

**SIEMENS**

# **Hicom 150 E/H Hicom 300 E/H HiPath 3000 HiPath 4000**

## **HiPath Hotel Advanced V4.2**

Hotel Server Solution

Service Manual





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**The information provided in this document contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products.**

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# 1      Welcome to Caracas Link 4.2

## Introduction

This document describes the new version of the hotel server software Caracas Link 4.2. The first chapters provide a brief overview of the scope and the features of Caracas Link. These sections also explain the improvements compared to the previous versions 4.0 and 4.1.

### You have already worked with a previous version of Caracas Link?

Chapter 1.1 is particularly interesting for those who have already worked with a previous version. This chapter briefly describes the differences compared to the previous versions. In chapter 2 gives you a full overview of the features offered by Caracas Link 4.2.

### You are not yet familiar with Caracas Link

If you are new to Caracas Link, turn directly to chapter 2 for an overview of the individual components of Caracas Link and their features.

## 1.1      Caracas Link - What's new?

### 1.1.1      New features in Version 4.1

#### Compatibility

Caracas Link was developed on the basis of the very latest technologies (such as 32-bit access, client/server architectures) without complicating the individual programs. In this way, downward compatibility to previous versions is guaranteed.

The existing Caracas Link installations do not need to be upgraded as long as no new features have to be integrated.

#### Installation

A new, flexible installation program was integrated allowing the (post-)installation of individual components as well as the installation of software in additional languages.

#### New component Caracas Link Alarm Client

This component is installed on a Windows-PC of the Front Office system with network access to the Caracas Server PC and displays the application status and the interface status of the Caracas Link applications.

## Welcome to Caracas Link 4.2

*Caracas Link - What's new?*

### New component Caracas Link Client

This component is installed on a Windows PC in the front office area or in the telephone exchange with network access to the Caracas Server PC. It allows the configuration of wakeup calls, the changing of the class of service, the setting / deleting of the message-waiting lamp and the setting of the do not disturb function.

### Integration of the 32-bit WinCall variants

Caracas Link uses the current WinCall versions (32 bit).

### Connecting Hicom 300 via TCP/IP

WinCall Hicom 300 can be connected to the Caracas Link network either via IKK/2 or alternatively via the WAML module with TCP/IP. With the second solution, up to four Hicom 300 systems can be operated in this network.

### Connecting Hicom 150E Office via S0

WinCall 150E Office can be connected to Caracas Link either via V.24 (RS232) or alternatively via an S0 interface.

### Host connection via TCP/IP

The front office system can be connected to Caracas Host-Link either via the existing connections, i.e. V.24 (RS232) interface, file exchange and ODBC or alternatively via TCP/IP.

### Connecting voicemail via file

The voicemail systems can be connected either via a V.24 (RS232) interface or alternatively via the new file exchange option. For this purpose, the voicemail system is installed on a PC within the Caracas network and file exchange is performed to the front office system as in the case of Caracas-Host-Link.

### Data flow expansion:

- Host protocols supplemented to include various record types (check-in/check-out advanced, configuration of call pickup groups, configuration of PIN numbers, service costs)
- Enhanced use and increased number of PNIF record types (8-digit extension numbers, group ID, PABX number, etc.)
- Supplemented voicemail record types (fax charge transmission, room assignment, etc.)

### Call Charge Manager

The layout of the Call Charge Manager's GUI was revised to make it more user-friendly. The configuration options were enhanced. Moreover, configuration data can now also be imported.

## **External call charging**

With Caracas Link, call charging can be performed by an external application via the Caracas Server or the Call Charge Manager. The call charges are processed by Caracas.

### **1.1.2      New features in Version 4.2**

#### **Connection to HiPath 4000**

Caracas Link can be connected to the HiPath 4000 PBX System via TCP/IP and CAP using the WAML adapter or directly using the HiPath 4000 Atlantic-LAN interface.

#### **New component Caracas Horizon-Link**

This component is installed on the Caracas Server PC and provides an interface to the Callstar Horizon accounting system for charging calls. The Callstar Horizon System can be connected via TCP/IP.

#### **Management extensions**

Besides guest extensions Caracas Link 4.2 handles management extensions. You can setup separate call charges for management extensions.

#### **Call Charge Manager**

The call charge manager distinguishes between guest extensions and management extensions. The export of charging configuration data has been added.

## Welcome to Caracas Link 4.2

*Caracas Link - What's new?*

## 2 Features

### 2.1 Networking across Caracas components

Architecture of Caracas Link 4.2

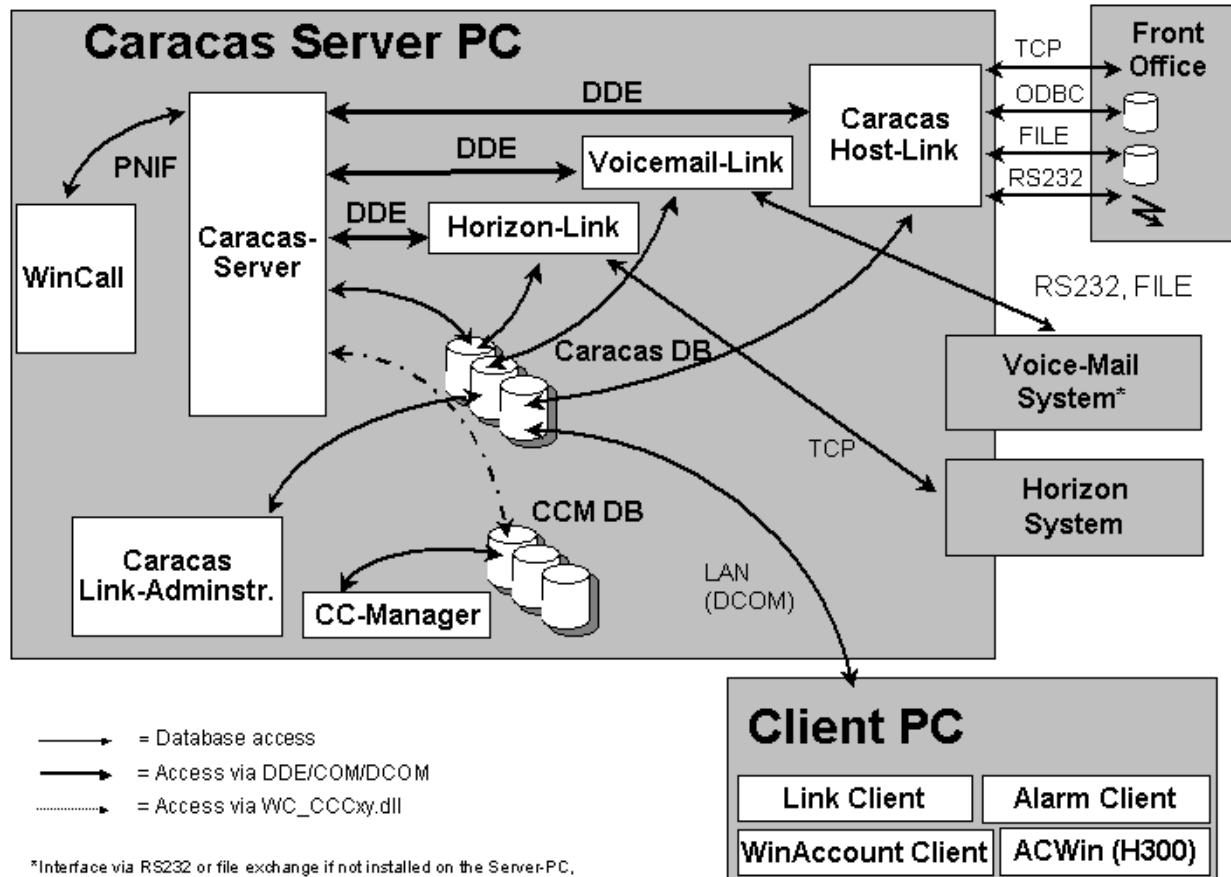


Figure 2-1 Overview: The Caracas Link components

## Features

*Caracas Server / Caracas Service*

## 2.2 Caracas Server / Caracas Service

### Overview

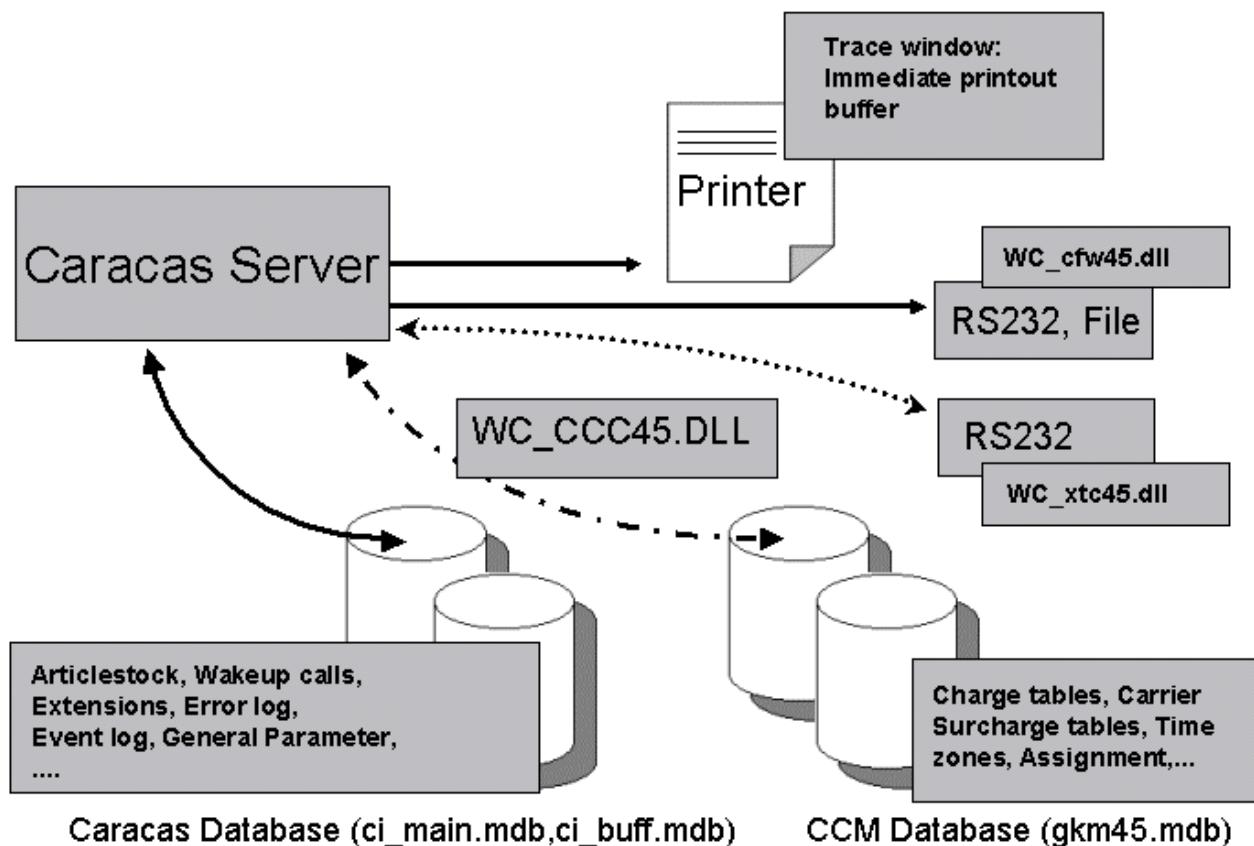


Figure 2-2 Overview: Caracas Server

### Caracas Server...

- Is the main component of the system. It runs 24 hours a day as an independent 32-bit application under Windows 2000 on the Caracas Server PC.
- Accepts and processes requests from the client components via buffers and DDE conversations.
- Establishes the conversation to WinCall and thus facilitates the processing of all data from and to the PBX server.
- Accesses the central Caracas configuration tables, uses tables for buffering records and for user management.
- Implements immediate printouts.

- Updates the display in the status bar on the basis of status messages from the client components.
- Calculates the call charges in accordance with the call charge configuration stored by the Call Charge Manager and saves records in a call charge database for analysis with WinAccount.
- Forwards call charge records to a configured RS232 (V.24) interface or to a file for separate processing by Caracas Link.
- Supports call charging via an external application via RS232 (V.24).

### **Caracas Service Agent...**

- Is the communications and database component of this solution which runs in the background (not visible to the user) on the Caracas server PC as an independent 32-bit application under Windows 24 hours a day.
- Consists of the following internal applications:
  - **Caracas Scheduler** (Management of scheduled programs).
  - **Caracas Service** (Mapping of operating rules to the database).
  - **Caracas Messenger** (Monitoring and implementation of communication between the client applications and the Caracas server).
- Accepts jobs from the Caracas server and forwards these to the client applications Caracas Link Client/Caracas Link Alarm Client.
- Accesses the central Caracas configuration tables, uses tables to buffer records.
- Executes scheduled jobs.

### **The user...**

- Can follow all key program steps using trace windows.
- Can activate the online help at any time.
- Cannot update any system-specific options in Caracas Server. This can be done with the Caracas Link Administration program.
- Can monitor the status of Caracas Service from the Caracas server status bar and from the Windows status bar (taskbar).
- Can display Caracas Scheduler as a component of Caracas Service Agent in the foreground and check processing steps via the trace windows.

## Features

WinCall Hicom 200/150E, Hicom300, Hicom 150E Office, HiPath 4000

### 2.3 WinCall Hicom 200/150E, Hicom300, Hicom 150E Office, HiPath 4000

#### Overview

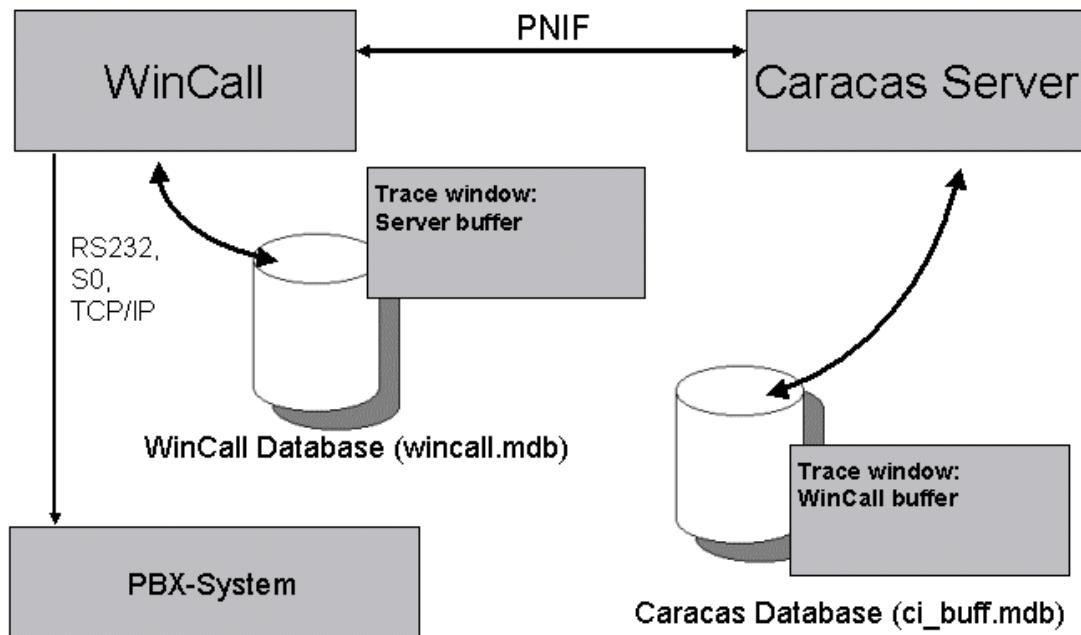


Figure 2-3 Overview: WinCall Hicom 200/150E, Hicom 300, Hicom 150E Office

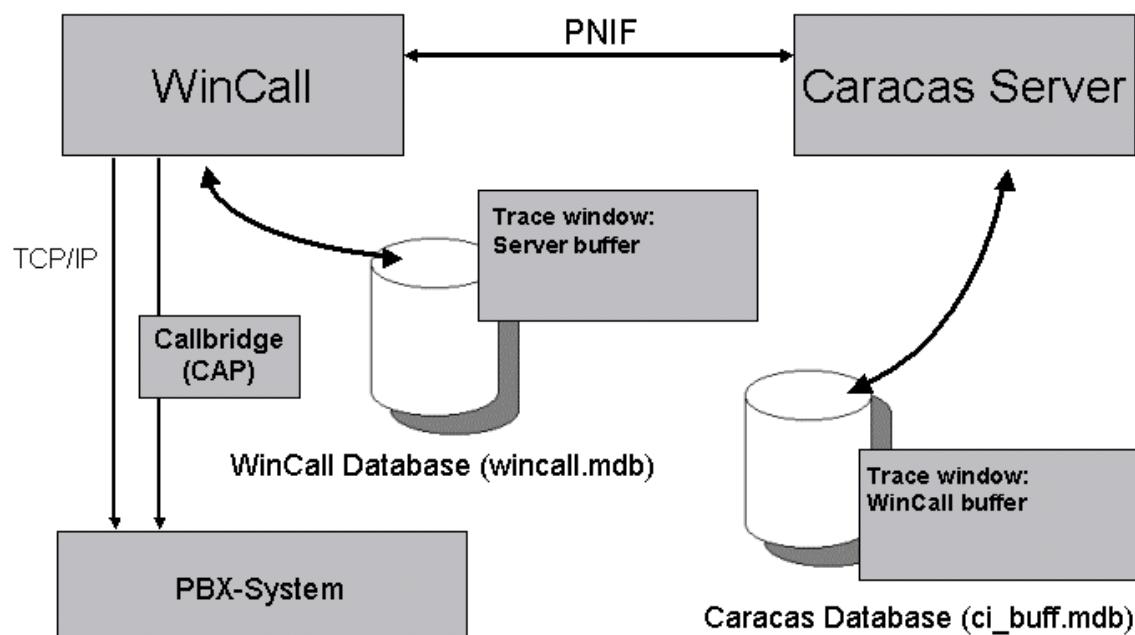


Figure 2-4 Overview: WinCall HiPath 4000

**WinCall...**

- Is the PBX server component of the system. It runs 24 hours a day as an independent 32-bit application under Windows 2000 on the Caracas Server PC.
- Accepts information from Caracas Server via DDE, e.g. for requests regarding class of service switches, name entry, message waiting updates, etc., and forwards this information to the PBX system via the ACL interface.
- Accepts information from the PBX system via the ACL interface, e.g. operator input on the guest telephone, call records, etc., and forwards this information to Caracas Server via DDE.

**The user...**

- Can use available tests to check all transfer functions from/to the PBX system.
- Can check all key program steps using trace windows.
- Can activate the online help at any time.

## Features

*Caracas Host-Link*

### 2.4 Caracas Host-Link

#### Overview

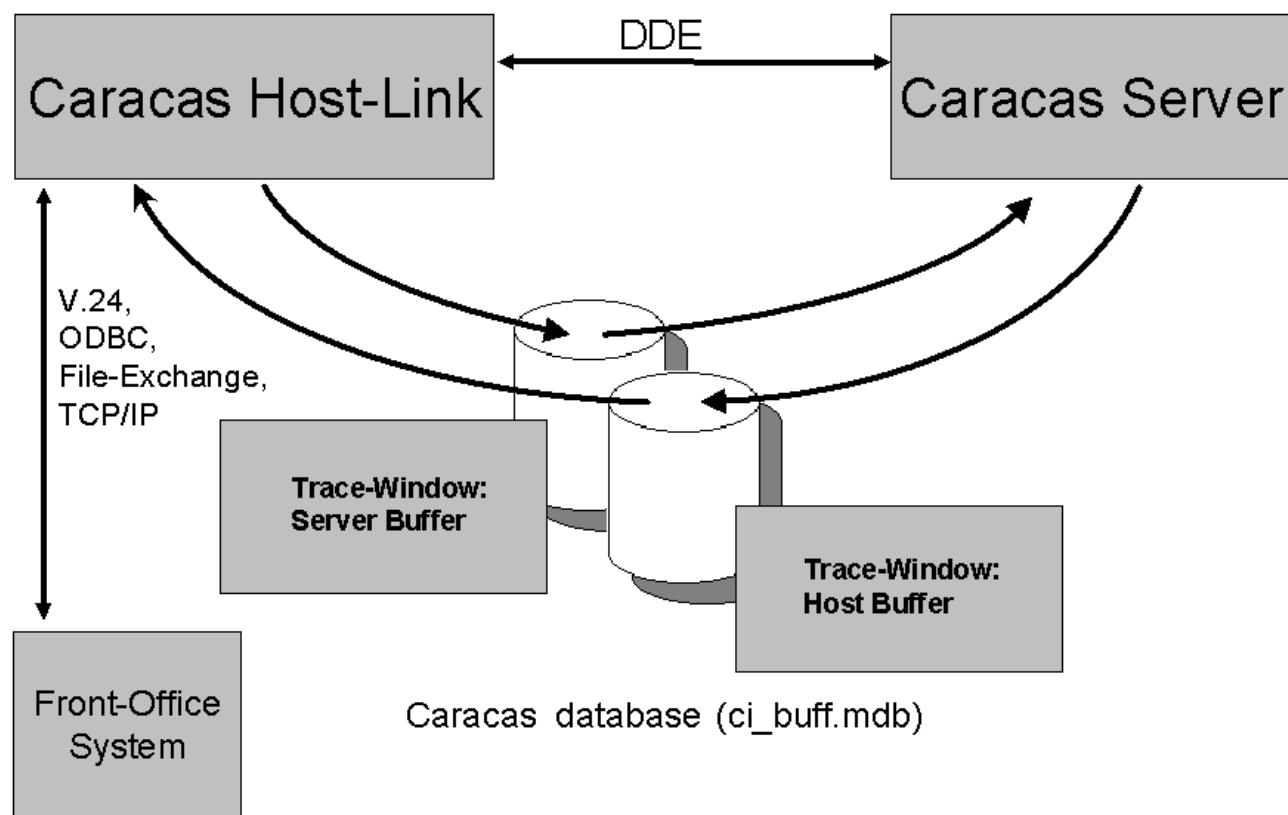


Figure 2-5 Overview: Caracas Host-Link

#### Caracas Host-Link...

- Is an independent 32-bit application under Windows 2000 which runs 24 hours a day on the Caracas Server PC.
- Accesses the central Caracas databases and uses the tables for buffering records and for user management, for example.
- Sends the interface status to Caracas Server at regular intervals via DDE for graphical display in its status bar.
- Can also enter communication records in a log file.
- Performs the logon and logoff on Caracas Server via DDE.

**The connection to the front office system can be made...**

- Using the default Caracas RS232 (V.24) protocol.
- Using the RS232 (V.24) Fidelio protocol.
- Using file exchange with the record types of the default Caracas protocol.
- Using file transfer with the record types of the default Caracas protocol.
- Using the ODBC database interface with the record types of the default Caracas protocol.
- Using TCP/IP and Windows sockets with the record types of the default Caracas protocol.

**The user...**

- Follows all key program steps using trace windows.
- Enters all protocol options via appropriate configuration dialogs. All system-specific options are entered using the Administration program.
- Can activate the online help at any time.
- Can use predefined RS232 (V.24) profiles to set the communications options to the front office system.
- Can use test functions to create records for Caracas Server or the front office system, or import a batch of records.

## Features

*Caracas Link Administration program*

### 2.5 Caracas Link Administration program

#### Overview

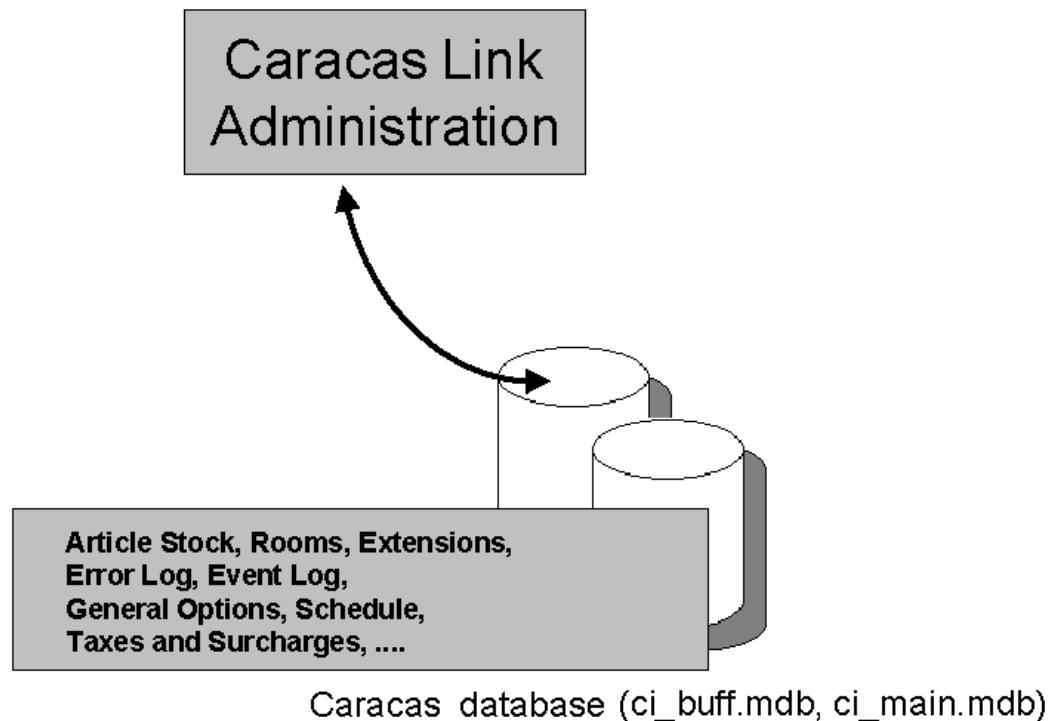


Figure 2-6 Overview: Caracas Link Administration program

#### The Caracas Link Administration program...

- Is an independent 32-bit application under Windows 2000 on the Caracas Server PC which is only activated for configuration purposes.
- Accesses the central Caracas databases and uses the tables for configuration and user management, for example.

**The user...**

- Configures all system-specific parameters using configuration dialogs.
- Configures the users and assigns the users to the individual components.
- Evaluates the event log and the error log.
- Configures the scheduled jobs.
- Can activate the online help at any time
- Can configure the article stock.
- Can enter and check wakeup calls.
- Can configure and manage extensions and sub-extensions.

## Features

*Call Charge Manager (CCM)*

### 2.6 Call Charge Manager (CCM)

#### Overview

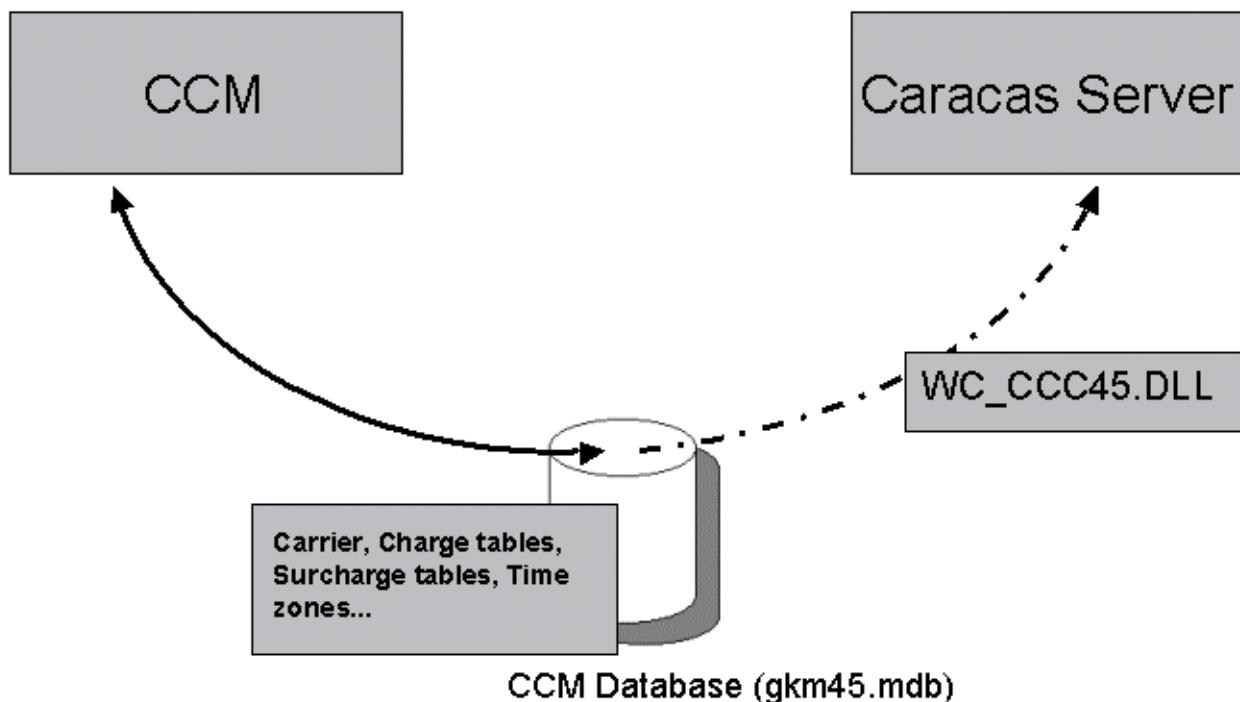


Figure 2-7 Overview: Call Charge Manager

#### The Call Charge Manager...

- Is an independent 32-bit application which is activated under Windows 2000 on the Caracas Server PC for configuration purposes.
- Can distinguish between guest and management extensions.
- To determine call charges, the Call Charge Manager can be configured:
  - Using unit price \* units.
  - Using call duration, destination number and time on the basis of call charge tables, time zone tables, and charge assignments.
  - Using a surcharge table (Swiss table) with call charges and surcharges.

**The user...**

- Activates the Call Charge Manager to configure the call charge tables.
- Can import or export the configuration tables.
- Can activate the online help at any time.

## Features

*Caracas Voicemail-Link*

### 2.7 Caracas Voicemail-Link

#### Overview

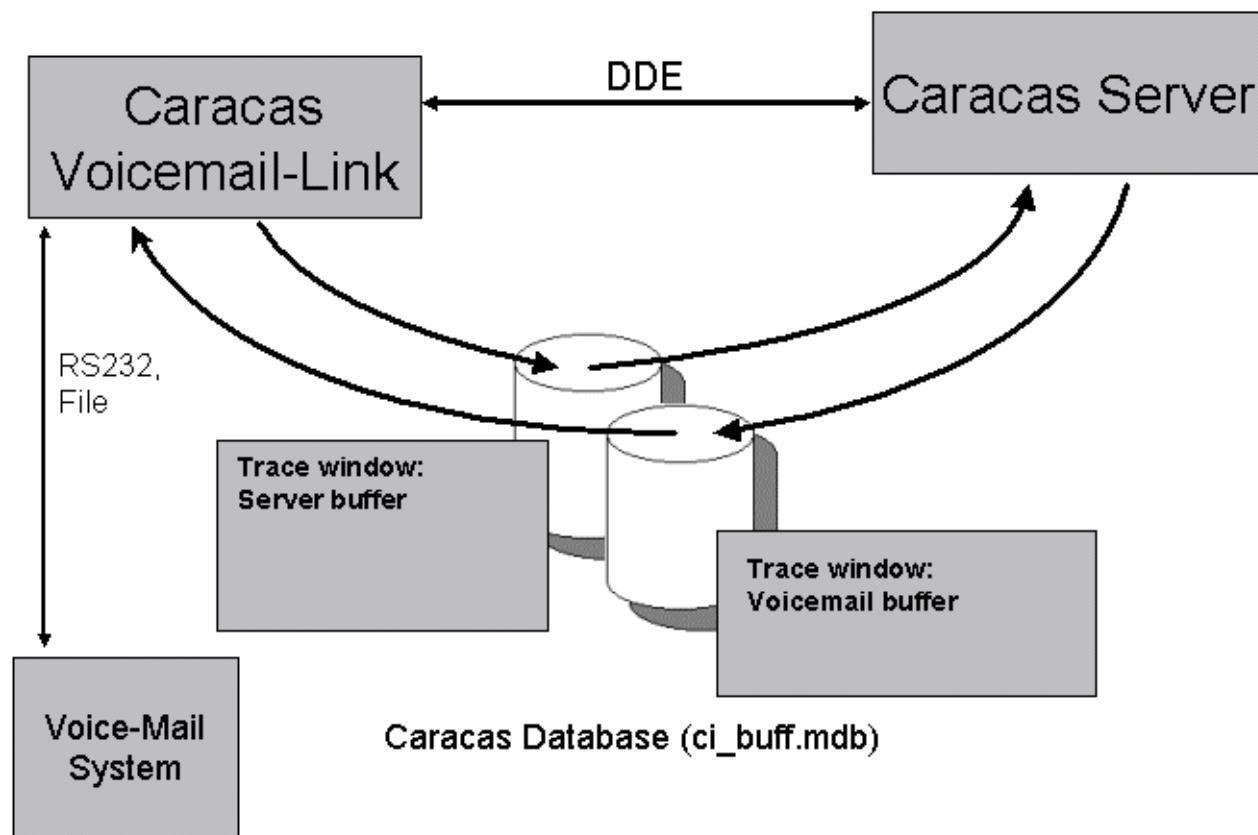


Figure 2-8 Overview: Caracas Voicemail-Link

#### Caracas Voicemail-Link...

- Is an independent 32-bit application which runs 24 hours a day under Windows 2000 on the Caracas Server PC.
- Accesses the central Caracas databases and uses the tables for buffering records and for user management, for example.
- Sends the interface status to Caracas Server at regular intervals via DDE for graphical display in its status bar.
- Implements logon and logoff on Caracas Server via DDE.
- Can also enter communication records in a log file.

**TThe voicemail system can be connected...**

- Using the default RS232 (V.24) protocol.
- Using file exchange with the record types of the default voicemail protocol.



The connection via RS232 (V.24) is accessible only after consultation with the development / product management department of Siemens for Caracas Link. By default the connection via RS232 (V.24) is not available.

**The user...**

- Enters all protocol options via the appropriate configuration dialogs; the system-specific options are configured in the Caracas Link Administration program.
- Can follow all key program steps using trace windows.
- Can activate the online help at any time.
- Can use test functions to create records for Caracas Server or the voicemail system, or import a batch of records.

## Features

*Caracas Horizon-Link*

### 2.8 Caracas Horizon-Link

#### Overview

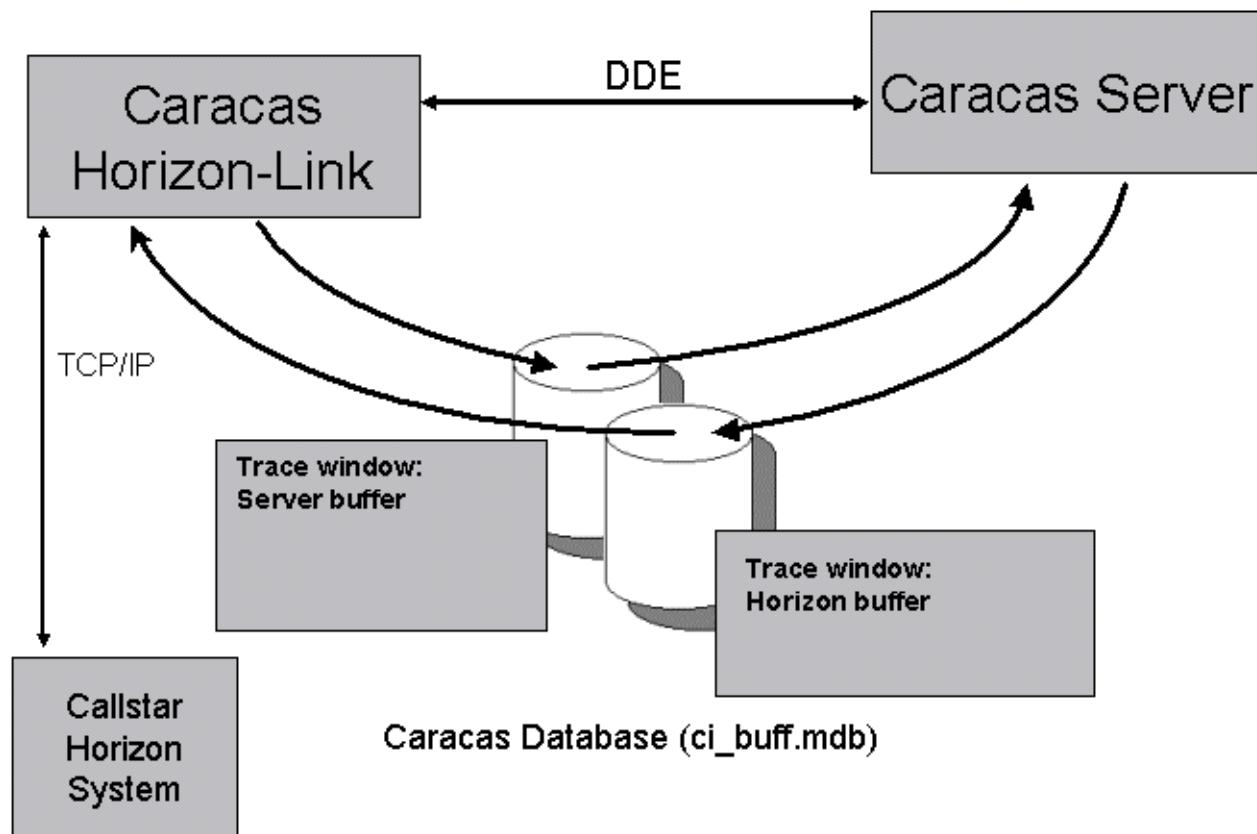


Figure 2-9 Overview: Caracas Horizon-Link

#### Caracas Horizon-Link...

- Is an independent 32-bit application which runs 24 hours a day under Windows 2000 on the Caracas Server PC.
- Accesses the central Caracas databases and uses the tables for buffering records and for user management, for example.
- Sends the interface status to Caracas Server at regular intervals via DDE for graphical display in its status bar.
- Implements logon and logoff on Caracas Server via DDE.
- Can also enter communication records in a log file.

**The Callstar Horizon system can be connected...**

- Using TCP/IP with the Caracas Horizon protocol.

**The user...**

- Enters all protocol options via the appropriate configuration dialogs; the system-specific options are configured in the Caracas Link Administration program.
- Can follow all key program steps using trace windows.
- Can activate the online help at any time.

## Features

*Caracas Link Alarm Client*

### 2.9 Caracas Link Alarm Client

#### Overview

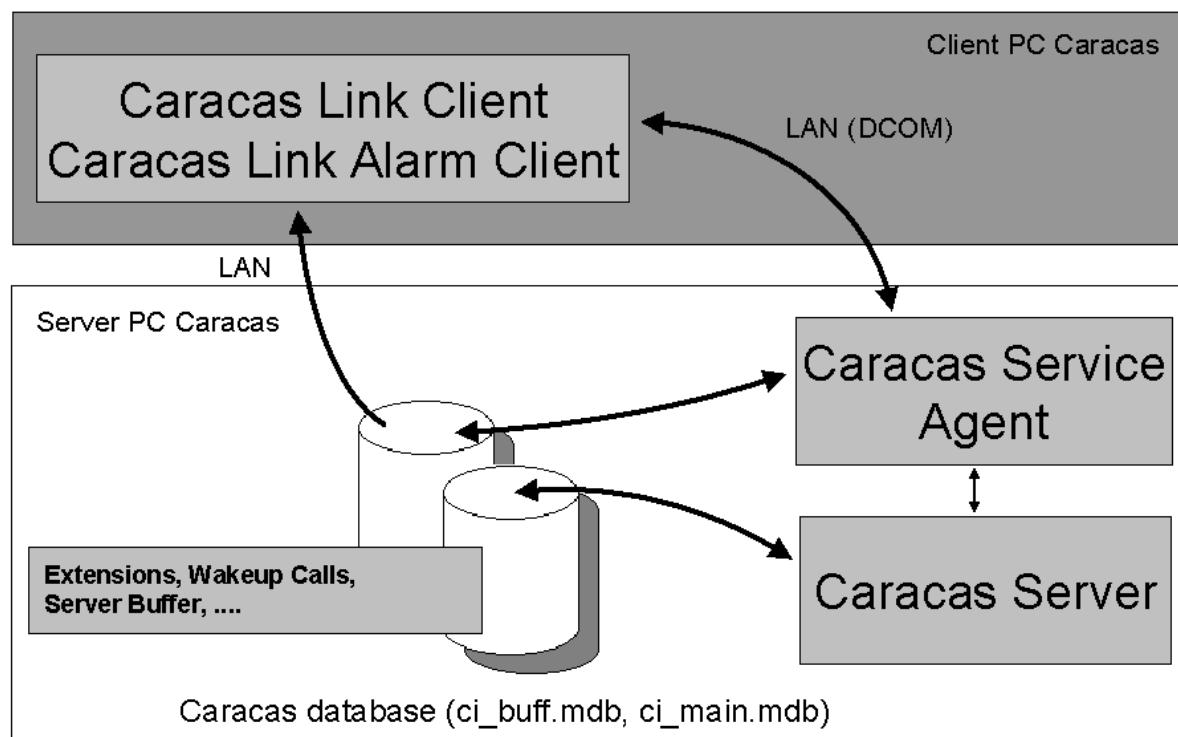


Figure 2-10 Overview: Caracas Link Alarm Client

#### Caracas Link Alarm Client...

- Is an independent application under Windows 9x/NT/2000 on a client PC with network access to the Caracas Server PC which can be activated when required.
- Shows the application status of the Caracas Link component on the basis of record type 26 of the Caracas host protocol.

#### The user can...

- Activate the Caracas Link Alarm Client and follow the messages on the screen.

## 2.10 Caracas Link Client

### Overview

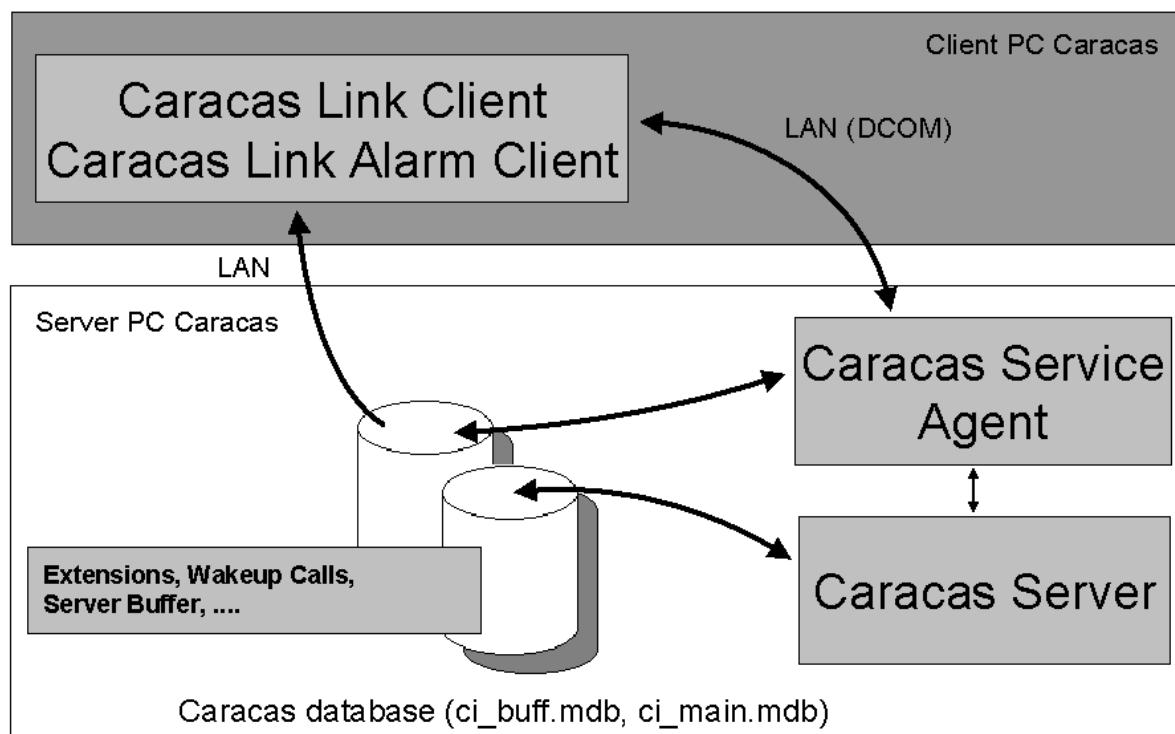


Figure 2-11 Overview: Caracas Link Client

### The Caracas Link Client...

- Is a standalone 32-bit application that is activated under Windows 9x/NT/2000 on a client PC with network access to the Caracas Server PC.
- Provides extension information on the client PC for external applications in a file (INI format).
- Receives extension information changes (telephone directory) from Caracas Service.
- Accesses the central Caracas databases and uses the tables, e.g. to buffer the data records.

## **Features**

### *Caracas Link Client*

#### **The user...**

- Activates Caracas Link Client.
- Can manage wakeup calls.
- Can perform the following tasks for an extension
  - set/delete do-not-disturb
  - modify classes of service
  - set or delete the message waiting lamp

## 2.11 Caracas Link Autostart program

### The Caracas Link Autostart program...

- Is an independent 32-bit application which is activated under Windows 2000 on the Caracas Server PC to start the components.
- Accesses a configuration file and starts the components Caracas Server, WinCall, Caracas Host-Link, Caracas Service Agent, Caracas Voicemail-Link (if configured) and Caracas Horizon-Link (if configured).
- Is registered in the StartUp group of Windows and can also be activated via the Start menu.
- Displays a log window for checking the activation process.
- Is configured automatically by the installation program.

## **Features**

*Caracas Link Autostart program*

## 3 Installation

### Supply

Caracas Link PCs are supplied preconfigured and preinstalled in Germany. The following chapter is intended, therefore, for inspection purposes.

### 3.1 Hardware requirements

#### **Hardware requirements for the Caracas server PC:**

PC component	Requirements
Computer:	<ul style="list-style-type: none"> <li>• III 1.0/133, 256 KB (min.)</li> </ul>
Main memory:	<ul style="list-style-type: none"> <li>• 256 MB (min.)</li> </ul>
Hard disk capacity:	<ul style="list-style-type: none"> <li>• 4 GB (min.)</li> </ul>
Diskette:	<ul style="list-style-type: none"> <li>• 3.5" (1.44 MB)</li> </ul>
Streamer:	<ul style="list-style-type: none"> <li>• SCSI, supported by Windows</li> </ul>
CD drive:	<ul style="list-style-type: none"> <li>• supported by Windows</li> </ul>
Serial interfaces:	<ul style="list-style-type: none"> <li>• COM1/2 on board</li> <li>• Additional COM interfaces (optional) via Digiboard 4 multi-port card</li> </ul>
Network card:	<ul style="list-style-type: none"> <li>• Etherlink III/16 PCI (only for network integration)</li> </ul> <p><b>Note:</b> Connecting the HiPath 4000 via the so called Atlantic-LAN (without WAML) in a customers network there may be another network adapter necessary.</p>
Monitor:	<ul style="list-style-type: none"> <li>• SVGA 800 * 600, 15" or 17"</li> </ul>
Printer:	<ul style="list-style-type: none"> <li>• Page printer</li> </ul>
Modem:	<ul style="list-style-type: none"> <li>• Hayes-compatible, 14400 bauds <b>or</b></li> <li>• ISDN-card</li> </ul>
Interface card:	<ul style="list-style-type: none"> <li>• To link to the Hicom 300 system the interface card IKK/2 can be used</li> <li>• Default settings for the KK/2 card: <ul style="list-style-type: none"> <li>– Interrupt: 14 (jumper 1)</li> <li>– I/O-address: 0x230 (switch 1)</li> <li>– Memory range: 0xD400</li> <li>– Clocking: extern (jumper 16)</li> <li>– ESCC 12,228 MHz (jumper 7)</li> </ul> </li> </ul>

## Installation

### Hardware requirements

PC component	Requirements
S0 card	<ul style="list-style-type: none"><li>The S0 interface card DIVA Pro 2.0 (PCI) S/T from EICON Technology is used for connecting to Hicom 150E Office via S0.</li></ul> <p><b>Note:</b> When installing the card and the necessary driver files, consult the documentation provided with the card. The driver files are provided with the card installation package.</p>

### Hardware requirements for a Caracas client PC:

PC component	Requirements
Computer:	<ul style="list-style-type: none"><li>Pentium II 350/100 (min.)</li></ul>
Main memory:	<ul style="list-style-type: none"><li>32 MB (min.)</li></ul>
Hard disk capacity:	<ul style="list-style-type: none"><li>3,2 GB (min.)</li></ul>
Diskette:	<ul style="list-style-type: none"><li>3.5" (1.44 MB)</li></ul>
Streamer:	<ul style="list-style-type: none"><li>not required</li></ul>
CD drive:	<ul style="list-style-type: none"><li>supported by Windows</li></ul>
Serial interfaces:	<ul style="list-style-type: none"><li>COM1 on board</li></ul>
Network card:	<ul style="list-style-type: none"><li>e.g. Etherlink PCI 3C900 combo (only for network integration)</li></ul>
Monitor:	<ul style="list-style-type: none"><li>SVGA 800 * 600, 15"</li></ul>
Printer:	<ul style="list-style-type: none"><li>Page printer</li></ul>

### Printer

A connected printer is to be installed before the Caracas Link software is loaded. It may not be possible to start up Caracas Link software if the printer is installed subsequently. Laser printers are recommended. Do not connect dongle (software protection module) and printer together at LPT1 interface on the Caracas Link PC. Connect the printer, if necessary, at the additional LPT2 interface of an interface card.

**Hardware requirements for the PBX system:**

PBX system	Requirements
Terminals:	<ul style="list-style-type: none"><li>• Analog and digital terminals at the Hicom 200/150E, Hicom 300, Hicom 150E Office or HiPath 4000 PBX system with DTMF suffix dialling option</li></ul>

## **Installation**

### *Software requirements*

## **3.2 Software requirements**

### **Software requirements for the Caracas server PC and a Caracas client PC:**

<b>Software component</b>	<b>Requirements</b>
Operating system:	<ul style="list-style-type: none"> <li>• Server PC: <ul style="list-style-type: none"> <li>– Windows 2000 Professional or</li> <li>– Windows 2000 Server</li> </ul> </li> <li>• Client PC <ul style="list-style-type: none"> <li>– Windows 95 OSR/2 version 950B and higher or</li> <li>– Windows 98 or</li> <li>– Windows NT 4.0 incl. Service Pack 4 or</li> <li>– Windows 2000 Professional or</li> <li>– Windows 2000 Server</li> </ul> </li> </ul>
Screen saver:	<ul style="list-style-type: none"> <li>• Not installed or not active</li> </ul>
Power Safe Management:	<ul style="list-style-type: none"> <li>• Not installed or not active</li> </ul>
Other driver software	<ul style="list-style-type: none"> <li>• Microsoft ODBC driver software for MS Access</li> </ul>

### **Hicom / HiPath operating system statuses supported:**

<b>Hicom model variant</b>	<b>Operating system status</b>
Hicom 150E	<ul style="list-style-type: none"> <li>• as of V1.0</li> </ul>
Hicom 150E Office	<ul style="list-style-type: none"> <li>• as of V1.0</li> </ul>
Hicom 300	<ul style="list-style-type: none"> <li>• as of V3.3</li> </ul>
Hicom 200	<ul style="list-style-type: none"> <li>• as of V2 Sa 6</li> </ul>
HiPath 4000	<ul style="list-style-type: none"> <li>• as of V1.0 SMR 08</li> </ul>

### **Installation media**

Caracas Link 4.2 is delivered with two CD-ROM for installation:

- The CD labelled with the order number P30370-P146-C-\* is used exclusively for installation on a server PC under Windows 2000 Professional/Server. For installation of the client programs (Caracas Link Client / Caracas Link Alarm Client) you can find the installation programs for Windows 2000 or Windows 9x/NT also on this CD.

### 3.3 Setting up Caracas Administration User under Windows 2000

#### General

First set up Caracas Administrator on the server PC or any client PC and, following logon, implement all further installation steps on the PC. If the client PC is a Windows 95 PC, a Windows logon must also be set as a Caracas user.

#### Setting up the user on the server PC under Windows 2000:

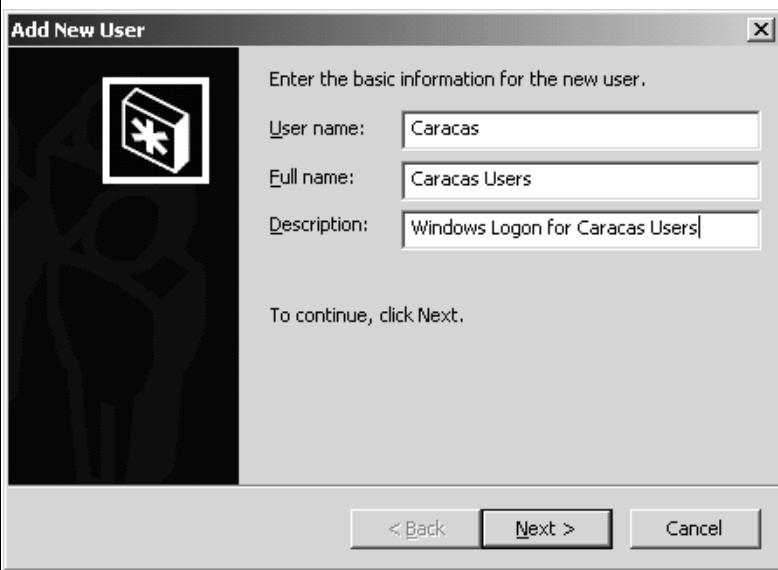


The following pictures show the user set up on a Windows PC which is member of a workgroup. If the PC is member of a domain the dialogs can be different.

Step	Procedure
1	Logon as an administrator on the server PC.
2	Activate user management through <i>Start - Settings - Control Panel - Users and Passwords</i> .
3	Activate the <i>Users</i> tab ad press on the <i>Add</i> button: 

## Installation

### Setting up Caracas Administration User under Windows 2000

Step	Procedure
4	<p>Enter the <i>User name</i> Caracas, the <i>Full name</i> and the <i>Description</i> for the caracas administration user and confirm your entries by pressing <i>Next&gt;</i>:</p> 
5	<p>Enter the <i>Password</i> caracas, confirm this entry in the field <i>Confirm password</i> and then press <i>Next</i>:</p> 

Step	Procedure
6	<p>Now you select the level of access <i>Other</i> for the Caracas administration user. In the list field you select the entry <i>Administrators</i>:</p>  <p>The screenshot shows the 'Add New User' dialog box. The question 'What level of access do you want to grant this user?' is at the top. Three radio button options are shown: 'Standard user' (Power Users Group), 'Restricted user' (Users Group), and 'Other'. The 'Other' option is selected, and a dropdown menu is open, showing the 'Administrators' group highlighted. Below the dropdown are other group names: Backup Operators, Guests, Power Users, Replicator, and Users. At the bottom of the dialog are buttons for '&lt; Back', 'Finish', and 'Cancel'.</p> <p>Then press the <i>Finish</i> button.</p>

## Installation

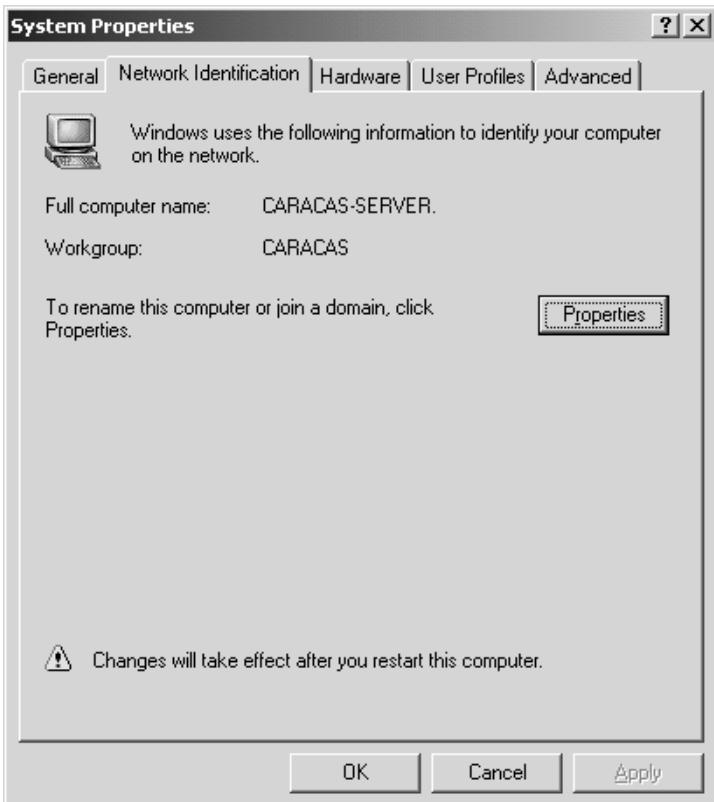
### Setting up Caracas Administration User under Windows 2000

Step	Procedure
7	You return to the dialog shown in step 1, the new user is displayed. You press the <i>OK</i> button for saving your entries and leaving this dialog. 

## 3.4 Checking / configuring network settings

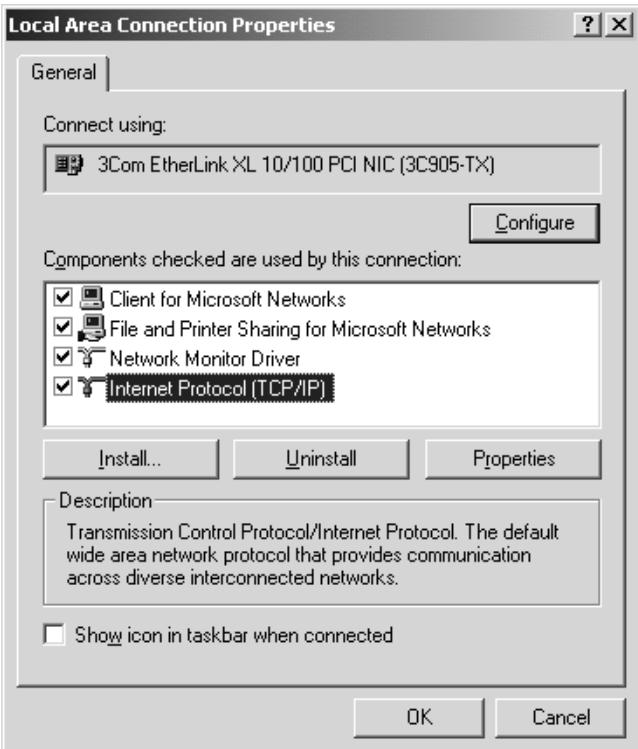
### 3.4.1 Checking / configuring network settings (Windows 2000 server or client PC)

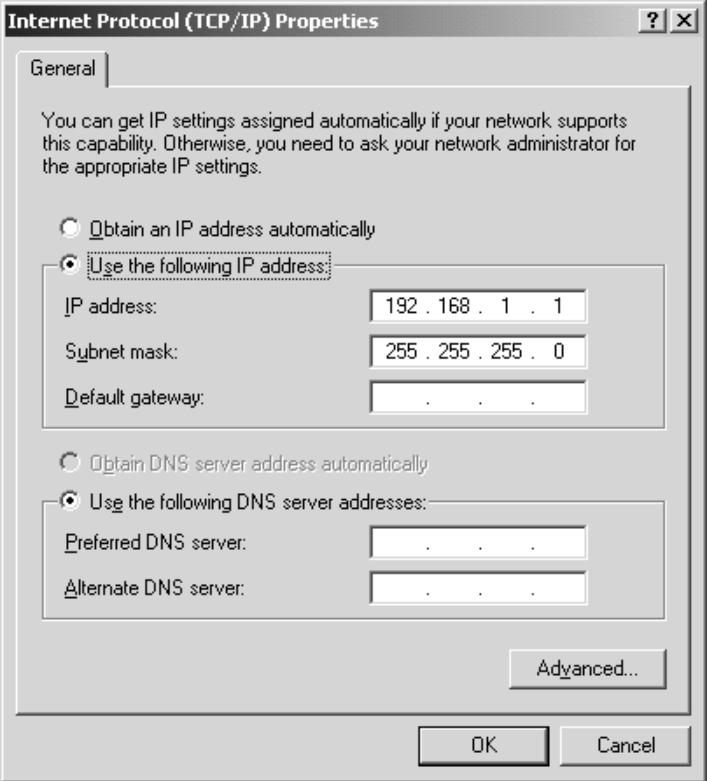
#### Checking and configuring network settings under Windows 2000

Step	Procedure
1	Click the menu item <i>Start - Settings - Control Panel</i> . Start the program <i>System</i> .
2	In the dialog box that appears, select the tab <i>Network Identification</i> :  <p>Confirm as <i>Full computer name</i> CARACAS-SERVER and as <i>Workgroup</i> CARACAS or enter these names after activating the button <i>Properties</i>.</p> <p><b>Note:</b> All Caracas PCs have to be assigned to the same workgroup. You can determine a suitable computer name, the following examples (under Windows 2000) use "CARACAS-SERVER" as computer name.</p>
3	Confirm your entries by pressing the <i>OK</i> button.
4	Activate the menu item <i>Start - Settings - Control Panel</i> . Start the program <i>Network and Dial-up Connections</i> .

## Installation

### Checking / configuring network settings

Step	Procedure
5	<p>In the upcoming dialog choose the entry <i>Local Area Connection</i> by double-click. The following dialog appears:</p>  <p>Select <i>Internet Protocol (TCP/IP)</i> and click the button <i>Properties</i>.</p> <p><b>Note:</b> If the <i>Internet Protocol (TCP/IP)</i> is not listed, insert the Windows 2000 CD in the CD-ROM drive of the PC, click the button <i>Install</i> to install this protocol and follow the further instructions which appear on the screen.</p>

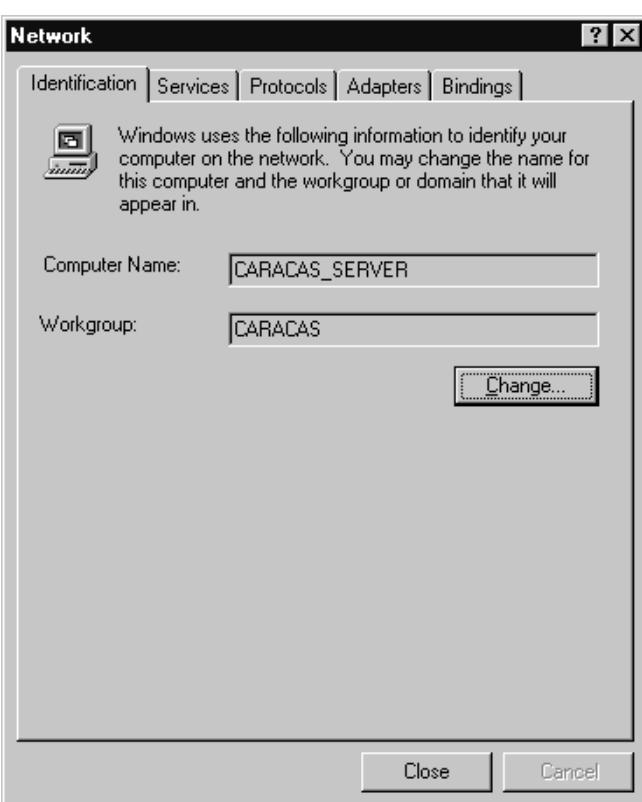
Step	Procedure
6	<p>The properties dialog box for the Internet Protocol (TCP/IP) appears:</p> 
7	<p>Check or enter the <i>IP address</i>. The standard address is: 192.168.x.y (e.g. 192.168.1.1 for the server PC or 192.168.1.2 for the first client PC, etc.). Any entry here should only proceed with the consent of the system or network administrator (where available) as the standard IP addresses are "free" IP addresses which are generally issued only for PCs within an internal house network.</p>
8	<p>Quit the program by clicking the <i>OK</i> button.</p>

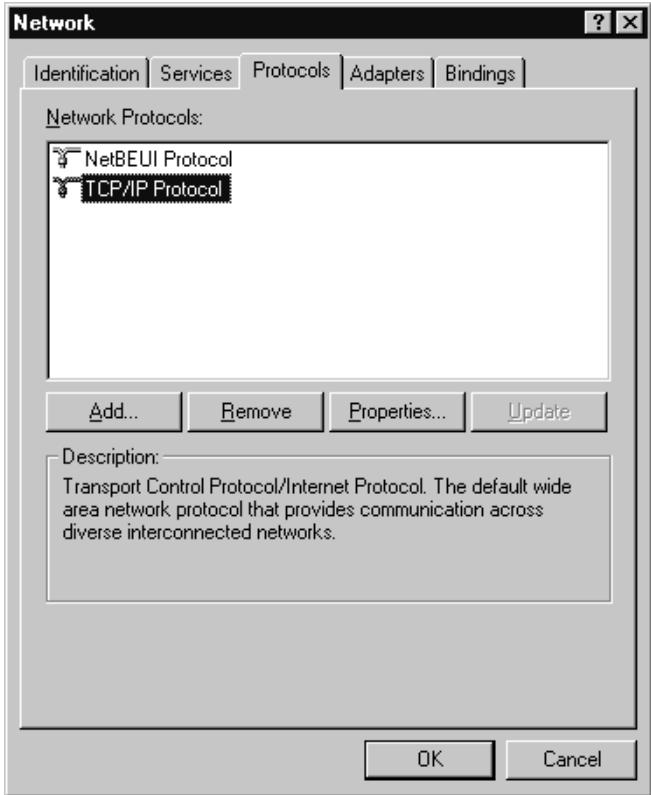
## Installation

Checking / configuring network settings

### 3.4.2 Checking / configuring network settings under Windows NT 4.0 (client PC)

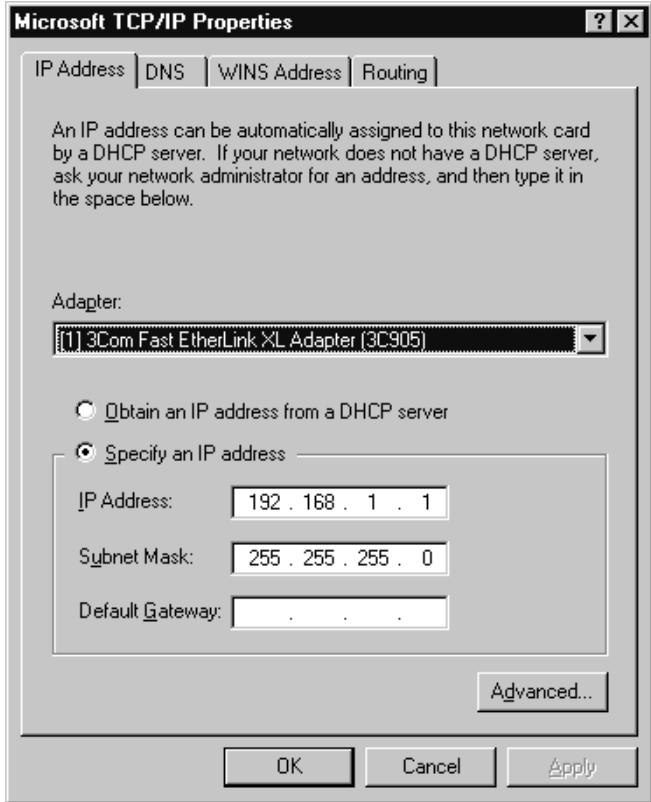
#### Checking and configuring network settings under Windows NT 4.0

Step	Procedure
1	Click the menu item <i>Start - Settings - Control Panel</i> . Start the program <i>Network</i> .
2	In the dialog box that appears, select the tab <i>Identification</i>  <p>Confirm as <i>Computer name</i> CARACAS_SERVER and as <i>Workgroup</i> CARACAS or enter these names after activating the button <i>Change</i>.</p> <p><b>Note:</b> All Caracas PCs have to be assigned to the same workgroup. You can determine a suitable computer name, the following examples use "CARACAS_SERVER" as computer name.</p>

Step	Procedure
3	<p>Select the <i>Protocols</i> tab in the appearing dialog box.</p>  <p>The screenshot shows the Windows Network Properties dialog box. The title bar says "Network". The tabs at the top are "Identification", "Services", "Protocols" (which is selected and highlighted in blue), "Adapters", and "Bindings". Below the tabs is a section titled "Network Protocols:" containing two entries: "NetBEUI Protocol" and "TCP/IP Protocol", with "TCP/IP Protocol" being the one currently selected (indicated by a dark gray background). At the bottom of the dialog box are four buttons: "Add...", "Remove", "Properties...", and "Update". Below these buttons is a "Description:" label followed by a text box containing the text: "Transport Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.". At the very bottom are "OK" and "Cancel" buttons.</p> <p>Select the network protocol <i>TCP/IP Protocol</i>. and click the button <i>Properties</i>.</p> <p><b>Note:</b> If the network protocol <i>TCP/IP protocol</i> is not listed, insert the Windows NT CD in the CD-ROM drive of the PC, click the button <i>Add</i> to install and install this protocol following the further instructions which appear on the screen.</p>

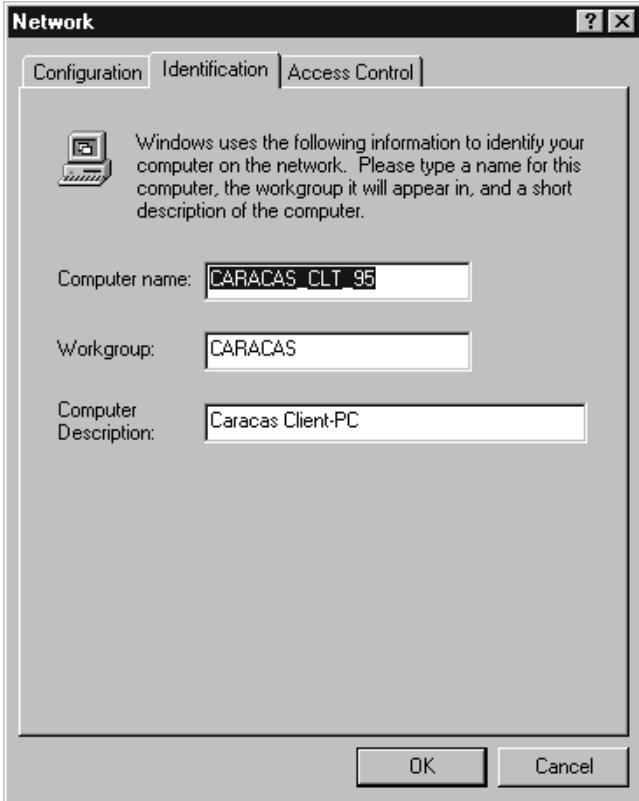
## Installation

### Checking / configuring network settings

Step	Procedure
4	The properties dialog box for this network protocol appears on screen: 
5	Select the <i>IP Address</i> tab and check or enter the <i>IP Address</i> . The standard address is: 192.168.x.y (e.g. 192.168.1.1 for the server PC or 192.168.1.2 for the first client PC, etc.). Any entry here should only proceed with the consent of the system or network administrator (where available) as the standard IP addresses are "free" IP addresses which are generally issued only for PCs within an internal house network.
6	Quit the program by clicking the <i>OK</i> button.

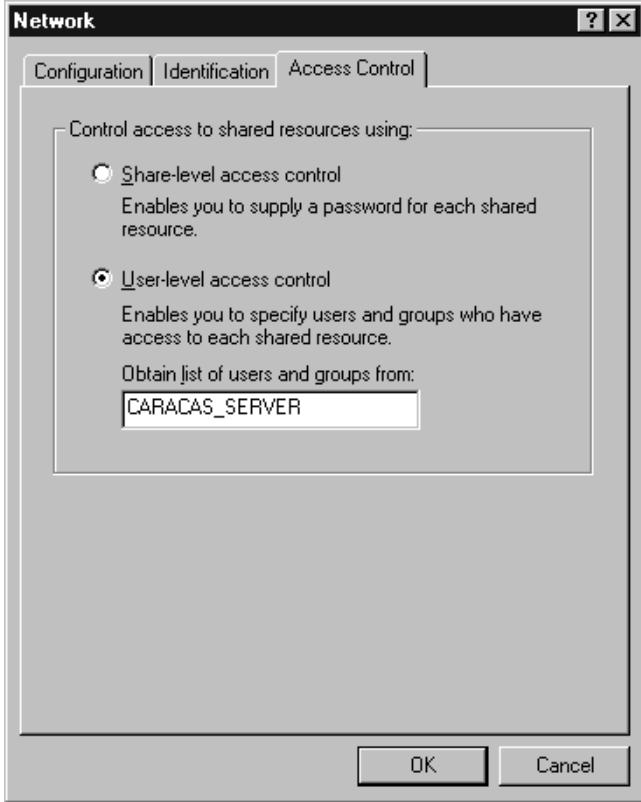
### 3.4.3     **Checking / configuring network settings under Windows 95/98 (client PC)**

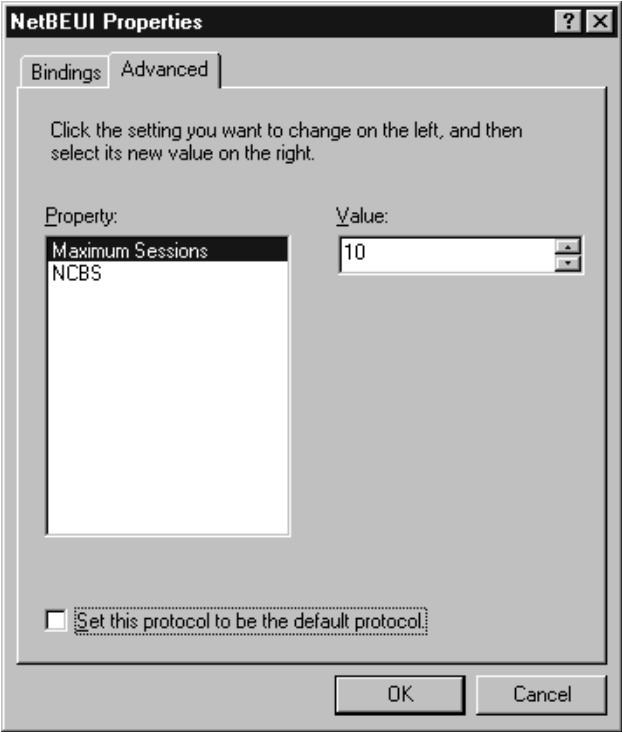
#### **Checking and configuring network settings under Windows 95/98**

<b>Step</b>	<b>Procedure</b>
1	Click the menu item <i>Start - Settings - Control Panel</i> . Start the program <i>Network</i> .
2	In the dialog box that appears, select the <i>Identification</i> tab.   <p>Enter the identification data in accordance with the prompts. In this it is essential that the client PC is assigned to the workgroup CARACAS to which all PCs on which a Caracas component is installed belong.</p>

## Installation

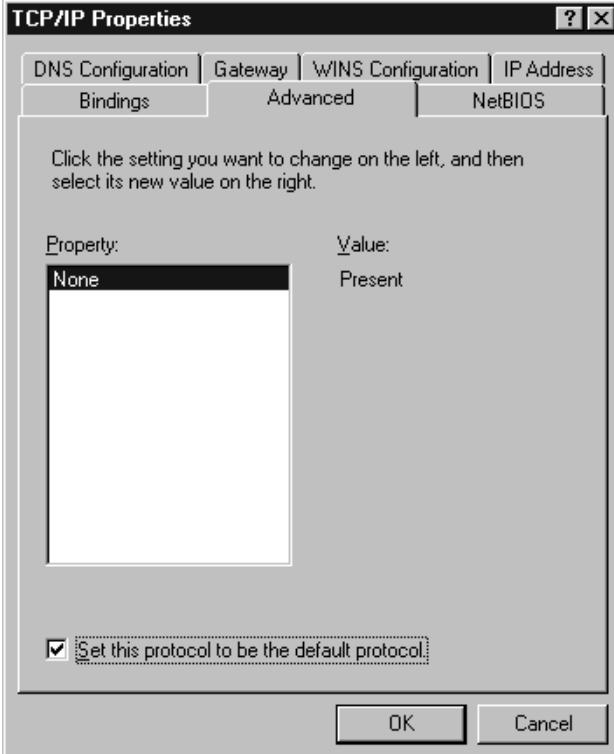
### Checking / configuring network settings

Step	Procedure
3	<p>Click the tab <i>Access Control</i>.</p> 
	<p>Select the option <i>User-level access control</i> and enter the computer name of the Caracas Server PC in the field <i>Obtain list of users and groups from</i>.</p>
4	<p>Click the <i>Configuration</i> tab. If the network component <i>NetBEUI</i> is installed, and hence included in the list, activate this entry and click the button <i>Properties</i>.</p>

Step	Procedure
5	<p>When the properties dialog box appears, click the tab <i>Advanced</i>.</p>  <p>The option <i>Set this protocol to be the default protocol</i> must be <b>de-activated</b>. Click the button <i>OK</i>. This returns you to the tab <i>Configuration</i>.</p>
6	Click the network component <i>TCP/IP</i> and click the button <i>Properties</i> .

## Installation

### Checking / configuring network settings

Step	Procedure
7	<p>The Properties dialog box appears. Click the tab <i>Advanced</i>.</p>  <p>The screenshot shows the 'TCP/IP Properties' dialog box. The title bar says 'TCP/IP Properties'. Below it is a tab bar with four tabs: 'DNS Configuration', 'Gateway', 'WINS Configuration', and 'IP Address'. The 'Advanced' tab is highlighted. On the left side, there's a list box labeled 'Property:' containing 'None'. To its right, under 'Value:', is the word 'Present'. At the bottom of the dialog box, there is a checked checkbox labeled 'Set this protocol to be the default protocol.' Below the checkbox are two buttons: 'OK' and 'Cancel'.</p> <p>The option <i>Set this protocol to be the default protocol</i> must be activated. Click the button <i>OK</i>. This returns you to the tab <i>Configuration</i>. Click here again on <i>OK</i> and the program is ended.</p>

## 3.5      **Installing Caracas components**

### Different Caracas components

Caracas Link breaks down into a server and, at present, two client components:

Component type	Component
Server components	<ul style="list-style-type: none"><li>● Caracas Server</li><li>● Caracas Link Administration program</li><li>● Caracas Host-Link</li><li>● Caracas Voicemail-Link</li><li>● Caracas Horizon-Link</li><li>● WinCall</li><li>● Caracas Service Agent</li><li>● Call Charge Manager</li></ul>
Client component	<ul style="list-style-type: none"><li>● Caracas Link Alarm Client</li><li>● Caracas Link Client</li></ul>

### Where are components installed?

- Server PC:
  - The components Caracas Server, Caracas Administration program, Caracas Service Agent, Caracas Host Link and Call Charge Manager are to be installed in the basic package.
  - Installation of WinCall according to the installed PBX system.
  - In the case of voicemail connection, the component Voicemail-Link is to be installed.
  - In the case of Callstar Horizon connection, the component Horizon-Link is to be installed.
- Client PC:
  - If a client PC is employed, Caracas Link Alarm Client and Caracas Link Client is to be installed on it.
  - WinAccount is generally installed only on the client PC, since the system loading caused by evaluation with WinAccount are too high for one server PC.



If a client PC is employed, this should have access to a printer of its own.

## Installation

### Interface assignment

## 3.6 Interface assignment

### General

The following table shows the interface assignments in the Caracas server and the client PC(s) in connection with the different PBX Systems. This is the maximum assignment if every Caracas component is installed.

### Overview

Component	Interface assignment (default)
<b>Connection to Hicom 200/150E</b>	
Server PC	<ul style="list-style-type: none"><li>• COM1: WinCall connection</li><li>• COM2: Front Office connection or Network: Front Office connection via TCP/IP / file / ODBC</li><li>• Network: Callstar Horizon</li><li>• COM3: modem connection (pcANYWHERE)</li><li>• (Network): Caracas Voicemail-Link connection via file</li><li>• COM4: external call detail interface connection or (Network): external call detail interface connection via file</li><li>• COM5: external call calculation</li><li>• LPT1: printer</li><li>• Network: client PC</li></ul>
Client PC	<ul style="list-style-type: none"><li>• LPT1: printer</li><li>• Network: server PC</li></ul>
<b>Connection to Hicom 300 via ACL</b>	
Server PC	<ul style="list-style-type: none"><li>• IKK/2 adapter: WinCall connection</li><li>• COM1: Front Office connection or Network: Front Office connection via TCP/IP / file / ODBC</li><li>• Network: Callstar Horizon</li><li>• COM2: modem connection (pcANYWHERE)</li><li>• (Network): Caracas Voicemail-Link connection via file</li><li>• COM3: external call detail interface connection or (Network): external call detail interface connection via file</li><li>• COM4: external call calculation</li><li>• LPT1: printer</li><li>• Network: client PC</li></ul>
Client-PC	<ul style="list-style-type: none"><li>• LPT1: printer</li><li>• Network: server PC</li></ul>

<b>Component</b>	<b>Interface assignment (default)</b>
<b>Connection to Hicom 300 via TCP/IP (LAN)</b>	
Server-PC	<ul style="list-style-type: none"> <li>● Network: WinCall connection</li> <li>● COM1: Front Office connection or Network: Front Office via TCP/IP / file / ODBC</li> <li>● Network: Callstar Horizon</li> <li>● COM2: modem connection (pcANYWHERE)</li> <li>● (Network:): Caracas Voicemail-Link connection via file</li> <li>● COM3: external call detail interface or (Network:): external call detail interface via file</li> <li>● COM4: external call calculation</li> <li>● LPT1: printer</li> <li>● Network: client PC</li> </ul>
Client-PC	<ul style="list-style-type: none"> <li>● LPT1: printer</li> <li>● Network: server PC</li> </ul>
<b>Connection to Hicom 150E Office via V.24</b>	
Server-PC	<ul style="list-style-type: none"> <li>● COM1: WinCall connection</li> <li>● COM2: Front Office connection or Network: Front Office connection via TCP/IP / file / ODBC</li> <li>● Network: Callstar Horizon</li> <li>● COM3: modem connection (pcANYWHERE)</li> <li>● (Network:): Caracas Voicemail-Link connection via file</li> <li>● COM4: external call detail interface or (Network:): external call detail interface via file</li> <li>● COM5: external call calculation</li> <li>● LPT1: printer</li> <li>● Network: client PC</li> </ul>
Client-PC	<ul style="list-style-type: none"> <li>● LPT1: printer</li> <li>● Network: server PC</li> </ul>

## Installation

### Interface assignment

Component	Interface assignment (default)
<b>Connection to Hicom 150E Office via S0</b>	
Server-PC	<ul style="list-style-type: none"><li>• S0 adapter: WinCall connection</li><li>• COM1: Front Office connection or Network: Front Office connection via TCP/IP / file / ODBC</li><li>• COM2: modem connection (pcANYWHERE)</li><li>• Network: Callstar Horizon</li><li>• (Network:): Caracas Voicemail-Link connection via file</li><li>• COM3: external call detail interface</li><li>• COM4: external call calculation</li><li>• LPT1: printer</li><li>• Network: client PC</li></ul>
Client-PC	<ul style="list-style-type: none"><li>• LPT1: printer</li><li>• Network: server PC</li></ul>
<b>Connection to HiPath 4000 via TCP/IP (LAN)</b>	
Server-PC	<ul style="list-style-type: none"><li>• Network: WinCall connection</li><li>• COM1: Front Office connection or Network: Front Office via TCP/IP / file / ODBC</li><li>• Network: Callstar Horizon</li><li>• COM2: modem connection (pcANYWHERE)</li><li>• (Network:): Caracas Voicemail-Link connection via file</li><li>• COM3: external call detail interface or (Network:): external call detail interface via file</li><li>• COM4: external call calculation</li><li>• LPT1: printer</li><li>• Network: client PC</li></ul>
Client-PC	<ul style="list-style-type: none"><li>• LPT1: printer</li><li>• Network: server PC</li></ul>

## **3.7      Running the installation on the server PC under Windows 2000**

### **3.7.1    Software**

#### **Installation sequence**

The installation of the different components under Windows 2000 is proceeded in one step automatically. You don't need to start different setup routines for the Caracas components. The setup follows the following sequence:

- Install the dongle driver (Hardlock) - if not installed yet.
- Basic software installation:
  - Caracas Server
  - Caracas Administration program
  - Caracas Service Agent
  - Caracas Host-Link
  - Caracas Link Client
  - Caracas Link Alarm Client
  - Necessary DLLs
  - Databases
  - Caracas voicemail connection (optional, depending on customer)
  - Caracas Callstar Horizon connection (optional, depending on customer)
  - Call Charge Manager (optional, depending on customer)
  - WinCall (Variant depending on the PBX system employed)
- Configuring Caracas Service Agent (DCOM, remote connection for Caracas Service Agent)
- Sharing the Caracas Link database folder.

#### **Installation as Caracas Administrator under Windows**

On principle, install Caracas Link under Windows after logon as Caracas Administration User (ID Caracas, password caracas - observe upper and lower case!).

## **Installation**

*Running the installation on the server PC under Windows 2000*

### **Abort installation program**

On principle, you can interrupt a running installation program. To do so, click the button *Cancel* in the relevant dialog box / screen. The program removes any files and components installed.

### **Add / change software installation**

After the first installation of Caracas Link you can later de-/install single Caracas components, e.g. the documentation (see Section 3.7.2).

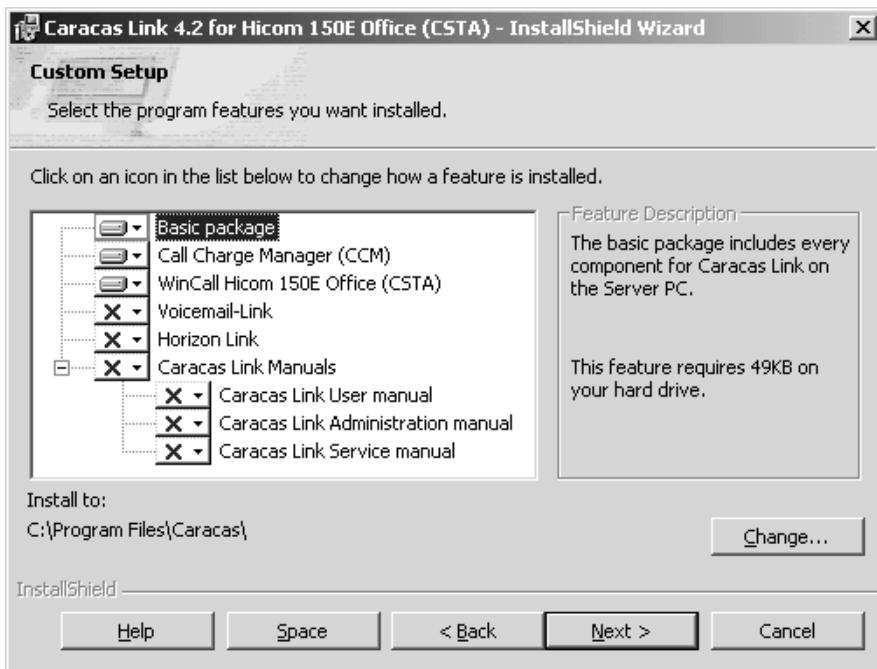
**To install the software proceed as follows:**

<b>Step</b>	<b>Procedure</b>
1	Close all applications on the PC except Windows 2000.
2	Insert the installation CD for Caracas Link in the CD-ROM drive. The installation program is automatically started and you will see the following screen:  <p>To install the software components, activate the button <i>Setup</i> on the left of the screen by clicking the mouse.</p>

## Installation

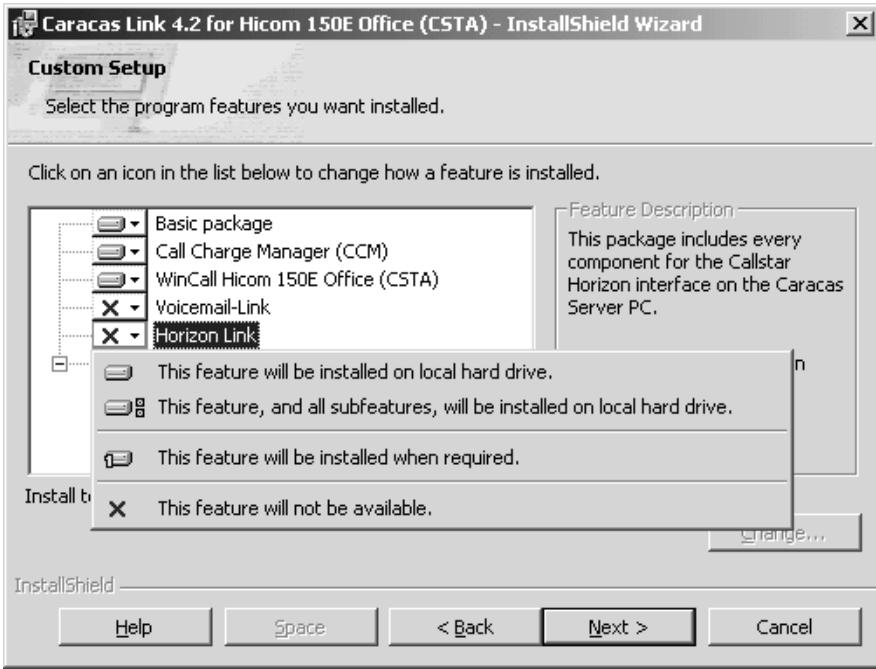
*Running the installation on the server PC under Windows 2000*

Step	Procedure
3	<p>The following screen appears:</p>
	<p>You select the entry according to the PBX system connected to Caracas Link.</p>
4	<p>The installation program starts. Press the <i>Next</i> button in the appearing dialog.</p>
5	<p>The license agreement and information about installing and running Caracas Link (readme file) appears. Accept the license agreement by activating the appropriate option. Then click the <i>Next</i> button.</p>
6	<p>Enter the user information (<i>User Name</i> and <i>Organization</i>). The dialog comes up with the default Windows settings from the Windows installation. If any field is empty enter the appropriate information. You can only continue if both fields contain valid information.  With the option <i>Anyone who uses this computer (all users)</i> you can make Caracas Link available for all users that use this computer.  Then select <i>Next</i>.</p>

Step	Procedure
7	<p>Now select the <i>Setup Type</i>:</p> <ul style="list-style-type: none"> <li>• <i>Standard</i> The components (Basic Package, Call Charge Manager, WinCall, Host-Link) will be installed.</li> <li>• <i>Custom</i> You select the components that will be installed. If you want the standard installation, select the option <i>Standard</i>, click the <i>Next</i> button and proceed with step 11. If you want a custom installation, select the <i>Custom</i> option, click the <i>Next</i> button and proceed with step 8.</li> </ul>
8	<p>After choosing the custom installation you can select the components you need:</p>  <p>The screenshot shows the 'Custom Setup' window of the InstallShield Wizard. The title bar reads 'Caracas Link 4.2 for Hicom 150E Office (CSTA) - InstallShield Wizard'. The main area is titled 'Custom Setup' with the sub-instruction 'Select the program features you want installed.' Below this, a note says 'Click on an icon in the list below to change how a feature is installed.' A tree view on the left lists features: 'Basic package' (selected), 'Call Charge Manager (CCM)', 'WinCall Hicom 150E Office (CSTA)', 'Voicemail-Link', 'Horizon Link', 'Caracas Link Manuals' (selected), 'Caracas Link User manual', 'Caracas Link Administration manual', and 'Caracas Link Service manual'. To the right, a 'Feature Description' box for 'Basic package' states: 'The basic package includes every component for Caracas Link on the Server PC.' and 'This feature requires 49KB on your hard drive.' At the bottom, 'Install to:' is set to 'C:\Program Files\Caracas\'. Buttons include 'Change...', 'Help', 'Space', '&lt; Back', 'Next &gt;', and 'Cancel'.</p>

## Installation

*Running the installation on the server PC under Windows 2000*

Step	Procedure
9	<p>For changing the installation option of a component you click on the symbol left of the components name. A window with the available options comes up. Select the desired option and you return to the <i>Custom Setup</i> dialog (shown in step 8):</p>  <p>Press the <i>Help</i> button if you need assistance.      To check the available / needed disk space press the <i>Space</i> button.      To continue press <i>Next</i>.      To change the default installation folder proceed to step 10, else proceed to step 11.</p>
10	To change the default installation folder C:\Program Files\Caracas\ press the <i>Change</i> button. In the upcoming dialog enter or browse for the desired folder name. Please notice the setup process will add several folders to this (default) installation folder which names cannot be changed. Confirm your entries with <i>OK</i> , you return to step 9.
11	To start the installation press the <i>Install</i> button in the upcoming dialog.

Step	Procedure
12	If the setup does not find a valid Hardlock dongle installation the program comes up with the following message:   Confirm with <i>OK</i> . Then you follow the installing instructions, no further entries are necessary.
13	Installation of Caracas Link is proceeded, the progress is displayed in a status display.
14	If Caracas Link has been successfully installed, press the <i>Finish</i> button.
15	You return to the browser shown in step 3. All selected components and tools are installed. You can quit the browser by pressing the <i>Exit</i> button.

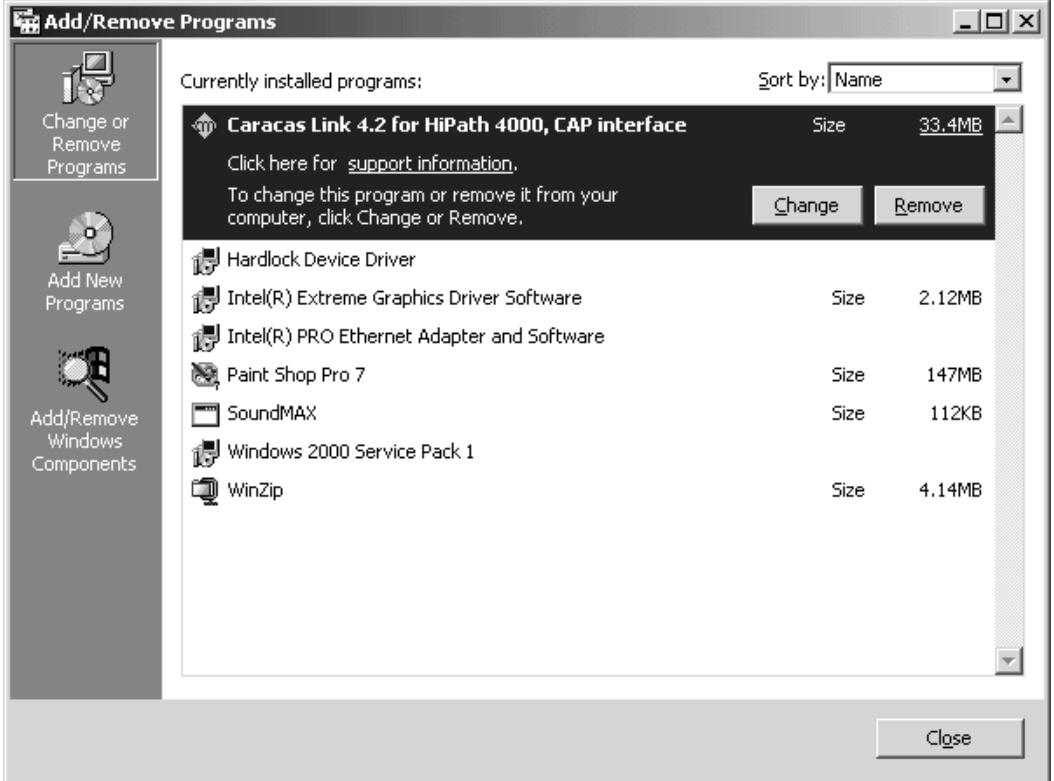
### 3.7.2 Add / change the installation on the server PC

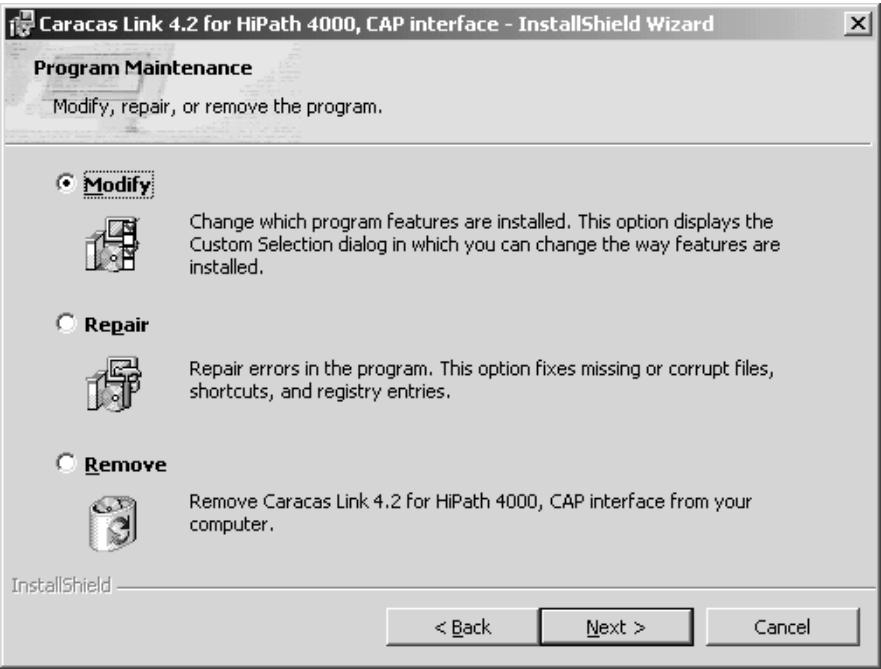
To add / change the installation proceed as follows:

Step	Procedure
1	Close all applications on the PC except Windows 2000.

## Installation

Running the installation on the server PC under Windows 2000

Step	Procedure																		
2	<p>Choose <i>Start - Settings - Control Panel -Add/Remove Programs</i>. An overview of the installed software on the server PC appears:</p>  <p>The screenshot shows the Windows 2000 Control Panel's Add/Remove Programs window. On the left, there's a sidebar with icons for Change or Remove Programs, Add New Programs, and Add/Remove Windows Components. The main area lists installed programs with their sizes. The first item, 'Caracas Link 4.2 for HiPath 4000, CAP interface', is highlighted. Below it, there's a note: 'Click here for support information.' and 'To change this program or remove it from your computer, click Change or Remove.' At the bottom right of the list are 'Change' and 'Remove' buttons. A 'Sort by: Name' dropdown is also visible.</p> <table border="1"><caption>Installed Programs</caption><thead><tr><th>Program</th><th>Size</th></tr></thead><tbody><tr><td>Caracas Link 4.2 for HiPath 4000, CAP interface</td><td>33.4MB</td></tr><tr><td>Hardlock Device Driver</td><td>2.12MB</td></tr><tr><td>Intel(R) Extreme Graphics Driver Software</td><td></td></tr><tr><td>Intel(R) PRO Ethernet Adapter and Software</td><td></td></tr><tr><td>Paint Shop Pro 7</td><td>147MB</td></tr><tr><td>SoundMAX</td><td>112KB</td></tr><tr><td>Windows 2000 Service Pack 1</td><td></td></tr><tr><td>WinZip</td><td>4.14MB</td></tr></tbody></table>	Program	Size	Caracas Link 4.2 for HiPath 4000, CAP interface	33.4MB	Hardlock Device Driver	2.12MB	Intel(R) Extreme Graphics Driver Software		Intel(R) PRO Ethernet Adapter and Software		Paint Shop Pro 7	147MB	SoundMAX	112KB	Windows 2000 Service Pack 1		WinZip	4.14MB
Program	Size																		
Caracas Link 4.2 for HiPath 4000, CAP interface	33.4MB																		
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Intel(R) PRO Ethernet Adapter and Software																			
Paint Shop Pro 7	147MB																		
SoundMAX	112KB																		
Windows 2000 Service Pack 1																			
WinZip	4.14MB																		
3	<p>Select the entry for Caracas Link and press the <i>Change</i> button.</p> <p>Press the <i>Next</i> button in the appearing dialog.</p>																		

Step	Procedure
4	<p>To modify the installed components of Caracas Link, e.g. add the documentation, choose the option <i>Modify</i>. Then press <i>Next</i>.</p> 
5	<p>The <i>Custom Setup</i> dialog (see step 8 in Section 3.7.1) appears. Select or unselect the desired components. Press the <i>Next</i> button, the installation starts.</p>
6	<p>If the un-/installation has been successfully finished, press the <i>Finish</i> button. You return to the <i>Add/Remove Programs</i> dialog shown in step 2, which you quit.</p>

## **Installation**

*Running the installation on the client PC*

### **3.8 Running the installation on the client PC**

#### **General**

If the Caracas Link Alarm Client or the Caracas Link Client is meant to run on a client PC, it is important to implement a specific sequence and scope of installation on the PC.

#### **Workgroup**

It is also essential that the client PC is set up in the same network group as the server PC.

#### **Stopping the installation program**

On principle, you can interrupt a running installation program. To do so, click the button *Cancel* in the relevant dialog box / screen. The program removes any files and components installed.

### **3.8.1 Software Installation on the client PC under Windows 2000**

#### **Client PC installation sequence**

Installation / configuration of Caracas Link components on a client PC is proceeded automatically in only one step. You don't need to start different setup routines for single components. The setup installs Caracas Link Alarm Client and Caracas Link Client.

**To install the software on a client PC under Windows 2000 proceed as follows:**

<b>Step</b>	<b>Procedure</b>
1	Log on as Caracas Administration User (User Caracas, password caracas) on the client PC under Windows 2000. Close all applications on the PC except Windows.
2	Insert the installation CD for Caracas Link in the CD-ROM drive. The installation program is automatically started and you will see the browser screen (already described in Section 3.7.1). To install the software components, activate the button <i>Setup</i> on the left of the screen by clicking the mouse.
3	Then you select the entry <i>Caracas Link Clients, Client PC-Installation, Windows 2000</i>
4	The installation starts according to the description in Section 3.7.1 from step 4 to 15. After successful installation you return to the browser (step 3). Quit the browser by pressing <i>Exit</i> .

<b>Step</b>	<b>Procedure</b>
5	<p>When the installation of Caracas Link on the client PC is complete, you will be prompted to supply the name of the server PC, once for Caracas Link Messenger and once for Caracas Link Service, before the installation program finishes:</p> A screenshot of a Windows-style dialog box titled "CMSG.VBR". It contains three sections: "Remote Transport" with two radio button options ("Distributed COM" and "Remote Automation", where "Distributed COM" is selected), "Network Address" with a text input field containing "CARACAS_SERVER", and "Protocol" with a dropdown menu showing "ncacn_http". There are "OK" and "Cancel" buttons at the bottom right. <p>In each case click the option <i>Distributed COM</i> and enter the name of the server PC in the field <i>Network addresses</i>. Confirm with <i>OK</i>. Then return to the screen shown in Step 2.</p>

## **Installation**

*Running the installation on the client PC*

### **3.8.2 Software installation on a client PC under Windows NT**

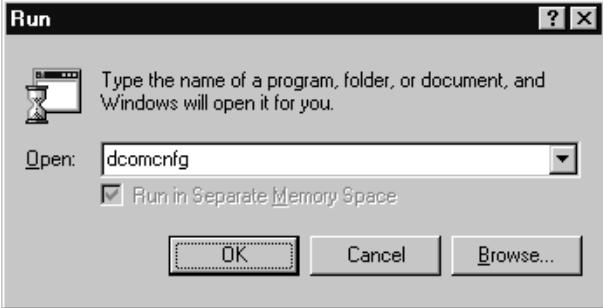
#### **Starting installation**

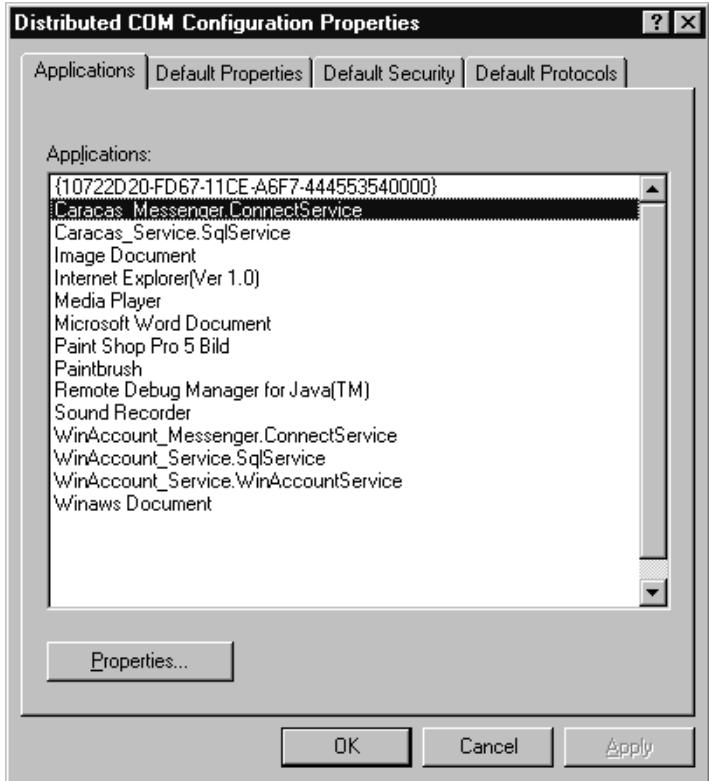
The software installation procedure on a client PC under Windows NT is more extensive than installation under Windows 2000. Caracas Link Alarm Client and Caracas Link Client are installed separately.

#### **3.8.2.1 Configuration of DCOM on a client PC under Windows NT**

##### **Configuring Caracas Service Agent (DCOM)**

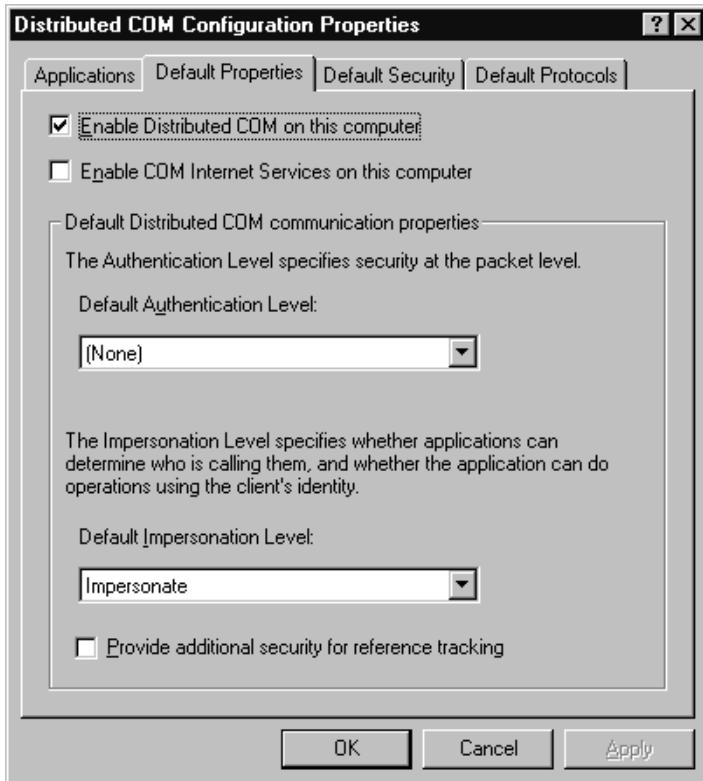
To configure Caracas Service Agent (DCOM) on the client PC under Windows NT, proceed as follows:

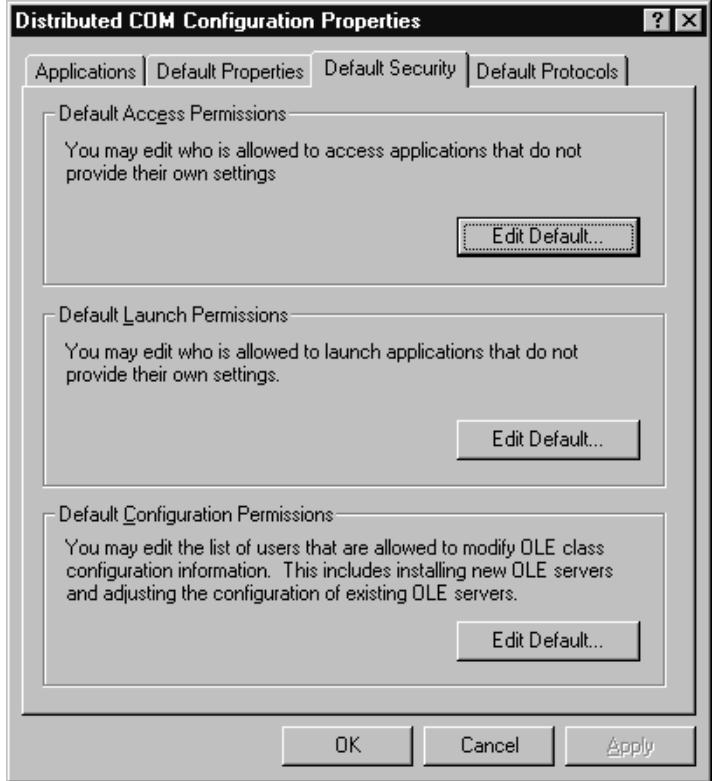
<b>Step</b>	<b>Procedure</b>
1	Click <i>Run</i> in the start menu. As program name enter <code>dcomcnfg</code> and confirm with <i>OK</i> . 

Step	Procedure
2	The dialog box <i>Distributed COM Configuration Properties</i> appears.  <p>The screenshot shows the 'Distributed COM Configuration Properties' dialog box. The 'Applications' tab is selected. A scrollable list box displays various COM components and services, including: (10722D20-FD67-11CE-A6F7-444553540000), Caracas_Messenger.ConnectService, Caracas_Service.SqlService, Image Document, Internet Explorer(Ver 1.0), Media Player, Microsoft Word Document, Paint Shop Pro 5 Bild, Paintbrush, Remote Debug Manager for Java(TM), Sound Recorder, WinAccount_Messenger.ConnectService, WinAccount_Service.SqlService, WinAccount_Service.WinAccountService, and Winaws Document.</p>

## Installation

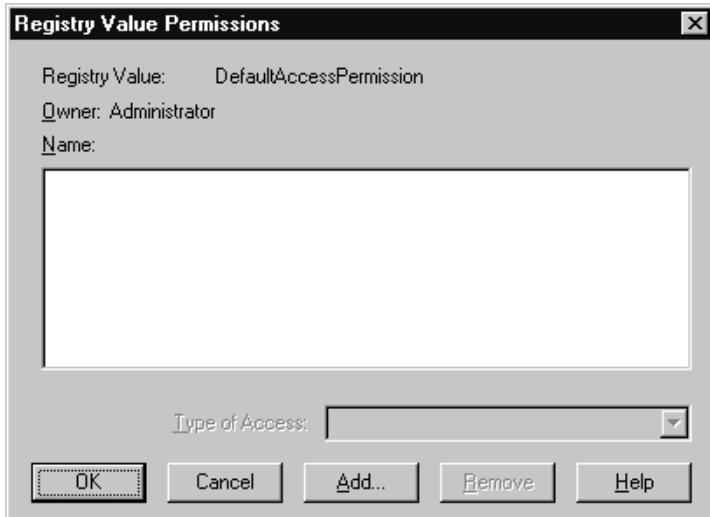
Running the installation on the client PC

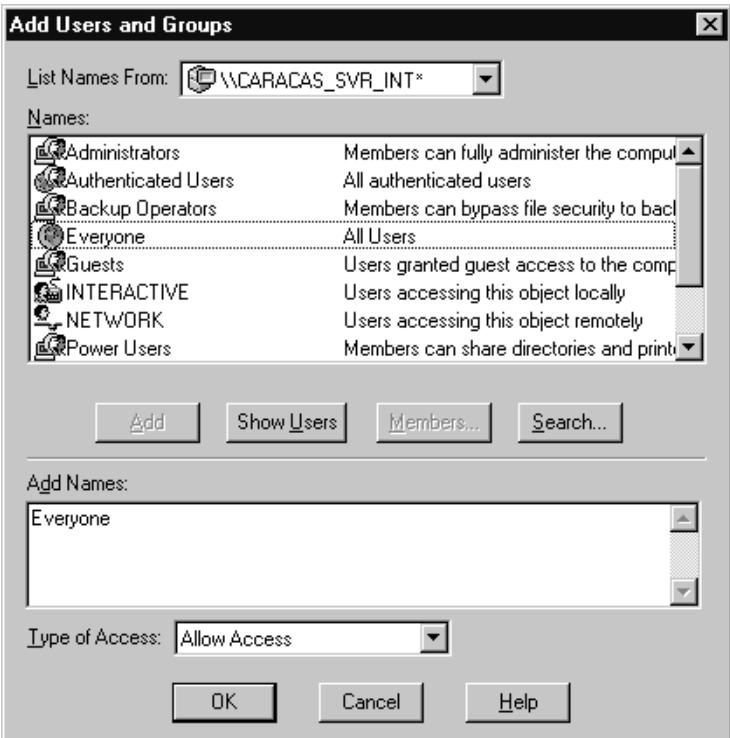
Step	Procedure
3	<p>Click the <i>Default Properties</i> tab.</p>  <p>Enable the option <i>Enable COM on this computer</i>. Select the option <i>(None)</i> in the list field <i>Default authentication level</i> and as <i>Default Impersonation level</i> select <i>Impersonate</i>.</p>

Step	Procedure
4	<p>Then click the <i>Default Security</i> tab.</p> 
5	<p>With the aid of this dialog box, now add the user "Everyone" for the <i>Default Access Permissions</i>, the <i>Default Launch Permissions</i> and the <i>Default Configuration Permissions</i>.</p> <p>Then click the button <i>Edit Default</i> under the group <i>Default Access Permissions</i>.</p>

## Installation

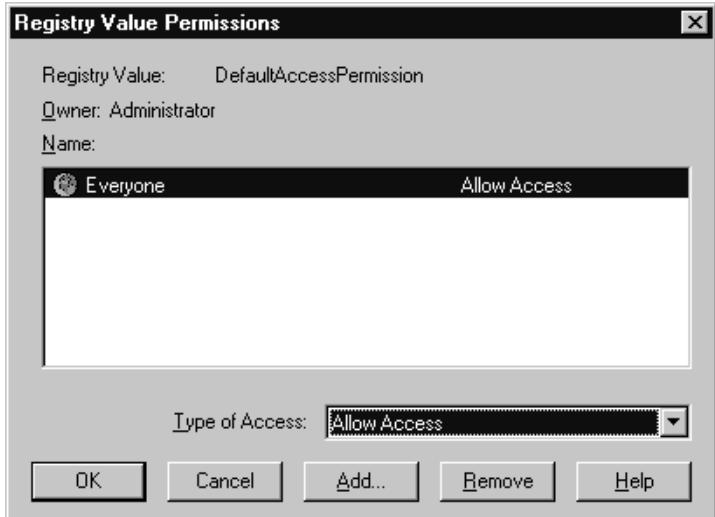
*Running the installation on the client PC*

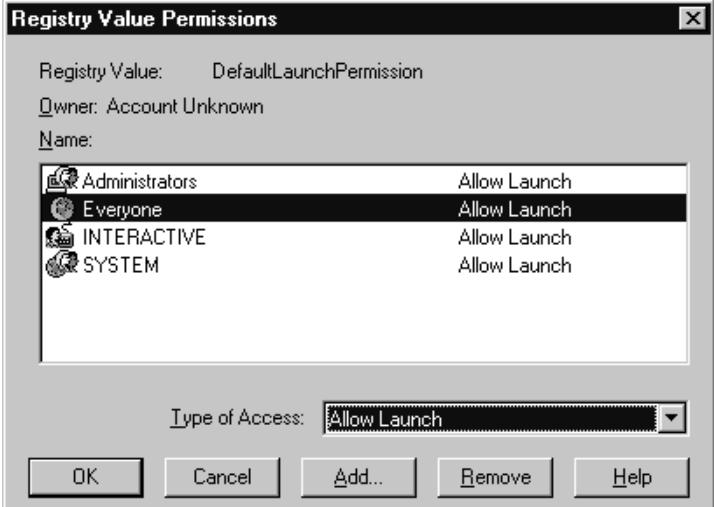
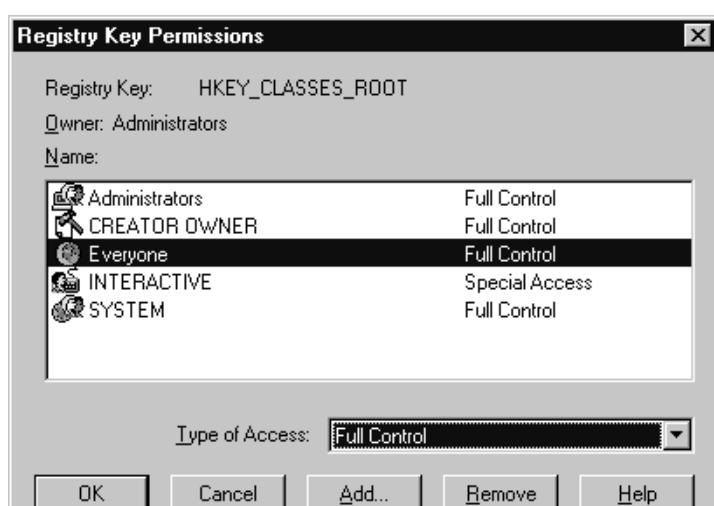
Step	Procedure
6	<p>The dialog box <i>Registry Value Permissions</i> (<i>Registry Value: DefaultAccessPermission</i>) is displayed.</p>  <p>Click the button <i>Add</i>.</p>

Step	Procedure
7	<p>The dialog box <i>Add Users and Groups</i> appears. Select "Everyone" from the list <i>Names</i> and click the button <i>Add</i> the cursor moves to the field <i>Add Names</i> to which the entry has been added.</p>  <p>Confirm by clicking the button <i>OK</i>.</p>

## Installation

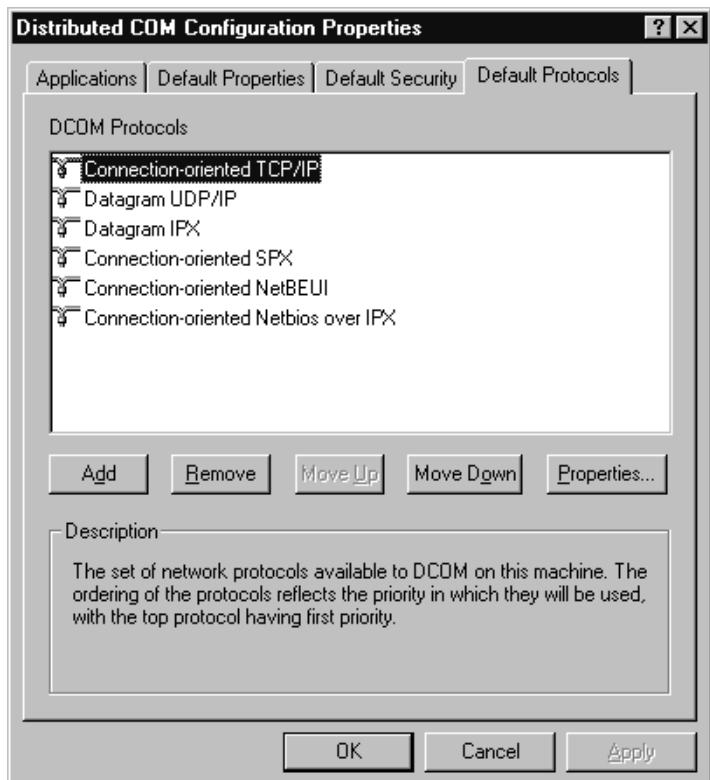
Running the installation on the client PC

Step	Procedure
8	<p>Return to the dialog box <i>Registry Value Permissions</i>, in which the name just added is listed. Select <i>Allow Access</i> in the list field <i>Type of Accesses</i> and confirm by clicking the button <i>OK</i>.</p> 
9	<p>You are returned to the dialog box shown in Step 4 (<i>Distributed COM Configuration Properties</i> tab <i>Default Security</i>).</p> <p>Now click the button <i>Edit Default</i> under the group <i>Default Launch Permissions</i>. The dialog box <i>Registration value permissions</i> again appears (<i>Registration value: DefaultLaunchPermission</i>), where you click the button <i>Add</i>. As set out in Steps 7 and 8, again select the user "Everyone" and confirm with <i>OK</i>.</p>

Step	Procedure												
10	<p>You are again returned to the dialog box <i>Registry Value Permissions</i>.</p>  <table border="1"> <thead> <tr> <th>User</th> <th>Type of Access</th> </tr> </thead> <tbody> <tr> <td>Administrators</td> <td>Allow Launch</td> </tr> <tr> <td>Everyone</td> <td>Allow Launch</td> </tr> <tr> <td>INTERACTIVE</td> <td>Allow Launch</td> </tr> <tr> <td>SYSTEM</td> <td>Allow Launch</td> </tr> </tbody> </table> <p>Select the entry <i>Allow Launch</i> in the list field <i>Type of Access</i> and confirm with the button <i>OK</i>.</p>	User	Type of Access	Administrators	Allow Launch	Everyone	Allow Launch	INTERACTIVE	Allow Launch	SYSTEM	Allow Launch		
User	Type of Access												
Administrators	Allow Launch												
Everyone	Allow Launch												
INTERACTIVE	Allow Launch												
SYSTEM	Allow Launch												
11	<p>You are returned to the dialog box shown in Step 4 (<i>Distributed COM Configuration Properties</i> tab <i>Default Security</i>). Now click the button <i>Edit Default</i> under the group <i>Default Configuration Permissions</i>. The dialog box <i>Registration code permissions</i> appears when you click <i>Add</i> as in Steps 7 and 8, now select the user "Everyone" and confirm with <i>OK</i>.</p>												
12	<p>You are returned to the dialog box <i>Registry Key Permissions</i>.</p>  <table border="1"> <thead> <tr> <th>User</th> <th>Type of Access</th> </tr> </thead> <tbody> <tr> <td>Administrators</td> <td>Full Control</td> </tr> <tr> <td>CREATOR OWNER</td> <td>Full Control</td> </tr> <tr> <td>Everyone</td> <td>Full Control</td> </tr> <tr> <td>INTERACTIVE</td> <td>Special Access</td> </tr> <tr> <td>SYSTEM</td> <td>Full Control</td> </tr> </tbody> </table> <p>In the list field <i>Type of Access</i>, select the entry <i>Full control</i>, confirm by clicking <i>OK</i> and you are returned to the dialog box described in Step 4 (<i>Distributed COM Configuration Properties</i> tab <i>Default Security</i>).</p>	User	Type of Access	Administrators	Full Control	CREATOR OWNER	Full Control	Everyone	Full Control	INTERACTIVE	Special Access	SYSTEM	Full Control
User	Type of Access												
Administrators	Full Control												
CREATOR OWNER	Full Control												
Everyone	Full Control												
INTERACTIVE	Special Access												
SYSTEM	Full Control												

## Installation

Running the installation on the client PC

Step	Procedure
13	<p>Now activate the <i>Default Protocols</i> tab. The following dialog box appears: ensure that the <i>Connection-oriented TCP/IP</i> protocol is entered as a minimum. It is not necessary to make any further entries:</p> 

### 3.8.2.2 Installation of Caracas Link (Alarm) Client on the client PC under Windows NT

Step	Procedure
1	Log on as Caracas Administration User (User Caracas, password caracas) on the client PC under Windows NT.
2	Close all applications on the PC except Windows.
3	Insert the installation CD for Caracas Link 4.2 in the CD-ROM drive. The installation program is automatically started and you will see the browser window (already described in Section 3.7.1).
4	For installation of the Caracas Link Alarm Client / Caracas Link Client on the client PC you select the <i>Setup</i> button on the left side of the dialog. Then choose the entry <i>Caracas Link Alarm Client</i> or <i>Caracas Link Client</i> . The installation wizard will be started, follow the instructions.

Step	Procedure
5	<p>When the installation of Caracas Link on the client PC is complete, you will be prompted to supply the name of the server PC, once for Caracas Link Messenger and once for Caracas Link Service, before the installation program finishes:</p> A screenshot of a Windows-style dialog box titled "CMSG.VBR". The dialog has a title bar with "CMSG.VBR" and a close button. Inside, there's a group box labeled "Remote Transport" containing two radio buttons: "Distributed COM" (which is selected) and "Remote Automation". Below this is a "Network Address:" label with an input field containing "CARACAS_SERVER". Underneath is a "Protocol:" label with a dropdown menu showing "ncacn_http". At the bottom right are "OK" and "Cancel" buttons. <p>In each case click the option <i>Distributed COM</i> and enter the name of the server PC in the field <i>Network addresses</i>. Confirm with <i>OK</i>. Then return to the screen shown in Step 3.</p>

## **Installation**

*Running the installation on the client PC*

### **3.8.3 Software installation on the client PC under Windows 95/98**

#### **General**

DCOM may only be installed when the client PC is running under Windows 95. Under Windows 98, the standard scope of installation already includes DCOM. DCOM has to be configured on client PCs under Windows 95 and Windows 98. Follow this installation sequence:

- Installing DCOM for Windows 95 (only if the client PC is running under Windows 95, see Section 3.8.3.1).
- Configuring DCOM for Caracas Service Agent (see Section 3.8.3.2)
- Installing Caracas Link Alarm Client / Caracas Link Client (see Section 3.8.2)

#### **3.8.3.1 Installing DCOM on a client PC under Windows 95**

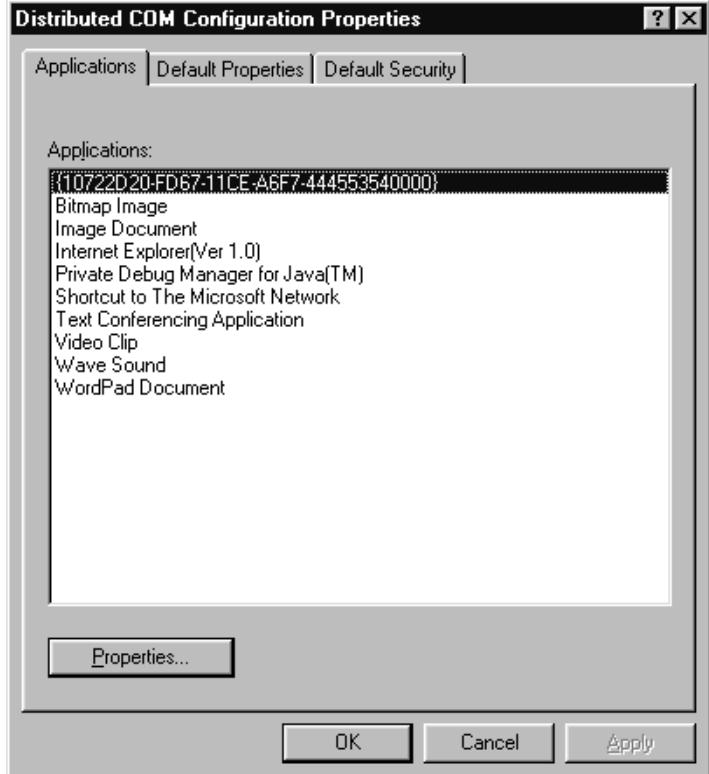
##### **Starting installation**

The basic sequence of installation for DCOM under Windows 95 corresponds to the standard installation of Windows programs. Start installation from the Tools screen of the Caracas Link Installations CD by selecting the option *DCOM for Windows 95*. Follow the instructions which appear on the screen.

### 3.8.3.2 Configuring DCOM on the client PC under Windows 9x

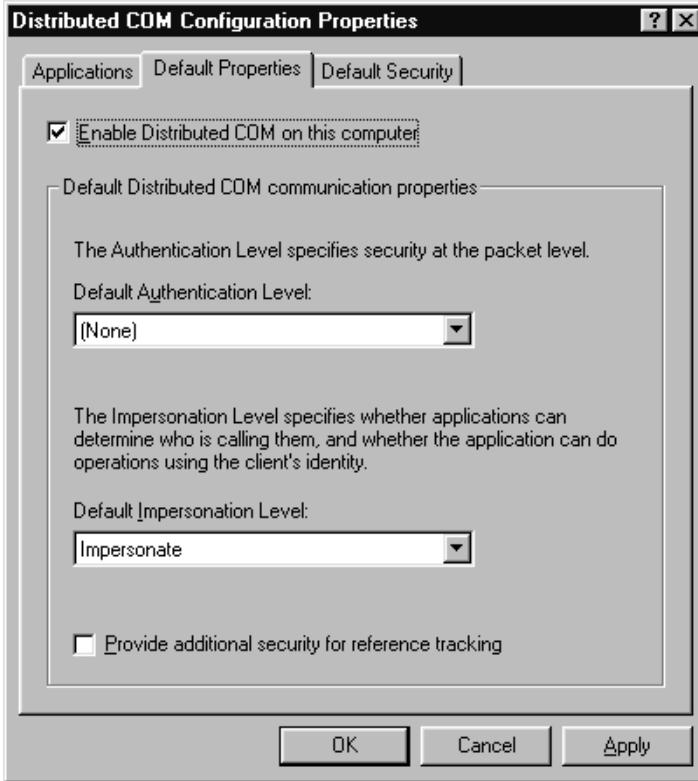
#### Configuring Caracas Service Agent (DCOM)

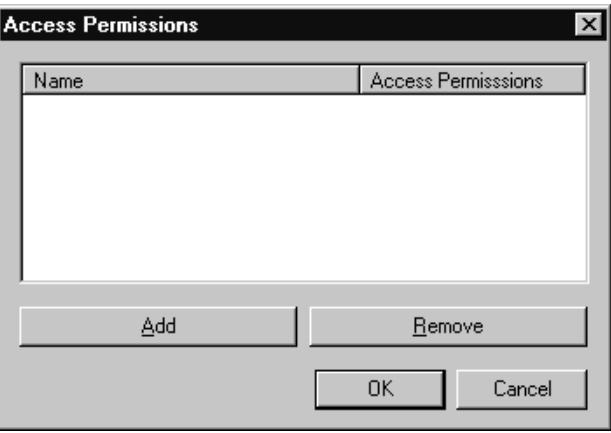
To configure Caracas Service Agent (DCOM) on the client PC under Windows 9x, proceed as follows:

Step	Procedure
1	<p>Click the entry <i>Run</i> in the start menu. Enter the program name <code>dcomcnfg</code> and confirm with <i>OK</i>.</p> 
2	<p>The dialog box <i>Distributed COM Configuration Properties</i> appears.</p> 

## Installation

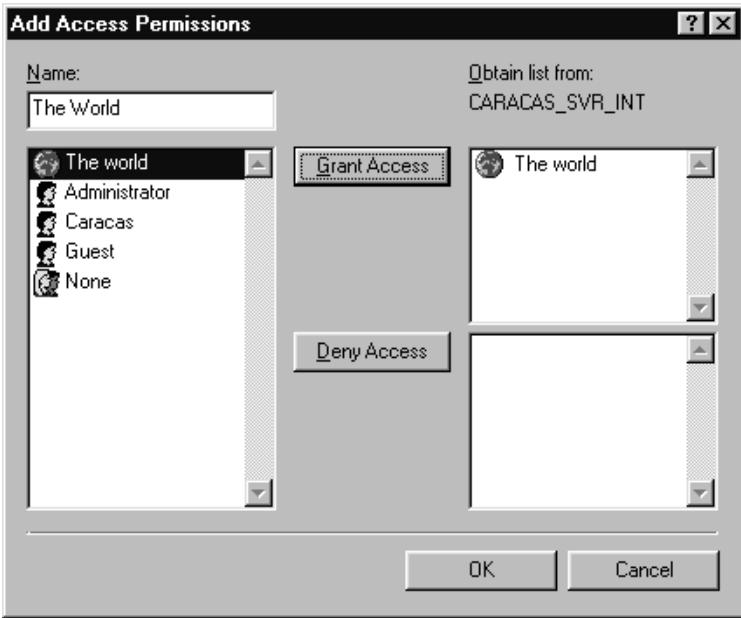
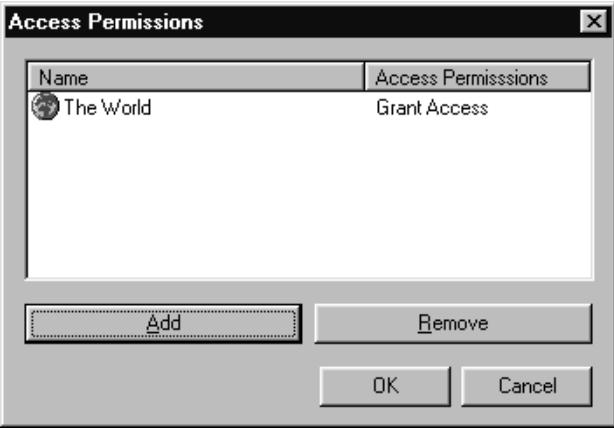
Running the installation on the client PC

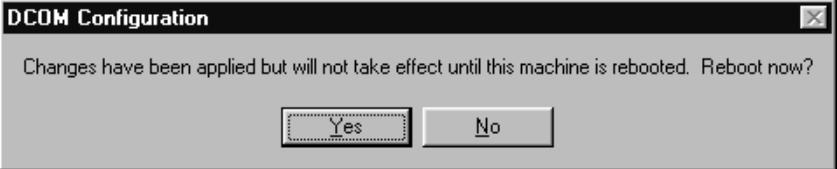
Step	Procedure
3	<p>Click the tab <i>Default Properties</i>:</p>  <p>In the option field <i>Enable Distributed COM on this computer</i>, click this communication type.</p> <p>In the list field <i>Default Authentication Level</i>, select the entry <i>(None)</i> and select <i>Impersonate</i> as the <i>Default Impersonation Level</i>.</p>

Step	Procedure
4	<p>Now click the tab <i>Default Security</i>.</p> 
5	<p>Next you click on the button <i>Edit Defaults</i> to add the permission for all users as <i>Default Access Permissions</i>.</p>
6	<p>The dialog box <i>Access Permissions</i> appears.</p>  <p>Click the button <i>Add</i>.</p>

## Installation

Running the installation on the client PC

Step	Procedure
7	<p>The dialog box <i>Add Access Permissions</i> appears. Select the entry "The World" from the <i>Name</i> list and click the button <i>Grant Access</i>. The entry is accepted.</p> 
8	<p>Confirm by clicking the button <i>OK</i>.</p> <p>You are returned to the dialog <i>Access Permissions</i> where the entry just accepted is now listed. Confirm by clicking <i>OK</i>.</p> 
	<p>You are returned to the dialog box described in Step 4 (<i>Default Security</i>).</p>

<b>Step</b>	<b>Procedure</b>
9	Click <i>OK</i> . As your inputs only become effective after the client PC is restarted, a message appears to this effect. Confirm with <i>OK</i> and the PC reboots. 

## Installation

### Installed data structure

## 3.9 Installed data structure

### Caracas program directory

When installing Caracas, specify the program directory in which the data structure for all Caracas components is installed. The default installation directory is C:\Program Files\Caracas.



Changes in the data structure of Caracas or deleting or adding of files in the data structure have the consequence that Caracas cannot be deinstalled (completely).

### Data structure in the program directory

The following subdirectories are created in the program directory:

Program directory, e.g.: C:\Program Files\Caracas Subdirectory or file	Description
.\Admin	Subdirectory for the Caracas Link Administration program. The subdirectory is created if the basic component <i>Caracas Link</i> was selected during installation.
.\Admin\error.rpt	Print template file for printing Caracas Link Administration program error logs
.\Admin\log.rpt	Print template file for printing Caracas Link Administration program event logs
.\Admin\wakeup.rpt	Print template file for printing Caracas Link Administration program wakeup logbook
.Admin\cadmin.exe	Caracas Link Administration program file
.Admin\cadmin.lng	Database with menu texts, dialog texts and messages for Caracas Link Administration program (preliminary version for additional international versions of Caracas Link)
.Alarm	Subdirectory for the Caracas Link Alarm Client. The subdirectory is created automatically during installation.
.Alarm\cl_alarm.exe	Caracas Link Alarm Client program file.
.Alarm\cl_alarm.lng	Database with menu texts, dialog texts and messages for Caracas Link Alarm Client

<b>Program directory, e.g.:</b> C:\Program Files\Caracas <b>Subdirectory or file</b>	<b>Description</b>
.\Client	Subdirectory for the Caracas Link Client. The subdirectory is created automatically during installation.
.\Client\clclient.exe	Caracas Link Client program file.
.\Client\clclient.lng	Database with menu texts, dialog texts and messages for Caracas Link Client
.\Data	Subdirectory of the databases used by the individual Caracas components
.\Data\ci_buff.mdb	Buffer and log database for Caracas
.\Data\ci_geb.mdb	Calls database
.\Data\ci_main.mdb	Configuration database for Caracas
.\Data\gkm45.mdb	Configuration database of the Call Charge Manager
.\Data\wincall.mdb	Configuration database of WinCall.
.\GKM45	Subdirectory for the Call Charge Manager. The subdirectory is created if the basic component <i>Caracas Link</i> was selected during installation.
.\GKM45\a_error.rpt	Print template file for printing Call Charge Manager error logs.
.\GKM45\a_log.rpt	Print template file for printing Call Charge Manager event logs.
.\GKM45\gkm45.exe	Program file of the Call Charge Manager
.\GKM45\gkm45.lng	Database with menu texts, dialog texts and messages for the Call Charge Manager.
.\Horizon	Subdirectory for Caracas Horizon-Link.
.\Horizon\ccshl.exe	Caracas Horizon-Link program file
.\Horizon\ccshlxml.dll	Caracas XML library
.\Horizon\bstrcmn.exe	Trace monitor for XML library
.\Link	Subdirectory for Caracas Host-Link. The subdirectory is created if the basic component <i>Caracas Link</i> was selected during installation.
.\Link\clink.exe	Caracas Host-Link program file

## Installation

### Installed data structure

Program directory, e.g.: C:\Program Files\Caracas Subdirectory or file	Description
\Link\profile.cnt	Configuration file for the various profiles to the V.24 link between Caracas Host-Link and the front office system.
\Scheduler\cmsg.exe	Program file of the Caracas Messenger (part of the Caracas Service Agent)
\Scheduler\cmsg.lng	Database with menu texts, dialog texts and messages for the Caracas Messenger
\Scheduler\csched.exe	Program file of the Caracas Scheduler (part of the Caracas Service Agent)
\Scheduler\csched.lng	Database with menu texts, dialog texts and messages for the Caracas Scheduler
\Scheduler\csrvc.exe	Program file of the Caracas Service (part of the Caracas Service Agent)
\Scheduler\csrvc.lng	Database with menu texts, dialog texts and messages for the Caracas Service
\Server	Subdirectory for Caracas Server. The subdirectory is created if the basic component <i>Caracas Link</i> was selected during installation.
\Server\anrun.exe	Caracas Autostart program file
\Server\csrvr_42.exe	Caracas Server program file
\Voice	Subdirectory for Caracas Voicemail-Link. The subdirectory is created if the component <i>Voice-mail</i> was selected during installation.
\Voice\chbar.exe	Program file Caracas Voicemail-Link
\Wincall	Subdirectory for WinCall. The subdirectory is created if a WinCall component was selected during installation.
\Wincall\a_error.rpt	Print template file for printing WinCall error logs.
\Wincall\a_log.rpt	Print template file for printing WinCall event logs.
\Wincall\wc_H15c.exe	WinCall Hicom 150E Office program file.
\Wincall\wc_H2_32.exe	WinCall Hicom 200/150E program file.
\Wincall\wc_H3_32.exe	WinCall Hicom 300 program file.
\Wincall\wincallhu.exe	WinCall HiPath 4000 program file
\Wincall\wc_log32.exe	Logbook evaluation program file for WinCall.

<b>Program directory, e.g.:</b> C:\Program Files\Caracas <b>Subdirectory or file</b>	<b>Description</b>
.\Wincall\wc_log32.lng	Database with menu texts, dialog texts and messages for the Logbook evaluation for WinCall.

### Data structure in the Windows directory

The following files are created in the Windows directory:

<b>Windows directory, e.g.:</b> C:\Windows (under Windows 9x) C:\WINNT (under Windows NT/ 2000)	<b>Description</b>
.\anrun.cfg	Configuration file for Caracas Autostart program
.\msv.ikk	IKK device driver file
.\param.ini	IKK configuration file
.\Fonts\vgaHex.fon	Font file for the Hex font (trace windows)
.\Help\cadmin.cnt	Contents file (contents) for the Caracas Link Administration program help
.\Help\cadmin.hlp	Help file for the Caracas Link Administration program
.\Help\ccsh1.cnt	Contents file (contents) for Caracas Horizon-Link help
.\Help\ccsh1.hlp	Help file for Caracas Horizon-Link
.\Help\chbar.cnt	Contents file (contents) for Caracas Voicemail-Link help
.\Help\chbar.hlp	Help file for Caracas Voicemail-Link
.\Help\clclient.cnt	Contents file (contents) for Caracas Link Client help
.\Help\clclient.hlp	Help file for Caracas Link Client
.\Help\clink.cnt	Contents file (contents) for the Caracas Host-Link help
.\Help\clink.hlp	Help file for Caracas Host-Link
.\Help\csrvr_42.cnt	Contents file (contents) for the Caracas Server help
.\Help\csrvr_42.hlp	Help file for Caracas Server
.\Help\csched.cnt	Contents file (contents) for the Caracas Service Agent (Scheduler) help
.\Help\csched.hlp	Help file for the Caracas Service Agent (Scheduler)

## Installation

### Installed data structure

Windows directory, e.g.: C:\Windows (under Windows 9x) C:\WINNT (under Windows NT/ 2000)	Description
.\Help\gkm45.cnt	Contents file (contents) for the Call Charge Manager help
.\Help\gkm45.hlp	Help file for the Call Charge Manager
.\Help\wc_H15C.cnt	Contents file (contents) for the WinCall Hicom 150E Office help
.\Help\wc_H15C.hlp	Help file for the WinCall Hicom 150E Office
.\Help\wc_h2_32.cnt	Contents file (contents) for WinCall Hicom 200/150E help
.\Help\wc_h2_32.hlp	Help file for the WinCall Hicom 200/150E
.\Help\wc_h3_32.cnt	Contents file (contents) for the WinCall Hicom 300 help
.\Help\wc_h3_32.hlp	Help file for the WinCall Hicom 300
.\Help\wincall.cnt	Contents file (contents) for the general section in WinCall help
.\Help\wincall.hlp	Help file for the general section in WinCall
.\Help\wincallhu.cnt	Contents file (contents) for WinCall HiPath 4000 help
.\Help\wincallhu.hlp	Help file for WinCall HiPath 4000
.\system32\msvdll.dll	DLL for MSV/IKK drivers
.\system32\wc_ccc45.dll	DLL for the call charging
.\system32\wc_cfw45.dll	DLL for call details interface via V.24 or file
.\system32\wc_xtc45.dll	DLL for external call charging via V.24
.\system32\Drivers\ikkio.sys	Kernel mode driver file for the IKK/2 card using WinCall Hicom 300



In addition to the files described above, some system files which are not listed here are also exchanged/copied to the system.

## 3.10 New / extended program groups

### New program group

A separate program group named *Caracas Link* is formed for the Caracas components. This new program group which contains the installed components as well as the Caracas Autostart program is created by the installation program on the PC.

### Caracas components in the Start menu (server PC)

The Caracas components installed on the server PC can be activated via the Start menu under *Programs - Caracas Link*:

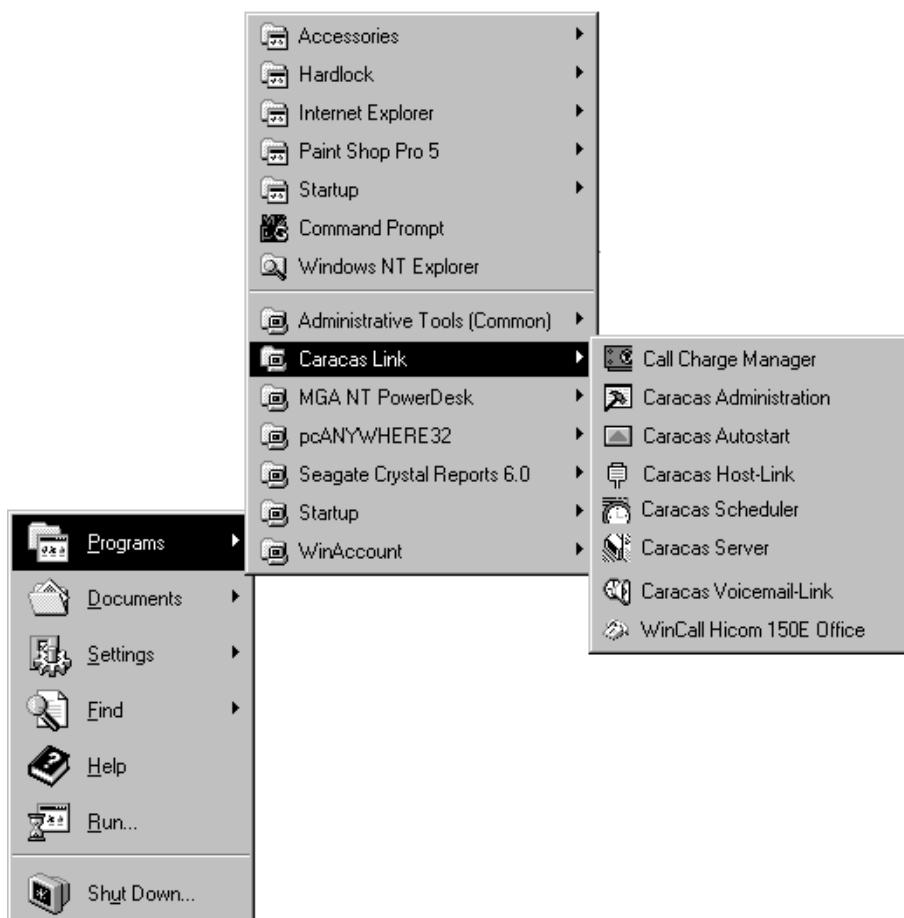


Figure 3-1 Windows Start menu with Caracas Link components (server PC)

## Installation

New / extended program groups

### Caracas components in the Start menu (client PC)

The Caracas components installed on the client PC can be activated via the Start menu under *Programs - Caracas Link*:



Figure 3-2 Windows Start menu with Caracas Link components (client PC)

### StartUp program group

The StartUp program group is extended to include Caracas Autostart program:

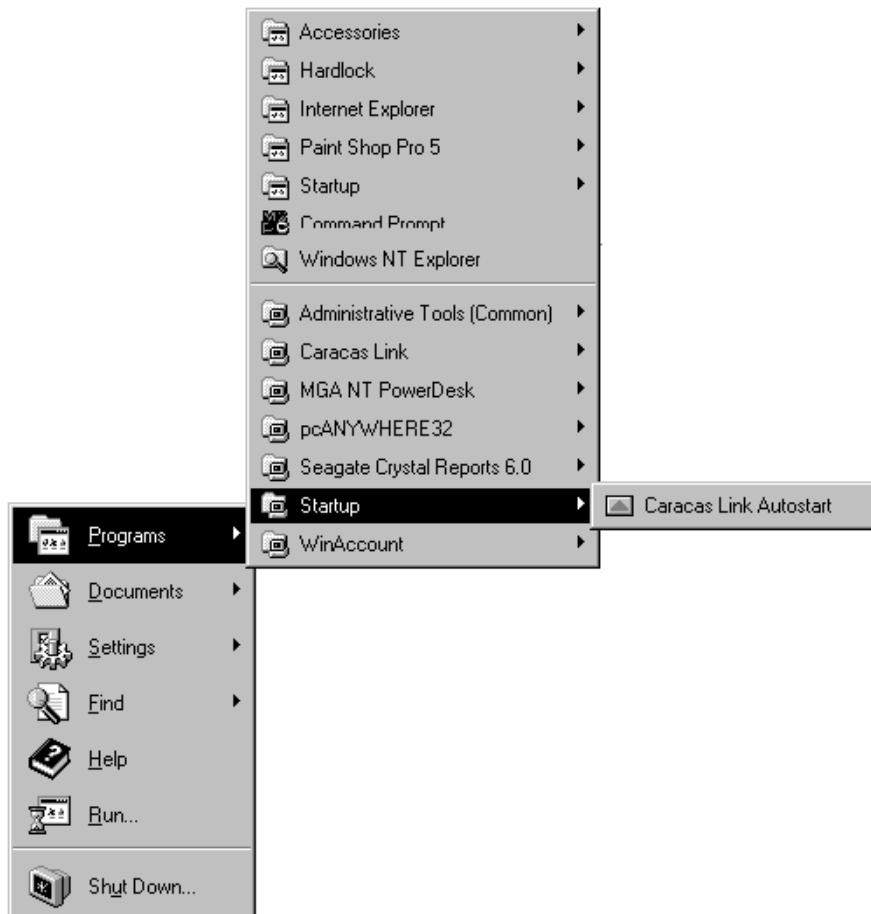


Figure 3-3      Windows StartUp program group with the Caracas Autostart program

## **Installation**

*Program shortcuts on the desktop*

### **3.11 Program shortcuts on the desktop**

#### **Why create shortcuts?**

Once the installation has been completed successfully, shortcuts should be created on the desktop for the Caracas components installed. It is then possible for both the technician and the administrator to activate individual components by clicking the shortcut without having to go via the Start menu.

#### **Creating a shortcut for a component**



If you need help for creating a shortcut on the desktop please read the instructions in the Windows help.



Another and faster method to create a desktop shortcuts to copy the shortcut fpr a Caracas component from the *Start* menu (program group *Caracas*) via Drag & Drop.

### **3.12 ODBC configuration after installation**



The Caracas setup installs the ODBC data sources automatically under Windows 2000. The following description is for controlling purpose only.

#### **After installation**

Once the installation program has been completed successfully, the program files for the selected components and the databases created are maintained in the Caracas file structure. The components with shared access to the databases do not, however, have a valid connection to the databases. This connection is to be set up via a single ODBC configuration that can be performed automatically by Caracas.

#### **Data sources involved**

The following data sources must be set up for Caracas Link on the server PC and the client PC:

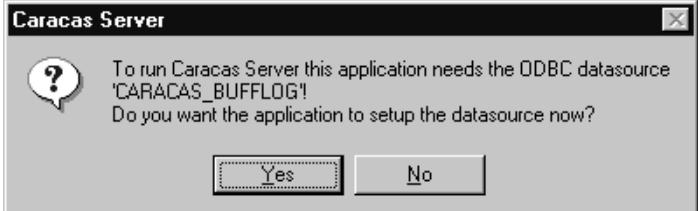
- CARACAS\_BUFFLOG:  
(Caracas Database)
- CARACAS\_MAIN:  
(Caracas Database)
- GEB:  
(Call charge database)
- GKM:  
(Configuration database, call charges)
- WINCALL\_MAIN:  
(WinCall Database)

## Installation

*ODBC configuration after installation*

### Activating automatic ODBC configuration

The automatic ODBC configuration is activated by simply starting Caracas Server or WinCall after the first-time installation of Caracas.

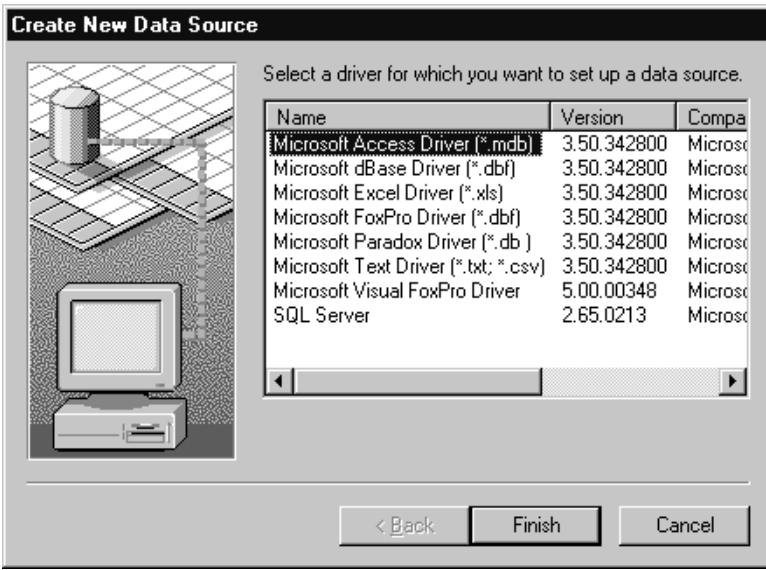
Step	Procedure
1	Start Caracas Server or WinCall via the shortcut on the desktop or the Start menu.
2	The following prompt (see below) for the databases listed above (CARACAS_BUFFLOG in the example):  <p>Confirm this prompt by clicking Yes. The automatic ODBC configuration is started for the relevant data source ("CARACAS_BUFFLOG" in the example, database with buffers, logbooks, etc.). An error message appears if the automatic ODBC configuration cannot be performed for the relevant data source. The data source must then be configured manually.</p>
3	The procedure described in step 2 now also applies to the data sources CARACAS_MAIN, GEB, GKM and WINCALL_MAIN (for GEB and GKM if charging via Call Charge Manager was configured)
4	Caracas Server / WinCall is started once the data sources have been successfully configured and the main window appears.



All applications started subsequently which also access the data sources that have been set up are also based on these settings and do not query the configuration.

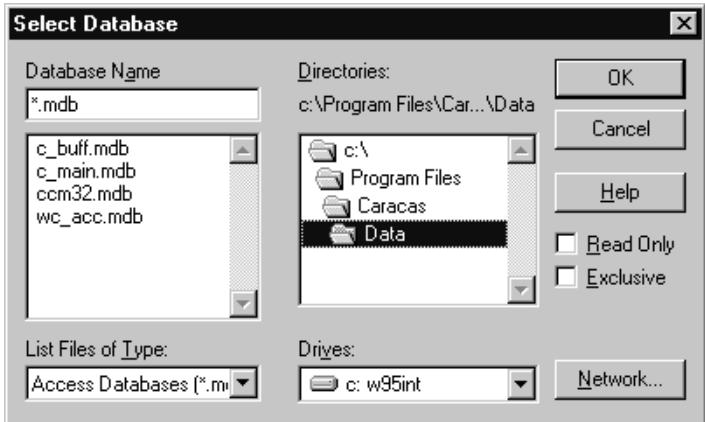
## Performing manual ODBC configuration

Appropriate error message appear if the Caracas component cannot perform automatic ODBC configuration for one or all of the four data sources. The configuration for the data sources CARACAS\_BUFFLOG, CARACAS\_MAIN, GEB, GKM and WINCALL\_MAIN must then be carried out manually.

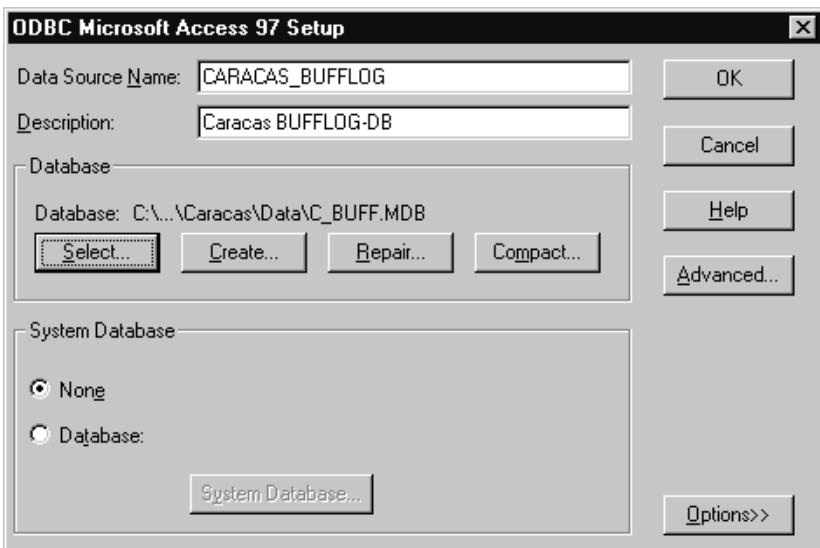
Step	Procedure																											
1	Start the program <i>32bitODBC</i> via the Start menu under <i>Settings - Control Panel</i> . The configuration dialog box for data sources appears.																											
2	Click <i>Add</i> . The following dialog box appears:  <table border="1"> <thead> <tr> <th>Name</th> <th>Version</th> <th>Compa</th> </tr> </thead> <tbody> <tr> <td>Microsoft Access Driver (*.mdb)</td> <td>3.50.342800</td> <td>Microso</td> </tr> <tr> <td>Microsoft dBase Driver (*.dbf)</td> <td>3.50.342800</td> <td>Microso</td> </tr> <tr> <td>Microsoft Excel Driver (*.xls)</td> <td>3.50.342800</td> <td>Microso</td> </tr> <tr> <td>Microsoft FoxPro Driver (*.dbf)</td> <td>3.50.342800</td> <td>Microso</td> </tr> <tr> <td>Microsoft Paradox Driver (*.db )</td> <td>3.50.342800</td> <td>Microso</td> </tr> <tr> <td>Microsoft Text Driver (*.txt; *.csv)</td> <td>3.50.342800</td> <td>Microso</td> </tr> <tr> <td>Microsoft Visual FoxPro Driver</td> <td>5.00.00348</td> <td>Microso</td> </tr> <tr> <td>SQL Server</td> <td>2.65.0213</td> <td>Microso</td> </tr> </tbody> </table>	Name	Version	Compa	Microsoft Access Driver (*.mdb)	3.50.342800	Microso	Microsoft dBase Driver (*.dbf)	3.50.342800	Microso	Microsoft Excel Driver (*.xls)	3.50.342800	Microso	Microsoft FoxPro Driver (*.dbf)	3.50.342800	Microso	Microsoft Paradox Driver (*.db )	3.50.342800	Microso	Microsoft Text Driver (*.txt; *.csv)	3.50.342800	Microso	Microsoft Visual FoxPro Driver	5.00.00348	Microso	SQL Server	2.65.0213	Microso
Name	Version	Compa																										
Microsoft Access Driver (*.mdb)	3.50.342800	Microso																										
Microsoft dBase Driver (*.dbf)	3.50.342800	Microso																										
Microsoft Excel Driver (*.xls)	3.50.342800	Microso																										
Microsoft FoxPro Driver (*.dbf)	3.50.342800	Microso																										
Microsoft Paradox Driver (*.db )	3.50.342800	Microso																										
Microsoft Text Driver (*.txt; *.csv)	3.50.342800	Microso																										
Microsoft Visual FoxPro Driver	5.00.00348	Microso																										
SQL Server	2.65.0213	Microso																										
3	Select the entry <i>Microsoft Access Driver (*.mdb)</i> from the list of installed ODBC drivers and click the <i>Finish</i> button.																											
4	In the prompted Setup dialog box, enter the data source name in the <i>Data Source Name</i> input field: <ul style="list-style-type: none"> <li>– CARACAS_BUFFLOG or</li> <li>– CARACAS_MAIN or</li> <li>– GEB or</li> <li>– GKM or</li> <li>– WINCALL_MAIN</li> </ul>																											

## Installation

### ODBC configuration after installation

Step	Procedure
5	<p>Enter the description of the data source in the <i>Description</i> input field:</p> <p>Data source Description</p> <ul style="list-style-type: none"><li>• CARACAS_BUFFLOG Buffer data source for Caracas</li><li>• CARACAS_MAIN Main data source for Caracas</li><li>• GEB Call charge data source for Caracas</li><li>• GKM Call charge configuration data source for Caracas</li><li>• WINCALL_MAIN Main data source for WinCall</li></ul>
6	Click the <i>Select</i> button to select the database file.
7	<p>Select the database in the subdirectory <b>data</b>.</p> <p>Data source Database</p> <ul style="list-style-type: none"><li>• CARACAS_BUFFLOG c1_buff.mdb</li><li>• CARACAS_MAIN c1_main.mdb</li><li>• GEB ci_geb.mdb</li><li>• GKM gkm40.mdb</li><li>• WINCALL_MAIN wincall.mdb</li></ul> <p>The subdirectory <b>data</b> is located in the directory that was specified by Caracas as the program directory during installation (default directory: C:\Program Files\Caracas).</p>  <p>Confirm your selection by clicking the <i>OK</i> button.</p>

**Installation**  
*ODBC configuration after installation*

<b>Step</b>	<b>Procedure</b>
8	<p>The system returns to the Setup dialog box where you confirm your entries by clicking the <i>OK</i> button.</p> <p>Example for the data source CARACAS_BUFFLOG:</p> 
9	Exit the configuration program by clicking <i>Close</i> .

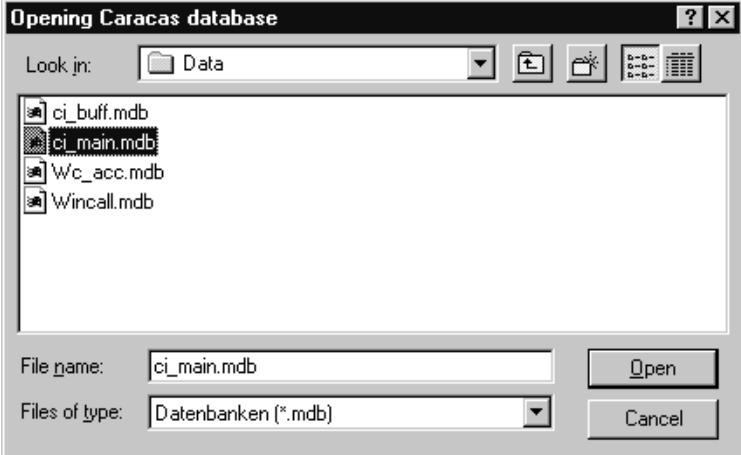
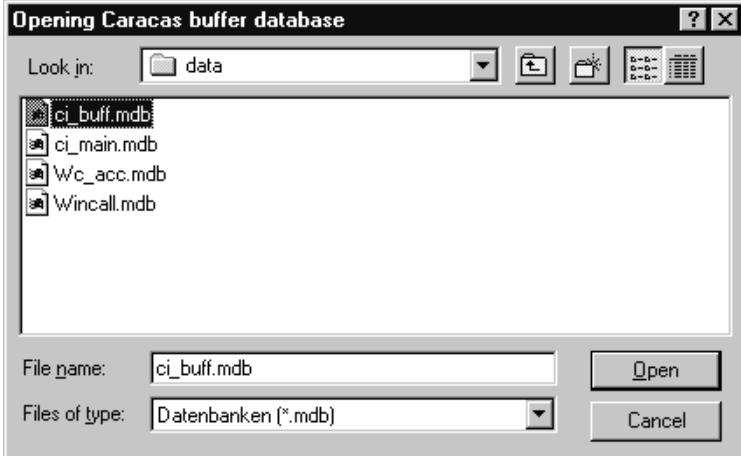
## Installation

*Creating the data connection on the client PC*

### 3.13 Creating the data connection on the client PC

#### General

When Caracas Link Alarm Client / Caracas Link Client is first started, you are prompted to establish the connection on the client to the databases in the central Caracas data directory (Default: C:\Program Files\Caracas\Data):

Step	Procedure
1	When the program Caracas Link Client has started, the dialog box for opening the Caracas main database on the server PC appears. Select the main database in the data directory and click the button <i>Open</i> . 
2	The dialog box for opening the Caracas buffer database on the server PC appears. Select the buffer database in the data directory and click the button <i>Open</i> . 
3	Caracas Link Alarm Client / Caracas Link Client then starts normally.

## 3.14 Uninstalling Caracas

### Why uninstall?

The above files are not the only items transferred to the Caracas program folder when installing the individual Caracas Link components. Specific configuration entries are also made in the Windows registry, library files (\*.dll files) are updated, program groups are created/extended, etc. If individual or all Caracas components are to be deleted, the relevant files should be uninstalled and not deleted by hand.



The deinstallation program only removes those files that were copied on to the system by the relevant installation program. Thus, it is important to ensure that applications are only installed using the relevant setup programs and are not manually copied to or deleted from the system.



Do not save any files to the Caracas working directory (e.g. trace files, backup copies etc.). Use the relevant Windows folders!

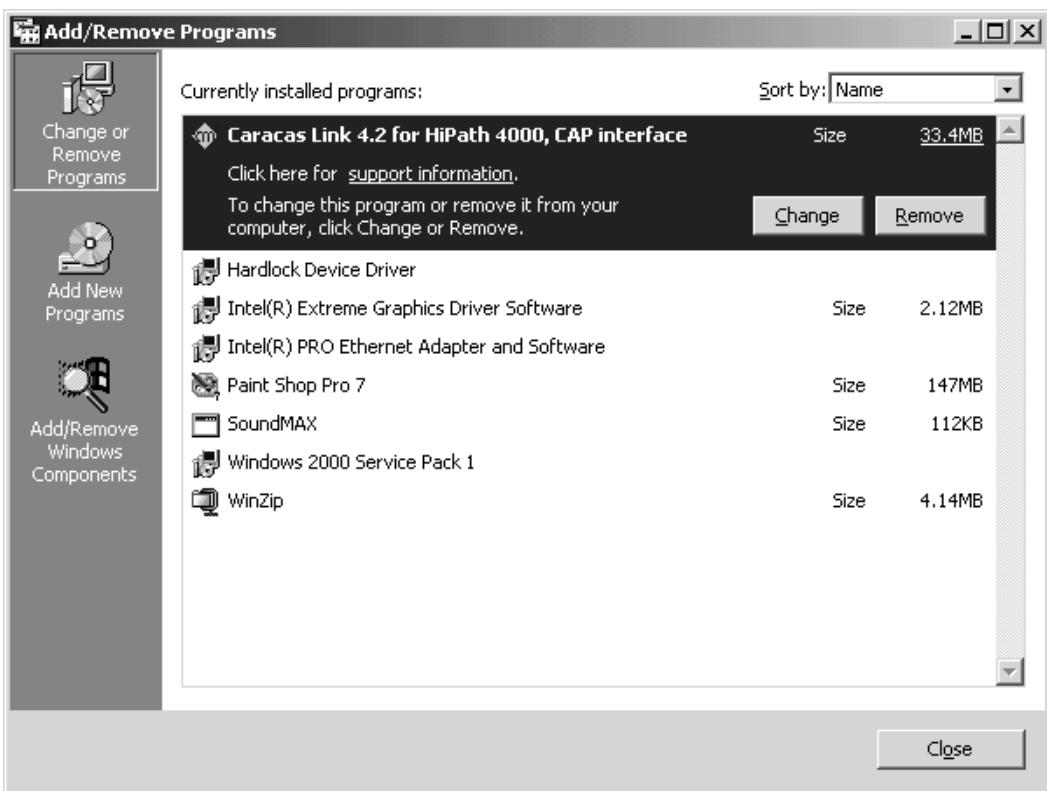
### 3.14.1 Uninstalling of Caracas Link under Windows 2000

For uninstalling Caracas Link under Windows 2000 proceed as follows:

Step	Procedure
1	Logon on the PC under Windows 2000 as a Caracas administrator. Activate <i>Programs - Settings - Control Panel</i> via the Start menu.

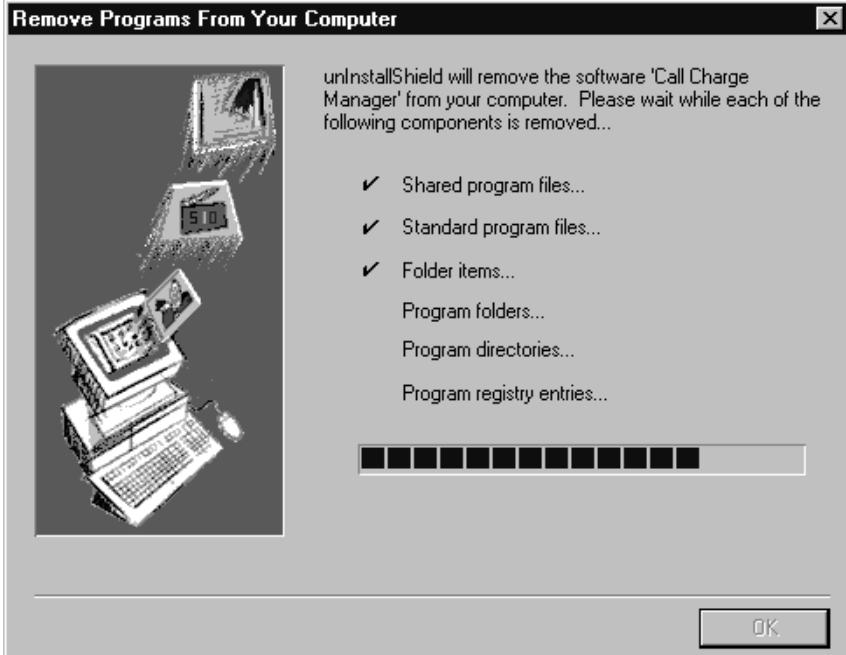
## Installation

### Uninstalling Caracas

Step	Procedure																		
2	Activate the item labeled <i>Add/Remove Programs</i> in the Control Panel. The prompted dialog contains a list from which you select the software to be uninstalled:  <p>The screenshot shows the Windows Control Panel's 'Add/Remove Programs' window. On the left, there's a sidebar with icons for 'Change or Remove Programs', 'Add New Programs', and 'Add/Remove Windows Components'. The main area is titled 'Currently installed programs:' and lists several items:</p> <table border="1"><thead><tr><th>Program</th><th>Size</th></tr></thead><tbody><tr><td>Caracas Link 4.2 for HiPath 4000, CAP interface</td><td>33.4MB</td></tr><tr><td>Hardlock Device Driver</td><td>2.12MB</td></tr><tr><td>Intel(R) Extreme Graphics Driver Software</td><td></td></tr><tr><td>Intel(R) PRO Ethernet Adapter and Software</td><td></td></tr><tr><td>Paint Shop Pro 7</td><td>147MB</td></tr><tr><td>SoundMAX</td><td>112KB</td></tr><tr><td>Windows 2000 Service Pack 1</td><td></td></tr><tr><td>WinZip</td><td>4.14MB</td></tr></tbody></table> <p>At the bottom right of the list area are 'Change' and 'Remove' buttons. A message below the list says: 'Click here for support information. To change this program or remove it from your computer, click Change or Remove.' At the very bottom right of the window is a 'Close' button.</p>	Program	Size	Caracas Link 4.2 for HiPath 4000, CAP interface	33.4MB	Hardlock Device Driver	2.12MB	Intel(R) Extreme Graphics Driver Software		Intel(R) PRO Ethernet Adapter and Software		Paint Shop Pro 7	147MB	SoundMAX	112KB	Windows 2000 Service Pack 1		WinZip	4.14MB
Program	Size																		
Caracas Link 4.2 for HiPath 4000, CAP interface	33.4MB																		
Hardlock Device Driver	2.12MB																		
Intel(R) Extreme Graphics Driver Software																			
Intel(R) PRO Ethernet Adapter and Software																			
Paint Shop Pro 7	147MB																		
SoundMAX	112KB																		
Windows 2000 Service Pack 1																			
WinZip	4.14MB																		
3	Press the <i>Remove</i> button. For uninstalling Caracas Link you confirm the appearing message with <i>Yes</i> .																		
4	The dongle driver will not be removed. Confirm the message with <i>OK</i> .																		
5	Uninstalling proceeds, the progress is displayed.																		
6	After uninstallation you return to the <i>Add/Remove Program</i> Dialog of step 2. If you want to uninstall the hardware dongle driver select the item, activate the button and follow the instructions in the dialogs. After uninstallation press the <i>Close</i> button.																		

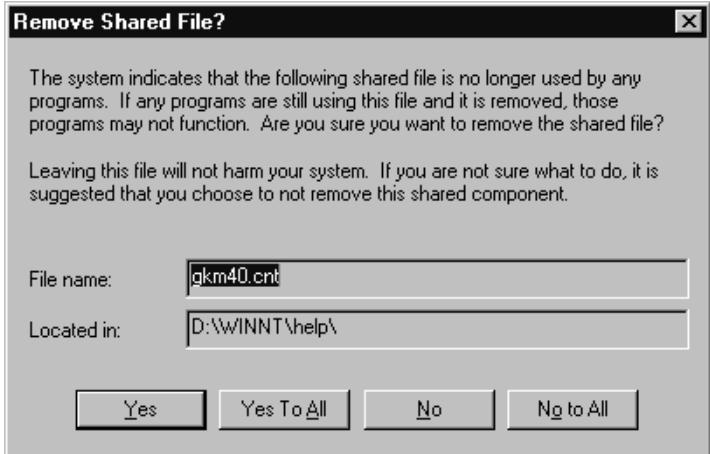
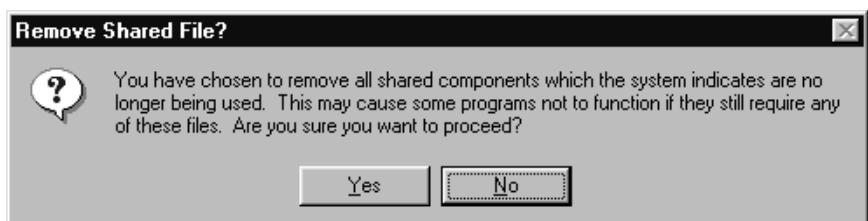
### 3.14.2 Uninstalling Caracas Link components under Windows NT/9x

For uninstalling Caracas components proceed as follows:

Step	Procedure
1	Logon on a PC under Windows NT as a Caracas administrator. Activate <i>Programs - Settings - Control Panel</i> via the Start menu.
2	Activate the item labeled <i>Add/Remove Programs Properties</i> in the Control Panel. The prompted properties sheet contains a list from which the components to be uninstalled are selected.
3	Click the <i>Add/Remove</i> button. The system prompts the user to confirm. If you want to stop uninstalling the selected component, click <i>No</i> and return to the Control Panel. If you want to continue uninstalling the selected component, click <i>Yes</i> .
4	The program for deinstalling the selected component is activated. The procedures to be implemented are displayed, and a check mark appears beside those completed. 

## Installation

### Uninstalling Caracas

Step	Procedure
5	If during the current deinstallation a so-called shared file is also to be removed, the following message appears:  <p>Click the button <i>Yes To All</i></p>
6	The following prompt appears:  <p>Confirm by clicking <i>Yes</i>. This ensures that the "common files" concerned will only be removed if these are no longer required by any Caracas or Windows components.</p>
7	The deinstallation program shows you its progress. When deinstallation is complete, a message appears.
8	Click the button <i>OK</i> . You return to the dialog box shown at Step 2. By clicking the deinstallation you can continue with a further component or by clicking <i>OK</i> you can leave the properties dialog and return to the control panel.



If a message appears that some elements could not be removed, carry out a manual check of the program directories of the components to be de-installed.  
The reason for this message may be that in the past data had been copied manually into the program directory concerned, and that the de-installation routine does not know and therefore deletes neither these data nor the program directory. You can rectify this manually after checking.  
Please notice the remarks in Section 3.9, "Installed data structure".

## 4 General functions of all components

### Introduction

The following chapter describes some general functions/contents that are available or can be performed in all applications. As a result descriptions of these functions are not provided in the appropriate component chapters in the present manual.

### Sample component: Caracas Server

This manual uses dialog boxes and screen shots from Caracas Server to illustrate examples. These dialogs are identical in all Caracas applications.

### 4.1 Starting a component

#### How are Caracas components started?

There are various options available for starting Caracas components:

Start via...	Description
StartUp group	Caracas Autostart is incorporated in the Windows StartUp group during installation. The components Caracas Server, Caracas Host-Link, WinCall, Caracas Service Agent, Caracas Voicemail-Link (if installed) and Caracas Horizon-Link are started when Caracas Autostart is activated with Windows running in the background.
Windows desktop	After installation, the components installed can be linked as program icons on the desktop. The appropriate components are started by double-clicking on these program icons.
Start menu	After installation, the <i>Caracas Link</i> program group which contains the individual components is available. A component is activated from the Start menu via <i>Programs - Caracas Link - &lt;component&gt;</i>

#### After startup

After a component is started up:

- the corresponding program configuration is loaded.
- the connection to the databases is set up.
- the necessary logon to the server is performed (apart from Caracas Server itself).
- the interface to the front office system is opened (Caracas Host-Link).

## **General functions of all components**

### *Starting a component*

- the interface to the Voicemail system is opened (Caracas Voicemail-Link).
- the interface to the Callstar Horizon system is opened (Caracas Horizon-Link).

### **Splash screen**

The splash screen is displayed while these actions are being completed:

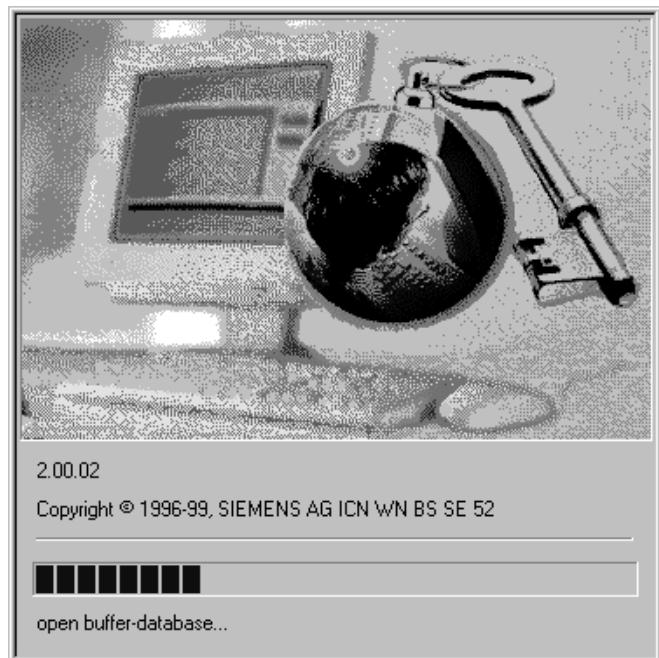


Figure 4-1      Splash screen

## 4.2 Logging on and off

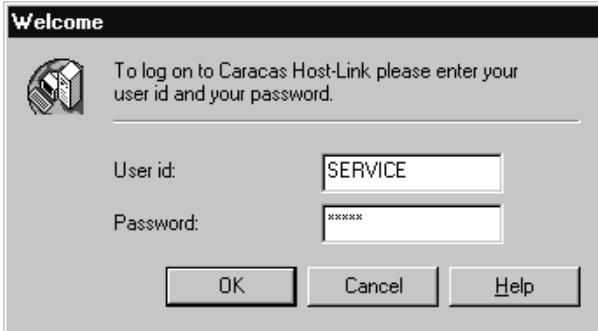
### Why log on?

Basically, the individual components are networked. Users do not have to log on to each individual component. Users are split into different class of service levels (user level) for configuration, test or other control activities. If you want to work with a Caracas component in the dialog box, you must identify yourself by specifying a user ID and password.



In the components Caracas Service Agent, Caracas Link Client, Caracas Link Alarm Client and Call charge manager no user identification or logon is necessary.

### How do I log on?

Step	Procedure
1	<p>Activate the component from the desktop/Start menu. The following logon dialog box appears:</p> 
2	<p>In the field <i>User id</i> the user id of the user logged in before is showed, the cursor is in the field <i>Password</i>. You have 30 seconds to enter the corresponding (technician's) password or another user ID with the corresponding password and to confirm your entries.</p>
3	<p>The input dialog closes if no entries are made within 30 seconds. Select <i>File - Log On</i> to reactivate this dialog.</p>
<b>Tip</b>	<p>The <i>Log On</i> menu item can also be selected from the context menu activated in the Caracas component dialog.</p>

### After logging on

Once you have successfully logged on, the main window appears with the menu items. The user level defined by the administrator for your user ID ensures that menu items not permitted for this user level are automatically locked

## **General functions of all components**

### *Logging on and off*

#### **User profiles**

The system also stores certain user settings that are taken into consideration after the user has logged on. These parameters are:

<b>Parameter</b>	<b>Meaning/setting</b>
Toolbar status	The toolbar status can be activated or deactivated.
Status bar status	The status bar can be activated or deactivated. The status can only be changed in the Caracas Link Administration program. The status bar is always active in the other components.
Opened trace window	For components that offer the trace window (Caracas Server, Caracas Host-Link, Caracas Voicemail-Link, Caracas Horizon-Link Caracas Service Agent and WinCall), the following applies: the last settings saved in an open trace window of a component are active when the user next logs on.
Trace window display	In this case, the last parameters saved for window settings, color and trace window splitting are used.

#### **Logon by the service technician**

The technician can log on using his/her user ID and technician's password. This password cannot be changed. The user ID of the technician for logon using a technician's password is not stored as a user profile, but must be entered for logging reasons. The other user profiles of the technician are stored in the database under a General Entry, i.e. the same user profiles apply to all technician's password.

#### **Logon by the administrator**

Each component creates a default user with the ID ADMIN and the password caracas for the administrator the first time the program is started up (after installation). This password can then be modified in the individual components or in the user administration in the Caracas Link Administration program.

### **Logon by a new user**

A new user is set up each time a user who has not yet been created by the system administrator logs on to the system for the first time. The password for this new user is requested the first time the user logs on (password confirmation):



Figure 4-2      Caracas password confirmation

At present, users can create themselves in the following components:

- Caracas Server
- Caracas Host-Link
- Caracas Voicemail-Link
- Caracas Horizon-Link
- WinCall

### **How do I log off?**

Basically, you should always log off if you are not performing any more actions or activities with the component in question. Logoff is performed in the following manner:

<b>Step</b>	<b>Procedure</b>
1	Select <i>File - Log Off</i> .

## General functions of all components

### Window structure

## 4.3 Window structure

### Window elements in a Caracas component

The individual elements are described using the Caracas Server mask window as an example:

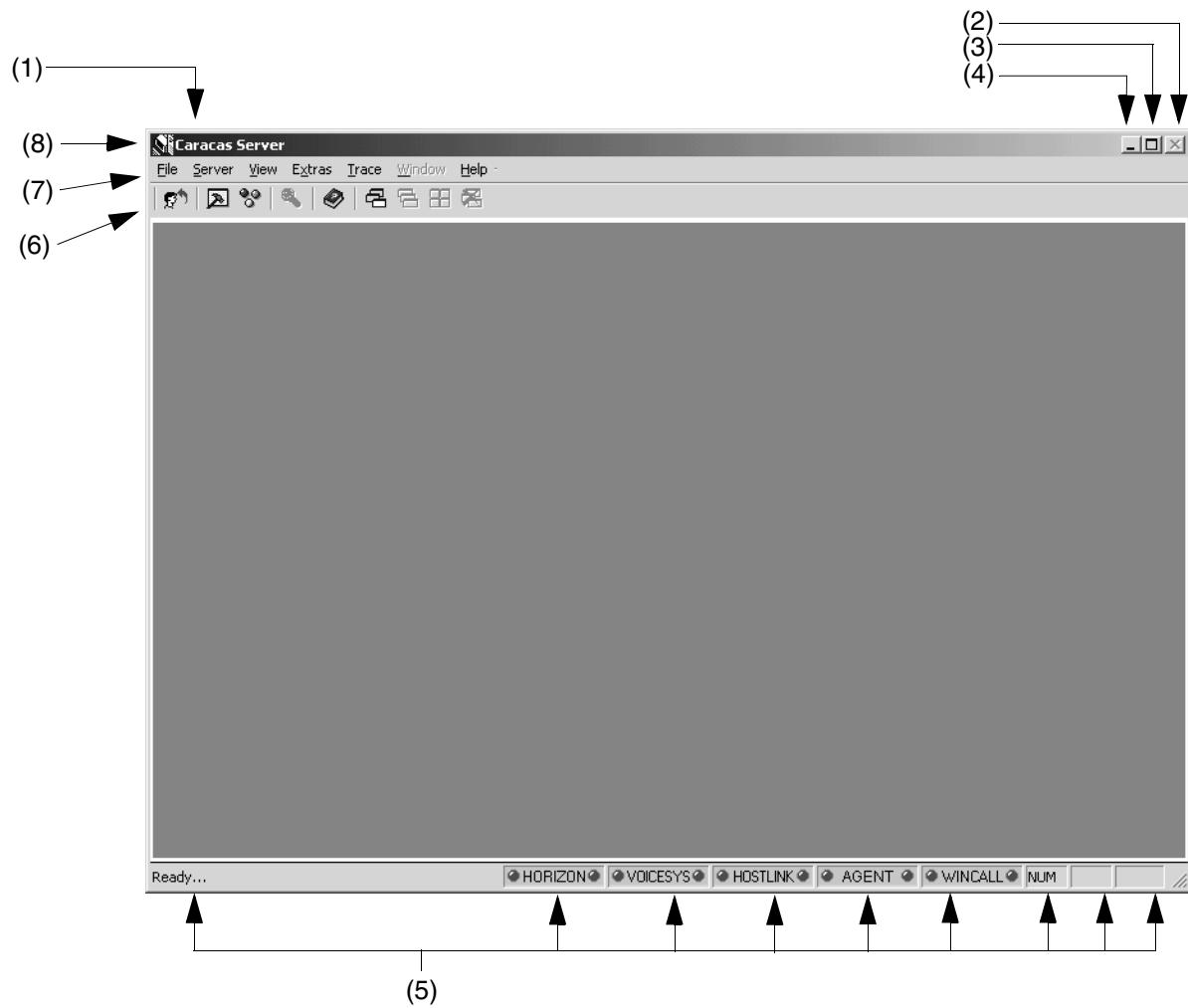


Figure 4-3 Window elements of a Caracas Link component

### Meaning of the individual elements

Window element	Description
(1) Title bar	The title bar shows the name of the current component/program. The title bar of the current window is highlighted.

## General functions of all components

### Window structure

Window element	Description
(2) Close button	The application window is closed and the program is terminated by clicking on this button (disabled in the components Caracas Server, Caracas Host-Link, Caracas Voicemail-Link, Caracas Horizon-Link and WinCall).
(3) Maximize	The application window is collapsed or expanded to fill the screen by clicking on this button.
(4) Minimize	The application window is collapsed into an icon and moved to the Windows taskbar by clicking on this button.
(5) Status bar	Messages and help texts, e.g. for the selection of menu functions are displayed in the left part of the status bar. In the right part, the status of the Num Lock, the Caps Lock and the  key as well as the status of the other components are displayed.
(6) Toolbar	The component's essential features can be activated by clicking on the appropriate icon in the toolbar.
(7) Menu bar	The selectable main menus are displayed here.
(8) Control menu icon	A submenu with different system functions is opened by left-clicking here with the mouse.

## General functions of all components

### The Control menu

#### 4.4 The Control menu

##### Activating Control menus

The Control menu is located in the upper left-hand corner of an application window, application icon, document window or a dialog field. Left-click this icon to open a submenu. Please note that the scope of the submenu entries in the Control menu can differ in the individual components.

##### Control menu example



Figure 4-4 Control menu example

##### Control menu functionalities

Menu item	Description
Restore	Restores the previous window size.
Move	You can move the active window with the keyboard and the arrow keys.
Resize	You can change the window size with the keyboard and the arrow keys.
Minimize	Collapses the window into an icon in the Windows taskbar.
Maximize	Expands the window to fill the screen.
Close Alt + F4	Exits the component and closes the window (not available in all components)

## 4.5 Context menus (right mouse key)

### What is a context menu?

Context menus are available for a wide variety of elements in the application. These menus offer functions that are currently "relevant" to this element and that could also be activated in different positions by menus/submenus.

### Working with the context menu

To work with a window element via the context menu, you must proceed as follows:

Step	Procedure
1	Move the mouse pointer to the window element in question.
2	Right-click with the mouse. A context menu appears for those elements that have a defined context menu.
3	Select the required menu item from the context menu by left-clicking the mouse or with a key combination.

## General functions of all components

*Context menus (right mouse key)*

### Example

The following menu items are offered if you right-click in a Caracas Server trace window:

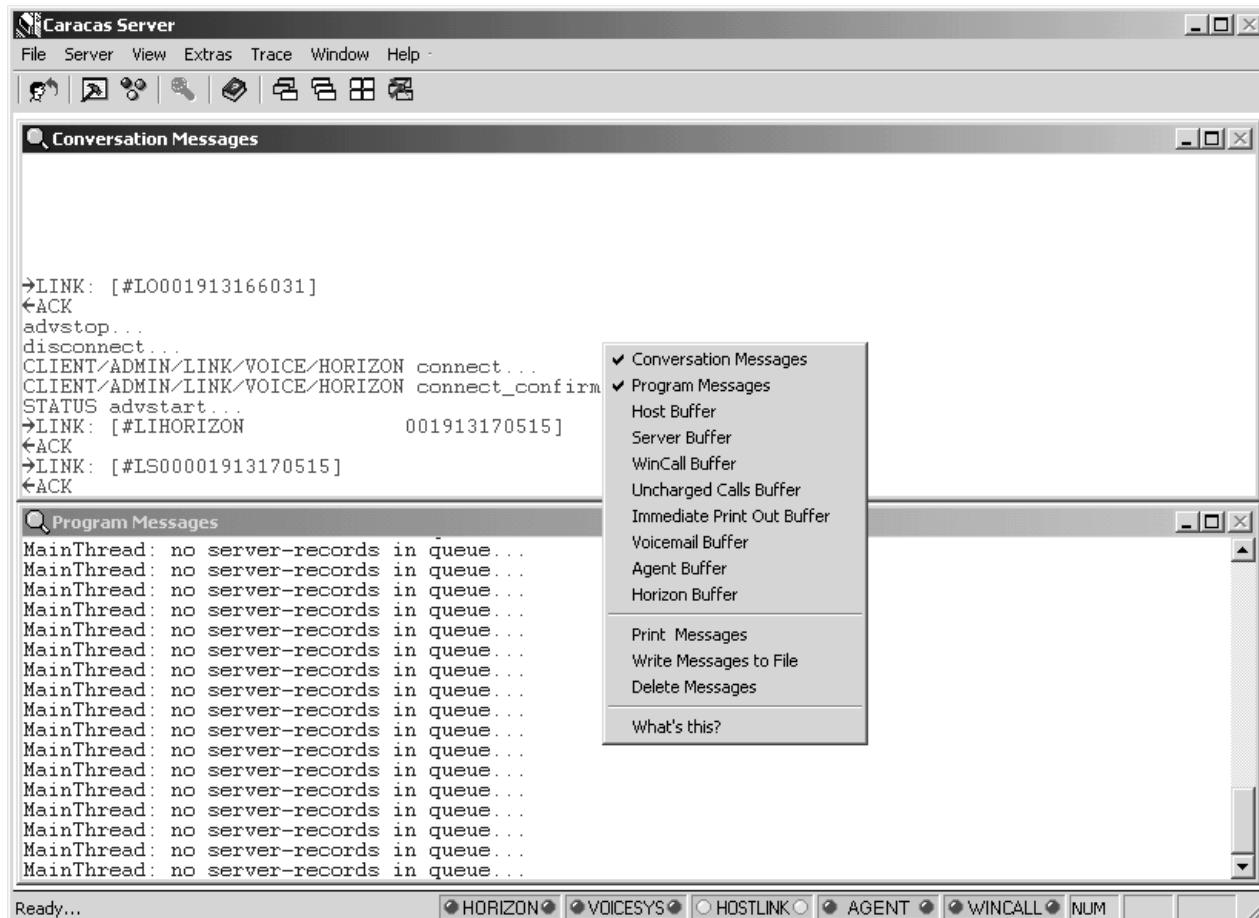


Figure 4-5 Example of a context menu

The menu items are combined from the *Trace* menu and the trace window Control menu.

## 4.6 The toolbar

### General

The toolbar can be activated in all components. The toolbar icons conceal functionalities that are executed when the relevant icon is activated. In general, these functionalities can also be activated in a more time-consuming manner by selecting the relevant (sub)menu.

### Icons available in each component

In addition to icons that execute specific functions for the component in question, there are icons that activate general functions and are therefore included in the toolbar of almost every component:

Icon	Function
	Log off the component (Logout). Corresponds to the submenu item <i>Log Off</i> in the <i>File</i> menu.
	Change password. Corresponds to the submenu item <i>Change Password</i> in the <i>Extras</i> menu
	Open all trace windows. Corresponds to the submenu item <i>Open All</i> in the <i>Trace</i> menu
	Cascade all open trace windows Corresponds to the submenu <i>Cascade</i> in the <i>Window</i> menu or the  +  key.
	Tile all open trace windows. Corresponds to the submenu <i>Tile Vertically</i> in the <i>Window</i> menu or the  +  key.
	Close all trace windows. Corresponds to the submenu <i>Tile Vertically</i> in the <i>Window</i> or the  key
	Activate help. Corresponds to the submenu <i>Help Topics</i> in the ? Menu
<b>Tip</b>	In the toolbar, you can activate a context menu that includes the menu items <i>Deactivate Toolbar</i> and <i>What's this?</i> (on the toolbar).

## General functions of all components

### The toolbar

#### Customizing the toolbar

To customize the toolbar, activate the menu item *Extras - Customize*. The following dialog box is displayed:

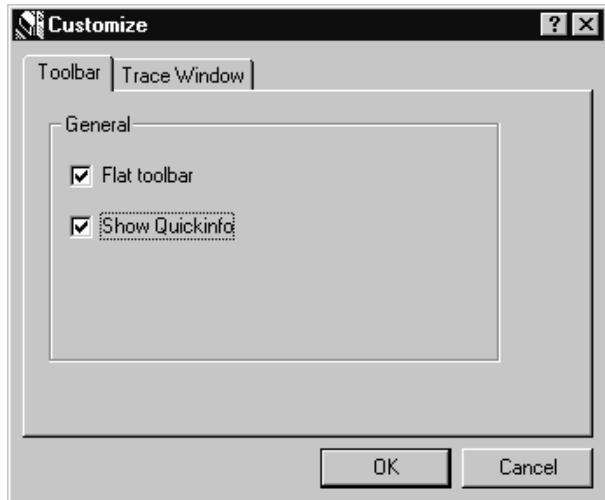


Figure 4-6      Customizing the toolbar

You can enable/disable the following options:

- *Flat toolbar*:  
When the option is disabled, the icons are displayed in the form of buttons on the toolbar. If the option is enabled, the icons appear flat on the toolbar.
- *Show Quickinfo*:  
If you want to display the help text (quickinfo) for the icon, place the cursor on the icon for more than 2 seconds without clicking on it; the option is enabled. When the option is disabled, the help text is not displayed.



In the components Caracas Service Agent (Scheduler), Caracas Link Client and Caracas Link Alarm Client no toolbar is implemented.

#### Icon help text (quickinfo)

If the mouse pointer pauses on an icon for more than 2 seconds without activating it with a mouse click, a help text appears that briefly explains the function of the icon:



Figure 4-7      Icon help text

### **Activating/deactivating the entire toolbar**

You can deactivate or reactivate the toolbar by selecting the menu item *View - Toolbar*.

### **Saving the toolbar status**

You can also specify that the current toolbar status is saved in your user profiles. To do this, select the menu item *Extras - Save Window/Toolbar-Settings*. The marked toolbar status (activated/deactivated) is regenerated the next time the program is started up with your user ID.

## General functions of all components

### Keyboard functions

## 4.7 Keyboard functions

### Default functions in components

Actions can be performed within a component or within a dialog box with the help of the following key functions.

Key(s)	Function
	Activate the online help (help topics) In dialog boxes,  activates dialog-sensitive help (similar to the Help button, if available)
	Opens the external (V.24) connection
	Closes the external (V.24) connection
	Corresponds to the menu item Open All in the Trace menu (open all trace windows)
	Corresponds to the menu item Close All in the Window menu (close all trace windows)
+	Corresponds to the menu item Tile Vertically in the Window menu
+	Corresponds to the menu item Cascade in the Window menu
+	Corresponds to the menu item Tile Horizontally in the Window menu

### Default functions in dialogs

Key(s)	Function
or  +	Closes dialog without saving the setting (corresponds to the cancel function)
	Confirms default selection (button with black border).
	Switches to the next dialog element
+	Switches to the previous dialog element

**Default functions in dialog elements**

<b>Key(s)</b>	<b>Function</b>
<b>...in input fields</b>	
	Moves cursor to the first character in the input field.
	Moves cursor to the previous character.
	Moves cursor to the next character.
	Moves cursor to the last character in the input field.
	Deletes the character to the left of the cursor.
	Deletes the character to the right of the cursor.
<b>...in list fields</b>	
	Moves cursor to the first element of the list field.
	Moves cursor upwards by one element in the list field.
	Moves cursor downwards by one element in the list field.
	Moves cursor to the last element in the list field.
<Space>	Selects element in the list field
+	Opens list field
+	Closes list field
	Moves cursor one page up through the list
	Moves cursor one page down through the list
<b>...in combination fields</b>	
	Moves cursor to the first element in the list field.
	Moves cursor upwards by one element in the list field.
	Moves cursor downwards by one element in the list field.
	Moves cursor to the last element in the list field.
<Space>	Selects element in the list field
+	Opens the list field
+	Closes the list field
	Moves the cursor one page up through the list
	Moves the cursor one page down through the list
<b>...in check boxes</b>	
<Space>	Activates or deactivates the field and the associated function

## General functions of all components

### Keyboard functions

Key(s)	Function
<b>...in spinners</b>	
	Selects the incremented value
	Select the decremented value.
<b>...in tabs</b>	
	Displays the tab to the left.
	Displays tab to the right.

## **4.8        Help system**

### **Integrated online help**

An online help system is integrated in all Caracas Link components. This can be activated by selecting the menu item *Help - Help Topics*, by clicking with the mouse on the help icon in the toolbar or by selecting the corresponding submenu item in the available context menu.

### **Using the online help**

The online help complies with the Windows industry standard. Information on how to use the help function can be found in the Windows documentation.

## General functions of all components

### About Caracas Server

#### 4.9 About Caracas Server

##### Activating product information

Copyright information or information on the version of the Caracas components installed can be found in the About window that appears when the menu item *Help - About* is activated:

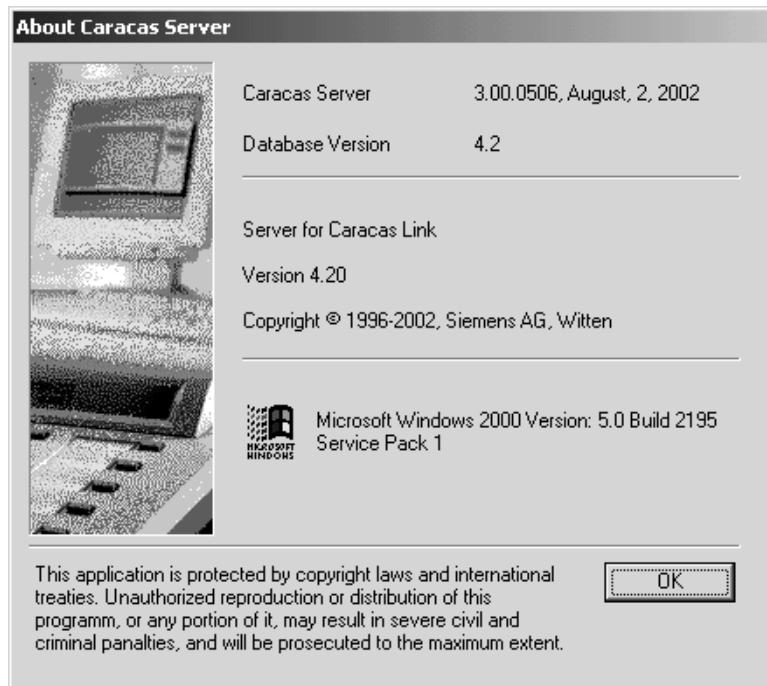


Figure 4-8 Information dialog

## 4.10 The Event Log

### What's recorded?

Caracas Link 4.00 comprises two logbooks (logs) which cover all components: the event log and the error log. Important user inputs, system logons/logoffs and processing messages are entered in the event log. Program errors and serious processing errors are entered in the error log.

### How is recorded?

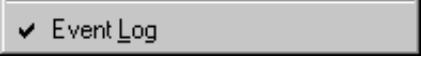
All components record the events/errors in the two central log files provided the logbook feature is active for the component. In addition to the input text, the originating component and PC name in question are recorded for each entry. This data can be evaluated with the Caracas Link Administration program.

The logbook feature is not active for the individual components after startup. This feature must be activated if required, for example, for error analysis. You can de-/activate the logbook feature in the following Caracas Link components:

- Caracas Server
- Caracas Host-Link
- Caracas Voicemail-Link
- Caracas Horizon-Link

The logbook feature can not be deactivated other caracas Link components. WinCall has an separate logbook (see Section 5.1.11 for Hicom 150E/200, Section 5.4.10 for WinCall Hicom 150E Office, Section 5.2.13 for WinCall Hicom 300 and Section 5.4.10).

### Starting/stopping the logbook

Step	Procedure
<b>...Starting the logbook</b>	
1	Select the menu item <i>Extras - Event Log</i> . A check mark appears beside the menu item: 

## General functions of all components

### The Event Log

#### ... Stopping the logbook

- 1 Select the menu item *Extras - Event Log*. The check mark beside the menu item disappears:



Event Log

## 4.11 Working with the trace module

### Introduction

The different Caracas Link components communicate with each other via various buffers and messages. You can trace the individual entries in the various buffers, communicated immediate messages, program and conversation messages in a separate trace window.

#### 4.11.1 General Functions

##### General

The following description is valid for the components Caracas Server, Caracas Voicemail-Link, Caracas Host-Link, Caracas Horizon-Link and WinCall.

##### Opening/closing a trace window

There are a number of different methods for opening/closing trace windows:

Step	Procedure
<b>... You want to open/close all available trace windows:</b>	
1	To open all available trace windows, press <b>[F5]</b> or select the menu item <i>Trace - Open All</i>
2	To close all open trace windows, press <b>[F6]</b> or select the menu item <i>Window - Close All</i>
<b>... You want to open/close a single trace window:</b>	
1	Activate/deactivate the window in question using the menu item <i>Trace</i> . Activated trace windows are identified in the <i>Trace</i> menu by a check mark beside window's submenu point.
2	Alternatively, you can open the context menu in a trace window by right-clicking the mouse and activate/deactivate the required trace window. Active trace windows are also identified here by a check mark.



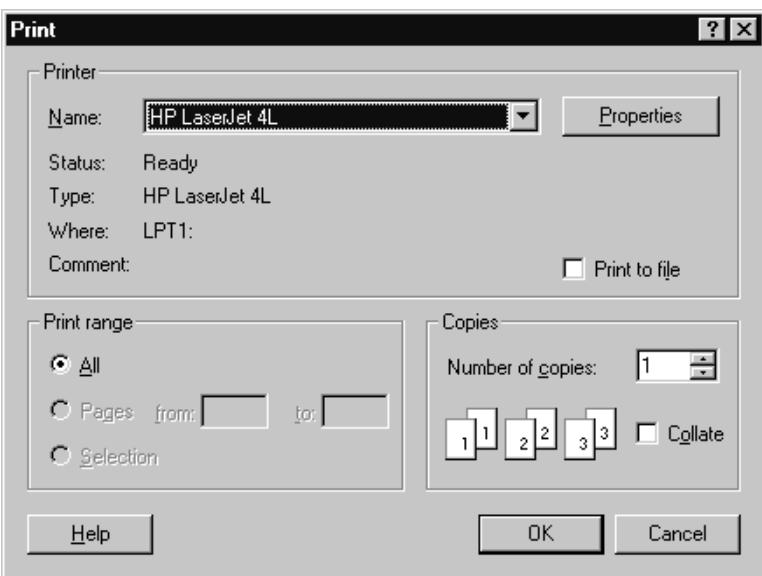
The message "(n.a.) xxx" appears in unused but open trace windows in the Caracas Server, Caracas Host-Link, Caracas Horizon-Link and Caracas-Voicemail-Link components to indicate the status (e.g. in the voicemail buffer table trace window in the Caracas Server if no voicemail system is connected/installed).

## General functions of all components

### Working with the trace module

#### Printing a trace window

You can output the contents of the window to an available printer in the system in order to document the current status of a trace window.

Step	Procedure
1	Activate the Control menu or alternatively the context menu of the trace window in question and select <i>Print Messages</i> .
2	Enter your individual settings in the ensuing Windows print dialog box, e.g. select the output printer and start printing by confirming your entries: 

#### Emptying the trace window

Proceed as follows to empty the contents of a trace window:

Step	Procedure
1	Activate the Control menu or alternatively the context menu of the trace window in question and select <i>Delete Messages</i> .

## Arranging the trace window in a component

The active trace windows can be arranged as follows:

Alternative	Procedure
<b>...Cascade</b>	
1	Press  + <b>F5</b>
2	Activate the menu item <i>Window - Cascade</i>
3	Activate the appropriate icon in the toolbar
<b>...Tile horizontally</b>	
1	Press  + <b>F6</b>
2	Activate the menu item <i>Window - Tile Horizontally</i>
3	Activate the appropriate icon in the toolbar
<b>...Tile vertically</b>	
1	Press  + <b>F4</b>
2	Activate the menu item <i>Window - Tile Vertically</i>
3	Activate the appropriate icon in the toolbar

## **General functions of all components**

### *Working with the trace module*

#### **4.11.2 Writing of single trace windows to a trace file**

##### **General**

The description below applies to the components Caracas Server, Caracas Host-Link, Caracas Voicemail-Link, Caracas Horizon-Link and WinCall. See Section 4.11.4 for writing trace information to trace file in the components Caracas Service Agent (Scheduler, Messenger and Service) and also Caracas Link Client / Caracas Link Alarm Client.

##### **Writing a trace information to file**

Each trace window by default has a capacity for 500 entries. If this capacity is reached, each new entry in a trace window overwrites the oldest entry. To document a trace window situation, you can record the current status of a trace window in a file:

<b>Step</b>	<b>Procedure</b>
1	Activate the Control menu or alternatively the context menu of the trace window in question and select the point <i>Write Messages to File</i> .
2	A message field appears which contains the path/file name of the trace file for the trace window: 

##### **Destination folder of a trace file**

The so-called shell user folder in Windows is selected by default as the target folder for trace files:

- Windows 2000  
C:\Documents and Settings\[Windows user]\My Documents

##### **Naming convention for trace files**

<Component name>\_<Trace designation>.trc

Example for program messages in Caracas Server:

C:\Documents and Settings\Caracas\My Documents\SERVER\_PRGMESS.TRC

## Overview of trace files

Name of trace file	Buffer
<b>...trace files initiated in Caracas Server</b>	
SERVER_CONVERSATION.TRC	Conversation Messages
SERVER_PRGMESS.TRC	Program Messages
SERVER_HOSTBUFF.TRC	Host Buffer (Jobs for Front-Office System)
SERVER_SRVRBUFF.TRC	Server Buffer (Jobs for Caracas Server)
SERVER_WINCALLBUFF.TRC	WinCall Buffer (Jobs for PBX-System)
SERVER_CALLBUFF.TRC	Uncharged Calls Buffer (Calls for external call calculation)
SERVER_PRTBUFF.TRC	Immediate Printout Buffer
SERVER_VOICEBUFF.TRC	Voicemail Buffer (Jobs for Voicemail System)
SERVER_SRVCBUFF.TRC	Agent Buffer (Jobs for Caracas Scheduler)
SERVER_CSHBUFF.TRC	Horizon Buffer
<b>...trace files initiated in Caracas Host-Link</b>	
LINK_PRGMESS.TRC	Program Messages
LINK_HOSTBUFF.TRC	Host Buffer (Jobs for Front-Office System)
LINK_SRVRBUFF.TRC	Server Buffer (Jobs for Caracas Server)
LINK_CONVERSATION.TRC	Host Conversation
LINK_FTPBUFF.TRC	Host records from File (Jobs for Front-Office System)
<b>...trace files initiated in Caracas Voicemail-Link</b>	
VOICE_PRGMESS.TRC	Program Messages
VOICE_VOICEBUFF.TRC	Voicemail Buffer (Jobs for Voicemail System)
VOICE_SRVRBUFF.TRC	Server Buffer (Jobs for Caracas Server)
VOICE_CONVERSATION.TRC	Voicemail Conversation
VOICE_FTPBUFF.TRC	Voicemail records from File (Jobs for Voicemail System)
<b>...Trace files initiated in Caracas Horizon-Link</b>	
CSTAR_PRGMESS.TRC	Program Messages
CSTAR_VOICEBUFF.TRC	Horizon Buffer
CSTAR_SRVRBUFF.TRC	Server Buffer
CSTAR_CONVERSATION.TRC	Horizon conversation

## General functions of all components

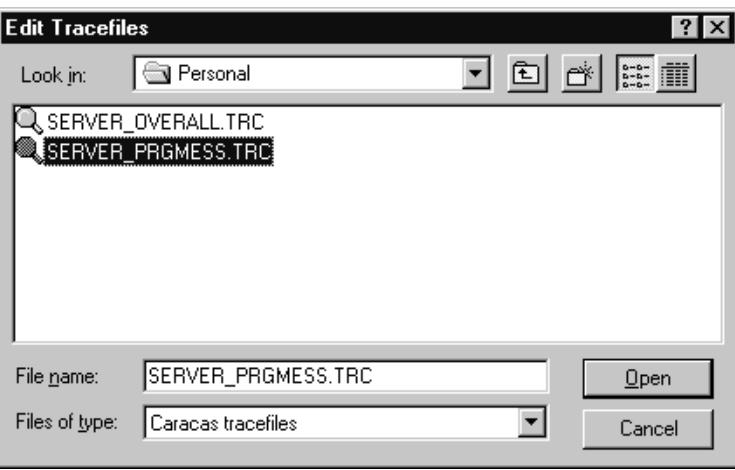
### *Working with the trace module*

Name of trace file	Buffer
<b>...trace files initiated in WinCall Hicom 200/150E</b>	
WCH200_PROGMESS.TRC	Program Messages
WCH200_HCCS.TRC	Hicom HCCS-Service
WCH200_AMHOST.TRC	Hicom AMHOST-Service
WCH200_MR.TRC	Hicom MR-Service
WCH200_CPSTREP.TRC	Hicom CPSTREP-Service
WCH200_TDS.TRC	Hicom TD-Service
WCH200_INTERFACE.TRC	Hicom Conversation
WCH200_SRVRBUFF.TRC	Server Buffer
WCH200_MESSAGE.TRC	Conversation Messages
<b>...trace files initiated in WinCall Hicom 300</b>	
WCH300_PROGMESS.TRC	Program Messages
WCH300_DGV.TRC	Hicom ECCS-Service
WCH300_TDD.TRC	Hicom TD-Service
WCH300_GUE.TRC	Hicom CDR-Service
WCH300_FAMOS.TRC	Hicom FAMOS-Service
WCH300_INTERFACE.TRC	Hicom Conversation (1st / 2nd /... Hicom 300 System)
WCH300_MESSAGE.TRC	Conversation Messages
WCH300_SRVRBUFF.TRC	Server Buffer
WCH300_AMO.TRC	AMO Commands (1st / 2nd /... Hicom 300 System)
<b>...trace files initiated in WinCall Hicom 150E Office</b>	
WCH150CSTA_PROGMESS.TRC	Program Messages
WCH150CSTA_MR.TRC	Hicom MR-Service
WCH150CSTA_TDS.TRC	Hicom TD-Service
WCH150CSTA_AMHOST.TRC	Hicom AMHOST-Service
WCH150CSTA_CSTA.TRC	CSTA-Commands
WCH150CSTA_MONITORING.TRC	Extension Monitoring
WCH150CSTA_INTERFACE.TRC	Hicom Conversation
WCH150CSTA_SRVRBUFF.TRC	Server Buffer
WCH150CSTA_MESSAGE.TRC	Conversation Messages

Name of trace file	Buffer
<b>...Trace file initiated in WinCall HiPath 4000</b>	
WCHP4000_PROGMESS.TRC	Program Messages
WCHP4000_DGV.TRC	HiPath ECCS-Service
WCHP4000_TDD.TRC	HiPath TD-Service
WCHP4000_GUE.TRC	HiPath CDR-Service
WCHP4000_FAMOS.TRC	HiPath FAMOS-Service
WCHP4000_INTERFACE.TRC	HiPath Conversation
WCHP4000_MESSAGE.TRC	Conversation Messages
WCHP4000_SRVRBUFF.TRC	Server Buffer
WCHP4000_AMO.TRC	AMO Commands

## Editing trace files

As a user (from Level 2) you can edit trace files from Caracas:

Step	Procedure
1	Activate the menu item <i>Extras - Edit Tracefiles</i> .
2	Select the appropriate trace file in the file window and activate the button <i>Open</i> to confirm your selection: 
3	You can thus open the file with the Windows editor and, for example, print it out or search for particular entries. All trace files are created as read-only files by the relevant component.

## General functions of all components

### Working with the trace module

#### 4.11.3 Overall trace files (all trace windows)

##### General

The description below applies to the components Caracas Server, Caracas Voicemail-Link, caracas Host-Link, Caracas Horizon-Link and WinCall. See Section 4.11.4 for writing the trace windows to tracefile in the components Caracas Service Agent (Scheduler, Messenger and Service) as well as Caracas Link Client / Caracas Link Alarm Client.

##### Starting/stopping writing all trace windows to trace files

In addition to writing individual trace windows to trace files in order to obtain a momentary record of this trace window, administrators can (level 2 min.) write all trace messages to a single trace file. All new trace messages are thus not only entered in the appropriate windows, but are recorded in a central trace file in sequence of occurrence as of the start of the writing operation.

Step	Procedure
1	To start writing all trace messages to a file, activate the menu item <i>Trace - Start Writing to Swap File</i> .
2	To stop writing all trace messages to a file, activate the menu item <i>Trace - Stop Writing to Swap File</i> :



##### Stopping writing all trace messages to trace file automatically

This feature is stopped by the respective component after 24 hours, provided it has not already been terminated by the user.

##### Target directory for overall trace files

The shell user directory is selected as the default target directory for overall trace files:

- in Windows 2000:  
C:\Documents and Settings\[Windows user]\My Documents

### **Naming convention for trace files (all trace windows)**

<Component name>\_OVERALL.trc

Example of the overall trace file in Caracas Server:

C:\Documents and Settings\Caracas\My Documents\SERVER\_OVERALL.TRC

### **Overview of overall trace files (all trace windows)**

<b>Name</b>	<b>Overall trace file for component</b>
SERVER_OVERALL.TRC	Caracas Server
LINK_OVERALL.TRC	Caracas Host-Link
VOICE_OVERALL.TRC	Caracas Voicemail-Link
WCH200_OVERALL.TRC	WinCall Hicom 200/150E
WCH300_OVERALL.TRC	WinCall Hicom 300
WCH150_CSTA_OVERALL.TRC	WinCall Hicom 150E Office
WCH4000_OVERALL.TRC	WinCall HiPath 4000
CSTAR_OVERALL	Caracas Horizon-Link

## General functions of all components

### Working with the trace module

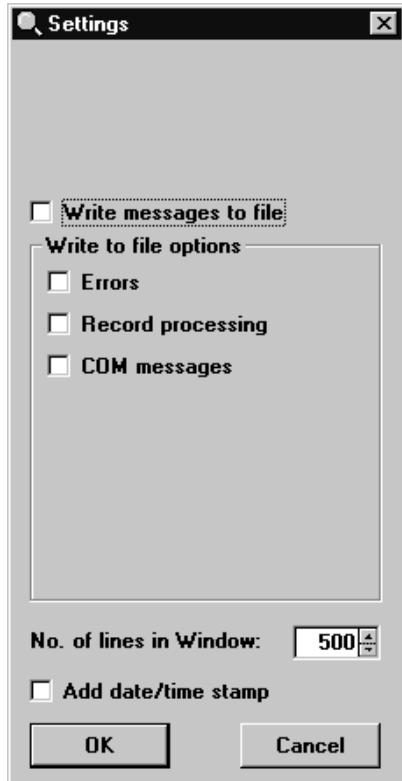
#### 4.11.4 (Overall) writing of trace messages to a trace file (Caracas Service Agent, Caracas Link Clients)

##### General

The description below applies to the components Caracas Administration, Caracas Service Agent (Scheduler / Messenger / Service) and Caracas Link Client and Caracas Link Alarm Client. See chapter 4.11.2 and chapter 4.11.3 for writing the trace windows to tracefile in the other components.

##### Writing a trace window to tracefile

You can write all trace windows to a tracefile to document a specific situation. When started, this action not only enters all new trace messages in the relevant windows, it simultaneously logs them in a central tracefile in the sequence in which they occurred.

Step	Procedure
1	Activate the menu item <i>Trace - Settings</i> .
2	A dialog box appears in which you can define the trace messages which are to be written to tracefile:  The screenshot shows a Windows-style dialog box titled "Settings". Inside, there's a checkbox labeled "Write messages to file". Below it is a section titled "Write to file options" containing three checkboxes: "Errors", "Record processing", and "COM messages". At the bottom, there's a numeric field set to "500" with a spin button, labeled "No. of lines in Window". Below that is another checkbox labeled "Add date/time stamp". At the very bottom are two buttons: "OK" and "Cancel".

Step	Procedure
3	To write to tracefile, activate the option <i>Write messages to file</i> . Use the options listed under this (in this example the dialog box for Caracas Link Scheduler) to control which trace messages are to be written to the tracefile.
4	Define the max. number of trace window lines in the displayed input field. The default value is 500. When this number is reached in a trace window, the oldest message is deleted and the new message is entered in the trace window.
5	Using the option field <i>Add date / time stamp</i> , define whether the trace messages are to be stored in the trace window / tracefile with or without date and time.

### Destination folder for trace file

The destination folder selected as default for trace files is the Shell User Directory:

- in Windows 2000:  
C:\Documents and Settings\[Windows user]\My Documents

### Naming convention for trace file

<Component name>\_<Trace name>.trc

Example of overall trace file for Caracas Link Service Agent (Scheduler):

- C:\Documents and Settings\Caracas\My Documents\CSCHED\_OVERALL.TRC



The Caracas Link Client and the Caracas Link Alarm Client can be installed under Windows 9x/NT. The destination folder for the trace files varies depending on the installed Windows system (see section Section 15.6 in the Service manual).

### Overview of trace file

Name of trace file	Buffer
CMSP_OVERALL.TRC	Caracas Service Agent (Messenger)
CSCHED _OVERALL.TRC	Caracas Service Agent (Scheduler)
CSRVC_OVERALL.TRC	Caracas Service Agent (Service)
CLCLIENT_OVERALL.TRC	Caracas Link Client
CLALARM_OVERALL.TRC	Caracas Link Alarm Client
CADMIN_OVERALL.TRC	Caracas Administration

### Editing trace files

Trace files can be opened and edited with any editor the user desires, e.g. NotePad.

## General functions of all components

### Working with the trace module

#### 4.11.5 Customizing the trace window display

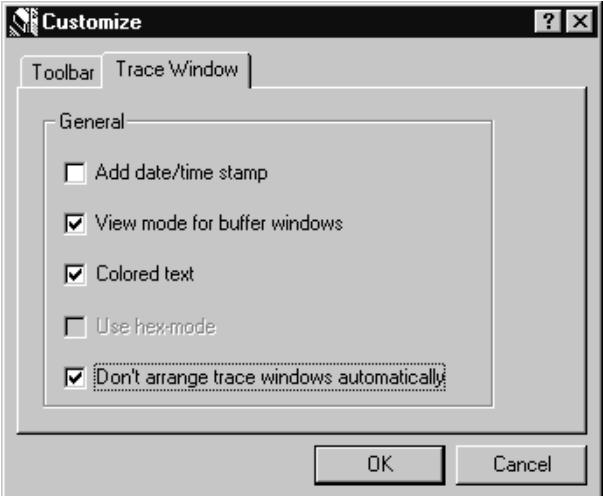
##### General

The trace message output in Caracas Server, Caracas Host-Link, Caracas Voicemail-Link, Caracas Horizon-Link and WinCall are customized via a special menu item under *Extras*.

In Caracas Administration, Caracas Service (Scheduler, Messenger and Service), Caracas Link Client and Caracas Link Alarm Client components, this is performed via the trace configuration (*Trace - Configuration*, see Section 4.11.4)

##### Customizing the trace window display

The layout of the trace message displays in the trace windows can be changed individually.

Step	Procedure
1	Activate the dialog <i>Extras - Customize</i> .
2	Select the <i>Trace window</i> tab in the dialog box which appears. 

Step	Procedure
3	<p>You can activate or deactivate the following options:</p> <ul style="list-style-type: none"> <li>• <i>Add date/time stamp:</i> When this option is activated, the component inserts the date / time of the message as well as the trace message in the window.</li> <li>• <i>View mode for buffer windows:</i> When this option is activated, the contents of the buffer window is shown in View mode, i.e. in the form of a table with column headings.</li> <li>• <i>Colored text:</i> When this option is activated, the trace messages are displayed in red or blue font instead of black font.</li> <li>• <i>Use hex-mode:</i> When this option is activated, the trace messages are displayed in certain trace windows in hex mode instead of in plain font (e.g. Hicom conversation window in WinCall)</li> <li>• <i>Don't arrange trace windows automatically:</i> When this option is activated, the trace windows are not re-arranged on the screen of the component after actions using the trace module (e.g. open new window, or close window). This means that all window settings remain as they were.</li> </ul>
4	Confirm your setting by clicking on <i>OK</i> .
<b>Tip</b>	The settings that you have performed are user-specific and are therefore only valid for the user currently logged on.

## **General functions of all components**

### *Working with the trace module*

#### **4.11.6 Saving window/toolbar settings**

##### **General**

You can save the settings of the trace window currently open as well as its window and color settings and screen layout in order to reactivate these settings the next time the component is started up:

<b>Step</b>	<b>Procedure</b>	
1	Open/close the trace window in question, select the required layout and color display for the window.	
2	<b>...in the components Caracas Server, Caracas Host-Link, Caracas Horizon-Link, Caracas Voicemail-Link and WinCall</b>	<b>...in the components Caracas Administration, Caracas Service Agent (Scheduler, Messenger, Service), Caracas Link Client and Caracas Link Alarm Client</b>
	Activate the menu item <i>Extras - Save Window/Toolbar Settings</i> .	Activate the menu item <i>Window - Save Settings</i> .

#### 4.11.7 Overview of trace functionalities

##### General

The following table is an overview of the options possible with the trace module in the individual components of Caracas Link:

Function	Server	Host-Link	Voice-mail-Link	Horizon Link	Service	WinCall	Alarm Client	Client
Open/close the trace window	X	X	X	X	X	X	X	X
Print trace window contents	X	X	X	X		X		
Delete trace window contents	X	X	X	X		X	X	
Arrange trace windows	X	X	X	X	X	X		
Write individual trace windows to a trace file	X	X	X	X		X		
Edit a trace file	X	X	X	X		X		
Write all trace windows to a trace file	X	X	X	X	X	X	X	X
Customize the trace window display	X	X	X	X	X	X	X	X
Save window settings	X	X	X	X	X	X	X	X

## **General functions of all components**

*Working with the trace module*

## 5 Configuring WinCall

### 5.1 Configuring WinCall Hicom 200/150E

#### 5.1.1 General

##### Configuration option for Caracas

WinCall is configured by the service technician (user level 1) as part of the cutover operation. The following options are configured within the framework of this operation:

- Protocol options for connecting the server PC to Hicom via V.24 (RS232)
- Services and service options
- Caracas-specific options
- Extensions
- COS (classes of service)

##### Starting WinCall Hicom 200/150E

If it is not already active, the WinCall Hicom 200/150E component is started as part of configuration.

Step	Procedure
1	Activate the start menu and/or the WinCall Hicom 200/150E desktop link.
2	Log on using the technician password.

##### Deactivating the connection to Hicom

In order to configure options, the connection to Hicom should be deactivated. This ensures that all the options you have set are available the next time the connection is set up.

Step	Procedure
1	Activate the <i>Conversation – Close Conversation to Hicom</i> menu or press <b>[F3]</b> .
Tip	The status of the connection to Hicom is indicated in the status bar (see Section 5.1.8)

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

#### 5.1.2 Configuring protocol options

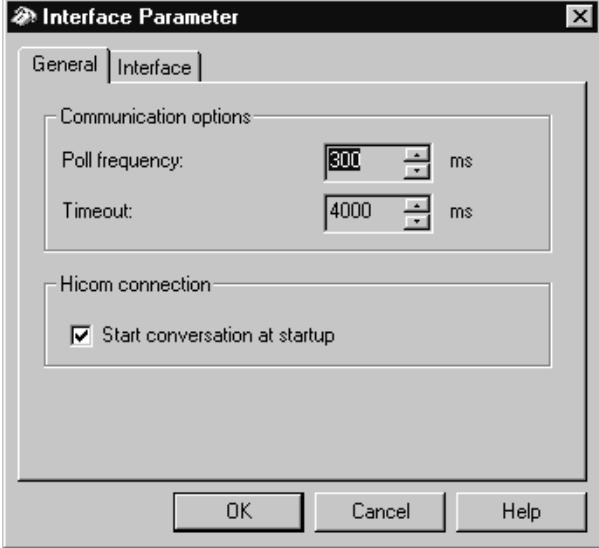
##### Which options are configured?

Hicom 200/150E is connected for Caracas via a V.24 (RS232) interface in the Caracas Server PC. The configuration of the V.24 (RS232) options includes all fundamental interface options that define the V.24 (RS232) connection properties. The following options are to be configured:

- General V.24 protocol options
- Interface options

##### General protocol options

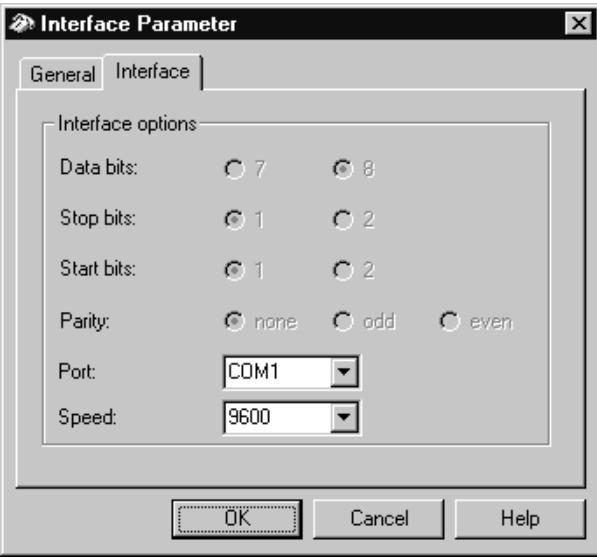
To configure the general options, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings – Interface Parameter</i> .
2	Select the tab <i>General</i> . 
3	Enter the time (in ms) that the interface is to wait for new data in the <i>Poll frequency</i> input field under <i>Communication options</i> . Enter the maximum time (in ms) in the <i>Timeout</i> field that the system waits for an ACK before it sends out an enquiry or clears down the connection. This value can range from 1000 to 20000 ms.
4	Under <i>Hicom connection</i> , you can define whether the connection to Hicom is to be set up automatically when WinCall is started (check box activated). Otherwise, the connection is set up manually as required when selecting the <i>Conversation – Open Conversation to Hicom</i> menu item.

Step	Procedure
5	Confirm your input by pressing OK.
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topics</i> The online help is started by activating the help for the current dialog box.</li> </ul>

## Interface options

To configure interface options, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings – Interface /Parameter</i> .
2	<p>Select the tab <i>Interface</i>.</p> 
3	<p>The settings under <i>Data bits</i>, <i>Stop bits</i>, <i>Start bits</i> and <i>Parity</i> are preset in Hicom 200 and thus cannot be changed. These are displayed here for information purposes only.</p> <p>Under <i>Port</i>, select the port that was selected for the connection to Hicom and enter a baud rate in the <i>Speed</i> field.</p>
4	Confirm your input by pressing OK.

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

Step	Procedure
Tip	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## 5.1.3 Configuring general options

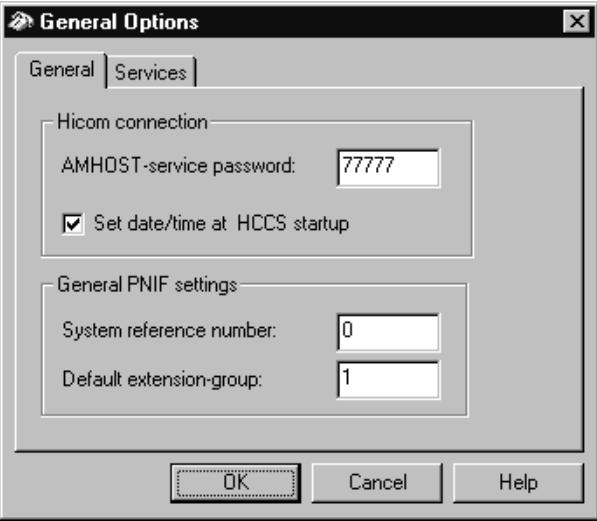
### Which general options are configured?

The configuration of general options includes all settings for the Hicom 200/150E services available. The following options are to be configured:

- General options
- Services

### General options

To configure the general options, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings – General Options</i> .
2	Select the tab <i>General</i> . 
3	Enter the required AMHOST service password in the relevant field. This password is transferred by WinCall when you start the AMHOST service.
4	Activate the <i>Set date/time at HCCS startup</i> check box. The Hicom 200 time is then set to the PC time at HCCS service startup.
5	The options under <i>General PNIF settings</i> are used for the PNIF interface between WinCall and Caracas Server. Changing these options is not necessary.
5	Confirm your input by pressing OK.

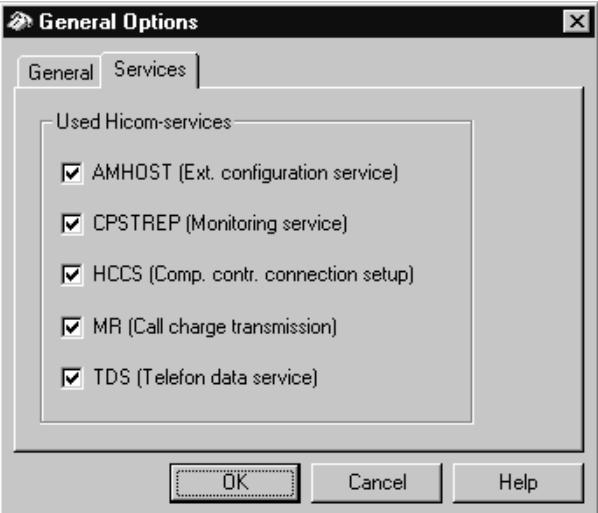
## Configuring WinCall

### Configuring WinCall Hicom 200/150E

Step	Procedure
<b>Tip</b>	<p>By right-clicking the mouse, you can call up a contact menu in which you can activate the following menu items (provided they are available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Services

To configure the services, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings – General Options</i> .
2	Select the tab <i>Services</i> . 
3	You can use this tab to indicate which Hicom services should be available in WinCall. A service can only be started if it is activated here. Deactivating a service in this dialog box does not affect a service that is currently running. In general, you can configure the AMHOST, CPSTREP, HCCS, MR and TDS services.
4	Confirm your input by pressing OK.
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## 5.1.4 Configuring HCCS options

### Which HCCS options are configured?

The configuration of HCCS options includes all settings for the HCCS service (DP-controlled connection setup) on Hicom 200/150E. The following options are to be configured:

- General HCCS options
- HCCS codes

#### General HCCS options

To configure the general HCCS options, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - HCCS-Options</i> .
2	Select the tab <i>General</i> tab. 
3	Every job transferred to the HCCS service is canceled if the system was unable to complete it within the time entered <i>Cancel Service after</i> . A wakeup call is canceled when the time span entered under <i>Stop wakeup calls after</i> elapses. The time span for wakeup call should be less than the span for service cancellation, so that the wakeup call is not ended ahead of schedule by a service cancellation. The timeouts are both specified in seconds.

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

Step	Procedure
4	You can specify whether the wakeup call is carried out with <i>Music on Hold</i> or with <i>Recorded announcement</i> under <i>Execute wakeup calls with</i> . If you select the <i>Recorded announcement</i> option, you must enter the number of the required announcement in the <i>Rec. announcement number</i> field.
5	Confirm your input by pressing OK.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>● <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>● <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## HCCS codes

To configure the HCCS codes, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - HCCS-Options</i> .
2	Select the tab <i>Access codes</i> .

A screenshot of a Windows-style dialog box titled "HCCS-Options". The dialog has two tabs at the top: "General" and "Access codes", with "Access codes" being the active tab. Below the tabs is a section labeled "Codes for" with a list of six items, each with a text label and a corresponding input field containing a code:

- Set message waiting: \*53
- Delete message waiting: #53
- Set diversion: \*45
- Delete diversion: #45
- Set date / time: \*74
- Line access: 0

At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

Step	Procedure
3	<p>Define the codes with which specific HCCS functions can be executed at the telephone in the ensuing dialog box. The codes entered here must correspond to the codes entered for Hicom 200.</p> <p>You can define codes for the following HCCS functions:</p> <ul style="list-style-type: none"> <li>• Set message waiting</li> <li>• Delete message waiting</li> <li>• Set diversion</li> <li>• Delete diversion</li> <li>• Set date/time</li> <li>• Line access</li> </ul>
4	Confirm your input by pressing OK.
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> </ul>

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

#### 5.1.5 Configuring TDS options

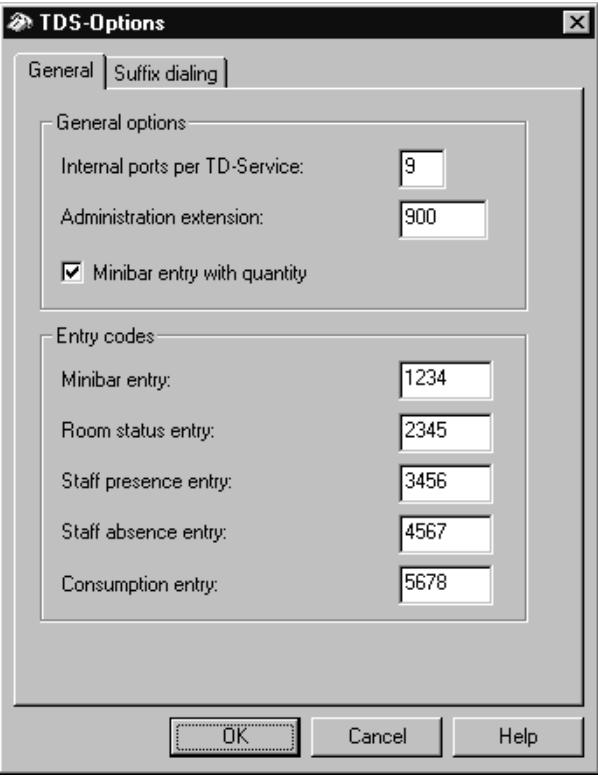
##### Which TDS options are configured?

The configuration of TDS options includes all settings for the TD service (Telephone Data Service) on Hicom 200/150E. The following options are to be configured:

- General options
- Dialing suffixes

##### General options

To configure the general options, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings – TDS options</i> .
2	Select the tab <i>General</i> . 
3	Enter the number of ports to be used per TD service in the <i>Internal ports per TD-Service</i> field. This option defines the number of extensions that can use the same service simultaneously. The maximum value is 9.

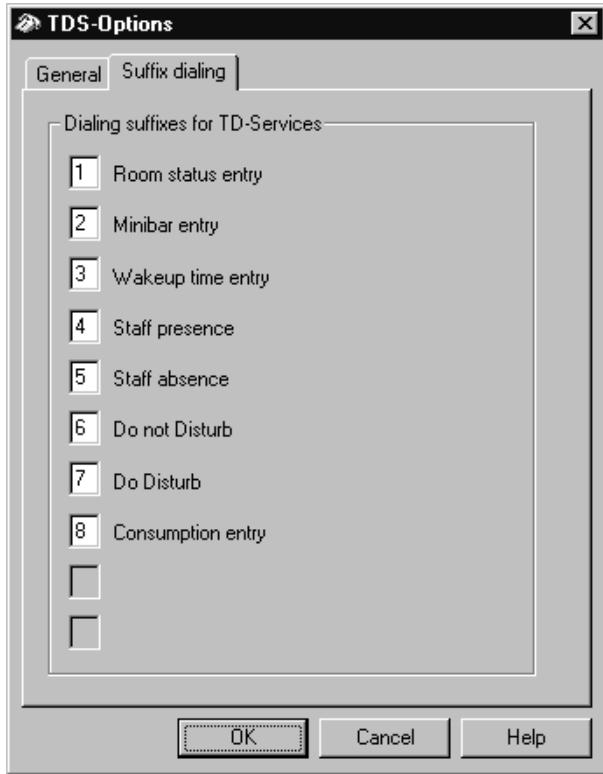
<b>Step</b>	<b>Procedure</b>
4	Enter the number of the extension that is authorized to perform guest-related services for other extensions in the <i>Administration extension</i> field (e.g. reception telephone).
5	If you activate the <i>Minibar entry with quantity</i> check box, you will be asked to specify the quantity when making minibar entries at the guest telephone.
6	A user must enter an entry code to receive authorization to start a TD service at a guest telephone. You can specify entry codes for the following TD services: <ul style="list-style-type: none"> <li>• Minibar entry</li> <li>• Room status entry</li> <li>• Staff presence entry</li> <li>• Staff absence entry</li> <li>• Consumption entry</li> </ul>
7	Confirm your input by pressing OK.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> </ul>

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

#### TDS suffix dialing

To configure TDS suffix dialing, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings – TDS options</i> .
2	Activate the tab <i>Suffix dialing</i> . 
3	The input dialing suffixes configured here at the telephone identify the appropriate application-specific services after TD service startup.
4	Confirm your input by pressing OK.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

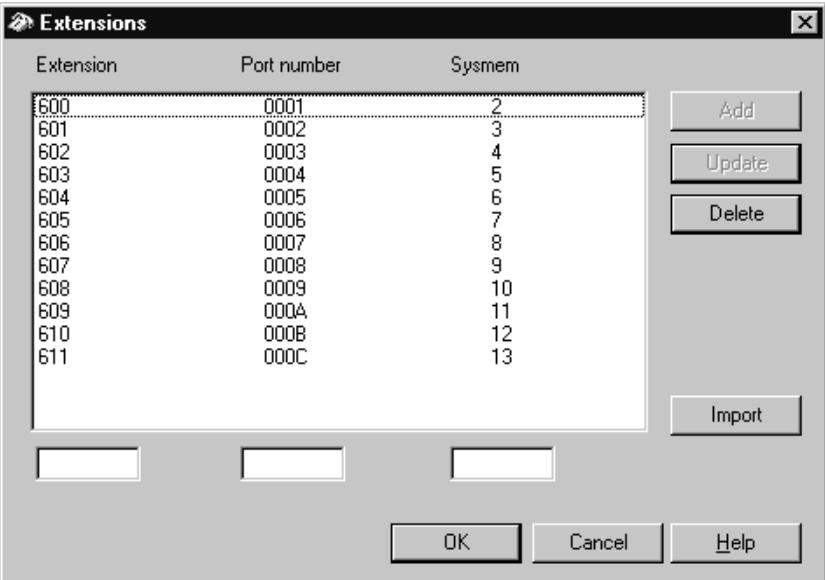
## 5.1.6 Extension configuration

### General

Extension settings are configured in this dialog box. Each extension requires three values that must be identified for WinCall. These values are available in the connected Hicom system.

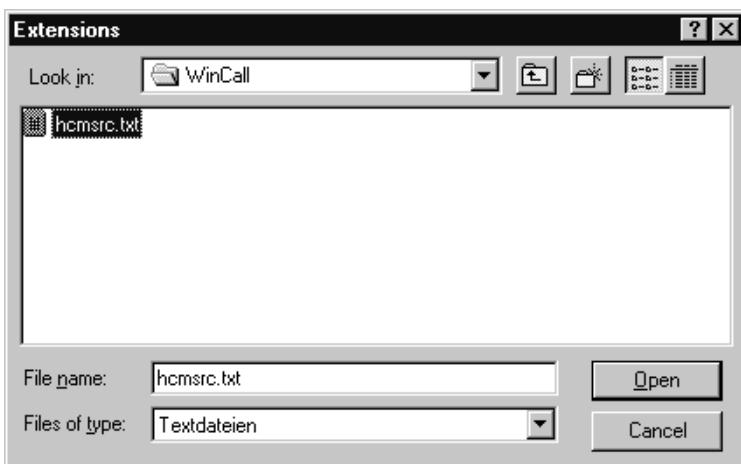
A configuration file generated by the "Tool 200" application can be loaded by clicking *Import* (offline import). The values then appear in the dialog box.

### Configuring extensions

Step	Procedure																																							
1	Activate the menu item <i>Settings – Extensions</i> .  <table border="1"> <thead> <tr> <th>Extension</th> <th>Port number</th> <th>System</th> </tr> </thead> <tbody> <tr><td>600</td><td>0001</td><td>2</td></tr> <tr><td>601</td><td>0002</td><td>3</td></tr> <tr><td>602</td><td>0003</td><td>4</td></tr> <tr><td>603</td><td>0004</td><td>5</td></tr> <tr><td>604</td><td>0005</td><td>6</td></tr> <tr><td>605</td><td>0006</td><td>7</td></tr> <tr><td>606</td><td>0007</td><td>8</td></tr> <tr><td>607</td><td>0008</td><td>9</td></tr> <tr><td>608</td><td>0009</td><td>10</td></tr> <tr><td>609</td><td>000A</td><td>11</td></tr> <tr><td>610</td><td>000B</td><td>12</td></tr> <tr><td>611</td><td>000C</td><td>13</td></tr> </tbody> </table>	Extension	Port number	System	600	0001	2	601	0002	3	602	0003	4	603	0004	5	604	0005	6	605	0006	7	606	0007	8	607	0008	9	608	0009	10	609	000A	11	610	000B	12	611	000C	13
Extension	Port number	System																																						
600	0001	2																																						
601	0002	3																																						
602	0003	4																																						
603	0004	5																																						
604	0005	6																																						
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608	0009	10																																						
609	000A	11																																						
610	000B	12																																						
611	000C	13																																						
<b>...Adding new extensions</b>																																								
2	Enter the extension number, the port number and the system number of the extension to be added in the input fields in the relevant columns.																																							
3	Click the <i>Add</i> button which becomes active as soon as the last value is entered in the last input field. The new extension is included in the list.																																							

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

Step	Procedure
<b>...Changing settings for the configured extension</b>	
2	Select the entry to be changed in the list of created extensions. The values for this extension are transferred to the input fields below the relevant columns where they can be changed.
3	Click <i>Change</i> to confirm your changes. The changed values are transferred to the list.
<b>...Importing extension configuration data (offline)</b>	
2	Click <i>Import</i> to import configuration data in offline mode from a file created with "Tool 200". The following dialog box appears for opening the required import file:  The screenshot shows a Windows-style dialog box titled 'Extensions'. In the top left, there's a 'Look in:' dropdown set to 'WinCall' and a file list containing 'hcmsrc.txt'. Below the list are two buttons: 'File name:' with 'hcmsrc.txt' and 'Open', and 'Files of type:' with 'Textdateien' and 'Cancel'.
3	Search for or select the required import file and confirm your selection with <i>Open</i> .
4	No other message appears if the system is able to import the file contents. You are returned to the <i>Extensions</i> dialog box and the imported extensions are displayed in the list. All extension entries are transferred from the import file. This operation overwrites extensions that already exist. An error message appears if the contents of the file cannot be imported, e.g. because the data available is in the wrong format. Click <i>OK</i> to confirm the message and return to the <i>Extensions</i> dialog box.  The screenshot shows a standard Windows error dialog box with a black header bar containing the title 'WinCall Hicom 200/150E' and a close button. The main area has a yellow warning icon and the text 'Error processing with extension configuration file'. At the bottom is an 'OK' button.

Step	Procedure
<b>...Deleting extensions</b>	
2	To delete extensions, select the relevant extension from the list and then click <i>Delete</i> . The extension entry is removed.
<b>Tip</b>	You can also select a number of extensions in the extension list and delete them simultaneously. To do this, hold down the  key or the  key when selecting the extension.
<b>...Quitting extension configuration</b>	
2	Click <i>OK</i> to quit the extension configuration operation and save your input. Click <i>Cancel</i> to quit the extension configuration operation without saving your changes.

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

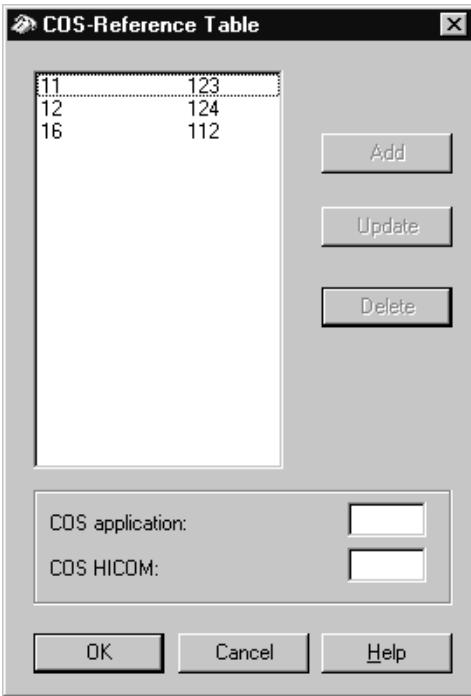
#### 5.1.7 Configuring the COS reference table

##### General

You can assign the two-digit classes of service used by Caracas to the three-digit classes of service used by Hicom 200/150E and configured in "Tool 200" in this dialog box.

##### Configuring the COS reference table

To create or change assignments in the COS reference table, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings – COS-Reference Table</i> . 
<b>...Adding new assignments</b>	
2	Enter the two-digit Caracas class of service in the <i>COS application</i> input field and the appropriate three-digit Hicom 200/150E class of service in the <i>COS HICOM</i> field.
3	Click <i>Add</i> which becomes active when you make your input. The new assignment is entered in the list.

Step	Procedure
<b>...Changing assignments</b>	
2	Select the required entry from the list of assignments. The values for this entry are transferred to the input fields where they can be changed.
3	Click <i>Update</i> which becomes active when you make your input. The modified values are accepted in the list.
<b>...Deleting assignments</b>	
2	Select the class of service assignment to be deleted in the list. Then click <i>Delete</i> . The COS is removed.
<b>Tip</b>	You can also select a number of classes of service in the assignment list and delete them simultaneously. To do this, hold down the  key or the  key when selecting the COS.
<b>...Quitting the assignment dialog box</b>	
2	Click <i>OK</i> to quit <i>COS-reference table</i> dialog box and save your input. Click <i>Cancel</i> to quit the dialog box without saving your changes.

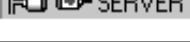
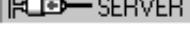
## Configuring WinCall

### Configuring WinCall Hicom 200/150E

#### 5.1.8 Displays in the status bar

##### Displays in the status bar

The status of the WinCall/Caracas Server connection is shown by WinCall Hicom 200/150E in the status bar. The following variants are possible:

Display	Meaning
 PBX	Status of the V.24 (RS232) conversation to Hicom: <ul style="list-style-type: none"><li>Green dots:<ul style="list-style-type: none"><li>interface opened successfully</li><li>conversation established</li></ul></li><li>Green / yellow dots:<ul style="list-style-type: none"><li>interface opened successfully</li><li>DSR signal detected, but conversation not yet been fully established</li></ul></li><li>Red dots:<ul style="list-style-type: none"><li>conversation not yet opened</li><li>No conversation to Hicom</li></ul></li></ul>
 SERVER  SERVER	Status of the conversation to Caracas Server: <ul style="list-style-type: none"><li>Plug in:<ul style="list-style-type: none"><li>Conversation started (green arrow)</li></ul></li><li>Plug out:<ul style="list-style-type: none"><li>Conversation stopped (red arrow)</li></ul></li></ul>
	Status of logon to Hicom 200: <ul style="list-style-type: none"><li>Green:<ul style="list-style-type: none"><li>Logon to Hicom successful</li></ul></li><li>Red:<ul style="list-style-type: none"><li>Logon to Hicom not successful</li></ul></li></ul> <p>It is possible to log on to Hicom either automatically at startup or manually via the menu item <i>Conversation - Start Conversation to Hicom</i>.</p>
    	Status display for the services AMHOST, CPSTREP, HCCS, MR and TDS. The different colors indicate the following: <ul style="list-style-type: none"><li>Green:<ul style="list-style-type: none"><li>Service started and active (TDS: if at least one entry is made)</li></ul></li><li>Yellow:<ul style="list-style-type: none"><li>Service started, but login not successful (incorrect password) (only AMHOST)</li></ul></li><li>Red:<ul style="list-style-type: none"><li>Service not active</li></ul></li><li>Gray:<ul style="list-style-type: none"><li>Service not configured</li></ul></li></ul>

<b>Display</b>	<b>Meaning</b>
<b>Tip</b>	Double-click on a service icon in the status bar to start or terminate the (depending on current status) a given service.

## **Configuring WinCall**

### *Configuring WinCall Hicom 200/150E*

#### **5.1.9 The trace window**

##### **General trace functions**

The general functions for opening, closing, printing, and writing trace windows/window contents to files, etc. were described in chapter 4.

##### **Trace windows available in WinCall Hicom 200**

<b>Title: Trace window/ menu item under <i>Trace</i></b>	<b>Description</b>	<b>Name trace file</b>
Program Messages	General WinCall program messages	WCH200_PROGMESS.TRC
Hicom HCCS-Service Hicom AMHOST-Service Hicom MR-Service Hicom CPSTREP-Service Hicom TD-Service	Service-specific messages, text messages provide information on the status of the relevant action performed	WCH200_HCCS.TRC WCH200_AMHOST.TRC WCH200_MR.TRC WCH200_CPSTREP.TRC WCH200_TDS.TRC
Hicom Conversation	Interface connection messages to Hicom	WCH200_INTERFACE.TRC
Server Buffer	PNIF records which could not yet be sent to the main application and have been cached.	WCH200_SRVRBUFF.TRC
Conversation Messages	Messages to/from Caracas Server	WCH200_MESSAGE.TRC

## Trace window context menu

You can activate the individual trace windows available on the screen and print, save or delete the trace window currently active using the context menu that can be activated in the trace windows:

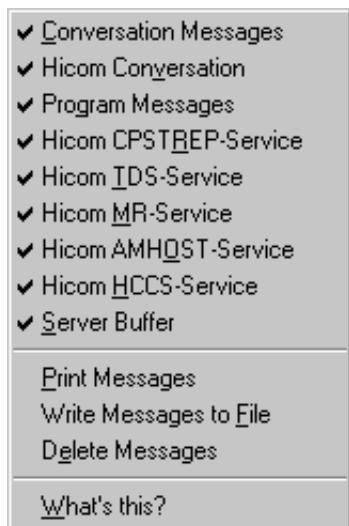


Figure 5-1 Trace window context menu of WinCall Hicom 200/150E



The *Print Messages* and *Delete Messages* entries are not available in the context menu of the *Server Buffer* trace window if *View mode for buffer windows* (see chapter 4, “General functions of all components”) is active. In this case, the contents of the buffer can only be saved externally. The file can, however, be printed with *Extras – Edit Tracefiles*.

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

#### 5.1.10 Testing the connection

##### General

You can test the connection to Hicom by performing the essential functions used by Caracas in test dialog boxes in WinCall. Caracas Server does not have to be activated when you perform this test. It is enough if WinCall is started and the connection to Hicom is set up. The following functions/services can be tested:

- Test HCCS-Service
- Test AMHOST-Service
- Simulate MR-Service
- Extension monitoring

##### Testing the HCCS service

To test the HCCS service, proceed as follows:

Step	Procedure
1	<p>Set up the connection to Hicom via the <i>Conversation – Open Conversation to Hicom</i> menu item (or press <b>F2</b>).</p> <p>The interface is opened, the status display  in the status bar changes to green LEDs, the logon status on the Hicom  changes to green if logon to Hicom is successful, the service status display  changes to green.</p>

Step	Procedure
2	<p>Activate the menu item <i>Tools – Test HCCS-Service</i>. The following dialog box appears:</p> 

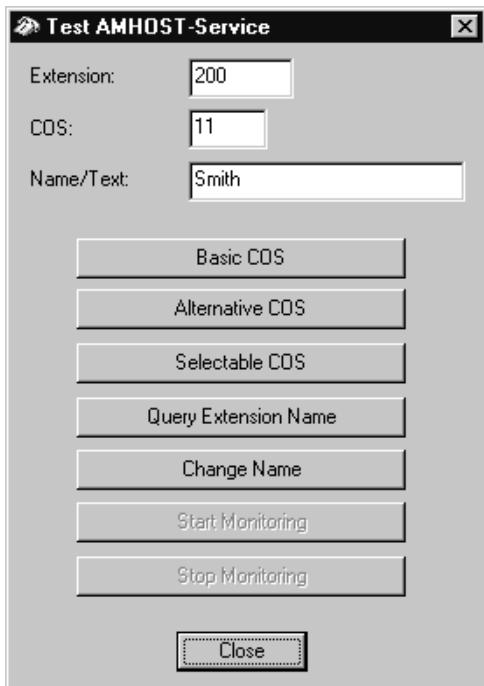
## Configuring WinCall

### Configuring WinCall Hicom 200/150E

Step	Procedure
3	<p>This dialog box provides the HCCS service functions used by WinCall for the test. For all functions excluding Set time, an extension number to which the functions refer must be entered in the Extension field. You can perform the following tests by entering data in the following input fields/clicking the buttons:</p> <ul style="list-style-type: none"><li>• <i>Connection</i> to set up a connection to an internal extension or an external line; you must enter a number under <i>Destination number</i> before you click the button for the internal or external connection.</li><li>• <i>Record announcement</i> to set up a connection to an extension with an answering machine by dialing the announcement number; enter the number under <i>Announcement no.</i> and then click the <i>Start</i> button.</li><li>• <i>Diversion</i> to set/remove a diversion to an extension; enter the extension number of the diversion destination in the <i>to extension</i> field before clicking <i>set/delete</i>.</li><li>• <i>Message waiting</i> to set/delete the message waiting function; no other input are necessary, start the test by clicking <i>Set</i> or <i>Delete</i>.</li><li>• <i>Miscellaneous</i> to connect music on hold, click <i>MoH</i> or activate the wakeup configured in <i>HCCS-Options</i> with <i>Wakeup call</i>.</li><li>• <i>Set time</i> to set the Hicom time, enter the required time with the spinner and then click <i>Set</i>.</li></ul>
4	Quit the test dialog box by clicking <i>Close</i> .
<b>Tip</b>	If you want to monitor the function/record processing more closely, you can view the individual messages in the various trace windows.

## AMHOST service

To test the AMHOST services:

Step	Procedure
1	<p>Set up the connection to Hicom via the <i>Conversation – Open Conversation to Hicom</i> menu item (or press <b>F2</b>).  The interface is opened, the status display  in the status bar changes to green LEDs, the logon status on the Hicom  changes to green if logon to Hicom is successful, the service status display  changes to green.</p>
2	<p>Activate the menu item <i>Tools – Test AMHOST-Service</i>. The following dialog box appears:</p> 

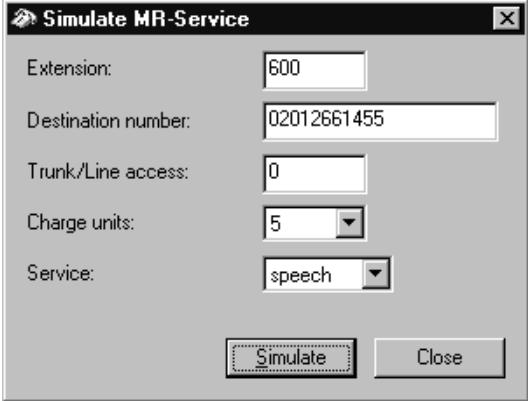
## Configuring WinCall

### Configuring WinCall Hicom 200/150E

Step	Procedure
3	<p>This dialog box provides the AMHOST service functions used by WinCall for the test. For all functions, an extension number to which the functions refer must be entered in the <i>Extension</i> field.</p> <ul style="list-style-type: none"><li>● <i>Basic COS</i> to switch to the basic COS in accordance with the entry in the <i>COS</i> field;</li><li>● <i>Alternative COS</i> to switch to the alternative COS in accordance with the entry in the <i>COS</i> field;</li><li>● <i>Selectable COS</i> to switch to a COS entered in the <i>COS</i> field;</li><li>● <i>Query Extension Name</i> to switch to extension's telephone book entry</li><li>● <i>Change Name</i> to change the name of the extension to the name entered in the <i>Name/Text</i> field.</li><li>● <i>Start Monitoring</i> to activate extension monitoring; this button can be selected in a connected Hicom 200 system as of Release 3.2.</li><li>● <i>Stop Monitoring</i> to deactivate extension monitoring; this button can be selected in a connected Hicom 200 system as of Release 3.2. and in a connected Hicom 150E system as of Release 1.0.</li></ul>
4	Quit the test dialog box by clicking <i>Close</i> .
<b>Tip</b>	If you want to monitor the function/record processing more closely, you can view the individual messages in the various trace windows.

## Simulating an MR service

To simulate the MR service, proceed as follows:

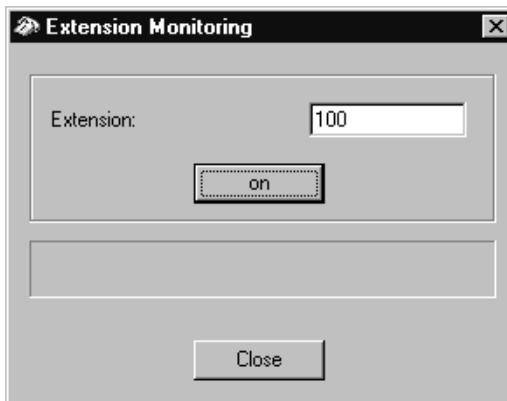
Step	Procedure
1	<p>Set up the connection to Hicom via the <i>Conversation – Open Conversation to Hicom</i> menu item (or press <b>F2</b>).  The interface is opened, the status display  PBX in the status bar changes to green LEDs, the logon status on the Hicom  changes to green if logon to Hicom is successful, the service status display  AMH CPST HCCS MR changes to green.</p>
2	<p>Activate the menu item <i>Tools – Simulate MR-Service</i>. The following dialog box appears:</p>  <p>The dialog box has the title "Simulate MR-Service". It contains five input fields: "Extension" (600), "Destination number" (02012661455), "Trunk/Line access" (0), "Charge units" (5), and "Service" (speech). At the bottom are "Simulate" and "Close" buttons.</p>
3	<p>This dialog box allows you to simulate a call charge record. Enter the relevant data under <i>Extension</i>, <i>Destination number</i>, <i>Trunk/Line access</i>, select the required entries in the <i>Charge units</i> and <i>Service</i> fields.  An appropriate call charge record is sent via PNIF to Caracas Server when you click <i>Simulate</i>.</p>
4	<p>Quit the test dialog box by clicking <i>Close</i>.</p>
<b>Tip</b>	<p>If you want to monitor the function/record processing more closely, you can view the individual messages in the various trace windows.</p>

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

#### Monitoring an extension

To monitor an extension via the CPSTREP service, proceed as follows:

Step	Procedure
1	<p>Set up the connection to Hicom via the <i>Conversation – Open Conversation to Hicom</i> menu item (or press <b>F2</b>). The interface is opened, the status display  PBX in the status bar changes to green LEDs, the logon status on the Hicom  changes to green if logon to Hicom is successful, the service status display  AMH CPST HCCS MR changes to green.</p>
2	<p>Activate the menu item <i>Tools – Extension monitoring</i>. The following dialog box appears:</p> 
3	<p>This dialog box allows you to monitor an <i>Extension</i> that you enter. Enter the relevant extension number and click <i>on/off</i>. Extension actions are output in a dialog box. You can quit monitoring by clicking the <i>Disable</i> button that then appears.</p>
4	<p>Quit the test dialog box by clicking <i>Close</i>.</p>
<b>Tip</b>	<p>If you want to monitor the function/record processing more closely, you can view the individual messages in the various trace windows.</p>

## 5.1.11 Event and error log

### General

The contents of the event log generated by WinCall for logons and logoffs, program starts, etc. and the error log can be viewed in WinCall. You can selectively display the event log (user ADMIN) and the error log (technician only) on the screen to increase diagnostic performance, or you can print out the contents of the log.

### Log reduction

The schedule automatically reduces the log volume once a day (at night between 03:00 and 03:45) in both the error and event log.

### Editing options

Both logs can be printed and partially or completely deleted (see below). Moreover, the event log can be selectively displayed.

### Evaluating an error log

To display the error log, activate the menu item *Extras – Evaluate Error Log*:

Error log						
Date/Time	Program	Computer	Modul	Object	Procedure	Description
16/02/98 3:11:50 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:28:02 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:32:23 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:38:18 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:41:36 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:57:18 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:04:44 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:14:58 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:16:03 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/03/98 1:51:14 PM	WinCall Hicc	PC14005	tracewnd.c	print_traci	CreateFile	03.06.1998 13:51:14 TimeThread: checking 0 - 315 - t - 3: Datei nicht gefunden!
16/17/98 2:11:41 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/17/98 2:34:10 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
17/09/98 11:35:44 AM	WinCall Hicc	PC14005	odbc.c	ExecuteS	SQLExecDirect	DELETE FROM WC_VBZ: no rows affected!
17/09/98 11:36:09 AM	WinCall Hicc	PC14005	odbc.c	ExecuteS	SQLExecDirect	DELETE FROM WC_VBZ: no rows affected!
17/13/98 7:06:23 PM	WinCall Hicc	PC14005	tracewnd.c	print_traci	CreateFile	13.07.1998 19:06:23 STOP-Thread activated...: Datei nicht gefunden!
19/17/98 7:19:11 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVInit	MSVInit: [Loading error]
19/17/98 7:25:53 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVInit	MSVInit: [Loading error]
1/05/98 2:24:13 PM	WinCall Hicc	PC14005	tracewnd.c	print_traci	CreateFile	05.11.1998 14:24:13 TimeThread: checking 1 - 330 - t - 2: Datei nicht gefunden!
1/05/98 2:30:10 PM	WinCall Hicc	PC14005	common.c	GetUserlr	SQLFetch	user unknown!
1/05/98 2:30:15 PM	WinCall Hicc	PC14005	common.c	GetUserlr	SQLFetch	user unknown!

Figure 5-2      Error Log of WinCall

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

#### Evaluating the event log

To display the event log, activate the menu item *Extras – Evaluate Event Log* or press **[F7]**:

Event log				
Date/time	Section	Computer	Program	Description
8/19/98 2:46:35	SYS	CARACAS_SVR_IN	WinCall Hicom 200/150E	TIME-thread startet!
8/19/98 2:47:11	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog Interface Parameter
8/19/98 2:48:15	USR	CARACAS_SVR_IN	WinCall Hicom 200/150E	Window: Interface Parameter closed!
8/19/98 2:48:18	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog General Options
8/19/98 2:49:31	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog HCCS-Options
8/19/98 2:50:47	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog TDS-Options
8/19/98 2:52:07	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog Extensions
8/19/98 2:53:06	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	saved dialog Extensions
8/19/98 2:53:10	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog Extensions
8/19/98 2:56:47	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	saved dialog Extensions
8/19/98 2:56:49	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog Extensions
8/19/98 3:01:55	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	Processing with extension configuration file.
8/19/98 3:01:55	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	Error processing with extension configuration file
8/19/98 3:02:43	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog COS-Reference Table
8/19/98 3:03:10	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	saved dialog COS-Reference Table
8/19/98 3:03:13	PRG	CARACAS_SVR_IN	WinCall Hicom 200/150E	opened dialog COS-Reference Table
8/19/98 3:04:26	SYS	CARACAS_SVR_IN	WinCall Hicom 200/150E	BUFFER-thread activated!

Figure 5-3 Event log of WinCall Hicom 200/150E

## Selecting event log display

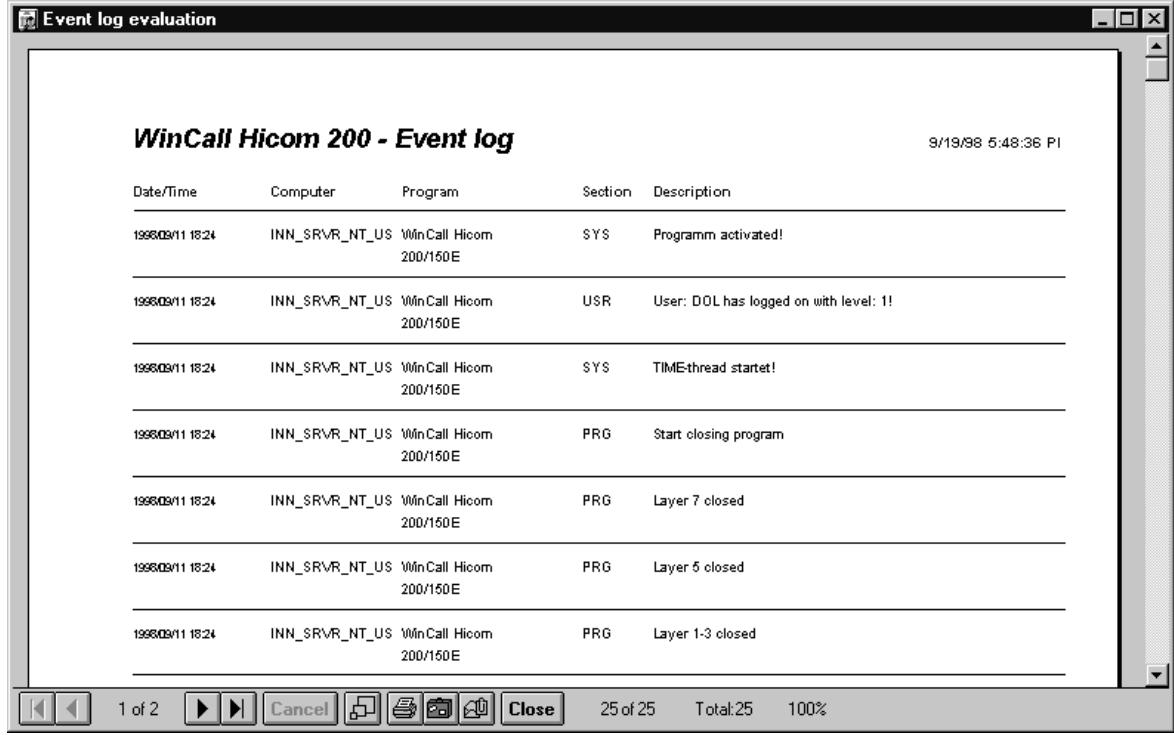
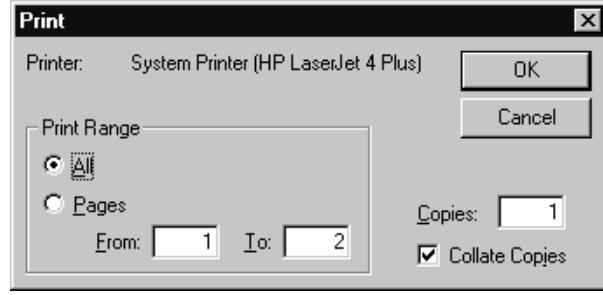
When displaying the event log, you can select particular entry types and particular types of program (components) or computer:

Step	Procedure
1	Select the required entry type in the <i>Section</i> field. The possible types are listed below. A list of the current entries available in the event log is then displayed.
	[ALL] All entries are displayed.
	AMHOS Errors and messages from the AMHOST service
	CLK Errors and messages from the WinCall schedule
	CPSTP Errors and messages from the CPSTREP service
	DBF Database entries: errors or messages that occur when you enter a record in the database.
	HCCS Errors and messages from the HCCS service
	MR Errors and messages from the MR service
	MSG Records from WinCall to Caracas Server and from Caracas Server to WinCall
	PRG General program messages from WinCall
	PRT Errors and messages in connection with outputs to a printer
	REG Errors or messages relating to functions with the Windows registration
	SYS General system messages, e.g. end of program
	TDS Errors and messages from TDS service
	USR Error in connection with user actions, e.g. when logging on or off
	V24 Errors or messages from the V.24 (RS232) connection
	WAS Records from WinCall to Caracas Server
2	Select the required component in the <i>Program</i> field.
3	Select the required computer name in the <i>Computer</i> field, this list contains all possible computer names.
4	Click <i>Refresh</i> to confirm your selection. The log is displayed in accordance with the selection.

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

#### Printing the event or error log

Step	Procedure
1	Activate the dialog box for the relevant log, e.g. <i>Extras – Evaluate Event Log...</i>
2	Click the <i>Print</i> button.
3	The log is displayed in page layout mode: 
<b>...Printing a log to the default printer</b>	
4	 Click the print button to start printing to the default printer. The dialog box for the default printer currently set appears: 
5	Click <i>OK</i> to start printing.

<b>Step</b>	<b>Procedure</b>
<b>...Zooming log outputs</b>	
4	 To zoom in/out the page layout of the event log select the zoom value (in %) or enter it in the zoom list field.
<b>...Exporting a log</b>	
4	 Press this button to export the logged data. In the subsequent dialog boxes, you can specify the desired export format and filename. Following the export procedure, you return to the page layout of the event log.
<b>...Quitting page layout log output</b>	
4	 Click this button to quit the log output in page layout view. You are returned to the log display dialog box.

### **Deleting a log partially or entirely**

<b>Step</b>	<b>Procedure</b>
1	Activate the dialog box for the relevant log, e.g. <i>Extras – Evaluate Event Log</i> .
2	Click the <i>Delete</i> button.
3	The following dialog box appears:  Enter the date up to which all entries are to be deleted. Click <i>OK</i> if the entries are to be deleted. If no entries are to be deleted, click <i>Cancel</i> . In both cases, you are returned to the log display.
<b>Tip</b>	By right-clicking the date field, you can activate a calendar in which you can select the date to be transferred to the date field.

## **Configuring WinCall**

*Configuring WinCall Hicom 200/150E*

### **5.1.12 Configuration examples for Hicom 200/150E (Rel. 2.0).**

#### **5.1.12.1 Remarks**

##### **V.24 (RS232) interface**

The V.24 (RS232) interface used for connecting Caracas Link must demonstrate the following characteristics:

- Speed = 2400 b/s
- No parity bit
- 8 data bits
- 1 stop bit
- When using a Hicom 200 IOP interface, a speed of up to 9600 b/s can be set.

##### **COS changeover at check in/check out**

The standard configuration of the Caracas Link PC switches to trunk access at check in (COS table 7) and to outward restricted toll access at check out (COS table 2) by means of COS changeover. This assumes that the appropriate classes of service have been set up for trunk access/outward restricted toll access. If this is not the case, the generation must be changed either on the Hicom 150 E-M/Hicom 200 side or on the gateway side.



Before handing the system over to the customer and commencing operation (before initial check in), all room telephones must be switched to outward restricted toll access (COS changeover via hotel application and call processing).

##### **Assigning the call number, port number, and system number**

Information on assigning the call number of the room telephone, the port number and the system number is required for the Caracas Link gateway PC. This information must be incorporated in the configuration table of the gateway PC.

##### **Hicom 150 E-M, Hicom 200 Release 3.2**

For all stations for which this is necessary (e.g. for the telephone data services (TDS) feature), data is compiled using Hicom Assistant S.

## Hicom 200 Release 2.0

The connection between system number and port number is determined as follows:

DBVERB-ABFRAGEN:AUSWAHL=PORT,GERLOG=TLN-18-SPRACHE,TABELLE=SR;  
DBVERB-ABFRAGEN started

```
TLN      =18      DIENST   =SPRACHE
BGPOS   =9       PORT     =2          GERAETESTATUS =0401
BPLSR
2BF0-38B4  00 00 00 00 00 00 00 00 00 00 00 00 1F 00 FF FF 05 00
2BF0-38C4  XX XX
```

The port number for system number **18** is **001F<sub>hex</sub>** and can be found in bytes **11<sub>dez</sub>** and **12<sub>dez</sub>** of table BPLSR.

This procedure is to be repeated for all stations that are to be assigned the telephone data services feature (TDS).



The data described above can also be determined using PC DAGEN (as of Version 4.09), menu item Syspro. The file HICOM.SRC is created containing the assignment of call number to system number and port number as well as to device type. When installing the system, the file can be loaded to the Caracas Link PC.

The DBV program can also be installed.

## Error signaling

A limit value can be defined as a percentage for the call data buffer with Hicom Assistant S (Hicom 150 E-M, Hicom 200 Release 3.2) or BTA GEDATEN (Hicom 200 Release 2.0). If the buffer reaches this value, an alarm message is generated by the communication system. This message is to be interpreted as a warning that the buffer is about to overflow and data may be lost as a result (assuming an appropriate limit value has been set). Buffer overflow can also be caused by failure of the V.24/RS232 interface used for call data transfer.



The limit value should be set as low as possible for early alarm signaling.

Reason: if an alarm message is only signaled at 50%, 250 call records remain in Caracas Autostart buffer. The hotel guests (who incurred the call data/costs) have already left when the error is cleared.

Hicom 150 E-M: faults are signaled on the display of optiset E telephones (service menu or key for check errors) by class A error messages.

WARNING CALL CHARGE LOSS

Overflow of call data memory

ACL-LINE NOT READY

ACL connection fault

## Configuring WinCall

### Configuring WinCall Hicom 200/150E

PRINTER/V24 NOT READY

No printer paper, printer not working, interface fault, ...



Class A and B error messages are deleted as soon as the relevant fault causes are cleared.

### **5.1.12.2 System generation**



#### **Hicom 150 E, Hicom 200 Release 3.2**

Information on generating is available in the help text (configuration examples) on Hicom Assistant S.

### **5.1.13 Configuration examples for Hicom 150E (up to Rel. 2.1)/200 (as of Rel. 3.2)**



WinCall for Hicom 150E Rel. 1.0 and Hicom 200 as of Rel. 3.2 can be configured using the Hicom Assistant program.

## **Configuring WinCall**

*Configuring WinCall Hicom 300*

### **5.2 Configuring WinCall Hicom 300**

#### **5.2.1 General**

##### **Configuration options for Caracas**

WinCall is configured by the service technician (user level 1) as part of the cutover operation. The following options are configured:

- General options for connecting the server PC to Hicom
- Services and service options
- Caracas-specific options
- Announcement devices
- COS / LCOS assignment table

##### **Starting WinCall Hicom 300**

If it is not already active, the WinCall Hicom 300 component is started as part of configuration.

<b>Step</b>	<b>Procedure</b>
1	Activate the start menu and/or the WinCall Hicom 300 desktop link.
2	Log on using the technician password.

##### **Deactivating the connection to Hicom**

In order to configure options, the connection to Hicom should be deactivated. This ensures that all the options you have set are available the next time the connection is set up.

<b>Step</b>	<b>Procedure</b>
1	Activate the menu item <i>Conversation - Close connection to Hicom</i> or press <b>[F3]</b> .
<b>Tip</b>	The Hicom connection status is displayed in the status bar (see Section 5.2.10)

## 5.2.2 Connection mode to the Hicom 300

### Different connection modes

Two alternative methods are available for data exchange between Caracas and Hicom 300. The valid method must be configured by specifying the relevant parameters:

- Connection via V.24 (RS232) interface (IKK/2 card)
- Connection via TCP/IP (standard LAN card)

The user defines the connection type when configuring the general parameters (see next chapter).

### 5.2.2.1 Connection via IKK/2

#### Initializing the IKK/2 card

As part of its start procedure, the WinCall Hicom 300 program initializes the IKK/2 card and loads the driver for the Hicom 300 connection (MSV driver) to the card. If an error occurs during this procedure, WinCall displays a corresponding error message on the screen. In this case, the program does not close, but instead enables configuration to proceed without installing the IKK/2 card in the usual manner.

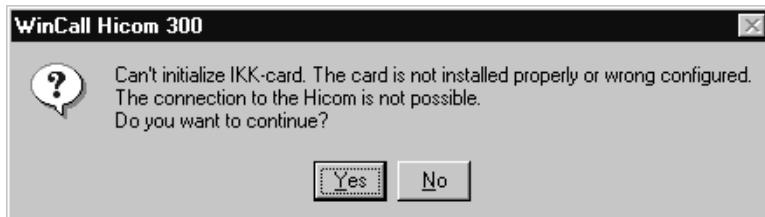


Figure 5-4 Error initializing IKK/2 card

#### Default hardware settings for the IKK/2 card

Errors can be triggered by an incorrect jumper setting on the IKK/2 card (for example). The default values are:

- Interrupt: 14 (setting on IKK/2 card, jumper 1)  
I/O address: 0x230 (setting on IKK/2 card, switch 1)  
Memory range: 0xD400 (setting in BIOS setup)  
Synchronization: external (jumper 16)  
ESCC: 12,228 MHz (jumper 7)

## **Configuring WinCall**

*Configuring WinCall Hicom 300*

### **5.2.2.2 Connection via TCP/IP: physical network connection**

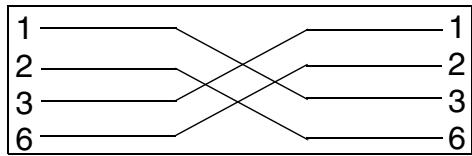
#### **Several Hicom 300 systems to be operated/direct connection to WAML module**

If several Hicom 300 systems are to be operated and there is a direct connection to the WAML modules, a HUB must be used for the star networking.

#### **Connecting the system(s) via WAML module gateway access**

The physical network connection can be implemented with out additional hardware for the connection of one/more Hicom 300 system(s) via WAML module gateway access and system networking via S2M. There are two possibilities here:

1. Connection by Cheapernet 10Base2 Coax adapter with Coax cable/BNC connector using two BNC Tparts each terminated with a BNC terminating resistor. The maximum length of the network is 200 meters.
2. Connection by RJ45 western plug adapter with twisted pair cable/RJ45 western plug connector. A “crosslink” twisted pair cable must be used with wires 1/2 “crossed with“ 3/6:



### 5.2.3 Configuring general options

#### Which general options are configured?

The configuration of general options includes all settings for the Hicom 300 services available. The following options are to be configured:

- Connection mode
- General options
- Options for the IKK/2 card
- TCP/IP system parameters (with connection type via TCP/IP)
- TCP/IP connection parameters (with connection type via TCP/IP)

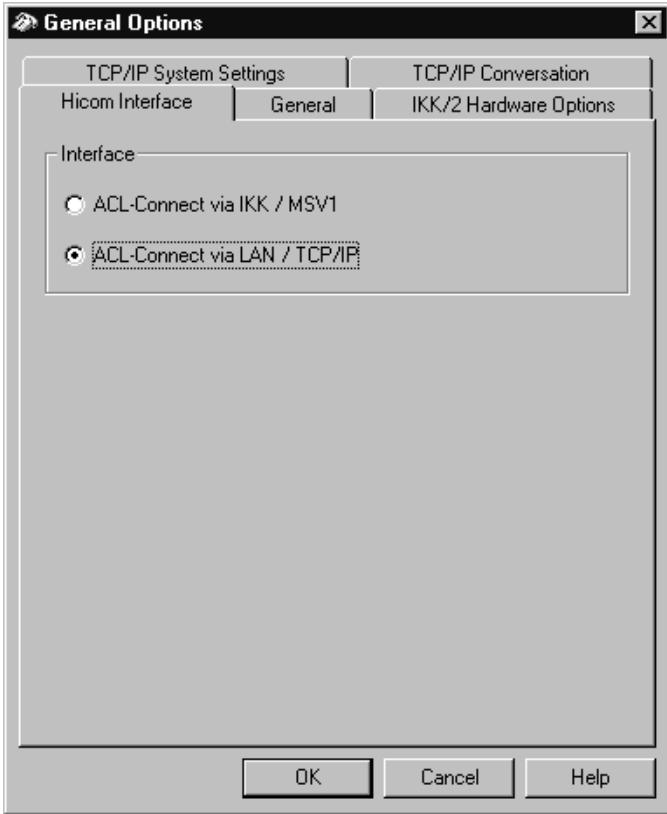
#### General options for internal service processing

To configure general options for internal service processing, proceed as follows:

Step	Procedure
1	The connection type can only be defined if there is no connection to Hicom. An active connection is to be closed. Therefore activate the menu item <i>Conversation - Close connection to Hicom</i> or press <b>[F3]</b> .

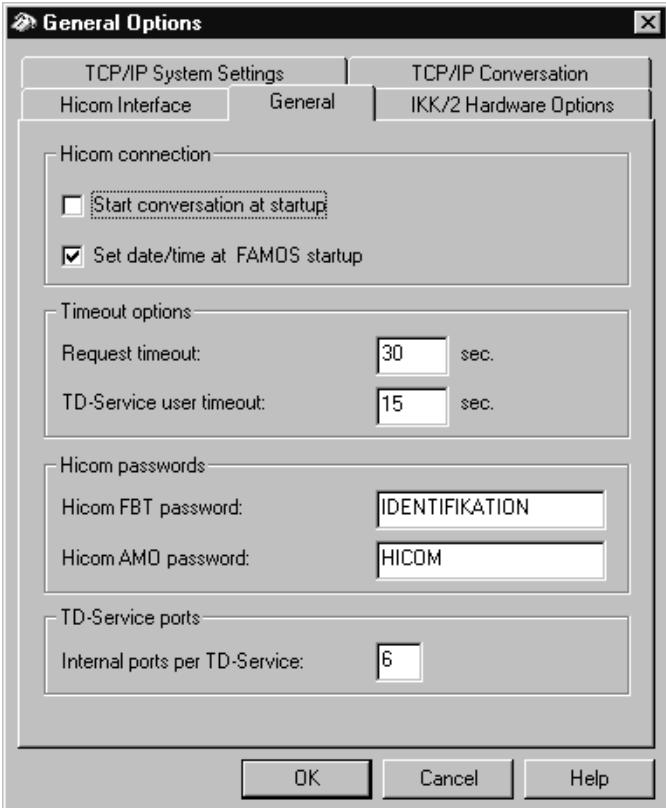
## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
2	<p>Activate the menu item <i>Settings - General Options</i> and select the <i>Hicom Interface</i> tab:</p> 
	<p>Irrespective of the desired connection type, proceed as follows:</p>
3	<p>Select the required connection type:</p> <ul style="list-style-type: none"><li>• <i>ACL-Connect via IKK / MSV1</i> if you wish to connect Hicom via V.24 (RS232) interface / IKK/2 card.</li><li>• <i>ACL-Connect via LAN / TCP/IP</i> if you wish to connect Hicom in the LAN using the TCIP/IP protocol.</li></ul>
4	Confirm the option selected by pressing the <i>OK</i> button.

## Configuring the general parameters for internal service processing

To configure the general parameters for internal service processing, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	Select the tab <i>General</i> .
	
3	<p>Under <i>Hicom connection</i> in the option field <i>Start conversation at startup</i>, define whether all configured links should be opened and initialized at the same time, each time the program is started. This option should only be deactivated when analysis is to be performed.</p> <p>Each time the ACL service FAMOS is started, the option <i>Set date/time at FAMOS startup</i> causes the function "Set time" to be called up via the AMO DATE. This ensures time synchronization between Hicom 300 and the PC. This option should only be deactivated when analysis is to be performed.</p>

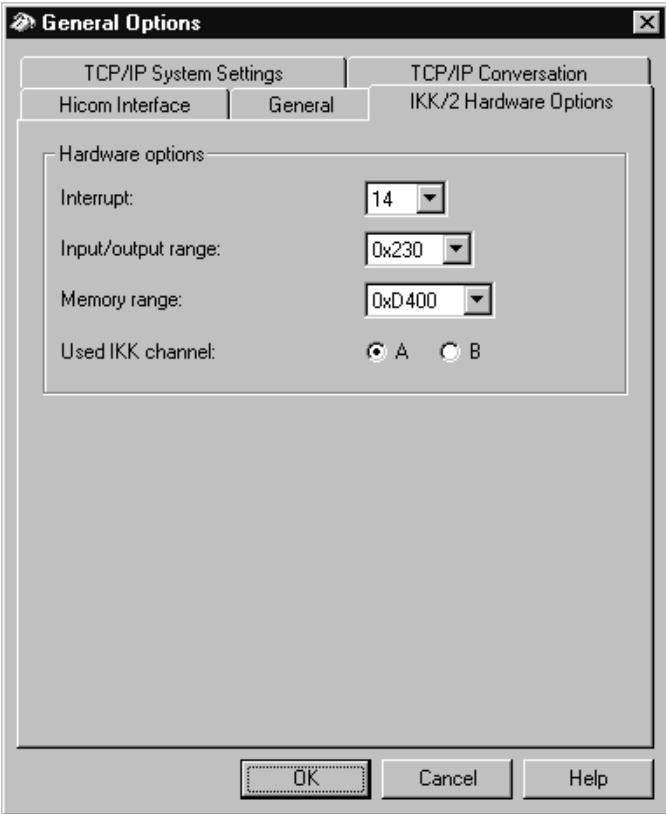
## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
4	<p>Under <i>Timeout Options</i>, define the following timeouts in seconds:</p> <ul style="list-style-type: none"><li>• <i>Request timeout</i> Timeout for all processing steps via ACL (independent of service). If WinCall does not receive the response expected from Hicom 300 within a configured interval, the current request is terminated/deleted and, where appropriate, returned to the main application which made the request.</li><li>• <i>TD-Service user timeout</i> Timeout for TD services to be started by terminal operators. If WinCall does not receive the terminal operator input expected via Hicom 300 within a configured interval, the current request is deleted.</li></ul>
5	<p>Create the following passwords under <i>Hicom passwords</i>:</p> <ul style="list-style-type: none"><li>• <i>Hicom FBT password</i> This password is required for initializing the FAMOS link. This password must be used when logging in via the interface. Configuration using the incorrect FBT password causes FAMOS service processing to breakdown, with the result that important request such as COS changeover and updating guest names can no longer be completed. The corresponding FBT password configured in Hicom 300 must be used in this case. A maximum of 15 characters may be entered.</li><li>• <i>Hicom AMO password</i> This password is required for implementing certain AMOs. Before implementing certain AMOs, Hicom 300 requests a password. This prevents unauthorized persons accessing these AMOs and tampering with the Hicom 300 database. The corresponding AMO password (password with the highest authorization level) configured in Hicom 300 must be used in this case. A maximum of 15 characters may be entered.</li></ul>
6	Enter the number of ports to be used per TD service in the <i>Internal ports per TD-Service</i> field. This option defines the number of extensions that can use the same service simultaneously. The maximum value is 9.
7	Confirm your input by pressing OK.
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Options for the IKK/2 card

To configure options for IKK/2 card, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	Select the tab <i>IKK/2 Hardware Options</i> . The following dialog box appears: 
3	The options <i>Interrupt</i> , <i>Input/output range</i> and <i>Memory range</i> can be configured here according to card settings. The default options are shown. In the option field <i>Used IKK channel</i> , set the channel via which communication from the IKK/2 card should take place. The IKK/2 card has 2 controllable channels. Channel A has a direct external connection from the IKK/2 card. For an external connection, channel B requires an additional interface. <b>Remark:</b> If you have changed the settings here, you must restart WinCall after saving.
4	Confirm your input by pressing <b>OK</b> .

## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
Tip	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Configuring the TCP/IP system parameters

If the connection type via TCP/IP has been selected, it is necessary to configure the TCP/IP system parameters. To configure these parameters, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	Select the tab <i>TCP/IP System Settings</i> . This tab can only be accessed if the connection type via TCP/IP is selected. The following dialog box appears:
<p>In this dialog box, assign/configure all of the Hicom systems to be operated in the Hicom network. A maximum of 4 systems can be configured.</p>	
<p><b>... Configuring a new system</b></p> <p>3 Enter the system name (max 20 characters) in the field <i>Name</i>.</p> <p>4 Enter the system ID for this Hicom system in the field <i>System ID</i>. Values between 0 and 99 are allowed (from the perspective of the Hicom system connected via the WAML module).</p> <p><b>Note:</b> The parameter <i>System ID</i> corresponds to the ZLNR parameter of the AMO WABE. This parameter is used to assign subscribers to the relevant system.</p>	

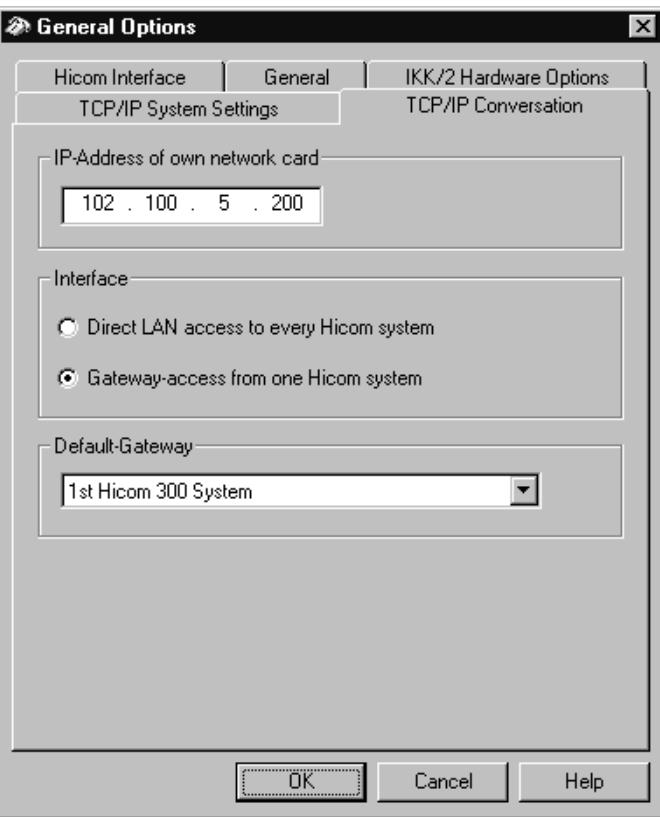
## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
5	<p>Enter the external IP address (WAML module IP) of the system to be configured in the field <i>IP-Address EXT-LAN (WAML)</i>. Enter the corresponding system ISDN-WAN IP address (IP of the S0 subscriber which has been assigned to the WAML module) in the field <i>IP-Address ISDN-WAN (WAML)</i>.</p> <p><b>Note:</b> The parameter <i>IP-Address ISDN-WAN</i> corresponds to the IP address which was configured in the AMO-LANC under TABTYP=NETZWERK and NETNAME=ISDN1. This is used for the ISDN routing function with gateway access.</p>
6	Activate the button <i>Save</i> to save the parameters entered. The system parameters are displayed in the system table in the dialog box.
<b>... Editing configured system parameters</b>	
3	Click on the system entry to be edited in the system table. The system parameters appear in the input fields.
4	Change the parameters as required. Activate the button <i>Save</i> to save the parameters entered. The edited system parameters are displayed in the system table in the dialog box.
<b>... Deleting system parameters</b>	
3	Click on the system entry to be deleted in the system table. To delete the entry, activate the button <i>Delete</i> . The entry is deleted with no further request for confirmation.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Configuring the TCP/IP connection parameters

The TCP/IP connection parameters must be configured if the connection type via TCP/IP has been selected. To configure these parameters, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	Select the tab <i>TCP/IP Conversation</i> . This tab is only accessible if the connection type via TCP/IP is selected. The following dialog box appears: 
3	Enter the network card IP address on the Caracas server PC in the field <i>IP-Address of own network card</i> .
4	The following settings are available for the definition of connection access to the networked Hicom systems: <ul style="list-style-type: none"> <li>• <i>Direct LAN access to every Hicom system</i> The hicom systems are available on the local network via HUB connection and are operated directly via the relevant WAML.</li> <li>• <i>Gateway-access from one Hicom System</i> The Hicom systems are cross-linked with S0 subscribers and are operated via the WAML of a Hicom system which is selected in the <i>Default-Gateway</i> list field.</li> </ul>
5	To save the entries made, press the button <i>OK</i> .

## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>



For the selection of the connection access *Gateway-access from one Hicom System*, the WAML IP address of the selected gateway Hicom system in the network configuration must be entered as the default gateway under the TCP/IP protocol parameters. If a Class C network address pool is used for the internal WAML/S0 IP address, the subnet mask should be set to 255.255.255.0.

For the selection of the connection access *Direct LAN access to every Hicom system*, a default gateway must not be entered in the network configuration under the TCP/IP protocol parameters. If a Class C network address pool is used for the internal WAML/S0 IP address, the subnet mask should be set to 255.255.255.0.

## 5.2.4 Configuring Hicom 300 services

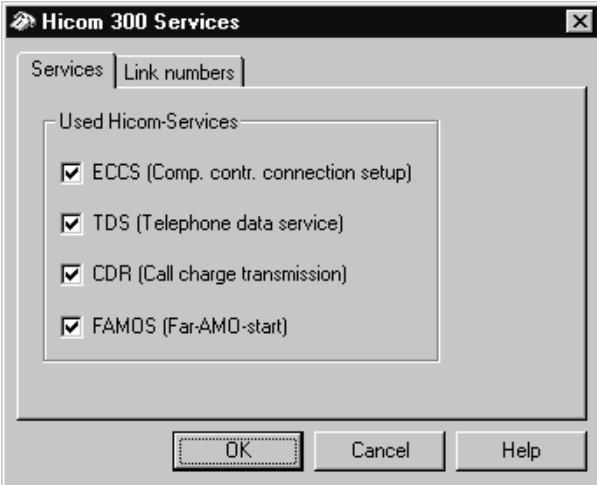
### Which service options are configured?

Configuring service options includes all settings for Hicom services and the link numbers configured at the Hicom system. The following options are to be configured:

- Hicom 300 services
- Assigning configured link numbers

### Hicom 300 services

To configure Hicom 300 services, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - Hicom 300 Services</i> .
2	Activate the tab <i>Services</i> . 
3	The services ECCS, CDR, TDS and FAMOS for WinCall Hicom 300 internal service processing can be activated or deactivated here. Processing an individual service has no effect on other services, i.e. each service can be activated/deactivated independently of the other ACL services. The only exception is COS changeover via AMO SCSU/SBCSU where both the FAMOS service and ECCS service must be activated.
4	Confirm your input by pressing OK.

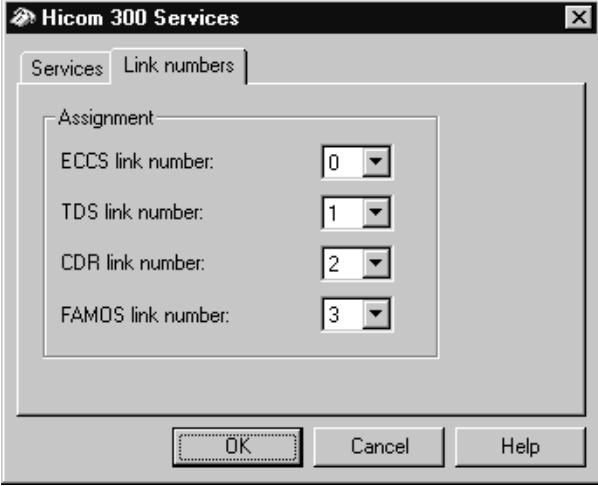
## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
Tip	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Assigning configured link numbers

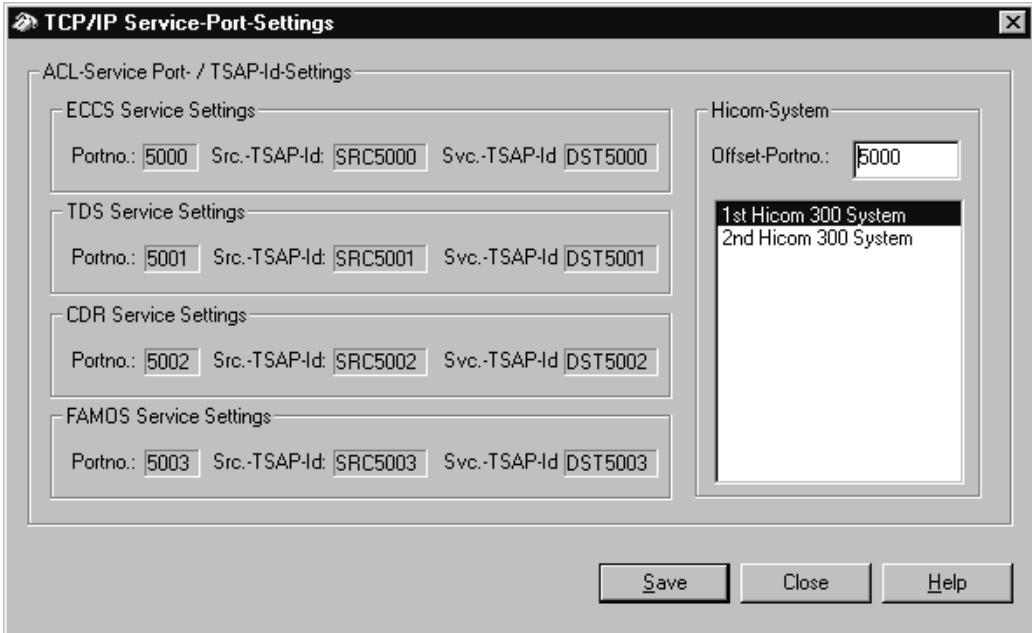
To assign configured link numbers, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - Hicom 300 Services</i> .
2	Select the tab <i>Link numbers</i> . The following dialog box appears: 
3	In the list field which appears for each service, assign the link number configured in Hicom 300 for the service in question (the figure shown here contains the standard CPSM settings).
4	Confirm your input by pressing OK. With the connection via TCP/IP the configured values are valid for the whole network. This means that the links of each system are established with the algorithm $5000 + (4 \times \text{system link ID})$ .
Tip	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## 5.2.5 Configuration of Service-TCP-Ports parameters

### General

The Service-TCP-Ports parameters must be configured if the configuration type via TCP/IP has been selected. To configure these parameters, proceed as follows:

Step	Procedure
1	<p>Activate the menu item - <i>Hicom 300 Service-TCP-Ports</i>. This menu item is only available if the connection type via TCP/IP is selected. The following dialog box appears:</p> 
2	<p>The ACL services to be operated by WinCall Hicom 300 are assigned here with the corresponding port numbers to be configured on the Hicom 300. Selection is made using the list field under <i>Hicom-System</i> which contains the configured Hicom systems.</p> <p>The relevant service options - service port numbers, service source TSAP IDs and the service destination TSAP IDs - are displayed on the left.</p> <p>The <i>Offset-Portno.</i> is automatically assigned by WinCall Hicom 300 during configuration of the TCP/IP system parameters. The service options derived which are from this and displayed must be adopted when the system is set up in the AMO-CPTP.</p>
3	<p>When the <i>Offset-Portno.</i> is changed, the default port number is changed and processed with the correspondingly modified service options.</p> <p><b>Note:</b>  The default port numbers should only be changed in exceptional cases, e.g. if the intended port numbers have already been assigned elsewhere in the Hicom system.</p>

## Configuring WinCall

### Configuring WinCall Hicom 300

## 5.2.6 Configuring the ECCS/FAMOS/TDS options

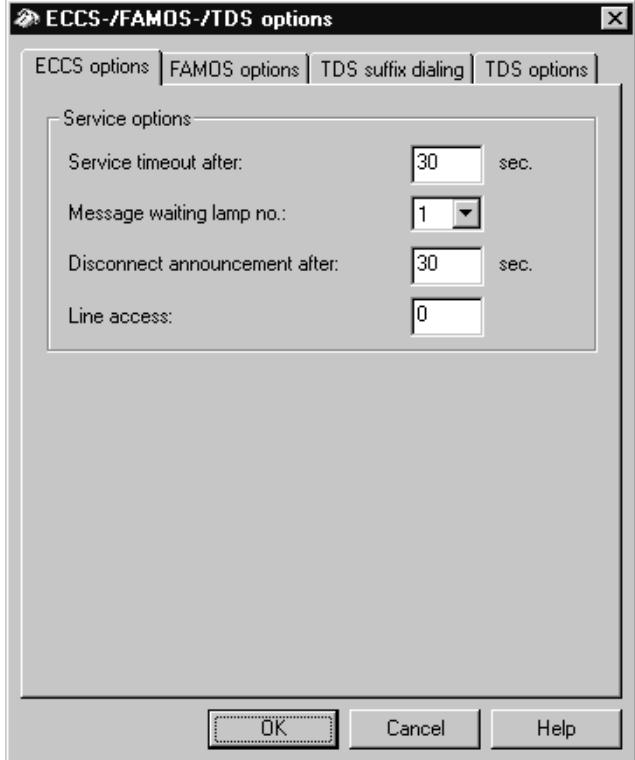
### General

Service-specific options must be configured for Hicom 300 services:

- Options for the ECCS service
- Options for the FAMOS service
- TDS suffix dialing
- TDS options

### Options for the ECCS service

To configure options for the ECCS service proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - ECCS-/FAMOS-/TDS-Options</i> .
2	Activate the tab <i>ECCS-Options</i> . The following dialog box appears: 

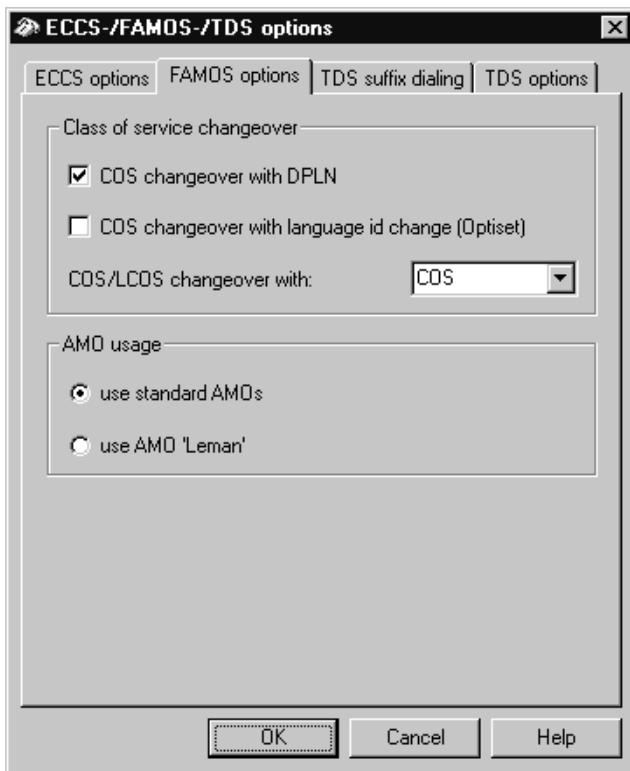
Step	Procedure
3	<p>In the field <i>Service timeout after</i>, enter the timeout in seconds for ECCS processing steps which are waiting for changes in the connection status (e.g. Request: connect extensions, Application: wait for extension 1 to take call). If no response is received via Hicom 300 from the called subscriber within the configured interval, the current request is terminated/deleted and, where appropriate, returned to the main application which made the request.</p> <p>In the list field <i>Message waiting lamp no.</i>, enter the controlling LED (associated with a name key) for the message waiting service. The number selected is valid system-wide, regardless of the type of terminal installed.</p> <p>In the field <i>Disconnect announcement after</i>, enter the maximum duration in seconds for which the announcement device should be connected. Once this interval has expired, the announcement device will be automatically disconnected.</p> <p>In the field <i>Line access</i>, enter the trunk seizure code. This setting is required for setting up connections with external destinations.</p>
4	Confirm your input by pressing OK. With the connection via TCP/IP the configured values are valid for every configured Hicom 300 in the network.
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> </ul>

## Configuring WinCall

### Configuring WinCall Hicom 300

#### FAMOS service options

To configure options for the FAMOS service proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - ECCS-/FAMOS-/TDS-Options</i> .
2	Activate the tab <i>FAMOS options</i> . The following dialog box appears: 
3	In the check box <i>COS changeover with DPLN</i> define whether options for COS changeover with DPLN should be implemented. These options have no direct influence on service processing, instead they only control configuration specifications for the LCOS/COS assignment table.
4	In the check box <i>COS changeover with language ID change (Optiset)</i> define whether each COS changeover by Caracas Server should automatically be accompanied by the transmission of a language code, used to control the user guidance display texts at the Optiset terminal.
5	Your input in the list field <i>COS/LCOS changeover with</i> determines the type of options transferred at COS changeover. These options have no direct influence on service processing, instead they only control configuration specifications for the LCOS/COS assignment table.

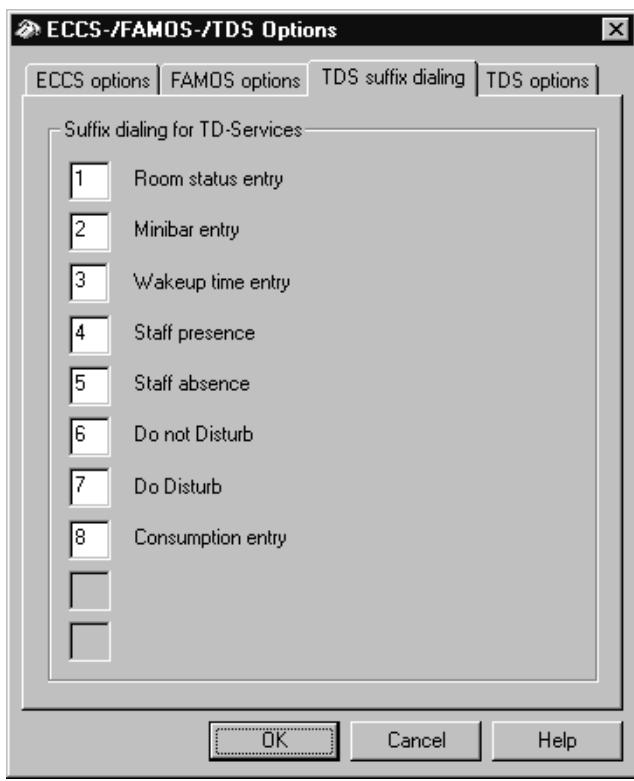
<b>Step</b>	<b>Procedure</b>
6	Under <i>AMO usage</i> , you can select one of 2 AMO processing modes. You can either process requests via default AMOs such as SCSU/SBCSU, PERSI and RUFUM, or you implement the faster option ACL-AMO LEMAN. This requires the installation of the corresponding patch in Hicom 300.
7	To save your input press OK. With the connection via TCP/IP the configured values are valid for every configured Hicom 300 in the network.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Configuring WinCall

### Configuring WinCall Hicom 300

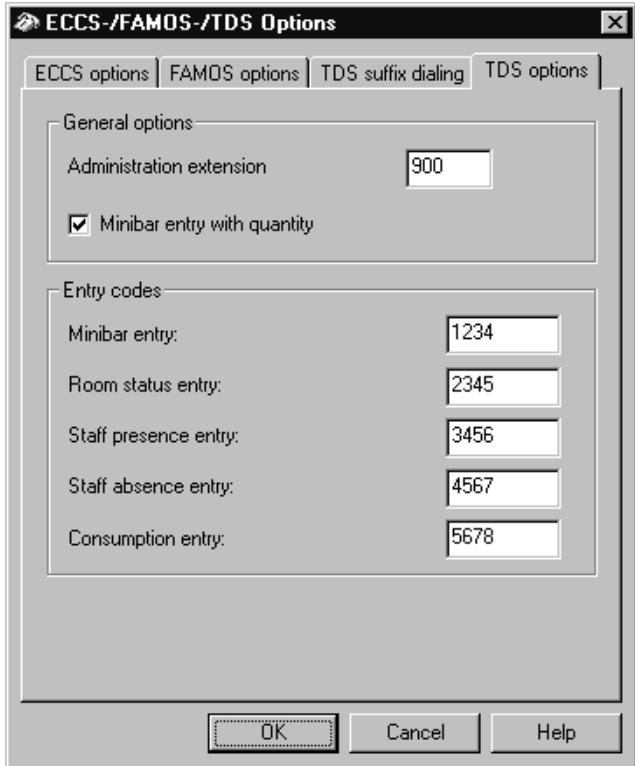
#### TDS suffix dialing

To configure suffix dialing for the TD services, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - ECCS-/FAMOS-/TDS-Options</i> .
2	Activate the tab <i>TDS suffix dialing</i> . The following dialog box appears: 
3	The suffix dialing input for the telephone configured here identifies the corresponding application-specific services, once the TD-service has been started.
4	Confirm your input by pressing OK. With the connection via TCP/IP the configured values are valid for every configured Hicom 300 in the network.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>● <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>● <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## TDS options

To configure code numbers for the TD service, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - ECCS-/FAMOS-/TDS-Options</i> .
2	Activate the tab <i>TDS options</i> . The following dialog box appears: 
3	Under <i>General options</i> in the input field <i>Administration extension</i> , enter the extension number authorized to perform guest-related services for other extensions (e.g. reception telephone).
4	If you activate the <i>Minibar entry with quantity</i> check box, you will be asked to specify the quantity when making minibar entries.
5	A user must enter an entry code to receive authorization to start a TD service at an extension. You can specify entry codes for the following TD services: <ul style="list-style-type: none"> <li>• Minibar entry</li> <li>• Room status entry</li> <li>• Staff presence entry</li> <li>• Staff absence entry</li> <li>• Consumption entry</li> </ul>
6	Confirm your input by pressing OK. With the connection via TCP/IP the configured values are valid for every configured Hicom 300 in the network.

## Configuring WinCall

### Configuring WinCall Hicom 300

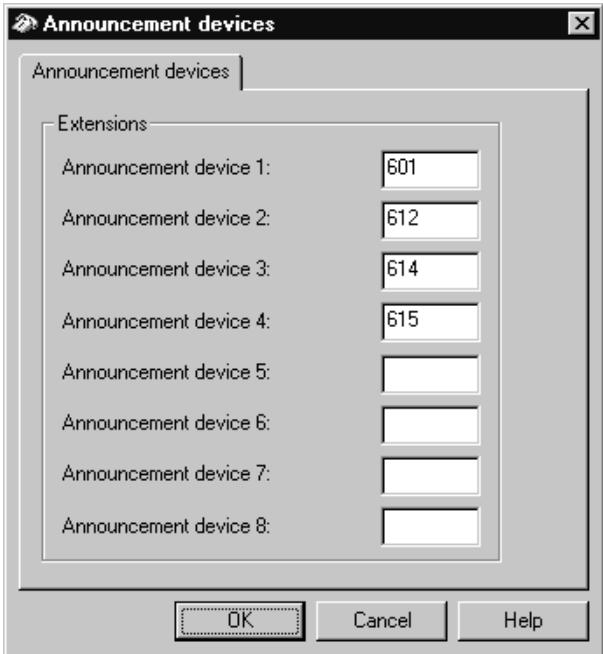
Step	Procedure
Tip	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## 5.2.7 Configuring announcement devices

### General

Extension numbers for the connected announcement devices can be configured in this dialog box.

### Configuring announcement devices

Step	Procedure
1	Activate the menu item <i>Settings - Announcement Devices</i> . The following dialog box appears: 
2	WinCall Hicom 300 manages up to 8 announcement devices. The corresponding extension numbers are entered numerically in the respective fields and can be up to 6 characters in length.
3	Confirm your input by pressing OK. With the connection via TCP/IP the configured values are valid for every configured Hicom 300 in the network.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Configuring WinCall

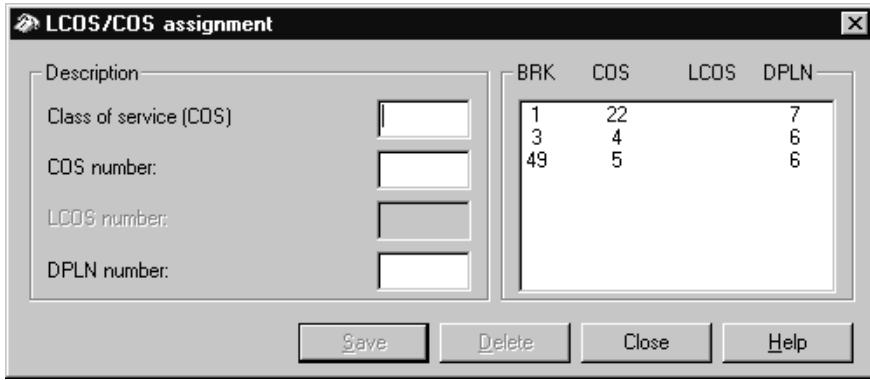
### Configuring WinCall Hicom 300

#### 5.2.8 Configuring LCOS/COS assignment

##### General

Classes of service are assigned to the corresponding COS, LCOS or DPLN settings in the Hi-com system in this configuration dialog box.

##### Configuring LCOS/COS assignment

Step	Procedure
1	Activate the menu item <i>Settings - LCOS/COS-Reference Table</i> . The following dialog box appears: 
2	Classes of service which have already been configured are displayed in the columns <i>BRK</i> , <i>COS</i> , <i>LCOS</i> and <i>DPLN</i> . The individual fields/columns: <ul style="list-style-type: none"><li>• <i>Class of service / BRK</i> The class of service number configured in Caracas (numeric, value range 1 to 99).</li><li>• <i>COS number / COS</i> The COS which assigns classes of service (numeric, value range 1 to 999)</li><li>• <i>LCOS number / LCOS</i> The LCOS which assigns classes of service (numeric, value range 1 to 32).</li><li>• <i>DPLN number / DPLN</i> The DPLN which assigns classes of service (numeric, value range 0 to 15)</li></ul>
<b>...Adding a class of service</b>	
3	If you wish to configure a new class of service, enter the respective value in the input field and press <i>Save</i> to confirm.

Step	Procedure
<b>...Changing a class of service</b>	
3	Select the class of service to be changed in the list. The relevant values are accepted in the input fields. You can modify all values apart from the option <i>Class of service (BRK)</i> . Confirm your input by pressing <i>Save</i> . If your entries are not accepted in the input fields, press <i>Cancel</i> .
<b>...Deleting a class of service</b>	
3	Select the class of service to be deleted in the list. The relevant values are accepted in the input fields. Confirm deletion by pressing <i>Delete</i> .
<b>...Quitting classes of service configuration</b>	
4	Quit the dialog box for LCOS/COS assignment by pressing <i>Close</i> .



The fields *COS number*, *LCOS number* and *DPLN number* can only be processed if the corresponding options are set in the *FAMOS options* tab under *Settings - ECCS-/FAMOS-/TDS-Options*.

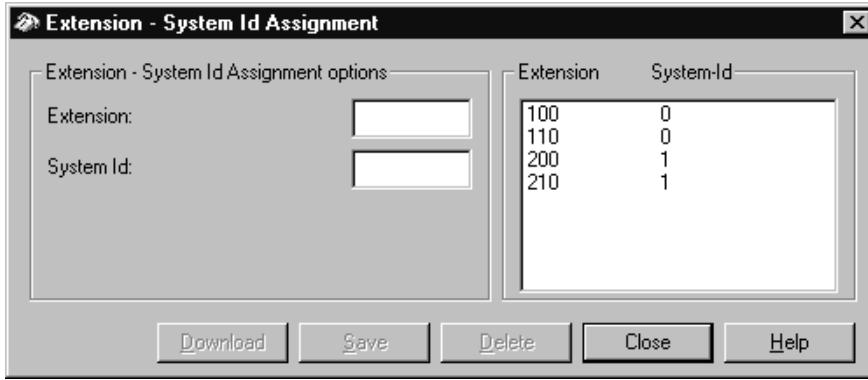
## Configuring WinCall

### Configuring WinCall Hicom 300

#### 5.2.9 Assigning the extensions

##### General

If the connection type via TCP/IP has been selected, the existing extensions on the relevant Hicom system must be assigned in the network. Based on the existing assignment of Hicom numbers to the TCP/IP address, it is possible to define the relevant Hicom system IP address for each extension on the basis of the existing assignment of Hicom numbers to TCP/IP addresses. To assign extensions to systems, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - Extension-System Id assignment</i> . This menu item is only available if the connection type via TCP/IP is selected. The following dialog box appears: 
<b>... Entering a new assignment</b>	
2	Enter the extension numbers to be assigned in the <i>Extension</i> field.
3	Enter the system ID of the Hicom system on/to which the extension is configured/connected (from the perspective of the Hicom system connected via the WAML module) in the field <i>System Id</i> . The validity of existing system IDs is not checked here. The maximum length of the system ID is 2 characters. <b>Note:</b> The parameter <i>System Id</i> corresponds to the ZLNR parameter of the AMO WABE. This parameter is used to assign subscribers to the relevant system.
4	To save your entries, press the button <i>Save</i> .
<b>... Editing an assignment</b>	
2	Click on the assignment to be edited in the list of extensions. The values are displayed in the fields.
3	You can now edit the system ID.
4	To save your entries, press the button <i>Save</i> .

Step	Procedure
<b>... Carrying out an automatic transfer of extension assignments</b>	
2	Click on the button <i>Download</i> . The current extension assignment is deleted in the background and the background AMO WABE is transmitted for the transfer of the extension assignment to the master Hicom system (Hicom system with the lowest ID). A message appears on the screen indicating that the automatic transfer has been carried out.
3	Confirm this message and wait for the transfer operation to finish. This is indicated in a message displayed on the screen.
4	Confirm this message. All of the subscribers currently configured on the Hicom systems are now transferred.
<b>... Deleting an assignment</b>	
2	Click on the assignment to be deleted in the list of extensions.
3	To delete the assignment, activate the button <i>Delete</i> . The assignment is deleted with no further request for confirmation and the user is returned to the dialog box.

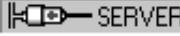
## Configuring WinCall

### Configuring WinCall Hicom 300

#### 5.2.10 Displays in the status bar

##### The WinCall Hicom 300 status bar

The WinCall Hicom 300 status bar displays the status of an interface connection to Hicom 300, to Caracas Server, together with the respective service status. The following variants are possible:

Display	Meaning
	Status of the conversation between WinCall and Hicom 300, where the left LED corresponds to the PC and the right LED to Hicom 300: <ul style="list-style-type: none"><li>• Green LEDs:<ul style="list-style-type: none"><li>– all configured service processes started</li><li>– all configured links are "READY"</li></ul></li><li>• Green / yellow LEDs:<ul style="list-style-type: none"><li>– all configured service processes started</li><li>– at least one configured link is / is not "READY" (start mode or not open)</li></ul></li><li>• Green / red LEDs:<ul style="list-style-type: none"><li>– all configured service processes started</li><li>– none of the configured links are "READY"</li></ul></li><li>• Yellow LEDs:<ul style="list-style-type: none"><li>– at least one configured service process is / is not started</li><li>– at least one configured link is not "READY" (start mode or not open)</li></ul></li><li>• Yellow / red LEDs:<ul style="list-style-type: none"><li>– at least one configured service process is / is not started</li><li>– none of the configured links are "READY"</li></ul></li><li>• Red LEDs:<ul style="list-style-type: none"><li>– none of the configured service processes have started</li><li>– none of the configured links are "READY"</li></ul></li></ul>
 	Status of conversation to Caracas Server: <ul style="list-style-type: none"><li>• Plug in:<ul style="list-style-type: none"><li>– Conversation started (green arrow)</li></ul></li><li>• Plug out:<ul style="list-style-type: none"><li>– Conversation stopped (red arrow)</li></ul></li></ul>

Display	Meaning
   	<p><b>For connection setup via MSV:</b>  Service status display for ECCS, TDS, CDR and FAMOS services. The colors indicate the following:</p> <ul style="list-style-type: none"> <li>● Green: <ul style="list-style-type: none"> <li>– Service started and active</li> </ul> </li> <li>● Yellow: <ul style="list-style-type: none"> <li>– Service started, but login not successful (only FAMOS)</li> </ul> </li> <li>● Red: <ul style="list-style-type: none"> <li>– Service not active</li> </ul> </li> <li>● Gray: <ul style="list-style-type: none"> <li>– Service not configured</li> </ul> </li> </ul> <p><b>For connection setup via TCP/IP:</b></p> <ul style="list-style-type: none"> <li>● Green: <ul style="list-style-type: none"> <li>– Service started on all configured system and is active</li> </ul> </li> <li>● Yellow: <ul style="list-style-type: none"> <li>– Service started on at least one but not all configured systems and is active there</li> </ul> </li> <li>● Red: <ul style="list-style-type: none"> <li>– Service is not active on any of the configured systems</li> </ul> </li> <li>● Gray: <ul style="list-style-type: none"> <li>– Service is completely switched off</li> </ul> </li> </ul>
<b>Tip</b>	Double-click on a service icon in the status bar to start or terminate (depending on current status) a given service.

## Configuring WinCall

### Configuring WinCall Hicom 300

#### 5.2.11 The trace window

##### General trace functions

The general functions for opening, closing, printing, and writing trace windows/window contents to files, etc. were described in chapter 4.

##### Trace windows available in WinCall Hicom 300

Trace window title / menu item under <i>Trace</i>	Description	Name of tracefile
Program Messages	General WinCall H300 program messages	WCH300_PROGMESS.TRC
Hicom ECCS-Service Hicom TD-Service Hicom CDR-Service Hicom FAMOS-Service	Service-specific messages, text messages provide information on the status of the relevant action performed	WCH300_DGV.TRC WCH300_TDD.TRC WCH300_GUE.TRC WCH300_FAMOS.TRC
Hicom Conversation	Connection messages to Hicom 300. In the case of connection via TCP/IP, a corresponding trace window is provided for each Hicom in the network.	WCH300_INTERFACE.TRC or WCH300_INTERFACEx.TRC
Conversation Messages	PNIF records sent to or from the main application.	WCH300_MESSAGE.TRC
Server Buffer	PNIF records which could not yet be sent to the main application and are have been cached.	WCH300_SRVRBUFF.TRC
AMO Commands (1st / 2nd / ... Hicom 300 System)	Trace window for AMO processing, AMO messages are displayed as in terminal mode. In the case of connection via TCP/IP, a corresponding trace window is provided for each Hicom in the network.	WCH300_AMO.TRC or WCH300_AMO_x.TRC



The trace windows *Hicom Conversation* and *AMO Commands* are available for each configured Hicom 300 in the network. The trace window title includes the (sequence) number of the Hicom in the network.

### Trace window context menu

You can activate the individual trace windows available and print, save or delete the current trace window currently active using the context menu that can be activated in the trace windows:

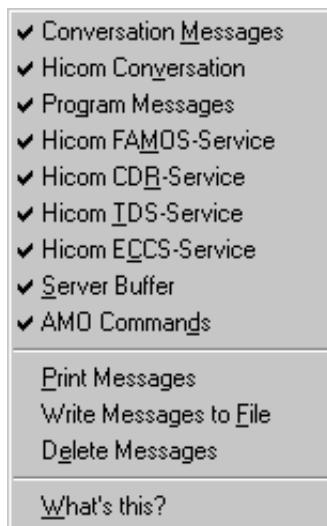


Figure 5-5 Trace window context menu in WinCall Hicom 300



The *Print Messages* and *Delete Messages* entries are not available in the context menu of the *Server Buffer* trace window if *View mode for buffer windows* (see chapter 4, “General functions of all components”) is active. In this case, the contents of the buffer can only be saved externally. The file can, however, be printed with *Extras – Edit Tracefiles*.

## **Configuring WinCall**

*Configuring WinCall Hicom 300*

### **5.2.12 Testing the connection**

#### **General**

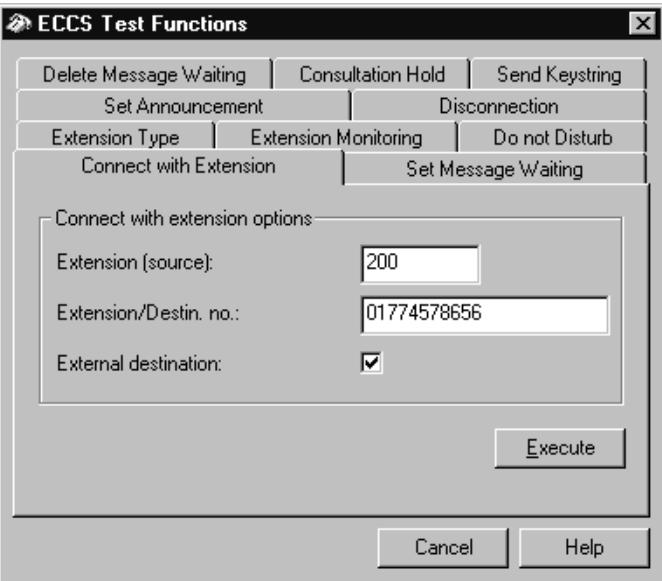
The various services and connection to Hicom 300 are tested by means of test dialogs. The following tests can be carried out:

- ECCS test functions
  - Connection setup
  - Set/delete message waiting light
  - Extension monitoring
  - Activate do not disturb
  - Clear connection
  - Query extension type
  - Initiate consultation call
  - Send keystring
  - Record announcement
- FAMOS test functions
  - Class of service changeover
  - Name update
  - Enter PIN
  - Delete PIN
  - Add subscriber to call pickup group
  - Delete subscriber from call pickup group
  - Set system time
  - Query subscriber
  - Set telephone number translation
  - Delete telephone number translation
- AOC simulation
- Writing of transparent data to the Hicom 300
  - ECCS data
  - TDS data
  - AOC data
  - FAMOS data

### 5.2.12.1 ECCS test functions

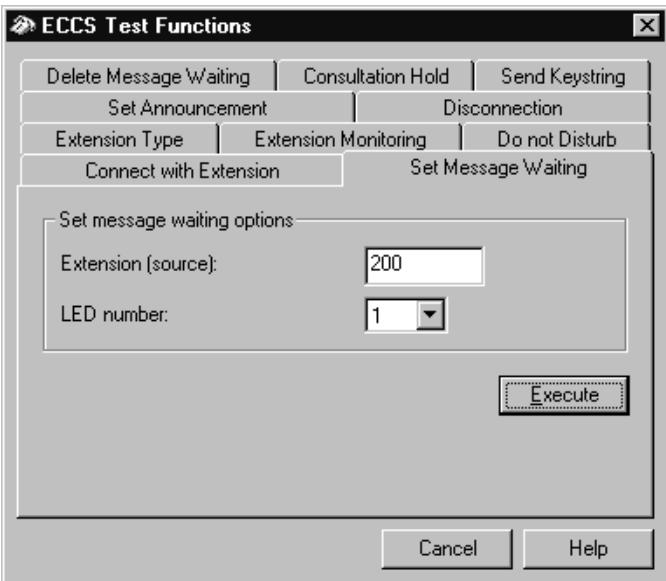
#### General

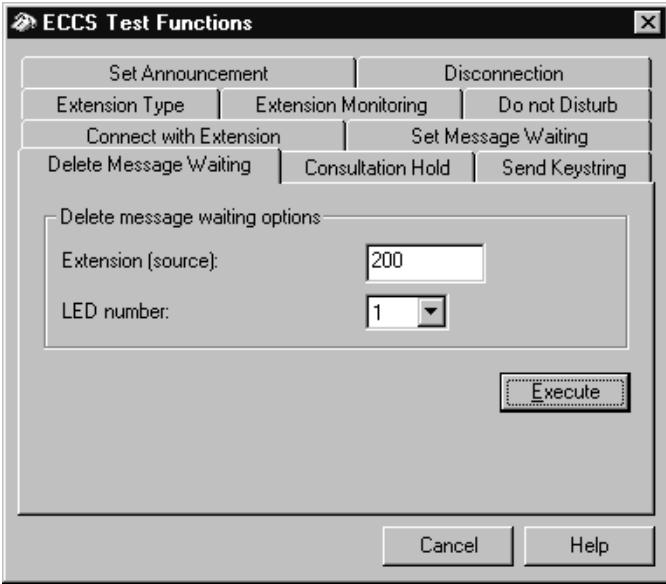
The dialog for testing the ECCS service is only available if at least one ECCS link is open and it is ready to operate. To test the various ECCS functions, proceed as follows:

Step	Procedure
1	To start the ECCS test functions, activate the menu item <i>Extras - Test ECCS</i> . A dialog box appears with a range of tabs which enable you to carry out the relevant tests:
<b>... Testing connection setup</b>	
2	Activate the tab <i>Connection Setup</i> . The following dialog box appears:
	
3	Enter the following parameters: <ul style="list-style-type: none"> <li>• <i>Extension (source)</i>: Extension number of the internal extension to be called.</li> <li>• <i>Extension/Destin. no.</i>: Number of the second internal extension to be called or external number to be called (max. 24 characters)</li> <li>• <i>External destination</i>: If the target number is an external number, select this option.</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
<b>... Setting the message waiting lamp</b>	
2	Activate the tab <i>Set Message Waiting</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the extension to be called (max. 8 characters)</li><li>• <i>LED number</i> Select the number of the LED to be switched on (irrespective of terminal used) from the list field.</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>... Deleting the message waiting lamp</b>	
2	<p>Activate the tab <i>Delete Message Waiting</i>. The following dialog box appears:</p> 
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be called (max. 8 characters)</li> <li>• <i>LED number</i> Select the number of the LED to be deleted (depending on the terminal used) from the list field.</li> </ul>
	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

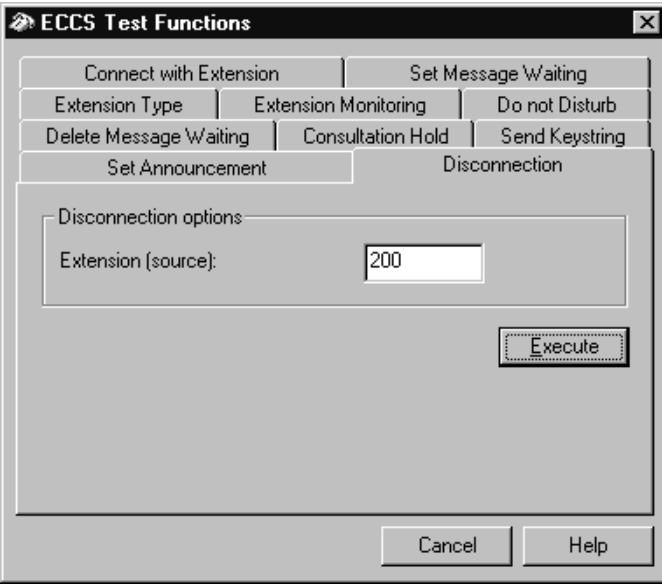
### Configuring WinCall Hicom 300

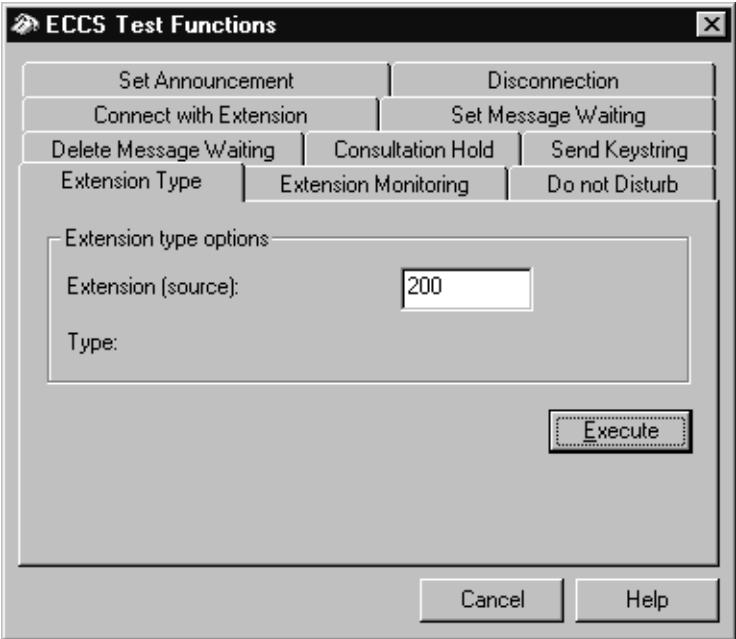
Step	Procedure
<b>... Extension monitoring</b>	
2	Activate the tab <i>Extension Monitoring</i> . The following dialog box appears: A screenshot of a Windows-style dialog box titled "ECCS Test Functions". At the top, there is a menu bar with icons for File, Edit, View, Tools, Help, and a separator. Below the menu is a toolbar with icons for Set Announcement, Disconnection, Connect with Extension, Set Message Waiting, Delete Message Waiting, Consultation Hold, Send Keystring, Extension Type, Extension Monitoring (which is highlighted in blue), and Do not Disturb. The main area contains a section titled "Extension monitoring options" with a label "Extension (source):" followed by a text input field containing "200". Below this is a label "Actual status:" followed by a large gray text area. At the bottom of the dialog are three buttons: "Off", "On" (which is currently selected and highlighted in blue), and "Snapshot". At the very bottom are "Cancel" and "Help" buttons.
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be monitored (maximum 8 characters) The status transmitted by Hicom is displayed in the output field <i>Current Status</i>.</li></ul>
4	If you press the <i>Snapshot</i> button, the status at the time of the query is displayed in the text field. If you activate the button <i>Monitor On</i> , this display is also updated if there are changes in status. To close this display, press the button <i>Monitor Off</i> . <b>Note:</b> If the monitoring function is active, changes in the status of a subscriber are automatically displayed under <i>Current Status</i> . <b>Note:</b> The monitor messages are displayed in the ECCS trace window.

Step	Procedure
<b>... Activating do not disturb</b>	
2	Activate the tab <i>Activate Do Not Disturb</i> . The following dialog box appears:
	 <p>The screenshot shows the 'ECCS Test Functions' dialog box. At the top, there is a menu bar with icons for File, Edit, Tools, Help, and a separator. Below the menu is a toolbar with icons for Connect with Extension, Set Message Waiting, Delete Message Waiting, Consultation Hold, Send Keystring, Set Announcement, Disconnection, Extension Type, Extension Monitoring, and Do not Disturb. The 'Do not Disturb' icon is highlighted. The main area contains a section titled 'Do not Disturb Options'. It has a label 'Extension:' followed by a text input field containing '200'. Below it is a label 'Set Do not Disturb:' with two radio buttons: one labeled 'on' and another labeled 'off'. At the bottom right of the dialog is a 'Execute' button.</p>
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension</i> Number of the internal extension (maximum 8 characters).</li> <li>• Option <i>Set Do not Disturb</i> activate / deactivate Do not Disturb.</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

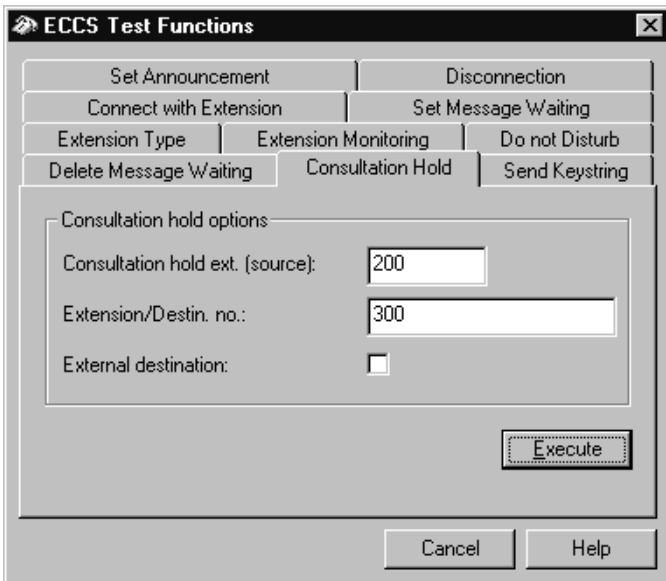
### Configuring WinCall Hicom 300

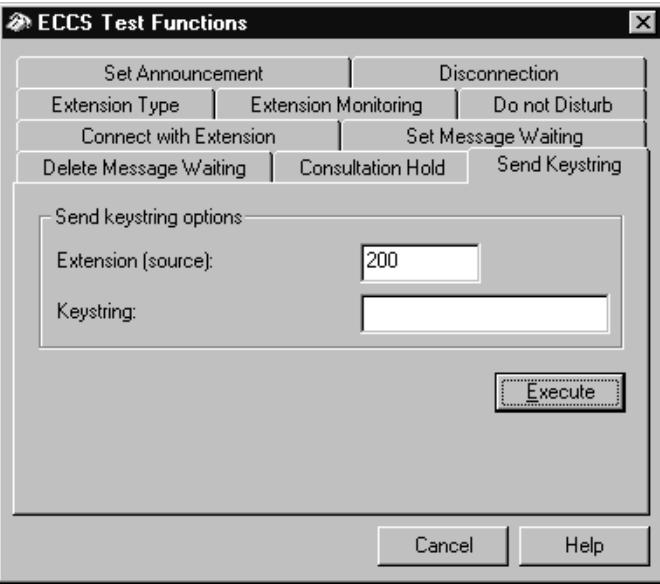
Step	Procedure
<b>... Clearing down a connection</b>	
2	Activate the tab <i>Disconnection</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be disconnected (maximum 8 characters).</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Querying an extension type</b>	
2	<p>Activate the tab <i>Extension Type</i>. The following dialog box appears:</p>  <p>The dialog box is titled "ECCS Test Functions". It has a tab bar at the top with several options: Set Announcement, Disconnection, Connect with Extension, Set Message Waiting, Delete Message Waiting, Consultation Hold, Send Keystring, Extension Type (selected), Extension Monitoring, and Do not Disturb. Below the tabs is a section labeled "Extension type options". It contains two text input fields: "Extension (source)" with the value "200" and "Type". At the bottom right is a large "Execute" button. At the very bottom of the dialog are "Cancel" and "Help" buttons.</p>
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be called (max. 8 characters).</li> </ul> <p>The terminal type transmitted by Hicom is displayed in the text field <i>Type</i>.</p>
4	<p>To generate the order, activate the <i>Execute</i> button.</p> <p><b>Note:</b> The monitor messages are displayed in the ECCS trace window.</p>

## Configuring WinCall

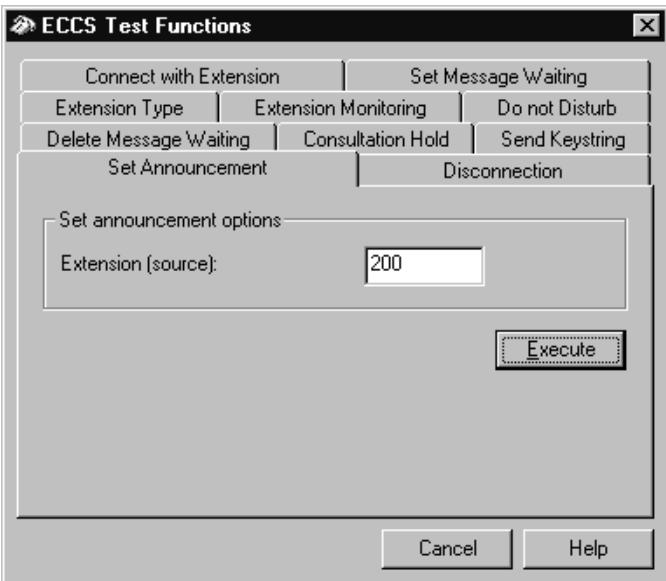
### Configuring WinCall Hicom 300

Step	Procedure
<b>... Initiating a consultation call</b>	
2	Activate the tab <i>Consultation Call</i> . The following dialog box appears:  The screenshot shows the 'ECCS Test Functions' dialog box. At the top, there are several tabs: 'Set Announcement', 'Disconnection', 'Connect with Extension', 'Set Message Waiting', 'Extension Type', 'Extension Monitoring', 'Do not Disturb', 'Delete Message Waiting', 'Consultation Hold' (which is selected), and 'Send Keystring'. Below the tabs, there is a section titled 'Consultation hold options' containing three input fields: 'Consultation hold ext. (source)' with value '200', 'Extension/Destin. no.' with value '300', and 'External destination' with an unchecked checkbox. At the bottom right of this section is a 'Execute' button. At the very bottom of the dialog box are 'Cancel' and 'Help' buttons.
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Consultation hold ext. (source)</i> Number of the internal extension (maximum 8 characters) which is to be set to consultation call.</li><li>• <i>Extension/Destin. No.</i> Number of the extension to be set to consultation call or the external number.</li><li>• <i>External destination</i> If the target number is an external consultation call number, activate this option.</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Sending a keystring</b>	
2	<p>Activate the tab <i>Send Keystring</i>. The following dialog box appears:</p>  <p>The dialog box is titled "ECCS Test Functions". It has a tab bar at the top with several options: Set Announcement, Disconnection, Extension Type, Extension Monitoring, Do not Disturb, Connect with Extension, Set Message Waiting, Delete Message Waiting, Consultation Hold, and Send Keystring. The "Send Keystring" tab is currently selected. Below the tabs is a section labeled "Send keystring options". It contains two input fields: "Extension (source)" with the value "200" and "Keystring" which is empty. At the bottom right of this section is a button labeled "Execute". At the very bottom of the dialog box are "Cancel" and "Help" buttons.</p>
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <b>Extension (source)</b> Number of the internal extension (maximum 8 characters) to which the keystring is to be transmitted.</li> <li>• <b>Keystring</b> Keystring to be transmitted (maximum 22 characters).</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

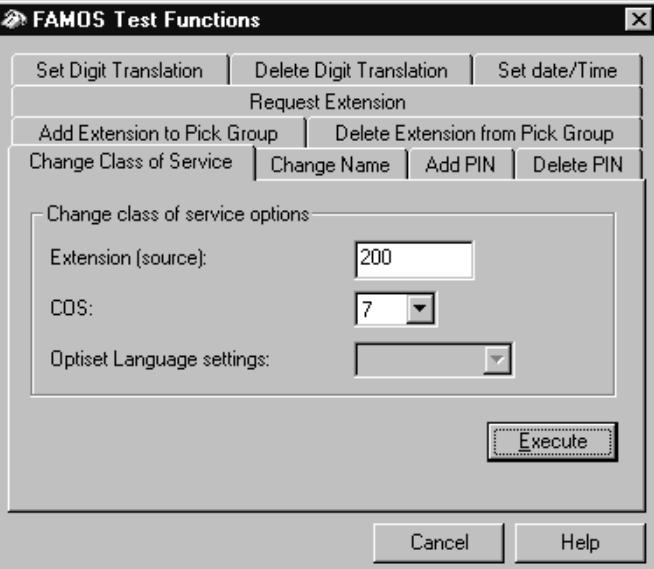
### Configuring WinCall Hicom 300

Step	Procedure
<b>... Recording an announcement</b>	
2	Activate the tab <i>Set Announcement</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension (maximum 8 characters) on which the announcement is to be operated.</li></ul>
47	To generate the order, activate the <i>Execute</i> button.

### 5.2.12.2 FAMOS test functions

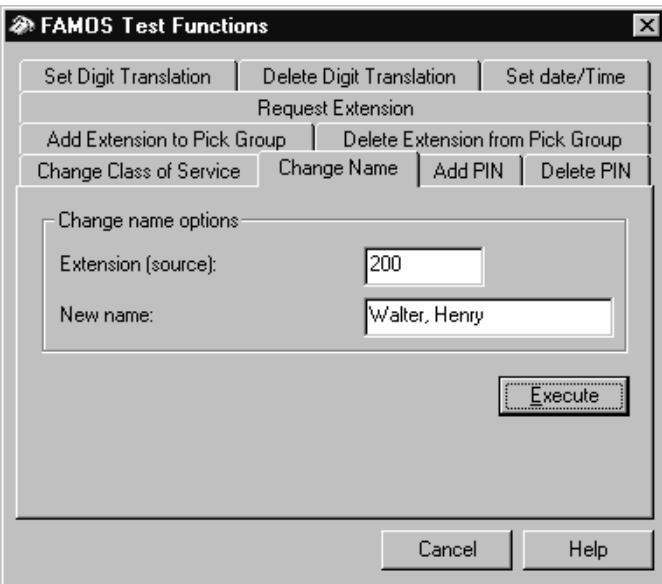
#### General

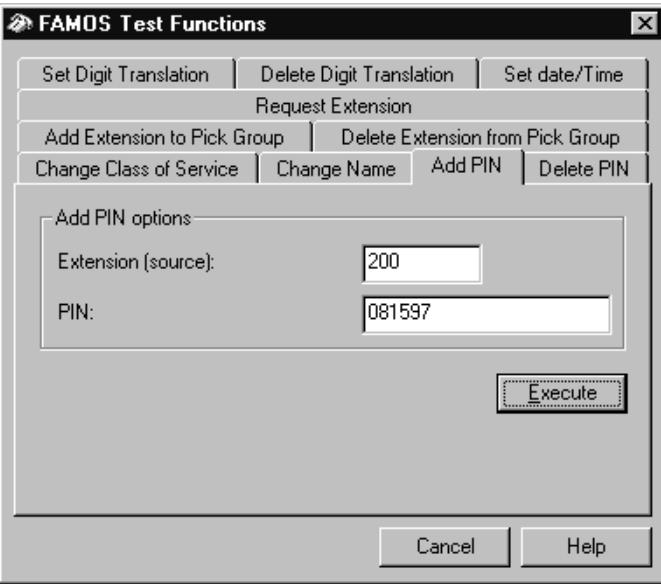
This dialog box is only available if at least one FAMOS Link is open and it is ready to operate. To test the various FAMOS functions, proceed as follows:

Step	Procedure
1	To start the FAMOS test functions, activate the menu item <i>Tools - Test FAMOS</i> . The following dialog box with a range of tabs is displayed enabling you to carry out the relevant tests:
<b>...Class of service changeover</b>	
2	Activate the tab <i>Change Class of Service</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li> <li>• <i>COS</i> Number of the class of service to be activated in accordance with the configuration specified in the LCOS/COS table. Only those services defined in the LCOS/COS table are offered for selection in this list.</li> <li>• <i>Optiset Language settings</i> You can define the language settings for Optiset terminals here. All of the available languages are contained in the list.</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

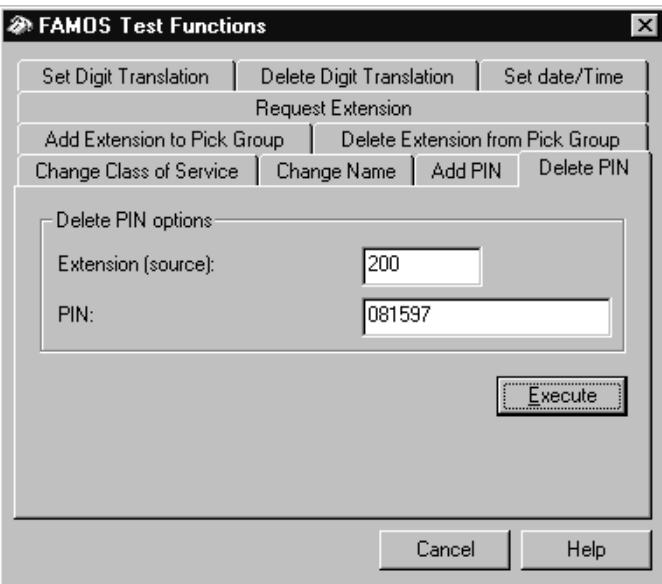
### Configuring WinCall Hicom 300

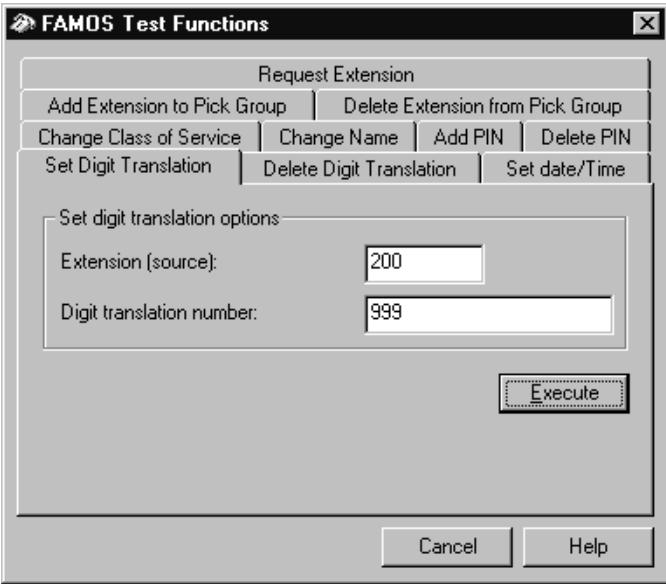
Step	Procedure
<b>...Updating a name</b>	
2	Activate the tab <i>Change Name</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li><li>• <i>New Name</i> Name to be entered for the extension (maximum 15 characters).</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Entering a PIN</b>	
2	<p>Activate the tab <i>Add PIN</i>. The following dialog box appears:</p> 
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li> <li>• <i>PIN</i> The PIN to be entered under this extension (up to 12 characters, depending on the Hicom configuration).</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

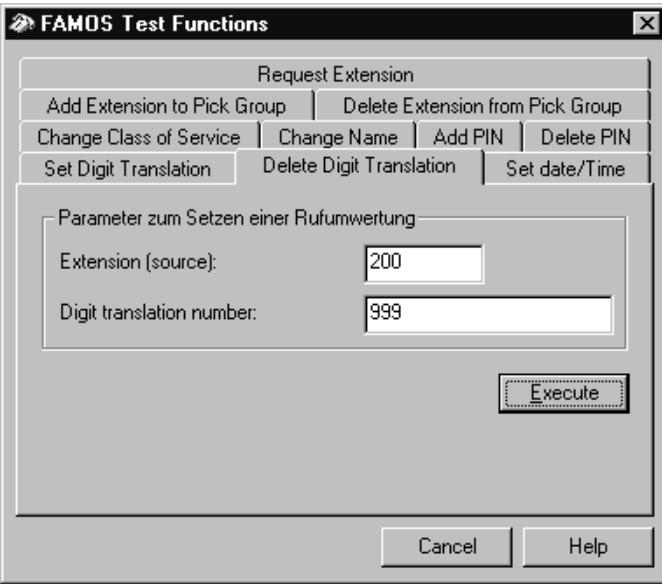
### Configuring WinCall Hicom 300

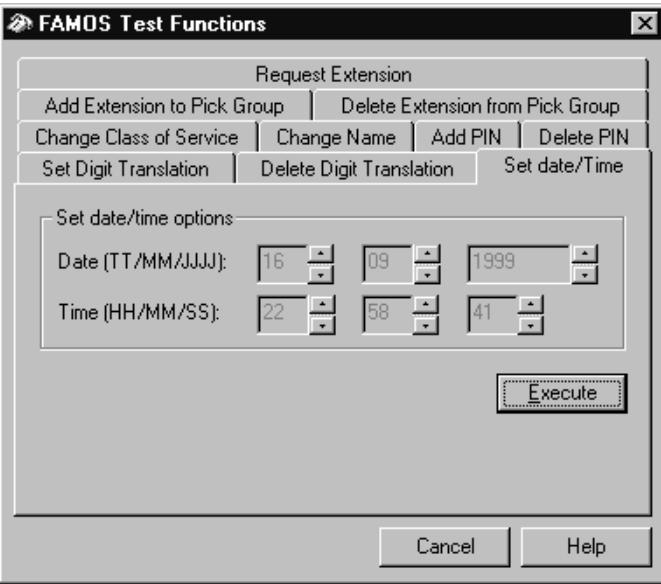
Step	Procedure
<b>...Deleting a PIN</b>	
2	Activate the tab <i>Delete PIN</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li><li>• <i>PIN</i> The PIN to be deleted under the extension (up to 12 characters, depending on the Hicom configuration).</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Setting telephone number translation</b>	
2	<p>Activate the tab <i>Set Digit Translation</i>. The following dialog box appears:</p> 
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li> <li>• <i>Digit translation number</i> The number of the extension to be forwarded (maximum 8 characters).</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

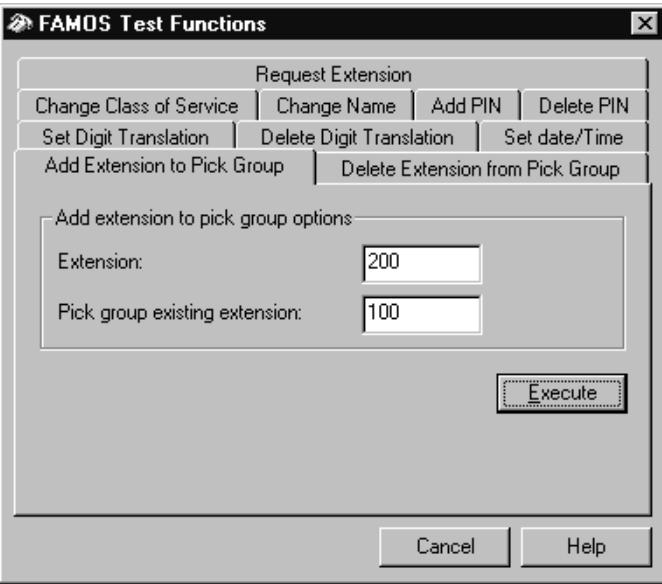
### Configuring WinCall Hicom 300

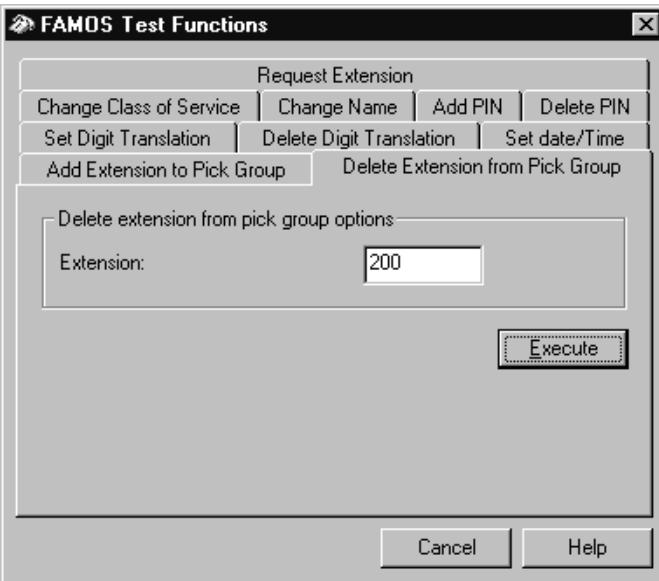
Step	Procedure
<b>...Deleting telephone number translation</b>	
2	Activate the tab <i>Delete Digit Translation</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li><li>• <i>Digit translation number</i> The translation number of the translated extension (maximum 8 characters).</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Setting the system time</b>	
2	Activate the tab <i>Set Date/Time</i> . The following dialog box appears:
	
3	Enter the following parameters: <ul style="list-style-type: none"> <li>• <i>Date (TT/MM/YYYY)</i> The current date or date to be set.</li> <li>• <i>Time (HH/MM/SS)</i> The current time or time to be set</li> </ul>
4	To generate the order, activate the <i>Execute</i> button. <b>Note:</b> If connection type TCP/IP is selected, the time will be set on each configured Hicom system!

## Configuring WinCall

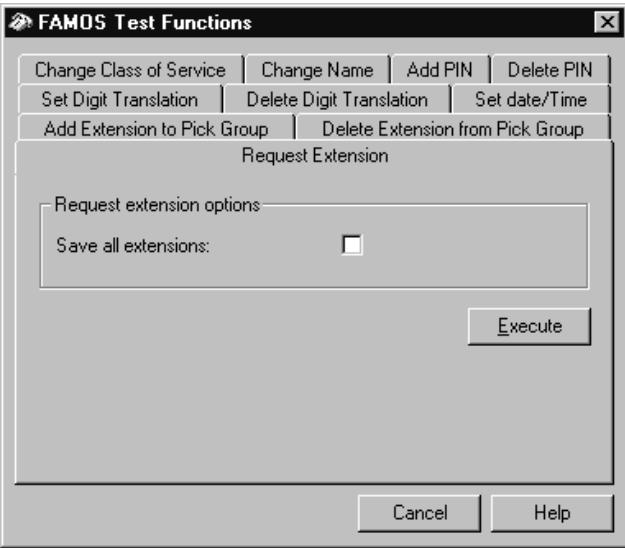
### Configuring WinCall Hicom 300

Step	Procedure
<b>...Adding a subscriber to a call pickup group</b>	
2	Activate the tab <i>Add Extension to Pick Group</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension</i> Number of the extension (maximum 8 characters) to be included in the PU group.</li><li>• <i>Pick group existing extension</i> The number of the extension (maximum 8 characters), which is already set up in any pickup group.</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Removing a subscriber from call pickup group</b>	
2	Activate the tab <i>Delete Extension from Pick Group</i> . The following dialog box appears:
	
3	Enter the following parameters: <ul style="list-style-type: none"> <li>• <i>Extension</i>              The number of the extension (maximum 8 characters) to be removed from the call pickup group.</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
<b>... Querying a subscriber</b>	
2	Activate the tab <i>Request Extension</i> . The following dialog box appears:  The screenshot shows a Windows-style dialog box titled "FAMOS Test Functions". At the top, there is a menu bar with several options: "Change Class of Service", "Change Name", "Add PIN", "Delete PIN", "Set Digit Translation", "Delete Digit Translation", "Set date/Time", "Add Extension to Pick Group", "Delete Extension from Pick Group", and "Request Extension". The "Request Extension" option is highlighted with a blue selection bar. Below the menu, there is a section titled "Request extension options" containing a checkbox labeled "Save all extensions" which is currently unchecked. At the bottom of the dialog are two buttons: "Execute" and "Cancel".
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Save all extensions</i> This option should be activated if the transmitted subscribers are to be saved in the extensions table.</li></ul>
4	To generate the order, activate the <i>Execute</i> button. The previously configured assignments are automatically deleted if the saving of all subscribers was activated. The FAMOS command AMO WABE is run in the background and all assignments available via Hicom are made available during processing (if saving was activated). It can take a good twenty minutes to complete this operation on larger systems. When the order has been carried out, a message is displayed indicating whether the task has been completed or interrupted. <b>Note:</b> The AMOs are displayed in the FAMOS trace window.

### 5.2.12.3 Simulation of call charge data

#### General

This function is only available if the CDR Link is open. To simulate call charge data, proceed as follows:

Step	Procedure
1	To simulate call charge data, activate the menu item <i>Extras - Simulate CDR</i> . The following dialog box appears: 
2	Enter the following parameters: <ul style="list-style-type: none"> <li>• <i>Extension</i> Number of the extension (maximum 8 characters) for which the call charge data record is to be simulated.</li> <li>• <i>Destination number</i> Target number of the simulated call charge data record.</li> <li>• <i>Trunk/Line access</i> Number of the trunk group access/trunk code of the simulated call charge data record (maximum 4 characters).</li> <li>• <i>Units</i> Number of units of the simulated call charge data record.</li> </ul>
3	To generate the order, activate the <i>Execute</i> button. The data record contains the current date/time, call duration 1 minute and no PIN.

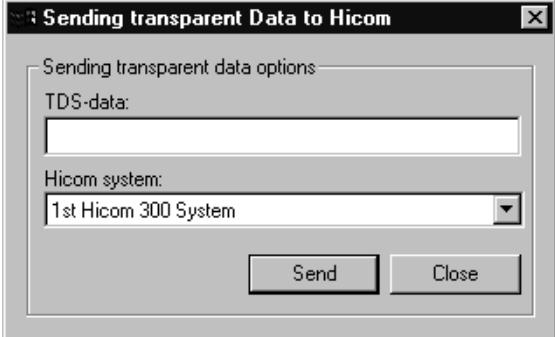
## Configuring WinCall

### Configuring WinCall Hicom 300

#### 5.2.12.4 Writing transparent data to the interface

##### General

Using this test function, you can output ACL service-independent messages directly to the interface. You can then directly enter the ACL command for the relevant service. To write transparent data, proceed as follows:

Step	Procedure
1	To write transparent data, activate the menu item <i>Extras - Write transparent data</i> . Select the required service from the submenu which appears. The options are - only if at least one service processing link is ready to operate: <ul style="list-style-type: none"><li>• ECCS Service</li><li>• TD Service (TDS)</li><li>• CDR Service</li><li>• FAMOS Service</li></ul>
2	Select the required item from the submenu. A dialog box with the following structure appears (example for TDS data): 
3	Enter the ACL command directly in the input field, in the example <i>TDS Data</i> . If the Hicom connection was configured via TCP/IP, select the Hicom to be addressed in the field <i>Hicom System</i> .
4	The command is transmitted by activating the button <i>Send</i> .

## **5.2.13 Event and error log**

### **General**

The contents of the event log generated by WinCall for logons and logoffs, program starts, etc. and the error log can be viewed in WinCall. You can selectively display the event log (user ADMIN) and the error log (technician only) on the screen to increase diagnostic performance, or you can print out the contents of the log.

### **Log reduction**

The schedule automatically reduces the log volume once a day (at night between 03:00 and 03:45) in both the error and event log.

### **Editing options**

Both logs can be output and partially or completely deleted (see below). Moreover, the event log can be selectively displayed.

## Configuring WinCall

### Configuring WinCall Hicom 300

#### Displaying the error log

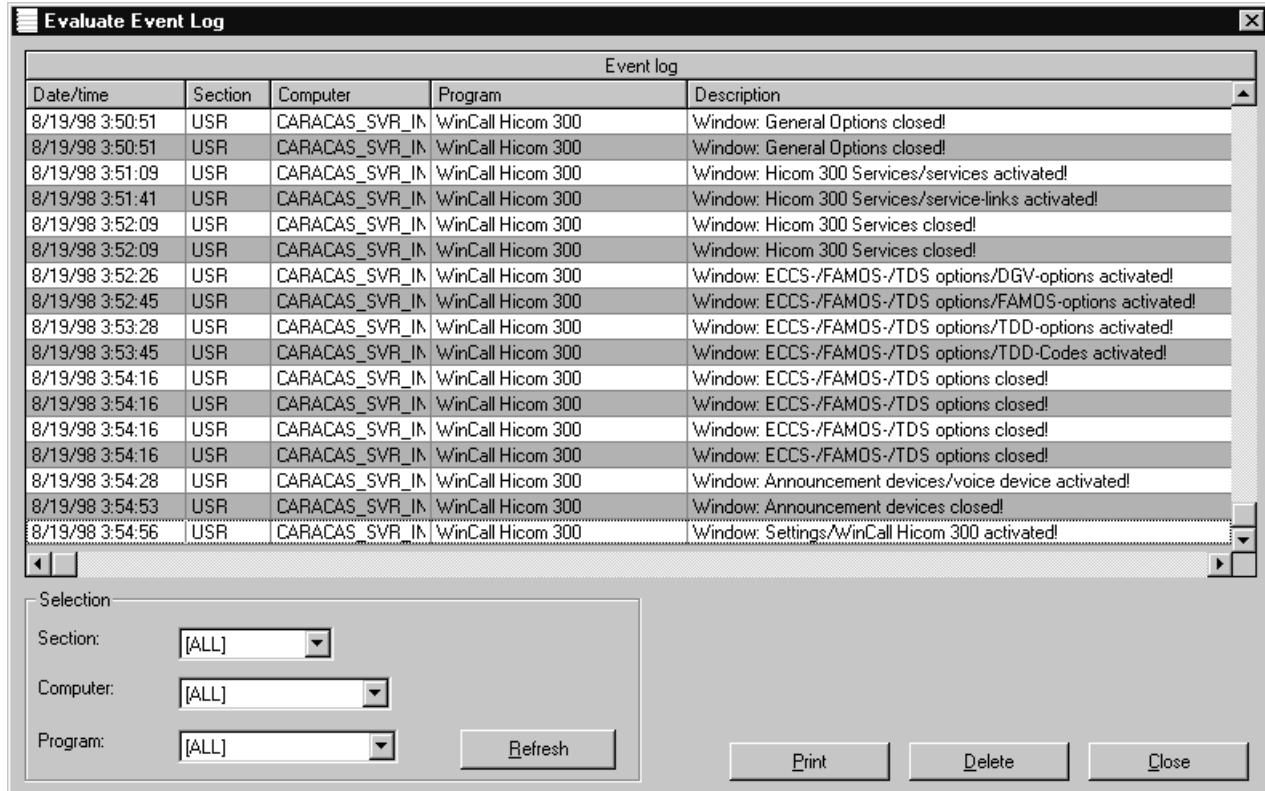
To display the error log, activate the menu item *Extras – Evaluate Error Log*:

Error log						
Date/Time	Program	Computer	Modul	Object	Procedure	Description
16/02/98 3:11:50 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:28:02 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:32:23 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:38:18 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:41:36 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:57:18 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:04:44 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:14:58 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:16:03 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/03/98 1:51:14 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	03.06.1998 13:51:14 TimeThread: checking 0 - 315 - t - 3: Datei nicht gefunden!
16/17/98 2:11:41 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/17/98 2:34:10 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
17/09/98 11:35:44 AM	WinCall Hicc	PC14005	odbc.c	ExecuteS	SQLExecDirect	DELETE FROM WC_VBZ: no rows affected!
17/09/98 11:36:09 AM	WinCall Hicc	PC14005	odbc.c	ExecuteS	SQLExecDirect	DELETE FROM WC_VBZ: no rows affected!
17/13/98 7:06:23 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	13.07.1998 19:06:23 STOP-Thread activated...: Datei nicht gefunden!
19/17/98 7:19:11 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVInit	MSVInit: [Loading error]
19/17/98 7:25:53 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVInit	MSVInit: [Loading error]
1/05/98 2:24:13 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	05.11.1998 14:24:13 TimeThread: checking 1 - 330 - t - 2: Datei nicht gefunden!
1/05/98 2:30:10 PM	WinCall Hicc	PC14005	common.c	GetUserlr	SQLFetch	user unknown!
1/05/98 2:30:15 PM	WinCall Hicc	PC14005	common.c	GetUserlr	SQLFetch	user unknown!

Figure 5-6      Error Log in WinCall

## Displaying the event log

To display the event log, activate the menu item *Extras – Evaluate Event Log* or press **F7**:



The screenshot shows a Windows application window titled "Evaluate Event Log". The main area is a table titled "Event log" with columns: Date/time, Section, Computer, Program, and Description. The table lists numerous entries from August 19, 1998, at 3:50:51 to 3:54:56, all from the "CARACAS\_SVR\_IN" computer and "WinCall Hicom 300" program. The descriptions detail various system events such as general options closing, service activation, and specific software module activations.

Event log				
Date/time	Section	Computer	Program	Description
8/19/98 3:50:51	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: General Options closed!
8/19/98 3:50:51	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: General Options closed!
8/19/98 3:51:09	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Hicom 300 Services/services activated!
8/19/98 3:51:41	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Hicom 300 Services/service-links activated!
8/19/98 3:52:09	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Hicom 300 Services closed!
8/19/98 3:52:09	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Hicom 300 Services closed!
8/19/98 3:52:26	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options/DGV-options activated!
8/19/98 3:52:45	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options/FAMOS-options activated!
8/19/98 3:53:28	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options/TDD-options activated!
8/19/98 3:53:45	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options/TDD-Codes activated!
8/19/98 3:54:16	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options closed!
8/19/98 3:54:16	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options closed!
8/19/98 3:54:16	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options closed!
8/19/98 3:54:16	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options closed!
8/19/98 3:54:28	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Announcement devices/voice device activated!
8/19/98 3:54:53	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Announcement devices closed!
8/19/98 3:54:56	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Settings/A/WinCall Hicom 300 activated!

**Selection**

Section: [ALL]      Computer: [ALL]      Program: [ALL]

Refresh      Print      Delete      Close

Figure 5-7      Event log in WinCall

## Configuring WinCall

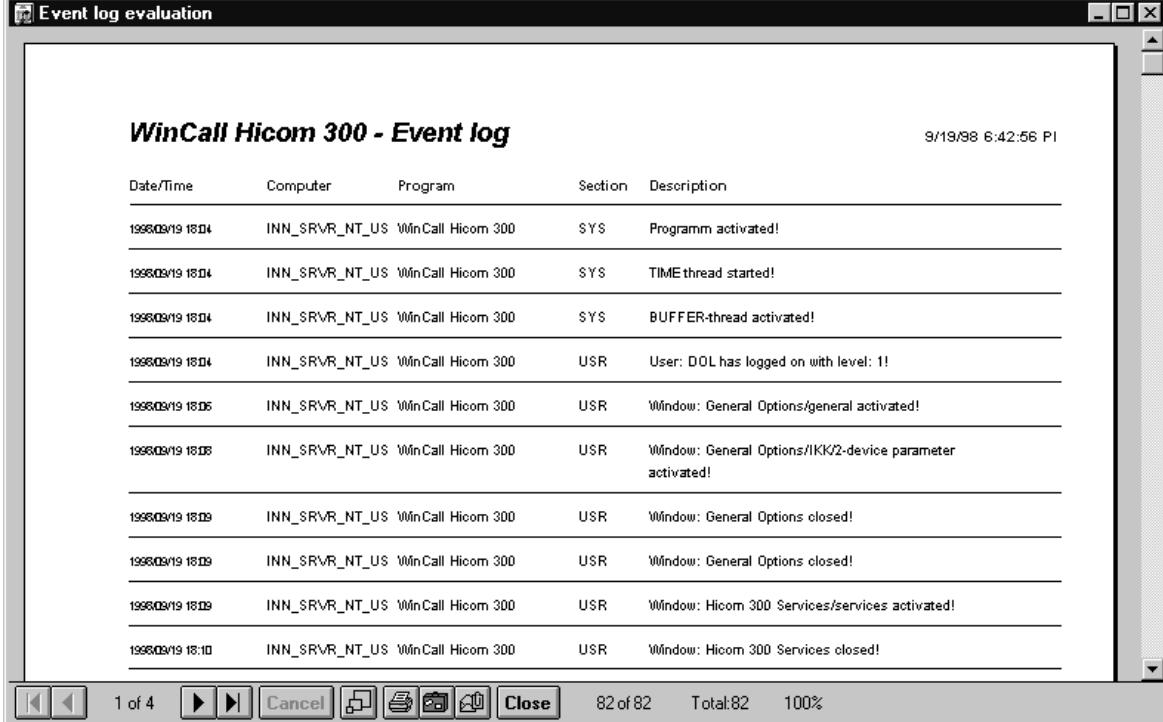
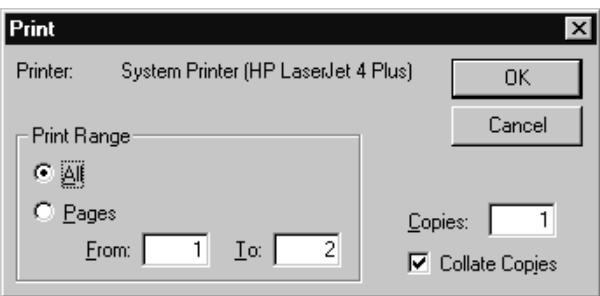
### Configuring WinCall Hicom 300

#### Selecting event log display

When displaying the event log, you can select particular entry types and particular types of program (components) or computer:

Step	Procedure	
1	Select the required entry type in the <i>Section</i> field. The possible types are listed below. A list of the current entries available in the event log is then displayed.	
	[ALL]	All entries are displayed.
	AMO	Errors and messages from the AMO service
	CLK	Errors and messages from the schedule
	DBF	Database entries: errors or messages that occur when you enter a record in the database
	ECCS	Errors and messages from the ECCS service
	FAMOS	Errors and messages from the FAMOS service
	CDR	Errors and messages from the CDR service
	MSG	Records from WinCall to Caracas Server and from Caracas Server to WinCall
	PRT	Errors and messages in connection with outputs to a printer
	REG	Errors or messages relating to functions with the Windows registration
	SYS	General system messages, e.g. end of program
	TDS	Errors and messages from TD service
	USR	Error in connection with user actions, e.g. when logging on or off
	V24	Errors or messages from the V.24 (RS232) connection
2	Select the required component in the <i>Program</i> field.	
3	Select the required computer name in the <i>Computer</i> field, this list contains all possible computer names.	
4	Click <i>Refresh</i> to confirm your selection. The log is displayed in accordance with the selection.	

## Printing the event or error log

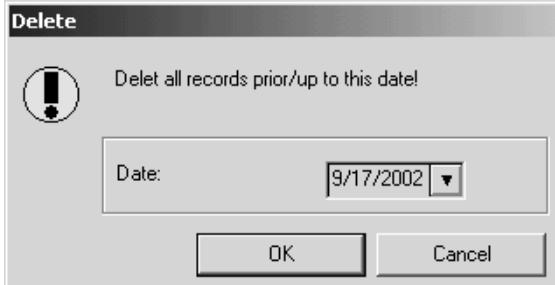
Step	Procedure
1	Activate the dialog box for the relevant log, e.g. <i>Extras – Evaluate Event Log</i> .
2	Click the <i>Print</i> button.
3	The log is displayed in page layout mode: 
4	...Printing a log to the default printer  Click the print button to start printing to the default printer. The dialog box for the default printer currently set appears: 
5	Click <i>OK</i> to start printing.

## Configuring WinCall

### Configuring WinCall Hicom 300

Step	Procedure
<b>...Zooming log outputs</b>	
4	To zoom in/out the page layout of the event log select the zoom value (in %) or enter it in the zoom list field.
<b>...Exporting a log</b>	
4	Press this button to export the logged data. In the subsequent dialog boxes, you can specify the desired export format and filename. Following the export procedure, you return to the page layout of the event log.
<b>...Quitting page layout log output</b>	
4	Click this button to quit the log output in page layout view. You are returned to the log display dialog box.

### Deleting a log partially or entirely

Step	Procedure
1	Activate the dialog box for the relevant log, e.g. <i>Extras – Evaluate Event Log</i> .
2	Highlight the log entries to be deleted and press <i>Delete</i> .
3	The following dialog box appears:  <p>Enter the date up to which all entries are to be deleted. Click <i>OK</i> if the entries are to be deleted. If no entries are to be deleted, click <i>Cancel</i>. In both cases, you are returned to the log display.</p>
<b>Tip</b>	By right-clicking the date field, you can activate a calendar in which you can select the date to be transferred to the date field.

## 5.2.14 Setup examples for Hicom 300 (V.24 (RS232)connection)

### General

Detailed instructions for the configuration of the telephone system parameters can be found in the service manual "Hicom 300 CallBridge / ACL Service Manual". The information provided below only covers important organizational requirements.

### Organizational requirements

- In order to install the system, the technician requires information about the features required by the customer to be able to assign the corresponding functions to each terminal.
- The PBX operating status version as of Hicom 300 V3.3-06Supplement 02 is required to operate the MSV-ACL interface with WinCall H3.
- The PBX operating status version as of Hicom 300 V3.6 is required to operate the LAN-ACL interface with WinCall H3.
- At least two (2) COS classes are required for COS changeover of telephones: e.g. class '7' for direct trunk access and class '2' for no direct trunk access. Additional COS classes can be configured as required, e.g. for *Caracas Link*. All of the COS classes to be activated from the main application must be configured on the Hicom (with AMO command COSSU).

### Generating Hicom 300



You can find the examples for generating the Hicom 300 (AMO commands) on the Caracas installation CD in the \Misc folder.

## **Configuring WinCall**

*Configuring WinCall Hicom 300*

### **5.2.15 Setup examples for Hicom 300 (TCP connection)**

#### **General**

A setup example for Hicom 300 TCP connection is provided below.

#### **Parameter**

(example with two systems via ISDN-WAMS)

IP-PC:	192.168.5.200
IP-WAML-EXTLAN system 1 (ext. IP):	192.168.5.150
IP-WAML-ISDN1system 1 (int. IP):	192.168.100.150
S0-TLN f. WAML-ISDN system 1:	190
IP-WAML-EXTLAN system2 (ext. IP):	192.168.10.152
IP-WAML-ISDN1 system 2 (int. IP):	192.168.100.152
S0-TLN f. WAML-ISDN system 2:	290
Line Trunk Group (LTG)	1
Line Trunk Unit (LTU)	1
WAML slot of 1st Hicom system	73
WAML slot of 2nd Hicom system	85
Access via EXTLAN WAML system 1:	System 1 = Master Hicom System 2 = Slave Hicom

#### **Additional settings:**

The PC TCP/IP driver must be set up with the connection via gateway with default gateway IP-  
WAML-EXTLAN Master-Hicom (configuration 1: 192.168.5.150/ configuration 2:  
192.168.10.152)!

The Hicoms are called from the DVA with:

Master Hicom-> EXTLAN-IP

Slave Hicom-> ISDN1-IP

The EXTLAN-IPs of the various systems must be on a different Class C network. Otherwise the internal routing by ISDN/S0 tie trunk will not work because the routing was only implemented on a network-wide basis in the Hicom-LAN interface.

## PC IP address

The PC IP address must be in the same Class B network segment as the Hicom system WAML modules to be operated (for direct access). For gateway access, the IP address must be in the same Class C network segment as the IP of the master Hicom WAML module.



You can find the examples for generating the Hicom 300 (AMO commands) on the Caracas installation CD in the \Misc folder.

## Configuring WinCall

Configuring WinCall HiPath 4000

### 5.3 Configuring WinCall HiPath 4000

#### 5.3.1 CAP HiPath 4000 Administration

##### General

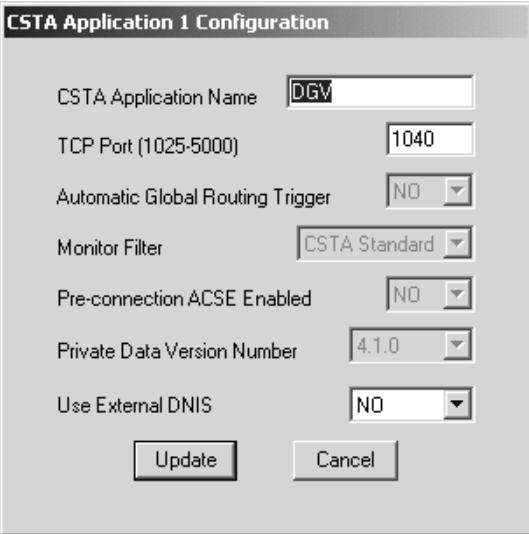
Connecting the HiPath 4000 the connection of the services ECCS and TDS is realized via the application CAP HiPath 4000 and WinCall HiPath 4000, the connection of the services FAMOS and CDR is realized via the application WinCall HiPath 4000 only. The installation of the CAP HiPath 4000 includes a CAP HiPath 4000 administration program. This installation is not part of this description, which presumes a correct installation.

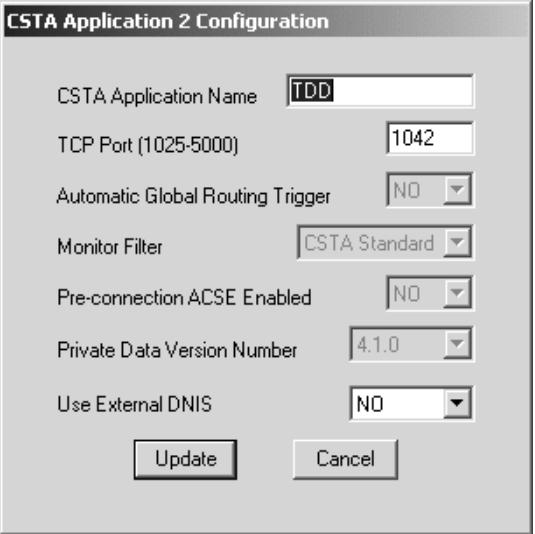
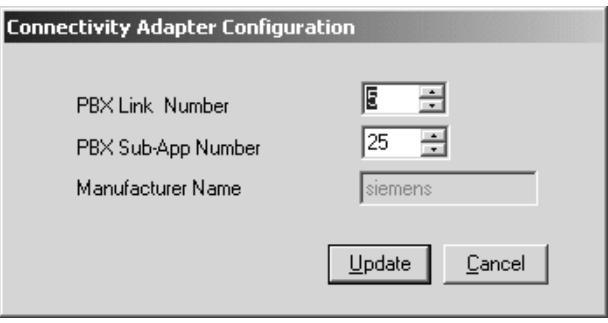
If there is more than one HiPath 4000 system connected to Caracas the CAP has to be installed on a separate PC for every single HiPath 4000.

##### Start of the CAP HiPath 4000 administration program

Start the CAP HiPath 4000 administration program with *Start - Programs - Siemens - CAP - CA4000 Admin*. A logon is not needed.

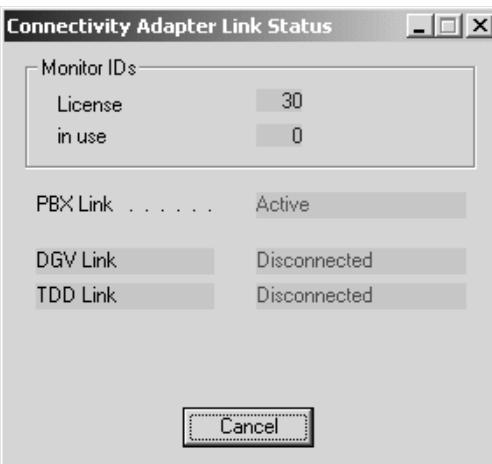
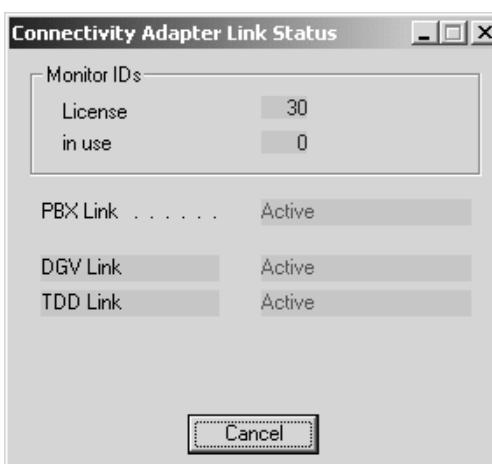
##### Service configuration

Step	Procedure
<b>Configuration of the ECCS service</b>	
1	Activate menu item <i>Configuration - CSTA 3 App - New</i> in the CAP HiPath 4000 administration program.
2	Choose the following options:  Confirm your entries with <i>Update</i> .

Step	Procedure
<b>Configuration of the TD service</b>	
1	Activate menu item <i>Configuration - CSTA 3 App - New</i> in the CAP HiPath 4000 administration program.
2	Choose the following options:   Confirm your entries with <i>Update</i> .
<b>Connectivity Adapters settings</b>	
1	Activate menu item <i>Configuration - Connectivity Adapter</i> in the CAP HiPath 4000 administration program.
2	Select the following options:   Confirm your entries with <i>Update</i> .

## Configuring WinCall

### Configuring WinCall HiPath 4000

Step	Procedure
<b>Checking the status</b>	
1	Activate menu item <i>Status - Display Connectivity Adapter Link Status</i> in the CAP Hi-Path 4000 administration program.
2	The Connectivity Adapter Link Status is displayed:  



For connecting the HiPath 4000 an entry in the hosts-file on the Caracas PC for the CAP administration program may be necessary. More information is indicated in the documentation on the CAP installation CD. The following description shows a tested setting with a released CAP version. The settings can differ in other CAP versions.  
IP address (from the PC with the CAP installed): cbadmin-server  
additionally when connected via WAML interface:  
IP address (from the ADS for external access): aclserver0

**Example:**

```
#      102.54.94.97      rhino.acme.com
#      38.25.63.10      x.acme.com

127.0.0.1      localhost

198.9.21.250    aclserver0
198.9.21.66      cbadmin-server
```

## 5.3.2 WinCall configuration

### General

WinCall is configured by the service technician (user level 1) as part of the cutover operation. The following options are configured:

- General parameters
- Services and service options
- Caracas-specific options
- Announcement devices
- COS / LCOS assignment table

### Starting WinCall HiPath 4000

If it is not already active, the WinCall HiPath 4000 component is started as part of configuration.

Step	Procedure
1	Activate the start menu and/or the WinCall HiPath 4000 desktop link.
2	Log on using the technician password.

### Deactivating the connection to Hicom

In order to configure options, the connection to Hicom should be deactivated. This ensures that all the options you have set are available the next time the connection is set up.

Step	Procedure
1	Activate the menu item <i>Conversation - Close connection to Hicom</i> or press <b>[F3]</b> .
<b>Tip</b>	The Hicom connection status is displayed in the status bar (see Section 5.3.10)

## **Configuring WinCall**

*Configuring WinCall HiPath 4000*

### **5.3.3 Connection mode to the HiPath 4000**

#### **5.3.3.1 Connection via TCP/IP: physical network connection**

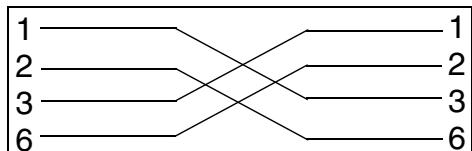
##### **General**

HiPath 4000 is connected via TCP/IP to Caracas Link. A direct connection via Atlantic-LAN of the HiPath 4000 and via WAML is possible. If you are installing several HiPath 4000 systems, the connection has to be set up via WAML.

##### **Connecting the system(s) via WAML module gateway access**

The physical network connection can be implemented without additional hardware for the connection of one/more Hicom 300 system(s) via WAML module gateway access and system networking via S2M. There are two possibilities here:

1. Connection by Cheapernet 10Base2 Coax adapter with Coax cable/BNC connector using two BNC Tparts each terminated with a BNC terminating resistor. The maximum length of the network is 200 meters.
2. Connection by RJ45 western plug adapter with twisted pair cable/RJ45 western plug connector. A “crosslink” twisted pair cable must be used with wires 1/2 “crossed with“ 3/6:



### 5.3.4 Configuring general options

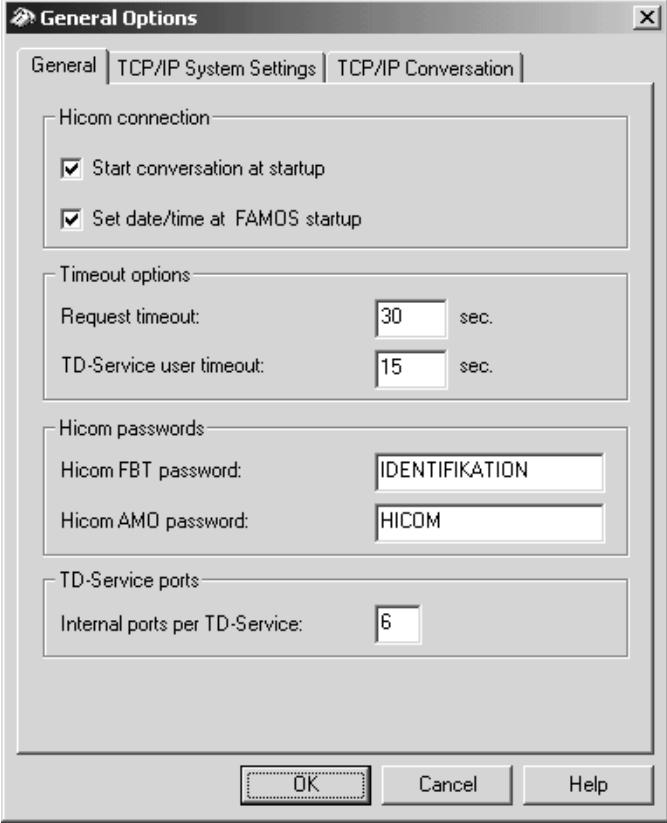
#### Which general options are configured?

The configuration of general options includes all settings for the HiPath 4000 services available. The following options are to be configured:

- General options
- TCP/IP system parameters
- TCP/IP connection parameters

#### Configuring the general parameters for internal service processing

To configure the general parameters for internal service processing, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	Select the tab <i>General</i> .  

## Configuring WinCall

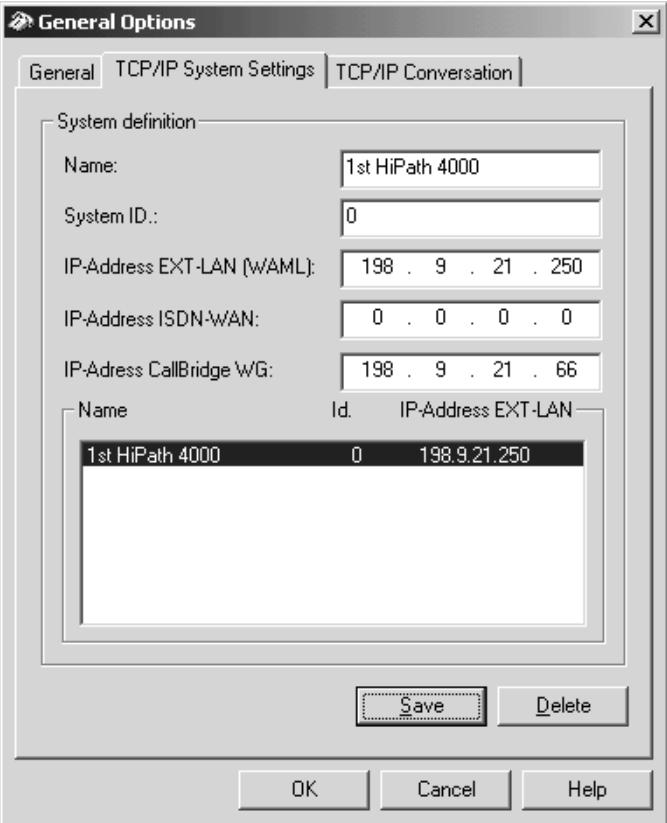
### Configuring WinCall HiPath 4000

Step	Procedure
3	<p>Under <i>Hicom connection</i> in the option field <i>Start conversation at startup</i>, define whether all configured links should be opened and initialized at the same time, each time the program is started. This option should only be deactivated when analysis is to be performed.</p> <p>Each time the ACL service FAMOS is started, the option <i>Set date/time at FAMOS startup</i> causes the function "Set time" to be called up via the AMO DATE. This ensures time synchronization between HiPath 4000 and the PC. This option should only be deactivated when analysis is to be performed.</p>
4	<p>Under <i>Timeout Options</i>, define the following timeouts in seconds:</p> <ul style="list-style-type: none"><li>● <i>Request timeout</i> Timeout for all processing steps via ACL (independent of service). If WinCall does not receive the response expected from HiPath 4000 within a configured interval, the current request is terminated/deleted and, where appropriate, returned to the main application which made the request.</li><li>● <i>TD-Service user timeout</i> Timeout for TD services to be started by terminal operators. If WinCall does not receive the terminal operator input expected via HiPath 4000 within a configured interval, the current request is deleted.</li></ul>
5	<p>Create the following passwords under <i>Hicom passwords</i>:</p> <ul style="list-style-type: none"><li>● <i>Hicom FBT password</i> This password is required for initializing the FAMOS link. This password must be used when logging in via the interface. Configuration using the incorrect FBT password causes FAMOS service processing to breakdown, with the result that important request such as COS changeover and updating guest names can no longer be completed. The corresponding FBT password configured in HiPath 4000 must be used in this case. A maximum of 15 characters may be entered.</li><li>● <i>Hicom AMO password</i> This password is required for implementing certain AMOs. Before implementing certain AMOs, HiPath 4000 requests a password. This prevents unauthorized persons accessing these AMOs and tampering with the HiPath 4000 database. The corresponding AMO password (password with the highest authorization level) configured in HiPath 4000 must be used in this case. A maximum of 15 characters may be entered.</li></ul>
6	Enter the number of ports to be used per TD service in the <i>Internal ports per TD-Service</i> field. This option defines the number of extensions that can use the same service simultaneously. The maximum value is 9.
7	Confirm your input by pressing OK.

Step	Procedure
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> </ul>

## Configuring the TCP/IP system parameters

To configure TCP/IP system parameters, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	<p>Select the tab <i>TCP/IP System Settings</i>. The following dialog box appears:</p>  <p>In this dialog box, assign/configure all of the Hicom systems to be operated in the Hicom network. A maximum of 4 systems can be configured.</p>

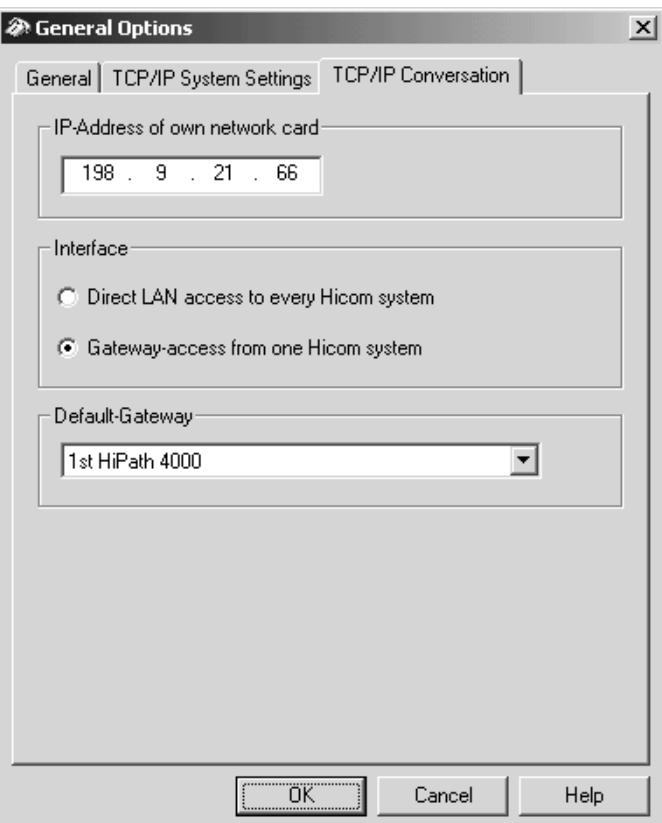
## Configuring WinCall

### Configuring WinCall HiPath 4000

Step	Procedure
<b>... Configuring a new system</b>	
3	Enter the system name (max 20 characters) in the field <i>Name</i> .
4	Enter the system ID for this Hicom system in the field <i>System ID</i> . Values between 0 and 99 are allowed (from the perspective of the Hicom system connected via the WAML module). <b>Note:</b> The parameter <i>System ID</i> corresponds to the ZLNR parameter of the AMO WABE. This parameter is used to assign subscribers to the relevant system.
5	Enter the external IP address (WAML module IP) of the system to be configured in the field <i>IP-Address EXT-LAN (WAML)</i> . Enter the corresponding system ISDN-WAN IP address (IP of the S0 subscriber which has been assigned to the WAML module) in the field <i>IP-Address ISDN-WAN (WAML)</i> . <b>Note:</b> The parameter <i>IP-Address ISDN-WAN</i> corresponds to the IP address which was configured in the AMO-LANC under TABTYP=NETZWERK and NETNAME=ISDN1. This is used for the ISDN routing function with gateway access.
6	Enter the IP address of the PC of the HiPath 4000 CAP in the Field <i>IP-Address Call-Bridge WG</i> . Usually it is the address of the Caracas Server PC.
7	Activate the button <i>Save</i> to save the parameters entered. The system parameters are displayed in the system table in the dialog box.
<b>... Editing configured system parameters</b>	
3	Click on the system entry to be edited in the system table. The system parameters appear in the input fields.
4	Change the parameters as required. Activate the button <i>Save</i> to save the parameters entered. The edited system parameters are displayed in the system table in the dialog box.
<b>... Deleting system parameters</b>	
3	Click on the system entry to be deleted in the system table. To delete the entry, activate the button <i>Delete</i> . The entry is deleted with no further request for confirmation.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Configuring the TCP/IP connection parameters

To configure TCP/IP connection parameters, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	Select the tab <i>TCP/IP Conversation</i> . The following dialog box appears: 
3	Enter the network card IP address on the Caracas server PC in the field <i>IP-Address of own network card</i> .
4	The following settings are available for the definition of connection access to the networked HiPath systems: <ul style="list-style-type: none"> <li>• <i>Direct LAN access to every Hicom system</i> The HiPath systems are available on the local network via HUB connection and are operated directly via the relevant WAML.</li> <li>• <i>Gateway-access from one Hicom System</i> The HiPath systems are cross-linked with ISDN-WAN (S0 subscribers) and are operated via the WAML of a Hicom system which is selected in the <i>Default-Gateway</i> list field.</li> </ul>
5	To save the entries made, press the button <i>OK</i> .

## Configuring WinCall

### Configuring WinCall HiPath 4000

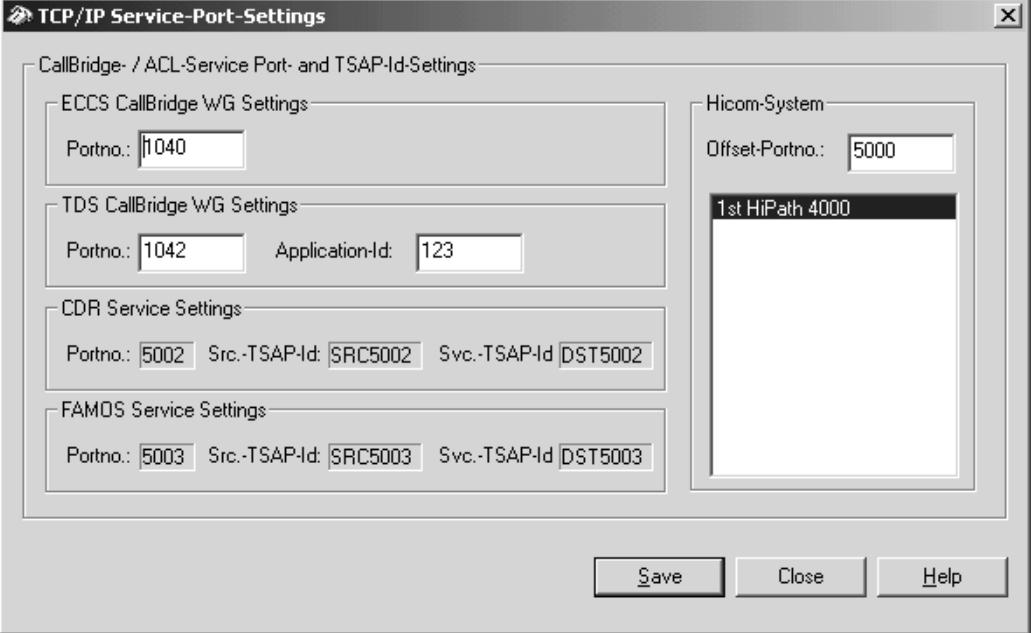
Step	Procedure
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i>The online help is started by activating the help for the current dialog box.</li></ul>



For the selection of the connection access *Gateway-access from one Hicom System*, the WAML IP address of the selected gateway Hicom system in the network configuration must be entered as the default gateway under the TCP/IP protocol parameters. If a Class C network address pool is used for the internal WAML/S0 IP address, the subnet mask should be set to 255.255.255.0.  
For the selection of the connection access *Direct LAN access to every Hicom system*, a default gateway must not be entered in the network configuration under the TCP/IP protocol parameters. If a Class C network address pool is used for the internal WAML/S0 IP address, the subnet mask should be set to 255.255.255.0.

## 5.3.5 Configuration of Service-TCP-Ports parameters

### Parameter configuration

Step	Procedure
1	<p>Activate the menu item - <i>HiPath 4000 Service-TCP-Ports</i>. The following dialog box appears:</p>  <p>The dialog box contains the following sections:</p> <ul style="list-style-type: none"> <li><b>ECCS CallBridge WG Settings:</b> Portno.: 1040</li> <li><b>TDS CallBridge WG Settings:</b> Portno.: 1042, Application-ID: 123</li> <li><b>CDR Service Settings:</b> Portno.: 5002, Src.-TSAP-Id: SRC5002, Svc.-TSAP-Id: DST5002</li> <li><b>FAMOS Service Settings:</b> Portno.: 5003, Src.-TSAP-Id: SRC5003, Svc.-TSAP-Id: DST5003</li> </ul> <p>A list on the right side shows configured Hicom systems, with "1st HiPath 4000" selected.</p>
2	<p>The ACL services to be operated by WinCall HiPath 4000 are assigned here with the corresponding port numbers to be configured on the HiPath 4000. Selection is made using the list field under <i>Hicom-System</i> which contains the configured Hicom systems.</p> <p>For the services CDR and FAMOS the relevant service options - service port numbers, service source TSAP IDs and the service destination TSAP IDs - are displayed on the left. The <i>Offset-Portno.</i> is automatically assigned by WinCall HiPath 4000 during configuration of the TCP/IP system parameters. The service options derived which are from this and displayed must be adopted when the system is set up in the AMO-CPTP.</p> <p>For the services ECCS and TDS the relevant TCP ports have to be configured according to the CAP HiPath 4000 administration. The TD service needs additionally an <i>Application-ID</i>, which has to be configured on the Hipath 4000.</p>

## Configuring WinCall

### Configuring WinCall HiPath 4000

Step	Procedure
3	<p>When the <i>Offset-Portno.</i> is changed, the default port number for the services CDR and FAMOS is changed and processed with the correspondingly modified service options.</p> <p><b>Note:</b></p> <p>The default port numbers should only be changed in exceptional cases, e.g. if the intended port numbers have already been assigned elsewhere in the Hicom system.</p>

## 5.3.6 Configuring the ECCS/FAMOS/TDS options

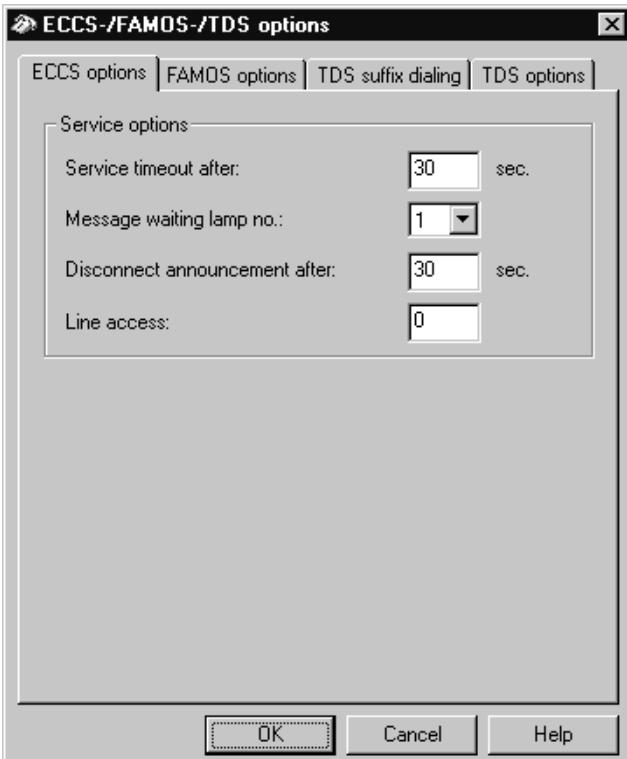
### General

Service-specific options must be configured for HiPath 4000 services:

- Options for the ECCS service
- Options for the FAMOS service
- TDS suffix dialing
- TDS options

### Options for the ECCS service

To configure options for the ECCS service proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - ECCS-/FAMOS-/TDS-Options</i> .
2	Activate the tab <i>ECCS-Options</i> . The following dialog box appears: 

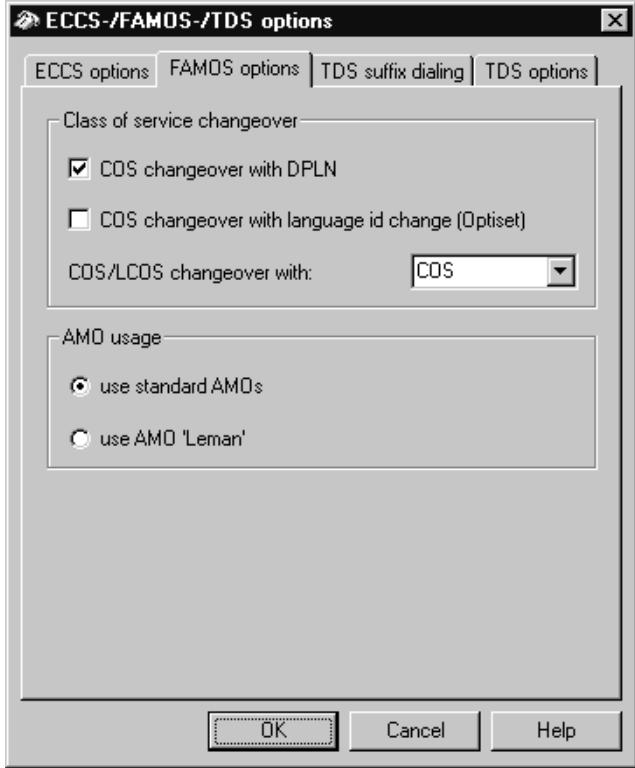
## Configuring WinCall

### Configuring WinCall HiPath 4000

Step	Procedure
3	<p>In the field <i>Service timeout after</i>, enter the timeout in seconds for ECCS processing steps which are waiting for changes in the connection status (e.g. Request: connect extensions, Application: wait for extension 1 to take call). If no response is received via HiPath 4000 from the called subscriber within the configured interval, the current request is terminated/deleted and, where appropriate, returned to the main application which made the request.</p> <p>In the list field <i>Message waiting lamp no.</i>, enter the controlling LED (associated with a name key) for the message waiting service. The number selected is valid system-wide, regardless of the type of terminal installed.</p> <p>In the field <i>Disconnect announcement after</i>, enter the maximum duration in seconds for which the announcement device should be connected. Once this interval has expired, the announcement device will be automatically disconnected.</p> <p>In the field <i>Line access</i>, enter the trunk seizure code. This setting is required for setting up connections with external destinations.</p>
4	Confirm your input by pressing OK. The configured values are valid for every configured HiPath 4000 in the network.
Tip	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## FAMOS service options

To configure options for the FAMOS service proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - ECCS-/FAMOS-/TDS-Options</i> .
2	Activate the tab <i>FAMOS options</i> . The following dialog box appears: 
3	In the check box <i>COS changeover with DPLN</i> define whether options for COS changeover with DPLN should be implemented. These options have no direct influence on service processing, instead they only control configuration specifications for the LCOS/COS assignment table.
4	In the check box <i>COS changeover with language ID change (Optiset)</i> define whether each COS changeover by Caracas Server should automatically be accompanied by the transmission of a language code, used to control the user guidance display texts at the Optiset terminal.
5	Your input in the list field <i>COS/LCOS changeover with</i> determines the type of options transferred at COS changeover. These options have no direct influence on service processing, instead they only control configuration specifications for the LCOS/COS assignment table.

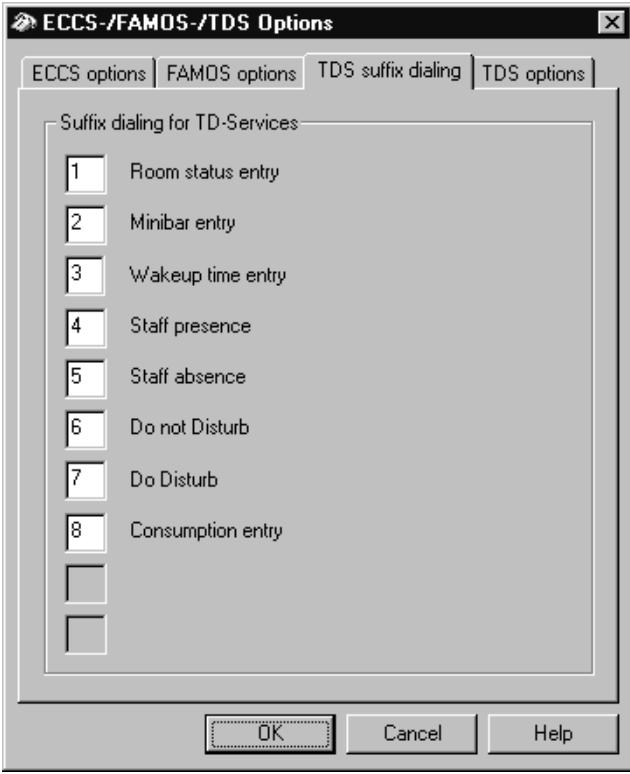
## Configuring WinCall

### Configuring WinCall HiPath 4000

Step	Procedure
6	Under <i>AMO usage</i> , you can select one of 2 AMO processing modes. You can either process requests via default AMOs such as SCSU/SBCSU, PERSI and RUFUM, or you implement the faster option ACL-AMO LEMAN.
7	To save your input press OK. The configured values are valid for every configured HiPath 4000 in the network.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>● <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>● <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## TDS suffix dialing

To configure suffix dialing for the TD services, proceed as follows:

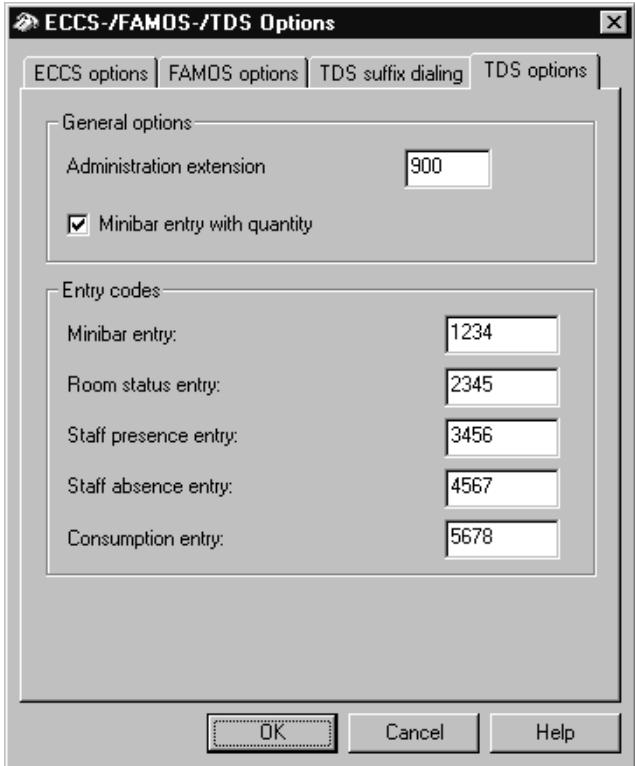
Step	Procedure
1	Activate the menu item <i>Settings - ECCS-/FAMOS-/TDS-Options</i> .
2	Activate the tab <i>TDS suffix dialing</i> . The following dialog box appears: 
3	The suffix dialing input for the telephone configured here identifies the corresponding application-specific services, once the TD-service has been started.
4	Confirm your input by pressing OK. The configured values are valid for every configured HiPath 4000 in the network.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> </ul>

## Configuring WinCall

### Configuring WinCall HiPath 4000

#### TDS options

To configure code numbers for the TD service, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - ECCS-/FAMOS-/TDS-Options</i> .
2	Activate the tab <i>TDS options</i> . The following dialog box appears: 
3	Under <i>General options</i> in the input field <i>Administration extension</i> , enter the extension number authorized to perform guest-related services for other extensions (e.g. reception telephone).
4	If you activate the <i>Minibar entry with quantity</i> check box, you will be asked to specify the quantity when making minibar entries.
5	A user must enter an entry code to receive authorization to start a TD service at an extension. You can specify entry codes for the following TD services: <ul style="list-style-type: none"><li>● Minibar entry</li><li>● Room status entry</li><li>● Staff presence entry</li><li>● Staff absence entry</li><li>● Consumption entry</li></ul>
6	Confirm your input by pressing OK.

<b>Step</b>	<b>Procedure</b>
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>● <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>● <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Configuring WinCall

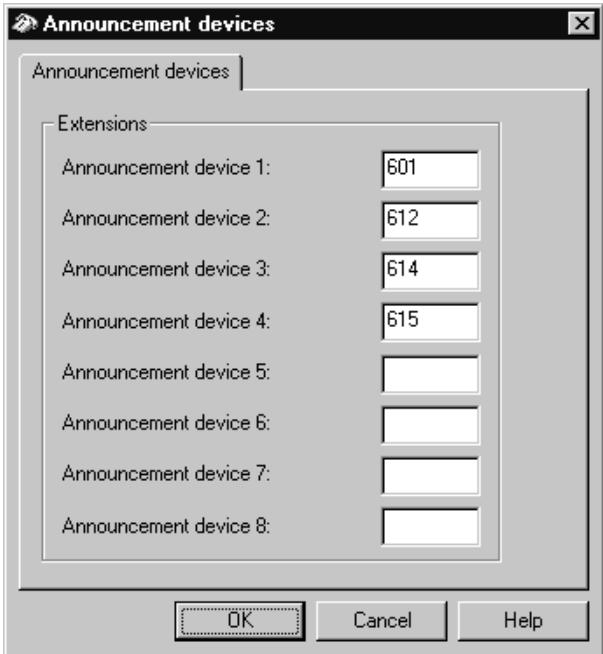
### Configuring WinCall HiPath 4000

#### 5.3.7 Configuring announcement devices

##### General

Extension numbers for the connected announcement devices can be configured in this dialog box.

##### Configuring announcement devices

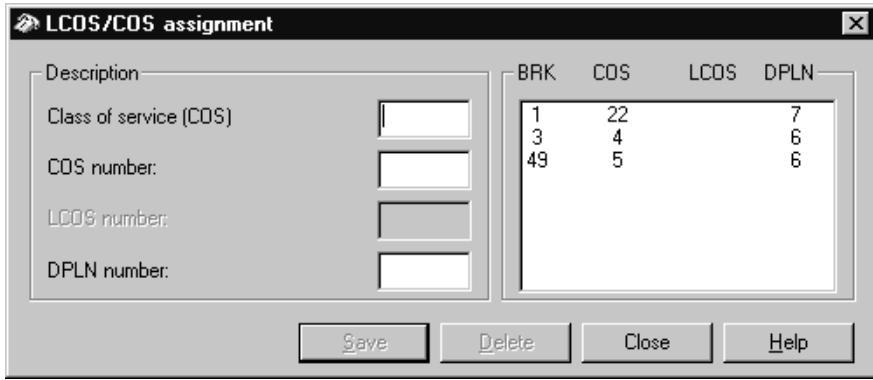
Step	Procedure
1	Activate the menu item <i>Settings - Announcement Devices</i> . The following dialog box appears: 
2	WinCall HiPath 4000 manages up to 8 announcement devices. The corresponding extension numbers are entered numerically in the respective fields and can be up to 6 characters in length.
3	Confirm your input by pressing OK.
Tip	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## 5.3.8 Configuring LCOS/COS assignment

### General

Classes of service are assigned to the corresponding COS, LCOS or DPLN settings in the Hi-com system in this configuration dialog box.

### Configuring LCOS/COS assignment

Step	Procedure																
1	<p>Activate the menu item <i>Settings - LCOS/COS-Reference Table</i>. The following dialog box appears:</p>  <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>BRK</th> <th>COS</th> <th>LCOS</th> <th>DPLN</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>22</td> <td>7</td> <td></td> </tr> <tr> <td>3</td> <td>4</td> <td>6</td> <td></td> </tr> <tr> <td>49</td> <td>5</td> <td>6</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Save</b>   <b>Delete</b>   <b>Close</b>   <b>Help</b></p>	BRK	COS	LCOS	DPLN	1	22	7		3	4	6		49	5	6	
BRK	COS	LCOS	DPLN														
1	22	7															
3	4	6															
49	5	6															
2	<p>Classes of service which have already been configured are displayed in the columns <i>BRK</i>, <i>COS</i>, <i>LCOS</i> and <i>DPLN</i>.</p> <p>The individual fields/columns:</p> <ul style="list-style-type: none"> <li>• <i>Class of service (COS) / BRK</i> The class of service number configured in Caracas (numeric, value range 1 to 99).</li> <li>• <i>COS number / COS</i> The COS which assigns classes of service (numeric, value range 1 to 999)</li> <li>• <i>LCOS number / LCOS</i> The LCOS which assigns classes of service (numeric, value range 1 to 32).</li> <li>• <i>DPLN number / DPLN</i> The DPLN which assigns classes of service (numeric, value range 0 to 15)</li> </ul>																
<b>...Adding a class of service</b>																	
3	If you wish to configure a new class of service, enter the respective value in the input field and press <i>Save</i> to confirm.																

## Configuring WinCall

### Configuring WinCall HiPath 4000

Step	Procedure
<b>...Changing a class of service</b>	
3	Select the class of service to be changed in the list. The relevant values are accepted in the input fields. You can modify all values apart from the option <i>Class of service (BRK)</i> . Confirm your input by pressing <i>Save</i> . If your entries are not accepted in the input fields, press <i>Cancel</i> .
<b>...Deleting a class of service</b>	
3	Select the class of service to be deleted in the list. The relevant values are accepted in the input fields. Confirm deletion by pressing <i>Delete</i> .
<b>...Quitting classes of service configuration</b>	
4	Quit the dialog box for LCOS/COS assignment by pressing <i>Close</i> . The configured values are valid for every configured HiPath 4000 in the network.

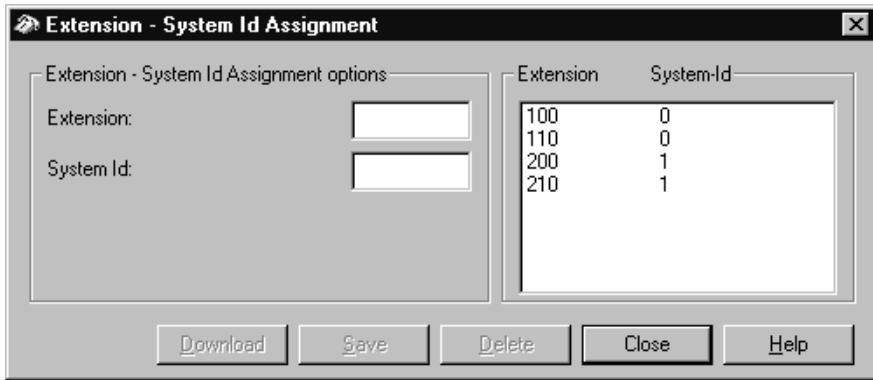


The fields *COS number*, *LCOS number* and *DPLN number* can only be processed if the corresponding options are set in the *FAMOS* options tab under *Settings - ECCS-/FAMOS-/TDS-Options*.

## 5.3.9 Assigning the extensions

### General

The existing extensions on the relevant HiPath 4000 system must be assigned in the network. Based on the existing assignment of Hicom numbers to the TCP/IP address, it is possible to define the relevant Hicom system IP address for each extension on the basis of the existing assignment of Hicom numbers to TCP/IP addresses. To assign extensions to systems, proceed as follows:

Step	Procedure										
1	<p>Activate the menu item <i>Settings - Extension-System Id assignment</i>. This menu item is only available if the connection type via TCP/IP is selected. The following dialog box appears:</p>  <table border="1"> <thead> <tr> <th>Extension</th> <th>System-Id</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>0</td> </tr> <tr> <td>110</td> <td>0</td> </tr> <tr> <td>200</td> <td>1</td> </tr> <tr> <td>210</td> <td>1</td> </tr> </tbody> </table>	Extension	System-Id	100	0	110	0	200	1	210	1
Extension	System-Id										
100	0										
110	0										
200	1										
210	1										
<b>... Entering a new assignment</b>											
2	Enter the extension numbers to be assigned in the <i>Extension</i> field.										
3	<p>Enter the system ID of the Hicom system on/to which the extension is configured/connected (from the perspective of the Hicom system connected via the WAML module) in the field <i>System Id</i>.</p> <p>The validity of existing system IDs is not checked here. The maximum length of the system ID is 2 characters.</p> <p><b>Note:</b>  The parameter <i>System Id</i> corresponds to the ZLNR parameter of the AMO WABE. This parameter is used to assign subscribers to the relevant system.</p>										
4	To save your entries, press the button <i>Save</i> .										
<b>... Editing an assignment</b>											
2	Click on the assignment to be edited in the list of extensions. The values are displayed in the fields.										
3	You can now edit the system ID.										
4	To save your entries, press the button <i>Save</i> .										

## Configuring WinCall

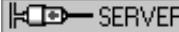
### Configuring WinCall HiPath 4000

Step	Procedure
<b>... Carrying out an automatic transfer of extension assignments</b>	
2	Click on the button <i>Download</i> . The current extension assignment is deleted in the background and the background AMO WABE is transmitted for the transfer of the extension assignment to the master Hicom system (Hicom system with the lowest ID). A message appears on the screen indicating that the automatic transfer has been carried out.
3	Confirm this message and wait for the transfer operation to finish. This is indicated in a message displayed on the screen.
4	Confirm this message. All of the subscribers currently configured on the Hicom systems are now transferred.
<b>... Deleting an assignment</b>	
2	Click on the assignment to be deleted in the list of extensions.
3	To delete the assignment, activate the button <i>Delete</i> . The assignment is deleted with no further request for confirmation and the user is returned to the dialog box.

### 5.3.10 Displays in the status bar

#### The WinCall HiPath 4000 status bar

The WinCall HiPath 4000 status bar displays the status of an interface connection to HiPath 4000, to Caracas Server, together with the respective service status. The following variants are possible:

Display	Meaning
	<p>Status of the conversation between WinCall and HiPath 4000, where the left LED corresponds to the PC and the right LED to HiPath 4000:</p> <ul style="list-style-type: none"> <li>• Green LEDs:           <ul style="list-style-type: none"> <li>– all configured service processes started</li> <li>– all configured links are "READY"</li> </ul> </li> <li>• Green / yellow LEDs:           <ul style="list-style-type: none"> <li>– all configured service processes started</li> <li>– at least one configured link is / is not "READY" (start mode or not open)</li> </ul> </li> <li>• Green / red LEDs:           <ul style="list-style-type: none"> <li>– all configured service processes started</li> <li>– none of the configured links are "READY"</li> </ul> </li> <li>• Yellow LEDs:           <ul style="list-style-type: none"> <li>– at least one configured service process is / is not started</li> <li>– at least one configured link is not "READY" (start mode or not open)</li> </ul> </li> <li>• Yellow / red LEDs:           <ul style="list-style-type: none"> <li>– at least one configured service process is / is not started</li> <li>– none of the configured links are "READY"</li> </ul> </li> <li>• Red LEDs:           <ul style="list-style-type: none"> <li>– none of the configured service processes have started</li> <li>– none of the configured links are "READY"</li> </ul> </li> </ul>
 	<p>Status of conversation to Caracas Server:</p> <ul style="list-style-type: none"> <li>• Plug in:           <ul style="list-style-type: none"> <li>– Conversation started (green arrow)</li> </ul> </li> <li>• Plug out:           <ul style="list-style-type: none"> <li>– Conversation stopped (red arrow)</li> </ul> </li> </ul>

## Configuring WinCall

### Configuring WinCall HiPath 4000

Display	Meaning
   	The colors indicate the following: <ul style="list-style-type: none"><li>● Green:<ul style="list-style-type: none"><li>– Service started on all configured system and is active</li></ul></li><li>● Yellow:<ul style="list-style-type: none"><li>– Service started on at least one but not all configured systems and is active there</li></ul></li><li>● Red:<ul style="list-style-type: none"><li>– Service is not active on any of the configured systems</li></ul></li><li>● Gray:<ul style="list-style-type: none"><li>– Service is completely switched off</li></ul></li></ul>
<b>Tip</b>	Double-click on a service icon in the status bar to start or terminate (depending on current status) a given service.

### 5.3.11 The trace window

#### General trace functions

The general functions for opening, closing, printing and writing trace windows/window contents to files, etc. were described in chapter 4.

#### Trace windows available in WinCall HiPath 4000

Trace window title / menu item under <i>Trace</i>	Description	Name of tracefile
Program Messages	General WinCall HiPath 4000 program messages	WCH4000_PROGMESS.TRC
Hicom ECCS-Service Hicom TD-Service Hicom CDR-Service Hicom FAMOS-Service	Service-specific messages, text messages provide information on the status of the relevant action performed	WCH4000_DGV.TRC WCH4000_TDD.TRC WCH4000_GUE.TRC WCH4000_FAMOS.TRC
Hicom Conversation	Connection messages to HiPath 4000. A corresponding trace window is provided for each HiPath in the network.	WCH4000_INTERFACE.TRC or WCH4000_INTERFACEx.TRC
Conversation Messages	PNIF records sent to or from the main application.	WCH4000_MESSAGE.TRC
Server Buffer	PNIF records which could not yet be sent to the main application and are have been cached.	WCH4000_SRVRBUFF.TRC
AMO Commands	Trace window for AMO processing, AMO messages are displayed as in terminal mode. A corresponding trace window is provided for each HiPath in the network.	WCH4000_AMO.TRC or WCH4000_AMO_x.TRC



The trace windows *Hicom Conversation* and *AMO Commands* are available for each configured HiPath 4000 in the network. The trace window title includes the (sequence) number of the HiPath in the network.

## Configuring WinCall

### Configuring WinCall HiPath 4000

#### Trace window context menu

You can activate the individual trace windows available and print, save or delete the current trace window currently active using the context menu that can be activated in the trace windows:

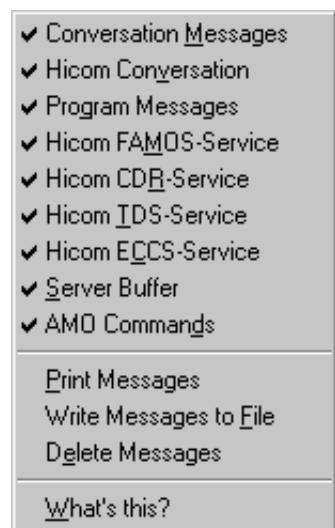


Figure 5-8 Trace window context menu in WinCall HiPath 4000



The *Print Messages* and *Delete Messages* entries are not available in the context menu of the *Server Buffer* trace window if *View mode for buffer windows* (see chapter 4, “General functions of all components”) is active. In this case, the contents of the buffer can only be saved externally. The file can, however, be printed with *Extras – Edit Tracefiles*.

### **5.3.12 Testing the connection**

#### **General**

The various services and connection to Hicom 300 are tested by means of test dialogs. The following tests can be carried out:

- ECCS test functions
  - Connection setup
  - Set/delete message waiting light
  - Extension monitoring
  - Activate do not disturb
  - Clear connection
  - Query extension type
  - Initiate consultation call
  - Send keystring
  - Record announcement
- FAMOS test functions
  - Class of service changeover
  - Name update
  - Enter PIN
  - Delete PIN
  - Add subscriber to call pickup group
  - Delete subscriber from call pickup group
  - Set system time
  - Query subscriber
  - Set telephone number translation
  - Delete telephone number translation
- AOC simulation
- Writing of transparent data to the Hicom 300
  - ECCS data
  - TDS data
  - AOC data
  - FAMOS data

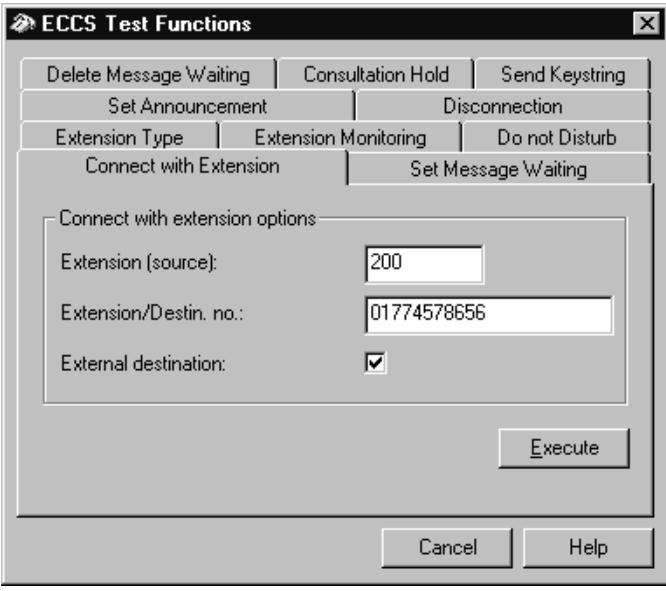
## Configuring WinCall

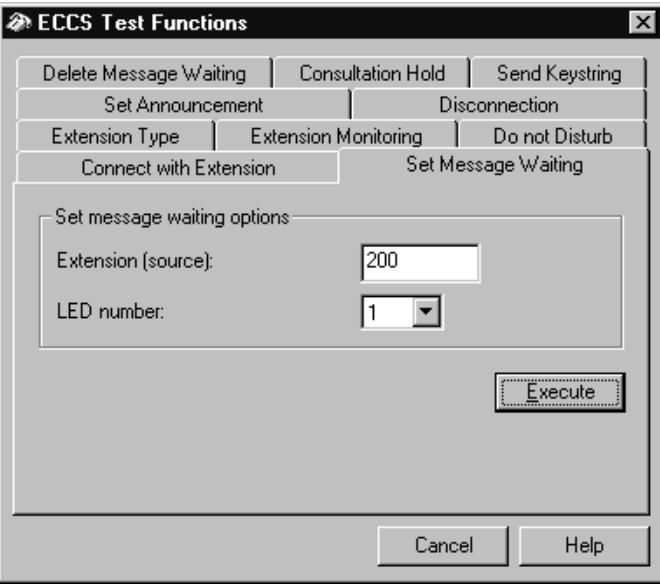
### Configuring WinCall HiPath 4000

#### 5.3.12.1 ECCS test functions

##### General

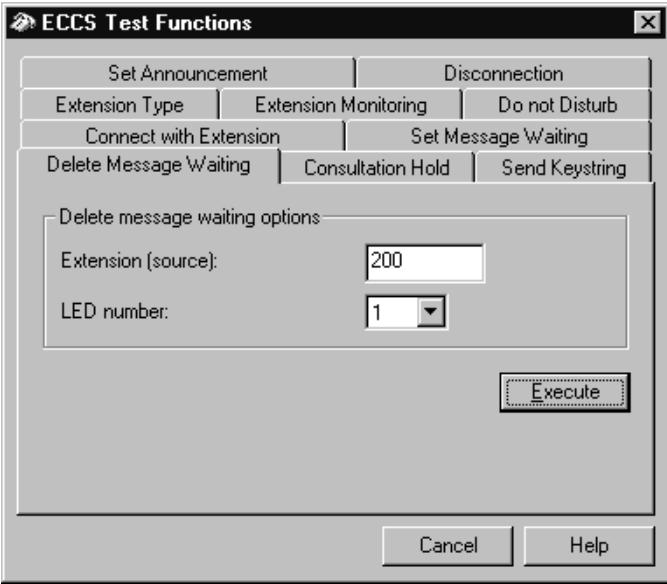
The dialog for testing the ECCS service is only available if at least one ECCS link is open and it is ready to operate. To test the various ECCS functions, proceed as follows:

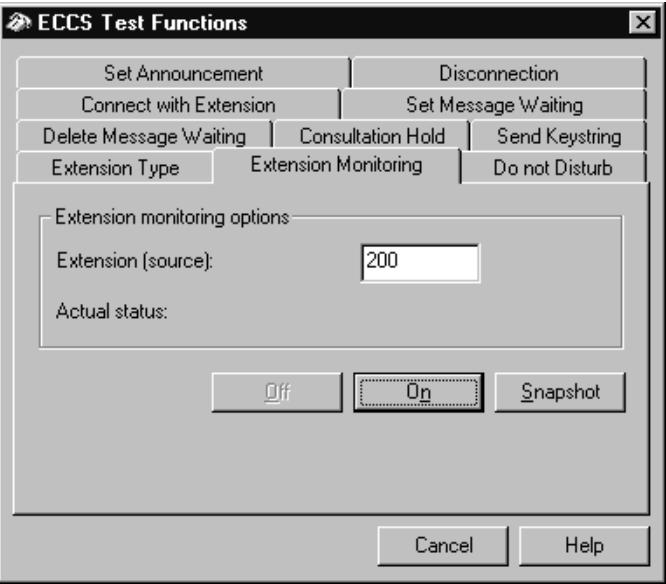
Step	Procedure
1	To start the ECCS test functions, activate the menu item <i>Extras - Test ECCS</i> . A dialog box appears with a range of tabs which enable you to carry out the relevant tests:
<b>... Testing connection setup</b>	
2	Activate the tab <i>Connection Setup</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i>: Extension number of the internal extension to be called.</li><li>• <i>Extension/Destin. no.:</i> Number of the second internal extension to be called or external number to be called (max. 24 characters)</li><li>• <i>External destination</i> If the target number is an external number, select this option.</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>... Setting the message waiting lamp</b>	
2	Activate the tab <i>Set Message Waiting</i> . The following dialog box appears:
	 <p>The dialog box is titled "ECCS Test Functions". The "Set Message Waiting" tab is selected. Inside, there are two input fields: "Extension (source)" containing "200" and "LED number" containing "1". Below these is an "Execute" button. At the bottom are "Cancel" and "Help" buttons.</p>
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the extension to be called (max. 8 characters)</li> <li>• <i>LED number</i> Select the number of the LED to be switched on (irrespective of terminal used) from the list field.</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

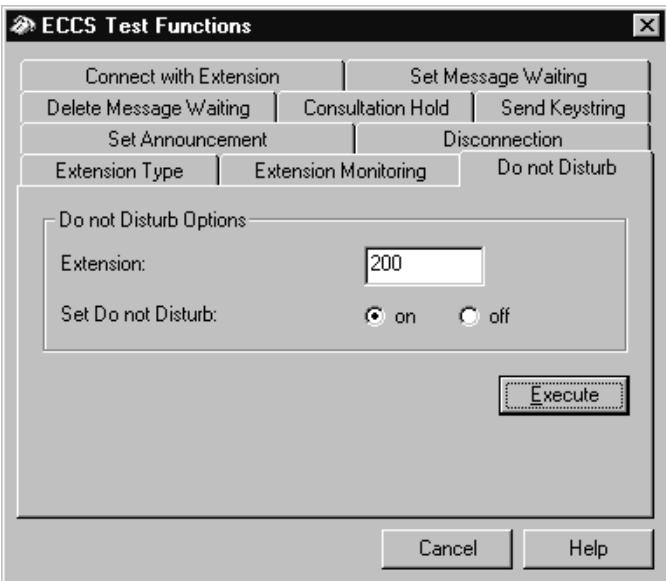
### Configuring WinCall HiPath 4000

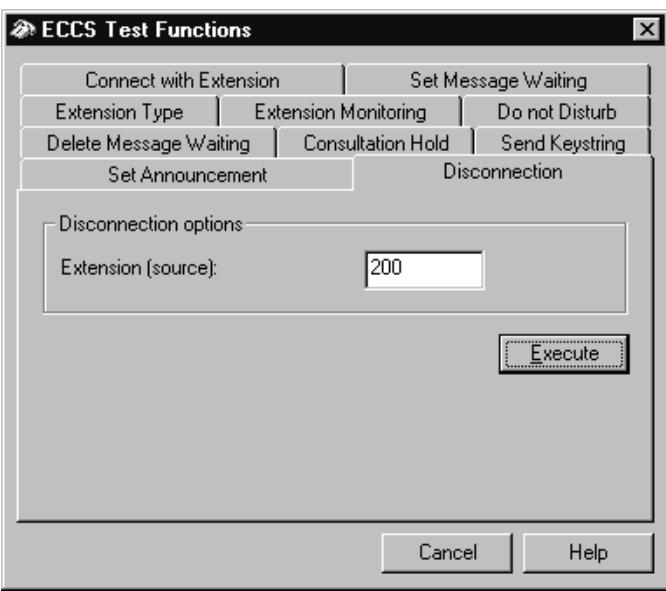
Step	Procedure
<b>... Deleting the message waiting lamp</b>	
2	Activate the tab <i>Delete Message Waiting</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be called (max. 8 characters)</li><li>• <i>LED number</i> Select the number of the LED to be deleted (depending on the terminal used) from the list field.</li></ul> To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>... Extension monitoring</b>	
2	<p>Activate the tab <i>Extension Monitoring</i>. The following dialog box appears:</p>  <p>The dialog box is titled "ECCS Test Functions". It has a tab bar at the top with "Extension Monitoring" selected. Below the tabs is a section labeled "Extension monitoring options". It contains a text field "Extension (source):" with "200" entered. Below it is a text field "Actual status:" which is currently empty. At the bottom are three buttons: "Off", "On" (which is highlighted), and "Snapshot". At the very bottom are "Cancel" and "Help" buttons.</p>
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be monitored (maximum 8 characters) The status transmitted by Hicom is displayed in the output field <i>Current Status</i>.</li> </ul>
4	<p>If you press the <i>Snapshot</i> button, the status at the time of the query is displayed in the text field. If you activate the button <i>Monitor On</i>, this display is also updated if there are changes in status. To close this display, press the button <i>Monitor Off</i>.</p> <p><b>Note:</b> If the monitoring function is active, changes in the status of a subscriber are automatically displayed under <i>Current Status</i>.</p> <p><b>Note:</b> The monitor messages are displayed in the ECCS trace window.</p>

## Configuring WinCall

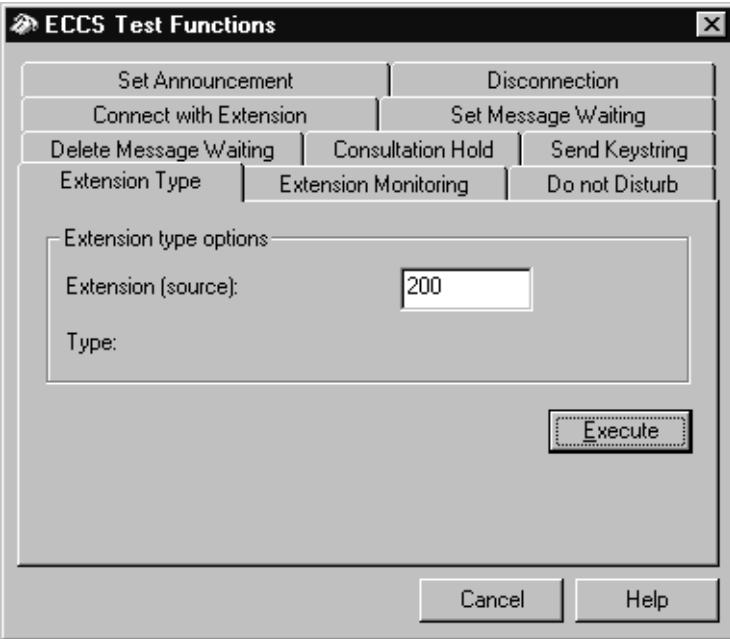
### Configuring WinCall HiPath 4000

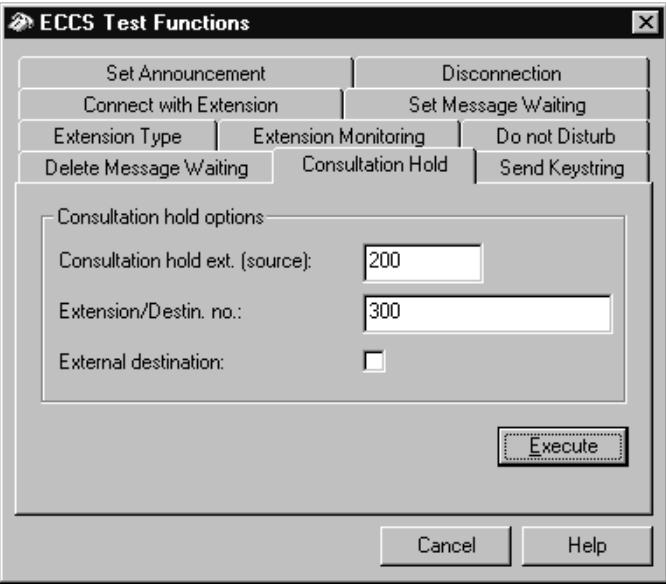
Step	Procedure
<b>... Activating do not disturb</b>	
2	Activate the tab <i>Activate Do Not Disturb</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension</i> Number of the internal extension (maximum 8 characters).</li><li>• Option <i>Set Do not Disturb</i> activate / deactivate Do not Disturb.</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>... Clearing down a connection</b>	
2	Activate the tab <i>Disconnection</i> . The following dialog box appears:
	 <p>The screenshot shows the 'ECCS Test Functions' dialog box. At the top, there are several tabs: 'Connect with Extension', 'Set Message Waiting', 'Extension Type', 'Extension Monitoring', 'Do not Disturb', 'Delete Message Waiting', 'Consultation Hold', 'Send Keystring', 'Set Announcement', and 'Disconnection'. The 'Disconnection' tab is currently selected. Below the tabs, there is a section titled 'Disconnection options' containing a label 'Extension (source)' and a text input field containing '200'. At the bottom of the dialog box are two buttons: 'Execute' and 'Cancel'.</p>
3	Enter the following parameters: <ul style="list-style-type: none"> <li>• <i>Extension (source)</i>            Number of the internal extension to be disconnected (maximum 8 characters).</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

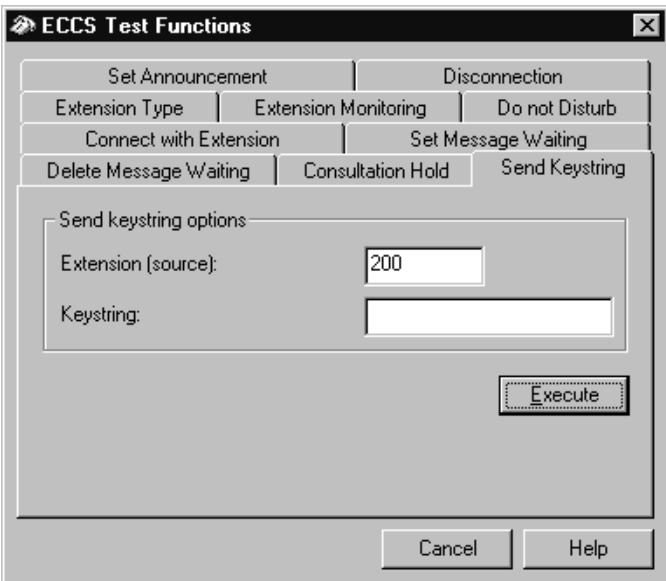
### Configuring WinCall HiPath 4000

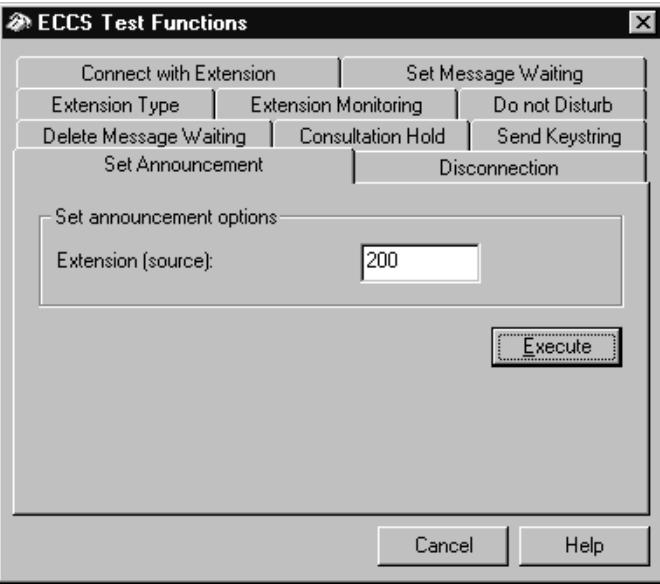
Step	Procedure
<b>...Querying an extension type</b>	
2	Activate the tab <i>Extension Type</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be called (max. 8 characters). The terminal type transmitted by Hicom is displayed in the text field <i>Type</i>.</li></ul>
4	To generate the order, activate the <i>Execute</i> button. <b>Note:</b> The monitor messages are displayed in the ECCS trace window.

Step	Procedure
<b>... Initiating a consultation call</b>	
2	Activate the tab <i>Consultation Call</i> . The following dialog box appears:
	
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Consultation hold ext. (source)</i> Number of the internal extension (maximum 8 characters) which is to be set to consultation call.</li> <li>• <i>Extension/Destin. No.</i> Number of the extension to be set to consultation call or the external number.</li> <li>• <i>External destination</i> If the target number is an external consultation call number, activate this option.</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

### Configuring WinCall HiPath 4000

Step	Procedure
<b>...Sending a keystring</b>	
2	Activate the tab <i>Send Keystring</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension (maximum 8 characters) to which the keystring is to be transmitted.</li><li>• <i>Keystring</i> Keystring to be transmitted (maximum 22 characters).</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>... Recording an announcement</b>	
2	<p>Activate the tab <i>Set Announcement</i>. The following dialog box appears:</p>  <p>The dialog box is titled "ECCS Test Functions". It has a tab bar at the top with several options: "Connect with Extension", "Set Message Waiting", "Extension Type", "Extension Monitoring", "Do not Disturb", "Delete Message Waiting", "Consultation Hold", "Send Keystring", "Set Announcement" (which is selected), and "Disconnection". Below the tabs is a section titled "Set announcement options". Inside this section, there is a label "Extension (source):" followed by an input field containing "200". At the bottom right of this section is a button labeled "Execute". At the very bottom of the dialog box are two buttons: "Cancel" and "Help".</p>
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension (maximum 8 characters) on which the announcement is to be operated.</li> </ul>
47	To generate the order, activate the <i>Execute</i> button.

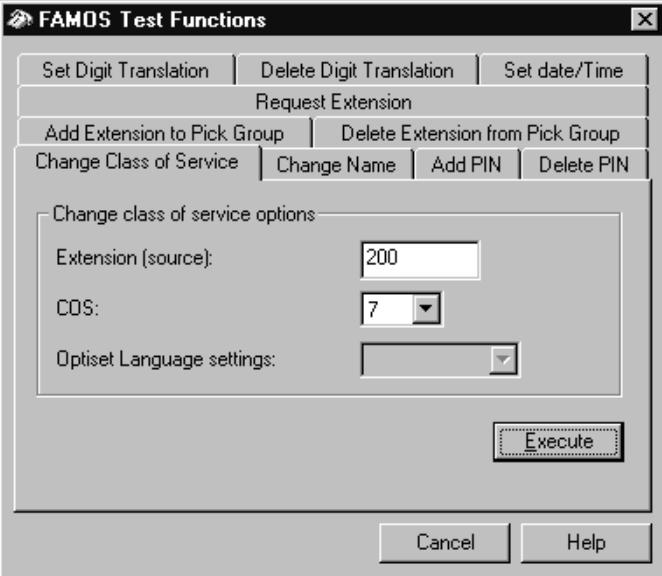
## Configuring WinCall

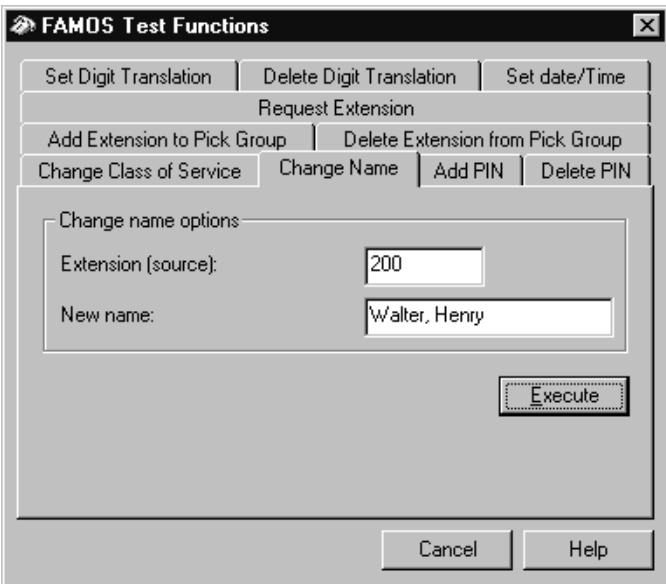
### Configuring WinCall HiPath 4000

#### 5.3.12.2 FAMOS test functions

##### General

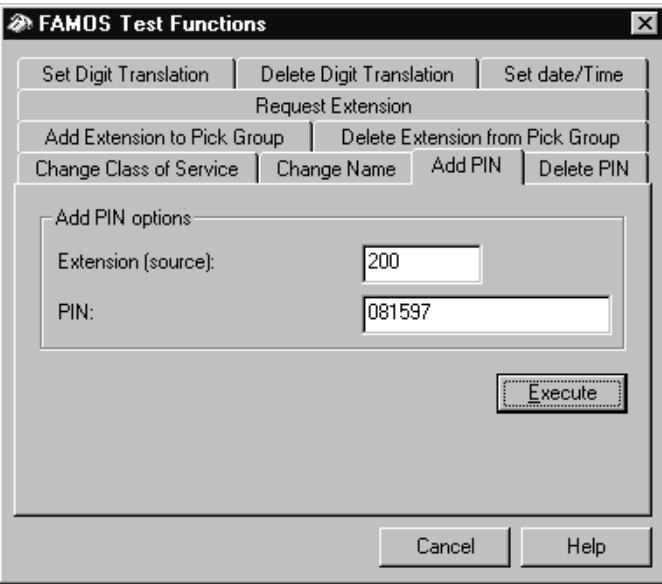
This dialog box is only available if at least one FAMOS Link is open and it is ready to operate. To test the various FAMOS functions, proceed as follows:

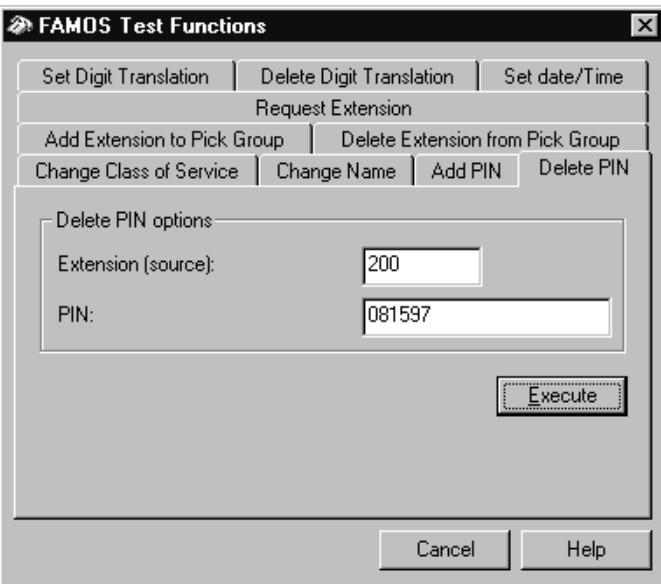
Step	Procedure
1	To start the FAMOS test functions, activate the menu item <i>Tools - Test FAMOS</i> . The following dialog box with a range of tabs is displayed enabling you to carry out the relevant tests:
<b>...Class of service changeover</b>	
2	Activate the tab <i>Change Class of Service</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li><li>• <i>COS</i> Number of the class of service to be activated in accordance with the configuration specified in the LCOS/COS table. Only those services defined in the LCOS/COS table are offered for selection in this list.</li><li>• <i>Optiset Language settings</i> You can define the language settings for Optiset terminals here. All of the available languages are contained in the list.</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Updating a name</b>	
2	Activate the tab <i>Change Name</i> . The following dialog box appears:
	 <p>The screenshot shows the 'FAMOS Test Functions' dialog box. At the top, there are several tabs: Set Digit Translation, Delete Digit Translation, Set date/Time, Request Extension, Add Extension to Pick Group, Delete Extension from Pick Group, Change Class of Service, Change Name (which is highlighted), Add PIN, and Delete PIN. Below the tabs, under the 'Change name options' section, there are two input fields: 'Extension (source)' containing '200' and 'New name' containing 'Walter, Henry'. At the bottom right of the dialog box is a 'Execute' button.</p>
3	Enter the following parameters: <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li> <li>• <i>New Name</i> Name to be entered for the extension (maximum 15 characters).</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

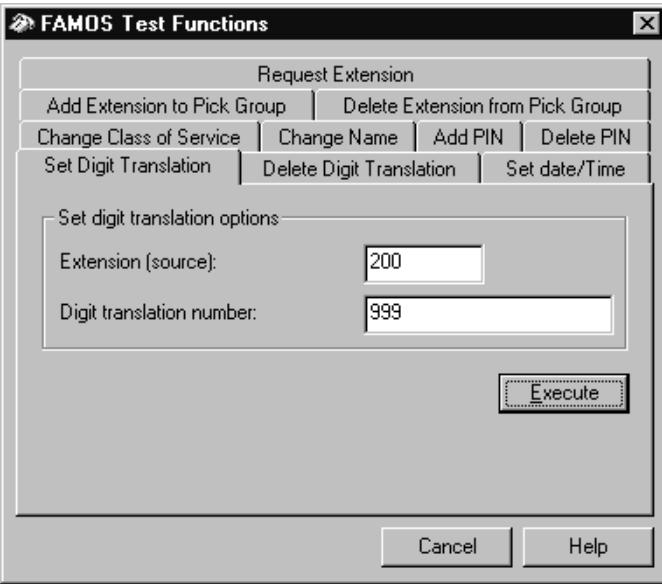
### Configuring WinCall HiPath 4000

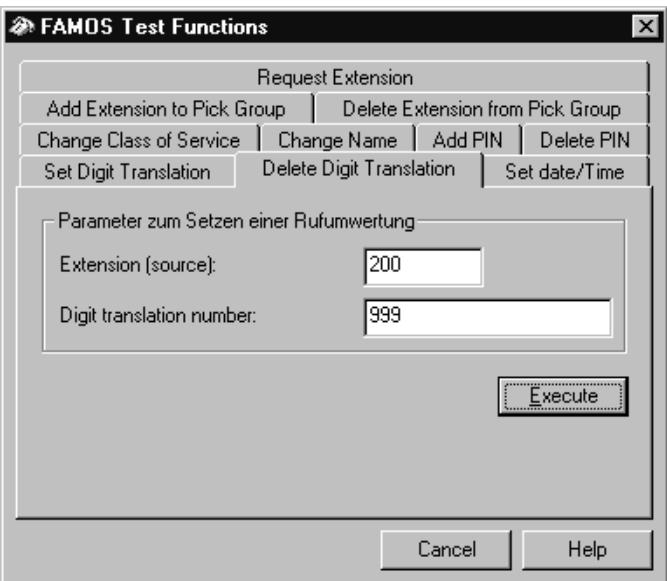
Step	Procedure
<b>...Entering a PIN</b>	
2	Activate the tab <i>Add P/N</i> . The following dialog box appears:
	
3	Enter the following parameters: <ul style="list-style-type: none"><li>● <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li><li>● <i>PIN</i> The PIN to be entered under this extension (up to 12 characters, depending on the Hicom configuration).</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Deleting a PIN</b>	
2	<p>Activate the tab <i>Delete PIN</i>. The following dialog box appears:</p> 
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li> <li>• <i>PIN</i> The PIN to be deleted under the extension (up to 12 characters, depending on the Hicom configuration).</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

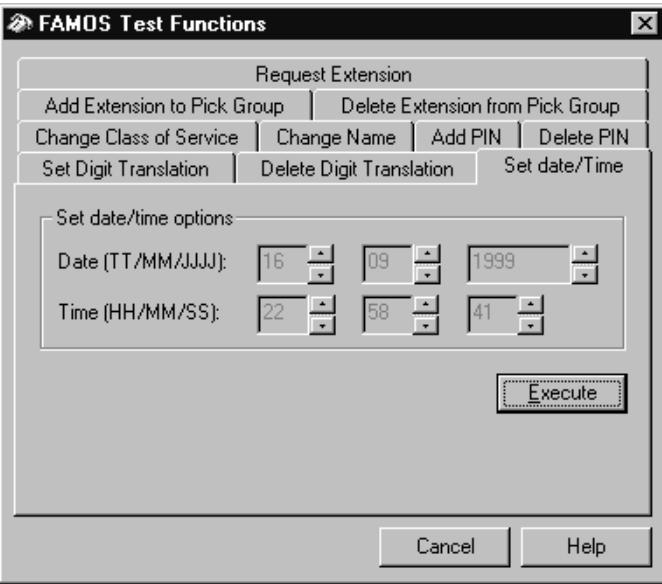
### Configuring WinCall HiPath 4000

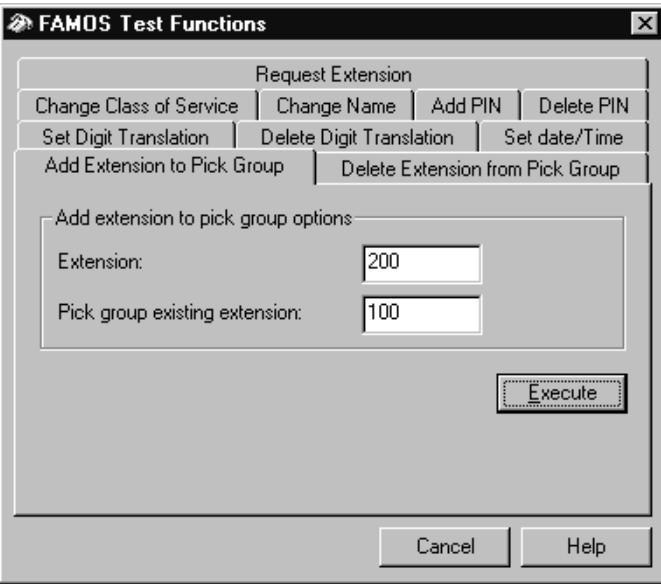
Step	Procedure
<b>...Setting telephone number translation</b>	
2	Activate the tab <i>Set Digit Translation</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li><li>• <i>Digit translation number</i> The number of the extension to be forwarded (maximum 8 characters).</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>...Deleting telephone number translation</b>	
2	<p>Activate the tab <i>Delete Digit Translation</i>. The following dialog box appears:</p> 
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension (source)</i> Number of the internal extension to be called (maximum 8 characters).</li> <li>• <i>Digit translation number</i> The translation number of the translated extension (maximum 8 characters).</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

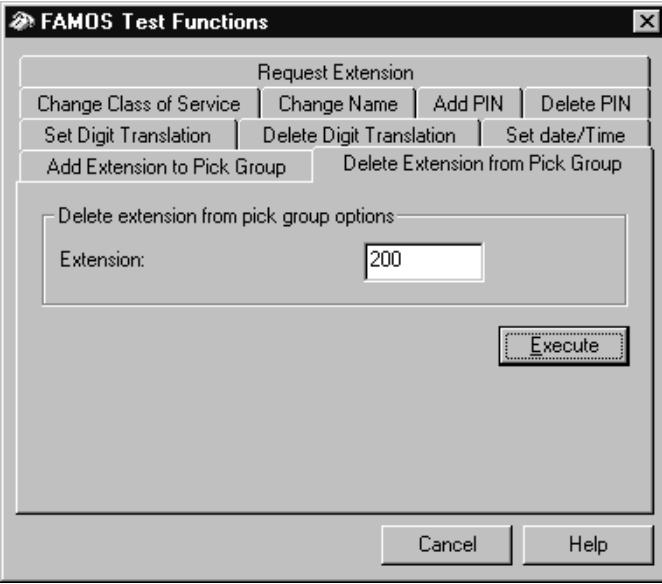
### Configuring WinCall HiPath 4000

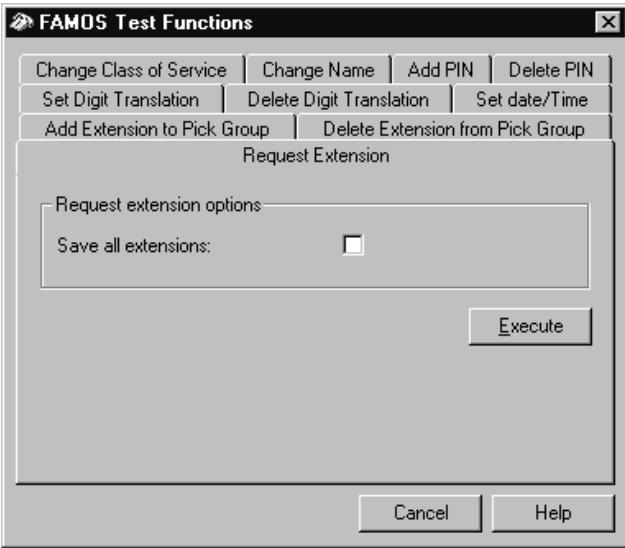
Step	Procedure
<b>...Setting the system time</b>	
2	Activate the tab <i>Set Date/Time</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Date (TT/MM/YYYY)</i> The current date or date to be set.</li><li>• <i>Time (HH/MM/SS)</i> The current time or time to be set</li></ul>
4	To generate the order, activate the <i>Execute</i> button. <b>Note:</b> If connection type TCP/IP is selected, the time will be set on each configured Hicom system!

Step	Procedure
<b>...Adding a subscriber to a call pickup group</b>	
2	Activate the tab <i>Add Extension to Pick Group</i> . The following dialog box appears:
	
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>• <i>Extension</i> Number of the extension (maximum 8 characters) to be included in the PU group.</li> <li>• <i>Pick group existing extension</i> The number of the extension (maximum 8 characters), which is already set up in any pickup group.</li> </ul>
4	To generate the order, activate the <i>Execute</i> button.

## Configuring WinCall

### Configuring WinCall HiPath 4000

Step	Procedure
<b>...Removing a subscriber from call pickup group</b>	
2	Activate the tab <i>Delete Extension from Pick Group</i> . The following dialog box appears: 
3	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension</i> The number of the extension (maximum 8 characters) to be removed from the call pickup group.</li></ul>
4	To generate the order, activate the <i>Execute</i> button.

Step	Procedure
<b>... Querying a subscriber</b>	
2	<p>Activate the tab <i>Request Extension</i>. The following dialog box appears:</p>  <p>The screenshot shows the FAMOS Test Functions dialog box. At the top, there is a menu bar with several tabs: Change Class of Service, Change Name, Add PIN, Delete PIN, Set Digit Translation, Delete Digit Translation, Set date/Time, Add Extension to Pick Group, Delete Extension from Pick Group, and Request Extension. The Request Extension tab is currently selected. Below the tabs, there is a section labeled "Request extension options" containing a checkbox labeled "Save all extensions". At the bottom of the dialog box are two buttons: "Execute" and "Cancel".</p>
3	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> <li>● <i>Save all extensions</i></li> </ul> <p>This option should be activated if the transmitted subscribers are to be saved in the extensions table.</p>
4	<p>To generate the order, activate the <i>Execute</i> button. The previously configured assignments are automatically deleted if the saving of all subscribers was activated. The FAMOS command AMO WABE is run in the background and all assignments available via Hicom are made available during processing (if saving was activated). It can take a good twenty minutes to complete this operation on larger systems. When the order has been carried out, a message is displayed indicating whether the task has been completed or interrupted.</p> <p><b>Note:</b>  The AMOs are displayed in the FAMOS trace window.</p>

## Configuring WinCall

### Configuring WinCall HiPath 4000

#### 5.3.12.3 Simulation of call charge data

##### General

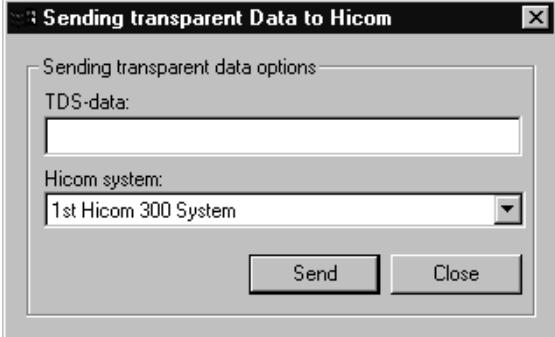
This function is only available if the CDR Link is open. To simulate call charge data, proceed as follows:

Step	Procedure
1	To simulate call charge data, activate the menu item <i>Extras - Simulate CDR</i> . The following dialog box appears: 
2	Enter the following parameters: <ul style="list-style-type: none"><li>• <i>Extension</i> Number of the extension (maximum 8 characters) for which the call charge data record is to be simulated.</li><li>• <i>Destination number</i> Target number of the simulated call charge data record.</li><li>• <i>Trunk/Line access</i> Number of the trunk group access/trunk code of the simulated call charge data record (maximum 4 characters).</li><li>• <i>Units</i> Number of units of the simulated call charge data record.</li></ul>
3	To generate the order, activate the <i>Execute</i> button. The data record contains the current date/time, call duration 1 minute and no PIN.

### 5.3.12.4 Writing transparent data to the interface

#### General

Using this test function, you can output ACL service-independent messages directly to the interface. You can then directly enter the ACL command for the relevant service. To write transparent data, proceed as follows:

Step	Procedure
1	To write transparent data, activate the menu item <i>Extras - Write transparent data</i> . Select the required service from the submenu which appears. The options are - only if at least one service processing link is ready to operate: <ul style="list-style-type: none"> <li>• ECCS Service</li> <li>• TD Service (TDS)</li> <li>• CDR Service</li> <li>• FAMOS Service</li> </ul>
2	Select the required item from the submenu. A dialog box with the following structure appears (example for TDS data): 
3	Enter the ACL command directly in the input field, in the example <i>TDS Data</i> . If the Hicom connection was configured via TCP/IP, select the Hicom to be addressed in the field <i>Hicom System</i> .
4	The command is transmitted by activating the button <i>Send</i> .

## **Configuring WinCall**

*Configuring WinCall HiPath 4000*

### **5.3.13 Event and error log**

#### **General**

The contents of the event log generated by WinCall for logons and logoffs, program starts, etc. and the error log can be viewed in WinCall. You can selectively display the event log (user ADMIN) and the error log (technician only) on the screen to increase diagnostic performance, or you can print out the contents of the log.

#### **Log reduction**

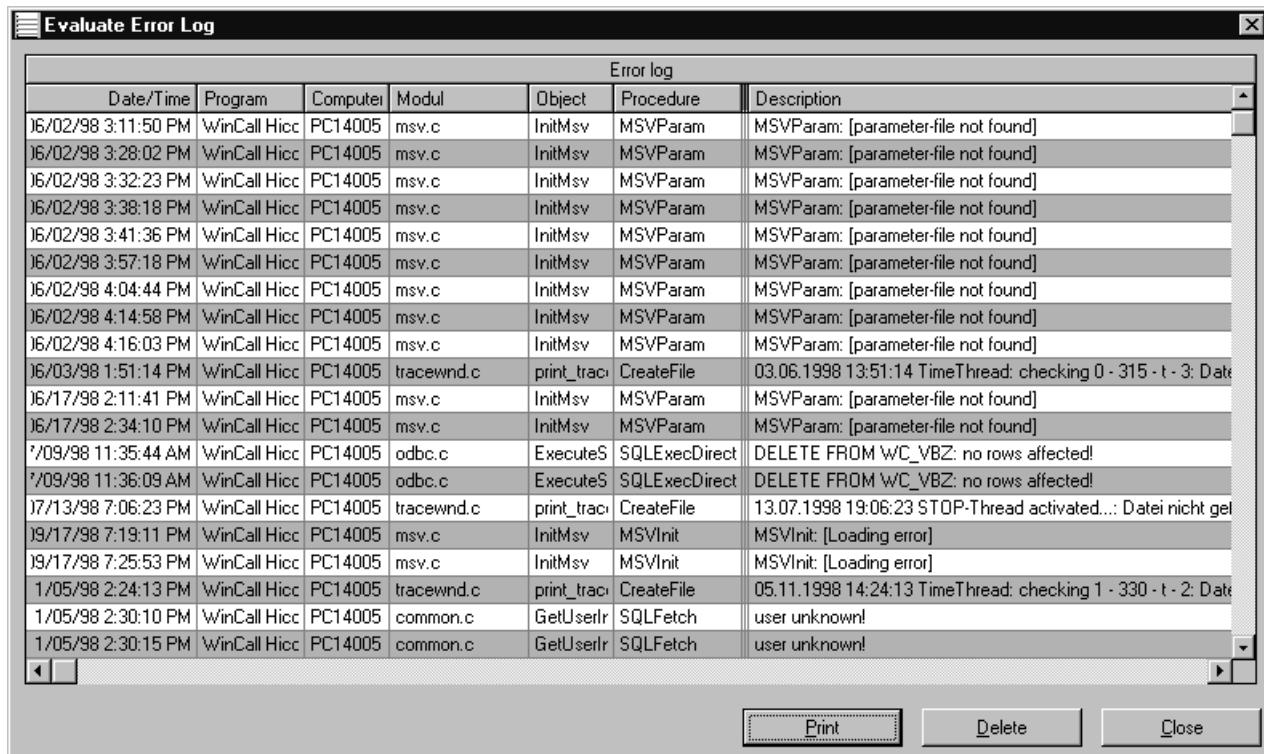
The schedule automatically reduces the log volume once a day (at night between 03:00 and 03:45) in both the error and event log.

#### **Editing options**

Both logs can be output and partially or completely deleted (see below). Moreover, the event log can be selectively displayed.

## Displaying the error log

To display the error log, activate the menu item *Extras – Evaluate Error Log*:



The screenshot shows a Windows-style application window titled "Evaluate Error Log". The main area is a table titled "Error log" with columns: Date/Time, Program, Computer, Modul, Object, Procedure, and Description. The table lists numerous entries, mostly from March 1998, detailing various errors such as parameter-file not found, MSVParam errors, and database-related issues like DELETE FROM WC\_VBZ failing. The bottom of the window features standard Windows controls for Print, Delete, and Close.

Error log						
Date/Time	Program	Computer	Modul	Object	Procedure	Description
16/02/98 3:11:50 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:28:02 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:32:23 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:38:18 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:41:36 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:57:18 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:04:44 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:14:58 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:16:03 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/03/98 1:51:14 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	03.06.1998 13:51:14 TimeThread: checking 0 - 315 - t - 3: Date
16/17/98 2:11:41 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/17/98 2:34:10 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
17/09/98 11:35:44 AM	WinCall Hicc	PC14005	odbc.c	ExecuteS	SQLExecDirect	DELETE FROM WC_VBZ: no rows affected!
17/09/98 11:36:09 AM	WinCall Hicc	PC14005	odbc.c	ExecuteS	SQLExecDirect	DELETE FROM WC_VBZ: no rows affected!
17/13/98 7:06:23 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	13.07.1998 19:06:23 STOP-Thread activated...: Datei nicht gel
19/17/98 7:19:11 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVInit	MSVInit: [Loading error]
19/17/98 7:25:53 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVInit	MSVInit: [Loading error]
1/05/98 2:24:13 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	05.11.1998 14:24:13 TimeThread: checking 1 - 330 - t - 2: Date
1/05/98 2:30:10 PM	WinCall Hicc	PC14005	common.c	GetUserlr	SQLFetch	user unknown!
1/05/98 2:30:15 PM	WinCall Hicc	PC14005	common.c	GetUserlr	SQLFetch	user unknown!

Figure 5-9      Error Log in WinCall

## Configuring WinCall

### Configuring WinCall HiPath 4000

#### Displaying the event log

To display the event log, activate the menu item *Extras – Evaluate Event Log* or press **[F7]**:

Event log				
Date/time	Section	Computer	Program	Description
8/19/98 3:50:51	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: General Options closed!
8/19/98 3:50:51	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: General Options closed!
8/19/98 3:51:09	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Hicom 300 Services/services activated!
8/19/98 3:51:41	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Hicom 300 Services/service-links activated!
8/19/98 3:52:09	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Hicom 300 Services closed!
8/19/98 3:52:09	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Hicom 300 Services closed!
8/19/98 3:52:26	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options/DGV-options activated!
8/19/98 3:52:45	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options/FAMOS-options activated!
8/19/98 3:53:28	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options/TDD-options activated!
8/19/98 3:53:45	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options/TDD-Codes activated!
8/19/98 3:54:16	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options closed!
8/19/98 3:54:16	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options closed!
8/19/98 3:54:16	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options closed!
8/19/98 3:54:16	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: ECCS-/FAMOS-/TDS options closed!
8/19/98 3:54:28	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Announcement devices/voice device activated!
8/19/98 3:54:53	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Announcement devices closed!
8/19/98 3:54:56	USR	CARACAS_SVR_IN	WinCall Hicom 300	Window: Settings/WinCall Hicom 300 activated!

Figure 5-10 Event log of WinCall

## Selecting event log display

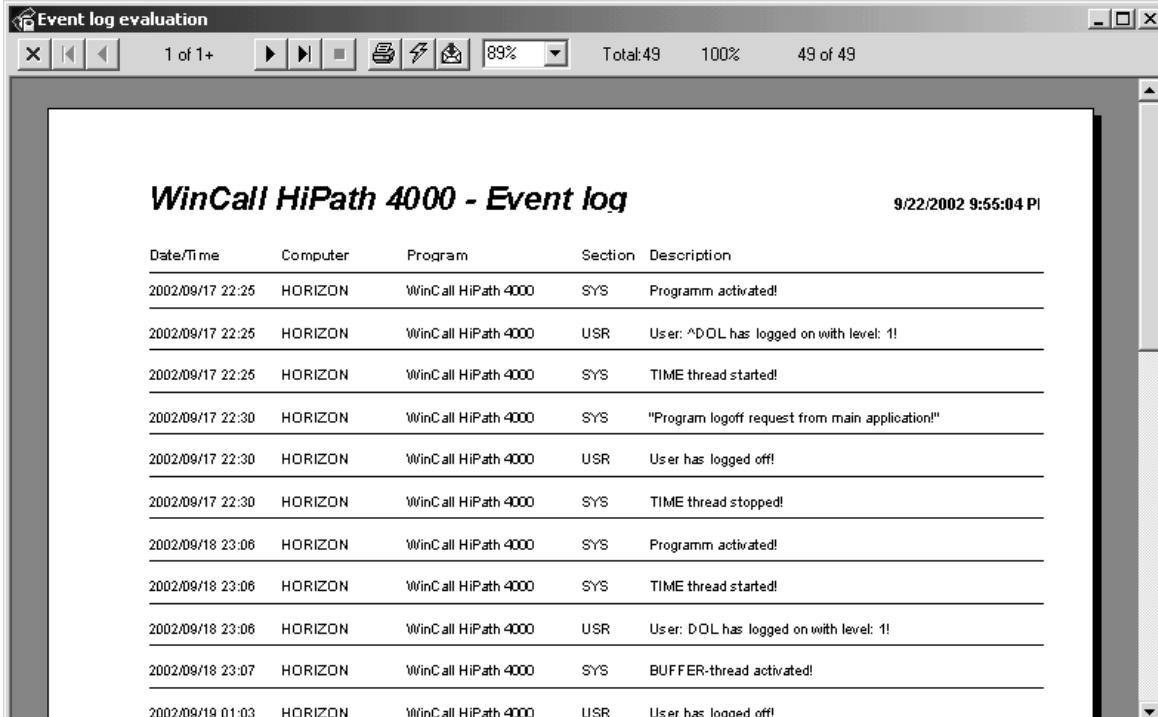
When displaying the event log, you can select particular entry types and particular types of program (components) or computer:

<b>Step</b>	<b>Procedure</b>
1	Select the required entry type in the <i>Section</i> field. The possible types are listed below. A list of the current entries available in the event log is then displayed.
	[ALL] All entries are displayed.
	AMO Errors and messages from the AMO service
	CLK Errors and messages from the schedule
	DBF Database entries: errors or messages that occur when you enter a record in the database
	ECCS Errors and messages from the ECCS service
	FAMOS Errors and messages from the FAMOS service
	CDR Errors and messages from the CDR service
	MSG Records from WinCall to Caracas Server and from Caracas Server to WinCall
	PRT Errors and messages in connection with outputs to a printer
	REG Errors or messages relating to functions with the Windows registration
	SYS General system messages, e.g. end of program
	TDS Errors and messages from TD service
	USR Error in connection with user actions, e.g. when logging on or off
2	Select the required component in the <i>Program</i> field.
3	Select the required computer name in the <i>Computer</i> field, this list contains all possible computer names.
4	Click <i>Refresh</i> to confirm your selection. The log is displayed in accordance with the selection.

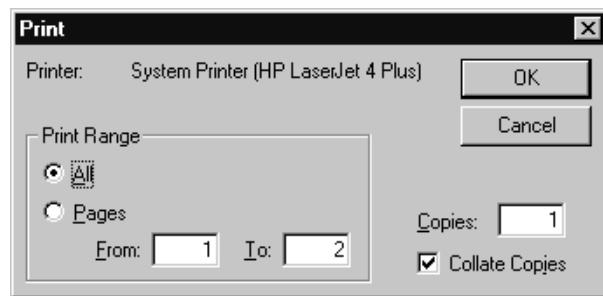
## Configuring WinCall

### Configuring WinCall HiPath 4000

#### Printing the event or error log

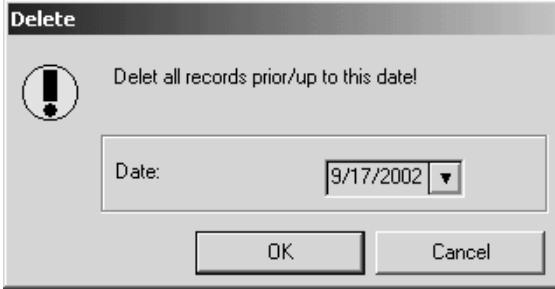
Step	Procedure																																																												
1	Activate the dialog box for the relevant log, e.g. <i>Extras – Evaluate Event Log</i> .																																																												
2	Click the <i>Print</i> button.																																																												
3	The log is displayed in page layout mode:  <p>The screenshot shows a window titled "Event log evaluation" with a sub-title "WinCall HiPath 4000 - Event log". The window displays a list of system events with columns for Date/Time, Computer, Program, Section, and Description. The events listed are:</p> <table border="1"><thead><tr><th>Date/Time</th><th>Computer</th><th>Program</th><th>Section</th><th>Description</th></tr></thead><tbody><tr><td>2002/09/17 22:25</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>SYS</td><td>Programm activated!</td></tr><tr><td>2002/09/17 22:25</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>USR</td><td>User: ^DOL has logged on with level: 1!</td></tr><tr><td>2002/09/17 22:25</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>SYS</td><td>TIME thread started!</td></tr><tr><td>2002/09/17 22:30</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>SYS</td><td>"Program logoff request from main application!"</td></tr><tr><td>2002/09/17 22:30</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>USR</td><td>User has logged off!</td></tr><tr><td>2002/09/17 22:30</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>SYS</td><td>TIME thread stopped!</td></tr><tr><td>2002/09/18 23:06</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>SYS</td><td>Programm activated!</td></tr><tr><td>2002/09/18 23:06</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>SYS</td><td>TIME thread started!</td></tr><tr><td>2002/09/18 23:06</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>USR</td><td>User: DOL has logged on with level: 1!</td></tr><tr><td>2002/09/18 23:07</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>SYS</td><td>BUFFER-thread activated!</td></tr><tr><td>2002/09/19 01:03</td><td>HORIZON</td><td>WinCall HiPath 4000</td><td>USR</td><td>User has logged off!</td></tr></tbody></table>	Date/Time	Computer	Program	Section	Description	2002/09/17 22:25	HORIZON	WinCall HiPath 4000	SYS	Programm activated!	2002/09/17 22:25	HORIZON	WinCall HiPath 4000	USR	User: ^DOL has logged on with level: 1!	2002/09/17 22:25	HORIZON	WinCall HiPath 4000	SYS	TIME thread started!	2002/09/17 22:30	HORIZON	WinCall HiPath 4000	SYS	"Program logoff request from main application!"	2002/09/17 22:30	HORIZON	WinCall HiPath 4000	USR	User has logged off!	2002/09/17 22:30	HORIZON	WinCall HiPath 4000	SYS	TIME thread stopped!	2002/09/18 23:06	HORIZON	WinCall HiPath 4000	SYS	Programm activated!	2002/09/18 23:06	HORIZON	WinCall HiPath 4000	SYS	TIME thread started!	2002/09/18 23:06	HORIZON	WinCall HiPath 4000	USR	User: DOL has logged on with level: 1!	2002/09/18 23:07	HORIZON	WinCall HiPath 4000	SYS	BUFFER-thread activated!	2002/09/19 01:03	HORIZON	WinCall HiPath 4000	USR	User has logged off!
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2002/09/19 01:03	HORIZON	WinCall HiPath 4000	USR	User has logged off!																																																									

#### ...Printing a log to the default printer

4	 Click the print button to start printing to the default printer. The dialog box for the default printer currently set appears:  <p>The screenshot shows a "Print" dialog box. The "Printer" dropdown is set to "System Printer (HP LaserJet 4 Plus)". The "Print Range" section has "All" selected. The "Copies" field is set to "1". The "Collate Copies" checkbox is checked.</p>
5	Click <i>OK</i> to start printing.

<b>Step</b>	<b>Procedure</b>
<b>...Zooming log outputs</b>	
4	 To zoom in/out the page layout of the event log select the zoom value (in %) or enter it in the zoom list field.
<b>...Exporting a log</b>	
4	 Press this button to export the logged data. In the subsequent dialog boxes, you can specify the desired export format and filename. Following the export procedure, you return to the page layout of the event log.
<b>...Quitting page layout log output</b>	
4	 Click this button to quit the log output in page layout view. You are returned to the log display dialog box.

### **Deleting a log partially or entirely**

<b>Step</b>	<b>Procedure</b>
1	Activate the dialog box for the relevant log, e.g. <i>Extras – Evaluate Event Log</i> .
2	Highlight the log entries to be deleted and press <i>Delete</i> .
3	The following dialog box appears:  Enter the date up to which all entries are to be deleted. Click <i>OK</i> if the entries are to be deleted. If no entries are to be deleted, click <i>Cancel</i> . In both cases, you are returned to the log display.
<b>Tip</b>	By right-clicking the date field, you can activate a calendar in which you can select the date to be transferred to the date field.

## **Configuring WinCall**

*Configuring WinCall HiPath 4000*

### **5.3.14 Setup examples for HiPath 4000**



You can find the examples for generating the HiPath 4000 (AMO commands) on the Caracas installation CD in the \Misc folder.

## 5.4 Configuring WinCall Hicom 150E Office

### 5.4.1 General

#### Configuration options for Caracas

WinCall is configured by the service technician (user level 1) as part of the cutover operation. The following options are configured:

- Protocol options for connecting the server PC to Hicom
- Services and service options
- Caracas-specific options
- COS (traffic restriction groups) assignment

#### Starting WinCall Hicom 150E Office

If it is not already active, the WinCall Hicom 150E Office component is started as part of configuration.

Step	Procedure
1	Activate the start menu and/or the WinCall Hicom 150E Office desktop link.
2	Log on using the technician password.

#### Deactivating the connection to Hicom

So that all configured options are available the next time the connection is set up, the connection to Hicom should be deactivated.

Step	Procedure
1	Activate the <i>Conversation – Close Conversation to Hicom</i> menu or press <b>[F3]</b> .
<b>Tip</b>	The status of the connection to Hicom is indicated in the status bar (see Section 5.4.7).

## **Configuring WinCall**

*Configuring WinCall Hicom 150E Office*

### **5.4.2 Connection type to Hicom 150E Office**

#### **Different connection types**

For the exchange of data between Caracas and Hicom 150E Office two alternative options are provided from which the relevant option must be configured using the relevant parameters:

- Connection via V.24 (RS232) interface
- Connection via S0 interface (D channel)

The connection type is defined in the configuration of the general parameters (see next chapter).

### 5.4.3 Configuring protocol options

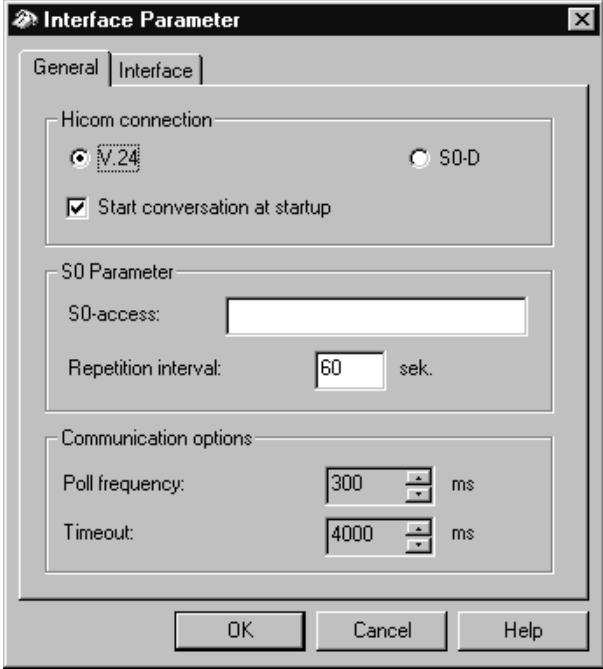
#### Which options are configured?

The following options are to be configured:

- General protocol options (HICOM-connection, S0 parameters, protocol options)
- Interface options (for the V.24 (RS232) interface)

#### General protocol options

To configure general protocol options, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - Interface Parameter</i> .
2	Select the tab <i>General</i> . 

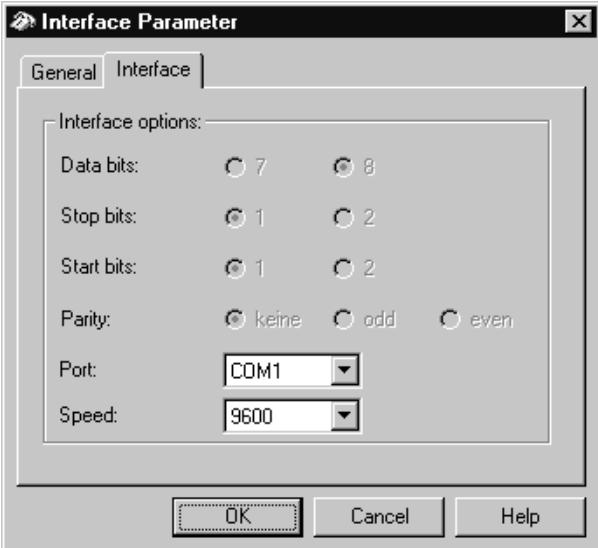
## Configuring WinCall

### Configuring WinCall Hicom 150E Office

Step	Procedure
3	<p>Select the required connection type under <i>Hicom connection</i>:</p> <ul style="list-style-type: none"><li>● <i>V.24</i> Connection via V.24 (RS232) interface</li><li>● <i>S0-D</i> Connection via S0 interface (D channel)</li></ul> <p>Under <i>Start conversation at startup</i> you can define whether the connection to Hicom is to be set up automatically when WinCall is started (check box activated). Otherwise, the connection is set up manually as required when selecting the <i>Conversation – Open Conversation to Hicom</i> menu item.</p>
4	<p>For the settings under <i>S0 Parameter</i>, enter the number which WinCall must dial to access the PBX system in the field <i>S0-access</i>.</p> <p>In the field <i>Repetition interval</i> enter the time in seconds after which a new attempt should be made to setup the connection if the connection to the PBX system is cut.</p>
5	<p>Enter the time under <i>Communication options</i> (in ms) that the interface must wait for new data in the <i>Poll frequency</i> input field.</p> <p>Enter the maximum time (in ms) in the <i>Timeout</i> field that the system waits for an ACK before it sends out an enquiry or clears down the connection. This value can range from 1000 to 20000 ms.</p>
6	Confirm your input by pressing OK.
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"><li>● <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>● <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Interface options

To configure interface options proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - Interface Parameters</i> .
2	Select the tab <i>Interface</i> 
3	The settings under <i>Data bits</i> , <i>Stop bits</i> , <i>Start bits</i> and <i>Parity</i> are preset in Hicom 150E and thus cannot be changed. These are displayed here for information purposes only. Under <i>Port</i> , select the port that was selected for the connection to Hicom and enter a baud rate in the <i>Speed</i> field.
4	Confirm your input by pressing <b>OK</b> .
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> </ul>

## Configuring WinCall

### Configuring WinCall Hicom 150E Office

#### 5.4.4 Configuring general options

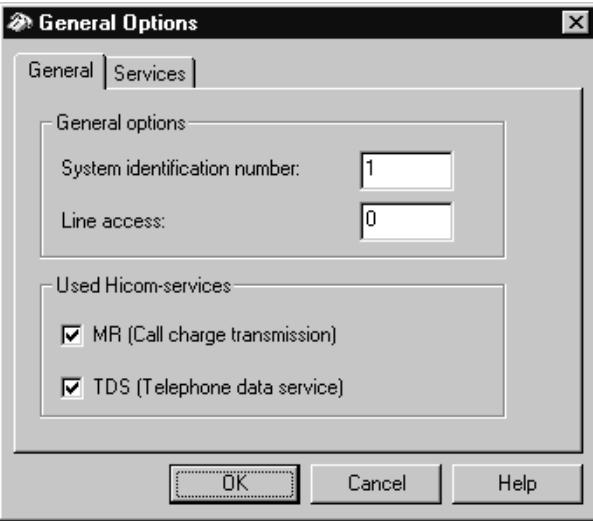
##### Which general options are to be configured?

The configuration of general options includes all settings for the Hicom 150E Office services available. The following options are to be configured:

- General options and services
- Timeout and wakeup options

##### General options and services

To configure general options and services, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	Select the tab <i>General</i> . 
3	The entries in the field <i>System identification number</i> identify the system where several COS are installed. In the field <i>Line access</i> , enter the corresponding trunk access digits.
4	Under <i>Used Hicom-services</i> , enter the Hicom-services which WinCall should provide. A service is only available if it has been activated here. Deactivating a service in this dialog box does not affect services currently in use. In general, the MR and TDS services can be configured.

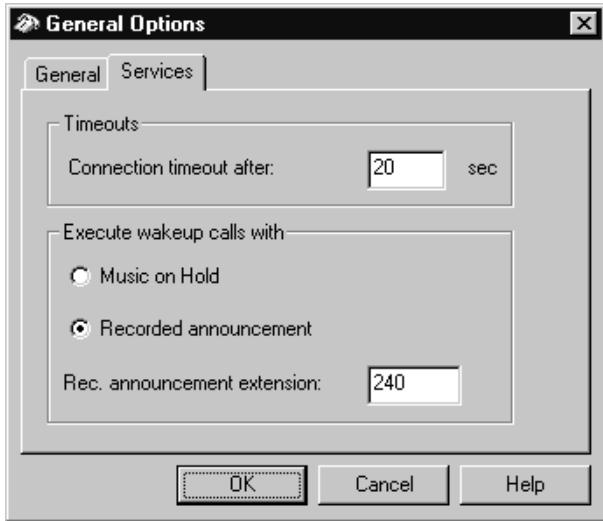
Step	Procedure
5	Confirm your input by pressing OK.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## Configuring WinCall

### Configuring WinCall Hicom 150E Office

#### Timeout and wakeup options

To configure proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - General Options</i> .
2	Select the tab <i>Services</i> . 
3	When the period defined under <i>Connection timeout after</i> (in seconds) has lapsed, the connection setup to a terminal (e.g. the wakeup call) is disconnected if it was not possible to establish the connection (e.g. guest does not answer).
4	Under <i>Execute wakeup calls with</i> , define whether the wakeup call should be implemented with <i>Music on Hold</i> or <i>Recorded announcement</i> . Select the option <i>Recorded announcement</i> and enter the required extension number in the field <i>Rec. Announcement extension</i> .
5	Confirm your input by pressing <b>OK</b> .
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## 5.4.5 Configuring TDS options

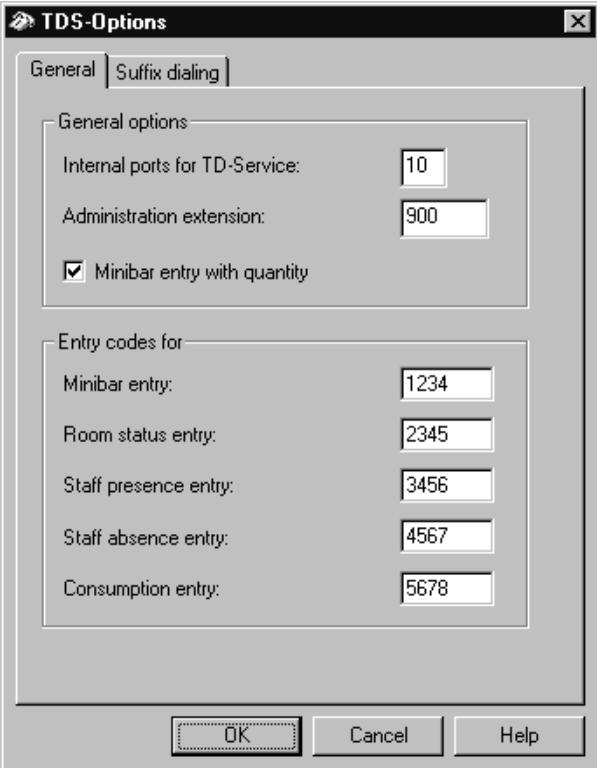
### Which TDS options are configured?

The configuration of TDS options includes all settings for the TDS service (telephone data service) on Hicom 150E Office. The following options are to be configured:

- General TDS options
- TDS suffix dialing

#### General TDS options

To configure the general TDS options, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - TDS options</i> .
2	Select the tab <i>General</i> 
3	Under <i>General options</i> , define the number of <i>Internal ports per TD-Service</i> , i.e. the number of extensions that can use the TD service simultaneously. The maximum value is 99.

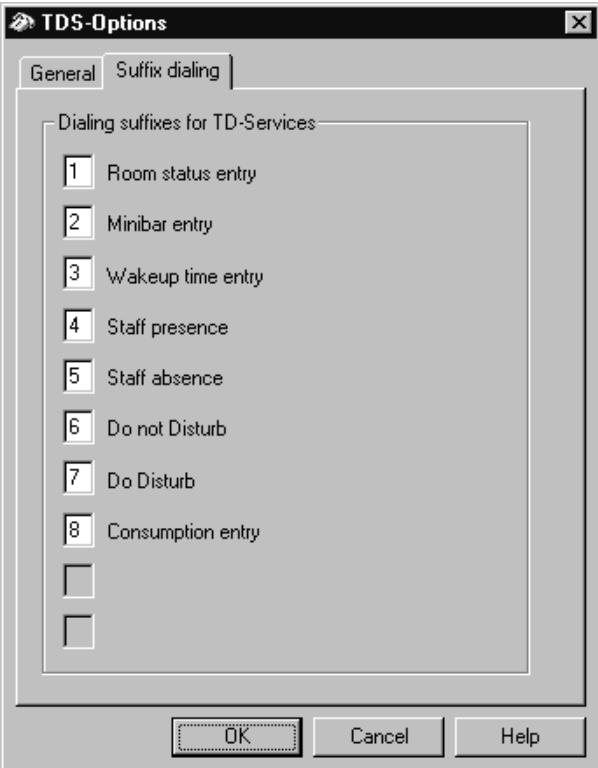
## Configuring WinCall

### Configuring WinCall Hicom 150E Office

Step	Procedure
4	Enter the number of the extension that is authorized to perform guest-related services for other extensions in the <i>Administration extension</i> field (e.g. reception telephone).
5	If you activate the <i>Minibar entry with quantity</i> check box, you will be asked to specify the quantity when making minibar entries at the guest telephone.
6	A user must enter an entry code to receive authorization to start a TD service at an extension. You can specify entry codes for the following TD services: <ul style="list-style-type: none"><li>● Minibar entry</li><li>● Room status entry</li><li>● Staff presence entry</li><li>● Staff absence entry</li><li>● Consumption entry</li></ul>
7	Confirm your input by pressing OK.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>● <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>● <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li></ul>

## TDS suffix dialing

To configure TDS suffix dialing, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - TDS-Option</i> .
2	Activate the tab <i>Suffix dialing</i> . 
3	The input dialing suffixes configured here at the telephone identify the appropriate application-specific services after TD service startup.
4	Confirm your input by pressing OK.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> </ul>

## Configuring WinCall

### Configuring WinCall Hicom 150E Office

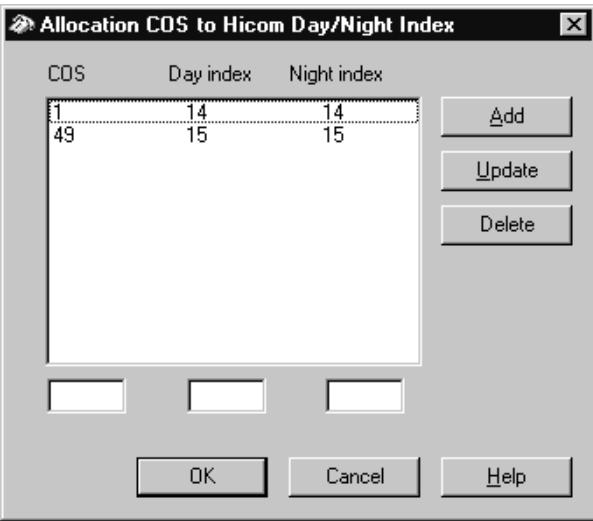
#### 5.4.6 Assigning a class of service to COS groups

##### General

The 2-digit logical classes of service used by Caracas for the day/night classes of service of Hicom 150E Office are assigned in this dialog box.

##### Assigning a class of service to COS groups

To add or process assignments, proceed as follows:

Step	Procedure
1	Activate the menu item <i>Settings - Allocation COS to Hicom Day/Night Index</i> . 
<b>...Adding new assignments</b>	
2	In the input field under the <i>COS</i> column, enter the Caracas class of service. In the fields under the <i>Day index</i> and <i>Night index</i> columns enter the corresponding COS group for day/night in Hicom 150E.
3	Click <i>Add</i> which becomes active when you make your input. The new assignment is entered in the list.
<b>...Changing assignments</b>	
2	Select the required entry from the list of assignments. The values for this entry are transferred to the input fields where they can be changed.
3	Confirm your changes by pressing <i>Update</i> . The modified values are accepted in the list.

Step	Procedure
<b>...Deleting assignments</b>	
2	Select the class of service assignment to be deleted in the list. Then click <i>Delete</i> . The COS is removed.
<b>Tip</b>	You can also select a number of classes of service in the assignment list and delete them simultaneously. To do this, hold down the <b>CTRL</b> key or the <b>SHIFT</b> key when selecting the COS.
<b>...Quitting the assignment dialog box</b>	
2	Click <i>OK</i> to quit <i>Allocation COS to Hicom Day/Night index</i> dialog box and save your input. Click <i>Cancel</i> to quit the dialog box without saving your changes.

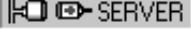
## Configuring WinCall

### Configuring WinCall Hicom 150E Office

#### 5.4.7 Displays in the status bar

##### Displays in the WinCall Hicom 150E Office status bar

The status of the WinCall Hicom 150E Office connection is shown by WinCall Hicom 200/150E in the status bar. The following variants are possible

Display	Meaning
 PBX	Status of the conversation to Hicom: <ul style="list-style-type: none"><li>● Green dots:<ul style="list-style-type: none"><li>– Interface opened successfully</li><li>– conversation successfully established</li></ul></li><li>● Green / yellow dots:<ul style="list-style-type: none"><li>– Interface opened successfully</li><li>– DSR signal detected, but conversation not yet fully established</li></ul></li><li>● Red dots:<ul style="list-style-type: none"><li>– Conversation not open</li><li>– no conversation to Hicom</li></ul></li></ul>
 SERVER  SERVER	Status of the conversation to Caracas Server: <ul style="list-style-type: none"><li>● Plug in:<ul style="list-style-type: none"><li>– Conversation started (green arrow)</li></ul></li><li>● Plug out:<ul style="list-style-type: none"><li>– Conversation stopped (red arrow)</li></ul></li></ul>
	Logon status to Hicom 150E: <ul style="list-style-type: none"><li>● Green:<ul style="list-style-type: none"><li>– Successful logon to Hicom</li></ul></li><li>● Red:<ul style="list-style-type: none"><li>– Logon to Hicom not successful</li></ul></li></ul> You can automatically log on to the Hicom with the program start or manually by selection of the <i>Conversation - Open Conversation to Hicom</i> menu item.
	Status display for the MR service. The colors indicate the following: <ul style="list-style-type: none"><li>● Green:<ul style="list-style-type: none"><li>– Service started correctly and is active.</li></ul></li><li>● Red:<ul style="list-style-type: none"><li>– Service is not active.</li></ul></li><li>● Gray:<ul style="list-style-type: none"><li>– Service is not configured.</li></ul></li></ul>

Display	Meaning
TDS	Status display for the TDS service. The colors indicate the following: <ul style="list-style-type: none"><li>● Green:<ul style="list-style-type: none"><li>– Service started and currently used at least once</li></ul></li><li>● Yellow:<ul style="list-style-type: none"><li>– It is not possible to use the TDS service at this time</li></ul></li><li>● Red:<ul style="list-style-type: none"><li>– Service not currently in use</li></ul></li><li>● Gray:<ul style="list-style-type: none"><li>– Service not configured</li></ul></li></ul>
Tip	Double-click on a service icon in the status bar to start or terminate the (depending on current status) a given service.

## Configuring WinCall

### Configuring WinCall Hicom 150E Office

#### 5.4.8 The trace window

##### General trace functions

The general functions for opening, closing, printing, and writing trace windows/window contents to files, etc. were described in chapter 4.

##### Trace windows available in WinCall Hicom 150E

Title: Trace window/ menu item under <b>Trace</b>	Description	Name trace file
Program Messages	General WinCall program messages	WCH150CSTA_PROGMESS.TRC
Hicom MR-Service Hicom TD-Service Hicom AMHOST-Service CSTA Commands	Service-specific messages, text messages provide information on the status of the relevant action performed	WCH150CSTA_MR.TRC WCH150CSTA_TDS.TRC WCH150CSTA_AMHOST.TRC WCH150CSTA_CSTA.TRC
Extension Monitoring	Messages from extension monitoring	WCH150CSTA_MONITORING.TRC
Hicom Conversation	Interface connection messages to Hicom	WCH150CSTA_INTERFACE.TRC
Server Buffer	PNIF records which could not yet be sent to the main application and have been cached.	WCH150CSTA_SRVRBUFF.TRC
Conversation Messages	Messages to/from Caracas Server	WCH150CSTA_MESSAGE.TRC

### Trace window context menu

You can activate the individual trace windows available and print, save or delete the trace window currently active using the context menu that can be activated in the trace windows:

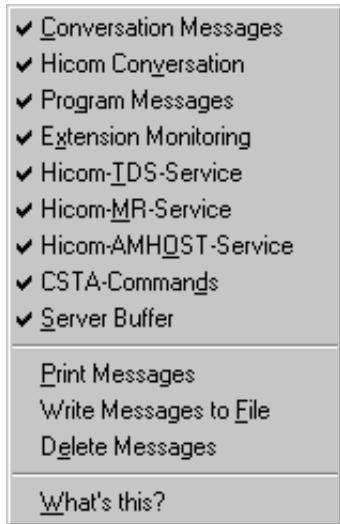


Figure 5-11 Trace window context menu (WinCall Hicom 150 E Office)



The *Print Messages* and *Delete Messages* entries are not available in the context menu of the *Server Buffer* trace window if *View mode for buffer windows* (see chapter 4, “General functions of all components”) is active. In this case, the contents of the buffer can only be saved externally. The file can, however, be printed with *Extras – Edit Tracefiles*.

## Configuring WinCall

### Configuring WinCall Hicom 150E Office

#### 5.4.9 Testing the connection

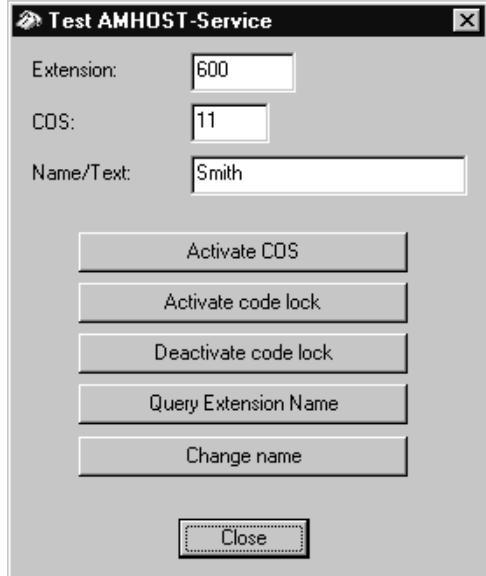
##### General

You can test the connection to Hicom by performing the essential functions used by Caracas in test dialog boxes in WinCall. Caracas Server does not have to be activated when you perform this test. It is enough if WinCall is started and the connection to Hicom is set up. The following functions/services can be tested:

- Test AMHOST-Service
- Simulate MR-Service
- Extension monitoring

##### Testing the AMHOST service

To test the AMHOST service, proceed as follows:

Step	Procedure
1	<p>Set up the connection to Hicom via the <i>Conversation – Open Conversation to Hicom</i> menu item (or press <b>F2</b>). The interface is opened, the status display  in the status bar changes to green LEDs, the logon status on the Hicom  changes to green if logon to Hicom is successful, the  service status display changes to green.</p>
2	<p>Activate the menu item <i>Tools – Test AMHOST-Service</i>. The following dialog box appears:</p> 

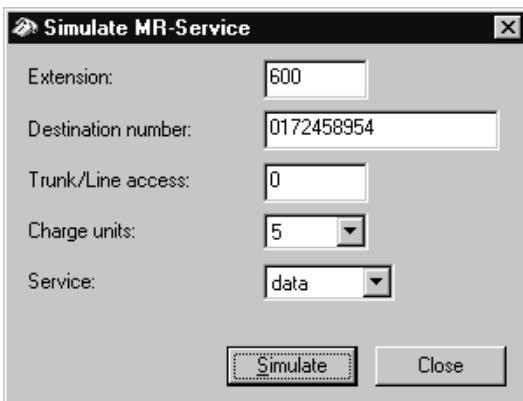
Step	Procedure
3	<p>This dialog box provides the AMHOST service functions used by WinCall for the test. For all functions, at least one extension number to which the functions refer must be entered in the <i>Extension</i> field.</p> <ul style="list-style-type: none"><li>• <i>Activate COS</i> Changes over to COS depending on the entry in the field <i>COS</i></li><li>• <i>Activate codelock / Deactivate codelock</i> Activates/deactivates the central telephone function</li><li>• <i>Query Extension Name</i> Queries the telephone book entry for the extension</li><li>• <i>Change name</i> Changes the name of the extension to the name entered in the field <i>Name / Text</i>.</li></ul>
4	Quit the test dialog box by pressing <i>Close</i>

## Configuring WinCall

### Configuring WinCall Hicom 150E Office

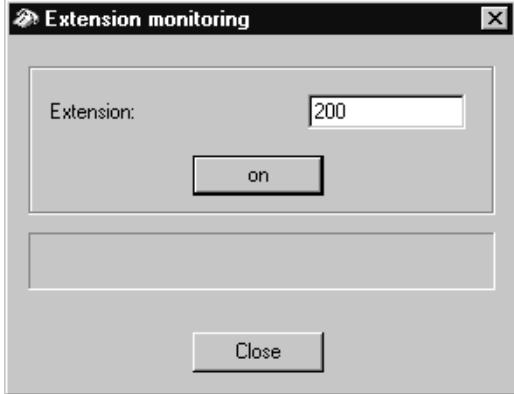
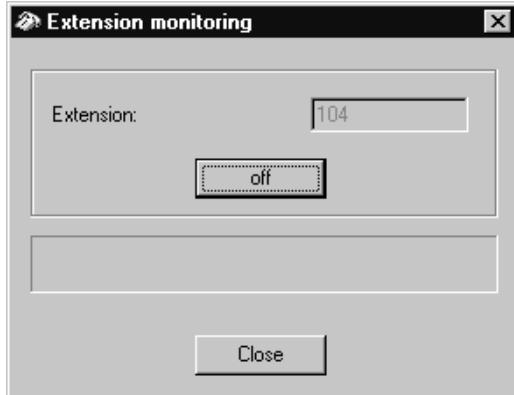
#### Simulating an MR service

To simulate the MR service, proceed as follows:

Step	Procedure
1	<p>Set up the connection to Hicom via the <i>Conversation – Open Conversation to Hicom</i> menu item (or press <b>F2</b>). The interface is opened, the status display  in the status bar changes to green LEDs, the logon status on the Hicom  changes to green if logon to Hicom is successful, the service status display  changes to green.</p>
2	<p>Activate the menu item <i>Tools – Simulate MR-Service</i>. The following dialog box appears:</p> 
3	<p>This dialog box allows you to simulate a call charge record. Enter the relevant data under <i>Extension</i>, <i>Destination number</i>, <i>Trunk/Line access</i>, select the required entries in the <i>Charge units</i> and <i>Service</i> fields. An appropriate call charge record is sent via PNIF to Caracas Server when you click <i>Simulate</i>.</p>
4	<p>Quit the test dialog box by clicking <i>Close</i>.</p>
<b>Tip</b>	If you want to monitor the function/record processing more closely, you can view the individual messages in the various trace windows.

## Monitoring an extension

To monitor an extension, proceed as follows:

Step	Procedure
1	<p>Set up the connection to Hicom via the <i>Conversation – Open Conversation to Hicom</i> menu item (or press <b>F2</b>).  The interface is opened, the status display  in the status bar changes to green LEDs, the logon status on the Hicom  changes to green if logon to Hicom is successful, the service status display  changes to green.</p>
2	<p>Activate the menu item <i>Tools – Extension monitoring</i>. The following dialog box appears:</p>  <p>The dialog box has a title bar "Extension monitoring". It contains a label "Extension:" followed by an input field containing "200". Below the input field is a button labeled "on". At the bottom right is a "Close" button.</p>
3	<p>This dialog box allows you to monitor an <i>Extension</i> that you enter. Enter the relevant extension number and click the button <i>on</i>.  Extension actions are output in a dialog box.</p>  <p>The dialog box has a title bar "Extension monitoring". It contains a label "Extension:" followed by an input field containing "104". Below the input field is a button labeled "off". At the bottom right is a "Close" button.</p>
4	<p>Quit monitoring by clicking the button <i>off</i>. Quit the test dialog box by clicking <i>Close</i>.</p>

## **Configuring WinCall**

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### **5.4.10 Event and error log**

#### **General**

The contents of the event log generated by WinCall for logons and logoffs, program starts, etc. and the error log can be viewed in WinCall. You can selectively display the event log (user ADMIN) and the error log (technician only) on the screen to increase diagnostic performance, or you can print out the contents of the log.

#### **Log reduction**

The schedule automatically reduces the log volume once a day (at night between 03:00 and 03:45) in both the error and event log.

#### **Editing options**

Both logs can be output and partially or completely deleted (see below). Moreover, the event log can be selectively displayed.

## Evaluating the error log

To display the error log, activate the menu item *Extras – Evaluate Error Log*:

Error log						
Date/Time	Program	Computer	Modul	Object	Procedure	Description
16/02/98 3:11:50 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:28:02 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:32:23 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:38:18 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:41:36 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 3:57:18 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:04:44 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:14:58 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/02/98 4:16:03 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/03/98 1:51:14 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	03.06.1998 13:51:14 TimeThread: checking 0 - 315 - t - 3: Date
16/17/98 2:11:41 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
16/17/98 2:34:10 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVParam	MSVParam: [parameter-file not found]
17/09/98 11:35:44 AM	WinCall Hicc	PC14005	odbc.c	ExecuteS	SQLExecDirect	DELETE FROM WC_VBZ: no rows affected!
17/09/98 11:36:09 AM	WinCall Hicc	PC14005	odbc.c	ExecuteS	SQLExecDirect	DELETE FROM WC_VBZ: no rows affected!
17/13/98 7:06:23 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	13.07.1998 19:06:23 STOP-Thread activated...: Datei nicht gel
19/17/98 7:19:11 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVInit	MSVInit: [Loading error]
19/17/98 7:25:53 PM	WinCall Hicc	PC14005	msv.c	InitMsv	MSVInit	MSVInit: [Loading error]
1/05/98 2:24:13 PM	WinCall Hicc	PC14005	tracewnd.c	print_trac	CreateFile	05.11.1998 14:24:13 TimeThread: checking 1 - 330 - t - 2: Date
1/05/98 2:30:10 PM	WinCall Hicc	PC14005	common.c	GetUserlr	SQLFetch	user unknown!
1/05/98 2:30:15 PM	WinCall Hicc	PC14005	common.c	GetUserlr	SQLFetch	user unknown!

Figure 5-12 Error Log of WinCall

## Configuring WinCall

### Configuring WinCall Hicom 150E Office

#### Evaluating the event log

To display the event log, activate the menu item *Extras – Evaluate Event Log* or press **[F7]**:

Event log				
Date/time	Section	Computer	Program	Description
8/19/98 4:01:03	SYS	CARACAS_SVR_IN	WinCall Hicom 150E Office	TIME-thread startet!
8/19/98 4:01:05	USR	CARACAS_SVR_IN	WinCall Hicom 150E Office	User: UUU has logged on with level: 1!
8/19/98 4:01:10	PRG	CARACAS_SVR_IN	WinCall Hicom 150E Office	Opened dialog Interface Parameter
8/19/98 4:02:05	USR	CARACAS_SVR_IN	WinCall Hicom 150E Office	Window: Interface Parameter closed!
8/19/98 4:02:09	PRG	CARACAS_SVR_IN	WinCall Hicom 150E Office	Opened dialog General Options
8/19/98 4:03:13	PRG	CARACAS_SVR_IN	WinCall Hicom 150E Office	Opened dialog TDS-Options
8/19/98 4:06:03	PRG	CARACAS_SVR_IN	WinCall Hicom 150E Office	Opened dialog Allocation COS to Hicom Day/Night Index
8/19/98 4:06:34	PRG	CARACAS_SVR_IN	WinCall Hicom 150E Office	Saved dialog Allocation COS to Hicom Day/Night Index
8/19/98 4:06:36	PRG	CARACAS_SVR_IN	WinCall Hicom 150E Office	Opened dialog Allocation COS to Hicom Day/Night Index
8/19/98 4:07:17	PRG	CARACAS_SVR_IN	WinCall Hicom 150E Office	Opened dialog Allocation COS to Hicom Day/Night Index
8/19/98 4:07:55	SYS	CARACAS_SVR_IN	WinCall Hicom 150E Office	BUFFER-thread activated!
8/19/98 4:11:55	USR	CARACAS_SVR_IN	WinCall Hicom 150E Office	User has logged off!
8/19/98 4:11:55	SYS	CARACAS_SVR_IN	WinCall Hicom 150E Office	BUFFER-thread cancelled!
8/19/98 4:11:59	USR	CARACAS_SVR_IN	WinCall Hicom 150E Office	User: UUU has logged on with level: 1!
8/19/98 4:12:11	PRG	CARACAS_SVR_IN	WinCall Hicom 150E Office	Opened dialog TDS-Options
8/19/98 4:12:22	USR	CARACAS_SVR_IN	WinCall Hicom 150E Office	User has logged off!
8/19/98 4:12:27	USR	CARACAS_SVR_IN	WinCall Hicom 150E Office	User: UUU has logged on with level: 1!

Figure 5-13 Event log of WinCall

## Selecting event log display

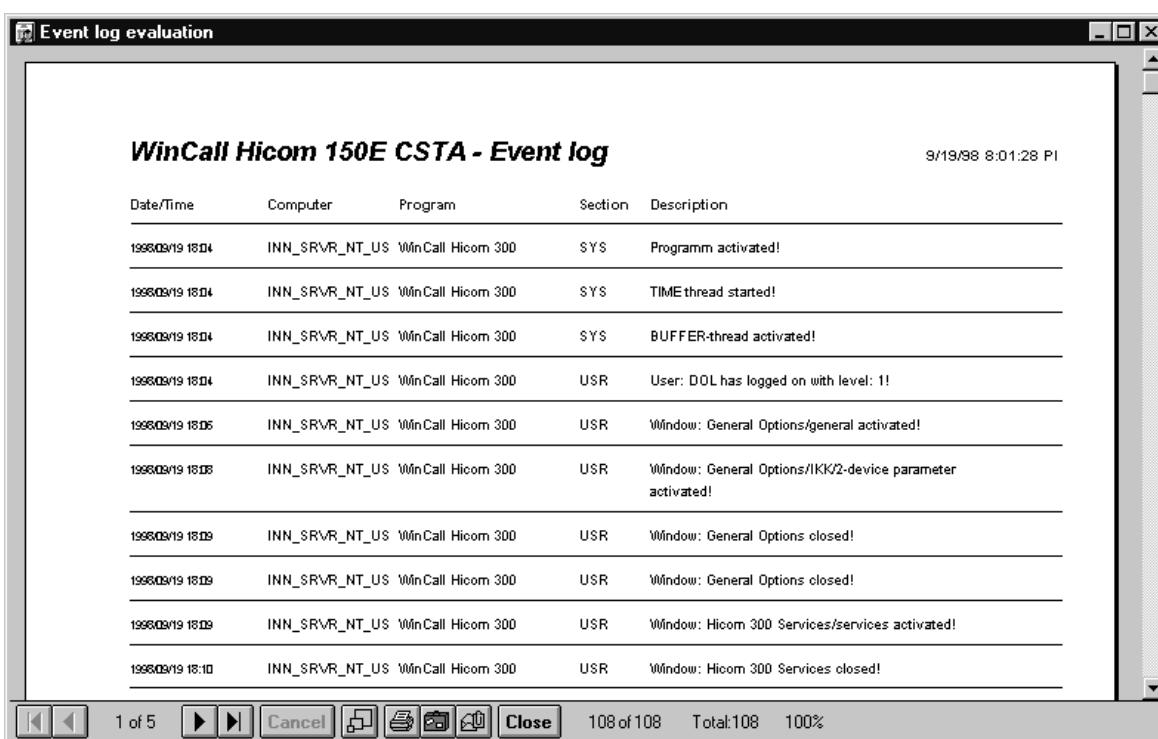
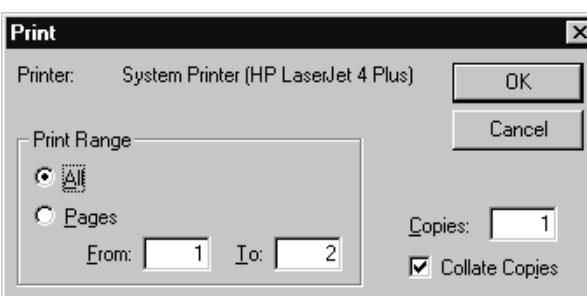
When displaying the event log, you can select particular entry types and particular types of program (components) or computer:

Step	Procedure
1	Select the required entry type in the <i>Section</i> field. The possible types are listed below. A list of the current entries available in the event log is then displayed.
	[ALL] All entries are displayed.
	AMHOS Errors and messages from the AMHOST service
	CLK Errors and messages from the WinCall schedule
	CSTA CSTA commands
	DBF Database entries: errors or messages that occur when you enter a record in the database.
	MONI Extension monitoring
	MR Errors and messages from the MR service
	MSG Records from WinCall to Caracas Server and from Caracas Server to WinCall
	PRG General program messages from WinCall
	PRT Errors and messages in connection with outputs to a printer
	REG Errors or messages relating to functions with the Windows registration
	SYS General system messages, e.g. end of program
	TDS Errors and messages from TDS service
	USR Error in connection with user actions, e.g. when logging on or off
	V24 Errors or messages from a component communicating via a V.24 (RS232) connection.
	WAS Records from WinCall to Caracas Server
2	Select the required component in the <i>Program</i> field.
3	Select the required computer name in the <i>Computer</i> field, this list contains all possible computer names.
4	Click <i>Refresh</i> to confirm your selection. The log is displayed in accordance with the selection.

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#### Printing the event or error log

Step	Procedure
1	Activate the dialog box for the relevant log, e.g. <i>Extras – Evaluate Event Log...</i>
2	Click the <i>Print</i> button.
3	The log is displayed in page layout mode: 
<b>...Printing a log to the default printer</b>	
4	 Click the print button to start printing to the default printer. The dialog box for the default printer currently set appears: 
5	Click <i>OK</i> to start printing.

Step	Procedure
<b>...Zooming log outputs</b>	
4	To zoom in/out the page layout of the event log select the zoom value (in %) or enter it in the zoom list field.
<b>...Exporting a log</b>	
4	Press this button to export the logged data. In the subsequent dialog boxes, you can specify the desired export format and filename. Following the export procedure, you return to the page layout of the event log.
<b>...Quitting page layout log output</b>	
4	Click this button to quit the log output in page layout view. You are returned to the log display dialog box.

### Deleting a log partially or entirely

Step	Procedure
1	Activate the dialog box for the relevant log, e.g. <i>Extras – Evaluate Event Log</i> .
2	Highlight the log entries to be deleted and press <i>Delete</i> .
3	The following dialog box appears:  <p>Enter the date up to which all entries are to be deleted. Click <i>OK</i> if the entries are to be deleted. If no entries are to be deleted, click <i>Cancel</i>. In both cases, you are returned to the log display.</p>
<b>Tip</b>	By right-clicking the date field, you can activate a calendar in which you can select the date to be transferred to the date field.

## **Configuring WinCall**

*Configuring WinCall Hicom 150E Office*

### **5.4.11 Configuration examples for Hicom 150E Office**

#### **General**

Hicom 150E Office can currently be connected to Caracas using standard configuration procedure. Only the following changes are required to the basic configuration:

1. Assign a barred COS list.
2. Automatic connection via CSTA turned off.



This flag appears to operate in the opposite direction, i.e. on = off, off = on.

3. Also include LCR must be active to enable correct call charging.

## **6      Configuring Caracas Link**

### **6.1      General**

#### **Configuration parameters for Caracas Link in the Administration program**

The following program parameters are configured by the service technician in the Caracas Link administration program:

- available codes for classes of service
- available codes for guest extension types
- available codes for management extension types
- available codes for the voice IDs
- available codes for the language IDs
- general parameters (classes of service, wakeup, immediate printout, etc.)
- schedule
- available record-types

#### **Starting the Caracas Link Administration program**

If not already active, the Caracas Link Administration program component is activated first for configuring Caracas Link:

<b>Step</b>	<b>Procedure</b>
1	Activate the Caracas Link Administration program via the Start menu or the desktop shortcut
2	Log on with the technician's password

## Configuring Caracas Link

### Configuring class of service codes

## 6.2 Configuring class of service codes

### What are classes of service?

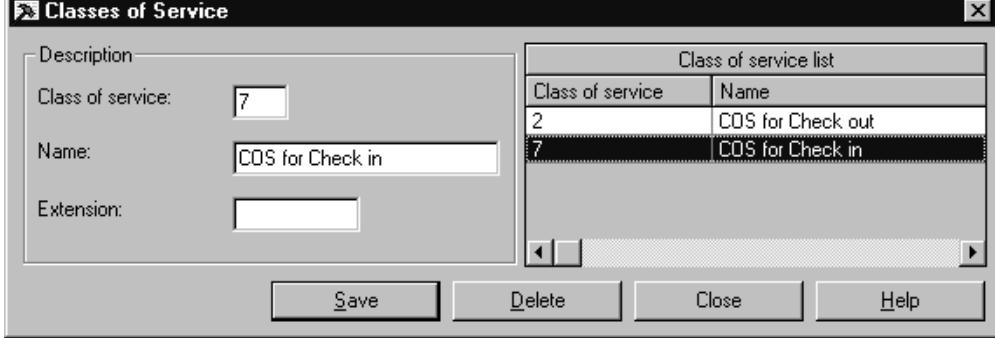
The class of service set for an extension define the scope in which calls can be conducted at the extension or if the extension is locked for calls. The possible classes of service are defined there during PBX system configuration.

### Definition in Caracas

These classes of service must be defined in Caracas Link by specifying the class of service code and the name. The codes are used in a wide variety of situations, e.g. in assigning to Caracas-internal classes of service.

When Hicom 300 / HiPath 4000 is used, you must also specify a (virtual) extension here which is to have a class of service with a PIN number set up on the Caracas system.

The class of service codes are configured in the following manner:

Step	Procedure
1	Activate the menu item <i>Settings - Classes of Service</i> . The following configuration dialog box appears:  <p>The two default codes (2 and 7) appear. You can, however, define other codes for classes of service (similar to the definition on the PBX system).</p>
<b>...Defining a new code</b>	
2	Enter the new, unique, one or two-digit and numeric code in the <i>Key</i> field.
3	Enter the code name in the <i>Name</i> field (max. 30 characters).
4	Enter a (virtual) extension number in the field <i>Extension</i> with the class of service which corresponds to a PIN code which has been created by Caracas. This is only necessary when Caracas Link is connected to Hicom 300 / HiPath 4000.
5	Confirm your entries by clicking the <i>Save</i> button.

Step	Procedure
<b>...Changing a defined code</b>	
2	Select the code to be changed in the classes of service list. The data is transferred to the input fields.
3	Change the entries in the input fields as required.
4	Confirm your changes by clicking the <i>Save</i> button.
	<b>Remark:</b> If you change the <i>Key</i> of an entry and save it, a new code is created for a class of service with the changed specifications. If, on the other hand, you only change the code name of an entry and save it, the existing entry is changed.
<b>...Deleting a defined code</b>	
2	Select the code to be deleted in the list of classes of service. The data is transferred to the input fields.
3	Click the <i>Delete</i> button. If the class of service to be deleted is still used as an assignment to a Caracas-internal class of service, the following message appears (see also Section 6.7, "General options"): 
	If the class of service is not assigned, the system prompts the user to confirm: 
	The class of service is deleted if you click the <i>Yes</i> button. The code is not deleted if you click <i>No</i> . In both cases, you are returned to the configuration dialog box.

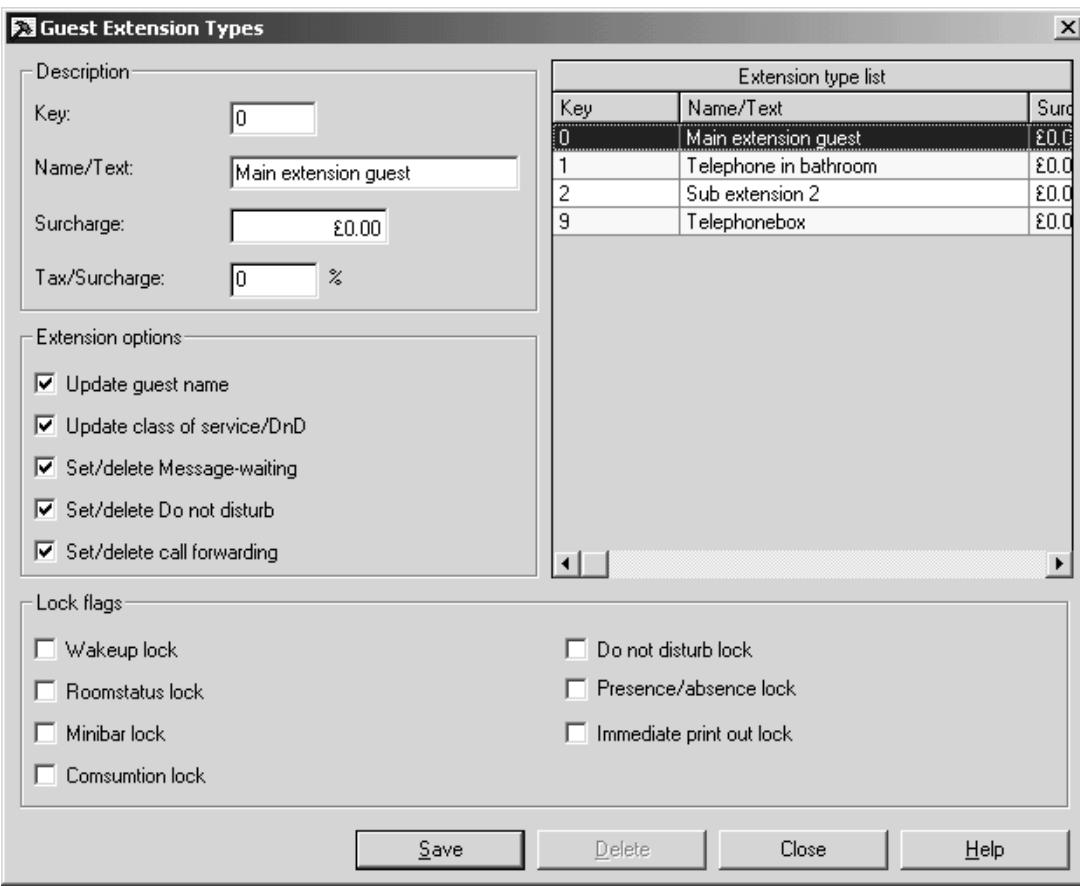
## Configuring Caracas Link

### Configuring guest extension type codes

## 6.3 Configuring guest extension type codes

### What are guest extension types?

The extension type defines specific default settings for new (created) extensions that can be individually edited when defining the appropriate extension.

Step	Procedure															
1	Activate the menu item <i>Settings - Guest Extension Types</i> . The following configuration dialog box appears:  <p>The dialog box has several sections:</p> <ul style="list-style-type: none"><li><b>Description</b>: Fields for Key (0), Name/Text (Main extension guest), Surcharge (£0.00), and Tax/Surcharge (0 %).</li><li><b>Extension options</b>: Checkboxes for Update guest name, Update class of service/DnD, Set/delete Message-waiting, Set/delete Do not disturb, and Set/delete call forwarding.</li><li><b>Lock flags</b>: Checkboxes for Wakeup lock, Roomstatus lock, Minibar lock, Consumption lock, Do not disturb lock, Presence/absence lock, and Immediate print out lock.</li><li><b>Extension type list</b>: A table showing existing extension types:</li></ul> <table border="1"><thead><tr><th>Key</th><th>Name/Text</th><th>Surcharge</th></tr></thead><tbody><tr><td>0</td><td>Main extension guest</td><td>£0.00</td></tr><tr><td>1</td><td>Telephone in bathroom</td><td>£0.00</td></tr><tr><td>2</td><td>Sub extension 2</td><td>£0.00</td></tr><tr><td>9</td><td>Telephonebox</td><td>£0.00</td></tr></tbody></table>	Key	Name/Text	Surcharge	0	Main extension guest	£0.00	1	Telephone in bathroom	£0.00	2	Sub extension 2	£0.00	9	Telephonebox	£0.00
Key	Name/Text	Surcharge														
0	Main extension guest	£0.00														
1	Telephone in bathroom	£0.00														
2	Sub extension 2	£0.00														
9	Telephonebox	£0.00														
<b>...Defining a new extension type</b>																
2	Enter the new, unique, one-digit and numeric code in the <i>Key</i> field.															
3	Enter the code name in the <i>Name</i> field (max. 30 characters).															
4	In the <i>Surcharge</i> field, enter the surcharge to be applied to calls made with this type of extension in the national currency. Enter the percentage that applies to calls made from this extension in the <i>Tax/Surcharge</i> field. The tax for the total is calculated from the call charges and the surcharge. The price of the call is saved in the call charge record calculated as the call charges + surcharge + tax.															

Step	Procedure
5	<p>Activate the required extension parameters:</p> <ul style="list-style-type: none"> <li>• <i>Update guest name</i> if a guest name is to be updated at an extension of this type (e.g. after check in)</li> <li>• <i>Update class of service</i> if the COS can be changed for this extension type (e.g. after check in/check out)</li> <li>• <i>Update message waiting</i> if the message waiting indicator can be set/deleted for this extension type</li> <li>• <i>Set / delete do not disturb</i> if the do not disturb function can be activated for this extension type.</li> <li>• <i>Set / delete call forwarding</i> if the call forwarding feature can be activated for this extension type.</li> </ul>
6	<p>Activate the required lock flag:</p> <ul style="list-style-type: none"> <li>• <i>Wakeup lock</i> if the entry of wakeup calls at the guest telephone for this extension type is to be locked.</li> <li>• <i>Room status lock</i> if the entry of the room status at the guest telephone is to be locked for this extension type</li> <li>• <i>Minibar lock</i> if the entry of minibar use at the guest telephone is to be locked for this extension type</li> <li>• <i>Consumption lock</i> if the entry of services used at the guest telephone is to be locked for this extension type</li> <li>• <i>Do-not-disturb lock</i> if the entry of the do not disturb feature is to be locked for this extension type.</li> <li>• <i>Presence/absence lock</i> if the presence/absence entry is to be locked at the guest telephone for this extension type</li> <li>• <i>Immediate printout lock</i> if no immediate printout is to be performed for this extension type (e.g. wakeup calls)</li> </ul>
7	Confirm your entries by clicking the <i>Save</i> button.
	<p><b>Remark:</b>  The activated extension parameters and lock flags are preset as default parameters (template) when configuring extensions of this type. These can be modified individually, however, for each extension.</p>

## Configuring Caracas Link

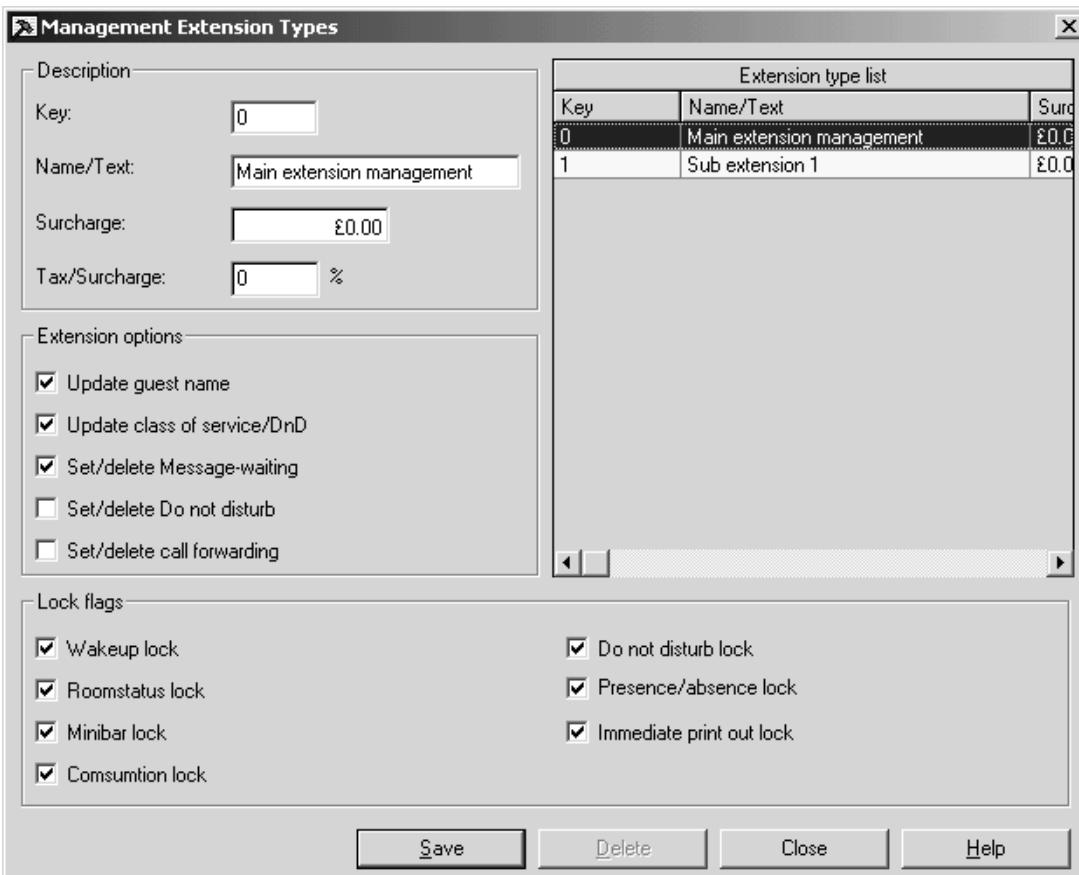
### Configuring guest extension type codes

Step	Procedure
<b>...Changing a defined extension type</b>	
2	Select the code to be changed in the extension type list. The data is transferred to the input fields.
3	Change the entries in the input fields, the extension parameters and the lock flags as required.
4	Confirm your changes by clicking the <i>Save</i> button.
	<b>Remark:</b> If you change the <i>Key</i> of an entry and save it, a new code is created for a class of service with the changed specifications. If, on the other hand you only change the code name of an entry and save it, the existing entry is changed. The changes you make here do not affect defined extensions.
<b>...Deleting a defined extension type</b>	
2	Select the code to be deleted in the list of extension types. The data is transferred to the input fields.
3	Click the <i>Delete</i> button. If the extension type to be deleted is assigned to an extension, deletion is not possible and the following message appears: 
	If the extension type is not assigned, the system prompts the user to confirm: 
	The extension type is deleted if you click <i>Yes</i> . The code is not deleted if you click <i>No</i> . In both cases, you are returned to the configuration dialog.

## 6.4 Configuring management extension type codes

### What are management extension types?

The extension type defines specific default settings for new (created) extensions that can be individually edited when defining the appropriate extension.

Step	Procedure												
1	Activate the menu item <i>Settings - Management Extension Types</i> . The following configuration dialog box appears:												
 <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="3">Extension type list</th> </tr> <tr> <th>Key</th> <th>Name/Text</th> <th>Surcharge</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Main extension management</td> <td>£0.00</td> </tr> <tr> <td>1</td> <td>Sub extension 1</td> <td>£0.00</td> </tr> </tbody> </table>		Extension type list			Key	Name/Text	Surcharge	0	Main extension management	£0.00	1	Sub extension 1	£0.00
Extension type list													
Key	Name/Text	Surcharge											
0	Main extension management	£0.00											
1	Sub extension 1	£0.00											
	<p><b>...Defining a new extension type</b></p> <p>2 Enter the new, unique, one-digit and numeric code in the <i>Key</i> field.</p> <p>3 Enter the code name in the <i>Name</i> field (max. 30 characters).</p> <p>4 In the <i>Surcharge</i> field, enter the surcharge to be applied to calls made with this type of extension in the national currency. Enter the percentage that applies to calls made from this extension in the <i>Tax/Surcharge</i> field. The tax for the total is calculated from the call charges and the surcharge. The price of the call is saved in the call charge record calculated as the call charges + surcharge + tax.</p>												

## Configuring Caracas Link

### Configuring management extension type codes

Step	Procedure
5	<p>Activate the required extension parameters:</p> <ul style="list-style-type: none"><li>• <i>Update guest name</i> if a guest name is to be updated at an extension of this type (e.g. after check in)</li><li>• <i>Update class of service</i> if the COS can be changed for this extension type (e.g. after check in/check out)</li><li>• <i>Update message waiting</i> if the message waiting indicator can be set/deleted for this extension type</li><li>• <i>Set / delete do not disturb</i> if the do not disturb function can be activated for this extension type.</li><li>• <i>Set / delete call forwarding</i> if the call forwarding feature can be activated for this extension type.</li></ul>
6	<p>Activate the required lock flag:</p> <ul style="list-style-type: none"><li>• <i>Wakeup lock</i> if the entry of wakeup calls at the guest telephone for this extension type is to be locked.</li><li>• <i>Room status lock</i> if the entry of the room status at the guest telephone is to be locked for this extension type</li><li>• <i>Minibar lock</i> if the entry of minibar use at the guest telephone is to be locked for this extension type</li><li>• <i>Consumption lock</i> if the entry of services used at the guest telephone is to be locked for this extension type</li><li>• <i>Do-not-disturb lock</i> if the entry of the do not disturb feature is to be locked for this extension type.</li><li>• <i>Presence/absence lock</i> if the presence/absence entry is to be locked at the guest telephone for this extension type</li><li>• <i>Immediate printout lock</i> if no immediate printout is to be performed for this extension type (e.g. wakeup calls)</li></ul>
7	Confirm your entries by clicking the <i>Save</i> button.
	<p><b>Remark:</b></p> <p>The activated extension parameters and lock flags are preset as default parameters (template) when configuring extensions of this type. These can be modified individually, however, for each extension.</p>

Step	Procedure
<b>...Changing a defined extension type</b>	
2	Select the code to be changed in the extension type list. The data is transferred to the input fields.
3	Change the entries in the input fields, the extension parameters and the lock flags as required.
4	Confirm your changes by clicking the <i>Save</i> button.
	<p><b>Remark:</b>  If you change the <i>Key</i> of an entry and save it, a new code is created for a class of service with the changed specifications. If, on the other hand you only change the code name of an entry and save it, the existing entry is changed.  The changes you make here do not affect defined extensions.</p>
<b>...Deleting a defined extension type</b>	
2	Select the code to be deleted in the list of extension types. The data is transferred to the input fields.
3	Click the <i>Delete</i> button. If the extension type to be deleted is assigned to an extension, deletion is not possible and the following message appears:  If the extension type is not assigned, the system prompts the user to confirm:  The extension type is deleted if you click <i>Yes</i> . The code is not deleted if you click <i>No</i> . In both cases, you are returned to the configuration dialog.

## Configuring Caracas Link

### Configuring Voice Language Id codes

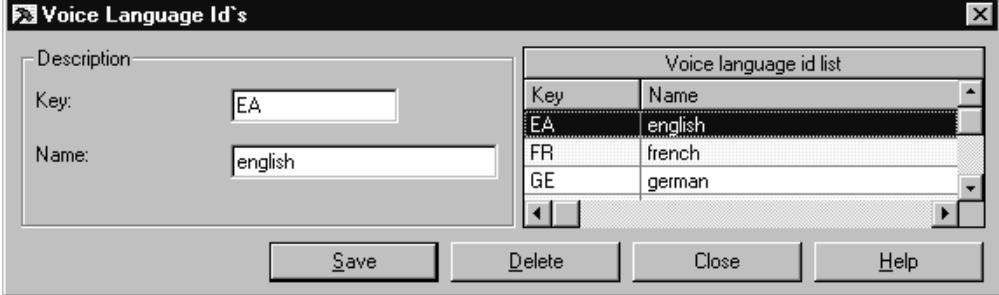
## 6.5 Configuring Voice Language Id codes

### What are Voice Language Id's?

The voice Ids define the language Id's that are supported by the voice mail system.

These Id's must be defined in Caracas Link by specifying the voice language id and the name of the language. The codes are used for the language functions when Caracas Link 'translates' the numeric language id from the front office system to the alphanumeric language id's that the voicemail system supports:

The voice Ids are configured in the following manner:

Step	Procedure
1	Activate the menu item <i>Settings - Voice language Id's</i> . The following configuration dialog box appears:  <p>The default codes appear. You can, however, define other codes.</p>
<b>...Defining a new Id code</b>	
2	Enter the new, unique, two-digit and alphanumeric code in the <i>Key</i> field.
3	Enter the code name in the <i>Name</i> field (max. 30 characters).
4	Confirm your entries by clicking the <i>Save</i> button.
<b>...Changing a defined Id code</b>	
2	Select the code to be changed in the Language Id list. The data is transferred to the input fields.
3	Change the entries in the input fields as required.
4	Confirm your changes by clicking the <i>Save</i> button.
	<b>Remark:</b> If you change the <i>Key</i> of an entry and save it, a new code is created for voice id with the changed specifications. If, on the other hand, you only change the code name of an entry and save it, the existing entry is changed.

Step	Procedure
<b>...Deleting a defined Id code</b>	
2	Select the code to be deleted in the Language Id list. The data is transferred to the input fields.
3	Click the <i>Delete</i> button. If the voice id to be deleted is still used as an assignment to a Caracas-internal language id, the following message appears:



If the voice id is not assigned, the system prompts the user to confirm:



The voice id is deleted if you click the *Yes* button. The code is not deleted if you click *No*. In both cases, you are returned to the configuration dialog box.

## Configuring Caracas Link

### Configuring language ID codes

## 6.6 Configuring language ID codes

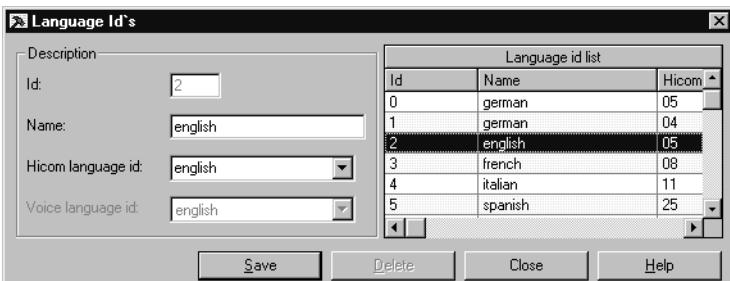
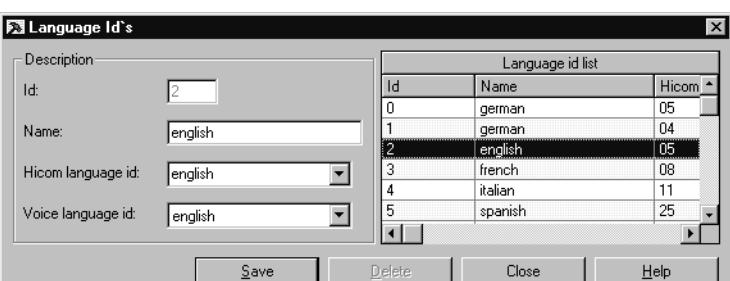
### What are language IDs?

The language ID defines the language used for automatic calls to a guest at a guest telephone, e.g. for wakeup calls. This is identified in Caracas Link by means of a freely definable code. Every language id code is assigned to the corresponding language code of the Hicom. If the component Caracas Voicemail-Link has also been installed, the appropriate language icon must be entered in addition to the Caracas-internal codes for language IDs for the voicemail system.

### Pre-configuration

In Caracas Link 10 language id codes (0 to 9) are preconfigured. You can change the assignments, deletion or defining of new language id codes is not possible.

The language IDs are configured in the following manner:

Step	Procedure
1	<p>Activate the menu item <i>Settings - Language Id's</i>. The following dialog box appears:</p> <p><b>If Caracas Voicemail-Link is not installed:</b></p>  <p><b>If Caracas Voicemail-Link is installed:</b></p> 
2	Select the code to be changed in the language id list. The data transferred to the input fields.
3	Change the assignment in the input fields as required.
4	Confirm your changes by clicking the <i>Save</i> button.

## 6.7 General options

### General options

Settings in the following areas are considered as general options:

- General options for the logbook range, for the call details interface and voicemail system parameters
- Options for wakeup calls and classes of service
- Immediate printout options
- Charging (call calculation) options

### Configuring General Options

Step	Procedure
1	Activate the menu <i>Settings - General Options</i> :
2	A dialog box containing five tabs appears in which you can configure the options in question.

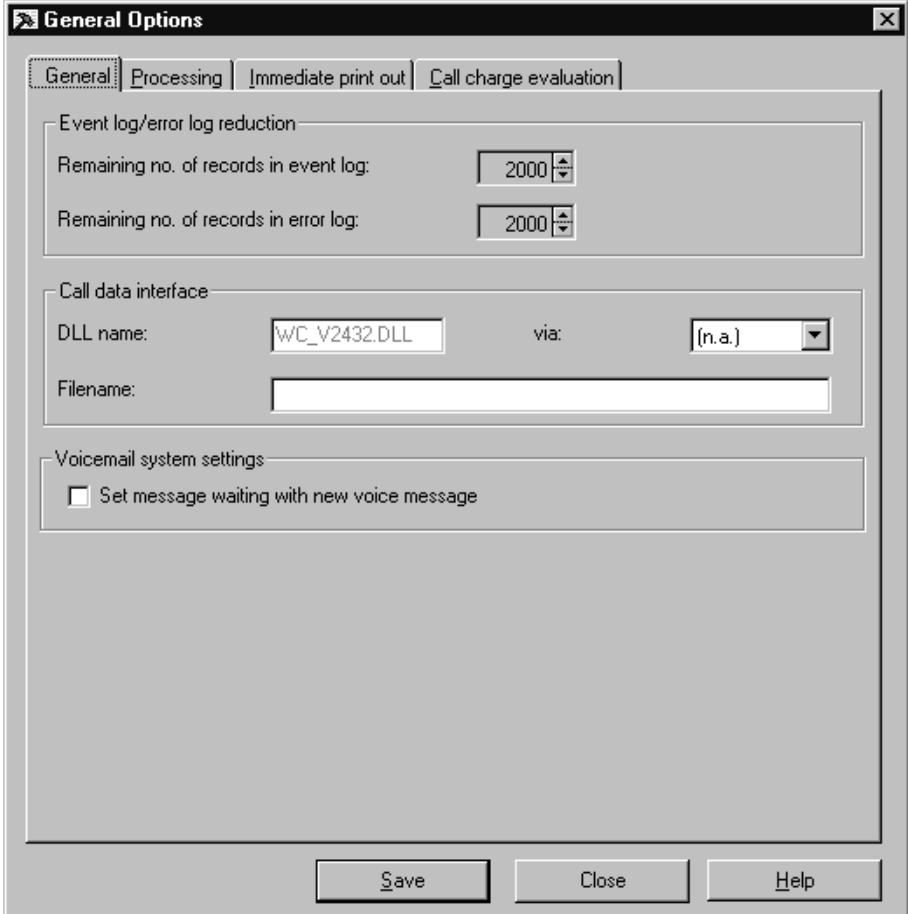
### Cancelling the configuration inputs

You can cancel your entries without saving at any time by clicking the *Close* button.

## Configuring Caracas Link

### General options

## Configuring General Options

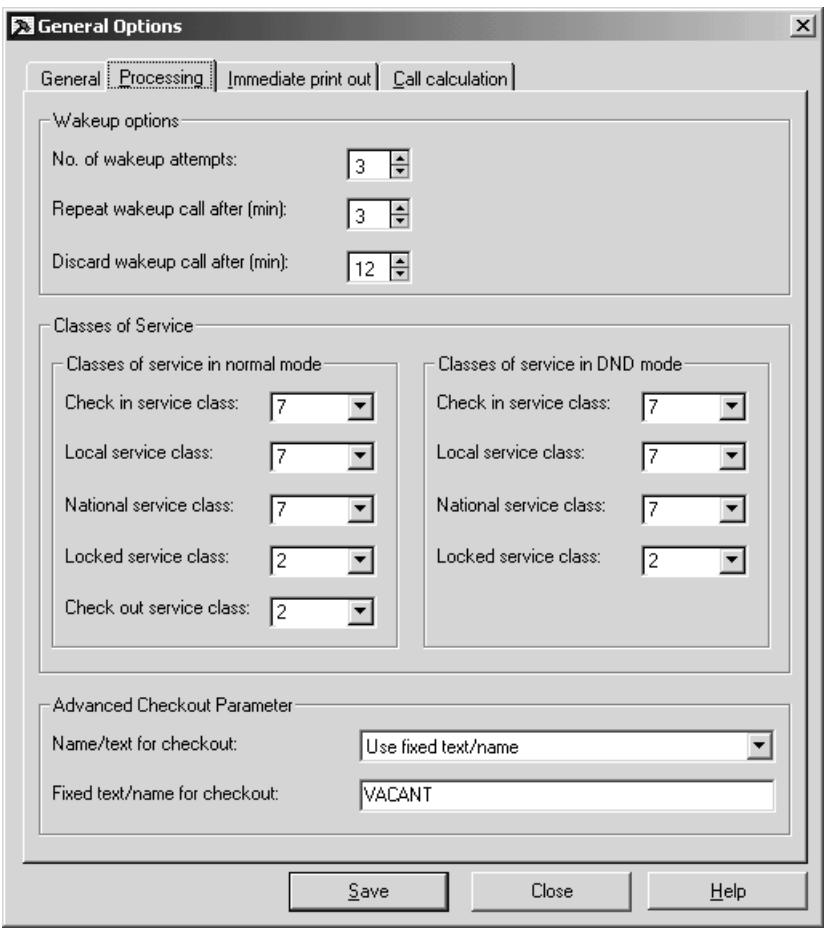
Step	Procedure
1	<p>Activate the <i>General</i> tab:</p> 
2	<p>In the fields <i>Remaining no. of records in event log/error log</i> enter the maximum number of records to remain in the logs if these are reduced by a schedule.</p>

Step	Procedure
3	<p>Besides the analysis of the call charge records with Caracas or WinAccount also offers the possibility of providing call charge records for analysis in an other application. Under <i>Call data interface</i>, the DLL file responsible for transfer of the call charge records in the PBX is displayed in the <i>DLL Name</i> field.</p> <p>In the <i>via</i> field, you specify:</p> <ul style="list-style-type: none"> <li>• <i>(n.a.)</i> No transfer of call charge data to external</li> <li>• <i>COM1, COM2, COM3, COM4, COM5, COM6, COM7</i> call data transfer via the V.24 (RS232) interface to the selected port (interface structure, see Section 15.12.)</li> <li>• <i>FILE</i> call charge transfer via file. Enter the name drive/path/name of the associated file name of the replacement file in the field <i>Filename</i>. The structure of the record in this file corresponds to that of the call data transfer via V.24 (RS232) (see Section 15.12) without control character.</li> </ul>
4	If the waiting lamp is to be set automatically at the relevant guest telephone by Caracas when new messages are received from the voicemail system, activate the relevant option under <i>Voicemail System Settings</i> . It is also possible for the voicemail system to set the MW lamp autonomously
5	Confirm your entries by clicking the <i>Save</i> button.

## Configuring Caracas Link

### General options

#### Configuring parameters for wakeup and classes of service

Step	Procedure
1	Activate the <i>Processing</i> tab: 
2	Enter the following wakeup parameters: <ul style="list-style-type: none"><li>• <i>No. of wakeup attempts</i> when wakeup calls are not answered</li><li>• <i>Repeat wakeup call after (min)</i> interval allowed between wakeup attempts</li><li>• <i>Discard wakeup call after (min)</i> maximum duration of a wakeup call</li></ul>

Step	Procedure
3	<p>Enter the valid class of service code for the internal Caracas classes of service listed or select in the list field.</p> <p>The internal Caracas classes of service are:</p> <ul style="list-style-type: none"> <li>• Check in service class</li> <li>• Local service class</li> <li>• National service class</li> <li>• Locked service class</li> <li>• Check out service class (only in normal mode)</li> </ul>
4	<p>Select how Caracas should handle extension names during checkout. In the field Name/text for checkout you can choose from the following options:</p> <ul style="list-style-type: none"> <li>• <i>Delete name/text</i> The extension name will be deleted in Caracas / in the PBX.</li> <li>• <i>Use name/text from Frontoffice</i> The extension name of the checkout record from the Front Office System will be used.</li> <li>• <i>Use fixed text/name</i> Use the fixed name which can be entered in the field <i>Fixed text/name for checkout</i> when this extension is checked out.</li> </ul>
4	Confirm your entries by clicking the <i>Save</i> button.

## Configuring Caracas Link

### General options

#### Configuring the parameter for immediate print out

Step	Procedure
1	<p>Activate the <i>Immediate print out</i> tab:</p> 
2	You activate the immediate printout by clicking the option field <i>Activate immediate print out</i> . All other fields of the dialog can be changed when this option is activated.
3	In the <i>Lines per page / print out</i> field, you specify the desired value.

Step	Procedure
4	<p>You can set the options for immediate printouts by de-/activating the following options:</p> <ul style="list-style-type: none"> <li>● <i>do not print</i> activate the radio button if you want to work without immediate printout for the corresponding actions.</li> <li>● <i>print always</i> activate the radio button if you want to activate immediate printout generally for the corresponding actions.</li> <li>● <i>print when Host offline</i> activate the radio button if you only want to activate immediate printout automatically when the front office system is not active for the corresponding actions.</li> </ul> <p>Immediate printout is available for the following actions:</p> <ul style="list-style-type: none"> <li>● <i>Calls</i> data relating to each call conducted is output</li> <li>● <i>Minibar entries:</i> minibar entries entered by guest telephone are output</li> <li>● <i>Room status entries</i> room status entered by guest telephone is output</li> <li>● <i>Wakeup call entries</i>  <i>Successful wakeup calls</i>  <i>Unsuccessful wakeup calls</i>  newly entered, executed or unexecuted wakeup calls are output</li> </ul>
5	Confirm your entries by clicking the <i>Save</i> button.

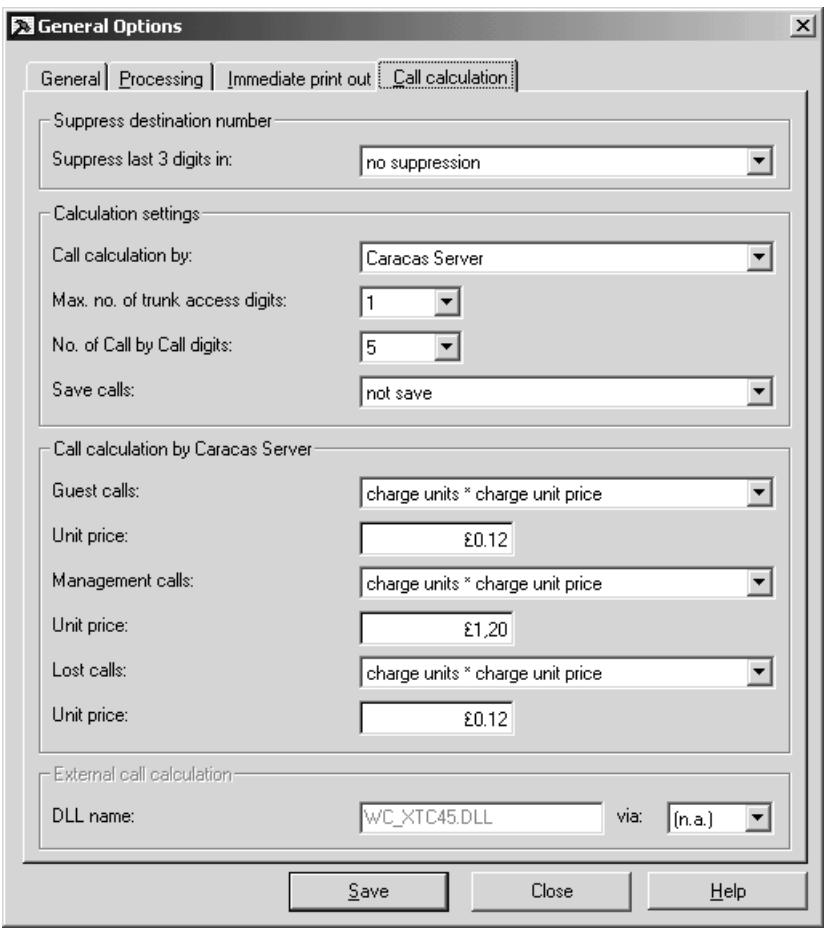


Caracas will print out only those records which have been entered via the TD Service (minibar, room status, wakeup). Records from the Voicemail System will not be printed out.

## Configuring Caracas Link

### General options

## Configuring parameters for charging

Step	Procedure
1	<p>Activate the <i>Call charge evaluation</i> tab:</p> 
2	<p>In the call charge record, you can suppress the last three digits of the target number. In the list box, you can now use the <i>Suppress last 3 digits in</i> option to define</p> <ul style="list-style-type: none"><li>• <i>no suppression</i> The target number is not suppressed.</li><li>• <i>Caracas</i> The target number is suppressed only for transfer to the host.</li><li>• <i>WinAccount</i> The target number is suppressed only in the call detail database of WinAccount.</li><li>• <i>WinAccount and Caracas</i> The target number is suppressed in the call detail database of WinAccount and on transfer to the host.</li></ul>

Step	Procedure
3	<p>In the <i>Call calculation by</i> field, you specify the type of call charge calculation:</p> <ul style="list-style-type: none"> <li>● <i>Caracas Server</i> The call charges are determined on the basis of the values defined under <i>Calculation by Caracas Server</i>. The relevant input fields are activated. Enter the required values there (step 4).</li> <li>● <i>Call Charge Manager</i> The call charge calculation is based on the tables / value entered in the call charge manager.</li> <li>● <i>External application via V.24</i> The call charge analysis is carried out in an external application which contains the call details of Caracas via the V.24 (RS232) interface, the call charges calculated and these data sent back over the same interface (see Section 15.13). In the <i>Max. no. of trunk access digits</i> field, you also specify the number of target numbers are considered as the digit for line access, in the <i>No. of Call by Call digits</i> field, how many digits of the target are considered as call-by-call number.</li> </ul>
4	<p>If call details are to be stored in the Caracas call detail database for further analysis, e.g. with WinAccount, select the call types to be saved in the <i>Save calls</i> list. The following are available:</p> <ul style="list-style-type: none"> <li>● <i>not save</i> (no storage of cost-analyzed call charge records)</li> <li>● <i>Guest calls only</i></li> <li>● <i>Lost calls only</i></li> <li>● <i>Management calls only</i></li> <li>● <i>Guest calls and lost calls</i></li> <li>● <i>Guest calls and management calls</i></li> <li>● <i>Management calls and lost calls</i></li> <li>● <i>Every call</i></li> </ul>
5	<p>In the case of call charge analysis via the server, the call charge analysis mode for <i>Guest calls</i>, for <i>Management calls</i> and for <i>Lost calls</i> must be specified. The following are available:</p> <ul style="list-style-type: none"> <li>● <i>no calculation:</i> A cost analysis is not performed for these calls.</li> <li>● <i>charge units * charge unit price:</i> The call charges are calculated on the basis of the number of units and the unit price, which must be stored in the <i>Unit price</i> field.</li> </ul>

## Configuring Caracas Link

### General options

Step	Procedure
6	<p>Besides the analysis of the call charges in the Caracas Server / in the call charge manager, it is also possible to analyze the call charges using an external application. Under <i>External call calculation</i>, the DLL file responsible for transfer of the call charge records to an external application in the PBX is displayed in the <i>DLL name</i> field.</p> <p>In the <i>via</i> field, you specify:</p> <ul style="list-style-type: none"><li>• (n.a.) No transfer of call charge data to external</li><li>• <i>COM1, COM2, COM3, COM4, COM5, COM6, COM7</i> Call charge data transfer via V.24 interface to the selected port (interface structure, see Section 15.13).</li></ul>
7	Confirm your entries by clicking the <i>Save</i> button.



External call calculation is also possible with Caracas Horizon-Link. You do not configure this interface here.

## 6.8 Schedule

### What is the schedule?

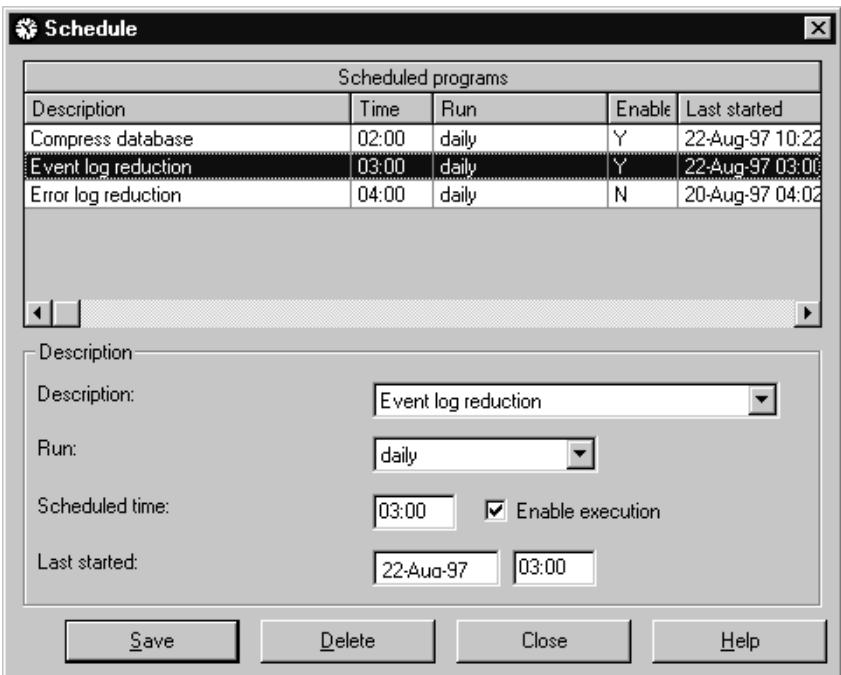
With the schedule feature, the following automated processes can be started in Caracas Link at a set interval and time.

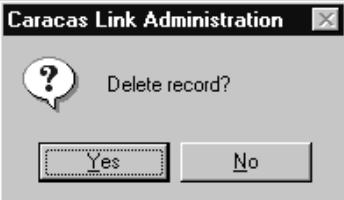
- *Event log reduction*  
Automatically reduces the event log volume to the maximum number of records set in the general options. (*Settings - General Options*, tab *General*).
- *Error log reduction*  
Automatically reduces the error log volume to the maximum number of records set in the general options (*Settings - General Options*, tab *General*).
- *Backup (complete)*  
Compresses and copies the database files (ci\_main.mdb, ci\_buff.mdb, ci\_geb.mdb) to the directory C:\Program Files\Common Files\backup\db\_save. This directory remains relevant for the backup system as configured, because the files to be saved are read from this directory (and not from the original file directory).
- *Copy databases*  
Copies the database files (ci\_main.mdb, ci\_buff.mdb, ci\_geb.mdb) to the directory C:\Program Files\Common Files\backup\db\_save. The files are saved without being compressed.  
This directory remains relevant for the backup system as configured, because the files to be saved are read from this directory (and not from the original file directory).
- *Compress databases*  
Compresses the database files (ci\_main.mdb, ci\_buff.mdb, ci\_geb.mdb)
- *Print wakeup call list*  
Prints out the wakeup call list for the following day.
- *Print unsuccessful wakeup calls*  
Prints out the un successful wakeup calls list.

## Configuring Caracas Link

### Schedule

#### Configuring the schedule

Step	Procedure
1	Activate the menu item <i>Settings - Schedule</i> : 
<b>...Defining a scheduled order</b>	
2	Select the appropriate entries from the <i>Description</i> list field and enter the required dates/intervals for logbook reductions. The last execution of the scheduled order in question is displayed under <i>Last started</i> .
3	If the scheduled order is not to be executed, deactivate the option field <i>Enable execution</i> . If, on the other hand, the order is to be executed, activate this option field.
4	Confirm your entries by clicking the <i>Save</i> button.
<b>Tip</b>	You can enter the date / the time(s) manually or with the aid of the spin fields. When you enter the date / time under <i>Last started</i> , you can specify a particular date for last execution, to force a timed order for example.

<b>Step</b>	<b>Procedure</b>
<b>...Deleting a scheduled order</b>	
2	<p>Select the entry to be deleted from the list of orders and click the <i>Delete</i> button. The system prompts the user to confirm:</p>  <p>The order is deleted by clicking <i>Yes</i>. If <i>No</i> is clicked, you are returned to the dialog without deleting the order.</p>

### **Default settings of the Schedule**

	<b>Time schedule (default setting after installation)</b>						
<b>Scheduled order</b>	<b>MON</b>	<b>TUE</b>	<b>WED</b>	<b>THU</b>	<b>FRI</b>	<b>SAT</b>	<b>SUN</b>
Event log reduction	04:00	04:00	04:00	04:00	04:00	04:00	04:00
Error log reduction							04:15
Copy databases	03:30	03:30	03:30	03:30	03:30	03:30	03:30
Compress databases	04:30						

## **Configuring Caracas Link**

*Record types host protocol (Host-Link)*

### **6.9 Record types host protocol (Host-Link)**

#### **Range of available record types**

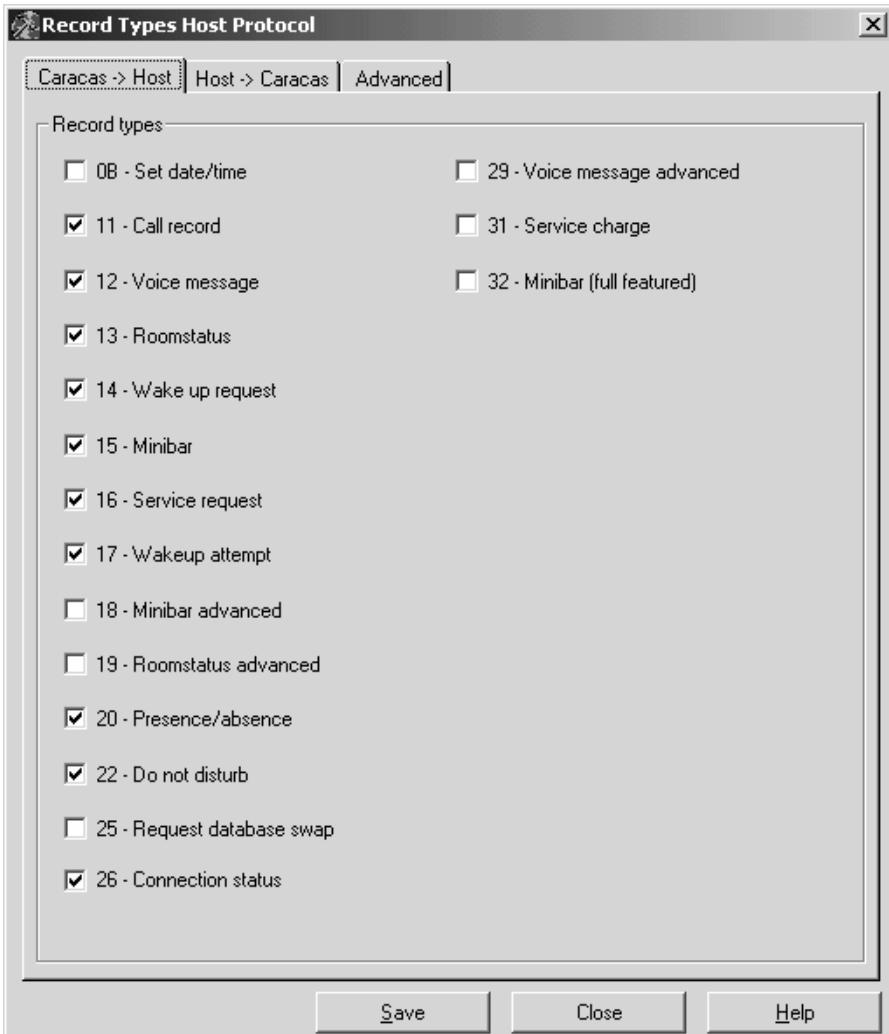
The range of available record types for exchanging "user data" between Caracas Host-Link and the front office system is heavily dependant on the front office system installed. It is therefore necessary to define which record types are to be used in the communication direction Caracas Host-Link → front office system and front office system → Caracas Host-Link.

#### **Documentation of the record types**

The record types that are exchanged between Caracas Host-Link and the front office system are described in more detail in the host protocol (chapter 13).

## Configuring record types

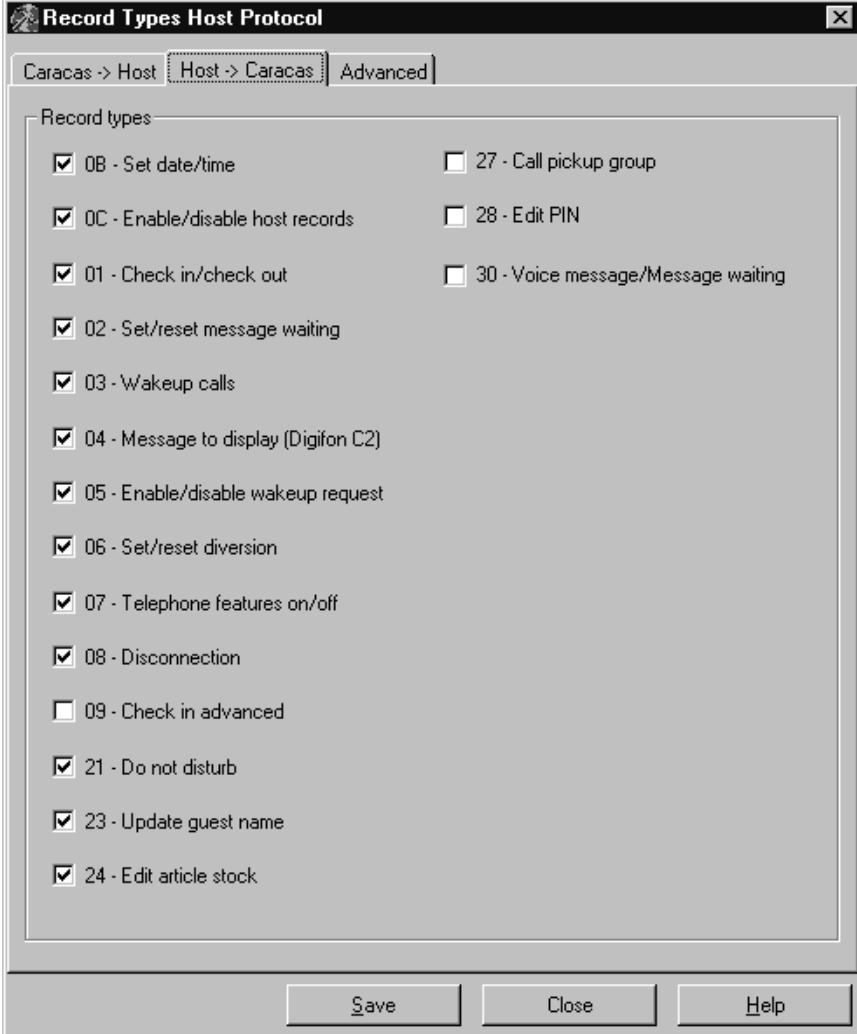
Step	Procedure
1	Activate the menu item <i>Settings - Record Types Host-Protocol</i> .
2	To configure the available record types from Caracas Host-Link to front office system, activate the <i>Caracas -&gt; Host</i> tab. Activate the appropriate option field in the prompted dialog box.



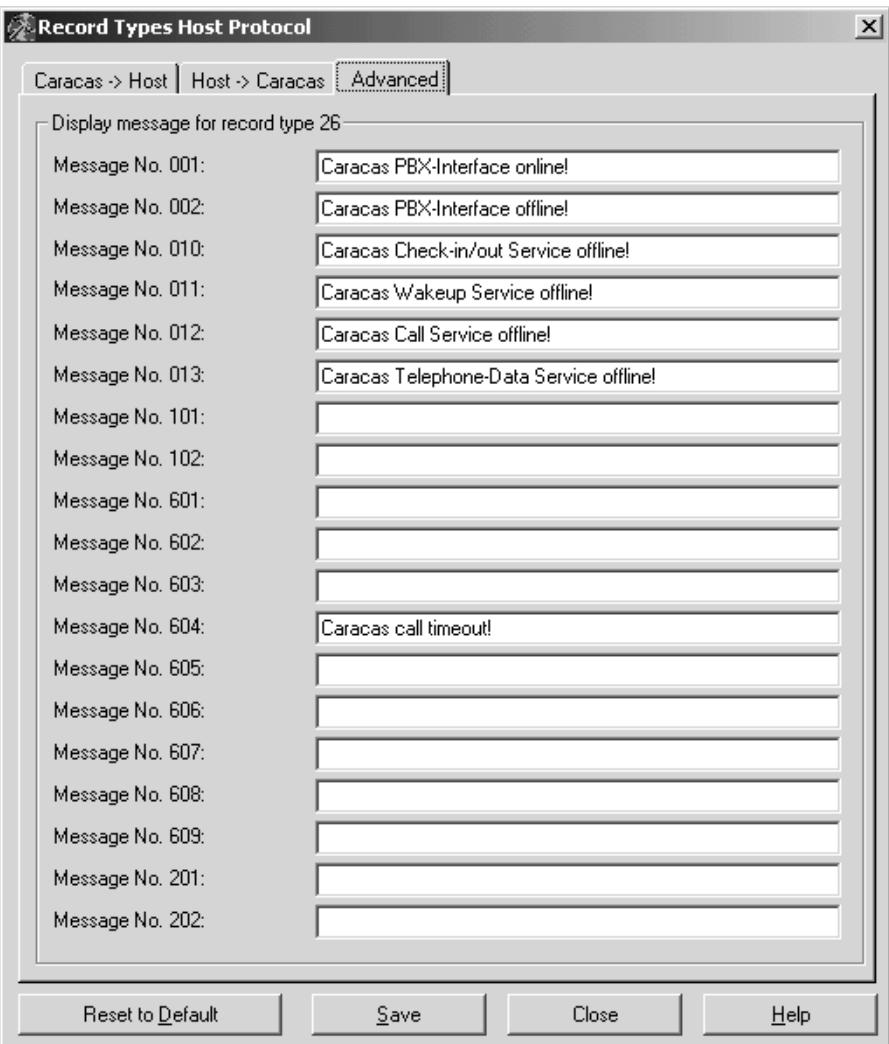
The dialog box shows the configuration of record types for the Caracas -> Host link. The 'Record types' section lists 28 different record types, each with a checkbox. Most of the checkboxes are checked, indicating they are enabled. The checked items include: 11 - Call record, 12 - Voice message, 13 - Roomstatus, 14 - Wake up request, 15 - Minibar, 16 - Service request, 17 - Wakeup attempt, 20 - Presence/absence, 22 - Do not disturb, and 26 - Connection status. The unchecked items include: 08 - Set date/time, 29 - Voice message advanced, 31 - Service charge, 32 - Minibar (full featured), 18 - Minibar advanced, and 19 - Roomstatus advanced. At the bottom of the dialog box are three buttons: 'Save', 'Close', and 'Help'.

## Configuring Caracas Link

Record types host protocol (Host-Link)

Step	Procedure
3	To configure the available record types from front office system to Caracas Host-Link, activate the <i>Host -&gt; Caracas</i> tab. Activate the appropriate option field in the prompted dialog box. 

**Configuring Caracas Link**  
*Record types host protocol (Host-Link)*

Step	Procedure																																						
4	<p>To configure the message texts for record type 26 send from the Caracas Alarm Client to Caracas Link, activate the <i>Extended</i> tab. If the message is to be deactivated, leave the text field blank. Enter a message text if the message is activated.</p>  <table border="1" style="margin-top: 10px;"> <tr><td>Message No. 001:</td><td>Caracas PBX-Interface online!</td></tr> <tr><td>Message No. 002:</td><td>Caracas PBX-Interface offline!</td></tr> <tr><td>Message No. 010:</td><td>Caracas Check-in/out Service offline!</td></tr> <tr><td>Message No. 011:</td><td>Caracas Wakeup Service offline!</td></tr> <tr><td>Message No. 012:</td><td>Caracas Call Service offline!</td></tr> <tr><td>Message No. 013:</td><td>Caracas Telephone-Data Service offline!</td></tr> <tr><td>Message No. 101:</td><td></td></tr> <tr><td>Message No. 102:</td><td></td></tr> <tr><td>Message No. 601:</td><td></td></tr> <tr><td>Message No. 602:</td><td></td></tr> <tr><td>Message No. 603:</td><td></td></tr> <tr><td>Message No. 604:</td><td>Caracas call timeout!</td></tr> <tr><td>Message No. 605:</td><td></td></tr> <tr><td>Message No. 606:</td><td></td></tr> <tr><td>Message No. 607:</td><td></td></tr> <tr><td>Message No. 608:</td><td></td></tr> <tr><td>Message No. 609:</td><td></td></tr> <tr><td>Message No. 201:</td><td></td></tr> <tr><td>Message No. 202:</td><td></td></tr> </table>	Message No. 001:	Caracas PBX-Interface online!	Message No. 002:	Caracas PBX-Interface offline!	Message No. 010:	Caracas Check-in/out Service offline!	Message No. 011:	Caracas Wakeup Service offline!	Message No. 012:	Caracas Call Service offline!	Message No. 013:	Caracas Telephone-Data Service offline!	Message No. 101:		Message No. 102:		Message No. 601:		Message No. 602:		Message No. 603:		Message No. 604:	Caracas call timeout!	Message No. 605:		Message No. 606:		Message No. 607:		Message No. 608:		Message No. 609:		Message No. 201:		Message No. 202:	
Message No. 001:	Caracas PBX-Interface online!																																						
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Message No. 011:	Caracas Wakeup Service offline!																																						
Message No. 012:	Caracas Call Service offline!																																						
Message No. 013:	Caracas Telephone-Data Service offline!																																						
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Message No. 609:																																							
Message No. 201:																																							
Message No. 202:																																							
5	Confirm your entries by clicking the <i>Save</i> button.																																						

## **Configuring Caracas Link**

*Record types host protocol (Host-Link)*

**Available record types from Caracas Host-Link to the front office system:**

<b>Record type</b>	<b>Description</b>
0B	Set date/time
11	Charge call
12	Voice message
13	Room status
14	Wakeup request
15	Minibar
16	Service request
17	Wakeup attempt
18	Minibar (advanced)
19	Room status (advanced)
20	Presence/absence
22	Do-not-disturb
25	Request database swap
26	Connection status
29	Voice message advanced
31	Service charge
32	Minibar complete

**Configuring Caracas Link**  
*Record types host protocol (Host-Link)*

**Overview: record types sent to different front office systems**

Company	Record types from Caracas Host-Link to front office system																		
	0B	11	12	13	14	15	16	17	18	19	20	22	25	26	29	31	32		
B.A.N.C.	x			x	x			x											
deltra Software GmbH	x														x				
EBS / Heiss	x			x	x				x										
Eureka Informatika	x	x	x	x	x	x	x	x	x	x	x	x							
Expert computer	x		x	x				x	x	x	x			x					
Feige (HORECS)	x			x			x												
FIDELIO	x	x		x			x			x	x		x	x					
futura Hotel	x							x											
Geiger	x			x				x											
Geosoft	x	x													x				
GUB		x		x	x	x		x	x	x									
Hogatex	x		x	x	x			x											
HotLine	x		x	x	x	x	x							x	x				
HVP (Uhlmann and Zacher)	x																		
Intrac	x		x		x		x					x		x	x				
Kreißl	x			x				x							x				
Linecker	x		x	x	x			x											
LIMA	x		x											x					
Lodgistix / Lanmark / Sulcus	x																		
Neptune	x		x							x					x				
Nordmann Software	x		x	x				x											
NovaCom	x		x	x	x			x					x						
OotelWin	x																		
PC-Technik	x						x								x				
Profile	x																		
PROTEL	x																		
Rebag	x		x							x			x		x				

## Configuring Caracas Link

*Record types host protocol (Host-Link)*

Company	Record types from Caracas Host-Link to front office system																
	0B	11	12	13	14	15	16	17	18	19	20	22	25	26	29	31	32
Schlingmeier & Partner	x		x	x	x	x	x	x	x		x	x					
Schuler			x					x									
SDS	x				x			x									
SITEC	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Syspro		x															
Team 80	x																
VIPS		x		x	x			x				x					

**Available record types from front office system to Caracas Host-Link:**

Record type	Description
0B	Set date/time
0C	Enable/disable host records
01	Check-in/Check-out
02	Set/reset message waiting
03	Wakeup calls
04	Message to display (Digifon 02)
05	Enable/disable wakeup request
06	Set/reset diversion
07	Telephone features on/off
08	Disconnection
09	Check-in advanced
21	Do-not-disturb
23	Update guest-name
24	Edit article stock
27	Call transfer group
28	Edit PIN
30	Voice message / Message waiting

**Configuring Caracas Link**  
*Record types host protocol (Host-Link)*

**Overview: record types sent from different front office systems**

Company	Record types from front office system to Caracas Host-Link																			
	0B	0C	01	02	03	04	05	06	07	08	09	21	23	24	27	28	30			
B.A.N.C.			X		X										X					
deltra Software			X	X	X	X														
EBS / Heiss			X	X	X										X					
Eureka Informatika		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Expert computer			X		X										X	X				
Feige (HORECS)			X		X										X					
FIDELIO	X		X	X	X				X					X	X	X				
futura Hotel			X		X															
Geiger			X	X	X										X					
Geosoft	X		X	X	X				X	X					X					
GUB			X	X	X										X					
Hogatex			X	X	X										X					
HotLine			X	X	X	X				X						X				
HVP (Uhlmann and Zacher)		X																		
Intrac			X	X	X										X	X				
Kreißl			X	X	X										X					
Linecker			X	X	X					X					X					
Lodgistix / Lanmark / Sulcus			X	X											X					
LIMA			X	X	X										X	X				
Neptune			X	X	X										X					
Nordmann Software		X														X				
NovaCom			X	X	X	X									X	X				
OotelWin		X	X													X				
PC-Technik			X						X			X				X				
Profile			X														X			
PROTEL			X														X			
Rebag				X												X	X			
Schlingmeier & Partner			X	X	X	X	X	X		X					X	X				
Schuler			X	X	X															

## Configuring Caracas Link

Record types host protocol (Host-Link)

Company	Record types from front office system to Caracas Host-Link																		
	0B	0C	01	02	03	04	05	06	07	08	09	21	23	24	27	28	30		
SDS			X	X	X								X						
Syspro			X										X						
SITEC Computertechnik	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Syspro			X										X						
Team 80			X										X						
VIPS		X	X		X								X						

## 7      **Configuring Caracas Host-Link**

### **Who can configure Caracas Host-Link?**

Caracas Host-Link is configured in the Caracas Host-Link component by the service technician (user level 1). Activate the program and log on to Caracas Host-Link with the technician's password.

### **What is to be configured?**

The following parameters are to be configured:

- connection mode to the front office system
- additional specific parameters for the selected connection depending on the connection mode

### **7.1        connection mode at the front office system**

#### **Different connection modes**

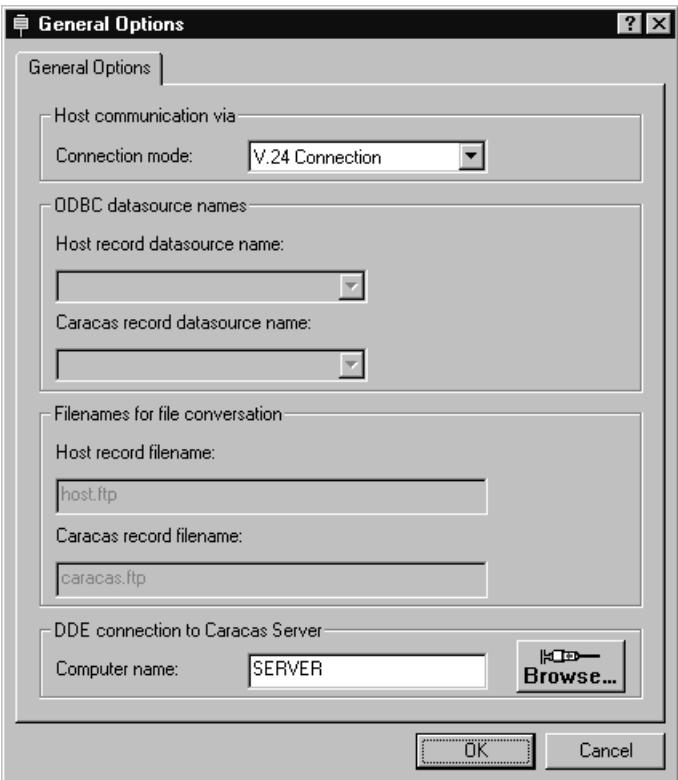
Three alternatives are available for exchanging data between Caracas Host-Link and the front office system. The applicable alternative is to be configured by specifying the appropriate parameter:

- connection via file conversation/data exchange
- connection via ODBC conversation to appropriate buffers
- connection via V.24 interface (default)
- connection via TCP/IP

## Configuring Caracas Host-Link

*connection mode at the front office system*

### How is the connection mode defined?

Step	Procedure
1	The connection mode can only be defined if there is no connection to the front office system. An active connection must therefore be cleared down: To do this, select the menu item <i>Conversation - Close Conversation to Host</i> or press <b>[F3]</b> in Caracas Host-Link.
2	Then activate the configuration dialog for the general options under <i>Settings - General Options</i> :
	
Depending on the required form of the connection, proceed as follows:	
<b>...Connection via file conversation/file exchange</b>	
3	Select the entry <i>File Connection</i> as the connection mode in the configuration dialog box. The fields in the group window <i>Filenames for file conversation</i> are activated.
4	Enter the appropriate file name and the complete path both for host records to Caracas and for Caracas records to the host. The file name is not checked and the file does not have to be available.
5	Confirm your entries.

**Configuring Caracas Host-Link**  
*connection mode at the front office system*

Step	Procedure
<b>...Connection via ODBC conversation on buffer</b>	
3	Select the entry <i>ODBC Connection</i> as the transfer type in the configuration dialog box. The fields in the group window <i>ODBC Datasource Names</i> are activated.
4	Select the appropriate data sources both for host records to Caracas and for Caracas records to the host. The following entries are possible: <ul style="list-style-type: none"> <li>• <i>(none)</i> no data source selected <b>OR</b></li> <li>• <b>CARACAS_BUFFLOG</b> data source for host and Caracas records</li> </ul> <b>Recommendation:</b> Select the data source "CARACAS_BUFFLOG" for both entries. This entry is, however, not essential at present since Caracas Host-Link is only waiting for the tables for the host or Caracas records in the data source CARACAS_BUFFLOG.
5	Confirm your entries.
<b>...Connection via V.24 (RS232) interface (default)</b>	
3	Select the entry <i>V.24 Connection</i> as the connection mode. The fields in the other group windows are deactivated.
4	Confirm your entries.
<b>...Connection via TCP/IP</b>	
3	Select the Entry <i>TCP/IP</i> as the conversation mode. The fields in the other group windows are deactivated.
4	Confirm your entries.

## 7.2 DDE connection to Caracas Server

### Defining the computer name

Caracas Server is linked via a DDE connection which is used for exchanging immediate messages. The computer name stored in the dialog box *Settings - General Options* (field *Computer name*) is used for the DDE connection between Caracas Server and Caracas Host-Link.

The current computer name is shown in this field the first time Caracas Host-Link is started up. Since Caracas Host-Link can only be installed on the same PC as Caracas Server at present, differing entries in this field have no affect.

## 7.3 Connection via V.24 (RS232) - protocol parameter

### When is this parameter configured?

If you set V.24 (RS232) connection as the connection mode, you must configure the protocol parameter. The interface must not be active during the configuration operation.

### Deactivating the interface to the front office system

Step	Procedure
1	Activate the menu <i>Conversation - Close Conversation to Host</i> or press <b>[F3]</b> . This menu item is not displayed if the connection to the host is already inactive.

### Which settings can be made?

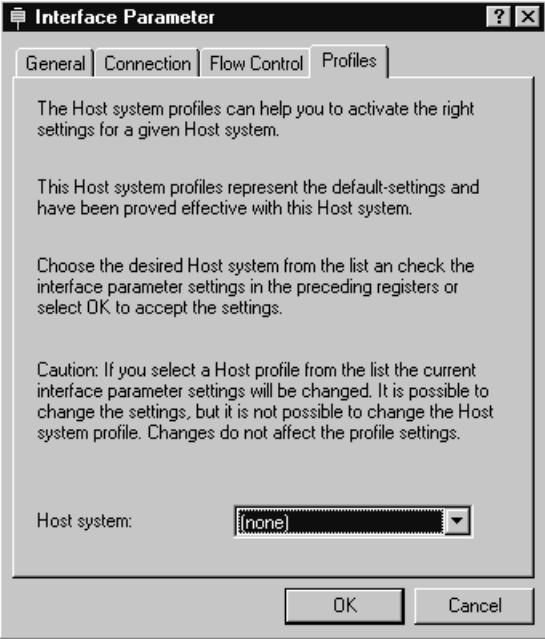
Basically, general options, V.24 (RS232) interface parameters and parameters for monitoring the interface are to be specified. These parameters are dependent on the front office system installed. For this reason, pre-configured interface profiles with tested and released default values are manufactured to simplify the setting of the required parameters for a front office system.

## Configuring Caracas Host-Link

Connection via V.24 (RS232) - protocol parameter

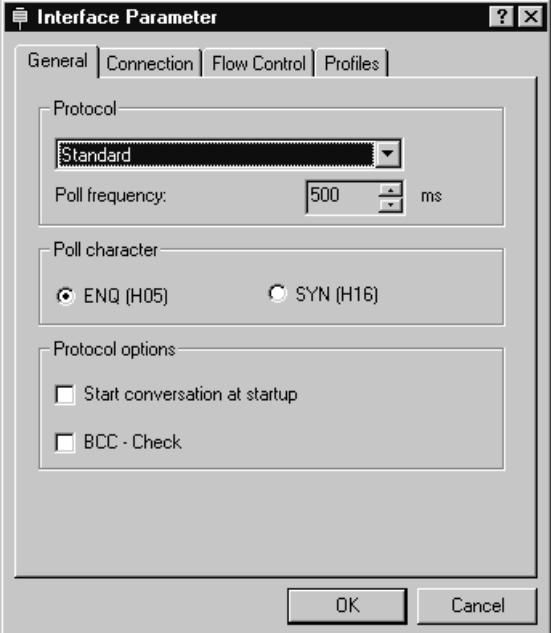
### V.24 (RS232) host profiles

To set a host profile, proceed as follows:

Step	Procedure
1	Activate the configuration dialog for the protocol parameter under <i>Settings - Interface Parameter</i> .
2	Activate the <i>Profiles</i> tab: 
3	Select the required host profile for the front office system installed in the list field. All interface parameters are automatically set.
4	You can check the settings via the other tabs. If the appropriate profile entry is missing for the front office system to be connected, all settings must be made manually.
5	If you change a setting after having selected a profile, this change cannot be incorporated in the profile and the profile setting is reset to the default value ( <i>none</i> ).

## General protocol parameters

To enter/change the general protocol parameters, proceed as follows:

Step	Procedure	Function
1	Activate the configuration dialog for the protocol parameters under <i>Settings - Interface Parameter</i> .	
2	Select the tab <i>General</i> :	
3	In the <i>Protocol</i> list field select the required protocol that is selected for the connection via the V.24 (RS232) interface to the front office system.	<ul style="list-style-type: none"> <li>● <i>Standard</i> secure transfer of data in polling operations</li> <li>● <i>Standard BIND</i>. for connecting to front office systems that operate with the standard protocol and so-called BIND-handling</li> <li>● <i>Fidelio protocol</i>: for connecting front office systems from FIDELIO (V.24 (RS232) protocol without polling operation)</li> </ul>
4	Enter the polling rhythm in the field <i>Poll frequency</i> (milliseconds).	Within the time set here, Caracas Host-Link queries the interface to the front office system once.

## Configuring Caracas Host-Link

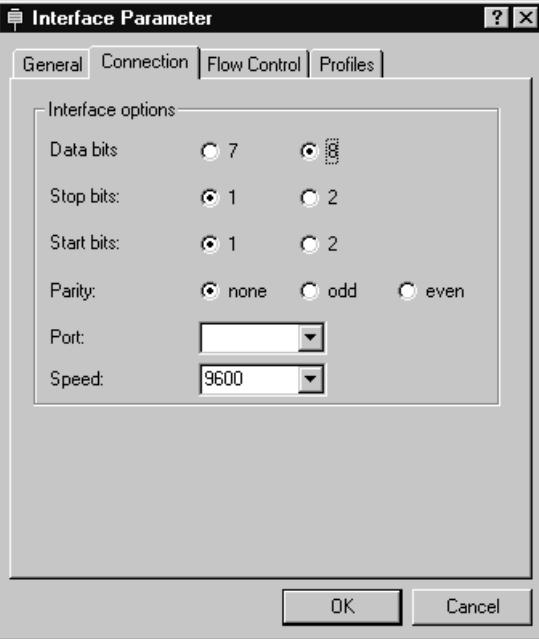
*Connection via V.24 (RS232) - protocol parameter*

Step	Procedure	Function
5	Select the character for data traffic with the host in the <i>Poll character</i> group field	In general, a distinction is made between ENQ (H05) and SYN (H16). For more information, see Section 13.2.3, “Protocol description”.
6	Activate the relevant settings in the <i>Protocol options</i> group field	<ul style="list-style-type: none"> <li>• <i>Start conversation at startup</i>: the host conversation is automatically opened when the program is started up. This setting should be selected after configuration/cutover in order to avoid having to manually activate the V.24 connection every time Caracas Host-Link is activated.</li> <li>• <i>BCC - check</i>: to be activated if the protocol between Caracas Host-Link and the front office system is operating with the BCC check procedure. For more information, see Section 13.6, “Record interface”. This parameter applies to the standard and Fidelio protocols.</li> </ul>
Tip	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> <li>• <i>What's this?</i> What's this is displayed for the current dialog element (e.g. button).</li> </ul>	

## Configuring Caracas Host-Link Connection via V.24 (RS232) - protocol parameter

### Interface parameters

To enter/change the general interface parameters, proceed as follows:

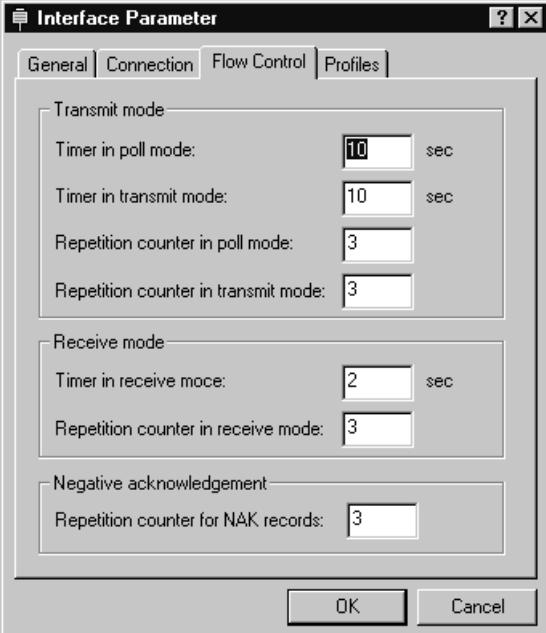
Step	Procedure	Function
1	Activate the configuration dialog for the protocol parameters under <i>Settings - Interface Parameter</i> .	
2	Select the <i>Connection</i> tab.	
3	Enter the interface-specific data in the individual fields. In addition to the number of data bits, start bits and stop bits, define the parity and configure the required COM interface and speed.	
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> <li>• <i>What's this?</i> What's this is displayed for the current dialog element (e.g. button).</li> </ul>	

## Configuring Caracas Host-Link

*Connection via V.24 (RS232) - protocol parameter*

### Flow rate parameters

To enter/change the flow rate parameters, proceed as follows:

Step	Procedure	Function
1	Activate the configuration dialog for the protocol parameters under <i>Settings - Interface Parameter</i> .	
2	Select the <i>Flow Control</i> tab:	
3	Define the transmit mode for poll mode in the fields <i>Timer in poll mode</i> and <i>Repetition counter in poll mode</i>	The program waits (duration = time set here in seconds multiplied by the number of attempts) for a valid response from the front office system before Caracas Host-Link logically logs off the connection to the front office system.
4	Define the transmit mode for transmit mode in the fields <i>Timer in transmit mode</i> and <i>Repetition counter in transmit mode</i>	The program waits (duration = time set here in seconds multiplied by the number of attempts) for a valid response from the front office system once Caracas Host-Link has sent a record. The record is reset if no valid response is received within this time and the connection is logically logged off. The record is repeated at a later time - if the front office system is online again.

**Configuring Caracas Host-Link**  
*Connection via V.24 (RS232) - protocol parameter*

Step	Procedure	Function
5	Define the transmit mode for receive mode in the fields <i>Timer in receive mode</i> and <i>Repetition counter in receive mode</i> .	The program waits (duration = time set here in seconds multiplied by the number of attempts) for a valid response from the front office system once Caracas Host-Link has sent a record. The record is negatively acknowledged if this time expires without a complete record.
6	Enter the <i>Repetition counter for NAK records</i> .	This setting defines how often a record is repeated if it was negatively acknowledged by the front office system. The record is deleted, entered in the event log and the program works with the next record once the counter has expired.
<b>Tip</b>	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"> <li>• <i>Reset to Default</i> All entries are reset to the default value in the current dialog box.</li> <li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li> <li>• <i>What's this?</i> What's this is displayed for the current dialog element (e.g. button).</li> </ul>	

## Configuring Caracas Host-Link

*Connection via TCP/IP - protocol parameters*

### 7.4 Connection via TCP/IP - protocol parameters

#### When is this parameter configured?

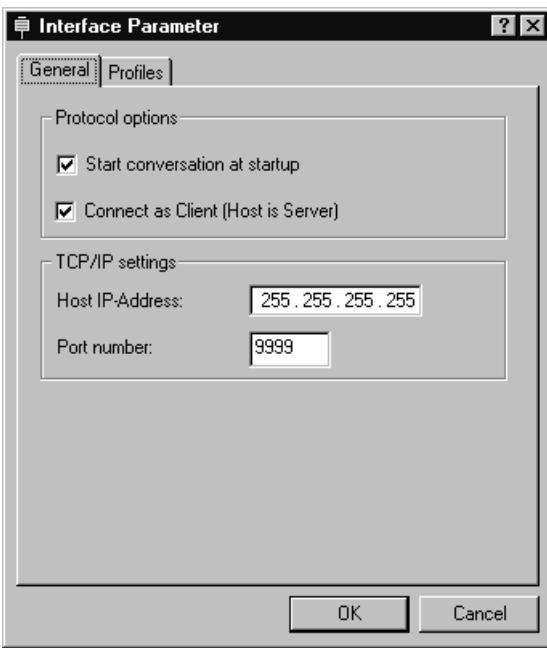
If you set TCP/IP connection as the connection mode, you must configure the TCP/IP protocol parameter. The interface must not be active during the configuration operation.

#### Deactivating the interface to the front office system

Step	Procedure
1	Activate the menu <i>Conversation - Close Conversation to Host</i> or press <b>[F3]</b> . This menu item is not displayed if the connection to the host is already inactive.

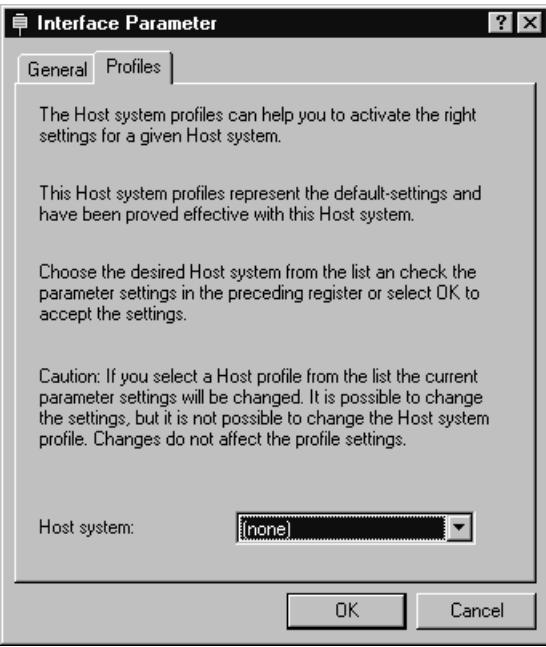
## Configuration of the protocol parameters for TCP/IP

Proceed as follows to enter the log parameters:

Step	Procedure
1	First activate the configuration dialog for the protocol parameters under <i>Settings - Interface Parameter</i> .
<b>Configuring general log parameters...</b>	
2	Activate the <i>General</i> tab: 
3	The following parameters must be configured for the log structure: <ul style="list-style-type: none"> <li>• <i>Start conversation at startup</i>: the conversation is automatically opened when the program is started up. This setting should be selected after configuration/cutover in order to avoid having to manually activate the connection every time Caracas Host-Link is activated.</li> <li>• <i>Connect as Client (Host is Server)</i> This setting in the option field specifies how the TCP/IP connection is to be respond. This setting is important for the connection setup and must be coordinated with the relevant front office system. If the option is activated, the Caracas Host Link attempts to setup the connection cyclically. If the option is not activated, Caracas Host Link provides only one connection and waits on the CONNECT from the host.</li> </ul>
4	In the <i>Host IP address</i> field, you specify the IP address of the front office system in the network. Under <i>Port number</i> , you enter the associated TCP/IP number.
5	Press <i>OK</i> to confirm your entries.

## Configuring Caracas Host-Link

*Connection via TCP/IP - protocol parameters*

Step	Procedure
<b>Select profile...</b>	
2	<p>Activate the <i>Profile</i> tab:</p> 
3	Choose the desired profile in the list box for the front office system used. Then all the connection parameters are set automatically.
4	You can check the settings using the other tabs. If the relevant profile entry is missing for the front office system to be linked, you must make all the entries manually.
5	If you change the setting after you have selected a profile, this change cannot be added to the profile and the profile setting is set to the default value ( <i>none</i> ).

## 7.5 Status bar display

### The status bar in Caracas Host-Link

The connection status is displayed in the status bar by Caracas Host-Link. The following variants are possible:

Status bar element	Function
	<p>Status of the connection between Caracas Host-Link and the front office system:</p> <ul style="list-style-type: none"> <li>● red LEDs:             <ul style="list-style-type: none"> <li>– no connection available</li> </ul> </li> <li>● green/yellow LEDs:             <ul style="list-style-type: none"> <li>– connection set up</li> <li>– interface open</li> <li>– no data exchange</li> <li>– host logically offline</li> </ul> </li> <li>● green LEDs:             <ul style="list-style-type: none"> <li>– connection set up</li> <li>– interface open</li> <li>– current data exchange</li> </ul> </li> <li>● grey LEDs:             <ul style="list-style-type: none"> <li>– no connection via V.24 (RS232) or TCP/IP was selected</li> </ul> </li> </ul>
 	<p>Status of the DDE connection between Caracas Server and Caracas Host-Link:</p> <ul style="list-style-type: none"> <li>● Plug closed:             <ul style="list-style-type: none"> <li>– DDE connection started (green arrow)</li> </ul> </li> <li>● Plug opened:             <ul style="list-style-type: none"> <li>– DDE connection stopped (red arrow)</li> </ul> </li> </ul>

## Configuring Caracas Host-Link

*The trace window*

### 7.6 The trace window

#### General trace functions

The general functions for opening, closing, printing, and writing trace windows/window contents to files, etc. were described in chapter 4.

#### The trace window

Trace window title / menu item under <i>Trace</i>	Description	Name of tracefile
Program Messages	Caracas Server execution messages	LINK_PRGMESS.TRC
Host Buffer (Orders for Front-Office System)	Buffered records from Caracas Server to Caracas Host-Link for additional processing at the front office system	LINK_HOSTBUFF.TRC
Server Buffer (Orders for Caracas Server)	Buffered records from the front office system via Caracas Host-Link for additional processing at Caracas Server	LINK_SRVRBUFF.TRC
Host Conversation	For connection via V.24 (RS232), FTP or TCP/IP: messages from interface to front office system	LINK_CONVERSATION.TRC
Host records from File (Orders for Front-Office System)	For connection via file conversation/ data exchange: buffer window for the file with the records to the front office system	LINK_FTPBUFF.TRC

### Trace window context menu

You can activate the individual trace windows available on the screen, print out the current trace window, write it to a file or delete it with the help of the context menu that can be activated in the trace window:

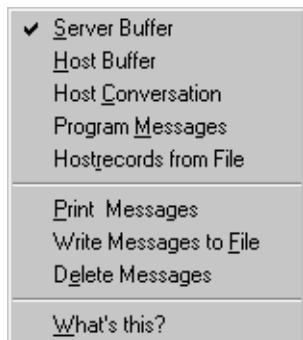


Figure 7-1      Trace window context menu in Caracas Host-Link

## Configuring Caracas Host-Link

Testing the connection

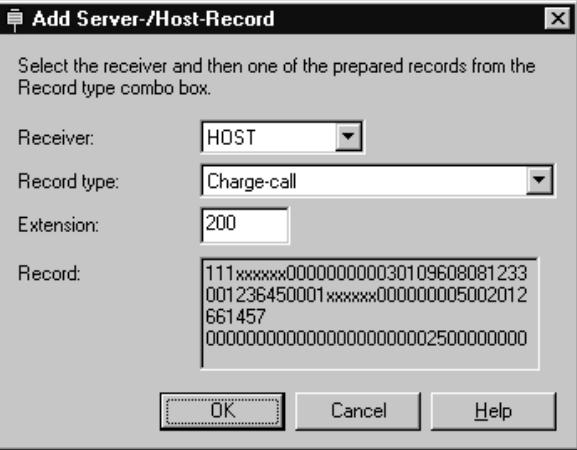
### 7.7 Testing the connection

#### Test options

Preconfigured records can be sent from Caracas Host-Link to the front office system, from the front office system to Caracas Host-Link and from Caracas Host-Link to Caracas Server in order to test the connection.

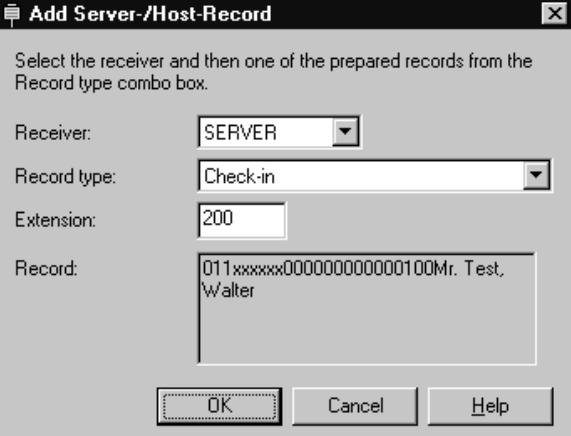
If you want to test with more flexible values, you can work with records from an import file for the test, where the import file is to be created taking the different record types (options) into consideration.

#### Test: preconfigured records to the front office system

Step	Procedure	Result
1	Open the connection to the front office system via the menu item <i>Conversation - Open Conversation to Host</i> or press <b>F2</b> .	The interface is opened, the status display  HOST in the status bar changes to green/yellow LEDs or green/green LEDs if the host is already active.
2	Start the test dialog box under <i>Extras - Add Server/Host Record</i> . Select the required receiver in the <i>Receiver</i> list field, enter the required record type in the <i>Record type</i> field and the required extension in the <i>Extension</i> field. The record created (preconfigured) is output in the <i>Record</i> field.	Example: call charge record to front office system 
3	Click the <i>OK</i> button. If the record was successfully entered in the buffer, the following message appears:	
4	The record can be traced in the trace windows <i>Host Buffer</i> (immediately read and deleted) and <i>Host Conversation</i> .	

Step	Procedure	Result
<b>Tip</b>	If you want to trace record editing closely, you can also stop the conversation to the front office system, create the required records and then reopen the connection. Record editing can then be easily traced.	

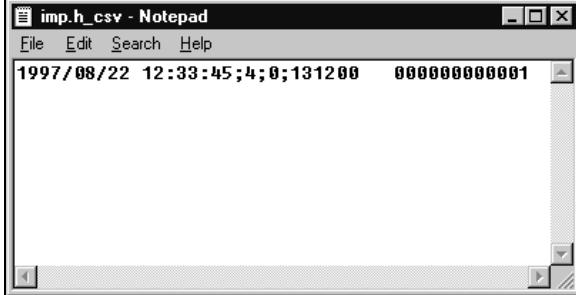
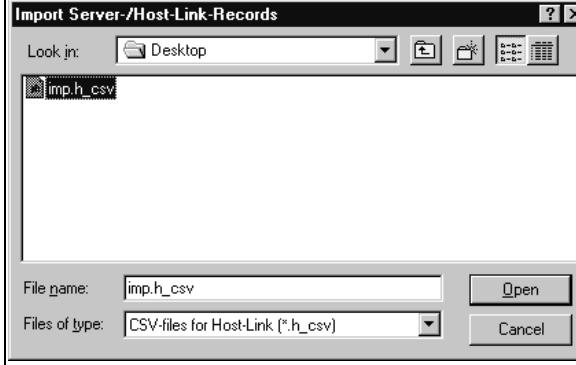
### Test: preconfigured records to Caracas Server

Step	Procedure	Result
1	Open the DDE connection to the server via the menu item <i>Conversation - Open DDE Conversation to Server</i> .	The interface is opened, the status display  SERVER in the status bar changes to "Plug closed (green arrow)" if the server is active.
2	Start the test dialog box under <i>Extras - Add Server/Host-Record</i> . Select the required receiver in the <i>Receiver</i> list field, enter the required record type in the <i>Record type</i> field and the required extension in the <i>Extension</i> field. The record created (preconfigured) is output in the <i>Record</i> field.	Example: Check-in to SERVER 
3	Click the <i>OK</i> button. If the record was successfully entered in the buffer, the following message appears:	
4	The record can be traced in the trace window <i>Server Buffer</i> (immediately read and deleted).	

## Configuring Caracas Host-Link

### Testing the connection

#### Test: imported records to the front office system/Caracas Server

Step	Procedure	Result
1	<p>You can create the import file with an editor of your choice, e.g. with the Windows editor.</p> <p>If the file contains test records for the front office system, the file name ends with ".h_csv". If the file contains test records for the server, the file name ends with ".s_csv".</p> <p>Please respect the appropriate record structure when entering records. The different record types are described in the host protocol (chapter 13).</p>	 <p>The file has the following structure:          &lt;date&gt;;          &lt;priority&gt;; (e.g. 4)          &lt;processing id&gt;; (always 0)          &lt;record&gt; (see chapter 13, "Host protocol")</p>
2	<p>Start the test dialog box under <i>Extras - Import Server/Host-Record</i>.</p> <p>Select the created import file (example for the front office system = HOST).</p>	
4	The imported records can be traced in the appropriate trace windows.	
<b>Tip</b>	<ul style="list-style-type: none"> <li>If you want to trace record editing closely, you can also stop the conversation to the front office system, create the required records and then reopen the connection. Record editing can then be easily traced.</li> <li>Please notice the correct date/time format in the import file. You must use the date/time format from the Regional Settings in the Control Panel. The time format has to be hh:mm:ss always.</li> </ul>	

## 8      **Configuring Caracas Horizon-Link**

### **Who can configure Caracas Horizon-Link?**

Caracas Horizon-Link is configured by the service technician (user level 1). Activate the program and log on to Caracas Horizon-Link under the technician's password.

### **What's to be configured?**

The following parameters are to be configured:

- General parameters
- Interface parameters for the connection to the Horizon system

### **8.1      General parameters for the Horizon System**

#### **Which general parameters are to be configured?**

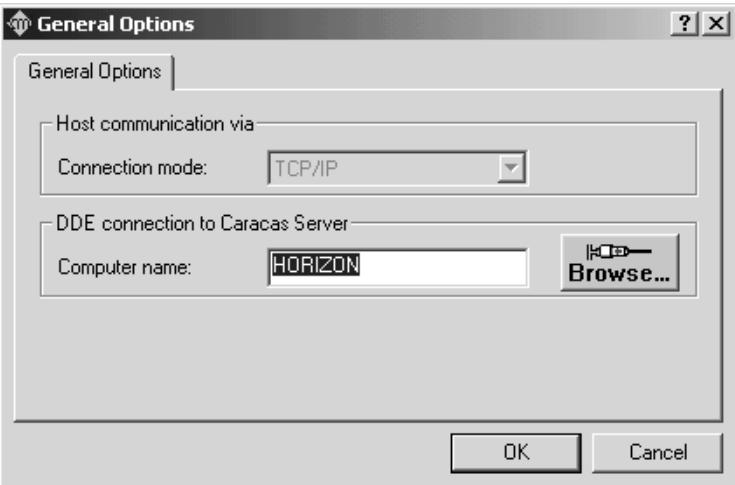
- Connection mode (only TCP/IP at this time)
- DDE connection parameter to the Caracas Server

#### **How are the general parameters defined?**

<b>Step</b>	<b>Procedure</b>
1	The connection mode can only be defined if there is no connection to the Horizon system. An active connection must therefore be cleared down: To do this, select the menu item <i>Conversation - Close Conversation to Horizon</i> or press <b>[F3]</b> in Caracas Horizon-Link.

## Configuring Caracas Horizon-Link

*General parameters for the Horizon System*

Step	Procedure
2	<p>Then activate the configuration dialog for the general options under <i>Settings - General Options</i>:</p>  <p>Depending on the required form of the connection, proceed as follows:</p>
3	The connection mode <i>TCP/IP</i> is preselected.
4	Caracas Server is linked via a DDE connection which is used for exchanging immediate messages. The computer name stored in the dialog box <i>Settings - General Options</i> (field <i>Computer name</i> ) is used for the DDE connection between Caracas Server and Caracas Horizon-Link. The current computer name is shown in this field the first time Caracas Horizon-Link is started up. Since Caracas Horizon-Link can only be installed on the same PC as Caracas Server at present, differing entries in this field have no affect.

## 8.2 Configuring protocol parameters (TCP/IP)

### General

If the connection to the Horizon system is configured via TCP/IP you have to configure the protocol parameters.

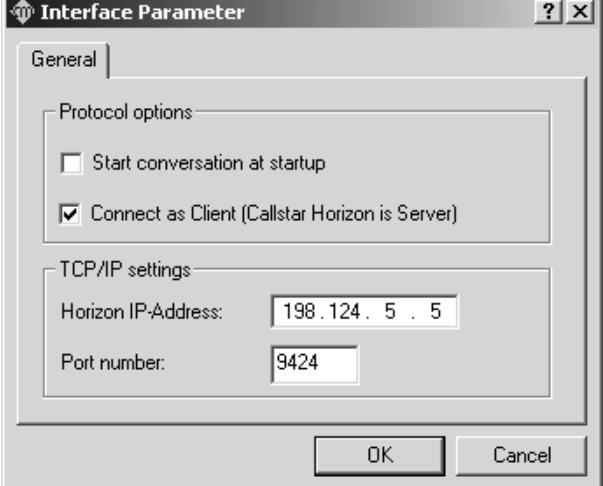
### Deactivating the interface to the Horizon system

The interface to the Horizon system must not be active when configuring the interface parameters. It is thus necessary to clear down any existing connections first:

Step	Procedure
1	Activate the menu <i>Conversation - Close Conversation to Horizon</i> or press <b>[F3]</b> . The above menu item is not displayed if the connection to the Horizon system is already inactive.

### Configuration of the protocol parameters for TCP/IP

Proceed as follows to enter the log parameters:

Step	Procedure
1	First activate the configuration dialog for the protocol parameters under <i>Settings - Interface Parameter</i> .
<b>Configuring general log parameters...</b>	
2	Activate the <i>General</i> tab: 

## Configuring Caracas Horizon-Link

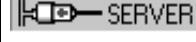
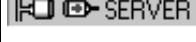
### Configuring protocol parameters (TCP/IP)

Step	Procedure
3	<p>The following parameters must be configured for the log structure:</p> <ul style="list-style-type: none"><li>• <i>Start conversation at startup:</i> the conversation is automatically opened when the program is started up. This setting should be selected after configuration/cutover in order to avoid having to manually activate the connection every time Caracas Host-Link is activated.</li><li>• <i>Connect as Client (Callstar Horizon is Server)</i> This setting in the option field specifies how the TCP/IP connection is to be respond. This setting is important for the connection setup and must be coordinated with the Horizon system. If the option is activated, the Caracas Horizon-Link attempts to setup the connection cyclically. If the option is not activated, Caracas Horizon-Link provides only one connection and waits on the CONNECT from the Callstar Horizon system.</li></ul>
4	<p>In the <i>Horizon IP address</i> field, you specify the IP address of the Horizon system in the network. Under <i>Port number</i>, you enter the associated TCP/IP number.</p>
5	Press <i>OK</i> to confirm your entries.

## 8.3 Status bar displays

### The status bar in Caracas Horizon-Link

The Caracas Horizon-Link connection status is displayed in the status bar. The following variants are possible for this:

Element	Description
	<p>Status of the connection between Caracas Horizon-Link and the Horizon system:</p> <ul style="list-style-type: none"> <li>• red LEDs:           <ul style="list-style-type: none"> <li>– no connection available</li> </ul> </li> <li>• green/yellow LEDs:           <ul style="list-style-type: none"> <li>– connection set up</li> <li>– interface open</li> <li>– no data exchange</li> <li>– Horizon logically offline</li> </ul> </li> <li>• green LEDs:           <ul style="list-style-type: none"> <li>– connection set up</li> <li>– interface open</li> <li>– current data exchange</li> </ul> </li> </ul>
 	<p>Status of the DDE-connection between Caracas Server and Caracas Horizon-Link:</p> <ul style="list-style-type: none"> <li>• Plug closed:           <ul style="list-style-type: none"> <li>– DDE-connection started (green arrow)</li> </ul> </li> <li>• Plug opened:           <ul style="list-style-type: none"> <li>– DDE-connection stopped (red arrow)</li> </ul> </li> </ul>

## Configuring Caracas Horizon-Link

*The trace window*

### 8.4 The trace window

#### General trace functions

The general functions for opening, closing, printing, and writing trace windows/window contents to files, etc. were described in chapter 4.

#### Available trace windows in Caracas Horizon-Link

Trace window title / menu item under <i>Trace</i>	Description	Name of tracefile
Program Messages	Horizon system execution messages	CSTAR_PRGMESS.TRC
Horizon Buffer (Jobs for Horizon System)	Buffered records from Caracas Server to Caracas Horizon-Link for additional processing at the Horizon system	CSTAR_CSHBUFF.TRC
Server Buffer (Jobs for Caracas Server)	Buffered records from Horizon system at Caracas Horizon-Link for additional processing in Caracas Server	CSTAR_SRVRBUFF.TRC
Horizon Conversation	Messages from connection to Horizon system	CSTAR_CONVERSATION.TRC

### Trace window context menu

You can activate the individual trace windows available, print out the current trace window, write it to a file or delete it with the help of the context menu that can be activated in the trace window:

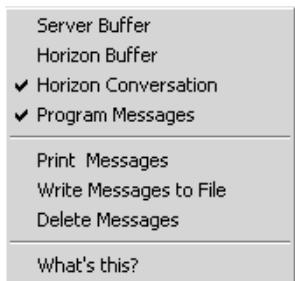


Figure 8-1      Trace window context menu in Caracas Horizon-Link

## **Configuring Caracas Horizon-Link**

*Testing the connection*

### **8.5 Testing the connection**

#### **Test options**

To test the connection to the Horizon system you can send preconfigured test records from Caracas Host-Link and Caracas Server to the Callstar Horizon system as well as records from WinCall and the Caracas Server to Caracas Horizon Link.

## 9 Configuring Call Charge Manager (CCM)

### 9.1 General

#### 9.1.1 Call charges and configuration

##### What does the Call Charge Manager do?

The Call Charge Manager calculates call charges for Caracas Link (when configured in the Caracas Link Administration program). The necessary options for call charge calculation must be stored there. It is not necessary for the Call Charge Manager to be constantly active - it is only activated for configuration. In the case of call charge calculation, the values configured by the Call Charge Manager are accessed via system files.

##### Who can configure the Call Charge Manager?

The Call Charge Manager is configured by the service technician or the administrator. The program must be activated for the purpose of configuration. It is not necessary to log on to any other application.

##### Call charge calculation methods

The Call Charge Manager distinguishes between three different methods of call charge evaluation when calculating call charges:

Call charges can be calculated with...

- a configured charge unit price multiplied by the number of units in the call.
- Carrier, Time zone, destination number and call charge tables, where the call charge are calculated on the basis of the call duration, the destination number and the time using the configured carrier information, call charge tables, time zone tables and charge assignments. This method is generally selected if no unit is available.
- the surcharge table (also Swiss table), in which a call charge or a surcharge is configured for the number of units contained in the call.

##### Saving calls

Cost-evaluated calls can (depending on the configuration) be stored in a call detail database or written to a text file. This data is thus available for additional evaluation, e.g. with WinAccount.

## Configuring Call Charge Manager (CCM)

### General

#### Starting up the utility

There are various different options available for activating the Call Charge Manager:

- double-click on the Call Charge Manager icon on your desktop
- start the Call Charge Manager via the Start menu under *Programs - Caracas Link - Call Charge Manager*.
- start the Call Charge Manager by activating the menu item *Server - Activate Call Charge Manager*.



Depending on the current call charge configuration database structure the program checks if necessary updates have to be done (Table CALCINFOBTG). The call charge manager prompts you with an appropriate message box which has to be confirmed with *OK*. After that the call configuration database will be automatically converted and the program starts.

After program start the Call Charge Manager window is displayed.

## 9.1.2 The Call Charge Manager window

### Window elements

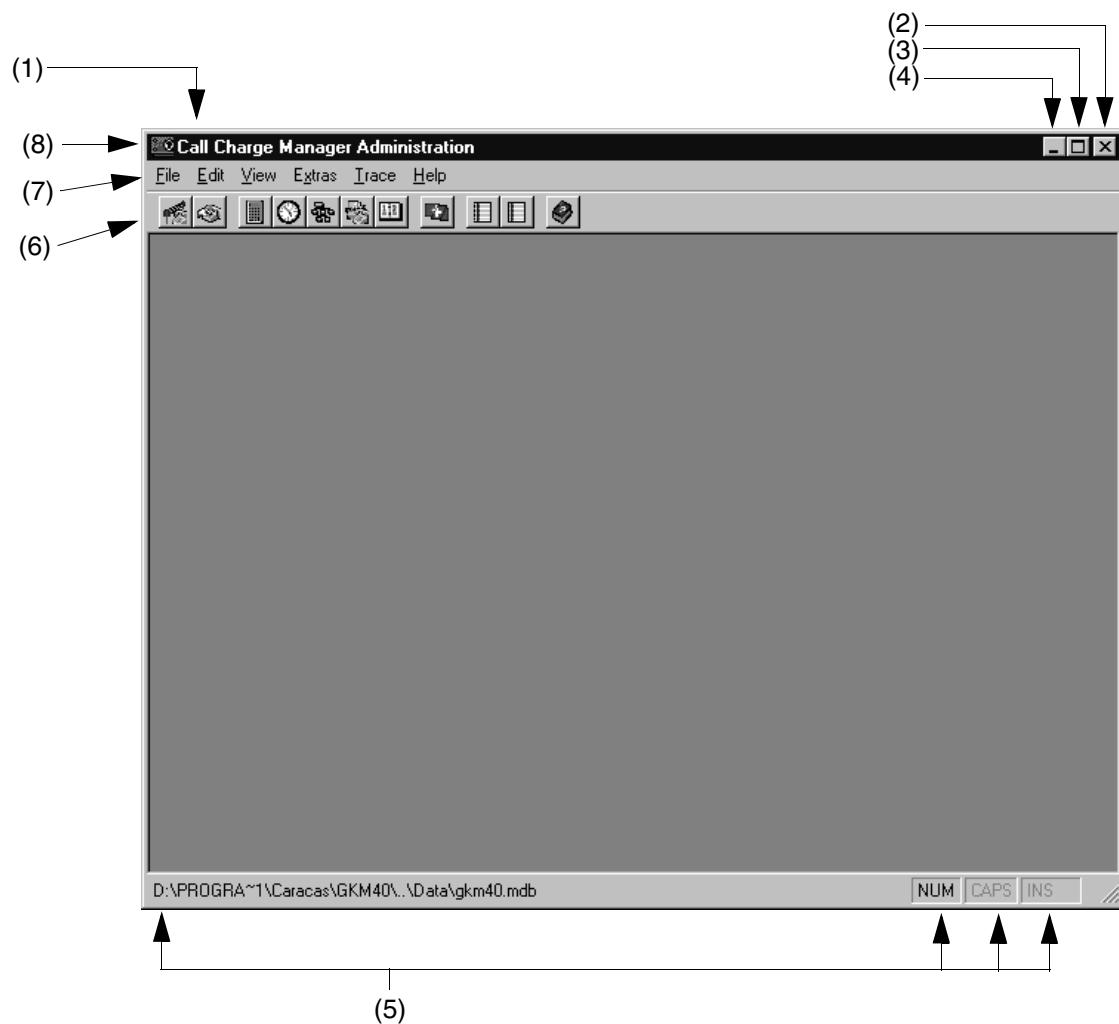


Figure 9-1 Mask elements of the Call Charge Manager

### Meaning of the individual elements

Mask element	Description
(1) Title bar	The title bar shows the name of the current component/program. The title bar of the current window is highlighted.
(2) Close button	The application window is closed and the program is terminated by clicking on this button.

## Configuring Call Charge Manager (CCM)

### General

Mask element	Description
(3) Maximize	The application window is collapsed or expanded to fill the screen by clicking on this button.
(4) Minimize	The application window is collapsed into an icon and moved to the Windows taskbar by clicking on this button.
(5) Status bar	The name of the currently opened configuration database is displayed in the left-hand area of the status bar. In the right part, the status of the  key, the  and the  key are displayed.
(6) Toolbar	The component's essential features can be activated by clicking on the appropriate icon in the toolbar.
(7) Menu bar	The selectable main menus are displayed here.
(8) Control menu icon	A submenu with different system functions is opened by left-clicking here with the mouse.

### 9.1.3 The Call Charge Manager toolbar

#### General

General information about the toolbar, e.g. Activate or deactivate, or Information about how to save the icon status is given in the chapter of this manual. Here, you have an overview of the icons available only in the call charge manager along with their meanings.

#### The Call Charge Manager icons

Icon	Function
	Start the configuration dialog of the carriers (telephone companies). Corresponds to the submenu item <i>Carrier</i> in the <i>Edit menu</i> .
	Start the configuration dialog for the trunk access codes Corresponds to the submenu item <i>Trunk Access Table</i> in the <i>Edit menu</i>
	Start the configuration dialog of the call charge tables Corresponds to the submenu item <i>Call Charge Tables</i> in the <i>Edit menu</i>
	Start the configuration dialog of the time zones Corresponds to the submenu item <i>Time Zone Tables</i> in the <i>Edit menu</i>
	Start the configuration dialog of the tariff structure Corresponds to the submenu item <i>Tariff Structure</i> in the <i>Edit menu</i>
	Start the configuration dialog of the destination number table Corresponds to the submenu item <i>Destination Number Table</i> in the <i>Edit menu</i>
	Start the dialog for configuring the table of public holidays Corresponds to the submenu item <i>Holiday Table</i> in the <i>Edit menu</i>
	Start the configuration dialog of the surcharge table (Swiss Table) Corresponds to the submenu item <i>Surcharge Table</i> in the <i>Edit menu</i>
	Start the event log Corresponds to the submenu item <i>Evaluate Event Log</i> in the <i>Edit menu</i>
	Start the error log Corresponds to the submenu item <i>Evaluate Error Log</i> in the <i>Edit menu</i>
	Call help. Corresponds to the submenu <i>Help Topics</i> in the <i>Help menu</i>

## **Configuring Call Charge Manager (CCM)**

### *Configuring Call Charge Manager*

## **9.2 Configuring Call Charge Manager**

### **Configuration scope**

The following configuration tables must be set up to configure the call charge data manager:

<b>Tables</b>	<b>Meaning</b>
Carrier	In the carrier table, you define the valid telephone companies and specify which call charge recording variants these may use.
Trunk access table	In the trunk access codes table, you assign the trunk access codes or Call-by-Call to a particular telephone company. You can configure different time and call charge tables for these assignments.
Call charge table	In the call charge table, you define the time billing units. Instead of unavailable charge pulses, the number of time units for billing can be computed from the call duration and the configured time units for billing to determine the cost of the call.
Time zone table	In the time zones table, you define the start and end times as well as the zone validity. You can configure the prices per time billing unit for certain days. These can be grouped according to days of the week and time of day.
Tariff structure	In the tariff structure tables, you assign the relevant time zones to the valid tariffs.
Destination number table	Use the destination number table to assign individual destination number to a tariff structure.
Holiday table	In this table, you configure the valid public holidays and specify how these days are to be handled when calculating the call charges.
Surcharge table	In this table, you configure the basic price plus one of an applicable surcharges per call, on the basis of the total number of units charged for the call (Swiss Table).

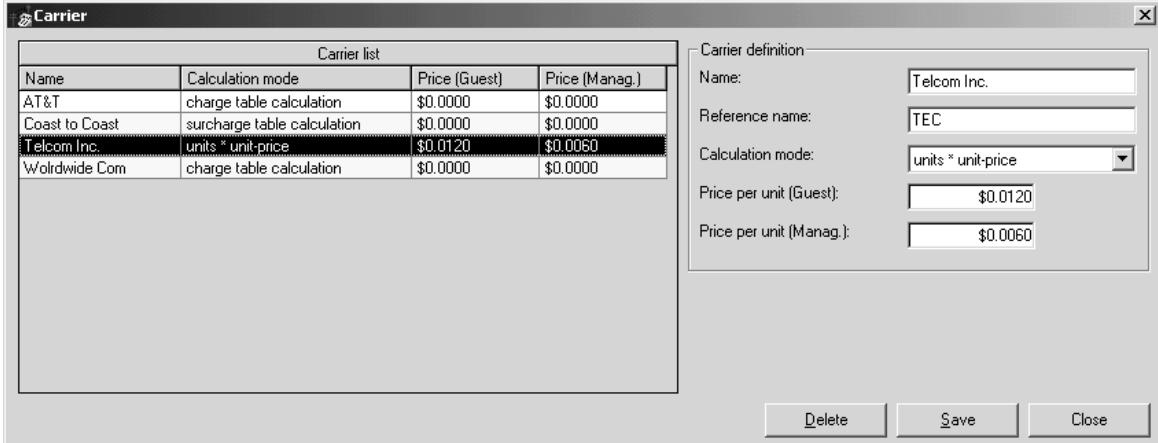
## 9.2.1 Carrier configuration

### General

In the carrier table, you define the valid telephone companies and specify which call charge recording variants these may use.

#### To configure the carrier:

Proceed as follows to configure the carrier:

Step	Procedure
1	<p>Activate the menu item <i>Edit - Carrier</i> in the call charge manager or activate the relevant icon. The following dialog appears:</p> 
<b>...Configuring a new carrier...</b>	
2	Enter the name in the <i>Name</i> field and abbreviation for the new carrier in the <i>Reference Name</i> field.

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

Step	Procedure
3	<p>Choose the applicable mode in the <i>Calculation mode</i> list box. The following are available:</p> <ul style="list-style-type: none"><li>● <i>no calculation</i> The call charges are not evaluated for the carrier.</li><li>● <i>units * unit price</i> The call charges for this carrier are calculated on the basis of the units charged and the unit rate. You enter the price per unit for guest calls and management calls in the fields <i>Price per unit (Guest)</i> and <i>Price per unit (Manag.)</i> field.</li><li>● <i>charge table calculation</i> The call charges for this carrier are determined via the call charge tables, destination number tables, time zones and tariff structure.</li><li>● <i>surcharge table calculation</i> The call charges for this carrier are determined using the configured surcharge table.</li></ul>
4	Press <i>Save</i> to confirm your entries. Proceed at step 2 to continue entering a carriers. Press <i>Close</i> to exit the dialog.
<b>...Editing a carrier entry...</b>	
2	Choose the desired entry from the <i>Carrier list</i> . The data are entered in the input fields.
3	Edit your entries as appropriate and press <i>Save</i> to confirm your changes. Proceed at step 2 to continue editing the carriers. Press <i>Close</i> to exit the dialog.

Step	Procedure
<b>...Deleting a carrier entry...</b>	
2	Choose the entry to be deleted from the <i>Carrier list</i> . The data are entered in the input fields.
3	Press <i>Delete</i> .
4	If the relevant entry is still referenced in another table, the following message appears; on confirmation, you return to the <i>Carrier</i> dialog.
	 <p>If the entry to be deleted is not referenced further, a query appears:</p>  <p>The entry is deleted when you press <i>OK</i>. If you press <i>Cancel</i>, you return to the <i>Carrier</i> dialog without deleting the entry.</p>

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

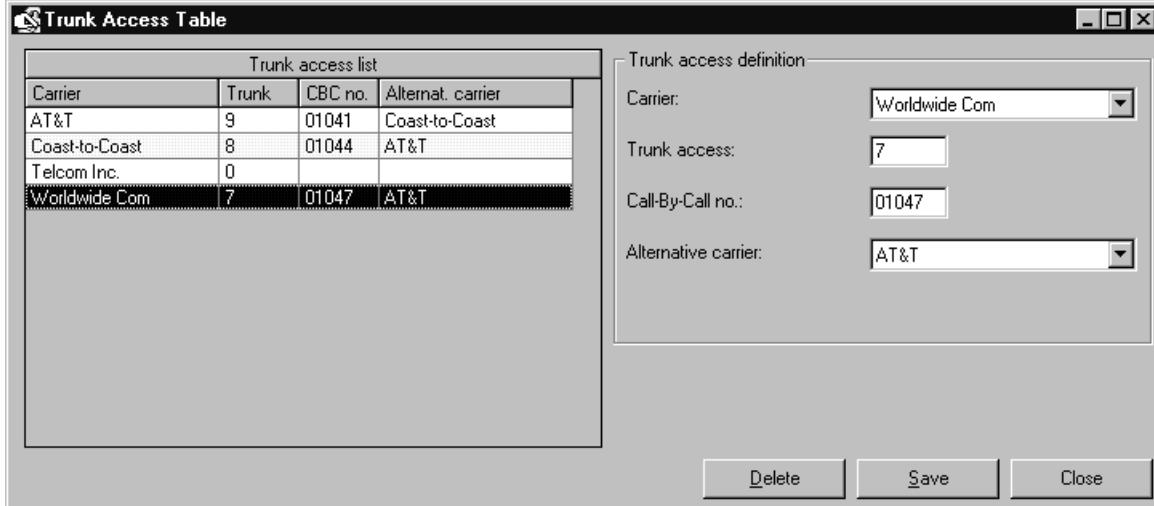
#### 9.2.2 Trunk access configuration

##### General

In the trunk access codes table, you assign the trunk access codes or Call-by-Call to a particular telephone company. You can configure different time and call charge tables for these assignments.

##### To configure the trunk access codes

Proceed as follows to configure the trunk access codes:

Step	Procedure
1	Choose menu item <i>Edit - Trunk Access Table</i> or activate the corresponding icon in the toolbar. The <i>Trunk Access Table</i> dialog appears:  <p>The dialog box has two main sections. On the left is a table titled "Trunk access list" with columns: Carrier, Trunk, CBC no., and Alternat. carrier. The table contains four rows: AT&amp;T (Trunk 9, CBC 01041, Alt. Coast-to-Coast), Coast-to-Coast (Trunk 8, CBC 01044, Alt. AT&amp;T), Telcom Inc. (Trunk 0, CBC 01047, Alt. AT&amp;T), and Worldwide Com (Trunk 7, CBC 01047, Alt. AT&amp;T). The last row, Worldwide Com, is highlighted. On the right is a "Trunk access definition" panel with fields: Carrier (dropdown menu showing Worldwide Com), Trunk access (text box containing 7), Call-By-Call no. (text box containing 01047), and Alternative carrier (dropdown menu showing AT&amp;T). At the bottom are three buttons: Delete, Save (highlighted in blue), and Close.</p>
<b>...Configuring a new trunk access...</b>	
2	Choose the carrier for which you wish to define a trunk access code from the <i>Carrier</i> list box.
3	Enter the trunk access code in the <i>Trunk access</i> field; enter the call-by-call number of the carrier in the <i>Call-By-Call no.</i> field.
4	In the <i>Alternative carrier</i> list box, you select the alternative carrier which is to be selected for calls when calculation cannot be carried out with the original carrier. <b>Note:</b> The entry in the <i>Alternative carrier</i> field is only considered for the configured carriers that have selected the mode <i>charge table calculation</i> for call charge analysis.
5	Press <i>Save</i> to confirm your entries. Proceed at step 2 to continue entering the trunk access code. Press <i>Close</i> to exit the dialog.

Step	Procedure
Tip	<p>The reference is taken from the call-by-call number and the trunk access code for the calculation. The <i>Alternative carrier</i> is used for the calculation if there is no destination number entry for the configured carrier.</p> <p><b>Example:</b></p> <p>Station dials: 9 01041 - the carrier “AT&amp;T” is determined</p> <p>Station dials: 0 02801 - determines the carrier “Telecom”</p> <p>Station dials: 7 01047 - the carrier “Worldwide Com” is determined; if no corresponding destination number entry is found, the alternative carrier “AT&amp;T” is used for the calculation.</p>
<b>...Editing a trunk access codes entry...</b>	
2	Choose the desired entry from the <i>Trunk access list</i> . The data are entered in the input fields.
3	Edit your entries as required and press <i>Save</i> to confirm your changes. Proceed at step 2 to continue editing the trunk access code. Press <i>Close</i> to exit the dialog.
<b>...Deleting a trunk access code entry...</b>	
2	Choose the entry to be deleted from the <i>Trunk access list</i> . The data are entered in the input fields.
3	Press <i>Delete</i> .
4	A query appears:
	 <p>The entry is deleted when you press <i>OK</i>. The entry is deleted when you press <i>OK</i>.</p>

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

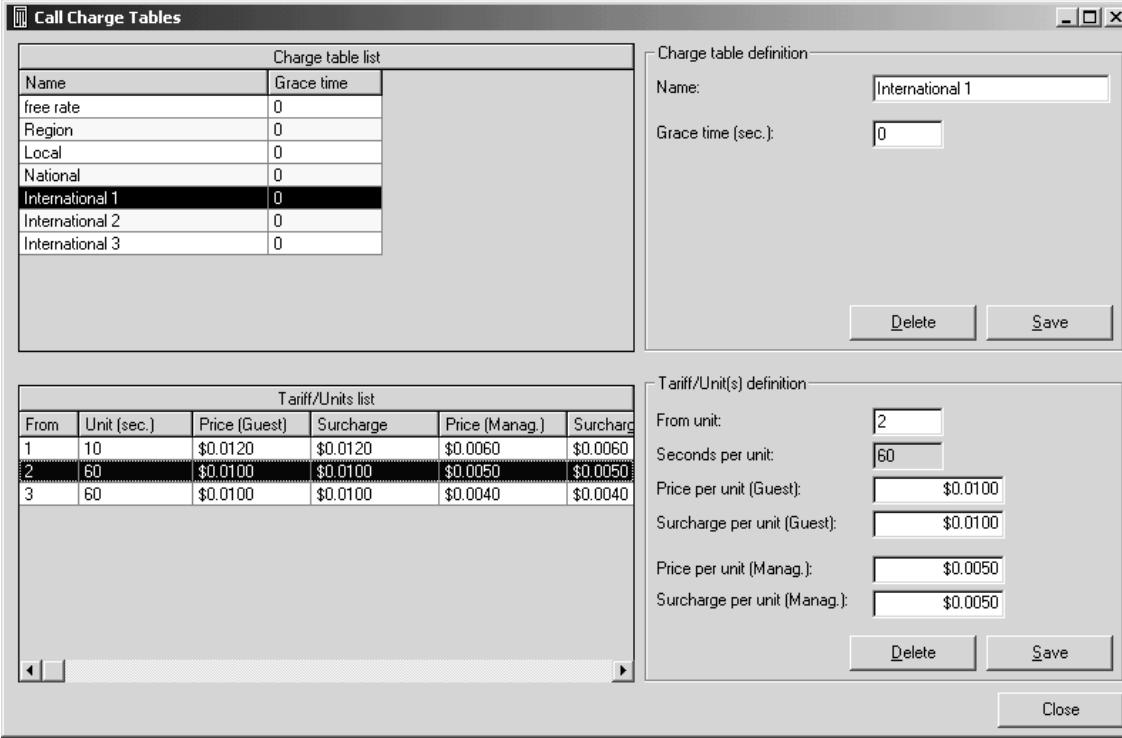
#### 9.2.3 Call charge table configuration

##### General

In the call charge table, you define the time billing units. Instead of the charge pulses (that may not be available for example) the number of time units for billing can be computed from the call duration and the configured time units for billing to determine the cost of the call.

##### To configure the call charge tables

Proceed as follows to configure the call charge tables:

Step	Procedure
1	Choose menu item <i>Edit - Call charge tables</i> or activate the corresponding icon in the toolbar. The <i>Call charge tables</i> dialog appears:  <p>The dialog has two main panes. The left pane, titled 'Charge table list', contains a table with columns 'Name' and 'Grace time'. It lists several entries: free rate (Grace time 0), Region (Grace time 0), Local (Grace time 0), National (Grace time 0), International 1 (Grace time 0, selected), International 2 (Grace time 0), and International 3 (Grace time 0). The right pane, titled 'Charge table definition', shows fields for 'Name' (International 1) and 'Grace time (sec.)' (0). At the bottom are 'Delete' and 'Save' buttons. The bottom section, titled 'Tariff/Units list', shows a table with columns 'From', 'Unit (sec.)', 'Price (Guest)', 'Surcharge', 'Price (Manag.)', and 'Surcharge'. It contains three rows: From 1, Unit 10, Price \$0.0120, Surcharge \$0.0120, Price \$0.0060, Surcharge \$0.0060; From 2, Unit 60, Price \$0.0100, Surcharge \$0.0100, Price \$0.0050, Surcharge \$0.0050; From 3, Unit 60, Price \$0.0100, Surcharge \$0.0100, Price \$0.0040, Surcharge \$0.0040. The right side of the bottom section, titled 'Tariff/Unit(s) definition', contains fields for 'From unit' (2), 'Seconds per unit' (60), 'Price per unit (Guest)' (\$0.0100), 'Surcharge per unit (Guest)' (\$0.0100), 'Price per unit (Manag.)' (\$0.0050), and 'Surcharge per unit (Manag.)' (\$0.0050). At the bottom are 'Delete', 'Save', and 'Close' buttons.</p>

Step	Procedure
<b>...configure a new tariff...</b>	
2	<p>Under <i>Charge table definition</i> you define the basic tariff information:</p> <ul style="list-style-type: none"> <li>– Enter the name of the new tariff in the <i>Name</i> field.</li> <li>– If a grace time applies to calls with this tariff, enter the duration of the grace time in seconds in the <i>Grace time (sec.)</i> field. The grace time is subtracted from the call duration as free time for connection setup.</li> <li>– Press <i>Save</i> to save your entries. Then they are listed in the <i>Charge table list</i>. For deleting a definition you select the tariff from the <i>Charge table list</i> and press <i>Delete</i>. You confirm the appearing message with <i>OK</i>, the definition will be deleted:</li> </ul> 
<b>...edit a tariff...</b>	
3	<p>Under <i>Tariff/Unit(s) definition</i> you can enter the price/surcharge valid from different billing units:</p> <ul style="list-style-type: none"> <li>– Enter the starting unit in the field <i>From unit</i>.</li> <li>– Enter the number of seconds for this unit in the field <i>Seconds per unit</i>.</li> <li>– Enter the price for guest calls for this unit in the local currency in the field <i>Price per unit (Guest)</i>.</li> <li>– Enter the surcharge for guest calls for this unit in the local currency in the field <i>Surcharge per unit (Guest)</i>.</li> <li>– Enter the price for management calls for this unit in the local currency in the field <i>Price per unit (Manag.)</i>.</li> <li>– Enter the surcharge for management calls for this unit in the local currency in the field <i>Surcharge per unit (Manag.)</i>.</li> </ul> <p>Press the <i>Save</i> button to save the definition. It is then listed in the <i>Tariff/Units list</i>.</p>
4	To enter an additional tariff proceed to step 1. Press <i>Close</i> to quit the dialog.

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

Step	Procedure
<b>...delete a tariff entry...</b>	
2	Choose the entry to be deleted from the <i>Charge table list</i> . The data are entered in the input fields.
3	Press <i>Delete</i> . A query appears:  <p>The entry is deleted when you press <i>OK</i>. If you press <i>Cancel</i> you return to the <i>Call Charge Tables</i> dialog without deleting the entry.</p>

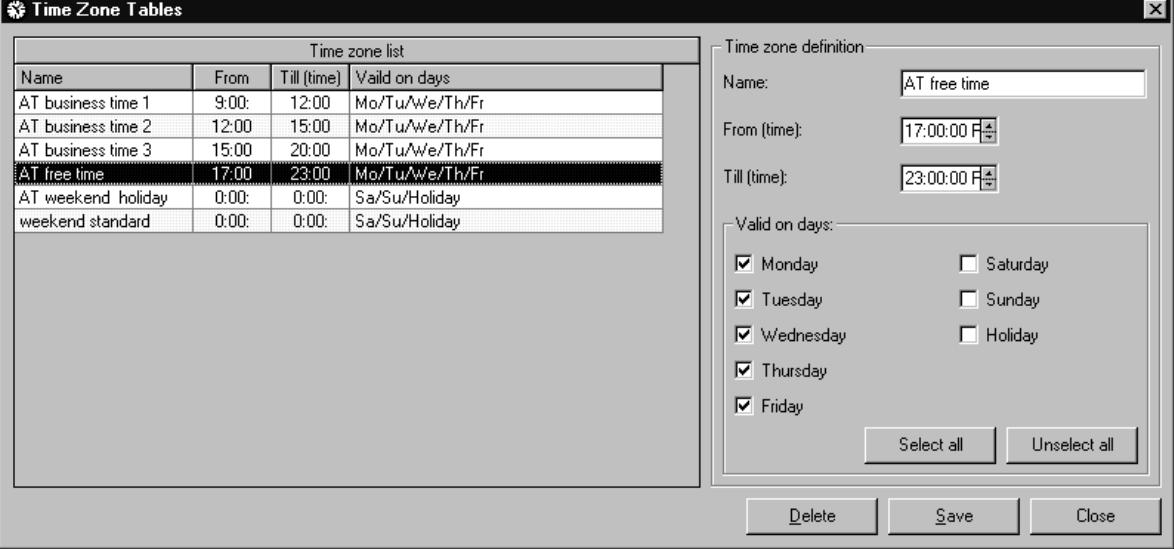
## 9.2.4 Time Zone configuration

### General

In the time zones table, you define the start and end times as well as the zone validity. You can configure the prices per time billing unit for certain days. These can be grouped according to days of the week and time of day.

### To configure the time zones

Proceed as follows to configure the time zones:

Step	Procedure
1	<p>Choose menu item <i>Edit - Time Zone Table</i> or activate the corresponding icon in the toolbar. The <i>Time Zone Tables</i> dialog appears:</p>  <p>The screenshot shows the 'Time Zone Tables' dialog. On the left is a 'Time zone list' table with columns: Name, From, Till (time), and Valid on days. The table contains several entries like 'AT business time 1', 'AT business time 2', etc. On the right is a 'Time zone definition' panel with fields for Name (set to 'AT free time'), From (time) (set to 17:00:00), Till (time) (set to 23:00:00), and a 'Valid on days:' section with checkboxes for Monday through Friday, Saturday, Sunday, and Holiday. Buttons for Delete, Save, and Close are at the bottom.</p>
<b>...Configuring a new time zone...</b>	
1	Enter the name of the new time zone in the <i>Name</i> field.
2	Specify the period during which the time zone is valid in the <i>From (time)</i> and <i>Till (time)</i> fields.
3	Under <i>Valid on days</i> , activate the option fields for the days that define the time zone. To obtain assistance, press the <i>Select all</i> or <i>Unselect all</i> , which you can use to activate or deactivate all option fields.

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

Step	Procedure
4	<p>Press <i>Save</i> to confirm your data. Proceed at step 2 to continue entering the time zone. Press <i>Close</i> to exit the dialog.</p> <p><b>Note:</b></p> <p>Many carriers use the same time zones. The time zones are assigned later when configuring the tariff structure (see chapter 9.2.5, “Tariff structure configuration”).</p>
	<b>...Editing a time zone...</b>
2	Select the desired entry from the <i>Time zone list</i> . The data are entered in the input fields.
3	Proceed at step 2 to continue editing the time zone. Press <i>Close</i> to exit the dialog.
	<b>...Deleting a time zone...</b>
2	Choose the entry to be deleted in the <i>Time zone list</i> . The data are entered in the input fields.
3	Press <i>Delete</i> .
4	A query appears:  <p>The entry is deleted if you press <i>OK</i>. If you press <i>Cancel</i>, you return to the <i>Time Zone Tables</i> dialog without deleting the entry.</p>

## 9.2.5 Tariff structure configuration

### General

In the tariff structure tables, you assign the relevant time zones to the valid tariffs.

### To configure the tariff structures

Proceed as follows to configure the tariff structure:

Step	Procedure
1	<p>Choose menu item <i>Edit - Tariff Structure</i> or activate the corresponding icon in the toolbar. The <i>Tariff Structure</i> dialog appears:</p>
<b>...Defining a new tariff structure...</b>	
1	Enter the name of the new tariff structure under the tariff definition in the <i>Name</i> field.
2	<p>Choose the <i>Type</i> in the relevant list box. The following are possible:</p> <ul style="list-style-type: none"> <li>• <i>International</i></li> <li>• <i>National</i></li> <li>• <i>Mobile</i></li> <li>• <i>Local</i></li> </ul> <p>This information is accepted when the call details record is saved and is therefore available in the front office system, e.g. for separate analysis of the call details. This field has not further significance for Caracas Link.</p>

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

Step	Procedure
3	<p>When you activate the <i>Charge only true calls</i> option field, the costs are evaluated only for successful calls. If this option is not activated, call charges are evaluated for the connection attempt / connection setup (depending on the table settings).</p> <p><b>Note:</b></p> <p>The <i>Charge only true calls</i> option is currently not used, since the relevant support must be available from the carrier or the PBX system.</p>
4	The new tariff structure is saved after you activate the <i>Save</i> button (in the <i>Tariff structure definition</i> ) group. The tariff structure is now created, but without assignment of the time zones or Tariff (see next steps).
<b>...Editing a new tariff structure...</b>	
2	To edit a tariff structure, click in the list of tariff structures first. The values are incorporated into the input fields under <i>Tariff structure definition</i> ; the assignments already defined are displayed under <i>Tariff assignment</i> .
3	Modify the data in the <i>Tariff structure definition</i> as appropriate and activate the <i>Save</i> button (in the <i>Tariff structure definition</i> group) to confirm your changes.
4	If the tariff assignments are to be processed, proceed as follows: <ul style="list-style-type: none"><li>● Defining a new tariff assignment: In the list boxes under <i>Tariff assignment</i> assign the desired <i>Time zone</i> and <i>Tariff</i> and press <i>Save</i> (in the <i>Tariff assignment</i> group). This assignment is only part of the tariff structure.</li><li>● Editing tariff assignments: To edit an existing assignment, choose the tariff assignment from the list of tariff assignments; the values are added to the list boxes. Now change the assignments as required and activate the <i>Save</i> to confirm.</li><li>● Deleting tariff assignments: To delete an assignment, click this first in the list of tariff assignments. You delete the assignment by activating the <i>Delete</i> button. A query appears: The assignment is deleted when you press <i>OK</i>. If you press <i>Cancel</i>, you return to the <i>Tariff Structure</i> dialog without deleting the entry.</li></ul>



Step	Procedure
<b>...Deleting a tariff structure...</b>	
2	Choose the entry to be deleted from the <i>Tariff structure list</i> . The data are entered in the input fields.
3	Press <i>Delete</i> .
4	If tariff assignments still exist for the entry, the following message appears:  <p>You must first delete the tariff assignments before you can delete the tariff structure. If there are no tariff assignments, a query appears:</p>  <p>The entry is deleted if you press <i>OK</i>. If you press <i>Cancel</i>, you return to the <i>Tariff Structure</i> dialog without deleting the entry.</p>

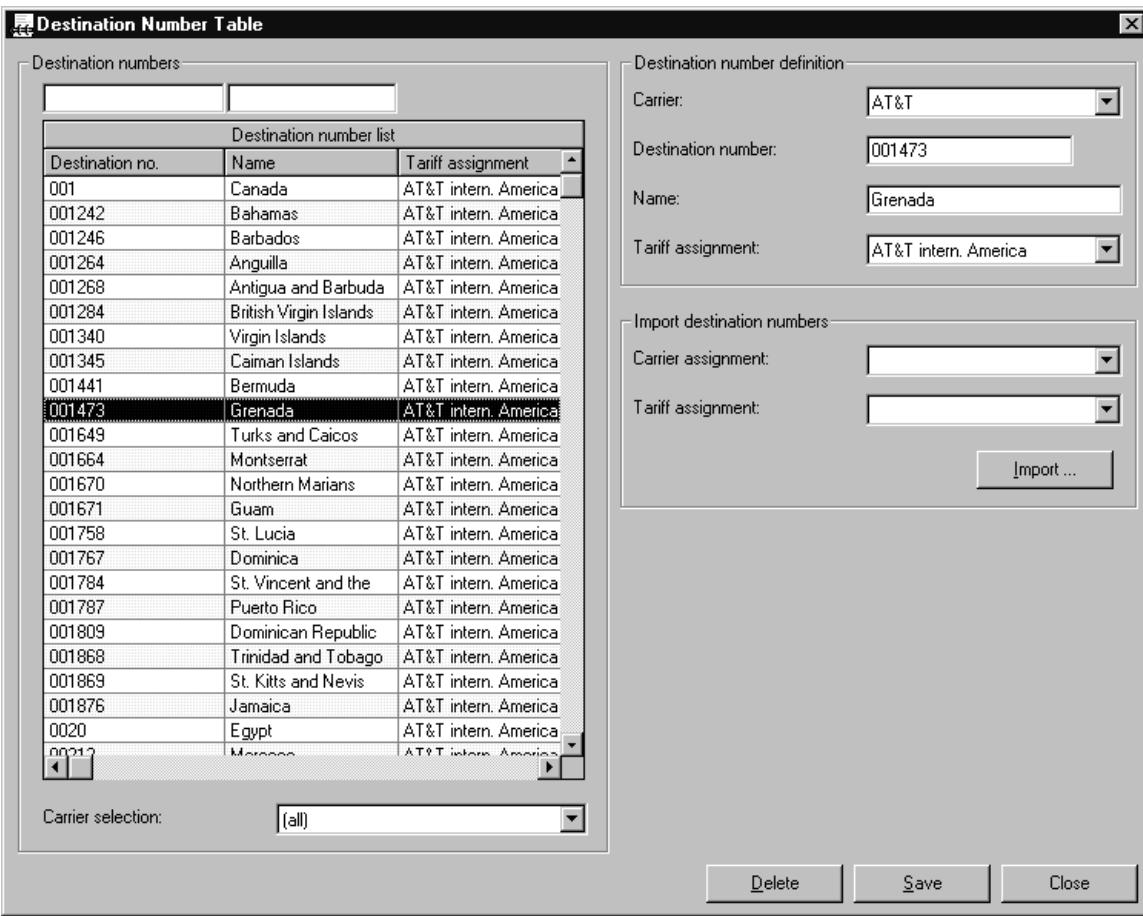
## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

#### 9.2.6 Destination number table configuration

##### To configure the destination number tables

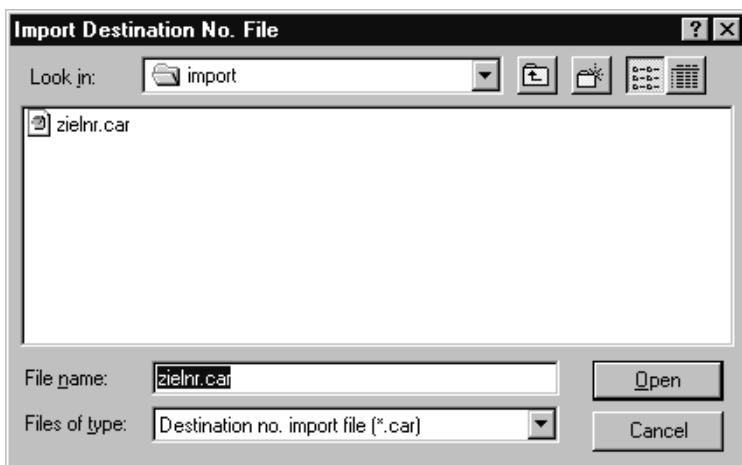
Proceed as follows to configure the destination number table:

Step	Procedure
1	Choose menu item <i>Edit - Destination Number Table</i> or activate the relevant icon in the toolbar. The <i>Destination Number Table</i> dialog appears: 
<b>...Carrier selection</b>	
1	If you select the appropriate entry in the <i>Carrier selection</i> list box under the list of destination numbers, you can filter the display the table of destination numbers to a particular carrier or choose all carriers.
<b>...Sorting destination number table...</b>	
1	The destination number table can be sorted according to destination number, name or tariff structure. To do this, click the relevant list overview field and the table is sorted in ascending order according to the column criterion.

Step	Procedure
<b>...Searching for a destination number entry...</b>	
1	If you are looking for a particular destination number, enter it in the left-hand input field above the destination number table. The display bar is positioned at the first matching entry according to your input in the list of destination numbers.
2	If you are looking for a particular name of a destination number, for example, the name of a country, enter the desired name in the right-hand field via the destination number table. Here too, the display bar in the list of destination numbers is positioned at the first matching entry according to your entry. <b>Note:</b> To obtain a better overview, you are recommended to sort the data according to the relevant column criterion before you enter the search criterion.
<b>...Configuring a new destination number entry...</b>	
1	Choose the carrier for which the definition is to apply under <i>Destination number definition</i> in the <i>Carrier</i> list box.
2	Enter the destination number / start of the destination number in the <i>Destination number</i> field. Enter a name in the <i>Name</i> field, e.g. the country of the destination number.
3	Choose the desired tariff structure to be assigned to this destination number entry from the list box.
4	Press <i>Save</i> to confirm your entries. Proceed at step 2 to continue entering the destination number. Press <i>Close</i> to exit the dialog.
<b>... Edit destination number entries...</b>	
2	Choose the desired entry from the <i>Destination number list</i> . Multiple selection via the keyboard ( or  key) are possible with the left mouse button.
3	Edit your entries as required, e.g. Assign a tariff structure that is valid for all selected entries and press <i>Save</i> to confirm your changes. Proceed at step 2 to continue editing the destination number. Press <i>Close</i> to exit the dialog. <b>Note:</b> If you select several destination numbers, the <i>Carrier</i> , <i>Destination number</i> and <i>Name</i> fields are disabled in the <i>Destination number definition</i> group. Before you edit the entries of destination number table, it is advisable to click on the column title to sort the entries before you enter the values in the destination number table.

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

Step	Procedure
<b>...Importing destination numbers...</b>	
2	<p>The definition of the destination number entries can also be made from an ASCII file using the file import function. A file with the extension *.car is expected as import file, the line structure is as follows:</p> <p>&lt;destination number&gt;;&lt;Name&gt;&lt;CR&gt;&lt;LF&gt;</p> <p><b>Example of an import file:</b></p>  <p>The screenshot shows a Windows Notepad window titled "zielnr.car - Notepad". The content of the file is a list of destination numbers and their corresponding names, separated by a semicolon. The list includes: 001;Canada, 001242;Bahamas, 001246;Barbados, 001264;Anguilla, 001268;Antigua and Barbuda, 001284;British Virgin Islands, 001340;Virgin Islands, 001345;Caiman Islands, 001441;Bermuda, 001473;Grenada, 001649;Turks and Caicos Islands, 001664;Montserrat, 001670;Northern Mariana Islands, 001671;Guam, 001758;St. Lucia, and 001767;Dominica.</p>
3	Specify the assignment to a carrier in the <i>Carrier assignment</i> list box. During import, the destination numbers are assigned immediately to a tariff structure which you select in the <i>Tariff assignment</i> list box.
4	The activate the <i>Import</i> button. A dialog box appears in which you may select the import file:
	 <p>The screenshot shows the "Import Destination No. File" dialog box. It has a "Look in:" dropdown set to "import" and a preview window showing a file named "zielnr.car". Below the preview window, the "File name:" field contains "zielnr.car" and the "Files of type:" dropdown is set to "Destination no. import file (*.car)". There are "Open" and "Cancel" buttons at the bottom right of the dialog.</p>

Step	Procedure
5	<p>Choose the desired file and press <i>Open</i>. You return to the <i>Destination Number Table</i> dialog and the file is imported.</p> <p><b>Note:</b> A sample import file can be found on the Caracas CD in the \misc folder.</p>
<b>Tip</b>	<p>This sample file can be imported several times and can be assigned to various carriers and tariff structures. The file is not deleted after import.</p> <p>If errors occur during import, these are displayed on screen and stored as errors in the error log (with type "IMPORT").</p>
<b>...Deleting destination number entries...</b>	
2	Choose the desired entry from the <i>Destination number list</i> . Multiple selection via the keyboard ( <b>CTRL</b> key or <b>Shift</b> key) are possible with the left mouse button.
3	Press <i>Delete</i> .
4	<p>A query appears:</p>  <p>The selected entries are deleted when you press <i>OK</i>. If you press <i>Cancel</i> you return to the <i>Destination Number Table</i> dialog without deleting the entry.</p>

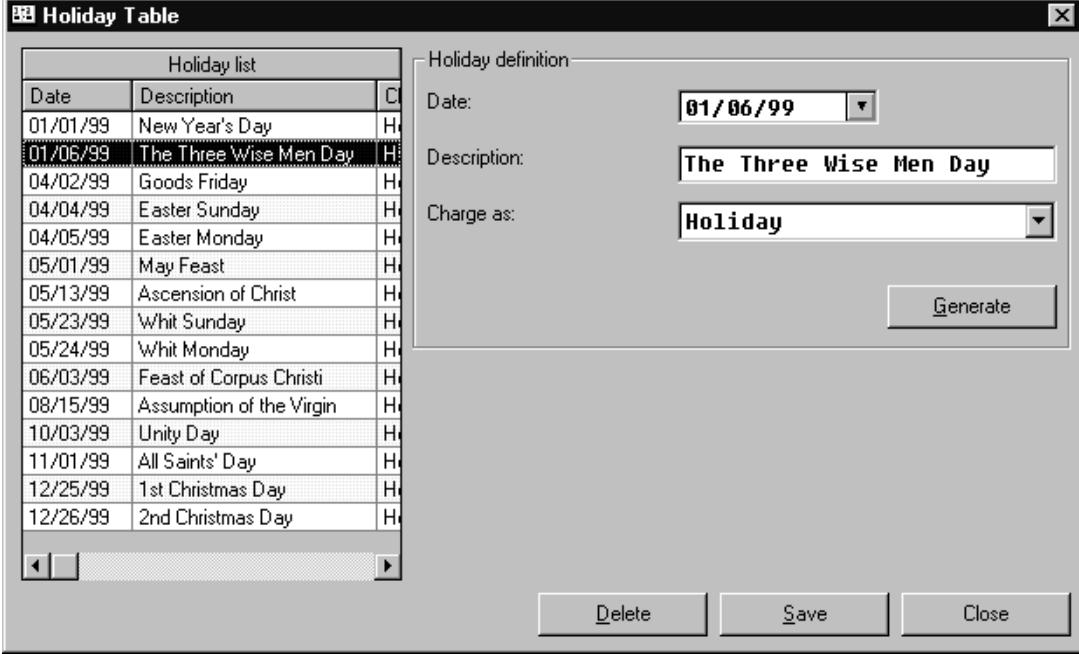
## Configuring Call Charge Manager (CCM)

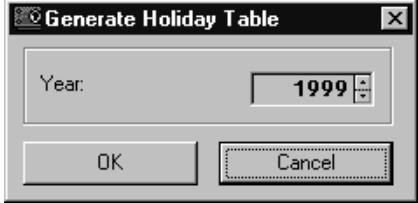
### Configuring Call Charge Manager

#### 9.2.7 Public holiday table configuration

##### General

Using the public holidays table you can record applicable public holidays and establish how these are to be treated when calculating call charges through the charges tables / destination numbers. A public holiday can, for instance, be treated as a "normal" working day, e.g. Monday, or separately with the special settings for "Public holiday" for calculating call charges on the basis of time charge or assignment to a specific trunk access digit. The time charge for the assigned weekday or public holiday is then taken into account in the time charge table.

Step	Procedure
1	Choose menu item <i>Edit - Holiday Table</i> or activate the corresponding icon in the toolbar. The <i>Holiday Table</i> dialog appears: 
<b>...Defining a new public holiday</b>	
2	Enter the date of the public holiday in the <i>Date</i> field ad the description of the public holiday in the <i>Description</i> field.
3	Choose the desired weekday or public holiday from the <i>Charge as</i> list box. This entry defines the time tariff used to calculate the call charges.
4	Press <i>Save</i> to confirm your changes.
<b>Tip</b>	You can click the right mouse button on the <i>Date</i> field to enter a date via the calendar that appears.

Step	Procedure
<b>...Editing a defined public holiday...</b>	
2	Enter the <i>Date</i> and a <i>Description</i> of the public holiday.
3	Select the desired charging mode in the list field <i>Charge as</i> . This entry is responsible for the calculation of the call.
4	Confirm your entries with <i>Save</i> .
<b>TIP</b>	After opening a calendar per right-mouse click in the field <i>Date</i> you can enter a date from this calendar.
<b>... Delete a defined public holiday...</b>	
2	Choose the desired entry from the list of public holidays. The data are entered in the input fields.
3	Press <i>Delete</i> .
4	A query appears:
	 <p>The public holiday is deleted when you press <i>OK</i>. If you press <i>Cancel</i>, you return to the <i>Holiday Table</i> dialog without deleting the entry.</p>
<b>...Generating public holidays</b>	
2	The call charge manager is able to generate public holidays automatically. To do this, active the <i>Generate</i> button.
3	A dialog appears in which you can specify the year for which you want to generate the public holidays:
	
4	Press <i>OK</i> to confirm your entry. The public holidays are created for the desired year or overwritten if they already exist. All public holidays generated are created with <i>Charge as</i> "Public holiday".

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

#### 9.2.8 Example of call charge recording (destination number table):

<b>Basic call details:</b>	
Carrier	AT&T
Trunk access	9
Call-by-Call number	01041
Destination number	9010412235689
Day of week	Sunday
Time	11:43:16 - 11:51:23
Duration	79 seconds
Extension type	guest extension

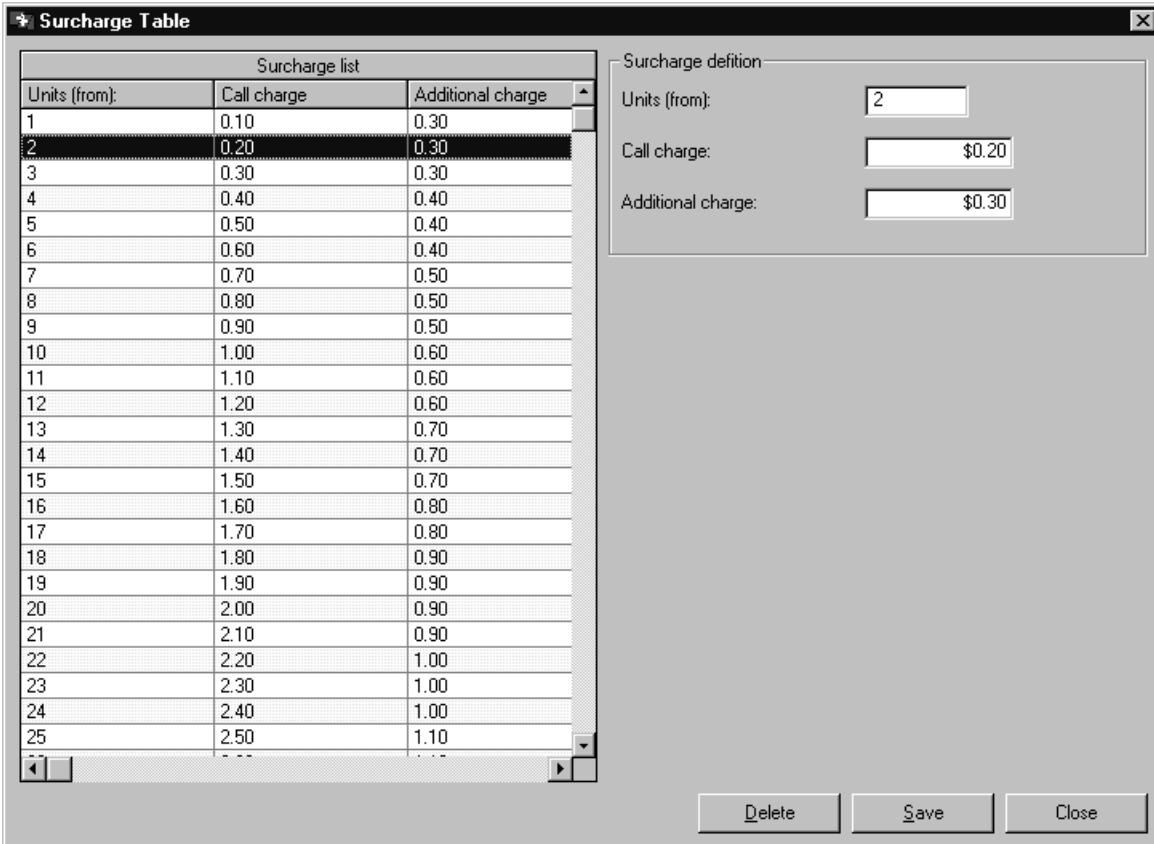
<b>Results determined:</b>			
Time zone	“AT weekend holiday” (00:00 - 00:00 weekend and holiday)		
Tariff structure	“AT&T local calls” <ul style="list-style-type: none"><li>● with time zone “AT weekend holiday”</li><li>● and assigned Tariff “AT local secondary”</li></ul>		
Tariff	“AT local secondary” <ul style="list-style-type: none"><li>● from 1st unit (6 sec.)</li></ul>	price: (guest): \$ 0,0180	surcharge (Guest): \$ 0,0000
	For a call duration of 79 seconds: <b>14 units = \$ 0,252 call charge.</b>		

## 9.2.9 Surcharge table configuration

### General

When calculating call charges on the basis of the surcharge table, a fixed call price and a surcharge price is defined for each number of call units. In the case of call charge calculation, the total cost of the call is available in a table entry in the surcharge table.

### Configuration

Step	Procedure
1	<p>Choose menu item <i>Edit - Surcharge Table</i> or activate the corresponding icon in the toolbar. The <i>Surcharge Table</i> dialog appears:</p>  <p>The dialog box has two main sections. On the left is a table titled "Surcharge list" with columns "Units (from)", "Call charge", and "Additional charge". The table lists values from 1 to 25. Row 2 is selected, showing "2" in the "Units (from)" column, "0.20" in the "Call charge" column, and "0.30" in the "Additional charge" column. On the right is a "Surcharge definition" panel with fields for "Units (from)" (set to 2), "Call charge" (\$0.20), and "Additional charge" (\$0.30). At the bottom are "Delete", "Save", and "Close" buttons.</p>

## Configuring Call Charge Manager (CCM)

### Configuring Call Charge Manager

Step	Procedure
<b>...Defining a new table entry</b>	
2	To configure the prices for a call with a specific number of units, select the appropriate unit entry in the list. The entry values are transferred to the fields.
3	In the <i>Call charge</i> field, enter the price of a call with the number of units contained in the <i>Units (from)</i> output field. The entry is made in the national currency currently set (e.g. DM, Lira, \$, etc.) with two digits after the decimal point.
4	In the <i>Additional charge</i> field, enter the surcharge for a call with the number of units contained in the <i>Units (from)</i> output field. The entry is made in the national currency currently set with two digits after the decimal point.
5	Confirm your entries by clicking the <i>OK</i> button.
6	If you want to define another table entry (for calls with another number of units), proceed from Step 2.
<b>...Editing a defined table entry</b>	
2	Select the appropriate charge unit entry in the list. The entry values are transferred to the fields.
3	Edit the assigned call and surcharge price. The entry is made in the national currency currently set (e.g. DM, Lira, \$, etc.) with two digits after the decimal point.
4	Confirm your entries by clicking the <i>OK</i> button.
5	If you want to define another table entry (for calls with another number of units), proceed from Step 2.
<b>...Deleting a defined table entry</b>	
2	Select the appropriate unit entry in the list. The entry values are transferred to the fields.
3	Click the <i>Delete</i> button.
4	The system prompts the user to confirm: 
	The basic price/surcharge price is deleted by clicking the <i>OK</i> button. If you click <i>Cancel</i> , you are returned to the <i>Surcharge Table</i> tab without deleting the entry.
5	If you want to delete another table entry (for calls with another number of units), proceed from Step 2.

### **9.2.10 Example of call charge calculation (surcharge table):**

<b>Basic call details:</b>	
No. of units	12
<b>Calculated results:</b>	
Call price	\$ 0.60
Surcharge price	\$ 0.40
	<b>\$ 1.00 call charge</b>

## Configuring Call Charge Manager (CCM)

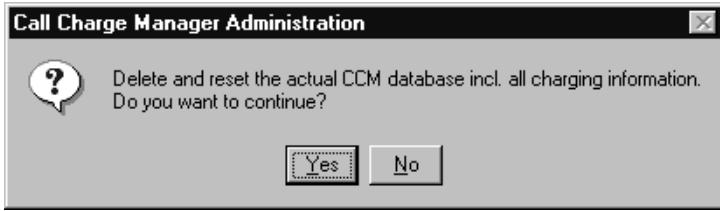
*Delete / clear database*

### 9.3 Delete / clear database

#### General

The configuration database of the call charge manager can be cleared entirely; the database structure is retained. This also makes sense when an external / older configuration database was copied for the call charge manager and is now to be “emptied” before the relevant configuration data are entered or when new configuration data are to be imported into an empty database.

#### To delete / cleanup the configuration database

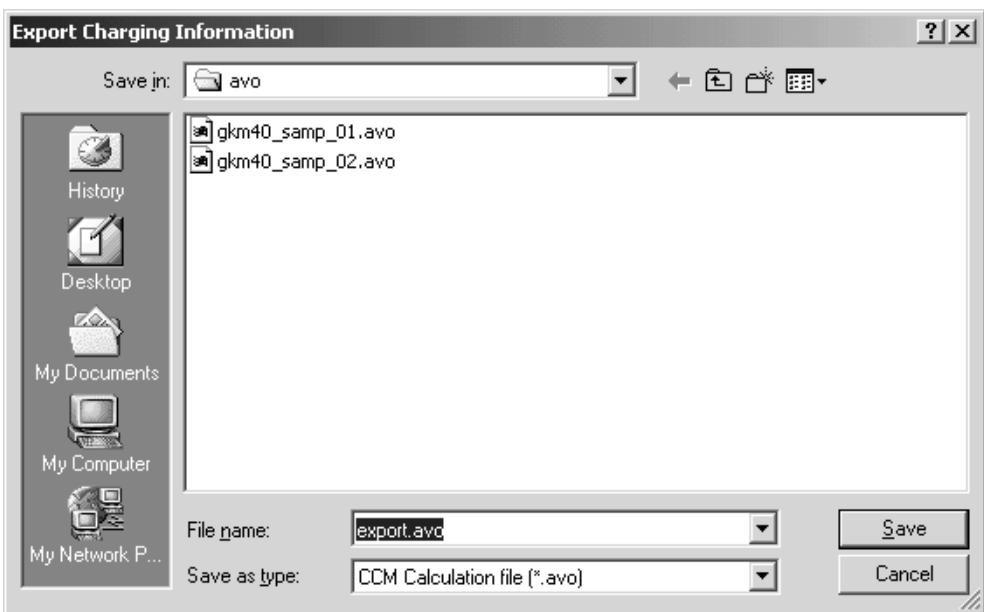
Step	Procedure
1	In the <i>File</i> menu, activate the entry <i>Delete/Reset Database</i> .
2	A query appears:  <p>If the configuration database is to be cleaned up, press <i>Yes</i>. The cleanup progress is displayed in the status bar. If the configuration is not to be cleaned up, press <i>No</i>. <b>Note:</b> Start / end of cleanup and any errors encountered are entered in the logbook.</p>

## 9.4 Exporting the database / charging information

### General

You can export the configuration database with the charging information. This can be helpful when you want to distribute an existing database to different sites and import the information.

#### To export the configuration database:

Step	Procedure
1	<p>Activate the menu item <i>File - Export Charging Information</i>. The dialog box to select the export file appears:</p>  <p>The import file is a text file whose name ends with *.av0. Enter the relevant file name and press <i>Save</i>.</p>
2	The export is started and the progress shown in the status bar. Errors detected are notified. The export cannot be aborted, but the errors are logged in the logbook.

## Configuring Call Charge Manager (CCM)

### Importing zoning information

## 9.5 Importing zoning information

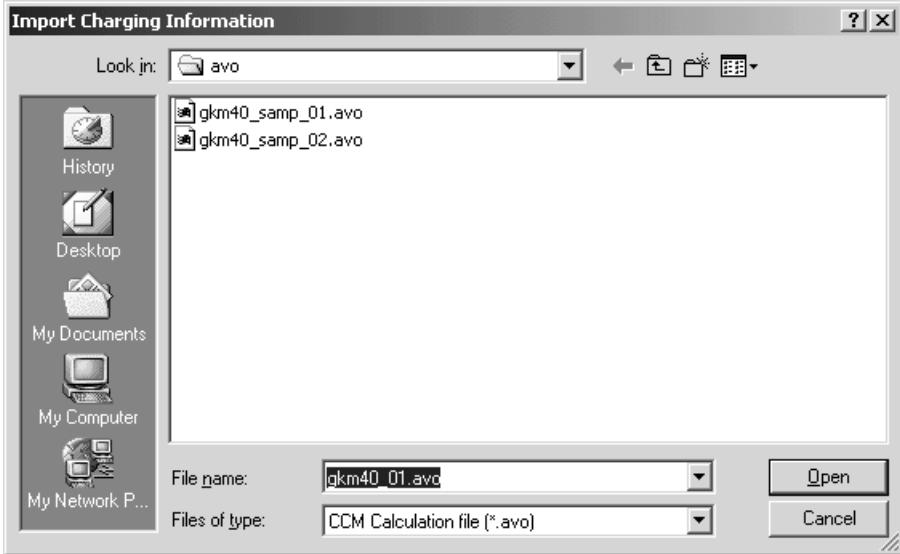
### General

As an alternative to manual input of the configuration data for the call charge manager in the relevant dialog boxes, you can also import this information in the form of an appropriately structured field. This file can for example, be created by service providers or third parties or copied to the system. After import, you can edit/adapt the configuration data as required in the relevant configuration dialogs.



The Caracas Server can automatically activate a appropriately processed call charge configuration file. The import cannot be automated however, see chapter 4.8, "Transferring call charges configuration database" in the Administration Manual for Caracas Link.

### To import the configuration data

Step	Procedure
1	<p>Activate the menu item <i>File - Import Charging Information</i>. The dialog appears to let you open the import file:</p>  <p>The import file is a text file whose name ends with *.avo. The import file is expected in the <i>My Documents</i> folder. Choose the relevant file and press <i>Open</i>.</p>
2	The import is started and the progress shown in the status bar. On import, the structure of the record is checked and the data checked for consistency. Errors detected are notified. The import cannot be aborted, but the errors are logged in the logbook.

## Record structure of import file

- Characters that are not allowed as a rule within parameters are:  
[ ] \ | < > , ; ? \* = ! \ % ' :
- Field delimiter is the | character
- The basic structure of a record is as follows:  
DB|FB1:FB1 Parameter|FB2:FB2 Parameter|...|FBn:FBn Parameter<CR><LF>  
where:
  - DB corresponds to data ID
  - FB corresponds to the field ID
- Example of a record:  
RA|ID:free time tariff|FT:10|R1:10|T1:1000|RN:20|TN:1500
- Carriage returns / blanks at the start of line (=data record).

## Configuring Call Charge Manager (CCM)

### Importing zoning information

#### Overview of possible records (record identifier)

Record ID	Meaning
<b>IV</b>	Import version: This record describes the import version. If this record is missing, the import version is 1.0.
<b>#</b>	Comment: The line in the import file is not interpreted / imported.
<b>II</b>	Saving import information (tariff information). The text is added to the log.
<b>CA</b>	Setup or update of a carriers. The carrier is stored in the database and <i>Units charged * Tariff unit.prices</i> assigned optionally for the calculation.
<b>RA</b>	Setup or update of a rate. Pulse times and prices are assigned to a tariff name.
<b>TZ</b>	Setup of a time zone. Valid time are assigned to a tariff zone name.
<b>TS</b>	Setup of a tariff structure. Create a tariff structure and assign the data pairs to time zone to rate.
<b>TN</b>	Setup of a destination number. Assigning a carrier and tariff structure to a destination number.

## Structure of the individual records

Record name	Field name	Optional	Parameter length		Remarks	
			min.	max.		
IV	<b>Import Version</b> The record description of the record IV is stored in the event log and in the actual database. This version information is checked with every import of call charge tables and avoids version conflicts with older versions. <b>Example:</b> IV 1.1 <b>Possible errors:</b> <ul style="list-style-type: none"><li>• Invalid version information; possible values are 1.0 and 1.1</li></ul>	<none>	No	1	255	Version information. Invalid version information leads to <ul style="list-style-type: none"><li>• the import is aborted</li><li>• an entry is made to the log book</li></ul>
II	<b>Import Information</b> Record II is used to store the following text in the logbook and in the INI table of the linked database. The text is also displayed in the import dialog, e.g. to see the file origin and creation date in the call charge manager. <b>Example:</b> II Import file gkm1.avo created on 23.06.1999 <b>Possible errors:</b> <ul style="list-style-type: none"><li>• Special characters in text<ul style="list-style-type: none"><li>—</li></ul></li></ul>	<none>	No	1	255	Information text about the import file. If the text contains special characters <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the INI entry is deleted</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>

## Configuring Call Charge Manager (CCM)

### Importing zoning information

Record name	Field name	Optional	Parameter length		Remarks
			min.	max.	
CA	<b>Carrier</b> The CA record is used to create a named carrier. <b>Example:</b> CA ID:Telekom UP:1200 CA ID:Arcor CC:01070				
	<b>ID</b>	No	1	30	<b>Identifier</b> Unique name of the carriers and key field. If a carrier of this name already exists in the database, the data are updated. The field is mandatory field and can be referenced by other records. If this field or parameter does not exist: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>UP</b>	Yes	1		<b>Unit price</b> For guest extensions: Unit price for the calculation type <i>Units charged * Unit rate</i> . The value is entered in 1/10000 currency units (\$ 0,12 corresponds to UP:1200). If the field does not exist / is not filled: <ul style="list-style-type: none"><li>• \$ 0 is entered as unit rate</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>AUP</b>	Yes	1		<b>Admin Unit price</b> For management extensions: Unit price for the calculation type <i>Units charged * Unit rate</i> . The value is entered in 1/10000 currency units (\$ 0,12 corresponds to UP:1200). If the field does not exist / is not filled: <ul style="list-style-type: none"><li>• \$ 0 is entered as unit rate</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>

## Configuring Call Charge Manager (CCM)

### *Importing zoning information*

Record name	Field name	Optional	Parameter length		Remarks
			min.	max.	
	<b>CC</b>	Yes	1	5	<b>Call by Call</b> Assignment of a call-by-call number to the carrier. If the field or the parameter does not exist / is not numeric: <ul style="list-style-type: none"><li>• no call-by-call number is assigned to the carrier</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>

## Configuring Call Charge Manager (CCM)

### Importing zoning information

Record name	Field name	Optional	Parameter length		Remarks
			min.	max.	
RA	<b>Rate</b> Record RA is used to create a tariff. <b>Example:</b> RA ID:Telekom 150 R1:150 T1:1200 RN:150 TN:1200 RA ID:Telekom 1 R1:1 T1:5000 RA ID:Telekom 10 R1:10 T1:2000 R2:12 T2:2000 R3:15 T3:2000 RN:20 TN:2000 RA ID:ExTariff FT:10 R1:10 T1:2000 R2:10 T2:1800 R3:13 T3:1600 RN:12 TN:1600				
	<b>ID</b>	No	1	30	<b>Identifier</b> Unique name of the rate and key field. You can use the name to reference the tariff structure. If a tariff of this name already exists, the relevant record is updated, otherwise added. If this field or parameter does not exist: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>FT</b>	Yes	1	6	<b>Free time</b> Free time (grace time) in seconds without call charging. If this field is missing or invalid <ul style="list-style-type: none"><li>• the free time will be 0 seconds.</li></ul>
	<b>SP</b>	Yes	1	6	<b>Start pulse</b> Starting unit for a tariff/unit definition If this field is missing or invalid, <ul style="list-style-type: none"><li>• SP is imported with the value 1</li><li>• the following fields PT, PR and PS will be assigned to this unit.</li></ul>
	<b>PT</b>	No	1	6	<b>Pulse time</b> Duration of pulse in seconds. If the field does not exist its parameters do not exist or are incorrect: <ul style="list-style-type: none"><li>• the record is rejected</li></ul>
	<b>PR</b>	Yes	1	10	<b>Pulse rate</b> For guest extensions: Price of the tariff/unit definition in 1/10000 of the currency units. If the field does not exist <ul style="list-style-type: none"><li>• the price will be 0.1200 in the database.</li></ul>

## Configuring Call Charge Manager (CCM)

### *Importing zoning information*

Record name	Field name	Optional	Parameter length		Remarks
			min.	max.	
(RA)	<b>PS</b>	Yes	1	10	<b>Pulse surcharge</b> For guest extensions: Surcharge for the tariff/unit definition in 1/10000 currency units. if this field does not exist or is invalid • the surcharge will be 0 in the database.
	<b>APR</b>	Yes	1	10	<b>Admin pulse rate</b> For management extensions: Price of the tariff/unit definition in 1/10000 of the currency units. If the field does not exist • the price will be 0.1200 in the database.
	<b>APS</b>	Yes	1	10	<b>Admin pulse surcharge</b> For management extensions: Surcharge for the tariff/unit definition in 1/10000 currency units. if this field does not exist or is invalid • the surcharge will be 0 in the database.

## Configuring Call Charge Manager (CCM)

### Importing zoning information

Record name	Field name	Optional	Parameter length		Remarks
			min.	max.	
TZ	<b>Time zone</b> Assigning a carrier and tariff structure to a destination number. <b>Example:</b> TZ   ID:Week 00-12   ST:0000   ET:1159   VD:31 TZ   ID:Week 12-17   ST:0000   ET:1659   VD:31 TZ   ID:Week 17-24   ST:1700   ET:2359   VD:31 TZ   ID:Weekend 00-12   ST:0000   ET:1159   VD:96 TZ   ID:Weekend 12-24   ST:0000   ET:2359   VD:96 TZ   ID:Public holiday 0-24   ST:0000   ET:2359   VD:128 TZ   ID:Always 0-24   ST:0000   ET:2359   VD:255				
	<b>ID</b>	No	1	30	<b>Identifier</b> Unique name of the time zone and key field. You can use the name to reference the tariff structure. If a time zone of this name already exists, the corresponding record is updated, otherwise added. If this field or parameter does not exist: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>ST</b>	No	1	5	<b>Start time</b> Start time in format hhmm. The valid range for values is 0000-2359. The assigned rate is valid from this time on. If this field or parameter is invalid: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>ET</b>	No	1	5	<b>End time</b> End time of the time zone in the format hhmm. The valid range for values is 0000-2359. The rate assigned later is valid up to this time. If this field or parameter is invalid: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>

## Configuring Call Charge Manager (CCM)

### *Importing zoning information*

Record name	Field name	Optional	Parameter length		Remarks
			min.	max.	
(TZ)	VD	No	1	3	<p><b>Valid days</b>            Validity of the tariff on the specified days, where the following applied in bit-coded form:</p> <ul style="list-style-type: none"> <li>– 1 = Monday</li> <li>– 2 = Tuesday</li> <li>– 4 = Wednesday</li> <li>– 8 = Thursday</li> <li>– 16 = Friday</li> <li>– 32 = Saturday</li> <li>– 64 = Sunday</li> <li>– 128 = Public holiday</li> </ul> <p>(e.g.: Monday and Friday: 16+1=17)            If this field or parameter is invalid:</p> <ul style="list-style-type: none"> <li>• the record is rejected</li> <li>• the import is continued</li> <li>• an entry is made in the log book</li> </ul>

## Configuring Call Charge Manager (CCM)

### Importing zoning information

Record name	Field name	Optional	Parameter length		Remarks
			min.	max.	
TS	<b>Tariff structure</b> Record TS is used to assign a tariff structure and time zones to tariffs. <b>Example:</b> TS   ID:Telekom 150 TS   ID:Telekom 150   TZ:Week 00-12   RA:Telekom 150 TS   ID:Telekom 150   TZ:Week 12-17   RA:Telekom 1 TS   ID:Telekom 150   TZ:Week 17-24   RA:Telekom 10				
	<b>ID</b>	No	1	30	<b>Identifier</b> Unique name of the tariff structure and key field. You can use the name to reference the tariff structure. If a tariff structure of this name already exists, the corresponding record is updated, otherwise added. If this field or parameter does not exist: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>TZ</b>	Yes (in conjunction with RA)	1	30	<b>Time zone</b> Assignment of a time to a tariff structure. The parameter must correspond to a time zone set up from the TZ record type. If the parameter is not known as time zone or is not transferred with the RA field: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>RA</b>	Yes (in conjunction with RA)	1	30	<b>Rate</b> Assignment of a tariff to the tariff structure. The parameter must correspond to a rate set up from the RA record type. If the parameter is not known as a time zone or is not transferred along with the TZ field: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>

## Configuring Call Charge Manager (CCM)

### *Importing zoning information*

Record name	Field name	Optional	Parameter length		Remarks
			min.	max.	
<b>TN</b>	<b>Target number</b> Record TN is used to create a destination number. <b>Example:</b> TN NO:02302 CA:Telekom Telekom 150 NA:Witten TN NO:02381 CA:Telekom Telekom 150 NA:Hamm TN NO:0180 CA:Arcor Arcor 2				
	<b>NO</b>	No	1	20	<b>Number</b> destination number, numeric. If the parameter does not exist or is not numerical: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>TS</b>	No	1	30	<b>Tariff structure</b> Assignment of a tariff structure to a destination number. The parameter must correspond to a tariff structure set up from the TS record type. If the parameter is not known as tariff structure: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>CA</b>	No	1	30	<b>Carrier</b> Assignment of a carriers to the destination number. The parameter must correspond to a carrier set up from the CA record type. If the parameter is not known as carrier: <ul style="list-style-type: none"><li>• the record is rejected</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>
	<b>NA</b>	Yes	1	30	<b>Name</b> Designation / name of the destination number. If the parameter for NA does not exist: <ul style="list-style-type: none"><li>• the field is ignored</li><li>• the record is imported</li><li>• the import is continued</li><li>• an entry is made in the log book</li></ul>

## Configuring Call Charge Manager (CCM)

### *Event log and error logging*

## 9.6 Event log and error logging

### General

The contents of the event log maintained in the call charge manager show the log on and log off information, start of configuration dialogs, etc. Error messages in the system are recorded in the error log. In the call charge manager, you can display the logs selectively on screen to facilitate diagnosis, delete certain entries from the logs or print the log contents.

### Display event log

First start / activate the call charge manager. To display the event log, activate the menu item *Edit - Evaluate Event Log* or press the corresponding icon in the toolbar:

Event log				
Date/time	Section	Computer	Program	Description
09/15/99 6:46:10	DBF	INN_SRVR_NT_U9	GKM40	Closing databases!
09/15/99 6:47:46	DBF	INN_SRVR_NT_U9	GKM40	MS Access databases opened!
09/15/99 6:47:47	SYS	INN_SRVR_NT_U9	GKM40	Program Administration activated!
09/15/99 6:47:47	USR	INN_SRVR_NT_U9	GKM40	User DEFAULT logged on!
09/15/99 6:47:48	USR	INN_SRVR_NT_U9	GKM40	Window Destination Number Table activated!
09/15/99 7:06:46	USR	INN_SRVR_NT_U9	GKM40	Window Destination Number Table closed!
09/15/99 7:06:47	USR	INN_SRVR_NT_U9	GKM40	Window Holiday Table activated!
09/15/99 7:09:04	USR	INN_SRVR_NT_U9	GKM40	Window Holiday Table closed!
09/15/99 7:09:05	USR	INN_SRVR_NT_U9	GKM40	Window Holiday Table activated!
09/15/99 7:12:09	USR	INN_SRVR_NT_U9	GKM40	Window Holiday Table closed!
09/15/99 7:12:10	USR	INN_SRVR_NT_U9	GKM40	Window Surcharge Table activated!
09/15/99 7:12:25	USR	INN_SRVR_NT_U9	GKM40	Window Surcharge Table closed!
09/15/99 7:12:26	USR	INN_SRVR_NT_U9	GKM40	Window Holiday Table activated!
09/15/99 7:13:13	USR	INN_SRVR_NT_U9	GKM40	Window Holiday Table activated!
09/15/99 7:13:15	USR	INN_SRVR_NT_U9	GKM40	Window Holiday Table closed!
09/15/99 7:13:16	USR	INN_SRVR_NT_U9	GKM40	Window Surcharge Table activated!
09/15/99 7:14:08	USR	INN_SRVR_NT_U9	GKM40	Window Surcharge Table closed!

Figure 9-2 Event Log in Call Charge Manager

## Configuring Call Charge Manager (CCM) *Event log and error logging*

### Display error log

First start / activate the call charge manager. To display the error log, activate the menu item *Edit - Evaluate Error Log* or press the corresponding icon in the toolbar:

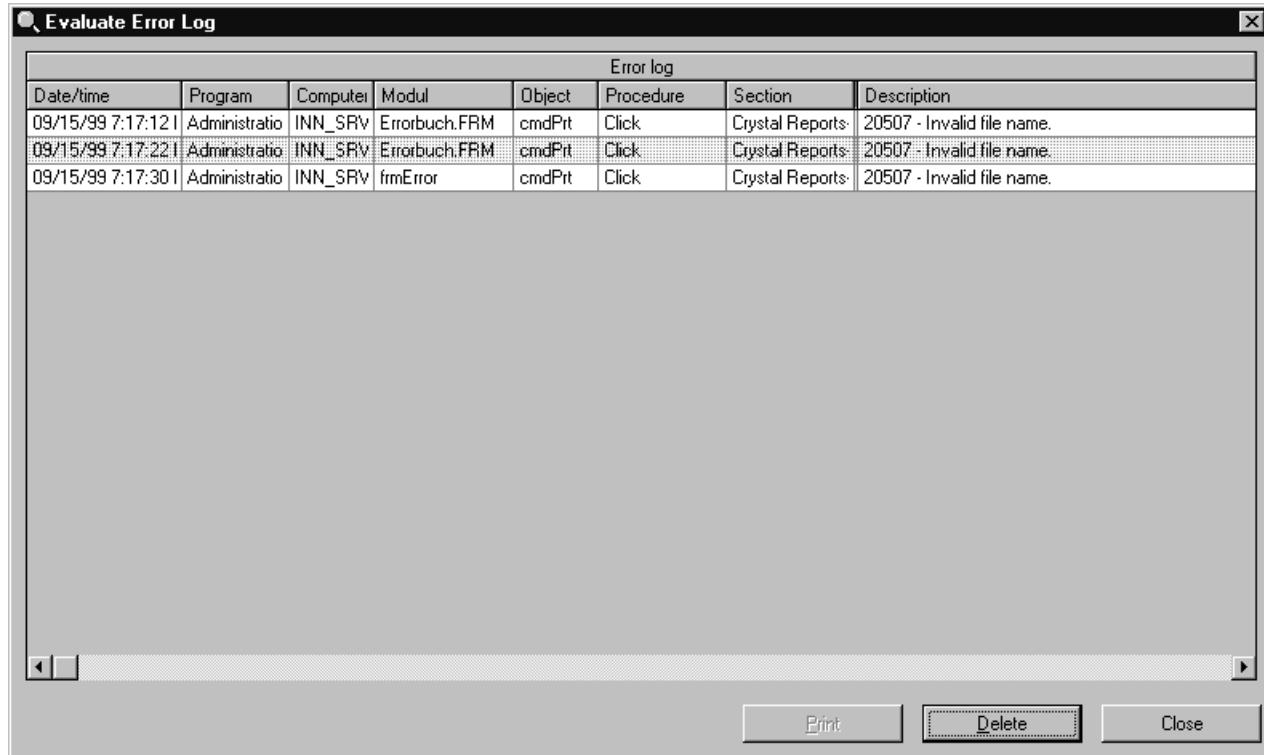


Figure 9-3      Error Log in Call Charge Manager

## Configuring Call Charge Manager (CCM)

### *Event log and error logging*

#### Selecting event log display

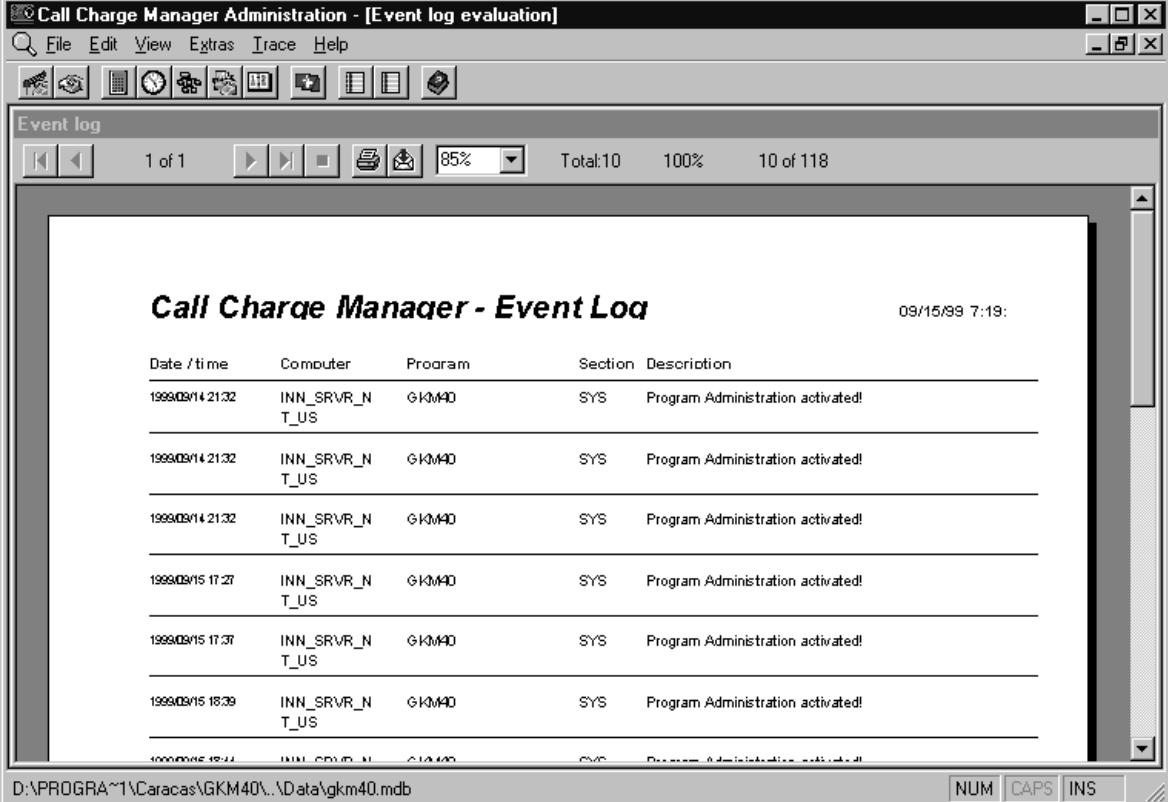
When displaying the event log, you can select particular entry types and particular types of program (components) or computer:

Step	Procedure	
1	Select the required entry type in the <i>Section</i> field. The possible types are listed below. A list of the current entries available in the event log is then displayed.	
	DBF	Database entries: errors or messages that occur when you enter a record in the database.
	DDE	Errors or messages for DDE connection from / to server.
	EXPORT	Entries created while exporting charging information.
	IMPORT	Entries created while importing destination numbers.
	SYS	General system messages, e.g. end of program.
	USR	Error in connection with user actions, e.g. when logging on or off.
2	Select the required component in the <i>Program</i> field.	
3	Select the required computer name in the <i>Computer</i> field, this list contains all possible computer names.	
4	Click <i>Refresh</i> to confirm your selection. The log is displayed in accordance with the selection.	

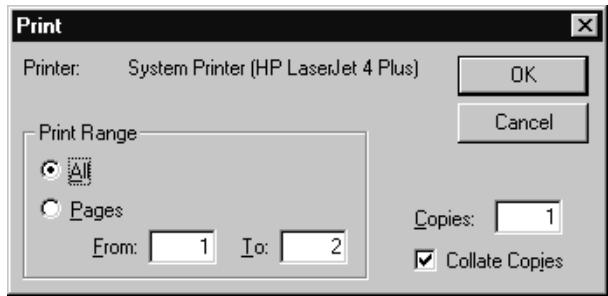
## Configuring Call Charge Manager (CCM)

### Event log and error logging

#### Printing the event or error log

Step	Procedure																																			
1	Activate the dialog box for the relevant log, e.g. <i>Edit – Evaluate Event Log</i>																																			
2	Click the <i>Print</i> button.																																			
3	The log is displayed in page layout mode:  A screenshot of a Windows application window titled "Call Charge Manager Administration - [Event log evaluation]". The menu bar includes File, Edit, View, Extras, Trace, and Help. The toolbar contains various icons. The main area is labeled "Event log" and shows a table of event logs. The table has columns for Date / time, Computer, Program, Section, and Description. The data in the table is as follows: <table border="1"><thead><tr><th>Date / time</th><th>Computer</th><th>Program</th><th>Section</th><th>Description</th></tr></thead><tbody><tr><td>1999/09/14 21:32</td><td>INN_SRVR_NT_US</td><td>GKMA0</td><td>SYS</td><td>Program Administration activated!</td></tr><tr><td>1999/09/14 21:32</td><td>INN_SRVR_NT_US</td><td>GKMA0</td><td>SYS</td><td>Program Administration activated!</td></tr><tr><td>1999/09/14 21:32</td><td>INN_SRVR_NT_US</td><td>GKMA0</td><td>SYS</td><td>Program Administration activated!</td></tr><tr><td>1999/09/15 17:27</td><td>INN_SRVR_NT_US</td><td>GKMA0</td><td>SYS</td><td>Program Administration activated!</td></tr><tr><td>1999/09/15 17:37</td><td>INN_SRVR_NT_US</td><td>GKMA0</td><td>SYS</td><td>Program Administration activated!</td></tr><tr><td>1999/09/15 18:39</td><td>INN_SRVR_NT_US</td><td>GKMA0</td><td>SYS</td><td>Program Administration activated!</td></tr></tbody></table> The status bar at the bottom shows the path "D:\PROGRAM\1\Caracas\GKM40..\Data\gkm40.mdb".	Date / time	Computer	Program	Section	Description	1999/09/14 21:32	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!	1999/09/14 21:32	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!	1999/09/14 21:32	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!	1999/09/15 17:27	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!	1999/09/15 17:37	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!	1999/09/15 18:39	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!
Date / time	Computer	Program	Section	Description																																
1999/09/14 21:32	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!																																
1999/09/14 21:32	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!																																
1999/09/14 21:32	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!																																
1999/09/15 17:27	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!																																
1999/09/15 17:37	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!																																
1999/09/15 18:39	INN_SRVR_NT_US	GKMA0	SYS	Program Administration activated!																																

#### ...Printing a log to the default printer

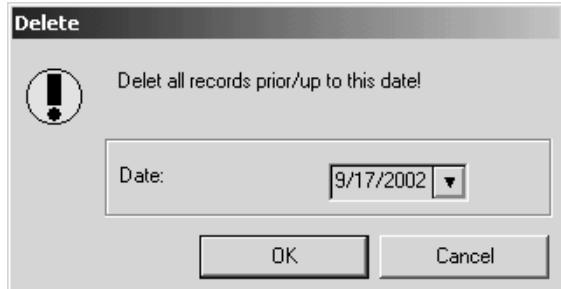
4	 Click the print button to start printing to the default printer. The dialog box for the default printer currently set appears: 
5	Click <i>OK</i> to start printing. You are returned to wakeup calls in page layout view.

## Configuring Call Charge Manager (CCM)

### Event log and error logging

Step	Procedure
<b>...Zooming log outputs</b>	
4	To zoom in/out the page layout of the event log select the zoom value (in %) or enter it in the zoom list field.
<b>...Exporting a log</b>	
4	Press this button to export the logged data. In the subsequent dialog boxes, you can specify the desired export format and filename. Following the export procedure, you return to the page layout of the event log.
<b>...Quitting page layout log output</b>	
4	Click this button to quit the log output in page layout view. You are returned to the log display dialog box.

### Deleting a log partially or entirely

Step	Procedure
1	Activate the dialog box for the relevant log, e.g. <i>Edit – Evaluate Event Log</i>
2	Click the <i>Delete</i> button.
3	The following dialog box appears:  <p>Enter the date up to which all entries are to be deleted. Click <i>OK</i> if the entries are to be deleted. If no entries are to be deleted, click <i>Cancel</i>. In both cases, you are returned to the log display.</p>
<b>Tip</b>	By right-clicking the date field, you can activate a calendar in which you can select the date to be transferred to the date field.

## **9.7 Test of the call charge recording**

### **Test options**

It only possible to test the configured call charge recording if "real" calls are made.

## **Configuring Call Charge Manager (CCM)**

*Test of the call charge recording*

## 10 Configuring Caracas Voicemail connection

### Who can configure Caracas Voicemail-Link?

Caracas Voicemail-Link is configured by the service technician (user level 1). Activate the program and log on to Caracas Voicemail-Link under the technician's password.

### What's to be configured?

The following parameters are to be configured:

- Connection mode to the voicemail system
- Interface parameters for the V.24 (RS232) connection to the voicemail system



The connection via V.24 (RS232) is realized only after consultation with the development / product management department of Siemens for Caracas Link. By default the connection via V.24 (RS232) is not available.

### 10.1 Connection mode at the Voicemail System

#### Different connection modes

Two alternatives are available for exchanging data between Caracas Voicemail-Link and the voicemail system. The applicable alternative is to be configured by specifying the appropriate parameter:

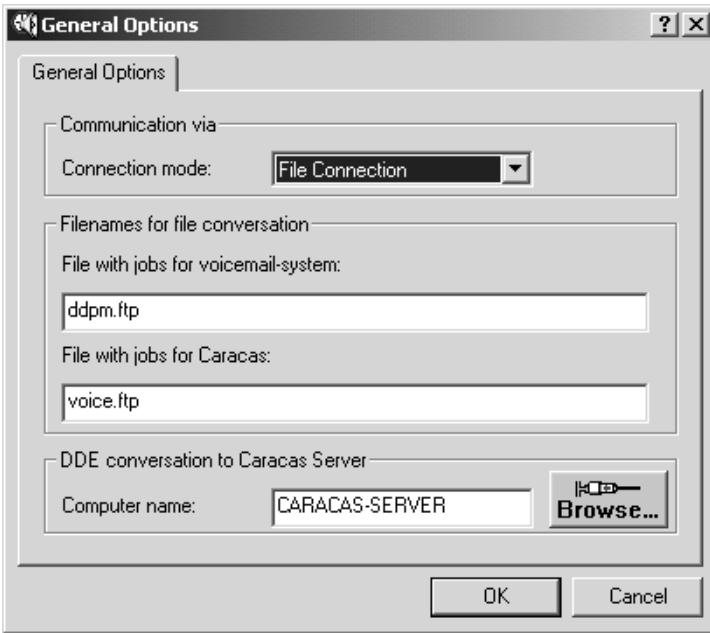
- connection via V.24 (RS232) interface (see info above)
- connection via file conversation/data exchange

#### How is the connection mode defined?

Step	Procedure
1	The connection mode can only be defined if there is no connection to the voicemail system. An active connection must therefore be cleared down: To do this, select the menu item <i>Conversation - Close Conversation to Voicemail System</i> or press <b>[F3]</b> in Caracas Voicemail-Link (this menu item is only available with V.24 (RS232) connection).

## Configuring Caracas Voicemail connection

*Connection mode at the Voicemail System*

Step	Procedure
2	Then activate the configuration dialog for the general options under <i>Settings - General Options</i> :
	
Depending on the required form of the connection, proceed as follows:	
<b>...Connection via file conversation/file exchange</b>	
3	Select the entry <i>File Connection</i> as the connection mode in the configuration dialog box. The fields in the group window <i>Filenames for file conversation</i> are activated.
4	Enter the appropriate file name and the complete path both for voicemail records to Caracas and for Caracas records to the voicemail system. The file name is not checked and the file does not have to be available.
5	Confirm your entries.
<b>...Connection via V.24 (RS232) interface</b>	
The connection via V.24 (RS232) is realized only after consultation with the development / product management department of Siemens for Caracas Link. By default the connection via V.24 (RS232) is not available.	
3	Select the entry <i>V.24 Connection</i> as the connection mode. The fields in the other group windows are deactivated.
4	Confirm your entries.

## 10.2 DDE-connection to Caracas Server

### Defining the computer name

A DDE-connection exists to Caracas Server across which immediate messages are exchanged. The computer name stored in the dialog box *Settings - General Options (Computer name field)* in the field *Computername* is used for the DDE conversation between Caracas Server and Caracas Voicemail-Link.

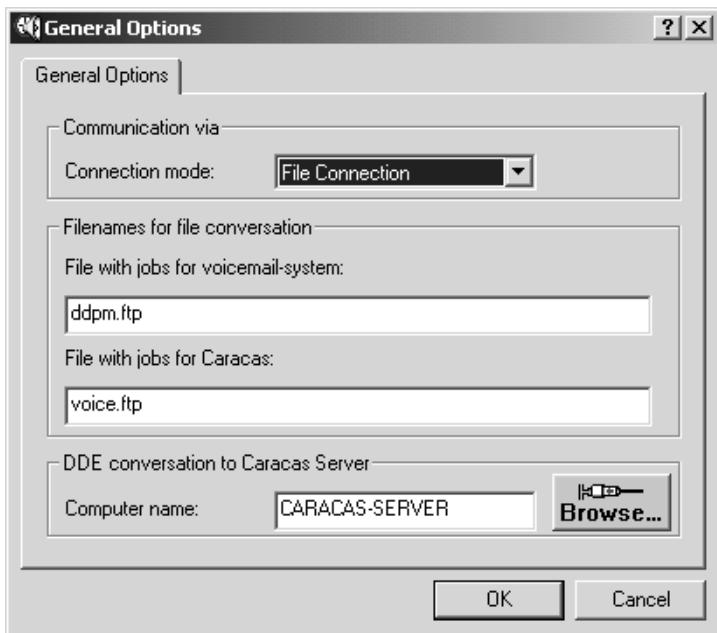


Figure 10-1 Configuring DDE-Connection

The current computer name is entered in this field the first time Caracas Voicemail-Link is activated. Since it is currently only possible to install Caracas Voicemail-Link on the same PC as Caracas Server, any deviating entries in this field have no effect.

## Configuring Caracas Voicemail connection

*Configuring protocol parameters*

### 10.3 Configuring protocol parameters

#### General

If the connection to the voicemail system is configured via V.24 (RS232) you have to configure the V.24 (RS232) protocol parameters.



The connection via V.24 (RS232) is realized only after consultation with the development / product management department of Siemens for Caracas Link. By default the connection via V.24 (RS232) is not available.

#### Deactivating the interface to the voicemail system

The interface to the voicemail system must not be active when configuring the V.24 (RS232) interface parameters. It is thus necessary to clear down any existing connections first:

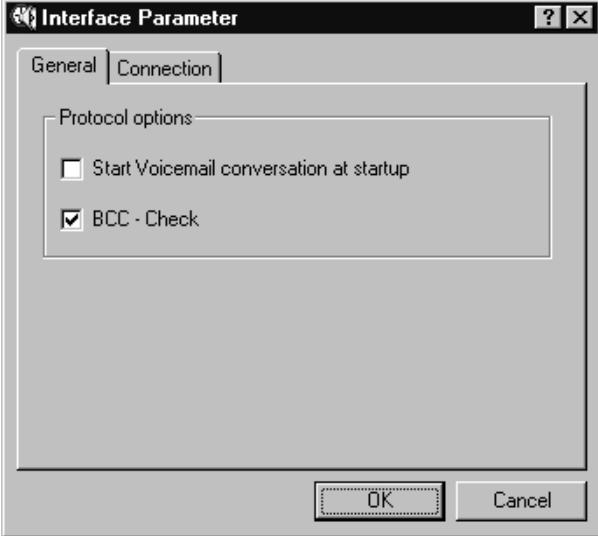
Step	Procedure
1	<p>Activate the menu <i>Conversation - Close Conversation to Voicemail-System</i> or press <b>F3</b>.</p> <p>The above menu item is not displayed if the connection to the front office system is already inactive.</p>

#### General V.24 (RS232) interface parameters

To enter/change interface parameters, proceed as follows:

Step	Procedure
1	Activate the configuration dialog box for the V.24 (RS232) interface parameters under <i>Settings - Interface Parameter</i> .

**Configuring Caracas Voicemail connection**  
*Configuring protocol parameters*

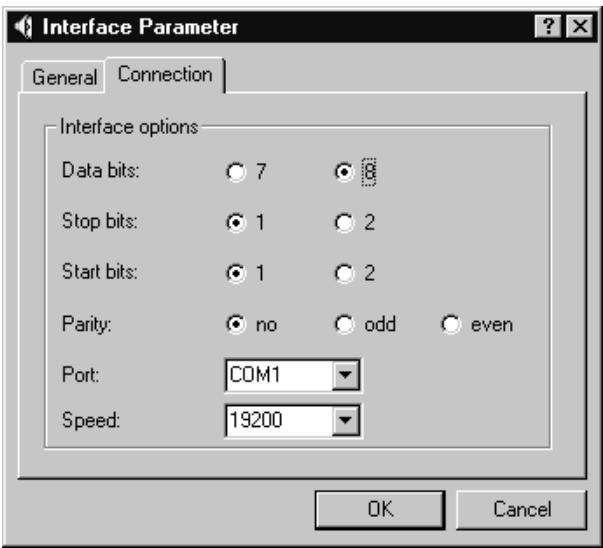
Step	Procedure
2	<p>Select the <i>General</i> tab:</p> 
3	<p>If the V.24 (RS232) line to the voicemail system is to be automatically opened when the program is started, activate the option field <i>Start Voicemail conversation at start-up</i>.</p> <p><b>Remark:</b>  This setting should be selected after configuration/cutover to avoid having to manually activate the V.24 (RS232) connection each time Caracas Voicemail-Link is started up.</p>
4	<p>If the protocol between Caracas Voicemail-Link and the voicemail system is to work with BCC check procedures, activate the <i>BCC check</i> option field (default: activated).</p>
<b>Tip</b>	<p>Right-click to display a context menu in which the following menu items can be activated (if available for the current object):</p> <ul style="list-style-type: none"> <li>• <i>Reset to Default</i>  All entries are reset to the default values in the current dialog box.</li> <li>• <i>Help Topic</i>  The online help is started by activating the help for the current dialog box.</li> <li>• <i>What's this?</i>  What's this is displayed for the current dialog element (e.g. button).</li> </ul>

## Configuring Caracas Voicemail connection

### Configuring protocol parameters

#### Changing the interface parameters (connection)

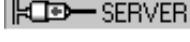
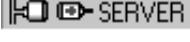
To change the interface parameters for the connection, proceed as follows:

Step	Procedure
1	Activate the configuration dialog for the V.24 (RS232) interface parameters under <i>Settings - Interface Parameters</i> .
2	Activate the <i>Connection</i> tab. 
3	Enter the interface-specific data in the individual fields. In addition to the number of data bits, start bits and stop bits, define the parity and configure the required COM interface and the speed. The default settings are shown in step 2.
Tip	Right-click to display a context menu in which the following menu items can be activated (if available for the current object): <ul style="list-style-type: none"><li>• <i>Reset to Default</i> All entries are reset to the default values in the current dialog box.</li><li>• <i>Help Topic</i> The online help is started by activating the help for the current dialog box.</li><li>• <i>What's this?</i> What's this is displayed for the current dialog element (e.g. button).</li></ul>

## 10.4 Status bar displays

### The status bar in Caracas Voicemail-Link

The Caracas Voicemail-Link connection status is displayed in the status bar. The following variants are possible for this:

Element	Description
	<p>Status of the connection between Caracas Voicemail-Link and the voicemail system:</p> <ul style="list-style-type: none"> <li>• red LEDs (only with connection via V.24 (RS232)):           <ul style="list-style-type: none"> <li>– no connection available</li> </ul> </li> <li>• green/yellow LEDs (only with connection via V.24 (RS232)):           <ul style="list-style-type: none"> <li>– connection set up</li> <li>– interface open</li> <li>– no data exchange</li> <li>– Voicemail logically offline</li> </ul> </li> <li>• green LEDs (only with connection via V.24 (RS232)):           <ul style="list-style-type: none"> <li>– connection set up</li> <li>– interface open</li> <li>– current data exchange</li> </ul> </li> <li>• grey LEDs:           <ul style="list-style-type: none"> <li>– the connection was chosen by interface records exchange</li> </ul> </li> </ul>
 	<p>Status of the DDE-connection between Caracas Server and Caracas Voicemail-Link:</p> <ul style="list-style-type: none"> <li>• Plug closed:           <ul style="list-style-type: none"> <li>– DDE-connection started (green arrow)</li> </ul> </li> <li>• Plug opened:           <ul style="list-style-type: none"> <li>– DDE-connection stopped (red arrow)</li> </ul> </li> </ul>

## Configuring Caracas Voicemail connection

The trace window

### 10.5 The trace window

#### General trace functions

The general functions for opening, closing, printing, and writing trace windows/window contents to files, etc. were described in chapter 4.

#### Available trace windows in Caracas Voicemail-Link

Trace window title / menu item under <i>Trace</i>	Description	Name of tracefile
Program Messages	Voicemail system execution messages	VOICE_PRGMESS.TRC
Voicemail Buffer (Jobs for Voicemail System)	Buffered records from Caracas Server to Caracas Voicemail-Link for additional processing at the voicemail system	VOICE_VOICEBUFF.TRC
Server Buffer (Jobs for Caracas Server)	Buffered records from voicemail system at Caracas Voicemail-Link for additional processing in Caracas Server	VOICE_SRVRBUFF.TRC
Voicemail Conversation	Messages from connection to Voicemail system	VOICE_CONVERSATION.TRC
Voicemail records from File (Jobs for Voicemail System)	Buffered records from Caracas at voicemail system if the connection is set via file exchange.	VOICE_FTPBUFF.TRC

## Configuring Caracas Voicemail connection

### The trace window

#### Trace window context menu

You can activate the individual trace windows available, print out the current trace window, write it to a file or delete it with the help of the context menu that can be activated in the trace window:

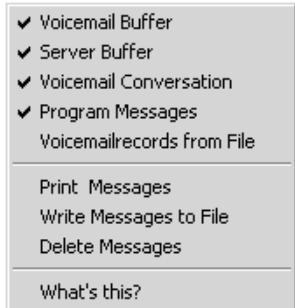


Figure 10-2 Trace window context menu in Caracas Voicemail-Link

## Configuring Caracas Voicemail connection

Testing the connection

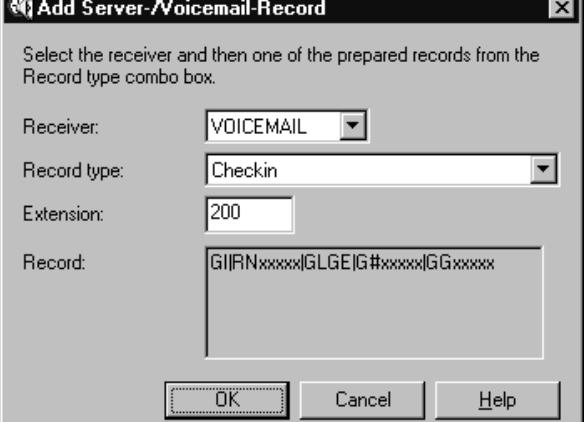
### 10.6 Testing the connection

#### Test options

Preconfigured records can be sent from Caracas Voicemail-Link to the voicemail system as well as to Caracas Server in order to test the connection.

If you want to test with more flexible values, you can work with records from an import file for the test, where the import file is to be created taking the different record types (options) into consideration.

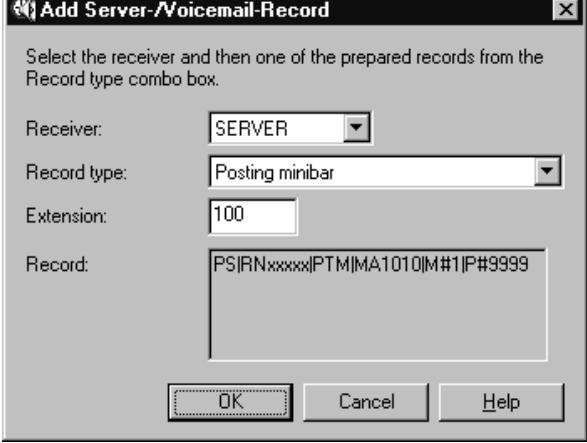
#### Test: preconfigured records to the voicemail system

Step	Procedure	Result
1	Only with connection via V.24 (RS232): Open the connection to the voicemail system using the menu item <i>Conversation - Open Conversation to Voicemail</i> or press <b>[F2]</b> .	The interface is opened, the LEDs in the status display  VOICE in the status bar change to green/yellow or green/green if the voicemail system is already active.
2	Start the test dialog under <i>Extras - Add Server/Voicemail Record</i> . Select the required receiver in the <i>Receiver</i> list field. Enter the required record type in the <i>Record type</i> field and the required extension in the <i>Extension</i> field. The created (preconfigured) record is output in the <i>Record</i> field.	Example: Checkin at Voicemail 
3	Click the <i>OK</i> button. If the record was successfully entered in the buffer, the following message appears:	
4	The record can be traced in the trace window <i>Voicemail Buffer</i> (where it is immediately read and deleted) and in <i>Voicemail Conversation</i> .	

**Configuring Caracas Voicemail connection**  
*Testing the connection*

Step	Procedure	Result
<b>Tip</b>	If you want to trace record editing closely, you can also stop the conversation to the voicemail system, create the required records and then reopen the connection. Record editing can then be easily traced.	

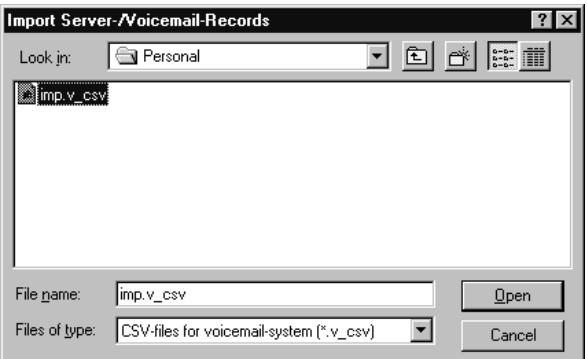
**Test: preconfigured records at Caracas Server**

Step	Procedure	Result
1	Open the DDE connection to the server via the menu item <i>Conversation - Open DDE Conversation to Caracas Server</i> .	The interface is opened, the status display  SERVER in the status bar changes to "Plug closed (green arrow)" if the server is active.
2	Start the test dialog under <i>Extras - Add Server/Voicemail-Record</i> . Select the required receiver in the <i>Receiver</i> list field. Enter the required record type in the <i>Record type</i> field and the required extension in the <i>Extension</i> field. The created (preconfigured) record is output in the <i>Record</i> field.	Example: minibar to SERVER.   Select the receiver and then one of the prepared records from the Record type combo box.  Receiver: SERVER Record type: Posting minibar Extension: 100 Record: PSIRNxxxx PTM MA1010 M#1 P#9999  OK Cancel Help
3	Click the <i>OK</i> button. If the record was successfully entered in the buffer, the following message appears:	 Record added! OK
4	The record can be traced in the trace window <i>Server Buffer</i> (immediately read and deleted).	

## Configuring Caracas Voicemail connection

### Testing the connection

#### Test: imported records to the Voicemail system / Caracas Server

Step	Procedure	Result
1	<p>You can create the import file with an editor of your choice, e.g. with the Windows editor.</p> <p>If the file contains test records for the voicemail system, the file name ends with ".v_csv". If the file contains test records for the server, the file name ends with ".b_csv".</p> <p>Please respect the appropriate record structure when entering records. The different record types are described in the documentation of the voicemail system.</p>	 <p>The file has the following structure:          &lt;date&gt;;          &lt;priority&gt;; (e.g. 4)          &lt;processing id&gt;; (always 0)          &lt;record&gt; (see description of Voicemail System)</p>
2	<p>Start the import dialog under <i>Extras - Import Server/Voicemail-Records</i>.</p> <p>Select the created import file (for the voicemail system in the example).</p>	
4	The imported records can be traced in the appropriate trace windows.	
<b>Tip</b>	<ul style="list-style-type: none"> <li>If you want to trace record editing closely, you can also stop the conversation to the voicemail system, create the required records and then reopen the connection. Record editing can then be easily traced.</li> <li>Please notice the correct date/time format in the import file. You must use the date/time format from the Regional Settings in the Control Panel. The time format has to be hh:mm:ss always.</li> </ul>	

# 11 Configuring Caracas Server / Service Agent

## Configuration in Caracas Server

No special configuration is performed for the Caracas Server component. All appropriate Caracas Server configuration parameters are set when the other components are configured.

The global system parameters are set exclusively in the Caracas Link administration program, but can be displayed in Caracas Server without having to start the Caracas Link administration program.

### 11.1 Displaying the system parameters

#### System parameter configuration

The system parameters set with the Caracas Link Administration program can be viewed in a configuration list in Caracas Server:

Step	Procedure
<b>...Activating the toolbar</b>	
1	Activate the toolbar with <i>View - Toolbar</i> (if the toolbar is not yet activated).
2	 Click on the icon (server configurations).
<b>...Activating the menu bar</b>	
1	Select the menu <i>Server - Configurations</i>

In both cases the list of Caracas system parameters appears.

## Configuring Caracas Server / Service Agent

Displaying the system parameters

### List of Caracas system parameters

The activated list shows the configuration table from the main Caracas Link database and has the following appearance:

Topic	Item	Value	Actual	Default
LINK	RecHost01	Yes	---	Yes
LINK	RecHost02	Yes	---	Yes
LINK	RecHost03	Yes	---	Yes
LINK	RecHost04	Yes	---	Yes
LINK	RecHost05	No	---	No
LINK	RecHost06	Yes	---	Yes
LINK	RecHost07	Yes	---	Yes
LINK	RecHost08	No	---	No
LINK	RecHost09	No	---	No
LINK	RecHost0B	No	---	No

Figure 11-1 Caracas system parameters

### Meaning of column entries

Column header	Description
Topic	Group to which the parameter belongs.
Item	Parameter name (original).
Value	Current value in the database.
Actual	Value with which Caracas Link is currently working. The value can differ from the value entered under VALUE if, e.g. the parameter in question was already changed in the Caracas Link Administration program and Caracas Server has not yet read the new value.
Default	Default setting of the value.



For setting that are not used by the Caracas Server, the columns *Actual* and *Default* are left blank ("---" is displayed).

## 11.2 Active applications

### What are the active applications?

All components currently logged on to Caracas Server are displayed in the list of active applications.

### Activating the list of active applications

Step	Procedure
<b>...via the toolbar</b>	
1	Activate the toolbar with <i>View - Toolbar</i> (if the toolbar is not already active).
2	 Click on the icon (active applications).
<b>...via the menu bar</b>	
1	Select the menu <i>Server - Active Applications</i>

In both cases, an overview of the current components logged on to Caracas Server appears:

### Overview of active Caracas applications

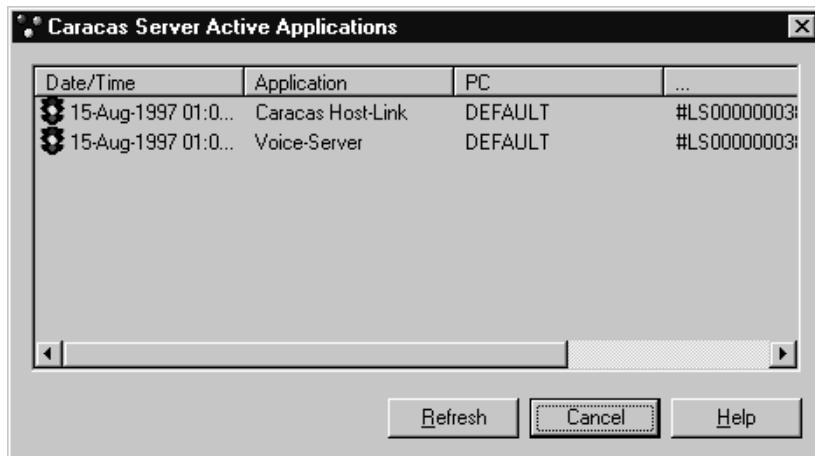


Figure 11-2 Overview of active Caracas applications

## Configuring Caracas Server / Service Agent

### Active applications

The individual columns have the following meaning:

Column overview	Description
Date/time	Date/time of logon.
Application	Component.
PC	Name of the PC on which the application is running.
...	Last message of this component.



Active applications are those which are also displayed in the status bar (Caracas Host-Link, Caracas Voicemail Link, Caracas Horizon-Link, WinCall, Caracas Service Agent).

## 11.3 Current Caracas Service Agent applications

### General

The current Caracas Link Messenger and Caracas Link Service activities can be displayed on the screen. You can activate/deactivate the relevant window using Caracas Link Scheduler.

#### Displaying the Scheduler / Messenger / Service activities:

Step	Procedure
1	Ensure that Caracas Link Scheduler is running. To do this, simply check the taskbar (default location bottom right of screen). When Caracas Link Scheduler is active, the Scheduler icon is displayed:  Symbol of the Scheduler in the Windows taskbar
2	Double-click on the icon to open the Caracas Link Scheduler window.
3	Open the Caracas Link Messenger or Caracas Link Service window by selecting the menu item <i>Extras - Activate Messenger Window</i> or <i>Extras - Activate Service Window</i> . If the relevant window is active, a check mark is shown before the menu item. When the window is inactive no check mark is visible.
4	You can view trace output data in the active Messenger / Service window.
5	To close the Caracas Link Messenger or Caracas Link Service window, select the menu items <i>Extras - Activate Messenger Window</i> or <i>Extras - Activate Service Window</i> in Caracas Link Scheduler.
6	If you wish to minimize the Caracas Link Scheduler window down to the taskbar, select the menu item <i>File - Hide</i> .

## Configuring Caracas Server / Service Agent

### Status bar display

## 11.4 Status bar display

### The Caracas Server status bar

The following connection status is shown in the status bar by Caracas Server shows:

Element	Description
	<p>Status of connection between Caracas Server and Caracas Voicemail-Link:</p> <ul style="list-style-type: none"><li>● grey LEDs:<ul style="list-style-type: none"><li>– the component is not installed</li></ul></li><li>● red LEDs:<ul style="list-style-type: none"><li>– no connection to Caracas Voicemail-Link</li></ul></li><li>● yellow LEDs:<ul style="list-style-type: none"><li>– Caracas Voicemail-Link is logged on at Caracas Server</li><li>– interface to voicemail system is not active</li></ul></li><li>● green LEDs:<ul style="list-style-type: none"><li>– Caracas Voicemail-Link is logged on at Caracas Server</li><li>– interface to voicemail system is active</li></ul></li></ul>
	<p>Status of the conversation between Caracas Server and Caracas Service Agent:</p> <ul style="list-style-type: none"><li>● red LEDs:<ul style="list-style-type: none"><li>– No conversation to Caracas Service Agent.</li></ul></li><li>● green LEDs:<ul style="list-style-type: none"><li>– Caracas Service Agent is logged on to Caracas Server</li></ul></li></ul>
	<p>Status of connection between Caracas Server and Caracas Host-Link:</p> <ul style="list-style-type: none"><li>● grey LEDs:<ul style="list-style-type: none"><li>– the component is not installed</li></ul></li><li>● red LEDs:<ul style="list-style-type: none"><li>– no connection to Caracas Host-Link</li></ul></li><li>● yellow LEDs:<ul style="list-style-type: none"><li>– Caracas Host-Link is logged on at Caracas Server</li><li>– interface to front office system is not active</li></ul></li><li>● green LEDs:<ul style="list-style-type: none"><li>– Caracas Host-Link is logged on at Caracas Server</li><li>– interface to front office system is active</li></ul></li></ul>

Element	Description
	Status of connection between Caracas Server and Caracas Horizon-Link: <ul style="list-style-type: none"> <li>● grey LEDs: <ul style="list-style-type: none"> <li>– the component is not installed</li> </ul> </li> <li>● red LEDs: <ul style="list-style-type: none"> <li>– no connection to Caracas Horizon-Link</li> </ul> </li> <li>● yellow LEDs: <ul style="list-style-type: none"> <li>– Caracas Horizon-Link is logged on at Caracas Server</li> <li>– interface to Horizon system is not active</li> </ul> </li> <li>● green LEDs: <ul style="list-style-type: none"> <li>– Caracas Horizon-Link is logged on at Caracas Server</li> <li>– interface to Horizon system is active</li> </ul> </li> </ul>
	Status of connection between Caracas Server and WinCall: <ul style="list-style-type: none"> <li>● red LEDs: <ul style="list-style-type: none"> <li>– no connection to WinCall</li> </ul> </li> <li>● yellow LEDs: <ul style="list-style-type: none"> <li>– WinCall is logged on at Caracas Server</li> <li>– interface to Hicom is not active</li> </ul> </li> <li>● green LEDs: <ul style="list-style-type: none"> <li>– WinCall is logged on at Caracas Server</li> <li>– interface to Hicom is active</li> </ul> </li> <li>● gray LEDs: <ul style="list-style-type: none"> <li>– WinCall is not installed</li> </ul> </li> </ul>

### **Status bar context menu**

Using the context menu in the status bar, you can start the *Caracas Server Active Applications* dialog box from the *Server* menu and display point and click help for the current topic:

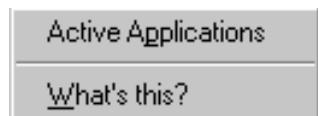


Figure 11-3     Status bar context menu

### **Help topic for status display (Quickinfo)**

If the mouse pointer is positioned more than 2 seconds on a status indicator in the status bar, a help topic is displayed (Quickinfo), which offers a short explanation of the function of the status indicator.

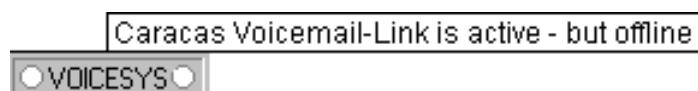


Figure 11-4     Help topic status display (quickinfo)

## 11.5 Current activities of the Caracas Link Scheduler

### General

The current activities of the Caracas Link Messenger and Caracas Link Service can be displayed on the screen. You can activate/deactivate the relevant window using Caracas Link Scheduler.

### Displaying the Scheduler / Messenger / Service activities

The Caracas Link Scheduler activity can be monitored by checking the taskbar (default location bottom right of screen). When Caracas Link Scheduler is active, the Scheduler icon is displayed:

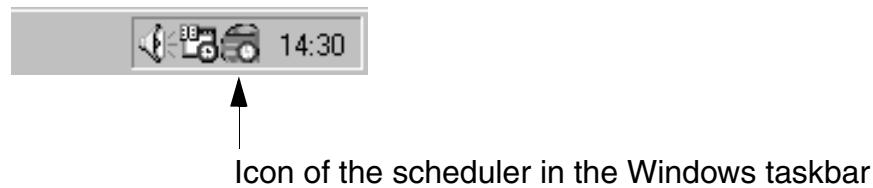


Figure 11-5 Displaying Scheduler activities

### Starting Caracas Link Scheduler

If this icon is not present on the taskbar, Scheduler is not active. To activate Scheduler select the menu item *Start - Program Files- Caracas Link - Caracas Scheduler*.

## 11.6 The trace window

### General trace functions

The general functions for opening, closing, printing, and writing trace windows/window contents to files, etc. were described in Chapter 4.

### Trace windows available in Caracas Server

<b>Trace window title/ menu item under <i>Trace</i></b>	<b>Description</b>	<b>Name of tracefile</b>
Conversation Messages	Messages from/to the server from the components Caracas Link Administration program, Caracas Host-Link, WinCall and Caracas Voicemail-Link (inter-process communication).	SERVER_CONVERSATION.TRC
Program Messages	Caracas Server execution messages	SERVER_PRGMESS.TRC
Host Buffer (Orders for Front-Office System)	Buffered records from Caracas Server to Caracas Host-Link for additional processing at the front office system	SERVER_HOSTBUFF.TRC
Server Buffer (Orders for Caracas Server)	Buffered records from the front office system via Caracas Host-Link for additional processing at the Caracas Server	SERVER_SRVRBUFF.TRC
WinCall Buffer (Orders for PBX-System)	Buffered records from Caracas Server to WinCall for additional processing at the PBX system	SERVER_WINCALLBUFF.TRC
Uncharged Calls Buffer (Calls for external call calculation)	Buffer for call records that are not charged yet by the external call calculation.	SERVER_CALLBUFF.TRC
Immediate Printout Buffer	Immediate printouts by Caracas Server	SERVER_PRINTBUFF.TRC
Voicemail Buffer (Orders for Voicemail System)	Buffered records from Caracas Server to Caracas Voicemail-Link for additional processing at the voice-mail system	SERVER_VOICEBUFF.TRC

## Configuring Caracas Server / Service Agent

### The trace window

Trace window title/ menu item under <b>Trace</b>	Description	Name of tracefile
Agent Buffer (Orders for Caracas Scheduler)	Buffered records from voicemail system to Caracas for additional processing in Caracas Service Agent	SERVER_SRVCBUFF.TRC
Horizon Buffer	Buffered records from Caracas Server to Caracas Horizon-Link for additional processing at the Callstar Horizon system.	SERVER_HORIZONBUFF.TRC

### Trace window context menu

You can activate the individual trace windows available on the screen, print out the current trace window, write it to a file or delete it with the help of the context menu that can be activated in the trace window:

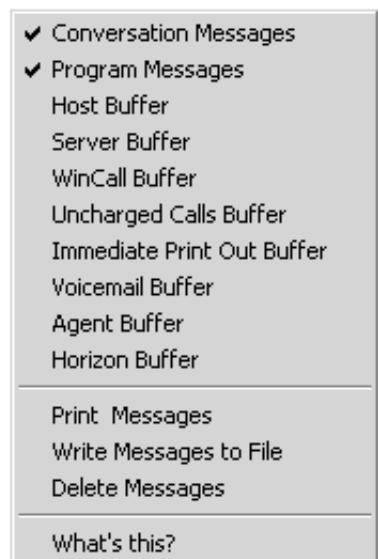


Figure 11-6 Trace window context menu in Caracas Server

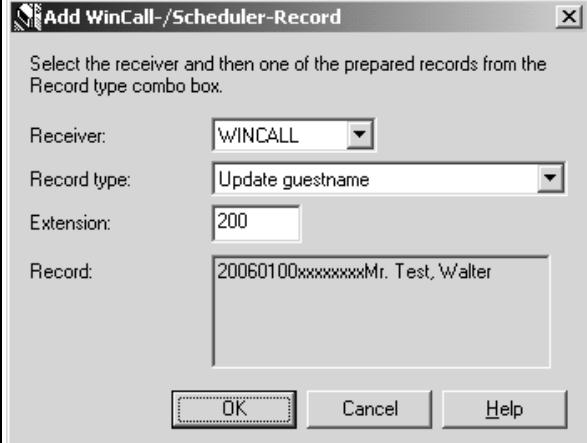
## 11.7 Testing the connection

### Test options

Preconfigured records can be sent from Caracas Server to WinCall as well as to Caracas Service Agent in order to test the connection.

If you want to test with more flexible values, you can work with records from an import file for the test, where the import file is to be created taking the different record types (options) into consideration.

#### Test: preconfigured records to WinCall

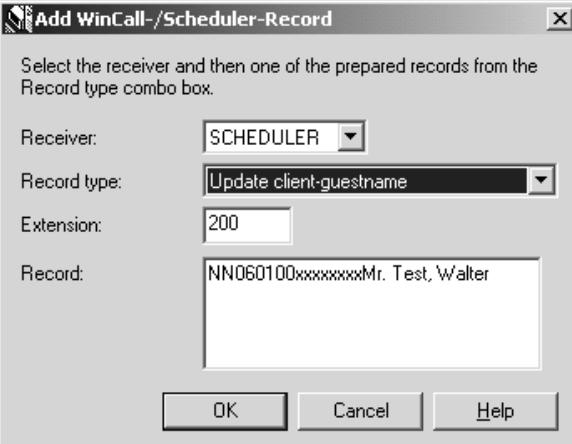
Step	Procedure	Result
1	Start the component WinCall - if not active yet.	The interface is opened, the LEDs in the status display in the status bar change to green/yellow or green/green if the voice-mail system is already active. 
2	Start the test dialog under <i>Extras - Add WinCall-/Service Record</i> . Select the required receiver in the <i>Receiver</i> list field. Enter the required record type in the <i>Record type</i> field and the required extension in the <i>Extension</i> field. The created (preconfigured) record is output in the <i>Record</i> field.	Example: Checkin at Voicemail 
3	Click the <i>OK</i> button. If the record was successfully entered in the buffer, the following message appears:	
4	The record can be traced in the trace window <i>WinCall Buffer</i> (where it is immediately read and deleted) and in <i>Conversation Messages</i> .	

## Configuring Caracas Server / Service Agent

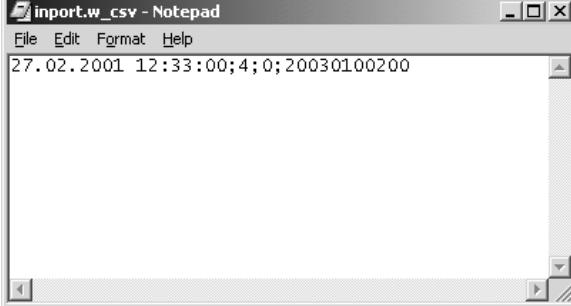
### Testing the connection

Step	Procedure	Result
<b>Tip</b>	If you want to trace record editing closely, you can also stop the conversation to the PBX, create the required records and then reopen the connection. Record editing can then be easily traced.	

### Test: preconfigured records to Caracas Service Agent (Scheduler)

Step	Procedure	Result
1	Start the component Caracas Scheduler - if not active yet.	The interface is opened, the status display in the status bar changes to green dots: 
2	Start the test dialog under <i>Extras - Add WinCall-/Scheduler Record</i> . Select the required receiver in the <i>Receiver</i> list field. Enter the required record type in the <i>Record type</i> field and the required extension in the <i>Extension</i> field. The created (preconfigured) record is output in the <i>Record</i> field.	Example: minibar to SERVER. 
3	Click the <i>OK</i> button. If the record was successfully entered in the buffer, the following message appears:	
4	The record can be traced in the trace window <i>Server Buffer</i> (immediately read and deleted).	
<b>Tip</b>	If you want to trace record editing closely, you can also stop the record processing in the Caracas Service (Scheduler), create the required records and then start the record processing again. Record editing can then be easily traced.	

### Test: imported records to the Caracas Service Agent or WinCall

Step	Procedure	Result
1	<p>You can create the import file with an editor of your choice, e.g. with the Windows editor.</p> <p>If the file contains test records for WinCall system, the file name ends with ".w_csv". If the file contains test records for the server, the file name ends with ".d_csv".</p> <p>Please respect the appropriate record structure when entering records. The different record types are described in Chapter 12, "Data flow and trace".</p>	 <p>The file has the following structure:          &lt;date&gt;;          &lt;priority&gt;; (e.g. 4)          &lt;processing id&gt;; (always 0)          &lt;record&gt; (see Chapter 12, "Data flow and trace")</p>
2	<p>Start the import dialog under <i>Extras - Import WinCall-/Scheduler-Records</i>.</p> <p>Select the created import file (for WinCall in the example).</p>	
4	The imported records can be traced in the appropriate trace windows.	
<b>Tip</b>	<ul style="list-style-type: none"> <li>• If you want to trace the WinCall records closely, you can also stop the conversation to the Hicom in WinCall, create the required records and then reopen the connection. Record editing can then be easily traced.</li> <li>• Please notice the correct date/time format in the import file. You must use the date/time format from the Regional Settings in the Control Panel. The time format has to be hh:mm:ss always.</li> </ul>	

## **Configuring Caracas Server / Service Agent**

*Testing the connection*

## 12 Data flow and trace

### 12.1 Communication within Caracas Link

**Communication between:**

- Front office system
- Caracas Host-Link
- Caracas Server

**Overview:**

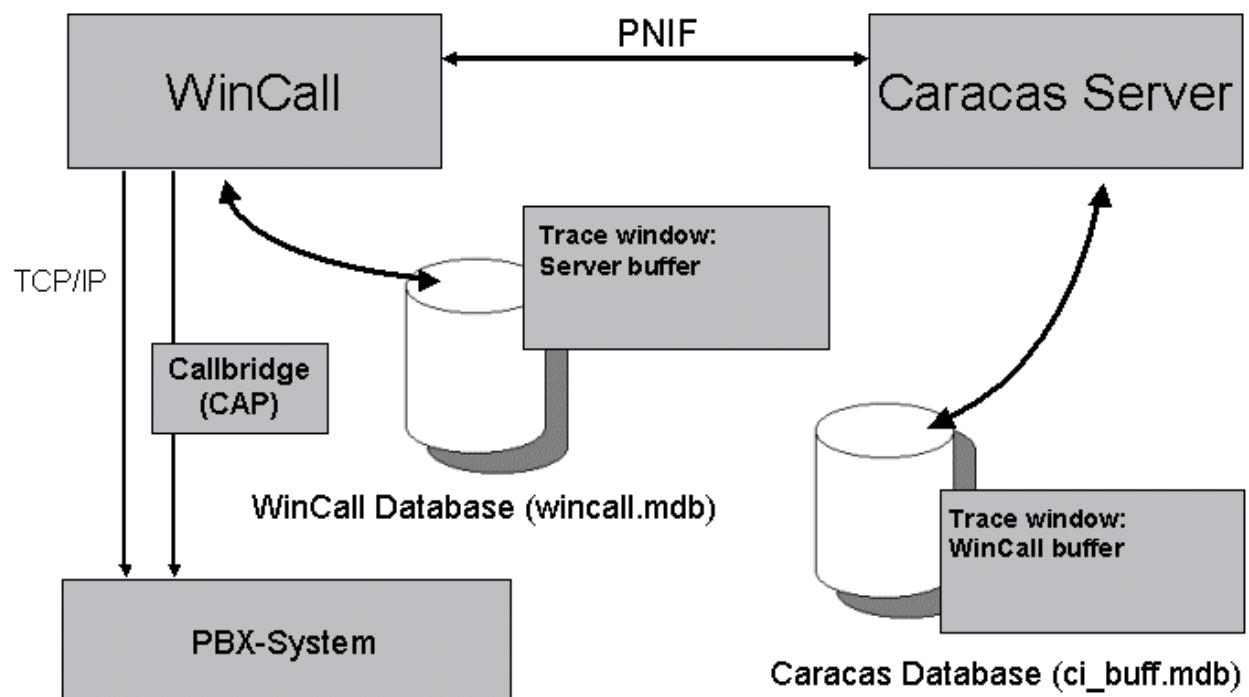


Figure 12-1 Communication overview Caracas Host-Link / Caracas Server

## Data flow and trace

### Communication within Caracas Link

#### Description:

From	To	Via	Description
Front office	Host-Link	V.24 / file	Record type description in Host protocol in chapter 13.
Host-Link	Front office		
Host-Link	Server	DDE for immediate messages, logons/logoffs	DDE-exchange record type, Description in Section 12.2.
Host-Link	Server	Server buffer (LINKANSERVER) Trace files: LINK_SRVRBUFF.TRC SERVER_SRVRBUFF.TRC	Record types identical to those relating to communication between
Server	Host-Link	Host buffer (SERVERANLINK) Trace files: LINK_HOSTBUFF.TRC SERVER_HOSTBUFF.TRC	front office and Host-Link; record type description in Host protocol in chapter 13.

**Communication between:**

- Voicemail System
- Caracas Voicemail-Link
- Caracas Server

**Overview:**

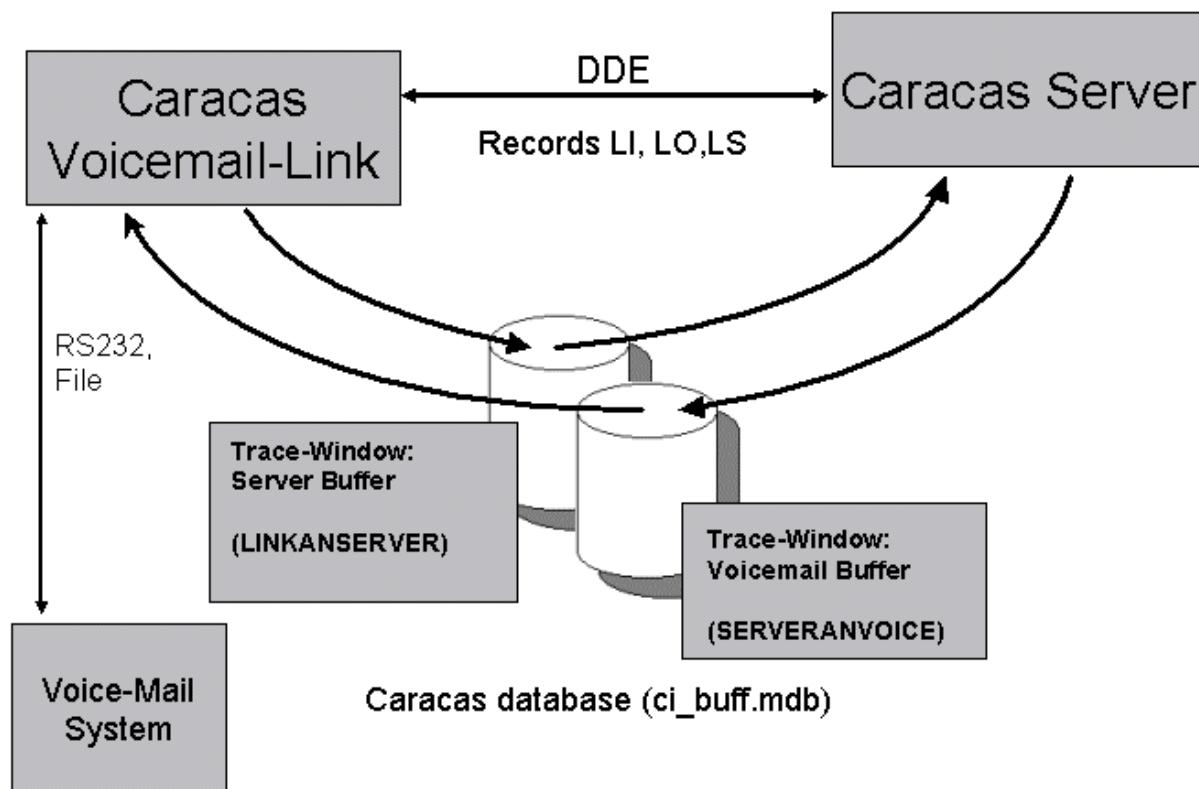


Figure 12-2 Communication overview Caracas Voicemail-Link / Caracas Server

## Data flow and trace

*Communication within Caracas Link*

### Description:

From	To	Via	Description
Voicemail	Voicemail-Link	V.24 / File	Voicemail record types
Voicemail-Link	Voicemail		
Voicemail-Link	Server	DDE for immediate messages, logons/logoffs	DDE-exchange record types Description in Section 12.2.
Voicemail-Link	Server	Server buffer (LINKANSERVER) Trace files: VOICE_SRVRBUFF.TRC SERVER_SRVRBUFF.TRC	Voicemail record types Description in voicemail system documentation.
Server	Voicemail-Link	Voicemail buffer (SERVERANVOICE) Trace files: VOICE_VOICEBUFF.TRC SERVER_VOICEBUFF.TRC	

**Communication between:**

- WinCall
- Caracas Server

**Overview:**

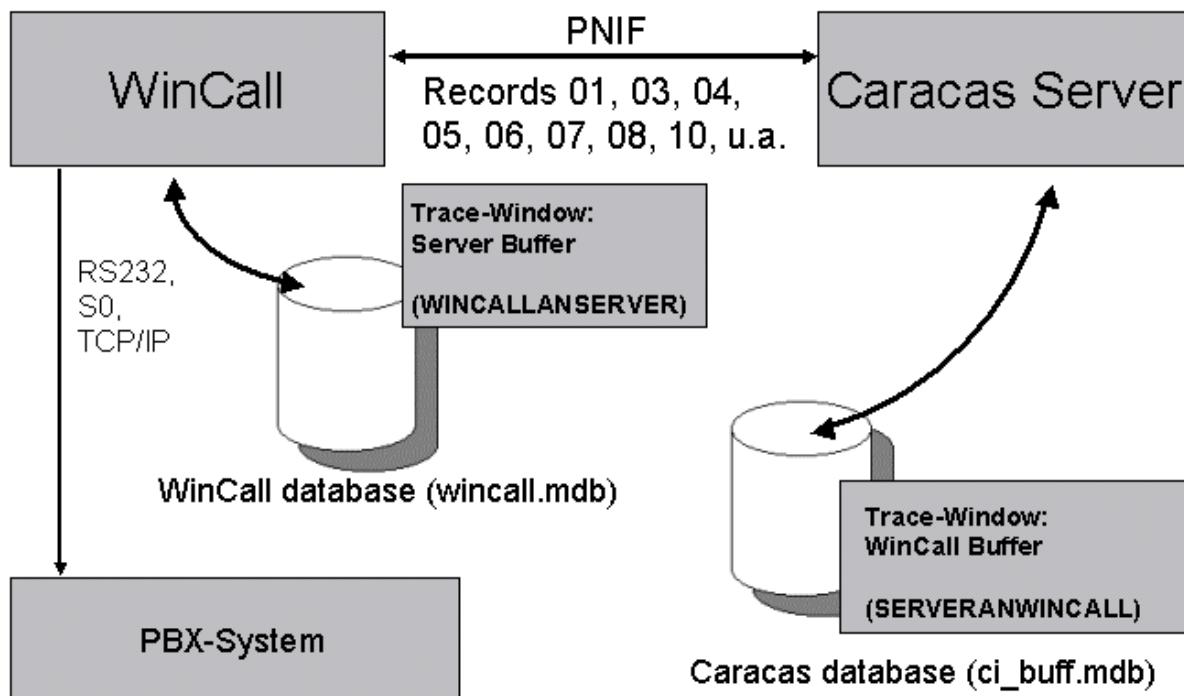


Figure 12-3 Communication Overview WinCall

**Description:**

From	To	Via	Description
WinCall	Server	PNIF interface	PNIF record types, Description in chapter 12.4.
Server	WinCall	Server Buffer Trace file: WCxxx_SRVRBUFF.TRC	PNIF records Description in chapter 12.4.
WinCall	Server		
Server	WinCall	WinCall Buffer Trace file: SERVER_WINCALLBUFF.TRC	

## Data flow and trace

*Communication via DDE*

### 12.2 Communication via DDE

#### The DDE interface

Immediate records from one component to the other and logons/logoffs are transferred via the DDE interface. Different records are used for this purpose.

#### DDE record types used

Record type	Meaning	Communication direction		
0B	Date/time	Host-Link	→	Server
0C	Record type change	Host-Link	→	Server
LI	Logon (login)	Host-Link Voicemail-Link	→	Server Server
LO	Logoff (logout)	Host-Link Voicemail-Link	→	Server Server
LS	Line status	Host-Link Voicemail-Link	→	Server Server

## Description of DDE record types

Record type	Position	Value	Description
<b>0B</b>	<b>Date/time:</b> – Host-Link → Server		
	This record type is sent by Caracas Host-Link to Caracas Server if the front office system wants to set the date and the time on the Caracas PC or on the TC system. <b>#0Bd(15)t(12)</b>		
	1	#0B	Record type
	4	d(15)	Date/time from front office Format: YYYYMMDDHHMMSSD
	19	t(12)	System time in ms
<b>0C</b>	<b>Record type change:</b> – Host-Link → Server		
	This record type is sent by Caracas Host-Link to Caracas Server if the front office system wants to activate or deactivate one of the Caracas record types. <b>#0Crrst(12)</b>		
	1	#0C	Record type
	4	rr	Record type to be activated/deactivated.
	6	s	Status – 0 deactivate – 1 activate
	7	t(12)	System time in ms
<b>LI</b>	<b>Logon:</b> – Host-Link → Server – Voicemail-Link → Server – Horizon-Link → Server		
	This record type is sent by the appropriate applications to Caracas Server if they log in at Caracas Server. <b>#LIn(20)t(12)</b>		
	1	#LI	Record type
	4	n(20)	Computer name of Link PC 20 digits left-aligned, completed with blanks
	24	t(12)	System time in ms

## Data flow and trace

*Communication via DDE*

Record type	Position	Value	Description
<b>LO</b>	<b>Logoff</b>		<ul style="list-style-type: none"> <li>– Host-Link → Server</li> <li>– Voicemail-Link → Server</li> <li>– Horizon-Link → Server</li> </ul>
			This record type is sent by the appropriate applications to Caracas Server if they log off at Caracas Server <b>#LOt(12)</b>
	1	#LO	Record type
	4	t(12)	System time in ms
<b>LS</b>	<b>Line status:</b>		<ul style="list-style-type: none"> <li>– Host-Link → Server</li> </ul>
			The record type LS is sent by Caracas Host-Link to Caracas Server if the connection status or the status of the front office system changes. The record is sent cyclically by Caracas Host-Link once every minute. <b>#LSzst(12)</b>
	1	#LS	Record type
	4	z	Status byte for connection <ul style="list-style-type: none"> <li>– 0 Off</li> <li>– 1 On</li> <li>– 9 FTP/ODBC</li> </ul>
	5	s	Voicemail system Status <ul style="list-style-type: none"> <li>– 0 logically offline</li> <li>– 1 logically online</li> </ul>
	6	t(12)	System time in ms

<b>Record type</b>	<b>Position</b>	<b>Value</b>	<b>Description</b>
<b>LS</b>	<b>Line status:</b> – Voicemail-Link → Server		
	The record type LS is sent by Caracas Voicemail-Link to Caracas Server if the connection status or the status of the voicemail system changes. The record is sent cyclically by Caracas Voicemail-Link once every minute. <b>#Szst(12)</b>		
	1	#LS	Record type
	4	z	Status byte for connection – 0 Off – 1 On – 9 FTP
	5	s	Voicemail system status – 0 logically offline – 1 logically online
	6	t(12)	System time in ms
<b>LS</b>	<b>Line status:</b> – Horizon-Link → Server		
	The record type LS is sent by Caracas Horizon-Link to Caracas Server if the connection status or the status of the Horizon system changes. The record is sent cyclically by Caracas Horizon-Link once every minute. <b>#Szst(12)</b>		
	1	#LS	Record type
	4	z	Status byte for TCP/IP connection – 0 Off – 1 On
	5	s	Voicemail system status – 0 logically offline – 1 logically online
	6	t(12)	System time in ms

## **Data flow and trace**

*Communication via Voicemail record types*

### **12.3 Communication via Voicemail record types**

#### **Communication between Caracas Server and Caracas Voicemail-Link**

In the case of communication between Caracas Server and Caracas Voicemail-Link, the records are entered in a separate buffer and then read out of this buffer by Caracas Voicemail-Link or Caracas Server for additional processing. Voicemail record types are used for this purpose.

#### **Structure of the records for linking via data transfer**

When you connect the Voicemail system via the data interface, Caracas Link uses one file to send and one to receive the data. These files can reside both on the Caracas PC and on a network PC. Make sure that the corresponding drive is active on the PC so that Caracas or the voicemail system can access it. The position of the files (path) is configured in Caracas.

#### **File type and record structure**

These data are text files, which may contain 1 - n records. The structure of the record corresponds to that of the standard record. Each record is terminated with CR/LF (0A, 0D).

#### **Description of the Voicemail record types**

The description of the voicemail record types is given in the documentation of the voicemail system.

## 12.4 Communication via PNIF record types

### Communication between Caracas Server and WinCall

In the case of communication from the server to WinCall, all records from the server to WinCall are first entered in a separate buffer and then sent to WinCall via the PNIF interface.

Communication from WinCall to the server also takes place via the PNIF interface where the records sent immediately undergo further processing at the server. This means that the records sent are converted into the corresponding records for further processing at the front office system (Host buffer).

### PNIF interface

PNIF stands for "PN interface". This involves the internal message interface definition from Siemens PN AN for communication between a main application and a Siemens PBX server (WinCall Hicom 150E/200, WinCall Hicom 300 or WinCall HiPath 4000).

### PNIF record types used

Record type	Description	Communication direction
01	Edit call charge record	WinCall → Server
03	Class of service changeover	Server → WinCall
04	Update message waiting	Server → WinCall
05	Set/reset wakeup time	WinCall → Server
06	Delete wakeup time	WinCall → Server
07	Minibar entry	WinCall → Server
08	Room status	WinCall → Server
09	Set date/time	Server → WinCall WinCall → Server
10	Wakeup	Server → WinCall
12	Language check	WinCall → Server
13	Set/reset diversion	Server → WinCall
19	Poll cycle disrupted	WinCall → Server
20	Telephone book update/guest name update	Server → WinCall
23	Code number entry for extension	Server → WinCall
24	Disconnect call	Server → WinCall
25	Do-not-disturb/Override do-not-disturb	Server → WinCall

## Data flow and trace

Communication via PNIF record types

Record type	Description	Communication direction
30	Set/delete TN in/from the call transfer group	Server → WinCall
51	TDS service request	WinCall → Server
52	Set/reset presence	WinCall → Server
53	Service request	WinCall → Server
54	Do-not-disturb/Override do-not-disturb	WinCall → Server
55	Room status advanced	WinCall → Server
56	Minibar advanced	WinCall → Server
57	Article examination	WinCall → Server
59	Room status valid	WinCall → Server
90	Logon	Server → WinCall
92	Reset record	WinCall → Server
96	Request for logoff	Server → WinCall
97	Online-Ready	Server → WinCall
98	Application status	WinCall → Server
99	Offline message	WinCall → Server Server → WinCall

## Description of PNIF record types

Type	Pos.	Length	Type	Description
<b>01</b>	<b>Edit call charge record</b> – WinCall → Server			
	Record type 01 is sent by WinCall if a call charge record was created on the telephone system. Caracas transmits this call charge record in accordance with the interface description to the front office system. <b>0100011999020412330012374500200 0000502012661457  000024010 47125548</b>			
1	2	N		Record type 01 for call charge record
3	2	N		Application number 00 for WinCall
5	2	N		System reference number (always 01 at present)
7	8	N		Call start date Format YYMMDD
15	6	N		Call start time Format HHMMSS
21	6	N		Call end time Format HHMMSS
27	2	N		Id of default extension group, with leading zeros (00 if not existing)
29	8	N		Extension left-aligned, completed with blanks
37	5	N		Number of units, leading zeros
42	24	A		Destination number, left-aligned, completed with blanks
66	1	A		Destination number code
67	6	N		Duration in seconds, leading zeros
73	6	A		Trunk group (line access digit) left-aligned, completed with blanks
79	12	N		Code number left-aligned, completed with blanks

## Data flow and trace

Communication via PNIF record types

Type	Pos.	Length	Type	Description
03	<b>Class of service changeover</b> – Server → WinCall			
	Record type 03 is sent from Caracas to WinCall if an extension is to be assigned a new class of service (internal traffic restriction group). <b>03060100200 007104</b>			
	1	2	N	Record type 03 for Class of service changeover
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	3	N	COS right-aligned, completed with leading zeros
	20	1	N	COS code – 0: alternative COS e.g. after check-out – 1: basic COS e.g. after check-in
	21	2	N	Language id, with leading zeros 00 No language / default 01 American 02 Brazilian 03 Danish 04 German 05 English 06 Estonian 07 Finnish 08 French 09 Greek 10 Indonesian 11 Italian 12 Catalan 13 Croatian 14 Malaysian 15 Dutch 16 Norwegian 17 Polish 18 Portuguese 19 Rumanian 20 Russian Cyrillic 21 Russian Latin 22 Sweden 23 Slovakian 24 Slovenian 25 Spanish 26 Thai 27 Czech 28 Turkish 29 Hungarian 30...50 [reserved]\}

Type	Pos.	Length	Type	Description
<b>04</b>	<b>Set/reset message waiting</b> – Server → WinCall			
	Record type 04 causes WinCall to activate/deactivate message waiting at an extension. <b>0406010100200 000</b>			
	2	N	N	Record type 04 for message waiting
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
	7	2	N	Message type – 01: LED on – 02: LED off
	9	2	N	Id of default extension group, with leading zeros (00 if not existing)
	11	8	N	Extension left-aligned, completed with blanks
	19	3	N	COS for code reversion (currently "000")
<b>05</b>	<b>Set/reset wakeup time</b> – WinCall → Server			
	Record type 05 is sent by WinCall to Caracas if a wakeup time is to be entered for an extension or if a wakeup request could not be performed by WinCall. <b>05000100200 07:001</b>			
	1	2	N	Record type 05 for processing wakeup time
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	5	A	Time Format HH:MM
	22	1	N	Mode – 0: reset – 1: enter

## Data flow and trace

Communication via PNIF record types

Type	Pos.	Length	Type	Description
<b>06</b>	<b>Delete wakeup time</b> – WinCall → Server			
	Record type 06 is sent from WinCall if a wakeup request was successfully performed or the guest has deleted the wakeup request at the guest telephone.			
	<b>06000100200 0</b>			
	1	2	N	Record type 06 for delete wakeup time
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	1	N	Delete code – 0: delete active request – 1: delete all requests
<b>07</b>	<b>Minibar entry</b> – WinCall → Server			
	Record type 07 is sent by WinCall if the minibar entry is recorded via an extension. The entry of the article data takes place via the TDS service.			
	<b>07000100200 101001</b>			
	1	2	N	Record type 07 for minibar entry
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	6	N	Article number left-aligned, completed with blanks

Type	Pos.	Length	Type	Description
<b>08</b>	<b>Room status</b> – WinCall → Server			
	Record type 08 is sent by WinCall to Caracas if the room status is entered via an extension. The entry takes place via the TDS service. <b>08000100200 01</b>			
	1	2	N	Record type 08 for room status
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	2	N	Status right-aligned with leading zeros – 01: clean – 02: not clean – 03: unassignable – ... (etc.) Caracas only uses statuses 01 to 09 since the status is later converted to single-digit numbers
<b>09</b>	<b>Set date / time on PBX</b> – Server → WinCall – WinCall → Server			
	Record type 09 is sent from Caracas to WinCall so that WinCall can set/synchronize the time on the PBX system. If the record type is received from WinCall, a valid time is already set on the PC. <b>09060119990403122300</b>			
	1	2	N	Record type 09 for date/time
	3	2	N	Application number 06 for Caracas / 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	8	N	Date Format YYYYMMDD
	15	6	N	Time Format HHMMSS

## Data flow and trace

Communication via PNIF record types

Type	Pos.	Length	Type	Description
<b>10</b>	<b>Wakeup</b> – Server → WinCall			
				Record type 10 is sent from Caracas to WinCall if a wakeup call is to be applied to an extension. <b>10060100200 0</b>
	1	2	N	Record type 10 for wakeup
	3	1	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	1	N	Language – 0: Basic language – 0: German – 1: English – 2: French
<b>12</b>	<b>Language check</b> – WinCall → Server			
				The record type 12 is sent by WinCall to the server if WinCall must calculate the current language setting for an extension. <b>12000100200</b>
	1	2	N	Record type 12 for language check
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks

Type	Pos.	Length	Type	Description
<b>13</b>	<b>Set / reset diversion</b> – Server → WinCall			
	Record type 13 is sent from Caracas to WinCall if a (virtual) call number is to be assigned to a guest extension. <b>130601100210 00200</b>			
	1	2	N	Record type 13 for diversion
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
	7	1	N	Function – 0: reset – 1: set
	8	2	N	Extension group Id (source), with leading zeros
	10	8	N	Extension (source) left-aligned, completed with blanks
	18	2	N	Extension group Id (destination), with leading zeros
	20	8	N	Extension (destination) left-aligned, completed with blanks
<b>19</b>	<b>Poll cycle disrupted</b> – WinCall → Server			
	Record type 19 is sent by WinCall to Caracas if the line to the telephone system (Hicom) is faulty. <b>190</b>			
	1	2	N	Record type 19 for cycle fault
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)

## Data flow and trace

Communication via PNIF record types

Type	Pos.	Length	Type	Description
<b>20</b>	<b>Telephone book update/guest name update</b> – Server → WinCall			
	Record type 20 is sent by Caracas to WinCall if the guest name in the telephone system is to be changed (i.e. after a check-in/check-out or a change of name). <b>20060100200 Miller, John</b>			
	1	2	N	Record type 20 for guest name
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	max. 40	A	Text or guest name
<b>23</b>	<b>Code number entry for extension</b> – Server → WinCall			
	Record type 23 is sent by Caracas to WinCall to enter a code number (PIN) on the PBX system. <b>230601100200 081597 0071</b>			
	1	2	N	Record type 23 for Code number entry for extension
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
	7	1	N	Function: – 0: delete – 1: set
	8	2	N	Id of default extension group, with leading zeros (00 if not existing)
	10	8	N	Extension left-aligned, completed with blanks
	18	12	N	PIN number left-aligned, completed with blanks
	30	3	N	COS right-aligned with leading zeros
	31	1	N	Mode – 0: not authorized – 1: always authorized – 2: at this extension only

**Data flow and trace**  
*Communication via PNIF record types*

Type	Pos.	Length	Type	Description
<b>24</b>	<b>Disconnect call</b> – Server → WinCall			
	Record type 24 is sent by Caracas to WinCall if an ongoing telephone call is to be disconnected (Hicom 300 only). <b>24060100200</b>			
	1	2	N	Record type 24 for call cleardown
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
<b>25</b>	<b>Do-not-disturb/Override do-not-disturb</b> – Server → WinCall			
	This record type is sent from Caracas to WinCall if the DND feature is to be activated at an extension. Unlike record type 21, the telephone feature is actually switched over (rather than simply changing the class of service) with this record type. (Hicom 300 and Hicom 150E Office only) <b>25060100200 11</b>			
	1	2	N	Record type 25 for activating feature
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	1	N	Function – 0: off – 1: on – 2: all off
	18	1	N	Feature – 1: Do not disturb – 2: Call forwarding – 3: Caller list
	19	30	N	(unused)

## Data flow and trace

*Communication via PNIF record types*

Type	Pos.	Length	Type	Description
30				<b>Setting stations in the call transfer group / Deleting stations from the call transfer group</b> – Server → WinCall
				Record type 30 is sent from Caracas to WinCall if the station is to be set in or deleted from a call transfer group. (Hicom 300 only)
				<b>300601100200 00310</b>
1	2	N		Record type 30 for station to/from call transfer group
3	2	N		Application number 06 for Caracas
5	2	N		System reference number (always 01 at present)
7	1	N	Function	<ul style="list-style-type: none"> <li>– 0: delete from call transfer group</li> <li>– 1: set in call transfer group</li> </ul>
8	2	N		Extension group Id (source new) with leading zeros (00 if not existing)
10	8	N		Extension (source new), left-aligned, completed with blanks
18	2	N		Extension group Id (source old) with leading zeros (00 if not existing)
20	8	N		Extension (source old), left-aligned, completed with blanks

Type	Pos.	Length	Type	Description
<b>51</b>	<b>TDS service request</b> – WinCall → Server			
	Record type 51 is sent by WinCall to determine the suitability of a service for the extension in question. WinCall is thus in a position to respond to the data input at the telephone with an appropriate confirmation tone or a language output and to lock particular inputs. This record type is used for all services that can be selected via the telephone (before WinCall), e.g. a wakeup time can be entered via a guest telephone, the request is made at Caracas with this record type. This record type avoids the double configuration of features in both programs. <b>5100010200200</b>			
1	2	N		Record type 51 for TDS service request
3	2	N		Application number 00 for WinCall
5	2	N		System reference number (always 01 at present)
7	2	N		Service number – 01: Room status – 02: Minibar – 03: Wakeup service – 04: Presence – 05: Absence – 06: Do-not-disturb – 07: Override do-not-disturb – 08: Service input
9	2	N		Id of default extension group, with leading zeros (00 if not existing)
11	8	N		Extension left-aligned, completed with blanks

## Data flow and trace

Communication via PNIF record types

Type	Pos.	Length	Type	Description
<b>52</b>	<b>Set / reset presence</b> – WinCall → Server			
	Record type 52 receives Caracas from WinCall if a presence is set or reset at the telephone, i.e. the staff member logs on and off with this function for a room. <b>52000100200 14712448</b>			
	1	2	N	Record type 52 for presence
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	1	N	Status – 0: Absence – 1: Presence
	18	10	N	Personnel number left-aligned, completed with blanks
<b>53</b>	<b>Service request</b> – WinCall → Server			
	Record type 53 is sent from WinCall to Caracas if additional hotel services are recorded for a guest via an extension (e.g. use of sauna, swimming pool, etc.). <b>53000100200 00440 201001</b>			
	1	2	N	Record type 53 for service request
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension 1left-aligned, completed with blanks
	17	2	N	Group ID the recording extension with leading zeros; if not available, the 00
	19	8	N	Recording extension left-aligned, completed with blanks
	27	6	N	Service number left-aligned, completed with blanks

Type	Pos.	Length	Type	Description
<b>54</b>	<b>Do-not-disturb/Override do-not-disturb</b> – WinCall → Server			
	Record type 54 is sent from WinCall to Caracas if the guest selected the TDS service "Do-not-disturb" or "Override do-not-disturb" at his/her telephone. Caracas sends record type 03 (COS changeover) - or 25 (Do not Disturb / Do Disturb) as its response. <b>54000100200 10</b>			
	1	2	N	Record type 54 for Do-not-disturb
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	1	N	Status – 1: Do not Disturb
	18	1	N	Switch Id: – 0: off – 1: on
<b>55</b>	<b>Room status advanced</b> – WinCall → Server			
	Record type 55 is sent from WinCall to Caracas if the room status is entered at the telephone with the personnel number. The structure of this record type is identical to record type 08 up to the personnel number. <b>55000100200 0347114521</b>			
	1	2	N	Record type 55 for room status advanced
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	2	N	Status right-aligned with leading zeros – 01 - 09: see record type 08
	19	10	N	Personnel number left-aligned, completed with blanks

## Data flow and trace

Communication via PNIF record types

Type	Pos.	Length	Type	Description
<b>56</b>	<b>Minibar advanced</b> – WinCall → Server			
	Record type 56 is sent from WinCall to Caracas if the minibar article (entry) is entered at the telephone with the personnel number. The structure of this record type is identical to record type 07 up to the personnel number. <b>56000100200 10100147115421</b>			
	1	2	N	Record type 56 for Minibar entry advanced
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Id of default extension group, with leading zeros (00 if not existing)
	9	8	N	Extension left-aligned, completed with blanks
	17	6	N	Article number left-aligned, completed with blanks
	23	10	N	Personnel number left-aligned, completed with blanks
<b>57</b>	<b>Article examination</b> – WinCall → Server			
	Record type 57 is sent by WinCall to Caracas when entering the minibar entry at the telephone. The validity of an article is requested via this record type. <b>570001201001</b>			
	1	2	N	Record type 57 for article valid
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	6	N	Article number left-aligned, completed with blanks
<b>59</b>	<b>Room status examination</b> – WinCall → Server			
	Record type 59 is sent by WinCall to Caracas when entering the room status entry at the telephone. The validity of an room status is requested via this record type. <b>59000103</b>			
	1	2	N	Record type 59 for room status valid
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	2	N	Room status left-aligned, completed with blanks

Type	Pos.	Length	Type	Description
<b>90</b>	<b>Logon at main application</b> – Server → WinCall			
	Record types 90 and 97 are sent together (immediately after each other) by Caracas to WinCall if Caracas was started and is ready to process records from WinCall. Caracas waits for record type 98 as an answer. <b>900601121xxxxxxxxx</b>			
	1	2	N	Record type 90 for logon
	3	2	N	Application number 60 Caracas
	5	2	N	System reference number (always 01 at present)
	7	2	N	Application id
	9	1	N	Application status – 0: secondary application – 1: main application
	10	10	N	Application handle of the main window
<b>92</b>	<b>Reset record</b> – WinCall → Server			
	Record type 92 is sent from WinCall to Caracas if an AMHOST service (ITR changeover, guest name entry) cannot be implemented by WinCall on account of a Hicom crash. As soon as the AMHOST service can be contacted once more and WinCall recognizes that a record was not fully implemented, this record is reset via record type 92 at Caracas and transferred again. <b>920001xxxxxxxxxxxx</b>			
	1	2	N	Record type 92 for reset
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	7	dyn.	A	record to be reset, dynamic length

## Data flow and trace

Communication via PNIF record types

Type	Pos.	Length	Type	Description
<b>96</b>	<b>Request for logoff</b> – Server → WinCall			
	Record type 96 is sent by Caracas to WinCall if the program is to be quit. Basically, this record type introduces the logoff procedure for both applications if the user wants to quit Caracas (menu <i>File - Exit</i> ). Caracas then waits for the automatic log off of WinCall via record type 99. Caracas is then quit also. If record type 99 is not received from WinCall, Caracas is quit after approx. 30 seconds and Caracas announces that the program end at WinCall via record type 99. Moreover, WinCall sends record type 99 if the program is logged off via the WinCall menu. <b>960601</b>			
	1	2	N	Record type 96 for request for logoff
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)
<b>97</b>	<b>Online-Ready</b> – Server → WinCall			
	Record types 90 and 97 are sent together (immediately after each other) by Caracas to WinCall if Caracas was started and is ready to process records from WinCall. Caracas waits for record type 98 as an answer. <b>970601</b>			
	1	2	N	Record type 97 for online readiness
	3	2	N	Application number 06 for Caracas
	5	2	N	System reference number (always 01 at present)

Type	Pos.	Length	Type	Description
<b>98</b>	<b>Application status</b> – WinCall → Server			
	Record type 98 is sent by WinCall to Caracas as a status message via the service status or the status of the V.24 connection to Hicom. <b>980001110111000000</b>			
	1	2	N	Record type 98 for status message
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)
	6	1	N	Error status of serial application / interface – 0: not active – 1: active
	7	1	N	Error status of services – 0: not active – 1: at least 1 service active
	8	10	N	Status of the Services (ORed LONG value)
<b>99</b>	<b>Offline message</b> – WinCall → Server – Server → WinCall			
	Record type 99 is sent by WinCall to Caracas if the program is quit. In addition, this record type is sent from Caracas to WinCall in connection with record type 96 as part of the logoff procedure. <b>990001</b>			
	1	2	N	Record type 99 for offline message
	3	2	N	Application number 00 for WinCall
	5	2	N	System reference number (always 01 at present)

## Data flow and trace

### Examples of trace files

## 12.5 Examples of trace files

### Example: server overall trace

```
..  
C:\My Documents\SERVER_OVERALL.TRC ***  
[HOS] MainThread: no server-records in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] BuffThread: [1] print-record(s) in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] PrintThread: [1] print-record(s) in queue...  
[HOS] BuffThread: no host-records in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] TimeThread: checking 0 - 600 - t - 1  
[HOS] TimeThread: checking 1 - 700 - t - 2  
[HOS] MainThread: no server-records in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] BuffThread: no server-records in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] MainThread: no server-records in queue...  
[PRG] LINK: [#LS11000005304999]  
[PRG] ACK  
[HOS] BuffThread: no wincall-records in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] PrintThread: [1] print-record(s) in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] BuffThread: no client/server-records in queue...  
[HOS] TimeThread: checking 0 - 600 - t - 1  
[HOS] TimeThread: checking 1 - 700 - t - 2  
[HOS] MainThread: no server-records in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] BuffThread: [1] print-record(s) in queue...  
[HOS] MainThread: no server-records in queue...  
[HOS] MainThread: no server-records in queue...  
[PRG] LINK: [#LS01000005331455]  
[PRG] ACK  
[HOS] MainThread: no server-records in queue...  
[HOS] BuffThread: no host-records in queue...
```

**.Example: Caracas Host-Link overall trace**

```
...
C:\My Documents\LINK_OVERALL.TRC ***
[PRG] EOT in mode 1...
[PRG] [STX]171601 00000000011029720031 [ETX]
[PRG] ACK in mode 0...
[PRG] EOT
[PRG] ENQ
[PRG] EOT in mode 1...
[PRG] [STX]141601 00000000020051 [ETX]
[PRG] ACK in mode 0...
[PRG] EOT
[PRG] ENQ
[PRG] EOT in mode 1...
[PRG] [STX]171601 00000000011029720051 [ETX]
[PRG] ACK in mode 0...
[PRG] EOT
[PRG] ENQ
[FTP] BuffThread: [13] host-record(s) in queue...
[PRG] EOT in mode 1...
[PRG] [STX]171601 00000000011029720051 [ETX]
[PRG] ACK in mode 0...
[PRG] EOT
[PRG] ENQ
[PRG] EOT in mode 1...
[PRG] [STX]141601 00000000020101 [ETX]
[PRG] ACK in mode 0...
[PRG] EOT
[PRG] ENQ
[PRG] EOT in mode 1...
[PRG] [STX]141608 00000000020111 [ETX]
[PRG] ACK in mode 0...
[PRG] EOT
[PRG] ENQ
[PRG] EOT in mode 1...
[PRG] [STX]171601 00000000011029720101 [ETX]
[PRG] ACK in mode 0...
[PRG] EOT
[PRG] ENQ
...
...
```

## Data flow and trace

*Examples of trace files*

### Example: Caracas Host-Link trace V.24 (RS232/) interface

```
...
C:\My Documents\LINK_CONVERSATION.TRC ***
- open communications device: [COM4]
- communications device settings: [[9600,0,8,0]
[0,0,2048,1024,0x11,0x13,0]
[0,0,0,0]]
- communications device timer: [-1,0,0,10,500]
- open communications device: conversation successfully opened!
- init connection...
< EOT
< ENQ
> EOT in mode 99...
< ENQ
> EOT in mode 1...
< [STX]141601 000000000017001[ETX]
> ACK in mode 0...
< EOT
< ENQ
> EOT in mode 1...
< [STX]171601 000000000011029717001[ETX]
- Connection closed!
```

### **Example: Caracas Voicemail-Link program messages**

```
...
C:\My Documents\VOICE_PRGMESS.TRC ***
- BuffThread: [5] hoerbar-record(s) in queue...
- BuffThread: no voice-records in queue...
- STOP-Thread activated...
- V24-Thread suspended...
- StopThread: Thread suspended...
< SERVER: [#LS00000032475445]
- connection to server not established...
- BuffThread: [5] hoerbar-record(s) in queue...
- BuffThread: no voice-records in queue...
- BuffThread: [5] hoerbar-record(s) in queue...
- V24-Thread activated...
< SERVER: [#LS10000033908267]
- connection to server not established...
- BuffThread: no voice-records in queue...
- BuffThread: [6] hoerbar-record(s) in queue...
- BuffThread: no voice-records in queue...
- BuffThread: [6] hoerbar-record(s) in queue...
- BuffThread: no voice-records in queue...
- BuffThread: [5] hoerbar-record(s) in queue...
- BuffThread: no voice-records in queue...
- BuffThread: [1] hoerbar-record(s) in queue...
- ExecutesQL: INSERT INTO SERVERANVOICE (ZEIT, PRIO, TXKZ, DATENSATZ) VALUES ('00:00:00',0,0,'LA|DA970320|TI183825|')
- BuffThread: no voice-records in queue...
- BuffThread: no hoerbar-records in queue...
- BuffThread: no voice-records in queue...
- BuffThread: no hoerbar-records in queue...
```

## Data flow and trace

Examples of trace files

### Example: Caracas Voicemail-Link trace V.24 (RS232) interface

```
...
- no transmission...
< [STX]PA|RN101|ASOK|P#2001|[ETX]
> ACK in mode 0...
- no transmission...
< [STX]LA|DA970321|TI161113|[ETX] '
> ACK in mode 0...
- no transmission...
- no transmission...
< [STX]WR|RN101|DA000000|TI080000|[ETX]
> ACK in mode 0...
- no transmission...
< [STX]WC|RN101|DA000000|TI080000|[ETX]
> ACK in mode 0...
- no transmission...
> [STX]LE|DA970321|TI161142|[ETX]
< ACK
- no transmission...
> [STX]LS|DA970321|TI161208|[ETX]
< ACK
- no transmission...
< [STX]LA|DA970321|TI161209|[ETX]
> ACK in mode 0...
< ACK
> [STX]LA|DA970321|TI161212|[ETX]
< ACK
> [STX]DR|DA970321|TI161212|[ETX]
< ACK
- no transmission...
< [STX]WC|RN101|DA000000|TI080000|[ETX]
> [STX]LS|DA970321|TI161244|[ETX]
< ACK
> [STX]LS|DA970321|TI161244|[ETX]
< ACK
> [STX]LD|DA970321|TI161244|V#1.0|IFVM|[ETX]
< ACK
> [STX]LR|RIGI|FLRNG#GLGGGSSF|[ETX]
< ACK
...
...
```

## 12.6 Editing logs (logbooks)

### General

The contents of the event log in Caracas for logon/logoff, component startup, etc. as well as the error log can be loaded in the Caracas Link administration program. It is possible to selectively display the event log (user ADMIN) and the error log (for technicians only) on the screen for the purpose of improved diagnosis or to print out log contents. The schedule automatically reduces the log volumes.

### Edit options

Both logs can be output and either fully or partly deleted (see below). The event log can, moreover, be selectively displayed.

### Displaying error logs

To display the error log, activate the menu item *Edit - Evaluate Error Log*:

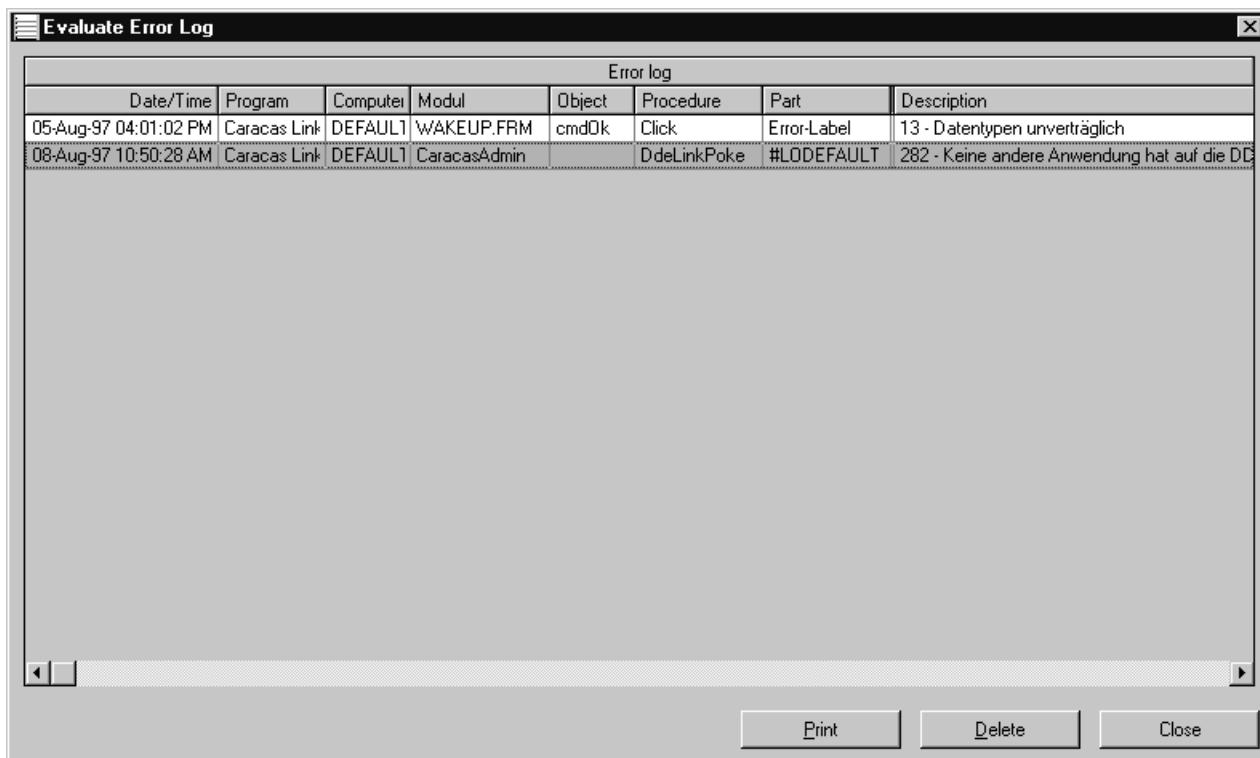


Figure 12-4 Evaluation of the Error Log

## Data flow and trace

### Editing logs (logbooks)

#### Displaying event logs

To display the error log, activate the menu item *Edit - Evaluate Event Log*:

Event log				
Date/time	Section	Computer	Program	Description
15-Aug-97	USR	DEFAULT	Caracas Server	Window: Caracas Server Active Applications closed!
15-Aug-97	USR	DEFAULT	Caracas Server	User has logged off!
15-Aug-97	SYS	DEFAULT	Caracas Server	TIME-Thread cancelled!
15-Aug-97	SYS	DEFAULT	Caracas Server	MAIN-thread cancelled!
15-Aug-97	USR	DEFAULT	Caracas hörBAR-Link	User has logged off!
15-Aug-97	DBF	DEFAULT	Caracas Link Administration	MS Access databases opened!
15-Aug-97	SYS	DEFAULT	Caracas Link Administration	Program Caracas Link Administration activated !
15-Aug-97	USR	DEFAULT	Caracas Link Administration	Window Welcome activated!
15-Aug-97	DDE	DEFAULT	Caracas Link Administration	Conversation to Caracas Server not established.
15-Aug-97	USR	DEFAULT	Caracas Link Administration	User DEFAULT logged on!
15-Aug-97	USR	DEFAULT	Caracas Link Administration	Window Welcome closed!
15-Aug-97	DDE	DEFAULT	Caracas Link Administration	Conversation to Caracas Server not established.
15-Aug-97	USR	DEFAULT	Caracas Link Administration	Window Evaluate Event Log activated!
15-Aug-97	DDE	DEFAULT	Caracas Link Administration	Conversation to Caracas Server not established.
15-Aug-97	USR	DEFAULT	Caracas Link Administration	Window Evaluate Event Log closed!
15-Aug-97	USR	DEFAULT	Caracas Link Administration	Window Evaluate Error Log activated!
15-Aug-97	USR	DEFAULT	Caracas Link Administration	Window Evaluate Error Log closed!

Figure 12-5 Evaluating the Event Log

## Selecting the event log display

When displaying the event log, you can select specific entry types, a program (component) or a computer for the display:

<b>Step</b>	<b>Procedure</b>
1	Select the required entry type from the <i>Type</i> list field. The possible types are listed below. You can only choose one of the types currently available in the event log.
	[ALL] All entries are displayed.
	BATCH Errors or messages from the timer in the Caracas Service
	DBF Database entries: errors or messages that occur when entering a record in a database.
	DDE Errors and messages during DDE connection from/to the server
	FTP Errors and messages during data exchange with the front office system via file conversation (via FTP) in Caracas Host-Link
	HAS Records from Caracas Horizon-Link to Caracas Server.
	LAS Records from Caracas Host-Link to Caracas Server
	MSG Records from WinCall to Caracas Server and from Caracas Server to WinCall
	PRT Errors and messages in connection with outputs to a printer
	REG Errors or messages in the case of functions with the Windows registry
	SAH Records from Caracas Server tot caracas Horizon-Link.
	SAL Records from Caracas Server to Caracas Host-Link
	SAV Records from Caracas Server to Caracas Voicemail-Link
	SYS General system messages, e.g. end of program
	TCP Errors and messages from the TCP/IP conversation between Caracas Host-Link and the Front Office system or Caracas Horizon-Link and the Horizon System.
	USR Error in connection with user actions, e.g. in the case of logon/logoff
	V24 Errors or messages from a component that is communicating via a V.24 connection (Caracas Host-Link, Caracas Voicemail-Link)
	XML Errors and messages from the XML record processing.
	WUP (Non-) implemented, input or deleted wakeup calls
2	Select the required components from the <i>Program</i> list field.
3	Select the required computer name whose log file is to be displayed from the <i>Computer</i> list field. Since all components are expected by default on a PC in the current version of Caracas Link, no different computer names are available here.

## Data flow and trace

### Editing logs (logbooks)

- |   |  |
|---|--|
| 4 | Confirm the selection by clicking the <i>Refresh</i> button. The log is displayed taking the selection into account. |
|---|--|

#### Example of a selected display of an event log:

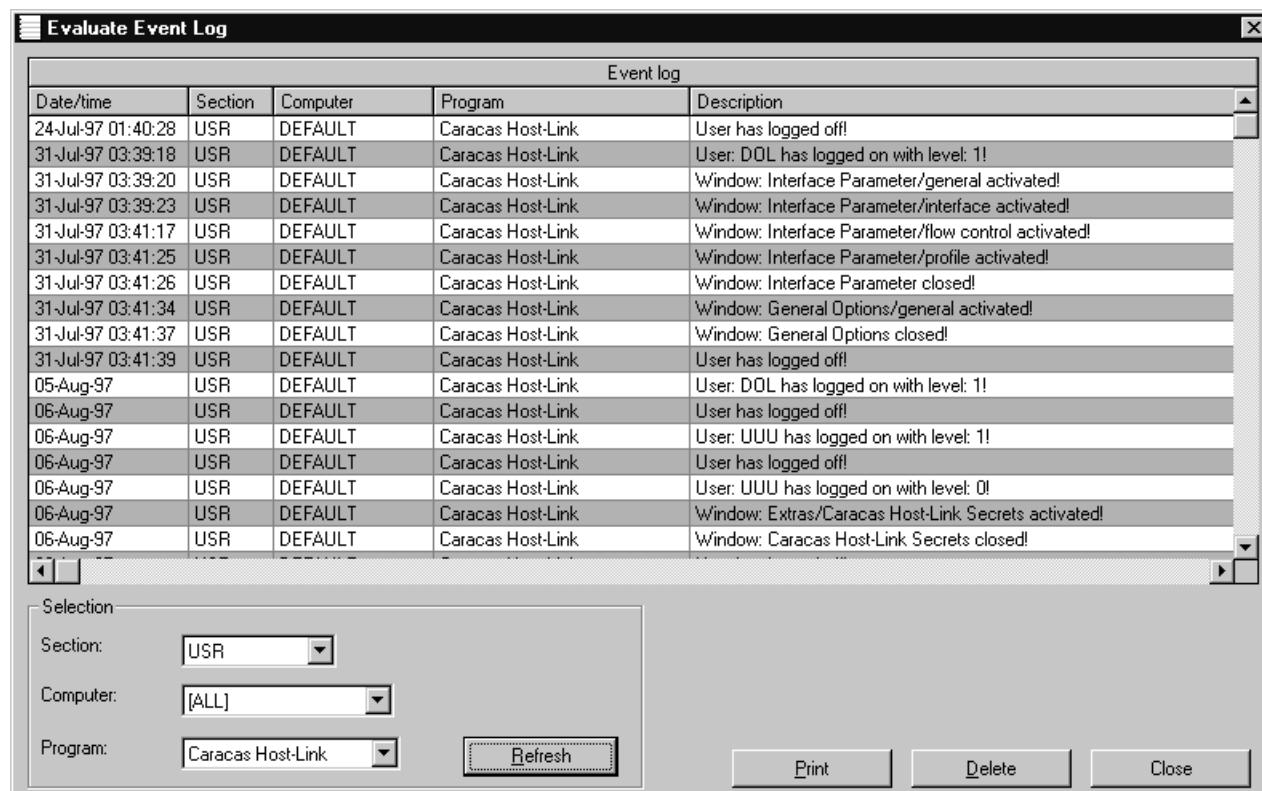
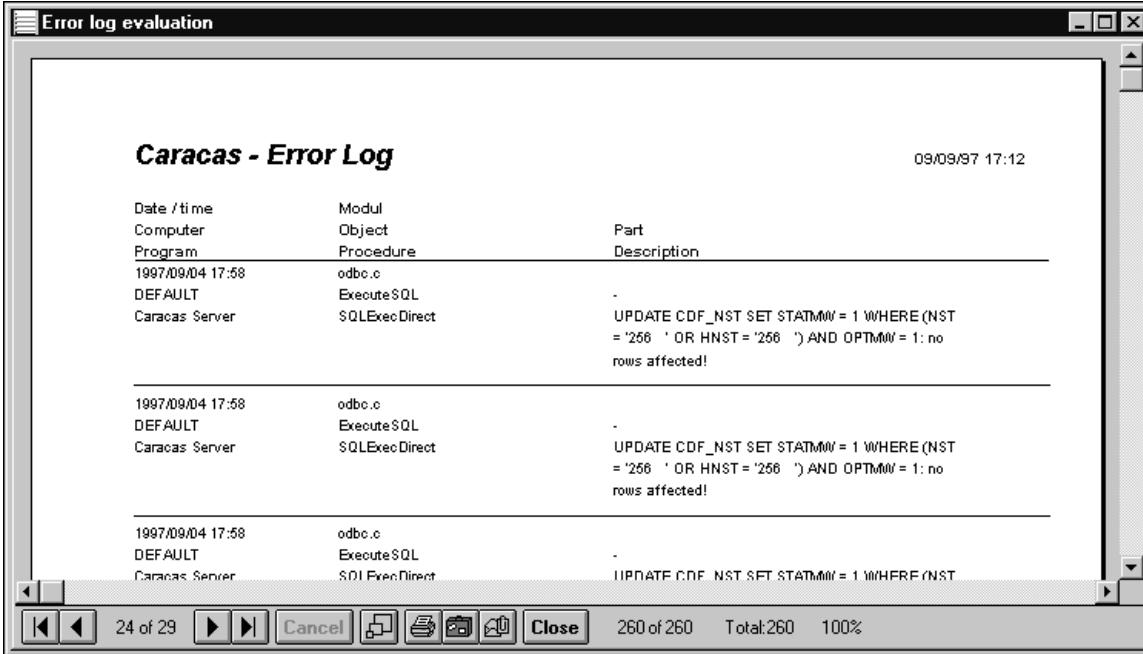
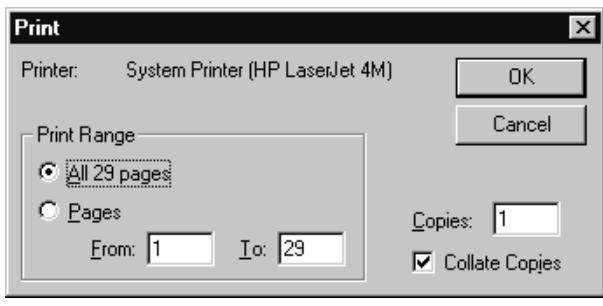


Figure 12-6     Event Log display (selected)

## Printing event or error logs

Step	Procedure
1	Activate the relevant log dialog box, e.g. <i>Edit - Evaluate Error Log</i> .
2	Click the <i>Print</i> button.
3	The protocol is displayed in Page Layout view: 

### ...Printing logs to a default printer

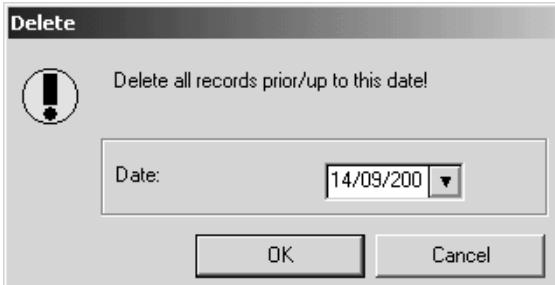
4	 Click the Printer button to start printing to the default printer. The dialog box for the default printer currently set appears: 
5	Click the <i>OK</i> button to start printing. You are returned to the wakeup requests in page layout view.

## Data flow and trace

### Editing logs (logbooks)

Step	Procedure
<b>...Zooming log outputs</b>	
4	To zoom in/out the page layout of the event log select the zoom value (in %) or enter it in the zoom list field.
<b>...Exporting a log</b>	
4	Press this button to export the logged data. In the subsequent dialog boxes, you can specify the desired export format and filename. Following the export procedure, you return to the page layout of the event log.
<b>...Quitting page layout log output</b>	
4	Click this button to quit the log output in page layout view. You are returned to the log display dialog box.

### Deleting the log either fully or partly

Step	Procedure
1	Activate the relevant log dialog box, e.g. <i>Edit - Evaluate Error Log</i> .
2	Mark the log entries to be deleted and click the <i>Delete</i> button.
3	The following dialog appears:  <p>Enter the date by which all entries are to be deleted from the log. Click the <i>OK</i> button if the entries are to be deleted. If no entries are to be deleted, click <i>Cancel</i>. In both cases, you are returned to the log display.</p>

# 13 Host protocol

## 13.1 Introduction

### What is the host protocol?

This chapter describes the communication interface between Caracas Link and a front office system. This solution is referred to in this document as the 'server' and the front office system as the 'host'.

### Preceding version

This chapter describes the functionality of the Caracas Link Version 4.2 of the host protocol. Although the actual protocol description was not changed, this version offers new functions (described in this chapter) that are not available for connecting an older version or another TC system and for existing Caracas Link installations.

### Downward compatibility

Caracas Link is basically downwardly compatible as regards protocol relationships, so that existing installations can also be operated with Caracas Link 4.2 and front office systems do not have to make protocol changes to connect to Caracas Link 4.2 (provided no new record types are used).

### Special aspects

- Basically, you must ensure that some functions or records are specifically for the PBX system. Corresponding remarks may be found with the description of the record type.
- Some record types, moreover, apply to configured main and sub-extensions while other record types are only performed for the transferred extension. Corresponding remarks may also be found with the description of the record type.
- A check-in is essential for some record types because Caracas Link can only edit extensions that were previously created - in the case of other record types, Caracas Link performs an independent check-in if the extension was not yet created. Please note the corresponding remarks.

### The host interface

Caracas Link can be used to connect a front office system of your choice via a server to a Hicom 200/150E, Hicom 300, Hicom 150E Office or HiPath 4000 PBX system.

The basis for communication between the systems is provided by the communication record types which are always used, irrespective of the connection type selected. A distinction is made between the following connection types:

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

- Connection via V.24 (RS232)
- Connection via network with file-based data exchange
- Connection via network with data exchange via TCP/IP and Windows Sockets as server and client
- Connection via ODBC

The individual connection types are described below.

### **13.2 Connection via V.24 (RS232) base protocol**

#### **Defining the communication interface**

Data is exchanged via an asynchronous V.24 (RS232) interface. The data flow is controlled by a base protocol which is the basis for data transport. The communication interface's properties are as follows:

Parameter	Contents	Default
Data bits	7, 8	8
Stop bits	1, 2	1
Start bits	1, 2	1
Parity	none, even, odd	none
Interface	COM1 - COM4	COM2
Speed	50 - 19200	9600
Poll sequence	100 - 9999	1000

#### **Explanations**

- In addition to the speed (50-19200), you can select the code width (7 or 8 bits), the number of stop and start bits (1 or 2), the parity (none, even or odd) and the possible serial interfaces.
- Moreover, Caracas Link offers an additional parameter for setting the poll sequence or the poll rhythm. The input values range from 100 ms to 9999 ms (10 sec.).

### 13.2.1 Timer and repetition counters

#### Dialog mode function

- The basic protocol operates in dialog mode, where the server (Caracas Link) shows the active partner and the front office system shows the passive partner
- If there is no data traffic, the server polls the front office system cyclically and then waits for an EOT (or data).
- The connection is considered active if the record 0A (link) was sent or received and the appropriate device has announced its readiness to receive.
- If the record type 0A was deactivated via the configuration, the server achieves online status after receiving the first EOT or STXxyzETX from the front office system.

#### Checking the protocol

To check the protocol, the following parameters are also implemented:

Parameter	Content	Default	Meaning
TIMER1 WHZ1	0 - 99 0 - 9	10 (sec.) 3	Timer in poll mode Repetition counter in poll mode These two parameters together define the transmit mode in poll mode. The system waits for a valid response within the poll cycle within the value entered here. The server re-initializes the connection (logically OFFLINE) after the repetition counter in receive mode.
TIMER2 WHZ2	0 - 99 0 - 9	10 (sec.) 3	Timer in transmit mode Repetition counter in transmit mode These two parameters together define the transmit mode in poll mode. The system waits for a valid response after transferring a text within the value entered here. The server re-initializes the connection (logically OFFLINE) after the repetition counter in receive mode.
TIMER3 WHZ3	0 - 99 0 - 9	3 (sec.) 2	Timer in receive mode Repetition counter in receive mode These two parameters together define the transmit mode in poll mode. The system waits for the complete dispatch of a text (in accordance with STX) from the front office system within the value entered here. The server re-initializes the connection (logically OFFLINE) after the repetition counter in receive mode.

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

Parameter	Content	Default	Meaning
WHZNOACK	0 - 99	3	This parameter defines how often a record is repeated if it was acknowledged with an NAK from the front office system. The record is deleted and the error is logged in the logbook after the counter.

### **"Logically OFFLINE" interface status**

The interface status "logically OFFLINE" means that the server maintains the poll cycle until the OFFLINE status is lifted again. To set up the connection, the front office system answers with record type 0A or the server waits for record type 0A from the front office system.

### 13.2.2 BCC check

#### Introduction

The BCC check is implemented in the protocol to save the transfer. To this end, each transfer block can be assigned 1 byte of a BCC character. The BCC determined is checked by the receive station and a positive or negative acknowledgement is issued for this record. The BCC character is formed using all characters of a transfer block incl. ETX but without STX. The BCC check therefore is an EXCLUSIVE-OR link of all characters.

#### Structure

The BCC character is incorporated in the record after the ETX and is formed with [STX][...][ETX] in the case of all transfer blocks, i.e. all records. The resulting structure is as follows:

[STX] ss 1 nnnnnn 0000000000 [DATA] [ETX] [BCC]

#### Example:

[STX] 0A100000000000000000000000000001 [ETX] [BCC]

#### BCC calculation

```
...
bcc = 0;

for(i = 1; i <= Buffsize; i++) /* Loop via record
bcc = bcc ^ EmpfBuffer[i]); /* BCC determine f. character
...
```

In this program example, the record received is checked in the variable "EmpfBuffer[]" and the number of characters received (= buff size) forms the BCC sum.

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

### **13.2.3 Protocol description**

#### **Poll cycle**

The following section describes the program's poll cycle in different situations. The basic protocol operates in dialog mode where the server represents the active partner and the front office system the passive partner. If there is no data traffic, the server polls the front office system cyclically and waits for an EOT (or data). The following ASCII control characters exist:

- EOT (H 04) End of Transmission
- ENQ (H 05) Enquiry, Polling Code
- SYN (H 16) Synchronous Idle, Polling Code
- ACK (H 06) Positive acknowledgement
- NAK (H 15) Negative acknowledgement
- STX (H 02) Start of Text
- ETX (H 03) End of Text

#### **Different cycle sections**

Basically, server 4 differentiates between four different cycle sections during the entire data transfer with the front office system. These sections are identified internally in the program by the so-called mode (MODE). The four sections are as follows:

<b>Mode</b>	<b>Meaning</b>	<b>Possible host responses</b>
MODE 9	First initialization	none
MODE 99	Initialization phase	EOT
MODE 00	Transfer mode	ACK, NAK, EOT
MODE 01	Poll mode	EOT, STX, NAK

#### **Different polling characters**

The protocol differentiates between two different polling characters for dialog mode: ENQ or SYN. The required polling character can be configured via the configuration, i.e. works with SYN, if ENQ is only permitted as the valid answer or request for repeating the last dispatch. Without SYN, ENQ is also permitted as a polling character. The resulting protocol situations are described in detail below (ENQ mode, SYN mode), where the basic protocol without XON/XOFF control is assumed.

### 13.2.4 Initializing the line without BIND (ENQ mode)

#### Overview

MODE	Server	Host
9	EOT	
	ENQ	
99		[TIMEOUT]
	ENQ	
		[TIMEOUT]
	ENQ	
		...
	...	
	ENQ	
		EOT
	[HOSTAKTIV]	
	ENQ	
1		EOT
	ENQ	
		EOT
	ENQ	
		...
	...	

#### Description

- During this initialization phase, EOT is the only possible answer accepted by the program. At any rate, no timers or repetition counters are started in this phase, even if there is no answer from the front office system.
- The connection is considered "active" once a valid answer has been received from the front office system. The server sends an EOT/ENQ (MODE 9, first initialization) only once after opening the line. Afterwards, only ENQs (MODE 99) are sent.

## Host protocol

Connection via V.24 (RS232) base protocol

### 13.2.5 Initializing the line with BIND (ENQ mode)

#### Overview

MODE	Server	Host
99	...	
		...
	ENQ	
		EOT
	STX[BIND]ETX	
0		ACK
	[TMR0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	EOT	
	ENQ	
1		EOT
	ENQ	
		...
	...	
1		STX[BIND]ETX
	[SEARCH ETX]	
	[HOSTAKTIV]	
	ACK	
		EOT
	ENQ	
		...
	...	

#### Description

- As soon as a valid answer is received from the front office system, record type 0A (BIND) is sent to the front office system and the system wait for an ACK as the valid response.
- All appropriate timers and counters are then reset and EOT/ENQ is sent to the front office system.

- The program returns to the normal polling cycle (MODE 1) and waits either for EOT as the valid response or the record type BIND.
- If the server receives this record type, the structure of the record ([STX]data[ETX]) is checked and sent to the front office system as the possible ACK response.
- The connection is considered "active".

## Deviations

The record type BIND is not essential for initializing the connection from the front office system. For reasons of error tolerance, this record type may also be absent from the front office system (e.g. because it is not configured). The connection cannot be considered fully active (i.e. the server only receives records from the front office system and is unable to send records until record type BIND is sent. Otherwise the program remains in the normal poll cycle).

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

### **13.2.6 Sending records (ENQ mode)**

#### **Introduction**

Basically, the program differentiates between three valid answers after sending a record from the front office system. In addition to the positive acknowledgement ACK, there exists the negative acknowledgement NAK and the renewed request for the transmission of EOT. Once the server has sent a record, the program is in internal processing mode 0 (MODE 0).

#### **Overview**

<b>MODE</b>	<b>Server</b>	<b>Host</b>
1		EOT
	STX[xyz]ETX	
0		ACK
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	EOT	
	ENQ	
1		EOT
	ENQ	
		...
	...	
0		EOT
	STX[xyz]ETX	
		ACK
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	EOT	
	ENQ	
1		EOT
	ENQ	
		...
	...	

## Description

If a record is positively acknowledged by the front office system (ACK), the corresponding timer and repetition counter are reset and the data is sent by the program with EOT/ENQ.

If the server receives the answer EOT or NAK (see below), the record is resent.

## Overview of renewed dispatch

MODE	Server	Host
1		EOT
	STX[xyz]ETX	
0		NAK (EOT)
	[WHZNOACK]	
	STX[xyz]ETX	
		NAK (EOT)
	[WHZNOACK]	
	STX[xyz]ETX	
		NAK (EOT)
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	[CLEAR]	
	ENQ	
1		...
	...	
		ACK
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	EOT	
	ENQ	
1		EOT
	ENQ	
		...
	...	

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

### **Description**

- If a record is negatively acknowledged by the front office system (NAK or EOT), the record is resent and the corresponding repetition counter in receive mode is checked.
- If the number of repeat attempts reaches the value set (3 repeat attempts in this example), the record is deleted, all timers and repetition counters in receive mode are reset and the polling cycle is continued with ENQ in mode 1.
- Until the number of repeat attempts has been reached, the server tries to send the record and waits for positive acknowledgement.
- In addition, a combination of NAK and EOT can request the repeat attempt after the record has been sent.

### 13.2.7 Timeout and protocol breakdown (ENQ mode)

#### Introduction

In addition to valid answers from the front office system, the server also processes an invalid answer or the so-called timeout after a record has been sent. This is where timers come in. Basically, the protocol takes two timers into account for the server. On the one hand, the timer for normal polling traffic (MODE 1) and on the other hand, the timer for transfer mode (MODE 0), once the server has sent a valid record and is waiting for a correct answer from the front office system. For each timer there is a corresponding repetition counter in receive mode which is checked after the timer has expired and which clears down the logical connection after reaching the value set and returns to offline mode (MODE 99).

#### Overview

MODE	Server	Host
1	ENQ	
		EOT
	ENQ	
		[TIMEOUT]
	[TIMER1]	
	[WHZ1]	
	ENQ	
		[TIMEOUT]
	[TIMER1]	
	[WHZ1]	
	ENQ	
		[TIMEOUT]
	[TIMER1]	
	[WHZ1]	
	ENQ	

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

<b>MODE</b>	<b>Server</b>	<b>Host</b>
99		[TIMEOUT]
	[HOSTINAKTIV]	
	[TIMER1 = 0]	
	[WHZ1 = 0]	
	ENQ	
		...
	...	

### **Description**

- If the program receives no (valid) data from the front office system, the corresponding timer is activated and the repetition counter in receive mode is checked.
- If the repetition counter reaches the configured value, the program ends the regular polling cycle and changes internally to mode 99, i.e. the polling rhythm is first initialized with ENQ and the system waits for the appropriate response.
- The program is logically offline and begins again with the initialization phase in mode 99.

## Timer for transfer mode

The timer for the transfer mode (MODE 0) operates identically to the timer for the polling mode but is activated at another time.

MODE	Server	Host
1		EOT
	STX[xyz]ETX	
0		[TIMEOUT]
	[TIMER2]	
	[WHZ2]	
	ENQ	
		[TIMEOUT]
	[TIMER2]	
	[WHZ2]	
	ENQ	
		[TIMEOUT]
	[TIMER2]	
	[WHZ2]	
	ENQ	
99		[TIMEOUT]
	[HOSTINAKTIV]	
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	ENQ	
		...
	...	

## Description

- Once a record has been sent by the server and no correct response has been received from the front office system, timer2 is started and the corresponding repetition counter in receive mode is checked.
- After this, the program behaves identically to the timeout already described. In this case, [TIMEOUT] stands for both a real timeout (i.e. no data received) and for an unauthorized response from the front office system, e.g. STX. This is called a protocol breakdown.

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

### **Additional timers**

There is still another timer that takes over transmit mode for the records from the front office system. This timer is required to limit the duration of the transfer of a record from the front office system.

As soon as the server receives a record, it is checked to ensure that the format is correct (i.e. the record is searched for a STX and a ETX). If the program cannot find an ETX, the record is incomplete. In this case, the server waits for the next transmission and appends this fragment on the record received until it is received in full.

### 13.2.8 Receiving records (ENQ mode)

#### Overview

MODE	Server	Host
1		STX[xyz]ETX
	[SEARCHETX]	
	ACK	
		EOT
	ENQ	
		...
	...	

#### Description

- If a record is successfully transferred, the correct structure of the data is checked and the admissibility of the record type is determined.
- The record is confirmed with ACK irrespective of whether the record type is permitted or not. This is because only the correct data structure is acknowledged and not the logical correctness of the data.
- Records of an inadmissible record type are not processed by the program.
- In this context, the system does not check whether the host is active for reasons of the parameters' error tolerance. As soon as the server receives a record from the host, the program automatically sets this parameter to "active".
- The server sends no records to the host as long as these exist. If the server does not receive any additional data (timeout) or invalid characters after the ACK, timer1 is started for transmit mode (see above).

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

### **Resend requirement**

The server can request that a record be resent from the front office system by transferring an NAK to the front office system. This only happens if the record was not correctly structured (STX[data]ETX), or the record was not completely available after repetition counter in receive mode 3 expired. In this case, the interface program must provide a corresponding repetition counter on the front office system that defines the number of repeat attempts of a records after an NAK from the server.

### **Overview**

<b>MODE</b>	<b>Server</b>	<b>Host</b>
1		STX[xyz]ETX
	[SEARCHETX = 0]	
	NAK	
		STX[xyz]ETX
	[SEARCHETX]	
	NAK	
		EOT
	ENQ	
		...
	...	

### **13.2.9 Protocol description in SYN mode**

#### **Introduction**

The following section describes the individual protocol situations in so-called SYN mode (see above). A more detailed description of the statuses, parameters, etc. is not provided since this is identical to the protocol description in ENQ mode.

### 13.2.10 Initializing the line without BIND (SYN mode)

#### Overview

MODE	Server	Host
9	EOT	
	SYN	99
	[TIMEOUT]	
	SYN	
		[TIMEOUT]
	SYN	
		...
	...	
	SYN	
		EOT
	[HOSTAKTIV]	
	SYN	
1		EOT
	SYN	
		EOT
	SYN	
		...
	...	

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

### **13.2.11 Initializing the line with BIND (SYN mode)**

#### **Overview**

<b>MODE</b>	<b>Server</b>	<b>Host</b>
99	...	
		...
	SYN	
		EOT
	STX[BIND]ETX	
0		ACK
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	EOT	
	SYN	
1		EOT
	SYN	
		...
	...	
1		STX[BIND]ETX
	[SEARCH ETX]	
	[HOSTAKTIV]	
	ACK	
		EOT
	SYN	
		...
	...	

### 13.2.12 Sending records (SYN mode)

#### Overview

MODE	Server	Host
1		EOT
	STX[xyz]ETX	
0		ACK
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	EOT	
	SYN	
1		EOT
	SYN	
		...
	...	
0		EOT
	STX[xyz]ETX	
		ACK
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	EOT	
	SYN	
1		EOT
	SYN	
		...
	...	
1		EOT
	STX[xyz]ETX	
0		NAK (EOT)
	[WHZNOACK]	

## **Host protocol**

*Connection via V.24 (RS232) base protocol*

<b>MODE</b>	<b>Server</b>	<b>Host</b>
	STX[xyz]ETX	
		NAK (EOT)
	[WHZNOACK]	
	STX[xyz]ETX	
		NAK (EOT)
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	[WHZNOACK = 0]	
	[CLEAR]	
	SYN	
1		...
	...	

### 13.2.13 Timeout and protocol breakdown (SYN mode)

#### Overview

MODE	Server	Host
1	SYN	
		EOT
	SYN	
		[TIMEOUT]
	[TIMER1]	
	[WHZ1]	
	SYN	
		[TIMEOUT]
	[TIMER1]	
	[WHZ1]	
	SYN	
		[TIMEOUT]
	[TIMER1]	
	[WHZ1]	
	SYN	
99		[TIMEOUT]
	[HOSTINAKTIV]	
	[TIMER1 = 0]	
	[WHZ1 = 0]	
	SYN	
		...
	...	

#### Addition

In SYN mode, it is only possible to send ENQ within the protocol if the server wants to request a valid response from the front office system after sending a record:

## Host protocol

Connection via V.24 (RS232) base protocol

### Overview

MODE	Server	Host
1		EOT
	STX[xyz]ETX	
0		[TIMEOUT]
	[TIMER2]	
	[WHZ2]	
	ENQ	
		[TIMEOUT]
	[TIMER2]	
	[WHZ2]	
	ENQ	
		[TIMEOUT]
	[TIMER2]	
	[WHZ2]	
	ENQ	
99		[TIMEOUT]
	[HOSTINAKTIV]	
	[TIMER2 = 0]	
	[WHZ2 = 0]	
	SYN	
		...
	...	

### 13.2.14 Receiving records (SYN mode)

#### Overview

MODE	Server	Host
1		STX[xyz]ETX
	[SEARCHETX]	
	ACK	
		EOT
	SYN	
		...
	...	

MODE	Server	Host
1		STX[xyz]ETX
	[SEARCHETX = 0]	
	NAK	
		STX[xyz]ETX
	[SEARCHETX = 0]	
	NAK	
		STX[xyz]ETX
	[SEARCHETX ]	
	ACK	
		EOT
	SYN	
		...
	...	

## **Host protocol**

*Connection via network with data exchange via TCP/IP and WINSOCK*

### **13.3 Connection via network with data exchange via TCP/IP and WINSOCK**

#### **Port number**

When the front office system is connected via TCP/IP, **one** port number is configured for the connection in addition to the IP address of the host PC. Caracas Link can thus operate both as a server and as a client in the network connection.

#### **Connection setup**

This setting is important for connection setup and must always be coordinated with the appropriate front office. When configured as a client, Caracas Link tries to set up the connection to the host at regular intervals. When configured as a server, Caracas Link only makes one connection available and waits for the connect from the host.

#### **Data exchange**

Data exchange can start as soon as the connection has been set up. The data record structure corresponds to the standard data record structure (see chapter on order interfaces), incl. control characters, but without BCC. Polling, for example, is not performed, i.e. only data records are transferred. Every data record must be acknowledged by the remote station with ACK. In other words, Caracas only sends one data record at a time and then waits for the acknowledgement with ACK. The data record is repeated if acknowledgement is not received within a set period of time. Acknowledgement, e.g. with NACK or an acknowledgement request with ENQ is not permitted.

## 13.4 Connection via network with file-based data exchange

### Procedure

When the host system is connected via the file interface, Caracas Link uses different files to send and receive the data. These files can reside both on the Caracas PC and on a network PC. The user must ensure that the appropriate drive is enabled on the PC so that Caracas or the FO system can access the relevant file. The file location (path) is configured in Caracas.

### File type and data record structure

These files are text files and can contain 1 - n data records. The data record structure corresponds to the standard data record structure (see chapter on order interfaces) without control characters and BCCs. Every record is concluded with a CR/LF (0A, 0D).

### Send and receive procedure

Caracas regularly checks if the relevant drive contains one of the configured files and if so, processes it immediately. The following procedure must be observed (by Caracas and host).

### Receiving data

1. Check the existence of the agreed data exchange file for receipt
2. Check if the agreed data exchange file is already open elsewhere (Caracas Link checks this, for example, with an exclusive file access command)
3. Processing can only continue if the file has not been opened, otherwise repeat check
4. **Rename** the agreed data exchange file, i.e. give it a **temporary file name** or **move** it to another directory (**do not copy the file**)
5. Evaluate the renamed or moved file
6. **Delete** the renamed or **moved file** and start the procedure again from point 1

### Sending data

1. Jobs are saved and placed at the start in a **temporary** file
2. Check if the agreed data exchange file to be sent exists
3. If it exists, all other data information is saved and placed at the start in the temporary file; the check must be repeated for the next data record.
4. If the data exchange file does not exist, the temporary file is to be **renamed** as the agreed data exchange file **or moved**. A new temporary file is to be opened for subsequent data to be set, process as described above

## **Host protocol**

*Connection via network with file-based data exchange*

## **Conflict avoidance**

File access conflicts can only be avoided in this way. Caracas does not support any procedure other than the one described - the strict observance of the specification is particularly important in the case of gateways to other operating systems (UNIX -> Windows). Seamless communication is only possible if this guideline is followed.



Additional software may be required to access a network in another operating system (e.g. PC NFS for UNIX). This software cannot be provided by Caracas or installed within the framework of the Caracas installation.

## 13.5 Connection via ODBC

### Data exchange via buffer database

In the case of a connection via the ODBC file interface, data is exchanged with the front office system directly via the Caracas buffer database. The FO system regularly reads the defined table for the host jobs and processes data records entered. Data records from the front office system are entered in the server order table and then processed by the server.

#### 13.5.1 Job table structure for the server

**Name: LINKANSERVER**

Name	Data type	Length	Index name	Description
LFNDNO	Number	Long	Yes (unique)	Auto value
ZEIT	Date/time		Yes (duplicate possible)	Date/time of job
PRIOR	Number	Integer	Yes (duplicate possible)	Priority of the job for the server, always 4 apart from record type 08 = 3, 0B and 0C = 0
PCID	Text	20	No	Name of the computer (node name)
APPID	Text	8	Yes (duplicate possible)	Name of the application = LINK
USERID	Text	8	No	User ID
TXKZ	Number	Integer	Yes (duplicate possible)	Transmission flag 0 = job not active, 1 = job active
DATEN-SATZ	Text	250	No	Data record for Caracas

## **Host protocol**

*Connection via ODBC*

### **13.5.2 Job table structure for the host**

**Name: SERVERANLINK**

<b>Name</b>	<b>Data type</b>	<b>Length</b>	<b>Index name</b>	<b>Description</b>
LFNDNO	Number	Long	Yes (unique)	Auto value
ZEIT	Date/time		Yes (duplicate possible)	Date/time of job
PRIOR	Number	Integer	Yes (duplicate possible)	Priority of the job for the host, always 4 apart for record type 11 = 3, 26 = 0, 0B (at host) = 0
PCID	Text	20	No	Name of the computer (node name)
APPID	Text	8	Yes (duplicate possible)	Name of the application = SERVER
USERID	Text	8	No	User ID
TXKZ	Number	Integer	Yes (duplicate possible)	Transmission flag 0 = job not active, 1 = job active
DATEN-SATZ	Text	250	No	Data record for the host

### **Data exchange**

Data exchange can start as soon as the connection has been set up. The data record structure corresponds to the standard data record structure (see chapter on order interfaces), without control characters and BCC.

### **Job processing**

Every job is immediately entered in the appropriate buffer table, processed by the program and then deleted. The transmission flag (TXKZ) can be used as an intermediate status by the processing application, if, for example, data records take place not immediately, but only after subsequent acknowledgement within the processing system. Basically, every job is assigned the transmission flag 0 once it has been entered.

## Avoiding access conflicts

To avoid access conflicts, the sending application is only allowed to add or append data records to the relevant table and the receiving application can update or delete data records. Processed data records cannot be left in the database (e.g. for protocol purposes) as otherwise the database volume would get too big and performance would be impaired. Moreover, the database is included in the Caracas data backup and compression mechanism.



The database is compressed and backed up by Caracas at least once a day (depending on the configuration). This procedure is only possible if Caracas has exclusive access to the database. Since there are no data records to register actions at the host, the host is responsible for ensuring that the relevant function can also be registered by Caracas. The host must ensure that Caracas has exclusive access at a configurable time.

## 13.6 Record interface

### Data exchange via record interface

Data is exchanged via a record interface that processes both records from the server to the front office system and records from the front office system to the server. Each record must be appropriately authorized so that it can be sent or received. If an unauthorized record is sent, the data is not processed on the system. The record however is acknowledged (with ACK).

#### 13.6.1 General information on connections via V.24 (RS232)

##### Description

Basically, every record that is correctly received via a line is confirmed with ACK. The acknowledgement of a record with NAK is only permitted if the record was not completely received (e.g.: ETX missing) or if the BCC check was negative. The sender must then repeat the record and may not send any other data until the data is acknowledged.

When connecting the Hicom system, an acknowledgement can also be requested from the sender via ENQ. This means that the sender repeats the last response to a record ACK/NAK - but does not resend the complete record. This procedure ensures that there is never more than one record en route at once. If the record cannot be transferred after multiple attempts, the record is stored and/or deleted and not transferred further.

The front office system can, once a record has been transferred, send the next record that receives positive acknowledgement (ACK) directly or return to the polling cycle with EOT. The server issues the send check with EOT/ENQ after each record sent.



The TIMER and WHZ used for protocol support must be continuously monitored!!

## 13.6.2 Structure of interface records

### Record structure in the case of data exchange

Data is exchanged between the server and the front office system via records. Basically, records have the following structure:

#### 13.6.2.1 Connection via V.24 (RS232)

Element	Length
STX	1 byte
Message type (record type)	2 byte
Subsystem IDs	1 byte (always 1)
Extension	6 bytes, left-aligned, completed with blanks
Application handle	10 bytes (always 000000000)
Data	Depends on the record type
ETX	1 byte
BCC	1 byte

#### 13.6.2.2 Connection via File

Element	Length
Message type (record type)	2 byte
Subsystem ID	1 byte (always 1)
Extension	6 bytes, left-aligned, completed with blanks
Application handle	10 bytes (always 000000000)
Data	Depends on the record type
CR (0A)	1 byte
LF (0D)	1 byte

## **Host protocol**

### *Record interface*

#### **13.6.2.3 Connection via TCP/IP**

<b>Element</b>	<b>Length</b>
STX	1 byte
Message type (record type)	2 byte
Subsystem ID	1 byte (always 1)
Extension	6 bytes, left-aligned, completed with blanks
Application handle	10 bytes (always 0000000000)
Data	Depends on the record type
ETX	1 byte

#### **13.6.2.4 Connection via ODBC**

<b>Element</b>	<b>Length</b>
Message type (record type)	2 byte
Subsystem ID	1 byte (always 1)
Extension	6 bytes, left-aligned, completed with blanks
Application handle	10 bytes (always 0000000000)
Data	Depends on the record type

This produces the following structure:

[STX] ss 1 nnnnnn 0000000000 [DATA] [ETX] [BCC]

Example:

[STX] 0A100000000000000001 [ETX] [BCC]

This example involves record type 0A that can be sent both from the server to the front office system and from the front office system to the server. The status is transferred as data, i.e. 0 = not ready, 1 = ready.

## 13.7 Overview of record types

Record type	Description	Communication direction	
01	Check-in/check-out	Front-Office	→ Server
02	Set/reset message waiting	Front-Office	→ Server
03	Set/reset wakeup request	Front-Office	→ Server
04	Message to Digifon	Front-Office	→ Server
05	Request for wakeup order	Front-Office	→ Server
06	Divert extension (as of version 2.5)	Front-Office	→ Server
07	Set features (as of version 2.5)	Front-Office	→ Server
08	Disconnection (as of version 4.0)	Front-Office	→ Server
09	Check-in advanced (as of version 4.0, enhanced with version 4.2)	Front-Office	→ Server
0A	Bind	Server Front-Office	→ Front-Office → Server
0B	Set date/time	Server Front-Office	→ Front-Office → Server
0C	Enable/disable host records	Front-Office	→ Server
11	Charge call (changed with version 4.2)	Server	→ Front-Office
12	Voice message	Server	→ Front-Office
13	Room status	Server	→ Front-Office
14	Wakeup request	Server	→ Front-Office
15	Minibar	Server	→ Front-Office
16	Service request	Server	→ Front-Office
17	Wakeup attempt	Server	→ Front-Office
18	Minibar advanced	Server	→ Front-Office
19	Room status advanced	Server	→ Front-Office
20	Presence/absence	Server	→ Front-Office
21	Do-not-disturb	Front-Office	→ Server
22	Do-not-disturb	Server	→ Front-Office
23	Update guest name	Front-Office	→ Server
24	Edit article stock	Front-Office	→ Server
25	Request for database swap	Server	→ Front-Office

## Host protocol

### Overview of record types

Record type	Description	Communication direction	
26	Server status information (changed with version 4.2)	Server	→ Front-Office
27	Call pickup/extension assignment	Front-Office	→ Server
28	Enter/delete PIN numbers	Front-Office	→ Server
29	Voice message advanced	Server	→ Front-Office
30	Set/delete message waiting lamp	Front-Office	→ Server
31	Service costs	Server	→ Front-Office
32	Minibar complete (new in version 4.2)	Server	→ Front-Office

Record type	Position	Value	Description
01			<b>Check-in/check-out</b> <span style="float: right;"><b>Front office → Server</b></span>
<b>NOTICE:</b>			
The record type 01 is supported only for compatibility reasons. Please use record type 09 for checkin / checkout.			
This function performs a check-in or a check-out. Basically, the front office system can only send this record for main extensions - the corresponding sub-extensions are administered by Caracas Link. The guest name does not have to be transferred (filled) for the check-out. The extension is created by Caracas Link as a main extension if it is not known.			
COS changeover and a guest name update are automatically performed by the server at check-in. At check-out, the COS is switched back and the guest name is removed and all wakeup requests are deleted for the extension and the message waiting indicator on the telephone is deleted, i.e. the front office system does not have to send these records in connection with check-in/check-out. Both functions are also always performed for the configured sub-extension as long as these are not locked for particular functions. Only the first 12 characters of the name are considered for the telephone book function			
<b>[STX]011nnnnnn0000000000ttscrx(40)[ETX][BCC]</b>			
4	nnnnnn		Extension 6-digit, left-aligned, completed with blanks
20	tt		Class of service, the configuration is only accessed by the server in the case of "00"
22	s		Status <ul style="list-style-type: none"> <li>– 1: check-in</li> <li>– 2: check-out</li> </ul>
23	cc		Country code or language code of the guest, codes subject to agreement (01 to 09)
25	x(40)		Guest name, max. 40 digits, simultaneous text for telephone book function/guest name

## Host protocol

### Overview of record types

Record type	Position	Value	Description
02			<b>Set/reset message waiting</b> <span style="float: right;">Front office → Server</span>
			This function reset or deletes the message waiting indicator at a guest telephone. Both functions are also always implemented for the configured sub-extension, provided they are not locked for these functions. [STX]021nnnnnn000000000s[ETX][BCC]
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	s	Status – 0: deactivate – 1: activate

Record type	Position	Value	Description
03			<b>Set/reset wakeup request</b> <span style="float: right;">Front office → Server</span>
			<p>This function saves or deletes a wakeup request for an extension. Basically, a number of wakeup times can be set for each extension. A wakeup time can also be entered from an extension that is not yet configured or an extension without a guest, i.e. the system does not check the check-in file or the extension is created.</p> <p>The system accesses the guest's language code from the check-in record for the language output. In the case of unknown extensions, the basic language code is set. A wakeup request only applies to the transferred extensions and is not transferred to configured sub-extensions, provided the extension involved is a main extension.</p> <p>When connecting to the voicemail system, the record is transmitted to this system. The records are not saved by Caracas Link! The configured conversion table for languages is also accessed for language control. Please note, moreover, that the voicemail system can only operate in 24 hour cycles, i.e. wakeup requests for data that occur more than 24 hours in the future are changed to the current date.</p> <p>[STX]031nnnnnn0000000000ddmmjjhhmmssp[ETX][BCC]</p>
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	dd mm yy	Date of the wakeup request, format ddmmyy
	26	hhmm	Wakeup time
	30	s	Status <ul style="list-style-type: none"> <li>– 0: delete wakeup requests</li> <li>– 1: set wakeup request</li> <li>– 2: delete all</li> </ul>
	31	p	Mode <ul style="list-style-type: none"> <li>– 0: one-time request</li> <li>– 1: daily request</li> </ul>

## Host protocol

### Overview of record types

Record type	Position	Value	Description		
04	<b>Message to Digifon</b>		<b>Front office → Server</b>		
	This function sends a message to the display on a telephone, if this function is supported by the TC system.				
	<b>[STX]041nnnnnn000000000sx(40)[ETX][BCC]</b>				
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks		
05	20	s	Status – 0: without acoustic display – 1: with acoustic display		
	21	x(40)	Text to be displayed, max. 40 digits		
	<b>Request for wakeup order</b>		<b>Front office → Server</b>		
With this function, the input of wakeup times via the guest telephone using Caracas Link data service (not for connection to the voicemail system) can be locked or released. Any extension or sub-extension can be specified. Up until now, unconfigured extensions are created by the server if the extension is to be locked. The function only applies however for the transferred extension and is not transferred to configured sub-extensions, provided the extension involved is a main extension.					
<b>[STX]051nnnnnn000000000s[ETX][BCC]</b>					
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks		
	20	s	Status – 0: deactivate (time input possible) – 1: activate (time input not possible)		

Record type	Position	Value	Description
06			<b>Divert extension</b> <span style="float: right;"><b>Front office → Server</b></span>
			This record type can be used by the front office system to divert call numbers for specific extensions or to assign virtual call numbers to specific telephones (if this function is supported by the TC system). The virtual call numbers are administered on the front office system. Basically, it is possible to divert both main and sub-extensions. The function however, applies only to the transferred extension and is not transferred to configured sub-extensions, if the extension involved is a main extension. The call diversion is not saved on the Caracas Link system, i.e. Caracas Link does not know which call numbers were transferred to which extensions - the front office system is responsible for the correct execution of the function and for administering the virtual call numbers.
			<b>[STX]061nnnnnn0000000000zzzzzks[ETX][BCC]</b>
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	zzzzzz	Virtual call number 6-digit, left-aligned, completed with blanks
	26	k	Extension type <ul style="list-style-type: none"> <li>– 0: main extension</li> <li>– 1: sub-extension 1</li> <li>– 2: sub-extension 2, ...</li> </ul> The extension type is only evaluated if call diversion is to be carried out for a main extension (nnnnnn = ...) and the extension type <> 0. The sub-extension transferred in the extension type is searched and diverted to the main extension.
	27	s	Status <ul style="list-style-type: none"> <li>– 0: delete diversion</li> <li>– 1: set diversion</li> </ul>

## Host protocol

### Overview of record types

Record type	Position	Value	Description						
07	<b>Set features</b>		<b>Front office → Server</b>						
This record type can be used by the front office system to activate/deactivate the <i>Do-not-disturb</i> function on a guest extension. This is also always implemented for the configured sub-extensions, provided they are not locked for this function. (Lock flag Update DND)									
The record type only works when connected to Hicom 150E Office, Hicom 300 or HiPath 4000. The host, however, can use this data record for all PBX systems as Caracas automatically creates record type 21 on the basis of this record type when connecting another PBX.									
<p><b>[STX]071nnnnnn0000000000s1[ETX][BCC]</b></p> <table> <tr> <td>4</td><td>nnnnnn</td><td>Extension 6-digit, left-aligned, completed with blanks</td></tr> <tr> <td>20</td><td>s</td><td>Status           <ul style="list-style-type: none"> <li>– 0: deactivate DND</li> <li>– 1: activate DND</li> </ul> </td></tr> </table>			4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks	20	s	Status <ul style="list-style-type: none"> <li>– 0: deactivate DND</li> <li>– 1: activate DND</li> </ul>	
4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks							
20	s	Status <ul style="list-style-type: none"> <li>– 0: deactivate DND</li> <li>– 1: activate DND</li> </ul>							
08	<b>Disconnection</b>		<b>Front office → Server</b>						
This function interrupts an ongoing call for a specific extension, provided the call is still active. This function can be used before check-out to definitively disconnect an ongoing call or to stop continuous calls. Basically, the telephone system can be configured in such a way that the call data is not transmitted to the telephone calls when the call is concluded, but at regular intervals. The front office thus receives several records with record type 11 for a call. This function is only supported in connection with Hicom 300.									
<p><b>[STX]081nnnnnn0000000000s[ETX][BCC]</b></p> <table> <tr> <td>4</td><td>nnnnnn</td><td>Extension 6-digit, left-aligned, completed with blanks</td></tr> <tr> <td>20</td><td>s</td><td>Status           <ul style="list-style-type: none"> <li>– 0: extension</li> <li>– 1: extension + sub-extension</li> </ul> </td></tr> </table>			4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks	20	s	Status <ul style="list-style-type: none"> <li>– 0: extension</li> <li>– 1: extension + sub-extension</li> </ul>	
4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks							
20	s	Status <ul style="list-style-type: none"> <li>– 0: extension</li> <li>– 1: extension + sub-extension</li> </ul>							

Record type	Position	Value	Description
09			<b>Check-in advanced</b> <span style="float: right;"><b>Front office → Server</b></span>
			This record type has the same functionality as record type 01, but contains additional fields that can be transferred for connecting to a voicemail system. The same conditions as for record type 01 apply. <b>[STX]091nnnnnn0000000000ttscxx(40)fr(10)g(10)o(6)vvy(40)l(10)</b> <b>[ETX][BCC]</b>
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	tt	Class of service, the configuration is only accessed by the server in the case of "00"
	22	s	Status <ul style="list-style-type: none"> <li>– 1 Check-in (the server automatically switches telephone privileges and enters a name)</li> <li>– 2 Additional check-in (the server automatically enters a name, telephone privileges are only switched in the case of new extensions)</li> <li>– 3 Relocation to free room (the server automatically switches telephone privileges and enters a name, check-out must be performed for the old room.)</li> <li>– 4 Relocation to occupied room (the server automatically enters a name, telephone privileges are only switched in the case of new extensions, check-out must be performed for the old room.)</li> <li>– 5 Check-out - room still occupied (telephone privileges are not switched and no name is entered)</li> <li>– 6 Check Out - Room Free The SWAP flag can only =1 in status 1, 2 and 6. The same conditions as for SWAP flag = 0 apply</li> </ul>
	23	cc	Country code or language code of the guest, codes subject to agreement (01 to 09)
	25	x(40)	Guest name, max. 40 digits, simultaneous text for telephone book function/guest name
	65	f	Swap-flag <ul style="list-style-type: none"> <li>– 0: new check-in</li> <li>– 1: repeated check-in, e.g. after record type 25 from front office system</li> </ul>

## Host protocol

### Overview of record types

Record type	Position	Value	Description
(09)	66	r(10)	Guest/reservation number, 10 digits, left-aligned, completed with blanks
	76	g(10)	Group number, 10 digits, left-aligned, completed with blanks
	86	o(6)	Extension/room old, 6 digits, left-aligned, completed with blanks
	92	vvv	Status, 3 digits left-aligned, completed with blanks, e.g. VIP
	95	y(40)	Group name, 40 digits left-aligned, completed with blanks
	135	l(10)	Limit amount, 10 digits with leading zeros account limit for call charges, actually not used by Caracas Link.
0A	<b>Bind</b>		
	<b>Server → Front office → Server</b>		
	This record type is sent if the corresponding program is not ready to receive data from the interface or if the program is once again ready to receive data (e.g. startup). If this record type is permitted, the line must be set up on both sides (server, front office system) with this record type.		
	<b>[STX]0A1000000000000000x[ETX][BCC]</b>		
0B	20	x	Status – 0: not ready – 1: ready
	<b>Set date/time</b>		
	<b>Server → Front office → Server</b>		
	This record type transfers the current date and the time to the front office system if the TC system provides a corresponding function. Moreover, the front office system sets the date and time on the Caracas Link PC.		
	<b>[STX]0B1000000000000000ss1yyymmddhhmmssd[ETX][BCC]</b>		
	20	ss	System ID – 21: Hicom 150E/200 – 31: Hicom 300 – 51 or 71: reserved
	23	yy mm dd	Date in format YYMMDD
	29	hh mm ss	Time in format HHMMSS
	35	d	Day – 1: Monday – 2: Tuesday – ...

Record type	Position	Value	Description
0C			<b>Enable/disable host records</b> <span style="float: right;"><b>Front office → Server</b></span> This function allows you to enable or disable record types that can be sent from the server to the front office system. In this way, only permitted record types are generally taken into account. The record type changeover is only temporary and switches back to the configured record types the next time the program is started up. <b>[STX]0C1000000000000000ssf[ETX][BCC]</b>
	20	ss	Record type
	22	f	Status <ul style="list-style-type: none"><li>– 0: disable record type</li><li>– 1: enable record type</li></ul>
11			<b>Charge call</b> <span style="float: right;"><b>Server → Front office</b></span> This function is used to transfer the call charges to the front office system. The system basically differentiates between two different call charge records: <i>default call charge record</i> and <i>enhanced call charge record</i> . In the case of enhanced call charge record, the program calculates the call charges and appends these to the record. The server decides independently which record is to be transferred. Each telephone call results in the transfer of at least one call charge record, if the telephone system is appropriately configured, several records can also be created for a call. The front office system can then disconnect ongoing calls using record type 08. This data record is created, moreover, if Caracas transferred a call charge record from the voicemail system. Call charge data is produced by the voicemail system if messages were forwarded externally or fax messages were received or sent. N.B.: this can lead to double call charge data. If, for example, the fax server sends a fax via a central extension, the PBX system creates a call charge record from this extension and this is forwarded by Caracas. This extension should never be assigned to a guest. The voicemail system then creates a call charge record for the fax. This data record is then charged to the guest as the voicemail system recognizes the relevant assignment. This data record also leads Caracas (at the guest extension) to the host. <b>[STX]111nnnnnn000000000aa10x(68)[ETX][BCC]</b>
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	aa	System ID <ul style="list-style-type: none"><li>– 50, 54, 55, 70, 74, 75: 8818</li><li>– 20: Hicom 150E/200</li><li>– 30: Hicom 300</li><li>– 81: voicemail system</li></ul>
	22	10	ID or filler (always 10)

## Host protocol

### Overview of record types

Record type	Position	Value	Description																																																						
(11)	24	x(68)	<p>Call record comprising:            YYMMDDHHMMSShhmmssudggnnnnnaaaaeeee            z(16)kgc(12)s</p> <table> <thead> <tr> <th>Pos.</th><th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>24</td><td>YYMMDD</td><td>Date of call start, 6-digit</td></tr> <tr> <td>30</td><td>HHMMSS</td><td>Time of call start, 6-digit</td></tr> <tr> <td>36</td><td>hhmmss</td><td>Time of call end, 6-digit</td></tr> <tr> <td>42</td><td>u</td><td>Satellite system ID, always 0 for Hicom</td></tr> <tr> <td>43</td><td>d</td><td>Service ID, always 0 for Hicom</td></tr> <tr> <td>44</td><td>gg</td><td>Group ID / Extension type, 2-digit            00 to 09 (guest extensions)            10 to 19 (management extensions)            99 (unknown)</td></tr> <tr> <td>46</td><td>nnnnnn</td><td>Extension, 6-digit</td></tr> <tr> <td>52</td><td>aaaa</td><td>Trunk number/line code/CO access digits, 4-digit max., left-aligned, completed with blanks</td></tr> <tr> <td>56</td><td>eeeeee</td><td>Number of charge pulses, 5-digit</td></tr> <tr> <td>61</td><td>z(16)</td><td>Destination number, 16-digit, left-aligned, completed with blanks</td></tr> <tr> <td>77</td><td>k</td><td>Destination number code, 1-digit</td></tr> <tr> <td>78</td><td>g</td><td>Call type, always 0 for Hicom</td></tr> <tr> <td>79</td><td>c(12)</td><td>Code number, if used, otherwise always 000000000000</td></tr> <tr> <td>91</td><td>s</td><td>Call setup code, always 0 for Hicom</td></tr> <tr> <td>92</td><td>p(10)</td><td>Call charges, 10-digit with leading zeros with amount for calculation using unit price from server</td></tr> <tr> <td>102</td><td>b(10)</td><td>Costs, 10-digit with leading zeros with amount for calculation using unit price, charge tables or the Swiss table if working with CCM</td></tr> <tr> <td>112</td><td>h</td><td>Code (national, international, local, mobile)</td></tr> </tbody> </table>	Pos.	Value	Description	24	YYMMDD	Date of call start, 6-digit	30	HHMMSS	Time of call start, 6-digit	36	hhmmss	Time of call end, 6-digit	42	u	Satellite system ID, always 0 for Hicom	43	d	Service ID, always 0 for Hicom	44	gg	Group ID / Extension type, 2-digit 00 to 09 (guest extensions) 10 to 19 (management extensions) 99 (unknown)	46	nnnnnn	Extension, 6-digit	52	aaaa	Trunk number/line code/CO access digits, 4-digit max., left-aligned, completed with blanks	56	eeeeee	Number of charge pulses, 5-digit	61	z(16)	Destination number, 16-digit, left-aligned, completed with blanks	77	k	Destination number code, 1-digit	78	g	Call type, always 0 for Hicom	79	c(12)	Code number, if used, otherwise always 000000000000	91	s	Call setup code, always 0 for Hicom	92	p(10)	Call charges, 10-digit with leading zeros with amount for calculation using unit price from server	102	b(10)	Costs, 10-digit with leading zeros with amount for calculation using unit price, charge tables or the Swiss table if working with CCM	112	h	Code (national, international, local, mobile)
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Record type	Position	Value	Description
12	<b>Voice message</b>		<b>Server → Front office</b>
	This function is used to transfer the voicemail status of a guest telephone. Caracas Link independently sets or deletes the message waiting indicator, before this message is sent to the front office system.		
	<b>[STX]121nnnnnn0000000000s[ETX][BCC]</b>		
13	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	<b>Room status</b>		<b>Server → Front office</b>
	This function is used by hotel personnel to set the room status by telephone. The record type is also used if the room status is entered via the voicemail system.		
14	<b>[STX]131nnnnnn0000000000ss[ETX][BCC]</b>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	ss	Status, e.g. – 01: clean – 02: not clean – 03 - 09: ... Caracas only uses statuses 01 to 09, since the status is later converted to single-digit numbers
	<b>Wakeup request</b>		<b>Server → Front office</b>
	This function transfers a wakeup request entered via the telephone to the front office system, i.e. the transfer of the wakeup data to the front office system. The actual wakeup procedure runs automatically via the server. As soon as the guest has received the wakeup call or if the guest could not be woken, the front office system receives a special message. This message is also sent if the guest sets or deletes a wakeup time via the voicemail system.		
14	<b>[STX]141nnnnnn0000000000hhmmss[ETX][BCC]</b>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	hhmm	Wakeup request time
	24	s	Status – 0: cancel wakeup request – 1: enter wakeup request
	25	p	Mode – 0 one-time request – 1 daily request

## Host protocol

### Overview of record types

Record type	Position	Value	Description
15	<b>Minibar</b>		<b>Server → Front office</b>
	This function transfers the minibar entry to the front office system. The entry is made by hotel personnel via the guest telephone using the Caracas Link data service. It is only possible to book minibar articles that are also entered in the article stock file by the server. This record type is also used if the minibar function was activated via the voicemail system:		
	<b>[STX]151nnnnnn000000000aaaaas[ETX][BCC]</b>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	aaaaaa	Article number 6-digit, left-aligned, completed with blanks
	21	s	Status – 1: booked – 0: cancelled Caracas-Link only uses Status '1'.
16	<b>Service request</b>		<b>Server → Front office</b>
	This function is used by hotel personnel to record additional services, such as sauna or swimming pool use, by telephone using the Caracas Link data service and to transfer this information to the front office system. The recorded services do not have to be entered or available as articles in the article stock file by the server.		
	<b>[STX]161nnnnnn000000000tttttaaaaaa[ETX][BCC]</b>		
	4	nnnnnn	Guest extension for which the service is to be entered 6-digit, left-aligned, completed with blanks
	20	ttttt	Extension used to record the service 6-digit, left-aligned, completed with blanks
	26	aaaaaa	Article number 6-digit, left-aligned, completed with blanks

<b>Record type</b>	<b>Position</b>	<b>Value</b>	<b>Description</b>
17	<b>Wakeup attempt</b>		
	<b>Server → Front office</b>		
	This function transfers the wakeup status for an extension. This function is also used if the wakeup status is transferred from the voicemail system. <b>[STX]171nnnnnn0000000000ttrmmmyyhhmms[ETX][BCC]</b>		
	4	nnnnnn	Extension used to record the service 6-digit, left-aligned, completed with blanks
	20	ddm-myy	Date of wakeup request
18	<b>Minibar advanced</b>		
	<b>Server → Front office</b>		
	This function transfers the minibar entry to the front office system. The entry is made by hotel personnel via the guest telephone using the Caracas Link data service. In contrast to record type 15, a personnel number is transferred with this record type, i.e. when entering an article at the guest telephone, the hotel personnel must identify themselves by means of the personnel number. It is only possible to book minibar articles that are also entered in the article stock file by the server. <b>[STX]181nnnnnn0000000000aaaaasx(10)[ETX][BCC]</b>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	aaaaaa	Article number 6-digit, left-aligned, completed with blanks
	26	s	Status <ul style="list-style-type: none"> <li>– 0: wakeup request not executed</li> <li>– 1: wakeup request executed</li> </ul>
	27	x(10)	Personnel number 10-digit, left-aligned, completed with blanks

## Host protocol

### Overview of record types

Record type	Position	Value	Description
19	<b>Room status advanced</b>		
	This function is used by hotel personnel to set the room status via the telephone using the Caracas Link data service. In contrast to record type 13, a personnel number is transferred with this record type, i.e. when entering an article at the guest telephone, the hotel personnel must identify themselves by means of the personnel number.		
	<b>[STX]191nnnnnn000000000ssx(10)[ETX][BCC]</b>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
20	20	ss	Status <ul style="list-style-type: none"> <li>– 01: clean</li> <li>– 02: not clean</li> <li>– 03: unassignable</li> <li>– 04 - 09: ...</li> </ul>
	22	x(10)	Personnel number 10-digit, left-aligned, completed with blanks
	<b>Presence/absence</b>		
20	This function transfers the presence status to the front office system. The hotel sets this status via the guest telephone using the Caracas Link data service and identifies itself with the personnel number.		
	<b>[STX]201nnnnnn000000000sx(10)[ETX][BCC]</b>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	s	Status <ul style="list-style-type: none"> <li>– 0: logged off</li> <li>– 1: logged on</li> </ul>
21	21	x(10)	Personnel number 10-digit, left-aligned, completed with blanks

Record type	Position	Value	Description
21	<b>Do-not-disturb</b>		<b>Front office → Server</b>
	<p>This function switches an extension to the required class of service. The function is also always performed for the configured sub-extensions, provided they are not locked for this function. Extensions that were not yet configured are created by the server as main extensions (see record type 07 also).</p> <p>[STX]21nnnnnn0000000000s[ETX][BCC]</p>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	s	<p>Status</p> <ul style="list-style-type: none"> <li>– 2 international</li> <li>– 3 national</li> <li>– 4 local</li> <li>– 5 locked</li> </ul> <p>for do-not-disturb</p> <ul style="list-style-type: none"> <li>– 0 cancel do-not-disturb</li> <li>– 1 do-not-disturb</li> </ul> <p>(This DND function only works when connected to Hicom 200, Octopus 8818 E and Hicom 150 E. The host, however, can use this data record at all PBX systems as Caracas automatically creates a record type 07 from this data record when connecting another PBX.)</p>
22	<b>Do-not-disturb</b>		<b>Server → Front office</b>
	<p>This function is used to forward a Do-not-disturb or Override do-not-disturb switch to the front office system, once the guest has selected this function at his/her guest telephone and the TC system has prepared a corresponding record. At the time of transfer, the relevant extension is already switched, i.e. the front office system does not have to react to this record type (e.g. with record type 21).</p> <p>[STX]221nnnnnn0000000000s[ETX][BCC]</p>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	s	<p>Status</p> <ul style="list-style-type: none"> <li>– 0: Override do-not-disturb</li> <li>– 1: Do-not-disturb</li> </ul>

## Host protocol

### Overview of record types

Record type	Position	Value	Description
23		<b>Update guest name</b>	<b>Front office → Server</b>
		This function changes the guest names and automatically causes a guest name change on the TC system for the corresponding extension. The function is also always performed for the configured sub-extensions, provided they are not locked for this function. Extensions that were not yet configured are created by the server as main extensions.	
		[STX]231nnnnnn0000000000x(40)[ETX][BCC]	
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	x(40)	Guest name, max. 40 digits, simultaneous text for telephone book function/guest name (12 digits only)
24		<b>Edit stock article</b>	<b>Front office → Server</b>
		This function is intended for the administration of the article file by the server. Basically all articles must be entered via the minibar function with the Caracas Link data service (not for connecting to the voicemail system) in which the server article file is available.	
		[STX]2410000000000000aaaaasx(20)[ETX][BCC]	
	20	aaaaaa	Article number 6-digit, left-aligned, completed with blanks
	26	s	Status <ul style="list-style-type: none"> <li>– 0: delete article</li> <li>– 1: create article</li> <li>– 2: delete article file (create again)</li> </ul>
	27	x(20)	Article name 20-digit, left-aligned, completed with blanks

Record type	Position	Value	Description
25	<b>Request for database swap</b>		
	<b>Server → Front office</b> This function is used by the server to request the transfer of specific records from the front office system. The program can thus, request all guest or article data, for example, particularly within the framework of installation. This record type is, however, not automatically sent but must be entered. <b>[STX]2510000000000000000s[ETX][BCC]</b>		
26	20	s	Status — 1: Check-in data — 2: Guest name — 3: Article data — 4: Wakeup requests — 5: Do-not-disturb status — 6: Messages — 0: Request for all host data
	<b>Server status information</b> <b>Server → Front office</b> The record type transfers the error or application status of a Caracas Link component to the host. <b>[STX]261000000000000ss1annx(60)[ETX][BCC]</b>		
23	20	ss	System ID: 21 Hicom 150E/200 31 Hicom 300 51 or 71 reserved 22 Hicom 150E Office 61 Caracas Server 81 Voicemail connection
	23	ann	Error number consisting of an application ID (a) <ul style="list-style-type: none"> <li>• 0 PBX</li> <li>• 1 voicemail system</li> <li>• 2 Callstar Horizon system</li> <li>• 6 server and error number (nn); the error number is managed by Caracas only</li> </ul> The following error numbers are currently implemented: <ul style="list-style-type: none"> <li>• 001: WinCall, =&gt; interface online</li> <li>• 002: WinCall, =&gt; application/interface offline</li> <li>• 010: WinCall, AMHOST/FAMOS service: =&gt; check-in/check-out and name update failure</li> <li>• 011: WinCall, DGV/HCCS service: =&gt; failure of switching function and wake-up calls</li> </ul>

## Host protocol

### Overview of record types

Record type	Position	Value	Description
(26)	(23)	(ann)	<ul style="list-style-type: none"> <li>• 012: WinCall, MR/GUE service: =&gt; failure of call charge transmission, 013: WinCall, TDD service (Hicom 300 only): =&gt; failure of TDD</li> <li>• 101 Voicemail, =&gt; interface online</li> <li>• 102 Voicemail, =&gt; application/interface offline</li> <li>• 201 Horizon =&gt; interface online</li> <li>• 202 Horizon =&gt; application/interface offline</li> <li>• 601: Server, =&gt; application online</li> <li>• 602: Server, =&gt; application offline</li> <li>• 603: Server: =&gt; failure of status message from voicemail system</li> <li>• 604: Server: =&gt; expiry of call charge timer</li> <li>• 605: Server: =&gt; failure of charging via Caracas Server</li> <li>• 606: Server: =&gt; update of charging table unsuccessful</li> <li>• 607: Server: =&gt; failure of call charge interface</li> <li>• 608: Server: =&gt; failure of charging via external application</li> <li>• 609: Server =&gt; failure of status message from Callstar Horizon system</li> </ul>
26	x(60)		Date and time in Control Panel form and error message in English.
<b>27</b>			<p><b>Call pickup / extension assignment</b> <span style="float: right;"><b>Front office → Server</b></span></p> <p>This record type is used by the host to assign free guest sub-extensions to a guest main extension and thereby configure a call pickup group. The guest can thus answer every call at every terminal in his/her call pickup group. Handsets or pay phones can be assigned in this way to the relevant guest extension and call charges are directly charged to the guest extension.</p> <p><b>N.B.:</b> this record type only contains the assignment of the extension – the class of service is not switched, for example, and no telephone directory entries are made.</p> <p><b>[STX]271nnnnnn000000000zzzzzks[ETX][BCC]</b></p>
4	nnnnnn		Extension, 6-digit, left-aligned, complete with blanks
20	zzzzzz		Extension to be assigned
26	k		Extension type <ul style="list-style-type: none"> <li>– 1 = sub-extension 1</li> <li>– 2 = sub-extension 2</li> <li>– ...</li> <li>– 9 = pay phone</li> </ul>
27	s		Status <ul style="list-style-type: none"> <li>– 0 = delete assignment</li> <li>– 1 = set assignment</li> </ul>

Record type	Position	Value	Description
28			<b>Enter/delete PIN numbers</b> <span style="float: right;">Front office → Server</span>
			The host can use this record type to assign or delete PIN numbers of an extension. The PIN numbers are managed at the host system. This function is also always performed for the configured sub-extensions, provided a main extension is involved. The function cannot be disabled by a lock flag at individual extensions in Caracas. <b>[STX]281nnnnnn0000000000zzzzzc(12)ttbs[ETX][BCC]</b>
	4	nnnnnn	Extension, 6-digit, left-aligned, completed with blanks
	20	zzzzzz	Virtual extension to which the PIN number is to be assigned in order to copy its class of service, 6-digit, left-aligned, completed with blanks (This virtual extension is only required for connection to the Hicom 300. Basically, the host does not have to perform the transfer if the virtual extension is unknown. The server configuration is then accessed. A valid class of service must be entered in the field or 00 must be transferred for this.)
	26	c(12)	PIN number, numeric, left-aligned, completed with blanks
	38	tt	Telephone class of service, the server configuration is accessed in the case of "00"
	40	b	PIN number class of service <ul style="list-style-type: none"> <li>– 0 = not authorized</li> <li>– 1 = always authorized</li> <li>– 2 = only authorized at this extension</li> <li>– 3 = authorized at main and sub-extensions (this function is not currently used as all PBX systems do not offer appropriate support.)</li> </ul>
	41	s	Status <ul style="list-style-type: none"> <li>– 0 = delete assignment</li> <li>– 1 = set assignment</li> </ul>

## Host protocol

### Overview of record types

Record type	Position	Value	Description
29	<b>Voice message advanced</b>		<b>Server → Front office</b>
	This function is used to copy the advanced voicemail status of a guest telephone. Depending on the parameter set, Caracas Link automatically sets or deletes the message waiting lamp before this message is sent to the front office system.		
	<b>[STX]291nnnnnn000000000ssnn[ETX][BCC]</b>		
	4	nnnnnn	Extension, 6-digit, left-aligned, completed with blanks
	20	ss	Number of new messages not yet played back This value is important for setting the message waiting lamp by Caracas. If ss = 00, the lamp is deleted, if ss <> 00, the lamp is set. N.B.: the message waiting lamp can also be set by the voicemail system.
	22	nn	Number of messages played back, e.g. 04
30	<b>Set/delete message waiting lamp</b>		<b>Front office → Server</b>
	Alternative to record type 02		
	<b>[STX]021nnnnnn000000000sa[ETX][BCC]</b>		
	As an alternative to record type 02, this function can be used by the host to set the message waiting lamp at the voicemail system and/or in Caracas. At the same time as setting the lamp in the voicemail system, a standard text is saved in the guest's voicemail box (e.g. "...there are messages for you at the reception..."). The voicemail system does not respond, e.g. with record type 12 or 29		
	<b>[STX]301nnnnnn000000000sa[ETX][BCC]</b>		
	4	nnnnnn	Extension, 6-digit, left-aligned, completed with blanks
	20	s	Mode <ul style="list-style-type: none"><li>– 1 = only in Caracas</li><li>– 2 = only in the voicemail system</li><li>– 3 = in Caracas and in the voicemail system</li></ul>
	21	a	Status <ul style="list-style-type: none"><li>– 0 = off</li><li>– 1 = on</li></ul>

Record type	Position	Value	Description
31	<b>Service cost</b>		<b>Server → Front office</b>
	This function is used to transfer service costs, e.g. from the voicemail system, for example, for fax transmission. The record structure corresponds to record type 16 and also contains a price which must be charged to the guest. The article number/s contained in the data record is/are assigned by the system at which they were incurred, e.g. the voicemail system. The article number is not known on the Caracas side.		
	<b>[STX]311nnnnnn0000000000tttttaaaaaap(10)[ETX][BCC]</b>		
	4	nnnnnn	Extension, 6-digit, left-aligned, completed with blanks
	20	ttttt	Extension that performs the function, 6-digit, left-aligned, completed with blanks; corresponds at present to the guest extension
	26	aaaaaa	Article number, 6-digit, left-aligned, completed with blanks Example: the voicemail system can charge service costs for outgoing faxes, incoming faxes and call charges in the case of call forwarding.
	32	p(10)	Price per article 10 digits with leading zeros and two digits after the decimal point.
32	<b>Minibar complete</b>		<b>Server → Front office</b>
	This function transfers the minibar consumption to the front office system. The consumption entry is made via the Voicemail system.		
	<b>[STX]321nnnnnn0000000000aaaaax(30)ccp(10)[ETX][BCC]</b>		
	4	nnnnnn	Extension 6-digit, left-aligned, completed with blanks
	20	aaaaaa	Article number 6-digit, left-aligned, completed with blanks
	26	x(30)	Article name 30 digit, left-aligned, completed with blanks
	56	cc	Amount 01 to 09
	58	p(10)	Price per article 10 digit, with leading zeros and two digits after the decimal point.

## **Host protocol**

### *Overview of record types*

## 14 pcANYWHERE

### What is pcANYWHERE?

The program pcANYWHERE allows you to set up a connection to another PC from your PC (by cable, modem, network or ISDN card) and to edit the files and directories located on this so-called host PC (e.g. copy, delete or overwrite).

For the Service division, this program is mainly used for remote support, error analysis as well as remote PC control. The PC must be connected to a modem or an ISDN card which is used to set up the connection to the other PC (host). The modem is connected to the PC serial interface.

### Installation

The program pcANYWHERE is preinstalled on PCs for Caracas Link at the factory. It is configured in such a way that the program automatically starts up every time Windows is started. The HOST mode must be configured on-site. The modem for Caracas Link is to be connected at the serial interface of the PC.



The figures and comments in this chapter are valid for pcANYWHERE version 8. The details can be slightly different for other versions of pcANYWHERE. Generally the parameters described in this chapter have to be configured.

### 14.1 Configuring Host mode

#### Definition of Host connection objects

Before you can start a remote control session with a remote PC, you must create a host connection object. A host connection object is a file that contains information about the connection device and the security settings.

#### Multiple host connection objects

With pcANYWHERE for Windows, you can create multiple host connection objects that each use a different configuration. In this way, you can, for example, create a host connection object for modem connections and other network connections.

#### Manual/automatic settings of host connection objects

You can create connection objects manually or execute the wizard "Add host object". The wizard allows you to specify the name and the connection device for the connection object, and uses standard settings for the remaining characteristics. For individual settings, you can:

- edit the characteristics of the connection object.

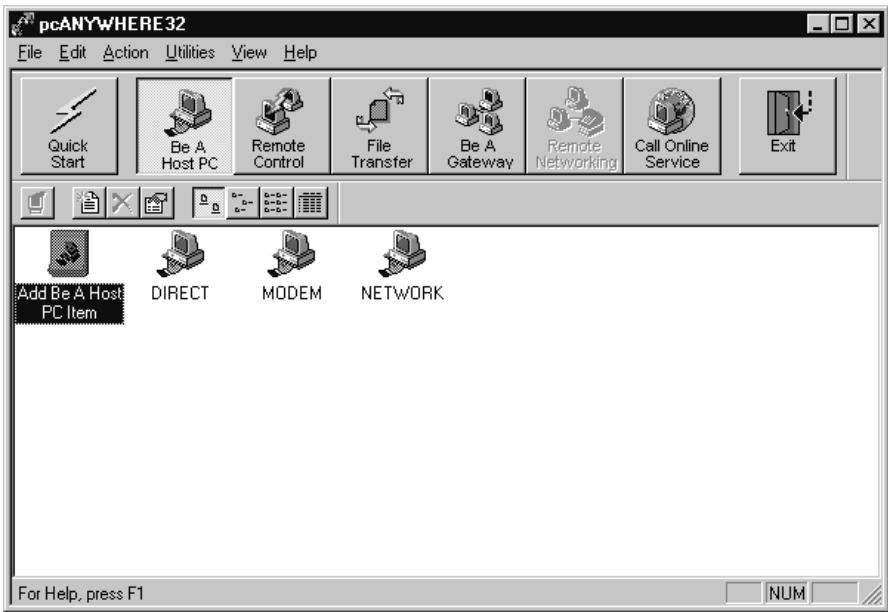
## pcANYWHERE

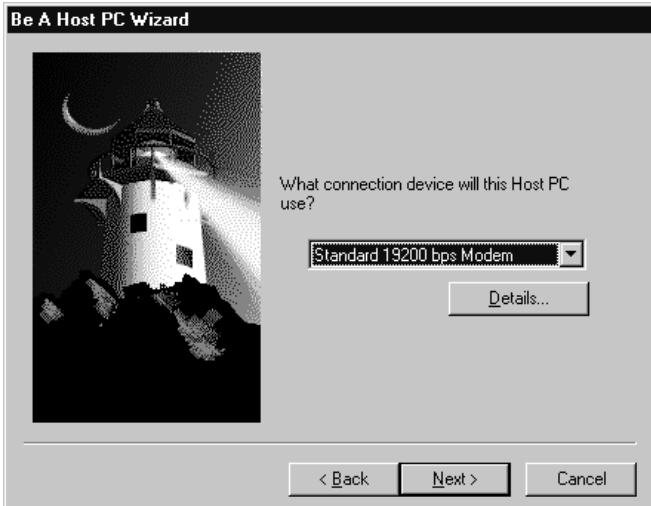
### Configuring Host mode

- individually customize the standard values used by the wizard. Each connection object created with the help of the wizard then receives the customized settings.

#### 14.1.1 Defining a new host connection object

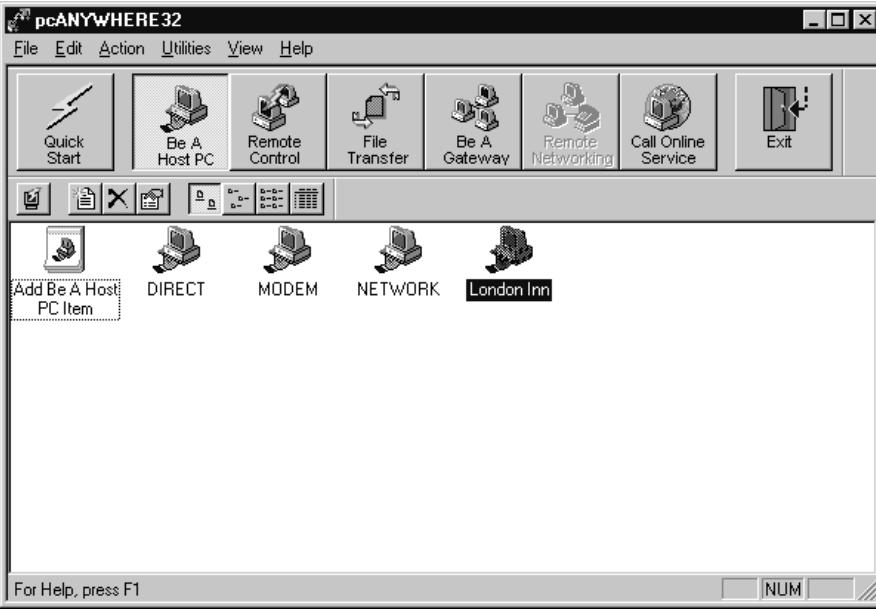
##### Creating a host connection object with the help the wizard

Step	Procedure
1	Activate pcANYWHERE (icon in the taskbar). The following window appears: 
2	Click the <i>Be A Host PC</i> button.
3	Double-click on the icon <i>Add Be A Host PC Item</i> to create a new connection object with the help of the wizard.

<b>Step</b>	<b>Procedure</b>
4	<p>Enter the name of the new host connection object in the window that appears and click the <i>Next</i> button.</p> 
5	<p>Specify the connection device with which you want to work. To do this, you can select an existing device from the list field. Confirm your specification by clicking the <i>Next</i> button.</p> 

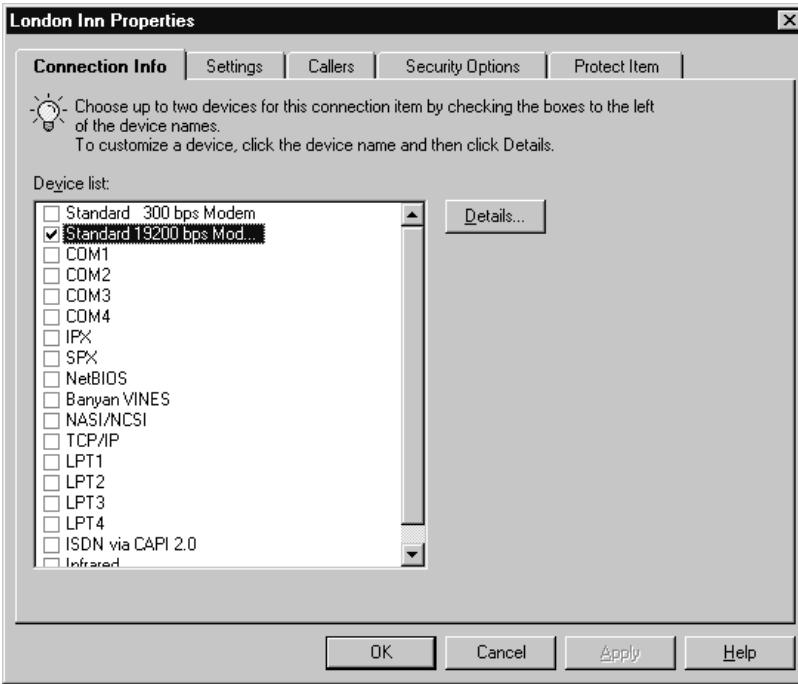
# pcANYWHERE

## Configuring Host mode

Step	Procedure
6	<p>The PC is thus configured as the host. Confirm the relevant message by clicking the <i>Next</i> button. The option field <i>Automatically launch after wizard</i> is not active.</p> 
7	<p>You are returned to the pcANYWHERE window. The newly created object is displayed in the window.</p> 
8	<p>If necessary, individual configurations that differ from the wizard's default settings are now to be made for this object.</p>

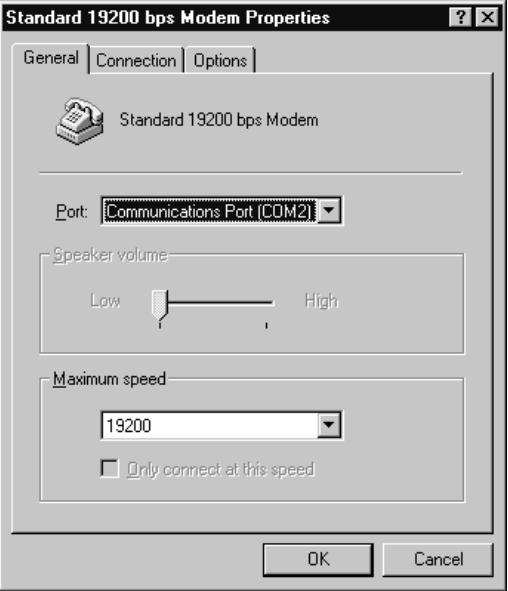
## 14.1.2 Configuring connection information

### Setting connection information for the host connection object

Step	Procedure
1	Activate the entry <i>Properties</i> in the <i>File</i> menu.
2	Activate the <i>Connection Info</i> tab. 
3	Select the modem activated in the Control Panel in Windows.

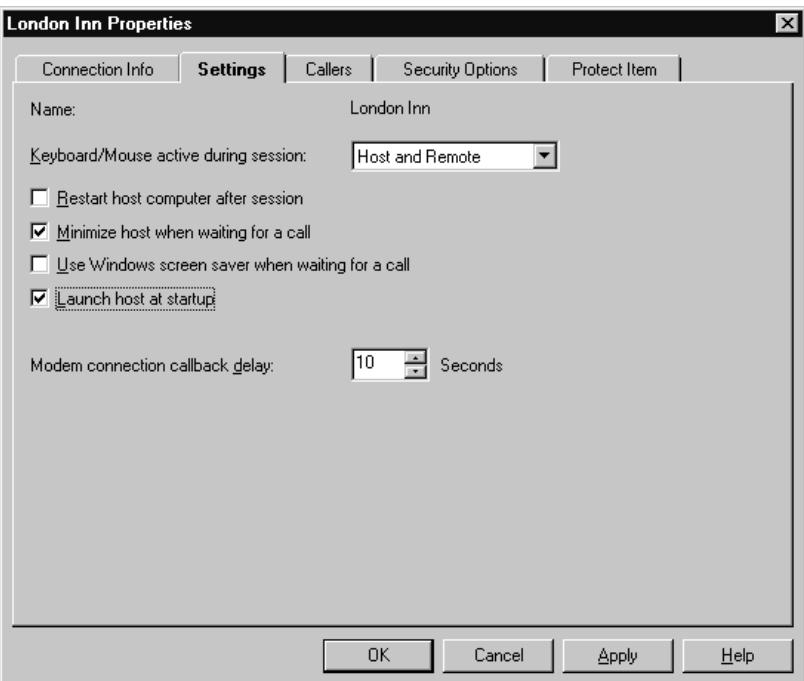
# pcANYWHERE

## Configuring Host mode

Step	Procedure
4	<p>Click the <i>Details</i> button. A window appears in which you can enter or change the preferred connection settings:</p>  <p>The default settings are as follows:</p> <ul style="list-style-type: none"> <li>• <i>Speed</i> In accordance with the modem/hardware used</li> <li>• <i>Parity</i> &lt;None&gt;</li> <li>• <i>Dataflow control</i> RTS/CTS</li> <li>• <i>Start by</i> Receive signal level</li> <li>• <i>End by:</i> Receive signal level</li> </ul>
5	Configure the host settings.

### 14.1.3 Configuring host settings

#### Configuring host settings for the host connection object

Step	Procedure
1	<p>Activate the <i>Settings</i> tab. Configure the host options for each remote control session involving the host object.</p> 
2	<p>Select the following settings:</p> <ul style="list-style-type: none"> <li>• <i>Keyboard/mouse active during session</i>: This setting defines who controls the keyboard and mouse during a session. The default setting is "Host and remote".</li> <li>• <i>Restart host computer after session</i>: Activate this check box if the host is to be restarted after each session or after a connection loss.</li> <li>• <i>Minimize host when waiting for a call</i>: If this check box is activated, the host is displayed as an icon on the desktop if it is waiting for a connection. If this option is not selected, pcANYWHERE displays a status dialog box.</li> <li>• <i>Use Windows screen saver when waiting for a call</i>: A screen saver must not be activated or installed when using Caracas Link. As a result, this option must be deactivated.</li> <li>• <i>Launch host at startup</i>: Requires that the host is automatically loaded and waits for a call when the PC is started up.</li> </ul>

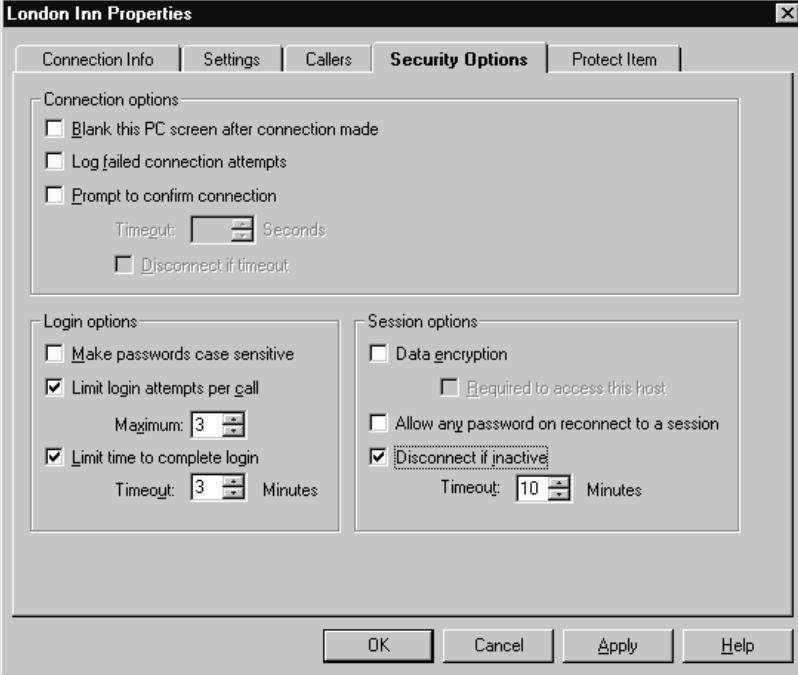
## pcANYWHERE

### Configuring Host mode

Step	Procedure
	<ul style="list-style-type: none"><li><i>Modem connection callback delay:</i> Enter the length of time in seconds that the host must wait before it calls back a remote PC. This setting is ignored if the <i>Use callback number</i> option was not activated on the <i>Callback</i> tab in the <i>Caller</i> properties window. To ensure that the host picks up a call after a specific number of rings, you must set the appropriate number in the <i>Program Options</i> tab.</li></ul>
3	Configure the security option of the host connection object.

#### 14.1.4 Configuring security options

##### Configuring security options for the host connection object

Step	Procedure
1	<p>Activate the <i>Security Options</i> tab. Select the security settings for all remote control sessions which involve the host.</p> 
2	<p>Select the following settings in the <i>Connection Options</i> group window:</p> <ul style="list-style-type: none"> <li><i>Blank PC screen after connection made</i>: Increases the security of unsupervised host sessions in which the screen display of the host PC is deactivated.</li> <li><i>Log failed connection attempts</i>: Records all failed connection attempts in a logbook file.</li> <li><i>Prompt to confirm connection</i>: Sends a brief message to the user of the host PC, if a connection is requested by a remote user. The host user can decide in a query field whether or not to authorize the connection.</li> <li><i>Timeout</i>: Specifies how long the host user has to answer the query. The default value is ten seconds.</li> </ul>

# pcANYWHERE

## Configuring Host mode

Step	Procedure
	<ul style="list-style-type: none"> <li><i>Disconnect if timeout:</i> As long as this check box is not active, the connection is automatically set up when the timeout expires. If, on the other hand it is active, the connection to the caller is cleared down once the specified timeout has expired without confirmation from the host user. This option is masked out if the check box <i>Prompt to confirm connection</i> is not active.</li> </ul>
3	<p>Select the following settings in the <i>Login Options</i> group window:</p> <ul style="list-style-type: none"> <li><i>Make password case-sensitive:</i> Passwords must be entered in the correct sequence of uppercase and lowercase letters.</li> <li><i>Limit login attempts per call:</i> Defines the number of logon attempts available to the caller. The default value is three attempts.</li> <li><i>Limit time to complete login:</i> Defines the length of time available to the caller for logon. The default value is three minutes.</li> </ul>
4	<p>Select the following settings in the <i>Session Options</i> group window:</p> <ul style="list-style-type: none"> <li><i>Data encryption:</i> Encrypts for the host all data to be transferred during a remote control session.</li> <li><i>Required to access this host:</i> The host accepts only calls from remote users using a version of pcANYWHERE that supports data encryption. This prevents unencrypted data from being transferred. This option is greyed if the check box <i>Data encryption</i> is not active.</li> <li><i>Allow any password on reconnect to a session:</i> Allows users to log on with any password after a remote administration session is unexpectedly interrupted.</li> <li><i>Disconnect if inactive:</i> Defines a timeout after which pcANYWHERE automatically interrupts the session if in the meantime the screen data has not been changed and no keystrokes have been made. The telephone line is kept free by defining the inactivity interruption in case a remote user forgets to end the session. This interruption can be defined for an individual caller by activating the check box <i>Caller subject to inactivity timeout</i> in the <i>Advanced</i> tab in the caller's properties window. The default timeout for inactivity is ten minutes before the connection is cleared down.</li> </ul>
5	Create a new caller for the host connection object or configure caller data.

### 14.1.5 Caller definition

#### What can be controlled?

As the host user you can control who is recorded with the host connection and restrict the control for each individual caller. You can grant full access rights to all callers or define individual rights for each individual caller.

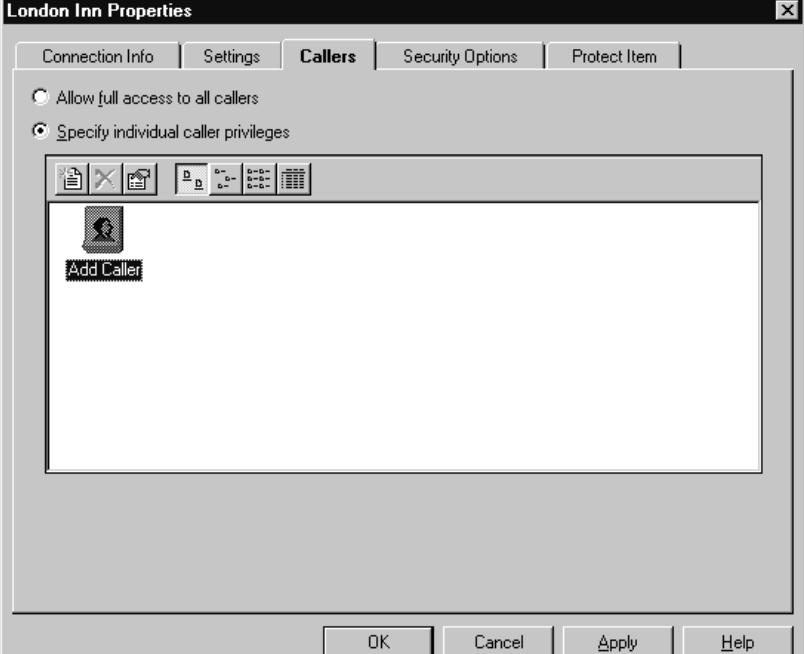
#### Restrictions

If the option "Callers have individual rights" is selected, only the callers selected by the host user can pick up a connection to this host object.

#### Password and login name for callers

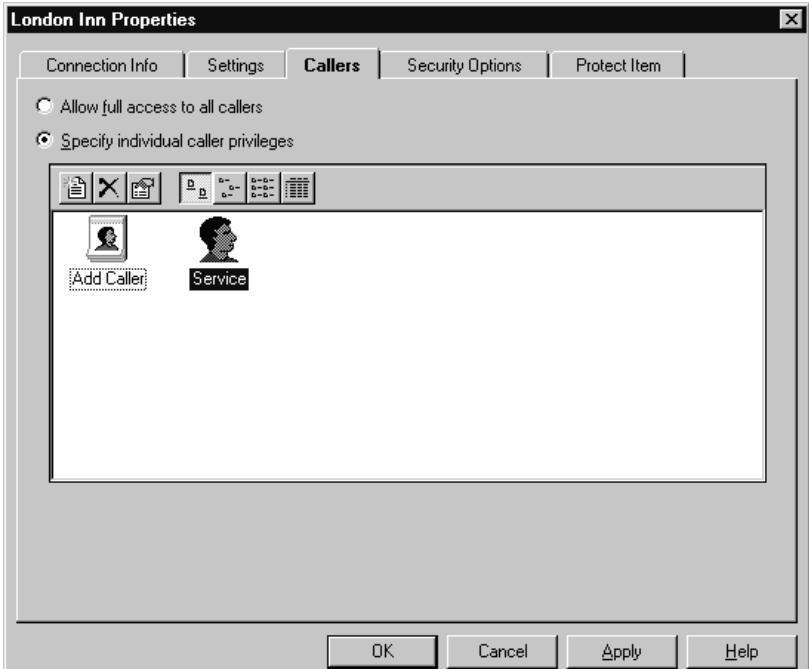
Each caller is assigned a password and a login name that identifies the caller for the host. Security for the host is considerably increased if caller access rights are defined on an individual basis.

#### Defining of a new caller

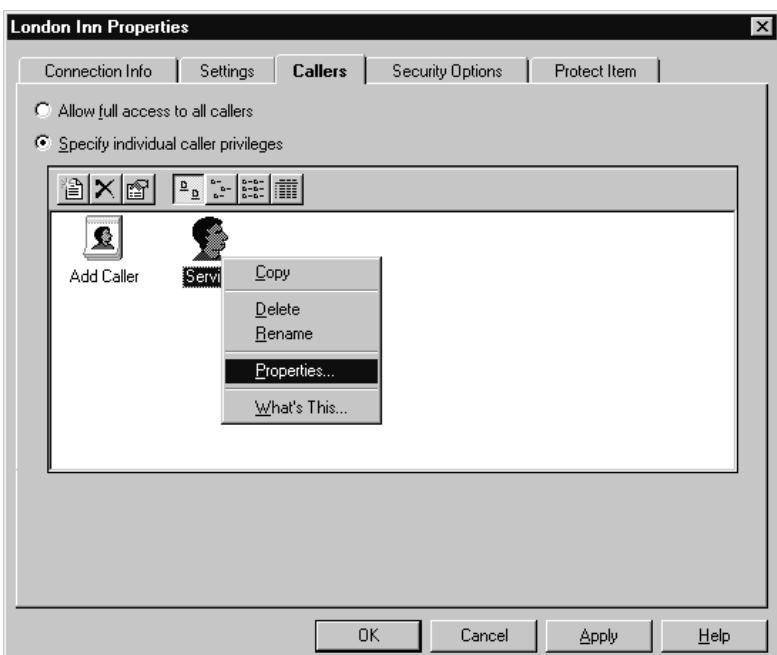
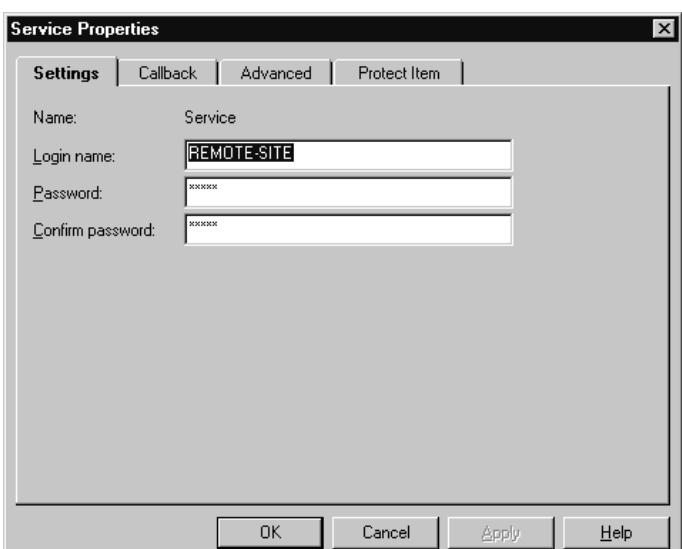
Step	Procedure
1	To define callers, activate the <i>Callers</i> tab in the host connection object properties window: 

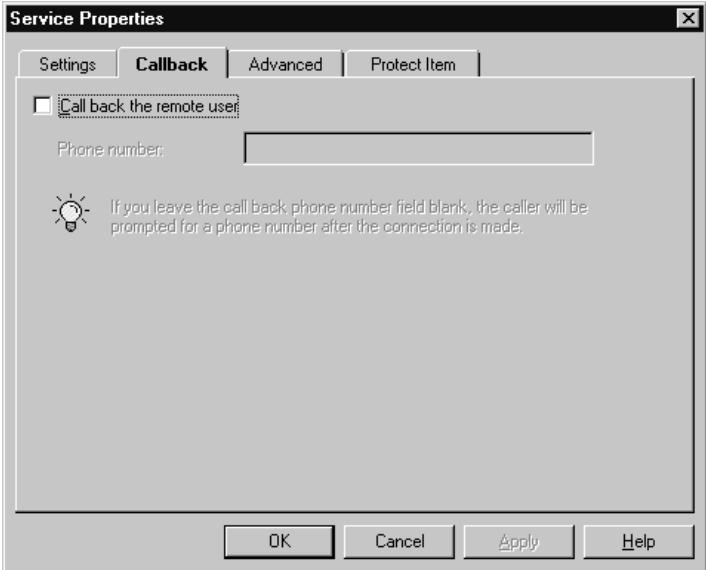
**pcANYWHERE**  
*Configuring Host mode*

Step	Procedure
2	<p>Double-click on <i>Add Caller</i> in the window. This brings you to the first window of the caller wizard where you enter the name of the caller. Confirm your entries by clicking the <i>Next</i> button:</p> 
3	<p>A window appears in which you enter the caller identification information.</p>  <p>Enter the following values and confirm your entries by activating the button <i>Next</i>:</p> <ul style="list-style-type: none"> <li>– <b>Login name:</b> REMOTE-SITE</li> <li>– <b>Password:</b> 77777 (entry concealed)</li> <li>– <b>Password confirmation:</b> 77777 (entry concealed)</li> </ul>

Step	Procedure
4	<p>The new caller is now defined. Confirm the conclusion message by clicking the <i>Next</i> button followed by the <i>Finish</i> button.</p> 
5	<p>You are returned to the properties windows of the host connection object (<i>Callers</i> tab) in which the new caller is now listed.</p> 

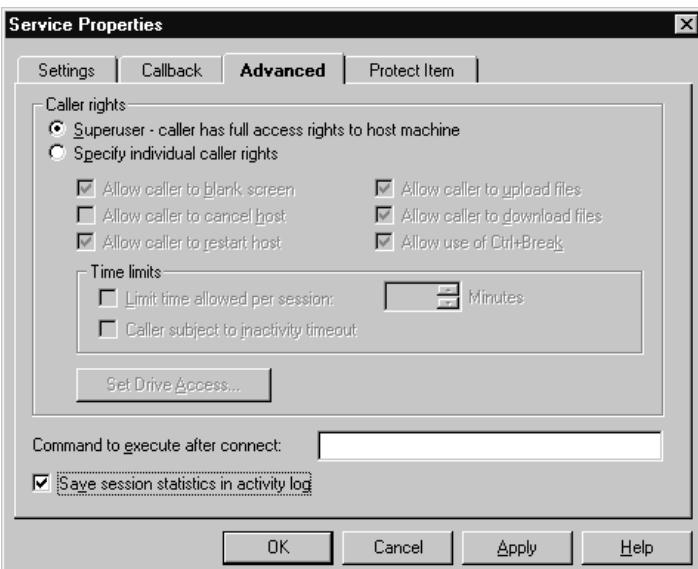
## Changing the characteristics of a caller

Step	Procedure
1	To define callers, activate the <i>Callers</i> tab in the host connection object properties window:
2	Right-click on the caller connection object and select <i>Properties</i> in the context menu: 
3	The caller's properties window appears. Select the tab <i>Settings</i> and enter your changes: 

Step	Procedure
4	<p>To edit the callback parameters, activate the <i>Callback</i> tab:</p>  <ul style="list-style-type: none"> <li>● <i>Call back the remote user:</i> Activate this check box if the host clears down the connection after the call to the remote user and has to call back this number.</li> <li>● <i>Phone number:</i> Enter the telephone number of the remote user. If this field remains blank, the caller is requested to enter a telephone number before the callback.</li> </ul>

# pcANYWHERE

## Configuring Host mode

Step	Procedure
5	<p>To configure additional options, activate the <i>Advanced</i> tab:</p>  <ul style="list-style-type: none"> <li><b>Superuser - caller has full access rights to host machine:</b> Grants the user full access rights. With the exception of <i>Command to execute after connect</i> and <i>Save session statistic in activity log</i> all other options are greyed since these options are automatically assigned to the caller when this check box is activated.</li> </ul>
6	<p>The following settings can be made when activating the option field <i>Specify individual caller rights</i>:</p> <ul style="list-style-type: none"> <li><b>Allow caller to blank screen:</b> Allows the remote user to deactivate the screen of the host PC. If the host PC is unsupervised, this option can be used to prevent unsupervised activities from being carried out by the remote user on the host during the session.</li> <li><b>Allow caller to cancel host:</b> Allows the remote user to terminate host mode and thus to prevent additional connections.</li> <li><b>Allow caller to restart host:</b> Allows the remote user to restart the host PC by remote control. The remote user can select the way in which the host is to be restarted in the session menu.</li> <li><b>Allow caller to upload files:</b> Allows the remote user to send files to the host PC. If this option is deactivated, the caller cannot perform any other operations that change the host drive, e.g. synchronize and copy directories.</li> <li><b>Allow caller to download files:</b> Allows the remote user to copy files from the host PC. If this option is deactivated, the remote user cannot perform any other operations that change the host drive, e.g. synchronize and copy directories.</li> </ul>

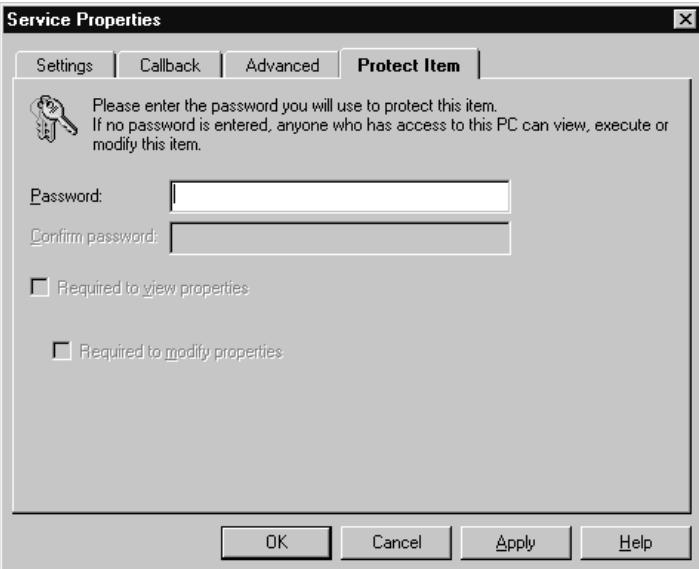
<b>Step</b>	<b>Procedure</b>
	<ul style="list-style-type: none"> <li>● <i>Allow use of Ctrl +Break</i> Allows the remote user to use the key combinations  or  in order to cancel an ongoing application on the host.</li> </ul>
7	<p>You can set <i>Time limits</i> for callers with individual settings:</p> <ul style="list-style-type: none"> <li>● <i>Limit time allowed per session</i>: The host user can restrict the session duration for the caller. pcANYWHERE automatically terminates the remote control session when the specified time expires.</li> <li>● <i>Caller subject to inactivity timeout</i>: Causes the connection to this caller to be cleared down if the timeout specified under <i>Interrupt in the case of inactivity</i> in the <i>Security Options</i> tab in the host's properties window expires. If the remote user for the timeout defined there is not active, the host interrupts the remote control session.</li> </ul>
8	<p>You can set the access to specific drives for callers with individual settings:</p> <ul style="list-style-type: none"> <li>● <i>Set Drive Access</i> button: Restricts the access of the remote user to the drives on the host PC. Select the corresponding option buttons to specify the availability of the host drives. Example: the host can deny the remote user access to the network drive, grant read-only access to hard disk drives and full access to disk drives.</li> </ul>
9	<p>Other settings:</p> <ul style="list-style-type: none"> <li>● <i>Command to execute after connect</i>: The host user can specify a program here that is automatically executed if the user logs on.</li> <li>● <i>Save session statistics in activity log</i>: Activates the host activity logbook.</li> </ul>
10	Transfer your settings to the caller by clicking <i>OK</i> . Return to the <i>Callers</i> tab (properties window of the host connection object).

## 14.1.6 Password protection for a host

### Password protection

Each caller object can be protected against unauthorized use with a password. You can define the same password for all caller objects or protect each object with a separate password. This password prevents the caller object from being viewed or changed by other users. This password is thus required for changing the settings of the host connection object. The password is not to be confused with the password that the caller requires for logging on to the host PC.

### Configuring password protection for a caller object

Step	Procedure
1	To define callers, activate the <i>Protect Item</i> tab in the properties window of the host connection window: 
3	Enter a password for the caller object and confirm your entry by repeating the entry in the <i>Confirm password</i> field.
4	Activate the required protection level by activating one or both protection options.
5	Click <i>OK</i> to transfer the settings for the host connection object.

## 14.2 Starting a session

### Using the configured values

pcANYWHERE sets up a connection using the information in the connection object's *Connection Info* tab, the session configuration of the host PC and caller privileges defined for the host PC.

### Options for starting a session

For the host PC there exists three methods for beginning a remote control session:

Variant	Description
1	<u>Starting the host</u> The host PC waits for calls using the connection device that was selected in the connection information of the host object. This variant is automatically selected in accordance with the configuration described here.
2	<u>Remote calling</u> The host PC dials the telephone number of the remote PC and sets up the connection. Once the connection is set up, the remote user controls the activities on the host. This variant is not configured and is not described here.
3	<u>Callback</u> The host PC waits for the call from a remote PC. If a caller sets up a connection to the host and identifies himself/herself with a login name and password, the host clears down the connection and calls the remote PC back using the telephone number that was entered in the caller's Callback tab. This variant is not configured and is not described here.

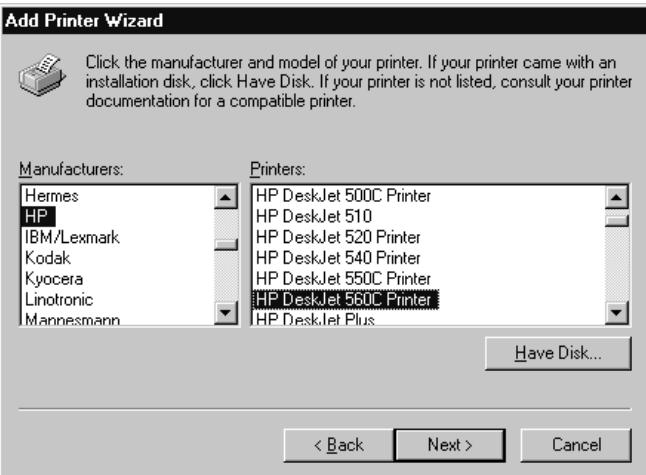
## 14.3 Printing on the remote PC

### Printer installation

If a remote user wants to print out host files on a local printer during a session, the printer of the remote user must be installed on the host PC.

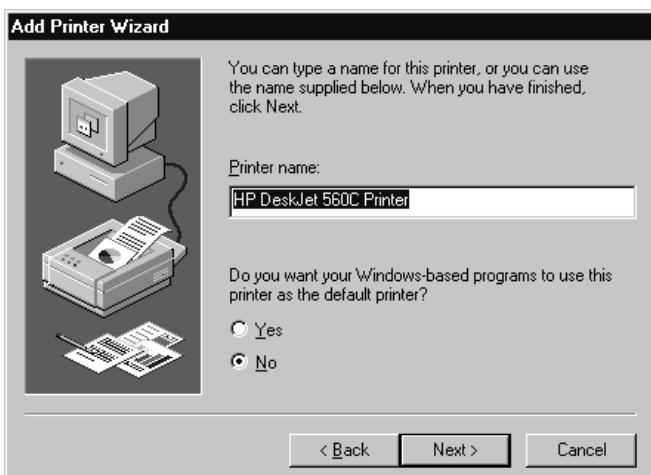
#### Installing a remote printer

Step	Procedure
1	Select the printer in the <i>Settings</i> menu in Windows.
2	Double-click on the <i>Add Printer</i> icon:  A screenshot of the Windows Printers window. The window title is "Printers". The menu bar includes "File", "Edit", "View", and "Help". Below the menu is a toolbar with icons for "Add Printer" and "HP LaserJet 4M". The main pane shows a list with one item: "1 object(s) selected".
3	Follow the printer installation wizard prompts to install a printer that is used by a remote user:  A screenshot of the "Add Printer Wizard" welcome screen. The title bar says "Add Printer Wizard". The main area contains text: "This wizard will help you to install your printer quickly and easily." and "To begin installing your printer, click Next.". There are three icons on the left: a computer monitor, a printer, and a document with a barcode. At the bottom are buttons for "< Back", "Next >" (which is highlighted), and "Cancel". Click <i>Local printer</i> and activate <i>Next</i> .

Step	Procedure
4	<p>Select the manufacturer and the model of the remote printer (in the example, OKI OJ400e) and click <i>Next</i>.</p> 
6	<p>Select <b>pcaw.prn</b> in the <i>Available ports</i> list field (the selection option <b>pcaw.prn</b> is only available after the installation of pcANYWHERE). Click the <i>Next</i> button.</p> 

## pcANYWHERE

### Printing on the remote PC

Step	Procedure
7	<p>Enter a name for this printer in <i>Printer name</i> text field in the prompted window. Use a name that identifies this printer as a remote printer, e.g. "OI400 Remote". Confirm your entries by clicking <i>Next</i>.</p> 
8	<p>If you want to print a test page, activate the <i>Yes</i> option field. Confirm your entry by clicking <i>Finish</i>.</p> 
9	<p>The installation files are now copied. If these are not available on the installation's disk carrier (hard disk, diskette or CD-ROM), an appropriate request appears requesting that the data carrier be inserted or that the installation directory be specified.</p>
10	<p>Once the files have been installed, you are returned to the printer window. The new printer is displayed.</p>

## 15      **Tips & tricks**

### 15.1      **Automatic startup**

#### **Configuration file for Autostart utility**

The Caracas Autostart utility integrated during installation in the StartUp group ensures that installed components are automatically activated up when Windows is started. Autostart operates with a configuration file named `anrun.cfg` that is stored in the Windows folder. This file contains the parameters for startup.

```
[System]
Order=acbd
Delay=7000
Title=Caracas Autostart
TopWindow=a

[a]
Start=EXE
Command=C:\Programme\Caracas\Server\CSrvr_42.exe -a -r
Wclass=SERVERWND
WorkDir=C:\Programme\Caracas\Server
Show=Yes

[b]
Start=EXE
Command=C:\Programme\Caracas\Link\CLink.exe -a
Wclass=LINKWND
WorkDir=C:\Programme\Caracas\Link
Show=No

[c]
Start=EXE
Command=C:\Programme\Caracas\Wincall\wc_h2_32.exe -a
Wclass=ACLH2_WClass
WorkDir=C:\Programme\Caracas\Wincall
Show=No

[d]
Start=EXE
Command=C:\Programme\Caracas\Voice\CHBar.exe -a
Wclass=CHBARWND
WorkDir=C:\Programme\Caracas\Voice
Show=No

[e]
Start=VB
Command=C:\Programme\Caracas\Scheduler\CSched.exe -a
Wclass=ThunderRT6MDIForm
WorkDir=C:\Programme\Caracas\Scheduler
Show=No
```

## Tips & tricks

### Automatic startup

#### Configuration file structure

Section	Entry	Meaning
[SYSTEM]	Order	Order in which the individual components are activated
	Delay	Delay (in milliseconds) between the startup of the individual components
	Title	Title in the Caracas Autostart window
	TopWindow	Component which should be active in the foreground when all configured components have been started
[a], [b], ...	Start	EXE: the component is a normal Windows application on the same PC
	Command	Program file name of the component (incl. path)
	Wclass	Window class of the component (defined by Caracas Link): <ul style="list-style-type: none"><li>• LINKWND: Caracas Host-Link</li><li>• CCSHWND: Caracas Horizon-Link</li><li>• SERVERWND: Caracas Server</li><li>• ACLH2_WClass: WinCall Hicom 200/150E</li><li>• WINCALL_H200_WND: WinCall Hicom 150E Office</li><li>• WINCALL_H300_WND: WinCall Hicom 300</li><li>• WINCALL_HP4000_WND: WinCall HiPath 4000</li><li>• CHBARWND: Caracas Voicemail-Link</li><li>• ThunderRT5MDIForm: Caracas Service Agent (Scheduler)</li></ul>
	WorkDir	Working directory of the component
	Show	If the component in question is already running when activating Autostart and is collapsed to an icon in the taskbar, this parameter defines whether the components window will be restored. Possible values: Yes or No

#### Preventing startup

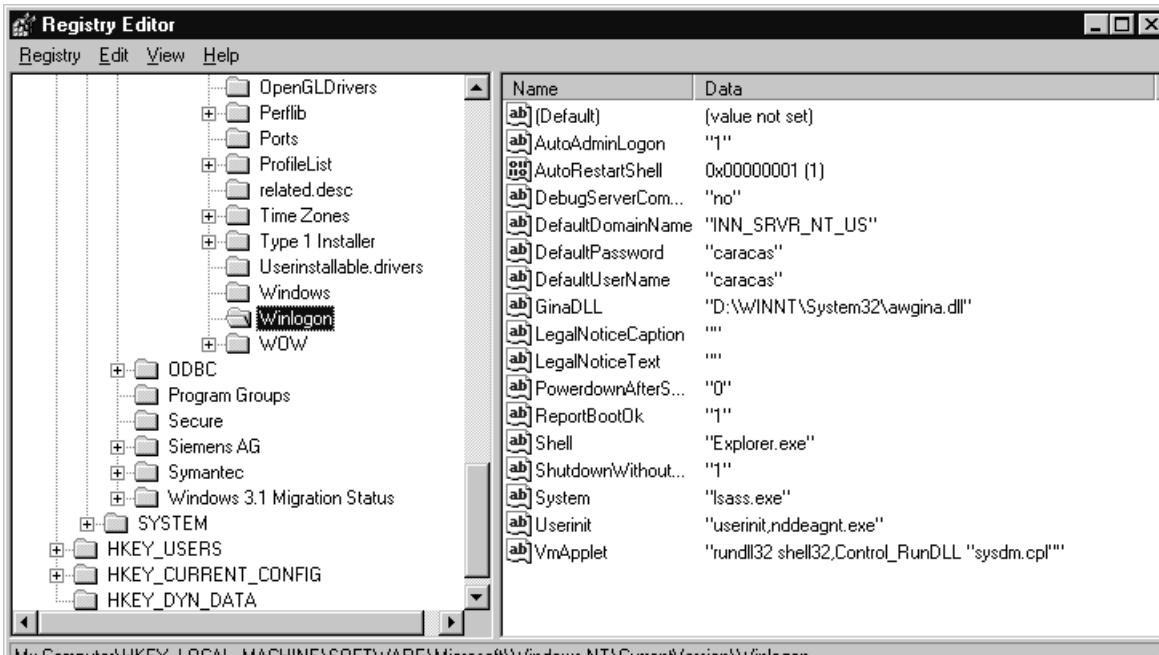
You can prevent startup when activating Windows by pressing the  key.

## 15.2 Automatic logon of the PC

### Introduction

After a system failure (e.g. following a power failure), the server PC should be immediately operational again. Following a restart, to ensure that the server PC does not wait for input from the logon dialog of Windows, thus preventing the activation of Caracas components, the PC can be configured so that logon occurs automatically. Enter the necessary data in the Windows registry:

### Configuring automatic logon:

Step	Procedure																																				
1	Start Windows registry (e.g. with <i>Start - Run</i> , entering <code>regedit</code> and clicking <i>OK</i> ).																																				
2	 <p>The screenshot shows the Windows Registry Editor window. The left pane displays a tree view of registry keys under <code>HKEY_LOCAL_MACHINE\Software\Microsoft\Windows NT\CurrentVersion</code>. The <code>Winlogon</code> key is selected. The right pane shows a table of registry entries with their names and data values:</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Data</th> </tr> </thead> <tbody> <tr> <td>(Default)</td> <td>(value not set)</td> </tr> <tr> <td>AutoAdminLogon</td> <td>"1"</td> </tr> <tr> <td>AutoRestartShell</td> <td>0x00000001 (1)</td> </tr> <tr> <td>DebugServerCom...</td> <td>"no"</td> </tr> <tr> <td>DefaultDomainName</td> <td>"INN_SRVR_NT_US"</td> </tr> <tr> <td>DefaultPassword</td> <td>"caracas"</td> </tr> <tr> <td>DefaultUserName</td> <td>"caracas"</td> </tr> <tr> <td>GinaDLL</td> <td>"D:\WINNT\System32\awgina.dll"</td> </tr> <tr> <td>LegalNoticeCaption</td> <td>""</td> </tr> <tr> <td>LegalNoticeText</td> <td>""</td> </tr> <tr> <td>PowerdownAfterS...</td> <td>"0"</td> </tr> <tr> <td>ReportBootOk</td> <td>"1"</td> </tr> <tr> <td>Shell</td> <td>"Explorer.exe"</td> </tr> <tr> <td>ShutdownWithout...</td> <td>"1"</td> </tr> <tr> <td>System</td> <td>"lsass.exe"</td> </tr> <tr> <td>Userinit</td> <td>"userinit,nddeagnt.exe"</td> </tr> <tr> <td>VmApplet</td> <td>"rundll32 shell32,Control_RunDLL \"sysdm.cpl\""</td> </tr> </tbody> </table> <p>The status bar at the bottom of the Registry Editor window shows the path: <code>My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon</code>.</p> <p>Select the entry on the left:</p> <pre> HKEY_LOCAL_MACHINE   \SOFTWARE     \Microsoft       \Windows_NT         \CurrentVersion           \Winlogon </pre>	Name	Data	(Default)	(value not set)	AutoAdminLogon	"1"	AutoRestartShell	0x00000001 (1)	DebugServerCom...	"no"	DefaultDomainName	"INN_SRVR_NT_US"	DefaultPassword	"caracas"	DefaultUserName	"caracas"	GinaDLL	"D:\WINNT\System32\awgina.dll"	LegalNoticeCaption	""	LegalNoticeText	""	PowerdownAfterS...	"0"	ReportBootOk	"1"	Shell	"Explorer.exe"	ShutdownWithout...	"1"	System	"lsass.exe"	Userinit	"userinit,nddeagnt.exe"	VmApplet	"rundll32 shell32,Control_RunDLL \"sysdm.cpl\""
Name	Data																																				
(Default)	(value not set)																																				
AutoAdminLogon	"1"																																				
AutoRestartShell	0x00000001 (1)																																				
DebugServerCom...	"no"																																				
DefaultDomainName	"INN_SRVR_NT_US"																																				
DefaultPassword	"caracas"																																				
DefaultUserName	"caracas"																																				
GinaDLL	"D:\WINNT\System32\awgina.dll"																																				
LegalNoticeCaption	""																																				
LegalNoticeText	""																																				
PowerdownAfterS...	"0"																																				
ReportBootOk	"1"																																				
Shell	"Explorer.exe"																																				
ShutdownWithout...	"1"																																				
System	"lsass.exe"																																				
Userinit	"userinit,nddeagnt.exe"																																				
VmApplet	"rundll32 shell32,Control_RunDLL \"sysdm.cpl\""																																				

## Tips & tricks

### Automatic logon of the PC

Step	Procedure
3	<p>Define the following entries:</p> <ul style="list-style-type: none"><li>• <i>AutoAdminLogon: 1</i></li><li>• <i>DefaultUserName: Caracas</i> ( Username of the Caracas administration user under Windows)</li><li>• <i>DefaultPassword: caracas</i> (Password of the Caracas administration user under Windows)</li></ul>
4	Quit registry editor.



A executable REG-file can be found on the Caracas CD which makes the necessary settings. The filename is `autologon.reg`.

## 15.3      Changing the start mode of Caracas components

### Start mode in the command line

The start mode defines how the program reacts at startup. The mode is transferred to the program and evaluated when the program is activated via the appropriate parameters e.g. in the command line. The standard settings for start mode are defined by the installation program and should only be changed by experienced Caracas users.

The following start modes are available:

Parameter	Meaning
-s (or -S)	Standard for startup via Start menu or desktop icon: the program displays all program, error and execution messages on the screen in message boxes.
-a (or -A)	Standard for startup via Windows StartUp group: the program displays no program messages.
-t (or -T)	Start with trace log file (Caracas Server, Caracas Host-Link, Caracas Voicemail-Link, Caracas Horizon-Link, WinCall): The program begins at startup with the trace in the trace file (e.g. SERVER_OVERALL.TRC). The file is recreated at startup or overwritten. This file is a text file that can be processed with any editor.
-r (or -R)	Standard for startup of Caracas Server (Repair): the program repairs and compresses the Caracas databases at startup. This start mode is only relevant for the Caracas Server component in combination with the Access database. During startup with this start mode, logically deleted data is also physically deleted from the database, reducing the size of the database.
-e (or -E)	Start with event log (Caracas Server, Caracas Host-Link, Caracas Voicemail-Link, Caracas Horizon-Link, WinCall): the program starts with an activated logbook (event and error log), i.e. the user must not activate this function via the corresponding menu item.
-h (or -H)	"Hiding" the component after activation in the toolbar. Activate the component window by double-clicking the icon in the taskbar.



The modes -s and -a are mutually exclusive and must be specified first after the program name.  
The default setting for Caracas Server is -s -r or -a -r when starting with StartUp.

## Tips & tricks

*Changing the start mode of Caracas components*

### Example

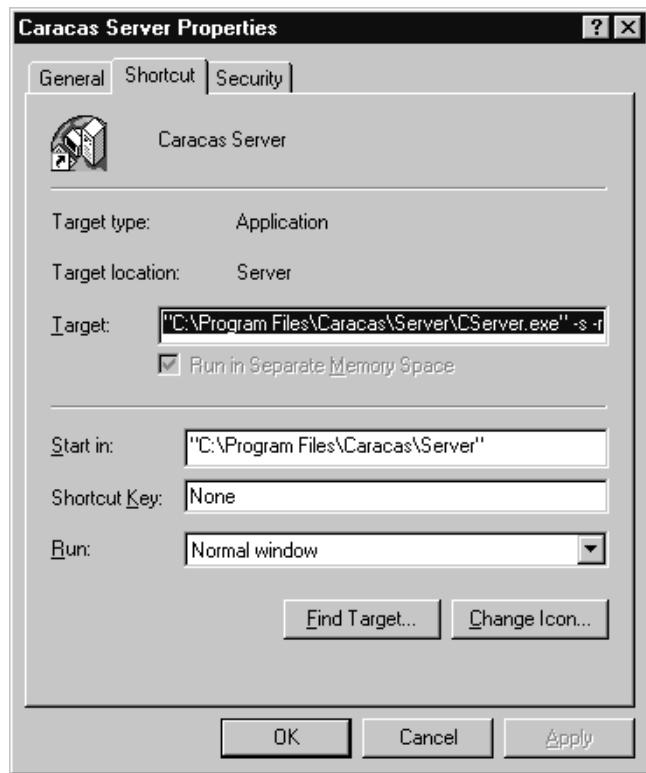


Figure 15-1 Start mode of Caracas components

## **15.4 If you forget your password**

### **Displaying a forgotten password**

If a user or the administrator forgets his/her password for one of the components, it can be displayed in the following manner:

<b>Step</b>	<b>Procedure</b>
1	Activate the component in question
2	Activate the login procedure
3	Enter the name of the user who forgot the password in the user ID field
4	Enter the character "@ " in the <i>Password</i> field. The forgotten password appears in the status bar.

## Tips & tricks

*Entries in the Windows registry*

### 15.5 Entries in the Windows registry

#### Program configuration parameters

The Windows registry is used for saving program configuration parameters. Basically, the appropriate program path is entered in the registry during installation and the program makes entries starting from this path. The path always begins with:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Siemens AG\...

#### Examples:

- for the Caracas Server: ... \Caracas Link Server
- for the Caracas Service Agent (Scheduler) ... \Caracas Link\Scheduler
- for Caracas Administration: ... \Caracas Link\Administration
- for Caracas Host-Link: ... \Caracas Hostlink
- for Caracas Voicemail-Link: ... \Caracas Voicemail-Link
- for Caracas Horizon-Link: ... \Caracas Horizon-Link
- for Caracas Link Client: ... \Caracas Link\Client
- for Caracas Link Alarm Client: ... \Caracas Link\Alarm-Client
- for the Call Charge Manager: ... \Gesprächskostenmanager  
  \Administration
- for WinCall Hicom 200/150E: ... \WINCALL\H200
- for WinCall Hicom 300: ... \WINCALL\H300
- for WinCall Hicom 150E Office: ... \WINCALL\H150CSTA
- for WinCall HiPath 4000 ... \WINCALL\HP4000

Up to this point, the path is set up by the installation program. From here on, the program can create additional keys on the basis of the INI files.

#### Key in the registry

An application key is also created. System-wide settings that were made by the user via the installation program are saved here by the installation program. The key is:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Siemens AG\Caracas Link

It contains the registry information and the key for the installed components.

## **Updating the key**

It is not necessary to update the key - the relevant programs search independently for the information.

## **Changes via the registry editor**

The data in the registry are used exclusively for information purposes by the administrator and the service technician. The values entered in the registry must not be changed. Incorrect or missing entries in the registry may prevent one or all Caracas components from operating correctly.

## Tips & tricks

### *Destination folder for trace files*

## 15.6 Destination folder for trace files

### **Default: shell user folder**

The so-called shell user folder from Windows is selected by default as the destination folder for trace files.

- Under Windows 9x:  
C:\My Documents
- Under Windows NT:  
C:\WINNT\Profiles\[NT user]\Personal
- Windows 2000  
C:\Documents and Settings\[Windows user]\My Documents

### **Alternatives**

If the default user folder is not available, the following alternative folders are used for writing to files:

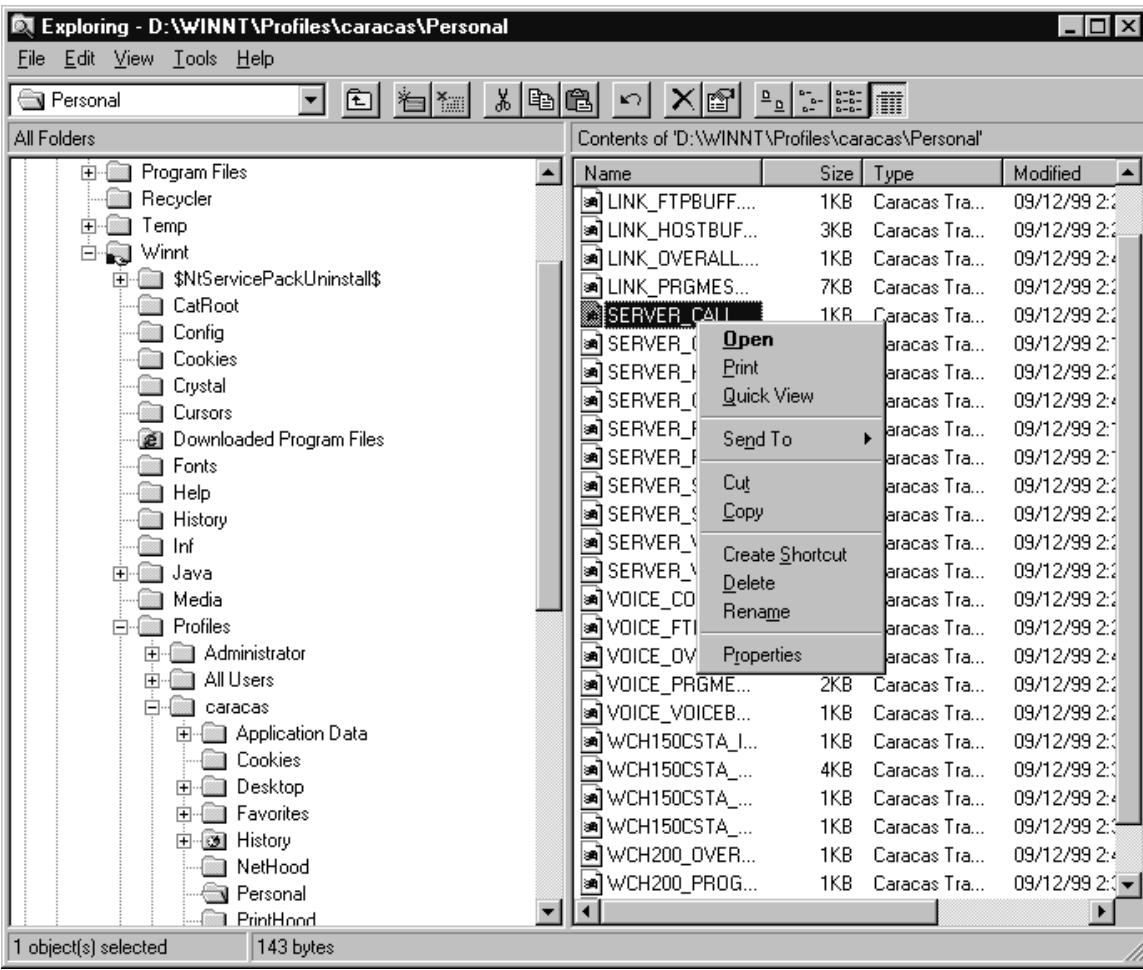
- Caracas subdirectory of the Windows common files folder:  
C:\Program Files\Common files\Caracas
- If this folder is also not available, the files are stored in the common folder in the Caracas application path that was specified during installation and is, by default:  
C:\Program Files\Caracas\Common
- If this folder is also not available, the tracefiles are stored in the Windows temp folder. The default folder is:
  - Under Windows 9x:  
C:\Windows\Temp
  - Under Windows NT/2000:  
C:\WINNT\Temp

## 15.7 Editing trace files in Windows Explorer

### Trace files in Explorer

Trace files are stored by default in the shell user folder of Windows. You can open these files from Explorer using the Windows editor, output them to a printer or obtain an overview of the data with Quick View.

### Editing in Explorer

Step	Procedure																																																																																																				
1	<p>Activate Explorer and switch to the directory in which the trace files are located. Right-click the file window to activate the context menu for the trace file to be edited:</p>  <table border="1"> <caption>Contents of 'D:\WINNT\Profiles\caracas\Personal'</caption> <thead> <tr> <th>Name</th> <th>Size</th> <th>Type</th> <th>Modified</th> </tr> </thead> <tbody> <tr><td>LINK_FTPBUFF....</td><td>1KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>LINK_HOSTBUF...</td><td>3KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>LINK_OVERALL....</td><td>1KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>LINK_PGMES...</td><td>7KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_CALL</td><td>1KR</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_I</td><td>Open</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_I</td><td>Print</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_I</td><td>Quick View</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_I</td><td>Send To</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_I</td><td>Cut</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_I</td><td>Copy</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_V</td><td>Create Shortcut</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>SERVER_V</td><td>Delete</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>VOICE_CO</td><td>Rename</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>VOICE_FT1</td><td>Properties</td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>VOICE_OV</td><td></td><td>aracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>VOICE_PGMES...</td><td>2KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>VOICE_VOICEB...</td><td>1KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>WCH150CSTA_I...</td><td>1KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>WCH150CSTA_...</td><td>4KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>WCH150CSTA_...</td><td>1KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>WCH150CSTA_...</td><td>1KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>WCH200_OVER...</td><td>1KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> <tr><td>WCH200_PROG...</td><td>1KB</td><td>Caracas Tra...</td><td>09/12/99 2:2</td></tr> </tbody> </table> <p>1 object(s) selected    143 bytes</p>	Name	Size	Type	Modified	LINK_FTPBUFF....	1KB	Caracas Tra...	09/12/99 2:2	LINK_HOSTBUF...	3KB	Caracas Tra...	09/12/99 2:2	LINK_OVERALL....	1KB	Caracas Tra...	09/12/99 2:2	LINK_PGMES...	7KB	Caracas Tra...	09/12/99 2:2	SERVER_CALL	1KR	Caracas Tra...	09/12/99 2:2	SERVER_I	Open	aracas Tra...	09/12/99 2:2	SERVER_I	Print	aracas Tra...	09/12/99 2:2	SERVER_I	Quick View	aracas Tra...	09/12/99 2:2	SERVER_I	Send To	aracas Tra...	09/12/99 2:2	SERVER_I	Cut	aracas Tra...	09/12/99 2:2	SERVER_I	Copy	aracas Tra...	09/12/99 2:2	SERVER_V	Create Shortcut	aracas Tra...	09/12/99 2:2	SERVER_V	Delete	aracas Tra...	09/12/99 2:2	VOICE_CO	Rename	aracas Tra...	09/12/99 2:2	VOICE_FT1	Properties	aracas Tra...	09/12/99 2:2	VOICE_OV		aracas Tra...	09/12/99 2:2	VOICE_PGMES...	2KB	Caracas Tra...	09/12/99 2:2	VOICE_VOICEB...	1KB	Caracas Tra...	09/12/99 2:2	WCH150CSTA_I...	1KB	Caracas Tra...	09/12/99 2:2	WCH150CSTA_...	4KB	Caracas Tra...	09/12/99 2:2	WCH150CSTA_...	1KB	Caracas Tra...	09/12/99 2:2	WCH150CSTA_...	1KB	Caracas Tra...	09/12/99 2:2	WCH200_OVER...	1KB	Caracas Tra...	09/12/99 2:2	WCH200_PROG...	1KB	Caracas Tra...	09/12/99 2:2
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<b>...Opening the trace file</b>																																																																																																					
2	Select <i>Open</i> from the context menu. The file is opened with the Windows editor																																																																																																				

## Tips & tricks

### *Editing trace files in Windows Explorer*

Step	Procedure
<b>...Printing the trace file</b>	
2	Select <i>Print</i> from the context menu. The file is opened with the Windows editor and the print operation is automatically started (on the default printer set). The editor is then closed.
<b>...Quick View of the trace file (if available)</b>	
2	Select <i>Quick View</i> from the context menu. The file is displayed in Quick View. You can increase/reduce the font or open the file with the Windows editor. If you quit Quick View, you are returned to Explorer.

## 15.8 Activating the record log file

### The record log file

The logging in a record log file can be activated in the components Caracas Host-Link, Caracas Voicemail-Link and Caracas Horizon-Link.

- Caracas Host-Link:  
all records from and to the front office system are logged including responses to the sent/received data
- Caracas Voicemail-Link:  
all records from and to the voicemail system are logged including responses to the sent/received data.
- Caracas Horizon-Link:  
all records from and to the Horizon system are logged including responses to the sent/received data.

### Activating logging

Step	Procedure
1	If the relevant component is not yet active, start the component via the Start menu or via desktop link.
2	Log in under the technician's password.
<b>...Activating log recording</b>	
3	Activate the menu item <i>Extras - Record Log</i> . If the record log feature is active, a check mark appears beside the menu item.
<b>...Deactivating log recording</b>	
3	Activate the menu item <i>Extras - Record Log</i> . If the record log feature is not active, there is no check mark beside the masked-out menu item.

## Tips & tricks

### Record priorities

## 15.9 Record priorities

### Fixed priorities

The individual records in the buffers have the following, fixed priorities:

Record	Communication direction	Priority
0B, 0C	Front office system → Host-Link → Caracas Server These immediate records are not processed via the buffers but via DDE	0
0B, 09 10	Caracas Server → WinCall These immediate records are not processed via the buffers but via DDE	0
03	Caracas Server → WinCall Buffer: SERVERANINCALL	2
11, 13, 25	Caracas Server → Host Buffer: SERVERANLINK	3
23	Caracas Server → WinCall Buffer: SERVERANWINCALL	3
12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 25, 26, 29, 31, 32	Caracas Server → Host-Link → Front office system Buffer: SERVERANLINK	4
01, 02, 03, 04, 05, 06, 07, 08, 09, 21, 23, 24, 27, 28, 30	Front office system → Host-Link → Caracas Server Buffer: LINKANSERVER	4
20	Caracas Server → WinCall Buffer: SERVERANWINCALL	4
04	Caracas Server → WinCall Buffer: SERVERANWINCALL	5
09, 30	Caracas Server → WinCall Buffer: SERVERANWINCALL	9
24	Caracas Server → WinCall Buffer: SERVERANWINCALL	0
92	WinCall → Caracas Server → WinCall Buffer: SERVERANWINCALL	1

## 15.10 Charging in Caracas Server

### Configuration of charging

At start up, Caracas Server reacts on the basis of the variant set for charging. This can be carried out using the data configured by the Call Charge Manager or without the Call Charge Manager on the basis of a charge unit price set in the administration program or via an external application.

### Charging with CCM configuration

The following charging modes can be configured in the Call Charge Manager:

- Charging via number of charge units \* charge unit price
- Charging via time zone tables
- Charging via surcharge table (Swiss table)

If this variant is configured, the DLL is initialized and the Call Charge Manager database is opened when starting up Caracas Server in relation to the charging variant set.

### Call charging in Caracas Server

If you are working without charges DLL, Caracas can calculate the charges on the basis of the number of charge units \* charge unit price. The charge unit price can be configured per call type in the administration program. There are the call types:

- Guest calls (from checked in guest extensions)
- Management calls (from checked in management extensions)
- Lost calls (non-assignable calls, unknown extensions or checked out extensions)

### Call charge evaluation via external application

The possible settings depend on the external application.

### Storing the call details

Independent of the calculation type set (with or without call charge manager), the calls can be stored in the WinAccount database. Storing call details is possible for all charge evaluation modes.

### Forwarding the call details to V.24 (RS232) or file

There is the option of making all call records available via a V.24 (Rs232) interface or in a file from the server.

## **Tips & tricks**

### *Integration of WinAccount*

## **15.11 Integration of WinAccount**

### **Storing cost-evaluated calls**

Every cost-evaluated call in Caracas Link can be entered in the configured call detail database `ci_geb.mdb` of the Call Charge manager. A distinction is made in this instance between guest calls (calls from a guest extension in 'Check-in' status) and lost calls (calls from unknown extensions, administration extensions and guest extensions in 'Check-out' status).

### **Evaluating cost-evaluated calls**

The records entered in the call table can then be evaluated with the program WinAccount on a client PC. In WinAccount, it is possible to perform a call evaluation on the basis of the above call types (guest calls or lost calls).

### **Evaluating lost calls in WinAccount**

WinAccount also offers the possibility of regrouping lost calls via a stand-alone extension/cost center configuration and then evaluating them.

## 15.12 Forwarding call records

### General

Forwarding the call records which arise for further evaluation by another program via V.24 (RS232) or file can be defined in the Caracas administration program (*Configuration - General options - General tab*). The call records are transferred to the interface or file defined there.

### Configuring the V.24 (RS232) interface

Use DOS command mode or Windows control panel to configure the interface options. This program enables you to set all interface options in the desired / required configuration.

### Record structure of sent call records

Field no.	Length	Description
1	1	<b>STX</b> (control character)
2	5	Extension number left-aligned, followed by blanks.
3	8	Call date in YYYYMMDD format
4	6	Start of call in HHMMSS format
5	6	End of call in HHMMSS format
6	5	Number of call charge units leading zeros
7	6	Duration of call in seconds leading zeros
8	6	Trunk access digit of the call left-aligned followed by blanks
9	26	Destination number left-aligned followed by blanks
10	12	Code number left-aligned followed by blanks
11	10	Call charge (price) leading zero
12	2	Group number left-aligned followed by blanks
13	2	Extension type 00 to 09 (guest extensions), 10 to 19 (management extensions) or 99 (unknown)
14	1	<b>ETX</b> (control character)

### Example of a call record

Call from extension 200 on 05/21/1998 from 12:52:43 hrs to 12:56:51, duration 248 seconds, 21 charge units, trunk access digit "0", destination number "089722123456", code number 471255 , Price 2,50, group number 01, extension type 09:

```
"<STX>200      19980521125243125651000210002480      089722123456
        471255      000000025000000109<ETX>"
```

## Tips & tricks

### Forwarding call records

#### Record structure of the call details when forwarding to a file

This file is a text file which may contain 1 - n records. The structure of the record corresponds to that of the standard record (see above), without control character. Each record is terminated with CR/LF (0A, 0D).

#### Sequence for sending via V24

Caracas sends each call record to the recipient application via the interface. This is responsible for processing the data. Since there is no protocol handling on the interface, Caracas only has "write access" to the interface and neither expects nor processes and messages from this application. It is not possible to repeat the records.

#### Sequence for sending via file

Caracas checks whether the configured files exists on the relevant drive. The following sequence is implemented in Caracas:

##### Sending data:

1. Orders are placed in a **temporary** file for ready access
2. Check whether the agreed data transfer file for sending exists
3. If it exists, the further information data are placed in a temporary file for ready access and must be checked for the next record.
4. If the data transfer file does not exist, the temporary file must be **renamed or moved** to the agreed data replacement file. Subsequent data to be set require a new temporary file to be opened; further processing is as described above

## 15.13 Call charge analysis via external application

### General

The charges incurred and calculated via an external application over the V.24 (RS232) interface can be defined in the Caracas Administration program (*Configuration - General parameters, Register Call charge evaluation*). The call charges are transferred to the interface specified.

### Configuration of the V.24 (RS232) interface

Use the DOS command mode or the Windows Control Panel to configure the interface parameters. This program enables you to set all the interface parameters in the desired/required configuration.

### Record structure of the sent call details

Field No.	Length	Description
1	1	<b>STX</b> (Control character)
2	2	CS (record ID)
3	1	(delimiter, pipe character)
4	10	Transaction number, right-justified with leading zeros
5	1	(delimiter, pipe character)
6	10	Extension number, left-justified with trailing blanks
7	8	Call date in the format YYYYMMDD
8	6	Start of call in the format HHMMSS
9	6	End of call in the format HHMMSS
10	5	Number of call units with leading zeros
11	6	Duration of call in seconds with leading zeros
12	6	Trunk access code for the call, left-justified with trailing blanks
13	26	Destination number of the call, left-justified with trailing blanks
14	12	Code number left-justified with trailing blanks
15	2	Group id with leading zeros
16	2	Extension type 00 to 09 (guest extensions), 10 to 19 (management extensions) or 99 (unknown)
17	1	<b>ETX</b> (Control character)

## Tips & tricks

*Call charge analysis via external application*

### Example: Sequence for sending/receiving via V.24 (RS232):

Caracas sends each call charge record to the application that computes the results and waits for a response that indicates the price of the call. Since there is no protocol handling on the interface, several records can be sent in succession (i.e., sending and receipt runs asynchronous). The transaction number uniquely identifies each record. If Caracas does not receive reply for the record after a certain time, this is repeated.

### Record structure of the received (calculated) call details

Field No.	Length	Description
1	1	<b>STX</b> (Control character)
2	2	CA (response ID)
3	1	(delimiter, pipe character)
4	10	Transaction number from sent record, right-justified with leading zeros
5	1	(delimiter, pipe character)
6	10	Right-justified price with leading zeros and three decimal places
7	1	Call id: – N: National – I: International – L: Local – M: Mobile
8	5	Calculated billing units with leading zeros
9	1	<b>ETX</b> (Control character)

## 15.14 Data backup



Generally the customer (e.g. system administration) is responsible for the whole data backup procedure. Therefor the backup of the Caracas Link application itself does not fall within the scope of any technician's responsibility.

### General

To backup the Caracas databases on the floppy disc drive or any other backup device setup the Windows backup tool which can be found in *Start - Programs - Accessories - System Tools - Backup*. Configure the backup using the backup assistant and follow the instructions. You find further help in the Windows online help.



Make sure to backup the Caracas databases which are located in the Caracas backup folder (`C:\Program Files\Common Files\backup\db_save`) and not the Caracas databases located in the working folder (`C:\Program Files\Caracas\data`).

## **Tips & tricks**

### *Data backup*

# Glossary

## **ACL interface**

Applications Connectivity Link

Collective term for Hicom features that can be controlled from a DP system, e.g. AMHOST, TDS, etc.

## **Autostart**

Program that ensure that (all) Caracas Link components are automatically activated when Windows is started up.

## **BCC check procedures**

Block Check Character

Checksum procedures for data transfer

## **BIND handling**

Communication method in Caracas Host-Link standard protocol for extended interface control with the front office system (record type 0A)

## **Call Charge Manager**

Configuration program for tables for charging; different variants are possible

## **Client components**

Caracas Link components that are not installed on the server PC, e.g. WinAccount

## **Client/server**

Program development philosophy whereby a development is divided into a processing components (server) and operating components (client).

## **COM1**

Serial interface 1 on the PC (RS232)

## **Context menu**

Activated by right-clicking the mouse, this menu combines a number of contextually relevant menu items for the object in question

## **Cursor**

PC insertion point, mostly in the form of an arrow. Form can change, however, in the case of different actions (e.g. hourglass, double arrow, etc.)

## **DDE**

Dynamic Data Exchange, procedure under Windows 95 for exchanging data between different programs using internal sequences

## **Desktop**

Lowest screen level in Windows 95.

**Error log**

Log file for error messages of Caracas components

**Event log**

Log file for events (program messages, etc.) of Caracas components

**File transfer**

Exchange of data using files

**Front office system**

Hotel system to which Caracas Link is connected.

**Horizon**

Program for calculating calls and evaluation of calls.

**LPT1**

Parallel interface of the PC for connecting a printer

**MSV1**

Interface card for connecting to Hicom 300

**ODBC configuration**

Open Database Connectivity

Application interfaces specially for client/server architectures for accessing data in relational database management systems

**Password**

The password is used by the user to log to at a component, which is only possible if a correct password is entered.

**PBX system**

Personal Branch Exchange, telephone system

**Profiles**

Pre-configured packages of parameters for connecting to specific front office systems

**Schedule**

In Caracas Link, specific processes can be scheduled to take place at the set date/interval

**Server components**

The server components are Caracas Server, Caracas Host-Link, Caracas Link Administration program, Caracas Voicemail-Link, Caracas Horizon-Link and WinCall.

**Shortcut**

Reference to an object that is linked to another object.

**Splash screen**

A mask that appears briefly after starting a component.

**Swiss table**

Table used to configure and later evaluate call charges in the Call Charge Manager (surcharge table)

**Unit**

Units of a call record

**User ID**

User name to be entered when logging on to a component.

**V.24 Fidelio protocol (RS232)**

Defined protocol for connecting to the front office system Fidelio.

**V.24 standard protocol (RS232)**

Standard protocol for communication with the front office system

**Voicemail system**

System for language-oriented user guidance and for administering spoken messages, e.g. for wakeup calls

**WinAccount**

Program for valuating cost-evaluated calls on the basis of pre-defined report/graphics layouts.



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