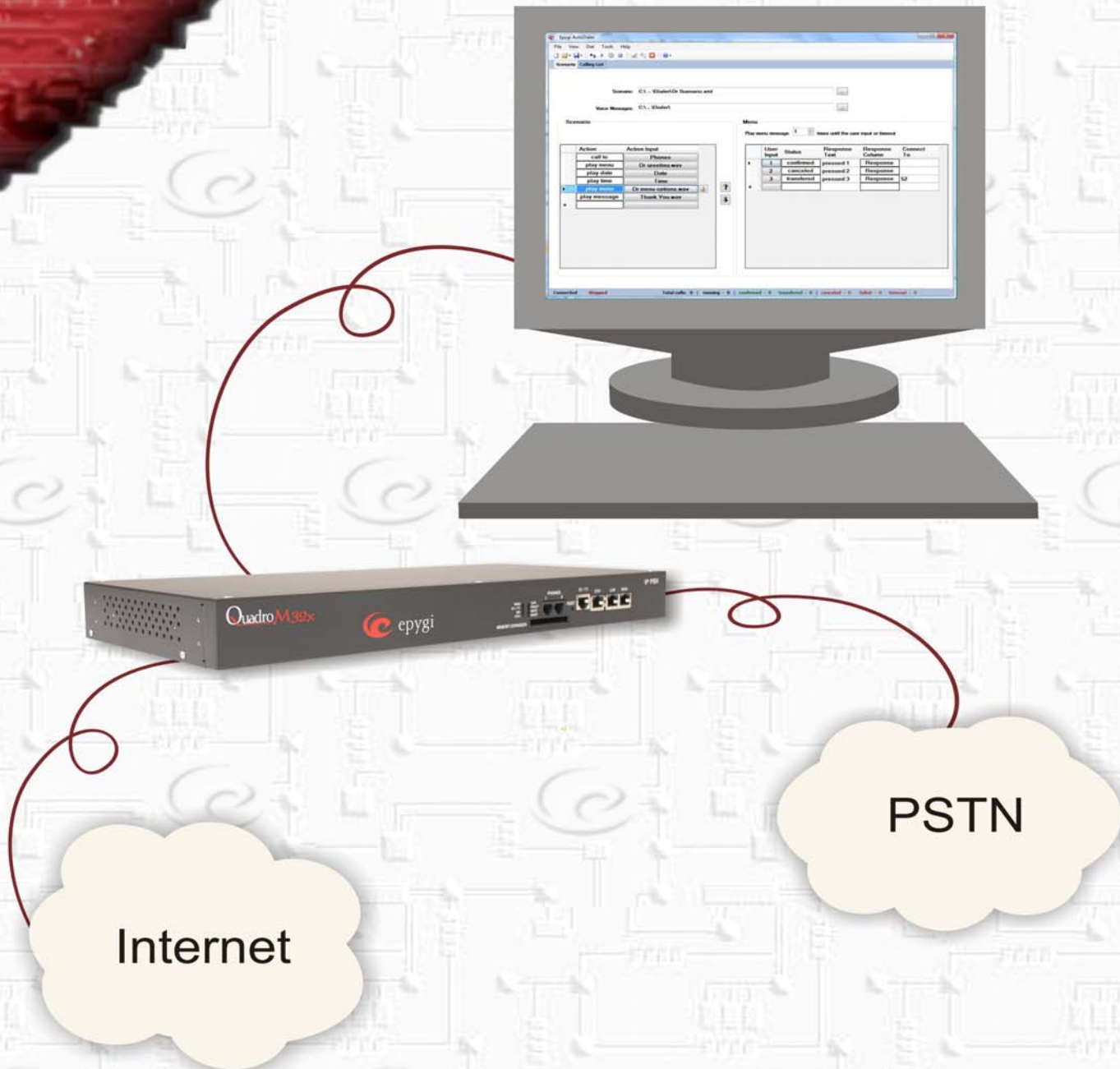


# Auto Dialer



## Manual: User's Guide

Edition 1 SW Release 1.0.9 and higher, February 2012

## Table of Contents

Description.....	3
Market.....	3
Installation.....	4
Configuration.....	4
Configuring Connection with Epygi IP PBX .....	4
Configuring the Calling Scenario.....	7
Creating a New Calling Scenario.....	7
Opening the Existing Calling Scenario .....	14
Building the Calling List .....	14
Making Calls.....	15
Start Command .....	15
Restart Command .....	16
Start by Schedule Command .....	16
Stop Command.....	16

## Description

The Epygi Auto Dialer is a licensable feature that enables all Epygi IP PBXs to perform immediate or scheduled dialing to phone numbers from a calling list, with the option of playing one or more voice files and a voice menu.

The Auto Dialer can prompt the called party to enter a response by pressing one or more DTMF keys to navigate options. The responses entered are then updated in the calling list. The feature is implemented as a MS Windows™ application.

The calling list that is used and updated by the Auto Dialer can be uploaded from a list of names and contact numbers that are stored in an MS Excel™ file. The contact numbers can also be manually entered from within the Auto Dialer's calling list screen.

**Please Note:** Auto Dialer does not require the additional 3pcc license to be installed on the Epygi IP PBX.

There is no limitation on the number of Auto Dialers that can be connected to the same IP PBX unit. The only limitation is there is a maximum number of concurrent calls originated by all connected Auto Dialers; it cannot exceed the total number specified in the Auto Dialer feature keys installed on the IP PBX unit.

## Market

The Auto Dialer's target markets are small doctors' offices, independent pharmacies and other service providers that call their customers on a daily basis as part of their operating procedures. Some of the usage scenarios are as follows:

**Doctor offices** – A doctor's office calls their patients on a daily basis to confirm appointments for the week and to minimize no-show appointments, which cost the doctor time and money. Doctors do this manually by using the front office staff to place the calls. Many times they have to call more than once if there is no answer, voice mail is encountered or the wrong person answers. In some cases, the patient needs to reschedule their appointment time and contact the doctor's office directly.

**Small local pharmacies** – Large pharmacy chains have very expensive phone systems, tied to their ERP systems that perform automated calling to alert patients when their prescriptions are ready. These systems also allow patients to call into the IVR and automatically refill prescriptions by entering their specific prescription number using the phone keypad. These systems are not always affordable, especially for small, independent pharmacies which have to rely on staff for customer calls notifying them when prescriptions are filled and ready to be picked up.

**Telemarketing** – Telemarketers prepare recorded promotions based on a customer database and place calls to the selected customers which allow them to talk to an agent or opt out.

## Installation

Before installing Epygi Auto Dialer, go to the **System -> Features** on the Quadro GUI to make sure the Auto Dialer Support feature is activated.

**Please Note:** Auto Dialer does not require the additional 3pcc license to be installed on the Epygi IP PBX.

The following is required for the proper operation of the Epygi Auto Dialer:

- Min required space on PC – 8 MB
- MS Windows XP, MS Windows 7, MS Windows Vista. MS Windows servers 2003 and 2008
- Microsoft .NET Framework 3.5
- Network connection to the Quadro IP PBX
- The Quadro IP PBX and the host where the Epygi Auto Dialer is running should be visible to each other.

To install, run the setup files for Epygi Auto Dialer and follow the instructions of the setup wizards until the end. For information on how to activate and configure the Auto Dialer feature on the Quadro IP PBX, see the Administrator's Manual for the Quadro.

To upgrade from an existing version, close the Auto Dialer and run the setup wizard for the new version. The configuration and the data will remain after the upgrade. It is not necessary to uninstall the previous version before performing the upgrade.

## Configuration

Before starting the calling session, you must configure the following items for the Auto Dialer:

- The connection and call-related parameters in the **Options** window
- Calling scenario – this specifies the Auto Dialer's actions to be taken before and after the called party has entered their response on the phone's keypad.
- Calling list – a list of phone numbers to call along with the corresponding supplementary information (like day of the week, time, etc.) to be used by the Auto Dialer for automatic generation of voice messages to be played to the called party. The calling list can be created by tools like MS Excel™ and saved in CSV format.

**Please Note:** At the time of configuring the calling scenario, all voice messages and voice menus (for details see below) need to be pre-recorded and placed in the same folder, accessible for Auto Dialer.

### Configuring Connection with Epygi IP PBX

Each time the **Auto Dialer** starts, it opens the **Options** window, where the user must configure in the **Connection** Tab the parameters used to connect to the Epygi IP PBX. The same window can be opened after the **Auto Dialer** starts by selecting the **Tools -> Options** menu item or corresponding icon in the toolbar. The input fields in the **Options** window are as follows (see the example on Figure 1):

- **Host** is the IP address of the Epygi IP PBX used by Auto Dialer for making the calls.
- **Port** is the 3pcc port of Epygi IP PBX. For details on how to configure this port on the Epygi IP PBX, see the IP PBX manual. The default value of the 3pcc port on all Epygi IP PBX products is 4849.
- **UserName** is either "admin", "localadmin" or an extension number on Epygi IP PBX. If "admin" or "localadmin" is entered for **UserName**, the Auto Dialer will make the calls on behalf of the system Auto Attendant. Otherwise, the calls will be made on behalf of the extension entered in this field. This value also determines the storage for voice messages used by Auto Dialer during the calls. Before starting the calls, the Auto Dialer uploads all needed voice files to the IP PBX - to the memory space for the extension indicated in the UserName field. In case of "admin" or "localadmin" the uploaded voice files will be stored in the system Auto Attendant's memory. Additional memory may need to be allocated to the AA or extension memory settings to accommodate the voice files. When the required memory exceeds, the oldest entries with "dial\_" prefix are being automatically deleted.

Figure 1

- **Password** is either the admin's or localadmin's "Phone Access Password" or the extension's password.
- **Secure Connection** checkbox allows to establish a secure connection with Epygi IP PBX if appropriate checkbox is set in Epygi IP PBX 3PCC settings.

The **Connection** tab field values can be changed only when the Auto Dialer is disconnected from the IP PBX.

The **Calls** Tab of the **Options** window allows the user to configure the following call-related parameters (see the example on Figure 2):

**No input timeout:** this is the period of time during which **Auto Dialer** waits for the called party's input after playing the voice menu. If there is no input during that period, the call is considered to have failed and **Auto Dialer** will make another call attempt to the same number.

**Max number of simultaneous calls:** This specifies the maximum number of concurrent calls that **Auto Dialer** is allowed to make. If this number is more than the total of the feature license keys installed on Epygi IP PBX then the max number of the concurrent calls will be limited to the licensed calls.

**Max retry count:** If the call to a particular phone number fails because it was busy, not connected (network failure), not answered or answered without called party's input (**No input timeout expired**), the Auto Dialer will make repetitive call attempts to that phone number until either:

- the number of failed attempts equals **Max retry count** or,
- the call is answered by the called party and the confirmation input is received.

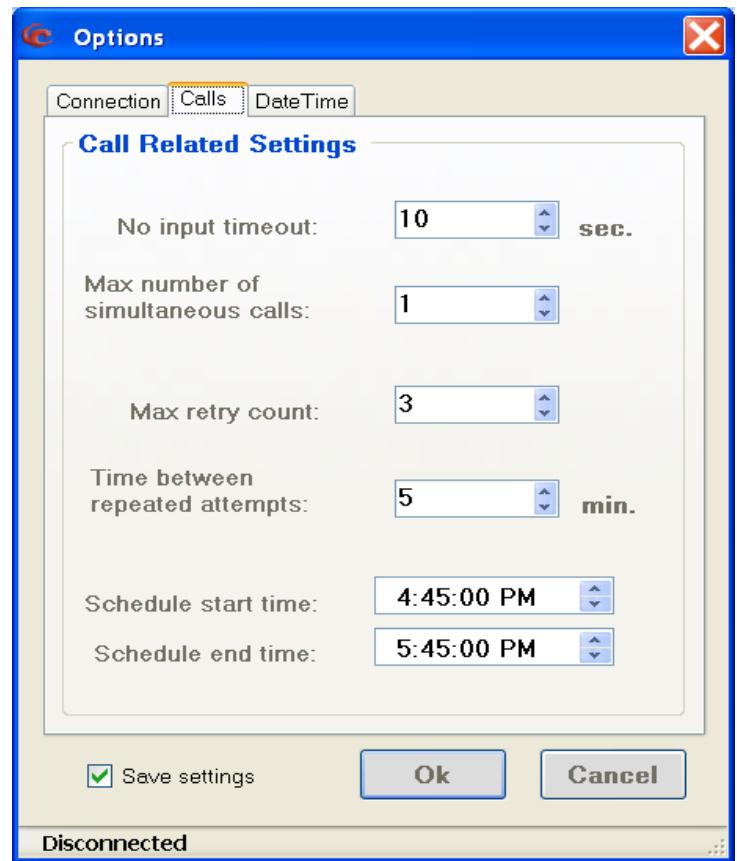


Figure 2

**Time between repeated attempts:** This specifies the minimum amount of time between the Auto Dialer's subsequent call attempts to the same phone number after the failed attempt.

**Schedule start time:** Auto Dialer will start the calling session either immediately by the **Start** command, or at the scheduled time, when the **Start by schedule** command is used. This parameter specifies the time of the day when the calling session will start by the **Start by schedule** button command. For details on how to use these commands, see below.

**Schedule end time:** This specifies the time of the day when the active calling session will stop after being activated by **Start by schedule** command. The calling session will not stop at the scheduled end time if the session was been activated by the **Start**.

The **Calls** tab field can be changed only when the calling session is not active.

The **Date Time** Tab of the **Options** window allows the user to specify the **Date** and **Time** formats settings for France and USA and to play records according to the selected format (see the example on Figure 3):

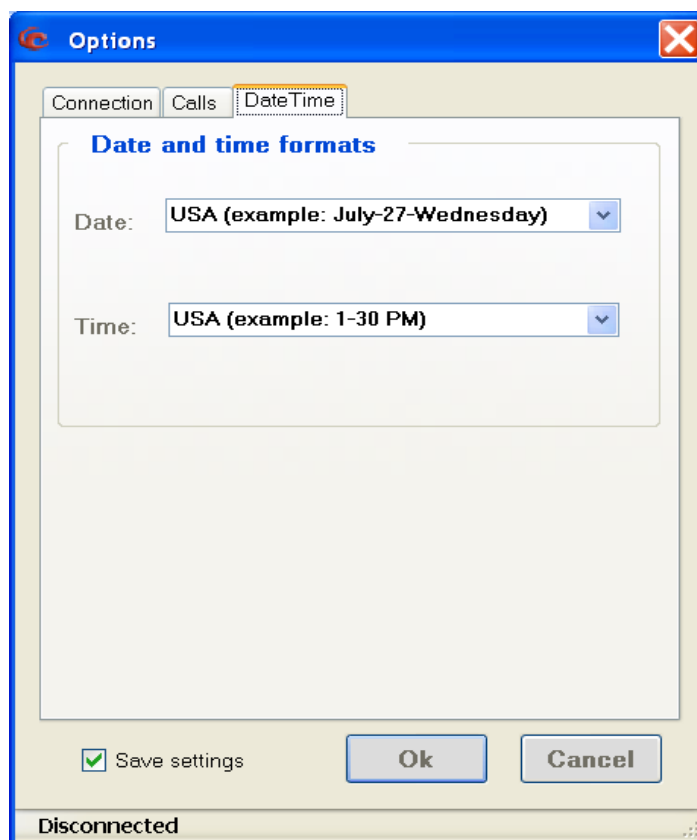


Figure 3

## Configuring the Calling Scenario

The calling scenario is a sequence of actions executed by Auto Dialer for every contact in the Calling List. Before starting the calling session, the user will either create a new scenario or open a saved scenario from a previous calling session.

## Creating a New Calling Scenario

To create a new scenario, open the scenario page selecting the **View -> Scenario** menu item or **Scenario** tab in the toolbar (see an example of the scenario page on the Figure 4).

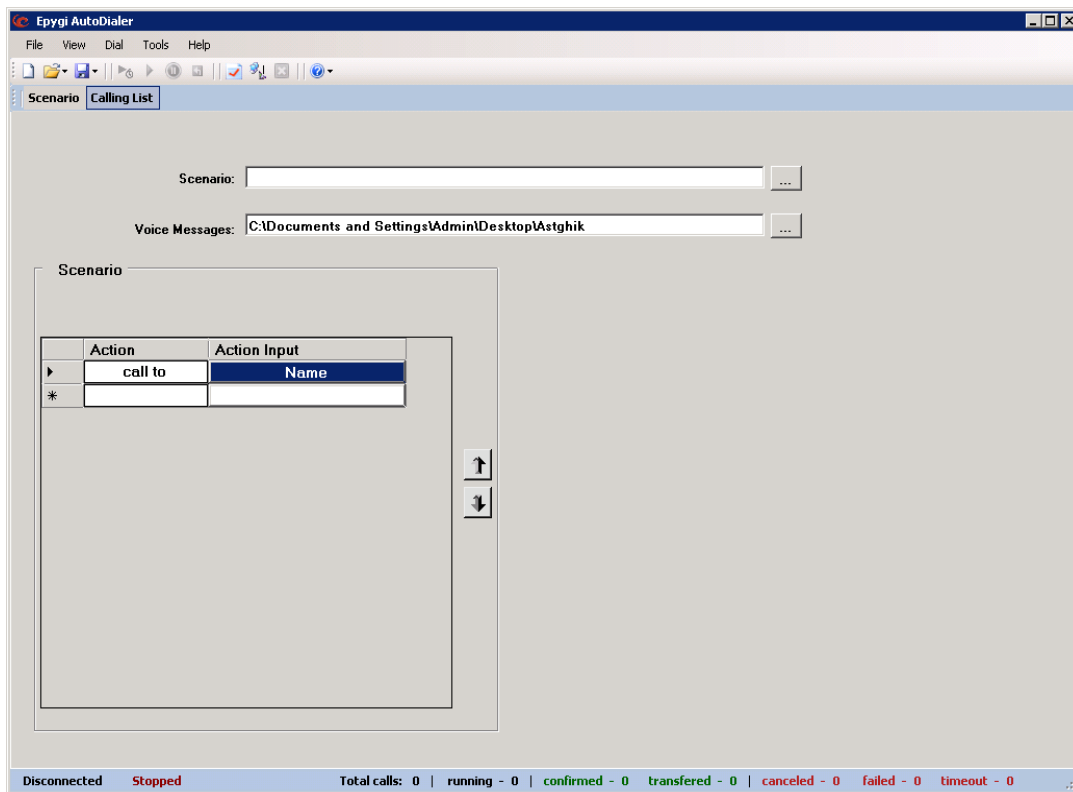


Figure 4

The scenario may consist of one or more actions. The possible actions are:

- ***Call to:***
- ***Play message:***
- ***Play menu:***
- ***Play date:***
- ***Play time***
- ***Play number***

To select the desired action, press the action button on the scenario page (see an example on Figure 5).



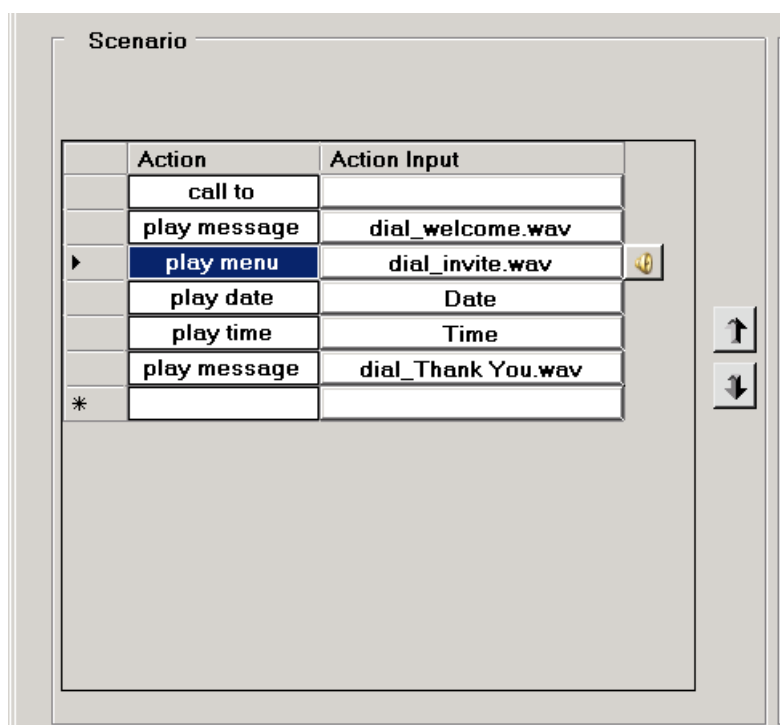


Figure 5

### call to action

The **call to** action is always the first action in the scenario. Each scenario only allows one **call to** action. The **call to** action will tell the Epygi IP PBX to make a call to the phone number retrieved from the current position (line) in the calling list.

All phone numbers should be stored in the same column from the Calling List. This column should have a heading name that will be automatically pulled from the **Action Input** field next to the **call to** action. In the calling list example on Figure 6, the phone numbers are stored in the "Phones" column and therefore, "Phones" needs to be selected from the drop down list of column names when pressing the **Action Input** button next to the **call to** action (see Figure 6).

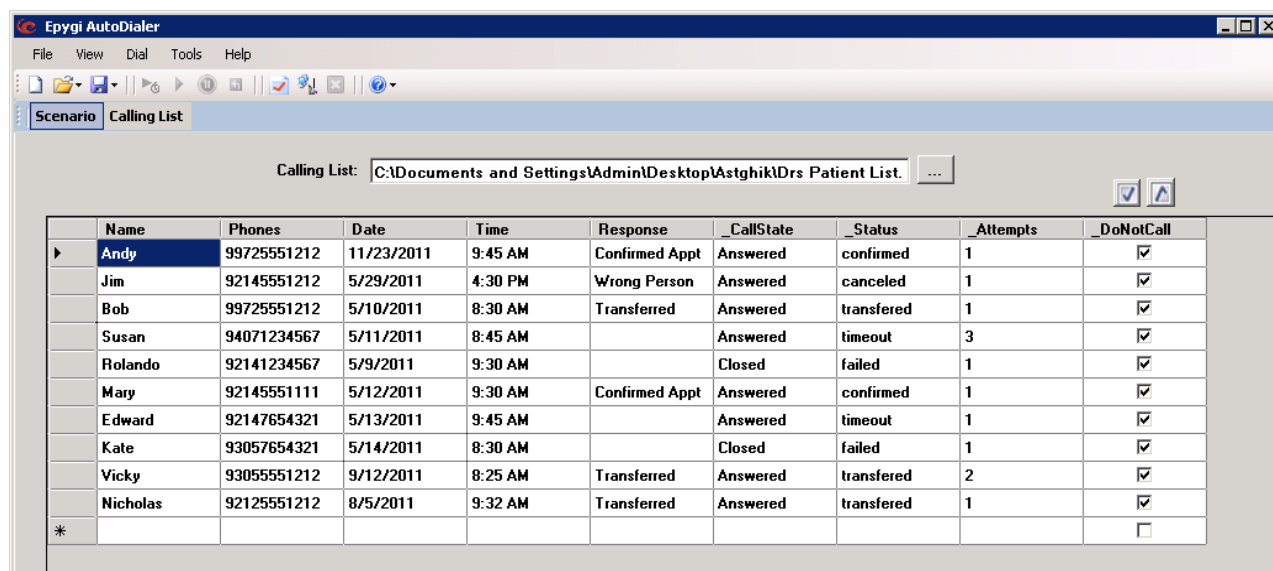


Figure 6

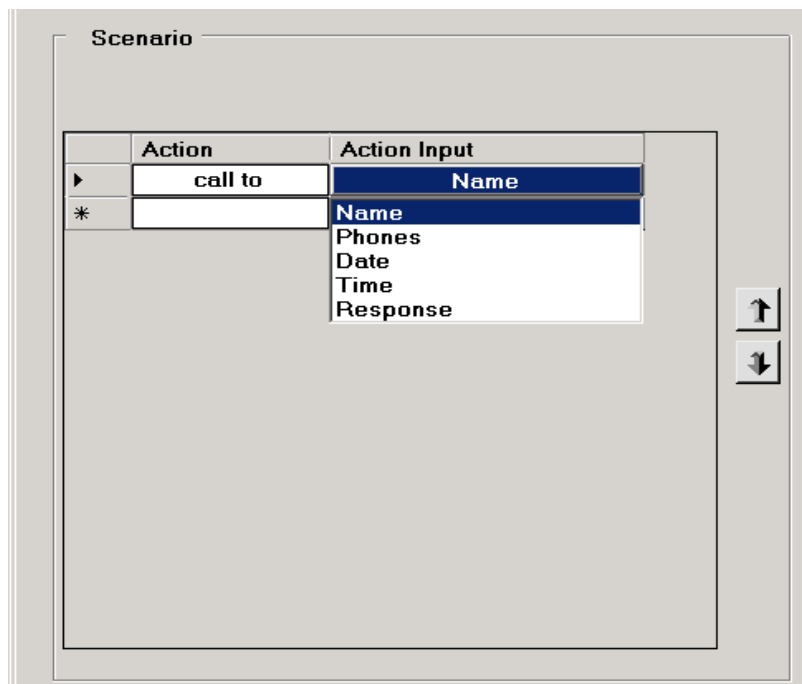


Figure 7

### **Play message action**

The ***play message*** action is used for playing a prerecorded voice message to the called party when the call is answered. The name of the voice message file should start with the "**dial\_**" prefix, otherwise the file will be rejected by the Auto Dialer Application. The user selects the voice message file to be played by pressing the **Action Input** button and browsing for the folder that contains the voice file. In the example on Figure 8 the "dial\_welcome.wav" file is selected for play out during the ***play message*** action.

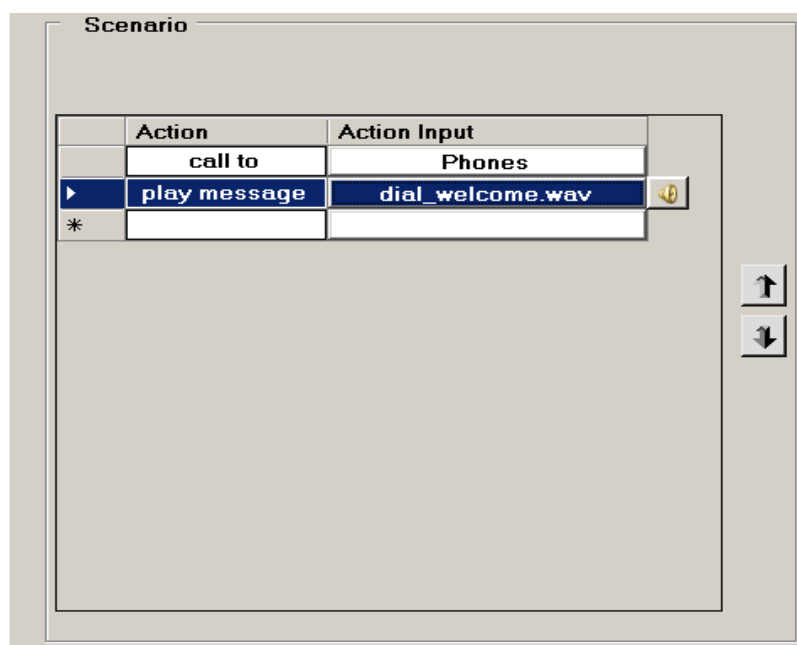


Figure 8

During the **play message** action, when the voice message is being played to the called party, the Auto Dialer will not react to DTMF tones received from the called party. If the **play message** action is the only action in the scenario that is listed after the **call to** action, then after playing the voice message, the call will be disconnected.

### **Play date** action

The **play date** action is used for playing an automatically generated voice message with the date and day of the week to the called party.

All dates should be stored in the same column from the calling list. This column should have a heading name that will be automatically pulled from the **Action Input** field next to the **play date** action. In the calling list example on Figure 6, the dates are stored in the "Date" column and therefore, "Date" needs to be selected from the drop down list of column names when pressing the **Action Input** button next to the **play date** action (see Figure 9).

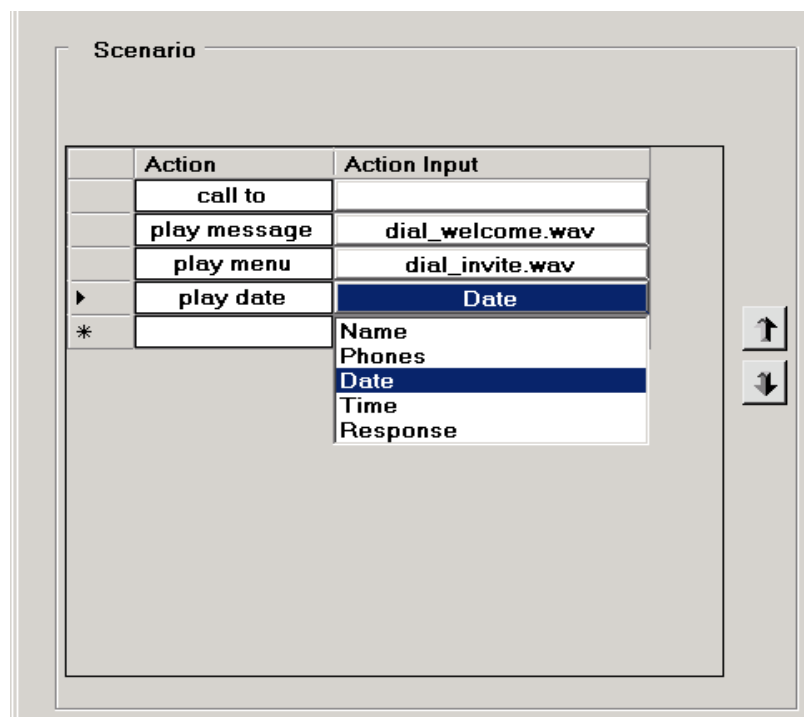


Figure 9

### **Play time** action

The **play time** action is used for playing an automatically generated voice message with the time of day to the called party.

All times should be stored in the same column from the calling list. This column should have a heading name that will be automatically pulled from the **Action Input** field next to the **play time** action. In the calling list example on Figure 6, the times are stored in the "Time" column and therefore, "Time" needs to be selected from the drop down list of column names when pressing the **Action Input** button next to the **play time** action (see Figure 10).

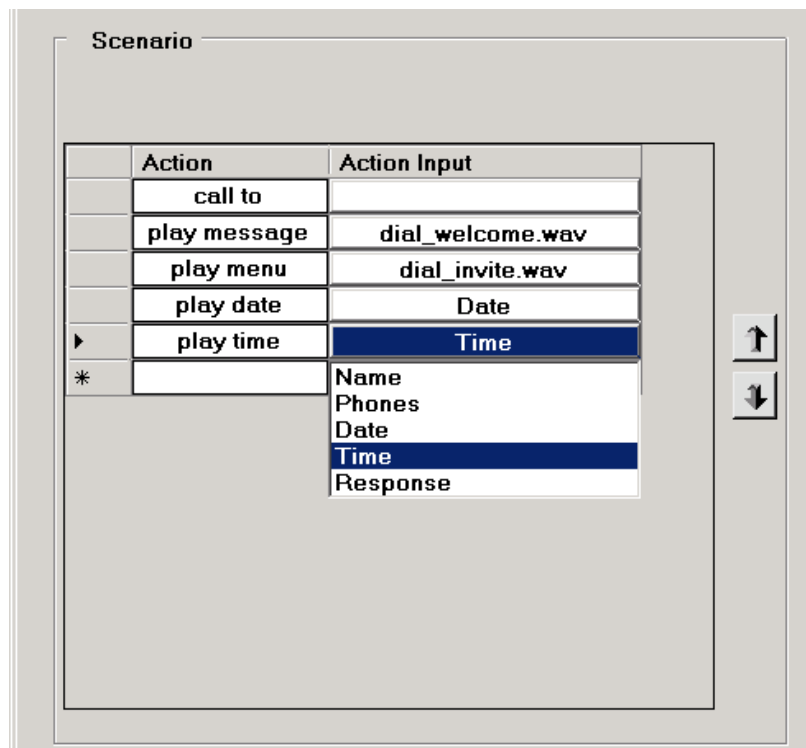


Figure 10

### **Play number** action

The **play number** is used for playing an automatically generated voice message representing a number to the called party.

All numbers should be stored in the same column from the calling list. This column should have a heading name that will be automatically pulled from the **Action Input** field next to the **play number**.

The **play number** action can be used to play a message to the called party when numbers are required. For example, a message that says, "Your ticket number is, 123456".

### **Play menu** action

The **play menu** action works in two steps. The first step is to play a pre-recorded message to the called party requesting the person to respond by pressing a key on their phone. The name of the voice message file should start with the "dial\_" prefix, otherwise the file will be rejected by the Auto Dialer Application and the corresponding warning will be displayed. The **Auto Dialer** will then wait for the person to enter their response.

The pre-recorded message to be played is selected by pressing the **Action Input** button (next to **play menu** action) and browsing to the folder that contains the voice file. In the example on Figure 11 the "dial\_invite.wav" file is selected for play out during the **play menu** action.

The valid user inputs and actions of the **play menu** action are configured in the **Menu** window which opens when the user selects the **play menu** action (see the example on Figure 11).

The screenshot shows two windows: 'Scenario' and 'Menu'.

**Scenario Window:**

Action	Action Input
call to	
play message	dial_welcome.wav
play menu	dial_invite.wav
play date	Date
play time	Time
play message	dial_Thank You.wav
*	

**Menu Window:**

Play menu message  times until the user input or timeout

User Input	Status	Response Text	Response Column	Connect To
1	confirmed	Yes	Response	
2	canceled	No	Response	
3	transferred	Transferred	Response	110
**				

Figure 11

Each item (line) of the **Menu** defines the final action that will be performed by Auto Dialer in response to called party's input.

The first field of the **Menu** line – **User Input**, defines the called party's input; the possible options are DTMF digits 0, 1, 2, ... 9, \* and #. The user can enter the DTMF digits at any point when a message is being played.

The second field of the **Menu** line – **Status**, defines the status of the call after the called party's input. The possible options are: "confirmed", "cancelled" and "transferred". If, like the example in Figure 11, the user presses 1, the call status will be set to "confirmed" and considered a positive reply from the user. The status will be displayed in the calling list in real time and the Auto Dialer will not call that phone number again during the calling session. If the user presses 2, the call status will be set to "cancelled" and considered a negative reply from the user. The status will be displayed in the calling list and the Auto Dialer will attempt to call that phone number again. If "cancel" is selected, the Auto Dialer will close the call immediately, ignoring all subsequent actions in the scenario following the **play menu** action. An example of the cancel option might be used if the wrong person was contacted, the user would press option 2. In the same example on Figure 11, if the user presses 3 then the call will be transferred to extension 110 - the phone number specified in the **Connect To** field of the **Menu** line.

The third field of the **Menu** line – **Response text**, specifies the text to be written into a column of the calling list after the user's input. The next field – **Response column**, specifies the column heading of the calling list where the above mentioned text will be written.

For example on Figure 11, if the user pressed 1, then the status of the call will be changed to "confirmed" and "Yes" will be the actual text written into the "Response" column of the calling list.

The last field of the **Menu** line – **Connect To** specifies the phone number to transfer the call to after the user's input. For example on Figure 11, if the user pressed 3 then the call will be transferred to extension 110. Any kind of phone number can be used in this field –it just needs to be in accordance with the call routing rules of the Epygi IP PBX connected to the Auto Dialer. For example, it can be an extension number, PSTN number, SIP number or ACD group number.

The above mentioned **Menu** item allows a lot of flexibility to create very simple or very complex scenarios by assigning different actions and response texts to different user inputs.

The "Play menu message [n] times until the user input or timeout" setting in the **Menu** window is used to repeat the message that will be played to the called party. This field is significant if the Auto Dialer will be calling out on a PSTN POTS line using one of the Quadro FXO ports. As a usage note, it is suggested to keep the very first greeting message that is played to the called party as

short as possible and recorded so that the user can listen to any part of the message and understand the intent. Calls placed on an FXO port do not receive answer supervision from the Central Office so the Quadro cannot start the message from the beginning when the caller actually answers and says, "Hello". Depending on when the called party answers, the first part of the message may have already been played. Therefore, with this option, the Auto Dialer can be configured to repeat this message so that it can be heard in its entirety.

## Opening the Existing Calling Scenario

The created scenario can be saved by selecting the **File -> Save** or **Save As** menu command or with the corresponding icon on the toolbar. When saving a scenario, the **Scenario** tab needs to be visible in the Auto Dialer's window. The scenario file will be saved in XML format.

To open the existing scenario, select **File -> Open -> Scenario** or click the corresponding icon on the toolbar. The opened scenario can be modified and saved for future usage.

## Building the Calling List

The best way to create the calling list is by using MS Excel™ and saving it in CSV format. The saved file can be opened by the Auto Dialer and used as a Calling List if it meets the requirements discussed below. An example of a calling list imported from a CSV file is presented in Figure 6.

The Excel sheet used as a calling list may have any number of columns but only a few of them are required for use by the Auto Dialer.

The main mandatory column is the column containing the phone numbers. The phone numbers in this column need to be in accordance with the call routing rules of the Epygi IP PBX used with the Auto Dialer. Any header name can be used for the phone number column and the same name will be presented in the **call to** action when creating the scenario.

If the scenario includes the **play date** and **play time** actions, the corresponding columns are also required in the calling list. The **play date** action uses the column containing the dates. The header name of that column is specified in the scenario, in **play date** action. The **play time** action uses the column containing the time of the day. The header name of that column is specified in the scenario, in **play time** action.

If the scenario includes a menu that uses the Response Text then there will need to be appropriate columns in the calling list and the names of those columns should be specified in the Response Column fields of the menu options. For example on Figure 11, all menu options are using the same "Response" column of the calling list to register the response of the called party. The number of response columns in Calling List is not limited; every menu option may register the responses in a separate column of the calling list.

The calling list may also include optional fields that are not utilized by the Auto Dialer but are good to have for user friendliness. For example, Figure 6 includes the "Name" column containing the names of the called parties. The Quadro will not play these names.

There are also some auxiliary columns in the calling list that are being created by the Auto Dialer when importing (opening) the CSV file. The names of these columns have the "\_" prefix to distinguish them from the columns created by the user. When saving the calling list, those auxiliary columns will be saved along with the data stored in the columns. These auxiliary columns will be blank initially and updated as the Auto Dialer runs. The auxiliary columns are as follows:

**\_CallState** column is used for tracking the call state in real time. The last state of the call stays in the calling list after the call is finished.

**\_Status** column is used for registering the status of the call after the called party's input. The possible options are: "confirmed", "cancelled" and "transferred". The values in this column are used by Auto Dialer to make a decision about the necessity of making another call to a particular phone number. More specifically, if the value of this column for some phone number (calling list line) is "cancelled," then the Auto Dialer may consider making another call attempt to that phone number. In the case of "confirmed" and "transferred," the Auto Dialer will not make another attempt to call that phone number.

**\_Attempts** column keeps track of the number of call attempts to a specific phone number. Each time the call is cancelled by the called party or fails for another reason, the Auto Dialer will increase the number of attempts. Irrelevant to the value of **\_Status** field, the Auto Dialer will stop calling a specific phone number if the value of **\_Attempts** field equals **Max retries count** in configuration of the Auto Dialer.

**\_Except** column contains the checkboxes for disabling specific lines of the calling list. If the checkbox in some line is checked, then the Auto Dialer will not make a call to the phone number in that line when passing through the list.

All fields of the Calling List except for auxiliary fields are editable for the user in real time (during active calling session).

## Making Calls

To start the **Auto Dialer** (calling) session the following options are available:

- Selecting the **Dial -> Start** menu command or corresponding button on the toolbar
- Selecting the **Dial -> Restart** menu command or corresponding button on the toolbar
- Selecting the **Dial -> Start by schedule** menu command or corresponding button on the toolbar

### Start Command

If the **Start** command is the first command after the Auto Dialer's launch, it will start making calls from the top of the calling list to the bottom until it reaches the last item on the list. During that process, the Auto Dialer populates the response and the auxiliary columns with the values indicating the user response, state and status of the call and the number of call attempts to the called number. When the first pass through the calling list is finished, the Auto Dialer starts the second pass from the top of the list.

The **Auto Dialer** will then only call numbers having the “cancelled” or “failed” status and the number of call attempts will be less than the **Max retry** count in **Options** configuration. If the calling process is not stopped by the user, the Auto Dialer will repeat the process until the list is completed. At this point, none of the entries in the calling list will have a status of “cancelled” or “failed” or the call attempt values will be equal to **Max retry count**.

The **Stop** command during the active session will stop the calling process and the current state of the Auto Dialer will be saved so that with the next Start command, the Auto Dialer will continue calling from the state where it had been interrupted the previous time.

If the **Start** command is the first command executed after the Auto Dialer launch, and the user response and auxiliary fields of the opened calling list are already populated by some values stored from previous sessions, then the command will take into account those values without resetting them.

## Restart Command

**Restart** command acts similar to the **Start** command except before making calls it will reset the calling list, cleaning up the user response and auxiliary columns and starting the calling process from the beginning of the list.

## Start by Schedule Command

**Start by schedule** command, similar to **Restart** command, cleans up the user response and the auxiliary columns of the calling list and starts calling from the beginning of the list at the point of time specified in the **Schedule start time** parameter in the **Options**. The calling session initiated by this command stops at the **Schedule end time** parameter in the **Options** unless the calling list is completed before that.

If the calling session initiated by the **Start by schedule** command has been interrupted by the **Stop** command, the calling session will be stopped, no matter what time is specified in the **Schedule end time** parameter under **Options**.

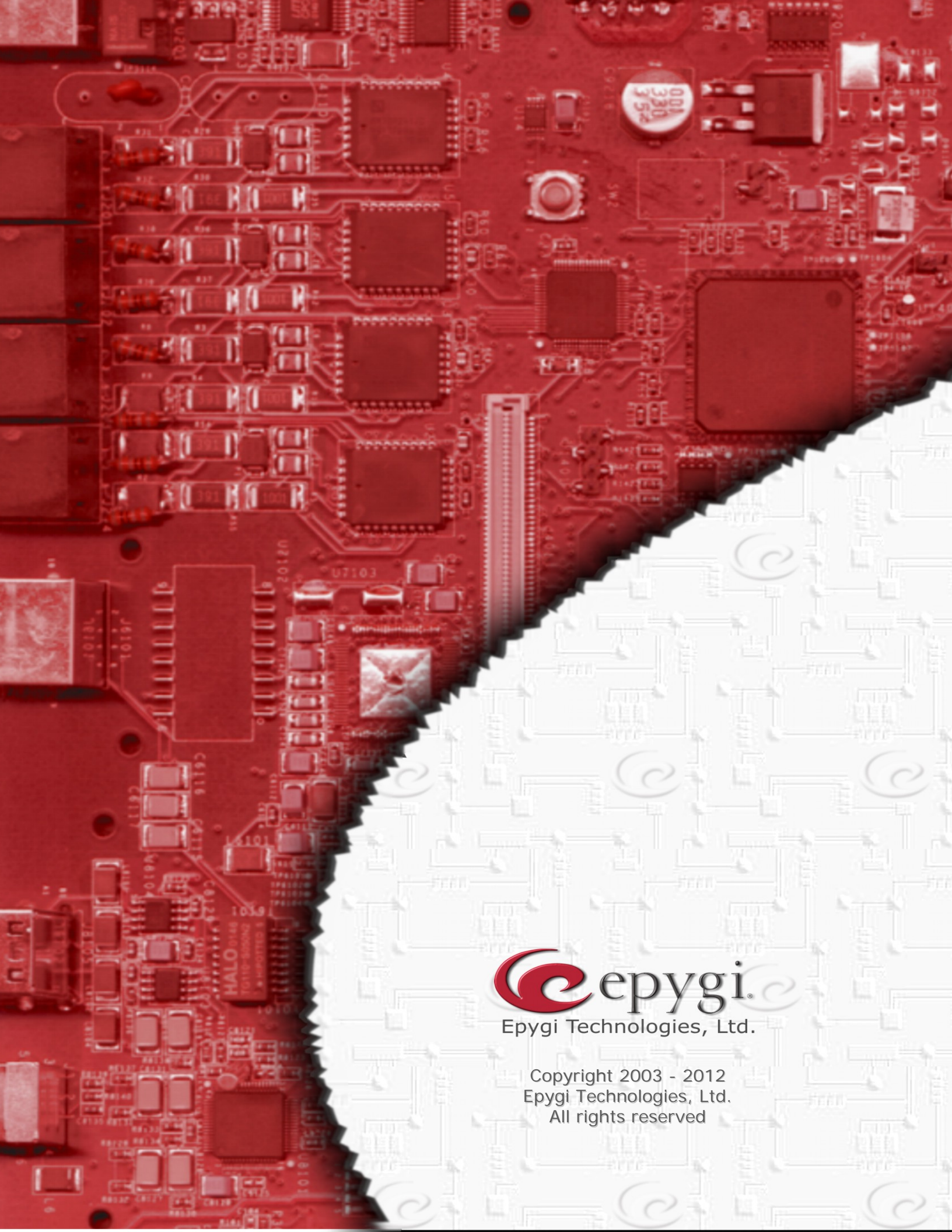
## Stop Command

Stop command stops the calling session, saving the current state of the calling list and current position of the dialer in the list.



THIS DOCUMENT IS PROVIDED TO YOU FOR INFORMATIONAL PURPOSES ONLY. The information furnished in this document, believed by Epygi Technologies to be accurate as of the date of publication, is subject to change without notice. Epygi Technologies assumes no responsibility for any errors or omissions in this document and shall have no obligation to you as a result of having made this document available to you or based upon the information it contains.

Epygi is a registered trademark of Epygi Technologies, Ltd. All other products and services are the registered trademarks of their respective holders.



Epygi Technologies, Ltd.

Copyright 2003 - 2012  
Epygi Technologies, Ltd.  
All rights reserved