User's Manual
for

CIMAlert

CIMScan's Message Manager

Document Number: CIMT-110
Revision 5, September 19, 2003

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Overview of The CIMAlert Message Management System

CIMAlert is a message management system that works with CIMScan to transmit messages by way of the following methods:

- Pager
- Telephone
- LAN e-mail
- Internet e-mail

You can configure a message to be sent by more than one method and to as many recipients as you wish.

A typical use would be to transmit a message when a database point reached an alarm limit. The message could include variables, like the name of the database point, the real-time data value, units of measure, alarm limits, plus any pre-defined text you wish.

The basic message and the action that triggers sending it are set up in CIMScan. The recipients and the methods for contacting them are set up in CIMAlert, along with a master schedule that determines how and if the message will be sent. This information is passed on to CIMScan. When you define the message in CIMScan, you can choose which recipients you want to receive it by simply selecting the names from a list.

CIMAlert also contains a Text-to Speech option that converts the message from a text string to high quality speech that can be played through the telephone (if you have a telephone interface card) or announced over a PA system. The telephony option also allows the recipient to request additional data by entering a code from a telephone key pad.

Currently, US English is the only supported text-to-speech conversion language. UK English, German, and Spanish may be offered if there is sufficient demand.

Hardware Requirements

CIMAlert requires a TAPI compliant telephone interface card for telephone and numeric pager support. Interface cards are available from your CIMScan distributor.

For an alpha/numeric pager and Internet e-mail support, a modem must be installed and configured on the computer running CIMAlert.

A sound card with the appropriate Windows drivers must be installed to be able to play messages to a PA system or through local speakers.

A local area network interface is required for LAN-based e-mail.

Setting up CIMAlert

Installing CIMAlert

Before using the messaging capabilities of CIMAlert, the software must be installed. CIMAlert does not install when you install the CIMScan program. Browse the provided CD for the Setup.exe file in the CIMAlert directory, then proceed with a normal Windows installation. Typically, CIMAlert is licensed as an option when you license CIMScan. If you are adding CIMAlert to an existing CIMScan system, you must upgrade your CIMScan license. In CIMScan, select **System Settings** from the **File** menu, click the **License** button at the bottom of the dialog, and follow the instructions on the **License Management** dialog.

Overview of Configuring Messages and Recipients in CIMAlert

The configuration dialogs are accessed from the **Setting** menu. Each menu selection is described below.

System..... A few system settings such as timeouts, logging options, time and date formats, etc.

Speech..... Text-to-speech conversion settings such as voice to use, speech rate, etc.

Constants..... Message segments, such as an introduction and conclusion, which are added to each message before it is sent.

Recipients ..... Recipient information, including their phone numbers, pager I.D's, and e-mail addresses. Every recipient will have a unique I.D. tag that will be used for identification in CIMScan. All schedules specifying how and if a message should be sent are set up here. Note: Individual recipients can also log on to CIMAlert and make changes to their schedule as necessary. (See **Using the Recipient List Edit Utility**.)

Portals ..... Configuration settings for each of the four message portals (pager, telephone, LAN e-mail, and Internet e-mail). These settings include physical port selections, mail server URLs, timeouts, etc.

Overview of Testing the Message and Recipient Set Up

Once you have configured the recipients and the messages, you can check your setup by sending test messages. Click **Test** in the main menu, then send a message to any recipient selected from a dropdown list. This is described in detail in **Testing a Configuration.**

Linking CIMScan Messages and CIMAlert Recipients

Once you have configured CIMAlert, the final step is to start the CIMScan program and link the CIMScan messages to the CIMAlert recipients. In CIMScan, access the **Messages Setup** dialog under **Settings** on the main menu. Choose the desired recipient(s) for each message by selecting them from the list of recipient I.D.s, which is accessed by double clicking the **List** field on the dialog's grid. (See **Configuring Messages in Cimscan**.)

Configuring Telephone Message Responses

One option with messages transmitted by telephone is allowing the recipient to request a response with additional data. The response will contain a user-defined message, plus information about the selected database points, such as name, group ID, the current value, and the units of measure. The response can be configured to either say or spell the group ID or the units of measure.

Response messages are configured in CIMScan. Click the **Options** button on the **Message Display Setup** dialog in CIMScan. (See **Configuring Messages in Cimscan**.)

How CIMAlert and CIMScan Interact to Send a Message

Any CIMScan Action can send a message. The message could be triggered by a new alarm condition, a change in a database point value, or by the CIMScan operator clicking a button on a graphic, to name just a few.

When a message is triggered, CIMScan displays it in the User Alerts list, and plays any associated wave files. Then, CIMScan sends the message to CIMAlert, along with the list of recipients linked to the message. CIMScan will automatically start CIMAlert if it is not running. (This example assumes that all the display options were enabled for the message in CIMScan.)

Once received, CIMAlert checks the message to see if it should be played through a sound card. (There must be a check in the **Spk** box on the **Message Display Setup** screen in CIMScan.) If so, CIMAlert will immediately convert the message to a wave file format and send it to the sound card. Next, CIMAlert compares the current date and time to the recipient schedules and scans the list of recipients to determine which are active and what mode of transmission (portal) to use. Then, the message is queued for transmission to the appropriate recipients via the specified **portals**.

CIMAlert's message manager periodically checks the messages in the queue and dispatches them to the appropriate portal handlers whenever the **retry** time has elapsed. The portal handler will attempt to send the message and, if successful, remove it from the queue. The message will, however, remain in the queue with a new **retry** timestamp if it cannot be sent because the telephone line is busy or there is no answer.

Receiving Telephone Messages

Telephone messages are a special case because the recipient can interact with them in real time. After establishing a connection, the message is played and the recipient is prompted to enter a confirmation code on the telephone pad. The message is considered sent if the correct confirmation code is entered. If the message is an alarm that requires acknowledgement in CIMScan, the confirmation is transferred to CIMScan and the message is marked as **Acknowledged** in the **Alarm List**.

After entering the correct code, the recipient may request additional data in the form of a canned message response by entering the message ID followed by the pound sign (#). The recipient can key "0#" for a list of all of the available messages and their ID codes. (Response messages are configured in CIMScan by clicking **Options** on the **Message Display Setup** dialog.

The following keys are used to move through a message.

alone..... continue to next message segment

* alone ..... repeat last message segment

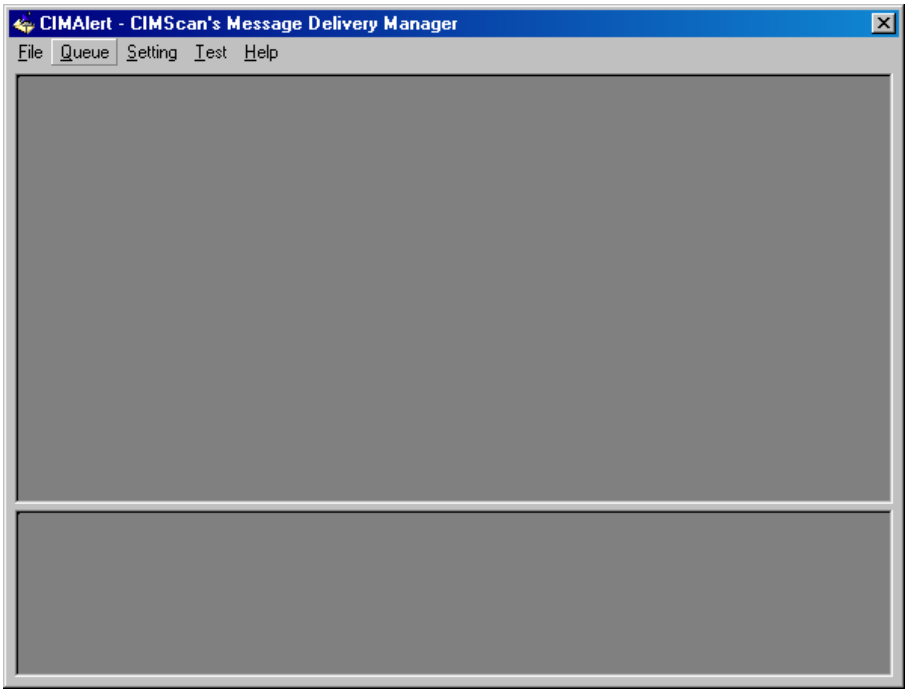
[number] # ..... play another message with ID=number

A single "beep" will be issued by the system whenever a user entry is expected. Completed entries must be followed by a pound sign (#) or a star (*). (See **Configuring Messages in Cimscan**.)

Operation of CIMAlert

Starting CIMAlert

Double click on the CIMAlert icon on your desktop to start the application or double click cimalert.exe found in the CIMAlert folder in the CIMScan directory. This will display the CIMAlert main window.



Overview of CIMAlert Menus

Across the top is a menu bar with the following items.

File ..... contains options to clear the list of transaction errors (described in **Transaction Log Display**) or to exit the CIMAlert program.

Settings ..... accesses all message settings. All the options under the **Setting** menu are described in **Setting Menu Selections**.

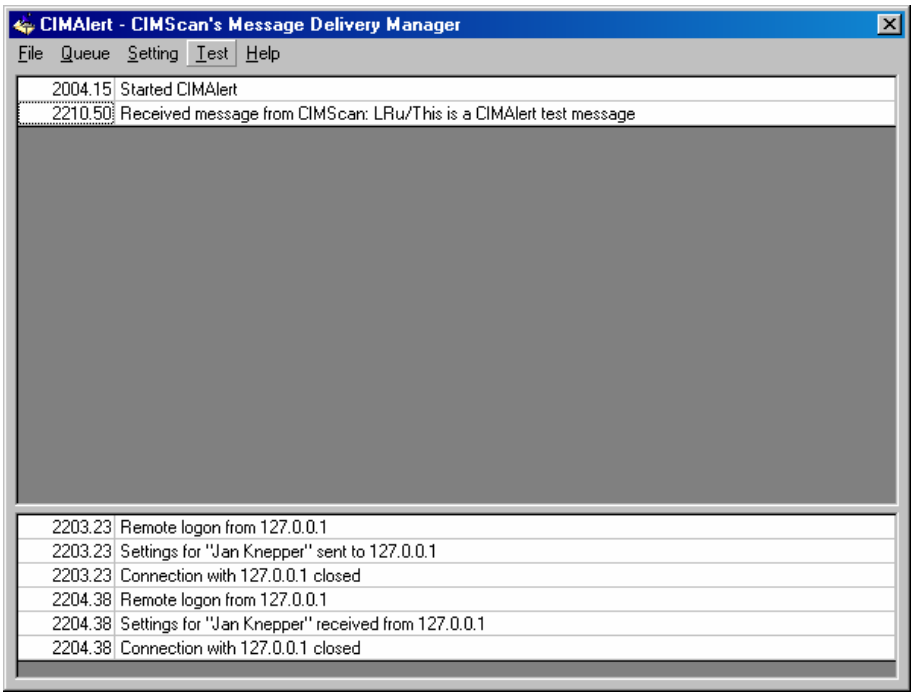
Test ..... click to open the dialog used for message testing

Help..... on-line help and version information

Transaction Log Display

An important part of the CIMAlert display is the list of transactions, errors and activities. The main screen is split in two. The CIMAlert transaction list is displayed on the top half. You can choose to record every transaction or just the error messages. (See **System Settings**.)

CIMAlert allows recipients to log in remotely and make changes to their own schedules. This would typically be used if the recipient had to take an unexpected day off or go away on a business trip. The recipient client activities (logons and schedule changes) are displayed on the bottom half of the main screen. See **Using the Recipient List Edit Utility.**

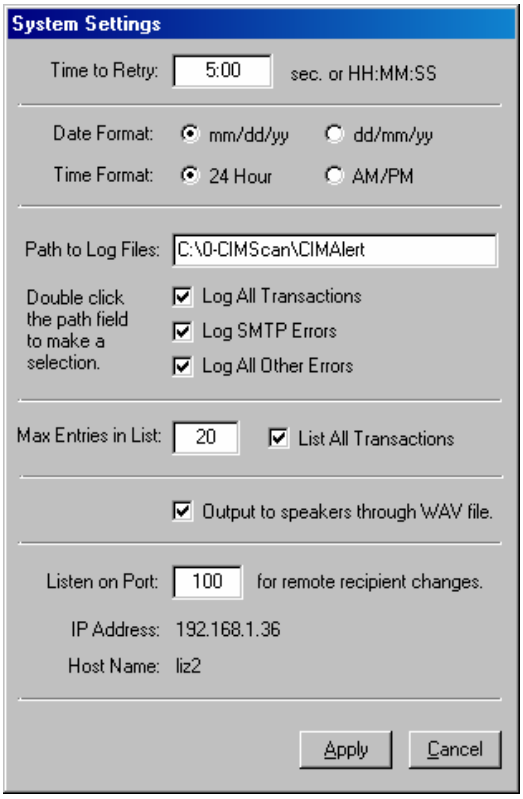


Click **Clear List** under the **File** menu to close the display.

Setting Menu Selections

System Settings

The **System Settings** dialog is used to set the transaction and error logging strategy, the time and date formats, and the port through which client recipients connect to CIMAlert to make changes to schedules. Select **System** from the **Setting** menu to display the **System Settings** dialog. The dialog's options are described below.



Time to Retry ..... Time between retries for a busy signal or no answer.

Date/Time Format ..... Choose the formats to use when setting up the schedules on the Recipient Settings screen.

Path to Log Files ..... Select or enter the path to the files that will log the errors or, optionally, all transactions. Double click on the field to navigate to a new folder. The actual log file names contain the date and are changed daily at midnight.

What to Log ..... Check what to log. All Transactions will record each step of sending a message. SMTP Errors refers to sending e-mail over the Internet. All Other Errors will log any errors generated when using other methods. See **Transaction Log Display**.

Max Entries in List ..... Enter the maximum number of entries to display in the list on the main screen. When that limit is reached, the oldest entry will be removed when a new one is added.

List All Trans..... Check to list all transactions on the main screen, in addition to errors.

Output to speakers ..... Normally left unchecked. Checked only if you are having problems broadcasting a text to speech message over a speaker system. When checked, the text to speech message is converted to a .WAV file for output to the speakers.

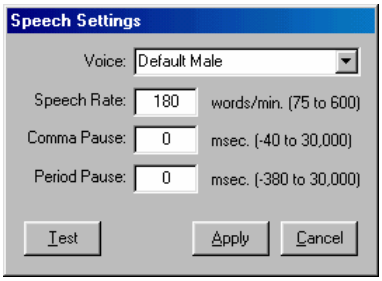
Listen on Port..... Port through which client recipients connect to change their schedules. The port (as well as the IP address) must be saved in the RListEdit.ini file in the CIMAlert directory so that recipients can log on.. (RListEdit.ini can be edited by Notepad or Wordpad.) The port number may be any number you like so long as it is not be used by any other device or application. It is not a physical port.

IP Address..... This is the computer's IP address. It must be included in the RListEdit.ini file, along with the port number. For informational purposes only.

Host NamE..... Name of the computer that is running CIMAlert. For informational purposes only.

Speech Settings

Select **Speech** from the **Setting** menu to access the **Speech Settings** dialog and configure the text-to-speech subsystem. The options in the dialog, described below, control how the message will sound.



Voice..... Select one of eight possible voices.

Speech Rate..... The default speech rate is 180 words per minute.

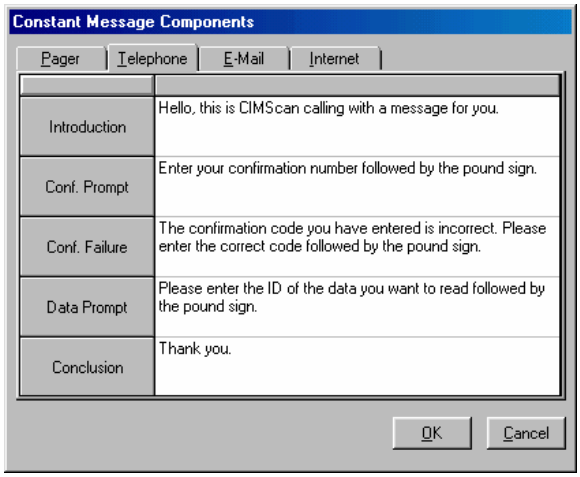
Comma Pause ..... The number of milliseconds to add to the default 160 msec. pause after a comma.

Period Pause..... The number of milliseconds to add to the default 640 msec. pause after a period.

Click the **Test** button at any time to play a test message through a local sound card (if available).

Constants Settings: Configuring Pre-defined Message Components

Pre-defined message segments can be automatically inserted in various parts of a message. Select **Constants** for the **Setting** menu to access **Constant Message Components** dialog.



The **Message Components** that may be defined vary with the sending method. For instance, a telephone message may incorporate the following components: **Introduction, Confirmation**, **Prompt**, **Confirmation Failure**, **Data Prompt**, and **Conclusion**. Click the tabs across the top, **Pager**, **Telephone**, **E-Mail**, or **Internet**, to enter the text appropriate for each sending method.

Recipients

Overview

The **Recipient** selection from the **Setting** menu accesses dialogs for setting up recipient information and message delivery schedules.

Recipient information includes names, IDs, passwords, and group affiliation. The ID and group are used in CIMScan when choosing recipients for messages. You can choose individual message recipients or opt to send the message to all members of a group. The ID and password are used by individual recipients to log on to CIMAlert from a remote computer to make modifications to their own schedules without involving the CIMAlert system administrator. This allows a recipient to select an alternate delivery method for messages if, for example, they take an unexpected day off. They can also forward all their messages to another recipient during a specific time frame.

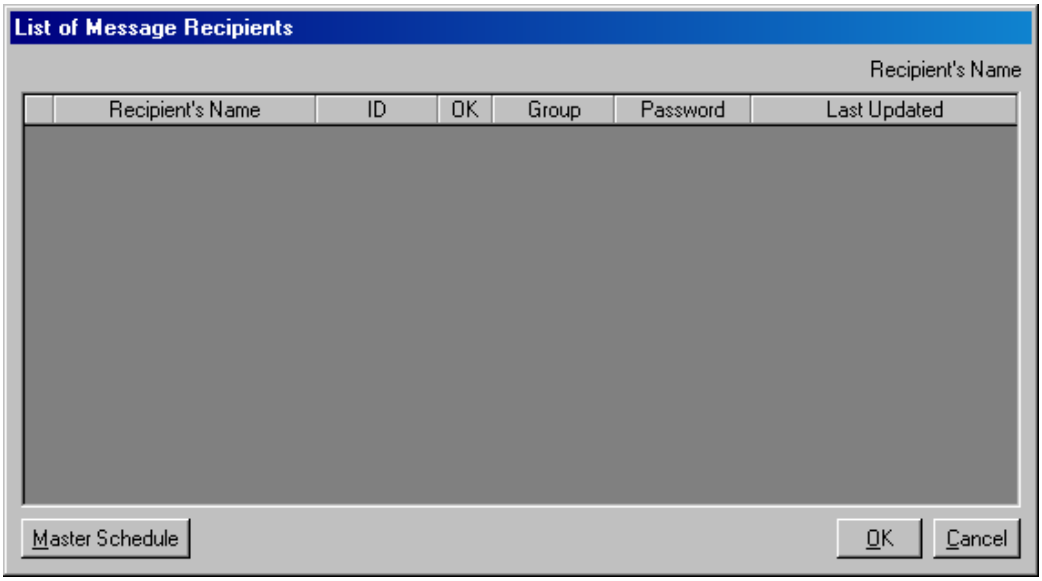
The scheduling mechanism in CIMAlert is quite sophisticated. There is a master schedule of work days and holidays that applies to all. Then, individual schedules are set up that apply to each recipient. These include sending methods (email, pager, or telephone) to use during working and non-working hours, vacation schedules when all messages can be forwarded to another recipient, and exception schedules when messages are sent to the recipient but by an alternate sending method.

To determine how to send a message, CIMAlert checks the schedules in the following order.

1. The contents of the message is checked to see if it contains a tag that limits to whom the message is sent. (See **Using Tags to Filter Messages**.) If there is no tag that inhibits sending the message...
2. The recipient's vacation is checked. If on vacation, the message will be forwarded to the designated recipient. If not on vacation...
3. The exception schedule is checked and, if valid, the message sent by the alternate schedule. If exceptions don't apply...
4. The holiday schedule is checked. If it is a holiday, the message will be sent by the method designated for non-working hours. If not a holiday...
5. The work schedule is checked and the message sent by the method designated for working hours.

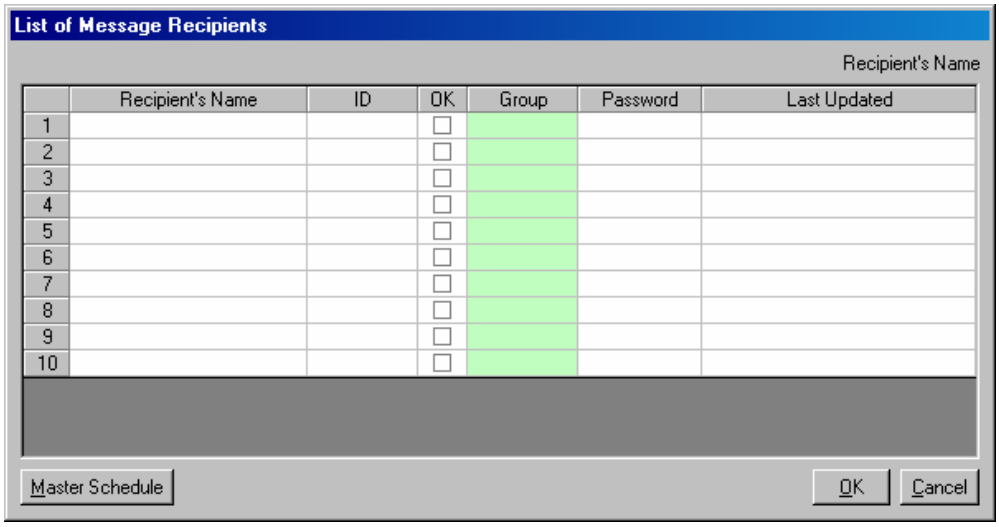
Defining Recipient Names, IDs and Passwords

Select **Recipients** from the **Setting** menu to define the list of recipients, the methods for contacting them, and their schedules. The first time you open the **List of Message Recipients** dialog, the window will be blank, except for the headings Recipient's **Name**, **ID**, etc.



Right click in the blank area to display a popup menu, then select **Add Row**.

You will be prompted to enter the number of rows to add. Add one row for each recipient you want to set up.



First, enter the recipient information in the following fields:

Recipient's name ..... Enter the full name of the recipient.

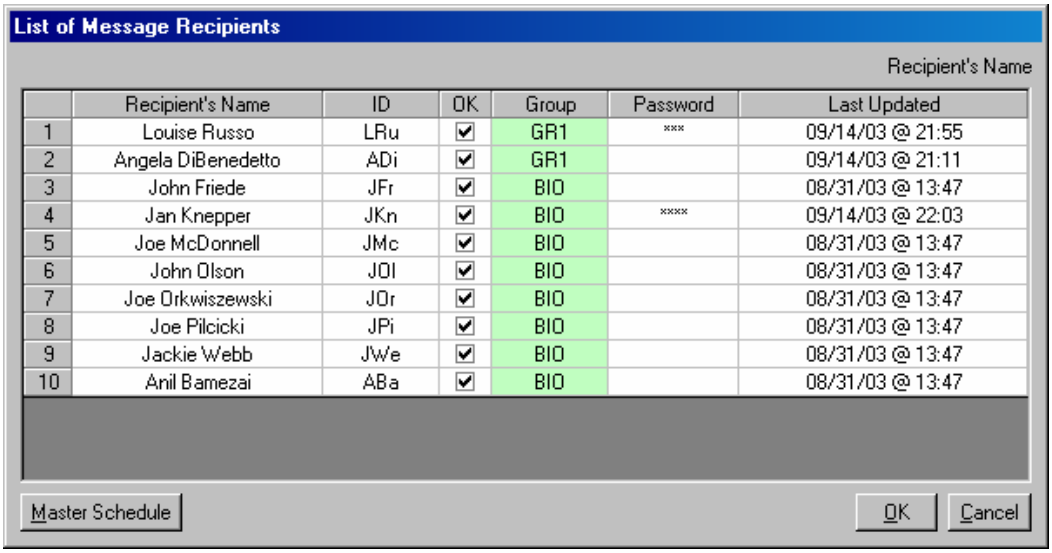
ID ..... Enter a short ID tag for the recipient. This ID will be added to the recipient list in CIMScan that is used to select recipients for a message. It is also used when recipients log on remotely to make a change to their schedule.

OK ..... Check to enable the recipient.

Group ..... Enter or select the **Group** to which the recipient belongs. Groups allow you to easily send a message to several people at once. You simply select the group name in CIMScan when defining the recipients, rather than the individual names.

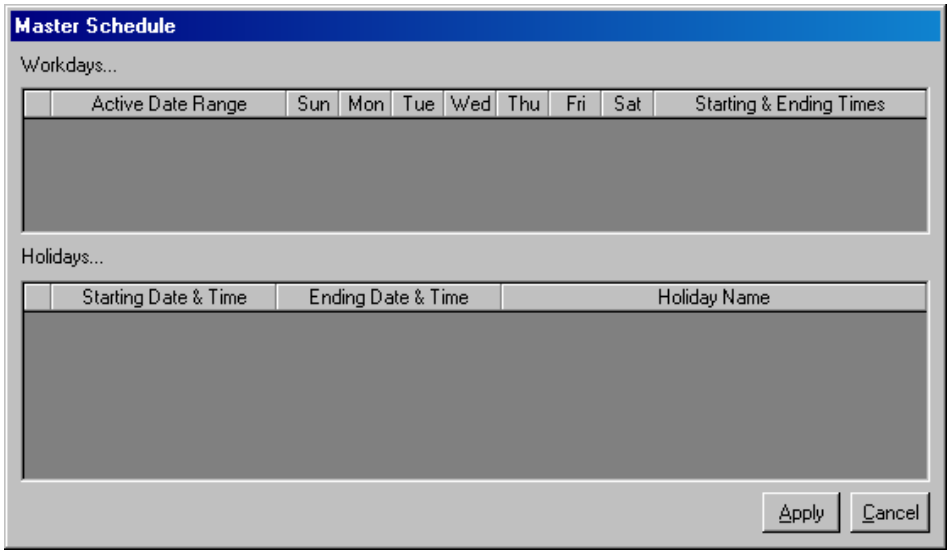
Password ..... Enter the password the recipient can use to remotely access his or her own recipient settings and make changes. This feature would be used if, for instance, the recipient was unexpectedly called out of town for a day and wanted to redirect messages to another person. Each character in the password will be replaced with a * once you exit the field.

Last Update ..... This accesses the dialogs for setting up the message delivery schedules for individual recipients. The date and time the schedules were last updated is displayed in this field.

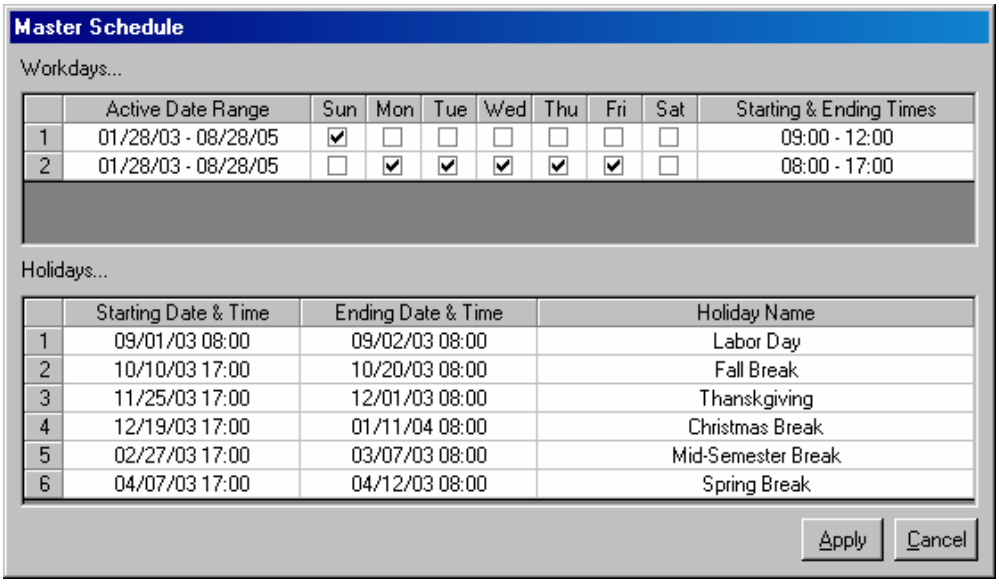


Master Schedule for Work Days and Holidays

The **Master Schedule** is where you set up the general work schedule and the standard holidays that apply to all. Click the **Master Schedule** button at the bottom to access the **Recipients** dialog.



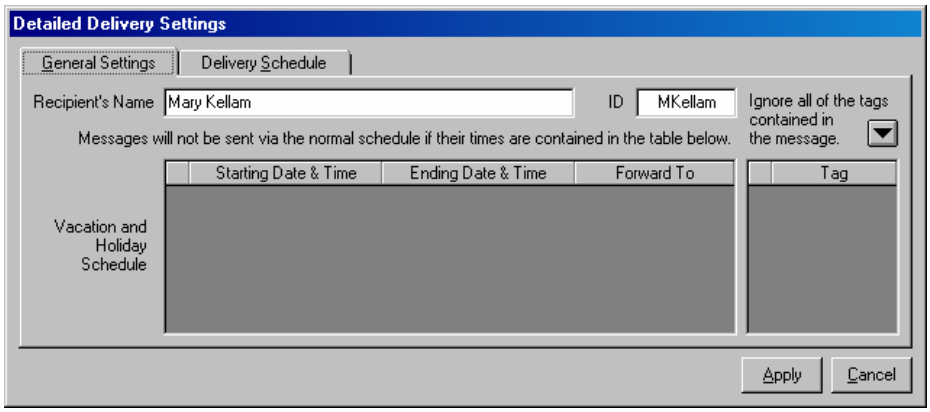
The **Workdays** are defined in the top half. Add rows, if necessary, then click the **Active Date Range** field and the button to define the time period for the schedule. Check off the days of the week which are workdays. Finally, click the **Starting and Ending Times** to select the hours worked during the selected days.



Holidays are defined in the bottom half of the dialog. For each **Holiday**, define the **Starting** and **Ending Date and Time**, then enter a **Holiday Name** to identify it. Click **Apply** to save the schedules.

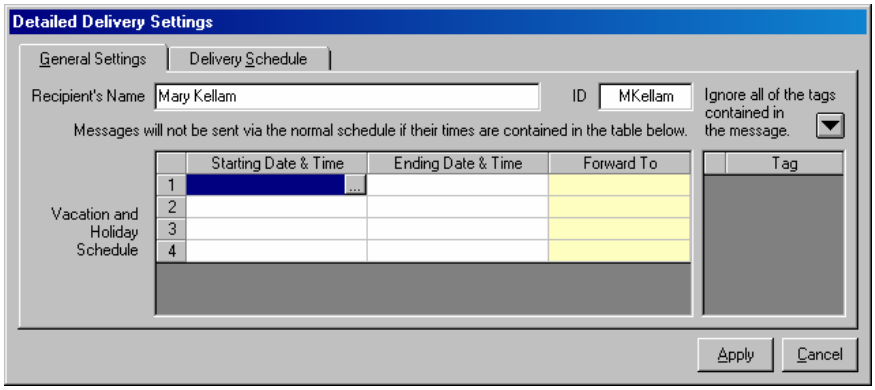
Setting Up Vacation Schedules

After setting up the general work and holiday schedules, you need to define vacation schedules for each recipient. Once you have set up the name, ID, etc. for a recipient, click the **Last Update** field, then the button to display the **Detailed Delivery Settings** dialog.

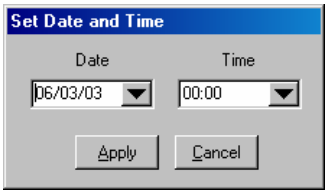


The dialog will open to the **General Settings** tab where you set up the vacation schedules. The recipient's name and ID are displayed at the top. During the vacation period, you may have all messages forwarded to another recipient.

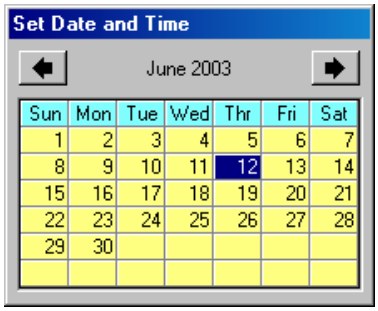
The first time you access this dialog for each recipient, you must right click in the blank area and select **Add Row** from the popup menu, then enter the number of rows you need, one row for each vacation time period.



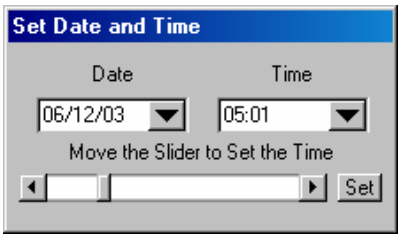
To define the beginning of the vacation, click the **Starting Date & Time** field, then the button to display the **Set Date and Time** dialog.



Either enter the start date in the **Date** field or click the down arrow and select a day from a calendar. Use the arrows at the top of the calendar to change the month.



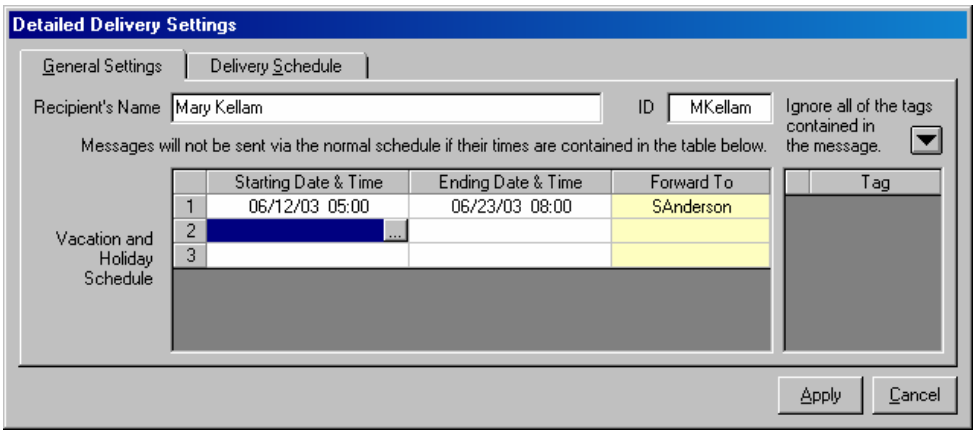
Enter the start time in the **Time** field or click the down arrow and drag the slide bar that appears to select a new time.



Clicking the arrows at either end of the slide bar will add or subtract a minute. Click **Set** to save the time, then **Apply** to return to the **General Settings** dialog.

Define the **Ending Date & Time** the same way.

In the **Forward To** field, type in the ID of the person to receive the messages during the vacation period.



Using Tags to Filter Messages

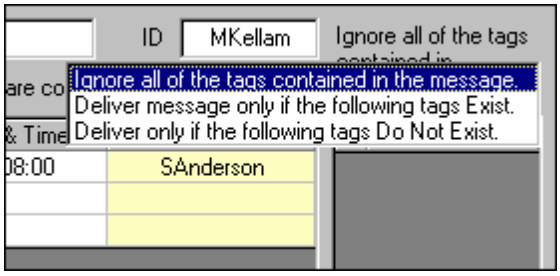
The **General Settings** screen of the **Detailed Delivery Settings** dialog also contains a section for defining message **Tags**.

Tags are a handy way to filter messages and send only those of interest to the recipient. **Tags** may be defined in three ways. Click the down arrow above the **Tag** section of the screen and select one of the following options:

Ignore all the tags contained in the message

Deliver message only if the following tags Exist

Deliver message only if the following tags Do Not Exist



The easiest way to explain how **Tags** can be used is to give an example. Suppose CIMScan is monitoring the temperature in several laboratories. You want to send an alarm message whenever the temperature exceeds the alarm limit. You want to apply the message to every lab in the building but only want to send the message to the lab manager in charge of the lab that is in alarm.

The way to do this is to define each lab as a separate database Group in CIMScan and incorporate the Group name into the alarm message as a variable. If you put the Group variable within { }, it is also recognized as a **Tag** in CIMAlert.

The following shows a simple version of a message that you could set up in CIMScan.

The temperature in Laboratory {[:GROup]} *is in alarm. The temperature is* [:VALue]

[:GROup] and [:VALue] are variables and the actual group name and temperature value will be inserted into the message. The Group variable will also be treated as a **Tag**. (Note: The group referred to here is a CIMScan database group, which is not the same as a CIMAlert recipient group. See the CIMScan User's Manual for details on setting up messages.)

Then, in CIMAlert, select **Deliver message only if the following tags Exist**. As you set up the lab managers as the **Recipients** in CIMAlert, define the text of the **Tag** as the Group name that corresponds to their laboratory. If the message contains the Group name of their lab, they will receive the message. They will not receive messages concerning the other laboratories.

To enter the text for the **Tags**, right click in the blank area in the **Tag** section and select **Add Rows** from the popup menu. Enter the number of rows you need, one for each **Tag**.

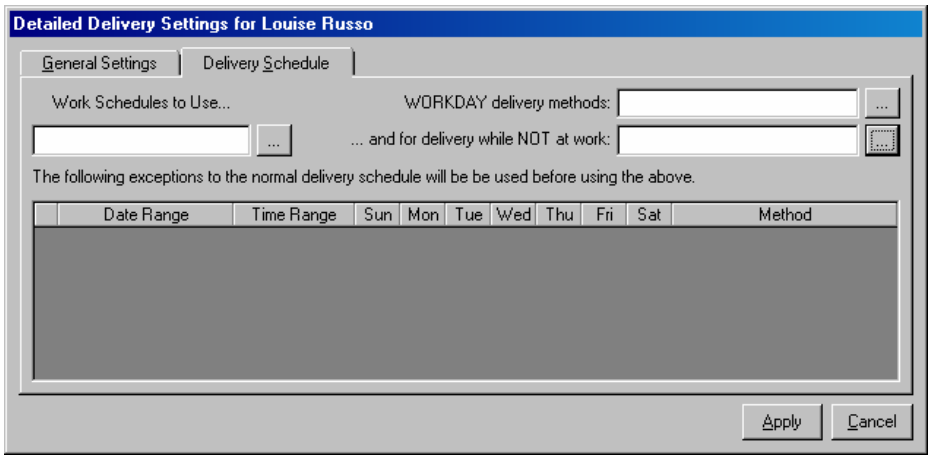
Then, type in the text you want to use for the tag, like **Lab 101**. The message will be sent only if **Lab 101** is the Group name.

Setting Up the Daily Delivery Schedules

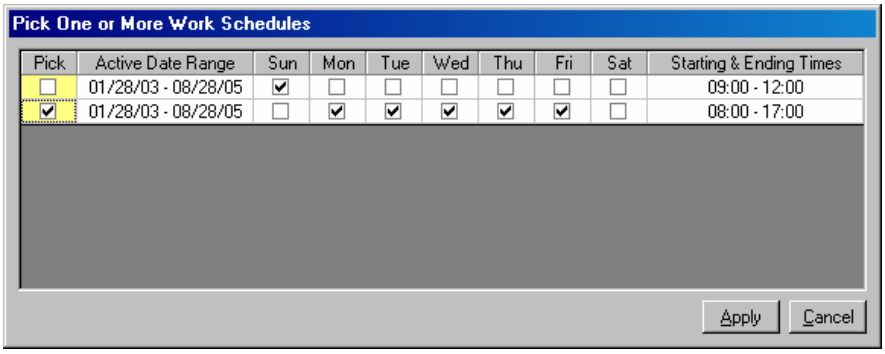
After defining normal working hours, holidays, and vacation schedules, you need to set up the message

delivery schedule that will be used daily for individual recipients. If the **Detailed Delivery Settings** dialog is open, simply click the **Delivery** tab. Otherwise, select **Recipient** from the **Setting** menu, select the **Last Update** field for one of the reciptients to display the **Detailed Delivery Settings** dialog.

The dialog is used to define delivery methods for working hours and for time when not at work (typically nights and weekends). In addition, you can set up exceptions to the normal delivery schedule for days off, business trips, etc. (Individual recipients may log onto this screen with the proper password, and make changes to their own schedules. See **Using the Recipient List Editor Utility to Change Schedules Remotely**.)

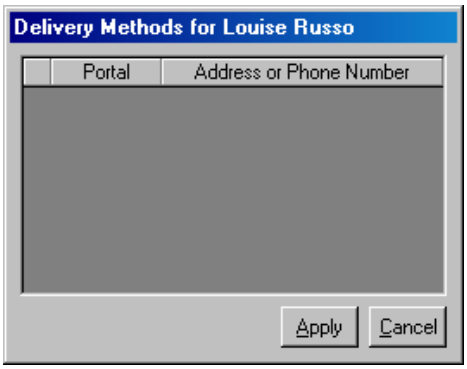


Start by selecting the work schedule. Click the button next to the **Work Schedules** to display the schedules previously set up.

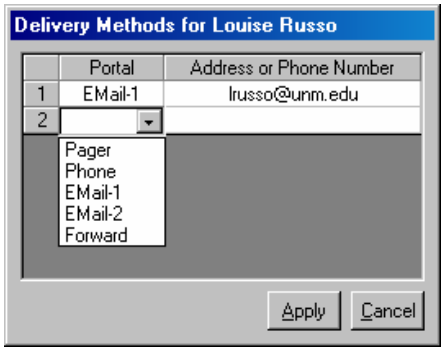


Add check marks to the **Pick** field for the schedules you want to use and click **Apply** to save your selections and return to the **Delivery Settings** screen.

Then, click the button for **WORKDAY delivery methods** to open the **Portal** dialog to set up the sending method.

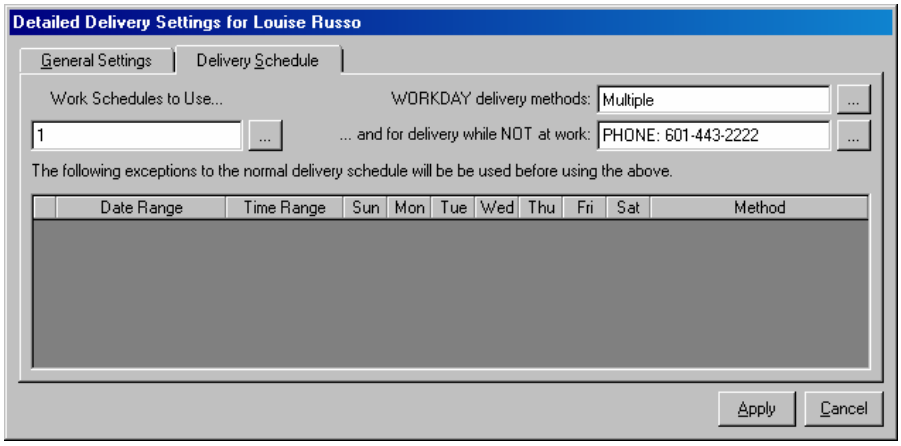


Select the **Portal** field and select a **Portal** from a dropdown list and enter an email address or phone number. Enter as many portals as necessary, then click **Apply**.

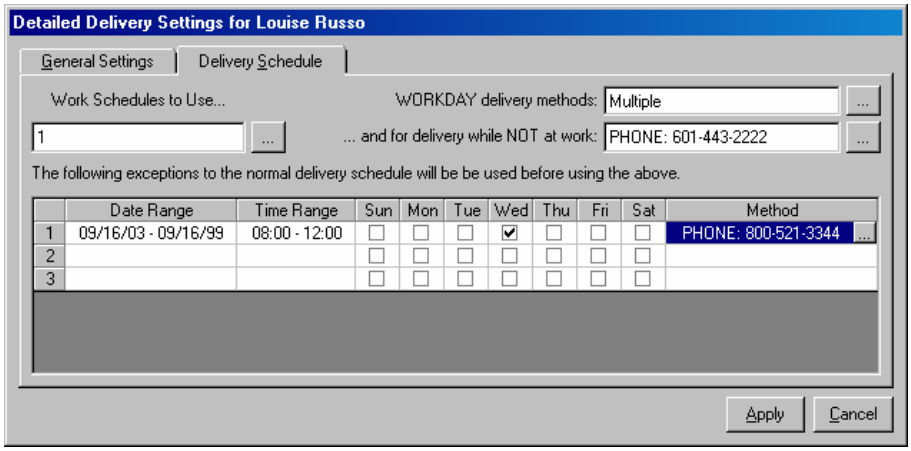


Finally, define the exceptions to the standard schedule. Use this schedule for planned days off, business trips, etc. Note: Individual recipients can log in to CIMAlert to make minor changes to their own schedule. This is handy for sick days and other unexpected days off. See **Using the Recipient List Edit Utility**.

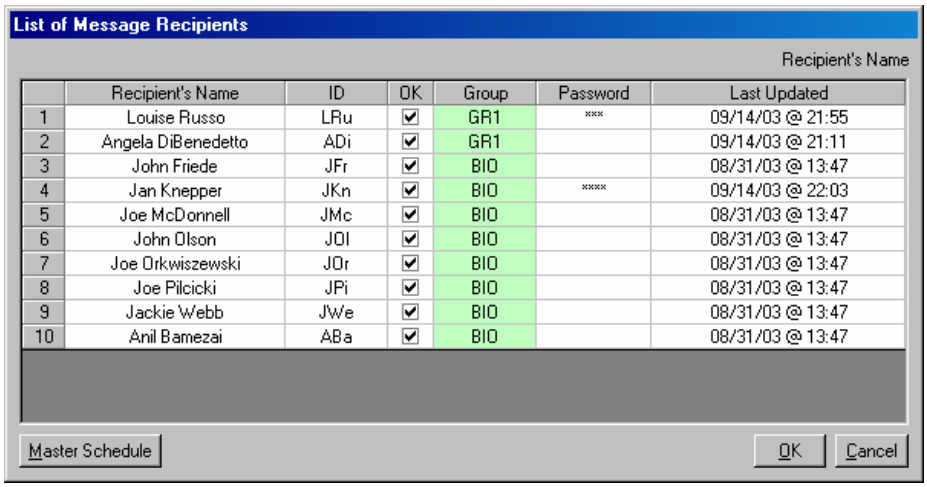
The first time you access this screen, you must right click in the blank area, select **Add Rows** from the popup menu and enter the number of rows you need, one row for each different date range, time range, and/or method of sending.



Select the **Date Range**, **Time Range**, check off the appropriate days of the week, then click the **Method** field to define the portal and phone number or address.



When the **Delivery Schedule** is complete, click the **Apply** button to save all your settings for the recipient and to return to the **List of Message Recipients** screen.

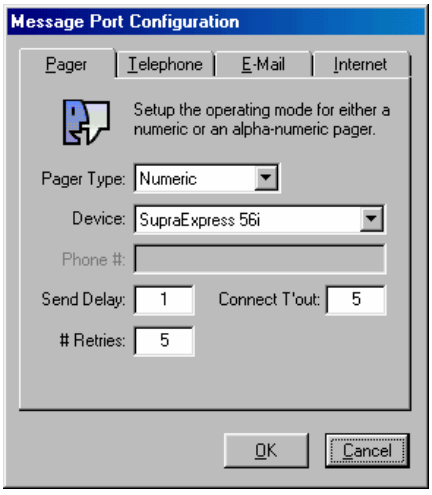


Then, click the **OK** button at the bottom of the screen to save the configurations.

Portals Settings

Clicking on the **Portals** menu item in the **Setting** menu will display a tabbed dialog box for configuring each of the four message ports: **Pager**, **Telephone**, **E-Mail**, and **Internet**.

Pager Portal Settings



Click **Pager** tab on the **Portal Settings** dialog and define the following.

Pager Type ..... Numeric or Alpha/Numeric.

Device ..... Select the I/O hardware (TAPI interface or modem).

For communicating with numeric pagers, CIMAlert supports both voice modems and telephone interface cards. In either case, the hardware must be TAPI compliant.

Alpha/Numeric pagers work with standard data modems. If you selected Alpha/Numeric as the Pager Type, the Device field changes to a COM Port selection field.

Phone # ..... Telephone number for the alpha/numeric pager service only. (The phone number for a numeric pager is associated with a specific recipient and is set up under **Recipients**.)

Send Delay ..... Number of seconds the system should delay after establishing the connection before sending the message. (Not required with data modems, which use a built-in connection protocol.)

If you are using a voice modem, the Send Delay is necessary because the "connection" is made as soon as the dialing operation is complete, NOT when the paging service answers OR when it beeps to signal that you may leave a number. This means the Send Delay must be long enough to allow the paging service to answer the phone and play its standard message before the system transmits the CIMAlert message to the pager.

If you are using a telephone card, the connection is made when someone answers the call. In this case, the Send Delay must be long enough to allow the paging service to finish playing its standard message before the pager message is sent from CIMAlert.

Connect T'out ..... Number of seconds the system will wait for the paging service to answer the phone and establish a connection. This setting is for telephone interface cards only.

Retries ..... Number of times to retry on busy signal or no answer before giving up and logging an error.

Telephone Portal Settings

Click the **Telephone** tab on the **Portal Settings** dialog and define the following.

Device ..... Select a TAPI compliant telephone interface device. This could be a modem or a phone card.

Call Strategy ..... Select to **Call everyone** or **Stop after first contact** is made.

No Ans. Timeout..... Number of seconds to wait before hanging up when there is no answer.

Retries ..... Number of retries before aborting call.

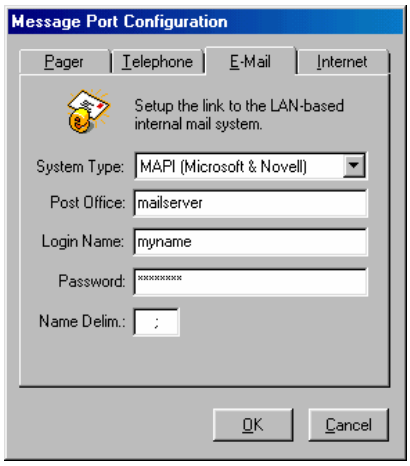
Confirmation ..... The call confirmation code entered by the recipient.

Max Conf. Retries..... Number of times the system will allow the recipient to try entering the correct confirmation code.

Volume ..... Enter 0 to use the default volume setting. Enter a number greater than 50 to make it louder and less than 50 to make it softer.

Requests for ..... Choose whether or not requests for additional data are allowed.

LAN E-Mail Portal Settings



Click the **E-Mail** tab on **Portal Settings** dialog and define the following.

System Type ..... Select the type of LAN mail system you will connect to

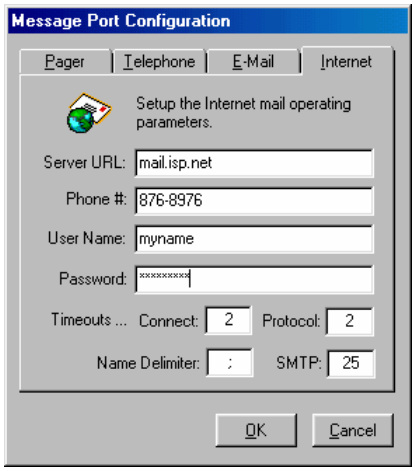
Post Office ..... Name of post office

Login Name ..... Your usual login name for the mail system

Password ..... Your mail system password

Name Delimiter..... Character that separates names when sending a message to multiple e-mail recipients.

Internet E-Mail



Click the **Internet** tab on the **Portal Settings** dialog and define the following.

Server URL ..... The URL for your Internet service provider's mail server

Phone # ..... The telephone number of your ISP

User Name ..... The name you use to log onto the mail server

Password ..... Your mail system password

Connect Timeout..... Timeout period, in seconds, to establish a connection

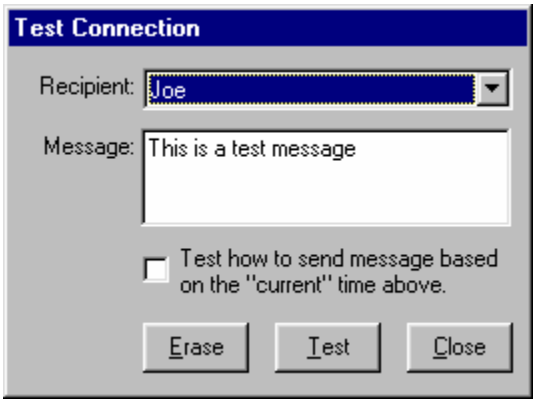
Protocol Timeout ..... Timeout period, in seconds, to wait for a message response

Name Delimiter..... Character that separates names of recipients. (Used when sending a message to multiple e-mail recipients.)

SMPT Port ..... Usually set to 25

Testing a Configuration

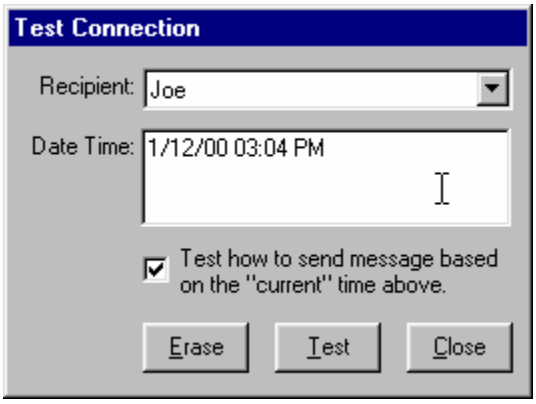
You can easily test a configuration by clicking the **Test** on the main menu to display the **Test Configuration** dialog.



You can check three different aspects of your configuration: the contact method, the way the message sounds when converted to speech, and the scheduling setup. To check the contact methods for the individual recipient, select a name from the **Recipient** field dropdown list. Type a short message in the **Message** box and click **Test**. The message will be transmitted via all the methods enabled for the recipient. The list of transactions and errors will be displayed on the main screen when you send the message, showing where and how the message was sent. Click the **Erase** button to clear the transaction log from the main screen.

To hear what a text-to-speech message sounds like, select [**Speech**] as the recipient. The test message will be sent to your local sound card.

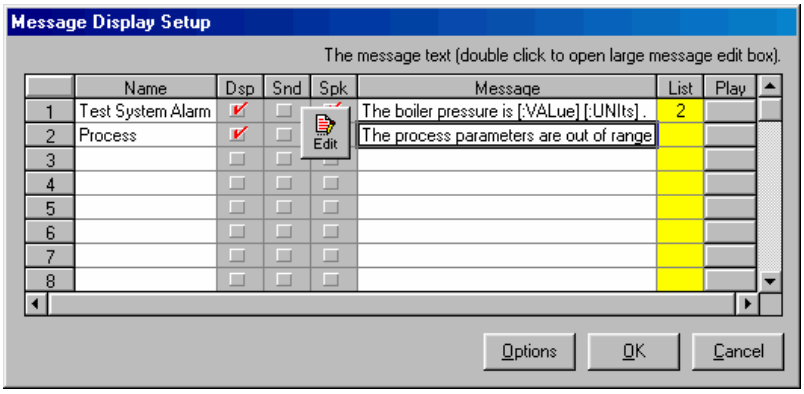
To check the scheduling for a recipient, put a check in the **Test how to send message…** box. The **Message** box now becomes the **Date Time** box. In this case, the message is not actually transmitted.



Enter the date and time you wish to check and then click **Test**. CIMAlert will check the schedules for the recipient. The transaction log will list where and how the message would be sent at the time and date entered for the test.

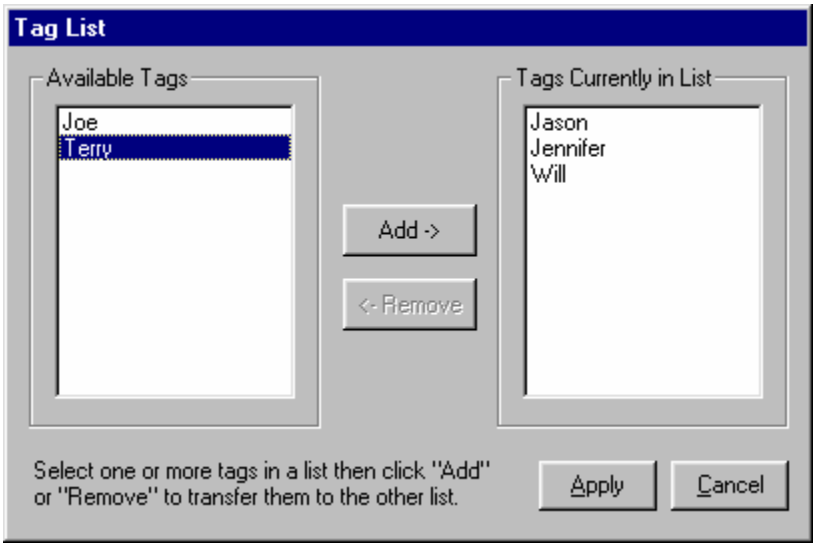
Configuring Messages in CIMScan

Start the CIMScan software if necessary. Access the **Message Display Setup** dialog by selecting it from the **Setting** menu in CIMScan.



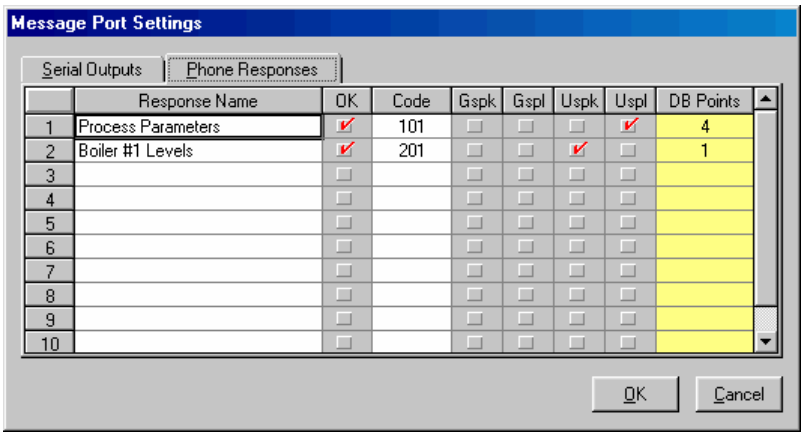
Create your message as outlined in the CIMScan documentation. To send the message through CIMAlert you must check the **Snd** box. To convert the message from text to speech, you must check the **Spk** box.

Then, double click on the recipients **List** field. This will display the **Tag List** dialog where you add and remove the recipients of the message.



The IDs of all the recipients set up in CIMAlert will appear in the list under **Available Tags** on the left. Click on a name that you want to receive the message then click **Add** to move it to the **Tags Currently in List** to the right. Use the **Remove** button to subtract a recipient from **Tags Currently in List**. Click **Apply** to save the entries.

With telephone messages, you can configure response messages that can be accessed by the recipient if they key in the message ID on the telephone keypad. Click the **Options** button on the **Message Display Setup** screen to the display the **Message Port Settings** dialog. Click on the **Phone Responses** tab to display the configuration screen with the following fields.



Response Name..... The name played just before the response

OK ..... Checked if the response is enabled

Code..... The numeric code used to request the response

Gspk..... Checked to say the ID of the group

Gspl..... Checked to spell the ID of the group

Uspk..... Checked to say the units of measure

Uspl..... Checked to spell the units of measure

DB Points..... Double click here select the database points to include in the message. This will display the database point selection dialog, described in the CIMScan documentation.

There is no limit, other than system resources, to the number of responses that can be configured. (See **Receiving Telephone Messages**.)

Using the Recipient List Editor Utility to Change Schedules Remotely

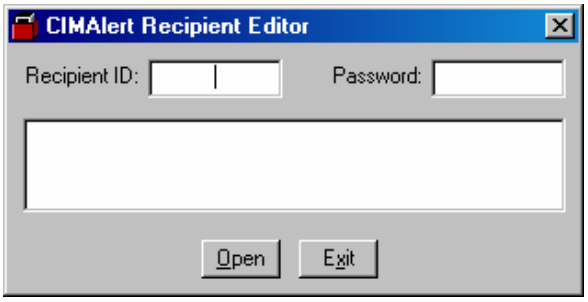
The Recipient List Editor Utility is provided with CIMAlert so that individuals can make changes to their own schedules and message sending methods without involving the person who administers CIMAlert. This would typically be used to take care of unexpected absences from work, to make changes in vacation schedules, etc. Before a schedule can be changed, the recipient must log-on to the CIMPrint program with their recipient ID and password.

Before a recipient can log onto the host computer running CIMAlert, the RListEdit.ini file must be set up correctly with the port and IP address information. The **System Settings** dialog contains both pieces of information. The RListEdit.ini file is found in the CIMAlert directory. To edit it, simply open it in Notepad or Wordpad, make changes as necessary, and save it. The contents of a typical RListEdit.ini file looks like this:

100
127.0.0.1

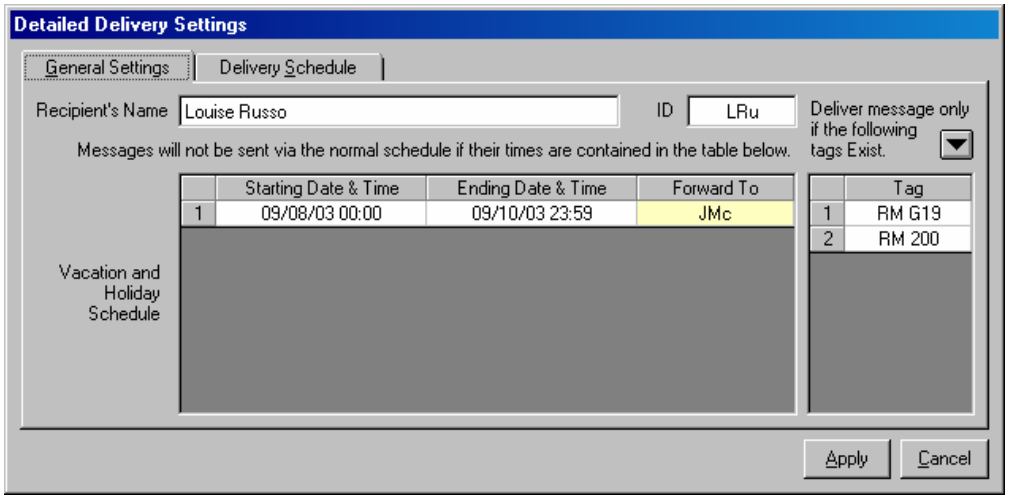
where 100 is the port and 127.0.0.1 is the IP address.

To start the utility, open Windows Explorer and double click on the file RListEdit.exe. in the CIMAlert folder. This will open the log on dialog.



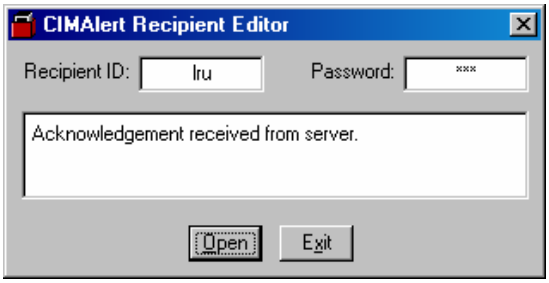
Enter your **Recipient ID** and your **Password**. When you click **Open**, the information is checked and if correct the **Detailed Delivery Settings** dialog will open. (Note: CIMAlert must be running on the host computer or you will get a connection error message.)

The dialog has two tabs: **General Settings**, where you can set up a schedule to forward all your messages to another recipient during vacations, and **Delivery Schedule**, where you can define how to send messages during working and non-working hours, as well as set up exception schedules.



See **Setting Up Vacation Schedules** and **Setting Up the Daily Delivery Schedules** for details on how to use these dialogs. The only difference between the dialogs accessed directly from CIMAlaert and those accessed remotely by recipients is the they are not allowed to change the general work schedule that has been assigned to them (**Work Schedules to Use** field).

When finished setting up your schedules, click **Apply** to save all your changes. This will return you to the log-on dialog.



A message confirming that the information was received by the CIMAlert server will be displayed in the dialog. If there were any communication problems, an error message will be displayed. Click **Exit** to close the dialog.

Appendix A: Step by Step Instructions For Setting Up Paging, Telephone, and E-Mail Messages

The following instructions step you through setting up each method of transmitting messages, screen by screen. Though all the setups are similar, each one is described in its entirety. It is assumed that you have set up the **System Settings** in CIMAlert and enabled the necessary system options in CIMScan. (In CIMScan, see the **Options** tab in **System Settings** under the **File** menu).

After you configure CIMAlert to send a message, it is a good idea to check your setup by clicking the **Test** menu option at the top of the screen.

Please refer to the other sections of this manual and the CIMScan documentation for details not covered in these instructions.

Numeric Pager - Step by Step Instructions

Since numeric pagers can only accept numbers, with no spaces or text, the messages you can send are very limited. Typically, you would send a phone number that the recipient could call for further information. Other possibilities include the reference number of a database point, a data value (whole numbers only), or a code number indicating that a particular alarm has occurred.

CIMAlert

In CIMAlert, select **Recipient** from the **Setting** menu. If necessary, define the recipient's name, ID, and password. Select the **Update** field to access the **Delivery Settings** screen. Click the **Delivery Schedules** tab and define the date and time period that you wish to send messages by numeric pager. Then, click the **Method** field to set up the numeric pager as the delivery method. Select **Pager** as the **Portal** and enter the phone number.

Select **Portals** from the **Setting** menu, then the **Pager** tab. Choose **Numeric** as the **Pager Type** and select the **Device** (must be a TAPI compliant modem or phone card) to use to send the message. Enter times for the **Send Delay**, and **Timeout**, depending on the type of device. Enter the number of times to try to connect to the pager when there is no answer or a busy signal.

CIMScan

Under the **Setting** menu, select **Messages Setup**. Give the message a name and check the **Snd** (send) option. In the **Message** field, enter the numbers you want to appear as a message on the recipient's pager.

Alternatively, you can click on the **Message** field, click the **Edit** button and choose variables to send as a message, such as database point value, group ID, or total number of alarms. **Because numeric pagers only accept numbers, only variables that are expressed as whole numbers will be transmitted correctly.** (See the CIMScan Manual or the Message Setup Addendum for details on setting up messages with variables.)

Double click the **List** field and select the recipients for the message.

Finally, set up the Action that will trigger sending the message. Access the screen where you want to set up the Action that will trigger the message. Actions may be tied directly to a database point, an alarm strategy, a user input, etc. Action fields appear on the following setup screens:

Alarm Strategies
Database Settings
Alarm Strategies

User Inputs Setup
Actions Menu
Graphic Display Setup
Pacer Settings (under the **File** menu)

Set up an Action to send a message by double clicking the Action field. In the **Actions** dialog, click the **Add** button. Under **What to act on**, choose **Display** and **Message**, then choose the name of the pager message. Make the appropriate selection under **Act when**, then choose **Display** or **Send Message** under **Action to take**.

Alpha/Numeric Pager - Step by Step Instructions

There are only minor differences between setting up numeric and alpha/numeric pagers. Because you can send text to the alpha/numeric pagers, defining the message can be more complex. Also, alpha/numeric pager recipients share one phone number, but require individual addresses.

CIMAlert

Select **Constants** from the **Setting** menu in CIMAlert. Click the **Pager** tab, then enter the text you want to appear as an introduction and conclusion for each message. (Consider the number of characters allowed by your pager when you set up message components.)

Select **Recipient** from the **Setting** menu. If necessary, define the recipient's name, ID, and password. Select the **Update** field to access the **Delivery Settings** screen. Click the **Delivery Schedules** tab and define the date and time period that you wish to send messages by alpha/numeric pager. Then, click the **Method** field to set up the alpha/numeric pager as the delivery method.

Select **Portals** from the **Setting** menu, then the **Pager** tab. Choose **Alpha/Numeric** as the **Pager Type** and select the **Device** (modem) to use to send the message. Enter the phone number for the pager, then enter a time for the **Send Delay** (only necessary for a voice modem). The **Timeout** field does not apply. Input the number of times to try to connect to the pager when there is no answer or a busy signal.

CIMScan

Under the **Setting** menu, select **Messages Setup**. Give the message a name and check the **Snd** (send) option. In the **Message** field, enter the text you want to appear as a message on the recipient's pager.

Alternatively, you can click on the **Message** field, click the **Edit** button and choose variables to embed in the message. Database point name and value, units of measure, group name, and total number of alarms are a few of the variables that can be included in the message. (See the CIMScan Manual or the Message Setup Addendum for details on setting up messages with variables.) Make sure your pager can accommodate the length of the message, plus the message components from CIMAlert.

Double click the **List** field and select the recipients for the message.

Finally, set up the Action that will trigger sending the message.

Access the screen where you want to set up the Action that will trigger the message. Actions may be tied directly to a database point, an alarm strategy, a user input, etc. Action fields appear on the following setup screens:

Alarm Strategies
Database Settings
Alarm Strategies
User Inputs Setup
Actions Menu
Graphic Display Setup
Pacer Settings (under the **File** menu)

Set up an Action to send a message by double clicking the Action field. In the **Actions** dialog, click the **Add** button. Under **What to act on**, choose Display and Message, then choose the name of the pager message. Make the appropriate selection under **Act when**, then choose Display or Send Message under **Action to take**.

Telephone - Step by Step Instructions

The setup for Telephone messages is more involved than the others because you must configure the text-to-speech parameters as well.

CIMAlert

Select **Speech** from the **Setting** menu. Choose the **Voice** for the message, as well as the **Speech Rate** and the pauses for commas and periods. It is a good idea to click the **Test** button to check how a message will sound.

Select **Constants** from the **Setting** menu and click the **Telephone** tab. Because recipients are able to interact with telephone messages, there are several message segments to set up. In addition to the introduction and conclusion, you may enter prompts for entering the confirmation number or requesting more data, as well as a message to play when the recipient responds with an incorrect number. Use the scrollbar at the side of the dialog box to access the message options that are not visible.

Select **Recipient** from the **Setting** menu. If necessary, define the recipient's name, ID, and password. Select the **Update** field to access the **Delivery Settings** screen. Click the **Delivery Schedules** tab and define the date and time period that you wish to send messages by alpha/numeric pager. Then, click the **Method** field to set up telephone as the delivery method.

Select **Portals** from the **Setting** menu. Under the **Telephone** tab, select the **Device**, either a modem or telephone card, and choose the **Call Strategy** (call everyone or stop after the first contact). Enter the number of seconds to wait before hanging up when there is no answer and the number of times to retry if there is no answer or a busy signal. Then enter the **Confirmation** code number and the number of times the recipient can attempt to enter it. Select whether the recipient can request more data or not.

CIMScan

Under the **Setting** menu, select **Messages Setup**. Give the message a name and check the **Snd** (send) and **Spk** (speak) options. In the Message field, enter the text you want to be spoken over the telephone.

Alternatively, you can click on the Message field, click the **Edit** button and choose variables to embed in the message. Database point name and value, units of measure, group name, and total number of alarms are a few variables that can be included in the message. (See the CIMScan Manual or the Message Setup Addendum for details on setting up messages with variables.)

Double click the **List** field and select the recipients for the message.

Finally, set up a Action to trigger the message. Access the screen where you want to set up the Action that will trigger the message. Actions may be tied directly to a database point, an alarm strategy, a user input, etc. Action fields appear on the following setup screens:

Alarm Strategies
Database Settings
Alarm Strategies
User Inputs Setup
Actions Menu
Graphic Display Setup
Pacer Settings (under the **File** menu)

Set up an Action to send a message by double clicking the Action field. In the **Actions** dialog, click the **Add** button. Under **What to act on**, choose Display and Message, then choose the name of the pager

message. Make the appropriate selection under **Act when**, then choose Display or Send Message under **Action to take**.

E-Mail - Step by Step Instructions

The setups for LAN (local area network) and Internet e-mail messages are virtually identical. This section will describe both. Both require an SMPT server.

CIMAlert

Select **Constants** from the **Setting** menu in CIMAlert. Click either the **E-mail** or **Internet** tab, then enter an e-mail address in the From and Reply To fields. Enter a Subject and any text you want to appear as an introduction or conclusion for each message.

Select **Recipient** from the **Setting** menu. If necessary, define the recipient's name, ID, and password. Select the **Update** field to access the **Delivery Settings** screen. Click the **Delivery Schedules** tab and define the date and time period that you wish to send messages by alpha/numeric pager. Then, click the **Method** field to set up the alpha/numeric pager as the delivery method.

Select **Portals** from the **Setting** menu. The portal settings are different for each type of e-mail message.

For a LAN setup, click the **E-mail** tab and select the type of e-mail system. Enter the **Post Office**, your **Login Name** and **Password**, then a delimiter to separate the names on messages sent to multiple recipients.

For e-mail sent over the internet, click the **Internet** tab and enter the URL and phone number for the Internet Service Provider (ISP) that handles the e-mail. Enter the **User Name** and **Password** required to send e-mail. Enter the number of seconds for the timeouts in the **Connect** and **Protocol** fields, a name delimiter, and the value for the SMTP field (usually 25).

CIMScan

Under the **Setting** menu, select **Messages Setup**. Give the message a name and check the **Snd** (send) option. In the Message field, enter the text you want to appear as a message.

Alternatively, you can click on the Message field, click the **Edit** button and choose variables to embed in the message. Database point name and value, units of measure, group name, and total number of alarms are a few variables that can be included in the message. (See the CIMScan Manual or the Message Setup Addendum for details on setting up messages with variables.)

Double click the **List** field and select the recipients for the message.

Access the screen where you want to set up the Action that will trigger the message. Actions may be tied directly to a database point, an alarm strategy, a user input, etc. Action fields appear on the following setup screens:

Alarm Strategies
Database Settings
Alarm Strategies
User Inputs Setup
Actions Menu
Graphic Display Setup
Pacer Settings (under the **File** menu)

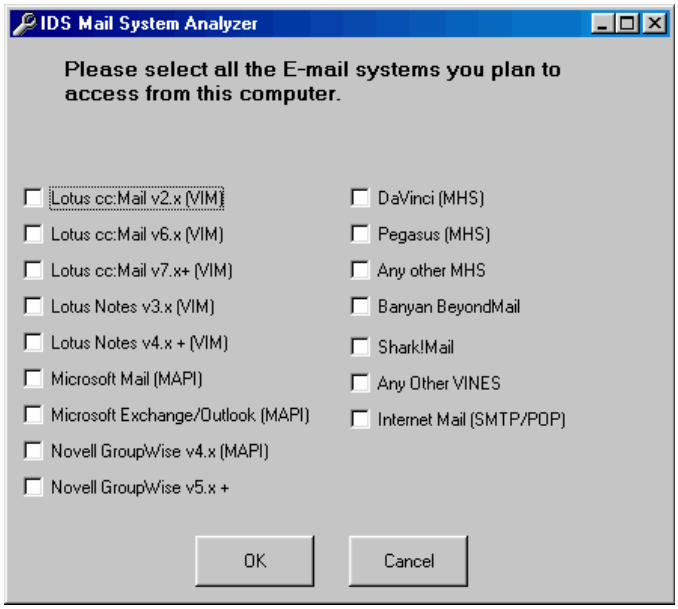
Set up an Action to send a message by double clicking the Action field. In the **Actions** dialog, click the **Add** button. Under **What to act on**, choose Display and Message, then choose the name of the pager message. Make the appropriate selection under **Act when**, then choose Display or Send Message under **Action to take**.

Appendix B: E-Mail Diagnostics

Setting up an e-mail system can sometimes be a daunting task because of all of the details that must be covered completely. A special e-mail diagnostic program is provided with CIMAlert to help solve any e-mail related problems. If you have problems, run the diagnostic program as described below and e-mail the results to Technical Support.

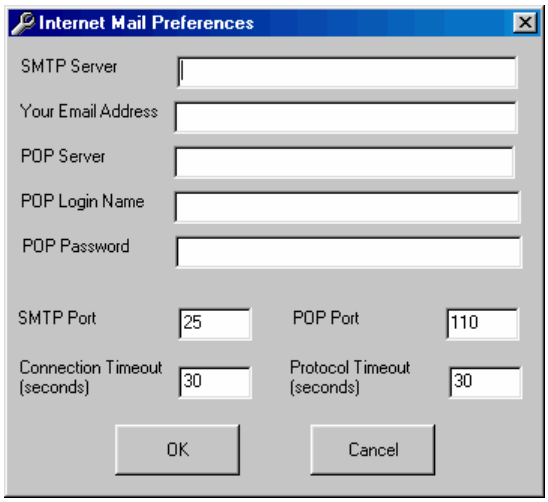
Start the diagnostic from the **Olesvr** folder in the Windows System directory using Windows Explorer. (The path is typically C:\Windows\System32\Olesvr\.) Double click the file named **Maildi32.exe** to display the **IDS Mail System Diagnostics** screen.

Make sure **32-bit** is selected (CIMAlert does not support 16-bit), then click on **Select Mail Systems to Test**. This will display the **IDS Mail System Analyzer** dialog with an extensive list of E-mail systems.



Check those that you plan to use, then click **OK** to return to the main screen.

If one of your selections was **Internet Mail (SMTP/POP)**, the **Internet Settings** dialog will need to be filled in. Back at the main screen, click **Internet Settings (SMTP/POP)** to display the **Internet Mail Preferences** dialog.



Enter your server names, login name, and password. (At the present time, CIMAlert only supports outgoing e-mail messages. Support for CIMScan data requests via incoming e-mail will be added in the future.) Close the **Internet Settings** dialog by clicking on **OK**.

Once back at the main screen, perform the e-mail test by clicking on **Run Tests**. This will display a diagnostic summary in Windows Notepad similar to the one below.

```
INFO: All tests were passed successfully.


      ****************** Technical Data ******************

[General]
DiagApplicationVersion32=3.01
DiagApplicationPath32=C:\WINDOWS\SYSTEM\OLESVR
 Date=9/12/99 5:43:30 AM

[SystemInformation]
Path=C:\WINDOWS;c:\windows\COMMAND;C:\DOS
Temp=C:\windows\TEMP
OSType=95
Running3.1=False
RunningNT=False
Running95=True

[TestedSystems]
Internet=True

[IDSMail]

[IDSMail32]
```

```
StartUp=True
ServerVersion=5.12
ServerPath=C:\WINDOWS\SYSTEM\OLESVR
NativeMailSystem=1
VINES=False
VIM=False
MHS=False
MAPI=True
SMTP=True
ActiveMessaging=False
ActiveMessagingVersion=0

[LicenseCheck]
GoodCount=1
BadCount=0

[MAPI]

[MAPI32]

[VIM]

[VIM32]

[MHS]

[VINES]

[WINSOCK]

[ActiveMessaging]

[ActiveMessaging32]

[Dialer]

[IDSDial]

[LotusMail]
Program=

[cc:Mail]
ProgramPath=
User0Name=
User1Name=
User2Name=
LastIDUsed=
LastUserID=
ProgVer=
```