonical or not)

- ENUM resolution to URI successful? > continue with A4) "Input of a URI"

- ENUM resolution not successful? > Call is not set up, corresponding error message

A4) Input of a URI

> Direct connection setup via proxy of the realm included in the URI.

Line for outgoing calls configured to URI of an account

A5) Input of a number (regardless of whether canonical or not)

> Number is dialed via this account. If the account is not registered, the number is not dialed, and there is a corresponding error message.

A6) Input of a URI

> Dialing via this account. If the account is not registered, the number is not dialed, and there is a corresponding error message.

B) Peer-to-peer is enabled, ENUM not:

LANCOM Advanced VoIP Client behaves exactly as in A), as if the ENUM resolution was not successful.

C) Peer-to-peer is not enabled (so no ENUM either):

Line for outgoing calls configured to "Automatic"

C1) Input of a number (regardless of whether canonical or not)

> number is dialed via any (the first) registered account. If no account is registered, the number is not dialed, and there is a corresponding error message.

C2) Input of a URI

- There is a registered account with matching realm? > Dial via matching account

- There is no registered account with matching realm? > URI is dialed via any (the first) registered account. If no account is registered, there is no dialing; there is a corresponding error message.

Line for outgoing calls configured to URI of an account

C3) Input of a number (regardless of whether canonical or not)

> Number is dialed via this account. If the account is not registered, the number is not dialed, and there is an appropriate error message.

C4) Input of a URI

> Dialing via this account. If the account is not registered, the URI is not dialed, and there is an appropriate error message.

App. A: Symbols on the Taskbar and in the Tray

Certain states and processes for LANCOM Advanced VoIP Client are signaled on the Windows taskbar or in the tray. You will find an overview here of the symbols used, and their significance.

The display of certain symbols (e.g. the behavior after the LANCOM Advanced VoIP Client window is minimized) can be adjusted in the user settings.

Example:

Taskbar:







LANCOM Advanced VoIP Client is started, or the LANCOM Advanced VoIP Client window is opened (depending on the setting).



Tray:

LANCOM Advanced VoIP Client is logged on.



Symbol	Occurring in...	Meaning	Explanation
	Tray	LANCOM Advanced VoIP Client is active	LANCOM Advanced VoIP Client is started and at least one SIP account is activated/registered. You can make phone calls and you can be called.
	Tray	The handset is off hook	You are speaking or can dial a number
	Tray	LANCOM Advanced VoIP Client is logged off	LANCOM Advanced VoIP Client is started and there is no SIP account activated/registered. You cannot telephone and cannot be called.
	Tray	CallList	You have a new call.
	Tray	You are being called	You can now lift the receiver and speak to the caller. (Only if "Call notification with tray icon" is active in the user profile.)
	Taskbar	LANCOM Advanced VoIP Client is logged on	LANCOM Advanced VoIP Client is logged on, or the LANCOM Advanced VoIP Client window is opened (depending on the setting).

App. B: Telephoning from Third Party Applications

This appendix describes how you can use LANCOM Advanced VoIP Client to start calls in third party applications.

LANCOM Advanced VoIP Client provides a TAPI 2.x (Telephony Application Interface) for these applications.

B.1 Installation of the TAPI 2.x

During LANCOM Advanced VoIP Client installation, you must have selected user-defined installation and in doing so have installed the TAPI Service Provider component (see chapter 9.3.2, *User-defined Installation*, page 150). If this is not the case, you can also install the TAPI 2.x later.

This is how you install the TAPI 2.x at a later point

Install TAPI later

- ① In "Start | Settings | Control Panel", double-click on "Software".
A list of the currently installed programs will appear.
- ② Highlight LANCOM Advanced VoIP Client and click on "Change".
Windows Installer will now call the LANCOM Advanced VoIP Client Installation Wizard.
- ③ Highlight "Change" and click on "Next".
The following window appears: "Select the functions":
- ④ From the dropdown list select the type of installation from the function "TAPI Service Provider".
- ⑤ Click on "Next" and start the installation.
The TAPI 2.x will then be installed. Now, under "Start | Settings | Control Panel | Telephone and Modem Options" on the "Advanced" tab, you will find the entry "LANCOM Advanced VoIP Client TAPI Service Provider".

Please make the appropriate settings in the third party application, which is to access the TAPI just installed. Select "LANCOM Advanced VoIP Client Line" there as the TAPI connection.

B.2 Configuring Third Party Applications for LANCOM Advanced VoIP Client Based on the Example of Microsoft Phone Dialer 1.0

You have installed the TAPI Service Provider component and you must now define the following parameters in the third party application – based on the example of Microsoft Phone Dialer 1.0:

- the location,
- the local area code,
- external line code for local and long distance calls and
- dialing procedure.

The following is a description of the necessary settings based on the example of Microsoft Phone Dialer 1.0 in Windows 2000.

This is how you configure the telephone options

- Configuration of Telephone Options
- ① In the Windows Phone Dialer, select the menu entry “Edit | Options...”
 - ② Then, under “Preferred Line for Calling”, click on “Telephone”.
 - ③ From the dropdown list select “Line Used for Telephone Calls” the option “LANCOM Advanced VoIP Client Line”.
 - ④ Click on “Telephone and Modem Options...” .
The following window appears: “Telephone and Modem Options...” .
 - ⑤ Select your location and click on “Edit” or click on “New” to define a new location.
The following window appears: “New Location” or the “Edit Location”.
 - ⑥ From the “Country/Region” drop-down list, choose the country from which you would like to place calls.
 - ⑦ Enter the area code of your current local network, without the preceding zero, in the “Area code” field.
 - ⑧ Then, in the fields for the external line code, enter the number you use to get an external line for placing a local and a long distance call.
 - ⑨ Click on “OK”.
 - ⑩ Click on “OK” in the “Telephone and Modem Options...” window.
 - ⑪ Then, in the “Options” window, click on “OK”.
- If you would like to check your settings, select the menu entry “Telephone | Dial...” and call a subscriber.



When using TAPI 2.x applications, it is usually necessary that the location be configured correctly and the number must be entered in canonical format. Any public line access numbers or local area codes will only be automatically added by the TAPI 2.x if the number is in canonical format.

App. C: Overview of Drag & Drop

This chapter provides an overview of the options for using Drag & Drop to handle buttons on the LANCOM Advanced VoIP Client interface.

You can always rely on Quickinfo (ToolTip), which changes when the mouse is moved and provides information on what is currently happening when you release the pressed left mouse button at a particular position.

Active Line Button



Button	is dragged to:	Explanation
Active line button	Line button on hold	The subscribers are connected; both Lines are free again.
Active line button	Conference Line on hold	The subscriber is added to the conference; the conference line is activated.
Active line button	The "Hold" Button	The line is put on hold.
Active line button	The "Conference" Button	The active line becomes the conference line.
Active line button	The "Phonebook" Button	You can select the Phonebook entry to which the active line should be connected.
Active line button	Speed dial	The subscriber is connected to the telephone number, which has been assigned to the Speed Dial, without an inquiry call.

Line Button On Hold



Button	is dragged to:	Explanation
Line Button On Hold	Active Line button	A conference is initiated on the active line, the line on hold is free again.
Line button on hold	Active Conference Line	The subscriber on hold is added to the conference; the line on hold is free again.

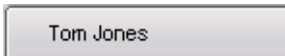
Button	is dragged to:	Explanation
Line button on hold	Conference Line on hold	The subscriber on hold is added to the conference, the conference line is activated and the line on hold is free again.
Line button on hold	The "Conference" Button	The subscriber on hold is added to the conference; the line on hold is free again.
Line button on hold	The "Phonebook" Button	You can select the Phonebook entry to which the line on hold should be connected.
Line button on hold	Speed dial	The subscriber is connected to the telephone number, which has been assigned to the Speed Dial, without an inquiry call.

Active Conference Line



Button	is dragged to:	Explanation
Active Conference Line	The "Hold" Button	The active conference line is on hold.

Speed dial



Button	is dragged to:	Explanation
Speed dial	Free Line Button	The subscriber is dialed depending on the configuration of the Speed Dial.
Speed dial	Forwarding Button	The unconditional forwarding to this subscriber is activated.

Example:

If you drag an active Line button per Drag & Drop onto a Line button on hold, both subscribers will be connected to one another.

App. D: Devices

In this appendix you will find information on the different devices (Handsets and Headsets), which are suitable for use with LANCOM Advanced VoIP Client.

LANCOM Advanced VoIP Client recognizes many devices automatically. The Sound Wizard automatically chooses the optimal settings for these devices.

D.1 Overview of the Available Devices

Handsets

The handset LANCOM VoIP USB Handset has a normal telephone handset and a desktop device. The desktop device is connected to the PC. The speaker for open listening and the connection for a headset is located in the desktop device.

Headsets

Many headsets are connected to a QuickDisconnect jack. The QuickDisconnect jack allows you to quickly and simply disconnect a connection if, for example, you would like to leave the headset on when you leave the room. The active line remains activated and is not put on hold.

If the headset has a QuickDisconnect jack, you will need an additional cable for the connection to the PC.

Cable for connecting a headset

The headsets can be connected to the PC via the QuickDisconnect jack with the adapters.

D.2 Configuration of the Terminal Devices in LANCOM Advanced VoIP Client

All terminal devices can be configured in LANCOM Advanced VoIP Client.

■ Configuration of the Output

You can indicate which terminal device should be used on the PC in the local setting for LANCOM Advanced VoIP Client. In doing so you can differentiate between

- the language used when telephoning,
- the hook off function,
- the output of the ringing sounds

For further information please refer to chapter 8.4.9, *SIP Account / Audio*, page 140.

D.3 Operation of the LANCOM VoIP USB Handset

LANCOM VoIP USB Handset has in addition to the handset

- a speaker on the desktop device for open listening,
- a headset connection to the left and
- four buttons on the right side
- in addition to a red LED.



Take care when connecting the QuickDisconnect cable (Headset Cable K400) to the LANCOM VoIP USB Handset to plug the speaker jack of the cable in the plug for the speaker on the LANCOM VoIP USB Handset (see imprint on the underside of the desktop device). Connect the jack for the microphone to the corresponding microphone plug.

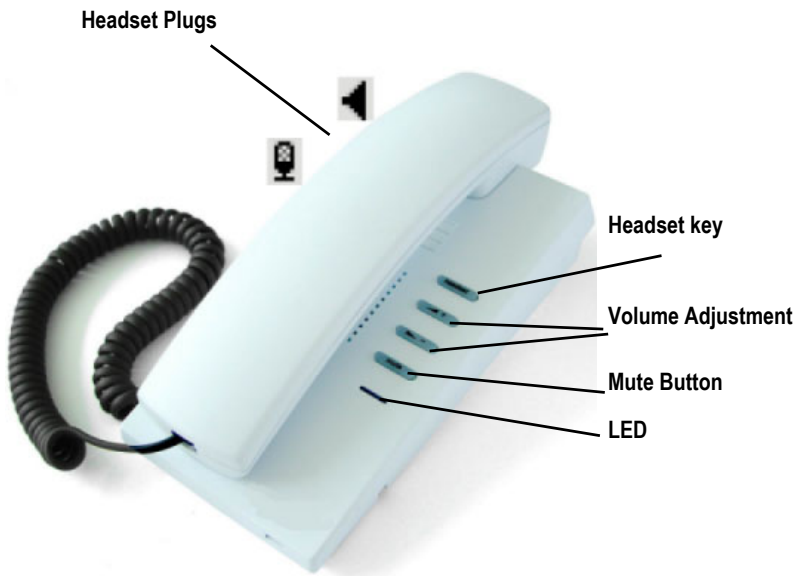


Fig. 1 LANCOM VoIP USB Handset

The two buttons in the middle are used to regulate the volume. The volume regulation affects the output source (headset, handset, speakers) currently in use. The "mute" button switches the microphone currently in use (handset, headset) on or off. The "headset" button is used to switch between the speaker, handset and a headset.

In general:

- The red LED is on if a line in LANCOM Advanced VoIP Client is active.
- The red LED blinks if the speaker for open listening is active.
- The "headset" button is on if the headset speaker is activated.

D.3.1 Standard Behaviour of LANCOM VoIP USB Handset

If a LANCOM VoIP USB Handset is recognized when LANCOM Advanced VoIP Client is started, the Sound Wizard will not be started.

- LANCOM Advanced VoIP Client uses the handset for the hook off function.

- LANCOM Advanced VoIP Client uses the handset for voice input and output.
- LANCOM Advanced VoIP Client uses the handset for ringing sound output (speaker in the desktop device).
- If the "headset" button is pressed during a call, the speaker in the phone rest will be activated for open listening.
- LANCOM Advanced VoIP Client uses the headset connection as microphone and speaker if the "headset" button is pressed while telephone is idle.
- LANCOM Advanced VoIP Client uses the volume control on the handset in order to adjust the volume of the ringing sound while it is ringing.
- LANCOM Advanced VoIP Client uses the volume control on the handset in order to adjust the volume during a call.

D.3.2 Functions of the LANCOM VoIP USB Handset in Detail

The various behaviors of the LANCOM VoIP USB Handset in interaction with a connected LANCOM VoIP Client Headset will be described in detail in the following.

■ The Handset is on hook, all lines in LANCOM Advanced VoIP Client are inactive

The "headset" button switches between the different states:

- Handset Mode (default setting)
- Headset Mode

Handset Mode (default)

The "headset" button was not pressed. The "headset" button is off, the LED is off. When you receive a call, lift the handset from the rest and telephone via the handset. The hook off function is started when the handset is lifted.

Headset Mode

Press the "headset" button once. The "headset" button is on the LED is off, you are telephoning via the headset. The hook off function is activated, e.g. by clicking on the LANCOM Advanced VoIP Client interface. Alternatively you can also dial via the numeric keypad of the keyboard (block dialing) if the Num button is activated and then start the dial connection with the entry key.

■ The headset is on hook, a line in LANCOM Advanced VoIP Client is active

You will then telephone using the headset. The "headset" button is on, the LED is on.

The "headset" button switches between the different states:

- Headset Mode
- Headset Mode and Speaker
- Speaker

Headset Mode

The "headset" button is on, the LED is on. If you receive a call, click on a line in LANCOM Advanced VoIP Client and telephone via the headset. End the call once again in LANCOM Advanced VoIP Client.

Headset Mode and Speaker

Press the "headset" button once. The "headset" button is on, the LED blinks, you are telephoning via the headset. End the call once again in LANCOM Advanced VoIP Client. **The speaker in the desktop device is activated for open listening.**

Speaker

Press the "headset" button once again. The "headset" button is off, the LED is off, you are speaking via the microphone in the headset. The speaker in the desktop device is activated. End the call once again in LANCOM Advanced VoIP Client.

■ The headset is off hook, you hear the idle tone.

The "headset" button switches between the different states:

- handset mode (default setting)
- Speaker

Handset mode (default)

Do not press the "headset" button. The "headset" button is off, the LED is on, you hear the idle tone in the handset.

Speaker

Press the "headset" button once. The "headset" button is on, the LED blinks, you hear the idle tone via the speaker in the headset and in the desktop device.

Headset Mode

Press the "headset" button once again. The "headset" button is on, the LED is on, you hear the idle tone in the handset and via the headset.

■ The handset is off hook, you are speaking

The microphone of the handset is always on, the microphone of the headset is always off.

The "headset" button switches between the different states:

- handset mode (default setting)
- Handset, Headset Speaker and Speakers
- Handset, Headset Speaker

Handset Mode (default)

Do not press the "headset" button. The "headset" button is on, the LED is on, you are telephoning via the handset.

Handset, Headset and Speakers

Press the "headset" button once. The "headset" button is on, the LED blinks, you are speaking via the handset, the speakers in the handset, in the headset and in the desktop device are switched on.

■ Handset and Headset

Press the "headset" button once again. The "headset" button is on, the LED is on, you are speaking via the handset microphone, the speakers in the headset and in the handset are switched on.

D.4 USB Headset Adapter without Keys

Recognized headsets without additional key functionality:

- Headset Cable K410 (GN Netcom GN8110-USB)
- Imtradex USB Adapter (AKA Micronas UAC3556B)

If such a headset is recognized by LANCOM Advanced VoIP Client

- the headset uses voice input and output
- for ringing sound output, if no other output option (soundcard) is available.

D.5 Swyx Headset Cable K411

If Swyx Headset Cable K411 is recognized by LANCOM Advanced VoIP Client, the Sound Wizard will not be started.

LANCOM Advanced VoIP Client uses the headset

- for voice input and output
- for ringing sound output, if no other output option (soundcard) is available.
- The "mute" button for the microphone and the headset speakers and the volume controls (+/-) are supported.



These key functions are controlled directly from the headset, the LANCOM Advanced VoIP Client software will not display, e.g. the state "mute".

D.6 Headset Cable GN8120

If Headset Cable GN8120 is recognized by LANCOM Advanced VoIP Client, the Sound Wizard will not be started. LANCOM Advanced VoIP Client uses the headset

- for voice input and output
- for ringing sound output, if no other output option (soundcard) is available.

The adapter has four different function keys:

Button	Function
Blue switch	Volume controls the Volume This controls the output currently in use.
Green button	Hook off The green button activates / deactivates the line depending on the original state. The LED glows during a telephone call.
Red button	Mute Switches off the microphone. The corresponding LED will glow if the microphone is off. The button has the same function as the microphone symbol on the LANCOM Advanced VoIP Client interface. For further information please refer to chapter 8.1.3, <i>Mute Microphone</i> , page 122.
White button	Redial The button has the same function as the "Redial" button in LANCOM Advanced VoIP Client. For further information please refer to chapter 8.4.2, <i>Lists</i> , page 128.

D.7 Plantronics CS60-USB Headset

If Plantronics CS60-USB Headset is recognized by LANCOM Advanced VoIP Client, the Sound Wizard will not be started.

- LANCOM Advanced VoIP Client uses the headset for the voice input and output
- LANCOM Advanced VoIP Client uses the headset for ringing sound output, if no other output option (soundcard) is available.

Button / LED	Function
Black switch on the headset	Volume controls the Volume. This controls the output currently in use. The "mute" function is switched on and off by pressing the switch. If the microphone is switched off, the green LED on the base station will blink quickly.
Silver button on the headset	Hook off The white button activates / deactivates the line depending on the original state.
Green LED on the base station	Blinks if there is a voice connection blinks quickly if the microphone is switched to mute



If LANCOM Advanced VoIP Client is idle, the Plantronics CS60-USB Headset will be switched off in order to switch off the speakers and to save electricity.

App. E: Technical Terms

Here you will find more detailed explanations of technical terms used in connection to the "Voice over IP" technology.

These terms are included to help you understand the technical background, but they are not necessarily required to operate the phone itself. We also recommend technical "laymen" briefly read through these terms; some of these terms are easy to understand, other explanations are aimed at those more technically interested readers.

Term	Explanation
Line	ISDN line for operating a single ISDN terminal. This is usually a telecommunications system with the option of dialing to an extension. In comparison to the multiple connection, the line has the advantage that the number of extension numbers is not limited.
ACD	Automatic Call Distribution Automatic call distribution
API	Application Programming Interface Interface for application programs
Block Dialing	All numbers of the destination phone number are entered before the handset has been lifted. In this case, it is still possible to change the phone number after it has been entered. The phone number will be dialed completely (as a block) when the handset is lifted. The opposite of this is 'Overlap Sending'.
CAPI	Common ISDN Application Programmable Interface CAPI is the software interface, which regulates the data transfer between the ISDN card and the applications. The CAPI is a standard, which also supports the D-channel protocol of the Euro-ISDN (DSS1) in the CAPI Version 2.0.
CCITT	Comité Consultatif International Télégraphique et Téléphonique International consulting committee for telegraph and telephone service; known as ITU-T today
CDR	Call Detail Record A call detail record provides statistical information, such as caller, duration and cost of the connection.
Client PC	The client PC is an single workstation computer (PC). Many client PCs are connected to a server via the network.
CMI	Cordless Multicell Integration Multicellular wireless network for cordless equipment

Term	Explanation
CTI	Computer Telephony Integration Term used for the connection of telecommunications systems and computer systems (e.g. databases) using a special interface. This enables the user to use telephony services from a PC.
DECT	Digital Enhanced Cordless Telecommunication European Standard for the digital cordless communication between a base station and a transportable device for the range of a few hundred meters.
DHCP	Dynamic Host Configuration Protocol Instead of permanently assigning an IP address to a computer in a LAN, DHCP makes it possible to assign IP addresses dynamically and variably. Applications, which depend on an IP address, are immediately assigned one upon request.
DDI	Direct Dial In DDI refers to the direct dial from a telephone network to a subscriber. Direct dial allows you to dial specific extensions directly via this number.
DMZ	Demilitarized Zone In the context of firewalls, a DMZ is a protected logical network segment which contains the publicly accessible services of a company. Thus, a DMZ prevents external access to internal IT structures.
DNS	Domain Name Server A server, which translates the symbolic name (e.g. www.microsoft.com) into an IP address.
DTMF	Dual Tone Multi Frequency Seven different frequencies and additional mixture frequencies are transmitted in the telephone line in order to clearly communicate the activated button.
DSP	Digital Signal Processor
Direct Dialing-In line	ISDN line, to which a telecommunications system with so-called extension numbers is connected, which can be used to directly contact a subscriber. In the case of the number "(0231) 4777-227, "227" is the extension number within a telecommunications system. An extension number allows you to dial a specific extension of a telecommunications system directly via this defined number.
E.164	ITU-T standard for global telephone numbering (country code, local area code and subscriber number, e. g. +49 (231) 123456-789.

Term	Explanation
ENUM	t elephone N umber M apping ENUM is an application of the Domain Name System for converting telephone numbers (in the E.164 format) to Internet addresses. An ENUM registration of a VoIP number allows calls to be placed directly via the Internet, for example.
Ethernet	Network for limited local operation (10 m to 10 km) in the LAN. The individual PCs are connected via a cable network. Data is transferred within this network at a rate of 10 Mbit/s, 100 Mbit/s or 1 Gbit/s.
FD	Full Duplex (DX, sometimes also FDX, permits simultaneous transmission of information in both direction, e. g. in telephony)
FTP	File Transfer Protocol (Network protocol for file transmission)
G.711	ITU standard for compression, here: Audiocodec 64 kbit/s
G.723.1	ITU standard for compression, here: Audiocodec 5.3 kbit/s and 6.3 kbit/s
GAP	Generic Access Protocol Standard for DECT Handsets, which allows the communication between handsets and basis stations of different manufacturers.
Gateway	A gateway is a system, which connects two different networks and which can transfer the data in one network to the other network and vice versa. This means that the physical networks can be different and the protocols used (e.g. IP network and ISDN) can also be different.
GSM	Global System for Mobile Communication Global system for mobile communication
H.323	A collection of international specifications (ITU), which define the transmission of multimedia data to packet-oriented data connections.
H.323 Alias Name	A symbolic name (e.g. TOMMY), which can be used as the address of an H.323 terminal instead of an IP address.
H.450	Standard for additional performance specifications in H.323, such as Conference, Call Forwarding, Hold, Call Swap, etc.
HTTP	Hypertext Transfer Protocol. A protocol for transmission of data over a network. It is mainly used for loading websites and other data from the World Wide Web (WWW) into a Web browser.
Hub	A hub creates a network node in a star-shaped LAN and it connects several clients to the network.
ID	Identification
IEEE	Institute of Electrical and Electronics Engineers International standardization committee

Term	Explanation
Instant Messaging	A service that uses the Instant Messenger software (client) to enable real-time communication (chat) with other subscribers. Short text messages are sent using push technology via a network (server) to the recipient (usually via the Internet), who can respond to them immediately. Files can usually also be exchanged by this means. In addition, many messaging programs offer video or telephone conferences.
IPEI	Hardware address (12 digits) of a DECT handset which allows an unique identification.
IP	Internet Protocol Fundamental protocol of the Internet, which combines packet-oriented networks with different technical bases to one large network. Thus this protocol (on layer 3 of the OSI layer model) is used for addressing and distributing data into packets.
IP Address	An IP address is a 32-bit number, which is usually shown as a four-part number, e.g. 192.177.65.4, and which is assigned to every computer connected to the Internet. Domain names, which are unambiguously assigned to IP addresses using a DNS server, were introduced in order to make these addresses simpler and clearer for users.
IP PBX	IP Private Branch Exchange A telephone private branch exchange (PBX) which is created by a software application. It uses Voice-over-IP (VoIP) technology for voice transmission.
ISDN	Integrated Services Digital Network Service integrating digital network
ITSP	Internet Telephony Service Provider. An Internet telephony service provider offers an interface via a gateway between Internet telephony and the classic telephone network. Thus via an ITSP, VoIP users can also reach subscribers in the classic telephone network, and vice versa.
IVR	Interactive Voice Response Interactive Call handling
LAN	Local Area Network A local network, which is made up of numerous, interconnected computer terminals within one company location and which is used to transfer data.
LDAP	Lightweight Directory Access Protocol A network protocol that allows querying and modification of information of a directory service (a distributed hierarchical database in the network). The current version is specified in RFC 4511.
LED	Light Emitting Diode Light emitting diode (small light) for displaying status information.

Term	Explanation
MAC Address	Medium Access Control Address Each network card identifies itself with the MAC address. This address is an 8-byte address, which is uniquely defined worldwide.
MAPI	Mail Application Programming Interface This Microsoft interface can be used by applications to send E-mails.
Multiple connection	Basic Rate Interface for operating up to eight ISDN terminals (ISDN telephones etc.) on a S ₀ bus. It is possible to operate ISDN telephones, ISDN PC cards or ISDN telecommunications systems on a multiple connection. The devices are addressed via MSNs.
MSN	Multiple Subscriber Number A non-direct dialing-in line can have several numbers (MSNs). The assignment of these MSNs to the terminals takes place in the terminals themselves.
Name Resolution	Automatic association of a name to a phone number. Example: You receive a call from the public telephone network and the caller's phone number is transmitted. LANCOM Advanced VoIP Client then searches, e.g. in Microsoft Outlook Contacts and in the Personal Phonebook, for a contact matching this phone number. If a contact is found, LANCOM Advanced VoIP Client will show the name of the caller in addition to the phone number in the display.
NAT	Network Address Translation is a method for replacing an IP address by another within a data package. This method is frequently used to map private IP addresses to public IP addresses.
NT mode	Network Terminator For ISDN (and other protocols) a different behavior is often required, depending on functionality. For ISDN, the exchange operates in NT mode and the telephones (terminals) operate in TE mode. An example of different behavior is the transfer of charging information, which of course is only possible from NT to TE, and not the other way round.
NetBIOS Name	A symbolic name (e.g. WS-SJONES), which is used for addressing a PC, if this PC should be contacted using the Microsoft NetBIOS protocol.
Overlap Sending	The numbers entered are dialed immediately. The destination phone number can no longer be edited. The opposite of this is 'Block dialing'.
P2P	see Peer-to-Peer
PABX	Private Automatic Branch Exchange Private branch exchange
PBX	Private Branch Exchange Private branch exchange, i.e. a system for regulating telephone systems in what is usually a smaller telephone network with an interface to the public telephone network.

Term	Explanation
PDA	Personal Digital Assistant. Small portable computer, usually equipped with a quick start operating system, and used along with many other programs mainly for personal calendar, address and task management.
PIN	Personal Identification Number This number is linked to the user name, and is used for user authentication.
Peer-to-Peer	Network principle in which the data exchange occurs decentrally, directly between the individual computers. In the VoIP field, this means that the connection exists directly between the two subscribers, without server or provider.
POTS	Plain Old Telephony System This is the classic analog telephone.
Power over LAN	Power over LAN is used to identify a property of devices with Ethernet connection, e.g. IP telephones. Thus, the power supply is provided via the Ethernet connection line and not via a power mains plug, as usual. In this case, the Switch or the Hub to which this device is connected per Ethernet must be able to guarantee the power supply via the Ethernet line.
PSTN	Public Switched Telephone Network Umbrella term for analog telephone networks, which usually use digital switches.
QoS	Quality of Service The quality in communication networks. Depending on the standard or protocol, different parameters are used for evaluating the properties, such as loss rate, availability, transfer rate and delay.
Router	A router connects different kinds of networks to each other. It recognizes the bordering networks and neighboring routers and it determines the path of the data packet. This connection can be created by using either a software or a hardware solution.
RSVP	Resource Reservation Protocol IETF standard to guarantee a certain transmission qualities, such as bandwidth and priority via TCP/IP.
Server	The workstation computers are connected (e.g. via Ethernet) to the server, which is the "central computer".
SIP	Session Initiation Protocol A network protocol which establishes a communication session between two or more subscribers.
Smartphone	A smartphone unites the functional scope of a mobile phone with that of a PDA. You can use a full keypad or touchscreen and speak from a PDA phone. Digital cameras are sometimes also incorporated, as in many mobile phones.

Term	Explanation
SNMP	Simple Network Management Protocol Network protocol developed by the IETF - an open international voluntary association of network engineers, manufacturers and users, which is responsible for proposals for Internet standardization -, to enable network elements (e.g. routers, servers, switches, printers, computers etc.) to be monitored and controlled from a central station.
SNTP	Simple Network Transport Protocol Standard for synchronizing clocks in computer systems over packet-based communication networks. Although mostly handled via UDP, can also be transported using other layer 4 protocols such as TCP. Specifically developed to enable reliable timing over networks with variable packet propagation time (ping).
Voice Compression	The voice data are compressed and sent via the network. This reduces the amount of data to be transmitted. This is especially important for the Home Office connection and the coupling of several branch offices via the Internet.
STUN	STUN is a simple network protocol that recognizes the existence and type of firewalls and NAT routers and uses this information to bypass them.
Subnet	A network can be divided into several subnets. For example, it is possible to use the IP address 192.177.65.xxx to address all computers, which have the number 192.177.65. in common and which only differ from one another in terms of the last three digits (xxx). The subnet mask indicates which positions should be used for differentiation within the subnet. In a subnet, two subscribers communicate directly with each other. The IP packets only have to pass through the router if subscribers communicate outside of the subnet.
Switch	A Switch is an active hub, which functions as a kind of exchange. In contrast to the hub, the switch does not forward the incoming data packets to all lines, but rather only to that line which leads to the destination of the packet.
TA	Terminal Adapter
TAPI	Terminal Application Programming Interface Interface for programming terminal applications
TE mode	Terminal Endpoint see <i>NT mode</i> , page 179
TEI	Terminal Endpoint Identifier With the help of the TEI, different terminals are addressed to an ISDN bus on Layer 2.

Term	Explanation
TCP/IP	Transmission Control Protocol / Internet Protocol Two commonly used protocols for the transfer of data and for Internet connection, which can be implemented on different types of transport media.
TSP	TAPI Service Provider, driver for TAPI devices
Unified Messaging	Message management system developed in 1989. It denotes a method of bringing incoming and outgoing messages of any kind (e.g. voicemail, email, fax, SMS, MMS, etc) into a standardized form, and granting the user access to this via a wide range of clients (fixed network or mobile phone, email client).
USB	Universal Serial Bus. Bus system for connecting a computer to ancillary equipment. A USB port takes little space, and can supply power to simple devices such as a mouse, a phone or a keyboard. Devices equipped with USB can be connected to each other during active operation (hot plugging), and their properties can be detected automatically.
VLAN	Virtual LAN. Virtual local network within a physical network. A widespread technical implementation of VLANs is partially defined in the standard IEEE 802.1Q.
VoIP	Voice over IP Collective term for all techniques for transmitting voice over IP networks.
WAP	Wireless Application Protocol. The Wireless Application Protocol denotes a collection of technologies and protocols, whose aim is to make Internet content available for the slower transmission rates and the longer response times in mobile radio, as well as for the small displays of mobile telephones. WAP is thus in direct competition with the i-mode services.
WAV	A file format used for recording voice or music, for example, announcement texts, music on hold, or Voicemail. 16 KB of memory are required for each recorded second.

Index

Symbols

(Call) Forwarding Unconditional
43
 (Tab) 123

-A-

Account 8
 Configure SIP account 154
 User 8

ACD

 (Definition) 175

Acoustic Signals 9

Activate

 Num key 140

Active Connection 8

API

 (Definition) 175

Audio Equipment 142

 Calibration 124

 for ringing 142

Automatic

 Provider 156

Automatic Redial

 always 129

 Exit 78

 Starting 77

 Window 78

-B-

Background 24

Backspace 72

Bandwidth

 Voice Compression 143

Behavior

 Configuration 119

Blind Call Transfer 89, 112

Block Dialing 33, 175

Busy Signal 9

 Switch On 79

Button

 Call Forwarding 110

 Call List 106

 Call Transfer 111

 Hold 111

-C-

Calendar Entry

 Call inviting party 52

Calibration of the Sound System

124

Call

 Call Swap 80

 Call Transfer 111, 112

 Disable 79

 Exit 36

 In Outlook 52

 Forward 44

 Forward All 43, 123

 Pick Up 35, 80

 Record 66

 Reject 80

 Transfer (without Inquiry) 39

Call Forwarding 43, 123

 configuring 109, 123

 Further 123

 Switch on/off 44

 Unconditional 123

Call Forwarding Button Shortcut

Menu 110

- Call List 106
 - (window) 107
 - configuring 108
 - Create 108
 - Define properties 108
 - View...
 - (Menu Command) 67
 - (Shortcut Menu) 107
- Call Pick Up
 - with Return Key 140
- Call Swap 9, 37, 80
- Call Transfer 38, 111
 - (Menu Command) 65
 - (Shortcut Menu) 112
 - by going on hook 127
 - party 81
 - Without Inquiry 89, 112
- Call Waiting
 - For secondary calls 138
 - Switch Off 138
- Call waiting 8
- Call Waiting Signal 9
- Callback Requests 106
- Call-by-call Code 97
- Calling
 - E-mail sender 52
 - From Outlook 50
 - Inviting party 52
- Canonical Telephone NumberCopy
 - Format 45
- CAPi
 - (Definition) 175
- CDR
 - (Definition) 175
- Client PC
 - (Definition) 175
- CMI
 - (Definition) 175
- command line
 - Call from the 145
 - Minimize 145
- Compression 143
 - Language 181
- Conference 40
 - (Menu Command) 65
 - Add 66
 - Initiate 65
- Configuration
 - local 140
 - configuring 119
- Confirmation of logon 17
- Connection
 - Active 8
 - On hold 8
 - Switch between 37
 - switch between 80
- Connection on Hold 8
- Contact
 - Open 54
 - View 54
- Contacts – Microsoft Outlook
 - 2000/XP (window) 50
- Conversation Recording
 - (Menu Command) 66
- Correct
 - Entry 72
- Country code 144
- CTI
 - (Definition) 176

-D-

data amount
 Compression 143
 DDI (Direct Dial In) 176
 deactivate
 Num key 140
 DECT
 (Definition) 176
 Delete
 (Menu Command) 63
 Desktop
 Install link 151
 DHCP
 (Definition) 176
 Dial 80
 From a Calendar Entry 52
 From an e-mail 52
 From every application 33
 From Outlook 50
 Numeric Keypad (Num key)
 140
 Selected number 33
 Dial Tone
 Internal 81
 Direct dialing-in line 176
 disable
 Line 94
 Display 25
 DMZ (Demilitarized Zone) 176
 DNS
 Definition 176
 Drag & Drop 12
 DSP
 (Definition) 176
 DTMF
 (Definition) 176

-E-

E.164
 (Definition) 176
 Echo Suppression
 local 142
 Edit
 (Menu Command) 63
 E-Mail
 Call sender 52
 from the Caller List 108, 115
 From the Redial List 75
 Enter License Key 151
 Entry
 Correct 72
 ENUM 177
 Ethernet
 (Definition) 177
 Exit
 (Menu Command) 63
 Call
 In Outlook 52
 Connection 73
 Export
 Phonebook Entries 104
 Recording List 116
 External subscribers 7
-F-
 F11
 Dial from Every Application
 33
 FD 177
 (Definition) 177
 File
 Menu 61
 Forward 40
 All Calls 43, 123

Forwarding, Routing 123
 FTP
 (Definition) 177
 Function Key 28
 Functions
 Description 72
 Menu 64
 Functions Summary 59
-G-
 G.723.1 177
 G0.711
 (Definition) 177
 GAP
 (Definition) 177
 Gateway
 (Definition) 177
 General (tab) 126
 General Information
 User Profile 126
 General Shortcut Menu 22, 61
 GSM
 (Definition) 177
-H-
 H.323
 (Definition) 177
 Alias Name 177
 Protocol 177
 H.450
 (Definition) 177
 Handset
 without additional speakers
 148
 Headset
 without additional speakers
 148
 Help
 Menu 67
 Help Topics
 (Menu Command) 68
 Hide
 Number 79, 127
 Hold 111
 (Menu Command) 65
 Home Office
 Voice Compression 143
 Hook
 Hook off and Dial
 (Menu Command) 65
 Pick Up 73
 Hook off 142
 Configuration 125
 Hook On
 In Outlook 52
 Hook on/off 72
 HTTP
 (Definition) 177
 Hub
 (Definition) 177
-I-
 Icon
 Minimize SwyXlt 128
 Minimize to tray 128
 ID
 (Definition) 177
 Idle tone 9, 81
 IEEE
 (Definition) 177
 Import
 Phonebook Entries 105
 Input / Output Device
 Local Settings 142
 Inquiry Calls 37

- Call Swap (Menu Command)
 - 65
 - Hold call 59
- Instant Messaging
 - (Definition) 178
- Interface of
 - Elements 19
- Internal subscribers 7
- Internet Protocol (IP) 13
- IP
 - (Definition) 178
- IP (Internet Protocol) 178
- IP Address
 - (Definition) 178
- IPEI
 - (Definition) 178
- IP-PBX
 - (Definition) 178
- ISDN
 - (Definition) 178
- ITSP
 - (Definition) 178
- IVR
 - (Definition) 178
- J-**
- Journal Entry
 - (Menu Command) 66
- L-**
- LAN (Local Area Network) 178
- LDAP
 - (Definition) 178
- LED
 - (Definition) 178
- Light Emitting Diode 178
- Line 175
 - (Definition) 7
- Concept 12
- Direct Dialing-In 175
- Direct dialing-in 176
- disable 94
- Multiple subscribers 179
- Select 27
- State 81
- Virtual 12
- Line button 27, 80, 84
 - configuring 93, 133
 - define properties 93, 133
 - maximum number 133
 - to a new Skin 134
- Line Button (Tab) 93
- Lines
 - Functions 21
 - Menu 64
- List
 - Delete (From the Redial List)
 - 75
 - Redial (Tab) 76
- Lists
 - (Tab) 109, 128
 - Menu 66
 - Lists (tab) 109
- Local Echo Suppression 142
- Local network 178
- Local Settings 140
 - Input / Output Device 142
- Location
 - Tab 144
- Logoff 15
- Logon
 - Successful 17
- Long Distance Call 7

- M -**
- MAC Address
 - (Definition) 179
- Managing calls
 - with the Outlook Journal 55
- MAPI
 - (Definition) 179
- Menu 19
 - Edit 21
 - File 21, 61
 - Functions 21
 - Lines 21
- Menu Bar 19, 61
- Menu Command
 - Autom. Redial 65
 - Automatic Redial 65
 - Call List
 - View... 67
 - Call Transfer 65
 - Conference 65
 - Conversation Recording 66
 - Copy 63
 - Delete 63
 - Exit 63
 - Help Topics 68
 - Hold 65
 - Hook off and dial 65
 - Inquiry Call/Call Swap 65
 - Minimize 63
 - Paste 63
 - Redial 65
 - Show Redial List 67
 - Speed dial 65
 - Tip of the day 68
 - Transfer to > 65
 - Transfer to Number... 65
- Microphone
 - Calibration 124
 - Mute 122
 - Microphone Adjustment 125
- Minimize
 - (Menu Command) 63
- Mode
 - Non-Transparent 19, 61
 - Transparent 20
- MS Outlook AddIn 46
- msiexec 152
- MSN
 - (Definition) 179
- Multiple connection 179
- N -**
- Name
 - Delete in Phonebook 103, 104, 105
 - Name assignment
 - From Outlook Contacts 45
 - Name Resolution 36
 - 179
 - From Outlook 56
 - NAT (Network Address Translation) 179
 - NetBIOS Name
 - (Definition) 179
 - Network
 - Local 178
 - Network Adapter 147
 - New Call (window) 51
 - Non-Transparent Mode 19, 61
 - NT mode
 - (Definition) 179
 - Num key 140
 - Number 7

- External subscribers 7
- Hide 79, 127
- internal subscribers 7
- Numeric Button 26, 72
- Numeric Keypad 72
 - Dial 140
- O-**
- Options
 - Configuration 119
- Outlook
 - End Call 52
 - Journal entries for calls 47
 - Managing Calls Using thePDA 180
 - Journal 55
 - Name assignment from
 - Contacts 45
 - Name Resolution 56
 - Open Contact for incoming
 - calls 47, 53
 - Telephone Number Format
 - 45
- Outlook Contact
 - Clear 54
 - View 54
- Overlap Sending
 - (Definition) 179
- P-**
- PABX
 - (Definition) 179
- Parameters
 - call command line 145
- Party 7
 - Call swap between 37
 - Call Transfer 38
 - Calls from Outlook 50
 - External 7
- Internal 7
 - party
 - call swap between 80
 - Call Transfer 81, 111, 112
 - Calling 80
 - Delete in Phonebook 103, 104, 105
 - Transfer 81
 - Paste
 - (Menu Command) 63
 - PBX
 - (Definition) 179
 - Personal Phonebook
 - delete subscriber 103, 104, 105
 - Export (Menu Command) 62
 - Import (Menu Command) 62
 - Phonebook 110
 - (Menu Command) 67
 - (window) 34, 101
 - delete subscriber 103
 - Export 62
 - Export entries 104
 - From the Redial List 75
 - Import 62
 - Import entries 105
 - Start 34, 101
 - Pick Up
 - Of a call 35
 - Telephone Call 80
 - with Return Key 140
 - PIN 8
 - (Definition) 180
 - POTS
 - Definition 180

Power over LAN	180	Redial	73
Prefix		(Menu Command)	65
configuring	144	Automatic	77
Properties		always	129
Line button (shortcut menu)		Cancel	65
84		Starting	77
Speed Dial (shortcut menu)		Window	78
96		configuring	76
Properties of...		Redial Button	73
Line Button (window)	93,	Always automatic	Redial
133		129	
Lists (window)	109	Redial list	
Local Configuration (win-		(Menu Command)	67
dow)	140	(Tab)	76
Redial List (window)	76	(window)	75
Shortcuts (window)	131	View	67, 74
User Settings (window)	126	Resolution	
Provider		Speed Dial	
Automatic	156	From Outlook	56
SIP Account	154	Return Key	140
PSTN		Return key	140
(Definition)	180	Ringin	9
Public Line Access		from the Caller List	108, 115
configuring	144	From the Redial List	75
-Q-		number dependent	135
QoS		Ringin (tab)	135
(Definition)	180	Router	
Quickstart	151	(Definition)	180
-R-		RSVP	
Record		(Definition)	180
See Conversation Recording-		Secondary call	
113		Call Waiting	138
Recorded Calls		Disable	79, 127
Listen to	114	Signaling	138
Recording List		Server	
Export	116		

(Definition) 180	Signal Sound 8, 9
Settings	Signaling
Menu 67	Status - 7
Shortcut 98	SIP (Definition) 180
(Tab) 131, 133	SIP Account
Export 100	Configure 154
Export (Menu Command) 62	SIP-URI 7
Import 100	Skin 9
Import (Menu Command) 62	Concept 11
maximum number 132	Edit(Menu Command) 63
Shortcut Menu 4	Load(Menu Command) 63
Call Transfer 112	Save(Menu Command) 63
General 22, 61	Standard 19
Show Caller List... 107	Smartphone
Speed Dial Properties 96	(Definition) 180
Start 22	SNMP
Shortcut Menu Line button	(Definition) 181
Active 88	SNTF
Conference On Hold 90	(Definition) 181
Dial 85	Sound Wizard
Disabled 91	Hook off 125
Exit 91	Microphone Adjustment
Handset Is Off the Hook 84	125
Idle 84	Ringing 125
On Hold 89	Speaker
Outgoing call, Call Waiting	Mute 121
87	Switch on/off 121
Ringing 86	Speed dial 96
Shortcut Menu:Redial Button 74	(Menu Command) 65
Show contact	(Tab) 96, 130
(Menu Command) 66	Export 100
Show Message Log 17	Export (Menu Command) 62
Show Quickstart	Import 100
(Menu Command) 68	Import (Menu Command) 62
Signal	maximum number 130
Acoustic 9	Standard User Interface 19

Start
 command line 145
 Start menu 151
 Store
 (Menu Command) 63
 STUN 181
 Subnet
 (Definition) 181
 Subnet Mask 181
 Subscribe 15
 Switch
 (Definition) 181
 Between several connec-
 tions 37
 switch
 between several connec-
 tions 80
 Switches 126
 Symbol
 shown in the taskbar 128
-T-
 TA
 (Definition) 181
 Tab
 Lines 92
 Location
 144
 TAPI
 (Definition) 181
 later installation 163
 TCP/IP
 (Definition) 182
 TE mode
 (Definition) 181
 TEI
 (Definition) 181
 Telephone Call
 Pick Up 80
 See also Call 80
 Telephone Number 7
 Delete in Phonebook 103,
 104, 105
 External subscribers 7
 Hide 79, 127
 Internal subscribers 7
 Telephone Number Format
 canonical 45
 Telephone Ring
 for call 135
 Terminating a call 36
 Test 15
 Third Party Applications
 Example (Windows Phone
 Dialer) 164
 telephone from 163
 Tip of the day 69
 (Menu Command) 68
 To 75
 Tone
 for call 135
 Toolbar 22
 Transfer
 Call 39
 party 81
 Transfer spontaneously 40
 Transfer to >
 (Menu Command) 65
 Transfer to Number...
 (Menu Command) 65
 Transparent mode 20
 Tray Icon 128
 Minimize to tray 128

TSP
 (Definition) 182
 Installation 163
 Typing Error 72
-U-
 Unconditional Call Forwarding
 123
 Unified Messaging
 (Definition) 182
 USB
 (Definition) 182
 User 8
 User account 8, 15
 User authentication 8
 User data
 Set up SIP account 154
 User Interface 9, 11
 Elements 19
 User name 8
 User Profile 125
 Call Pick Up with the Return
 Key 140
 View 125
-V-
 Virtual line 12
 VLAN
 (Definition) 182
 Voice Compression 143
 Voice quality
 Compression 143
 VoIP
 SIP Account 154
 VoIP (Voice over IP)
 (Definition) 182
 Volume
 Adjust 120

-W-
 WAP
 (Definition) 182
 WAV
 (Definition) 182
 What is new?
 (Menu Command) 68
 Window
 Always on top 128
 Wrap Up Time 94
 Definition 10
-X-
 XXX
 In the display 36