{button ,JI(`',`Intro_hlp')} Introduction to VentaFax

Modems

{button ,JI(`',`hlp_Begin')} Getting started

{button ,JI(`',`hlp_Multi-line')} Features of the Multi-Line Version

Reception

{button ,JI(`',`hlp_manauto_rec')} Manual and auto-answer mode

{button ,JI(`',`receive_fax')} Facsimile message reception

Manual Reception

Automatic Reception (with Auto-Answer on the Incoming Calls)

How to Receive a Fax if You Had Picked Up the Telephone Extension Handset Prior to the Modem and Heard the Fax Sounds

{button ,JI(`',`hlp_Print')} Printing received facsimile messages

{button ,JI(`',`move_man')} Received message dispatching

{button ,JI(`',`Edit_hlp')} How to edit received facsimile messages

{button ,JI(`',`hlp_AnsweringMachine')} The answering machine

{button ,JI(`',`hlp_AdAnswer')} Call discrimination (adaptive answer)

{button ,JI(`',`hlp_DistRing')} Distinctive ring services

{button ,JI(`',`hlp_Forwarding')} Actions after reception

Notification of Incoming Messages by Email. Forwarding of Incoming Messages by Email

Redirecting Received Messages to Another Telephone Number

Storing Incoming Messages in a Specified Folder

Transmission

{button ,JI(`',`prepare_fax')} Facsimile message preparation

Saving the prepared facsimile message

Creating facsimile message batch

Cover Page

{button ,JI(`',`hlp_VoicePrepare')} Voice message preparation

Creating voice message and tone commands batch

{button ,JI(`',`hlp_sendfax')} Facsimile message transmission

Manual transmission features

{button ,JI(`',`hlp_dialing')} How to dial a phone number

Redialing the Phone Number

Dialing Several Phone Numbers for One Recipient

Dialing a Phone Number via Private Branch Exchange (PBX)

Using a Calling Card

{button ,JI(`',`create_sch')} How to schedule a delivery task

{button ,JI(`',`hlp_email')} Sending a message via email

Other Functions

{button ,JI(`',`hlp_aon')} Using Caller ID

- The Black List and The White List
- Using Caller ID to Customize Your Answering Machine
- Calling Tones Emulation
- Playing the Phone Number via the Sound Device
- Problems with Caller ID

{button ,JI(`',`hlp_speakerphone')} Speakerphone mode

{button ,JI(`',`hlp_RecVoice')} Telephone conversation recording

{button ,JI(`',`hlp_Snoop')} Automatic Registration of Telephone Calls

{button ,JI(`',`hlp_SyncPlay')} Real-time message review mode

{button ,JI(`',`hlp_distcontrol')} Answering machine remote control

- Enabling the Remote Control
- Remote control script samples
- Using the Remote Control (by the Example of SIEMENS.VFA)
- The Answering Machine Remote Control Script Sample. Creating Voice Mailboxes

{button ,JI(`',`hlp_ClearOutbox')} Purging the Outbox folder

Information for Developers

{button ,JI(`',`hlp_Developers')} General Information

{button ,JI(`',`hlp_Keys')} Command line options

{button ,JI(`',`hlp_Plugins')} Using Plug-Ins

 The Phone Book

Phone Book data presentation

How to create, delete and rename a phone book

How to edit a phone book

How to search into a phone book

How to select a recipient's data from a phone book

How to import data in a phone book from other programs

How to export phone book contents

How to copy data from one phone book to another

Phone book password protection

 The Log Book

Log Book data presentation

How to create a new report

How to search in a log

How to delete records and files

How to view and play messages from a log book

How to transmit a message from the Log Book

How to add a recipient to a phone book
How to export log contents
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 The Message Manager
File selection
How to view a facsimile message
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Received message dispatching
How to save an image in graphic format
How to edit a facsimile message with the built-in editor
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 The Scheduler
How to schedule a delivery task
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Scheduler data presentation
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How to Purge the Schedule Automatically

 The answering machine remote control script editor
Script structure
Basic operations
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{button ,JI(`',`hlp_driver')} VentaFax Engine
Using VentaFax when the VentaFax Engine is set as a service in Windows NT, 2000 or XP
{button ,JI(`',`hlp_Brief')} VentaFax facsimile data exchange: a brief description
{button ,JI(`',`hlp_VoiceSendAlg')} VentaFax operations at voice message transmission with program telephone line state recognition enabled
{button ,JI(`',`hlp_FaxSendAlg')} VentaFax operations at facsimile message transmission with program telephone line state recognition enabled
{button ,JI(`',`hlp_DialAlg')} VentaFax operations at dialing a phone number
{button ,JI(`',`hlp_ShortCut')} Keyboard shortcuts
{button ,JI(`',`hlp_Errors')} Completion codes
{button ,JI(`',`hlp_ModemFeatures')} Features of certain modems
{button ,JI(`',`hlp_MessageModem')} USR/3COM Message Series Modem Self-Mode
{button ,JI(`',`hlp_Versions')} VentaFax versions review. Restrictions in Home and unregistered versions

{button ,JI(`',`hlp_SetupOutlook')} Setting up Microsoft Outlook, Outlook Express and The Bat! for use with VentaFax

{button ,JI(`',`hlp_Problem')} Troubleshooting

{button ,JI(`',`hlp_Questoins')} **If you have questions**

The VentaFax software package is designed for sending and receiving faxes and voice messages through common analog telephone lines, combining facsimile set and answering machine functions, as well as providing some other features. VentaFax runs under the 32-bit MS Windows operating system family (95 (OSR2), 98, Me, NT4.0, 2000, XP). The computer's modem is used as the transceiving device.

Using VentaFax, you can receive and transmit facsimile messages with ease. Just as with usual fax machine, fax reception can be performed both in manual and auto-answer mode. Received facsimile messages are saved as files in a standard graphic format and can be printed automatically. If there is no need to immediately print all the messages received, you can view and print them, if necessary, with The Message Manager application.

VentaFax also supports such reception and transmission modes as the error correction mode (ECM) and the V.34 fax (Super G3) connection. To be operational, both receiving and transmitting side must support these modes. The majority of modern fax machines and fax programs support the ECM mode, whereas the V.34 fax protocol has not gained wide enough acceptance yet.

The default facsimile file format (TIFF) is a standard graphic format. Received voice messages are also saved in standard Windows voice format. These features enable easy use of received messages both in standard Windows software and in special packages, for example in optical character recognition (OCR) software, as well as exchange of messages with any of your addressees. For the convenience of sending messages via email, special features are provided (see the Sending a message via e-mail section). In addition, you can adjust the program in such a manner that received messages are copied to the Inbox folder of your mail program automatically. Compatible programs include Outlook Express, MS Outlook or some other mail program that comply with certain standards (see the section entitled Setting up Microsoft Outlook, Outlook Express and The Bat! for use with VentaFax section).

Compared to a usual fax machine, VentaFax has advanced facsimile message transmission capabilities. Apart from the manual transmission, you can send out messages automatically by means of The Scheduler. In the Business version, the number of automatic delivery tasks is unlimited. In the Home version, scheduled delivery is limited and serves for demonstration purposes (see VentaFax versions review. Restrictions in Home and unregistered versions section).

You can fax a document from any Windows application by printing it on the VENTAFAX virtual printer that will appear in your system after correct installation of the program.

If your modem supports voice functions, voice versions of VentaFax enable using the program as an answering machine. If you are not satisfied with the usual answerback capabilities, you can use the answering machine remote control features. You can play received voice mail by means of any telephone with tone dialing mode but also create a branched system of voice menus, for example, for automatic help or using personal voice mailboxes. For developing remote control scripts, the VentaFax includes The Remote Control Script Editor.

With voice modems, not only facsimile messages, but also voice messages can be scheduled. If necessary, you can even record an answer to your voice message. To record voice messages or the answering machine announcements, you can use The Message Manager or any other sound recording application (for example, Sound Recorder supplied with MS Windows). Using the modem voice functions also expands facsimile transmission capabilities. Should the program recognize that a human picked up the handset, it can announce the "Press the Start button on your fax machine now" greeting or your custom announcement.

To speak over the modem without using a telephone, you can benefit from the speakerphone mode (if supported by your modem). For this purpose you can use a telephone headset (or microphone and headphones) plugged into the modem socket or sound device (depending on how the speakerphone mode is implemented in your modem). The program can also record a telephone conversation conducted over a telephone extension connected to the modem.

Automatic caller identification is possible with many (but not all) modems.

An special application, The Log Book, is used for storing all incoming and outgoing call information storage. Another application, The Phone Book, is intended for keeping track of your addressees' voice

and facsimile phone numbers. In addition to built-in phone books, the **Windows Address Book** is accessible in VentaFax.

VentaFax's adaptive answer (call discrimination) service allows distinction and adequate reaction to incoming voice and facsimile calls. Also, by detecting a modem call in data mode, a call can be redirected to an awaiting application, such as the **Windows Remote Access Server** (RAS).

In this Help file, we shall use the term **modem** to designate modern domestic and semi-professional fax modems intended for operation within personal computers architecture on dial-up, analog, general purpose telephone lines (referred to "telephone lines" or "lines", as opposed to dedicated lines and digital communication channels such as ISDN). Also we shall use the term "modem" for some other devices not covered by this definition but, as long as a computer is concerned, functioning similarly (for example, mobile telephones providing data transmission under a personal computer control). This is the kind of modem the VentaFax software package is intended for.

Modems can be divided into two basic groups.

1. Hardware modems that transmit data with its own processor working under the control of the so-called firmware stored in the modem's memory unit (usually, the fixed memory).

2. Software modems, or **Win-modems** that commit signal processing and data transmission operations to the computer's central processing unit (CPU) by means of a special program (driver) loaded in the RAM of your computer.

Modems of the first group are noticeably more expensive, but cause insignificant load on CPU resources. This can be important in case of lower processor throughput or high processor load.

System Requirements

Using facsimile functions does not impose high requirements on your system performance. As a rule, resources required for an operating system installed on the computer should be enough. Using voice functions requires much more system resources, especially in case of software modems. For such modems, minimum system requirements are frequently specified on the package box or in user's manuals. However, we recommend you to keep some processor throughput in reserve.

General Modem Functions

General functions performed by a modem can be divided into three large groups:

- Data transceiving;
- Facsimile data transceiving;
- Voice functions.

Modem transceiving functions support receiving data of any structure with the speed up to 56000 bps (bit per second) and sending data with the speed up to 33600 bps with error correction capabilities. Due to the availability of these functions in any modem, they are not performed by VentaFax and shall not be discussed henceforth.

Facsimile data transceiving functions support sending and receiving data of strictly defined structure, namely, two-color (black-and-white) images with 200x100 dpi (dots per inch, Normal mode) and 200x200 dpi (Fine mode) with usual maximum speed of 14000 bps. However, facsimile transmission enables the image exchange not only between computers, but with facsimile machines as well. Facsimile functions are supported by virtually all modern modems.

Voice functions consist of recording sound signals from and playing sound to a telephone line. In particular, this allows organizing voice message reception and transmission, just like an answering machine. The majority of modern modems, except for some out-of-date and semi-professional models, support voice functions. We shall refer to modems with voice functions support as **voice modems**. Actually, the "voice" term is usually present in a voice modem name. At the same time, the **Data/Voice** modem button has no relation to the availability of voice functions in a modem.

In the process of recording, a modem transforms sound signals into digital form. In doing so, it uses one or another *sampling rate* defined by the modem capabilities and settings. Typically, the higher the sampling rate, the higher the recorded sound quality. However, increasing the rate also increases the volume of information being processed, as well as consuming more system resources. This is especially relevant for soft-modems, which use CPU resources for sound digitization. Modern modems use 4800, 7200, 8000, 9600, and 11025 Hz sampling rates. In Windows, standard rates are 8000, 11025, 22050, and 44100 Hz. When receiving data from the modem, VentaFax always transforms "nonstandard" rates to

those used in Windows. Besides sampling rate, the sound data format is also transformed at reproduction via the sound device (sound card); the resulting format is PCM. Such a transformation is required in order to avoid incorrect playback speed when playing sound via some sound devices unfamiliar with nonstandard sampling rates.

The **speakerphone** features should be examined separately in the context of voice functions. These features enable standard telephone conversation to be carried via a modem. Sound being recorded with the microphone is reproduced in a telephone line, at the same time sound being recorded from a telephone line is reproduced in headphones or speakers. This mode is supported by the modem singularly or in connection with the computer's audio device (e.g., sound card). Not every voice modem supports the speakerphone feature. Both "voice" and "speakerphone" words are usually represented by the name of a speakerphone modem.

Facsimile Command Sets. Interaction between a modem and a computer in the facsimile data exchange mode is performed by means of one or another command set (the **Fax Class**). The majority of modern modems support several Fax Classes.

Sometimes they say that the newer Fax Class 2.0 provides for better modem activity. In fact, this is not true.

In **Fax Class 1** command set, the basic procedures of facsimile data reception and transmission (such as connection procedure and error correction) are delegated mainly to an external program executed by the computer central processing unit. It means that Fax Class 1 introduces more time-consuming operations performed by the CPU to facsimile data exchange. Should simultaneous peak demands arise (for example, when you insert a poor readable compact disc), this may result in data exchange failure. This is extremely improbable with modern processors in usual situations. With Win/soft-modems these nuances are irrelevant, because the very program running on your computer uses Class 2 (2.0) command set. Using Fax Class 1 provides an external program (such as VentaFax) with more flexible modem control. **Fax Class 1.0** in an extension to the Fax Class 1 command set. In particular, it enables adjusting acceptable delay from carrier loss to hang up in fax reception.

On the contrary, the **Fax Class 2** and **Fax Class 2.0** command sets are quite similar. Nevertheless, some differences do exist, so these command sets should not be confused. Both delegate basic procedures of facsimile data reception and transmission to a firmware developed by various modem manufacturers and are stored in modem fixed memory or performed by the Win/soft-modem driver. It means that using Fax Class 2 and 2.0 limits an external program (such as VentaFax) with control tools provided by firmware or driver developer. Unfortunately, usually these tools are somehow limited. In particular, only a few modem firmware provide for error correction in facsimile data exchange mode (ECM). Also, one cannot confirm actions in manual facsimile transmission. As any other program, the modem firmware may contain minor or even major bugs. There is practically no chance to neutralize these errors by means of an external program with Fax Class 2 or 2.0 command sets.

For these reasons, we usually recommend using the Fax Class 1 (1.0) command set.

Voice Command Sets. Although facsimile command sets are standardized, it has no bearing on voice command sets. As a rule, every modem manufacturer uses its own voice command set essentially different from those used by other manufacturers. Furthermore, each year brings on new modem models with previously unknown voice command sets. There have been some standardization attempts (IS-101 and v.253 standards), however, only a few voice modem manufacturers support these standards.

It particular, it means that a program would have to perform some operations to detect a voice command set supported by the modem. These operations are called *voice command set auto-detection*. To auto-detect a voice command set, click the **Detect** button in the **Modem** – **Voice Settings** tab. Perhaps for the reasons stated above a modem command set would be unknown to the program or cannot be used correctly. In both cases there is a chance that VentaFax developers would solve a problem by the next version release, if a user would supply the necessary data (see If You Have Questions section).

Finally, it can turn out, that modem voice functions are determined by the program and operate normally except in some instances for which this Help file does not provide solutions (for example, in Features of certain modems section). In this case you can contact our developers to provide them with further information (see If You Have Questions section).

The program uses one or another parameter set depending on the type of answer on an incoming call, manual or automatic. For manual answer, parameters located in the **Reception** – **Manual** tab are used. For automatic answer, parameters in the **Reception** – **Automatic** tab are used instead. The auto-answer mode is also influenced by parameters specified on the front panel of the facsimile set (**Announcement**, **Fax**, **Record**, and **Caller ID**).

Auto-Answer on Incoming Calls

When in auto-answer mode (automatic mode), the program will react to incoming calls.

The lit indicator by the **Auto** button on the fax set signals the auto-answer mode is on. Clicking this button switches between the modes.

The number of rings before the modem goes off hook

The modem would go off hook after as many rings, as are specified in **Answer on Ring** parameter in the **Reception** – **Automatic** tab. Manual mode reception assumes that you are already talking by telephone. The number of rings before the modem goes off hook also depends on the Toll Saver mode parameter in the same tab.

Automatic switching the number of rings to answer on

The program can answer on various numbers of rings at different time of the day. For example, it can answer on 10th ring at working hours and on the 2nd ring at the rest of the time. For that, set the value of the **Answer on XX ring** parameter equal to 10 and select the **Office hours** time mask in the adjacent list. Then set the value of the **Answer on XX ring at the rest of the time** parameter equal to 2. If necessary, you can edit the corresponding time mask by clicking the button next to the list.

The same time masks are used in this parameter as in the scheduled delivery.

You can also initiate auto-answer mode manually by pressing the **Alt+S** keys. In this instance it makes no difference whether automatic reception has been enabled or not.

Manual Answer on Incoming Calls

You can manually answer an incoming call by clicking the **Start** button. In this case an attempt to receive a fax will be undertaken. You can simply "pick up the handset" by clicking on the handset image for caller identification, for example.

Using Your Computer's Hibernate Mode

Windows can use the feature of all modern computers to enter the so-called "sleep mode" or "hibernation" and to exit from it. It enters this mode either automatically, after some period of inactivity, or on command from the **Start** – **Shut Down** – **Suspend** menu. System status at the moment of entering sleep mode is stored. Exiting this mode can be done in many ways. It is important when using VentaFax that the computer can come out of hibernation when an incoming call is received on your modem. After exiting the sleep mode the computer returns to the state it was in before entering it. The "sleep mode" parameters are set through the Windows Control Panel, not through VentaFax. If your system is set up correctly, then after exiting the sleep mode the system will receive the next VentaFax call, and function as usually.

Facsimile messages can be received in either manual and automatic mode.

Manual Reception

To receive the fax in manual mode simply click the **Start** button on the facsimile set, wait for your modem pilot tone (2100 Hz) and hang up the telephone extension at once. If the telephone is connected through the modem socket and you are sure that the modem disconnects it after "going off hook" by itself, then there is no need to hang up. If the modem does not disconnect the telephone or the telephone is connected as an extension, it will be useful to enable the Confirm actions in manual mode option in the **Fax** – **General** tab.

After the fax is received it can be printed or displayed on the screen with the **Message Manager** automatically. Whether the file will be displayed on the screen is specified by the **Open Fax Received** parameter in the **Reception** – **Manual** tab. For automatic printing the **Print all faxes received** – **in the manual reception mode** box in the **Printing** – **General** tab should be checked.

Automatic Reception (with Auto-Answer on the Incoming Calls)

In order to receive faxes in the auto-answer mode make sure that this mode is enabled and the **Fax** indicator to the right of the **Auto** button is on. Whether the file will be displayed on the screen is specified by the **Open Fax Received** parameter in the **Reception** – **Manual** tab. For automatic printing of the fax the **Print all faxes received** – **in the automatic reception mode** box in the **Printing** – **General** tab should be checked.

The name of a file received (both in automatic and manual mode) depends on the settings in the **Folders and Files** – **File Name Templates** tab.

How to Receive a Fax if You Had Picked Up the Telephone Extension Handset Prior to the Modem and Heard the Fax Sounds

This works similarly to 'eavesdropping mode' in Symantec WinFax. See details in Automatic Registration of Telephone Calls section.

Problems with Fax Reception

{button ,JI(`',`fax_rec_problem1')} Fax is received “garbled”, with many artifacts

{button ,JI(`',`RecFax_problem')} Only part of a document can be received

see also

{button ,JI(`',`ECM_ob')} Error Correction (ECM)

The **Connection Rate Limits** group of parameters (**Fax** – **Rate Limitations** tab) allows if necessary to limit the sending and receiving rate from above and/or from below. Limiting the sending and receiving rate from above allows satisfactory document quality levels on telephone lines with the high noise level. The rate of sending and receiving becomes lower, but the quality of documents being transmitted increases. The limitation of sending and receiving rate from below allows rejecting a transmission if the connection rate is lower than specified. It enables you to save time (and money, in case of the time rate for telephone communications) necessary to transfer the message. However, transmission on the higher rate on poor telephone lines can result in deterioration of transmitted facsimile message quality (aggravation of the fax readability).

Fax modems exchange the so-called test signals before transmitting in order to detect the telephone line quality. If insufficient, the sending and receiving rate is lowered automatically so as to ensure acceptable quality of the document. Lowering the parameter value that specifies the acceptable quality of the test signal increases the probability to start reception at the indicated rate, but the quality of the document received can appear to be low. In order to receive documents of higher quality (less "garbled" lines), this parameter value should be increased. At the same time, the receiving rate can decrease.

If the quality of page being received is considered insufficient, the program requests for retransmission of the "spoiled" page. This request is generated only in case the quality of the page transmitted is lower than specified. When increasing this parameter, it is necessary to bear in mind that retransmission of pages increase total document transfer time and not always results in obtaining of page with higher quality.

The parameter specifying the number of page retransmission attempts is used if the connection is established in a mode without error correction (ECM). It eliminates the misunderstanding sometimes arising with the transmission of multipage documents (**Fax** – **Error Correction (ECM)** tab). Some fax models demand page retransmission in case of poor (from their point of view) reception quality, although the page was actually transferred practically without errors. Such a request for retransmission of the same page can be produced but sometimes that will lead to the unjustified recipient's paper consumption and transmission time increase. With the parameter concerned it is possible to limit the number of the same page retransmission attempts. If the parameter value is non-zero and the next parameter is selected, page retransmission can be set "upside down".

In process of receiving a facsimile message without error correction (ECM) because of the noise in telephone line some lines of an image can be received with failures. In the error-correction mode the received document can also contain garbled lines, if correction of the received part of the page was interrupted by the transmitting party because of the excess number of frame repetitions or in case of **Disconnection error**.

When the parameter value is set to **Full** garbled lines are substituted with adjacent ones. In case of small number of errors this mode allows you to hide virtually all failures.

When the parameter value is set to **None** garbled lines would not be corrected. In case of many errors, if there is no possibility to repeat a transmission, this mode sometimes allows you to make out the message contents, though "broken", but nevertheless readable.

If the **both on the screen and in file** parameter box is checked, garbled lines would be corrected and will not appear in a message file. This is useful if you are about to edit a received fax in a graphic editor. If the parameter box is not checked, lines would be stored in a message file in the way they were received.

The **Normal** bit order suits the majority of modems.

The **MultiTech modem style** bit order should be set for some MultiTech modems.

If after setting up other parameters your modem establishes connection in the receive mode but receives a page with several vertical bands (when the **Replace garbled lines on the screen** option is on) or with multiple horizontal strips (when the **Replace garbled lines on the screen** option is off) and the page contains no useful information, then you probably need to change this parameter.

The **Initialize at** group of parameters (**Modem** – **Interacting With Modem** tab) specifies the rate of data exchange with the COM port at the modem initialization. TAPI-specified rate will do in most cases, but it is also possible it to set it manually. The selection of higher rate accelerates initialization, but is incompatible to some old types of modems. In the latter case use the standard value of 2400 bps. Otherwise, higher rate can be used.

The program can communicate with the modem on various speeds depending on its operation mode. You can make this speed constant from a moment of modem initialization by selecting **Fix rate** check box. For the majority of modern modems a combination of "set by TAPI" and "Fix rate" parameters is optimal. However, some modems require **Fix rate** parameter to be deselected for normal operation in facsimile mode.

Additional commands to be transferred to the modem at initialization are specified here. It is not recommended to enter any needlessly. In the vast majority of cases the automatic modem settings made by the program should be enough.

The Z, &F, D, A and the like types of commands can not be used here.

For a receiving mode this is the time from the modem answer till the beginning of a fax reception rate detection phase or till the program identifies the incoming call as a voice one.

For a voice message transmission mode the waiting time is the time from finishing dialing the number till the program makes a decision that the handset has been lifted by a human. For the fax transmission mode the parameter represents the time from the moment when dialing is completed until the beginning of transfer rate detection phase.

If the connection was not established over this time, the communication is terminated and the error message is displayed.

Switching off the voice mode for the fax transmission is necessary for some modems (for example, USR Sportster), those are unable to start facsimile message transmission until they hear the remote tone signal (fax whistle). As you likely known, usually the fax machine or the fax modem plays out the tone signal in the line for some seconds before starting the fax reception and playing specific fax trill. For the majority of modems the presence or absence of such a whistle makes absolutely no difference. However, some modems (including popular USR Sportster models) need to "hear" it to establish normal communication. If the whistle is not "heard", then the communication is not established and the transmission becomes impossible. When voice mode is on, the program analyses signals in the telephone line in a voice mode. By "hearing" the whistle it switches to the fax mode. It takes some time. As a result, your modem can simply have no time to "hear" the remote modem or fax machine whistle, and the transmission would not start. Switching off the voice mode with this parameter removes a problem for the modems involved, but disables software line signals recognition during transfer. In other words, your modem would be unable to detect (and to react appropriately) if the handset was lifted not by the fax machine, but by a human.

Unfortunately, some seldom-used fax machines (for example, some Panasonic models) do not play the initial whistle in line at all. Thus sending faxes to such devices with USR Sportster and similar modems appears impossible.

Besides the fax transmission mode this parameter is also used at remote fax polling.

See also **Command for starting fax transmission in established connection** parameter section.

If checked, the caller would hear short tone (whistle) prior to the recording a message, becoming a signal to speak. The signal frequency is specified by the **Tone signals** – **before recording reply** – **Frequency** parameter in the **Voice** – **Formation of Signals** tab.

This parameter specifies whether the received messaged would be displayed by the Message Manager upon reception of the document.

VentaFax & Voice supports three types of facsimile message files, which this manual refers to as internal packet format:

- **TIFF class F** format, TIF files;
- **VentaFax** format, VFX files;
- **QuickLink** format, QFX files.

The selected file format determines in what format VentaFax will use to store received and transmitted faxes. Note that the TIF file extension can stand for TIFF files not of facsimile format, but, for example, for the images created with a scanner. In this case VentaFax & Voice cannot send the file directly, and an error message will be displayed. You should instead open such TIFF file in the graphic editor and "print" it, as usual, on the VENTAFAX virtual printer. As a matter of fact, the TIFF Class F format is widely used by most graphic software packages, and specifically, by optical character recognition programs, as well as by the standard Windows imaging application, the **Image Viewer**. This is a weighty argument in favor of this file format. See also **Replace Garbled Lines in Received Faxes** parameters group section.

Number of rings before modem answers a call in auto-answer mode. In the **Toll Saver** mode, if no new messages were received after VentaFax launch, the program will answer not on the ring specified, but two rings later. For example, the situation when answer on the 2nd ring is set and the Toll Saver mode is enabled, and the program does not answer on the second ring it means that no new voice messages have been received. Therefore, there is no reason to wait for the program reply (which would occur after the fourth ring). This may come in handy when you make a charged telephone call.

For some modems answering on the first ring is not recommended because the modem may not respond to commands during the process of phone number identification, which is transmitted as Caller ID after the first ring. Thus, an Er 23 error message is displayed. If it is absolutely necessary to force the modem to answer on the first ring, make sure this works with your modem, since the program cannot disable the Caller ID feature when interacting with the modem via TAPI.

Inbox folder is where the received voice and facsimile messages are placed. By default, this is \IN folder in the directory where VentaFax & Voice is installed.

When selected, the program would be unloaded from memory after sending a facsimile message from an external Windows application (for example, MS Word or Excel).

If this parameter is set on, the **Number**, **Attn.** and **To** fields of the Message Transmission window would be pre-filled with the last transmission data.

If checked, the entire page is created, regardless of how much text is in the source document. Otherwise the page is formed only up to the lower image boundary, which allows conversation of the recipient's fax paper and to speeds up the message transmission.

Changing this mode does not affect the already created facsimile message.

Outbox folder is where outgoing (to be sent) voice and facsimile messages are created. By default, this is the \OUT folder in the directory where VentaFax & Voice is installed.

These parameters specify whether or not the program waits for the user's confirmation for some actions that the program will perform at the beginning and at the end of the session. If confirmation before connection is enabled, clicking the **Start** button would not cause the immediate receiving or transmitting of the facsimile message. The modem will be only initialized. The repeated clicking the **Start** button will start receiving or sending. It is convenient when modem initialization takes quite a long (some seconds) time. Then you can initialize the modem in advance to begin a session immediately after the second click in the **Start** button. If confirmation before disconnection is enabled, then the end of reception or transmitting the document or clicking the **Stop** button would not terminate the connection immediately. Only the current message transmission would be terminated. The repeated clicking the **Stop** button disconnects. This can be convenient when you need to chat to another party upon sending or receiving the message without calling the fax number again (for example, to inform the sender of the low fax quality and to ask to send it again).

It should be remembered that confirmation before disconnection is possible only if **Fax Class 1 (1.0)** command set is being used (**Modem** – **Facsimile Settings** tab).

This can happen due to heavy noise in the telephone line. Try to disconnect and dial the number once again. Chances are the line quality will be better.

Frequently users worsen the connection quality by themselves, trying "to check" fax reception by listening to the telephone line on an extension. This introduces a lot of noise, which has negative effect on the reception quality. If you don't want to miss a chance to chat with your fax mate (interlocutor), you need to select the Confirm actions in manual mode before the disconnection in the **Fax** – **General** tab.

Also make sure that error correction (ECM) in the **Fax** – **Error Correction (ECM)** tab is enabled.

If supported both by receiving and transmitting parties, the ECM protocol assures the facsimile message transmission without errors and failures. If a page is received garbled, the receiving party will ask the sender to transmit frames again. Modems support this function when the Fax Class 1 (1.0) command set is selected. Only a few modems support error correction with Fax Class 2 and 2.0 command sets.

When using this mode, the ECM sign lights up on the "display" of the facsimile set during the session. The use of ECM during the session is marked by an **E** character in the **Attributes** field the Log Book. In addition, the special line quality characteristic is calculated and stored in the Log Book for every connection with ECM. Its maximum value is 100%. The ECM protocol can be enabled and disabled for receiving and transmitting separately.

With ECM, frames with failures are sent repeatedly. Two parameters: Ask for resending corrupted frames no more than, x times and Send each frame no more than, x times in the **Fax** – **Error Correction (ECM)** tab are used to limit the number of frame repetitions at reception and transmission.

Facsimile Message Preparation

In order to transmit a document prepared in any Windows application, for example, in MS Word or Excel, it is necessary first to convert it into a format, suitable for transmission by fax. The VENTAFAX virtual printer that appears in the Windows Control Panel's **Printers** folder after the program installation exercises this conversion for you.

All you need to do to convert the source document to a facsimile format is simply to print it from the application in which this document was created on the VENTAFAX virtual printer. For this, print the document from the program used to create or edit it. Usually the printing option of the Windows applications can be found in the **File** menu. Some applications have a special **Print** button as well. It should be noted, however, that some applications start printing a document on the default printer after clicking that print button. Therefore, if you have another printer selected as the default, it would be better not to use this button. In many programs printing can be started by pressing the **Ctrl-P** keys.

Also make sure that the VENTAFAX is set as the current printer. If any other printer is selected, change it to VENTAFAX.

Facsimile messages can also be prepared in other ways.

The following parameters influence the process of facsimile message formation:

{button ,PI(`',`fine_vf')} Fine resolution (**Fine** button on the fax set)

{button ,PI(`',`fullpage_ob')} Create full-size page (**Fax** – **Page Design** tab)

{button ,PI(`',`format_ob')} Facsimile message format (**Fax** – **General** tab)

After printing the source document on the VENTAFAX virtual printer, the VentaFax program will start and either the **Message Wizard** window or, the express transmission window will be opened, depending on how you have configured the **To prepare and send message start** parameter (see the **Transmission** – **General** tab).

The name of a created file depends on the settings in the **Folders and Files** – **File Name Templates** tab.

Before transmitting the message, you need to perform some simple steps. Let's consider them in more detail using the **Message Wizard**.

Step 1: Page Design

In an opened **Message Wizard** window you will see the filled **File** and **Description** fields. The **File** field contains the name of the generated facsimile message and the **Description** field contains its brief description. The description text is formed automatically by the software application you are using to print, but it can be edited manually. This text will be saved in the file and displayed in the Log Book in the **File Description** column after the transmission. The thumbnail image of the prepared document will appear in the special preview window. You can enlarge the image by clicking on it.

During this step you can customize the document by adding a logo (header) and/or a signature (footer), as well as a background image.

Header and footer image options are available in the Business version only.

You can also add a cover page to the document.

After the page is designed click the **Next** button.

Step 2: Select Transmission Method

To select the transmission method, click one of the following buttons:

 - to dial the number by the modem and send out the message in the auto-answer mode.

 - to send out the message in a manually dialed connection (modem would not dial the number).

If by that time the necessary button is already locked, simply click **Next**.

Step 3: Select Message Recipient

If you are going to dial the number by the modem and send the fax in the auto-answer mode, you have to enter the recipient's fax number. To send the fax to another city or country you should also fill in the **Area Code** and **Country Code** fields. If you are transmitting the fax through a manually dialed connection, filling in these fields is not required.

If necessary, you can also fill in the **To:** (usually the company name) and **Attn.** (usually the name of the recipient) fields. This can be done either manually or by selecting the information from the **Phone Book**. By using the data from the Phone Book all fields, including the recipient's phone number, are filled in automatically.

During this step you can also edit your own data in the **Sender** group. By default these fields are filled in with the corresponding information stored in the **Fax** – **Page Design** tab.

You can switch the fax headline off by deselecting the **Information Header** parameter in this window.

If you are going to use the alternative operator service (i.e., a telephone card), check the **For long-distance calls, use this calling card** box and select the necessary card.

After filling all the necessary fields click the **Finish** button.

Manual Transmission Features

If you are transmitting the fax in the manual mode (using an established connection), wait for the specific tones (signals) of your modem and hang up the parallel telephone at once. It is recommended to begin transmission a little bit earlier than the answering party will press the **Start** button at his or her end. For some modems (for example, USR Sportster) this requirement is mandatory. Otherwise the transmission will not begin.

If the telephone is connected through the modem socket and you are sure that the modem disconnects it after "going off hook" by itself, then there is no need to hang up. If the modem does not disconnect the telephone or the telephone is connected as an extension on the same line, it will be useful to enable the Confirm actions in manual mode option in the **Fax** – **General** tab.

Problems with Fax Transmission

{button ,JI(`',`XonXoff_Problem')} Only Beginning of a Document Can Be Transmitted

see also

{button ,JI(`',`hlp_ModemFeatures')} Features of certain modems

{button ,JI(`',`ECM_ob')} Error correction (ECM)

You can select one of the two fax resolution options:

- Normal resolution - 200 dpi (dots per inch) horizontal, 100 dpi vertical;
- Fine resolution - 200 dpi horizontal, 200 dpi vertical.

A lit **Fine** button indicator on the fax set signals that fine resolution mode is on. Clicking this button switches between the resolution modes.

Please keep in mind that a document created in fine resolution mode looks better, but its transmission takes twice as long.

Changing this mode does not affect already created facsimile messages.

Most often this problem occur when the modem is waiting for a particular continuous signal from the telephone company's switch is needed after dialing a certain digit such as the prefix for the long-distance line. In this case the telephone number usually contains the **W** character (wait). By default, the modem waiting time is 2 seconds. If the telephone company's switch does not respond with a continuous signal within that time, dialing will stop. The program will return Error 25, the **Modem could not detect dial tone**. To correct this situation you can increase the value of the corresponding modem register. This is recommended for experienced users, who know how to do it. Another way to increase waiting time is to change the Dial modifier to wait second dial tone parameter in the **Transmission** – **Dialing** – **Advanced** tab from "**W"** to "**,W"** or even to "**,,W"**.

The basic method for facsimile message preparation is printing the document from the application in which it was created on the VENTAFAX virtual printer. This approach was detailed in the Facsimile message transmission section. Besides this method there are some other ways. Let's consider them more in more detail.

A facsimile message can be prepared with the built-in graphic editor provided with the Message Manager.

In a number of cases it is possible to transmit the document from some Windows application (text or graphic editor, spreadsheet processor, database, etc.) by fax without loading this application manually. Several ways to do that are available.

In the **Message Transmission** window click the  button and select **All files (*.*)** in the file type list. Then select the intended file, for example of MS Word format (*.doc), and click the **OK** button. The selected file will be automatically transformed to the facsimile format. Keep in mind that it will work only if the document is associated with a Windows application capable of printing the file specified from the command line. Some Windows applications are able to do that, some are not. You can verify it experimentally.

Similarly the source document can be transformed to a facsimile format by

– dragging the file icon on the VentaFax & Voice Main Application icon or

– at the DOS prompt, executing a command in the format

ventafax.exe "<filename.ext>" where <filename.ext> is the file you want faxed

or by

– dragging out the file icon to the Main Application window or

– from Windows Explorer, right-click on the file icon and select "Send To – VentaFax".

– scan the document by the built-in program means by clicking the  button in the transmission window.

{button ,JI(`',`SaveAs_fax')} Saving the prepared facsimile message

{button ,JI(`',`create_fax_batch')} Creating facsimile message batch

Frequently it is necessary to transmit several documents in one communication session. The batch creation tool serves this purpose. Actually, when you create a batch, a new document is built up on the disk with the number of pages equal to the total of number of pages in source documents.

To make a batch, simply print several documents on the VENTAFAX virtual printer. The Create batch of messages on repetitive printing to VentaFax printer parameter in the **Transmission** – **General** tab should be enabled.

If documents to be sent are already prepared in facsimile format, use another batch creation method. Click the  button in the **Message Transmission** window. Now you can add documents to a list by clicking the
 button. After adding the last document click the **Finish** button. This will open the window in which you can specify a batch name. By default the name assigned in the **Folders and Files** – **File Name Templates** tab is used.

After printing in the VENTAFAX virtual printer a temporary facsimile message file is created. If the **Confirm temporary files deletion** parameter in the **Transmission** – **General** tab is deselected, the facsimile message file will be deleted after transmission or failure to transmit. If the box is selected, you will be prompted whether to delete the file.

If you need to save this file, for example, for the further scheduling, then in an opened **Message Transmission** window do the following:

– if you use the **Message Wizard**, click **Next**, then, in a new window, click **Save the message with a new name** button and then click **Next**;

– if you use the mode the **Express Transmission** mode, click the **Save As…** button.

You can enter a new file name or leave an old one. Should a file with the name you specify already exist, you will be prompted whether to replace the existing file or to join it to the new file.

The modem dials the telephone number automatically, if the transmission mode with automatic dialing is selected, or a facsimile message is requested from a remote fax in a polling mode.

To dial a number without consequent automatic message transmission, simply enter the recipient's telephone number in the corresponding field on the fax set panel and click the  button. In addition, the ten last-dialed numbers are stored in the special menu. To access this menu, right-click on the telephone number field. If you use the modem voice functions, the program will switch to DTMF playing mode (off hook mode) or the speakerphone mode (if enabled) after dialing a number. (For details, see VentaFax operations at dialing a phone number section). In both modes you can play DTMF signals, start fax reception and transmission.

If you need to dial a phone number and to hear what is going on in the telephone line, the program settings depend on your modem's features.

1. **The modem does not support voice functions or voice functions are disabled.** In this case uncheck the **Disable BUSY detection** parameter in the **Transmission** – **Dialing** – **Advanced** tab. You will hear sounds on the telephone line via the built-in modem speaker. To adjust the speaker volume, use the **Modem speaker volume** parameter in the **Modem** – **Interacting with Modem** tab.

(Note: Some software-driven modems (softmodems) play back sound via headphones or speakers plugged to the computer's sound device).

2. **Using the speakerphone mode (for modems that support this mode).** In this case uncheck the **Apply for dialing without sending a message too** parameter in the **Voice** – **Recognition of Signals** tab (the **Recognize Telephone Line State** parameter group). See the Speakerphone mode section.

3. **The voice modem does not support the speakerphone mode or this mode is disabled.** In this case uncheck the **Apply for dialing without sending a message too** parameter in the **Voice** – **Recognition of Signals** tab (the **Recognize Telephone Line State** parameter group) and enable the **Real-time message review** (the  button in the Main Application window). With this parameter setting, the program dials the phone number and then plays voice data from the telephone line via the speakers plugged into the computer sound device. Playback continues for as long as is specified in the **Wait for answer no more than** parameter in the **Transmission** – **General** tab.

You can dial a phone number directly from a phone book. Open the Phone Book, select the desired entry and click the  button.

One Touch Dialing Phone Book

Frequently used phone numbers can be conveniently stored in the special One Touch Dialing phone book. The difference between this phone book and all other directories is that phone numbers stored in it are displayed directly on the fax set panel. This phone book can contain no more than eight entries. To select a phone number from this phone book, simply click on a corresponding one-touch dialing field on the fax set. To enter and/or edit an entry in the One Touch Dialing phone book, double-click on one of these fields. The Recipient's Data edit window will open.

To dial a phone number from this directory, press the **Alt+1**…**Alt+8** keys.

Telephone Number Format

In Windows telephone numbers are represented in the so-called canonical form, which consists of the following parts: a country code, area code and the number itself. For example, the 123-4567 number in St. Petersburg would be presented as

+ 7 (812) 1234567, where

+ is the indication of an international communication;

7 is the country code (Russia);

812 is the area code (St. Petersburg).

Normally if you place a call within the same calling area, only the recipient's number will be dialed, without any additional prefixes (this must be confirmed with your local telephone company, however, as some densely populated areas now require area codes even within the same calling area). The canonical form of a telephone number is widely used in the VentaFax. At the same time, for representing telephone numbers in particular in the **Number to be dialed** field of the transmission panel, another form is used. The phone number display style is set in the **Transmission** – **Dialing** – **Phone Numbers Display Style** tab.

Telephony Location

The area code and country code together identifies the location from which outgoing calls are placed at the moment of program activity. This information is used to define if it necessary to dial the long-distance access code prior to the telephone number. If the area code and/or the country code in the phone book do not coincide with a telephony location, the necessary codes together with the appropriate prefixes will be added to the telephone number selected for each call. Here VentaFax uses the Windows settings. In order to change the location or to adjust it click the **Edit** button in the **Transmission** – **Dialing** tab.

Redialing the Phone Number

This option allows redialing the number if the line was busy.

Redialing parameters are located at the **Transmission** – **Dialing - Redialing** tab.

Dialing Several Phone Numbers for One Recipient

If your addressee has several phone numbers, you can list them all separated by semicolons, as for example, 1234567;1234568. The program dials 1234567 first, and if the number is busy, it then dials 1234568. For this feature to work, repeat dialing mode must be enabled.

Dialing a Phone Number via Private Branch Exchange (PBX)

If a private branch exchange (PBX) is used and you need to dial a certain prefix to make an outgoing call, it is important to specify an area code even if it coincides with your own area code. Otherwise the phone number will be considered local within your PBX. Consequently, no prefix will be dialed.

You can enter the prefix in front of the phone number instead of specifying the area code.

Using a Calling Card

See Using a Calling Card section.

Advanced Parameters

{button ,PI(`',`waitdialtone_ob')} Wait for dial tone before dialing

{button ,PI(`',`Waitbusy_ob')} Disable BUSY detection

{button ,PI(`',`ImprovedVD_ob')} Consider answer to be voice answer if

{button ,PI(`',`dialindatemode_ob')} Dial a number in data mode before entering voice mode

Problems with Phone Number Dialing

{button ,JI(`',`LongDist_er')} Unable to dial a long-distance number

{button ,JI(`',`Er25_problem')} Disconnection with "Modem detected no dial tone" message

{button ,JI(`',`Er26_Problem')} Connection is terminated with "Unforeseen error when receiving data from the modem" error

Repeated dialing is available for manual dialing a number on the program dialer (but not on the parallel telephone) and for sending faxes without scheduling them. If enabled, in case of the unsuccessful calling attempt (for example, the number is busy) the number will be redialed automatically. If the Repeated dialing box is checked, then:

Redial automatically, times parameter specifies the maximum number of redial attempts.

Time interval, s specifies the interval between the redial attempts in seconds.

Deselect this parameter, if your modem does not detect a dial tone before dialing a phone number.

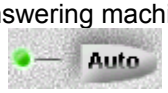
See also Disconnection with "Modem detected no dial tone" message in the **Troubleshooting** section.

Some private branch exchange (PBX) systems generate calling tones of non-standard sequence than can be confused with a busy signal. If you use such a system, you need to disable busy signal detection.

The **Consider Answer to be Voice Answer If** group of parameters sets a mode, at which time the program will try to detect a voice on the line (if the detection of the telephone line state is enabled in the **Voice** – **Recognition of Signals** tab). If only the **no special signals detected for, ms** parameter is selected and the program detects no special signals in the line in the time specified for signal detection (for example, dial tones, busy signals or fax tones), it will assume that the handset was picked up by a human or an answering machine. In any effort to speed up the program response on the voice answer do not set this time shorter than the interval between dial tones, which can be up to 5 seconds long, otherwise your messages will stay unheard. Selecting the **voice-like signal detected** parameter together with another parameter in this group enables VentaFax to recognize voice answers even if the handset is picked up on the very first ring (and the program does not hear the voice) and to speed up voice detection in other cases. Switching this parameter on does not interfere with the recognition functionality, which is used when this parameter is off.

Some modems incorrectly dial the number while in a voice mode. If this parameter is enabled, the modem will dial the number in data mode and then will switch to a voice mode. If enabled together with the subsequent analysis of the line, entering the voice mode can take some time and can cause the program to miss the first (and probably the only one) ring before the recipient answers. In addition, there are modems that cannot switch to voice mode after dialing a phone number while in data mode. This results in the **Voice command set selected is not supported by the modem (Er 7)** error message. In this case disable the parameter. By default, the parameter is disabled.

The answering machine allows the recording the incoming voice messages. In VentaFax the auto-answering operate simultaneously with automatic fax reception.

Turn the answering machine on by switching the modem to auto-answer mode. The lit indicator by the **Auto** button 

on the fax set signals the auto-answer mode is on. The behavior of the answering machine depends on four basic settings or parameters that can be switched on and off by clicking the **Announcement**, **Fax** and **Record** buttons to the right of the **Auto** button on the fax panel. The parameters can be actuated independently in any combination.

Announcement

If this parameter is on, after the modem answers an incoming calls it will play the voice message over the line. The message file to be played is specified by the **Answering machine greeting** parameter field in the **Folders and Files** – **Service Files** tab.

Fax

When switched on, VentaFax will attempt to receive a fax would be made upon detection of fax tones (signals).

Record

If this parameter is switched on, the program will record the voice message. Maximum and minimum recording time are specified by the Record voice message for parameters in the **Reception** – **Automatic** tab

How the Answering Machine Works

Let's examine a case in which all answering machine parameters are switched on and at least one of the Recognize telephone line state for incoming calls parameters in the **Voice** – **Recognition of Signals** tab is enabled. In this case the answering machine work sequence will be the following.

After the modem goes off hook, the auto-answer greeting is played; then the program will switch to a voice recording mode, along with the analysis of the line. The analysis is conducted in order to detect:

- short tones (when the handset on the other end has been put down);
- transmitting fax tones (signals);
- picking of an extension or of a telephone connected via the modem. The detection is possible if the modem (for example, the IDC modem) can recognize one of these situations;
- signals of the answering machine remote control.

The program reacts to the last two types of messages from the modem irrespective of the **Recognize telephone line state for incoming calls** – **by the modem** parameter state in the **Voice** – **Recognition of Signals** tab.

Upon detection of fax tones (signals) VentaFax will attempt to receive the fax (if, of course, if the fax reception is enabled). Otherwise the **Incoming fax signal detected when fax reception is not allowed (Er 68)** error would be returned.

If silence is detected on the telephone line an attempt to receive the fax will be made upon detection, if no voice message was received before that. If such a voice message was received, the detection of silence will cause the disconnection. The parameters in charge of this situation are located in the **Voice** – **Recognition of Signals** tab.

Should the answering machine remote control command be detected it will be executed, if such a command is indicated in the remote control script, of course. Thus the answering machine will switch to the remote control mode and the message recorded by this moment would be deleted. Some modems cannot recognize tone signals along with voice. For using this mode modems with Rockwell/Conexant chips should not use modem voice data formats with an 11025 Hz sampling rate. Many of them fail to detect DTMF, busy, fax and other signals at this frequency.

Should you pick up the handset on the telephone connected via the modem or an extension during the answering machine operation, before switching to the remote control mode, and your modem recognizes this situation, the program will hang up to give you an opportunity to talk over the telephone. This situation will be reflected in the Log Book as a record with an Er 69 completion code (**Handset lift detected on the telephone connected to modem or telephone extension**). If your modem cannot detect handset lift on a telephone connected to the modem or an extension telephone, you can inform the program to hang up by using a special command in a remote control script. This command must be located in the [Start] section. Also, it should not contain any operations. Putting aside other things you might want a script to do, remote control script for using this command could look like this:

[Start]
=mode 1
=0
=1

Pressing digits 0 or 1 in tone mode on an extension telephone would force the program to hang up. Of course, you can use one or several digits for this purpose. For details on remote control scripts, see the Answering machine remote control section.

Registering Incoming Calls without an Auto-Answer

If you want to be informed of incoming calls received in your absence, but do not want an answering machine to answer a call, you can choose from two options.

The first option is to assign a high value for the **Answer on, ring** parameter in the **Reception** – **Automatic** tab. The value must be high enough for caller to loose patience and hang up (for example, 99).

Alternatively, you can disable all answering machine operation modes (**Announcement**, **Fax**, **Record**, and **Caller ID**). If your telephony switch supports Caller ID service you can leave this mode selected to detect incoming numbers.

In both cases such an event would be registered in the Log Book as an **Unanswered incoming call** (Er 38). The time of call reception and phone number (with Called ID mode enabled) would also be registered.

Switching to the Speakerphone Mode

If the speakerphone mode is turned on, clicking the **Stop** button on the Main Panel at the time of message recording will stop the recording, and the program will switch to the speakerphone mode.

Switching to Answering Machine Remote Control Mode

When the **Switch to remote control mode immediately after answering a call** parameter box in the **Reception** – **Automatic** tab is checked, the **Announcement**, **Fax**, and **Record** answering machine parameters do not affect auto-answer mode. The color of these parameters on the fax set panel will change to gray. Right after answering on an incoming call the program will switch to answering machine remote control mode (the Default command from **[Start]** section of remote control script will be executed).

Problems with the Answering Machine

{button ,JI(`',`prob_LowQuality')} Insufficient quality of recording/playing sound via modem

{button ,JI(`',`prob_reduce')} Emulated tone fading

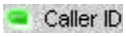
{button ,JI(`',`mid_er23')} Connection was terminated during answer on the first ring with completion code Er 23.

These parameters specify the minimum and maximum message recording time. When the maximum time is up, recording stops. Should the recorded message be shorter than the minimum time, it would be deleted and the session would finish with error message: **Disconnected or too short message recorded** (Er 67).

Caller Number Delivery (CND), commonly called **Caller ID,** is a new kind of phone service that may be offered by your local phone company. Check your phone company for availability. You must subscribe to it and usually pay an additional monthly service charge for this service.

With CND service, the phone company's central office will send the coded caller information to the called station. This information is sent once between the first and second ring. Your modem can decode this caller information and display it on your computer monitor during the second ring period as part of the call progress ring message.

To obtain caller information enable the auto-answer mode by clicking the 

button. Also the


indicator should be on. Caller ID will be received on reception of the first ring. If only Caller ID is enabled, the modem will not go off hook. Caller information will be simply recorded in the log book. If any of the answering machine modes is enabled (Announcement, Fax, Record), the modem will go off hook handset after the specified number of rings.
To see the caller's phone number, enable the **Display data in the window on identification** parameter in the **Caller ID** – **Displaying and Pronunciation** tab. To reproduce the identified phone number via the computer's sound device, enable **Pronounce number via sound device** in this tab. Phone number pronunciation rules are set by the Group Digits Within Number group of parameters.

The Black List and The White List

The Black and White lists are intended for filtering incoming calls by identified phone number. To enable call filtering by the Black List or White List, select the corresponding parameter in the **Caller ID** – **Calls Filtering** tab.

The lists are phone books with reserved names. Thus, placing user entries in the Black or White list is performed in the same way as with any other phone book. Also you can add a phone number to the list from the window, which opens after caller number identification. To do so, click the corresponding button in the Caller ID result panel.

If the number identified coincides with one of the Black List numbers (with Black List filtering on), the modem will not go off hook and **Call rejected. Number is found in black list** (Er 77) message will be written to the log.

If the White List connection filtering is enabled, only users with phone numbers included in this list will be able to reach you. The modem response to other phone numbers will be the same as if they were included in the Black List. Thus the **Call rejected. Number is not found in white list** (Er 78) message will be written to the log.

Using Caller ID to Customize Your Answering Machine

You can use caller number identification to customize some auto-answer parameters. For example, you can personalize the answering machine greeting announcement, allow or disable fax reception, change the maximum message recording time and the number of beeps in telephone line. To do so, open the **Caller ID** – **Redefining** and click the **Add** button. Enter a phone number for which you want to redefine the auto-answer parameters. Then make the desired changes in the answering machine operation parameters. To save the results, click the **Apply** button. You can redefine parameters for any number of phone numbers. To redefine answering machine operation parameters for unidentified or partly identified phone numbers, enter UNKNOWN or X in the **Number** field. To cancel redefinition, simply select the phone number in a list and click the **Delete** button.

Calling Tones Emulation

This mode can be useful when none of the auto-answer modes is enabled (that is, the modem does not go off hook and does nothing but registering incoming calls), but at the same time you need to reach your phone number for answering machine remote control.

On an incoming ring, the modem "picks up the handset" and emulates the long tones on a telephone

line, so a caller thinks that the handset has not been picked up. You can select the frequency and duration of these tones as well the delay between them, so the modem emulates your telephony company's signals (**Reception** – **Automatic**– **Calling tones emulation** tab). Also specify the number of calling tones to emulate after the modem goes off hook before hangs up. Now if would call up your answering machine, enter your PIN code during pauses between tones for remote control.

Playing the Phone Number via the Sound Device

To play the identified phone number via the computer's sound device, enable the **Pronounce number via sound device** parameter in the **Caller ID** – **Displaying and Pronunciation** tab. Phone number pronunciation rules can be set by the Group Digits Within Number group of parameters.

Problems with Caller ID

{button ,JI(`',`Problem_CallerID')} The Caller ID does not work

This parameter specifies phone number digits grouping rules for pronunciation. The "322" value for seven-place phone numbers means the number identified would be pronounced in three parts, first containing three digits and the other two parts containing two digits each. For example, the 1234567 number would be reproduced as "one hundred twenty-three – forty-five – sixty-seven".

Some voice modems can be used for usual telephone conversation in place of the telephone handset. For this purpose the modem must have the microphone (to speak into) and headphones or speakers (to play sound) connectors and **support the speakerphone mode**. These requirements, in particular, are met by USR Sportster Voice modems, as well as many other modems with Rockwell, Lucent, Cirrus Logic, etc. chip sets. In fact, this mode is simple: using a series of commands the modem is switched to the state in which it transmits the sound from the line to the speaker (headphones), and the sound from the microphone to the telephone line.

There are also the so-called WinModems. WinModems performs some traditional modem functions by means of a driver running on your computer. Some them (PCTel, for example) can use the computer sound device (sound card). Such modems do not have the microphone and headphones connectors (sockets). At the command to switch to the speakerphone mode the modem driver begins driving the data between the telephone line and the sound device. The "Real-time message review" function in VentaFax & Voice does not work with such kind of modems, because the sound device is already being used by the modem. Such a modem can be identified from user information on the box which might say: "Full-Duplex Sound Card required for Speakerphone Function".

The absence of microphone and headphone connectors on a modem does not mean that the speakerphone mode is realized via computer sound device. It is quite possible that a modem does not support speakerphone mode at all.

Irrespective of a modem model, the following rule should be followed when connecting a microphone and headphones for a speakerphone mode:

If the modem is equipped with microphone and headphone connectors, for their use in the speakerphone mode, a microphone and headphones should be connected to these connectors only. It makes no sense to connect a microphone and headphones to the computer sound device for this purpose.

To activate the speakerphone mode click the  button on the Main Panel and make sure that the mode was turned on and the button looks like

 . If it does not, it means your modem does not support the speakerphone mode or VentaFax could not detect its availability. If there no connection is established via the modem, activating the speakerphone mode does not mean you can start talking over the modem. The speakerphone mode will be used when the modem is active as the circumstances warrant.

When talking in the speakerphone mode, you can adjust the volume and microphone sensitivity with  buttons in the Main Application. For some modems setting the microphone sensitivity in the lowest position is equal to the activation of automatic gain control (AGC).

To Answer an Incoming Call

Click on the handset. It will go off hook and you can start talking. To end the conversation, click on the handset once again or click the **Stop** button.

To Make a Call

Enter the number in the telephone number field on the Main Panel and click the  button (see details in How to dial the telephone number section). After the modem dials the number and the other party replies, you can begin the conversation. N.B., for this to work properly, you must deselect the **Apply for dialing without sending a message too** in the **Voice** – **Recognition of Signals** tab.

Telephone Line Status Recognition for Outgoing Calls

The automatic recognition is possible, if at least one of the **Recognize telephone line state for incoming calls** parameters in the **Voice** – **Recognition of Signals** tab is enabled and the **Apply for dialing without sending a message too** box is checked. After dialing the number, the program will analyze signals on the telephone line and in case of short tones (busy), disconnect. If the redial

parameters in the **Transmission** – **Dialing - Redialing** tab are specified, the program will automatically dial again.

When the program has recognizes a voice answer it will switches the modem to the speakerphone mode. For a more consistent voice recognition it is recommended to select the voice-like signal detected parameter in the **Voice** – **Recognition of Signals** tab. To interrupt automatic recognition and force the speakerphone mode click the **Stop** button after the modem has dials the number. If you pick up the handset on the telephone connected to the modem during the line state analysis and your modem recognizes this situation, the program will hang up the modem to give you an opportunity to talk over the telephone.

For additional information about the mode setting see the VentaFax operations at dialing a phone number section of the Help file.

Exiting the Speakerphone Mode

The yellow-flashing **Stop** button signals that the modem is in the speakerphone mode, as does the lettering below the fax set:

Click Stop button to exit speakerphone mode

Clicking the **Stop** button terminates the connection.

This chapter describes the steps necessary to use the answering machine remote control mode. Let's take one of the operating scripts supplied with the program is as an example. The answering machine remote control script editor chapter deals with remote control scripts structure and development in more detail.

The answering machine remote control responds to commands dialed in the tone mode from a:

– a telephone with the tone dialing feature, or

– beeper, or

– modem and some software, VentaFax, for example.

These commands are also known as the DTMF (Dual Tone Multi Frequency) commands.

Enabling the Remote Control

To operate the answering machine remotely you have to provide the program with the remote control script file. This operation is performed differently depending on the type of a call: incoming or outgoing.

Enabling the Remote Control for Incoming Calls

To enable the remote control for incoming calls, open the **Folders and Files** – **Service Files** tab and select the remote control script file (in the **Remote control script file** field).

Enabling the Remote Control for Outgoing Calls

Remote control scripts can be applied not only to incoming calls, but also to outgoing calls. In this case you need to select a script file (*.VFA) as the file intended for transmission (for example, in the Message Wizard, send out this file in the manually established connection or schedule the task for automated delivery).

Remote Control Script Samples

Some scripts are included in the package. These are the *.VFA files located in the \SERVICE folder.

Below is an example of the remote control operation.

In the same tab, click the **Edit** button to start the **Remote Control Script Editor**. The selected script file will open. Some of the first lines in the supplied script files look like the following:

```
[START]
=mode 4
=default 3
play errpsw.wav
wait_cmd 60 0
; *** WARNING! It is necessary to change "0000" with your own PIN code! ***
=0000
goto menu_1 60
```

To preclude the possibility of outsider access to your answering machine you need to edit the PIN code. For this, change the 0000 provided in a script to any other four-digit number. You can also use the **#** and ***** symbols, as well as **A**, **B**, **C** and **D** characters. It should be noted, however, that the majority of telephone sets cannot dial the alphabetic characters. Thus, it is recommended to use **A**, **B**, **C** and **D** characters only if you are going to enter the PIN code with a modem or beeper.

If you consider a four-character PIN code to be too long or too short, you can change it. The number of characters is specified by the **=mode 4** parameter. Replace **4** with some other digit, corresponding to

the code length. Change the PIN code accordingly.

After entering your new PIN code, save the finished file.

Using the Remote Control (by the Example of SIEMENS.VFA)

Let's assume that the program is in the auto-answer mode and the SIEMENS.VFA file is being used as an answering machine control script. Call your answering machine from some other telephone. Wait for the machine to play the greeting, then, at the tone, enter your PIN code. If the pulse dialing was used, switching to the tone mode usually can be done by pressing the (*) key. Some modems can detect tone commands (DTMF codes) during the greeting announcement as well. In this case you can enter a PIN code without waiting for the entire greeting. Please notice that in the unregistered version of VentaFax the reply time is limited to 15 seconds. Thus, you have to enter a PIN code during this time slot; otherwise the connection will be terminated. The registered version has no time limit.

After a PIN code is entered successfully, you will hear the phrase: "*Going to another menu*". Now you can operate the answering machine remote control with the following numerals (control commands).

***** – state the number of newly received messages;

2 – play back all new messages in the first received – first played order;

3 – play back all new messages in the first received – first played order. Sending this command interrupts the current message reproduction and starts the next message;

1 – replay the current message once;

4 – play back the previous message;

5 – stop play back and wait for new commands for 60 seconds;

9 – switch to the answering machine greeting change mode. After entering this command you will hear the invitation to record, and new commands will be expected. This script supposes that there are two predetermined greetings, GREET_1.WAV and GREET_2.WAV, that can be used in turn. Here you can create those greetings.

1 - select greeting 1;

2 - select greeting 2.

After selecting a greeting to work with, enter one of three commands:

6 - record a new greeting no more than 60 seconds long. To interrupt the recording, press any digit key. After that the recorded phrase will be play back and set as the answering machine greeting announcement;

5 - play back a greeting (GREET_1.WAV or GREET_2.WAV depending on which one has been selected on the previous step) and set it as the answering machine greeting announcement;

9 - return to the main menu.

The sample remote control script files supplied with the program contain detailed comments. They can form the basis for the development of your own scripts or can be used immediately.

The Answering Machine Remote Control Script Sample. Creating Voice Mailboxes

The VentaFax package includes the 2MAILBOX.VFA file located in the \SERVICE folder. It contains the "voice mailbox creation" script that allows creating of two or more mailboxes. The same folder contains the sound files referred to in this script. The 2MAILBOX.VFA file contains the detailed comments on how to enable the script and how it works, as well as operational and modification guidelines.

To leave a message for the user of mailbox 1 or 2, the caller must press digit 1 or 2 on a touchtone telephone correspondingly. This is done after the greeting announcement. The messages for mailbox 1 are stored in the \IN\MAILBOX1 folder, the messages for mailbox 1 are stored in the \IN\MAILBOX2 folder.

The same script organizes playing back the received messages. To do so, the user can call up his or

her answering machine or open the received messages from the Log Book. Special reports (one per each mailbox) can be created in the Log Book for more convenience. To create a report, open the Log Book. In the **User Defined Reports** branch of the tree select **Create New One**. In the report setting window that opens:

- Select the **Messages in the mailbox only** parameter.
- Enter the mailbox number in the **mailbox no.** field.
- Change the report name in the **Name** field if necessary (for example, to "Mailbox 1").
- Click **OK**.

The example of an outgoing call control script. The telephone poll with three questions, answers to which are recorded to the single file

```
[START]
=mode 1
;
=begin
set_var %1 START
play "announcement 1.wav"
record * 30
set_var %AnswerFile %LastRecFile
set_var %1 questions 2 and 3
play "announcement 2.wav"
record "\temp\L%line.wav" 30
; adding a voice separator mark to the file being recorded
append %AnswerFile "2.wav"
append %AnswerFile "\temp\L%line.wav"
delete "\temp\L%line.wav"
set_var %1 question 3
play "announcement 3.wav"
record "\temp\L%line.wav" 30
; adding a voice separator mark to the file being recorded
append %AnswerFile "3.wav"
append %AnswerFile "\temp\L%line.wav"
delete "\temp\L%line.wav"

=0
; go to the next question
if equal("%1", "START")
    append %AnswerFile "2.wav"
    goto "questions 2 and 3"
endif
if equal("%1", "questions 2 and 3")
    if FileExist("\temp\L%line.wav")
        append %AnswerFile "2.wav"
```

```
        append %AnswerFile "\temp\L%line.wav"
        delete "\temp\L%line.wav"
        goto "question 3"
    endif

=break
; if disconnected
if equal("%1", "START")
    if FileExist("%LastRecFile")
        set_var %AnswerFile %LastRecFile
        set_var %StartSectionRep questions 2 and 3
        set_var %CompletionCode 67
        goto "stop"
    endif
endif
if equal("%1", "questions 2 and 3")
    if FileExist("\temp\L%line.wav")
        append %AnswerFile "2.wav"
        append %AnswerFile "\temp\L%line.wav"
        delete "\temp\L%line.wav"
        set_var %StartSectionRep question 3
        set_var %CompletionCode 67
        goto "stop"
    endif
endif
if equal("%1", "question 3")
    if FileExist("\temp\L%line.wav")
        append %AnswerFile "2.wav"
        append %AnswerFile "\temp\L%line.wav"
        delete "\temp\L%line.wav"
        set_var %CompletionCode 0
        goto "stop"
    endif
endif
;
set_var %StartSectionRep %1
set_var %CompletionCode 67


[questions 2 and 3]
=mode 1
;
```

```
=begin
set_var %1 questions 2 and 3
play "announcement 2.wav"
record "\temp\L%line.wav" 30
; adding a voice separator mark to the file being recorded
append %AnswerFile "2.wav"
append %AnswerFile "\temp\L%line.wav"
delete "\temp\L%line.wav"
set_var %1 question 3
play "announcement 3.wav"
record "\temp\L%line.wav" 30
; adding a voice separator mark to the file being recorded
append %AnswerFile "3.wav"
append %AnswerFile "\temp\L%line.wav"
delete "\temp\L%line.wav"

=0
; go to the next question
if equal("%1", "questions 2 and 3")
    if FileExist("\temp\L%line.wav")
        append %AnswerFile "2.wav"
        append %AnswerFile "\temp\L%line.wav"
        delete "\temp\L%line.wav"
        goto "question 3"
    endif
endif

=break
; if disconnected
if equal("%1", "questions 2 and 3")
    if FileExist("\temp\L%line.wav")
        append %AnswerFile "2.wav"
        append %AnswerFile "\temp\L%line.wav"
        delete "\temp\L%line.wav"
        set_var %StartSectionRep question 3
        set_var %CompletionCode 67
        goto "stop"
    endif
endif
if equal("%1", "question 3")
    if FileExist("\temp\L%line.wav")
        append %AnswerFile "3.wav"
```

```
        append %AnswerFile "\temp\L%line.wav"
        delete "\temp\L%line.wav"
        set_var %CompletionCode 0
        goto "stop"
    endif
endif
;
set_var %StartSectionRep %1
set_var %CompletionCode 67


[question 3]
=mode 1
;
=begin
set_var %1 question 3
play "announcement 3.wav"
record "\temp\L%line.wav" 30
; adding a voice separator mark to the file being recorded
append %AnswerFile "3.wav"
append %AnswerFile "\temp\L%line.wav"
delete "\temp\L%line.wav"

=break
; if disconnected
if FileExist("\temp\L%line.wav")
    append %AnswerFile "3.wav"
    append %AnswerFile "\temp\L%line.wav"
    delete "\temp\L%line.wav"
    set_var %CompletionCode 0
    goto "stop"
endif
;
set_var %StartSectionRep %1
set_var %CompletionCode 67

[Stop]
```

To prepare a voice message with VentaFax & Voice click the  button. The window with **Record** and **Play** panels will be open. The **Record** panel is used for recording sound signals from various sources: the telephone line, the parallel telephone connected via the modem, the microphone connected to the modem, or the installed sound card. The resulting file is in WAV format. The **Play** panel serves for the auditory control of recorded files by reproducing them on various audio devices: in the telephone line, on the parallel telephone connected via the modem, on the headphones or speakers connected to the modem (on the built-in speaker for some modems), or the computer sound system. To select the source and reproduction device, click on the corresponding images on the panel. The desired signal level can be set both for recording and playing. You can also select the voice data format from those supported by your modem.

To record a message, you need to select the sound source, recording level, voice data format, set the recording time (in seconds) and click the  button in the **Record** panel. During the time specified the sound file RECORD X.WAV would be recorded, where X is a file serial number. The file will be located in a folder set by the **Outbox folder** parameter in the **Folders and Files** – **Service Folders** tab. If the sound device is selected as a sound source, it will be used for recording, with the Windows application specified by the **External WAV editor** parameter in the **Folders and Files** – **Editors** tab. In the process of recording you will see the elapsed time, the size of the file already recorded and the display bar. If you would want to stop the recording before the end of time specified, you can click the  button.

The recording quality depends on a modem type (and sound device type, if it is being used for the recording), as well as on the selected voice data format. To obtain an optimal record quality you would probably need to carry out some experiments. To check the resulting sound quality auditory you can use the **Play** panel.

As soon as you have recorded the file, its name appears in the **File Name** field of the **Play** panel and you can play it immediately by clicking the  button. To stop playing, click the  button. If you would want to play another file, select it by clicking the  button. Using the  and  buttons, you can select previous and next files in the current folder correspondingly. Clicking the  button deletes a file. Finally, you can rename the file by editing its name in the corresponding field. To confirm renaming, click the  button.

Files prepared in such a way can be transmitted manually or by means of scheduled delivery, or used as announcements (announcement before fax transmission with automatic dialing, announcement before sending voice message, or the answering machine greeting). To assign the prepared file as one of those phrases, select the desired one from the announcement list in the bottom of the **Play** panel and click the  button near the list. The file will be moved to the special folder (\SERVICE). In addition, you can send out the recorded message immediately. For this purpose, click the **Send** button.

The voice messages used by the program are common WAV files (with your choice of PCM, MS ADPCM, IMA ADPCM and GSM coding). It means that you can prepare voice messages with any sound device and recording-editing-playing program you like besides VentaFax & Voice tools. Keeping in mind the limits of modem and telephone line capabilities, it does not make any sense to record messages with a sampling rate higher that 11KHz or in stereo mode.

It is presumed that you have read this Help file carefully and have not failed to look in the Features of certain modems and Troubleshooting sections. If you still have questions about how the program works with your modem, please write to our e-mail address: **support@ventafax.com**.

But prior to do that please do the following:

1) Open the Settings window (click the  button). Enable the **Log modem activity to PROTCOMX.TXT** parameter in the **Modem** – **Interacting with Modem** – **Modem Activity Logging** tab. 'X' is substituted with 0, if TAPI is selected for interaction with modem (**Modem** – **Interaction with Modem** tab). Otherwise, 'X' is substituted with port number. By doing so, you will start documenting the interactions between the program and the modem. If logging has already been enabled, delete the old modem log before starting a new one.

2) Click the **Detect** button in the **Modem** – **Voice Settings** tab and wait until the end of detection.

3) If you are using a command set other than had been determined, make sure that the incorrect command set had been selected and try another one.

4) Perform the operations that cause you to ask questions.

5) Disable the **Log modem activity to <log file name>**. Now the interaction between the program and the modem will cease to be logged. Otherwise the modem log file will expand indefinitely. Actually, you can always delete it without any damage to the program performance.

6) Describe your actions and state your questions in the message. For each question, provide the following information:

1. What result you expected to achieve;
2. What you did;
3. What actually happened.

Make sure to attach the modem log file (**PROTCOMX.TXT**) to your message. The file is located in the VentaFax installation folder. If you do not know where this file is located, simply click the **Send by Email** button. The new message creation window of your default mail program will open with the modem log file already attached. Also indicate the name of your modem, the type and speed of your system processor and Windows version.

Modem Auto-Detection Record

When all the above-stated actions are performed, the record compiled will already include a modem auto-detection record. If we ask you to send *only* the auto-detection record, performing steps 1, 2, 5 and 6 is sufficient. The auto-detection record itself is compiled in the step 2.

If You Have Multiple Problems

If you have encountered more than one problem at once, please make several records, one for each problem. If is also advisable to send us each problem in a separate email message. Often solving one problem also solves the other ones, for example those concerned with an incorrect setting of the voice command set.

The Phone Book is intended for the recipient's database management. It can be used for automatic filling the transmission window fields in the Main Application, and at a formation of the schedule as well. We shall use the "Phone Book" name (with capital letters) for the Phone Book application and a "phone book", (with lower case letter), or directory, for its databases. It is possible to manage as many directories as needed, for example, to create recipients groups. Besides the main phone book, there are also some special directories with the reserved names. These are the **One Touch Dialing**, the Black List and the White list directories. You can fill in each recipient's data or import a phone book from the text file with separators. Furthermore, the VentaFax Phone Book can access data stored in the **Windows Address Book**, which is used by MS Outlook Express included into the MS Internet Explorer package, for example. In VentaFax Phone Book, the Windows Address Book looks like any other directory, but is available in read-only mode. MS Outlook Express can be used for editing the Address Book.

To start the Phone Book, click the  button in the Main Application. If the  button is pushed, the phone book tree is displayed in a left part of the window. It enables fast access to the directories and allows easy creation, deleting and renaming directories.

{button ,JI(`',`Sort_pb')} Phone Book data presentation

{button ,JI(`',`Create_pb')} How to create, delete and rename a phone book

{button ,JI(`',`NewAb_pb')} How to edit a phone book

{button ,JI(`',`search_pb')} How to search in a phone book

{button ,JI(`',`SelAb_bp')} How to select a recipient's data from a phone book

{button ,JI(`',`Import_pb')} How to import data into a phone book from other programs

{button ,JI(`',`Export_pb')} How to export a phone book contents

{button ,JI(`',`Copy_pb')} How to copy data from one phone book to another

{button ,JI(`',`Password_pb')} Phone book password protection

A phone book is a table with each line representing a recipient entry. Each entry consists of several fields. In order to make phone book management easier, you can sort by field feature, both ascending and descending, is provided. To sort the entries, click on the field name. The blue arrow near the field name marks the field a directory is currently sorted by. The repeated click reverses the sort order. The sort order is specified and stored for each phone book individually.

You can also set a special font and background color for each phone book. To do that, open the **Program Settings** window by clicking the **View** – **Program Settings** menu or pressing **F2** key.

For fast access to a phone book data, use the bookmarks located at the bottom. Clicking the bookmark positions the cursor on the word which begins with selected letter or digit within the field the directory is sorted by.

Open the phone book tree by clicking the  button. To create a new phone book, click the **Create new one** branch. The directory with the **Phone Book X** name, where **X** stands for phone book number, will be created. To rename a phone book, move the cursor to its name in a tree, right-click for the pop-up menu and select **Rename**. Enter the new name and press **Enter**. To delete a phone book to the Recycle Bin, select **Delete phone book** in the same menu.

To add a new recipient, click the  button. The dialog box would open. Fill in the necessary fields and click **OK**. The **Country code** and **Area code** are filled in automatically with the data specified in Windows for your location. If the recipient is located in some other area or country, you need to fill in these fields with appropriate codes. The **Associated file** field allows linking the recipient entry with any file. It can be an image, sound file or document of any format. If you have associated a file, the clip would be displayed near the recipient's field in a phone book. Double-clicking the icon will open the file.

You can list several phone numbers in the **Telephone** and **Fax** fields, separating the numbers by semicolons. If the repeat dialing mode is enabled (including message transmission with dialing the number by the modem and scheduled delivery), the program will dial the specified phone numbers in turn until it reaches the recipient by one of them.

To edit the recipient's data, click the  button, make necessary changes and click **OK**. If you want to make an identical entry, click **Duplicate**. Then you can edit this entry.

To delete one or several recipients from a phone book select the corresponding entries and click the  button.

Using Associated Files

If the associated file is a sound file (*.WAV), it can be used in the following cases:

– after the caller's number delivery. The associated file is played via the computer's sound device instead of playing the phone number, if the caller's telephone number is found in a phone book.

– during the scheduled delivery. The associated file can be used instead of the greeting announcement, if specified during scheduling the delivery task.

If the associated file is a graphics file (*.BMP or *.JPG), it is displayed in the **Incoming Call…** window after the caller's number delivery, if the caller's telephone number is found in a phone book.

You can search for a recipient in the current or all directories through various fields (company name, last name, first name, fax or telephone number or area code). To make a search, click the  button. In the window opened select a field to search in and enter a search string. The search string can represent any part of the field contents. For example, searching by last name and setting the "son" string will find recipients with Johnson, Sonny and Parsonsen names. If you are searching all phone books and there are password-protected directories among them, their passwords would be requested. If you enter an invalid password, this phone book would be excluded from the search. Should any entries be found, the window would be divided in two panels with the obtained entries collected in lower one.

Select the necessary line (to find it fast, use the search option). If you would have to dial the fax number, click the  button or double-click the **Fax** field. Or, if you need the telephone number, click the  button or double-click the **Telephone** field. In both cases the Main Application's Message transmission window (or the Message Wizard) will open with the corresponding fields already filled in with selected data. If all that it is required is to dial a telephone number without transmitting a message (for example, if you want to talk on the phone), click the
 button.

Importing data from some other programs is another way to create or update a phone book. The data is imported to a directory that is active at the moment. Therefore you should start with selecting a necessary directory or creating a new one.

VentaFax allows importing the data from a text file with field-separating characters. The program with source data must be able to export it in a text file format that satisfies the following rules. Each recipient's data must be placed in a single text line. Any separating character, not present in any field data, for example, the semicolon, must separate all fields from each other. The majority of applications like database management systems or spreadsheet processors (for example, Microsoft Excel) support the database export into text files of such format.

Click the  button and select the necessary text file (*.TXT or *.CSV). Specify the file format (DOS or Windows). If necessary, change the separating and quotation characters, then click **Next**. Since the fields in a text file may not correspond to the Phone Book fields, you have to assign the proper fields. You will see the list of created phone book fields and the list of text file fields filled in with data from the first line of the exported file. Check up if the correct data is assigned to each field and make changes if necessary. If a private branch exchange (PBX) is used and you need to dial a certain prefix to make an outgoing call, it is important to specify a correct area code for each entry in a phone book, even for phone numbers within the same area. A phone number that has no area code would be considered as local (within your PBX). In this case no area code would be dialed. The program can substitute area code and/or county code automatically for entries where such codes are missing. To use this feature, make sure that **If unspecified, use** parameter is enabled and the appropriate area code and country code are entered. On completion of this procedure, click **Finish**.

Phone book contents export is the conversion of its information from VentaFax phone book format to the text file format with field-separating characters. Before exporting a phone book, make sure that the export parameters are set correctly. For that, open the **View** – **Program Settings** window and select **Export** tab. Specify the necessary separator (the character fields would be separated by) and the quotation character (this character will mark the beginning and ending of each field's text data). Here you can also specify if the field names should be placed in the first line of the text file. Moreover, you can enable automatic opening of the associated application. Usually, the Microsoft Excel is associated with *.CSV files (this extension is used by default). Therefore, enabling automatic application opening will cause the exported file to be opened with Excel.

To export data, click the  button. Then indicate the file name (the selected phone book name would be used by default) and click **Save**.

The easiest way to perform such an operation is to display both directories at once: the one you going to copy the data from and the one where the data is to be copied to. To open a second phone book, click the **View** – **Two phone books** menu or press **Ctrl-F3** keys. In the first phone book, select the necessary entries and simply drag them over the second phone book. Release the left mouse button and select **Copy** or **Move** in the pop-up menu.

The same operation can be done without dragging the data with the mouse. Select the necessary recipients and press **Ctrl-C** keys to copy or **Ctrl-X** keys to move entries. Next, change a directory with **Tab** key and press **Ctrl-V** keys.

Clicking the  button opens the window where you can set the password protection for your phone book. The protection consists of encoding the directory contents with the password. When you select a password protected phone book, the program will ask for the password.

The Log Book application is intended for recording the information about VentaFax operations. Each log record represents an event. An event can be the message reception or transmission, play back of a sound file over the telephone line, etc. Since multiple events can and typically do occur during a single telephone connection (session), several lines will appear in the log. To enhance recognition, each new session is color-coded with alternating light and gray lines. The records can be listed in chronological order or in reverse chronological order.

We shall refer to the application as the Log Book (capitalized), and to the information stored in it as a log (all in lower case letter). The **Report** is a sample of log records selected by some criteria, which criteria can be specified by the user. The Log Book has some predefined criteria (built-in reports): **Incoming Sessions**, **Outgoing Sessions**, **New Messages**, **Received Messages**, and **Sent Messages**. The structure of these reports cannot be changed. At the same time you can set up as many reports as you want. Unlike the **Incoming Sessions** report, in the **Received Messages** report only records with information on received messages are displayed. The **Incoming Sessions** report displays records on all incoming calls, including answering machine announcements, for example. The same difference can be found between **Outgoing Sessions** and **Sent Messages** reports.

{button ,JI(`',`View_lb')} Log Book data presentation

{button ,JI(`',`Create_lb')} How to create a new report

{button ,JI(`',`Search_lb')} How to search in a log

{button ,JI(`',`Delete_lb')} How to delete records and files

{button ,JI(`',`ViewFile_lb')} How to view and play messages from a log

{button ,JI(`',`Send_lb')} How to transmit a message from the Log Book

{button ,JI(`',`InsertPhone_lb')} How to add a recipient to a phone book

{button ,JI(`',`Export_lb')} How to export log contents

{button ,JI(`',`Archive_lb')} How to Create Log Book Archives

The Log Book and logs themselves are spreadsheets with each line representing the information about one VentaFax operation. Each line or record consists of several fields. Records can be sorted by time and date, both in direct and reverse chronological order. To change the sort order, click the  button. Clicking the
 button changes each field width, so that the whole information contained in is displayed. (Some fields can extend outside the window. To view those fields, use the horizontal scroll bar). Clicking the
 button equalizes the column width, so that all columns available will fit in the window. Clicking the
 button will maximize the spreadsheet to full screen, and at the same time, the tool bar will disappear. To return to the initial state simply press the space bar. To view extended information on the current log record click the
 button. To enable the preview facsimile messages in the Log Book, select the **View** – **Fax Preview** menu item.

Special font and background color can be set for each report. For this purpose, click the  button or press the **F2** key and select the **View** tab. Here you can also indicate which fields to hide and which to display, and change the field sequence in a spreadsheet. The width of each field can be changed by dragging its title with the mouse. The maximum number of records in a log book can be set in the **General** tab.
Various mnemonic icons are displayed on the left side of log records:
 icon means that the record corresponds to a fax reception or transmission;
 icon stands for a sound file recorded or reproduced;
 icon means the file is new and has not been viewed or played yet;
 icon means that the received or transmitted file is deleted;
 icon means that service announcement was played;
 icon means that manual real-time message review was in effect (with telephone conversation recording, for example);
 icon means that the answering machine remote control mode was active during the session.
 notification of an incoming message was sent by email.
 the received message was forwarded by email.
 notification of an incoming message was created, but was not sent by email.
 a forwarding message with the received message attached was created, but was not sent by email.
 icon means that the message was received, afterwards the task of redirecting this message to another telephone number was scheduled, but the task has not been completed.
 icon means the same as above, but the task has been completed.
 icon means that an attempt to redirect the received message to another telephone number has been made during the session.
Let's examine some fields of the Log Book in more detail.

Duration

This field displays time elapsed from the beginning of a session.

File

Here the file name used by the program in this operation is displayed. It can be the transmitted or received message file or the answering machine announcement.

Phone Number

Here the telephone number dialed by the program is displayed.

Result

This field contains the so-called operation completion code. For your convenience, some completion codes are substituted with mnemonic notations: **OK** for successful completion of the operation, **Stop** for sessions interrupted by the user, **Busy** if the recipient's number was busy. The description of a completion code can be displayed in this field instead of the code itself. To enable this feature, check the **Result** parameter in the **View** tab of the **Setting Log Book** window. Double-clicking this field opens the **Completion Codes** section of the Help file, which describes possible causes of errors. The decoding for the current completion code is displayed in the status bar at the bottom of the Log Book.

Pages/sec.

Here the number of delivered pages for received faxes is displayed. For transmitted faxes, the number of successfully sent pages is displayed in the numerator and the total number of facsimile message pages in the denominator. For voice messages, the length of the recorded or played-back message is displayed.

Resol./Freq.

This field contains the resolution information for transmitted and received faxes: **Normal** for 200 x 100 dots per inch (dpi), **Fine** for 200 x 200 dpi. For sound files, the sample rate, Hz of the recorded file is displayed.

Attributes

This field can contain the following characters describing some characteristics of the reception or transmission session:

A – auto-answer on incoming call,

F – fine resolution fax (200 x 200 dpi),

E – the use of error correction protocol (ECM),

S – service message,

RC – answering machine remote control mode,

P – fax request (polling),

D – demo mode (no reception or transmission took place).

Fax ID

The CSID (Caller Station Identifier) or the remote fax identifier transmitted by the recipient fax in connection is displayed here. Usually this is the remote fax telephone number. By the way, CSID sent by VentaFax is set by the **Fax ID** parameter in the **Fax** – **Page Design** tab in the Main Application.

Open the report tree by clicking the  button and then click the lowest line, **Create New**. The **Report settings** window will open. By default the **Report X** name, where X stands for a serial number, will be assigned to a new report. If necessary, you can change the report name. If you do not want certain records to be displayed in the report, deselect the corresponding parameters. For example, if you don't want to include records that fail to contain file names, deselect **empty** in the **Messages** group of parameters. After setting all necessary parameters, click **OK**.

By using the search function, you can quickly find a record or group of records meeting specific conditions. For example, you can find all transmission sessions with a certain phone number or find out when you have been called from a certain phone number. To open the search window, click the  button (or press **Ctrl-F** keys). Enter a search string for the field to search a log by. To refine the search, you can enter several strings for the appropriate fields. After you have set all the necessary conditions, click **Search**. The window will be split into two panels with the lower panel containing all found records. If all you need is to select some records without opening the second window (for example, to delete them), click the **Select** button instead.

You can use the search function to select record to be deleted. Press the **Del** key or right-click for the pop-up menu and select **Delete record(s)**. To delete files, click the  button or press **F8** key. Files are deleted to the Windows Recycle Bin. If you do not want to place them in the Recycle Bin, deselect the **Miscellaneous** – **General** – **Delete Messages into Windows Recycle Bin** parameter in the Main Application settings window.

To view facsimile messages or to play voice messages, select a line in the Log Book and click the  button or double-click the line to open The Message Manager. If a voice message has been selected, the Manager will close automatically after the message is played back. If the  button is locked, you can view the thumbnail image if the facsimile message in the lower left corner of the Log Book. You can also view facsimile messages in the special preview area. To enable the preview, select the **View** – **Fax Preview** menu item. The image changes while you are browsing through the Log Book lines. It is possible to synchronize the facsimile message image in the Message Manager with the corresponding line of the Log Book. To do so, select the **Synchronize with the Message Manager** parameter in the **General** tab of the Log Book settings.

Recipient answered but did not start fax reception (Er 76)

The program has recognized that the recipient being called has picked up the handset, but did not try to receive a fax. If you are sure that the remote fax answered, then your modem feature may be the reason of the error. See the It Is Impossible To Transmit a Fax in Automatic Mode or the It Is Impossible To Transmit a Fax in Manual Mode section of the Help file.

You can do so to retransmit a message or to transmit a message received earlier, if the appropriate file exists and is shown in the log. To transmit a message, click the  button or press **F5** key. The Message Transmission window will open, and the usual prepared message transmission procedure can be executed.
You can also send a message file via email by means of your system default mail program (such as Outlook Express). To do so, click the **Send via email**  button. Your email program "New Message" window will open with the message file already attached. Fill in the necessary fields and send your email message.

Adding the phone number to a phone book can be done even if you have dialed the number manually and would like to save it. To do so, select the log line with this number, right-click the pop-up menu and select **Put number into phone book**. Another pop-up window with the list of available phone books will open. Select the one you want to put the number into. The recipient's data input window with the fax and telephone number fields already filled out will open. If necessary, fill in the remaining fields and click **OK**.

The contents of the Log Book can be exported to files in formats which other programs can read. Any log book, report, or log search result can be exported. Only the fields selected for display are subject to export.

Before exporting a log make sure that the export parameters are set correctly. For that, open the log book settings window by clicking the  button or pressing **F2** and selecting the **General** tab. Specify the necessary separator (what character will separate or demarcate the fields) and the quotation character (this character will mark the beginning and ending of each field's text data). Here you can also specify if the field names should be placed in the first line of the exported file. Moreover, you can enable automatic opening of the associated application. Usually, for example, the Microsoft Excel is associated with default format *.CSV files (comma-separated value). Therefore, enabling automatic associated application opening will cause the exported file to be opened with Excel. This is useful, for example, for statistical data treatment with MS Excel.

To export the data click the  button. Then indicate the file name (the selected log name will by used by default) and click **Save**.

In the course of program use, the log book size increases until its number of records runs up to the number specified by the **Maximum log book size, lines** parameter in the **Miscellaneous** – **Automated Purging** tab in the Main Application settings window. After that, older lines are deleted from the log when new lines are added. To log more records, increase the parameter value. However, using a large log becomes inconvenient. In order to have a convenient log at hand and still keep the records, you can use the automated backup feature. To do this, enable the **Move messages to archives parameter** in the **Miscellaneous** – **Automated Purging** tab. Now an archive file containing older records will be created at regular time intervals (once every so many days, as specified by the **Create new archive every ... days(s)** parameter in the same tab). The current log will contain records for the number of days specified by the **When archive was created, leave records in the log book for the last ... days(s)**. The archive file has the *Archive <creation date>* name. Like the current log book, archived logs are created in the \ SERVICE folder.

Viewing, Renaming and Deletion of Archives

If at least one archive was created, a drop-down list will appear at the top of the Log Book tree where you can select the current log or any of the archive logs.

To rename an archive, select it from the drop-down list and enter the new name directly in the list. After that press the Enter key.

To delete an archive, select it from the drop-down list and click the right mouse button. In the pop-up menu select **Delete**.

The Message Manager allows you to view, print and delete received and transmission-ready facsimile messages, as well as to perform some other file operations.

The Message Manager also allows playing and deleting of the received and transmission-ready voice messages and announcement files, as well as performing some other sound file operations.

Both received facsimile messages and voice messages can be organized into local users' folders (in the Business version only).

The following functions are available for managing facsimile messages:

- View document in various scales (from 1:1 to 1:32) with Image smoothing mode;
- Rotate document on 90°, 180°, or 270°;
- Clear document of the "noise";
- Correct garbled lines;
- Print entire document or part of a document on the printer with a scaling option;
- Split long document into pages before printing;
- Send opened document as a fax;
- Save entire document or part of a document in the supported graphic format (TIFF, BMP, PCX);
- Delete documents;
- Multi-document view;
- Copy or organize into local users' folders (in the Business version only).

For managing voice messages, the following functions are available:

- Play voice message with the computer sound system or the modem;
- Delete messages;
- Copy or organize into local users' folders (in the Business version only).

{button ,JI(`',`OpenFile_man')} File Selection

{button ,JI(`',`ViewFax_man')} How to view a facsimile message

{button ,JI(`',`print_man')} How to print a facsimile message

{button ,JI(`',`move_man')} Received message dispatching

{button ,JI(`',`Save_man')} How to save an image in graphic format

{button ,JI(`',`EditInt_Man')} How to edit a facsimile message with the built-in editor

{button ,JI(`',`edit_man')} How to edit facsimile message with an external editor

{button ,JI(`',`voice_man')} How to play voice messages

{button ,JI(`',`send_man')} How to send out a message

If the Manager has been started by one of the VentaFax applications, a current document from this application will open (for example, transmission-ready message or the last of the received messages). To open an arbitrary file (facsimile or voice message), click the  button or press **Ctrl-O** keys and select the necessary one. You can select the next or previous document in the current folder by clicking the  button (**F7**) or the  button (**Ctrl-F7**) accordingly.

The folder tree and the file list located in the left Manager panel are an even more convenient way of selecting files. If this panel is not displayed, click the  button to open it. The folder tree is displayed in the top part. Here you will see some predetermined folders (such as **Inbox**, **Outbox** and **Service**) as well as user-defined folders. At the bottom of the panel the list of files in the current folder is displayed. Below is the drop-down **Message type** list. Here you can select which type of message to display in the file list: facsimile, voice messages or all messages. The file selected in the file list is opened after a brief pause.

When you open a multipage document, the first page is displayed. A panel with other page thumbnail images of other pages and arrows to navigate through them will open on the right. To view a page, click on its thumbnail image. The thumbnail of a page being displayed is framed in red. If the number of pages in the document exceeds the number of pages that fit in the panel, you can reach the necessary page with paging buttons located at the bottom of the panel. The number of the page selected is displayed below the thumbnails panel.

To change image size, click on the Scale drop-down list located in the toolbar under the push buttons and select the desired scale. To increase or decrease the scale, you can also use the "**+**" and "**-**" keys on the numeric keypad or the  and
 buttons accordingly.

With the Message Manager, you can print:

- the entire message;
- selected message pages;
- the selected part of a page.

To print a message, click the  button. Sometimes the page will not fit on the paper. This can happen if the printer is set with large margins or if multiple pages were transmitted as one. From the options offered by the program it is advisable to select "scale down to fit paper size" or "cut off to fit paper size" in the former case or "split into pages" in the latter. If you always use the same option and do not want the program to ask you again and again, check the **Use also when printing from Message Manager** box in the **Printing** – **General** tab.

Printing scale can also be set manually. To do this, specify the necessary scale in the **Printing scale** list under the toolbar.

Use the  button to select an area to be printed, if you wish to specify only a portion to be sent to the printer.

Nothing but the specified rectangular part of page would be printed if such area is selected (the selection mode can be toggled with the  button).

The Message Manager allows copying and moving received messages to users' personal mailboxes (in the Business version only). Click the **Copy** or **Move** button. In the dialogue box that opens, select user's folder, then click OK.

To create a personal mailbox, open the folder tree by clicking the button and select **Add**. Specify the user's folder path, enter his or her name and then click **OK**.

To delete a user's folder, right-click the pop-up menu and select **Delete**. The folder and its contents will not be deleted physically; only the link to this folder in the program will be removed.

Saving an image in a graphic format means the conversion of one or several fax pages or part of a page from an internal VentaFax format to one of the common graphic formats.

You can save images in the following formats:

- PCX;
- BMP (Windows);
- TIFF (no compression);
- TIFF (PackBits compression method);
- TIFF (Group3 compression method).

To convert an image, click the  button. Select the format to which you want to convert the document. Then specify a file name (the same as the source file by default). If the document contains multiple pages, you can indicate which pages to convert. If several pages were selected for conversion, several files will be created in an outcome, with names containing the numbers of corresponding source pages. Note that some graphic editors display monochrome document colors incorrectly (white color is displayed as black and black as white). If this is the case, to obtain a correct image make use the **Invert** option. When all parameters are set, click **OK**.

To edit a message, click the  button, therefore the external graphic editor or optical character recognition (OCR) program would start. The program must be specified beforehand by the **Graphic editor** parameter in the **Folder and Files** – **Editors** tab in the Main Application. If the facsimile message is not a TIFF Class F file, it will be automatically converted to TIFF Class F format file with the same name and TIF extension before loading in an application. Otherwise the file will be loaded as is, without conversion and renaming. The Imaging editor, supplied with Windows 95 and higher, is set by default. Unlike many other programs, it works with TIFF Class F facsimile format files correctly. Some graphic editors are unable to open facsimile message files received with failures (garbled files). For these editors to display such files normally, garbled lines must be corrected right after facsimile reception, while the file is being saved to the hard disk. In the Main Application settings, select the **Fax** – **General** tab and activate the **both on the screen and in file** parameter in the **Correct Garbled Lines in Received Faxes** group.

Open the voice message file. Select a playback device and click the  button. To stop playing, click the
 button. During playback you can move the slider to return to the previous part of message or skip some part of it. Clicking the
 or
 button would open the next or previous file accordingly. If clicked during the playback, the corresponding file would be played immediately. To play all files automatically, check the Auto-play box. To delete a message, click the
 button.

You can send a message directly from the Message Manager. For this, select the message to be sent, click the  button. The Message Transmission window with the file already specified will be opened, and you can transmit it as usual.
You can also send a message file via email by means of your system default mail program (such as Outlook Express). To do so, click the **Send via email**  button. Your email program "New Message" window will open with the message file already attached. Fill in the necessary fields and send your email message.

Scheduled delivery permits delayed delivery of single messages at an appointed time and/or for transmitting mass facsimile and voice message to many recipients. These functions are performed by means of the scheduled delivery subsystem. In the Home version the schedule can contain no more than three tasks, but in the Business version the number of tasks is unlimited.

The Scheduler displays information about the scheduled tasks. The schedule is a spreadsheet array with lines (records) representing each delivery task, each of which contains at least file name and phone (fax) number. The values of other parameters (such as the time interval between redial attempts, maximum number of repetitive attempts to deliver a message to the addressee, task attributes and transmission attempts due to several types of completion codes (errors) limitations) can be set by default or changed individually. Each element of the schedule has its own time mask, specifying time limits to deliver a message to the addressee, for your selection. Time limits can be set separately for each day of the week. The limits are set to within 1 hour and can be further refined to within 1 minute if necessary. The scheduled delivery parameters set by default are specified in the **Scheduled Delivery** – **For tasks by default** tab.

We shall use the Scheduler name (capitalized) for the application and a schedule (in lower case) for information stored in it. A **selection** is a group of records selected from the schedule with certain criteria, which can be specified by the user. There are some preset criteria (built-in selections) in the Scheduler:

Active – tasks not executed yet and authorized for execution at the moment.

Inactive – tasks not executed yet, but not authorized for delivery at the moment.

Completed – tasks executed successfully.

Failed – tasks not executed with execution terminated because some error attempt number went beyond the limit.

Put off – tasks suspended by user.

In addition to pre-defined selections, you can create as many selections as you need (user-defined selections).

The scheduled delivery can be active or inactive. To switch between the two, click the  button. If the button is locked, the delivery is active. If it is unlocked, the scheduled delivery is inactive.

Please keep in mind that when the scheduled delivery is active, an attempt to transmit a message in manual mode by dialing the number through the modem from the Main Application Message Transmission window will cause this task to be placed in the schedule.

If you exit the Main Application and the scheduled delivery is active, the VentaFax Engine program will start automatically upon Windows loading. Thus it would provide for execution of scheduled tasks.

To view a current schedule, click the  button.

{button ,JI(`',`create_sch')} How to schedule a delivery task

{button ,JI(`',`edit_sch')} How to Edit the Schedule

{button ,JI(`',`SchedWork_sch')} Scheduler data presentation

{button ,JI(`',`CreateNew_sch')} How to create a new selection

{button ,JI(`',`Purge_sch')} How to Purge the Schedule Automatically

Scheduling can be done when scheduled delivery is either active or inactive. In the former case new tasks will be processed immediately upon being added to the schedule. In the latter, you would have to activate scheduled delivery by clicking the button.
To make a schedule, prepare the message to be transmitted and, if you use the **Message Transmission** window, click the **Schedule** button.

If you use the Message Wizard, on Step 2 click the  button, then click **Next**.

The Home version allows scheduling of only one task at a time. In the Business version, the window will open, where you can then select one of the three scheduling methods:

- Schedule a single task using the recipient data entered manually;
- Schedule tasks for all recipients in a phone book;
- Schedule tasks for selected recipients in a phone book.

Let's consider each of these ways of scheduling in more detail.

Single Task

Select **Single recipient** item. If you use the **Message Wizard**, you will have to enter the recipient's data later. If scheduling from the Message Transmission window, data specified on the previous step will be used. Click **Next**. This is the only scheduling method supported in the Home version, thus the task type selection window will not be opened.

Tasks for All Recipients in a Phone Book

Select **Select from phone book** item and check **Select all the recipients in the phone book** parameter. From the list of directories, select the desired phone book. Click **Next**.

Tasks for Selected Recipients in a Phone Book

Disable the **Select all the recipients in the phone book** parameter, check **Select from phone book** and click **Next**. The Phone Book will open. Select the desired recipients and click the button. The Phone Book will close. Click **Next**. If you were unable to select all the recipients at once or would like to pick recipients from several directories, do the following. Select some recipients and click the button. The **Broadcast list** panel with selected records will open in the bottom of the Phone Book. Select the next group of recipients in this or some other phone book (to change a phone book, use the phone book tree in the left part of the window), and click the button again. New records will be added to the Broadcast list. After selecting all the desired recipients, click the button. The Phone Book will close, then click **Next**.

In the next step some delivery parameters must be set.

Transmission Attempts and Time Intervals

A set of control parameters is assigned to each task upon its inclusion in the schedule. Some of them are set by default but can be changed by the user if needed. Among those is the **Transmission Attempts Limitation** group of parameters. These parameters specify program response on possible errors. The default values of these parameters are set in the **Scheduled Delivery** – **For tasks by default** tab. Here you can both set the total maximum number of repetitions and specify the redial attempt limits due to certain types of transmission errors, including:

- no answer from recipient;
- line is busy;
- connection error;
- disconnection error;

- modem detected BUSY signals when playing sound;
- other errors.

Also this tab contains parameters that specify the minimum time interval between redial attempts for each task. These are the minimum time interval between redial attempts, s and inactivity time, s (in the **Scheduled Delivery** – **General** tab). To change the default values of these parameters, click the **Edit** button in the **Default Settings** group.

Delivery Time Mask

Specify the message delivery time mask. You can select **24-hour** and thus enable round-the-clock delivery attempts. To create a new time mask or edit an existing one, click the **Edit** button in the **Message Delivery Time Mask** group.

Message Delivery Time Limits

In addition to the time mask, sometimes it is useful to limit the message delivery time interval. If you don't want the delivery to start until a certain time, check the **Not sooner** box in the **Message Delivery Limitations** group of parameters and specify time and date when the delivery is allowed to start. If you want the delivery to stop after a certain time, check the **Not later** box and specify the time and date when the delivery should cease.

Repetitive Delivery

Sometimes it is required to redeliver a message after some period of time, to remind a customer about payment, for example. To do that, select **Repeat delivery** parameter in the **Repetitive Delivery** group, specify how many times to repeat and set time interval between repetitive deliveries.

Message Priority

Messages with higher priority will be processed first using scheduled delivery. The priority can range from 0 to 16. By default, the priority of 8 is set for all tasks. If you want a scheduled message to be sent out first, increase the priority. On the contrary, if you do not want the task to hinder the remaining ones and to execute it later, reduce the priority. The task priority can automatically decrease over time. For that set a nonzero value for the **Priority decrement** parameter. In this case the task priority will be reduced after each delivery attempt. For priority to start decreasing, the **Minimum** parameter must be set lower than the **Initial**.

Answer Recording

Sometimes when sending out voice (telephone) messages the recipient answer recording is required. To do that, select the **Record an answer** parameter in the **Answer Recording** group. Also specify the maximum answer recording time.

Voice answer also can be recorded during a fax transmission attempt. For details, see the VentaFax operations at facsimile message transmission with program telephone line state recognition enabled section.

Playing Individual Greeting Announcements

The program can play individual greeting announcements instead of those specified by the **Announcement before sending a fax** and the **Announcement before sending a voice message** parameters in the **Folders and Files** – **Service Files** tab.

For this feature to work, two conditions must be met:

– the recipients' phone numbers must be selected from a phone book when scheduling a delivery task;

– associated sound files must be specified in corresponding entries of the phone book.

To use this feature, select the **Use an associated file from a phone book instead of the announcement** parameter.

After all parameters are set, click **Finish**.

This parameter sets up the maximum number of message transmission attempts in case if because of any reasons it was not delivered from the first attempt.

This error arises if neither the signal of the answering fax, nor the voice answer were detected during the time set by the **Wait for answer no more than, s** parameter in the **Transmission** – **General** tab (most likely, it means that the handset simply was not picked up). Probably, the recipient's fax was not switched to auto-answer mode, or fax signal or voice answer were confused with noise in a line due to poor connection quality, or you may have entered a wrong number. There is no sense in setting value of this parameter high, if **Line is busy** event is detected normally.

Basically, this is not an error, just the recipient's telephone is busy. If it is really hard to reach a recipient, set a higher value. However, some modems are uncertain in detecting **busy** signal with some telephone lines, considering that recipient does not answer. In this case increase the **No answer from recipient** parameter value.

This error arises if the modem has detected fax machine or fax modem on the other end of a line, but could not transmit a page. Most often it suggests poor line quality in the given communication session or low **Wait for answer no more than, s** parameter value in the **Transmission** – **General** tab, so modems simply have no time to connect. This parameter concerns facsimile message delivery only and has no bearing on the delivery of voice messages.

Disconnection error arises in case if no confirmation has been obtained from the receiving party after page transmission meaning it probably was not received. There can be several reasons for this:

- disconnection during page transmission;
- the receiving fax was switched off during reception or is out of paper;
- page was transmitted successfully, but your modem detected no confirmation on it.

This parameter concerns facsimile message delivery only.

This error means that your modem has detected busy signals while playing voice message in a telephone line. Or, when sending a fax with program recognition enabled, no facsimile connection has been established after voice answer. Probably, the recipient has hang up without listening or the disconnection has taken place due to telephony switch fault. This error can also arise if disconnection has happened before the reply message was fully recorded if you are sending out messages with answer recording, i.e. the recorded reply is shorter than the **Record voice message for no less than, s** parameter value (**Reception** – **Automatic** tab).

Other errors are all the remaining errors that can arise during transmission. Leaving alone fatal errors due to hardware faults and incorrect modem parameters, there are the following errors of this type.

Modem detected no dial tone (Er 25). This error arises, if modem has not detected dialing tone after going off hook. The probable reason for that can be the conversation on the parallel telephone (if the one is present) or a line fault.

Terminated by user (Stop) arises, if you have clicked the **Stop** button during current session.

Specifies the minimum time interval, in seconds, to elapse for the given message retransmission to start. For example, if there is only one task left in the queue, next transmission attempt would be made not sooner than in the time specified.

In scheduled delivery mode, this allows adjusting the pause between the end of one session and the beginning of another. If you want to stay connected and still be reached when scheduled delivery is active, set this parameter value to nonzero. The pause between sessions is made after any scheduled delivery attempt and is identical for all tasks. Active right after setting on.

The schedule is a table with each line representing one task entry. Each record consists of several fields. The Scheduler has a sort by any field option, both ascending and descending. To sort entries, click on the field name. The field the schedule is currently sorted by is marked with a blue triangle in the field header. Its vertex indicates the sort order. Click on the header to reverse sort order.

You can also set a special font and background color for each selection. To do that, click the  button or press **F2** key and select the **View** tab. Here you can also indicate which fields to hide and which to display, and change the field sequence in a spreadsheet as well. Dragging the title border with the mouse can change the width of each field.

The following mnemonic icons can be displayed on the left side of the schedule entries:
– task awaits its turn and has a 24-hour time mask;
– task awaits its turn and has other than 24-hour time mask;
– message transmitted successfully;
– message not transmitted, transmission attempts ceased;
– delivery is temporarily stopped by user;
– task under execution in the moment.

Let's examine some Scheduler fields in more detail.

Scheduled

Task scheduling time and date are displayed in this field.

Attempt

Here the earliest time for the next transmission attempt is displayed. This is not to mean that the attempt would be made at this particular time – it would be made not earlier than indicated here. The field is empty if no delivery attempt has been undertaken yet, unless the **Not sooner** parameter was set on scheduling the given task.

Complete before…

If the **Not later** delivery time is specified on task scheduling, it will be displayed in this field. Otherwise, the field remains empty.

Completed

This field displays time and date of the last delivery attempt for tasks either executed successfully or with delivery ended due to excess number of errors.

Open a tree by clicking the  button and then click the **Create new** branch. The **Selection settings** window will open. By default, the **Selection X** name, where **X** stands for a new selection number, is assigned. You can change this name if necessary. If you do not want certain records to be displayed in the selection, uncheck the corresponding parameters. After setting all necessary parameters, click **OK**.

This feature is available in the Business versions only.

In the course of Scheduler use, the schedule size constantly increases. To remove completed tasks, check the **Automated purging of the schedule** parameter in the **Miscellaneous** – **Automated Purging** tab in the Main Application settings window. Also set the **Purge completed tasks after ... day(s)** parameter value. Please note that tasks are purged only when you add a new task to the schedule.

Modem command set contains information necessary for the program to find common language with the modem. You can choose between Fax Class 1, 1.0, 2 or 2.0. To find out which commands sets are supported by your modem, consult your user's manual. If your modem supports both Fax Class 1 (1.0) and Fax Class 2 (2.0), it is recommended to use the Fax Class 1 (1.0) command set. This will enhance communications between the program and the modem. If the modem command set is unknown, select **Program defined**.

There are plenty of command sets for voice modems. However, for the most part the supported voice command set can be detected automatically, if you click the **Detect** button.

Here you can specify a file (already prepared and saved in an internal VentaFax format) to be sent to anyone who would call with the fax (in the fax request, or polling mode). In this case the document specified would be transmitted to the caller. The transmission will not happen if caller would transmit a fax by himself or herself.

Gain and **AGC** parameters allow you to amplify the voice signal being recorded by either setting a factor or selecting automatic gain control (AGC).

It is recommended to switch off the AGC mode when recording answering-machine announcements since record quality can be lower. AGC is useful when recording a conversation if your voice is much louder than the other party's voice, as well as in all cases when software recognition of signals is used.

Automatic gain control (AGC) operation is controlled by the **Treat max. signal volume as silence at ... rel. units** parameter value in the **Voice** – **Recognition of Signals** tab. The higher the value, the lower the gain of the signals below this volume.

This command is used

- with manual fax transmission;
- with automatic fax transmission and the use of voice functions;
- with requested fax transmission with the use of remote control.

The default value is ATS6=2X3D.

Modems intended for some countries, Germany, for example, cannot execute ATD command without phone number specified. Sending faxes in one of the above ways with such modems results in **Invalid value of the "Command for starting fax transmission in established connection" parameter** (Er 34) error. If you are unable to change the modem built-it county code, try specifying any digit here (preferably in the tone mode), for example

ATX3DT1

Usually modems of this type also cannot receive messages in manual mode since the ATA command with no incoming rings present is interpreted as an error.

If you were unable to tune up this parameter, disable the use of voice functions during fax transmission by checking the **Disable voice mode when sending out a fax** parameter check box in the **Fax** – **General** tab.

For many modems the change of initialization string from ATS6=2X3D to ATS6=0X3D speeds up switching to fax mode. It can also enable sending out faxes with the use of voice functions for USR/3COM modems (see **Features of certain modems** section for details on these various modems operation). However, some modems can ignore new value or return ERROR for such a command. The latter would disable fax transmission and the session would break with an Er 34 completion code. Whatever the case, after changing this parameter make sure that fax can be transmitted in manual mode normally.

Message file selection

Turns page about at transmission

If background image file is specified, it would lay under a message being prepared. To find necessary background image, click button to the right of the field.

This option is enabled in the **Business version** only.

If header file is specified, its image would be placed in the beginning of the message being prepared. If footer file is specified, its image would follow the message being prepared. To find necessary files, click button to the right of the corresponding field.

Please note that unlike background image, header and footer do not lay under a document, but are added to it from above and from below accordingly. If header and/or footer are too high, the total document length would increase considerably. This can force the receiving fax to scale down the document or to split it into standard pages. If that is the case, you can reduce page height in a program that is used for document preparation.

Header option is enabled in the **Business version** only.

Here you can switch the fax information header language from national to English. This can be useful for sending faxes abroad.

If checked, half-sized document copies would be produced (4 pages in one).

This parameter specifies flow control method in the fax mode.

By default, the **Program defined** option is set, i.e. the program would use the flow control method which it considers appropriate for the given modem. The program selects from two options detailed below. Changing this parameter makes sense only if the flow control does not work. External indications of such an event are:

- **Unforeseen error when sending data to the modem** (Er 22), arising at page transmission;
- Only the onset of image or fragmented image is received (of course, if the reception fault is not the case). Moreover, in that case the page image will move out of the fax set smoothly, whereas in a normal situation its speed depends on the black and white sections ratio: the white, empty parts are transmitted much faster.

If you specify the flow control method explicitly, then to communicate with the modem directly via COM port (as opposed to TAPI), you should add a command that enables the selected flow control method to the **Additional initialization string** in the **Modem** – **Interacting with Modem** tab. The same should be done for interacting via TAPI, if the modem is specified in the system as "Standard modem".

When in voice mode, many modems allow using additional devices sharing the telephone line. Several device combinations can be offered for your choice.

Please keep in mind that not every modem allows using all device possible combinations. The only device you can always work with is a telephone line.

Even if you can select some combination for the voice command set installed, this does not signify yet that this combination would work. You need to make sure that the selected combination really provides the necessary effect. This is especially true for the speakerphone mode. In this particular case, the **Modem voice data format** parameter value in the **Voice** – **General** tab is important for some modems. It may well be that the speakerphone mode can be used with only one of the formats. Usually this is a format set by default, which is marked with an asterisk (*). Using the speakerphone at voice recording and/or playback via the modem that can be enabled with these parameters is not a standard modem feature, although it does work with some. The standard speakerphone use with "Telephone line" device is detailed in **The Speakerphone Mode** section. If the speakerphone mode of your modem is performed via a computer audio device, disable the **Real-time message review** mode ( button) when selecting this device.

In any case, if you have selected any combination besides the "telephone line" and this combination does not work, it means your modem does not support it in the selected mode. Usually this is demonstrated by the **Unforeseen error when receiving data from the modem** (Er 26) completion code. There is no need to write us about it – there is nothing we can do about it.

When interacting with modem via TAPI, you need to indicate which of the installed modems the program should work with. Even if you really have only one modem, there can be several modems installed in a system. This can happen if you had replaced the modem or reinstalled it in a system.

Interacting via TAPI is more effective than via COM port directly. The main advantage is that outgoing calls with some other program (for Internet access, for example) would be still enabled if the modem is set to auto-answer mode. Besides, TAPI modem description allows correct answer on incoming calls, phone number dialing, data flow control, distinctive ring services, and Caller ID operation (for the modem specified).

When interacting with modem via COM port you need to specify the modem port number.

Interacting via COM port with auto-answer mode enabled does not allow you to make outgoing calls with some other program. It would return the **Modem port is occupied by another application** error.

When checked, this parameter activates the recording of interactions with modem in a file. It is not recommended to enable this parameter needlessly, as this file, unlike the log book file, has no size limitation. Thus, when this parameter is enabled, the file can expand indefinitely.

The **Modem log level** parameter specifies how detailed the modem log would be. Should you have any problems with VentaFax, you can contact the developers. Most likely, they will ask to send the modem log file and suggest the log level to set for it.

Telephone line state recognition can be performed both by the program as well as by the modem. If recognition is performed **by the modem**, it would return special codes at busy signal detection, so the program can act accordingly. However, it is possible for a modem to confuse "busy" and a human voice, for example, in an answering machine greeting announcement. This would cause the answering machine malfunction. If this is the case, uncheck this parameter.

The telephone line state recognition is **by the program** is performed with frequency analysis algorithms, thus allowing confident recognition of various signals and even voice presence detection. However, the program recognition mode is incapable of analyzing telephone line state during announcement playback.

Checking **Recognize line status when dialing without sending a message too** parameter box will force the program to switch modem to the speakerphone mode or DTMF playing mode only after it makes a decision that a handset has been lifted by a human (see **VentaFax Operations at Dialing a Phone Number** section). Otherwise, the modem is switched to one of these modes right after dialing a phone number, so you have to decide whether you have reached a recipient or not.

Limits the conversation recording time on clicking the  button.

Specifies the delay before playing the answering machine greeting. When set to zero, the beginning of the announcement can be missed due to some modems voice mode operation characteristics.

An attempt to receive a fax will be made if silence is detected during the specified number of seconds after the auto-answer on an incoming call. This feature is useful for receiving documents from faxes that do not play specific tones (signals) in the telephone line. Detection of silence in the telephone line after voice message recording will cause the disconnection. This feature is useful for telephony switches that do not play short tones after the disconnection by another party.

This parameter is used in telephone line state analysis. Telephone line signals are detected only if their volume is higher than the one specified by this parameter. This parameter also influences the software automatic gain control (AGC): the higher the specified silence level, the lower the gain of weaker signals. In fact, this parameter is also used for the very detection of silence in the telephone line. This may be necessary, for example, when a ringing fax or modem plays no specific tones (signals) in the telephone line. If in this case the program detects silence in the telephone line, it starts, depending on settings, to receive a facsimile message or to redirect the call to an awaiting application. It is also important to detect silence if your telephone company's switch does not play short tones after disconnection by another party. In this case the detection of silence on the telephone line during recording of conversations will force the program to disconnect.

The parameter value can range from 0 to 32000. Setting it to zero disables silence recognition. If the program does not perform actions expected for silence detection after a lapse of time specified by another parameter in this tab, the value should be increased.

To adjust the parameter, right-click the VentaFax icon in the taskbar and select the VentaEngine. You will see charts and the LM ratio, the current signal volume. Note the signal volume when there is no conversation taking place in the recording. Set the parameter value 1.5 times higher than the signal volume at that point.

Sets printing rules for received messages larger than printer page size.

Specifies the type of Message Transmission window to be opened automatically after printing from external applications on the VENTAFAX virtual printer.

Transmission with the **Message Wizard** requires greater number of steps, but gives more options. For example, here you can add header and footer to the document being transmitted.

Message Transmission Window allows sending out a message with a single click.

If unchecked, facsimile message resulting from printing on the VENTAFAX virtual printer would be deleted after successful delivery. (Only the VentaFax format file in the outbox folder would be deleted, not the original document). If you have selected a file from the Message Transmission window or sent a message with the Scheduler, the delivered message would not be deleted.

This tab contains parameters that specify current location. These parameters must be specified correctly for prefixes to be set when dialing other areas or countries. To set them up, click **Edit**. For additional information, see Windows help system.

Specifies phone number style in the **Message Transmission** window. If **Full** style is selected, an entire number with all service commands would be displayed. **Simplified** style displays digits only, without additional commands.

Allows redefining Windows-specified dial modifier to wait for second dial tone (usually **W**). This may be useful for increasing waiting time. For example, changing "W" with ",W" or even ",,W" gives the modem more time to wait for a dialing tone.

If selected, a transmission ticket would be printed on the printer specified after each successful transmission. This option is available in the **Business version** only.

If facsimile connection establishment time period would exceed this value, the disconnection with **Connection error** (Er 18) completion code would result. Time reckoning starts with the remote fax answer detection and ends with the beginning of page reception or transmission.

You are probably familiar with such a situation: you have transmitted a fax, but only the first part of it has been received and recipient asks you "to transmit a page from the other end". This is what this item is supposed for – it rotates the page for 180 degrees. Only the first of all pages being transmitted would be turned about.

Enables error-correction mode (ECM) in reception and transmission accordingly. This must be enabled both on receiving and transmitting end for this mode to be used.

In ECM fault frames are retransmitted. Theoretically, on a very poor line this process can continue without limit. This parameter limits the number of repetitions. The limitation is necessary for not to occupy the line in vain and bear no unnecessary costs in case of the time rate for telephone communications.

Unregistered version includes small advertising banner in each facsimile message transmitted and displays an "Unregistered" notification. After registering a program these messages disappear automatically.

Header can contain "**Attn.**", "**To**", "**From**" and "**Fax ID**" fields.

"**From**" field can contain any characters.

In the "**Fax ID**" field, your phone number is usually included, in a way you want it to appear in each page's title line. Not only this parameter is used in a header, but is also transmitted to the calling fax or fax being called in a special way on connection. Thus, it may contain digits, "- +, . : ; ( )" characters and Roman letters, no more than 20 characters in total.

You can disable a header, but not the sending of Fax ID.

When checked, the fax header will contain "Transmitted with VentaFax software" phrase.

The list contains a set of selected modem voice data formats supported by VentaFax. Each format consists of three parts: audio compression method, bits per sample and sampling rate. Format determines quality of voice message recording/playback via the modem and affects the size of recorded file. The format used by default is marked with an asterisk (*).

The recording level set here controls the corresponding modem hardware amplification (gain) by means of special commands (if supported by the modem). Setting this level too high may cause audio signal distortion with some modems. With some modems, minimum (zero) recording level actuates hardware automatic gain control (AGC). If signal strength recorded by the answering machine is insufficient, you can use software amplification parameters, in particular, software AGC.

The play level set here controls the corresponding modem hardware amplification (gain) by means of special commands (if supported by the modem).

Specifies the number of short tones to receive after which the program would consider that the recipient's number is busy. The higher the value of this parameter, the more reliable (and longer) the recognition would be. This parameter is active in all cases of busy detection, including those when the recipient has hang up in answering machine mode before the answer recording time has elapsed. Also for this purpose, telephone line state recognition by the program must be set in the **Voice** – **Recognition of Signals** tab.

This parameter allows selecting from four formats: PCM, MS ADPCM, IMA ADPCM or GSM. PCM format is the simplest way of sound coding that does not support compression algorithms. It is impractical to use it when hard disk space is scarce. Another two formats use compression algorithms for sound coding, thus allowing to reduce the recorded file size by a factor of 4 as compared to PCM. IMA ADPCM format consumes less processor time, than does MS ADPCM. GSM sound files can be eight times smaller as compared to PCM files. All these file formats are Windows standard, i.e. they can be reproduced by the standard system applications. You can be sure that other Windows users will be able to play such sound files if you will send them. The recipient may be required to install the standard "Audio Compression Codecs" device: Control Panel – Add New Hardware – Select the hardware from a list – Sound, video and game controllers – Audio Compression Codecs.

These codecs are not required for playing sound files by means of the VentaFax.

These parameters are concerned with formation of various tone signals played in a telephone line by the modem. Signals can be formed in voice mode or at the modem commands.

Check this parameter if you want caller data to be displayed on the screen.

Time for caller data window to be displayed on the screen.

These parameters specify calling tones emulating signals frequency and duration, as well as delay between them so that these tones would resemble your telephony switch signals. If well adjusted, the caller would feel you had not picked up the handset.

This parameter specifies the number of calling tones to emulate after the modem goes off hook before it would hang up.

If the identified phone number is exactly the same as one of the Black List numbers (with Black List call filtering enabled), the connection would be terminated immediately, or calling tones would be emulated so that the caller would feel you had not pick up the handset. If White List connection filtering is enabled, only those callers whose numbers are present in the White List and identified correctly and completely would be able to reach you.

The list of phone numbers for which the answering machine substitution rules are defined.

Enter the phone number for which to redefine some answering machine parameters into the **Number** field. Selected parameters would be redefined.

If enabled, all received messages would be routed not only to the incoming messages folder, but to the "Inbox" folders of MS Outlook and Outlook Express as well. If **Except for those received manually** parameter were selected, only automatically received messages would be copied. If **Move** option is selected, then a file is to be deleted from the inbox after copying to the Outlook folder.

If selected, the specified sound file would be reproduced in telephone line after modem goes off hook in answering machine mode.

Here you can indicate whether the **Announcement before sending a fax** (for example, "Press the Start button on your fax machine now") or the **Announcement before sending a voice message** ("Listen to a voice message") should be made. Any prerecorded WAV file can be used as an announcement.

Here the answering machine remote control script file is specified.

Here you can specify the name of external application, for example, text editor, to be called on clicking the  button in the Main Application toolbar. By default, the WordPad editor supplied with Windows is used. If necessary, you can replace it with any other editor. The editor executable file can be found by clicking the Browse button to the left of this field.

Here you can specify the name of external graphic editor or optical character recognition (OCR) program to be called on clicking the  button in the Message Manager toolbar. The program executable file can be found by clicking the Browse button to the left of this field. By default, the **Imaging** editor supplied with Windows 95 or higher is used.

Here the batch name rules are set. Batches are created in the Message Transmission window by clicking the  button.

Folder where VentaFax appearance files (skins) are located.

Language selection.

Specifies time lag (in milliseconds) for hints to pop up after you have placed a mouse cursor on any control item.

Settings tab selection tree.

Sound source selection.

Voice message playing device selection.

Message sampling rate.

Here you can set current message as one of the answering machine announcements. Select the type of announcement and click the  button near this field. If **Other Announcement** is selected, the recorded file would be simply copied to the \SERVICE folder.

This section describes errors that can occur during program operation.

Unable to open fax message file (Er 1)

Program is unable to open facsimile message file assigned for transmission. This can happen in scheduled delivery when the file has been deleted or the device where it is located is inaccessible at the time of transmission (e.g., if the file is on a floppy diskette and the diskette is not in the floppy drive).

Error reading fax message file (Er 2)

File exists but cannot be read. Probably, something is wrong with the drive.

Unable to create fax message file (Er 3)

This can happen during reception if the program is unable to create a received message file in the specified inbox folder.

Error writing fax message file (Er 4)

This normally indicates existence of problems with the drive where inbox folder is located.

Voice or fax command set specified incorrectly (Er 6)

Incorrect fax command set (**Modem** – **Facsimile Settings** tab) or voice command set (**Modem** – **Voice Settings** tab) is selected. If you do not know which command set to select, click the **Detect** button in the **Modem** – **Voice Settings** tab. If for any reason you would need to change voice command set, perform auto-detection first. Changes take effect after clicking **OK** or **Apply**.

Voice command set selected is not supported by the modem (Er 7)

Make sure the voice command set is set correctly (see the **Modem** – **Voice Settings** tab). If this error appears only when the program performs phone number dialing operations, you probably have the **Dial a number in data mode before entering voice mode** parameter enabled (in the **Transmission** – **Dialing** – **Advanced** tab) and this is not supported by your modem. Disable the parameter.

Terminated by user (Er 8)

Process was terminated by user (user clicked the **Stop** button).

No answer from recipient (Er 15)

If **Recognize telephone line state** – **for outgoing calls** parameters (**Voice** – **Recognition of Signals** tab) are enabled, most likely the handset on the other end was not picked up. If these parameters are disabled and the program cannot recognize the telephone line state, this error will also occur when the number dialed is busy and when voice answer has been detected on fax transmission.

Line is busy (Er 16)

Modem has detected or program has recognized busy signals (short tones).

Connection error (Er 18)

Modem detected recipient's fax answer but was unable to establish a connection during the time period specified by the Wait for connect no more than, s parameter in the **Fax** – **General** tab.

Disconnection error (Er 20)

For reception, this means the program received the last-transmitted page, but not confirmation that it was the last page of a facsimile message. For transmitting, this means the program has sent out the page, but did not receive confirmation.

Unforeseen error when sending data to the modem (Er 22)

These errors suggest that the program was unable to determine the cause of an error. Probably, the modem could not execute a command sent by the program. Usually this concerns incorrect voice

command set selection in the **Modem** – **Voice Settings** tab.

Command is not recognized by the modem (Er 23)

Modem returned Error for a command sent. Most likely, an incorrect voice command set is selected in the **Modem** – **Voice Settings** tab.

For some modems answering on the first ring is not recommended because the modem may not respond to commands during the process of phone number identification, which is transmitted as Caller ID after the first ring. Thus, an Er 23 error message is displayed. If it is absolutely necessary to force the modem to answer on the first ring, make sure this works with your modem, since the program cannot disable the Caller ID feature when interacting with the modem via TAPI.

Modem detected no dial tone (Er 25)

See Disconnection with "Modem detected no dial tone" message in the Troubleshooting section.

Unforeseen error when receiving data from the modem (Er 26)

See Connection is terminated with "Unforeseen error when receiving data from the modem" error in Troubleshooting section.

Too many errors in reception (Er 27)

This error usually occurs during reception if communication with the transmitting fax has been terminated, but the receiving modem has not detected it and mistakes telephone line noise for a useful data signal.

Number of ECM repetitions is exceeded (Er 28)

Rare error arising on very poor lines. To transmit a fax on such a line in error correction mode, you need to increase the Send each frame no more than, x times parameter value in the **Fax** – **Error Correction (ECM)** tab or lower the connection rate in the **Fax** – **Rate Limitations** tab.

No response from fax (Er 29)

The modem has not detected any response signals from the remote fax, so it could not begin the connection establishment procedure. Never pick up a telephone extension during facsimile exchange. In a manually established connection follow the procedure prescribed in the Manual transmission features section.

Modem port is occupied by another application (Er 30)

No modem port (Er 31)

Modem port is occupied by another application or absent (Er 32)

Invalid value of the "Command for starting fax transmission in established connection" parameter (Er 34)

Check out this parameter value in the **Modem** – **Facsimile Settings** tab.

Dialing is locked by the modem according to regional requirements (country code) (Er 36)

The phone number being dialed was added to the modem **Black List**. Several countries (for example, Germany) limit the frequency of phone number redialing. Dialing the same number too often is not allowed. Modems sold in such countries have the special blocking so you cannot redial the number immediately. Some modems have a "country code" setting. This setting can be adjusted by the special command or by the modem driver settings (for Winmodems of softmodems). For additional information, see the modem manual.

Redialing is locked temporarily according to regional requirements (country code) (Er 37)

The phone number being dialed was added to the modem **Delayed List**. Causes and actions are similar to Er36.

Unanswered incoming call (Er 38)

This completion code means the program detected incoming rings but for some reason did not answer. This may happen if the number of incoming rings was lower than the one specified by **Answer on, ring** parameter in the **Reception** – **Automatic** tab. Alternatively, this situation may arise when none of the auto-answer modes (**Announcement**, **Fax**, **Record** or **Caller ID**) was enabled. The same completion code results when distinctive ring services mode has been enabled and the type of call was not the one VentaFax has been instructed to answer.

Error reading time masks file (Er 51)

For some reason delivery time masks are absent. To perform scheduled delivery, you need to create them again (for example, by starting the **Scheduler** application).

Unable to open voice message file (Er 61)

This can happen in scheduled delivery when the file has been deleted or the device where it is located is inaccessible at the time of transmission.

Invalid format of voice message file (Er 62)

Although a WAV file, the voice message file is not a sound file or is damaged.

This voice message file format is not supported (Er 63)

WAV file of this sort cannot be used in VentaFax.

Fax response detected when trying to send voice message (Er 64)

This error can occur when sending out voice messages.

Modem detected BUSY signals when playing sound (Er 66)

Connection was terminated before telephone message was completely sent. Or, during fax transmission with program recognition enabled, a fax connection was not established after voice answer. Probably, the recipient hung up without listening.

Disconnected or too short message recorded (Er 67)

The first reason for this error to arise is the detection of busy signals during answering machine announcement playback. The second reason is the detection of busy signals during answer recording, if the recorded reply is shorter than is specified by the Record voice message for at least, s parameter in the **Reception** – **Automatic** tab.

Incoming fax signal detected when fax reception is not allowed (Er 68)

An attempt was made to send you a fax, but fax reception mode was disabled.

Handset lift detected on the telephone connected to modem or telephone extension (Er 69)

The modem detected that the handset on the local telephone connected to it was picked up. This can happen in the event of an incoming call soon after the modem answer and in the event of an outgoing call soon after dialing the phone number.

If the handset actually was not picked up, this may suggest modem misconnection. Make sure that the cable from the phone jack is connected to the modem's Line (Telco) socket and not to the Phone socket. In case if the modem is properly connected, but the error remains, you probably have one of those modems that incorrectly recognize local telephone handset pick-up after switching to voice mode. You need to select the **with a delay** or even the **off** option for the Use modem recognition of local telephone handset pick-up parameter in the **Voice** – **Recognition of Signals** tab.

Modem doesn't support voice functions (Er 71)

Modem installed does not support voice functions or is unknown to VentaFax.

Modem doesn't support speakerphone mode (Er 72)

Modem installed does not support speakerphone mode or this mode is applied in a manner unknown to VentaFax.

Unable to open answering machine remote control script file (Er 75)

The file specified in the **Folders and Files** – **Service Files** tab is not present.

Recipient answered but did not start fax reception (Er 76)

The program has recognized that the recipient being called has picked up the handset, but did not try to receive a fax.

Call rejected. Number is found in black list (Er 77)

Identified phone number is listed in the **Black List** and Black List calls filtering is enabled in the **Caller ID** – **Calls Filtering** tab.

Call rejected. Number is not found in white list (Er 78)

Identified phone number is not listed in the **White List** and White List calls filtering is enabled in the **Caller ID** – **Calls Filtering** tab.

Voice data format is not supported by the modem (Er 80)

The Modem voice data format parameter is incorrectly set in the **Voice** – **General** tab or in the Recording and Playing Voice Messages window.

Invalid value of record or play volume (Er 81)

The Record or Play volume is incorrectly set in the **Voice** – **General** tab or in the Recording and Playing Voice Messages window.

Inadmissible recording or playing device selected (Er 82)

An invalid device is selected in the **Voice** – **Devices** tab.

One of the remote control script limitations is exceeded (Er 83)

See Limitations in **The Answering Machine remote Control Script Editor** section.

Maximum total duration of registered conversations for this version is exceeded (Er 86)

See VentaFax versions review. Restrictions in Home and unregistered versions section.

Unable to initialize TAPI (Er 100)

Apparently, some of the programs that use TAPI have crashed. You need to restart Windows.

Selected modem not found (possibly deleted in Windows Control Panel) (Er 101)

Select the necessary modem in the **Modem** – **Interacting with Modem** tab. Possibly the external modem was turned off at Windows startup.

Modem occupied by another application (Er 102)

Possibly the modem is being used by a program that interacts with it not via TAPI, but directly via the COM port.

Unable to communicate to modem (Er 103)

Select the necessary modem in the **Modem** – **Interacting with Modem** tab.

Invalid telephone number format (Er 110)

TAPI cannot interpret the phone number entered.

Invalid country code (Er 111)

TAPI does not recognize the specified country code.

No target for data call handoff (Er 114)

The **Transfer data calls to awaiting programs** parameter in the **Reception** – **Automatic** – **Call Discrimination (Adaptive Answer)** tab is enabled but there are no programs waiting for such a transfer.

Data mode connection failed (Er 116)

The **Transfer data calls to awaiting programs** parameter in the **Reception** – **Automatic** – **Call Discrimination (Adaptive Answer)** tab is enabled. An incoming data call was detected according to the criteria specified, but an attempt to establish a connection in data mode failed.

Invalid adaptive answer command (Er 117)

The **Transfer data calls to awaiting programs** parameter in the **Reception** – **Automatic** – **Call Discrimination (Adaptive Answer)** tab is enabled. An attempt to establish a connection by means of the adaptive answer (fax/data) command was made at the incoming call according to the criteria specified, but the modem does not support this command. Try another adaptive answer mode. The modem probably does not support adaptive answer commands.

Data call handoff request satisfied (Er 119)

Subsequent modem operations in data mode are defined by the program to which the request was transferred.

Modem is not capable to work in Self-mode (Er 170)

Error transferring data from modem memory (Er 171)

These errors can occur with USR/3COM modems.

To control VentaFax from external applications, for example, from the Task Scheduler, it can be started with certain options (modifiers). The program can be restarted with modifiers even if it has been already started. For the most part, this is used for switching auto-answer mode on and off, for schedule creation and updating and for delivery mode control.

The command line for starting the program looks like this:

<Path> ventafax.exe </option1>... </optionN>

Options

/r – answer in fax reception mode (as with Start button), but without manual mode actions confirmation (even if such confirmation is required);

/u – program shutdown. VentaFax Engine (VFDRV32.EXE) shutdown depends on **Leave in memory when unloading the Main Application** parameter state (**Miscellaneous** – **Engine** tab);

/u0 – program shutdown. VentaFax Engine remains in memory;

/u1 – program shutdown with unloading VentaFax Engine from memory;

/b – terminate current session;

/a2[+] /a2- – activate/deactivate scheduled delivery;

/init:"AT commands" – set additional initialization string;

/sound[+] /sound- – enable/disable sounds on events;

/speakcid[+] /speakcid- – enable/disable identified phone number pronunciation;

/poll[+] /poll- – enable/disable reply on remote request.

/aa- – disable the adaptive answer mode.

/aaf /aad /aa1 /aa2 – disable one of the adaptive answer types (fax, data, adaptive modem answer (type 1 or type 2)).

/recon – enable conversation recording;

/recoff – disable conversation recording.

Answering Machine Control

/a1[+] /a1- – enable/disable auto-answer mode;

/a1:N – enable auto-answer mode, where N is the number of ring for the program to answer on;

/fax[+] /fax- – enable/disable fax reception mode;

/cid[+] /cid- – enable/disable caller ID;

/rec[+] /rec- – enable/disable voice recording.

Announcement Control

/gr[+] /gr- – enable/disable answering machine greeting announcement;

/concl[+] /concl- – enable/disable answering machine concluding announcement;

/grfx[+] /grfx- – enable/disable announcement before sending a fax;

/grvm[+] /grvm- – enable/disable announcement before sending a voice message;

/gr:"filename.wav" – set answering machine greeting announcement;

/concl:" filename.wav" – set answering machine concluding announcement;

/grfx:" filename.wav" – set announcement before sending a fax;

/grvm:" filename.wav" – set announcement before sending a voice message.

Service File Setting

/scrpt:" filename.vfa" – set answering machine remote control script file;

/poll:"filename.vfx" – set file for remote request (polling)

Scheduling Delivery Tasks

/t:<number> – phone (fax) number;

/f: "filename.*" – the name of the file to be transmitted. If it is not the facsimile file or sound file, it will be converted to the facsimile format prior to scheduling;

/c:<recipient> – information for "To" field in the fax header (usually a company name);

/n1:<name 1> – information for "Attn." field in the fax header (usually recipient's name);

/n2:<name 2>

/n3:<name 3>

/n4:<name 4>

/h – start minimized;

/s – schedule a task. Ignored in the absence of /t: or /f: option;

/g:<number> – time mask number (by default, 24-hour time mask is set);

/as[-] – starting the VentaFax with this option forces the program to schedule tasks automatically. Thus, printing of any file on the VENTAFAX printer will create a new task in the schedule. Other task parameters (to, phone number, time mask) are set by means of other command line options. This option is designed for system programmers for joint using of VentaFax with other programs.

/e:"filename" – execute batch file.

Message Transmission

/sm – send the message without dialing the phone number. It is presumed that the connection is already established. This is ignored if the /f: option is missing;

/sa – dial the phone number by the modem and send out the message automatically. This is ignored if either the /t: or /f: option is missing.

These command line options can be used together with the /c: and /nX options.

Dial Phone Number

/td: <phone number> – dial specified phone number without message transmission.

Using /nX Option

If the recipient's name, second name and last name were entered in different fields, two /nX options are possible for correct "Attn." field composition. For example,

/n1:John /n2:Fitzgerald /n3:Kennedy

option is analogous to

/n1:'John Fitzgerald Kennedy'

In the latter case entire name must be enclosed in apostrophes.

Batch File Example

A batch file is a text file with every single line representing one operation. Batch file execution is equal to its command lines with whatever parameters are specified. For example:

/t:1234567 /f:"c:\Program Files\Venta\VentaFax 5\out\fax1.tif" /c:'Microsoft' /s

/t:2345671 /f:"c:\ Program Files\Venta\VentaFax 5\out\fax2.tif" /c:'Netscape' /s

/a2+

Execution of this batch file (with /e:"filename" option) will schedule tasks and activate scheduled delivery.

You may also use another /f: option format to schedule many tasks with the same file (especially

when this file must be converted to facsimile format prior to scheduling). Specify the full filename for the first task and only the /f: option for subsequent tasks. In this case the file specified in the first task will be converted to facsimile format and will be used for subsequent tasks by default instead of an empty "filename.*".

The Editor is designed for creating and editing answering machine remote control scripts. To start the Editor, click the  button in the Main Application toolbar.

{button ,JI(`',`scr_struct')} Script structure

{button ,JI(`',`scr_Var')} Variables

{button ,JI(`',`scr_operations')} Basic operations

{button ,JI(`',`scr_limitations')} Limitations

Script Structure

A script is a text file consisting of one or several **sections**. Section name is an arbitrary sequence of characters enclosed in square brackets. The first (and in most cases the only) section is named **[START]**. Its name cannot be changed. Other sections names are arbitrary. After opening a script file in the Editor, you will see its section tree in the left panel.

Each section can contain one or several **commands**. A command is a sequence of tone dialing symbols to be delivered to the program so it will execute script-defined sequence of **operations**, i.e., the basic operations VentaFax & Voice performs.

What are the sections for? In fact, each section can be assigned its own rules, for example, the number of tone symbols in a command (command length). A section's command length is set by the MODE instruction. This instruction is mandatory and must follow the section name. It has the following format:

=mode X[/Y] [<name>]

where

X is a dialing digit or character {**#**, *****, **A**, **B**, **C**, **D** }. If a number (from 1 to 20) follows MODE instruction, all commands in this section will be of that specified length. If a character follows it, commands will be of variable length, but this character must be the last dialed symbol. Command terminating symbol should not be inserted in command description. For example,

=mode #

instruction means that variable length commands may be used in a section, but the last dialed symbol must be **#**.

Y is a dialed codes cancellation character that can be entered during the process of dialing a command.

<filename> – sound file name to be played when entering a section.

The last two parameters are optional.

Only one section can be active at a time; initially, the START section is active. This enables use of identical commands in different sections. Dialing such a command executes corresponding instruction from the active section. Jumping between sections is performed with GOTO operation.

Here's a small example:

[START]

=mode 4

=1234

goto "Section 1" 60

[Section 1]

=mode 1

In this fragment only one command with a code of **1234** is available right after the answering machine responds. Upon receiving such a command, the program will go to **Section 1** and wait for another command for 60 seconds. **Section 1** uses single-character commands. This is typical for the

majority of answering machines; the command similar to **1234** in this example is called a password or PIN code. If you intend to use VentaFax's answering machine for playing back public messages and not as a private answering machine, setting command length to 1 in the **START** section is preferable.

What if an incorrect password is entered? By default, the program allows entering a password 5 times in total. If an incorrect password is entered 5 times in succession, the program hangs up. Generally, this means that if active section contains no special command, the answering machine would go on hook after fifth incorrect command. Should incorrect command be received during some operation, for example, during message playing, the operation will not be interrupted. Changing the allowed number of error commands is made with the **DEFAULT** instruction. This instruction must be located right after the MODE instruction. However, it is not mandatory. If absent, the default number of tries (5) will be set. N.B., if an incorrect command is entered during message playback or other operations, it is simply ignored and operation is not interrupted. The DEFAULT instruction has the following format:

=default N

{Operations}

where

N is the number of incorrect commands to be entered before disconnection.

{Operations} – actions to be performed at any incorrect command. For example:

[START]

=mode 4/#

=default 2

play "invalid password.wav"

wait_cmd 30

=1234

goto "section 1" 60

[Section 1]

In this fragment the **START** section contains one (four-character) password entering command. The correct password moves the answering machine to **Section 1**. If when entering a password you would have made a mistake, then you can cancel the current input (before dialing the fourth digit) by pressing the # key. Dialing four digits means you have entered a password. In this example, you are allowed to make only one mistake. After the first error the answering machine will play the "INVALID PASSWORD.WAV" sound file. After the second error, the answering machine will hang up.

Besides the **DEFAULT** command, there are four optional commands that define program operation in various cases.

The **BEGIN** command is always executed when user enters a section. For purposes of compatibility with earlier VentaFax versions, when the **BEGIN** command is *absent* from the **Start** section, the following happens. If the **Switch to remote control mode immediately after answering a call** parameter in the **Reception** – **Automatic** tab is enabled, the **DEFAULT** command is executed, as earlier. The execution of an outgoing call script also starts with the **DEFAULT** command, if the **BEGIN** command is not defined. The **BEGIN** command cancels the "time to wait" parameter of the GOTO operation that switches the program to that menu.

The **BREAK** command defines program operation in case of disconnection. The reception/transmission operations (such as message playing, message recording, etc) should not be used within this command unless for some special purposes. Basically, this command is meant for completion code overriding and sending messages by email.

The **SENDFAX** command is used to perform actions after the recognition of the fax answer tone

- during the execution of **PLAY**, **RECORD** or **WAIT_CMD** operations;
- when the fax answer tone is detected in process of recognition of signals after dialing a phone number, while the outgoing call control script is active.

In the latter case the **SENDFAX** command must be present in the **[Start]** section. If it is absent, the

fax answer tone response is considered as the **Fax response detected when trying to send voice message (Er 64)** error.

The **RECFAX** command is used to perform actions after the detection of the fax calling tone during the execution of **PLAY**, **RECORD** or **WAIT_CMD** operations.

Variables

Operations used to define command-specified actions may contain various variables. Names of all variables begin with the **%** character. All variables (except the **%CompletionCode**) contain text data up to 255 characters long. Variables can be used in operations with filenames present, and also in the **EXEC** and **SEND_MAIL** operations.

The value of a variable can be set as a result of the program operation or by means of the special **SET_VAR** operation that assigns a value to the variable.

Below is the list of variables to which a value can be assigned to:

%1-%9 – nine user-defined variables to store string values.

%EmailText, %EmailAddress, %EmailSubj, %EmailFromAddress, %EmailFromName – these variables define values for the **SEND_EMAIL** operation. Their values are in no way connected with the corresponding **Actions after reception** and are used for the remote control purposes (in the **SEND_EMAIL** operation) only.

%CompletionCode – sets the session completion code (overriding the program-generated code).

%AnswerFile – this variable is used in the outgoing call control script operation. It sets the answer file name to be placed in the corresponding field of the schedule. If this variable is not defined, the last file received as a result of the script operation will be specified as the answer to the message.

%StartSectionRep – this variable is used in the outgoing call control script operation. In case if the initial delivery attempt fails, the section name specified this way is used instead of the [Start] section for repeat delivery attempts for the given recipient. This section name is saved in the schedule.

In addition to the variables with assignable values there are variables whose values can be copied to other variables:

%1-%9 – the same nine variables to store string values.

%Phone – the phone number delivered (for incoming calls) or dialed (for outgoing calls).

%DTMF – the last DTMF command.

%LastRecFile – the last file received during the session.

%LastPlayedFile – the last sound file played by means of **PLAY**, **PLAY_NEW**, **PLAY_BACK**, **PLAY_PREV**, **PLAY_NEXT** or **PLAY_AGN** operations.

%Line – the telephone line number (for multi-line versions).

Basic Operations

Each command can start a sequence of operations, the basic operations VentaFax & Voice performs. All operations and button icons for adding each command to a script are detailed below.

Reception/Transmission Operations

 **PLAY "filename" [<time, ms>]** – play a message with the specified name. If no path is provided, the program will look for a message in the \SERVICE folder. The second optional parameter specifies the duration of tone signal before an announcement. If set to zero, no signal will be played back.

In addition, the **PLAY** operation can be used to play, for example, the phone number. To do so, the third parameter setting the phone number digits grouping rules must be specified for the operation. In this case the phone number to be pronounced must be specified as the first parameter of the operation.

For example:

```
set_var %1 %Phone
play %1   0   111111111111
```

These two operations define the digit-by-digit pronunciation of the phone number. The second operand defines the length of the tone signal that precedes the pronunciation. In this case the tone signal is absent.

RECORD "filename" <time, s> – to record a message with the specified name. In particular, this can be the name of an answering machine announcement or one of the files played by remote control. If no path is specified, the recorded file must be located in the \SERVICE folder. If * is used instead of a file name, the file with current number will be recorded in the inbox folder (as with usual VentaFax & Voice answering machine operation). When only the path (with \ character at the end) is specified instead of file name, the message will be saved to the folder under its current number. The "time, s" parameter specifies recording time in seconds.

The presence of the third descriptor parameter causes the message to be appended at the end of an existing file.

For example:

record %LastRecFile 60 1

This operation appends the voice data to the file specified earlier by the **RECORD** operation.

RECEIVE "filename" – receive a fax with the specified name. Path instructions are the same as with the RECORD operation.

SEND "filename" – send a fax with the specified name. Path instructions are the same as with the RECORD operation.

The Answering Machine's Messages Playback Operations

PLAY_NEW [N] [PA] – play new (not played yet) messages in the first received – first played order. If the parameter is not set or set to zero, all messages will be played. Second parameter is a flag for playing additional information, namely, message reception time. To play all messages with additional data, the operation looks like the following: PLAY_NEW 0 1.

PLAY_BACK [N] [PA] – play last messages in reverse (last received – first played) order irrespective of whether the message has been played earlier. Parameters same as with PLAY_NEW operation.

PLAY_PREV 1 [PA] – play previous message, i.e. message received **before** the message just played in current session. Second parameter same as with PLAY_NEW operation.

PLAY_NEXT 1 [PA] – play next message, i.e. message received **after** the message just played in current session. Second parameter same as with PLAY_NEW operation.

PLAY_AGN 1 [PA] – play messages again. Second parameter same as with PLAY_NEW operation.

The Reports Transmission Operations

SEND_REP_IN [N] – transmit incoming sessions report by fax. The program will make a facsimile message from the "Incoming sessions" report and transmit it. Parameter is the number of the latest report records to be transmitted. By default, the entire report is sent.

SEND_REP_OUT [N] – transmit outgoing sessions report by fax. The program will make a facsimile message from the "Outgoing sessions" report and transmit it. Parameter is the number of the latest report records to be transmitted. By default, the entire report is sent.

PLAY_REP_INFO X – play back information on answering machine status. Parameter is a sum of any of the following digits:

1 – total number of faxes received;

2 – total number of voice messages received;

4 – number of new faxes received;

8 – number of new voice messages received.

Any combination of attributes can be used. For example, to obtain information on new fax and new voice message number, set the parameter to 12 (8 + 4).

SEND_SCHED – transmit scheduled tasks report.

The File Processing Operations

EXEC <command line > – run specified executable file.

SEND_EMAIL "filename" [MaxFileSize] – create and send message by email. The message parameters are defined by the **%EmailText**, **%EmailAddress**, **%EmailSubj**, **%EmailFromAddress** and **%EmailFromName** variables.

The "filename" is an expression that may contain variables. If the file exists, it is attached to the email message. The optional **MaxFileSize** parameter sets the maximum file size (in bytes) that can be sent. The larger files are not attached to a message. By default, the maximum file size of 8 megabytes is set.

The mail server operating parameters are defined in the **Reception** – **Automatic** – **Actions After Reception** – **Mail Server** tab.

For example:

send_email ""

Sends email message without attaching a file.

send_email "%LastRecFile" 1048576

Sends email message with the last recorded file attached to it. The maximum file size is limited to 1 megabyte. File attachment feature is available in the Business version only. In the Home version an attempt to attach a file will cause the **One of the remote control script limitations is exceeded (Er 83)** error, and the script execution will be interrupted.

APPEND "filename" "filename" – append a sound file to an existing file. The operation is not executed, if any of the specified files does not exist. The filename specifications are the same as in the **PLAY** operation.

For example:

append "%LastRecFile" "1.wav"

DELETE "filename" – delete the specified file.

For example:

delete "%LastPlayedFile"

The Operations of Interacting with Modem

SPEAKERPHONE <time> <SpkVol> <MicVol> – switch modem to speakerphone mode. First parameter is a speakerphone operating time if no busy signals or tone commands are detected. SpkVol is the speaker volume in relative units, from 0 to 100. For some modems, a 0 value means automatic sensitivity control.

PLAY_DTMF "character sequence" [1] – reproduce tone signals (DTMF codes). The character sequence can include 0.. 9, A, B, C, D, *, .#, ! symbols. Tone signals reproduction depends on the second parameter and can be activated with voice commands or the ATDX1DT command. Not all modems can execute ATD command in an established connection in voice mode. Some modems cannot perform flash ("!" symbol) in voice mode, only an ATD command. If the second parameter is absent, the program will select the way that is best for the installed modem. If second parameter is set to 1, dialing will be forced to the ATX1DT command. Some modems cannot work in this mode.

RUN_MODEM_CMD "AT_command" [<time, s>] – send any command to the modem. The command is specified by the first parameter. Second parameter sets command answer waiting time. Incorrect use of this command may cause answering machine malfunction. It is intended only for those who have mastered his or her modem command set, are familiar with voice mode features and, should malfunctions arise, are able to answer the question: "Why doesn't the answering machine not operate as expected after processing an AT command?"

HANDOFF – causes the program to establish a connection in data mode and to transfer the call to awaiting applications (in the TAPI mode only). In this case it does not matter if the **Transfer data calls to awaiting programs** parameter in the **Reception** – **Automatic** – **Call Discrimination (Adaptive Answer)** tab is enabled or not.

You can use this operation to set the password for switching to data mode.

For example:

[start]

=mode 4

=begin

play "greeting announcement.wav"

record * 15

=1111

handoff

To establish a connection in data mode, you can send the ATD<phone number>,,,,,T1111 command to the modem, for example.

The number of commas (the delay) is selected so as the program has enough time to answer on an incoming call (which depends on the number of rings to answer on). To allow transferring data calls under the HANDOFF operation only, deselect the corresponding parameter in the **Call Discrimination (Adaptive Answer)** tab.

In addition (or instead of) to password setting you can use the HANDOFF operation to check the delivered phone number:

if equal(%phone,1230000)

handoff

endif

Other Operations

 **WAIT_CMD <time1> [<time2>]** – Wait for next command for specified number of seconds. First parameter is a waiting time in seconds. If absent, waiting time is set to 25 s. Usually this is the last operation in the command description block. Thus it begins with four tone signals, which should inform the caller of the command block completion. The second parameter sets the total signals duration in milliseconds. The default value is 220 ms.

 **SET_VAR [Variable] [Value]** – set the variable's value. The variable is cleared, if the **Value** parameter is missing. Several values can be specified for the %EmailSubj variable, separated by spaces.

SET_VAR operation syntax examples:

to clear the value of the variable

set_var %1

set_var %LastRecFile

to assign the 1234 value to the %1 variable

set_var %1 1234

to assign the "c:\name 1\name 2" (**including** quotation marks) value to the %1 variable

set_var %1 "c:\name 1\name 2"

to assign the phone number value to the %1 variable

set_var %1 %Phone

to copy the value of the %1 variable to the %2 variable

set_var %2 %1

to specify an email address

set_var %EmailAddress aa@bb.com

to create a subject text for the message using the variables' values

set_var %EmailSubj subject_text %1 subject_text %2 subject_text

IF, ELSE, ENDIF – allow conditional execution of operations in a command.

```
if condition
THE LIST OF OPERATIONS TO BE EXECUTED IN CASE OF THE CONDITION IS MET
else
THE LIST OF OPERATIONS TO BE EXECUTED IN CASE OF THE CONDITION IS NOT MET
endif
```

The following can stand as a condition:

- text containing variables. In this case the condition is true if the substitution of values results in a nonempty text;
- the **FileExist(text)** expression, where text may contain variables, and the result is considered as a filename. The same path instructions are applied here as in the **PLAY** and **SEND** operations. The condition is true if the file exists;
- the **equal("text1", "text2")** expression, where text1 and text2 may contain variables. The resulting strings are compared after the substitution of values. The condition is true if strings are equal.

The **ELSE** parameter is optional.

By way of illustration, below is the part of the script that records a message and, if successful, results in the following actions:

```
=begin
set_var %LastRecFile
record "\incoming\from the %Phone Caller ID" 30
goto "message recorded"

=break
if FileExist(%LastRecFile)
    goto   "message recorded"
endif

[message recorded]
…
```

Or about the same:

```
…
=begin
set_var %1 %LastRecFile
record "\incoming\from the %Phone Caller ID" 30
goto "message recorded"

=break
if equal(%1,%LastRecFile)
else
    goto   "message recorded"

[message recorded]
```

…

SET_OPTION [Parameters] – set the remote control options.

Parameters of this operation are text option labels separated by spaces:

SendFax_On/SendFax_Off – enable/disable recognition of fax answer tone and further actions.

RecFax_On/RecFax_Off – enable/disable recognition of fax calling tone and further actions.

BreakIfFaxError_On – if the error occurs during facsimile message reception or transmission (**Connection error (Er 18)**, **Disconnection error (Er 20)**), go to the **break** command.

BreakIfFaxError_Off – if the error occurs during facsimile message reception or transmission, continue the execution of script operations.

Forwarding_On/Forwarding_Off – enable/disable forwarding of messages received in the remote control mode. "Forwarding" here means both forwarding messages by email and redirection to another prone number, as specified in the **Reception** – **Automatic** – **Actions After Reception** tab.

For example:

set_option SendFax_On RecFaxOn BreakIfFaxError_On

GOTO <name> [<time>] – go to section. First parameter is the section name, second parameter is time, in seconds, to wait for some command in the specified section. This command is used for, but not limited to, answering machine password protection, i.e. START section can consist of GOTO commands only with further command interpretation organized in sections being called.

SET_PROTECTED <number> – access to protected messages. Sets personal mailbox identifier (in the Business version only). Parameter – mailbox number in integer (0, 1, 2, etc.). '0' value stands for access to common (unprotected) messages.

Protected messages can be made read-only (play-only) and write-only.

If followed by RECORD * (record a message) or RECEIVE * (receive a fax) operation in a single command, the message is accessible to those who have read (play) access to specified mailbox.

If followed by PLAY_NEW (play new messages), PLAY_BACK (play last messages), PLAY_PREV (play previous message), PLAY_NEXT (play next message) or PLAY_AGN (play messages again), only recorded to specified mailbox messages will be played.

SET_GREETING "filename" – set answering machine greeting file.

Limitations

	Unregistered version	Home version	Business version
Maximum number of sections in a script	5	11	Unlimited
Maximum number of commands in a section	8	16	Unlimited
Maximum number of GOTO operations in a section	4	10	Unlimited
Maximum number of SEND operation in a section	2	2	Unlimited
Maximum number of EXEC operation in a section	2	Unlimited	Unlimited
Maximum number of operations in a command	64	64	64

The shortcuts listed below are operational in the corresponding application windows. Also, you can assign three more shortcuts in the **Interface** – **Keyboard Shortcuts** tab. These shortcuts are operationally independently of which application you are currently working in if the VentaFax Engine (VFDRV32.EXE) is loaded. The following actions can be performed with these shortcuts:

- Start the Main Application. If there are new messages, the Log Book will launch instead;
- Force facsimile reception (as by clicking **Start** button) and start the Main Application;
- Force answering machine reply and start the Main Application.

{button ,JI(`',`sc_Main')} Main Application

{button ,JI(`',`sc_PBook')} Phone Book

{button ,JI(`',`sc_LogBook')} Log Book

{button ,JI(`',`sc_Manager')} Message Manager

{button ,JI(`',`sc_Schedule')} Scheduler

{button ,JI(`',`sc_ScriptEd')} Script Editor

Main Application

Enter –  dial phone number;

Ctrl+Enter – 

receive a fax in manual mode;

Esc – 

terminate current session;

Alt+F –  enable/disable fine resolution mode;

Alt+A –  enable/disable auto-answer on incoming calls;

Alt+D – enable/disable demo mode;

Alt+S – pick up the handset, activate answering machine;

Alt+V – enable voice data recording and real-time message review mode;

Alt+X – quit the program;

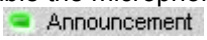
Alt+1...Alt+8 – dial the phone number from the One Touch Dialing phone book;

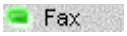
Ctrl+E –  record the conversation;

Ctrl+Y –  real-time message review;

Ctrl+S –  speakerphone mode;

Ctrl+M –  disable the microphone;

Ctrl+R – 

Ctrl+F – 

Ctrl+W – 

Ctrl+I – 

Ctrl+1 –  go to the first message;

Ctrl+2 –  go to the previous message;

Ctrl+3 –  pause/stop;

Ctrl+4 –  play;

Ctrl+5 –  go to the next message;

Ctrl+6 –  go to the last message;
F1 – display Help;
F2 –  program settings;
F3 –  start Message Manager;
F4 –  start external editor;
F5 –  Message Wizard;
Alt+F5 –  Message Transmission window;
F6 –  start Log Book;
F7 –  start Phone Book;
F9 –  start Remote Control Script Editor;
F10 –  start Scheduler;
F11 –  activate/deactivate scheduled delivery;
Ctrl+V –  prepare voice message;
Ctrl+T –  enable/disable application tree.

 Phone Book

Gray + – select all entries;
Gray – – deselect all entries;
Gray * – invert selection;
Insert –  new entry;
Ctrl+Del –  delete selected entries;
Ctrl+C –  copy entry to clipboard;
Ctrl+X –  cut entries (delete to clipboard);
Ctrl+V –  paste entries from clipboard to current phone book;
Ctrl+T –  enable/disable directory tree;
Alt+F –  transmit to recipient's fax number;
Alt+T –  transmit to recipient's voice number;
Ctrl+F –  find a recipient;
F1 – display Help;
F2 –  program settings;
Alt+X – quit program.

 Log Book

Gray + – select all entries;
Gray – – deselect all entries;
Gray * – invert selection;
Ctrl+F –  find in a log;
Ctrl+D – dial phone number;
Ctrl+E –  send a message via email;
Ctrl+S –  export a log;
Ctrl+T –  enable/disable log tree;

Ctrl+Del – delete selected records;
F1 – display Help;
F2 – program settings;
F3 – start the Message Manager;
F4 – enable/disable extended information panel;
F5 – send message;
F8 – delete message file;
Alt+C – open General log;
Alt+I – open "Incoming sessions" report;
Alt+O – open "Outgoing sessions" report;
Alt+N – open "New messages" report;
Alt+R – open the **Received Messages** report;
Alt+S – open the **Sent Messages** report;
Alt+X – quit program.

Message Manager

Ctrl+O – open file;
Ctrl+P – print fax;
Ctrl+E – start external graphic editor;
Ctrl+K – convert fax to other format;
Ctrl+S – select image area;
Ctrl+G – enable/disable image smoothing;
Ctrl+M – multi-document view;
F1 – display Help;
F5 – send message;
Ctrl+F5 – transmit the current page;
F6 – move to user's folder;
F7 – open next message;
Ctrl+F7 – open previous message;
Del – delete message file;
Alt+X – quit program.

Scheduler

F1 – display Help;
Del – delete task.

Script Editor

Ctrl+N – create new script;
Ctrl+O – open script file;
Ctrl+C – copy text to clipboard;
Ctrl+X – cut text to clipboard;

Ctrl+V –  paste text from clipboard to current position;
Ctrl+S –  save file;
Ctrl+T –  enable/disable section tree;
Ctrl+F –  find;
Ctrl+R –  find and replace;
F1 – display Help;
F2 –  program settings;
Alt+X – quit program.

This section describes features of certain modems to keep in mind when using VentaFax.

1. USR Sportster and 3COM Modems

By voice command set, these modems are defined by the program as one of the following types:

USR Sportster Vi – usually quite old modems that do not support speakerphone mode.

USR Sportster Voice and **USR Sportster Voice (2)** – current modems of various types and names. The difference between the two types from the program perspective is in the speakerphone mode activation method, i.e. if the modem was detected as **USR Sportster Voice** and this mode does not work, try setting the **USR Sportster Voice (2)** voice command set.

USR Voice: Mix of V.253 & IS-101 – new modem versions (WinModems).

Despite of their diversity, all these modems share the common drawbacks described below.

1.1. Very often the modem terminates fax reception at 9600 baud rate and higher because of the slight noise in a telephone line. See Only part of a document can be received section.

1.2. These modems cannot start facsimile message transmission as they cannot detect the remote fax initial whistle (pilot tone). If you use one of these modems, then in manual transmission you should start sending earlier so that the modem does not miss this tone (whistle). For automatic transmission, you should probably select the **Disable voice mode when sending out a fax** parameter in the **Fax** – **General** tab, since when detecting fax answer in voice mode the modem switches to fax mode and misses remote fax response. Switching to fax mode after fax answer detection takes some time. This time is composed of the delay caused by time lost switching from voice to fax mode commands processing time (which cannot be reduced) and time set by the modem's **S6** register. The latter can be reduced by replacing the parameter value in **Command for starting fax transmission in established connection** in the **Modem** – **Facsimile Settings** tab with

ATS6=0X3D

For this parameter to work, it is necessary to set an appropriate country code in the modem. Many country codes prohibit setting S6 register value lower than 2, which corresponds to 2 seconds of delay. The modem can return OK even for lower value, but in fact this value will not be set. In any terminal program, try typing the command

ATS6=0

and then

ATS6?

If the modem returns 0, there is no need to change country code; otherwise, the country code needs to be changed. For example, replacing a country code with 0 (USA/Canada) will set the S6 register to 0. At the same time, problems with busy detection in other programs may arise.

WE HAVE NOT TESTED THE SEQUENCE OF ACTIONS CITED BELOW ON ALL USR/3COM MODEMS. IT MAY CAUSE UNWANTED CONSEQUENCES WITH YOUR MODEM. WE CAN NOT ASSUME A RESPONSIBILITY FOR SUCH CONSEQUENCES. IF YOU ARE SURE IN YOUR MODEM KNOWLEDGE, TRY IT AT OUR OWN RISK.

Quote from 3COM/USR FAQ:

17. First of all, see what your modem returns on ATY14 command. If it is a single number, consider yourself lucky: a country code can be changed directly with ATC10=XX command, where XX is a country code:

0 USA/CANADA	8 South Africa	17 International
1 Japan	9 Italy	18 Austria
2 Finland	10 New Zealand	19 Ireland
3 Sweden	11 Czech/Slovakia	20 Spain

4 UK	12 Belgium	21 Portugal
5 Norway	13 Denmark	22 Asia
6 Switzerland	15 France	23 Korea
7 Netherlands	16 Germany	

After a country code is changed, it is recommended that you execute the following commands:

ATGBOOT5

ATGM

1.3. USR Sportster Voice and **USR Sportster Voice (2)** voice command set types. The difference between two types in the program is in the speakerphone mode activation method. If the modem was detected as **USR Sportster Voice** and this mode does not work, try the **USR Sportster Voice (2)** voice command set, and vise versa.

2. Various Modems with Rockwell/Conexant Chips

Based on voice command set, these modems are defined by the program as one of the following types:

- Rockwell
- Rockwell (Variant 2)
- Rockwell (Variant 3)
- Rockwell (IS101)
- Rockwell (V.253)

2.1. For many modems with these chips, modem voice data formats with 11025 Hz sampling rate is not recommended. Many of them cease to detect DTMF, busy, fax and other signals at this frequency.

2.2. Rockwell and **Rockwell (Variant 2)** voice command set types. The difference between the two types in the program is in the speakerphone mode activation method. If the modem was detected as **Rockwell** and this mode does not work, try the **Rockwell (Variant 2)** voice command set, and vise versa.

2.3. Rockwell and **Rockwell (Variant 3)** voice command set types. The difference between the two types in the program is in the sound volume control method. If the modem was detected as **Rockwell** and the volume of standard announcements in a telephone line in low, try the **Rockwell (Variant 3)** voice command set and use volume control.

2.4. By default the program selects the **PCM/8bits** voice data format for **Rockwell (V.253)** voice command set modems because it is supported by the majority of modems with this command set. However, in some modems with the Rockwell (V.253) voice command set this data format is supported poorly. If your modem supports such formats as **A-Law** and **uLaw** (you can find it out by trying them), you should use them instead. It is quite possible that sound quality will improve greatly.

3. Multitech Modems

For the majority of Multitech modems, the **Bit order** parameter in the **Fax** – **General** – **Advanced** tab must be set to **Multitech modem style**. A characteristic sign of incorrect setting is the following. Fax reception starts normally, but the received fax contains:

- Only a few vertical bands (if the **Replace garbled lines on the screen** parameter in the **Fax** – **General** tab is set to **Full**);
- Multiple horizontal strips (if the **Replace garbled lines on the screen** parameter is set to **None**) and page contains no useful information.

Probably, you need to change this parameter.

4. Various Modems with Lucent (V253) Chips

By voice command set, these modems are defined by the program as one of the following types:

Lucent (IS-101)

Lucent (V.253)

4.1. Modems at our disposal have the following bug. After voice mode operation with an 11025 Hz sampling rate the modem is unable to establish facsimile connection. In other words, if you are going to use the modem in combined mode (fax and voice), do not select voice data formats with this sampling rate.

4.2. WinModems detected as Lucent (V.253) do not support speakerphone mode.

5. Modems Detected as ST Soft Modem

With these modems, voice mode must be switched off for fax transmission, because after voice mode operation the modem is unable to establish an outgoing facsimile connection.

6. SmartLink

Same features of facsimile message transmission are characteristic to these modems as to the US Robotics modems (see item 1.2 of this section).

This section describes differences between the Home version and the Business version of VentaFax, as well as some restrictions in the unregistered version.

Function	Unregistered version	Home version	Business version
Maximum number of tasks in the schedule	3	3	Unlimited
Scheduling tasks for the group of recipients and for all recipients in a phone book	–	–	+
Fax header and background image options	–	–	+
Maximum answering machine message duration, s	15	Unlimited	Unlimited
Small advertising banner and "Transmitted with unregistered version of VentaFax software" notification in each facsimile message	+	–	–
Message copying (sorting) into local user's folders	–	–	+
Successful transmission ticket printing option	–	–	+
Notification of incoming messages by email	+	+	+
Forwarding of incoming message files by email option	-	-	+
Filters and additional notification rules setup option	-	-	+
Maximum conversation recording time in the call registration mode	20 minutes	3 hours	Unlimited
Customization of the auto-answer parameters for various ring patterns	-	-	+
Redirecting received messages to another telephone number	-	-	+

{button ,JI(`',`scr_limitations')} Answering machine remote control limitations

If you are not satisfied with the sound quality of messages recorded by the answering machine or the quality of announcements play back over the telephone, you may try selecting another modem voice data format. It is set by the same name parameter in the **Voice** – **General** tab. The simplest way to do that is to use the Recording and Playing Voice Messages window ( button). First, record some announcements via the modem (not the sound device) with different voice data formats. Now select the format that provides the best sound quality. Finally, select this format in the **Voice** – **General** tab and click **OK**.

By default the program selects the **PCM/8bits** voice data format for **Rockwell (V.253)** voice command set modems because it is supported by the majority of modems with this command set. However, in some modems with the Rockwell (V.253) voice command set this data format is supported poorly. If your modem supports such formats as **A-Law** and **uLaw** (you can find it out by trying them), you should use them instead. It is quite possible that sound quality will improve greatly.

Most likely, signals are formed in a voice mode (**Make signals** parameter in the **Voice** – **Formation of Signals** tab) and one of the ADPCM voice data formats is selected in the **Voice** – **General** tab. Virtually all ADPCM algorithms fade tone signals (for example, calling tones emulation). In this case, use a non-ADPCM format or simply select making signals **by modem commands**.

If automatic printing of all received faxes is enabled, then, if **Delay printing until reception is completed** parameter is checked, the entire document would be printed after transmission session. Otherwise, the document would be printed page by page in process of reception.

Background Notes

Prior to establishing a connection, the calling fax machine or fax modem goes off hook and plays special tone signals (short beeps). The answering fax machine or fax modem sends one long tone signal (the pilot tone) at 2100 Hz. Some fax modems (USR Sportster, etc) need to "hear" this pilot tone in order to start establishing a connection. It is especially relevant in manual mode, when you have had some conversation over the telephone and then begin transmission with such a fax modem. For the pilot tone not to be missed, the transmitting party must start transmission in advance.

Any facsimile data exchange consists of the following alternate phases.

1. **Control data exchange at 300 bps.** These are the trills you may have heard before sending and receiving faxes. You cannot control this rate. Fax machines exchange information about their intentions using control frames for sending facsimile data transmission results, etc.

2. **Facsimile data exchange by at 2400-14400 bps.** You can control this rate by setting maximum and minimum exchange rate. To the ear, it sounds like a hiss.

Document transmission or reception always begins and ends with control data exchange. In particular, this implies that fax transmission completion does not mean the ending of facsimile data exchange session. If your modem is connected in parallel to telephone extension and you would pick up the handset to talk to other party before the session is over, most likely the Disconnection error (Er 20) message will be displayed. There are two ways to speak on the telephone after the exchange.

First, you can connect a telephone handset not as an extension, but to a special socket on the modem. In this case the phone will stay disconnected all the time the modem is off hook. (Unfortunately, for some modems this is not true). So if you would pick up the telephone handset during the exchange, you will stay connected after the end of session.

Second, the telephone and the modem still can be connected in parallel (i.e., with the phone handset connected as an extension). VentaFax provides a special option for this case. Select the Confirm actions in manual mode before the disconnection parameter in the **Fax** – **General** tab. By doing so, you prevent the connection from terminating after the fax exchange session. This option does not work in Fax Class 2 and 2.0.

Unlike a modem connection, a modem in fax mode or a "true" fax machine can transmit data by turns (half-duplex transmission). Whatever the phase, the modem or fax machine detects nothing when transmitting data, neither connection break, nor the information sent by remote fax (for example, in case of facsimile data reception failure).

In full, the following information concerns Fax Class 1 (1.0) protocols only.

2. Establishing a Connection

The facsimile data exchange begins with a connection procedure. The receiving party communicates what it is able to do, and the transmitting party selects the appropriate action. At this time the following parameters are determined.

1. The facsimile data exchange rate is negotiated by sending test signals starting with the maximum allowable frequency (taking into account receiver capabilities and maximum transmission rate selected) and ending with the lowest allowable frequency. The receiving party checks up the quality of test signal. When it considers the signal satisfactory and informs the other party, facsimile data transmission begins. If signal quality at the lowest allowable rate is insufficient, the disconnection with the **Connection error** (Er 18) occurs. To control this process at the receiving end, use the **Decrease connection rate if test signal quality is lower than, %** parameter in the **Fax** – **General** – **Advanced** tab.

2. Facsimile data graphic resolution (200*100 or 200*100 dpi). When sending faxes with VentaFax, the resolution specified in VentaFax settings at the moment of sending a document to the VENTAFAX virtual printer.

3. Error Correction Mode (ECM). Error correction and frame size (64 or 256 bytes) are detected.

4. Receiver and transmitter identifiers.

5. Facsimile data compression method.

6. Some other parameters omitted in this Help file.

3. Transmission without Error Correction (ECM)

In this mode, an entire page (to put it more precisely, its compressed image) is transmitted from a beginning to an end. Receiving party can judge received page quality by the result of compressed data decoding. The number of poorly received lines and poor/well-received lines ratio can be calculated. An acceptable ratio (in your opinion) can be set by the Ask for page resending if the number of well-received lines is less than, % in the **Fax** – **General** – **Advanced** tab. Based on its quality criterion, the receiving party informs the transmitting end whether a page received is good or poor. The subsequent transmission can proceed as follows.

1. Unsatisfactory page is retransmitted, if the Repeat page transmission no more than, times parameter value in the **Fax** – **General** tab is greater than zero. At the same time, the transfer rate will be lowered, if the rate achieved so far is higher than minimum. At this point, a procedure similar to the connection establishment (with test signals check) takes place. Thus, if the receiving party rejects connection at the lowest allowable rate, the connection will be terminated (with the disconnection error). Should retransmission result in poor quality again, a page will be retransmitted until the permitted maximum number of repetitions is reached. Most likely, the received page will be printed every time at the receiving end (irrespective of the number or retransmissions). Some fax machines always assert the page has been received in poor quality – on principle, one may assume.

2. After the maximum number of retransmissions is reached, the next page is transmitted even if the receiving party states that the quality is unsatisfactory. At the same time, the transfer rate is lowered, if the rate achieved to this point is higher than minimum. At this moment, a procedure similar to the connection establishment (with test signals check) takes place. Thus, if the receiving party rejects connection at the lowest allowable rate, connection will be terminated (with the disconnection error). There is a minor risk that some fax machines will refuse to print a poor page at all, if it stores received pages in memory first and then prints them, so a poor quality page can be substituted with the following, well-received page of the same document. Usually this is not the case; not only "true" fax machines, but also the facsimile programs known to us form a new copy for each poorly received page.

3. Transmission will be continued from the next page at the same rate, if the receiving party advised that the page was received well and no rate redefinition is required. By the way, the quality criterion, tight as it may be, (except the special page-concluding sequence absence check) may not work here in case of reception is broken, which is not uncommon (and even regular for some telephony switches), especially at transmission rates higher than 4800 bps.

4. Transmission will continue from the next page with rate redefinition, if the receiving party advised that the page was received well, but if rate redefinition is still requested for this procedure (such "strange" faxes can be found). In this case the transmission rate will continue to be lowered or the connection will be terminated (see above).

5. Normal exchange termination, if the receiving party informs that the page quality is satisfactory and there is nothing else to transmit.

4. Transmission in Error Correction Mode (ECM)

In error correction mode, the page image is transmitted packed in special blocks with information broken down into frames of 64 or 256 bytes. Also each frame contains a checksum. The maximum number of frames in a block is 256. If a page does not fit in one block, several blocks are created for transmission. After a block is transmitted, the receiving party verifies the checksums of received frames. Then, one of the following takes place.

If checksums are correct, the receiving party informs the transmitting end about that, and the next block, if present, is transmitted.

If the checksums are incorrect, the receiving party communicates to the transmitting end the numbers of error frames. These frames are retransmitted in a special block, and the checksums are checked up again. If they are correct, the receiving party informs the transmitting end about that, and the next block, if present, is transmitted. If the checksums are incorrect, the procedure is repeated again. If error frames

are still present after the third retransmission attempt, the following options are possible.

If the Send each frame no more than, times parameter value in the **Fax** – **Error Correction (ECM)** tab (in transmitting **VentaFax** program) is greater than the number of undertaken attempts and if the transmission rate is higher than lowest allowable, it will be lowered, and the receiving party will be so informed. Then the triple error frames retransmission procedure will start again. This cycle will continue until the **Send each frame no more than, x times** parameter value is reached. After that, depending on the **Continue transmission if no more than, x frames within a block were not corrected** parameter, transmission will be terminated or continued. If more than the specified number of frames have not been corrected, the current block correction will stop and the connection will be terminated with a Disconnection error (Er 20). Otherwise, the program would proceed with transmission of the next block. Depending on the receiving end settings, it can terminate a connection also with the same completion code.

From the aforesaid it follows, that there is no point in setting the **Send each frame no more than, x times** parameter lower than 4. According to the facsimile data exchange protocol, in this case the connection can be terminated, but nothing is known about what to do with frames that have not been sent.

The reception of a facsimile message in error correction mode is controlled with the **Ask for resending corrupted frames no more than, x times** and the **Continue reception if no more than, x frames within a block were not corrected** parameters in the **Fax** – **Error Correction (ECM)** tab. The program requests error frames retransmission for the specified number of times. After that, depending on the **Continue reception if no more than, x frames within a block were not corrected** parameter, the current block correction will stop and the program would request for the next block, or connection will be terminated with a **Disconnection error** (Er 20).

Unlike transmission without ECM, error correction mode does not cause printing of all pages received. The entire block will be printed after it is received correctly or the correction procedure is stopped.

To start using VentaFax, you need to do some simple things after the installation.

Modem Selection

On the first loading, the program would automatically open the **Modem** – **Interacting with Modem** tab of the **Program Settings** window. Make sure that the modem you intend to use is selected. Sometimes several modems are installed in a system. In this case select the modem, which you will use in VentaFax. Even if you really have only one modem, there can appear to be several modems installed in a system. This can happen if you have replaced or reinstalled a modem.

Voice Command Set Selection

After the modem is selected, open the **Modem** – **Voice Settings** tab. If you have an external modem, turn it on. Click **Detect** button for the program to detect your modem command set automatically. If it is unable to do that, try selecting the necessary command set from the list (if you are sure about it). If your modem does not support voice functions, select **None**.

To save settings, click **OK**.

To gain a deeper understanding of your modem, we strongly recommend you to study the Features of certain modems section.

Should you have any questions about using the program and you cannot find answers in this Help file, please read the If you have questions section and follow the recommendations provided in it before contacting the developers.

We wish you successful connections.

The VentaFax Engine (VFDRV32.EXE) executes user actions with the modem. Among the basic ones are:

- facsimile message reception and transmission via telephone line with Fax Class 1, 1.0, 2 and 2.0 command sets, and real-time fax viewing at reception and transmission;
- voice message recording and playback via the modem in various modes (answering machine, prepared voice messages delivery, voice announcement before sending a fax, etc) and recognition of telephone line signals;
- calling number displaying and announcement via the sound card;
- scheduled message delivery;
- transmission and reception logging;
- modem logging.

VentaFax Engine runs both under control of the Main Application and autonomously.

Right-clicking on the icon in the System Tray opens a pop-up menu where you can start any VentaFax package application.

Problems with Phone Number Dialing

{button ,JI(`',`LongDist_er')} Unable to dial a long-distance number

{button ,JI(`',`Er25_problem')} Disconnection with "Modem detected no dial tone" message

{button ,JI(`',`Er26_Problem')} Connection is terminated with "Unforeseen error when receiving data from the modem" error

Problems with Fax Reception

{button ,JI(`',`fax_rec_problem1')} Fax is received "garbled", with many artifacts

{button ,JI(`',`RecFax_problem')} Only part of a document can be received

Problem with Fax Transmission

{button ,JI(`',`XonXoff_Problem')} Only Beginning of a Document Can Be Transmitted

{button ,JI(`',`AutoSendFax_problem')} It Is Impossible to Transmit a Fax in Automatic Mode

{button ,JI(`',`ManSendFax_problem')} It Is Impossible to Transmit a Fax in Manual Mode

Problems with the Answering Machine

{button ,JI(`',`FalseCall_Problem')} Answering machine responds when dialing a number on a telephone extension

{button ,JI(`',`Disconnect_Problem')} Disconnection while playing an announcement

{button ,JI(`',`Disconnect2_Problem')} Disconnection with "Handset lift detected on the telephone connected to modem or telephone extension" message

{button ,JI(`',`prob_LowQuality')} Insufficient quality of recording/playing sound via modem

{button ,JI(`',`prob_reduce')} Emulated tone fading

{button ,JI(`',`mid_er23')} Connection was terminated during answer on the first ring with completion code Er 23

Problems with Caller ID

{button ,JI(`',`Problem_CallerID')} The Caller ID does not work

Other Problems

{button ,JI(`',`Er26_Problem')} Connection is terminated with "Unforeseen error when receiving data from the modem" error

This can happen only during pulse dialing. The problem is not in the program but with the modem. The modem is the one that detects incoming calls and informs the program about it. In this case the modem confuses pulse dialing signals with an incoming ring. Unfortunately, it is impossible to get rid of this effect by means of the program. All you can do is to increase the number of rings before the modem goes off hook by changing the **Answer on, ring** parameter in the **Reception** – **Automatic** tab.

Disconnection happens because the modem detects short tones on the telephone line. If the handset actually was not picked up, this may suggest modem misconnection. Make sure that the cable from the phone jack is connected to the modem's Line (Telco) socket and not to the Phone socket. In case if the modem is properly connected, but the error remains, you probably have one of those modems that incorrectly recognize local telephone handset pick-up after switching to voice mode. You need to select the **with a delay** or even the **off** option for the Use modem recognition of local telephone handset pick-up parameter in the **Voice** – **Recognition of Signals** tab.

The program hangs up with the "Handset lift detected on the telephone connected to the modem or telephone extension" message either during answering machine operation after the modem answers or soon after dialing a number. If you did not pick up the handset, it means you have one of those modems that, when in voice mode, detects handset pick-up incorrectly. You need to select the Insert delay when detecting off hook parameter in the **Voice** – **Recognition of Signals** tab.

This suggests that the program was unable to determine the cause of an error. Probably, the modem could not execute a command sent by the program. Usually this occurs due to incorrect voice command set selection in the **Modem** – **Voice Settings** tab.

The second reason for this error to occur is an incorrect device selection in the **Voice** – **Devices** tab. For correct activity, select the "Telephone line" device for the problem mode.

In this mode the program works in the following sequence.

1. Modem is switched to voice mode and dials a phone number.

2. After dialing a number, telephone line voice data recording begins. From this point, **Wait for answer no more than, s** (**Transmission** – **General** tab) time reckoning starts. During this time, the program conducts a telephone line state analysis. If short tones are recognized, the connection is terminated with an Er 16 completion code (**Line is busy**). If neither fax, nor voice answer is detected during this time, the transmission session is ended with an Er 15 completion code (**No answer from recipient**). If a fax answer is detected, the transmission session is terminated with an Er 64 completion code (**Fax response detected when trying to send voice message**).

3. If voice answer is detected and an announcement before ending the voice message is set, the program will play back this announcement and then the intended message. Telephone line state recognition during transmission is possible only if the **Recognize telephone line state** – **for outgoing calls** – **by the modem** option (**Voice** – **Recognition of Signals** tab) is selected and the modem can detect "fax answer" and "short tones" states at voice transmission. If short tones are detected, connection is terminated with an Er 66 completion code (**Modem detected BUSY signals when playing sound**). Should a fax answer be detected, the transmission session is terminated with an Er 64 completion code (**Fax response detected when trying to send voice message**).

4. If message is sent and answer recording is disabled, the program switches to voice data analysis mode for 3 seconds to make sure that the remote party has not hung up during transmission. If short tones are detected during this time, the connection is terminated with an Er 66 completion code (**Modem detected BUSY signals when playing sound**).

5. If message is sent and answer recording is enabled, the program switches to voice data recording mode and records an answer. If short tones are detected during recording, the connection is terminated. If the recorded message is shorter than the **Record voice message for** – **no less than, s** parameter value (**Reception** – **Automatic** tab), it is deleted and the session ends with an Er 67 completion code (**Disconnected or too short message recorded**). If it is greater than or equal to this value, the session is terminated without error message, and the recorded message is saved.

If specific fax tones are detected during answer recording, the following actions are performed.

6. The program switches the modem to fax reception mode (line state analysis is impossible here) and tries to establish facsimile connection. Connection process lasts for the time specified by the **Wait for connection no more than, s** parameter (**Fax** – **General** tab). If connection is not established, then, depending on whether or not any fax answer has been received, the reception session ends with an Er 18 (**Connection error**) or an Er 29 (**No response from fax**) code.

7. After connection is established, fax reception starts. Usually modems do not detect hang up during facsimile exchange. If fax reception does not end normally, the transmission session ends with an Er 20 completion code (**Disconnection error**).

In this mode the program works in the following sequence.

1. The modem is switched to voice mode and the phone number is dialed.

2.1. If the **Recognize Telephone Line State** – **Apply for dialing without sending a message too** parameter in the **Voice** – **Recognition of Signals** tab is checked, after dialing a phone number the voice data recording is activated. At this point, VentaFax begins to wait for a period determined by the **Wait for answer no more than ... s** parameter (**Transmission** – **General** tab). During this time, the program conducts telephone line state analysis. If short tones are detected, the connection is terminated with an Er 16 completion code (**Line is busy**). If neither fax nor voice answer is detected during this time, the transmission session ends with an Er 15 completion code (**No answer from recipient**). Should a fax answer be detected, the transmission session ends with an Er 64 completion code (**Fax response detected when trying to send voice message**).

2.2. If the **Recognize Telephone Line State** – **Apply for dialing without sending a message too** parameter in the **Voice** – **Recognition of Signals** tab is checked, then after dialing a phone number, depending on whether the speakerphone is active or not, the program switches to speakerphone mode or DTMF playing mode (off-hook mode).

If the **Real-time message review** mode (the  button in the Main Application window) is active, then, as in item 2.1, during the time specified by the **Wait for answer no more than ... s** parameter in the **Transmission** – **General** tab the program receives voice data from the telephone line and plays the data back via the speakers plugged to the computer sound device. However, telephone line state analysis (whether the recipient response or busy signal is present) is not performed.

For certain modems, the only way of using the speakerphone during phone number dialing is to disable the **Recognize Telephone Line State** – **Apply for dialing without sending a message too** parameter in the **Voice** – **Recognition of Signals** tab and to disable the **Real-time message review** (by clicking the corresponding button in the Main Application). For example, this is true for the modems whose only voice function is the speakerphone mode.

3. If during telephone line state analysis you would click the **Stop** button with speakerphone mode enabled, or enable this mode, the program switches to speakerphone mode. Clicking the **Stop** button with disabled speakerphone mode disabled causes the program to switch to DTMF playing mode.

4. If you pick up the handset on the telephone connected via the modem or in parallel and your modem recognizes this situation, the program will hang up to give you an opportunity to talk over the telephone. This situation will be reflected in the Log Book as a record with an Er 69 completion code (**Telephone handset lift detected**).

In this mode the program works in the following sequence.

1. Modem is switched to voice mode and dials a phone number.

2. After dialing a number, telephone line voice data recording begins. At this point, **Wait for answer no more than, s** (**Transmission** – **General** tab) time reckoning starts. During this time, the program conducts telephone line state analysis. If short tones are recognized, connection is terminated with an Er 16 completion code (**Line is busy**). If neither fax, nor voice answer is detected during this time, transmission session ends with an Er 15 completion code (**No answer from recipient**). If fax answer is detected, see item 4.

3. If voice answer is detected and an announcement before ending voice message is set, the program plays back this announcement and then the intended message. Telephone line state recognition during transmission is possible only if **Recognize telephone line state** – **for outgoing calls** – **by the modem** option (**Voice** – **Recognition of Signals** tab) is selected, and the modem can detect "fax answer" and "short tones" states during voice transmission. If short tones are detected, connection is terminated with an Er 66 completion code (**Modem detected BUSY signals when playing sound**). Should a fax answer be detected, see item 5. Operations described in item 5 are performed after the announcement is played back. If no specific signals are detected and the **Record an answer** parameter is disabled, the item 5 is performed after the announcement. If the **Record an answer** parameter is enabled, the item 4 is performed.

4. Actions described in this item are performed only under the scheduled delivery. The **Record an answer** parameter can be enabled for scheduled tasks only.

The program records the voice signal from the telephone line until the recording time ends, or until the busy signals are detected, or until the fax answer is recognized. In the latter case the actions described in the item 5 are performed. In the first two cases session ends with the Er 76 completion code (**Recipient answered but did not start fax reception**). In any case, the name of the recorded message file is put as the answer file in the schedule.

If further attempts to complete this task are made, the answers received the same way are **appended** to the answer file that appears in the schedule.

5. The program switches the modem to fax reception mode (line state analysis is impossible here) and tries to establish a facsimile connection. If short tones are detected (it depends on the modem – the program does not analyze anything by now), connection is terminated with an Er 66 completion code (**Modem detected BUSY signals when playing sound**).

The connection process lasts for the time specified by the **Wait for connection no more than, s** parameter (**Fax** – **General** tab). If connection is established, then

- if fax answer is not received, the transmission session ends with an Er 76 completion code (**Recipient answered but did not start fax reception**);
- if fax answer is received, the transmission session ends with an Er 18 completion code (**Connection error**).

6. After connection is established, fax transmission starts. Usually modems do not detect hang up during facsimile exchange. If fax reception does not end normally, the transmission session ends with an Er 20 completion code (**Disconnection error**).

In the current VentaFax version, integration with email programs allows placing messages received in Inbox folders of Microsoft Outlook, Outlook Express and The Bat!. To do so, you need to check **Put incoming messages into default mail client inbox** parameter in the **Folders and Files** – **Service Folders** tab.

There are two different programs developed by Microsoft Corporation, with a related purpose and similar names: **Outlook Express**, which is supplied with MS Windows, and **Microsoft Outlook**, which is supplied with MS Office. These programs should not be confused. The Bat! is a widely used email client by RITLABS company.

1. Outlook Express

1.1. If there is only one identity (usually it is the "Main Identity") created, it should contain a default mail account.

1.2. If there are several identities, settings depends on the operating system.

Windows 2000 and Windows Me

In the Outlook Express menu, select **File** – **Identities** – **Manage Identities**. At the bottom of the window opened there is the "Use this identity when a program cannot ask you to choose an identity" list will appear. Select an Identity in which the received messages should be placed. This is the identity to be selected in Outlook Express for viewing incoming messages. It should contain a default mail account.

Windows 98

In this case messages are copied to an identity selected as "Current Identity". Do not confuse a "Current Identity" and an identity selected for use by default. "Current Identity" with the identity that appears in the **File** – **Switch Identity** menu. If current identity is not selected, this window will open at the first attempt by VentaFax to copy a message to an Inbox folder of Outlook Express.

1.3. If you have several mail programs installed, Outlook Express must be selected as the default e-mail program. To do so, use the Internet Options  or Windows Control Panel.

2. Microsoft Outlook Supplied with Microsoft Office 2000

If there is only one "configuration", it should contain a default mail account. If there are several "configurations" (see Microsoft Outlook settings), messages will be copied to the one selected in the VentaFax **Configuration** list in the **Folders and Files** – **Service Folders** tab. This "configuration" should contain a default mail account.

3. The Bat!

For VentaFax to be able to interact with The Bat!, you need to enable the "Install The Bat! as the Simple MAPI request handler" parameter in The Bat! settings (in the Options - Preferences – Applications menu).

For VentaFax to be able to copy received messages to The Bat! Inbox folder, you need to specify The Bat! mailbox name (see Account – Properties – Name menu) as a configuration name in VentaFax settings (in the **Folders and Files** – **Service Folders** tab).

This group of parameters defines the program reaction to the detection of the modem command (DLE code) that signals the handset pick-up on the telephone connected to the modem. You can insert a delay in the detection of the DLE code after switching to voice mode or disable the detection entirely. This delay allows using modems that falsely report off-hook detection on a telephone connected to the modem (for example, PCTel chip based modems). At the same time, it creates certain problems for users of modems free of such a weakness. If the delay is switched **on**, actions described in **The Answering Machine - How the Answering Machine Works** section and the **VentaFax Operations at Dialing a Phone Number** section of the Help file are not performed in case of handset pick-up.

Clicking the  button enables the real-time message review mode. When enabled, audio signals being transmitted over and being recorded from the telephone line are simultaneously reproduced via the computer's audio device (if one is installed). When the modem reproduces a message, it does not analyze the line; therefore you cannot hear the other party when playing a message. Telephone line audio data are reproduced only during message recording of telephone line signals analysis. Review takes place in the following cases:

- Incoming call auto-answer (if not only Fax is enabled in auto-answer mode). Review is performed during the telephone line signals analysis, voice message transmission, and recording;
- Fax or voice message transmission with manual dialing. Review is performed during the telephone line signals analysis, voice message transmission, and recording;
- Simple phone number dialing both with consequent switch to a speakerphone mode or without it. Review is performed during the telephone line signals analysis after dialing the number.

In the last two cases one of the program line state recognition modes (**Voice** – **Recognition of signals** tab) should be enabled.

Real-time message review mode can be initiated by pressing **Alt+V** keys in the Main Application. This switches the modem to telephone line data reading mode and starts review.

Enabling Telephone conversation recording ( button) automatically switches the real-time message review off, but it can be re-enabled during recording if that is desired.

You can record a conversation as a sound file. Contrary to our usual advice, the telephone over which you speak should be connected in parallel to the modem (i.e., as an extension on the same line) and should not be plugged into the special modem socket. To record and listen to conversation parameter in the **Voice** – **Devices** tab must be set to **Telephone Line**. If the **Telephone Line + Phone Connected to Modem** combination is selected, this telephone set can be used. However, only a few modems support this device combination in a voice mode. Even if this option is available for the voice command set selected, it is not guaranteed that it will work with your modem.

Some modems can record a conversation in a speakerphone mode (for example, some of the modems detectable as Rockwell V.253). In this case you can select Speakerphone device for a recording and start the conversation in speakerphone mode after clicking the **Record** button on the main panel. Speakerphone volume controls are inaccessible in this mode.

Automatic gain control (AGC) can be useful in this recording mode (see **Voice** – **General** tab).

To start recording a conversation, click the  button. During recording the button indicator will flash. To stop the recording, click this button again or click the **Stop** button. The maximum recording time can be limited with the **Record a conversation on clicking "Record" button no longer than** parameter in the **Reception** – **Manual** tab. If the Apply for conversation recording too ('Record a conversation' button) parameter in the **Voice** – **Recognition of Signals** tab is enabled, the program will terminate the connection in case of silence in the telephone line or busy signal detection.

During the recording the real-time message review mode switches off automatically, but it can be re-enabled during recording if that is desired.

Received faxes can be printed out automatically. To enable this mode, select the **Print all faxes received** parameter in the **Printing** – **General** tab. You can select automatic printing for either manual or automatic reception mode, or both. The printer specified in the **Select printer** list in the same tab will be used. Printing is also controlled by the If page doesn't fit paper size, then and Delay Printing until reception is completed parameters. If necessary, the name of the received facsimile message file can be typed in the page. To use this feature, enable the **Type-in the file name** parameter.

Facsimile messages can also be printed manually from the Message Manager.

Sometimes it is necessary to transmit several voice messages within one communication session. The batch creation tool serves this purpose. Actually, when you create a batch, the new file with MIX extension is created. Each line of this file contains the name of a voice message file to be sent.

To make a batch file, click the  button in the **Message Transmission** window. Now you can add voice messages to a list by clicking the
 button. After adding the last message, click the **Finish** button. This will open the window where you can name the batch file. By default the name assigned in the **Folders and Files** – **File Name Templates** tab is used.

The same batch can contain tone commands (DTMF sequences). DTMF sequences can be used, for example, for calls diversion (if supported by the telephony company's hardware). To add a tone command, enter it in the corresponding field and click the  button near this field.

Select a configuration in which to place incoming messages. For details, see Setting Up MS Outlook and Outlook Express for Using "Put Incoming Messages into Outlook Inbox" Parameter section.

To start VentaFax Engine as a service, select the **Run as Windows service** parameter in the **Miscellaneous** – **Engine** tab. This allows using VentaFax both as an answering machine and for scheduled delivery prior to user logon. If you need this feature, make sure that **Auto-Answer** and/or **Scheduled Delivery** modes are switched on. Also, the **Leave in memory when unloading the Main Application** and **Load automatically on Windows loading** parameters should be enabled. The service name is **VentaFax Engine**. Normally, when the VFDRV32.EXE is set as a service, it is started under a **Local System** account. Thus, network resources requiring user login and password for connection, will not be accessible to the service. For example, network printers will be inaccessible for **automatic** printing.

If various **Locations** are used for various telephone lines in the **Multi-line** version and the VentaFax Engine is running as the Windows service, the same limitations apply to the usage of **calling cards** as to the network resources. The solution is the same: run the service under the account in which these calling cards are defined. This is not relevant if the **Use the same location for all lines** parameter in the **Transmission** – **Dialing** tab is enabled. The same goes to the single-line versions, of cause.

If the **Put incoming messages into default mail client inbox** parameter in the **Folders and Files** – **Service Folders** tab is selected, messages will be put into the current user's folder. Messages received prior to user's logon will be copied to the first logged-on user with a set-up Outlook configuration.

To bypass the network resources access limitation, you need to select another user account with needed resources accessible (in Windows service settings). At the same time, incoming messages will be placed to this user's Outlook Inbox only. In order for a system to be able to:

a) start other VentaFax applications via the System Tray icon;

b) open the Main Application upon fax reception automatically.

After the selected user logon, you need to enable **Replace a process level token** permission for this user in Windows security settings.

This parameter specifies an acceptable duration that the modem waits after loss of carrier in fax reception. During this time the modem would try to restore fax reception. This can be useful in case of noise spikes causing transmission breaks when using Fax Class 1.0 command set.

Very often the modem terminates fax reception at 9600 and higher baud rates because of a slightest noise in a telephone line. Thus, many received faxes appear "torn off". To improve fax reception quality, limit the maximum reception rate in the **Fax** – **Rate Limitations** tab to 4800 bps. It is recommended to use Fax Class 1.0 command set, if your modem detects one. In this case reception stability depends on the Delay from lost carrier to hang up in fax reception parameter in the **Fax** – **General** tab.

The session frequently ends with the **Recipient answered but did not start fax reception (Er 76)** or the **Connection error (Er 18)** error.

The reason may be the following. Some modems (US Robotics, SmartLink, PCTel chip based modems and possibly others) cannot start facsimile message transmission until they detect the remote fax initial whistle (the pilot tone). You should probably select the **Disable voice mode when sending out a fax** parameter in the **Fax** – **General** tab, so that the modem does not miss the initial response of the remote fax when it switches to fax mode after the detection of the voice answer.

Another reason may be the incorrect setting of the Command for starting fax transmission in established connection parameter.

Some modems (US Robotics, SmartLink, PCTel chip based modems and possibly others) cannot start facsimile message transmission until they detect the remote fax initial whistle (the pilot tone). If you use one of these modems, then in manual transmission mode you should start sending earlier so that the modem does not miss this tone (whistle).

Another reason may be the incorrect setting of the Command for starting fax transmission in established connection parameter.

This is a phone service that may be offered by your phone company. With this service, you can have several phone numbers assigned to the same phone line. The phone company will send a different type of ring signal for each phone number being called. The subscriber can distinguish which number is called by distinguishing which type of ring is received. Thus, if the modem and usual telephone set are connected to such a line in parallel, the modem can be set so that it will answer only on a certain type of incoming calls and ignore usual voice calls.

See **Distinctive Ring services** section.

This parameter specifies the volume level for reproducing sound via the modem speaker at various actions. (Do not confuse it with Real-Time Line Review program option). However, for some software modems (the so-called Winmodems or softmodems) that do not have a speaker this can be the volume level for reproducing sound via computer sound device.

Parameter affects sound volume in the following cases:

- during dialing a phone number by a modem until the end of dialing and switching to voice mode, if such mode would be used, or clicking Stop button, if voice mode would not be used;
- after the modem goes off hook by clicking on the handset image, with speakerphone mode off;
- in process of establishing facsimile connection when sending and receiving faxes.

To have the sound play through the modem speaker in voice mode depends on the modem. For example, ZyXEL 56K modems reproduce sounds in telephone line via a built-in speaker, but modems with Rockwell chipset do not.

This parameter can be enabled only when interactions with the modem are performed via TAPI (**Modem** – **Interacting with Modem** tab).

If selected, a single facsimile file consisting of all documents printed sequentially on VENTAFAX virtual printer would be created. The file name would consist of a first printed document name and a number in square brackets representing the total number of printed documents. If deselected, each printing on VENTAFAX virtual printer would result in a separate facsimile document.

Here the rules of filename to be assigned to facsimile message after printing on VENTAFAX virtual printer are set. The need for such a set-up results from the lack of direct relationship between the source document name and the name to be assigned to it by an application from where this document is printed. Different applications assign printing names in different ways. Moreover, the printing name may not contain the source document filename. If the **Unique number** parameter is selected, a filename would contain a unique eight-place name consisting of letters and digits. If **Date** parameter is selected, a filename would contain a current date. If the **Source document name** parameter is selected, a filename would contain a text sent to the printer by the printing application. For example, printing the "Doc1.doc" file from MS Word would result in the following facsimile message name:

Microsoft Word - Doc1.doc.tif

If **Try to extract file name from source document name** option is enabled, the filename would look like this:

Doc1.doc.tif

If **Remove file extension from document name** option is enabled, the filename would look like the following:

Doc1.tif

Should a file with a name already exist, the serial number would be added in parentheses:

Doc1 (2).tif

In the **Remove this text from the file name** field you can specify a character string to be removed from the facsimile message filename. Several character strings can be entered using a colon as a separator.

Probable causes: ongoing conversation on a telephone extension, the modem is not connected to the telephone line, or a telephone line fault. Sometimes the modem is unable to discern a dial tone, probably because it is a non-standard dial tone. For example, the signal to dial a number may consist of two short tones instead of a continuous tone, as with some Private Branch Exchanges (PBX). In this case uncheck the Wait for dial tone before dialing parameter in the **Transmission** – **Dialing** – **Advanced** tab.

If in other dialer programs your modem works correctly, but is unable to dial a number in VentaFax, the following can be the reason. Some modems operate differently in voice, fax and data mode. In this case enable the Dial a number in data mode before entering voice mode parameter in the **Transmission** – **Dialing** – **Advanced** tab.

Usually this happens due to incorrect flow control method selection. See Flow control parameter status in the **Modem** – **Facsimile Settings** tab.

If is often advantageous to use an alternative telephone service provider when making long-distance and international calls; that is, to use a calling card. Usually it takes several steps to dial the long-distance phone number this way. The exact calling sequence can be obtained from the telephone company whose calling card you intend to use. For VentaFax to be able to dial phone numbers this way, you need to add the calling card data or to select an existing data set from the Windows settings.

Adding a New Calling Card

Windows 98/Me

Open the Windows **Control Panel** and double-click the **Phone and Modem** icon. In the window that opens check the **For long distance calls, use this calling card** parameter and click the **Calling Card...** button. Now click the **New...** button and type in the new calling card name (for example, "My Calling Card"). Enter your PIN number and access numbers to be dialed for long distance and international calls. Usually it is the same phone number of your telephone service provider. Click the **Long Distance Calls...** button and set up the long distance dialing sequence. The calling sequence must be the same as provided on your calling card. Enter all the necessary data and click **OK**. Then click the **International Calls...** button and set up the dialing sequence for international calls (e.g., 011 for the U.S., 00 for most of Europe). Close all windows by clicking the **OK** buttons.

Windows 2000/XP

Open the Windows **Control Panel** and double-click the **Phone and Modem** icon. In the window that opens double click on the location you want to modify. In the window that opens next, select the **Calling Card** tab. Type in the new calling card name (for example, "My Calling Card"), enter your telephone service provider's access number and the PIN number. Select the **Long Distance** tab and set up the long distance dialing sequence. The calling sequence must be the same as stated on your calling card. Then select the **International** tab and set up the dialing sequence for international calls. Enter all the necessary data and click **OK**.

Dialing a Phone Number with a Calling Card

If the calling card is selected for the current telephony location in Windows settings, then each time you start VentaFax you will see the  icon in the number to be dialed field.

To reach a long-distance person for chat only (without sending a message) enter his or her phone number in canonical form in the number to be dialed field and click the  **Dial the number** button. In the VentaFax Main Application window click the **Send Message** button (or press Alt+F5). In the window that opens enable the **For long-distance calls, use this calling card** parameter and select your calling card from the drop-down list. Enter the recipient's phone number manually or select it from the Phone Book. If the recipient's area code and/or country code are different from those of your telephony location, your calling card dialing information will be displayed in the **Number to be dialed** field. If you simply want to chat to another person, click the **Dial the number** button. If you want to send a message to this recipient, click the **Send with by dialing the number** button or the **Schedule** button.

Switching from Pulse to Tone Dialing Mode

If your telephone company's switch supports pulse dialing mode only, you will probably need to switch to tone mode after dialing the telephone service provider's access number. With Windows 98/Me, there is no trouble with this. All you need to do is to select the **Do Tone Dialing Hereafter** item at the appropriate step of the calling sequence when adding the new calling card. However, there is no such option for editing the calling card sequence in Windows 2000/XP. The Windows 2000/XP developers probably considered pulse dialing extinct. The only way to switch from pulse to tone dialing is to edit the Windows Registry. To do this, start the **regedit** program (if you don't know how to do this, ask a skilled person to perform the following operations). Open the following registry key:

HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Telephony\Cards\

The calling cards keys named Card0…CardN are located here. Open the key with your calling card name (for example, "My Calling Card") in the Name field. Usually the most recently created calling card has the highest number. You need to change the InternationalRule and LDRule values data. Select the InternationalRule value. Its data may contain, for example,

J,,,HEFG#

Enter the T character (which switches the modem to the tone dialing mode) before the H character. Thus the value data will be J,,,THEFG#. Make the same changes with the LDRule value data and close the Registry editor. Now open the VentaFax **Message Transmission** window (if this window was opened, close it and open it again). Make sure that the T character precedes your calling card PIN number in the **Number to be dialed** field. To display the dialing characters, select the **Full** option in the **Transmission** – **Dialing** – **Phone Numbers Display Style** tab.
Please keep in mind that every time you edit the calling card's data in Windows settings the registry edit procedure described above must be repeated because Windows deletes the T character from the Registry values.

Adaptive answer parameters assigned in the **Reception** – **Automatic** – **Call Discrimination (Adaptive Answer)** tab allow you to define the conditions for the program to decide that the incoming call is not a voice call but a fax (modem in the fax mode) call or a modem in the data mode call. In the latter case a data call can be transferred to a waiting application. A call can be transferred only with the modem configured via TAPI and only to a program working with the same modem also via TAPI. One of the standard Windows applications of this type is the Remote Access Server (RAS).

The selection options here depend on answering machine operation mode:

1. The **voice mode** of an answering machine is enabled, i.e. the **Announcement** and/or **Record** modes are active.

1.1. If the **Transfer data calls to awaiting programs** box is unchecked, then the *transfer data type calls mode* is inactive. You can define the parameters of silence in a telephone line (silence in a line is determined during the recording) for the program to consider a call an incoming fax. This is useful for working with fax machines and fax modems that do not play special signals by which a fax call can be identified. Some fax modems stop playing such signals after "hearing" a sound in a telephone line, for example, an answering machine announcement.

1.2. If the **Transfer data calls to awaiting programs** box is checked, then the *transfer data type calls mode* is active. The program will try to determine a modem call by special signals that may be played by a remote modem. If such signals are detected, the program will try to establish a connection with a remote modem in a data mode. Should such a connection be established, the program will transfer the call to a waiting application. In many cases modems do not play such signals (it depends on modem settings). For working with them you can define both silence in a telephone line parameters and four possible responses on silence detection. These reactions are the following reception modes: **fax**, **data**, **adaptive modem answer (type 1)** or **adaptive modem answer (type 2)**.

Fax. Telephone line silence is considered as a fax call, and an attempt to receive a fax is made.

Data. Telephone line silence would be considered as a modem data call, and the program would react in the same way as if a modem call has been recognized.

Adaptive modem answer (**type 1** or **type 2**). In the case of telephone line silence the modem itself distinguishes a modem call from a fax call. The modem must support the adaptive answer mode. The program has two options of switching on the adaptive answer mode. Type 2 should be selected for modems with Conexant/Rockwell chips and similar; type 1 - for all other modems. Some modems do not support adaptive answer at all. For such modems, your selection is limited to **Fax** and **Data** options. If one of the adaptive answer types is selected, the program will try to establish a connection in this mode. Should the connection be established, either fax will be received, or the data type call will be transferred to a waiting application. For a call to be transferred correctly in the adaptive answer node, select the same **Flow control** parameter value in the **Modem** – **Facsimile Settings** tab as specified in your modem properties (see Windows Control Panel – Modem).

Please keep in mind the following:

- Adaptive answer mode will be used only if fax reception is enabled in answering machine settings. Otherwise, VentaFax will answer in a data mode.
- If analysis of silence in a telephone line has not been performed (for example, if the **Record** parameter of an answering machine is switched off) and no special signals were detected during an announcement, the condition is treated like a "silence".

2. The **voice mode** of an answering machine is disabled, i.e. the **Announcement** and **Record** modes are inactive or modem voice functions are disabled.

If the **Transfer data calls to awaiting programs** box is checked, then, to recognize a call in data mode your modem must support one of the adaptive answer types, which needs to be selected.

The Telephone Line Silence Condition

Telephone line silence refers to the condition under which the signal volume in the line does not exceed a certain threshold limit during the specified time interval. This limit is set by the **Treat max. signal volume as silence at ... rel. units** parameter in the **Voice** – **Recognition of Signals** tab. The time interval is set by the **Silence recognition time, s** parameter in the same tab. These two values are best determined empirically (i.e., by trial and error.)

Sometimes it is necessary to change some delivery parameters after the task has been scheduled. For a group of tasks, it is possible to change a delivery time mask and a name of the message file to be transmitted. To replace a time mask, select one or several tasks and click  button. Select new time mask from the pop-up list and click **OK**. To replace a file, click
 button. In an opened window, select the new file. If you need to suspend some tasks, select necessary tasks and click
 button. All the selected tasks would be marked with the
 icon. To execute these tasks, select them and click the
 button again. If you need to delete one or more tasks from the schedule, select necessary task(s) and click
 button.

It may be required to perform some tasks repeatedly. For example, the number of transmission attempts may have been exceeded, bfut fax remains unsent. Or, on the contrary, a fax is marked as successfully sent in the schedule, but recipient asked to repeat the transmission. Select the tasks to be executed again and click  button.

If necessary, you can also edit task parameters. Select a task and click  button. In a window opened, edit the necessary parameters in **General** and **More** tabs and click **OK**.

Script tracing is a check of VentaFax operation under a remote control script. During the tracing process you can imitate tone commands input and observe the results. Please keep in mind that it is not the autonomous script operation check that is performed, but a system operation under a given script check. Therefore, it makes sense to do the following prior to tracing.

If the script has been edited, it is useful to check it for syntax errors. To do so, click the  button. Should errors be found, correct them.

Make sure that the script to be traced is activated as the loaded script. To activate a script, click the  button.

VentaFax & Voice should work with a voice modem, and at least one of the auto-answer modes that enable answering machine remote control operation should be activated. It can be the **Announcement**  and/or the **Record**  options. It is also recommended that you enable real-time message review mode ( button in the Main Application). This allows you to hear answering machine announcements via the computer's sound system.

Tracing can be performed both in normal and demo modes. In the former, the program will interact with the modem as if carrying out actual auto-answer on an incoming call. To avoid telephony switch signals distracting you from the tracing process, you may temporarily disconnect your modem from the telephone line. In the latter case no interaction with the modem will take place. To switch the program to demo mode, press the **Alt+D** keys in the Main Application. You will see "Demo mode" note at the bottom of the Main Application window.

To start tracing, click the **Test** button  in the Script Editor. The tracer will display activated script operation.

For the tracing to begin, an action from the answering machine is needed. It can be an answer on an incoming ring (of cause, if auto-answer mode is on and demo mode is disabled). An incoming ring can be emulated. To do so, click the  button. The cursor will move to the **[START]** section. Now the program will wait for tone control commands.

To manage the script (imitate DTMF commands), use digital buttons at the bottom of the window. After a correct input of a tone command consisting of one or more digits, the cursor in the tracing window will move to a corresponding line of the script and will move through the lines of operations being executed. The indicator to the right of the digit buttons shows time remaining for completion of current operation in a command.

To return to script editing, switch off the tracing by clicking the **Test** button  again.

If necessary, a prepared message can be sent by email. You need to have a default mail program supporting MAPI (Messaging Application Programming Interface) correctly installed. Examples include Outlook Express, MS Outlook, The Bat! or Netscape Communicator.

Prepare a message for transmission and, when in the **Message Transmission** window, click the **Wizard** button to switch to **Message Wizard**. On step 2, click the  button, then click **Next**. A "New Message" window of your email program will open with your message file already attached. Fill in the necessary fields and send your email message.

You can also send a message via email directly from the Log Book or the Message Manager.

In the long run, the Outbox folder may fill up with useless message files. Such files can be purged. To do so, open the Scheduler  and click **Purge Outbox Folder** button  . The program would search the Outbox for files with no records assigned both in the Scheduler and in the Log Book. In the window opened you will be offered to choose, whether to delete these files or to move them to the **Orphaned** folder. By selecting the move option, you can browse through these files later and delete unnecessary ones manually.

This is a phone service that may be offered by your phone company. Distinctive ring services permit several (up to four) subscribers to share the same telephone line. Calls to different numbers vary by ring and may be distinguished by a modem. Thus, if a modem and the usual telephone set are connected to such a line in parallel (i.e., with each an extension off the same line), a modem can be set so that it would answer only on a certain type of incoming calls and ignore usual voice calls. To use this function, check **Use distinctive ring services** parameter box in the **Reception** – **Automatic** – **Distinctive Ring Services** tab. The program has two alternative means for ring distinguishing: TAPI and software.

Through TAPI

This function is available in Windows 95, 98 and Me only and only if the **via TAPI** option is selected in the **Modem** – **Interacting with Modem** tab. Furthermore, this function must be supported by the modem. In user manuals it is usually called Distinctive Ring Detection. To use distinctive ring services your modem should have proper Windows settings. In a window to be opened, click **Properties** button. Open the **Distinctive Ring** tab. Check the **This phone line has Distinctive Ring services** parameter and set up a correspondence between ring pattern and type of call properly. If there is no such a tab in this pane, your modem does not support distinctive ring functions.

Through Software

This option is available if you do need to distinguish incoming rings but the operating system (for example, Windows 2000 or XP) has no means for that. With this option, the program "captures" the modem after the first ring and analyses ring information directly from the modem. In order to save the caller's phone number information (with the use of Caller ID), the **Initialize at Speed** – **set by TAPI** parameter should be enabled in the **Modem** – **Interacting with Modem** tab (anyway, this is the most often optimal option for interacting via TAPI). **Via TAPI** parameter should be selected in this tab. For the program to operate correctly **via port**, you can add special command set to the additional initialization string. This command set is specific to each modem models. This operation should be attempted only by advanced users.

Customizing the Answering Machine

This feature is available in the Business versions only.

Open the **Reception** – **Automatic** – **Distinctive Ring Services** tab and click the **More…** button. In the window that opens check the **Redefine parameters for this ring pattern** box and specify new auto-answer parameters. The following parameters can be redefined:

- the number of ring for the program to answer on;
- the answering machine greeting announcement;
- the auto-answer parameters (**Fax**, **Record**);
- the voice message recording time;
- the answering machine remote control script file;
- the **Switch to remote control immediately after answering a call** parameter state.

In this window the minimum and maximum duration of signal and pause for various ring patterns can be set. The only modems that this feature concerns are those that supply the program with the ring pattern information in the form of the time frame (DRON/DROF). One unit of measurement equals 100 millisecond time interval.

See **USR/3COM Message Series Modem Self-Mode** Section.

Modems in the USR/3COM Message series are able to operate as an answering machine and receive faxes and voice messages in the so-called Self-Mode even with a shutdown computer. Messages received in this mode are stored in modem memory. With VentaFax, you can download these messages to a PC. In the special settings tab (**Modem** – **Self-Mode**), you can specify Self-Mode operations and VentaFax-modem interaction parameters.

In Self-Mode settings, you can:

- enable or disable the Self-Mode;
- specify the number of rings after which a modem would answer;
- enable or disable voice and/or facsimile message reception. The voice message recording time is set by the same parameter as for the VentaFax automatic reception mode (**Record Voice Message for** – **no more than, s** parameter in the **Reception** – **Automatic** tab). Setting this value to 255 seconds or more disables the recording time limitation. Please keep in mind that the modem may detect a disconnection signal (short tones) incorrectly. If this happens, the entire modem memory may be occupied by the very first voice message;
- specify two answering machine announcements. One would be played when there remains some free memory for new messages, another – when modem memory is full. Both announcements are stored in a modem memory and cannot exceed 15 seconds;
- allow real-time playing of any sound over a telephone line during modem Self-Mode reply;
- allow built-in modem remote control in the Self-Mode and set a password to start this mode.

The **Download automatically on VentaFax Engine loading** parameter enables a mode in which received messages will be automatically downloaded from modem memory each time the VentaFax Engine starts. This happens upon Windows loading (if the **Load automatically on Windows loading** parameter is checked in the **Miscellaneous** – **VentaFax Engine** tab) or otherwise on VentaFax loading. With the **Download automatically on VentaFax Engine loading** parameter enabled, Self-Mode operation parameters will be loaded into modem on VentaFax Engine shutdown. This parameter is available in registered versions only. In any case, you will be able to download the messages from the modem memory manually by clicking the **Transfer Messages** button in the Main Application window. Also you will be able to load the self-mode parameters to the modem by clicking the **Load the parameters to the modem** button in the **Modem** – **Self-Mode** tab.

The **Allow fast download** parameter selects between the two message download options. The faster option is more sensitive to modem-computer data exchange failures. Since such failures are uncommon, this option is preferable. The fast option increases the download rate by 30 percent. Usually in case of data exchange failures you will simply be unable to use your modem in any mode. Furthermore, the message download rate is directly linked to the modem port exchange rate specified by the **Initialize at** group of parameters in the **Modem** – **Interacting with Modem** tab. Generally, it is recommended to select **set by TAPI** option and check the **Fix rate** box.

The **Play voice messages during download** parameter allows you listen to the beginning of each voice message right during downloading. Received faxes can be printed automatically. All messages received in the Self-Mode can be copied to email programs just like those received by VentaFax.

With the Self-Mode, there is no need to use VentaFax auto-answer mode (the Auto button on the fax set).

For facsimile messages reception, it should be noted that the modem does not support ECM in the Self-Mode. Also, it may not store information on resolution of a received document (Fine or Normal). The

point is that in the Self-Mode the modem advises a remote fax machine to send a document in Normal mode. Nevertheless, many faxes ignore this and transmit documents in Fine mode. As a result, the program has to select between Fine and Normal modes based on the first page's length. However, it can make an incorrect decision. For example, half of a standard page in a Fine mode is treated as a full page in Normal mode, and one double-height page is treated as standard in Fine mode.

Features of the Self-Mode Modem Operation

USR Message modems can be classified into two groups by the self-mode operation type. The first group includes the **Sportster Message Plus** modems and some of the **56K Message** modems. The second group includes the **56K Professional Message** modems the other part of the **56K Message** modems.

Modems of the first type suffer from the certain disadvantage when interacting with program via TAPI (see the **Modem** – **Interacting with Modem** tab). In case if the Self-Mode is enabled the TAPI actions aimed to cease the interaction with the modem (for example, at the end of session) will **disable** this mode. To re-enable the Self-Mode, the modem must be switched off and on again. However, this will clear the modem timer and the program will be unable to identify the messages' reception time. This shortcoming can be avoided if the program interacts with the modem directly via a COM port.

The second type of modems does not suffer from this disadvantage and related problems do not occur.

It is not recommended to enable the auto-answer on incoming calls mode (the **Auto** button) if you operate your modem in the Self-Mode. If both modes are enabled and the modem of the first type is used, it is the program that will always answer on incoming calls. In case of the second type of modems either the program or the modem itself can answer on an incoming call. Which of them will actually answer a call depends on which number of rings to answer on is lower.

To edit a facsimile message, click on the  button to switch the Message manager from view mode to edit mode. An additional vertical toolbar will appear in the left part of the window. The appearance of the main toolbar buttons will also change. With multipage documents, start by opening a page to be edited.
In the edit mode, you can:

- select a rectangular image block to move, delete or copy it to the clipboard;
- draw curves and geometric figures, such as a rectangular or oval, filled or transparent;
- write text in a font of your choice;
- erase an image with an eraser tool;
- paste a black-and-white image from file.

Both text and images can be pasted with a transparent or opaque background. General functions and button icons of the built-in editor are much the same as in the Paint, the standard Windows graphic editor. Therefore, to learn the basics of graphics editing, you can consult with the Windows Paint help file.

Facsimile Message Creation

The editor allows creating new facsimile documents as well as editing existing ones. To create a new document, click  button. The **Properties** window would open. Here you can specify some document parameters, such as page height, resolution, and file description. (This window is also accessible when editing an existing document). Page width, which equal to 1728 dots, is set standard for all facsimile messages and cannot be changed. Only one-page documents can be created this way. To return to view mode, click on
 button.

In the Message Manager, open a document to be edited. You can edit a facsimile by means of the built-in or an external graphics editor.

How to edit a facsimile message with the built-in editor

How to edit a facsimile message with an external editor

When the program operates in the auto-answer mode, it can perform several actions after an incoming session.

These program actions are defined by the so-called **Rules** in the **Reception** – **Automatic** – **Actions After Reception** tab. For the program to act in one way or another after the reception, set one or more rules and select the **Enable** checkbox in this tab. **Rule** setting depends on the **Action**. We shall discuss this procedure in the corresponding subsections.

At present, the program supports notification/forwarding of received messages by email. In the Business version you can also attach the message file to the email message. Other actions that can be performed after an incoming session are being developed.

Notification of Incoming Messages by Email. Forwarding of Incoming Messages by Email

To get notifications of received messages (or the messages themselves) by email, select **Forward by email** action in the **Reception** – **Automatic** – **Actions After Reception** tab. Thus, an email message will be created upon reception of a new message.

VentaFax sends email messages by SMTP protocol independently of any external mail programs. It does not matter if you have a modem (dial-up) or some kind of a permanent connection to the Internet Service Provider (ISP). The program will operate normally even if you use the same modem both for sending and receiving facsimile and voice messages and for the Internet connection. All you have to do is to set the mail server operating parameters.

After setting the parameters make sure that the **Email delivery** button () in the Main Application is locked.

Mail Server Settings

Select the **Reception** – **Automatic** – **Actions After Reception** – **Mail Server** tab. If you are connected via the local area network (LAN), select the **Permanent connection (LAN, cable modem etc.)** option. Otherwise, select the **Modem (dial-up) connection**. In the latter case you need to choose the connection name from the list below. The program will establish an Internet connection using the properties of the selected connection. However, if the VentaFax Engine is running as the Windows service (available in Windows NT, 2000, XP), you will have to fill in the user name (login) and password for the connection selected. Login and password are provided by the Internet Service Provider – you had entered them upon creation of the connection. In Windows XP this operation can be bypassed if the *Save this user name and password for the following users* – *Anyone who uses this computer* parameter is selected in the connection properties.

Next specify the outgoing mail server address (the **SMTP server** parameter). The address is also provided by the ISP. You can find it in your email account properties. The common **Port** parameter value is 25. Do not change it needlessly.

Some SMTP servers require an additional user authentication. In this case enable the **My server requires additional authentication** checkbox and enter your mailbox user name (login) and the password. Note that passwords are entered in a cipher (hidden) way so it is impossible to spy or copy them.

If you want email notifications to be delivered right after the message reception, select the **Deliver immediately after receiving a message** parameter in the **Reception** – **Automatic** – **Actions After Reception** – **Mail Server** tab. Otherwise notifications will be delivered at the time interval specified by the **Deliver periodicity, min.** parameter.

Setting Message Forwarding Rules

Select the **Reception** – **Automatic** – **Actions After Reception** tab. By default, one tab named **Rule 1** is created here. In the Business version several independent rules can be created. In the Home version only one rule applicable to all the received messages is available. Now specify settings in the **Message Content** parameter group.

Actions

Enter sender's name and email address and recipient's email address, that is, the address to send notifications to. Many cellular phone and paging companies provide special addresses for an email exchange. Thus, you can receive a short text message (SMS) on your cellular phone or pager. To find out this address, consult with your operator.

You can also modify the **Subject** and **Message Body** fields if necessary. These fields may contain any text. By default, special operators are specified here:

%Phone – the caller's phone number (Caller ID);

%Name – the caller's name found in a directory on the identified phone number;

%NP – the caller's name or phone number if the name is absent;

%FaxID – the remote fax identifier;

%Time – the time and date of message reception;

%Len – the number of pages for a facsimile message or duration, in seconds, for a voice message received.

You can exclude unnecessary data from the message body by removing the corresponding operator.

These operators also can be used for conveying the sender's name and the sender's email address. This feature may be useful for sending notifications to a mobile phone when the mobile telephone service provider will pass through an email address but cuts off the message itself. For example, setting the sender's email address as

%Phone_%Time@%FaxID.%Len

generates the following email address

2222222_05~11_21~05@Voice.6s

that can be interpreted as "An incoming ring from the phone number 2222222 was received on November 5 at 21:05 and a 6-second long voice message was recorded."

In order to receive the message file along with the email notification, enable the **Attach message file to email message (in the Business version only)** parameter.

Filter Setup

Filter setup is available in the Business version only. In the Home version an action is applied to all received messages indiscriminately. Click the **Set Filter** button. The first filtering criterion is the message type. In the window opened select message types for which to apply the rule (the **Fax messages** and **Voice messages** parameters). By default, both types are selected.

Filtering by phone number is also available. If **All** option is selected, no filtering will be performed. If **All except specified** option is selected, the action will be applied to messages from all phone numbers but those specified in the list. If **Only specified** option is selected, the action will be applied to messages from those phone numbers specified in the list. You may enter one phone number per line in this list.

Filtering by fax identifier and by recipient's mailbox number can be set up in a similar manner.

In multi-line versions you can also specify for which telephone lines the calls filtering option is enabled.

Adding and Deleting Rules

To add a new rule (in the Business version only), click the **Add** button. This will create the new tab named **Rule 2**. Set up the new rule as stated above. You can create any number of independent rules, each with its own filters. All rules will be verified by the program after message reception. Rules can be set in such a manner that messages received in different mailboxes will be forwarded to different email addresses. Or you may want to forward messages received from certain phone numbers or faxes to one address and all the rest to another. To create a new rule on the basis of an existing one, click the **Copy** button. To delete the rule click the **Delete** button.

Disabling Message Delivery

If you want to temporarily disable the message delivery, click the  button in the Main Application window. Messages will be created as usual, but will not be sent out. Should new messages be created with the delivery suspended, the program will display a notification of undelivered messages when you enable the delivery once again. You will be able to choose to deliver those messages or to delete them.

Verifying the Notification Results

To verify whether the notification or forwarding message was sent or not, open the Log Book and find the record that corresponds to the received messages. If notification/forward tasks were created for them, one of the following mnemonic icons is displayed on the left side of the log records:

 icon means that notification of an incoming message was sent by email.
 icon means that the received message was forwarded by email.
 icon means that notification of an incoming message was created, but was not sent by email.
 icon means that a forwarding message with the received message attached was created, but was not sent by email.

Thus if you see a yellow envelope, the notification was not sent. This may happen when no attempts to deliver the notification were made or when such attempts failed. In the former case the reason may be in a disabled **Delivery** button in the Main Application toolbar. In the latter case, when delivery attempts fail, the corresponding error message appears in the **Comment** field of the log.

Redirecting Received Messages to Another Telephone Number

This feature applies to both facsimile and voice messages and is available in Business versions only. Select the **Redirect to another telephone number** option in the **Actions** list in the **Reception** – **Automatic** – **Actions After Reception** tab and enter the phone number to redirect messages to. The new task is created in the schedule after a message is received, so an *enabled* scheduled delivery is essential for this feature. Also specify the message delivery time mask. In the Multi-Line versions you can also specify the telephone lines that can be used to deliver redirected messages.

Storing Incoming Messages in a Specified Folder

By default all incoming messages are stored in the inbox folder specified by the like parameter in the **Folders and Files** – **Service Folders** tab. However, certain messages that satisfy filtering criteria can be copied or moved to another folder. To do so, select the **Put into the specified folder** option in the **Action**

drop-down list in the **Reception** – **Automatic** – **Actions After Reception** tab. Select the necessary folder in the corresponding field. Set the filter as stated above.

When enabled, the program will also recognize signals during the recording of conversation initiated by clicking the  button on the front panel of the facsimile set. For example, the program will hang up by detecting a busy signal or silence in the telephone line. When disabled, the recording will continue until the **Stop** button is clicked or the recording time limit will be exceeded.

The automatic registration of telephone calls mode allows either conversation recording or simply registering the start time and duration of a conversation in a log. Both incoming and outgoing calls can be registered. You can also register the caller's phone number and the phone number dialed from your telephone (if supported by your modem and the telephone company's switch). This mode also helps to receive a fax even if you had picked up the telephone extension handset prior to the modem.

Below is the description of some common tasks that can be performed by means of the automatic registration of telephone calls. But previously some words have to be said about switching on this mode.

How to Enable the Automatic Registration of Telephone Calls Mode

To switch the program to call registration mode, check the **Enable** parameter in the **For Outgoing Calls** and/or the **For Incoming Calls** groups (for outgoing and incoming calls correspondingly) in the **Registration of Calls** – **General** tab and enable the auto-answer mode by clicking the  **Auto** button.

The other settings depend on the exact task you want to perform.

How to Record Telephone Conversations During Incoming Calls

First of all, you have to make sure that the program will not answer on initial rings:

- set the **Answer on … ring** parameter value in the **Reception** – **Automatic** tab high enough (equal to 10, for example).

The correct setting allows either recording a conversation automatically after the handset goes off hook or switching to usual auto-answer mode if the handset remains on hook long enough.

You can simply disable all auto-answer options on the fax set (the **Announcement**, **Fax**, and **Record**) instead. Also make sure that the **Switch to remote control mode immediately after answering a call** box in the **Reception** – **Automatic** tab is unchecked.

Next you have to set the program in such a way that it starts conversation recording after it detects the telephone extension handset going off hook. The most universal method of doing so, supported by all voice modems, is to do the following. The program starts recording after a lapse of time (specified by the **Maximum time lag between rings** parameter in the **Registration of Calls** – **Recognition of Signals** tab) after the last ring. Recording ceases either if short tones, the dial tone or silence in the telephone line is detected or after a lapse of time specified by the **Maximum duration of a single call registration** parameter in the **Registration of Calls** – **General** tab.

The following parameter values must be set:

- select the **via TAPI** option in the **Registration of Calls** – **Interacting with Modem** tab;

- uncheck the **Respond only to modem messages about going off- and on hook** box in the **Registration of Calls** – **Recognition of Signals** tab;

- select the **Enable** parameter in the **For Incoming Calls** group in the **Registration of Calls** – **General** tab;

- enable the **Record conversation** parameter in the same group;

- set the desired value of the **Maximum duration of a single call registration** parameter.

Possible Troubles

The sound in the telephone handset disappears after the programs goes off hook. It happens when the telephone is connected via the modem and the modem disables the phone jack when going off hook. This problem can be solved by connecting the telephone not to the modem, but as an extension on the same line. You can also try selecting different device (such as the **Telephone line + phone connected to modem** device) in the **For Incoming Calls** group in the **Voice** – **Devices** tab. However, it works only with certain types of modems.

How to Receive a Fax if You Had Picked Up the Telephone Extension Handset Prior to the Modem and Heard the Fax Sounds

If you had picked up the telephone extension prior to the answering machine, the following thing happens. In a certain number of seconds after the last ring (this time is specified by the **Maximum time lag between rings** parameter in the **Registration of Calls** – **Recognition of Signals** tab) the program goes off hook and starts analyzing the signals in the telephone line. In case if the fax calling tone (whistle) is detected, the program makes an attempt to receive a fax. All you have to do is to put the telephone handset back on hook timely in order not to hinder the reception. If no fax signals are detected, the program goes on hook after a time.

Set the parameter values as suggested above. The only difference is the action to be performed: you have to enable fax reception instead of conversation recording. To do so,

- enable the **Receive fax** parameter and disable the **Record conversation** parameter in the **For Incoming Calls** group in the **Registration of Calls** – **General** tab;

- set the **Maximum duration of a single call registration** parameter value equal to 1 minute.

Possible Troubles

Possible troubles and solutions are the same as above.

How to Record Conversations During Incoming and Outgoing Calls (With the Disabled Snoop Mode)

The automatic recording of conversations during outgoing calls is possible only if the modem is able detect the telephone extension going off hook. The telephone must be connected via the modem.

If that is the case, the following settings are required:

- the **exclusive software modem control** option in the **Registration of Calls** – **Interacting with Modem** tab must be selected;

- the **Respond only to modem messages about going off- and on hook** parameter in the **Registration of Calls** – **Recognition of Signals** tab must be enabled;

- the **Snoop mode** parameter in the **Registration of Calls** – **Recognition of Signals** tab must be disabled.

Certain modems are able to recognize Caller ID with such settings, although the identification is not guaranteed.

Possible Problems

1. The recording does not start during both incoming and outgoing calls. Most likely the modem cannot detect the local telephone handset going off- and on hook.

2. The modem does detect the local telephone handset going off- and on hook, but disconnects the telephone from the telephone line at the time of conversation recording, which renders the conversation impossible. Try selecting the **Telephone line + phone connected to modem** device or the **Speakerphone** device in the **For Incoming Calls** group in the **Voice** – **Devices** tab. It may not work, however.

Automatic Registration of Calls in the Snoop Mode

Some of these modems have an undocumented feature of being able to receive voice data from the telephone line without first going off hook. This feature allows registration of calls by means of telephone line signal analysis.

This feature is supported by:

- some modems with Rockwell/Conexant chips defined by the program as Rockwell, Rockwell (Variant 2), Rockwell (Variant 3) types (see the **Command set** parameter in the **Modem** – **Voice Settings** tab);

- several USR/3COM modems defined by the program as USR Sportster Voice and USR Sportster Voice (2). For example, many USR/3COM Message Series modems fall into this category.

Since the call registration feature is not documented for these modems, it may not function with all the mentioned modems.

If it does, the following settings are required:

- the **exclusive software modem control** option in the **Registration of Calls** – **Interacting with Modem** tab must be selected;

- the **Snoop mode** parameter in the **Registration of Calls** – **Recognition of Signals** tab must be enabled.

In case if the modem can detect the telephone extension going off hook, it is advisable to enable the **Respond only to modem messages about going off- and on hook** parameter in the **Registration of Calls** – **Recognition of Signals** tab.

The snoop mode set-up requires more detailed review.

Setting Up the Snoop Mode

To continue the "test" of call registration mode support, pick up the handset on the telephone you are testing. You should see the "oscilloscope" pattern of the signal in the display located on the upper right corner of the fax set image. The signal should disappear when you hang up the telephone. If the pattern does not appear in the display or if it appears straight after switching to the mode irrespective of whether the extension handset is lifted or not, your modem does not support this mode.

Recording begins when signal volume exceeds a certain threshold value. Any lower volume signal is treated as silence. The threshold value is specified by the **Treat max. signal volume as a silence at ... rel. units** parameter in the **Voice** – **Recognition of Signals** tab. This value should be set based on the VentaEngine reading. To do this, right-click the VentaFax icon in the taskbar and select the VentaEngine. You will see two charts and several indexes. The LM index shows the current signal volume. Set the threshold noise signal volume 1.5-2 times higher than the LM ratio on a silent telephone line. Check the LM ratio in two situations:

1. With the telephone handset on hook (hung up);

2. With the telephone handset off hook and a connection to another telephone established, but with no conversation going on.

If the ratio readings vary by a factor of no more than 1.5-2, use the higher value.

If the ratio readings vary by a factor of more than 2, the first reading being higher, then more or less stable call registration is possible only if the telephone line noise has stable spectral characteristics (the spectrum is displayed in the upper chart).

Spectrum variability over time is characterized by the SV ratio. This ratio can be taken into account only when the signal exceeds the specified threshold limit. If the SV ratio does not exceed 30-40 relative units, registration of calls is possible even if the noise level is 4 or 5 times higher than the threshold limit. Set the value of the **or its frequency changes for less than ... rel. units** parameter in the **Registration of Calls** – **Recognition of Signals** tab a little bit higher than the SV reading.

The parameter that defines the threshold noise level also affects:

- incoming call detection. The signal volume during a call must be at least three times higher than the threshold level;
- input signal automatic gain control (AGC). The higher the threshold level, the lower the gain of signals below this level.

The program can identify a phone number being dialed on the telephone through software. To operate in this mode, use the **Software recognition of phone number dialed on a telephone extension** – **tone dialing** and **pulse dialing** parameters in the **Registration of Calls** – **Recognition of Signals** tab. Please keep in mind that disabling the **pulse dialing** parameter disables the recognition at all, whereas disabling the **tone dialing** parameter switches the program from software recognition to recognition of dialing tones "by modem codes". Some modems are able to detect tone dialing in this mode.

Because software recognition of pulse dialing is based on the analysis of voice data received from the modem, the accuracy of recognition by this algorithm is not guaranteed. The software recognition algorithm has one parameter, the **pulse amplitude, rel. units**. It ranges from 1000 to 4000. To avoid noise interference, select through trial and error the highest value possible from the range in which stable recognition is observed.

Limitations

In the Home version the total conversation recording time is limited to 3 hours a day. In an unregistered version maximum conversation recording time is 20 minutes. In the Business version the recording time is unlimited.

See the **Automatic Registration of Telephone Calls** section of the Help file.

Plug-ins expand program functionality. Plug-ins are designed to perform user-specific actions, such as storing information in personal databases. A plug-in is a dynamic-link library (*.DLL) file that must contain at least one function (the AfterSession function) in a certain format. When the plug-in is loaded (plugged in), this function is called after each reception and transmission session. It will be supplied with all the data about the completed session that appear in the log. Sometimes several log records correspond to one session. In this case the function will be called several times. If there are several plug-ins installed, the function will be called by every loaded plug-in.

Installing Plug-Ins

To install a plug-in, put its file to the \PLUGINS folder. In the settings window open the **Miscellaneous** – **Plug-Ins** tab. The plug-in file name should appear in the list of plug-ins. Check the corresponding box and click the **Apply** button.

Testing and Editing Plug-Ins

To test a plug-in, select it in the list of plug-ins and click the **Test** button. The plug-in's AfterSession function will be called with some simulated data.

Some plug-ins may require parameter adjustment. For this purpose use the **Edit** button. Clicking this button calls the plug-in's Configure function.

How to Write a Plug-In

The README.TXT file in the \PLUGINS\EXAMPLE folder contains description of all the plug-in functions, their calling procedure and data structure. You will also find the INFORMER.DPR example plug-in file (written in DELPHI) in this folder.

The Sample Plug-In

The package includes the INFORMER.DLL sample plug-in. This plug-in displays the number of received facsimile and voice messages in the form of a big, flashing onscreen notification. The received messages are counted from the moment of program start in the auto-answer mode. In this plug-in you can edit the text color.

Limitations on Plug-In Use in the Home version

Full-scale use of plug-ins is available only in the Business versions of VentaFax. The plug-in functionality of the Home versions is limited and is intended for testing purposes only. The AfterSession function is called only after incoming sessions and is supplied only with the received message type (facsimile or voice) data. Other session parameters are not supplied to the function. These data are quite enough for testing purposes, as well as for the successful INFORMER.DLL plug-in operation.

This chapter is intended for those whose job is to develop, implement and maintain corporate information systems.

The VentaFax program contains special means of linking it with other document management software that can be installed in an organization. Most often there is a need to automate the facsimile message preparation and scheduling process. There may also be a need to verify message reception and transmission results and to save these results in databases.

The first task can be performed by means of the Command line options feature. Using special command line options, you can create a single task or a batch of several tasks. In the latter case note the batch file execution option.

The second task can be done by means of the plug-in feature. In this case the system developer has to develop a dynamic-link library (DLL) that will be called by VentaFax.

Possible causes:

1. **Your telephone company does not support this service or you are not subscribed to it.** Contact your telephone company's operator for more information.

2. **Your telephone network's Caller ID standard is different from the one built-in in the modem.** For mode information contact your telephone company's representative and the modem manufacturer's customer support service. If the modem allows changing the country code, this may help to solve the problem.

3. **The modem does not support Caller ID.** You can verify this in the modem's documentation or at the modem manufacturer's customer support service. In case if you have the so-called hardmodem and it supports firmware update, there possibly exists a firmware that supports Caller ID. In case of a winmodem the modem operation depends on the driver installed. Possibly, there are drivers that support Caller ID. If your winmodem supports the plug-and-play standard, then it is possible that the operating system had selected a generic driver at the moment of modem installation. Updating this driver with the modem manufacturer's driver may help to solve the problem.

4. **The modem supports Caller ID, but the modem description in the Windows Registry lacks the Caller ID initiation commands.** This may happen if at the moment of modem installation the operating system had used the INF files that do not contain such commands. For example, it could have been the INF files for the standard modem. It may also happen if the modem manufacturer forgot to add these commands to the INF file supplied with the modem. In the latter case the selection of interaction with the modem via COM port option instead of interaction via TAPI option (in the **Modem** – **Interacting with Modem** tab) may help. However, this way of interacting with modem has certain drawbacks. We recommend using it for debugging purposes only. It is better to find the appropriate INF files for your modem and your operating system that contain Caller ID commands. If your search is unsuccessful, try to enable the distinctive ring services with software means (select the **With software means** option in the **Reception** – **Automatic** – **Distinctive Ring Services** tab) even if this service is not supported by your telephone company or you normally don't use it. The "side effect" of the distinctive ring services is the caller's phone number identification overriding the TAPI.

5. The answer on the first ring is specified in the auto-answer settings (in the **Reception** – **Automatic** tab). Usually the Caller ID is transmitted between the first and the second rings, thus the **Answer on ... ring** parameter value should not be lower than 2. Besides, certain modems demonstrate unpredictable behaviour when answering on the first ring. The connection can be terminated and the session will end with one of the error codes (Er 22, 23 or 26).

The VentaFax Multi-Line version can operate several modems at once. There are program modifications for 2, 4 and 8 telephone lines. Versions that support eight telephone lines and more are recommended to run under Windows 2000 and Windows XP operating systems.

Setting-Up the Parameters

Most of the parameters can be set for each telephone line independently. To select the desired telephone line in the program settings window, click the corresponding button at the bottom of the window.

The Main Application Window

The current telephone line state is displayed in the Main Application window. To select the desired telephone line, click the corresponding button at the bottom of the window. If you need to keep an eye on the state of all telephone lines, select the **View** – **All lines** menu item.

Message Reception and Transmission

The automatic reception mode can be enabled independently for each telephone line. In case of the manual reception and transmission the current line is used.

Scheduled Delivery

The schedule created by the program is common for all the available telephone lines. The scheduled delivery mode can be enabled independently for each telephone line. If scheduled delivery is enabled for several telephone lines, messages are sent via all the selected lines. The program makes sure that no task is performed simultaneously in several telephone lines. If for some reasons a message was not sent, any of the free telephone lines can be used to send the message at the next attempt. Voice messages are transmitted only via the modems that have the voice functions enabled.

Telephone Line Deactivation

If you use less telephone lines that the program supports, the unnecessary lines can be deactivated in the **Active Lines** list in the **Miscellaneous** – **VentaFax Engine** tab. Deactivated telephone lines are unavailable for selection.

Renaming a Telephone Line

By default the telephone lines are named Line 1, Line 2, etc. To change the telephone line name, right-click the telephone line selection button. In the context menu, select **Rename**. Type in the new name and press **Enter**.

Specifying the Telephony Location for a Telephone Line

By default all telephone lines share the same telephony location selected in your system. However, each line may require its own telephony location when, for example, different telephone lines require different prefixes for outgoing local or long-distance calls. First, such telephony locations must be created in the system. To do so, click the **Edit** button in the **Transmission** – **Dialing** tab and create new telephony location. If necessary, use Windows help system. After all locations are defined you can select the necessary one for each telephone line from the **Location** list in the same tab.

A cover page is the service page that is transmitted prior to the facsimile message. It may look like the company letterhead with the logo, for example. Usually the cover page contains information about the sender and receiver of the message, the time and date of the transmission and the total number of pages in the document. This information is inserted in the cover page at the moment of a document transmission or preview. For instance, attaching the cover page to a document and scheduling the document for transmission to several recipients results in every recipient receiving the personalized cover page.

Selecting the Cover Page

An appropriate cover page template can be selected in the **Message Transmission** window or in the **Message Wizard** window. To select the template, click the button next to the **Cover page** field. You can also select the cover page template from the drop-down list where the 10 frequently used templates are listed. To ignore the cover page option, select **None**. It is possible to send the cover page only. To do so, select **None** in the drop-down **File** list.

Setting the Cover Page Content

The cover page template files have the ***.VFC** format and are normally stored in the \COVERPAGES folder. A template consists of the fixed graphic part and some information fields that are filled in with data just before the transmission. Each field, in turn, may contain some fixed text and a space where variable data are substituted. For example, the <Attn.> field can appear as follows:

The receiver: <Attn.>

In this case the "The receiver: " text is editable. You may change it to "Dear ", for, example. The receiver's real name will be automatically inserted instead of the <Attn.> text, of course, if the name will be provided at the task creation stage.

Creating and Editing the Cover Page Template

Open the Message Manager. To create the template from scratch, click the **Create** button and select the **Cover page template…** item.

You can also create the template on the basis on an existing facsimile document. To do so, open the facsimile document and select the **File** – **Save As…** menu item. In the dialogue box that opens, select the **Cover Page Template** from the **File type** list and click **OK**. Then open the saved template and click the **Edit page** button.

Arranging the Information Fields

The list of available cover page fields is displayed in the left part of the window in this mode (the  **Edit fields** button is locked). You can add a field to the cover page by clicking the corresponding button. The new field is placed at the top left corner of the cover page. Drag the field to the place where you want it to be arranged. You can do the same with the other available fields. If necessary, you can change each field's size, font parameters, text alignment, as well as the field content (except for the text in broken brackets).

Editing the Information Fields

Any cover page field can be edited. To do so, in the editing mode (the **Edit fields** button is locked) click the field you want to edit. Now you can change the field's parameters or delete it by pressing the **Delete** key.

The Note Field

The **Note** field is meant for writing notes on the cover page just before the facsimile transmission. Its content can be edited prior to sending in the **Message Wizard** window. The **Note** field becomes available in this window if the cover page is selected and its template contains the corresponding field.

It is worth noting that a page can contain several **Note** fields. In this case the **Message Wizard**

window will also contain two additional buttons for moving through these fields.

Editing the Cover Page Graphic Image

Click the  **Edit image** button. All fields will disappear from the screen leaving the graphic image only. Now you can edit the image as described in the How to edit a facsimile message with the built-in editor section.

Fax modems and fax machines that support this mode provide the reception and transmission rate up to 33600 bps.

The fact that your modem supports V.34 data transmission protocol does not necessary mean that it supports V.34 fax. This feature must be explicitly stated by the modem manufacturer. The developers tested the program operation on MultiTech modems in both Fax Class 1.0 and Fax Class 2.1. It is these two command sets where the V.34 fax mode can be implemented. However, the Fax Class 2.1 is the special extension to the Fax Class 2.0 supporting the V.34 fax, whereas the support of the Fax Class 1.0 command set does not mean that the modem supports V.34 fax mode as well.

Facsimile message reception and transmission in the V.34 fax mode are always performed in the error correction mode (ECM) mode.