PBX Call Assist 4

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1 Welcome to PBX Call Assist 4

The user help available leads you through the installation, configuration and handling of PBX Call Assist 4.

- An overview of basic functions is shown on the page What PBX Call Assist 4 offers to you.
- Install PBX Call Assist 4 and make the most important settings: Installation and Base Configuration.
- Information about how to integrate your contacts in PBX Call Assist 4 Usage of existing contact data.
- Everything about the daily work with the programme can be found under Work with PBX Call Assist 4.
- To be able to configure PBX Call Assist 4 ideally, please look up PBX Call Assist 4 customize.
- Links to software updates and support can be found on the page Product support.

Help can be accessed any time from the PBX Call Assist 4 program window via **Help**. Help opens by default on the subject which corresponds to the function just used by you.

In Help the following icons are used:

Icon	Meaning
	Note
	Warning, caution
	Change from earlier versions

2 What PBX Call Assist 4 is able to offer you

The PBX Call Assist 4 is a Unified Communications software suite for business. It combines computer-supported telephony (computer telephony integration, CTI) with features for company wide (and beyond company boundaries) online collaboration.

The PBX Call Assist 4 provides a broad feature set for communication and collaboration with remote call control, conference, presence information, instant messaging, chat and SMS text messaging.

The PBX Call Assist 4 with its various configuration options adapts perfectly for your personal daily working needs. The PBX Call Assist 4 integrates well with your favourite applications for e-mail and contact data administration and optimises seamless your workflow and communication processes for business purposes.

Learn more about the essential functions and performance features of PBX Call Assist 4 here:

2.1 Contact search: Find information about the current contact.

PBX Call Assist 4 automatically searches in case of an incoming or outgoing call for the appropriate contact information, based on the phone number (particularly the call partner) and displays this information. Which contact data sources are searched and in which order, can be defined in the configuration of the PBX Call Assist 4 and (by the administrator) in the PBX Call Assist 4 UCServer. If more contacts are found from several data sources for that phone number, the contact data which was last used is displayed as active.

Further you are able to search for the contact data of a person in the search window of PBX Call Assist 4 by entering a name or parts of it. Then start the call or other activities from the contact detail window.

2.2 ActiveContacts - actively manage contacts

The ActiveContacts technology in PBX Call Assist 4 shows further information in addition to the contact data and the phone status of the user, e.g., calendar data of Microsoft Outlook®. The information is constantly updated in "real time". Therefore, you are always informed when and how your contacts are accessible. You are able to start and control the communication via a software menu, depending on the available information.

2.3 Presence – see the availability of your contacts

Every user connected to the system owns a status further on reffered to as *Presence*. This information is aggregated according to defined rules based on the status of several services: Telephony status (telephony service), calendar status (calendar service), login-log off (system service) and the manually entered status, provided by the user.

The presence shows at any time the current availability of the person you wish to communicate with.

You find an overview of the displayed presence symbols and their meaning under Presence symbols.

2.4 Federation - The trustworthy network

A federation is a secured structure for the communication between members of different organisations (e.g. two companies, company and customer) with the aim to improve cooperation.

Within the federation, presence management permits the exchange of current information about the accessibility/availability of people, even beyond organisation boundaries. So, a suitable method of communication can be selected (e.g. phone, e-mail, chat, etc.).

Within the frame of the federation, every organisation defines which information is revealed and decides which services and systems are used for the exchange of this information.

2.5 Journal - tracking and planning communication

The PBX Call Assist 4 UCServer journal informs you about all communication events, e.g. completed phone calls, missed calls and unavailable call participants. The information can be filtered and arranged according to different criteria.

The journal entries can be edited, marked, provided with notes and shared with other users.

All details for future telephone calls can be collected and edited upfront.

This allows you to keep an overview of your entire communications at all times. Important information cannot get lost anymore.

2.6 Audio/VideoChat - Realtime communication using WebRTC

The PBX Call Assist 4 enables an ad-hoc communication with other users via Audio/VideoChat and screen sharing. This is supported within the enterprise network and using federation accross enterprise network boundaries.

2.7 Computer Smartphone Integration via Bluetooth (CSPI)

The PBX Call Assist 4 client supports connecting cell phones with the PC using Bluetooth. This connection will make controlling and monitoring of the telephone possible. Furthermore a PC audio device can be used for conversations by cell phone.

2.8 Softphone - Making phone calls with the PC via a PBX

The PBX Call Assist 4 client can be registered via the UCServer at a SIP-PBX. The PC in conjunction with a headset turns to be a VoIP phone.

3 Installation and Base configuration

The installation of the PBX Call Assist 4 can be done in various ways.

The Base configuration of the PBX Call Assist 4 is done directly after the successful installation of the software.

3.1 Installation

The installation of the PBX Call Assist 4 can be done in various ways.

- Requirements
- Manual installation at a workstation by the *.msi* file
- Installation using group policies in a network domain

3.1.1 Requirements

Requirements for the installation:

Operating system

- Windows® 8.1
- Windows® 10
- Windows® 11
- Windows Server® 2012
- Windows Server® 2012 R2
- Windows Server® 2016
- Windows Server® 2019
- Windows Server® 2022

- The product manufacturer ensures operation for its software product on operating systems that are still within the support period of the operating system manufacturer.
If the manufacturer support period for your operating system has expired, this also applies to the support for the software product described here, even if this operating system was still supported at the time of the software release.
- Which operating systems are currently supported can always be found in the release notes for the product.

- The time for the expiration of support for an operating system version can be found in the release notes.

- The product manufacturer reserves the right to take operating systems out of support although they are still supported by the operating system manufacturer.

- An existing software version cannot be run automatically on a future/new operating system.

- Problems in the software product are only rectified for operating systems for which the operating system manufacturer provides support.

- Support for the software product is only given for the current last activated product version.

3.1.2 Installation at the workplace

To start the installation at the workplace please double-click the *.msi* file. This starts the Windows® installer leading through the installation procedure. Several configuration options are offered to the user:

Version Information
The exact version number is displayed on the homepage.

⚠	Wird PBX Call Assist 4 auf einem 64-Bit Betriebssystem installiert, erscheint auf dieser Seite ein Hinweis, dass bei Bedarf die 64-Bit-Variante der TAPI-Treiber installiert werden.

License
The licence agreement has to be read and accepted by the user before the installation can be continued.

TAPI-driver
The latest version of PBX Call Assist 4 doesn't require a TAPI driver for communication with the PBX Call Assist 4 UCServer anymore. All functions are provided by direct communication now. This simplifies the installation and maintenance of the software even more in Terminal Server environments. During configuration the following options can be selected:

- Do not install a Tapi driver
- Installation of the client TAPI driver
  The client TAPI driver allows third parties the dialing via TAPI. The driver uses PBX Call Assist 4 as a connection with the PBX Call Assist 4 UCServer to carry out the dialing process. No additional TCP/IP connection is required and the installation and servicing of terminal servers are considerably easier than with TAPI.
- Installation of the enhanced remote TAPI driver
  With the help of this driver, third party manufacturer's software can use all functions via TAPI and the PBX Call Assist 4 UCServer. Nevertheless, this driver needs another TSP/IP connection with the server.

Connection to the server
Please enter the server here to be connected with the PBX Call Assist 4.

The server name or its IP address is entered in the input field when using static configuration.
The server can be searched for and selected in the local network with **Search server...**. The list displayed contains the following information about the servers found:

Computer name	Computer name of the server
Version	Information about the installed version of the PBX Call Assist 4 UCServer
Method of localization	**Broadcast** means, that the server has answered a search inquiry on the local network. **DNS service record** means, that the server was setup in the DNS as a service provider.

If a DNS Service Location Record is used for the configuration of the server the PBX Call Assist 4 UCServer should be found and configured automatically.

➡	The setup of a server side DNS Service Location Record is further explained in the help system of the PBX Call Assist 4 UCServer.

Once the target folder for the program installation is entered the software installation completes by installing all files on the system.
Afterwards please start the Base configuration by activating the checkbox and select *finsish*.

3.1.3 Installation via update service

The PBX Call Assist 4 can also be installed on the workstations by the PBX Call Assist 4 UCServer integrated update service.
A Windows® system service will be installed on the workstation executing the installation procedure including the central base configuration loaded from the PBX Call Assist 4 UCServer. The remote installation doesn't require a user intervention. Once finished the Windows® system service supervises the client software version running and starts the update procedure if necessary.
The user is informed about events and the installation progress in a bubble popup at the system tray. A manual intervention of the user is not possible while running remote installations.

The system requirements and the setup of the server based central software installation and update service are described at the help system of the PBX Call Assist 4 UCServer.

3.1.4 Installation using group policies

You can install workstations in the network automatically with the help of the group policy. Proceed as follows:

1. Define which components should be installed on the single workstations. Use the Windows® Installer in administrator mode for this. Start *msiexec/a client.msi*. You can now define a directory in which the prepared installation should be copied.
   This need to be an accessible network share. Then select the software components to be installed on the workstations and specify the PBX Call Assist 4 UCServer computer.
2. Start the Active Directory® user and computer management console in which you configure your domain users. Group your users (or computers) in such a way that you have organisational units. You can create group guidelines for each organisation-unit which controls the automatic installation of software.
   Open an organisatonal unit's properties.
   Go to Group policy. Add a new group policy.
   Open group guidelines with *Edit*.
   Add either under *computer configuration - software settings - software installation* or under *user configuration - software settings - software installation* a new package.
   Then select the installation package previously prepared via the administrative installation. Read the appropriate documentation on Windows Server®, Active Directory® and group policies.

3.2 Base configuration

The base PBX Call Assist 4 configuration is carried out, as is appropriate, immediately after the software is installed. The base configuration can also be opened via the Windows® start menu under **PBX Call Assist 4 My Computer Settings**. The following configuration options are available:

- Language selction of the PBX Call Assist 4
- Select PBX Call Assist 4 UCServer
- User log-in information in the PBX Call Assist 4 UCServer
- User settings: general user information
- User settings: contact address and user profile picture
- User settings: telephone numbers
- User settings: services
- Groupware connection
- Exchange Web Services
- Start options

Basic user settings are configured in **PBX Call Assist 4 UCServer Administration**. In addition to the central configuration, various settings can also be modified directly on a workstation using PBX Call Assist 4 My Computer settings. This way it is possible to fully maintain the workstation settings. If the user got the right from the administrator to configure the workstation settings by himself the user may change the settings anytime.

⚠	The configuration of specific configuration options requires administrative PBX Call Assist 4 UCServer access rights. The user may need to login as administrator in this case. At the related configuration page a login option as administrator appears.
➡	If you are using a active directory based usermanagement, there are some settings a user cannot change.

3.2.1 PBX Call Assist 4 language

By default, PBX Call Assist 4 is started in the language of the operating system. If this language is not available, PBX Call Assist 4 is displayed in English.

The language used can be changed in the PBX Call Assist 4 My Computer settings. Administrators may also specify the language through Active Directory® group policies. If so, the user may no longer change the language.

3.2.2 Connection to the server

The responsible PBX Call Assist 4 UCServer can find PBX Call Assist 4 through different ways:

- **Static PBX Call Assist 4 UCServer configuration**
  With static configuration the host name or the IP address of the PBX Call Assist 4 UCServer is required. Via the button **Search servers...** all PBX Call Assist 4 UCServer available on the network can be displayed. Afterwards select the correct PBX Call Assist 4 UCServer.
- **Use DNS service location record**
  By activating option **Use DNS Service Location Record** all necessary information about the Domain Name Service is provided to the Client.

Secure encrypted connection (TLS) is required
This option will force encrypted data transmission between PBX Call Assist 4 UCServer and PBX Call Assist 4. A corresponding certificate must be stored on the PBX Call Assist 4 UCServer computer.

Use these settings for all users
PBX Call Assist 4 supports hosting scenarios in terminal server environments in cooperation with several independent PBX Call Assist 4 UCServer instances.

➡	The Use These Settings for All Users checkbox will only be available on the system-wide server configuration dialog. Activate this checkbox if you use *only one* PBX Call Assist 4 UCServer system or all users on this computer (especially for terminal servers) should only use one PBX Call Assist 4 UCServer system. With this option, all users on the computer will be use the system-wide settings. If you use several PBX Call Assist 4 UCServer instances and the users of one computer (especially for terminal servers) should connect to different PBX Call Assist 4 UCServer instances, this checkbox should *not* be activated. Thereby, the server connection data will specified explicitly for each user logged in and may be configured optionally from the workstation setup dialog from the Server

	Configuration for This User tab or from Login Account through PBX Call Assist 4.
	A user-specific configuration of the server connection data will be taken into consideration by PBX Call Assist 4, the SDK components and the advanced remote TAPI driver. In contrast, the automatic updating service and the multiline TSP will always use the system-wide server configuration, regardless of the server configuration for all users.

3.2.3 User authentication

The PBX Call Assist 4 UCServer supports two options for the user authentication:
Decide either to log-in with your Windows® user name or provide the user name and the password which were configured in the PBX Call Assist 4 UCServer for you.

	If users are administered in the PBX Call Assist 4 UCServer, a new user profile can be entered with a *New* user name after authentication as PBX Call Assist 4 UCServer administrator.

3.2.4 User settings: general user information

Here you can enter or update the user's information.

Property	Description
User name (login)	This is the user name for logging onto the PBX Call Assist 4 UCServer service. If Active Directory® is used, this name will be the same as the Windows® login name.
Identity	The user's identity to be clearly identified in the Federation scenario. This identity address ideally corresponds to the e-mail address of the user. Therefore this user is also accessible via the Federation from outside of the company.
First name	The user's first name (e.g. Arthur).
Last name	The user's last name (e.g. Dent).
Displayed name	This is the user's full name (e.g. Arthur Dent). This can occur several times and is only used for display purposes. If the field is empty, a suggestion is automatically shown when the first and last name are entered.
Email Address	This is the email address of the user. Among other things, it will be used for notifying the user about missed calls and voice-mail messages.
(UC-)Password	The section for changing the password will only be displayed, if the user has been authenticated by PBX Call Assist 4 UCServer itself. If Active Directory® is used, this section will not be displayed.

3.2.5 User settings: contact address and user profile picture

Here you can enter the contact address of the user or update and add a user's profile picture.

Contact address shows all relevant contact details for the user. You may add a contact picture, which will be shown on various places in PBX Call Assist 4. This picture will be shown to server users and to federated contacts depending on the given permissions.

	If Active Directory® is used for user management, this information will be displayed for review by the user and cannot be changed.
	The user picture will be scaled free of distortions when added or loaded.

3.2.6 User settings: phone numbers

The user's phone numbers are displayed as provided in his contact data. This refers to the PBX Call Assist 4 UCServer user as well as to Federation contacts. PBX Call Assist 4 UCServer will detect the telephone lines for the phone numbers while loading the user profiles. The user will be assigned the phone lines associted with them automatically without further configuration.

Business phone numbers can be selected from the telephone line list via **Select...**.

	User phone numbers and line numbersmust be entered in the Supercanonical format in the integrated user administration. Phone numbers from Active Directory® will be shown as entered in the Active Directory®. When user profiles are loaded in PBX Call Assist 4 UCServer, these numbers will be reformatted to supercanoncial format.
	If more than one location is used, the phone numbers will have to be stored in supercanonical format in Active Directory®.

Property	Description
Business	The user's primary business phone number
Business 2	Other business phone number for the user
Private	The user's private phone number
Mobile	The user's cellphone number. This phone number is used, for example, to set up an automatic call diversion and to send SMS text messages.
Pager	The user's pager phone number. The attribute can be used to store a user's private mobile phone number.
Voice mailbox	Phone number of the user's mailbox. The mailbox is the personal answer machine. This phone number is used, for example, to set up an automatic call diversion.

Recording server	The phone number of an external call recording server. This field is only required if an external server is used and not the integrated call recording server. If this field contains a phone number then this number is used for the phone call recording. Without a phone number, the centrally configured number is used.

Via **Additional Lines...** dialog, you can configure additional lines for users and computers. You can provide the following information from that dialog:

Property	Description
First phone	This is the user's personal phone's internal number. A phone can only have one owner. This assignment is also used for the offline journal.
Second phone	You can specify a second personal phone for the user here.

Phones which stand next to this computer:

Property	Description
First phone	Phone number of the first phone next to the computer
Second phone	Phone number of the second phone next to the computer

➡	It is possible that some properties will not be displayed if they were deactivated server-side.
➡	These additional lines for the user and computer will not be listed in the contact details and will not be visible to other users.

3.2.7 User settings: services

Here you can configure or view which PBX Call Assist 4 UCServer services and functions the user may use.

Field	Value
Configure user profile personally	If this option is activated the user is allowed to change server-relevant settings.
Start chat	If this option is activated the user may send text messages to other users.
Allow audio chat	If this option is activated, the user is allowed to use audio chat with other users.

Allow audio/video chats	If this option is set, the user may communicate with other users using Audio- and VideoChat.
Accept screen sharing requests	If this option is activated, the user is allowed to accept screen sharing requests from another user.
Initiate desktop sharing	If this option is activated, the user is allowed share his own screen with other users.
Send SMS	If this option has been activated, the user will be allowed to send SMS text messages.
Send missed calls as an e-mail	Is this option is activated, the user receives an e-mail for every missed call. The user decides in the PBX Call Assist 4 settings whether to use this option.
Deliver unanswered phone calls as SMS text messages.	If this option is set, the user can receive SMS notifications about missed calls. The user will decide if they want to use this feature when making the PBX Call Assist 4 settings.
Record calls	If this option is activated, the user may use the function *Record calls*.
Use phone books	If this option is activated, the user is allowed to use phonebooks as a contact data source.

3.2.8 Groupware connection

Here you can define which product integration is allowed.

- **Use PBX Call Assist 4 with Outlook®**
  The client will connect to an Outlook/Exchange installation if this checkbox is checked
  MAPI and/or Exchange Web Services (EWS) can connect with Outlook® or Exchange.
  If Outlook® is used, check the **Use PBX Call Assist 4 Plug-in with Microsoft Outlook®** checkbox to activate PBX Call Assist 4 Plug-in for Outlook®. With this option enabled, an additional toolbar will be added to Outlook®, which provides access to some PBX Call Assist 4 functions in a context sensitive manner. See Integrating Microsoft® Outlook/Exchange for more information.
- **Connect to Microsoft® Echange directly**
  PBX Call Assist 4 can also connect to Exchange Servers directly by using Exchange Web Services. The necessary configuration can be read by PBX Call Assist 4 from Outlook® directly. Mailboxes configured there will be used automatically.
  Additionally, mailboxes can be added manually by using the 'Configure' button, e.g. when no Outlook® is installed.

	Only Exchange mailboxes from Outlook® can be used automatically, but no POP3 or IMAP mailboxes.
	Exchange Web Services requires .NET Framework v4.0 or newer.

- **Use PBX Call Assist 4 with IBM Notes®**
  Setting this option permits the client to use the functions and databases of an installed and set-up IBM Notes® Client.
  Depending on the IBM Notes® installation, it may be necessary to manually set the path to the file *notes.ini*. Tick the box before the input line and give the complete path to the file.

Professional applications
Integration with special applications will be offered from this section.

- **Use DATEV with PBX Call Assist 4**
  If DATEV Arbeitsplatz Pro has been installed and setup with Telefonie Pro on the computer, integration will be enabled by setting this option. In this case contacts from DATEV databases will be preferred automatically during the initial installation. This can be changed by the user in the database settings.
- **Use Windows® 10 Apps integration**
  On a computer with Windows® 10, it is possible to integrate the included Mail, Calendar, and Contacts apps into PBX Call Assist 4. This option will not be shown on older Windows® versions.

3.2.9 Exchange Web Services

Profil Dialog
Dieser Dialog zeigt alle konfigurierten Postfächer an. Hier können neue Postfächer hinzugefügt oder entfernt werden, sowie das Standard-Postfach ausgewählt werden.
Aus Outlook® ausgelesene Postfächer werden ausgegraut dargestellt, und können nicht gelöscht werden.

- **Default mailbox**
  In this mailbox tasks are generated (if desired) and calendar data for creation of the presence status are read out.
- **Use only EWS (disable MAPI)**
  Can be used to disable the MAPI interface. If the box is not checked, MAPI as well as EWS are used simultaneously.
- **Monitor Outlook® Inbox with EWS**
  With this setting, PBX Call Assist 4 monitors the Inbox of the default mailbox and displays unread emails.

Postfach hinzufügen Dialog
PBX Call Assist 4 kann sich an einem Exchange-Server entweder über Windows®-Anmeldung oder mittels Benutzername und Passwort anmelden.
Die für Exchange Web Services nötige URL des Servers kann in der Regel automatisch erkannt werden, und Sie müssen in diesem Dialog nur ihre E-Mail-Adresse eintragen.

- **Email Address**
  Die E-Mail-Adresse des Postfaches das hinzugefügt werden soll.
- **Server-URL**
  Die Adresse des Servers, über die der Exchange Web Service zu erreichen ist.
  Diese ist in der Regel in der Form "https://yourserver.domain/EWS/Exchange.asmx"
- **Server-URL automatisch erkennen**
  Diese URL kann in der Regel von PBX Call Assist 4 automatisch erkannt werden.
  Falls dies nicht möglich ist, kann hier die automatische Erkennung deaktiviert werden, und die Server-URL direkt eingetragen werden.

- **Windows®-Anmeldung verwenden**
  Falls es möglich ist sich gegenüber dem Exchange Server mittels der Domäne zu autentifizieren sollte diese Option gesetzt sein.
  Ansonsten frägt PBX Call Assist 4 nach Benutzername und Passwort.

3.2.10 Start options

Here you can define, when the PBX Call Assist 4 will be started.

Start PBX Call Assist 4 with Windows® logon.
If this option is selected, PBX Call Assist 4 will start when the user logs on to the computer. This option can also be changed in the settings of the program itself.

Start PBX Call Assist 4 now
With this option, PBX Call Assist 4 will start for initial use immediately after installation has completed.

4 Usage of existing contact data

Contact data from other programs can be implemented or searched for. PBX Call Assist 4 functions can be used from Microsoft Outlook® and Microsoft® Exchange. More information about supported contact data sources can be found on the following pages.

- Supported data sources
- Data from IBM Notes® (was: Lotus® Notes)
- Cooperation with Microsoft® Outlook/Exchange
- Google integration

4.1 Supported data sources

Contact data source integration is an integral part of PBX Call Assist 4. Based on contact data, PBX Call Assist 4 offers you an extensive catalogue of functions which ideally support you in your work.

In PBX Call Assist 4 numerous contact data sources can be linked:

- **PBX Call Assist 4 User**
  This PBX Call Assist 4 UCServer provided data source gives you access to all user, who are using PBX Call Assist 4 on the same PBX Call Assist 4 UCServer along with you. As a rule, these are your work colleagues who also use PBX Call Assist 4.
- **Lines**
  This data source is also managed by PBX Call Assist 4 UCServer by your administrator and gives you access to all available phone lines in your phone system.
- **PBX Call Assist 4 Favorites**
  The data source 'Favorites' offers you quick access to all contacts which you have filed in Favorites or in the PBX Call Assist 4 monitor.
- **Outlook®**
  With PBX Call Assist 4, you can use all contact data stored in your Outlook® client. Thereby, you may choose to only use individual contact folders or all contact folders for an Outlook® inbox. You can also choose to include public contact folders, if your Exchange system provides them and you have access to them.
- **Exchange Web Services**
  In addition to Outlook®, data can also be used directly from an Exchange server through its web service (as of Exchange Server 2007). Office 365 can also be integrated using this option, naturally.
- **IBM Notes®**
  You can use all IBM Notes® (= formerly Lotus® Notes) address books in PBX Call Assist 4. Both the local address book and address books on a Domino server can be directly connected and contacts stored in them can be used.
- **LDAP data sources**
  With the option of connecting LDAP data sources PBX Call Assist 4 makes a powerful interface available for accessing various contact data stocks provided they offer an LDAP interface themselves.
- **estos MetaDirectory**
  As a special case of a LDAP data source the estos MetaDirectory can be integrated in PBX Call Assist 4. Via this path you can integrate data sources such as IBM Notes®, Tobit David Infocenter (in version 3.5 or earlier) or ordinary ODBC data sources in PBX Call Assist 4. Further information can be found in the estos MetaDirectory help file.
- **Phone books**
  PBX Call Assist 4 permits the integration of phone books. At the moment, data from "Das Telefonbuch Deutschland" as well as "TwixTel Switzerland" can be directly accessed from PBX Call Assist 4. You can also use KlickTel Server in connection with estos MetaDirectory.

Information about the integration, configuration and use of contact data sources can be found under data sources.

4.2 Data from IBM Notes®

IBM Notes® address books can be integrated into PBX Call Assist 4 as contact data sources. Apart from local address books, address books on a IBM® Domino server can also be used.

The integration allows contacts to be edited and opened directly in IBM Notes® from within PBX Call Assist 4. New contacts can equally be created in IBM Notes® via PBX Call Assist 4. Please bear in mind, however, that the functions for editing and creating contacts are only available if IBM Notes® is running.

Dialing phone numbers from within IBM Notes® using PBX Call Assist 4 can be realized with scripts.

If a password is required for access to a IBM Notes® address book this must be entered when PBX Call Assist 4 is started. Optionally, the password can also be saved in PBX Call Assist 4.

Information about the integration, configuration and use of contact data sources can be found under data sources.

4.3 Cooperation with Microsoft® Outlook/Exchange

PBX Call Assist 4 works closely with Microsoft Outlook®. This cooperation is based on two components:

- **Joint data usage**
  PBX Call Assist 4 uses the MAPI interface for accessing information from Outlook® or providing new information to Outlook®.
  Alternatively, an Exchange Server can be integrated directly by using Exchange Web Services.
- **Outlook® user interface toolbar**
  In order to be able to use PBX Call Assist 4 functions from Outlook®, a COM add-in can be installed upon request, which will add a toolbar to the Outlook® user interface for quick access.

4.3.1 Joint data usage

Contacts
Contact information from the Outlook/Exchange database can be sought and displayed by PBX Call Assist 4. Contacts from other data sources can be comfortably created in the Outlook/Exchange database via PBX Call Assist 4 so that they are also available there.

E-mail
Auf Wunsch zeigt der Client die Anzahl der neuen E-Mails im Posteingang an.

Calendar
PBX Call Assist 4 can use Outlook/Exchange calendar information to determine the user's presence status. The user can define whether private appointments should be included and also prevent access to this information.

Tasks
The Outlook/Exchange task database can be used for comfortable call scheduling in PBX Call Assist 4.

Journal
The Outlook/Exchange journal can be used to save a call journal created by PBX Call Assist 4.
Copies of the PBX Call Assist 4 UCServer journal entries are made for this purpose in this journal either by mouse click or automatically. It is also possible to define under which conditions such an entry should be copied.

Exchange Web Services
Should Exchange Server have been integrated directly through Exchange Web Services, PBX Call Assist 4 will also be able to read the necessary configuration directly from Outlook®. All mailboxes setup there will be checked and used automatically.

4.3.2 PBX Call Assist 4 Plug-in for Outlook®

To make context-sensitive access to PBX Call Assist 4 features directly from Microsoft Outlook®, installation will add a plug-in-toolbar to Outlook®. Making calls, searching for contacts and creating tasks will be made possible by this plug-in.

Installation
The toolbar is set up as part of the PBX Call Assist 4 installation.

Functions
The toolbar consists of three buttons and one input field:

Element	Description
Phone call	A menu with different functions is displayed by clicking on this icon. The functions are based on the displayed or selected elements. • E-mail Search for sender and sender's e-mail address. • Contact Menu for direct dialing of all the contact's phone numbers. • Task If the theme of the dialed or displayed task contains a phone number in square brackets ([]) a menu entry for directly dialing the number is created. • Other element All other elements have an entry in this menu to open the client focussing on the search line. All elements always have the redialing list as last menu entry.
Search field	With the help of this entry field the PBX Call Assist 4 can be promted to search for a term or dial the entered phone number. Enter appropriate text or phone number and confirm it with the enter key.
Plan call	A call can be schedule for contact using this feature. To do so, a new task will be created using a specially formulated subject.
Info	PBX Call Assist 4 will display an informational window about this contact, which will list special information about the calls (done, scheduled and unanswered) in addition to contact data.

	The buttons *Plan call* and *Info* are only available if there is a contact selected.
	Presence status will only be displayed for contacts found in the list of favorites or the monitor.

4.4 Google integration

PBX Call Assist 4 is able to use contacts and appointments from your Google account.
To enable Google integration, your system administrator has to allow and configure this feature.
As soon as your administrator has done this, PBX Call Assist 4 will ask for the necessary permissions through your browser.

Contacts
All contacts from your Googlemail account will be used.

Appointments

By default, only appointments from your primary calendar will be used. If more calendars should be included, you can configure this under Integration -> Calendar.
You can integrate as many calendars as you want, including shared ones from other users.

⚠	By default, Google flags appointments as private.
⚠	Due to technical limitations, updates from Google to PBX Call Assist 4 may take a few minutes.

5 Work with PBX Call Assist 4

You can find out how to use PBX Call Assist 4 for your tasks from here. Please choose a subject.

- Program start and overview
- Manage contacts
- Use presence information
- Plan communication
- Communicate

5.1 Program start and overview

You can find out how to start or stop PBX Call Assist 4 and become familiar with the programs' user interface from here. Please choose a subject.

- PBX Call Assist 4 start and shut down
- Login account
- Main window
- Menu bar icon
- Speech bubble info

5.1.1 PBX Call Assist 4 start and shut down

Start
It was already specified in the Base configuration (Start options) whether PBX Call Assist 4 should automatically start with the Windows® login. You can also configure this at a later time via the PBX Call Assist 4 My Computer settings in the Windows® start menu.

PBX Call Assist 4 can be started manually at any time by the Windows®-start menu.

Exit
PBX Call Assist 4 will be closed by **Close** item on the main menu or the corresponding entry on the context menu for the tray icon.

5.1.2 Login account

In the dialog "login account" the user account can be configured in order to log onto the PBX Call Assist 4 UCServer.

5.1.2.1 Configure UCServer

If the server configuration was not specified for all users during the PBX Call Assist 4 installation or via the group guidelines, the PBX Call Assist 4 UCServer can be changed (which the PBX Call Assist 4 connects to) via the dialog "Login account".

Configure automatically
If the system administrator configured a DNS Service Location Record for the PBX Call Assist 4 UCServer, the PBX Call Assist 4 UCServer can be automatically located and configured.

Find server
All available PBX Call Assist 4 UCServer's in the network can be localized and placed into the input field for the server name with the dialog "Search server".

5.1.2.2 *Configure User account*

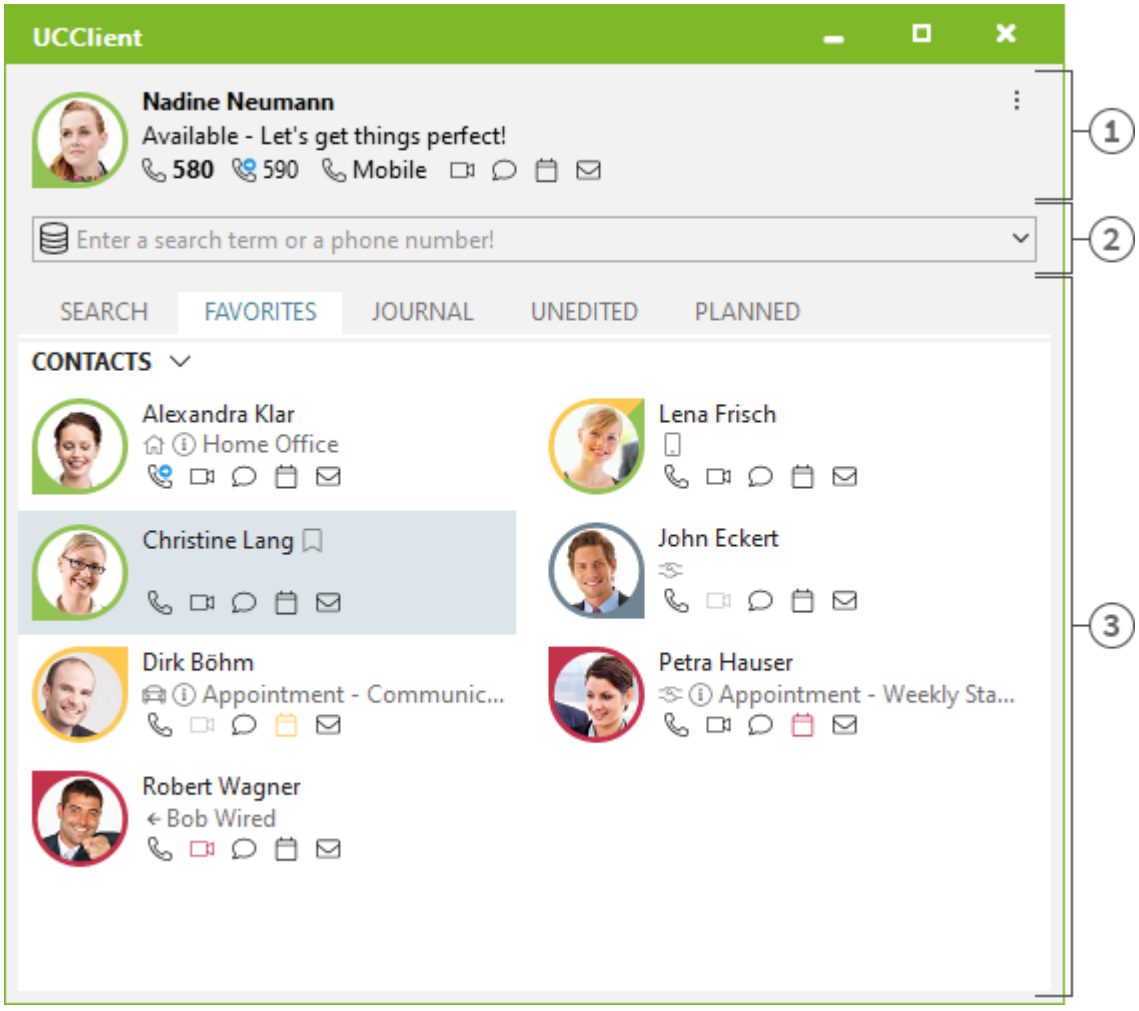
Enter here the user name and the corresponding password to log on to the PBX Call Assist 4 UCServer.

Use Windows® Login
If the system administrator activated the PBX Call Assist 4 UCServer authentication via the Windows® domain, it is alternatively possible to use the Windows® login.

5.1.3 Main window

The main window of PBX Call Assist 4 gives you access to the functions supporting your everyday work.

The significant sections of the main window will be described by the following material.



[1] My own presence
[2] Search input
[3] Tabs for Contact Search, Favorites, Journal , missed and planned calls

5.1.3.1 *My presence*

The **My Presence** section shows you the most important information about your presence, the status of your phone lines and audio/video devices, and your upcoming appointments. In addition to seeing this information, you can go to this section to change your presence state, configure call forwarding settings and access your calendar. You'll find more detailed information on the **My Presence** section at Your own presence.

5.1.3.2 Main menu

The main menu can be opened with the main menu button ▾ which is situated in the top right corner.

It has features which will support you in your daily routine or with which you can adjust PBX Call Assist 4 to your personal needs.

- **Display monitor**
  Click here to start and display the Monitor. You can store important contacts for quick access in the monitor and order them in groups and sub-groups.
- **Journal browser**
  This menu item will open the Journal Browser. In contrast with the Journal Tab on the main window, you will be able to track all available journal entries.
- **Inbox**
  This entry opens Outlook® to show you your inbox.
- **Settings**
  Click here to open the Settings. Here you can define or change the most important PBX Call Assist 4 settings.
- **Help**
  Opens this online help
- **About PBX Call Assist 4**
  Here you get information about the product version of PBX Call Assist 4 and you have the possibility to get more detailled support informations and log files.
- **Exit**
  Ends PBX Call Assist 4.

5.1.3.3 Search input line

You can use the search input at any time to quickly find your contacts or to simply dial a number. You can immediately re-use the contacts found in the Search tab or save them in the Favourites tab or the Monitor for later use.

5.1.3.4 Tabs

The following tabs can be put in the foreground:

- Contact search
  Lists the hits for a contact search
- Favorites
  Space for your most important contacts and speed-dial keys
- Journal
  Collects the last calls made and received
- Unprocessed
  Saves the incoming calls and chats which you did not answer
- Planned
  Saves the planned calls

5.1.4 Menu bar icon

The symbol in the notification area always gives you a fast access to the PBX Call Assist 4 main windows. Just left click on the symbol.

During a call, you can always move the Conversation Window into the foreground. If a conversation window is not open or all conversation windows have been displayed, the main window will be shown. Furthermore, your current Presence Status will be shown on the tray icon.

In contrast, if you right-click on the tray icon, you will have access to the following features from the context menu:

- **Presence Profile**
  The Presence Profiles menu will display all configured presence profiles and allow quick changes to your own presence. In addition, a presence status that was potentially changed manually can be reset using the Restore Status option. For more information, see Your Own Presence.
- **Display monitor**
  Use this function to start the Monitor. If the monitor is already running but currently hidden it is brought into the foreground with this command.
- **Journal browser**
  You can open the Journal browser with this menu item. Unlike the Journal tab in the main window you can consult all available journal entries here.
- **Inbox**
  The Inbox function switches to Outlook®. You can thus keep an overview of your e-mails received.
- **Settings**
  Open the PBX Call Assist 4 withSettings in which you can adapt PBX Call Assist 4 to your requirements.
- **Login account**
  The dialog "Login account" let you inspect the current server connection or log in to PBX Call Assist 4 UCServer under a different user account.
- **Help**
  Opens this online help
- **About PBX Call Assist 4**
  Here you get information about the product version of PBX Call Assist 4 and you have the possibility to get more detailled support informations and log files.
- **Exit**
  Exit PBX Call Assist 4

5.1.5 Speech bubble info

The speech bubble info window is a small information window at the bottom edge of the screen, which shows you any missed calls, new email messages, new chats and scheduled calls, for example.

If you have missed a call or received a new email, for example, the info dialog will be always displayed. Thus, you will immediately be able to see all of the important information at a glance. You can also change to the relevant view immediately if you click on the desired field:

Field	Function
Missed calls	This opens the Unprocessed tab in the main window. You can therefore see your missed calls at a glance.
E-mails	Click the e-mail field to open Outlook's Inbox and view your new e-mails.
Chats	Click the chat field to open the unedited. If there is one single unedited message the window Message is opened directly for a reply.

Planned	Click the field with the planned calls to display the main window with the Call planning. You will find all planned calls here.
Challenge-Response	Click on the row with new authorization requests to display a dialog with the list of authorization requests which are currently pending. You will see all pending authorization requests here.
Fax messages	Click on the row with new fax messages to display the new fax messages which have come into the inbox. You will see all new fax messages here.

You can also close the informational speech bubble window either by clicking on the Close icon at the top left of the window or by deactivating the corresponding option on the Behavior tab on the Settings dialog.

5.2 Manage contacts

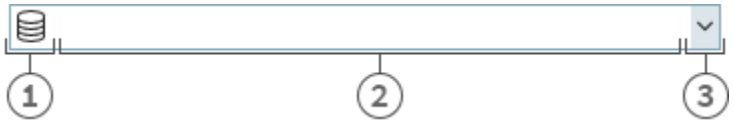
Here you can find out how to find contact details for a person in your database and how to organize this data. Please, choose a subject:

- Search contacts
- Contact details
- Telephone number formats
- Authorizations
- Favorites
- Monitor
- ActiveContacts
- The Phone-Link

5.2.1 Search contacts

5.2.1.1 Search with input line

The connected data sources are browsed via the search input line. The contacts found will appear on the **Search** tab and can be immediately used for your work or, for example, dragged to the Favorites list for later use.



[1] Data source selection
[2] Search input
[3] Extended search / last search terms

You can use the search input with four different search variants:

- **Name search**
  The name search is the default search case. All contacts with the specified search term in the **last name, first name, company name** and **display name fields** (insofar as they exist) are sought. For some data sources, such as Outlook® or Exchange Web Services, additional entries for name searches can be indicated using the Datasources tab.
- **Phone number search**
  A phone number search instead of a name search is started as soon as you enter a search term in the search input field which PBX Call Assist 4 can interpret as dialable . All contacts are found who have the searched phone number in a phone number field.

- **Search by e-mail address**
  A search across all e-mail fields is started if PBX Call Assist 4 recognises the search term as an e-mail address. All contacts are found who have the specified e-mail address.
- **Detail search**
  With help of the detail search you can search for terms in dedicated fields. For example you can search for all contacts with name "estos" in the city "Starnberg".

  The detail search uses a syntax where all search terms are seperated by comma. The position of the term in the line of commas determines the field where this term is search for.

  Default order of the fields is *Name*,*First name*,*Company*,*Zip code*,*City*,*Street*,*Phone number*. The Fields can be configured in the settings at Search parameters.

  Detail search example

  - You are searching for the contact "Anna Meier". Enter the last name in the first position and the first name in the second position. The search entry is "Meier, Anna".
  - You are searching for contact "Anna Meier". The town and the postcode are in fourth position. The company name is left empty as this is not known. The search input therefore reads "Meier, Anna,Starnberg".
  - You can also use the postcode (Starnberg's postcode is "82319"). The search input then reads "Meier, Anna,, 82319" or "Meier, Anna,, 82319 Starnberg".
  - You are looking for contact "Meier" in "Munich Street". The street is in fifth position. The town is not known and is therefore left empty this time. The search input reads "Meier,,,,Munich". Please note that, as with all other search terms, the street name does not have to be written out in full.
  - You are looking for contact "Meier" with the phone number "08151123456" (Germany). The search input for this reads "Meier,,,,,08151123456".

- **Advanced search entry**
  The advanced search is started via the arrow symbol at the end of the search line. It is helpful for users who do not want to use the comma syntax while searching. When entering the search criteria the appropriate comma syntax is entered automatically in the search field.

5.2.1.2 Search tab

The search results are received on the **Search** tab if a new search has been started by entering the search criteria in the search field.

All available functions for the selected contact are displayed in the context menu. The contact menu appears if you click a contact with the right mouse button. Alternatively you can also press the context menu button or the Enter key on the contact.

Some functions which can be used on contacts will be highlighted as links on the shown contact. So if you want to call the contact, just move your mouse over the phone number and left click it. The following table lists all such availible functions.

Type	Description
Display name	Opens the Contact details for the contact. Alternatively, you can open the contact with a double click.

	Press the CTRL key at the same time (when possible) to open and edit the contact. If the current contact was automatically generated because a contact matching the search criteria was not found, that contact may be saved in Outlook® using this link, by double clicking in Outlook® or through Exchange Web Services.
Address field	Opens the Web browser and displays the address on the map. When pressing the CTRL key at the same time a route to the contact is found.
Phone number	Dials the number on the phone and sets up a call to the subscriber. If you press the CTRL key down while you click on the phone number, the phone call is prepared. Press the CTRL key at the same time as the Shift key, while you click on the phone number, and the phone call is planned.
Email Address	Opens the e-mail editor and enters the e-mail address as the recipient.
Presence identity (e.g. SIP-URI)	Start a new chat with the contact with presence identity.
Website	Opens the Web browser with the Internet address which was stored in the contact.
Data source (or data source icon)	Opens the contact folder storing the contact. Please note that this feature will only be available for Outlook® and Exchange contacts.

The presence symbol gives you the actual presence state of the found person. You can get all available presence informations about this contact in th etooltip by moving the mouse cursor over this presence symbol.

The search result list can be alternatively arranged with data source, display name, surname or company . The grouping lines can be shown or hidden. Settings can be changed in the context menu which can be accessed by a right click on the row header.

The contacts found can be sorted in ascending (A-Z) or descending (Z-A) order. Click to change the sequence on the column header where it is displayed.

The results list allows the selection of several contacts. Keep the CONTROL key pressed while selecting individual contacts with the mouse. These selected contacts can be dragged into the register card **Favorites** or the monitor, or functions may be carried out that are available for all contacts. That way, for example, you can write an e-mail to several recipients. So it is possible to write emails with more than one recipients for example.

The search result list also allows the selection and copying of single contact fields for the chosen contact. If it contains a action link, move the mouse cursor over the appropriate contact field or a little bit to the left or right beside it. As soon as the mouse cursor changes and indicates a text choice, you can select by holding down the mouse key and pulling the contact fields.

PBX Call Assist 4 supports two different views in the results list

1. Only the details of the last selected contact will be displayed by default. All other contacts will only show with the most important entries, such as like Name, Company,, Presence and Data Source.
2. Alternatively, you can also display the contact details in the lower area of the search list. For this, pull the divider at the lower edge of the search list upwards with the mouse. You can remove the contact details area again by arranging the divider at the lower edge of the window. You can also move the divider with the CTRL+G key combination. Now use the arrow keys to change the new size of the detail area upwards or downwards. You confirm your input with the Enter key and cancel it with the ESC key.

The indicated contact fields and the click actions on the contact fields can be individually adapted in the settings under Search result.

5.2.2 Contact details

The contact details window contains all available informations and functions for the contact in question. You may open it with the entry **Open contact details...** in the context menu of the contact or by double click on the contact.

All functions available for the contact are to be found in the icon bar at the upper edge of the window:

- **Make call**
  You can dial every phone number of a contact. The numbers are categorized with symbols:
  - **Business phone number**
  - **Mobile phone number**
  - **Services - software**
  - **Further phone numbers**
- **Plan call**
  Use this function if you want to call the contact later. Planned calls will be restored at PBX Call Assist 4 after a restart of the client.
- **Prepare call**
  This function permits you to prepare a call. Prepared calls are created directly before a call and permit you to select special parameters such as project parameters etc. before the call is connected.
- **Start a Chat with the contact.**
  This function allows you to start a text based chat.
- **Start an AudioChat with the contact.**
  Start an AudioChat with the contact. The icon is inactive or grey if the related contact doesn't offer the feature, if no Audio devices are available or if the feature is deactivated.
- **Start a VideoChat with the contact.**
  Start a VideoChat with the contact. The icon is inactive or grey if the related contact doesn't offer the feature, if no Video and Audio devices are available or if the feature is deactivated.
- **Share screen**
  Pressing the Share Screen button will allow a local screen to be shared with a remote contact, if the rights have been granted by the administrator.
- **Request Screen Sharing**
  Would you like to see another user's screen, you can also request to share the screen by clicking Request Screen Sharing. The feature is available only if the related rights are granted by the administrator.
- **Edit contact**
  With this function you can open and make changes to the original contact. For example, the Outlook® contact editor is opened for an Outlook® contact. Please note that this function is only available if the contact comes from Outlook® or IBM Notes® and the application associated with the contact is installed on your computer.
  Exchange Web Services contacts may be edited using either the installed copy of Outlook® or the Outlook® Web app.

- **Create new contact**
  Click here if you wish to use the existing contact as a template for a new contact. A typical application is a further contact person in the company.
- **Open calendar**
  With the help of this function you can display the opened contact's calendar. Please note that this function is only available for PBX Call Assist 4 users who are configured on your Exchange system and that the subscriber's calendar must be enabled.
- **Contact folder**
  Select this entry to open the contact folder where the contact has been stored. Note that this feature will only be available if the contact originated from Outlook® or Exchange Web Services.
- **New Outlook® journal entry**
  Click here to create a new journal entry in Outlook® or on Exchange Server for this contact. Note that PBX Call Assist 4 no longer be able to open this contact afterwards.
- **E-mail**
  If you have stored an e-mail address for the contact this function opens the e-mail editor with the recipient's address already filled in.
- **Website**
  If you have specified a Web site for the contact this function opens the browser and loads the relevant Web site.
- **Clipboard**
  This function copies all contact detail information to the clipboard. This information can thus also be used in other applications.
- **Map**
  Call up this function to show the location of the contact on a map in the web browser. The map service set in PBX Call Assist 4 is used. Please note that there must be a complete address set up in the contact for this function.>
- **Route**
  Call this function to display a route to the contact's location in the Web browser. The map service set up in PBX Call Assist 4 is used for this. Please note that you must have configured your own address in the Location settings. The contact must also have an address.

5.2.2.1 Overview tab

The tab **Overview** will show all informations about a contact which were stored. Here you can see all phone numbers, all addresses or the note for example.
Some entries are clickable like links. So you can just click on a phone number to call the contact for example, or send an email by clicking on the email address.
The tab **Overview** is generated using the template file *contact.xslt*, which can be adopted to your needs. For more information about adopting it see Dialog adaptation with Templates.

5.2.2.2 Journal tab

In the **Journal** tab all phone calls made with a contact can be found.
This inpersonated journal is mostly the same view as in the tab Journal in the main window.

5.2.2.3 Unprocessed tab

The **unprocessed** tab shows all entries marked as not dealt with or not read, which relate to the contact opened.
Please note that this inpersonated view is always grouped by days beacause grouping by contact does not make sense here. This is in contrast to the unprocessed tab in the main window.

5.2.3 Telephone number formats

5.2.3.1 Supercanonical number

... makes it possible to distinctivly indentify a caller. PBX Call Assist 4 UCServer and PBX Call Assist 4 do exclusive use this format internally for all phone numbers. For display the numbers can view reformated in a beautified form. Phone actions will be performed with the shortened version.
Supercanonical phone numbers are starting always with a '+' character and have the following format: **+Country Area Number**.
No whitespace characters are used. The number consists only of numerics and the '+' character.
Example: +4901234567

5.2.3.2 Service numbers

... are official phone number which cannot be given in an international format. For example the german emergency number (110) or the directory assistence (118xx). To dial such numbers with the PC, they have to be longer than the internal numbers or they have to be configured as a rule for external numbers. These numbers will be given directly as dialable without any whitespaces.
Example: 11833

5.2.3.3 Phone number

Phone number	Description
Dialable phone numbers	... will be stored in exactly the format wich is needed to dial it on the PBX. This numbers may be reformatted with the rules stored in the PBX Call Assist 4 UCServer if needed. Examples: • **Phone number** internal extension number • **Phone number external dialing code** Number of subscriber 12345 in the local area network • **External dialing code Country Area code Phone number** Number of a subscriber in a different country
Phone numbers for display	... will be used by PBX Call Assist 4, if this format can be generated with country codes and city codes available. **+Country (area code) number** Example: **+49 (30) 123456** Phone number of subscriber 123456 in Berlin, Germany

The examples above are valid for germany and are strongly related to the according country. In the location settings you can see, which dial rules are valid for your location.

5.2.4 Authorizations

The display of contact information in Favorites or on the monitor is dependent on what information the user is allowed to see. To be able to control this, *authorizations* are necessary.
Additionally to the visibility the authorizations defines the availability of contact related functions which are accessible for the user throu the *ActiveContacts*

5.2.4.1 Granting authorizations

Each user can give other users or contact, who are connected to the system via federation, authorizations on the own contact or phone lines. These authorizations are strongly additive to already given adminitrative rights. You cannot remove already given rights.

Authorizations can be awarded through the context menu of the ActiveContacts (in Favorites or monitor), menu point **customize authorizations**.

Autorizations apply to contact data of the user and to dynamic informations and functions, which are provided by the PBX Call Assist 4 UCServer. The authorizations on the contact have a fixed definition.

5.2.4.2 Authorization inquiry dialog

If a user adds a contact to his or her Favorites or in the monitor but was not yet granted permission to do so, the newly added contact will receive a corresponding authorization request.

The dialog shows a list with the current authorization inquiries. Every line contains the name and/or the identity of the contact requesting authorization. One or several contacts can be selected from the list.

Below the list is a drop down menu where the authorization level can be selected. The authorizations are applied for the selected contacts via a click on **Apply**. These contacts are then immediately placed in the first contact group in Favorites on the main window.

It can be determined that selected contacts will receive no presence information with **Reject**. This corresponds to the authorization level "Blocked". This definition is applied immediately but the contacts do not appear in Favorites.
If a contact who was blocked should later receive authorization, then the users identity has to be added first via "Add contact..." to the Favorites context menu (or monitor).

The allocation of authorizations can also be carried out via the context menu which can be displayed by right clicking on contacts.

Close closes the authorization allocations dialog.

5.2.4.3 Change authorization levels

The Favorites or the monitor will be able to view and change the authorizations once granted simply by using the context menu under **Authorization Level:...**.

5.2.4.4 Remove authorizations

To revoke authorizations from a contact, this is also done in the context menu with the option **Blocked**. Thereby the contact receives no status updates or other information like names or e-mail addresses.

If a contact from Favorites / monitor is completely deleted, it can be decided whether the contact is set to *Blocked*. If this is not desired, the authorization level is completely reset so that a new authorization inquiry can start.

5.2.4.5 Table of user and contact authorizations

The authorizations which can be given to other users are differentiated in 5 levels:

- Blocked:
  Blocked contacts see only your name and your e-mail address and no further information about yourself.
- Public:
  Public contacts see your name, title, company, business phone numbers and e-mail address.
- Business:
  Business contacts will see certain contact information and also restricted information about your availability.
- Team:
  Team colleagues see detailed contact information and differentiated presence information including notes.
- Personal:
  Personal contacts see detailed contact- and presence information, inclusive a note ans private data.

The overview displays by which authorization level what contact data is transmitted to other users:

Information	Blocked	Public	Business	Team	Personal
Display name	X	X	X	X	X
E-mail address	X	X	X	X	X
Title		X	X	X	X
Work phone		X	X	X	X
Mobile number				X	X
Private phone					X
Other number					X
Company		X	X	X	X
Office			X	X	X
Business address			X	X	X
SharePoint/Web-Site			X	X	X
Note			X*	X	X

The authorization levels exclusively limit the contact data exchanged via presence information, that is, primarily presence information that is transmitted via Federation. The authorization level does not influence the contact search. Contact data, for example the cell phone number, continues to be visible via a contact search, regardless of the authorization levels.

X* In these authorization levels the notice will only be transmitted unrestricted within the users of

UCServer. Contacts via Federation receive the notice only if at least the authorization level **Team member** is allowed in the domain authorizations.

In PBX Call Assist 4 UCServer further information and functions are available to give authorizations to a contact.
The following definition is valid for standard authorization levels:

Authorization		Blocked	Public	Business	Team	Personal
See presence			X	X	X	X
Set presence					X	X
See private appointments						X
See public appointments				X	X	X
First line*	See outgoing phone numbers			X	X	X
	See incoming phone numbers			X	X	X
	See diversions			X	X	X
	Set diversions					X
	Retrieve call				X	X
Second line*	See outgoing phone numbers				X	X
	See incoming phone numbers				X	X
	See diversions				X	X
	Set diversions					X
	Retrieve call					X

(*) These authorizations only apply within the PBX Call Assist 4 UCServer service responsible for the user. Federation contacts or contacts from other PBX Call Assist 4 UCServer services will not see this data!

5.2.4.6 Administratively pre-set authorizations and authorization levels

The administrator is able to allocate authorization levels or single authorizations. In this case, the administratively pre-set authorization levels cannot be minimized anymore. This means that the lowest

authorization level "Blocked" cannot be selected anymore for the contacts concerned. This is because the lowest authorization level allocated by the administrator always applies.

	If single authorizations are administratively given instead of authorization levels, the authorization level can only be changed by the administrator.
	For contacts already authorized by administration settings there will be no authorization inquiry dialog.

5.2.5 Favorites

Frequently used contacts can be stored in PBX Call Assist 4 in the Monitor. In addition, PBX Call Assist 4 offers you the option of storing such Active contacts in the main window in the *Favorites* tab.

At the tab *Favorites* the most important contacts can be stored. They can be sorted in free allocatable groups without the need to use the Monitor window. For more information please refer to Monitor and ActiveContacts.

Special Favorites tab functions
Unlike the monitor, the *Favorites* tab has special functions. Contacts in the search result list can, for example, be added to this tab with the **Add to Favorites** context menu function.

Line group
A special group can be dislayed in the *Favorites* tab which contains all phone lines which your system administrator has configured for you. You can display this pre-defined line group if you activate the appropriate option in the settings dialog on the View page.

Please note that your Administrator can exclusively change the contents of the group. For you the group is read only. This is by the symbol in the title bar. If new lines are added or old ones removed, the group is automatically updated accordingly.

	If the pre-defined lines do not satisfy your needs you can copy the elements into a new group which you create and then deactivate the pre-defined group in the settings dialog. Please note, however, that this is then no longer automatically updated in case of changes.
	Unlike in the monitor, the groups cannot be arranged next to each other in the main window.

5.2.6 Monitor

The PBX Call Assist 4 monitor is the extended and more flexible version of the contact area in the main window.

The monitor is activated in the **Display monitor** in Main menu. The monitor can be filled with contacts like the Favorites tab in the main window. The different sorts of contacts are described in the section about ActiveContacts.

5.2.6.1 Functions in the monitor menu:

The monitor has its own menu. In the docked state it can be opened with the help of the main menu button.

- **Lookup contact**
  Click here if you are searching for a particular contact. The command opens the PBX Call Assist 4 main window and automatically sets the input focus in the search input field.
- **Journal browser**
  With this menu item in the **Tools** sub-menu, you can open the Journal browser. Unlike the **Journal** tab, you can search all available journal entries here.
- **Inbox**
  The **Inbox** function in the **Tools** sub-menu switches to Outlook®. You can therefore keep an overview of the e-mails you receive.
- **Display on incoming call (own line)**
  Activate this option in the **Characteristics** sub-menu if the monitor is to be displayed for incoming calls.
- **Display on incoming call (all lines)**
  Activate this option in the **Characteristics** sub-menu if the monitor is to be displayed when a call comes in from a saved contact (or line).
- **Docked to the edge**
  Set this setting in the **View**sub-menu if the monitor is to be docked at the edge of the screen as a sidebar. You can also place the monitor next to a different screen edge by picking it up and dragging it to the appropriate position.
- **Always on top**
  Set this setting in the **View** sub-menu if the monitor is always to be displayed. It can then no longer be covered by other windows.
- **Automatically in the background**
  Set this setting in the **View** sub-menu if the monitor should automatically 'sleep' when it is not being used. Please note that this option is only available if the monitor has been docked to the side.
- **Display group title bar**
  Activate this option if the monitor is to display the the groups' title bar.
- **About PBX Call Assist 4**
  Here you get information about the product version of PBX Call Assist 4 and you have the possibility to get more detailled support informations and log files.
- **Close monitor**
  Click here to close the monitor window. You can open it again by using the context menu on the task bar icon or using the menu button in the main window of PBX Call Assist 4.

5.2.6.2 Arranged in groups:

The PBX Call Assist 4 monitor offers various possibilities for individual and intuitive grouping of ActiveContacts. So it is possible to group ActiveContacts and to move them around freely by Drag & Drop. Groups will be visualized by tabs in the monitor. So you can picture organisational structures or project teams.

You can arrange groups side by side, one below the other or behind each other. Just right click and hold the button on the title of the group and move it arround to the desired position on the monitor.Positioning arrows which are displayed help you and show you where you can place the groups. Release the mouse button over the positioning arrow which represents the desired position.

5.2.6.3 Functions in the group context menu

Find more options in th econtext menu of the according group. This menu will be displayed via right click on the title of the group or in a free space inside the group.

- **Group**
  - **New…**
    Click here to create a new group. For this you must specify a group name and confirm with "OK".

  - **Rename…**
    Use this function if you wish to give the group a different name. Confirm the group name with the **OK** button in the dialog window.
  - **Delete…**
    With this function you can remove an existing group. Please note that this function cannot be undone and all ActiveContacts within the group are also deleted.
- **View**
  - **No sorting**
    Select this mode if you want to choose the order of the contacts yourself (use the mouse).
  - **Sort by display names**
    Use this function to sort all ActiveContacts inside the group according their display name. Please keep in mind, that administrative groups, like the line group, cannot be sorted.
  - **Sort by presence**
    Unlike display names and numbers the presence status is not color assorted. Rather, each Active Contactis categorized into 3 groups and each category is shown in specified order.
    - Online and available
      This includes following presences: available, busy, do not disturb, inactive
    - Offline, but absent
    - Not logged in or presence unknown

    Thus, each category contains one or more contacts which are sorted alphabetically.

  - **Sort by phone number**
    Run this function to sort all ActiveContacts of this group by their phone number.
- **Chat with** <Group name>**…**
  Click here to start a chat with all contacts of this group.
- **Add contact**
  This function opens a dialog window with which you can search for contacts and lines. Select the appropriate contacts or lines from the result list which are to be added and confirm you rselection with "OK".
- **Add key**
  Click here to insert a quickdial button in this group. A dialog will appear, where name, phoneline and the number to call should be entered. You may also enter a PBX code to make a special PBX feature available throu this speed-dial key. Close the dialog by clicking on **OK**.

5.2.6.4 Visualisation of PBX Call Assist 4 users on the monitor.

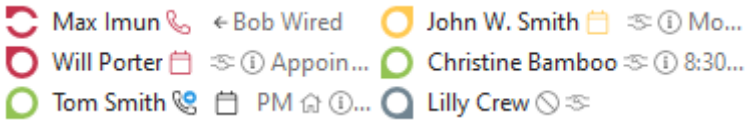
PBX Call Assist 4 users have a special role on the monitor (and in the tab Favorites). Their availability is displayed with a presence icon. Also displayed are phone number diversions and calendar entries of PBX Call Assist 4 users. Further information in the segment ActiveContacts.

★	Contacts from the **Search** tab can be moved with drag&drop from the main window into the monitor.
➡	Incoming calls from contacts within a group are indicated by a triple red flash if the relevant group is not visible.
➡	To re-order the groups it may be necessary to display the groups' title bars. This is especially the case if there are no group tabs due to the current layout.
➡	The current layout can be reset at any time. Switch to the settings with Advanced.
➡	Normally you can't generate subgroups in the monitor. To enable that feature, you have to set a new key in the registry under HKEY_CURRENT_USER\Software\estos\UCServer\CtiMain named

	"MonitorUseSubgroups" of the type DWORD and set its value to '1'. If it is needed, we recommend to set this key via Group Policy.
	When using multiple monitors, the monitor can be docked on the screen between two screens. Please note, that the setting "Auto Hide" move it to the desktop edge of the monitor, because the monitor can not be hidden between the screens.

5.2.7 ActiveContacts

Contacts are displayed as *ActiveContacts* in the **Favorites** tab.



In addition to ActiveContacts these entries can also be telephone lines and quick dial targets.

5.2.7.1 ActiveContacts

ActiveContacts are showing the presence of a contact. Additionly they offer buttons for call establishment, chat capabilities and they grant access to the context menu offering further functions.

The tooltip help of an ActiveContact contains all available information in text format.

A double click on an ActiveContact opens a window showing the related contact details. A right click on an ActiveContact opens the related context menu offering further functions.

Moving the mouse over the ActiveContact buttons displays a tooltip help. A left click on an ActiveContact displays the function buttons listed below:

Icon	Description
	Call a contact by phone, plan a phone call or prepare a phone call.
	Start a VideoChat with the contact. The icon is inactive or grey if the related contact doesn't offer the feature, if no Video and Audio devices are available or if the feature is deactivated.
	Start a Chat with the contact.
	Schedule an appointment with the contact.
	Write a new email to the contact.
	The menu item **Authorisation level** enables users to change the user rights for the specific contact.

The actual presence of a contact and its services changes dynamically the availablility and status of the related indicators or buttons.

Depending on the existing authorizations for this contact the following icons are displayed:

Icon	Description
Presence	The presence icon displays the contact status.
	The small phone icon displays a user's line and its status. A phone is displayed for each of the user's visible lines (maximum two). If the line is diverted the phone is complemented with a small arrow.
	The small calendar icon displays the status of the user's calendar if there is an appointment now or in the future (within 24 hours).
	The Federation icon identifies all external contacts accessible via Federation.
	If a user has not logged in using a Windows/Mac® client, or if logged in to UCServer using PBX Call Assist 4 Mobile while in idle mode, the cell phone icon is displayed in the ActiveContact.
	The symbol indicates that the user is being informed of status changes for this contact.

5.2.7.2 Lines

If the entry represents a phone line the status of a line is displayed. Actions like e.g. setting call diversions are available at the context menu. The actions available are configured centrally by the system administrator. A double click on the entry invokes a phone call.

5.2.7.3 Quick dial numbers

The entry can be also defined as quick dial target. The use is of course not just limited to phone calls; user-defined actions on the phone system can also be triggered (e.g. door opener activated by entering the appropriate system code).

5.2.8 The Phone-Link

With the installation of PBX Call Assist 4 on your system the additional URL Handler "phone:" is registered, which allows you to put HTML document references to phone numbers or to the contact details window. A visitor of an Internet site can be given the possibility to initiate a telephone call to a certain participant by clicking on a link, to open the contact detail window or to establish certain contacts in the Favorites or the PBX Call Assist 4 monitor.

The use of the URL handler "phone:" for dialing is analogous to "mailto:" within the anchor tag in the HTML code. The number to be dialled or the EntryIDs of the contact to be opened follows as a parameter immediately behind.

5.2.8.1 Dial with URL Handler

The phone Handler can easily select a phone number by clicking on a link. For this the phone number to be selected is given to the phone Handler as the only parameter.

Example:
You wish to create a dialing link for subscriber "John Smith" with phone number "+498912345678". Insert the following lines into your HTML code:

```
<a href="phone:+498912345678">call Jon Doe</a>
```

The example looks like this:
Call John Smith

5.2.8.2 Open contact detail window with the URL Handler

The phone Handler can also be used for opening contacts. The Entry-IDs of the contact (separated by ":") must be given to the Phone Handler.

Example:
You would like to create a link displaying the contact details of the party "John Smith".

For example, the subscriber "John Smith" has the following entry IDs:
Data base ID: DB06 (ODBC data source)
Data memory ID: ODBC (in case of ODBC: name of ODBC data source)
ContactID: 1 (ID of contact in the ODBC data source)

Add the following lines in your HTML code:

```
<a href="phone:ID:DB06:ODBC:1">open John Smith</a>
```

The example looks like this:
Open John Smith

	If PBX Call Assist 4 contains the setting that contacts are opened by default for editing, the contact in the editor of the data source (if possible) is opened instead of the contact detail window.

5.2.8.3 Add contact in the URL Handler Favorites

In addition the phone Handler can be used to implement or add contacts to the Favorites or in the PBX Call Assist 4 monitor. This can be optional contacts from the linked contact data sources or Federation contacts.

To add a contact from a data source, the keyword "addcontact:" must be given after the keyword "phone:". Afterwards, the Entry-IDs of the contact are displayed in the same way as in the contact detail window, each separated with ":". Optionally, the tab and the group name where the contact should be filed, can be given.

	Without specifying a tab and group name the contact is stored at the tab "Favorites".
	If only the tab name is given, the contact is put in the first group in the card index tab.
	If only the group name is given, all tabs are searched and the first group of the same name is used.
	If no tab or group with the given name exists, these are automatically applied.

Example:
You want to include "John Smith" in Favorites. The participant "John Smith" has the same EntryIDs like in the example "open contact detail window".

Add the following lines in your HTML code:

```
<a href="phone:addcontact:DB06:ODBC:1" > include John Smith in Favorites</a>
```

The example looks like this:
Include John Smith in Favorites

To include a Federation contact, specify the presence identity (e.g., SIP Uri) instead of the Kontakt-EntryIDs.

Add the following lines in your HTML code:

```
<a href="phone:addcontact:John.Smith@domain.com">Add John Smith to your favorites</a>
```

The example looks like this:
Include John Smith in Favorites

Example:
You want to include "John Smith" in the "Support" monitor group.

Add the following lines in your HTML code:

```
<a href="phone:addcontact:DB06:ODBC:1:support"> include John Smith in the support group</a>
```

The example looks like this:
Include John Smith in the support group

To include a Federation contact, specify the presence identity (e.g., SIP Uri) instead of the Kontakt-EntryIDs.

Example:
You want to include the Federation contact "John Smith" with the presence identity "john.smith@domain.de" in the "support" monitor group.

Add the following lines in your HTML code:

```
<a href="phone:addcontact:john.smith@domain.de:support" > include John Smith in the support group</a>
```

The example looks like this:
Include John Smith in the support group

5.3 Use presence information

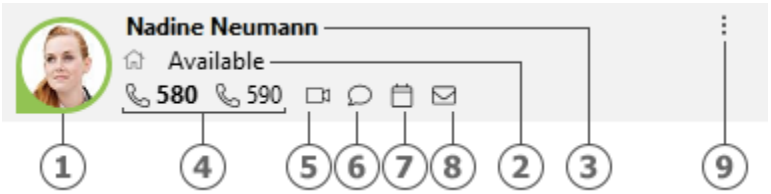
Here you find out how to control and use the presence information. Please, choose a subject:

- Own presence
- The presence of the contacts
- Presence icons

5.3.1 Own presence

The **My presence** display in the Main window shows the user's currently set presence information (or the information determined by PBX Call Assist 4 UCServer) . Therefore the user can see at any time how they are visible in the system for other users. The user interface visualizes upcoming appointments, status of phones, including set call forwardings and allows access to the settings of PBX Call Assist 4.

5.3.1.1 My presence



[1] My own presence
[2] Availability/Status/Notice
[3] Current logged in user
[4] My lines
[5] My audio/video devices
[6] My chats
[7] My calendar
[8] My inbox
[9] Main menu

This range consists of several parts (in the sequence of the numbering):

- **My presence**
  The large presence symbol shows you your current presence state (manually set or determind from the PBX Call Assist 4 UCServer). For more information about the symbols and colours used by PBX Call Assist 4 see Presence symbols. If you click on the presence symbol the menu for presence settings and presence profiles opens.
- **Currently logged-in users with status, memo and availability**
  The two lines of text contain, in the first line, the name of the user who is logged in, then below that the presence status in text form with the memo just set, if any. In addition, provided this was set, the availability stored in your presence profile is displayed as a symbol to the left of the presence status. Clicking on the name opens the "Presence settings and presence profiles" menu. By clicking on the presence status or memo text, you can immediately change the memo text. The selection list which then appears displays items of memo text which have already been used and which can be set again.
- **My line(s)**
  All phone lines of the user will be shown as symbols. You can find more information about phone lines in Lines options.
- **My audio/video devices**
  The item stands for the Audio-/Video devices available for Audio-/VideoChat. The item can be clicked or it can be opened per ALT+V keys to configure the usage of the Audio-/Video devices. Once the item is clicked a menu allows configuring if Audio- and Video devices are to be used (for VideoChat), if Audio devices only are to be used (for AudioChat) or if no devices are to be used (Audio/VideoChat off). The selected configuration can be changed later any time by pressing the AV device item at the My Presence area. Further an Audio-/Video Wizard can be started to store the devices to be used with Audio-/VideoChat. The tooltip on the item gives you a description of the devices you are using. Additionally the color of the item describes the actual status of the devices. If it is "green" all devices are ready to use, "red" for devices are in use and "gray" means that no devices are available. A triangle symbol is used for VideoChat, a headset symbol is used for AudioChat. For more information about Audio/Video communication see Audio-/VideoChat.
- **My chats**
  Signals new text chats in Tooltip that you have received, but still haven't read. Click on the button to

open a dialog box for contact selection, to be able to start a chat with a participant. Selecting several contacts starts a chat with several participants (chat room).

- **My calendar**
  Shows the current diary status and permits opening the diary if available. A tool tip will show the next scheduled appointment. Moreover, you can look into the context menu (right click) and read the diary so as to selectively reconcile your appointments with PBX Call Assist 4 UCServer.
- **My inbox**
  Signals new emails in Tooltip that you have received, but still haven't read. Click on the button to display the email inbox.
- **Main menu**
  Opens the PBX Call Assist 4 main menu.

5.3.1.2 Presence settings and presence profiles

This menu can be opened with clicking on the presence symbol and is used to change the own presence state and for configuring of presence profiles.

A presence profile is formed from the presence status, a memo and a call forwarding profile. Creating a separate presence profile is described later on in this section.

Presence entries
The first part of the menu displays the currently available presence profiles. There are four pre-defined profiles, one for each presence status. The menu entry describes precisely what is set on selection.

Reset status
With this, the user can reset a manually set presence state. This does not change the memo or set call redirections.

Set presence…
Opens a dialog with which all presence aspects can be set simultaneously. The user can select their status, the memo and a diversion profile here and set them by confirming with **OK**. **Cancel** closes the dialog without making changes to the presence.

Edit presence profiles…
Opens a dialog which can be used to configure presence profiles.
There are four default profiles, which can't be deleted but adopted to your needs.
The user can also create own additional profiles with the **New** button.
As well **Edit** as **New** open a further dialog which permits all aspects of a profile to be set.

5.3.2 The presence of the contacts

Every user connected to the system has his own status, his *Presence*. This information is established according to defined rules from the status of several services: Telephone status (telephone service), calendar status (calendar service), logged on/ logged off (system service) and manually entered user status.

The presence gives information about the current availability of a call partner at any time.

An overview of the displayed presence symbols and their meaning can be found under presence symbols.

5.3.3 Presence icons

Every user connected to the system has his own status, his *Presence*. This information is established according to defined rules from the status of several services: Telephone status (telephone service), calendar status (calendar service), logged on/ logged off (system service) and manually entered user status.

The presence therefore dynamically informs of the availability of a communication partner depending on the current status of the various services.

Possible presence states

Status color	Meaning
	Available
	Busy
	Out of office
	Inactive
	Do not disturb
	Presence information unavailable

In addition to this presence information the following additional icons are used in PBX Call Assist 4:

Icon	Meaning
	If a contact is not logged on to a server their status is displayed with a gray symbol.
	If a contact receives a call on one of their lines their status flashes red/orange

Optionally, a user can set, in his or her presence profile, an availability which is signaled to other users. This availability can describe the following statuses:

Icon	Meaning
	Break: The user is currently on a break and probably cannot be reached.
	Business trip: The user is currently on the road and may not be available.
	Home office: The user is working from home and can be reached there.
	Vacation: The user is currently on vacation and is therefore unavailable.

Besides to the contact-based presence information the telephone lines shows a different status:

Icon	Meaning

	Phone line ready, no active conversation
	Active conversation (external or internal)
	Changing between red and orange - incoming ringing
	Line faulty
	Active call redirection
	Active call protection (the icon for the redirection is not displayed with active call protection).

5.4 Plan communication

Here you can find out how to plan and track your communication with PBX Call Assist 4. Please choose a subject:

- Journal
- Journal browser
- Journal editor
- Unprocessed calls and chat
- Call planning
- Reminder window

5.4.1 Journal

The **Journal** tab in the main window shows the last calls and chats. It contains the most important information in a view. The entries are always grouped by days.

The calls displayed use the same icons on the **Journal** tab as in the journal browser.

- Incoming external calls (connected)
- Incoming external calls (not connected)
- Outgoing external calls (connected) and calls (not connected)
- Incoming internal calls (connected)
- Incoming missed internal calls (not connected)
- Outgoing internal calls (connected) and calls (not connected)
- TextChat
- Incoming audio chats (connected)
- Incoming missed audio chats (not connected)
- Outgoing Audio Chats
- Incoming video chats (connected)
- Incoming missed video chats (not connected)
- Outgoing video chats

The **Journal** tab can filter the shown entries with various options:

- **Today**
  Click here to display just the calls which were made or taken today.

- **Last week**
  Click here to display just the calls which were made or taken in the last seven days.
- **Last month**
  Click here to display just the calls which were made or taken in the last 31 days.

With PBX Call Assist 4 it is possible to filter journal entries with a freely defined text. For example type '123' into the input field of the filter options to reduce the contents of the view to entries which are containing the text '123'. Please note that using the free text filter in this view only affects the currently loaded data and hides unwanted rows for a quick access. For a complete full text search in the complete database please use the journal browser instead.

In the **Journal** tab you can configure the shown columns. You can reposition a column by left click and hold the left mouse button on the column header. Now move the mouse to the desired position. To remove a column, just move it outside the table. Right click on a column header opens a context menü. There you can change the visibility of columns and you can set the columns and their grouping options back to default. With this context menu you can open the field selection dialog. Here you can drag and drop column headers in to the table to add these columns to the view.

	Unlike the journal browser, the **Journal** tab does not have to be updated manually. New journal entries are entered automatically.
	Unedited calls and chats will be shown in bold.
	Calls which are answered by other users are shown in blue.
	Journal entries can be sorted by clicking on their column headers (reverse ordre it by click again). Please note, that journal entries are sorted within their grouping setting (per day).
	Please note that the journal in the main window is only a brief view of the journal entries. You will find a detailed journal with all columns and journal entries in the Journal browser.

5.4.2 Journal browser

The journal browser of PBX Call Assist 4 offers a more detailed view on your calls and chats than the journal tab in the main window. Here you can get all calls of arbitrary time frames and you can group them with differently, not only ba days.

The calls displayed use the same symbols in the Journal browser as in the main window:

- Incoming external calls (connected)
- Incoming external calls (not connected)
- Outgoing external calls (connected) and calls (not connected)
- Incoming internal calls (connected)
- Incoming missed internal calls (not connected)
- Outgoing internal calls (connected) and calls (not connected)
- TextChat
- Incoming audio chats (connected)
- Incoming missed audio chats (not connected)
- Outgoing Audio Chats
- Incoming video chats (connected)
- Incoming missed video chats (not connected)

- Outgoing video chats

The journal browser has a series of filters with whose help certain calls can be displayed or hidden depending on their type.

- **Default**
  Clicking on this button will reset all type-based filter settings to their default values. All calls that you have made will also be displayed again.
- **Incoming calls**
  Activate this option to display just incoming calls. Deactivate this option to display both incoming and outgoing calls.
- **Outgoing calls**
  Activate this option to display just outgoing calls. Deactivate this option to display both incoming and outgoing calls.
- **Internal calls**
  Activate this option to display just incoming calls. Deactivate this option to display both incoming and outgoing calls.
- **External calls**
  Activate this option to display just external calls. Deactivate this option to display both external and internal calls.
- **Calls (not connected)**
  Activate this option to display just calls which were not connected. This also contains all missed calls. Deactivate this option to display both calls which were connected and calls which were not connected.
- **Calls (connected)**
  Activate this option to display just connected calls. Deactivate this option to display both calls which were connected and calls which were not connected.
- **With note**
  Activate this option to display just calls for which call memos were saved. Deactivate this option to display both calls with and calls without call memos.
- **Without note**
  Activate this option to display just calls without call memos. Deactivate this option to display both calls with and calls without call memos.
- **Phone number hidden**
  Activate this option to also display phone conversations that block the partner's phone number. Deactivate this option to only display those conversations that provided the partner's phone number.
- **Public entries**
  Activate this option to also display calls by other PBX Call Assist 4 users. Please note that private calls by other PBX Call Assist 4 users are not displayed. Equally, the journal entries of other PBX Call Assist 4 users cannot be changed as a rule. Deactivate this option to only display your own phone calls.
- **Filter journal type**
  Use this feature to filter journal types. By default, all journal types will be displayed. Journal type options include: TextChats only , AudioChats only, VideoChats only or phone calls only.

In addition, PBX Call Assist 4 supports further functions for finding journal entries:

- **Date filter:** Select the desired start and end date in the date fields in order to display just journal entries from within a certain period. Alternatively you can also use the pre-defined keys **Today**, **Last week** or **Last month** to set the time period.
- **Text filter:** You can filter journal entries by a freely defined text. For example, type in the name of a sought after contact into the text field and press Enter. Alternativly you can start the search by pressing the **Start search** button.

The journal browser has the ability to group journal entries by certain criterias. You can change the grouping option in a drop down box in the area **View**.

- **Group by days**
  All journal entries from the same day are grouped together.
- **Group by contacts**
  All the same conversation partner's journal entries are grouped together.
- **Group by project**
  All journal entries assigned to the same project are bundled.
- **List view**
  The journal entries are displayed without grouping.

More journal entries
By default, a maximum of 100 hits will be returned from searches by PBX Call Assist 4. All additional journal entries corresponding to the search criteria can be requested by clicking the **Additional Journal Entries** button. That button is on the status bar. The button will be hidden when all log entries have been displayed.

The print function in the journal browser enables you to print either everything or only the selected journal entries as a list. It is printed the same as it is displayed on screen, i.e. with the current groupings and all visible columns.

You can freely change the columns to view in the journal browser. You can reposition a column by left click and hold the left mouse button on the column header. Now move the mouse to the desired position. To remove a column, just move it outside the table. Right click on a column header opens a context menü. There you can change the visibility of columns and you can set the columns and their grouping options back to default. With this context menu you can open the field selection dialog. Here you can drag and drop column headers in to the table to add these columns to the view.

	Unlike the **Journal** tab in the main window the journal browser must be updated manually, especially if new journal entries are added.
	Calls and chats marked as **Unprocessed** are highlighted in bold type.
	Calls which are answered by other users are shown in blue.
	The journal entries can also be sorted if you click the column headers (reverse sorting on second click). If a grouping has been set, the journal entries within each group are sorted according to the sort criterion.
	The grouping after projects is only available when the settings to Projects were configured that should use PBX Call Assist 4 projects.

5.4.3 Journal editor

The journal editor in PBX Call Assist 4 permits you to look up and subsequently edit information on a call made or received. It can be opened by double click on the journal entry of a journal list for example.

If a contact was linked to the opened journal entry, all functions for the contact can be run via the tool bar. For detailed descriptions of these functions, please refer to Contact details.

In addition, you will find special functions in the icon bar which you can execute for a journal entry:

- **Save**
  Click here to save all changes to the journal entry.

- **Save and close**
  The journal entry is saved and the editor window is subsequently closed with this function.
- **Print**
  Click here to print out the journal entry.
- **Print preview**
  Click here to show a print preview of the journal entry. You can also print the journal entry from the preview.
- **Printer settings**
  Click here if you wish to change the printer settings for printing the journal entry.
- **Edited**
  If this button is activated the journal entry is marked as processed. Activate this button if you wish to mark the journal entry as processed.
- **Unprocessed**
  If this button is activated the journal entry is marked as unprocessed. Activate this button if you wish to mark the journal entry as unedited. Unprocessed journal entries are displayed in bold type in the journal view.

The following data in the journal entry can be changed or added to with the journal editor:

- **Link contact**
  When the contact selection button is clicked the contact selection dialog opens where you can link the selected contact to the journal entry by clicking **Ok**. Please note that this process transfers both the contact name and also the company name from the selected contact in the journal editor. If a contact is linked to a journal entry, all contact related functions can be executed from within the journal entry. So you can call the contact with a different phone number again or send him an email.
- **Change contact name**
  You can enter any name in the contact name field which also appears in the journal views. Please note that the contact name can thus deviate from the name of the linked contact.
- **Change company name**
  You can enter any name to be stored in the journal entry in the company name field. Please note that the company name entered may thus be different from the company name of the linked contact.
- **Change project PIN**
  You can assign the call to a particular project here. You must first define the projects for this. You can create new projects in the settings under Projects.
- **Mark private call**
  If this option is activated the call can be marked as a private call. This means that other PBX Call Assist 4 users can no longer see this entry. Please note that depending on the server settings, all contact data including phone numbers can be shortened or deleted by this.
- **Edit call memo:**
  Enter your call memo in the journal editor's memo field.

⚠	Please note that you cannot change the journal entries of other PBX Call Assist 4 users.
⚠	Please note that the project PIN can only be changed if this feature has been activated in the settings on the Projects page.
⚠	It is only possible to mark private calls if this feature has been activated in the settings on the Projects page.

5.4.4 Unprocessed calls and chat

You will find phone calls and chats which require your particular attention on the **Unprocessed** tab. Depending on your settings, you will see all journal entries here that are marked as not dealt with or all "Call in absence" e-mail marked "not read". Further information can be found under Settings in the Incoming calls.

You will find the following functions on the **Unprocessed** tab's icon bar:

- **Mark as edited**
  The selected entry or entries are marked as processed or read. The entries thus disappear from the view.
- **Mark all as edited**
  Marks all entries in the view as processed or read. The view is then empty.
- **Internal calls**
  Activate this option to additionally display internal calls. Deactivate this option to display just external calls.
- **Grouped by days**
  Click here if the entries in the list are to be grouped by day.
- **Grouped by contacts**
  Click here if the same subscriber's entries in the list are to be grouped.

In this view of PBX Call Assist 4 it is possible to filter the entries with a freely defined text. For example, if you type in '123' into the input field of the filter options, you will only see entries which contain '123' in one of their fields.

In the tab **Unprocessed** you can freely configure the displayed columns. You can reposition a column by left click and hold the left mouse button on the column header. Now move the mouse to the desired position. To remove a column, just move it outside the table. Right click on a column header opens a context menü. There you can change the visibility of columns and you can set the columns and their grouping options back to default. With this context menu you can open the field selection dialog. Here you can drag and drop column headers in to the table to add these columns to the view.

	An overview of the entry icons can be found on the Journal.
	The phone calls can also be sorted if you click on the column headings (reverse sorting on second click). If a grouping is defined the phone calls within each group are sorted by the search criterion.

5.4.5 Call planning

5.4.5.1 Plan call

With the help of the *call planning* window you are able to mark calls which you wish to make in the future. Already planned calls can be viewed in the tab **Planned** in the main window.

You will find all the functions which you can use for a planned call in the editor's icon bar

- **Make call**
  Click the upper half of the button to call the subscriber. The phone number which was specified in the phone number field in the editor dialog is always used.
  In the lower half of the push button, you are able to view the contact context menu with the arrow. Here, you will find every activity available for the linked contact. For a detailed description of these functions, please refer to contact details.

- **Save**
  Click here to save the planned call and all changes. The saved call appears on the tab **planned** in the main window.
- **Save and close**
  The planned call is saved with this function and the editor window is then closed.
- **Print**
  Click here to print out the planned call.
- **Print preview**
  Click here to display a print preview of the planned call. You can also print out the planned call from the preview.
- **Printer settings**
  Click here if you wish to change the printer settings for printing the planned call.
- **Delete planned call**
  Click here to delete the planned call. The editor window is then closed. Please note that this action cannot be undone.

Change the status of the planned call
In the section **Status** on the tool bar, the status of the planned call can be define with the aid of the drop-down box:

- **Set to in process.**
  Select this entry if you wish to show that you are currently processing the planned call.
- **Mark as completed**
  Select this entry if you wish to show that you have successfully processed the planned call.
- **Mark as not started**
  Select this entry to indicate that the planned call is pending.
- **Mark as waiting for someone else**
  Select this entry if you have to wait for someone before you can make this call.
- **Mark as deferred**
  Select this entry to mark the planned call as postponed.

The following data for the planned call can be defined or changed with the editor:

- **Change subject:**
  The topic field is generated automatically when creating a new planned call. You can customise this according to your requirements here.
- **Link contact**
  Clicking the contact selection button opens the contact selection dialog with which you can link the selected contact to the planned call by confirming with "OK". Please note that both the contact name and also the company name are transferred from the selected contact to the editor by this process.
- **Change contact name**
  You can enter any name in the contact name field which also appears in the journal views. Please note that the contact name can thus deviate from the name of the linked contact.
- **Change company name**
  You can enter any name which is to be saved in the journal entry in the company name field. Please note that the company name entered can thus deviate from the name of the linked contact.
- **Change phone number**
  The phone number which is dialed when the upper half of the Call button is clicked is shown here. If you have linked a contact to this planned call you can dial one of the contact's phone numbers in the dropdown list. You can nevertheless also enter any phone number in the field.
- **Define start date**
  Enter the start date in the relevant field. This defines when the planned call is to be made.
  Alternatively you can open a calendar via the dropdown arrow and simply select a day.
  Note: If neither a due date nor a reminder date have been activated, these will also be entered automatically when selecting the starting date.

- **Enter date due**
  Define here by when the planned call should have been made. You can either enter the date directly or use the calendar which you can open via the dropdown arrow.
  Note: if you have not yet defined a reminder date this is automaticallly set when the due date is selected.
- **Set reminder**
  Activate this option and enter the reminder date with a time to be reminded of the call. The Reminder window opens at the given time. Please note that the reminder function is only performed for planned calls which are marked as not processed.
- **Change project PIN**
  Here you can assign the planned call to a particular project. You must first define the projects for this. You can create new projects in the settings under Projects.
  Please note that the project PIN can only be changed if this feature has been activated in the settings on the Projects page.
- **Change memo**
  Here you can enter a memo text for the planned call which you wish to save.

5.4.5.2 Planned calls

The tab **Planned** gives an overview of all phone calls which are planned with PBX Call Assist 4.

Display of planned calls
The planned calls have different icons depending on the processing status:

- **In progress**
  The planned call is presently being processed.
- **Completed**
  The planned call has been successfully processed.
- **Not started**
  Processing of the planned call has not yet begun.
- **Waiting**
  Waiting for someone else to process the plannned call.
- **Deferred**
  Processing of the planned call has been postponed.

In addition, the planned call is highlighted differently depending on its status:

- Planned calls which have not yet been processed are shown in bold text
- All planned calls due in the past which have not been completed are highlighted in red.
- Completed planned calls are crossed through and appear light grey.

The view on the "Planned" tab can be customised. Entries which fulfil certain criteria can be shown or blanked out.

- **Without date or reminder**
  Activate this option to also display all planned calls which have neither a date nor a reminder set.
- **Completed calls**
  Activate this option to additionally display all calls which have already been marked as completed.

The status of the planned calls can be changed via the icon bar or the context menu. Mark the relevant entries in the list and click the appropriate button.

- **Set to in process.**
  Select this entry if you wish to show that you are currently processing the planned call.

- **Mark as completed**
  Select this entry if you wish to show that you have successfully processed the planned call.
- **Mark as not started**
  Select this entry to indicate that the planned call is pending.
- **Mark as waiting for someone else**
  Select this entry if you have to wait for someone before you can make this call.
- **Mark as deferred**
  Select this entry to mark the planned call as postponed.

Further functions for processing planned calls are available in the icon bar:

- **Delete**
  Select this function to delete the selected entries. Please note that the deleted entries cannot be restored.
- **Update**
  Click this button to update the view.

In this view of PBX Call Assist 4 it is possible to filter the entries with a freely defined text. For example, if you type in '123' into the input field of the filter options, you will only see entries which contain '123' in one of their fields.

In the **planned** tab columns can be freely configured. You can reposition a column by left click and hold the left mouse button on the column header. Now move the mouse to the desired position. To remove a column, just move it outside the table. Right click on a column header opens a context menü. There you can change the visibility of columns and you can set the columns and their grouping options back to default. With this context menu you can open the field selection dialog. Here you can drag and drop column headers in to the table to add these columns to the view.

	Either the PBX Call Assist 4 editor or the Outlook® editor opens to edit the planned calls depending on your settings in the Planned section.
	The planned calls can also be sorted if you click on the column headers (reverse sorting on second click). Please note that the planned calls are sorted within their group, in other words per day.

5.4.6 Reminder window

The reminder window reminds you of calls which you have planned. It is always displayed when a reminder for a planned call is shown. The calls are displayed in a list.

Planned calls are highlighted differently in the overview. Details about this can be found in the help file for the call schedule.

You will find the following functions in the icon bar:

- **Make call**
  Click the upper half of the button to call the subscriber. The phone number which was specified in the phone number field of the planned call is always used.

  In the lower half of the push button, you can call up the contact context menu with the arrow. Here, you will find any operations available for the contact. For a detailed description of these functions, please refer to Contact detail window

- **Open planned call**
  Click this button to open the call schedule in the list. Alternatively you can also open a call with a double-click on the list entry.
- **Remind later**
  Use this function to be reminded of the planned call again later. Mark the relevant entries in the list and select the appropriate time period for this.

  You can also switch off the reminder for the planned calls. Select **Do not remind again** from the menu for this.

- **Delete planned call**
  Use this button to delete the selected planned calls form the list. Please note that this function cannot be undone.

	When you close the reminder window it is first displayed again when a reminder for the next call is due.
	A complete overview of all planned calls can be found in the main window in the "Planned" tab.
	The reminding time can be changed if you open the planned call in the editor. Further information under Planning calls.

5.5 Communicate

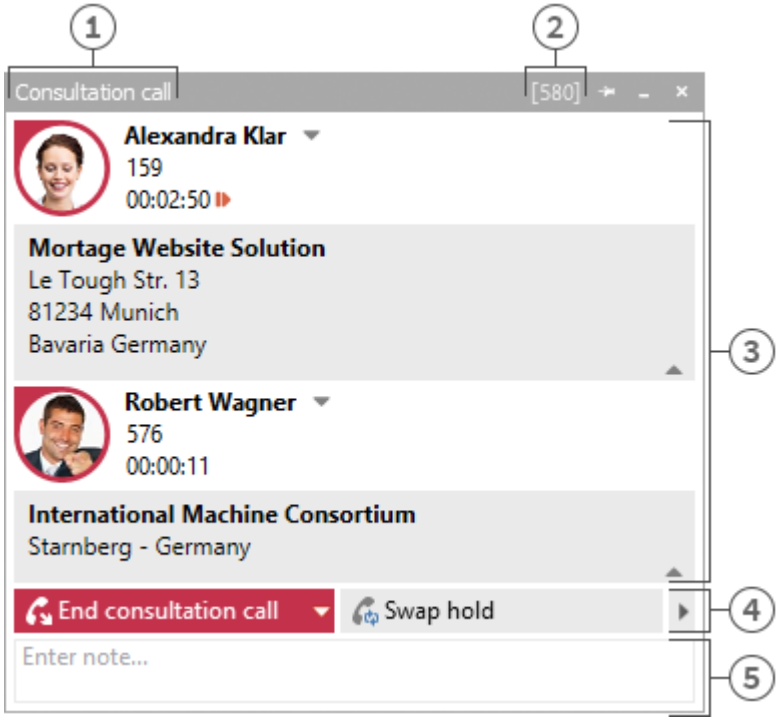
Here you can find out how PBX Call Assist 4 can support you in your daily work. Please, choose a subject:

- Call window
- Line settings
- Call forwardings
- Remote Office
- Chat, SMS, E-Mail
- Audio-/Video conversation window
- Screen Sharing

5.5.1 Call window

The call window is the information and control centre for your phone calls. In addition to the visualisation of the call state, dialog partner and other relevant informations about the call, it is also possible to control the call. The window combines logically related telephone conversations in one interface and in this way allows the convenient control of one or more conversations on a telephone. With the option of making project assignments, selecting private conversations and writing memes, this window is a central element of PBX Call Assist 4.

5.5.1.1 Call window overview:



[1] Call state
[2] Active line
[3] List of calls
[4] Control
[5] Call Memo / Project settings

The call window, as shown above, is divided vertically into three areas.

- A list of calls
  The call window can manage and control one or more calls or even a conference call. All calls which belong together are displayed in a call window.

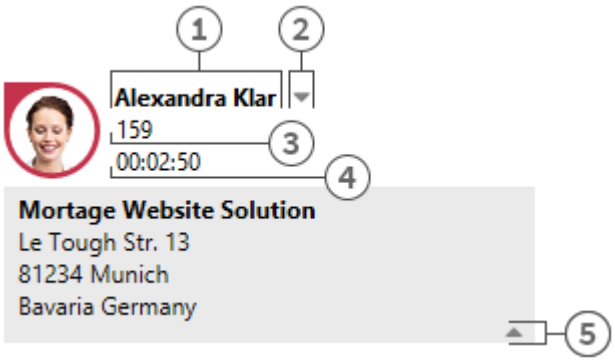
- Phone control The call control area enables you to control the active call.

- Memo area with project, private labelling, phone number display suppression
  The memo area extends the phone information and control with a collection of information about the call. The memo entered is written into the journal of all call participants when the window is closed. If finished calls are removed from the call window, the given note is stored at that time. To be able to set projects and mark private calls adds to the information pool. For more information about the project settings and private settings see Projects.

  In this area you still have the option of suppressing the display of your phone number by switching on the phone number display suppression. The remote station called then does not see who is calling. (Does not work with every phone system and not with internal calls).

Icon	Meaning
123	Phone number suppression deactivated
123	Phone number suppression activated

5.5.1.2 *Overview of the individual call in the call window:*



[1] Call partner
[2] Contact chooser
[3] Phone number
[4] Call duration
[5] Hide contact details

- Status icon
  The status icon shows the current state of the call. A list of status icons used can be found here. Apart from the visualisation, you can open the journal created for he current call participant via the icon. If the window contains several calls you can select a call by means of the icon and call this contact again. A tooltip on the icon displays a brief summary of the most important call information.

- Call partner
  PBX Call Assist 4 UCServer and PBX Call Assist 4 search automatically for a contact for the phone number during a call. The contact found is displayed here if available. If no contact could be found you can create a new contact here.
  You can read about which data sources can be searched in which order during a contact search in Contact search. If several contacts are found a button appears next to the contact to enable selection of a contact.

- Contact selection If several contacts are found for the current phone number, you can select a particular dialog partner by means of the contact selection. PBX Call Assist 4 stores this selection and will show you this contact as your dialog partner the next time he calls again. Further information about searching for contacts in PBX Call Assist 4 UCServer and PBX Call Assist 4 can be found under contact search.

- Number The number is displayed next to the status icon. The tooltip always contains the call status and number.
  You can change the dialog partner's number for a prepared or ended call here. A new contact search is automatically triggered if you change the number.

- Call duration Displays how long you have been connected with the dialog partner.

- Show contact details One of the strengths of PBX Call Assist 4 is the option of extending the call window with dynamic HTML content. You can show and hide the display of additional information with this button. A series of templates are available for displaying further information which you can adapt to your needs.
  The template defines which contact details are to be shown. You will find the templates in the installation directory in *Templates/default/*:
  - *RemoteContact.xslt*
    Is used in the call window for preprocess details for the current dialog partner. The template defines which contact details are displayed.
  - *HoldContact.xslt*
    Is used in the call window to preprocess the details for a dialog partner on hold. The partner

on hold is displayed if a further PBX Call Assist 4 user holds a subscriber while calling you. The template defines which contact details are displayed.

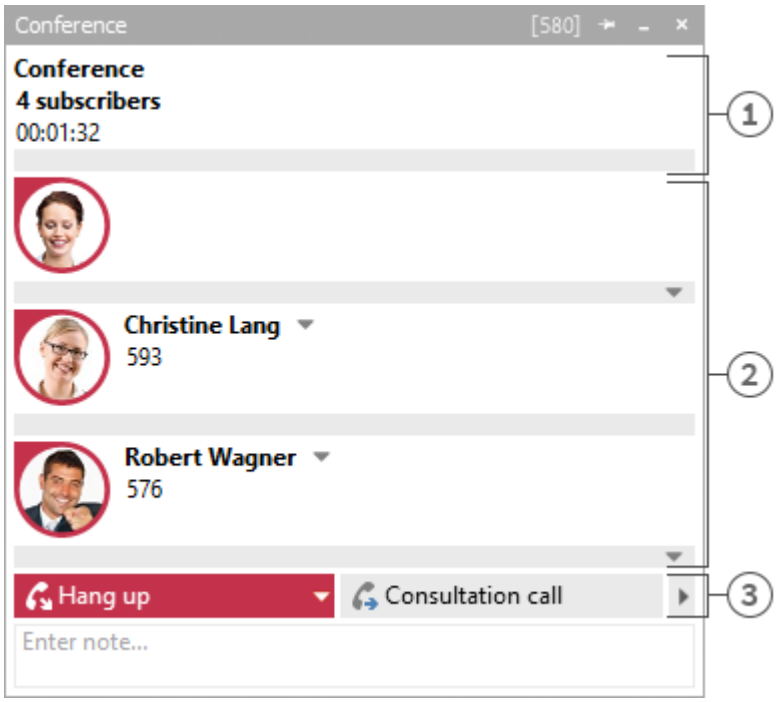
- *LocalContact.xslt* Is used in the call window to preprocess details for the contact called. In case of an incoming call the contact called is displayed if a contact's number is found. For this you must activate the hotline services in the settings for incoming calls. The template defines which contact details are displayed.
- *RedirectedContact.xslt* Is used in the call window to preprocess the contact details for a forwarded call. The contact for whom the call was last signalled is displayed. The template defines which contact details are displayed.

The contact data and call data provided in XML are implemented by the software in the template. If the template data contains data to be displayed, it is shown in the call window (if applicable).
In order to make customisation of the call window templates as simple as possible, you can display the XML contact and call data provided and also the result of the XSLT parser. Copy the appropriate template out of the default directory into the template folder, open it and change the value of variable *debug* in the body tag to 1:

```
<body minwidth="0" minheight="0" maxwidth="0" maxheight="0" debug="1">
```

After you have reloaded the contents of the call window by pressing F5, the displayed templates appear with a colored background. A context menu permits you to view the source code. The upper part of the text file contains the parsed template; the lower part contains the raw XML data which was handed to the parser. Further information on developing your own XSLT templates can be found here.

5.5.1.3 Conference



[1] Conference controller
[2] Conference participant
[3] Controls for the conference

The call window is displayed in the format shown above as soon as you initiate a conference. You can no longer directly control the individual calls but only the conference which is displayed as the uppermost entry in

the call list. How long the conference has been running is shown next to the number of conference participants. The further elements of of the call window are similar to those described above.

5.5.1.4 The various control options:

Depending on the telephony status you can perform various control actions on the current call. The visibility of the individual buttons is significantly influenced by the function range of the phone system.

Icon	Meaning
	Set up dialing for the phone number currently stored in the call window:
	The currently selected contact in the call window offers several numbers. Via the icon **select** you can choose another of the contact's phone numbers. The call is not yet initiated. The icon **call** starts the call.
	Accept an incoming call. The phone switches to hands-free mode. Analogue phones do not support this feature.
	End current call. Reject incoming ringing call. End consultation call End conference. End auto-dial.
	The current phone status either permits ending various calls or you can connect subscribers to each other by hanging up. The combo menu displays which actions are supported. The **hang-up** key ends the current call.
	Hold current caller. The subscriber is either put on hold or a callback is initiated depending on the phone system.
	Retrieve subscriber on hold
	Begin callback. A window opens for searching for contacts or entering numbers. The window contains the last targets for callbacks and forwardings.
	Call on hold. Current call participant is on hold and call participant which was on hold gets connected.
	Initiate conference. Initiate a conference with the current dialog partner and the dialog partner on hold.
	Add dialog partner to the conference being held.
	Forward call. A window opens for searching for contacts or entering numbers. The window contains the last targets for callbacks and forwardings.

	Forward call. You have access to your contact's further phone numbers via the check box. Thus, you can quickly forward a call on your cordless or mobile phone. **The Forward** button opens the contact dialog as described under *Forwarding*.
	If the number called is engaged you can start automatic redialing via this icon. An attempt is made to call the subscriber again after a certain period of time. At what intervals and how often this redialing should take place can be defined in the settings Outgoing calls define.
	Activates the Callback when no answer or engaged function. A callback to this subscriber is started as soon as the remote station is available again.
	Planning a new call to the current contact's last connected number. If the select button is visible, you can choose one of the contact's other phone numbers for the planned call.
	The current call will be restored to the planned status e.g. for setting other project settings. If the select button appears, you can choose other phone numbers of the contact for planing the call.
	Begin call recording. If call recording is set up on the server, you can thus start call recording which is sent to you as an e-mail after the end of the call. This is possible both with a dialog partner and a conference.
	End current call recording.
	Opens a dialog for subsequent selection of DTMF tones. Input can be made with both the keyboard and the mouse.
	If various buttons are not visible either the current phone status or the phone system driver do not permit this action.

5.5.2 Line settings

All lines assigned to the user or computer are indicated as icons in My Presence. These change color in accordance with the telephone status of the line. Many different operations can be carried out on this line via the menus opened with a click.

5.5.2.1 Entries in the line menu:

- **Set as default line**
  If a user has more than one line, he can define via the menu which one is to be the standard line. All telephone operations not requiring specification of the user's own line relate to this line. The line is shown in bold typre.
- **Telephony control**
  If a line is busy with a call, you can only have a controlling influence on the call on this line. No other operations are offered.
- **Set call diversion...**
  Permits direct set-up of call diversion without having to configure a Call diversion profile. The last call diversion is saved and automatically recorded in the last dialog.

- **Cancel call diversion**
  Shows all items of call diversion set up on this line. If the call diversion set up can be attributed to a Call diversion profile, the name of the profile is displayed.
- **Set call forwarding**
  Shows all configured Call diversion profiles currently set up on the line.
- **Switch protection against incoming calls on/off**
  Permits activating or deactivating protection against incoming calls on the line.
- **Remote Office**
  Redirects the extension to a phone outside of the company. Outgoing calls will display the company's number. Further details can be found under Remote Office.
- **Configured feature codes**
  If feature codes for your telephone system were configured on the PBX Call Assist 4 UCServer these will be displayed here.
- **Activate/deactivate suppression of phone numbers**
  This allows you to activate or deactivate caller ID suppression for outgoing calls on the line. You will see in the menu whether caller ID is displayed or suppressed. You must activate the caller ID suppression feature in the Settings.
- **Extended settings**
  - **Configure call forwardings...**
    Allows configuration of Call diversion profiles.
  - **Rename line...**
    Here, you can change the name for the line. That way, it is easier to distinguish between different terminals using the same phone number.

5.5.3 Call forwardings

Call diversions can be set in several contexts in PBX Call Assist 4.
Call diversion profiles have been integrated to support the User in being able to reuse several different often-used call diversions and at the same time to be able to divert several lines.

If a call diversion is to be set on one of your own lines this can be done via the lines button in the "My presence" area.
This opens a dialog which lists the currently available call diversions and allows them to be reset or edited.

A call diversion profle consists of a name, the line which is to be diverted (or the lines which are to be diverted), the type of diversion and the target phone number.

New
With **New** a new call diversion profile can be established. This opens a dialog. In this dialog, the user defines the name of the profile and selects the line to be forwarded. He can also select **All** if he has several lines and wishes to forward calls from all of them.

Edit
The currently selected diversion profile can be edited with this icon.

Delete
Deletes the selected profile.

5.5.4 Remote Office

The Remote Office makes it possible to work on the road or at the home office. With this function it is possible to use any other telephone (remote office telephone) instead of your own phone.

This feature can be turned on and off from Line Settings. If the feature is not visible there, the telephone system does not support it.

If the feature 'Remote Office' is turned on, the behavior will change as follows:

- Calls to your phone will be forwarded to the Remote Office phone.
- If the PC is used to select phone number, the Remote Office Phone will ring first. If the call is answered, you will be connected with the selected phone number.

5.5.5 Chat, SMS, E-Mail

The message system in PBX Call Assist 4 allows conversations (Chat) between two and up to 30 participants. If individual users are not logged in while the conversation is ongoing, they are shown all conversations after logging in. Participants can be added to or removed from the conversation at any time.

5.5.5.1 Start chat

There are various ways of initiating a chat.

- **Chat to a single user:**
  Everywhere you see another user or contact in PBX Call Assist 4 you can begin a chat with this user via the context menu or via the ActiveContacts icons. This is possible in any presence state of the contact. In the presence state *Do Not Disturb (DND)* the message may be delivered later. If the Chat icon is clicked the **Chat window** opens. At the text field the message can be entered. Once finished the icon *Send* can be pressed. By pressing the *Smiley* button, a smiley from the Smilies list and added to the message. The message sent and the message received by remote users will be displayed with contact name and time stamp in the upper text chat message window. If either Audio- or Video-Chat are available, a request to use those chat modes with the contact can be sent using the corresponding green button (see the corresponding information below).
- **SMS text to a single user:**
  Everywhere you see a contact in PBX Call Assist 4 you can send him a SMS text via the context menu or via the ActiveContacts. For this purpose the context menu offers all phone numbers which are to be found in the mobile phone number fields for the contact.
- **Chat with a group**
  In Favorites and on the monitor you can start a chat with the user group via the context menu of a group. Only those internal users will be added who are active on the same PBX Call Assist 4 UCServer. If a SIP Proxy is used, internal users can also be active on another PBX Call Assist 4 UCServer and thus not be added to a group chat. Alternatively, you can also create a new chat room from the chat with an individual user using the button "Create chat room", which can be found in the "Further Actions" menu.
- **AudioChat with a single user**
  Wherever in the PBX Call Assist 4 a contact appears an AudioChat (if available) can be established with it using the context menu or using the ActiveContacts icons. If a **Chat window** is open (see above *Chat with single user*) an AudioChat can be established with the user by pressing the related green button. The AudioChat can be dropped anytime by pressing the red *hang-up* button. Further functions of the AudioChat dialog are explained at the chapter Audio/Video conversation window.
- **VideoChat with a single user**
  Wherever in the PBX Call Assist 4 a contact appears a VideoChat (if available) can be established with it using the context menu or using the ActiveContacts icons. If a **Chat Window** is open (see *Chat with Single User* above), VideoChat with that user can be requested by pressing the corresponding green button. As long as the other participant has not accepted the VideoChat request, the request can be terminated by clicking the red *Hang Up* button. Further information about the Audio- or Video-Chat features can be found in the Audio-/Video-Chat Window section.
- **Share screen**
  If a **Chat window** is open your local screen can be shared with a remote contact by pressing the Share screen button. The feature is available only if the related rights are granted by the administrator.
- **Request Screen Sharing**
  Would you like to see another user's screen, in the **Chat window** you can also request to share the

screen by clicking Request Screen Sharing. The feature is available only if the related rights are granted by the administrator.

To be able to send a SMS message to a user your user profile at the PBX Call Assist 4 UCServer need the authorisation from the system administrator.

The Audio/VideoChat feature is available only if it has been enabled, if Audio and Video devices are installed and if the system administrator granted the right to use it. How to change the Audio/Video functionality is described in chapter Presence at the bullet point *Audio/Video devices*. How to configure the Audio/Video devices for the usage with the Audio/VideoChat is described in chapter Audio/Video Wizard.

5.5.5.2 Chat status

Messages sent by the user always have a status that is indicated with an icon in the status bar of the message or of the message block. The meaning of the icon is given in the tool tip.

The "read" status of a message is not transmitted for participants who are reached via Federation and thus not signaled.

5.5.5.3 Chat with a group

Every chat participant can add or remove other users to/from the chat room or exit or rejoin the chat room later. The chat room can also be given a descriptive name, for example to be able to find it again later in the journal.

- **Add party**
  After clicking the button to add users the search dialog opens in which you can see all internal users. Select one or more users and confirm the dialog to add the participants.
  Chat parties can be added per drag & drop to the Chat window (sending SMS messages for mobile contacts only, a PBX Call Assist 4 UCServer Chat for internal users only).
  The maximum number of participants is limited to 30.
- **Remove participant**
  To remove a subscriber from the chat open the subscriber's context menu and select the relevant entry.
- **Join chat room**
  If you have exited a chat room or were removed from the chat room by another participant, you can rejoin the chat room. You will find this function in the "Further Actions" menu.
- **Leave chat room**
  If the chat room was created by sending the first chat message, you can exit the chat room at any time. Then you will no longer receive any messages of other participants. You will find this function in the "Further Actions" menu.
- **Set or modify chat room names**
  You can name or change the name of a chat room at any time, provided you are a participant of the chat. To make changes, click in the Name line of the chat, which you will find above the participant list.

5.5.5.4 Chat messages

- **Delete chat history**
  You have the option, both in a chat with a single user and also in a group chat, to delete the entire

chat history, by using the "Delete chat history" button which can be found in the "Further actions" menu. The chat history is only deleted from your view, and the action does not affect the chat history of your other chat partners.

- **Delete individual chat messages**
  If you want to delete specific chat messages, move your mouse over the message you want to delete. This will cause a red X symbol to appear, which you can use to delete your message. The message will only be deleted from your view; and the action does not affect the chat record of your other chat partner.

Please note that no chat rooms can be created with Federation users and no Federation subscribers can be added to a chat room.

5.5.5.5 Links:

PBX Call Assist 4 supports the following links in the chat window:

- **Phone numbers:**
  Phone numbers are highlighted as such and can be selected by clicking them as long as they comply with the rules for the currently selected line's location. (phone:+4912345612, +49 123 456 - 12, 12 etc.)
- **E-mail links:**
  E-mails are recognised and the default mail program is started by clicking it. (mailto:info@info.de, info@info.de etc.)
- **Web links:**
  Recognises all Internet links such as. (http:, https:, www:, www2:, file:, ftp:, gopher:, ntp:, prospero:, telnet:, news:, wais:)
- **UNC paths:**
  Recognises UNC paths. (\\server\directory\file)

If links contain whitespaces PBX Call Assist 4 cannot find the beginning and the end of the link itself. If you place these links between < and > brackets the link is correctly recognised. <Link with space(s)>

To be able to chat with one participant, the Public authorization level must have been granted, at least. This authorization level may also be set administratively for internal users using global settings or group policies (see also Authorizations).

5.5.6 Audio-/Video conversation window

The Audio-/Video conversation window is active while an Audio-/VideoChat conversation is present. Using the AudioChat mode no Video area is displayed thus the AudioChat window size is smaller than the VideoChat window size. But the usage for establishing Audio/VideoChats and the device handling is identical between Audio and VideoChat. The Audio/Video conversation window comprises of the contact area at the upper left corner and below a coloured keypad for Audio/VideoChat call control (e.g. accept calls, hang-up calls), a Text Chat area, below an area for Screen Sharing and a status line at the bottom. If Video is present the conversation window includes a video area at the right side including control buttons (overlays) becoming visible once the mouse moves over. The Chat area (text mode) at the left lower side can be used in any call state. If multiple video streams are shown (e.g. camera views and a shared screen) the major video picture can be changed by clicking on one of the minor video pictures. If the Audio-/Video conversation window is maximized the view changes to full screen mode. The full screen mode can be stopped by pressing the Escape key. The text based chat doesn't depend on any callstates and can be used any time.

Several Audio/VideoChats are supported simultaneously. Each Audio/VideoChat is represented by a conversation window. Only one conversation window can be active at the same time. Additional calls are in

"on hold" state. If another call is accepted additionally to an existing call, the first call is automatically placed on hold. A call that is on hold can be activated by a "Retrieve" button.

In addition to the described methods how to accept and reject calls some USB devices offer the possibility to control the calls with device buttons (Human Interface Device "HID" buttons). This means that an Audio-/VideoChat can be accepted or dropped per device button. The microphone can be muted per device button. The supported devices and how to configure them can be found at the chapter Audio/Video Wizard, call control per device buttons.

5.5.6.1 Incoming Audio-/VideoChat

An incoming Audio-/VideoChat opens the AV conversation window. At the left upper corner the calling contact is displayed. A specific ringer sound plays at the speaker standard device to indicate the incoming Audio-/VideoChat to the user. While ringing an incoming VideoChat the local picture is shown at a large Video area at the right side of the window. The picture appears to be mirrored in order to allow users to check their apperance as using a real mirror:

- **Accept an AudioChat**
  If the green button with the headset and text has been pressed for accepting calls, the call will be accepted. The status bar on the bottom left indicates the quality of the media connection.
- **Accept VideoChat**
  If the green button with the triangle and text has been pressed for accepting calls, the call will be accepted. The status bar on the bottom left indicates the quality of the media connection. The local video image will be small and the remote participant's video image will appear large. The local Video area can be hidden by pressing a small triangle item at the lower right side of the large Video picture. The triangle item is a toggle button thus once pressed again the local video area appears back again.
- **Reject an Audio/VideoChat**
  If the red button with the rectangle and text has been pressed for rejecting calls, the call will be rejected and the audio- or video-chat window will be closed.

5.5.6.2 Outgoing Audio-/VideoChat

With an outgoing Audio-/VideoChat the AV conversation window opens. At the left upper corner the called contact is shown. A specific ringback sound is played at the configured Audio device (e.g. headset) as soon as the remote device could be contacted and rings. If VideoChat is used the local picture is shown at the large right Video area. While running an outgoing VideoChat the local picture is shown at a large Video area at the right side of the window. The picture appears to be mirrored in order to allow users to check their apperance as using a real mirror. During the call establishment phase several operations are possible:

- **Hang-up the Audio/VideoChat**
  If the red button with the rectangle item is pressed the outgoing Audio/VideoChat is disconnected and the Audio/Video conversation window is closed again. The called contact finds a small "bubble" message at the Windows® system tray in order to allow a comfortable call back per mouse click.

5.5.6.3 Connected Audio-/VideoChat

If the called contact accepted the Audio/VideoChat the parties can communicate with each other. Several options are possible:

- **Hang-up the Audio/VideoChat**
  If the red button with the rectangle item is pressed the Audio-/VideoChat is disconnected and the

Audio/Video conversation window is closed again. A specific disconnect sound is played to the Audio standard device indicating the closed call.

- **Quality and status line**
  During an Audio-/VideoChat the quality of the data stream is indicated by a small triangle bar item. The more black bars are shown the better is the data stream quality. Moving the mouse over the item additional information is presented to the user as tooltip text: overall quality (good/bad), transmit statistics ("TX" values), receive statistics ("RX" values), Codec used(e.g. "Opus" with Audio and "VP8" with Video), Video resolution (e.g. 640x480), consumed bandwidth in kilobit per second (kb/s), Jitter buffer in milliseconds (ms), Round-Trip-Time "RTT" in milliseconds (how long the signal takes forth and back) and the calculated available bandwidth for Audio- and Video signals (mostly not fully consumed). The "ICE (TURN/STUN) Info" contains information about the IP-addresses and ports of the current media connection. Along with the IP-address, the connection type of the ICE candidates is displayed in parentheses ("host" - local IP in the LAN, "srflx" and "prflx" – usually publically available IP in the WAN (STUN), "relay" – usually publically available IP in the WAN (TURN)). The media connection status is shown next to the triangle bar symbol (e.g. connected). To the right the elapsed time for the Audio/VideoChat counts up.
- **Mute button for Audio/Video devices**
  Near the red *Hang-up* button a small triangle button opens a menu for "muting" the microphone or the camera devices (if present).
- **Microphone mute overlay button with VideoChat**
  In the small, local Video picture an overlay button to mute the microphone appears while moving over with the mouse. While being muted the overlay button appears striked out. Pressing again the button turns back to normal.
- **Camera mute overlay button with VideoChat**
  In the small, local Video picture an overlay button to mute the camera appears while moving over with the mouse. While being muted the overlay button appears striked out. Pressing again the button turns back to normal.
- **Adapt Video picture size with VideoChat**
  In the main Video picture an overlay button to adapt the main Video size appears (to remove black stripes) while moving over with the mouse. Pressing the button again the Video size turns back to normal.
- **Control the remote Camera with VideoChat**
  If the remote camera supports remote control and if the remote user enabled the feature with the Audio/Video Wizard the local user can move the remote camera. The camera can be turned to the left (arrow key left), to the right (arrow key right), upwards (arrow key up) and downwards (arrow key down). Further it is possible to zoom-in (key "-") and to zoom-out (key "+"). The controlling user may also move the remote camera by using the mouse in the main Video picture with the related overlay buttons.
- **Share screen**
  By pressing the Share screen button a local screen can be shared with a remote contact. The feature is available only if the related rights are granted by the administrator.
- **Request Screen Sharing**
  Would you like to see another user's screen, you can also request to share the screen by clicking Request Screen Sharing. The feature is available only if the related rights are granted by the administrator.
- **Change devices**
  In an active Audio/VideoChat you can change your input/output devices here.

The configuration of your Audio/Video devices to be used with Audio/VideoChat can be done with the Audio/Video Wizard.

The conversation window of a Audio-VideoChat includes also a Text Chat capability.

5.5.7 Screen Sharing

To enhance cooperation with PBX Call Assist 4 you can share your screen with other PBX Call Assist 4 users. So that the other user can see your screen content and control your mouse and keyboard once you have activated it.

Screen Sharing can be started from the context menue of an ActiveContact. The context menue is opened by a right-click on the ActiveContact. The feature is available only if the related rights are granted by the administrator. Further the Screen Sharing can be added to an existing chat in the Chat window or while an Audio/VideoChat. More further a Screen Sharing session can be started from the Contact details.

If you are sharing your screen to another party, a small "Active Screen Sharing" status window appears. Clicking on the status window moves closed or minimized conversation windows back to the foreground.

5.5.7.1 Share a local screen with another user

If you have shared your screen with another user a conversation window is opened showing the connected user. At the beginning of a Screen Sharing session the remote control per mouse and keyboard is deactivated. The remote control per mouse and keyboard can be activated by clicking on the "Allow control" button. It can be disabled by clicking on the button toggled as "Disable control" button. If the conversation window is closed but a Screen Sharing session is still active a small "Active Screen Sharing" status window still remembers about its activity.

5.5.7.2 Request Screen Sharing

Would you like to see another user's screen, you can also request to share the screen. The other party must confirm or reject to share it. The remote control per mouse and keyboard can be enabled with the "Allow control" button and it can be disabled with the "Revoke control" button.

5.5.7.3 Select a screen for Screen Sharing

If more than one screen exists in a system, a menu for the "Share screen" button can be opened in a conversation window, making it possible for you to select the local screen to be shared, based on a preview image. If no screen is selected or if only one screen is available, the main screen will be used. In order to ensure the privacy of the remote user, preview images are not displayed during screen share requests.

5.5.7.4 Using Audio-/VideoChat while running a Screen Sharing session

While a Screen Sharing session is already running an AudioChat can be added to the conversation. A camera video stream can be added to the AudioChat by opening the small menue near the "Hang up" button by selecting "Camera on". Also while an Audio/VideoChat is already running a Screen Sharing session can be added to the conversation. The upper big red "Hang up" button disconnects the entire session. The "Revoke Screen Sharing" button ends the Screen Sharing session only.

5.5.7.5 Full screen mode

If a user shared a screen with you the screen appears initially in a conversation window. If you maximize the conversation window you can see the session in full screen mode. If you move the mouse to the middle of the upper screen border a window bar appears including further control buttons e.g. to end the full screen mode. The full screen mode can also be terminated with the Escape key.

	To use the Screen Sharing, this feature must be available on the computers of both participants.
	Screen Sharing is also possible for SIP federated PBX Call Assist 4 users across network borders. The feature is available only if the related rights are granted by the administrator and if it is supported by the product versions on both sides. Requesting Screen Sharing between federated users is not supported for security reasons.
	An administrator UAC (User Account Control) prompt per Screen Sharing is not supported. Applications started with UAC as administrator can't be used within a Screen Sharing session.

6 Customise PBX Call Assist 4

PBX Call Assist 4 functions can be customised to your needs in many places. The first is the **settings** dialog, which you can acces via the main menu.

The dialog is divided into the following catagories:

- Appearance and behavior
- Telephony
- Search
- Integration
- Collaboration

6.1 Appearance and behavior

In this category you can customize the view of the client, control the behavior in certain events, assign hotkeys and shortcuts, add locations and use advanced service functions.

- View
- Characteristics
- Actions
- Action filter
- Action fields
- User-defined actions
- Hotkeys
- Shortcuts
- Location
- Advanced
- Customize dialogs with templates
- Control functions via Windows® Registry

6.1.1 View

6.1.1.1 Presence icons

The Presence icons in the client represent the status of the PBX Call Assist 4 user.

Normally you always use the default symbol set. However, your administrator can provide own symbol sets to you.

6.1.1.2 Element width

The contacts and function buttons in the monitor and in the Favorites tab are displayed in columns if the window width permits. With the "Element width" option you can influence as from which width a further column or a column less is displayed. Please note that the entire available window width is always used.

6.1.1.3 Level of detail

The level of detail can be selected separately for the main window (Favorites, talk and chat windows, etc.) and the monitor. There are 3 levels available:

Low	This is the most compact setting, displays just the color of the presence and the name of the contact in one line.
Medium	At this stage, the corresponding contact picture (if available) for each contact and CTI information is displayed (phone lines, Calls, diversions).
High	Compared to the "Medium" level, just with larger Contact imagse and additionally the position in the company.

6.1.1.4 Deposited contact with presence color

If this option is activated, every registered contact is stored in the monitor and in Favorites with his current presence color. The background of unregistered contacts remains unchanged.

6.1.1.5 Additional lines

The additional lines will be configured by the administrator on the PBX Call Assist 4 UCServer. Normally these lines do not have an explicit owner but should be monitored and controlled by PBX Call Assist 4 users, like a phone line in the warehouse of the company. You can still decide for yourself whether you wish to display these lines or not. If you activate this option, the additional lines are displayed in a separate sub-group on the Favourites tab. Please note that this sub-group is fixed and canot be edited.

➡	The line group is automatically updated if the administrator configures it accordingly.
➡	To edit the line group, a new sub-group must be created and all elements of the line group copied there. Afterwards, the option **Additional lines** can be deactivated.Please note that the line group is no longer automatically updated if the administrator adds or removes lines.
➡	Changes to the settings on this page have an immediate effect on PBX Call Assist 4 (preview). These settings are, however, only stored when confirmed with **OK**.

6.1.2 Characteristics

6.1.2.1 General

Display PBX Call Assist 4 with Windows® log-on
Use this option if PBX Call Assist 4 is to be started automatically when the system re-boots. The client is always started minimised in this case.

Show start process
Check this checkbox if you want more detailed information to be shown on the screen when PBX Call Assist 4 starts.

6.1.2.2 Monitor

- **Show at program start**
  Automatically re-opens the monitoring program, when PBX Call Assist 4 is re-started. This setting is useful when you want to temporarily close the monitor window during your session, however it should be re-started when PBX Call Assist 4 is also re-started.

- **At program startup as last**
  In this mode, the monitoring program will only be displayed when it starts, if it had been open when the last PBX Call Assist 4 session ended.

6.1.2.3 Show speech bubble for

If at least one of this settings are active a speech bubble will show you the according information near the windows taskbar.

- **Missed calls**
  Display of all unanswered calls
- **Unread E-Mails**
  Display of new e-mails in the in-box
- **Chats**
  Display of unanswered chats
- **Planned calls**
  Display of planned calls due
- **Challenge-Response**
  Display of open Challenge-Responses
- **Unread Fax-Messages**
  Display of new Fax messages in the Inbox

6.1.2.4 Advanced

- **Open Contacts by default for editing**
  Contacts are normally opened for display in PBX Call Assist 4. Alternatively, you can set-up the contacts to be always open for editing. By keeping the CONTROL key pressed down, you can switch to the operation not selected by default when clicking on a contact.
- **Commit contact detail tabs last selected to memory**
  With this function, you will open the contact detail window always with in the same tab. If you close the contact detail window in the tab "Unprocessed", the page "Unprocessed" will automatically appear when you next open a contact.
- **Register as default telephony application**
  Here you can control whether PBX Call Assist 4 should automatically register itself automatically at start as a standard-telephony application. The standard-telephony application takes on telephone dialing requests on the TAPI level and diverts this to the telephone or telephone system.
- **Register as default Instant-Messaging application**
  This lets you control whether PBX Call Assist 4 is to automatically register at start as a default application for instant messaging. The default application for instant messaging is for example used by Microsoft Outlook® to start chats or to get contact information such as presence, contact name or contact picture.
- **Play notification sounds**
  Notification sounds of PBX Call Assist 4 will be configured through the audio scheme of Microsoft® Windows®. You can switch off notification sounds altogether here and open the relevant Windows® settings page.

6.1.3 Actions

Automate PBX Call Assist 4:
PBX Call Assist 4 enables you to execute numerous of actions if defined events occur (ringing phone for example). The following tabel givs you a brief overview:

Event	Description

In case of an incoming call	Occurs when your phone rings.
In case of an outgoing call	Occurs, when you have established a call and the phone rings with your respondent.
At the end of a call	Occurs when the call (not connected) or the conversation (connected) was ended.
When call is answered	Occurs when you accept an incoming call or your dialog partner accepts an your call.
When the remote call party changes	Occurs when the dialog partner changes during the call.
After logging on to the server	Occurs when the user could log on PBX Call Assist 4 UCServer successful.
After logging off from the server	Occurs when PBX Call Assist 4 properly log off from the server. This is particularly the case when PBX Call Assist 4 shuts down, but not when the compound is separated from the PBX Call Assist 4 UCServer.
In case of an appointment (busy)	Occurs when an appointment in Outlook® which is marked with the "busy" attribute becomes due.
In case of appointment (out of office)	Occurs when an appointment in Outlook® which is marked with the "absent" attribute becomes due.
Automatically opened contact detail window	Occurs when a contact details window open by PBX Call Assist 4 automatically.
After xx minutes idling	Occurs, when you have pressed no key or moved your mouse in xx minutes.

6.1.3.1 Create new action:

1. Click **Add new action** and select the event when the action is to be executed in future.
2. Click **Choose action** and select the action which is to be executed by the selected event.
3. Make sure that the checkbox to the left of the selected event is active (checked). The action will only then be executed. You can also uncheck the checkbox if the action should not to be performed at present but will be needed later.

6.1.3.2 Activate/deactivate action

You can create an action for later use or temporarily deactivate an already created action if you deselect the hook on the left, beside the event field. As soon as the hook is input again, the event happens.

6.1.3.3 Remove actions

Actions which are no longer required can be removed with the "Delete" button at any time. The action to be removed must first be marked. Alternatively you can select the **Remove action** entry in the event field.

6.1.3.4 Use Actions filter

PBX Call Assist 4 allows you to limit certain events by the aid of action filters, or to describe something more specifically. To put in an Action filter or to change, click on the filter button in the suitable row.

- Up until now no Action filter was defined or the Action filters were deactivated. Click on this button to apply an Action filter or to activate the Action filter.
- An action filter was defined and activated. Click on this button to change the Action filter or to deactivate the Action filter.

You can find further information in the section Action filter.

6.1.3.5 User-defined actions

PBX Call Assist 4 gives you the option to create actions by yourself. These can be additionally selected when an event in the action list occurs. To create a new action, click the "Actions" button.

An overview page opens with all actions that have already been defined. For each action, you have the option of specifying there whether it is to be displayed in the main menu or in the context menus You can find more information about this in the section User-defined actions.

	The events "at appointment (engaged)" and "at appointment (absent)" work only if data should be transferred, what can be changed by the settings under calendar.
	A call diversion which is preset "at appointment (busy)" or "at appointment (absent)" as an action in the events, is also set as not activated in PBX Call Assist 4.
	A call diversion which is preset "at appointment (busy)" or "at appointment (absent)" as an action in the events, is reset at the end of the appointment again.
	If no actions have been defined to an event this entry is deleted when the settings dialog is closed.

6.1.4 Action filter

Action fields are rules that describe the execution conditions of the action or of the event in greater detail. Thus you can specify to execute or be able to execute actions only in specified cases. The action will only be executed if *all* input rules apply.

Set the check mark to **use filter** in order to create a filter. Remove the check if you want to disable an already defined filter, however it is not deleted immediately.

Click on the button **Add...** and choose the field name whose field value should fulfil a condition. Here you are offered every action fields.

After you have chosen the field name, enter the rule in the column **Regular expression** which the field value must fulfil.

6.1.4.1 Regular expressions

A brief overview of the permitted expressions:

Character	Description
^	The beginning of the string. With the Caret at the beginning of the regular expression, it is determined that the field value must agree from the outset. The expression "^0 " means that the field value must begin with "0 ".
^	The caret (^) directly after the left bracket ([) has another meaning. It is used to exclude the other signs within the bracket. The expression "[^0-4] " permits only figures except 0 to 4.
$	The dollar character ($) calls the end of the string. The expression "152$ " is valid only for strings which end with "152".
|	The sign (|) permits both characters between it. The expression "8|9 " permits "8 " or "9 ".
.	The point (.) permits every character (or every figure).
*	The Star (*) indicates, that the character to the left must exist 0 times or more.
+	The Plus (*) is similar to the Star, only that the character to the left must exist at least 1 time.
?	The question mark (?) indicates, that the character to the left must exist 0 or 1 time.
[]	The corner brackets ([and]) indicate the amount of characters that are permitted at this point.
\	The Backslash is used as an Escape sequence. If you want to search for "+", you must write "\+".
	Tip: The Caret sign (^) can be found on the top left of a German keyboard.

6.1.4.2 Check filter

You can check your input immediately here. Enter a value as an example in the field of the same name. The example value is applied to all regular expressions. The symbols beside the field name indicate whether the example value on the regular expression fits.

- The blue symbol indicates that either no example value was entered, or that the entered example value does not fit on the regular expression.
- The green symbol indicates that the entered example value on the regular expression fits.
- The red symbol indicates that the regular expression is not valid. In this case correct the regular expression.

6.1.4.3 Examples

Effect	Actions field	Regular expression
Complete only with internal calls	<Call.Internal>	1
Complete only with external calls	<Call.Internal>	0
Complete only with calls from Germany	<Call.NumberSC>	^\+49
Complete only with calls from Germany or Switzerland	<Call.NumberSC>	^\+49|^\+41
Complete with calls, in which no contact was found	<Call.ContactEntryID>	^$
Execute only with contacts of the company "estos GmbH "	<Contact.Company>	^XYZ GmbH$
Complete only with high priority appointments	<Appointment.Importance>	2
Run only for appointments that start at 9 clock (german date format)	<Appointment.StartTime>	09:00
Run only if appointments start at 9 o'clock (American date format)	<Appointment.StartTime>	9:00:00 AM

Filters can be used both to limit a specified event, and also to determine the basic conditions for user-defined actions of when a user-defined action makes sense. Dependent on this, set the filter for a specified entry in the Event/Action list or in the user-defined actions yourself.

Please note that in certain events not all fields can be used. Thus no appointment fields are available, e.g. for telephony events. An entire overview of all fields, as well as which fields are available with which events, can be found in the section action fields.

Action fields that represent a timestamp, such as <Appointment.StartTime> use the date format configured for the local computer. This corresponds to the display of dates, as PBX Call Assist 4 displays them in the log view in the Date column. For example, "Mo 02.07.2012 15:10:25" (Germany) or "Mon 7/2/2012 3:10:25 PM" (USA). The Date column can be added to the column headers on the **Journal** tab page by right-clicking the column header with the mouse.

6.1.5 Action fields

While editing User-defined actions in PBX Call Assist 4 you can use placeholders which were replaced when the action is executed with actual data (e.g. the phone number of the participant in the discussion will be filled in). These placeholders can also be used for action filters.

The Action fields can be divided into three different groups:

- Telephony-Action fields
- Contact-Action fields
- Appointment-Action fields

6.1.5.1 Telephony-Action fields

Field name	Description
<Call.NumberSC>	The phone number in supercanonical format (e.g. +49301234567)
<Call.ContactEntryID>	The database or Outlook® EntryID of the contact, if one was found.
<Call.ContactEntryIDStore>	The database or Outlook® EntryID of the Messagestore in which the contact was found
<Call.ContactEntryIDDB>	The database identifier of the database in which the contact was found.
<Call.ContactName>	The display name of the contact, if a contact was found for the phone call.
<Call.Origin>	The direction of the phone call: 1 for "outgoing", all other values mean "incoming".
<Call.Internal>	Indicates whether the call is internal or external: "1" for internal, "0" for external.
<Call.Private>	Indicates whether the call is marked as private: "1" with private calls.
<Call.ProjectName>	The project name, if the telephone call is assigned to a project.
<Call.ProjectPIN>	The project PIN, if the telephone call is assigned to a project.
<Call.Note>	Contains the call memo.
<Call.LineNumberSC>	Own extension number in canonical format.
<Call.LocalNumberSC>	The phone number called for incoming calls. The line number for outgoing calls.
<Call.LocalNumberName>	For activated hotline services (client function) the contact found for the LocalNumberSC
<Call.RedirectingSC>	The forwarding phone number in canonical format.
<Call.RedirectingName>	The name of the contact who forwarded the call.
<Call.HoldNumberSC>	The number of the contact that is being on hold.

<Call.CreatedTime>	The time at which the call has been created on the server.
<Call.ConnectedTime>	The time at which the call was accepted.
<Call.DisconnectedTime>	The time at which the call has been terminated.

6.1.5.2 Contact-Action fields

Field name	Description
<Contact.DatabaseName>	Readable name of the database which the contact comes from.
<Contact.EntryID>	The database or Outlook® EntryID of contact.
<Contact.EntryIDStore>	The database or Outlook® EntryID of the messagestore, in which the contact was stored
<Contact.EntryIDDB>	The Database identifier of the database, in which the contact is stored
<Contact.CtiServerUserName>	The CTI username if it is a CTI user
<Contact.DisplayName>	The contact's display name.
<Contact.FirstName>	The contact's first name.
<Contact.LastName>	The contact's last name.
<Contact.JobTitle>	The contact's job title.
<Contact.Company>	The contact's company name.
<Contact.Department>	The contact's department.
<Contact.OfficeRoomNumber>	The contact's office number.
<Contact.CustomerID>	The contact's customer number.
<Contact.BusinessAddressStreet>	The street of the contact's company address.
<Contact.BusinessAddressPostalCode>	The Post code (zip code) of the contact's company address.
<Contact.BusinessAddressCity>	The town/city of the contact's company address.

<Contact.BusinessAddressState>	The province/state of the contact's company address.
<Contact.BusinessAddressCountry>	The country of the contact's company address.
<Contact.PrivateAddressStreet>	The street of the contact's private address.
<Contact.PrivateAddressPostalCode>	The Post code (zip code) of the contact's private address.
<Contact.PrivateAddressCity>	The town/city of the contact's private address.
<Contact.PrivateAddressState>	The province/state of the contact's private address.
<Contact.PrivateAddressCountry>	The country of the contact's private address.
<Contact.OtherAddressStreet>	The street of the additional contact's address.
<Contact.OtherAddressPostalCode>	The post code (zip code) of the additional contact's address.
<Contact.OtherAddressCity>	The town/city of the additional contact's address.
<Contact.OtherAddressState>	The province/state of the additional contact's address.
<Contact.OtherAddressCountry>	The country of the additional contact's address.
<Contact.EMail>	The contact's first e-mail address.
<Contact.EMail2>	The contact's second e-mail address.
<Contact.EMail3>	The contact's third e-mail address.
<Contact.SIPAddress>	The contact's SIP-Address (or instant messaging address).
<Contact.WebPageURL>	The contact's Web-Address.
<Contact.PhoneBusiness>	The contact's first business phone number.
<Contact.PhoneBusiness2>	The contact's second business phone number.
<Contact.CompanyMainTelephoneNumber>	The contact's company phone number.
<Contact.AssistantTelephoneNumber>	The contact's assistance phone number.l
<Contact.PhoneHome>	The contact's first private phone number.

<Contact.PhoneHome2>	The contact's second private phone number.
<Contact.PrimaryTelephoneNumber>	The contact's primary phone number.
<Contact.PhoneMobile>	The contact's mobile/cell phone number.
<Contact.CarTelephoneNumber>	The contact's car telephone number.
<Contact.RadioTelephoneNumber>	The contact's radio phone number.
<Contact.PagerTelephoneNumber>	The contact's pager phone number.
<Contact.OtherTelephoneNumber>	The contact's additional phone numbers.
<Contact.CallbackTelephoneNumber>	The contact's callback phone number.
<Contact.ISDNTelephoneNumber>	The contact's ISDN phone number.
<Contact.TTYTTDTelephoneNumber>	The contact's hearing impaired phone number.
<Contact.FaxBusiness>	The contact's business Fax number.
<Contact.FaxHome>	The contact's private Fax number.
<Contact.Body>	The contact's memo text
<Contact.IsPrivateContact>	Indicates whether it is an private or business contact.
<Contact.IsCtiServerUser>	Indicates whether it is a CTI-user.
<Contact.DirectWebLink>	The contact's Web application link for web-based CRM systems.
<Contact.Customo> - <Contact.Custom19>	Contents of the custom contact fields "Customo" to "Custom19".

6.1.5.3 Appointment-Action fields

Field name	Description
<Appointment.EntryID>	The database or Outlook® EntryID of the appointment.
<Appointment.OwnerName>	The owner of the appointment.

<Appointment.DataSource>	The database identifier of the database, in which the appointment is stored.
<Appointment.StartTime>	The date and time the appointment starts.
<Appointment.EndTime>	The date and time the appointment ends.
<Appointment.Duration>	The duration of the appointment.
<Appointment.Subject>	The subject of the appointment.
<Appointment.Body>	The memo text of the appointment.
<Appointment.AllDay>	Indicates whether it is an all-day appointment.
<Appointment.Status>	Indicates the status of the appointment.
<Appointment.Category>	The category of the appointment.
<Appointment.Importance>	The level of importance of the appointment.
<Appointment.Sensitivity>	The level of confidentiality of the appointment.

6.1.5.4 Event dependend

Depending on the event, for which a User defined action or a Actionsfilter is created, different Action fields can be used:

Event	Available Action fields
On incoming call On outgoing call At the end of a call When call is answered When the remote call party changes	Telephony-Action fields Contact-Action fields
In case of an appointment (busy) In case of appointment (out of office)	Appointment-Action fields
Automatically opened contact detail window	Contact-Action fields
After xx minutes idling When computer is locked	-

Please note also that not all fields can be combined with one another. For example, a user-defined

	action cannot simultaneously have a reference to telephony action fields and appointment action fields.

6.1.6 User-defined actions

User-defined actions serve to implement programmes with certain phone call actions. Some information can be transferred at the start of the programme as a command line. In most cases it will concern applications developed yourself which carry out additional functions, e.g. when a phone call is signalled.

Overview list of the user-defined actions
All configured actions will be displayed in the Overview list. You can add new actions or edit existing actions or delete them again. In addition, for each action you can determine whether it is offered in the Main menu or in the context menus and/or in the dialog box, to then be able to execute it manually if necessary:

Filter
The filter can be used in the user-defined actions, in case the execution of the action only makes sense under certain conditions. For example, the user-defined action might only be practical for selected contacts from specified data sources or for specified conversation states. With a set filter the action will only be offered when the conditions defined there apply. You will find examples of filters in the section Action filters.

Menu integration
Any user-defined action can also be integrated in the menus of the client. Hence, the action can also be implemented without a special event. Depending on the set filter or depending on theAction fields used there, the action will be offered in the corresponding menus. For example, if you specified a contact field, the action will only be used in menus with a contact reference, thus in the context menus of the contacts, but also in the context menu of a journal entry with a contact reference. Without a filter the action is always executable and is thus offered in the Main menu.

Call window integration
In addition to or as an alternative to menu integration, the action can also be incorporated in the Call window as a button. To do this, enable the checkmark in the Overview list of the user-defined actions.

Set up a user-defined action
Any user-defined action is defined by the following specifications:

Action name
Allocate a name here, which is indicated. This name is for your information only and is recorded on the list of available actions on the settings page Behavior.

Application
Give the path for the application which you want to complete here. You can also specify the document to be opened. In addition, specific field names which are replaced at Program start with the corresponding values of the phone call, contact or appointment, can be entered here. You can find an overview in the section action fields.

Command line
Give here which command line of the program should be transferred. As with the application line, the given fields which are replaced by Program start with the corresponding values of the phone call, contact or appointment, can be used here. You can find an overview in the section action fields.

Directory
The list in use should be begun.

Mode
Here you can state how the program should start (maximised, minimised, normal or hidden). Not every program evaluates this parameter!

Description
This is a free text which is displayed in the tool tip of the action in the conversation window integration.

Change icon
Here you can determine the icon that should be used in the menu integration or conversation window integration for this action.

Example:
It should be a user-defined action which opens the homepage of the caller automatically.

1. Give the action a descriptive name, e.g. "web page open".
2. Enter in the application line, the entire path to your Internet browser, e.g."C:\programFiles (x86)\Mozilla Firefox\firefox.exe".
3. As a parameter, the browser expects the URL of the Internet site to be opened. The URL is restored by PBX Call Assist 4 in the contact-action field "WebPageURL ". Enter in the command line of the field names "< Contact. WebPageURL>" or click on "field add" and select the entry of the same name from the list.
4. You do not have to state the compete list. Simply leave the line "list" free.
5. Because the browser with the homepage should be indicated, set the mode to "Normal start".

6.1.7 Hotkeys

The term hotkey describes the option of defining system-wide key combinations which permit phone numbers to be dialed or calls to be ended (hang up) out of almost all programs. You define the key combination in this settings dialog.

Dial selected phone number, otherwise start Contact Search.
To dial a number with the shortcut key, the number has to be selected with mouse in the according window, then press the shortcut key. If there is no phone number selected, PBX Call Assist 4 tries to search for a contact instead.

	You can use the hotkey in Outlook® itself. You can thus dial any phone number in a contact by marking the phone number. Use the hotkey also to transfer a contact to the phone status window. You can also start callback from the journal with the hotkey.
	Dialing from a console application (DOS window): If the phone number cannot be selected directly by the mouse, then first activate the DOS Console's Editing Mode using [ALT]+[Spacebar].

Use this hotkey also for accepting a call
If this option is selected, incoming calls can be answered with the same hotkey as is used for dialing (if your phone supports this feature).

Shortcut key for hanging up
Here you can define the hotkey for ending the active connection. Type in the key combination (special keys such as Alt, CTRL and Shift are also possible). You delete the hotkey with the Del key.

Display main window
This Hotkey brings the main window of PBX Call Assist 4 on screen and you can immediatly start searching contacts.

ⓘ	These hotkeys are configured system wide, so no other application can use the same key combinations for other actions.
⚠	Dialing with the hotkey uses the Windows® clipboard and the keyboard shortcut [CTRL+C]. The contents of the clipboard can be changed at the same time and the shortcut [CTRL+C] not used as a hotkey. Consider these restrictions with the use of this function.
⚠	Phone numbers or contacts cannot be dialed (or searched) from applications that have been started with higher administration rights than PBX Call Assist 4. If the hotkey has been pressed in such an application, an information dialog will provide a reminder. PBX Call Assist 4 can only display this reminder if the hotkey is used in combination with or (a Windows® restriction).
ⓘ	If phone numbers cannot be dialed, advanced users can attempt to give the other applications more time so that this data can be provided. See Function control via Windows® Registry for more information.

6.1.8 Shortcuts

To increase productivity, certain application features can be assigned to key shortcuts. Thereby, certain tasks and features can be started, opened or executed using a simple shortcut.

The list contains all available features, sorted by units, that can be assigned to shortcuts.

Assign a shortcut to a feature:
Click on the second column so that a text entry cursor will appear. Then simply press the desired key combination.

Delete a shortcut:
The Delete button can be used for this purpose. If you are currently in the process of assigning a new key, simply press [Del].

Reset all shortcuts to their default values:
The two buttons "Reset" and "Reset All" are available for this purpose.

ⓘ	The shortcuts for features that have been grayed out cannot be modified. This can be because of the following reasons: 1. The shortcuts may have been assigned by the manufacturer. 2. The shortcut has been assigned by the System Administrator using group policies.
⚠	If a conflict is discovered between the choosen hotkey and a hotkey from another application, an alternative hotkey should be choosen, or remove the other hotkey from the other application first.

6.1.9 Location

Location settings contain all the necessary information which make it possible for phone numbers to be correctly dialed and displayed. These settings are especially important if you are using a phone system or if your phone is attached to a phone system, otherwise external numbers could not be dialed and the dispalying a phone number would not function correctly.

The country, dialing code and phone or phone system settings are configured exclusively in PBX Call Assist 4 UCServer and cannot therefore be changed in the client. If you have more than one line assigned, the Location settings always refer to the selected default line.

You can configure in which format the phone numbers should be shown in PBX Call Assist 4. Internal phone numbers will always be shown in short notation.

Address
You should enter your location's address here. This information is necessary and is used exclusively for the map function and route planning.

Map/route planning
Select a service from the list which you wish to use for the map function and route planning. You can choose the language in which the route information is displayed.

	If no country name was indicated in a Contact, the country name of your default location will be assumed.
	To plan a route to a contact it is important that a complete address is available for the contact.
	The name of the country in a Contact must be spelled in full. A "D" or "de" for Germany is not enough. The name of the country may be given in several languages such as, among others, German, English, French or Japanese.

6.1.10 Advanced

Display all messages
PBX Call Assist 4 often uses message windows which you can automatically suppress for future similar cases with the "Do not show again" option. Use this function to re-display all message windows which would otherwise not be opened again.

Reset layout
Click here to reset the current layout of the client to default. This implies restoring the default column widths in the tabs (e.g. journal, planned calls etc.) and a reordering of all contact groups in the monitor and the tabs in the main window. Saved contacts, lines and function keys are preserved.

6.1.11 Dialog adaptation with Templates

PBX Call Assist 4 uses XSLT templates to display XML data as HTML pages. The XSLT templates are in the *Templates* or *Templates/default* folder.

Directory	Deployment
templates	You should save files you have changed in this directory if you wish to change one of

	the files supplied in templates/default
templates/default	Configuration files which were installed with the product. These are overwritten if the product is updated.

XSLT processor
PBX Call Assist 4 provides the files in XML format. These XML files are processed into an HTML page with the help of an XSLT template and an XSLT processor. Sablotron or Microsoft® XML Parser are used as XSLT processors.

Development of own templates
You can develop and use your own templates. You should familiarise yourself with XSLT syntax for this. You can find help on the subject athttp://www.w3schools.com/xsl/ or the Microsoft® MSDN pages.

If you wish to use templates you have developed by yourself these should be stored in the *template* directory. Your changes will then not be lost if an product update is installed.

Template	Deployment
common.xslt	Provides different template functions for e-mail and web links and for transcoding sets of characters
unanswered.xslt	E-mail messages regarding unanswered calls. More precise details can be found in the PBX Call Assist 4 UCServer help file.
contact.xslt	Overview page in the Contact details window.
RemoteContact.xslt	Is used in the Call window to prepare the details for the current dialog partner. The template defines which contact details are displayed.
HoldContact.xslt	Is used in the Call window to prepare the details for a dialog partner on hold. The held dialog partner is displayed if a further PBX Call Assist 4 user is holding a participant and calls you. The template defines which contact details are displayed.
LocalContact.xslt	Is used in the Call window to prepare the details for a called contact. The called contact is displayed if a contact for an incoming call to the phone number is found. You must activate the hotline service in the settings for Incoming calls for this. The template defines which contact details are displayed.
RedirectedContact.xslt	Is used in the Call window to prepare the contact details for a redirected call. You are shown the contact for whom the call was last signalled. The template defines which contact details are displayed.

⚠ When changing the templates, please keep in mind that the *common.xslt* must always be in the same directory as the template using the *common.xslt*.

6.1.12 Function control via Windows® Registry

All necessary settings which are saved in the Windows® registry can be changed in the PBX Call Assist 4 user interface. You can, nevertheless, also activate or deactivate special functions in PBX Call Assist 4 by means of certain keys.

Please note that the functions mentioned here only make sense in exceptional cases and their use is not generally recommended.

All the following listed registry values are expected in the **HKEY_CURRENT_USER\Software\estos\UCServer4\CtiMain** key. The registry value must be created below this key to enable the relevant function in PBX Call Assist 4.

Registry entry	Type	Meaning
JournalAutoCreateFlags	DWORD	With this registry entry you can control whether PBX Call Assist 4 generally automatically creates a journal entry in Outlook® for all incoming and/or outgoing calls. Set the DWORD value to "1" to always automatically create an Outlook® journal entry for all incoming calls. With value "2", all outgoing calls are always included. Set the value to "3" to log all calls in Outlook®.
EnableOutlook® EnableMAPI	DWORD	Use these two registry values if PBX Call Assist 4 is to use neither Outlook® nor MAPI. To switch off the connection to Outlook® or to not use MAPI, set both DWORD values to "0". These registry entries have no effect if you do not have Outlook® installed or if no MAPI is available in the system. Please also note that these values have no effect on the Outlook® plug-in.
EnableLotusNotes	DWORD	Use this registry value if PBX Call Assist 4 should not use IBM Notes® which is installed on the computer. Set the DWORD value to "0" to switch off the connection to IBM Notes®. This registry entry has no effect if you do not have IBM Notes® installed.
EnableEWS EnableEWS	DWORD	Use this registry value to allow PBX Call Assist 4 to use Exchange Web Services. To enable Exchange Web Services, set this DWORD to "1".

EnableGoogle EnableGoogle	DWORD	Use this registry value to allow PBX Call Assist 4 to integrate Google (requires configuration by your system administrator). To enable Google, set this DWORD to "1".
EnableWindowsStore EnableWindowsStore	DWORD	Use this registry value to allow PBX Call Assist 4 to integrate Windows® 10 Apps (Calendar, People, Mail). To enable this integration, set this DWORD to "1". This value has no effect on older versions of Windows®.

6.2 Telephony

In **Telephony** you can customize the call window to your needs, choose settings for incoming, outgoing, unprocessed and planned calls and also define projects. Additionally you can configure your Bluetooth connection here.

- Conversation window
- Incoming calls
- Outgoing calls
- Planned calls
- Projects
- Bluetooth Cell Phones
- Call Protection

6.2.1 Conversation window

Display automatically for incoming calls
Display automaticaly for outgoing calls
You can define whether you wish the call window to be displayed for incoming or outgoing calls. If the window is not displayed automatically you can display it at any time during the call via the PBX Call Assist 4 task bar.

Always display active calls as the topmost window
You should activate this option if you wish to always display active calls as the topmost window. If the window is automatically displayed, it is normally displayed as the topmost window for an incoming or outgoing call but can then subsequently be covered by other windows. You can bring all curent calls into the foreground via the tray icon at any time.

Duration of displaying the conversation window after the call ends
After ending the telephone call the call window remains open for a certain amount of time. During this time it's possible to allocate this call, for example to a certain Project or to enter a short note. Here you can specify how long the window should remain open.

Transparency, support display and fading out
The call window supports transparency and is normally faded in and out. If you do not wish to use this function you should deactivate the transparency.

Window position
You can define the position as to where the call window opened by PBX Call Assist 4. Call windows for prepared calls are excluded. These windows are always opened at the current position of the mouse.

- **Default position (task bar icon)**
  PBX Call Assist 4 opens the conversation window at an appropriate location on the screen. Other, already open windows of PBX Call Assist 4 are not overlaid.
- **Remember last position**
  The conversation window appears again at the same position where you have closed it the last time or where it was automatically hidden.
- **Define position using preview**
  Open a call window with the preview button and place it where windows should open it in future. Moving the conversation window during a call has no effect on the display position.

6.2.2 Incoming calls

Support for Hotline-Services (client function)
The hotline service analyses the number called for incoming calls (multi-entity capability). Analysis of the number called can be used to differentiate between various companies if you have to announce yourself differently depending on the number called (e.g. for a secretarial service).

Activate the option **Display called contact,** so that the contact information is displayed in the Call window of an incoming phone call. What information should be displayed can be defined via a template.

Unanswered calls
The PBX Call Assist 4 UCServer recognizes missed phone calls and checks whether the phone call was answered from a call group or call diversion. Notifications can be sent as an e-mail for these missed calls. With these settings it can be defined to which e-mail addresses unanswered phone calls are sent and whether these notifications should be also sent if the user is logged on to the server. Moreover, unanswered calls can be automatically marked as processed when a telephone call was made to the same contact at a later date.

	In addition to the server-side search for client contacts, local client folders can be specified in the settings of the Data sources.
	If the matching client contact should be opened automatically during the phone call, then it can be specified in the settings Actions.

6.2.3 Outgoing calls

Call preparation
The option **Always prepare phone calls** enables you to set projects projects or set the private marker on the calls. This setting is not needed if projects or the marking of private calls are not used.

Automatic redialing
If an outgoing call does not go through because the line is busy, you can start automatic redialing in the call window. You can define how often the system will try to connect the call and at which intervals. Automatic redialing is terminated as soon as the line is no longer busy or the set number of attempted calls has been reached.

Caller ID suppression
You can activate the suppression of caller ID for outgoing calls if this is supported by your telephone system. You may activate caller ID suppression for all outgoing calls or choose case by case whether you wish to suppress caller ID. If you wish to suppress caller ID in individual cases only, an additional button for activating or deactivating this option appears in the call window. Please keep in mind that this option must be activated before you start the call so that the caller ID can be suppressed.

6.2.4 Planned calls

With planned calls, you can have yourself reminded at a specified time of calls to be made or plan upcoming calls in advance. Planned calls appear in the main window on the tab of the same name.

PBX Call Assist 4 offers you two options for managing planned calls:

PBX Call Assist 4

- **Administration with PBX Call Assist 4 UCServer (recommended):**
  Planned calls are only saved in PBX Call Assist 4 UCServer and can be added and changed in the PBX Call Assist 4 UCServer editor.
- **Management with Outlook®**
  Planned calls are saved exclusively in Outlook® and can only be saved with the Outlook® editor. Please note that the possibilities for subsequent alterations to the phone number and the linked contact are limited as only Outlook® contacts can be subsequently linked.

6.2.5 Projects

PBX Call Assist 4 helps the user assign calls to previously defined projects. This feature is also available from the Journal as well as the telephone system itself. The project identifier should be selected from the server through the system as would be appropriate for the project settings. Making private calls through so-called calling card providers is the exception to this. If a call is marked as private, the call through the telephone system can be configured using the identifying numbers.

If the **Mark private calls** option is activated a call can be marked, for example, as private in the call window.

To prevent others seeing private numbers or callers they can be marked as private. Any call information is not visible to others in the journal.
Prerequisite: PBX Call Assist 4 UCServer is set to not save phone numbers. See also Telephone Journal in the PBX Call Assist 4 UCServer help file.

If private conversations are not allowed in the company, having the administrator deactivate this option in PBX Call Assist 4 UCServer or in the group policies is reasonable.

Use projects and code numbers
In PBX Call Assist 4, projects are predominantly configured for the journal. In addition, specifics PINs and calling card providers can be defined for private conversations. If the project has been defined as a private call then the PIN will be used for the call and it will not logged in the journal.

The following rules apply:

Character	Deployment
0-9 * #	Digits which are dialed normally
C	Here you wait for the remote station to accept the call.
e, E	Place-holder for entering a PIN. With E, the number of digits for entry is not important. With e, the number of digits is defined by the number of letters (eee for three digits).

u, U	Space for the input of a user ID. With 'U' the number of digits input is not important. With 'u' the number of digits is defined over the number of the letters ('uuu' for three digits).
p, P	Dialing pause: 'p' for 0.5 seconds, 'P' for 1 second.
N	Space for the number to be chosen. If the space is not set, the number is automatically transferred to the end.
J	Defines, if available, that the user login and pin number entered by the user is noted in the journal.
X	If available, the phone number should be dialed with an external prefix. If 'X' is absent the phone number is dialed in national format (03012345678).

In the user interface configured projects are visualised centrally and locally with differently coloured Icons:

Projects configured in PBX Call Assist 4 UCServer.
Project for the journal
Project for dialing
Project for dialing and for the journal
Project configured in PBX Call Assist 4 UCServer which is processed as a private call
Projects configured in PBX Call Assist 4:
Project for the journal
Project configured in P PBX Call Assist 4 which is processed as a private call

6.2.6 Bluetooth

Support for Bluetooth Cell Phones
Cell phones can be connected with the PC using Bluetooth. This connection will make controlling and monitoring of the telephone possible. Furthermore an audio device connected to the PC (e.g. headset) can be used for conversations by cell phone. The telephone must support the Bluetooth Hands-Free Profile. This is also be used with a speaker phone in the car.

Connect New Devices with the PC (Bluetooth pairing)
The cell phone must be connected with the PC (Bluetooth pairing) in order to be able to use it. During pairing, Bluetooth must be active and visible at the cell phone while new phone devices in the Bluetooth configuration of the Windows® Control Panel are being searched. If pairing is successfully completed the new phone device appears listed available in the Bluetooth configuration of PBX Call Assist 4.

All cell phones that have been connected with the PC can be automatically used. Alternatively, only those telephones that are desired for use can be selected from the list of connected devices. If the cell phone is successfully connected with PBX Call Assist 4 you see at the Presence area of the Main window a green line symbol. If no Bluetooth connection exists the line symbol turns to be grey. If you have more than one line available and you wish to do an outbound call you have to select the related line symbol of the cell phone to be used. Then enter the phone number of the destination party at the search line or select an ActiveContact in the Favorites area and press the symbol for calling.

Phonebook
The Phonebook of the mobile phone/cell phone can be optionally integrated.

Offline journal
If the Bluetooth connection will be interrupted and becomes available at a later moment, calls that have been made in the meantime are synchronized with the journal based on the imported call list.
Please note that no call duration can be determined from the imported entries for the journal.
iPhone® mobile phone via Bluetooth
The transferred content of the imported call log has been changed by the last iOS versions.
The imported call log contains only the most recently calls per subscriber, each for incoming, outgoing or missed calls.

Call Protection
The settings for Call Protection are also valid for cell phones connected via Bluetooth with the PBX Call Assist 4 client.

Enable PC audio devices
If you like to use the PC audio devices for speech conversations via cell phone, the setting "Enable PC audio devices" must be checked (default setting).

Deactivate hands-free system driver
Because of technical restrictions only one hands-free driver can be active at the same time. PBX Call Assist 4 can automatically disable the system driver to enable this functionality.

Configuration of the PC audio devices
The PC audio device can be configured with the Audio/Video Wizard. The Wizard is started automatically during the initial setup procedure. But the Wizard can be started anytime by pressing the Audio/Video symbol at the Presence area of the main window. If you have enabled the checkbox "Enable Hook switch support" ("HID" buttons) in the Wizard, calls via cell phone can be accepted or dropped per PC audio device buttons.

Conversations via cell phone, via Audio/VideoChat and via Softphone can be done using the same PC audio device (e.g. headset).

Conversations per Bluetooth and PC audio devices
An active call is being represented by the Call window. In the conversation window near the call control buttons a small menu allows using further features like sending DTMF tones or moving audio from the PC towards the cell phone or back.
If you have paired your cell phone with PBX Call Assist 4 and you establish a call by using your cell phone (e.g. accept or dial a call), audio is active on your cell phone. But if you establish a call by using the PC, the PC audio devices are being used. This is because if you are with your cell phone in the Bluetooth signal range of the PC but not at your desk, audio should be automatically active at your cell phone.

Technical information
You may pair several cell phones with PBX Call Assist 4 at once. Please be aware that one active audio stream

via Bluetooth is supported with one of the paired cell phones. Thus if another paired cell phone does calls while the PC audio devices are already in use, you talk on the related cell phone.
PC audio devices are supported using sampling rates between 8 kHz and 96 kHz (8, 16, 22.05, 32, 44.1, 48, 96 kHz). It is recommended to use a headset.

6.2.7 Call Protection

6.2.7.1 Link Call Protection to "Do Not Disturb" presence status

You can link "Call Protection" settings to the "Do Not Disturb" presence status. This requires that the telephone system supports that function for your telephone, or this function must be enabled in UCServer for the Softphone line.

"Do Not Disturb" presence status controls Call Protection
Setting a "Do Not Disturb" presence status activates "Call Protection" for all telephone and softphone lines and also for AudioChat and VideoChat (incl. screen transfer).

Call Protection controls "Do Not Disturb" presence status
Activating "Call Protection" for a line causes your presence status to be automatically set to "Do Not Disturb". "Call Protection" on other lines is not affected by this, nor by the option '"Do Not Disturb" Presence Status Controls Call Protection'.

Apply Call Protection to all communication devices
If you change Call Protection (DND) on your desk telephone, this setting is applied to all telephone and softphone lines and also to AudioChat and VideoChat. If 'Call Protection Controls "Do Not Disturb" Presence Status' is activated as well, presence status is set accordingly.

6.2.7.2 Reject calls when busy

If the telephone system is configured so you can receive a second call (call waiting), a second call that comes into your telephone or softphone is signaled to you during a telephone conversation. In addition, the various communication devices in PBX Call Assist 4 (telephone, softphone, audio chat, video chat) work independently of one another. Second calls may therefore occur on just one communication device, or on a set of communication devices. The following settings allow you to control this behavior.

Busy on Busy
If this option is activated, second calls made to the line on which you're making a call are declined with "Busy".

Busy on Busy across multiple devices
If this option is activated, new calls that come in on other lines during a telephone call are declined with "Busy".

If unconditional call forwarding (forward all calls (both internal and external)) is set for a line, Busy on Busy will not be activated for that line.

6.3 Search

In **Search** you can control the search behavior of PBX Call Assist 4, in particular by selecting which data sources and search-parameters should be used in the detail search.

- Data sources
- Search parameter
- Search result

6.3.1 Data sources

The data source settings contain the list of all contact data sources which are to be used when searching for contact definition. PBX Call Assist 4 automatically inserts the data sources for PBX Call Assist 4 users, the lines, the PBX Call Assist 4 favorites and the estos MetaDirectory centrally configured in PBX Call Assist 4 UCServer. Also data sources which are administratively defaulted by group guidelines are automatically entered.

Using the data source PBX Call Assist 4 Favorites you can not only search all contacts in your Favorites, but also quickly find all the contacts that are stored in PBX Call Assist 4 monitor.

In addition, your personal inbox is imported from Outlook® when PBX Call Assist 4 is started if you have Outlook® installed on your computer and have not specified any other folders.

6.3.1.1 General settings

The search behavior can be set for each data source in the list. The general settings can be changed directly in the overview list or by clicking the **Edit** button on the **General** tab.

- **Use in search filter "All"**
  If this option is selected for a data source the data source is searched if the "All" filter is selected in the search field.
- **Search on incoming call**
  For every call, PBX Call Assist 4 automatically searches data sources for the phone number in order to find the call partner. You can define here which data sources are to be used for this. It is recommended that especially slow data sources are not searched when contact search.
- **Use if tenant function**
  In addition to the phone number search to find out the call participant, PBX Call Assist 4 can also search a contact, the client, for the phone number on your own telephone. This function is useful, e.g. for hotline services, and you should only activate it if the data source contains client contacts and you want to show the client contact, e.g., in the call window. Please note that the tenant function can not be used for the data source "PBX Call Assist 4 user" as well as for phonebook data sources.
- **Treat as unpersonalized data source**
  As well as your personal contact data sources you can also use PBX Call Assist 4 with unpersonalized data sources (mainly phone books). However, the search of phone books only makes sense if there is no contact in your personal contact data sources which corresponds to the search criteria. Activate this setting if the data source should only be searched when no contact is found in the personal data sources already searched. Phone book data sources are a typical application case.

6.3.1.2 Data source search sequence:

PBX Call Assist 4 permits you to define the order in which the data sources are searched. The topmost data source in the list is always processed first. Click the **Move up** button to move the selected data source up one place. Similarly, use the **Move down** button to move the selected data source one place lower down in the list. Please note that all data sources with the **Treat as phone book** option are always searched at the end and therefore must always be at the bottom of the list.

6.3.1.3 Adding data sources

New data sources can be linked at any time in PBX Call Assist 4. For this, click the **Add** button and select the data source option.

- **Outlook®**
  Click here to add an Outlook® mailbox or a specific Outlook® contact folder to the search list. Please note that you can only select mailboxes or contact folders in the selection dialog. If you add a mailbox

this is automatically configured so that all subordinate contact folders are also used in the search. Subordinate folders are not, however, included for added contact folders. This behavior can be altered at any time with **Edit**.

- **Exchange Web Services**
  The Contacts folder can be added using Exchange Web Services from here. As with Outlook®, all sub-folders for mailboxes will be used automatically, but not with normal folders.
- **IBM Notes®**
  Click here to add a IBM Notes® address book to the search list. The configuration dialog assists you with integration and offers default settings. You can change the configuration at any time with "Edit".
- **ODBC**
  Click here to add an ODBC data source to the search list. You can thus use contact data which you have stored, for example in a Microsoft® Excel file or a Microsoft Access® database, directly in PBX Call Assist 4.

  The configuration dialog supports you with connection and specifies default values. You can modify the configuration at any time with **Edit**.

  Please note that for this function the appropriate ODBC driver must be present on your system. The use of a estos MetaDirectory is recommended to integrate larger data stocks for performance reasons.

- **Add phone book**
  PBX Call Assist 4 offers you the option of adding phone books installed locally on your computer. Although PBX Call Assist 4 automatically recognises locally installed phone books it may be necessary to specify the installation manually. When installing "Das Telefonbuch Deutschland" please indicate the installation path of the product in a manual configuration, when installing "TwixTel" the path to the Data-CD must always be specified.

  You can also integrate phone books into PBX Call Assist 4 which are not installed locally but centrally. For this, you must configure the phone book in the estos MetaDirectory and connect the estos MetaDirectory as a phone book.

- **Add MetaDirectory or LDAP data source**
  You can integrate both a estos MetaDirectory and normal LDAP data sources into PBX Call Assist 4 with the help of the database wizard. Field allocation is automatic in the case of estos MetaDirectory.
- **DATEV SDD**
  Click here to add the DATEV SDD database to the search list.

6.3.1.4 Editing data sources

Specific data source properties can be viewed or modified via the **Edit**button. Alternatively you can double-click a data source list entry.

- **Adjust favorite data source**
  In the event that a company name has not been explicitly provided by the federation participant, check the **Fill empty company names from the presence domain entries for federation contacts** checkbox, to find Federation contacts based on company name when searching Favorites. When checked, the presence domain will be interpreted as the company name for federation contacts.
- **Edit Outlook® folders**
  Select the**Include all sub-folders when searching** option on the **Advanced** tab if all subordinate contact folders should be searched in addition to the folder itself.

  On the **Name search** tab you can specify a list of fields which should be additionally included in name searches in Outlook® folders. The Last name, First name and Company fields are already searched by default. Please note that the name search fields apply globally for all Outlook® folders.

Example:
Click **<Add field here>** and select the **Item.Department** entry from the list. The subsequent name search will then find all Outlook® contacts which match the search criterion in the **Department** field.

- **Edit Exchange Web Services**
  The settings available are the same as those for Outlook® folders.
- **Edit IBM Notes® folders**
  The tab **Advanced** displays the most important details of the selected IBM Notes® Directory. Select the button **Configure** in order to change the parameters.
- **Edit ODBC connection**
  The tab **Advanced** displays the most important details of the selected ODBC connection. Select the button **Configure** in order to change the parameters.
- **Edit phone book**
  Here you can query the installation path and the current status and, if necessary, information about the connected phone book. Please note that the installation path can only be changed if you remove and re-attach the current phone book.
- **Edit MetaDirectoryor LDAP data source**
  On the **Advanced** tab, information can be retrieved about the selected data source or configuration of the data source. The database wizard assists with this. Please note that a centrally configured estos MetaDirectory can only be changed in PBX Call Assist 4 UCServer and not in PBX Call Assist 4.
- **Edit DATEV SDD data source**
  Check **Use Comments from Communication Details as the Contact Person's Name** so that contacts maintained in the Comments entry in DATEV Arbeitsplatz Pro can also be found.

Please note that with data sources that are administratively defaulted by group guidelines, the configuration cannot be edited by the User.

6.3.1.5 Deleting data sources

Click the **Delete** button to remove a data source. Please note that some data sources cannot be removed. These include the PBX Call Assist 4 users, PBX Call Assist 4 UCServer's lines, the PBX Call Assist 4 favorites and the estos MetaDirectory centrally configured on PBX Call Assist 4 UCServer. Also data sources cannot be deleted which are administratively defaulted by group guidelines.

	If a data source could not be integrated this is indicated by an exclamation mark in the data source icon. An error description is displayed in the tooltip if you place a mouse pointer over the data source icon.
	Local mail boxes from Outlook® or IBM Notes® are added autimatically at the start of PBX Call Assist 4 if no data sources were configured for Outlook® or IBM Notes®.
	If at Start, PBX Call Assist 4 recognises a phone book that until now is not configured, this is included in the data source list automatically.
	"Das Telefonbuch Deutschland" must be installed on your computer with the phone book data bank. To copy the phone book database (without installation) is not sufficient.
	DATEV integration automatically gives priority to contacts from DATEV databases for the resolution of phone numbers after initial installation. This setting can be changed by the user in the database settings.

6.3.2 Search parameter

On the settings page "Search parameters" you can define the fields which PBX Call Assist 4 uses in the detail search. There you can define their order and other options for the detailed search.

The following search parameters are preset in PBX Call Assist 4:

- Last name
- First name
- Company
- Customer ID
- Department
- Postcode/City
- Street
- Phone number
- Presence-/e-mail address

Customize the search parameter sequence
Use the "Up" or "Down" buttons to shift the search-parameter either upwards or downwards in the list. The search-parameter order in the list determines their position in the detail search.

Activate or deactivate search parameter
The search parameters can be activated and deactivated. Only enabled search parameters are used in the detailed search. Checkmark the box on the list to activate the search parameter. Delete the checkmark on the list entry not to use the search parameter in the detailed search.

User-defined search parameter
User-defined search parameters can also be laid out in PBX Call Assist 4 beside the given search parameters. These allow the user to consider other contact fields not normally displayed in the detail search.

Configure user-defined search parameter
Click on **Add** to create a new user-defined search parameter. Click on **Edit...** to change the selected user-defined search parameter.

1. Allocate a name to the user-defined search-parameter. This name is used in the list of all search-parameters and in the tool tip for the detail search.
2. Select the corresponding contact fields which should be considered in this search-parameter. A user-defined search-parameter can also search several contact fields at the same time. In this case the contact is found when the search word matches the content of only one contact field.

Example:
A user-defined search-parameter should be added in order to find a contact by its SIP-Address in the detail search.

1. Enter **SIPAddress** in the name field.
2. Tick the box before the field name to select the "SIPAddress" in the contact field list.
3. Confirm your entry with **OK**.

With the command **delete** every user-defined search-parameter can be deleted again. Please note that only user-defined search-parameters can be edited or deleted.

6.3.3 Search result

Here the search result can be adapted and defined for the user. With this the order of the contact fields to be displayed can be set as well as their appearance and click actions.

Available contact fields
In the list of the available contact fields the corresponding tick-box next to a contact field can be activated if this contact field should always be shown in the search results. With the buttons **Up**or**Down** you are able to change the order of the contact fields in the search results.

Customize Layout settings
On the **layout** tab the general appearance of the selected contact field can be adapted.

Layout Option	Description
Display in compact view	Indicates whether the contact field is also displayed in the compact view. If the box is not ticked, the contact field is only shown in the detail view.
Display field names	Specifies if the field name should be displayed next to the account of the contact field.
Insert paragraph before field	Allows a better overview with the help of paragraphs to group and structure contact fields.
Display in bold type	With this option the contact field is displayed in bold type and is thereby emphasised.

tab **Customize field**
Here you can further customize the appearance of the contact field selected from the contact field list. The setting possibilities vary, depending on the selected contact field.

Specify contact field actions
On the **Actions** tab, actions which are executed by clicking on the contact field can be changed. All contact functions of the contact menu are available here as well as all User-defined actions.

In addition, up to three different actions can be put on one contact field, either by using no key, holding down the CTRL key or holding down the Shift and CTRL key together, while clicking on the corresponding contact field in the search result list.

➡	The button **Default** resets the default layout.
➡	Only contact fields which are not empty are displayed in the search result.
➡	All contact fields are displayed in the search result (including the compact view) which were searched for.

6.4 Integration

Calendar and journal connections are controlled in **Integration**.

- Calendar
- Journal
- DATEV

6.4.1 Calendar

Appointment dates are transferred from the client to PBX Call Assist 4 UCServer in order to permit PBX Call Assist 4 to display them and pass them on. They are stored temporarily, consulted for creating your own presence and displayed to other users who have the appropriate user rights.

Appointment details can presently be read either from the Outlook® or from the IBM Notes® diary. In Windows® 10 you can also use the included calendar app.
If your administrator has installed this, it is also possible to use Google Calendar.
If you use multiple Systems, you can select the system you use as the data source.

A user has the option of limiting the amount of appointment data which is made available to the system.
The following options can be selected:

- **None**
  No data is transferred to the server. This data is then not displayed to other users and the information is not included when determing your own presence status.
- **Public appointments only**
  Only appointments which are marked as public are transferred to the server. They are then available for other users and for determining your presence.
- **Public appointments as well as the status and times of private appointments (default setting)**
  All appointments are transmitted to the server, but for private appointments only the start and end time and the appointment status (busy, out of office, etc.) are transmitted. This will show your presence during private appointments according to the appointment status to other users, without giving other users access to any further information (such as the subject).
- **Private and public appointments**
  All appointment information is transferred to the server and is available to other users and can be used to determine your presence status.

6.4.2 Journal

PBX Call Assist 4 uses a journal provided by the server. All conversations and calls will always be stored on PBX Call Assist 4 UCServer irrespective of these settings. Specifically, PBX Call Assist 4 enables you to copy journal entries also into Outlook® or IBM Notes®.

Select data source:
If you use both Outlook® and IBM Notes®, you may selected your preferred system as a data source.

Setup journal file
PBX Call Assist 4 always lays out the journal copies in the set journal folder. If another journal folder should be used, this can be changed here with the "Search" button. Please note that only the journal folder can be selected in the choice dialog. Select "default" to activate the default-journal folder.

Create automatic journal copies
In addition to the option of placing a copy of a journal entry in Outlook® or IBM Notes® manually via the context menu, PBX Call Assist 4 can also prepare automated journal entries of telephone calls in Outlook® or IBM Notes®:

- **For a call memo**
  Activate this option, and PBX Call Assist 4 will always store a journal copy in Outlook® or IBM Notes® as soon as you enter a memo about the call in the call window while you speak.

- **Contact from own mailbox**
  Activate this option and PBX Call Assist 4 will always store a journal copy in Outlook® or IBM Notes® as soon as a contact from one of your personal contact files was assigned to the call.

★	Use the Journal browser for a more detailed call journal.
➡	Since PBX Call Assist 4 keeps a journal provided by the server, journal entries for every call in Outlook® or IBM Notes® are not necessary. This saves unnecessary objects and ensures lasting high-quality performance of Outlook® and IBM Notes®, respectively.
➡	You can see an overview of your last calls in the PBX Call Assist 4 main window if you click the Journal tab.
➡	For special requirements, it may be necessary to save all calls as journal entries in Outlook® or IBM Notes®. This service can be activated in the Windows® registry. Details can be found at Control functions via Windows® Registry. Please note that activation of this function is not recommended!

6.4.3 DATEV integration - Automatic Data Transfer

PBX Call Assist 4 can automatically synchronize data between DATEV Arbeitsplatz Pro and PBX Call Assist 4 in large part. By setting "Automatic Data Transfer", all phone calls will be synchronized (regardless of any properties) with DATEV Arbeitsplatz Pro. Setting the following options has a restrictive effect (similar to black listing) on synchronization with DATEV Arbeitsplatz Pro.

- **Answered Calls Only:** Missed calls will not be synchronized automatically with DATEV Arbeitsplatz Pro. However, they can be subsequently synchronized from the PBX Call Assist 4 Journal for Unanswered Calls.
- **External Calls Only:** Calls from your organization will not be automatically synchronized against DATEV Arbeitsplatz pro.
- **DATEV Contacts Only:** Only those calls from contacts that have already been created in the DATEV master data service (SDD) will automatically be synchronized with DATEV Arbeitsplatz Pro. A connection to the DATEV master data services (SDD) must have been configured already and be available for this feature.

6.5 Collaboration

In **Colaboration** the behavior of the client regarding chat from other PBX Call Assist 4 users and notifications of presence changes of contacts are described.

- Chat
- Notification window
- Audio/Video Wizard

6.5.1 Chat

Display time without user interaction
If you didnt respond to a new chat, the chat window will be faded out after a specific time and a new chat will be added to the speech bubble info window. As soon as you respond to a chat message, the window will not be faded out automatically any more.

Transparency, support display and fading out
The chat window supports transparency and is generally faded in and out. If you do not wish to use this function, deactivate transparency.

Window position
You can determine where a message window opened by PBX Call Assist 4 should be displayed.

- **Default position (task bar icon)**
  PBX Call Assist 4 opens the chat window to a suitable location on the screen. Other, already opened windows of PBX Call Assist 4 are not superimposed.
- **Remember last position**
  If you close a message window, the position is stored and displays new windows there.
- **Define position using preview**
  Open a chat window with the button "Preview" and place this at the position where future windows are to be opened. As soon as you close the window, the position will be stored.
- **At mouse position**
  The mouse cursor will be used as a reference position, so that the window will always appear in the immediate vicinity of the window(s) being used for work.

These settings do not apply for chats that have been started by the user. In this case, the message window will always be opened at the mouse position.

6.5.2 Notification window

Notification windows can draw the user's attention to certain presence changes of contacts in Favorites or in the monitor. A small notification window will open for specially identified users and briefly indicate the type of the change and which contact is affected.

Notification in case of the following event:

- **Contact becomes available.**
  The notification window appears when a tagged contact logs on, switches from the status "Inactive" to "Available" or switches from "Absent" to "Available".
- **Contact signs out.**
  The notification window indicates when a tagged contact signs out.
- **Contact has a call to pick up.**
  The notification window appears when a call rings for the tagged contact while the tagged contact is not "available", but contact permits picking the call.

Display duration
The notification window will fade out after a certain time. With this setting, you can define the time period yourself.

Transparency, support display and fading out
The notification window supporty transparency and generally fades in and out. If you do not wish to use this function, deactivate transparency.

Window position
The position can be defined where a notification window opened by PBX Call Assist 4 should be shown.

- **Default position (task bar icon)**
  PBX Call Assist 4 will open a new window at a apropriate position on the screen. Other already open windows of PBX Call Assist 4 will not be overlaped.

- **Remember last position**
  A notification window will appear at the same position where you have closed it or it was automatically hidden.
- **Define position using preview**
  Open a notification window with the button "Preview" and position it where future windows are to be opened.Moving the message box has no effect on the display position.

6.5.3 Audio/Video Wizard

With the **initial startup** of the PBX Call Assist 4 the user can decide if Audio and Video devices are to be used (for VideoChat and Audio applications), if Audio devices only are to be used (for AudioChat, Softphone, Bluetooth) or if no devices are to be used (Audio/Video off). The selected configuration can be changed later anytime by pressing the AV device item at the Presence area. If an Audio or Video device is configured to be used an Audio/Video Wizard starts.

During **normal operation** the Audio/Video Wizard opens automatically if the device configured for Audio/VideoChat is removed and if another device could be selected. If another device is configured the new one is further on used but the old one stays known. Thus, the previous settings remain known for laptops with docking stations and will be corresponding set in the event of changes to the docking state without intervention.

- **Audio configuration**
  With the Audio Wizard the microphone and the speaker devices can be configured to be used with Audio/VideoChat. Pressing the "Devices" button opens the Windows® sound devices e.g. for configuring the Windows® standard devices or just for review. While the Wizard is open devices may be plugged in or removed. The list updates accordingly.
  The use of USB headsets or Bluetooth / DECT headsets with USB dongle is recommended (see below the list of supported and tested devices). Otherwise the device control could not work or the presence (e.g. connected, on / off) of the device could not be recognized.
  When using a Bluetooth headset directly coupled with the PC, the microphone and speaker devices should be set with the name "Hands Free AG Audio" in the device name. Bluetooth headsets also offer a speaker device with the name "Stereo" in the device name. This is only intended for music playback, because it is muted by the PC when "Hands Free AG Audio" devices are activated while having calls. If the connection status of a directly coupled Bluetooth headset changes, the device names are updated accordingly on the audio wizard. In some cases the microphone speech quality is improved when the "device echo cancellation" is deactivated (see below). It is recommended not to pair more than one Bluetooth audio device.

6.5.3.1 Device echo canceller

Most audio devices offer hardware echo cancellation with high quality (default on). If echo cancellation on the device is deactivated or not available, software echo cancellation (based on WebRTC) is used automatically. If hardware based echo cancellation is active and strange noises or unwanted blanking effects are heard from the other party (e.g., when both are speaking), the behavior may improve if the device echo canceller is disabled.

6.5.3.2 Device automatic gain control

Some audio devices offer a hardware-specific automatic gain control "AGC". If AGC is deactivated or not available on the device, a software AGD (WebRTC based) is automatically used. If the hardware-specific AGC interferes, it can be disabled here (Default setting on).

6.5.3.3 Noice cancellation

Sometimes the microphone is near a noise source, e.g. a built-in laptop microphone, air conditioner or fan is running. The voice quality can increase if noise reduction is activated in such environments (default setting off).

6.5.3.4 Call control via audio device buttons

If the selected device supports call control with device buttons (Human Interface Device "HID" buttons, e.g. for accepting or dropping calls) a checkbox "Enable Hook switch support" is offered (otherwise disabled grey). If the option is checked Audio/VideoChats can be accepted or dropped per device button. The list of supported HID devices can be found below. For example incoming Audio/Video chats are accepted and ended by the corresponding press of a button on the headset. Several phone calls can also be handled simultaneously. For example, if there is already a conversation, additional callers can be accepted by pressing a button. The existing conversation will be placed on hold.
Some devices (for example with a hands-free function) have separate buttons for accepting and ending calls. You can refuse a call with the End call button or accept a call with the Accept button.
If the device offers a swap calls function, pressing the Answer button allows users to change between conversations. If the microphone was switched to Mute during a call, muting will be suspended when switching to another call. The list of supported audio devices with control options is at the bottom of this page.
In the case of the use of Plantronics headsets, please note that the “Plantronics Hub” software must be installed (for details, see below under Plantronics devices).

The test button offers a simple way to verify that your current device configuration is working with the software. After pressing the microphone test button a LED bar lits according to your speech for some seconds. After pressing the playback test button a sound is played for some seconds to the selected speaker device. Pressing the button again while the test runs cancels the test.

- **Video settings**
  With the Video Wizard the camera device can be configured to be used with VideoChat. The actually selected camera starts immediately and a test picture is shown. This helps identifying the selected camera device and the camera can be adjusted before a VideoChat starts the first time.

  If the selected camera device supports to be remote controlled per software the option "Enable remote control of the local camera" checkbox becomes enabled (otherwise disabled grey). If checked the local user can move the remote camera. The camera can be turned to the left (arrow key left), to the right (arrow key right), upwards (arrow key up) and downwards (arrow key down). Further it is possible to zoom-in (key "-") and to zoom-out (key "+"). The controlling user may also move the remote camera by using the mouse in the main Video picture with the related overlay buttons (see also Conversation window). The list of supported devices can be found below.

6.5.3.5 Audio/video hardware with control option

6.5.3.5.1 Logitech®:

Logitech® Hardware	Call control	Mute	LED	Camera control
USB Headset H570e Mono	yes	yes	yes	n/a
USB Headset H570e Stereo	yes	yes	yes	n/a
USB Headset H650e Mono	yes	yes	yes	n/a
USB Headset H650e Stereo	yes	yes	yes	n/a
USB DECT Headset H820e Mono	yes	yes	yes	n/a
USB DECT Headset H820e Stereo	yes	yes	yes	n/a
USB B530	yes	yes	no	n/a
USB Speakerphone P710e	yes, including swap calls	yes	yes	n/a
USB Camera BCC950	yes	yes	yes	yes
ConferenceCam CC3000e	yes, including swap calls	yes	yes	yes

6.5.3.5.2 Plantronics:

Calls can be controlled by Plantronics devices if the "Plantronics Hub" headset software was installed on the computer. This software comes provided on CD or can be downloaded from the manufacturer's web site. If an old version of "Plantronics Spokes" is installed, the current "Plantronics Hub" software must be installed.
Use the Plantronics Hub software to adjust the behavior of Plantronics headsets. For example, the smart sensor can be set (if available), which accepts calls when the headset is donned and end calls when removed. Moreover, the automatic muting of the smart sensor can be adjusted there, which can be helpful in some situations, but also undesirable. The software can be opened via a Headset icon in the Windows® System-Tray (use the mouse on the icons of the taskbar). If a Bluetooth USB dongle was supplied with the headset, it should be used on the PC as otherwise the device controller may not function, for example.

Plantronics Hardware	Call control	Mute	LED	Sensor	Ringer
Blackwire C320	yes	yes	yes	no	no
Blackwire C325	yes	yes	yes	no	no
Blackwire C720 (USB)	yes	yes	yes	yes	no
Blackwire C720-M (USB)	yes	yes	yes	yes	no

Savi W440A (D100)	yes	yes	yes	no	yes
Savi 7xx	yes	yes	yes	no	yes
Voyager 5200 UC (BT600)	yes	yes	yes	yes	yes
Voyager Focus UC (BT600)	yes	yes	yes	yes	yes
Voyager Legend UC (BT300)	yes	yes	yes	yes	yes
Calisto 620 (BT300C)	yes	yes	yes	no	no
Encore Pro HW301N/A-DA45/A	yes	yes	only mute LED	no	no

Smart Sensor *is a name of Plantronic for call control functionality (while putting on = accept call; while putting down = end call)*
Intrusion Ringer *describes a headset's own ringing sound for incoming calls.*

6.5.3.5.3 Sennheiser:

The following headsets from the manufacturer have been successfully tested and are suitable for Call Control, other models from the manufacturer are available with Call Control.

Hardware	**Call control**
Circle SC 260 USB CTRL	yes
Century SC 630 USB CTRL	yes
DW Office	yes
DW Pro 1	yes
Presence UC	yes

6.5.3.5.4 Jabra™:

The following headsets from the manufacturer have been successfully tested and are suitable for Call Control, other models from the manufacturer are available with Call Control.

Hardware	**Call control**
Jabra™ Engage 75	yes
Jabra™ Evolve2 65	yes

Jabra Pro™ 9460 EMEA	yes
Jabra Evolve™ 65 UC Stereo	yes
Jabra™ BIZ 2400 II Mono USB	yes
Jabra™ SPEAK 510 UC	yes
Jabra™ SPEAK 710	yes
Jabra™ SPEAK 810	yes

6.5.3.5.5 Gigaset:

Hardware	**Call control**	**Mute**	**LED**
Gigaset ION	yes, including hold, swap calls and refuse calls	yes	yes

6.5.3.5.6 Polycom®:

Other hardware	**Call control**	**Mute**	**LED**
Polycom® CX100	yes, including swap calls	ja	ja

6.5.3.6 Technical requirements for audio devices

The audio devices for softphones and audio / video chat are supported with sampling rates of 8 kHz ... 96 kHz, mono / stereo, in 16/24 bit PCM format. All devices in the system should be set in this ranges.

7 Info about PBX Call Assist 4

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