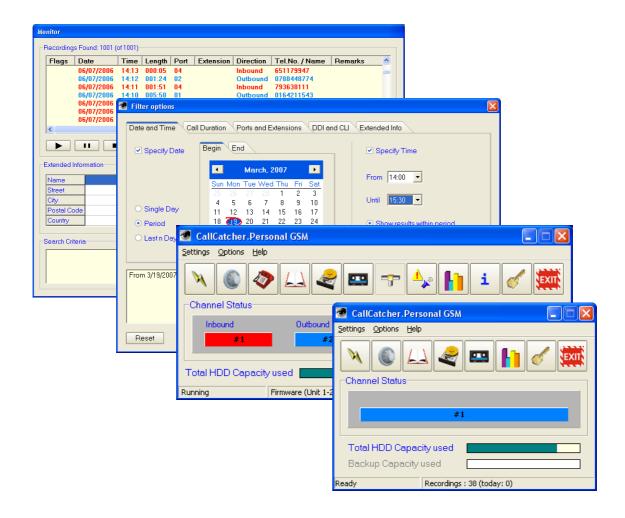


CallCatcher.Personal GSM [®] Users Manual



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1. INTRODUCTION

1.1 PRODUCT DESCRIPTION

CallCatcher.Personal GSM is an advanced small channel count Win-2000, Win-XP, Win-2003 and Windows Vista Call Monitoring, Recording and Logging system for GSM mobile phones.

The CallCatcher.Personal GSM system is based on integrated back-to-back GSM gateways that route inbound and outbound GSM voice calls and SMS messages through the integrated voice recorder.

Only registered users will be able to access, monitor or playback calls, manage the recordings or add extra information to the recorded phone and SMS calls.

1.1.1 Features

CallCatcher.Personal GSM offers many advanced features combined with an intuitive user interface. Some of the outstanding features are:

- Capacity from 1 up to 4 ports in a single PC / notebook.
- Quad Band GSM technology.
- PCI card and portable USB versions.
- Superior voice recording quality at 64kb/s and 36kb/s.
- Integrated phonebook to provide detailed caller information.
- Advanced user and security management.
- Ultra secure encrypted recordings.
- Extensive searching capabilities.
- Extra text like remarks or notes can be added to every recording.
- Live monitoring and playback (CallPlayer) over the LAN.



- Integrated scheduled backup facilities. Export facility for .wav files.
- CallPlayer remote client supports .wav and .MP3 Drag & Drop for integration with for example Outlook.



1.1.2 Minimum System requirements

- Win-2000, Win-XP, Win-2003 or Windows Vista.
- Pentium-3 based PC / notebook with a minimum of 512 MByte RAM and 500MHz+ CPU. This figure is based on a maximum of 100.000 recordings in the database.
- The amount of internal RAM memory must be sufficient to handle a large amount of recordings. For <u>each</u> additional 100.000 recordings expected, it is recommended to add a minimum of 128 MByte RAM to the total internal RAM count.
- LAN network interface card. TCP/IP network protocol installed.
- High speed USB 1.1 or 2.0 interface (USB versions only).
- 5 Volts compatible standard PCI slot(s) (PCI versions only).
- Windows compatible sound card.

1.1.3 Recommendations

A backup facility like a DVD writer to make periodical backups of the recordings made earlier using the build-in backup facilities. Backup drives or LAN backup directories should be mapped as logical drives that can be accessed by the CallCatcher.Personal GSM server.



2. INSTALLATION & USAGE

2.1 PREPARATION

Before powering up the system, always check whether the proper mains voltage is set. It should be installed in a safe and preferably air-conditioned server/PBX room or in an office environment. Like standard systems, you need to connect the display, keyboard, mouse, network and all other necessary peripherals first before starting up the system.

Your systems administrator is responsible for managing the user settings and network access rights to every user on the connected LAN. This should be done on network, system and application level before usage.

All antennas must be connected before powering the system!

2.2 SIM CARDS

Please make sure that the SIM cards of your mobile operator have their <u>4 digit pincode turned off</u>.

The signal strength of your mobile operator should be strong enough to insure good quality reception and transmission at all times.

Please verify the above points by putting these SIM cards first in your own mobile phone and check if the provider is found quickly after turning on your mobile without having to enter a pincode.

SIM cards should be inserted or removed only when the GSM recording device is turned off. In case of USB models please



remove the power of the USB box and in case of PCI models please turn off the computer system completely.



2.3 SIM CARD INDICATOR LEDS

At each SIM card connector on the back of the PCI bracket or backside of the USB unit, there is a red LED that will indicate the following:

Red LED is blinking (50% on, 50% off):

This indicates that SIM card is not ready or SIM card failed to register to GSM network which is caused by either an inactive SIM, a SIM card waiting for pincode or bad GSM signal strength.

Red LED is flashing (10% on, 90% off):

This indicates that the SIM has registered successfully and that calls and SMS messages are ready to be made or received.

Red LED is turned on permanently:

This indicates that a call is in progress.



2.4 SIM CARD POSITIONS

For the recording device to operate there are two SIM cards required per user. A third SIM card must be put in your mobile phone. SIM cards must be arranged as follows:

- Original user's SIM card must be put at position SIM#2 or SIM#4 (2nd user). This SIM is referred to as the "PUBLIC SIM".
- A new SIM is to be put in the users mobile phone ("USER SIM") and another new SIM to be put at position SIM#1 or SIM#3 (2nd user). This SIM is called the "GATEWAY SIM".
- The phone number of the new SIM at #1 or #3 (2nd user) is to be programmed in the user's mobile phone under a arbitrary name like "Gate Way".
- The phone number (of the new SIM) in the user's mobile phone must be programmed into the recording unit. This because the device must 'know' the user's mobile phone number (USER SIM). Please refer to the next paragraph on how to program this number.

2.4.1 Recommendations

It is highly recommended that both "GATEWAY SIM" and "USER SIM" mobile numbers are not disclosed to anyone except to the user who will use these peer SIM cards to make and receive calls.

Also it is recommended to turn off the "USER SIM" CLI presentation to prevent your own mobile number from being 'discovered'. The CLI presentation for the "GATEWAY SIM" however is very useful as the user will immediately recognize that an incoming call is routed through the GSM recording system.



2.5 PROGRAMMING USING SMS

The PCI or USB device has an integrated non-volatile phonebook. This phonebook has 20 programmable entries available for each user and is programmed using SMS messages.

These entries are numbered 0..19. Entry 0 is reserved and must contain the "USER SIM" phone number. This number will be dialled when an incoming call or SMS message enters the system via the "PUBLIC SIM".

A phonebook entry is programmed by sending a SMS message (to the "GATEWAY SIM"):

7=+31612345678=OptiLogix#

This example will program entry no. 7 with a number and (optional) name. The name can be omitted and the message then would look like this:

07=+31612345678#

Please note that in this example the '7' is entered as '07'. Both numeric formats can be used. Valid digits for the number are 0..9 and '+'.

A special phonebook entry is no. 0, which should represent the "USER SIM" number. This entry is protected against overwriting by requesting the number and name field to be the same before the entry can be programmed / overwritten.

For example in case the "USER SIM" number to be programmed is 066778899, the SMS programming message must be:

0=066778899=066778899#



All above SMS commands will result in a SMS response coming back in order to confirm if a programming action has been successfully executed or not.



2.6 SMS RESPONSES

SMS responses as a result of a programming action or other notifications are described here:

(Entry Accepted) Programming successful.

(Entry #0 is NOT changed) "USER SIM" number not

programmed.

(Bad Programming Index) Wrong entry index (valid range:

0..19).

(Verification Error) Data verification error during

program.

(Bad Data) Command is invalid.

(Index Range) Index out of range.

(Empty Shortcut) Shortcut is empty (not

programmed).

(Shortcut Range) Shortcut is invalid (valid range:

0..99).

(Invalid Number) Number is invalid.

(Bad Query Index) Query index out of range.

Some of the above SMS responses will also contain:

Index: xx

Number: xxx..xxx Number, "ERROR" or

"UNCHANGED".

Name: xxx..xxx Name, "ERROR" or

"UNCHANGED".



Note: when a shortcut or phone number is 'forgotten' while sending a SMS, the SMS message will 'bounce back' to you with a copy of your own SMS message.



2.6.1 Phonebook Query

A phonebook query is done like this:

15? Request phonebook listing starting

from entry position 15.

The phonebook query command will then return:

(Query Result) This will show 20 phonebook

entries.

15: number (name) 20 entries like this will be returned

16: number (name) (starting from the query entry

index)

. . .

34: number (name)

Upon a bad query, this will be returned:

(Bad Query Index) Query index out of range.

2.6.2 Missed Call notification

Upon a missed call (only when CLI is available) this SMS will be send:

Missed Call: number (name) Number and name both shown.

Missed Call: number Name was not found in

phonebook.



2.7 SENDING A SMS MESSAGE

A SMS message is send as follows:

xx#message_content.... Where **xx** is either a shortcut

number or the full destination

phone number.

2.8 RECEIVING A SMS MESSAGE

A SMS message received will look like this:

xx..xx: message_content.... Where xx..xx is the full caller

phone number.

xx..xx (nn..nn): message..... Where xx..xx is the full caller

phone number and **nn..nn** is the senders'

from the internal phonebook.



2.9 DIALLING A PHONE NUMBER

A number is dialled by dialling the "GATEWAY SIM" number. Your call will be answered immediately and a fast beeping notification note will be heard. The following actions can be taken:

Dial: # The "Missed Call" number will be dialled.

Dial: **0#** or **00#** Redial the last number dialled.

Dial: **x#** or **xx#** Dial the shortcut number from the

phonebook.

Dial: xxx...xxx# Dial the full number.

Dial: * Delete number entered so far and start

again.

(the * can be entered any time and will

make the notification tone re-appear)

Note: as soon as a DTMF digit is received, the notification tone will be silenced.



2.10 WINDOWS USAGE AND SETTINGS

Although the CallCatcher.Personal GSM system uses its system resources efficiently, the use of other third party software that is CPU, hard disk, network or Operating System intensive might affect its performance and behaviour. Most of the default Windows settings after installation of the CallCatcher.Personal GSM and Windows Operating System will be sufficient for normal usage. In case network functionality is required please consult your systems administrator to configure the system properly on the Windows Operating System level.

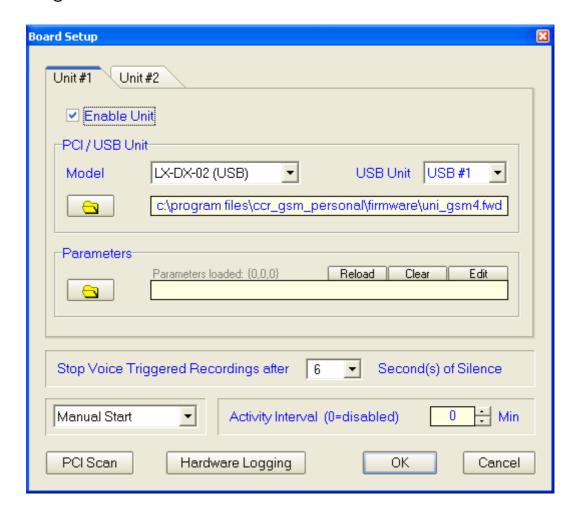
Do not run a virus scanner while the CallCatcher.Personal GSM system is recording as it can affect hard disk performance as well as causing unpredictable behaviour.

As a safety precaution also make sure that file sharing is NOT enabled for any directory on your CallCatcher.Personal GSM server.



3. BOARD SETUP

Up to two GSM Voice recording PCI board(s) or USB unit(s) can be installed within a single CallCatcher.Personal GSM configuration.



In the Board Setup window, each tab selection #1 and #2 has the following properties for each of the two:

'Enable Unit' checkbox, this has to be checked to activate the selected board. The 'Model' dropdown list box specifies which type of Voice Recording board or USB box is to be used.

PCI boards must be installed by PCI Scan doing a first.



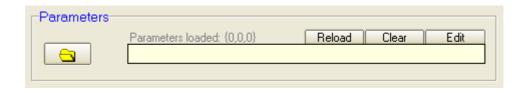
This will auto detect OptiLogix PCI cards. A list of available cards will be displayed of which the appropriate one can be selected.



The detected hardware bus and slot number of the PCI card will be displayed in the 'PCI Bus/Slot' pop-up box.



In the above 'PCI/USB Unit' panel, the yellow browse button selects the downloadable firmware file for the board, which is to be downloaded during the start-up phase of the CallCatcher.Personal GSM. A firmware file must be selected. Consult the latest release notes and use the most recent software and firmware versions to achieve a successful installation or update of the product.



In the above 'Parameters' panel, the yellow browse button selects which optional parameter file is to be used in conjunction with the specified board. The Edit button will open a parameter editor panel for advanced hardware related settings and will create a parameter file automatically. Using the Reload button a parameter file can be loaded during runtime. The Clear button will clear the parameter file path.

3.1 AUTO-STARTING THE SYSTEM



This dropdown box specifies if manual starting or automatic starting after ${\bf N}$ seconds is required.

During auto-starting of the system, the user





always has the opportunity to cancel this by clicking on the countdown button.



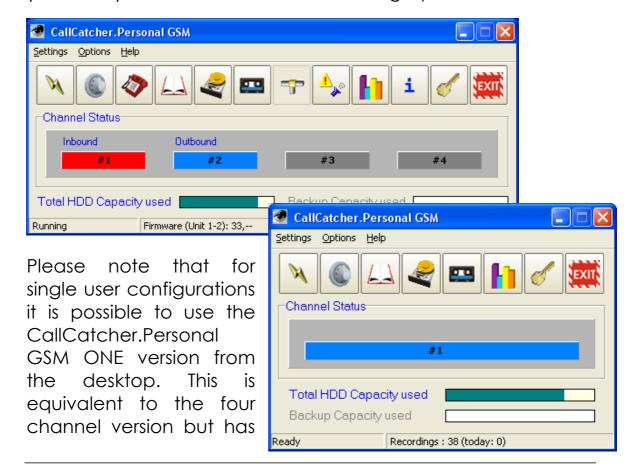
4. USING THE SYSTEM

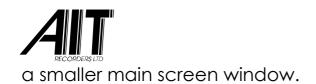
After a successful installation you can start the program from the icon on your desktop, after which a tray icon will appear. Double click this tray icon to get the 'Log On...' panel. When logged in for the first time, a warning will be issued that you are required to modify the user management settings. At this stage you have unrestricted access to the system. Refer to the 'User Management' chapter.

Note: The system uses **UTC** time (Universal Time Coordinated) to create date/time named directories for recording storage.

4.1 MAIN SCREEN

The main screen shows the status of all installed ports (channels). Non-available channels are greyed out.







4.1.1 Line Status Display

The main screen shows the systems activity status. Change of line status is shown as follows:

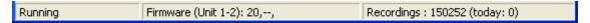
- Idle state, no recording is made.
- Idle state, no recording is made (Voice Activated mode).
- Recording of an Outgoing call.
- Recording of an Incoming call.
- Recording of a Voice Activated call.
- Channel not available.
- Channel available but disabled.

Please note that a dark coloured status like dark Blue or dark Red shows that an outbound or inbound call is detected but that recording has not been started.

This either means that the detected call is not yet in a Connect state or it means for example that ports have been disabled or that the hard disk cannot be written to. Please check your CallCatcher.Personal GSM configuration settings when all line state indicators remain dark coloured.

4.1.2 System Status Bar

The status bar shows the current status of the system.



When the system is started and the firmware is downloaded it will show the firmware release levels of each PCI board or USB box installed. Also the total amount of recordings available is shown.



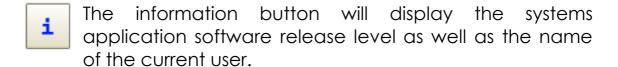
4.1.3 CallCatcher.Personal GSM Speed-Buttons

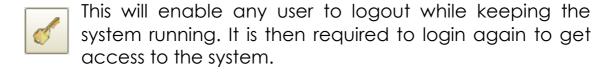


The CallCatcher.Personal GSM is started using this button or it will start automatically when configured to do so (see **Board Setup**).

This button will enable authorized users to close the program.

Unauthorized users will <u>not</u> be able to terminate the program.





Set system port properties on a per port basis or set all ports at once.



Phonebook Entry access button.

Hard disk Management and Backup settings.





Click here to search for and listen to recordings.



Status overview of remote Network Clients that are logged in to the CallCatcher.Personal GSM server.



Alarm and Sound card settings.

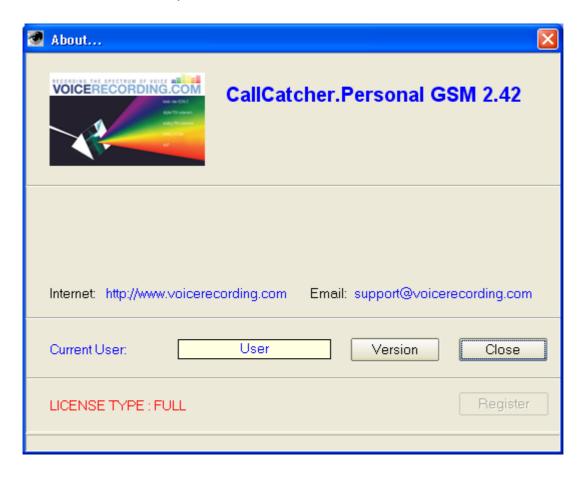


View system and recordings statistics.



4.1.4 About panel

The '**About**' panel is programmable and can display dealer/distributor specific information.



Using the Register button, a time limited license or a full license key code can be entered. By default a 60 day license is active after installing the CallCatcher.Personal GSM software.

Click on Version for the full version number.

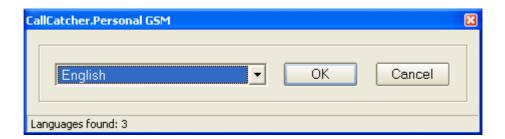




4.2 LANGUAGE SUPPORT

Support for multiple languages is available and can be selected in the panel shown below. This panel can be accessed through the main menu option: 'Settings' / 'Available Languages'

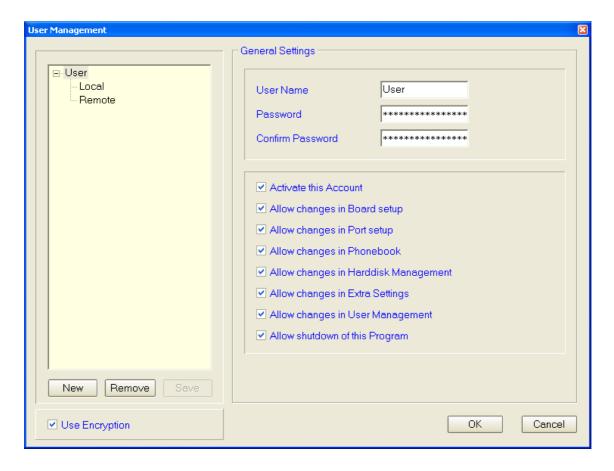
Languages can be created and added. See the .Ing files in the \Program Files\CCR_Personal_GSM directory. Use an existing language, rename it (use a .Ing extension!) and modify it to suit your new language.





5. USER MANAGEMENT

An unlimited amount of users, each with their associated access rights, can be created here.



Using the New and Remove buttons, users can be created or removed. When the focus is on the User Name in the tree list, the right side of the view will show the global settings for editing. Click the Save button to confirm the changes made.

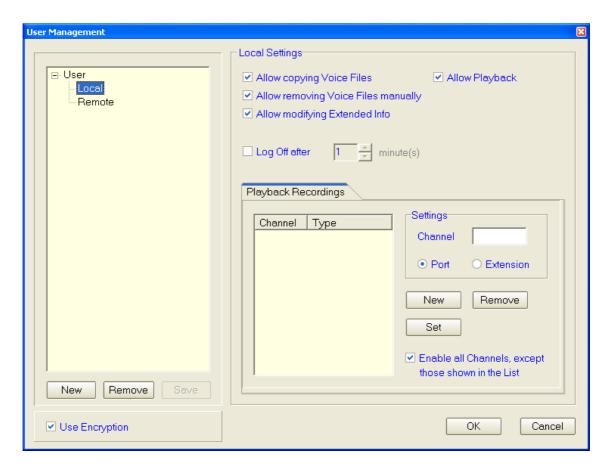
Note: make sure the machine is connected to the local LAN to allow CallCatcher.Personal GSM remote client software login.



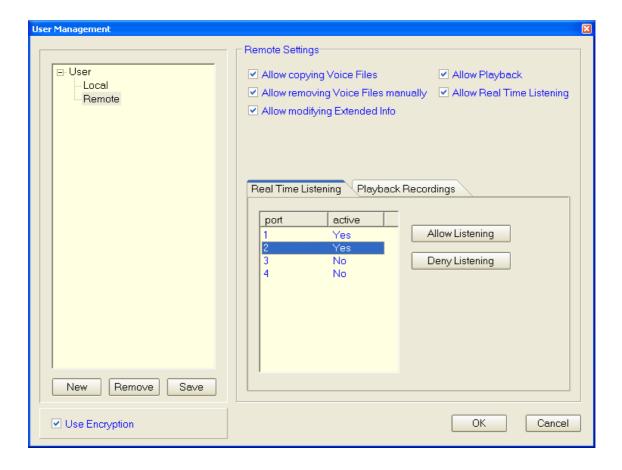
5.1 LOCAL AND REMOTE SETTINGS

The 'Local' settings and the 'Remote' settings can be accessed by putting focus on these nodes in the tree list.

These settings, which are further grouped using tabs, have various checkboxes and lists available to change individual access rights. The names of these checkboxes are sufficiently explanatory and present the access rights to various parts of the CallCatcher.Personal GSM environment. In addition to this, a list of ports and / or extensions can be specified which should be included or excluded from having access to by a specific user.







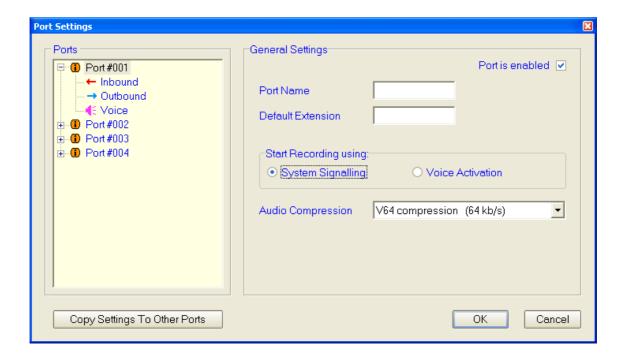
Entering a 'Channel' number and selecting the type ('Port' or 'Extension') followed by clicking on the New button will program the setting. The Clear button will remove the focused entry in the list and will clear the editbox. The Set button allows for updating a list entry without creating a new one.

5.1.1 Encryption

When the 'Use Encryption' checkbox is checked, the CallCatcher.Peronal GSM will use a default encryption key to store recordings on disk. When unchecked, the files will not be encrypted and will be readable by most commercially available audio player programs.



6. PROPERTIES PORT



As the CallCatcher.Personal GSM has integrated back-to-back gateways with internal signalling, the ports must be configured in 'System Signalling' mode.



A specific port setting can be copied to all or a selection of other ports by focussing on the port to be copied first and then clicking on the Copy Settings To Other Ports button which will make this panel appear.



6.1 GENERAL SETTINGS

6.1.1 Audio Compression

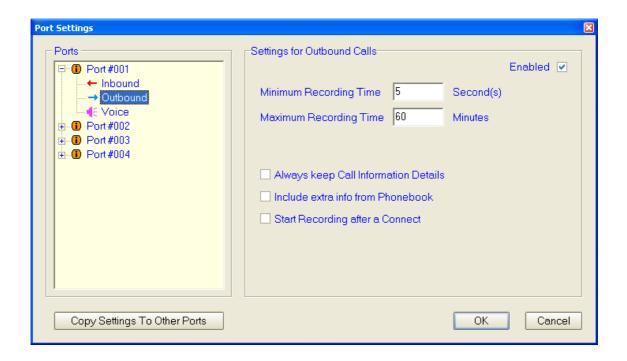
The 'Audio Compression' property allows to select a proprietary 36 kbit/s compression mode that gives almost the same high 64 kbit/s quality at about half the file size.

6.1.2 Port Name

A **Port Name** can be specified which will be displayed on the main status screen as a static text. The '**Default Extension**' will appear in the '**Extension**' column of the recordings list in the '**Monitor**' screen.



6.2 OUTBOUND SETTINGS



6.2.1 Min / Max Recording Time

When enabled, it is possible to enter the 'Minimum Recording Time' duration in seconds for which a call must have lasted before the recording is actually saved. Please note that the recording itself is started immediately and not delayed. The 'Maximum Recording Time' limit in minutes will put a maximum limit to the recording time. If a negative value is entered like – 60 it will record forever but will create segmented recordings with a length of 60 minutes each.

6.2.2 Keep Call Information Details

When checked, incomplete calls like Busy, No Answer, wrong/incomplete Dialled Number and recordings that are too short (voice file not being created), will get a 'header only' file that contains Call Information Details only and no



voice recording. For <u>SMS message recording</u>, this checkbox must be <u>set</u>.



6.2.3 Phonebook Data inclusion

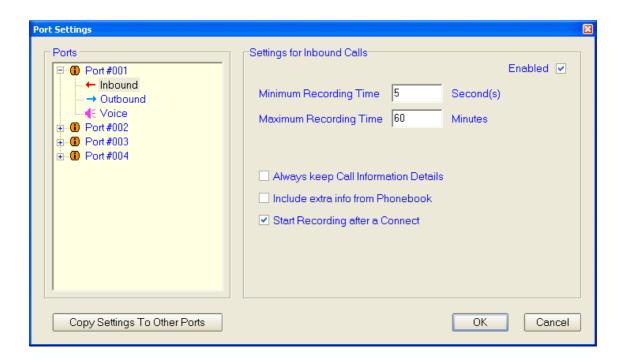
This checkbox will attach data from the Phonebook to the voice recording file. This data can contain descriptive information in relation to the dialled telephone number (DDI) or the received Caller-Line-Identification (CLI) number.

6.2.4 Start Recording after a Connect

When checked, a recording will be started only after the far-end has answered the call. Please note that not all PBX types of Digital Extension firmware will support this feature.



6.3 INBOUND SETTINGS



6.3.1 Min / Max Recording Time

When enabled, it is possible to enter the 'Minimum Recording Time' duration in seconds for which a call must have lasted before the recording is actually saved. Please note that the recording itself is started immediately and not delayed. The 'Maximum Recording Time' limit in minutes will put a maximum limit to the recording time. If a negative value is entered like – 60 it will record forever but will create segmented recordings with a length of 60 minutes each.

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6.3.3 Phonebook Data inclusion

This checkbox will attach data from the Phonebook to the voice recording file. This data can contain descriptive information in relation to the dialled telephone number (DDI) or the received Caller-Line-Identification (CLI) number.

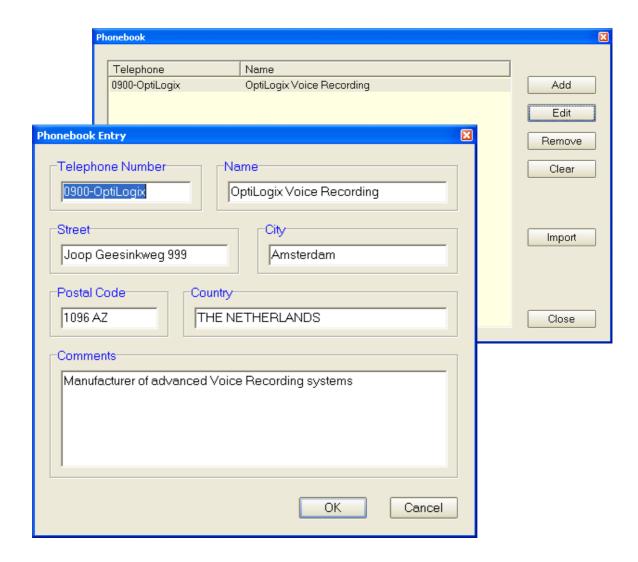
6.3.4 Start Recording after a Connect

When checked, a recording will be started only after the incoming call has been answered. Please note that not all PBX types of Digital Extension firmware will support this feature.



7. PHONEBOOK ENTRY

This view shows a list of all Phonebook entries available in the systems database. Adding, editing, removing as well as importing a CSV (Comma Separated Value) file are supported.





7.1 ENTERING PHONEBOOK DATA

Telephone number, Name, Street, City, ZIP code, Country and Comments can be stored. This call specific information will be displayed in the 'Monitor' screen when a recorded dialled number or Caller-ID number matches the 'Telephone Number' field.

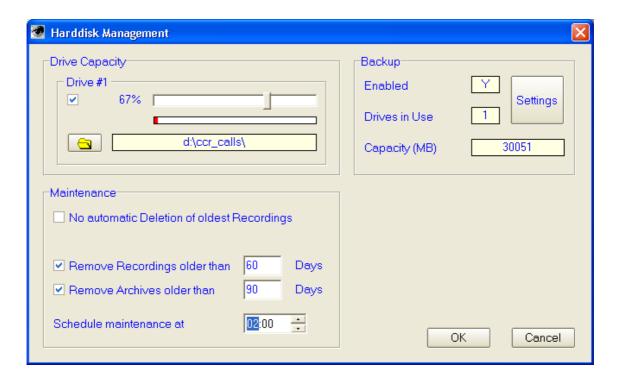
7.2 IMPORTING EXTERNAL DATA

An external data file with a list of Phonebook entries can be imported using the Import button. The format of the data file is in CSV format that has all <u>seven</u> data-fields separated by <u>six</u> commas as shown below:

TelNo,Name,Street,City,postcode,Country,Comments



8. HARDDISK MANAGEMENT



The physical disk must be assigned a directory path in which the voice recordings are stored.

The current used disk space of the hard disk is shown by a red coloured bar-graph. Typically the manual slider must be set in such a way that it does not fall within the red area of the bar-graph.

For the hard disk the maximum allowable storage space (percentage of the disk size) and the directory path, in which every individual recording will be stored, must be specified. In case the hard disk reaches its maximum capacity then the oldest files will be erased automatically to create room for new recordings.

Before being erased completely (header + voice content) or only the voice content itself, the files can be automatically backed-up by the CallCatcher.Personal GSM. The backup



drive must be a logical drive and can physically reside on the local machine or on a machine on the Local Area Network (LAN).



8.1 REMOVE RECORDINGS AUTOMATICALLY

It is possible to have recordings older than a certain number of days to be removed automatically. When a recording is removed, its archive (header) is kept and the voice contents (the actual voice recording) is deleted. Archives remain visible in the CallCatcher.Personal GSM recording database and can be removed automatically as well after a number of days.

Maintenance			
☐ No automatic Deletion of oldest Recordings			
Remove Recordi	ngs older than	60	Days
Remove Archives	olderthan	90	Days
Schedule maintenan	ce at	02:00	
		,	

The checkbox 'No automatic Deletion of oldest Recordings' when enabled will prevent old recordings from being removed when the storage capacity is exceeded. This means that new recordings will <u>not</u> be created (CallCatcher.Personal GSM will stop writing recordings to disk).

Recordings older than **N** days can be automatically deleted. Only the voice content itself will be deleted, but the header (archive) will NOT be deleted and will stay visible in the list of recordings.

Archives (header without voice content) older than ${\bf X}$ days can be deleted as well. In this case the complete file will be removed from the system.

Warning: Files that are deleted cannot be recovered anymore!

The CallCatcher.Personal GSM will do an automatic maintenance check on a daily basis during which the system

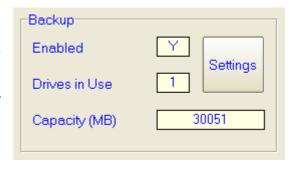


is checked for missing files, empty directories and recordings/archives to be removed.



8.2 BACKUP

The creation of automatic backups is supported by CallCatcher. Personal GSM and can be configured for various types of backup media, time schedules and multiple backup targets.



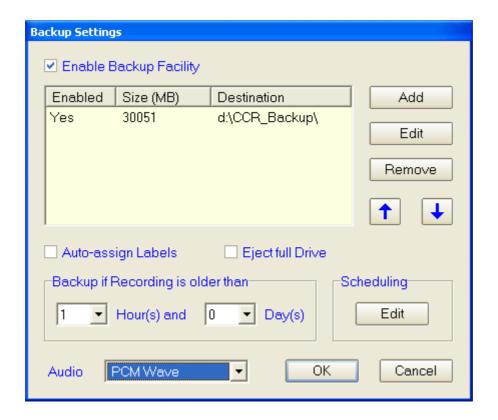
When a voice recording file is being backed-up, it will be stored unaltered on the target drive (all backup media should be configured to be accessible as a logical drive). On the source drive the recording will be deleted and only the header (archive) will be preserved.

This modified header contains all original header data and some new data regarding the backup process that was applied to the original recording (date of backup and name of the backup medium). In this way archives will appear as true recordings to the system while having a fraction of the total storage size of the original recording. The name of the backup medium enables an easy way of finding the right backup tape. The CallPlayer client program can then be used on the tape for local audio playback and searching.

These archives (information headers without audio recording) can be deleted automatically by the CallCatcher.Personal GSM. In this case they will be removed from the CallCatcher.Personal GSM recording database as well.



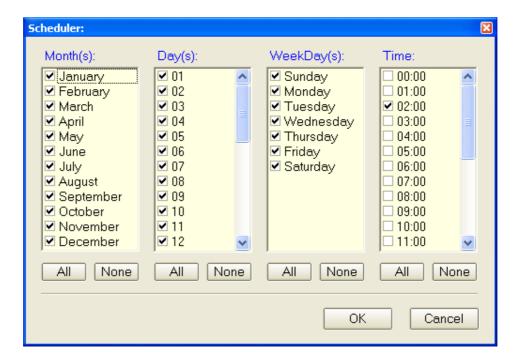
8.2.1 Backup Settings



Multiple backup target drives can be configured. The sequence at which these are accessed can be programmed using the up and down arrow buttons.

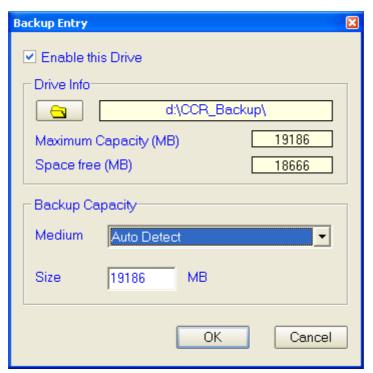


The age of the recording at which is should be backed-up can be specified by day and hour. The moment at which backups are being made can be configured using a scheduling table as shown:



For each backup target drive, the maximum size can be specified. Some presets are available under the dropdown box 'Medium'.

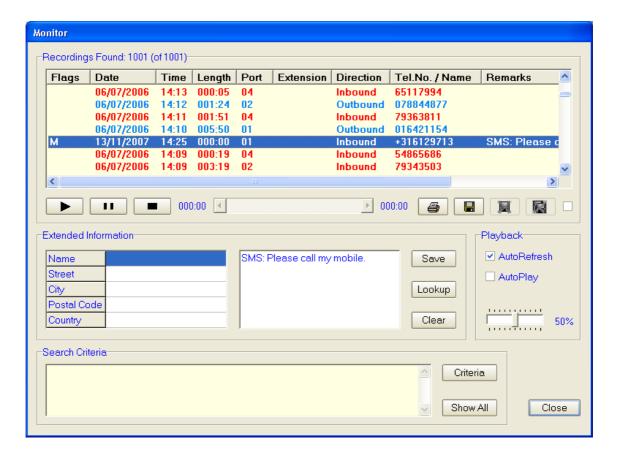






9. MONITOR

The 'Monitor' screen is used for searching and listening to recordings. Please note that it is only possible to playback recordings when the system is running.



The upper list shows all recordings available which have matched the search criteria. These criteria can be adapted in the 'Filter options' screen, which is accessed by the Criteria button. The search criteria that can be applied are made visible in verbose form in the lower Search Criteria status window. The recordings that have matched the criteria can be sorted on every column item by clicking on the preferred columns heading.

By pressing the Show All button, all recordings available regardless of any search criteria will be displayed.



9.1 FLAGS

The **Flags** column in the recordings list can show the following attributes:

- A Recording is archived by the maintenance process (voice content is removed but header is preserved)
- B Recording is backed-up by the backup process.
 Recording and header are still available and unmodified.
- M Message recording. This is a zero length recording (no voice) containing a SMS message stored in the Remarks field.

9.2 EXTENDED INFORMATION

The 'Extended Information' window will show information from the Phonebook if there is an accurate match available with the dialled (DDI) number or received CLI number. This information can be modified and remarks can be added to it. Click on Save to update/write this information into the header of the recording.



9.3 PLAYING VOICERECORDINGS



By using the Play, Pause and Stop buttons together with the slide bar, which shows the total duration of the recording as well, it is possible to scan for voice fragments within a recording very quickly.

If the 'AutoPlay' checkbox is checked, then during scrolling of the recordings list, the recording that has received focus, will be played automatically. The volume slider bar will adjust the playback audio level between **0%** and **100%**.

Note: As soon as an item in the list of recordings is clicked, or when extended info is added / modified on a focussed item, the list will not be refreshed anymore with new recordings and the background colour of the recordings list will change to indicate this. This in order to prevent the list from being updated while listening and looking for existing recordings. Clicking the '**Auto Refresh List**' checkbox, the list will return from its 'frozen' state.



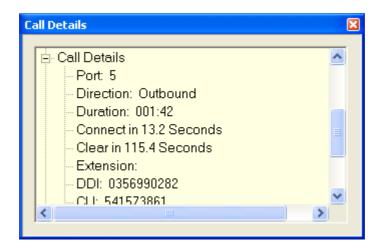
9.4 EXPORTING AND ERASING RECORDINGS

The list of recordings can be written to file for printing or archiving with the Save to File button. To the right of this button there is a button that will allow saving an audio recording in its native encrypted format (including header data) or to export it in a standard unencrypted .wav audio format.

The single and multiple 'Erase' buttons are enabled only when the safety checkbox to the right of these buttons is checked. When enabled, either a group of recordings (the recordings which have received focus) or all recordings that match the search criteria, are permanently erased. After the erasing operation the checkbox is cleared for safety reasons.

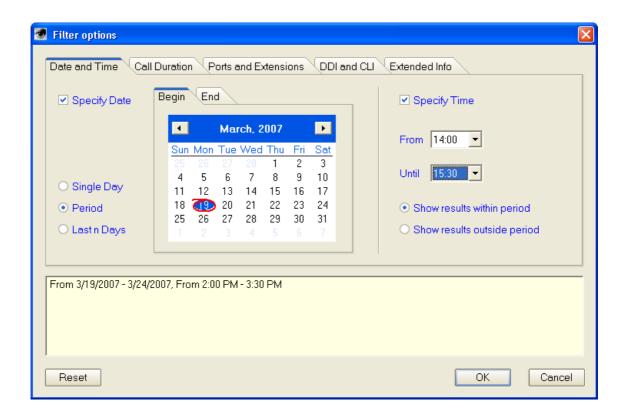
9.5 DETAILED FILE INFORMATION

By double clicking on a recording in the list, detailed information will be shown in the form of a tree-list with both generic and file specific information regarding the type of audio compression, file size etc...





9.6 FILTER OPTIONS



9.6.1 Date Criteria (Period)

The 'Date & Time' tab has a 'Specify Date' checkbox, which will include the <u>date</u> into the search criteria. The same is true for 'Specify Time', which will include the <u>time</u> selection into the search criteria.

The date criteria allows for selecting a 'Single Day' or a 'Period' or the 'Last n days'. The calendars allow an easy way of picking a day, month and year. By double clicking the text presenting the month, the month can be changed and by clicking on the year value, the year can then be changed using a spin-button.

9.6.2 Time Criteria





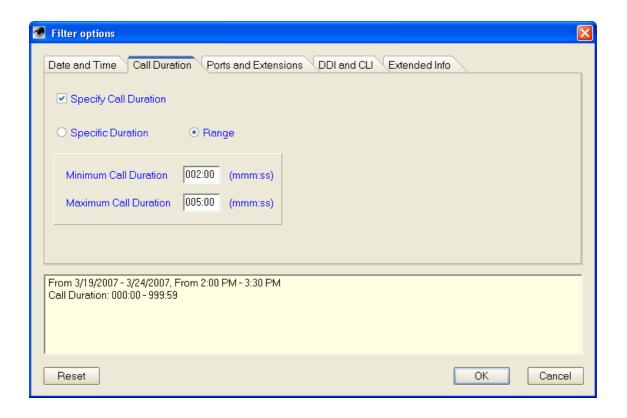
The time criteria allows for selecting a time period (in 15 minutes increments) within or outside the recordings should be found.

9.6.3 Date Criteria (Last n Days)

The 'Number of Days' selection allows for searching back to the last 90 days. If a longer period is required to search back for, please select the 'Period' radio button.



9.6.4 Call Duration Criteria

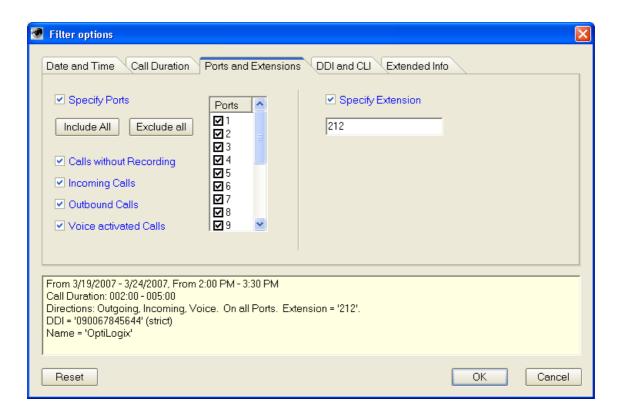




Recordings can be filtered on the basis of duration of the call. This can be done by specifying a single duration (with a 10 second margin) or by range.



9.6.5 Port Criteria

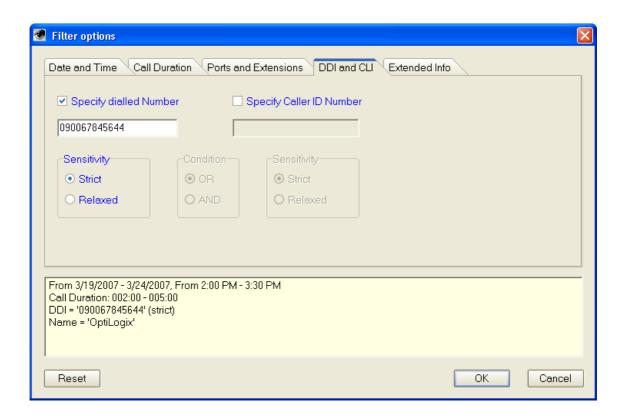


The Ports criteria allows for Including or Excluding certain ports (recording channels) and to search for incoming, outgoing or both types of calls. Criteria also can be set for Voice activated calls.

Extension numbers (in case of recording extensions directly) can be specified as well.



9.6.6 Dialled Number and Caller-ID Criteria



Dialled- or received Caller-ID telephone numbers can be searched on. The criteria are enabled when the 'Specify dialled Number' and 'Specify Caller ID Number' checkboxes are checked respectively. On both criteria there is a selection possible to choose either 'Strict' or 'Relaxed' search sensitivity.

Please note that the Caller-ID option is available on all ISDN firmware and Digital Extension firmware with D-channel signalling support (some PBX models only).

The strict sensitivity rules for the searching number(s) are:

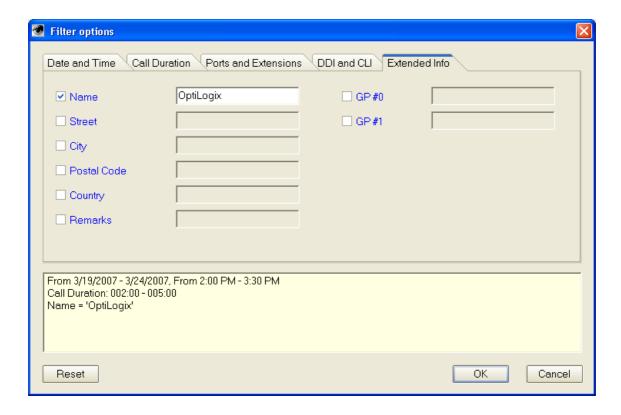
- Match the recorded numbers fully or,
- The searching number must fully fit the first N digits of the recorded numbers.



The relaxed sensitivity will treat the searching number(s) as a subset. A match is found if the search number is found anywhere as a part of a recorded number.

The conditions '**OR**' and '**AND**' are used to select if one of the searching numbers must match (OR condition), or if both the numbers must match (AND condition).

9.6.7 Extended Info Criteria

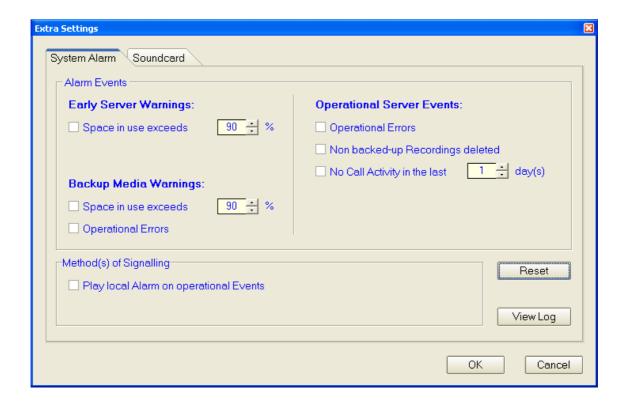


In this '**Extended Info**' tab, one or more Extended Information items can be specified here and used in the search criteria. Please note that searching is not case sensitive.



10. EXTRA SETTINGS

10.1 SYSTEM ALARM SETTINGS

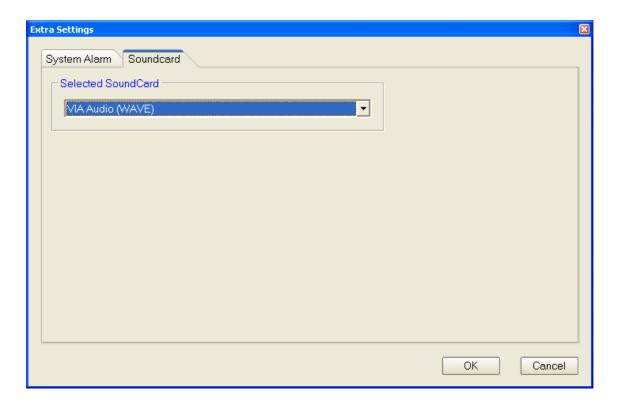


Additional facilities are provided by the CallCatcher.Personal GSM to support alarm warnings.

A local alarm can be generated when storage or backup capacity is exceeding pre-programmed limits. Operational errors or warnings are logged and can be viewed using the View Log button.



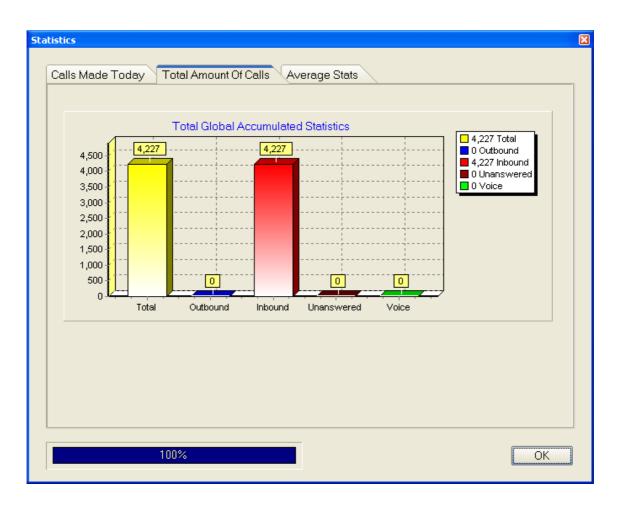
10.2 SOUND



Windows machines can have multiple sound resources, a specific sound resource must be selected in case the default resource does not operate with the CallCatcher.Personal GSM server.

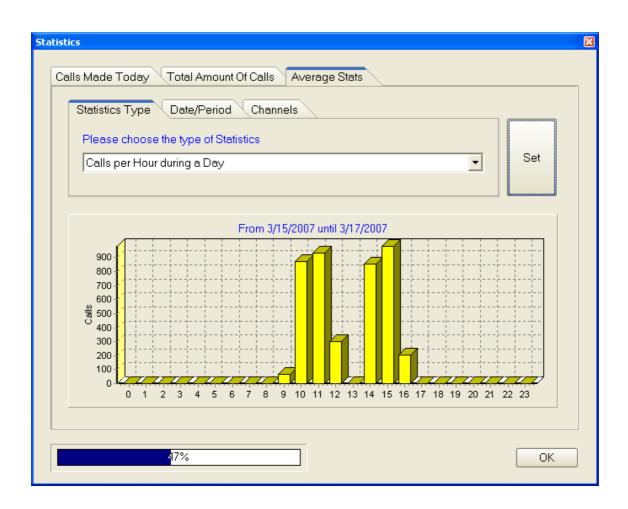


11. STATISTICS



Statistical information provided is based upon the information in the voice recording database. This includes full recordings as well as archives (voice contents that are removed, but which have their header information preserved)







12. CLIENTS

The CallCatcher.Personal GSM supports real-time monitoring of live conversations over the corporate LAN using streaming techniques. With a minimum of processor overhead and network traffic, crystal clear voice can be delivered to any desktop computer (with Windows compatible sound card) that is connected to the corporate LAN or WAN including the Internet. Besides real-time monitoring, also stored and archived recordings can be played and managed over the corporate LAN.

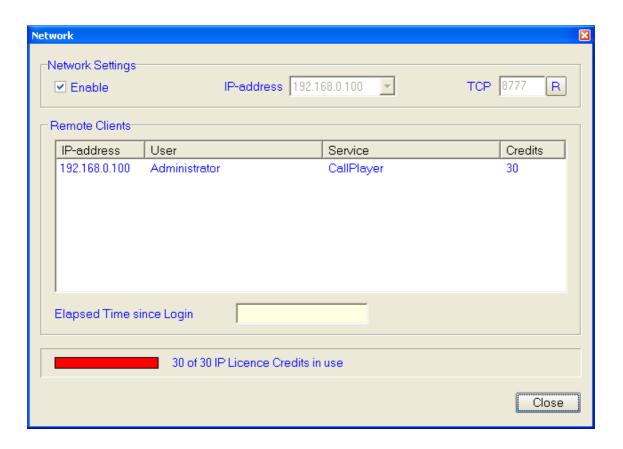
The same high level of security is offered as with local access to the CallCatcher.Personal GSM server application and its encrypted recordings. The streaming packets travelling over the corporate LAN are heavily encrypted as well.

Only CallLive (Real Time Monitoring) clients and CallPlayer (remote and local playback) clients with sufficient monitoring rights can login from their workstation onto the CallCatcher.Personal GSM server.





12.1 NETWORK CONNECTION STATUS



The **Network** status window shows which clients are currently logged in.

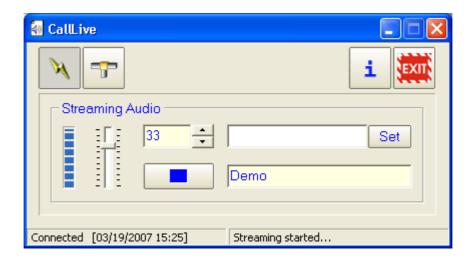
Clients that are logged in are shown in the list with their IP address, User name, Type of Service and the amount of required IP licence credits.

There is a limit to the number of clients that can be logged in at the same time. This depends on the total amount of IP credits available and the total accumulated amount of IP credits required by the various client applications.

By focussing on an IP client in the list and clicking the right mouse button, that client can be forced to disconnect.



13. CALL-LIVE



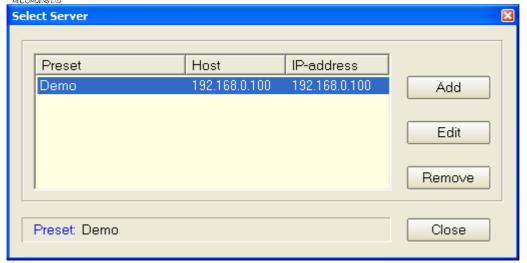
This **CallLive** client application enables to listen, on a remote client machine with a Windows compatible sound card, to live conversations on selected CallCatcher.Personal GSM ports / channels.

13.1 LOGIN



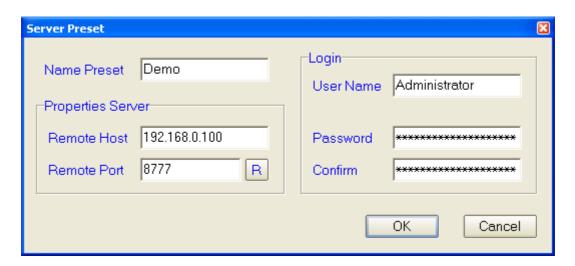
Using this configuration button a specific CallCatcher.Personal GSM server to login to can be selected from a user defined list of servers.







Select a preset and click on Close to activate this preset. New presets can be created using the Add button. Adding or editing a preset will make the following screen appear:



The 'Server Preset' panel must contain the same 'User Name' and 'Password ' as the user would have on the CallCatcher.Personal GSM server in order to be able to login.



LAN.

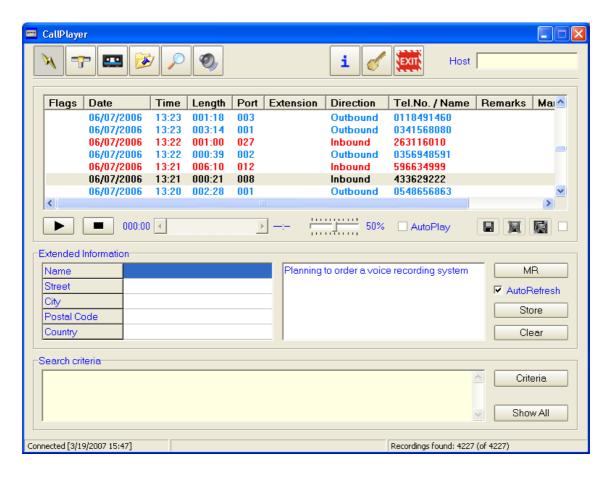
Using the connect button, this client application can login in a secured way and enables a highly secured and encrypted transmission of voice packets over the

The CallCatcher.Personal GSM port to be monitored, as well as the audio gain can be adjusted on the fly. Using the Set button a description can be attached to a specific port number and therefore enabling an easy way of searching for a specific port to listen to in real-time.

Note: make sure the machine is connected to the local LAN to allow CallCatcher.Personal GSM remote client software login.



14. CALL-PLAYER



The **CallPlayer** is a client application that is used for searching and listening to recordings. These can be remote recordings (located on the CallCatcher.Personal GSM server), locally saved recordings or backups. Functionally it is almost identical to the '**Monitor**' screen in the CallCatcher.Personal GSM server. Please refer to chapter 9 for more information on the searching facilities.

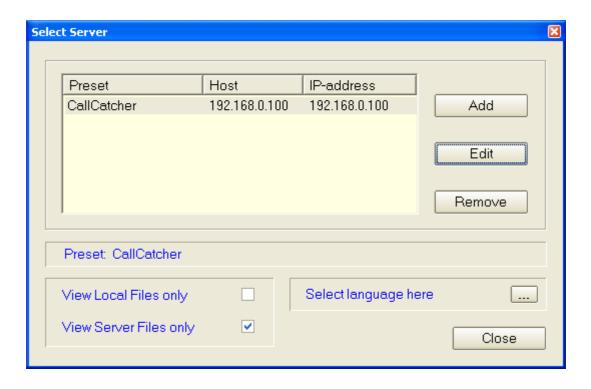


14.1 SAVING RECORDINGS LOCALLY

Recordings can be saved on the local client machine using the save button. This is very useful for important recordings that should not be left on the CallCatcher.Personal GSM server where these might be archived and deleted after some time. These saved recordings will be kept on the local client machine and will be marked as such in the recordings list.

Multiple recordings can be saved or exported to .wav or .MP3 at the same time. Refer to the 'Drag & Drop' section regarding filename conventions.

14.2 LOGIN



Login to the CallCatcher.Personal GSM server is described in more detail in the CallLive section (chapter 14) of this manual. When a password is not programmed in the 'Server Preset'

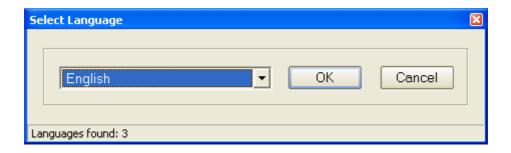


panel you will be prompted to enter your password during login.



14.3 LANGUAGE SUPPORT

Support for multiple languages is available and can be selected in the panel shown below. Languages can be created and added. See the .Ing files in the \Program Files\CallPlayer directory. Use an existing language, rename it (use a .Ing extension!) and modify it to suit your new language.



14.4 LOCAL (BACKUP) FILES

To operate CallPlayer in a local playback mode (for reading backups) enable the 'View Local Files only' checkbox. In this mode only local (backup) files will be shown. Login to the server is required to playback recordings.

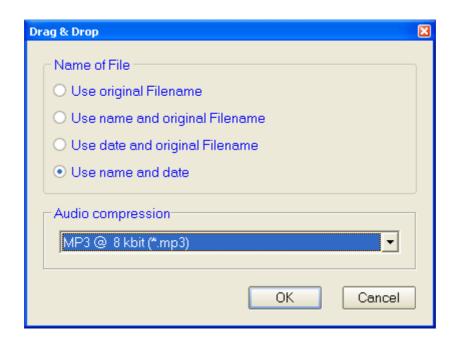
14.5 EXTENDED INFORMATION

Any changes made to for example Extended information fields by other clients or changes in the server database are automatically updated at all other CallPlayer clients on the network.



14.6 DRAG & DROP

From the main screen, a <u>single</u> recording can be selected with the left mouse button and dragged & dropped onto the Windows desktop or for example into your contacts field in Outlook.



You can configure in which audio format the recording is to be converted into during the Drag & Drop operation. How the filename will be composed can be selected as well.

When using the Save/Export facility <u>and</u> multiple recordings are selected using the **shift** or **ctrl** key, these Drag & Drop settings will be used for generating the filenames.

Recordings that are located on the CallCatcher.Personal GSM must be streamed over the network and converted into your specified format. This will be done automatically during Drag & Drop and Save/Export operations. Please take into account that this might take some time in case large recordings are to be processed.



14.7 SELECTING A SOUND RESOURCE

As a Windows machine can have multiple sound resources, a specific sound resource must be selected in case the default resource does not operate with CallPlayer.





15. WIRING DIAGRAMS

Wiring diagrams are provided for the following PCI board / USB box models:

15.1 GSM PCI VERSION

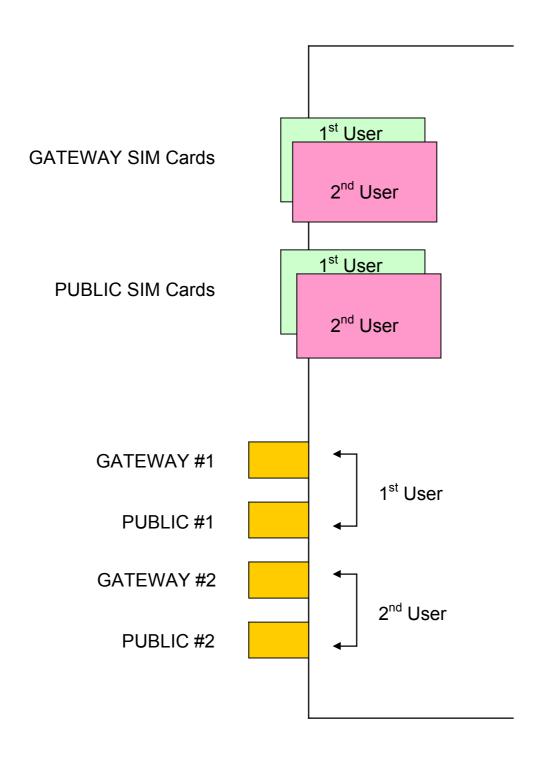
GSM-100-PCI 1 user GSM
 GSM-200-PCI 2 user GSM

15.2 GSM USB VERSION

GSM-100-USB 1 user GSMGSM-200-USB 2 user GSM



16. GSM PCI VERSION





17. GSM USB VERSION

