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Rockwell
Automation

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About RSView32 Messenger

RSView32 Messenger™ is a voice alarm notification, paging, reporting and messaging system. It is an add-on to RSView32™.

With Messenger you can announce alarms locally using a computer sound or voice card, or over a telephone using a voice card. You can also send alarm notification to pagers, fax machines, e-mail addresses, mobliephones or to an RSView32 Active Display Client computer. In addition, you can create a schedule of alarm notification destinations. This lets you accommodate holidays, weekends, and other times when you might want notification sent off-site to personnel who are on call.

Messenger alarm notification works with RSView32, extending and enhancing its alarm capabilities.

In addition to announcing alarms with Messenger, you can create messages and reports about alarm activity and tag activity. These reports can be sent to the same destinations as alarms.

About Messenger Pro

If you purchase an RSView32 Messenger Pro™ license, you can use these additional features:

- Send file attachments with e-mail notifications.

- Dial in using a regular phone line, to hear and respond to alarms, hear status phrases, or run RSView32 commands or macros.

You must activate the Messenger Pro license on your run-time system, as described later in this chapter.

System requirements

To run RSView32 Messenger, the recommended requirements are:

- Personal computer (PC) with an Intel® Pentium® processor. 200 MHz or faster processor recommended. 300 MHz or faster to use voice card.

- Memory. 64 MB or more is recommended.

- Hard disk space. Minimum 50 MB.

- Operating system. Microsoft® Windows® Server 2003 R2 Standard Edition with Service Pack 2; Windows XP Professional with Service Pack 1 or later; Windows 2000 Server with Service Pack 4 or Windows 2000 Professional with Service Pack 4; or Windows Vista Business with Service Pack 1 or later (32-bit) or Windows Vista Home Basic with Service Pack 1 or later (32-bit); Windows 7 Professional (32-bit); and Windows Server 2008 Standard Edition Service Pack 2 (32-bit).

- Modem. To communicate with pagers or fax machines, you need a Windows-compatible fax-modem. For sending e-mail, either a modem, network, or Internet connection is required.

- Sound card. To announce alarms over loudspeakers, you need a Sound Blaster®-compatible sound card and speakers.

- Voice card. You must use a voice card to send alarm notification to a telephone, or to use dial-in access. Messenger supports the Intel Dialogic ProLine/2V, Intel Dialogic D/4PCI, Intel Dialogic D/4PCIUF, and Intel Dialogic D/4PCIU4S voice cards.

  The ProLine/2V is an ISA card. Make sure your PC has an ISA slot before purchasing this card.

  If you use the D/4PCI voice card, Messenger supports channels 1 and 2 on the voice card.

- RSView32 software. RSView32 7.60.00

- Microsoft Exchange e-mail. To send e-mail, you need Microsoft Exchange e-mail. Other MAPI-compliant e-mail systems might work as well. (MAPI is the Messaging Application Program Interface.)

For detailed information about calculating system requirements, see the RSView32 Readme file.

Installing RSView32 Messenger

As part of the installation process, Messenger creates program folders and modifies registry entries. In order to make these modifications, Messenger must be installed on a Windows computer that is set up with these rights (for example, the Windows administrator account has these rights).

Installation steps

The steps below explain how to install Messenger software from a CD-ROM to your computer. Before installing Messenger, be sure that RSView32 7.60.00 is installed on the computer.

1. Close all open Windows programs.

2. Place the RSView32 Extensions CD-ROM in your CD-ROM drive. The CD should start running automatically.

   If the CD does not start automatically, run D:\Setup.exe where D is the drive containing the CD.

3. Follow the on-screen instructions.

4. When installation is complete, restart Windows. If you do not restart Windows now, be sure to restart it before running Messenger for the first time.

Installation summary

The default installation installs RSView32 Messenger in \Program Files\Rockwell Software\Messenger.

Activating RSView32 Messenger Pro

Rockwell Software uses activation files to activate some of its Windows-based software packages. You do not need to activate RSView32 Messenger. However, if you purchased an RSView32 Messenger Pro license, you must activate it on the run-time computer.

You can activate RSView32 Messenger Pro by using FactoryTalk Activation software to download and transfer activation files.

FactoryTalk® Activation

FactoryTalk Activation provides a secure, software-based system for activating Rockwell Software products and managing software activation files. With FactoryTalk Activation, there is no need for a physical "master disk" or any physical media; instead, activation files are generated and distributed electronically.

Important: EvRSI activation is replaced by FactoryTalk® Activation in this release. If you are using EvRSI activation, please contact your local Rockwell Automation Sales office or Technical Support for information on migrating your activations to FactoryTalk® Activation. For Rockwell Automation Technical Support in the U.S. call (440)646-3434. Outside the U.S. see http://www.rockwellautomation.com/locations/.

Finding more information about FactoryTalk Activation

You can find detailed information, instructions, and troubleshooting tips in the FactoryTalk Activation Help.

After installing and launching the FactoryTalk Activation software, click **Help** or **Learn More . . .** to open FactoryTalk Activation Help.

Using the FactoryTalk Activation Manager

The FactoryTalk Activation tool is used to obtain the activation files needed to activate your software. It can also be used to borrow activations from servers having available activations, return activations back to servers, re-host activations, etc.

To open the FactoryTalk Activation Manager:

On the Windows Start menu, click Programs > Rockwell Software > FactoryTalk Activation > FactoryTalk Activation Manager.

To use the FactoryTalk Activation Manager:

1. In the FactoryTalk Activation Manager, click the Home tab then click Get New Activations, or you may click Manage Activations tab, then click Get New Activations.

2. Select the Activation Method to be used.
   To provide the software's Serial Number and Product Key, identify the activation server's Host ID, and download activation files, follow the instructions in the manager.

3. Save the activation file or files.
   Activation files must have a .lic extension. You can save the files to the default location:
   On Windows 2003 and Windows XP the default location for FactoryTalk activation files is:.C:\Documents and Settings\All Users\Shared Documents\Rockwell Automation\Activations

4. On Windows 7 Professional and Windows Vista the default location for FactoryTalk activation files is:C:\Users\Public\Documents\Rockwell Automation\Activations"

For details, click Help in the top left corner of the page.

Protecting activation files

Activation files are simple text files that must have a .lic extension. The activation key for RSView32 Messenger Pro is called RSVMSGR.PRO.

As long as the .lic extension is retained, you can copy or rename an activation file without harming it. However, tampering with text inside the activation file can disable your Rockwell Software products.

If an activation file is damaged or deleted, contact Rockwell Automation Technical Support.

For safekeeping, keep an original set of your activation files on backup media. Use descriptive names for the files, so that you can identify them later, and copy them back to the appropriate computers.

Activation files are locked to the Host IDs of the computers (or dongles) that need them. Activation will fail for Rockwell Software products on a computer where the specified Host ID is not recognized by the activation file.

Using borrowed activations

RSView32 Messenger Pro supports borrowed activations for development computers. A borrowed activation is retrieved from a pool of available activations on the activation server, and expires after a specified length of time. Once a borrowed activation is checked out to a particular computer, the computer can disconnect from the network. When the time limit expires, the associated software on the computer is no longer activated, and the activation automatically becomes available again from the server's activation pool. A borrowed activation can also be returned to the activation server manually before the time limit expires.

To borrow activations from a server:

1. Connect your computer to the network where the activation server is located.

2. Run the FactoryTalk Activation Manager and then click the **Manager Activations** tab.

3. Click the Manage Activations tab, and then click Borrow Activations tab.To borrow a single activation, click the checkbox that corresponds to the activation you want to borrow, and then click **Set Borrow Term**. To borrow more than one activation, click additional checkboxes for the activations you want to borrow and then click **Borrow**. If you do not see the activations you want to borrow, click **I Don't See My Activation Here**. The Activations in gray may not be selected as they are already borrowed by your computer.
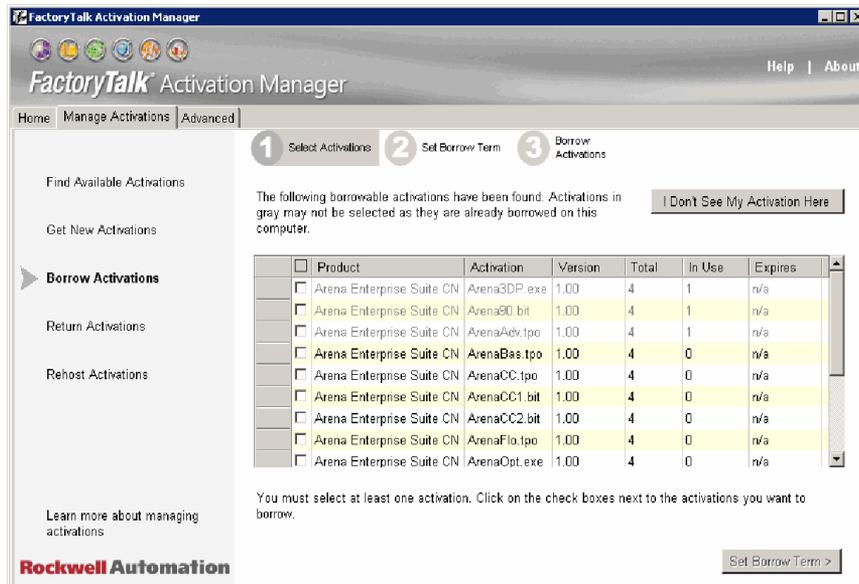
4. In the Set Borrow Term window, set the time of the return by entering a calendar date, net number of days, or approximate hours (shift). The default Calendar date is the maximum borrow term for the activation or group of activations.
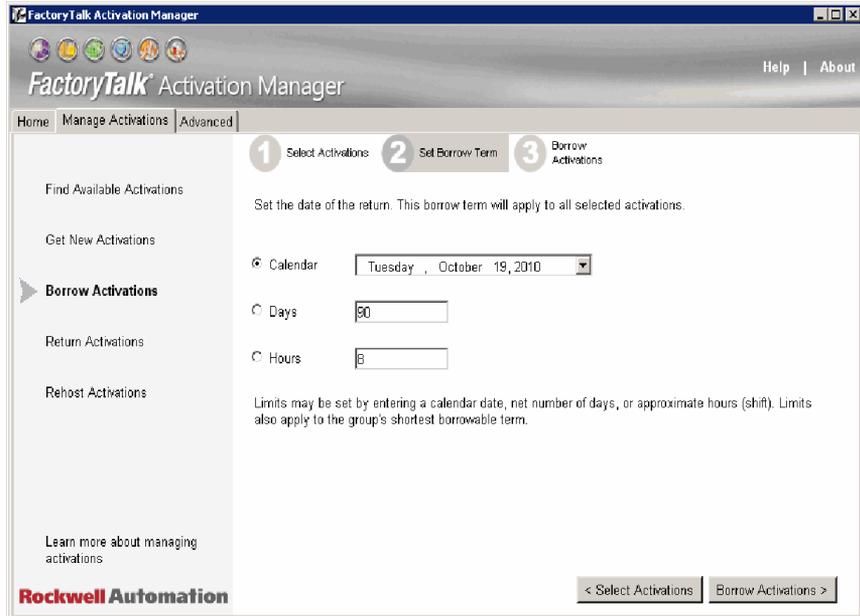
To return a borrowed activation before it expires:

1. Connect to the network and run the FactoryTalk Activation Manager.

2. On the Manage Activations tab, click **Return Activations**, select the borrowed activations you want to return.

3. Click the **Return Activations** button.

To open the Activation Help:

To open FactoryTalk Activation Help. Open FactoryTalk Activation Manager, click Help or Learn More . . .

FactoryTalk® Activation Grace Period

FactoryTalk® Activation provides customers with access to critical software components for a grace period of 7 days regardless of the availability of valid activations. When a product is successfully activated, all grace period records will be cleared and the product will proceed with valid activations.

- During the RSView32 Messenger grace period, FactoryTalk® Activation will display a Grace Period warning message box to the user and log a diagnostic warning message to FactoryTalk® Diagnostics every four hours if no valid activation key is detected.

- When the grace period expires, Messenger will continue to run as in the grace period until it is restarted; however, after RSView32 Messenger is restarted, the dial-in and email feature will not be supported.

Starting RSView32 Messenger

When you have installed Messenger, a folder containing three editors appears in the RSView32 Program Manager. Double-click any editor to open it; or right-click an editor, and then click Show.
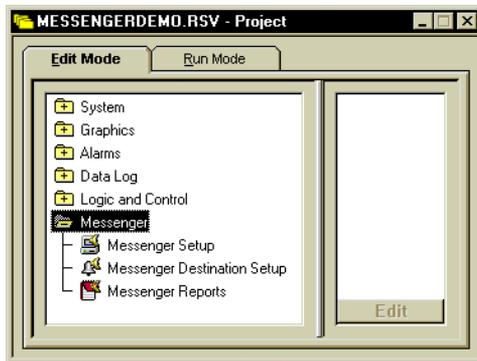
For information about using these editors, see Chapter 2, *Getting started.* Or, see Help.

2 Getting started

Welcome to RSView32 Messenger

RSView32 Messenger™ is an optional extension to RSView32™, for creating and using customized voice and text alarm messages and reports. You can send alarm messages and reports to plant speakers connected to sound or voice cards, to pagers, e-mail addresses, fax machines, telephone numbers, mobilephones and to RSView32 Active Display Client computers.

You can use RSView32 security to prevent unauthorized access to RSView32 Messenger and Messenger commands at run time. See *RSView32 Help* for information about setting up security.

Additional features with Messenger Pro

If you purchase an RSView32 Messenger Pro™ license, you can use these additional features:

- Send file attachments with e-mail notifications.

- Dial in using a regular phone line, to hear and respond to alarms, hear status phrases, or run RSView32 commands or macros.

You must activate the Messenger Pro license on your run-time system, as described in Chapter 1, *Installing RSView32 Messenger.*

The Messenger editors

The Messenger folder in the RSView32 Project Manager contains three editors.
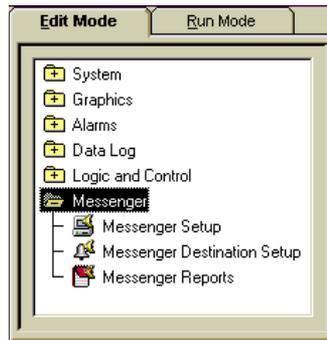
Use Messenger Setup to:

- set up how the voice will sound (using text-to-speech software).

- select tags to monitor for alarms.

- record and import sounds, words, and phrases.

- set up security for dial-in access, including the greeting users will hear.

- set up dial-in phone menus that users can select from.

- set up short message service center number and cellphone number that users can send short message to specified cellphone.

Use Messenger Destination Setup to:

- set up the destinations (telephones, pagers, faxes, e-mail, sound card speakers, voice card speakers, cellphone and RSView32 Active Display Client computers) for alarm messages and reports.

- specify destinations for alarms of different severities and for alarm events.

- specify alarm messages and alarm event messages.

- set up a schedule for who's on call to receive alarms or reports during the week, on weekends, and on holidays.

- specify which days are statutory holidays, and which days are special holidays that relate to your plant or business.

Use Messenger Reports to create reports about alarm activity and other tag activity.

Setting up how messages sound

Messenger comes with text-to-speech conversion software that automatically provides spoken versions of all RSView32 tag names and logging messages. You can also record messages yourself, and then include them in alarm messages and reports. If you want to use text-to-speech, you can choose whether the text-to-speech voice is male or female, and you can provide pronunciations for unusual or industry-specific words.

Using the RSView32 Messenger sample project

Installing Messenger also installs a sample project that you can use to see how Messenger is set up and to test the program before using it with your own projects.

To see Messenger data in action, and to get ideas for setting up your own projects to use Messenger, open the RSView32 Messenger sample project.

To open the sample project

- Click the Windows® Start button, and then select Programs>Rockwell Software>RSView32 Messenger>RSView32 Sample Messenger Project (Messengerdemo.rsv).

Quick start steps

The following steps explain how to get up and running with Messenger. To work with Messenger, you must complete step 1. The other steps are optional and can be completed in any order.

For more detailed information than is provided in this manual, see Help.

Step 1 ■ Set up communications

To start using Messenger right away, all you need to do is install a sound card and issue the MessengerOn command.

If you want to use Messenger to send alarm notification or reports to pagers, e-mail addresses, fax machines, phone numbers, cellphones or RSView32 Active Display Client computers, set up destination information in Messenger for each communication method you plan to use. Then test communications to ensure everything is set up correctly.

Set up destinations in the Destinations tab of the Messenger Destination Setup editor.

For details, see Chapter 3, *Setting up communications*.

Step 2 ■ Set up alarm monitoring

You can specify which tags are monitored for alarms, as well as where and when different alarm messages are sent.

- By default, Messenger monitors and announces alarms for all the tags in the RSView32 tag database for which you have defined alarms. To change the default, you can select individual tags to monitor.

  Specify the tags to monitor in the Alarm Tags tab of the Messenger Setup editor.

- You can send alarm messages to different destinations for different alarm severities or events. For example, you can route all Severity 1 alarms that remain unacknowledged for 60 seconds to a plant-floor supervisor's cellular phone, while routing alarms of all other severities to destinations according to a schedule. At the same time, you can set up Messenger to announce every alarm acknowledgement over the plant's loudspeakers.

  Specify the destinations for messages for different alarm severities and events in the Alarm Severities tab of the Messenger Destination Setup editor.

- You can set up a schedule to specify which destinations receive calls at certain times of day, over the weekend, or on holidays.

  Set up schedule details in the Schedule and Holiday Setup tabs of the Messenger Destination Setup editor.

For details, see Chapter 4, *Setting up alarm monitoring*.

Step 3 ■ Set up phrases, messages, and reports

You can use Messenger to announce customized alarm messages, issue message announcements that you create at run time, or deliver pre-defined reports at regular intervals. You can control what form the information appears in, and even how it sounds.

- You can use the text-to-speech software that ships with Messenger to customize how audio message announcements sound. You can select from a variety of synthesized male and female voices, and control how unusual or industry-specific words are pronounced.

  Set up the text-to-speech software in the Setup tab of the Messenger Setup editor.

- You can create and import audio recordings to use in your messages and reports. For example, you can record a tag name description to include in a message. Or you can import a bell tone to use at the beginning and ending of message announcements.

  Create and import audio recordings in the Audio Recordings tab of the Messenger Setup editor.

- You can use the specific in-alarm, out-of-alarm, and acknowledge messages that have been set up for each tag in RSView32, or you can use standard messages that you set up in Messenger. You can also set up standard messages for alarm faults and alarm suppression events.

  Specify the alarm messages to use in the Alarm Messages tab of the Messenger Destination Setup editor.

- You can create reports for many purposes. For example, you can create a report about the operational status of the plant, and then e-mail the report to shift supervisors and management. Or you can keep people up-to-date by regularly sending a status report—for example, once every hour—to one or more pagers or telephone numbers.

  Set up reports in the Reports editor.

- At run time, you can create messages to report current plant activity. These messages, which are generally shorter than your pre-defined reports, are called "phrases."

  Type phrases on the command line, using the MessengerPhrase command.

For details, see Chapter 5, *Setting up phrases, messages, and reports*.

You can issue Messenger commands from the command line, or include them in an event, a macro, VBA code, or anywhere else that RSView32 commands are used.

Step 4 ■ Set up dial-in access

If you purchase a Messenger Pro license, you can set up dial-in access to allow operators to phone in to hear and respond to alarms, hear status phrases, or run RSView32 commands or macros.

- You can use the pre-defined greeting and log-in prompts provided with Messenger Pro, or create your own audio prompts.

  Set up a greeting and log-in prompts in the Phone Security tab of the Messenger Setup editor.

- You can customize the pre-defined menu system, which provides the caller with a main menu and submenus to choose from, and you can create a custom menu for issuing commands and macros or playing recorded phrases.

  Set up phone menus in the Phone Menus tab of the Messenger Setup editor.

For details, see Chapter 6, *Setting up dial-in access*.

Chapter

3

Setting up communications

Quick start

To start using RSView32 Messenger™ right away, all you need to do is install a sound card and issue the MessengerOn command.

To issue the command, start your RSView32™ project, and then on the command line type MessengerOn.

To test that Messenger is working and the sound card is installed properly, on the command line type this:

MessengerPhrase "Testing sound card"

When you use this quick start method, Messenger:

- announces alarm messages over the local Windows® sound card.

- monitors and announces alarms for all RSView32 tags for which alarms are defined.

- uses the default alarm messages in the Alarm Messages tab of the Messenger Destination Setup editor (not the alarm messages that have been set up for the tags in RSView32, if any).

- uses the default text-to-speech pronunciation for tag names and descriptions.

Setting up destinations

In addition to sending alarms or reports to speakers attached to a computer's sound card, you can send alarm messages or reports to people who are not on the plant floor. Destinations you can use include e-mail addresses, the phone numbers of pagers, telephones, cellular phones, and fax machines, and RSView32 Active Display Client computers.

To add a destination, use the Destinations tab in the Messenger Destination Setup editor.

Choose where to send messages and reports...

...and then fill in the details about the destination.

Setting up pager destinations

Before you set up pagers in Messenger, install a modem and set it up to dial out of your building correctly.

1. In the Destinations tab in the Messenger Destination Setup editor, click Add, and then type a name for the destination.

2. In the Destination type box, select Pager.

3. Click Import, and then select the pager service you use.

   If your pager service is not listed, click New and set up the pager service using the configuration details provided by your service.

4. In the PIN number box, type your pager number.

5. In the Pager service box, select your pager service.

6. Click Retries, type the number of times to retry the pager before giving up, and then click OK to close the dialog box.

7. Click OK to save your changes.

8. Start your RSView32 project, and then on the command line type MessengerOn.

9. To test that the pager is set up properly, on the command line type this:

   MessengerPhrase "Testing pager" /d*PagerDestinationName*

   If the pager destination is set up properly, the phrase "Testing pager" will appear on your pager. If you do not receive a response from your pager, go back to step 1 and verify your settings. You can also verify the settings with your pager company.

Setting up fax destinations

Before you set up fax destinations in Messenger, connect your computer's fax-modem to a COM port.

1. In the Destinations tab in the Messenger Destination Setup editor, click Add, and then type a name for the destination.

2. In the Destination type box, select Fax.

3. In the Number box, type the phone number for the fax machine. If you have to dial 9 to get an outside line, type a 9 and a comma before the number.

   For example, type 9,555-1212.

4. In the Initialization box, type the initialization string to send to the fax modem, if one is required.

5. In the Connect using box, select the COM port to which your fax-modem is connected.

6. Click OK.

7. Start your RSView32 project, and then on the command line type MessengerOn.

8. To test that the fax destination is set up properly, on the command line type this:

   MessengerPhrase "Testing fax" /d*FaxDestinationName*

   If the fax destination is set up properly, the phrase "Testing fax" will appear on a fax sent to you. If you do not receive a message on your fax machine, go back to step 1 and verify your settings.

Setting up e-mail destinations

Messenger requires the use of a local area network to send e-mail.

1. In the Destinations tab in the Messenger Destination Setup editor, click Add, and then type a name for the destination.

2. In the Destination type box, select E-mail.

3. In the E-mail address box, type the full e-mail address. For example, yourname@yourcompany.com. (For testing purposes, set up a destination that uses your e-mail address first.)

4. In the E-mail Subject box, type a subject line for the e-mail, if desired.

   This subject line will be used for all alarm messages sent to this destination. You can include phrases and tag properties in the subject line.

5. To insert a tag property or pre-recorded phrase in the subject line, click Browse and then select a property or phrase from the Phrase Components dialog box.

   For more information, see the next section.

6. If you purchased an RSView32 Messenger Pro™ license and want to send a file attachment with the e-mail, type or select the name of the file to send.

   For example, you might want to send an alarm log file.

   To use file attachments, Messenger Pro must be activated on the run-time computer. For information about activating Messenger Pro, see Chapter 1, *Setting up communications.*

7. Click OK.

8. Start the program you use to send e-mail (with a current Internet connection).

9. Start your RSView32 project, and then on the command line type MessengerOn.

10. To test that the e-mail address is set up properly, on the command line type this:

    MessengerPhrase "Testing e-mail" /d*EmailDestinationName*

11. Check your "Sent Items" folder. E-mails sent by Messenger should appear here within a few seconds.

12. After a few minutes, check your Inbox.

If the e-mail destination is set up properly, the phrase "Testing e-mail" will appear in an e-mail sent to you. If you do not receive an e-mail response, go back to step 1 and verify your settings.

Inserting tag properties and recordings

To insert tag property or audio recording into an e-mail subject line, position the cursor where you want to insert, and then click the Browse (...) button to open the Phrase Components dialog box.

To insert a recording, click the Audio Recordings tab.

To include a property in the subject line, double-click it. If you are inserting the property for a specific tag, first specify the tag in the Tag box.
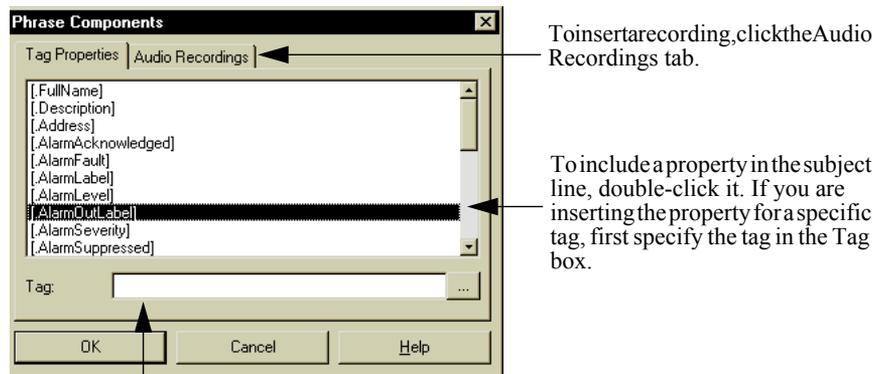
To insert the property for a specific tag, type the tag name here, or click Browse (...) to open the Tag Browser, and then select a tag.

At run time, when an alarm message is announced, Messenger sends an e-mail message with the specified information in the subject line. The current values of tag properties are displayed. The names of audio recordings are displayed. The e-mail message does not play audio recordings.

Setting up phone destinations

Before you set up phone destinations in Messenger, install an Intel® Dialogic® ProLine/2V, Intel Dialogic D/4PCI, Intel Dialogic D/4PCIUF, or Intel Dialogic D/4PCIU4S voice card.

Messenger supports channels 1 and 2 on the D/4PCI voice card.

1. In the Destinations tab in the Messenger Destination Setup editor, click Add, and then type a name for the destination.

2. In the Destination type box, select Voice card phone out.

3. In the Number box, type the phone number to dial. If you have to dial 9 to get an outside line, type a 9 and a comma before the number.

   For example, type 9,555-1313.

4. In the Channel box, select a channel on the voice card. If you also set up a voice card speaker destination, Channel 2 is automatically used for that destination.

5. Click OK.

6. Start your RSView32 project, and then on the command line type MessengerOn.

7. To test that the phone is set up properly, on the command line type this:

   MessengerPhrase "Testing phone" /d*PhoneDestinationName*

   If the phone destination is set up properly, you will hear the phrase "Testing phone" in a phone call to you. If you do not receive a phone call, go back to step 1 and verify your settings.

Setting up sound card speaker destinations

Before you set up sound card speaker destinations in Messenger, install a sound card and speakers.

1. In the Destinations tab in the Messenger Destination Setup editor, click Add, and then type a name for the destination.

2. In the Destination type box, select Sound card speakers.

3. In the Voice box, select the speaker voice. If you select the default, the speaker voice used is the one you select in the Messenger Setup dialog box.

4. Click OK.

5. Start your RSView32 project, and then on the command line type MessengerOn.

6. To test that the sound card speaker destination is set up properly, on the command line type this:

   MessengerPhrase "Testing sound card" /d*SoundcardDestinationName*

   If the sound card speaker destination is set up properly, you will hear the phrase "Testing sound card" on the speakers using the speaker voice you selected. If you do not receive a response on the speakers, go back to step 1 and verify your settings.

Setting up voice card speaker destinations

Before you set up voice card speaker destinations in Messenger, install a voice card and speakers.

Messenger supports the Intel Dialogic ProLine/2V voice card and the D/4PCI voice card, the Intel Dialogic D/4PCIUF and Intel Dialogic D/4PCIU4S voice card. Channel 2 is used for the voice card speaker destination. You cannot select a different channel.

1. In the Destinations tab in the Messenger Destination Setup editor, click Add, and then type a name for the destination.

2. In the Destination type box, select Voice card speakers.

3. Click OK.

4. Start your RSView32 project, and then on the command line type MessengerOn.

5. To test that the voice card speaker destination is set up properly, on the command line type this:

   MessengerPhrase "Testing voice card" /d*VoicecardDestinationName*

   If the voice card speaker destination is set up properly, you will hear the phrase "Testing voice card" on the speakers. If you do not hear a message on the speakers, go back to step 1 and verify your settings.

Setting up short messeage service destination

Before you set up short messeage service destinations in Messenger, specify comm port, baud rate and short messeage service number in Messenger Setup editor, SMS Setting tab.

1. In the Destinations tab in the Messenger Destination Setup editor, click Add, and then type a name for the destination.

2. In the Destination type box, select Short Message Service.

3. Click OK.

4. Start your RSView32 project, and then on the command line type MessengerOn.

5. To test that the short message service destination is set up properly, on the command line type this:

MessengerPhrase "Testing short message service" /d*CellphoneDestinationName*

Setting up the Active Display Client

To set up an RSView32 Active Display Client as a destination in Messenger, you must also set up a graphic display using RSView32. The graphic display must contain an ActiveX® control called RSView32 Messenger Client Control. Create the graphic display containing the RSView32 Messenger Client Control using the Graphic Display editor.

At run time, the display must be displayed and running in the background on the client computer. The server sends alarm messages and reports to the client through string tags.

Before you set up the RSView32 Active Display Client as a destination, check that the client and the server are working properly.

1. In the Destinations tab in the Messenger Destination Setup editor, click Add, and then type a name for the destination.

2. In the Destination Type box, select Active Display Client.

3. To specify the string tag that stores the voice name you want to use, click Browse (...). In the Tag Browser, select the string tag.

   For example, to use the text-to-speech voice called Mary, create a string tag with the value Mary. Select this tag in the box.

4. Select a string's row in the table, from 1 to 10, and click Browse (...) to select a string tag that stores the alarm message or report.

   You can specify a maximum of 10 string tags, with up to 82 characters for each.

5. In RSView32, perform the following steps:

   ■ In the Graphic Display editor, create a new display. For detailed instructions, see the RSView32 Help.

   ■ Add an RSView32 Messenger Client Control object.

   ■ Right-click the RSView32 Messenger Client Control object, and then click ActiveX Property Panel.

   ■ In the Animation tab of the ActiveX Property Panel, select the string tags you specified in steps 3 and 4 (such as, Message and Voice).

   ■ In the Properties tab of the ActiveX Property Panel, change the voice if you want to use a different voice. To do this, double-click the Voice property, and then type the name of the voice to use.

- Right-click the graphic display, and then click Display Settings. Set the Cache After Displaying option to Yes, and select Always Updating.

  or

  If you do not want the graphic display to be visible on the RSView32 Active Display Station, use the Display /ZA command for the display. Messenger announces any changes in the tags that are continuously being updated. Those tags are specified in the Messenger Destination Setup editor. For more information about the Display /ZA command, see the RSView32 Help.

- Save the graphics display file.

- Create a startup macro that clients can use to display the graphic display containing the RSView32 Messenger Client Control object. For more information about creating macros, see the RSView32 Help.

  Important: Do not use the FlushCache command. This command removes the graphic display from the cache at the client. For more information about the FlushCache command, see the RSView32 Help.

6. In the Messenger Destination Setup editor, click OK.

7. Start your RSView32 project, and then on the command line, type MessengerOn.

8. Start the RSView32 Active Display Station to open the graphic display file.

   The RSView32 Messenger Client Control monitors the specified string tags, plays the alarm message or report, and clears the string tags.

9. To test that the client destination is set up properly, on the command line type this:

   MessengerPhrase "Testing Active Display Client" /d*ClientDestinationName*

   If the RSView32 Active Display Client destination is set up properly, you will hear the phrase "Testing Active Display Client" on the speakers. If you do not receive a response on the speakers, go back to step 1 and verify your settings.

Important: If you view the graphic display file containing the RSView32 Messenger Client Control object from the web browser, you must open a new web browser window to view another graphic display file.

Turning destinations on and off at run time

You can turn destinations on and off using the MessengerDestinationEnable and DestinationDisable commands. When you first start Messenger, all destinations are turned on.

See *RSView32 Help f*or information about providing operators with ways to issue commands at run time. See *RSView32 Messenger Help* for more information about Messenger-specific commands.

4 Setting up alarm monitoring

Specifying tags to monitor

By default, RSView32 Messenger™ monitors and announces alarms for all the tags in the RSView32™ tag database for which you have defined alarms. To change the default, you can select individual tags to monitor.

Whether to use all alarm tags depends on how frequently you expect alarms to be generated. For example, if you choose to announce alarms for all tags, alarms might be generated faster than they can be communicated to a telephone, or, if you send alarms by e-mail, the number of alarms generated might bring down the e-mail system.

To specify the tags for which alarms will be announced, use the Alarm Tags tab in the Messenger Setup editor.

To limit the number of tags Messenger monitors, click here.

Messenger Setup

| Setup | **Alarm Tags** | Audio Recordings | Phone Security | Phone Menus | SMS Setting |

○ Use all alarm tags   ◉ Use specific alarm tags

Select tag:

Process\Batch_Tank\Pv
Process\Batch_Tank\Sp

Type: Analog

Name: Process\Batch_Tank\Pv ▶

Description: Batch Tank Level ▶

Units: gallons ▶

Alarm Labels

Out of alarm: ▶

Alarm threshold labels:

1: LOLO ▶   2: LO ▶

3: HI ▶   4: HIHI ▶

5: ▶   6: ▶

7: ▶   8: ▶

[Add...] [Remove]
[Play Message...]

[OK] [Cancel] [Help]
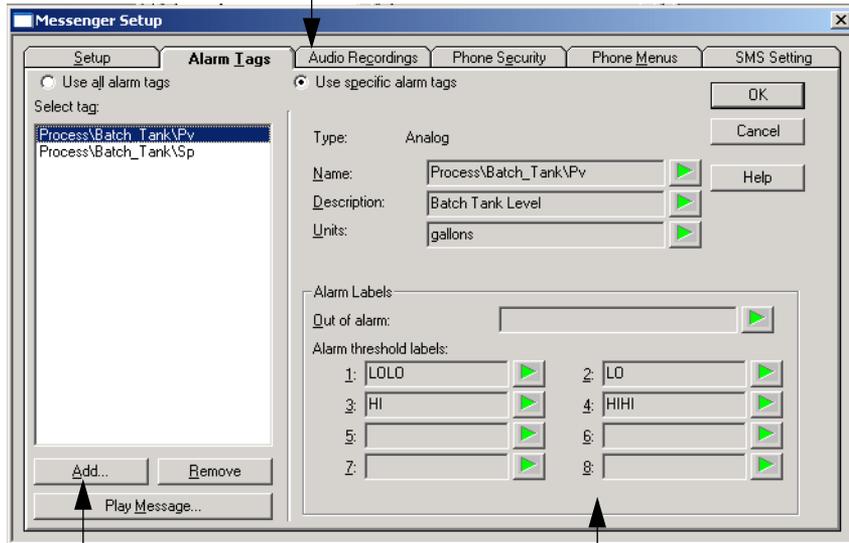
To add a tag to the list, click Add.

View details about the selected tag here. To hear what the text in the box will sound like when spoken, click Play (the button with the green arrow on it).

Specifying destinations for alarm severities and events

You can send alarm messages to different destinations for different alarm severities and events.

To assign destinations to alarm severities or events, use the Alarm Severities tab in the Messenger Destination Setup editor.

Click an alarm severity or event...

...and then choose whether to specify the destination or use the schedule to determine the destination.

If you choose to specify the notification, set it up here.

To display and select destinations, click Browse (...) to open the Select Destinations dialog box.
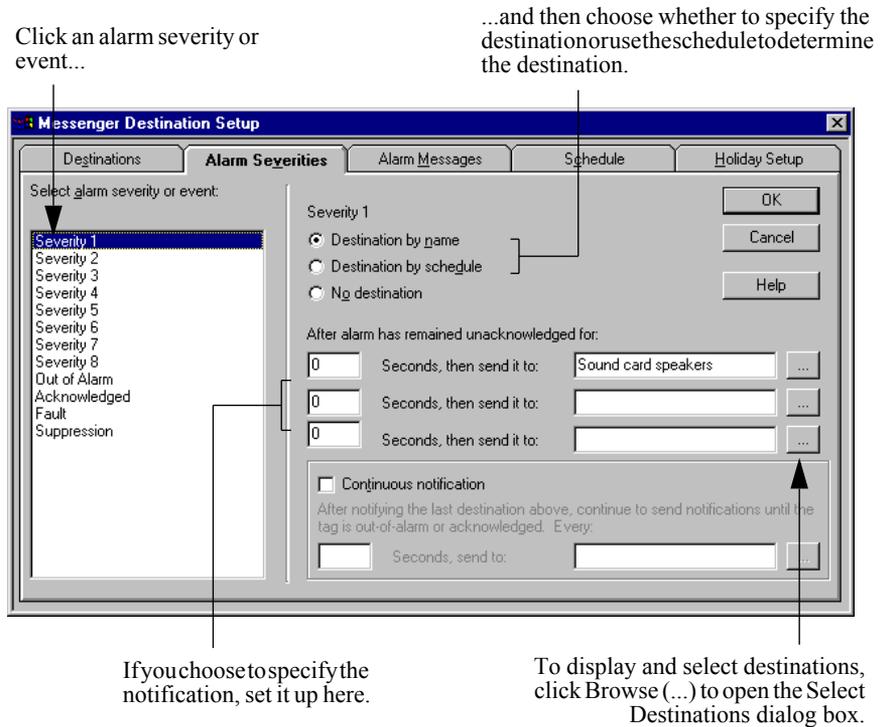
If you choose No destination for alarm severities or events, notification of the alarm severity or event is not sent. For example, you might not want notification to be sent when alarms are acknowledged. In this case, you would set the Acknowledged event to No destination.

Acknowledging alarms

If you purchased an RSView32 Messenger Pro™ license, operators can acknowledge alarms by dialing in to the run-time computer. Users can listen to and acknowledge single alarms, or acknowledge all alarms. For more information, see Chapter 6, *Setting up dial-in access.*

Setting up notifications and destinations

For each alarm severity, you can set up three notifications, or you can let the schedule determine which destinations will receive alarm notification. To set up a notification, specify the time (in seconds) when the notification will take place, and choose one or more destinations where the notification will be sent.

Similarly, for each alarm event you can either set up three notifications that will be sent to one or more destinations at a specified time, or you can let the schedule determine which destinations will receive alarm notification.

To assign destinations, click the Browse (...) button to open the Select Destinations dialog box. You can specify up to 25 destinations.

Click the check boxes to select a destination or multiple destinations.

Setting up continuous notification and announcements

For alarms, you can set up continuous notification. Messenger continues to send you notifications until the alarm is acknowledged. You can specify how often you want notification and assign destinations.

Click to send further notifications until the alarm is acknowledged.

☐ Continuous notification

After notifying the last destination above, continue to send notifications until the tag is out-of-alarm or acknowledged. Every:

[   ] Seconds, send to: [   ] [...]

Specify the notification time, between 1 and 99999 seconds. Click Browse (...) to open the Select Destinations dialog box.

For acknowledged alarms, you can set up Messenger to announce the acknowledgement only if the tag is still in alarm at the time of the acknowledgement.

Messenger Destination Setup

| Destinations | **Alarm Severities** | Alarm Messages | Schedule | Holiday Setup |

Select alarm severity or event:

Severity 1
Severity 2
Severity 3
Severity 4
Severity 5
Severity 6
Severity 7
Severity 8
Out of Alarm
Acknowledged
Fault
Suppression

Acknowledged
○ Destination by name
○ Destination by schedule
○ No destination

Destination for alarm event: [Sound card speakers] [...]

☐ Announce the acknowledgement only if the tag is still in alarm at the time of the acknowledgement.

OK
Cancel
Help

Select to announce the acknowledgement of a tag in alarm at the time of the acknowledgement. Clear the checkbox to announce all alarm acknowledgements.

Setting up a schedule

You can set up a schedule to specify which destinations receive calls at certain times of day, over the weekend, or on holidays.

For example, you can set up the system so that alarms are announced over speakers attached to a computer's sound card from Monday to Friday, between the hours of 8 A.M. and 6 P.M., and you can have alarms announced via the phone to one or more people who are on call evenings and weekends.

You can also specify different alarm destinations for statutory and special holidays. For details, see "Setting up holidays" on page 36.

To set up a schedule for alarm notification, use the Schedule tab in the Messenger Destination Setup editor.

To edit a cell, double-click it.

To see the schedule for holidays, click Show holidays.
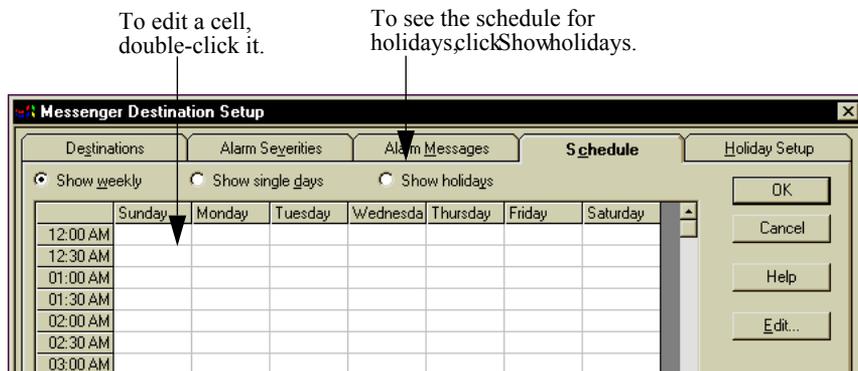
When you double-click a cell in the schedule, the Schedule Detail dialog box opens so you can specify which destinations receive notification of an alarm if it remains unacknowledged for a certain period of time. You can specify up to 25 destinations for each notification.

To assign the same destinations to multiple time periods, select the cells for the time periods, and then click Edit.

Schedule Detail

Special Holiday 11:30 PM

After alarm has remained unacknowledged for:

10	Seconds, then send it to:		...
240	Seconds, then send it to:		...
600	Seconds, then send it to:		...

OK
Cancel
Clear
Help

Note: Alarm Faults, Alarm Suppressions, Out of Alarm, and Acknowledges are sent immediately to the first destination only.

☐ Announce the acknowledgement only if the tag is still in alarm at the time of the acknowledgement.

☐ Continuous notification

After notifying the last destination above, continue to send notifications until the tag is out-of-alarm or acknowledged. Every:

| 300 | Seconds, send to: | | ... |

To display and select destinations, click Browse (...) to open the Select Destinations dialog box.

Select the check box to announce the acknowledgement only if the tag is in alarm at the time of the acknowledgement. Clear the check box to announce all alarm acknowledgements.

Click to send notifications until the alarm is acknowledged.

Specify the notification time, between 1 and 99999 seconds. Click Browse (...) to open the Select Destinations dialog box.

For alarms, you can set up continuous notification. Messenger continues to send you notifications until the alarm is acknowledged. You can specify how often you want notification and assign destinations.

For acknowledged alarms, you can set up Messenger to announce the acknowledgement only if the tag is still in alarm at the time of the acknowledgement.

Setting up holidays

You can set up dates that will use the statutory holiday or special holiday schedules. If a date is assigned to one of the holiday schedules, on this date Messenger uses the holiday schedule instead of the regular schedule. You can assign any dates to a statutory holiday schedule or special holiday schedule. A special holiday is a day off scheduled by the company.

Select Statutory Holiday or Special Holiday.

Type the date of the holiday.

Click to import a group of statutory holidays. Follow the instructions in the wizard.

To add a single holiday to the Select holiday list, click Add. To remove a holiday, click Delete.
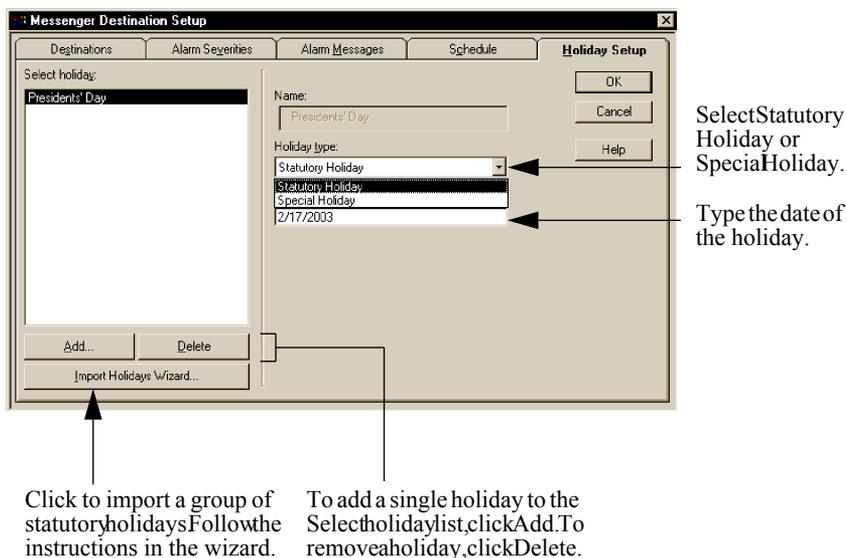
5 Setting up phrases, messages, and reports

Setting up text-to-speech

What is text-to-speech?

Text-to-speech is software for translating text so that it can be spoken by a synthesized human voice. RSView32 Messenger™ comes with Microsoft® text-to-speech software, but you might be able to use Messenger with SAPI-compliant text-to-speech software from other manufacturers. (SAPI is the Speech Application Programming Interface.)

The text-to-speech voice is used with sound cards or voice cards when sending alarm messages and reports to audio destinations. You can test how text-to-speech pronounces your messages and reports as you set up your project.

Bypassing text-to-speech

You do not have to use the text-to-speech voice to produce audio messages. You can create your own audio recordings and import .wav files in the Audio Recordings tab of the Messenger Setup editor. Messenger saves your recordings in .wav format. For details, see "Creating and importing audio recordings" on page 40.

Customizing text-to-speech

The Microsoft text-to-speech software is already set up with default values that are suitable for most projects. You can customize these settings:

- the text-to-speech voice
- the pronunciation of unusual or industry-specific words that are not part of the text-to-speech software's normal vocabulary

To set up the text-to-speech software, use the Setup tab in the Messenger Setup editor.

Click here to choose a text-to-speech voice.

Click here to add or change the pronunciation of words.

If you use the Microsoft text-to-speech conversion software that comes with Messenger, the Setup button displays the software version, and the Translation button is inactive.
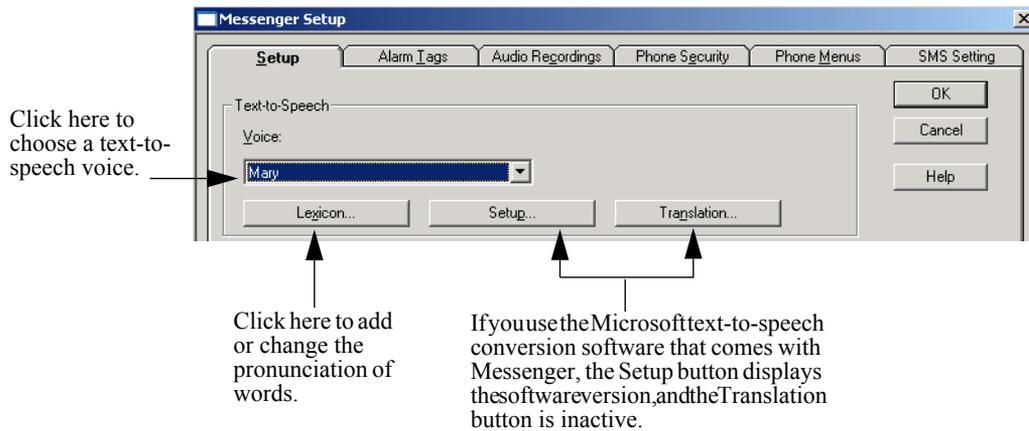
Choosing a text-to-speech voice

The default voice is called Mary. Test the default voice to see if it is suitable for your project. While experimenting with voices, use these tips:

- Use a male (lower-pitched) voice in spaces where there is little or no echo; use a female (higher-pitched) voice in spaces where there is a lot of echo.

- The higher the volume, the more difficult it is to understand what the voice is saying. Keep the volume level at the lowest audible setting.

- Test the voice in different settings. Choose a voice that sounds natural and life-like while adapting to the environment in which it will be used.

Specifying the pronunciation of words

The text-to-speech software cannot always correctly pronounce words such as company names, the names of people and places, technical terms, and so on. For these words, you will need to define or correct the pronunciation before using them in messages and reports.
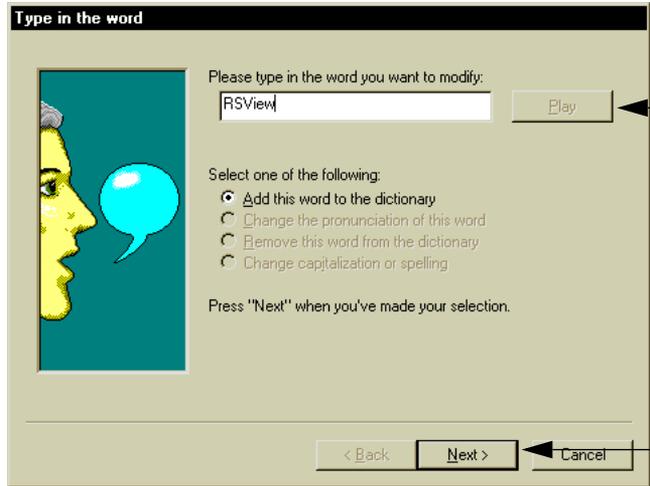
Type the word for which to define pronunciation here...

...and then click Next.

Specify how to pronounce the word by breaking it into syllables.
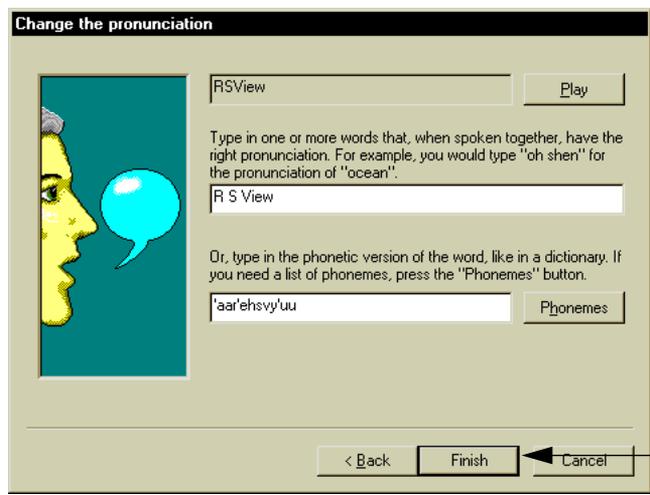
Click Play to hear how the word sounds.

Type short words that have the same sound as the syllables of the word you are defining.

When the word sounds right, click Finish.

For the changes in pronunciation to take effect, you have to stop and then start the RSView32™ project.

For additional tips, see "Working with text-to-speech software" in the Messenger Help.

Creating and importing audio recordings

You can record words and phrases to use in your messages and reports. A microphone is required to create audio recordings. You can use these recordings in addition to or instead of messages spoken by the text-to-speech voice.

Audio recordings are stored as .wav files. You can also import .wav files and use them in your messages and reports. For example, you might use the Windows® system file Chord.wav to signal the beginning and end of a report.

To create, import, or re-record audio recordings, use the Audio Recordings tab in the Messenger Setup editor.

2. If an item has been added to the list but nothing has been recorded yet, a loudspeaker with a red X appears next to the item.

3. To make an audio recording, select the item in the list, then click Record (red circle). Click Stop (white rectangle) to stop recording. Click Play (green arrow) to hear how the recording sounds.
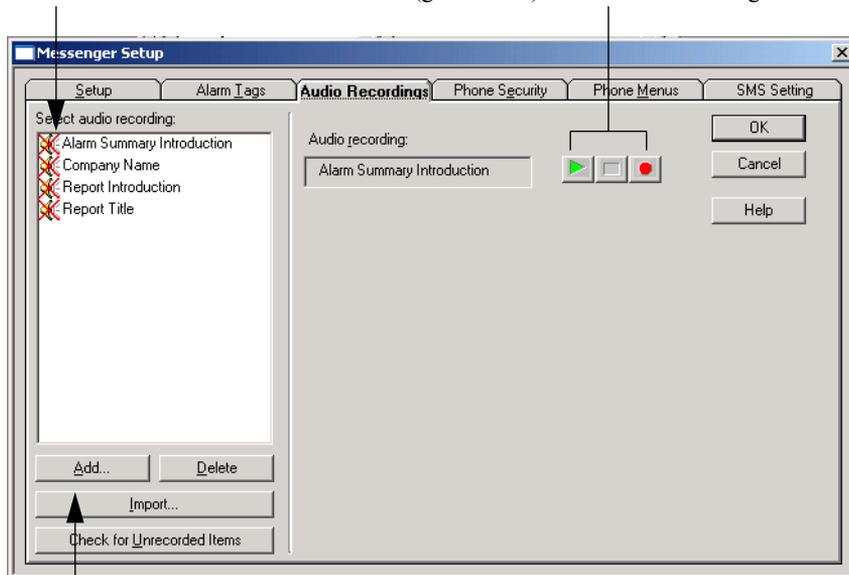
1. To create an audio recording item, click Add, and then type a name and click OK.

To import a .wav file, click Import.

Specifying and creating alarm messages

You can use the custom in-alarm, out-of-alarm, and acknowledge messages that have been set up for each tag in RSView32, or you can use standard messages that you set up in Messenger. You can also set up standard messages for alarm faults and alarm suppression events, whether or not you use the custom RSView32 alarm messages.

To specify or create alarm messages, use the Alarm Messages tab in the Messenger Destination Setup editor.

To use the custom messages set up for each tag in RSView32, click Use custom file messages or Use custom printer messages.

Click Play (green arrow) to hear how a message sounds.
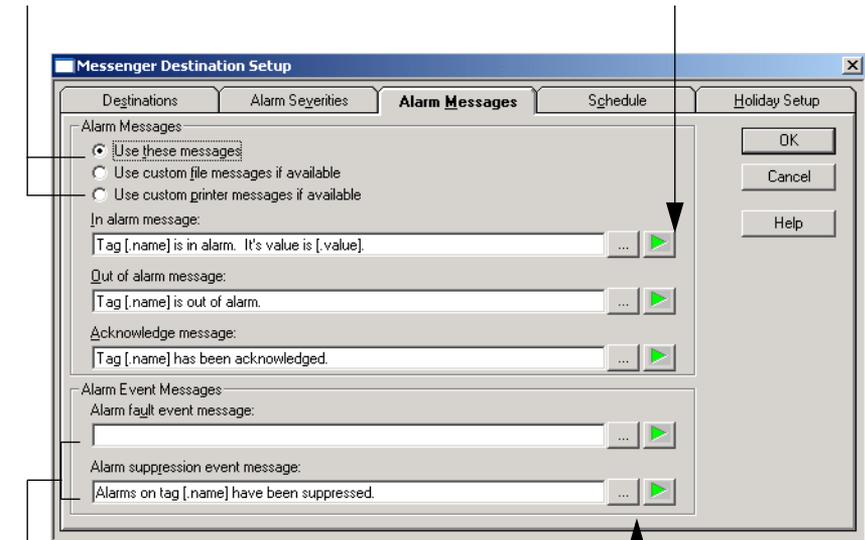
You can specify alarm event messages here even if you use the RSView32 tags' alarm messages.

To insert a tag property or audio recording into the message, click Browse (...) to open the Phrase Components dialog box.

When you create alarm messages in this editor, you can include tag properties for a specific tag or for the tag that is in alarm. You can also include audio recordings, and type plain text.

Inserting tag properties and recordings

To insert a tag property or audio recording into a message, position the cursor where you want to insert, and then click the Browse (...) button to open the Phrase Components dialog box.

To insert a recording, click the Audio Recordings tab.

To include a property in the report, double-click it. If you are inserting the property for a specific tag, first specify the tag in the Tag box.
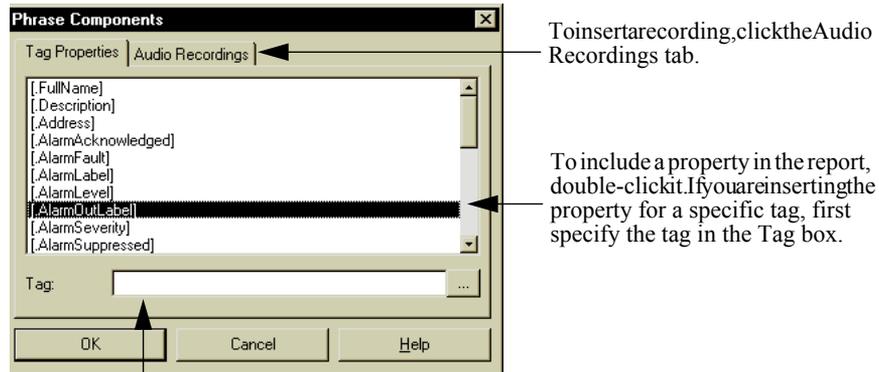
To insert the property for a specific tag, type the tag name here, or click Browse (...) to open the Tag Browser, and then select a tag.

At run time, when an alarm message is announced, the text-to-speech software speaks the plain text and the current values of the tag properties, and Messenger plays the audio recordings.

Creating reports

You can create reports about alarm activity and other plant activity using any combination of plain text, tag properties, and audio recordings.

To create reports, use the Messenger Reports editor.

To listen to your report, click Play.

...click Browse(...) to open the Phrase Components dialog box, and then double-click the property or recording to insert.

Type the text to use in your report. With the cursor positioned where you want to insert a tag property or audio recording...
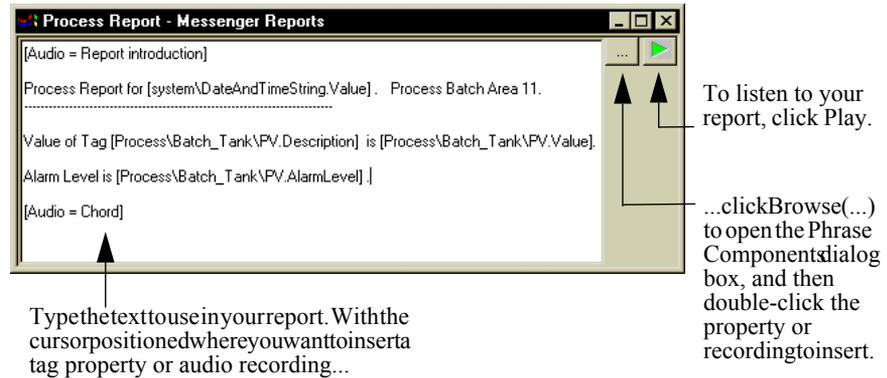
As with alarm messages, to insert tag properties or audio recordings use the Phrase Components dialog box, shown in the previous section.

When you are finished creating the report, save it by choosing File>Save from the RSView32 menu bar. Use the report's file name, without the .vrp extension, when you send the report at run time.

Using reports at run time

At run time, you can send a report to any destination by using the MessengerReport command. For example, to send a report called Oventemp to a destination called Supervisors E-mail, type this:

MessengerReport Oventemp /dSupervisors E-mail

If you do not specify a destination, the report is announced using the speakers connected to the local Windows sound card. The report will contain the values of tag properties at the time the command is issued. If you specify tags in the report, the values for the specified tags will be used. If you do not specify tags, the values for the most recent tag that is in alarm will be used.

Creating phrases at run time

At run time, you can create messages to report current plant activity. These messages, which are generally shorter than your pre-defined reports, are called "phrases."

Type phrases on the command line, using the MessengerPhrase command.

For example, to send the current value of the tag called Oventemp to a destination called Pager, type this:

> MessengerPhrase "The oven has reached [Oventemp.Value] degrees." /dPager

If you do not specify a destination, the phrase is announced over the local Windows sound card.

For details about formatting your phrases correctly, see "Phrase components syntax" in Messenger Help.

6 Setting up dial-in access

Using dial-in access

Dial-in capabilities are available at run time only if the run-time system has an RSView32 Messenger Pro™ license, which must be purchased in addition to RSView32™. You must activate the Messenger Pro license on your run-time system.

For information about activating Messenger Pro, see Chapter 1, *Installing RSView32 Messenger.*

Operators can dial in to:

- listen to alarms

- acknowledge alarms, either singly or all at once

- play a Messenger phrase

- run an RSView32 command or macro

Dialing and logging in

Operators must have a numeric user ID and a numeric password to log into the system. Set up user names and passwords in the RSView32 User Accounts editor.

To dial and log in

1. Dial the phone number of the phone line to which the run-time computer is connected.

2. Type your numeric user name, and then press the # key.

3. Type your numeric password, and then press the # key.

4. Listen to the voice prompts and make your selections using the numeric keypad on your touch-tone phone.

The options available depend on how you set up the dial-in phone menus.

Preparing the voice card and setting up a greeting

To prepare the voice card for dial-in access and set up a greeting, use the Phone Security tab in the Messenger Setup editor.

Type the number of the channel on the voice card to use for dial-in access.

Check this box to set up the voice card for dial-in access.

Type a greeting here, and prompt the user to enter a numeric user name and password. The user must press the # key after entering each number.

To insert a tag property or audio recording into the message, click Browse (...) to open the Phrase Components dialog box.

Messenger supports phoning in using the Intel® Dialogic® ProLine/2V, Intel Dialogic D/4PCI, Intel Dialogic D/4PCIUF and Intel Dialogic D/4PCIU4S voice cards. The ProLine/2V card has 2 channels. Messenger supports channels 1 and 2 on the D/4PCI card.

If you are using the voice card speaker destination, that destination occupies channel 2.

Setting up phone menus

You can set up these options for the dial-in phone menu:

- a welcome message that the user hears once logged in successfully

- an exit message that plays before disconnecting

- the options on the Main Menu

- the options on the Alarm Menu

- the options on the Commands Menu

- the error message that is spoken if the user enters the wrong number or doesn't respond to the voice prompts quickly

To set up options for the phone menus, use the Phone Menus tab in the Messenger Setup editor.

Setting up voice prompts for the phone menus

You can set up separate voice prompts for each of the menus you plan to use. The prompts tell users which buttons to press to select menu items.

Check this box to play a welcome greeting when the user has logged in. Type the greeting in the box.

Check the boxes for the phone menus you want to use. Type the menu prompts in the text boxes.

Type an exit message to play before the user hangs up.
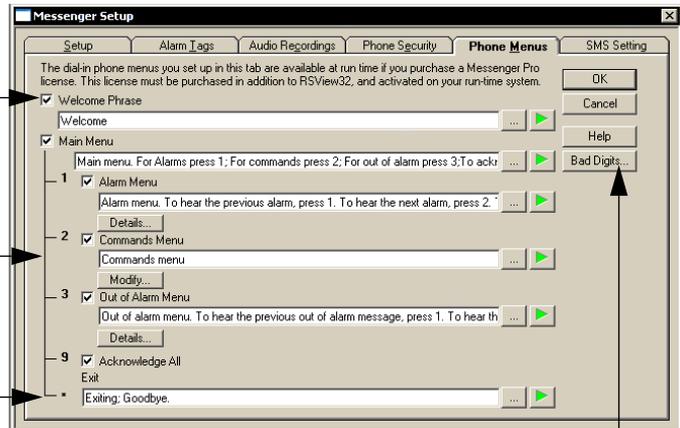
Cick here to set up messages for when the user enters an invalid digit or doesn't respond to the voice prompts. Type the messages in the dialog box that opens.

Setting up the Alarm Menu

You can choose which items to include on the Alarm Menu by removing unwanted items from the Alarm Menu's audio prompt.

Check this box to use the Alarm Menu. Remove unwanted menu items from the voice prompt in the text box.

Clear this box if you don't want the operator to acknowledge all alarms from the Main Menu.
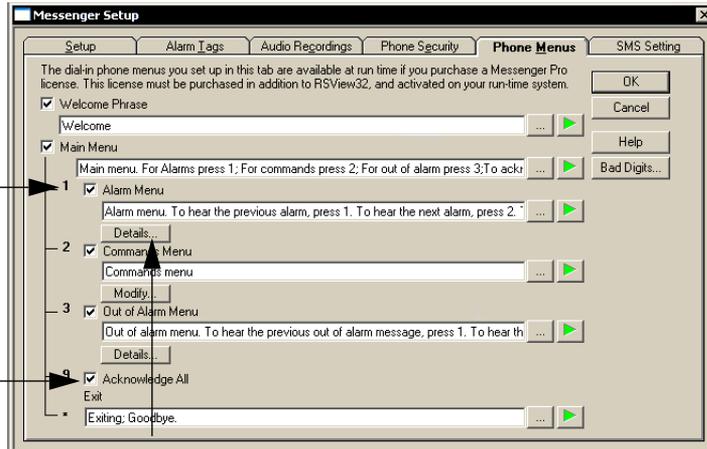
Click Details to see the options available on the Alarm Menu...
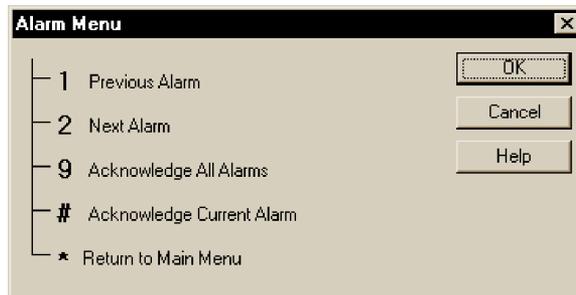
The * key on the Alarm Menu is reserved for returning to the Main Menu.

Setting up the Commands Menu

You can use the Commands menu to run RSView32 commands and macros, or to play Messenger phrases such as messages about tag status.

Check this box to use the Commands Menu. Type a voice prompt in the text box to tell users which buttons to press to select menu items.
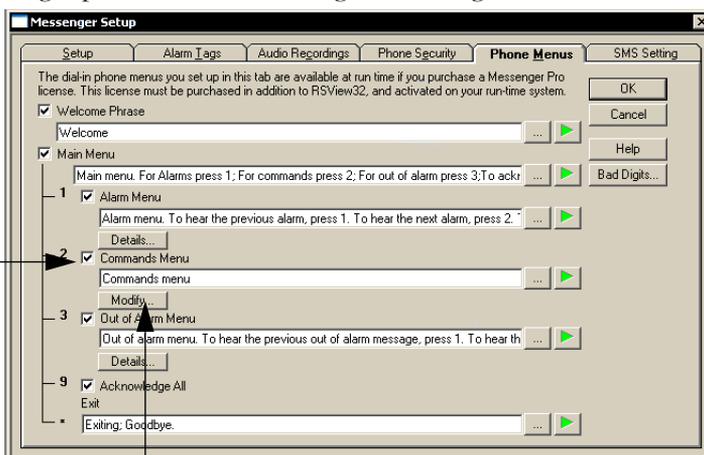
Click Modify to set up the options for the Commands Menu...

Specify whether to use the menu for running commands and macros, or for playing Messenger phrases.
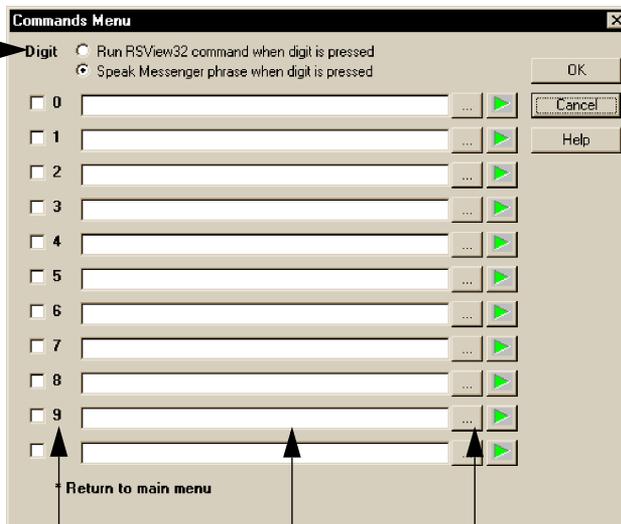
Check the boxes for the menu item numbers you want to use, then...

...type a command, a macro (multiple commands, separated by a space or comma), or a phrase...

...or click Browse to open the Command Wizard or the Phrase Components dialog box.

The * key on the Commands Menu is reserved for returning to the Main Menu.

7 Getting the information you need

Using RSView32 Messenger Help

RSView32 Messenger™ Help provides overviews, reference information, and step-by-step procedures for working with all of the features in Messenger. To open Help while running RSView32™ you can:

- click the Help button on any window.

- on the RSView32 menu bar, click Help>Contents.

Viewing the Help contents

For an overview of the Messenger Help, click the Contents tab, and then double-click the RSView32 Messenger book.
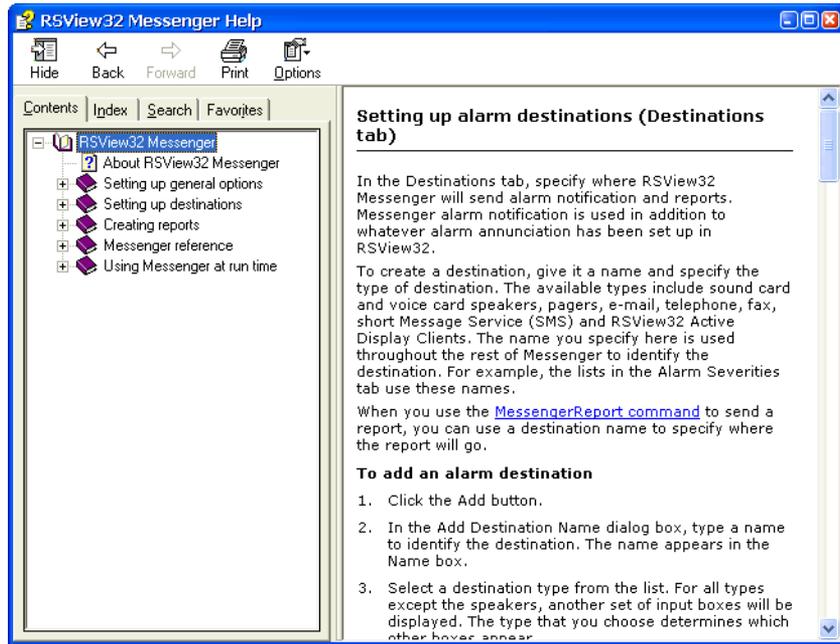
Using the index

The Help index is similar to an index in a book, listing keywords for topics in the Help. To see the index, click the Index tab.
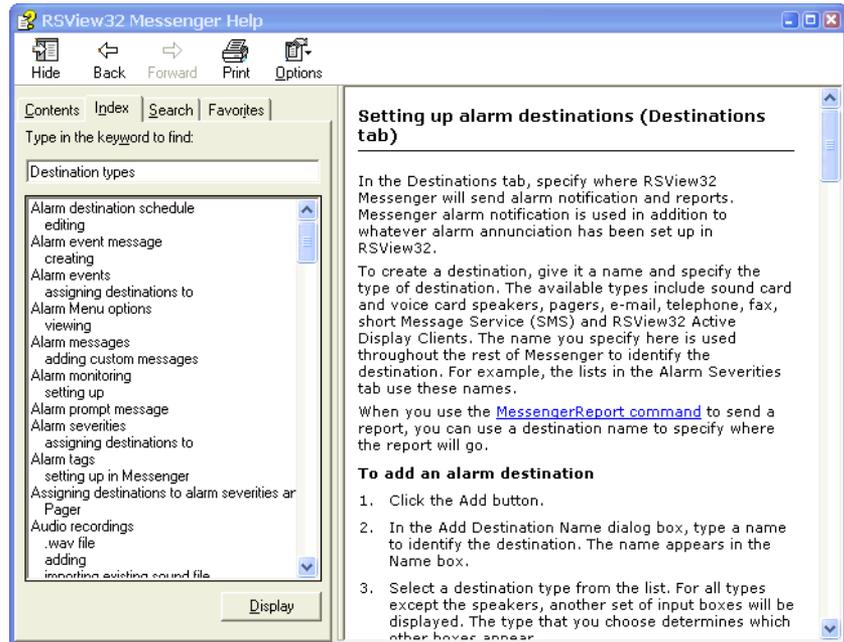
Finding RSView32 Messenger version information

To find the Messenger version number and serial numbers, click Help>About RSView32, and then click Add-Ons. In the box, select RSView32 Messenger, and then click Details.

Finding information about RSView32

For information about RSView32, refer to these publications:

RSView32 User's Guide

Rockwell Software, Publication ID VW32-UM001E-EN-E

RSView32 Runtime User's Guide

Rockwell Software, Publication ID VW32RT-UM001E-EN-E

RSView32 Getting Results Guide

Rockwell Software, Publication ID VW32-GR001E-EN-E

These publications are also available on the RSView32 installation CD-ROM and from the Programs>Rockwell Software>RSView32>RSView32 User's Guides menu.

Technical support

If you have a question about Messenger, please consult this guide or the RSView32 Messenger Help. Or, click Help, Rockwell Software on the Web, and then click the name of the web page you want to view. To use Rockwell Software on the Web, you must have a web browser installed on your computer and a current internet connection.

If you can't find the answers, contact Rockwell Software Technical Support:

Telephone—440-646-3434

World Wide Web Support web site—http://support.rockwellautomation.com

Support staff are available Monday through Friday from 8 A.M. to 5 P.M. eastern time, except during holidays.

When you call

When you call, be at a computer and prepared to give the following information:

- the product serial number

  For RSView32 Messenger Pro, you can find this number on the Activation disk label.

- the product version number

  You can find this number online. With the Messenger Setup editor selected, click Help, and then click About Messenger Setup.

- the type of hardware you are using

- the exact wording of any messages that appeared on your screen

- a description of what happened and what you were doing when the problem occurred

- a description of how you tried to solve the problem

You might also be required to provide information about other RSView32 Messenger Pro add-ons and updates that are installed on your computer.

To view the list of installed add-ons and updates

1. With the Project Manager window selected, click Help>About RSView32 Messenger Pro.

2. Click Add-Ons to view the list of installed add-ons.

3. Click Updates to view the list of installed updates.

Voice cards
    setting up 46
    supported types 2, 21