

Weather Message

Version 3.0

Weather Alerting Software for your network.

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Weather Message Server

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Special thanks to:

All of the Weather Message users that have helped with the development of this software. I have listened carefully to your requests. Without your continued devotion, this version would not be possible.

Also to the people that make reporting and responding to severe weather a priority. Your dedication saves lives.

Our Goal:

"To provide users with software that can help save lives. If one life is saved through our combined efforts the value is immeasurable."

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Part



1 Introduction

1.1 Overview

Weather Message .Net 3.0 is a full-featured weather alerting software package. Utilizing data streams from the National Weather Services, Weather Message provides the ability to view weather text and weather graphics on computers connected to a network with audible alerts for severe weather; provides a map for seeing a visual representation of weather alerts; can send abbreviated or full text weather messages to pagers, e-mail addresses, and fax machines; archives weather products locally or to a website; retrieves radar images; and has the ability to activate electrical devices using X10 control.

Weather Message operates as a server for connected clients. The message viewer, image viewer and map are considered clients. These clients can be run on the same computer as the server or located on a number of computers on your network.

Weather Message works by receiving weather products from the National Weather Service EMWIN data stream, Weather Wire Service, or NOAAPort. For additional information, see [What is EMWIN](#), [What is Weather Wire](#), and [What is NOAAPORT](#). Weather Message can receive weather products from satellite, radio modem, or Internet. The received weather products are processed against alarms you setup in Weather Message.

Why would you want to use Weather Message? It allows you to send abbreviated messages to pagers and cellular phones, in addition, it allows you to send weather products to other computers on your network and even ftp weather messages and warning maps to a website. Weather Message Server, Message Client and Weather Message Map run in the background on the client computers.

Weather Message can be downloaded from the Internet and has a 30-day evaluation period. You can download it at <http://www.wxmesg.com>.



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1.2 Data Warning

Warning

Due to the nature of the **EMWIN**, **Weather Wire**, and **NOAAPORT** data streams, it is possible, on rare occasions, for weather messages to be missed or not processed. This can be caused by satellite black out, technical problems, weather conditions, poor Internet connections or corrupted messages. *Weather Message* makes deliberate attempts to process all received messages, even those that may have been corrupted. Because of this, the expiration times of some messages may be set to a default of 30 minutes or 72 hours. With any watch or warning, you should read the text of the message to validate the expiration time.

1.3 Obtaining Help

Email Support

If you need help with Weather Message, send an email to help@wxmesg.com.

Mail Support

You can reach the program author by mail to Weather Message Software, 203 Old Shepard Road, Dadeville, Alabama 36853.

Weather Message Website

You can check for software updates and information on the [Weather Message Website](#).

Discussion Group

A Yahoo Discussion Group has also been established for users to exchange ideas and help each other. You can join this group at <http://groups.yahoo.com/group/WxMesg/join>.

1.4 Installation

Weather Message can be purchased on CD or downloaded from the [website](#). The CD will automatically load the installation program. If you download the software from the Internet, you will need the full installation executable. It contains all of the files necessary for a full installation. A [Quick Start](#) guide can be downloaded from the website to assist you with installation and initial setup.

Updates to the software can also be downloaded from the Internet. The program updates only contain changes to the Weather Message programs. It cannot be used for a full installation.

Weather Message can be uninstalled using the standard Windows Add/Remove Programs facility. The uninstaller will not delete files created while running Weather Message. After uninstalling the software, you can safely remove the WxMesgNet directory.

Weather Message features a full 30 day fully functional evaluation. During the evaluation period, all aspects of the software function normally. At the end of the 30 day evaluation, the software will display an message, asking you to register the software.

Note: *If your installation will use multiple user login names/profiles, we recommend that you install Weather Message using the administrator login. This will insure that all users have access to the programs.*

Note: *It is not necessary to uninstall a previous version of Weather Message before installing an updated software version. Uninstalling the software will delete your operating setup information.*

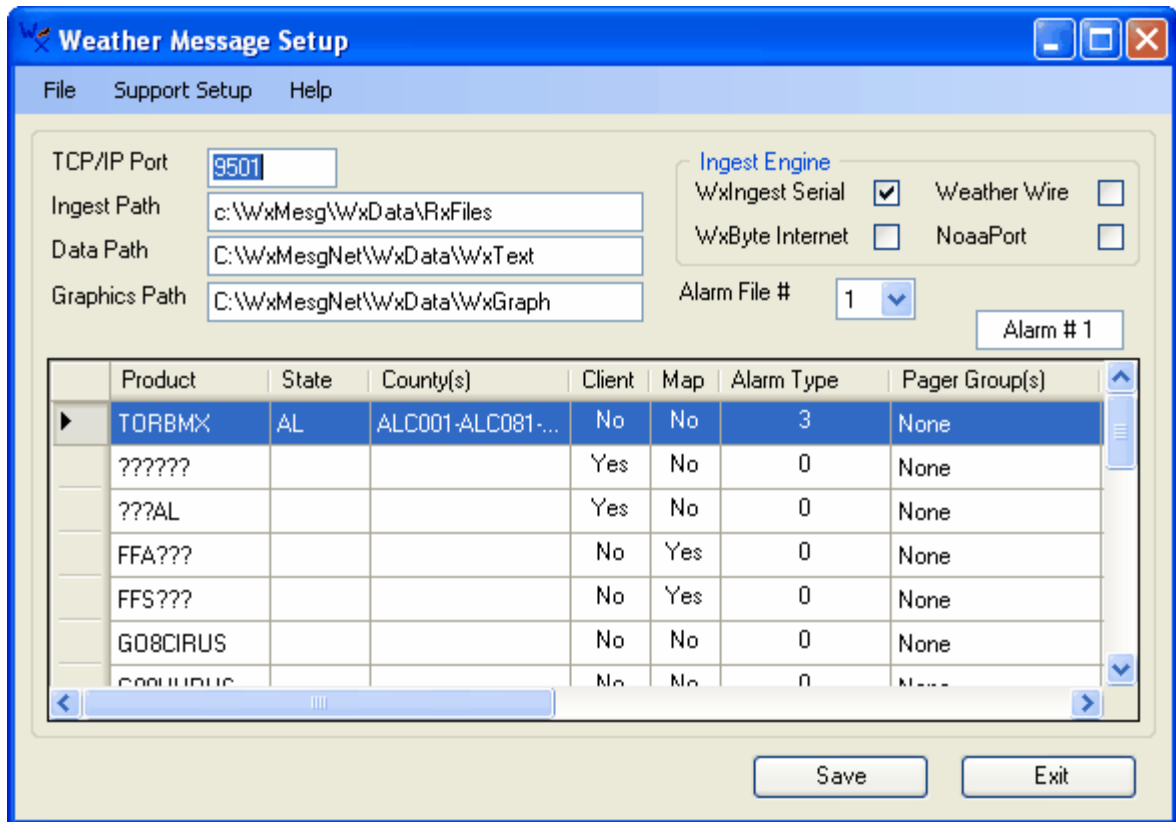
Part



2 Weather Message Server Setup

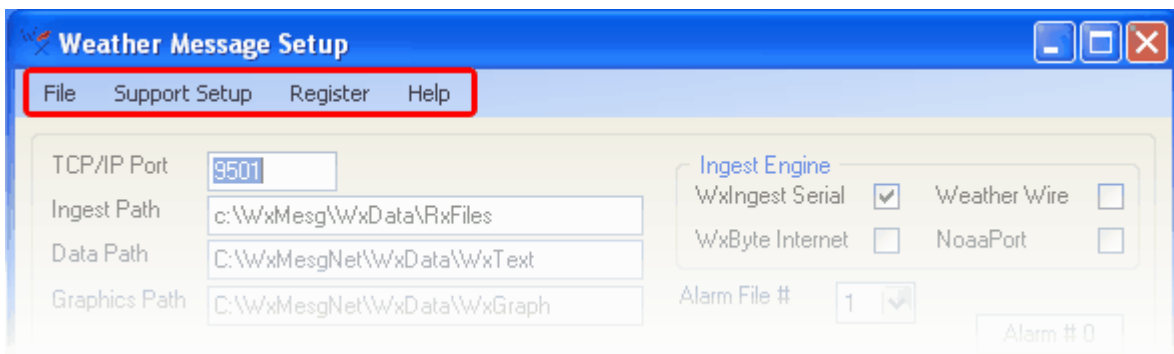
2.1 Overview

The Weather Message Setup program is used to configure the operation of Weather Message. It has a number of options that are detailed in this manual. The default installation is pre-configured to work immediately and alarm all received weather products.



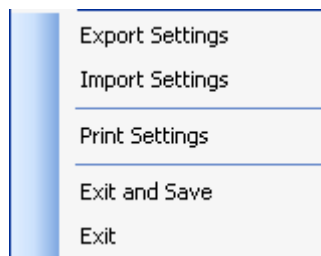
Weather Message processes received weather products based on [alarms](#) that you configure. Only products that match your alarms will be processed.

2.2 Menu Options



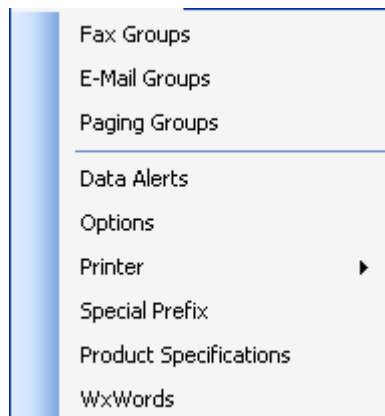
The menu buttons perform these functions:

The **File** menu allows you to export and import the program registry values, print the alarm and group settings and exit the program.



- The **Export Settings** option will export all of the registry settings for the Weather Message programs. They are exported to WxRegSet.txt. By exporting the registry settings, you can easily backup the weather message directory and save all of your settings.
- The **Import Settings** option will import the registry settings contained in the WxRegSet.txt file. After the registry entries have been imported, the setup program will exit. When you restart the setup program, the imported registry values will be used. You should stop all of the weather applications before importing settings.
- The **Print Settings** option will print the alarm, email, fax, and paging group setup information.
- The **Exit and Save** option saves any changed data and exits the program.
- The **Exit** option exits the program without saving any alarm changes.

The **Support Setup** menu allows you to change the systems settings.

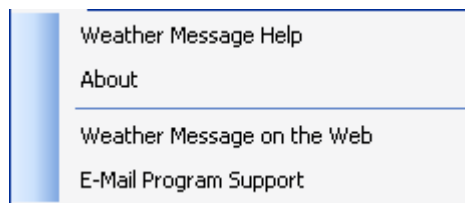


- The **Fax Groups** option allows you to setup fax groups and fax associated settings.

- The **E-Mail Groups** option allows you to setup email groups and fax associated settings.
- The **Paging Groups** option allows you to setup fax groups and fax associated settings.
- The **Options** option allows you to specify general program operation settings.
- The **Special Prefix** option allows you to establish prefixes that can be used to alarm more than one product per alarm.
- The **Product Specifications** option allows you to establish and maintain short message formats by product.
- The **WxWords** option allows you to edit the word replacement file.

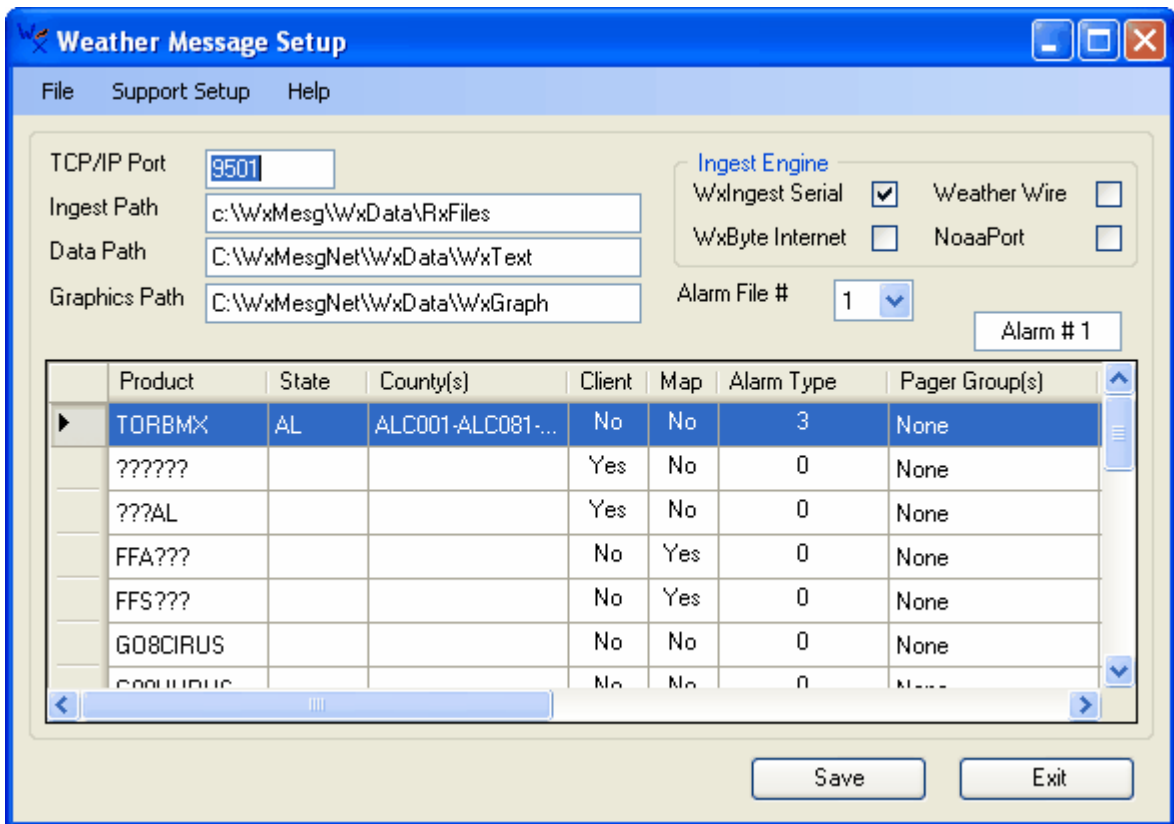
The **Register** menu allows you to [register](#)⁴³ Weather Message. This button does not appear if the software is registered. Note: If the software is not registered after 30 days, it will stop functioning.

The **Help** menu allows you to see this manual, and display information about the program.



2.3 Main Window

The main setup window allows you to configure the general program operation, along with product alarms.



The main screen is used to setup the **TCP/IP Port** address that the [clients](#) will use to access the Weather Message Server. Weather Message uses the port specified plus the next sequential port number. If you specify port 9501, the program will also use port 9502.

The **Ingest Path** field contains the directory path where received weather files are initially stored. Weather Message Server looks in this directory for incoming files to process. This path is used by the Internet ingest (WxByte), serial port ingest (WxIngest), weather wire ingest (WxWw2000), and NOAAPort (WxPort) programs to store received weather files.

The **Data Path** field contains the directory path to store processed text weather messages. The **Graphics Path** field contains the directory path to store processed graphic products.

The **Alarm File #** field allows you to select from 1 to 9 different alarm files. Only one alarm file is active at a time. This option is useful if you want to define a different set of alarms for different times of the year.

Select the **Ingest Engine(s)** to automatically start when Weather Message Server is loaded. Check WxIngest Serial to start the EMWIN serial port ingest program. Check WxByte Internet to start the EMWIN Internet ingest program. Check Weather Wire to start the Weather Wire ingest program. Check NOAAPort to start the NOAAPort ingest program.

Note: *Weather Message supports simultaneous ingesting from all data sources. If you want to receive data from multiple sources, select each source as appropriate. Weather Message will filter duplicate messages so they will not be alarmed twice. Simultaneous ingesting provides a level of redundancy.*

When the **Save** button is clicked, the Ingest, Data and Graphics paths are validated. If they do not exist, a message box will appear asking you if they should be created.

This screen also contains a grid for entering alarms. The alarms displayed in the grid are from the alarm file selected in the **Alarm File #** field. The alarm grid can be sort by clicking on the column header. Click once for descending order, click again for ascending order.

Hint: The widths of the alarm columns can be changed. To change a column width, position your cursor over the column line, hold down the left mouse button and drag the column line.

Hint: The location of a column can be changed by dragging the column to another location.

Hint: Inactive alarms are shown in the alarm grid with a yellow background.

Weather Message supports 1000 alarms, 500 e-mail groups, 500 fax groups and 500 pager groups.

Note: Changing any of the alarms will cause the setup program to notify Weather Message Server that changes have occurred. The Server will reload the current alarm file. You will see the message "Loaded Alarm Table" on the Weather Message Server status screen. If you change the TCP/IP port, you must stop and restart Weather Message Server.

2.4 Support Setup

2.4.1 Fax Groups

2.4.1.1 Fax Settings

The Fax Setup window allows you to set the faxing program to use along with your fax groups.

Group Name	Style
FaxOffice	Full

Select the program that you will use to send faxes. Select Windows 2K/XP to use the integrated fax server in Windows 2000, 2003 and XP. Select Win Fax Pro to use WinFax Pro, by Symantec.

Enter your name in the **Fax Name From** field. Enter your fax telephone number in the **Fax**

Telephone # field.

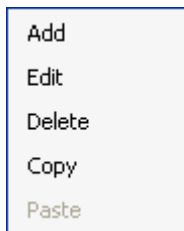
The **Create Fax Header/Trailer** button allows you to create text that will be added to the beginning and end of "selected" and "full" fax messages. See [Message Header/Trailer](#)^[42] for an example. When you click on this button, a screen will be displayed to enter the header and trailer. If you only want a head/trailer message for certain groups, see the [Fax Group](#)^[17] section.

Hint: *Clicking on one of the column headers will sort the list for that column.*

Note: *WinFax Pro is not provided with Weather Message. This third party software can be purchased directly from Symantec.*

Note: *For faxing to work properly, you must have your faxing software setup properly. It is recommended that you test your faxing software setup before instructing Weather Message to send faxes.*

To edit an existing group, double click the group. For other options, select the group and right click to see these menu options.



- The **Add** option will add a new group.
- The **Edit** option will edit the selected group.
- The **Delete** option will delete the selected group.
- The **Copy** option will copy the selected group.
- The **Paste** option will paste the last copied group as a new group.

2.4.1.2 Fax Group

The Edit Fax Group window allows to setup a group to receive faxes.

Enter the name of the group to be setup in the **Group Name** field. This name will appear in the alarm setup window as an available fax group.

Select the **Style** of fax to send. Select **Selected** for selected text from the alarmed [UGC](#) group; **Selected No Head** for selected text from the alarmed [UGC](#) group without the header; **Full** for Full Text; **Full No Head** for Full Text without header

Hint: The No Head style option removes the heading lines from the messages. This option removes all of the heading text from the first line in the message or UGC group down to the issued date/time line.

The **Subject Style** allows you to specify how the fax subject line is formatted. **Full** gives you the description, for example, "Tornado Warning". **Product** gives you just the product (AWIPS) code, for example, "TORBHM". The **None** option causes the faxing program to not include a subject line.

The **Parse** option can be used to reduce the size of the fax messages sent. Selecting "Y" tells the system to parse the messages, for this group, against the WxWords word substitution file.

Enter the fax telephone numbers in the **Fax List** box. Put one fax number per line. You can also enter a name associated with each address by following the fax number with a single space, then the name. Entering a name will help you identify the person associated with the fax number.

Hint: If you are required to dial a nine to obtain an outside line, you can insert a "P" after the 9 to cause the modem to pause for a second dial tone. For example: 9P3292952.

The **Create Group Fax Header/Trailer** button allows you to create text that will be added to the beginning and end of "selected" and "full" fax messages for this group. When you click on this button, a screen will be displayed for you to enter the header and trailer. See [Message Header/Trailer](#)⁴²⁾ for an example.

2.4.2 Email Group

2.4.2.1 Email Settings

The Email Setup window allows you to set the email server information along with your email groups.

Group Name	Style
Danny	Full
Phone	Short
Phone2	Full No Head
WxTech	Short
Graphic	Full

Enter the name of your **SMTP Server** and your **E-mail Address**. The **E-Mail From** field can be used to attach your agency name and/or abbreviation. This field will be shown in the e-mail From field.

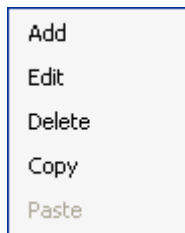
The **Email Options** button is used to setup SMTP port, authentication, retries, and backup e-mail servers. See [Email Options](#)^[20].

The **Create E-Mail Header/Trailer** button allows you to create text that will be added to the beginning and end of all "selected" and "full" email messages. See [Message Header/Trailer](#)^[42] for an example. When you click on this button, a screen will be displayed for you to enter the header and trailer. If you only want a header/trailer message for certain groups, see the [Email Group](#)^[21] section.

Hint: Clicking on one of the column headers will sort the list for that column.

Note: When you are ingesting from the Internet, WxByte uses the email address entered on this screen to validate you as a user.

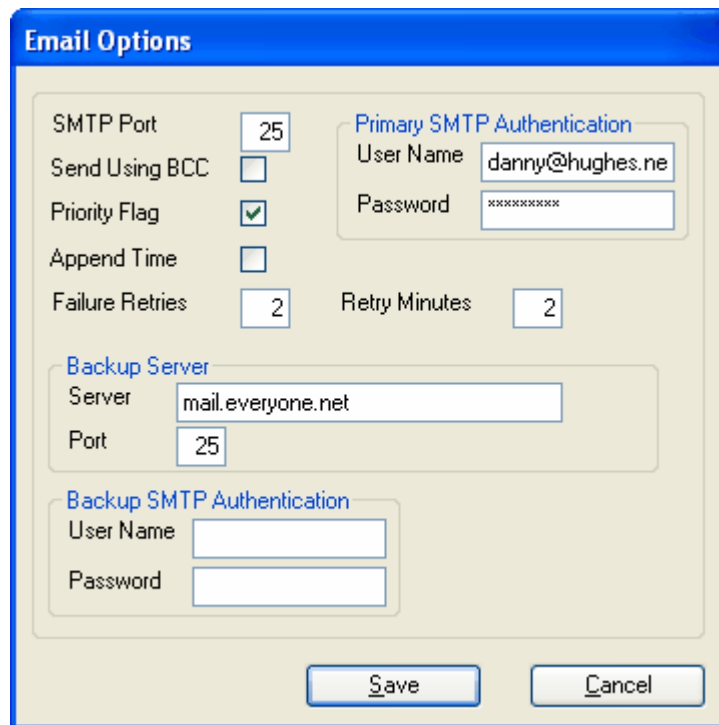
To edit an existing group, double click the group. For other options, select the group and right click to see these menu options.



- The **Add** option will add a new group.
- The **Edit** option will edit the selected group.
- The **Delete** option will delete the select group.
- The **Copy** option will copy the selected group.
- The **Paste** option will paste the last copied group as a new group.

2.4.2.2 Email Options

The Email Options window allows you to set STMP port, authentication, retries and backup e-mail servers.



The **SMTP Port** defaults to port 25. If your ISP uses a non-standard port, enter that port number in this field.

The **Send Using BCC** field should be checked if you want to send email using the email field BCC (Blind Carbon Copy). The email program normally sends email using the email field To. Using the BCC email field prevents each email address that you entered for a group from appearing in each email.

The **Priority Flag** field should be checked if you want to the recipients email to be flagged as

priority.

Hint: Some spam filters may flag messages with priority flags as spam. If you run into a problem with a spam filter, uncheck this option.

The **Append Time** check box is used to add a date and time to the email subject. This option can be used with email forwarding software that does not forward email messages with duplicate subject lines.

Some ISPs require that you authenticate your connection when you connect to their SMTP servers. If your ISP has this requirement, enter your **User Name** and **Password** in the Primary SMTP Authentication fields.

Hint: Use the SMTP authentication fields if they are required, otherwise leave them blank. If your ISP does not require authentication and you enter a user name and password, connection attempts to your email server will fail.

In the event that an email message cannot be delivered, you can specify the number of times the software will attempt to deliver the message. Enter the number of retries in the **Failure Retries** field. Enter the number of minutes between retries in the **Retry Minutes** field.

The **Backup Server** and **Backup SMTP Authentication** fields can be used for a backup email server. In the event that the primary server fails to respond, the software will automatically switch to the backup server.

2.4.2.3 Email Group

The Edit Email Group window allows to setup a group to receive emails.

Edit E-Mail Group

Group Name: Phone

Style: Short

Subject Style: None

Size: 140

Maximum: 3

Parse:

Time Zone: Central

E-Mail List: 2563972934@page.tmobile.com Danny
danny@wxmsg.com

Put each email address on a separate line.

Address Entry Format: address [space] name
john@server.com John Doe

Buttons: Create Group E-Mail Header/Trailer, Create Group Short Message, Save, Cancel

Enter the name of the group that you are creating in the **Group Name** field. This name will appear in the alarm setup window as an available email group.

Select the **Style** of email to send. Select **Short** for a short message; **Selected** for selected text from the alarmed [UGC](#) group; **Selected No Head** for selected text from the alarmed [UGC](#) group without the header; **Full** for Full Text; **Full No Head** for Full Text without header

Hint: *The No Head style option removes the heading lines from the messages. It removes all of the heading text from the first line in the message or UGC group down to the issued date/time line.*

The **Subject Style** allows you to specify how the fax subject line is formatted. **Full** gives you the description, for example, "Tornado Warning". **Product** gives you just the product (AWIPS) code, for example, "TORBHM". The **None** option causes the faxing program to not include a subject line.

The E-mail messages can be broken down into small packets to be sent to cellular phones and pagers. These devices normally cannot receive a large email message. Entering 0 (zero) for **Size** will tell the system to not break the message down into packets. In addition, you can limit the number of these packets you want to send, by specifying that number in the **Maximum** field. Entering 0 (zero) for Maximum will tell the system to send all of the packets.

The **Parse** option can be used to reduce the size of email messages sent. Selecting "Y" tells the system to parse the messages, for this group, against the WxWords word substitution file.

The **Time Zone** option allows you to select the time zone for this group. This option is used when the Style is set to Short. The system will adjust the received message to the selected time zone.

Enter the email addresses in the **E-mail List** box. Put one e-mail address per line. You can also enter a name associated with each address by following the email address with a single space, then the name. Entering a name will help you identify the person associated with the email address.

The **Create Group E-Mail Header/Trailer** button allows you to create text that will be added to the beginning and end of "selected" and "full" e-mail messages for this group. When you click on this button, a screen will be displayed for you to enter the header and trailer. See [Message Header/Trailer](#)^[42] for an example.

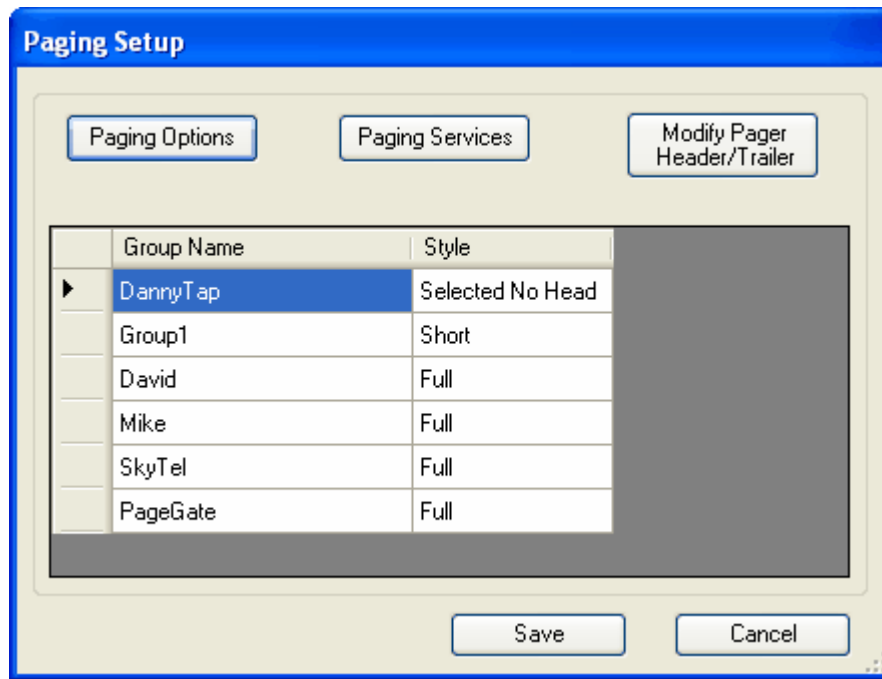
The **Create Group Short Message** button allows you to create a short message for this group. This option allows you to modify the system short message format for this group. See [Short Message](#)^[38] for additional information.

Note: *If you enter a short message for a group, it overrides the default and product specific specifications.*

2.4.3 Paging Groups

2.4.3.1 Paging Settings

The Paging Setup window allows you to set the paging information along with your paging groups.



The **Paging Options** button is used to setup the paging subsystem. See [Paging Options](#)^[24].

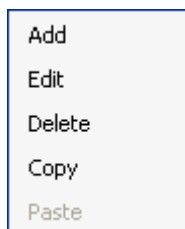
The **Paging Services** button is used to setup paging service providers. Paging services must be established before adding paging groups. See [Paging Services](#)^[25].

The **Create Pager Header/Trailer** button allows you to create text that will be added to the beginning and end of "selected" and "full" pager messages. See [Message Header/Trailer](#)^[42] for an example. When you click on this button, a screen will be displayed for you to enter the header/trailer. If you only want a header/trailer message for specific groups, see the Editing Paging Groups section.

Note: *Weather Message removes all control characters from messages sent to a pager. Most paging companies do not allow embedded control characters.*

Hint: *Clicking on one of the column headers will sort the list for that column.*

To edit an existing group, double click the group. For other options, select the group and right click to see these menu options.



- The **Add** option will add a new group.
- The **Edit** option will edit the selected group.
- The **Delete** option will delete the selected group.
- The **Copy** option will copy the selected group.

- The **Paste** option will paste the last copied group as a new group.

2.4.3.2 Paging Options

The Paging Options window allows you to set modem, SNPP and WCTP information.

Select the **Serial Port** that is attached to your modem. The **Retries** field is used to specify the number of times that the program will attempt to connect to your paging provider when their modem line number is busy. The **Modem Initialization** box is used to enter the initialization string needed for your modem.

For SNPP Paging, enter the **Default SNPP Port** number. Most paging companies use port 444 for SNPP connections. The **Connect Mode** option, when checked, causes the software to remain connected to the SNPP server when sending a group of messages.

For WCTP Paging, enter the **Default WCTP Port** number.

Modem Initialization Strings

Modem initialization strings can be different for each modem manufacturer and in most cases are different. The following generic strings can be used with most modems.

Generic		AT&FQ0V1X4&D2
Generic	14.4 & 28.8	AT&FQ0V1X4&D2N0S37=5
US Robotics		AT&F0Q0V1X4&D2&B1&K0&M0&N2

Some US Robotic modems will not communicate with computers at slow baud rates. If you encounter problems with your US Robotics modem, use the above initialization string and set the baud rate for your users and groups to 19200.

In general your initialization string should do the following.

- Send the attention command AT
- Load factory defaults &F
- Turn echo off E0
- Enable result codes Q0
- Display result codes as words V1
- Enable extended result codes X4 (could be X0)
- Enable modem hang up DTR change &D2

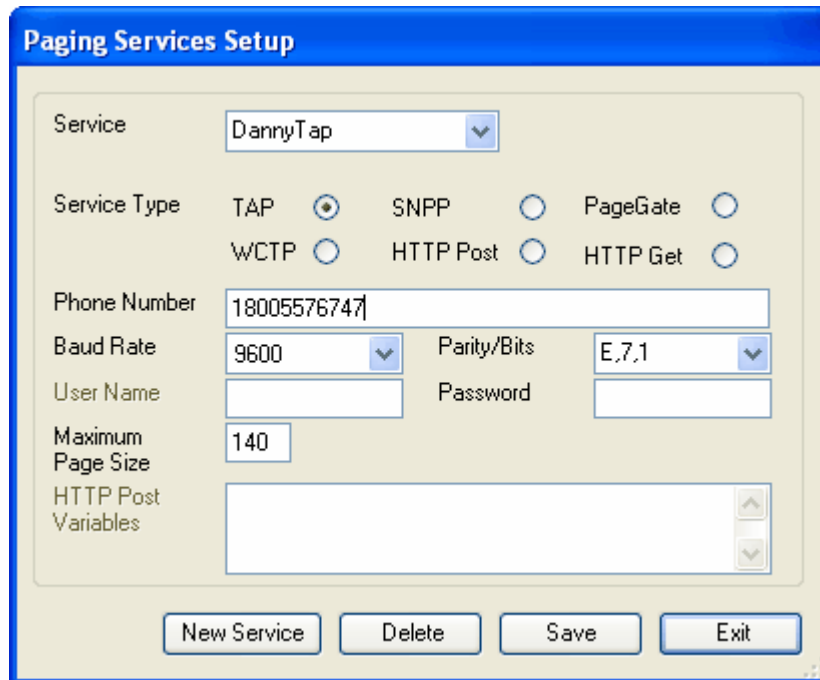
In addition, these options should be specified – they vary by manufacturer.

- Turn off data compression
- Turn off error correction
- Turn off flow control

If these codes do not work with your modem, send e-mail to help@wxmesg.com. Include your modem model number and we will try to send you an initialization string that will work.

2.4.3.3 Paging Services

The Paging Services window allows you to setup different paging services.



To add a new service, click the **New Service** button and enter a new **Service** name. To delete a service, select the service from the drop down list and click the Delete button. To change a service, select the service from the drop down list.

The **Service Type** field allows you to specify the type of paging service. Select **TAP** for modem dial-up paging, **SNPP** or **WCTP** for direct Internet paging, **HTTP Post** or **HTTP Get** to interface with a web page / web server, or **PageGate** if you want to interface with PageGate software.

Note: The PageGate option will cause the software to create messages named "Page#.asc"

in the "C:\Program Files\WxMesgNet\WxDATA\PageGate" directory. You should configure PageGate to scan this folder for messages.

For TAP paging, enter the service Telephone Number, Baud Rate and Parity/Bits. For SNPP, WCTP, or HTTP paging, enter the service Address and SNPP Port, WCTP Port, or HTTP Port.

Most paging devices have a limitation on the number of characters they can receive in one page. This limit should be entered in the Maximum Page Size field. Entering 0 (zero) for Size will default to 80 characters. Ask your paging provider for this limit.

Hint: *Some paging companies restrict the message size that can be sent to their pagers. If you exceed the size limitation the page request may be refused or rejected by the paging company. If your page requests are being rejected, try a shorter message length.*

The HTTP Post and HTTP Get option allows you to interface directly with a web page or web server. The Post option posts variables to the web server. The Get option URL encodes the variables before appending them to the http address. These options require a good understanding of posting data to web servers and the paging providers webpage. It is beyond the scope of this manual to describe these requirements. If you have questions contact Weather Message Support.

For HTTP, you must enter the information and variables to be posted or URL encoded to the HTTP server. Enter the required information in the HTTP Post Variables field. They are entered in the format variable=value. Three replacement variables are available to insert the pager pin, group name and message. Use the variable \$Pin\$ to insert the pager pin, \$Group\$ to insert the paging group name, and \$Message\$ to insert the pager message.

The following is an example of the variables needed for the SouthernLinc HTTP server.

```
PageArea1=  
PageNum1=$Pin$  
From=EMWIN  
PageMsg=$Message$  
NumChars=  
Page=Send Message
```

2.4.3.4 Paging Group

The Edit Paging Group window allows to setup a group to receive pages.

Enter the name of the group to be setup in the **Group Name** field. This name will appear in the alarm setup window as an available paging group.

Select the **Style** of page to send. Select **Short** for a short message; **Selected** for selected text from the alarmed **UGC** group; **Selected No Head** for selected text from the alarmed **UGC** group without the header; **Full** for Full Text; **Full No Head** for Full Text without header

Hint: *The No Head style option removes the heading lines from the messages. This option removes all of the heading text from the first line in the message or UGC group down to the issued date/time line.*

The pager messages can be broken down into small packets to be sent to cellular phones and pagers. These devices normally cannot receive a large email message. Entering 0 (zero) for **Size** will tell the system to not break the message down into packets. In addition, you can limit the number of these packets you want to send, by specifying that number in the **Maximum** field. Entering 0 (zero) for Maximum will tell the system to send all of the packets.

Hint: *Some paging companies restrict the message size that can be sent to their pagers. If you exceed the size limitation the page request will be refused or rejected by the paging company. If your page requests are being rejected, try a shorter message length.*

The **Parse** option can be used to reduce the size of email messages sent. Selecting "Y" tells the system to parse the messages, for this group, against the WxWords word substitution file.

The **Time Zone** option allows you to select the time zone for this group. This option is used when the Style is set to Short. The system will adjust the received message to the selected time zone.

Select a paging service provider from the **Service Name** drop down list. See [Paging Services](#) ²⁵¹ to add a new service.

Enter the email addresses in the **Pager Pin List** box. Put one pin per line. You can also enter a

name associated with each ping by following the pin with a single space, then the name. Entering a name will help you identify the person associated with the email address.

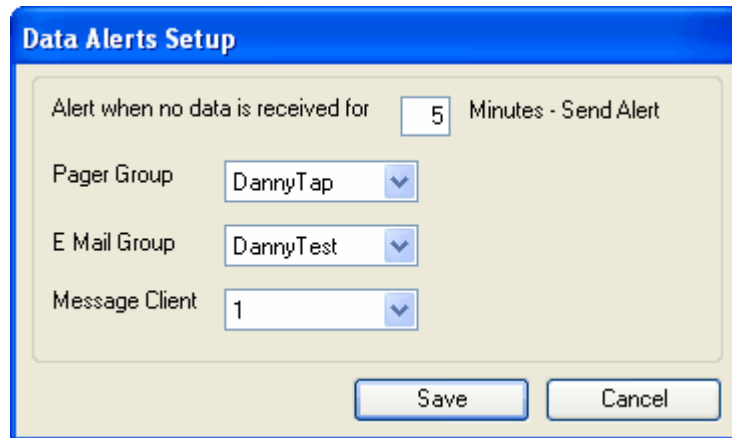
The **Create Group Pager Header/Trailer** button allows you to create text that will be added to the beginning and end of "selected" and "full" pager messages for this group. When you click on this button, a screen will be displayed for you to enter the header and trailer. See [Message Header/Trailer](#)^[42] for an example.

The **Create Group Short Message** button allows you to create a short message for this group. This option allows you to modify the system short message format for this group. See [Short Message](#)^[38] for additional information.

Note: *If you enter a short message for a group, it overrides the default and product specific specifications.*

2.4.4 Data Alerts

The Data Alerts window allows you to configure the software to notify a group of people if it does not receive data for a specific period of time.



The screenshot shows a dialog box titled "Data Alerts Setup". It contains the following fields and controls:

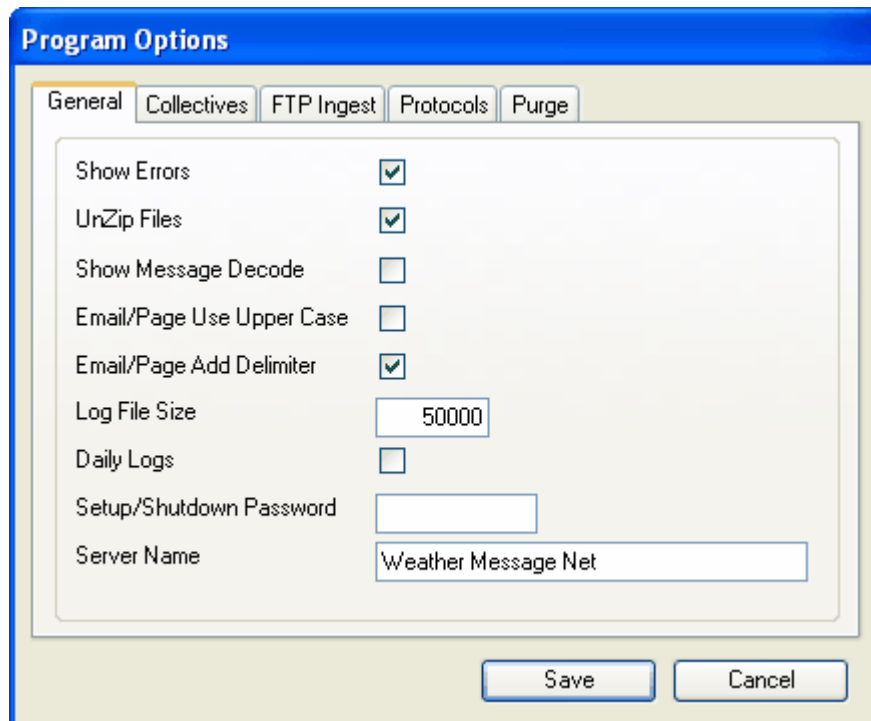
- Alert when no data is received for: 5 Minutes - Send Alert
- Pager Group: DannyTap (dropdown)
- E Mail Group: DannyTest (dropdown)
- Message Client: 1 (dropdown)
- Buttons: Save, Cancel

To activate data alerting, set the number of minutes that the program should wait, without receiving data, before sending an alert. You can specify a **Pager Group** and **Email Group** to receive the message. The program will send a brief message indicating it is no longer receiving data. The message will also include the name of the computer. When data resumes, you will get a second message indicating that it has resumed.

2.4.5 Options

2.4.5.1 General Tab

The Option's General Tab contains general settings for the server.



The **Show Errors** check box, when checked, will cause the software to pop-up an error box when a problem is encountered during program operation. Regardless of this setting, all errors are logged to the log file.

The **UnZip Files** check box, when checked, will cause the software unzip received compressed files. Files with the extensions "zis" and "zip" will be uncompressed when this option is enabled. This option is checked by default.

The **Show Message Decode** option, when checked, will cause Weather Message Server to show detailed information in the server window about each message as it is decoded. This option is only used for debugging and should not be used for normal operation.

The **Email/Page Use Upper Case** option, when checked, will cause all email and paged messages to be sent in upper case.

The **Email/Page Add Delimiter** option, when checked, will cause the program to add a comma between county names when using the short message option.

The **Log File Size** field allows you to specify this size of your Weather Message log files. The default is 50,000 bytes.

The **Daily Logs** option, when checked, causes the program to store the log files for each day in the ..\WxMesgNet\WxLogs directory. The logs for each day are copied to this directory. The log file name is appended with the day number. These logs will be overwritten with the next month's logs. After enabling this option, you must restart all Weather Message programs.

Note: *Enabling the Daily Logs option disables the log file size option.*

The **Setup/Shutdown Password**, if entered, will cause the Weather Message Server, WxByte, WxIngest and WxRadar programs to prompt the user for a password before stopping the respective program. The Weather Message Server Setup program will also require this

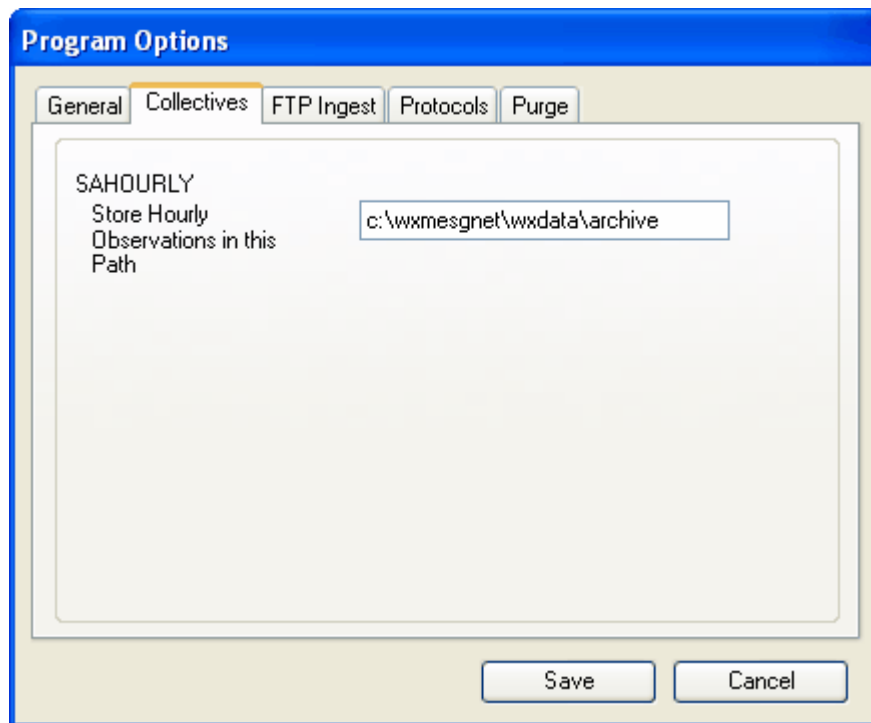
password before allowing setup options to be changed.

Hint: *Entering a password will prevent the server and ingest programs from being accidentally shutdown.*

The **Server Name** field is used to record a name for your Weather Message Server. The server name is transmitted to each connected client.

2.4.5.2 Collectives Tab

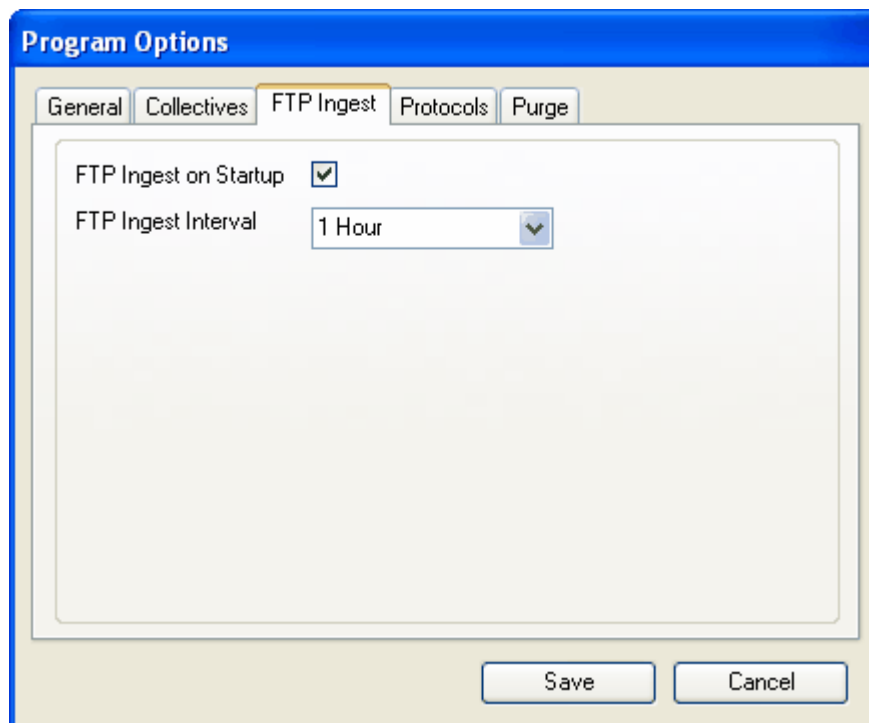
The Option's Collectives Tab allows you to optionally store collectives in a user defined directory.



The software currently supports the SAHOURLY collective. Enter the directory path to store this file.

2.4.5.3 FTP Ingest Tab

The Option's FTP Ingest Tab allows you to configure FTP ingesting of EMWIN data.



The FTP Ingest on Startup, when checked, will cause Weather Message to automatically request the three hour file when the program is first launched.

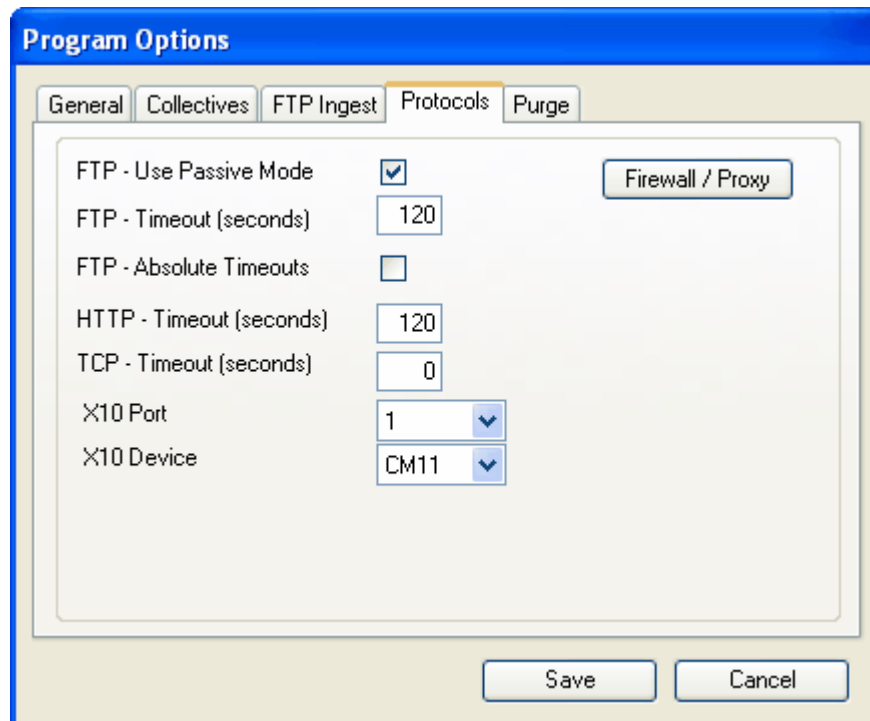
Hint: *This option pre-loads the system with the last three hours of EMWIN data. This can be used when Weather Message is not run continuously.*

The FTP Ingest Interval allows you to specify whether you want the software to automatically request FTP files for ingesting. You can select these options; None for no FTP Ingesting, 15 Minutes for FTP Ingesting every 15 minutes, 1 Hour for FTP Ingesting every hour, and 3 Hour for FTP Ingesting every 3 hours.

Note: *FTP Ingesting requires an Internet connection.*

2.4.5.4 Protocols Tab

The Option's Protocol Tab allows you to configure the protocols used by Weather Message.



The **FTP – Use Passive Mode** option, when checked, will cause the ftp program to use the passive mode. This option may be needed for firewalls that restrict incoming connections.

The **FTP Timeout** field allows you to specify the maximum amount of time the program will wait for responses from ftp servers.

The **FTP – Absolute Timeouts** option, when checked, will cause the ftp program to use absolute timeouts. An absolute timeout requires the ftp software to complete a ftp command within the timeout seconds specified. When unchecked, the ftp software will use normal timeouts. Normal timeouts are based on communication activity between the ftp software and the ftp server.

The **HTTP Timeout** field allows you to specify the maximum amount of time the program will wait for responses from http servers.

The **TCP Timeout** field allows you to specify the maximum amount of time the program will wait for responses from clients connected to the Weather Message Server. The default is 0 (zero), wait indefinitely. Use caution when changing this value. If a value is entered, the Server will disconnect clients that have not received data stored in the internal buffer within the specified time. The minimum time value allowed is 30 seconds.

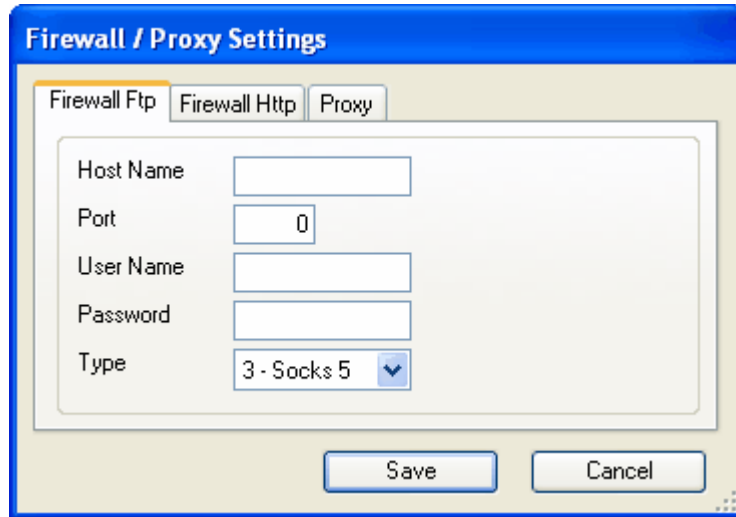
The **X10 Port** field allows you to specify the serial port that is connected to X10 interface hardware. If X10 is not used, select an unused port.

The **X10 Device** field is used to select the type of X10 interface device connected to your system. The valid options are CM17 and CM11.

The **Firewall / Proxy** button allows you to configure Firewall and Proxy settings for your computer. See [Firewall / Proxy](#)^[33].

2.4.5.4.1 Firewall / Proxy

The Firewall / Proxy window allows you to configure firewall / proxy information for your computer.



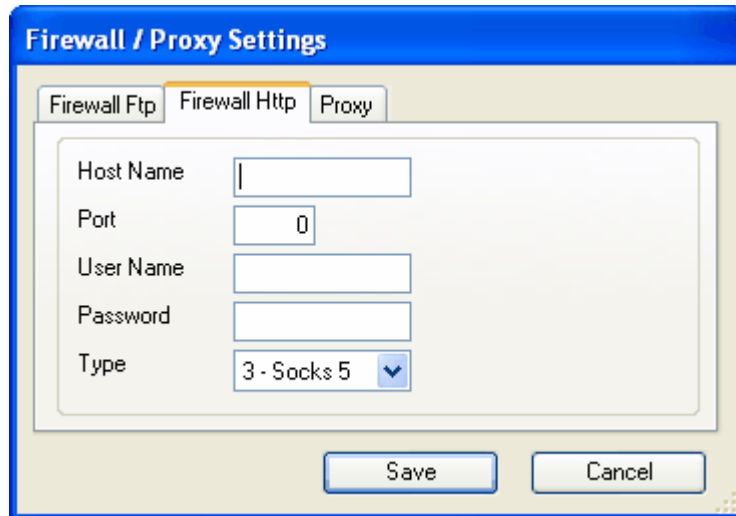
The screenshot shows the 'Firewall / Proxy Settings' dialog box with the 'Firewall Ftp' tab selected. The dialog has three tabs: 'Firewall Ftp', 'Firewall Http', and 'Proxy'. The 'Firewall Ftp' tab is active. The fields are: 'Host Name' (empty text box), 'Port' (text box containing '0'), 'User Name' (empty text box), 'Password' (empty text box), and 'Type' (dropdown menu showing '3 - Socks 5'). At the bottom are 'Save' and 'Cancel' buttons.

For a FTP firewall, enter the domain name or TCP/IP address of the firewall in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup in the firewall.

Select the **Type** of firewall. Valid entries are 1-Tunnel, 2-Socks version 4, or 3-Socks version 5.



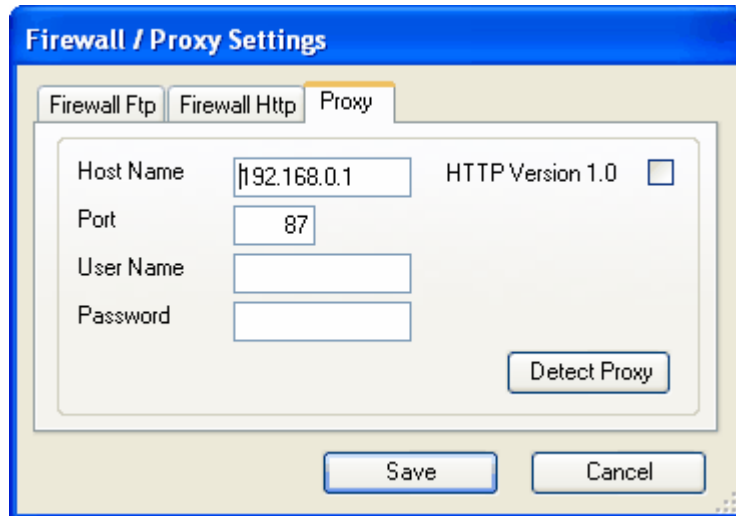
The screenshot shows the 'Firewall / Proxy Settings' dialog box with the 'Firewall Http' tab selected. The dialog has three tabs: 'Firewall Ftp', 'Firewall Http', and 'Proxy'. The 'Firewall Http' tab is active. The fields are: 'Host Name' (empty text box), 'Port' (text box containing '0'), 'User Name' (empty text box), 'Password' (empty text box), and 'Type' (dropdown menu showing '3 - Socks 5'). At the bottom are 'Save' and 'Cancel' buttons.

For a HTTP firewall, enter the domain name or TCP/IP address of the firewall in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup in the firewall.

Select the **Type** of firewall. Valid entries are 1-Tunnel, 2-Socks version 4, or 3-Socks version 5.



For a Proxy access, enter the domain name or TCP/IP address of the proxy in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup for the proxy.

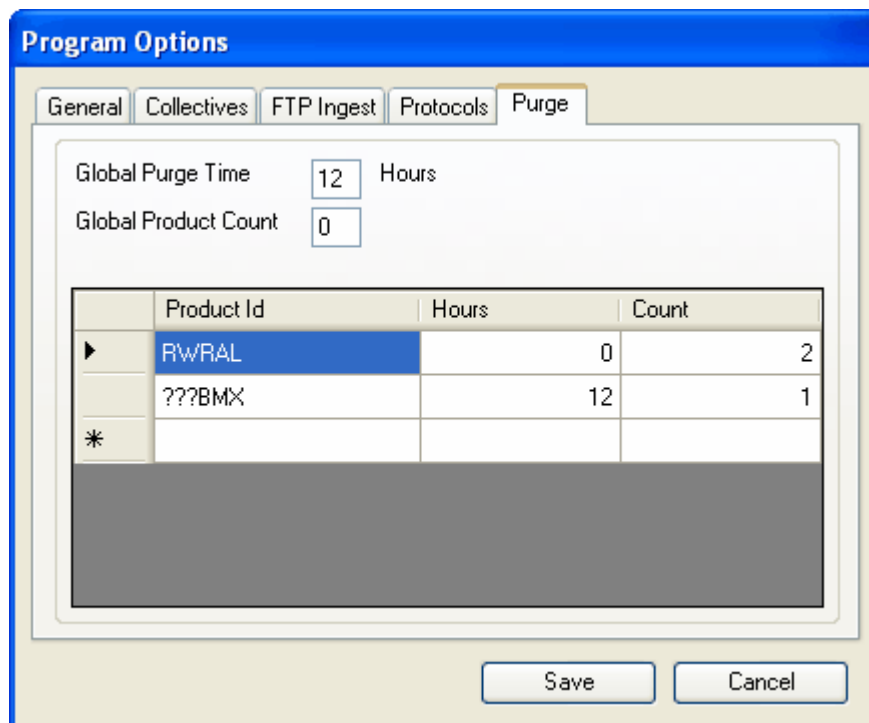
If **HTTP version 1.0** is required for the proxy server, check this box.

The **Detect Proxy** button will automatically detect the proxy settings for your computer and populate the host name and port fields.

Note: *The Firewall / Proxy settings are common to all Weather Message applications. Changing these settings will automatically change them for the other applications.*

2.4.5.5 Purge Tab

The Option's Purge Tab allows you to configure the purge interval and product count for received products.



The **Global Purge Time** field specifies the number of hours to keep expired weather and graphic products, before deleting them from the directories entered in Data Path and Graphics Path.

The **Global Purge Count** allows you specify the minimum number of products to keep on file after the Global Purge Time as elapsed.

Individual Product Purging

Purge options can also be specified for individual products or wildcard patterns. These options override the global options. To enter a new product identifier, click in the **Product Id** field on the row that has the "*". Enter the **Hours** and **Count** for this product.

The Product Id field supports the wildcard "?" and "*" characters.

To change an entry, click in the cell to be changed. To delete an entry, select the row and press the delete key.

Purge Option Combinations

Product purging give you three options:

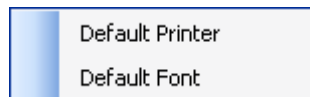
- Hours > 0 and Count = 0
This purges the product based on the expiration time.
- Hours > 0 and Count > 0
This purges the product based on expiration time and product count. The program favors the hours parameter first. That is it will always keep a product until the hours elapses, then it will honor the count setting.
- Hours = 0 and Count > 0
This purges the product based on the count of products. If you set the count to 2 and 4

product have been received in the last 30 minutes, the purge cycle will keep the last 2 product received and the previously received products will be deleted.

Note: *Weather Message starts a product purge cycle every 30 minutes.*

2.4.6 Printer

The Printer menu allows you to select a default printer and font size.

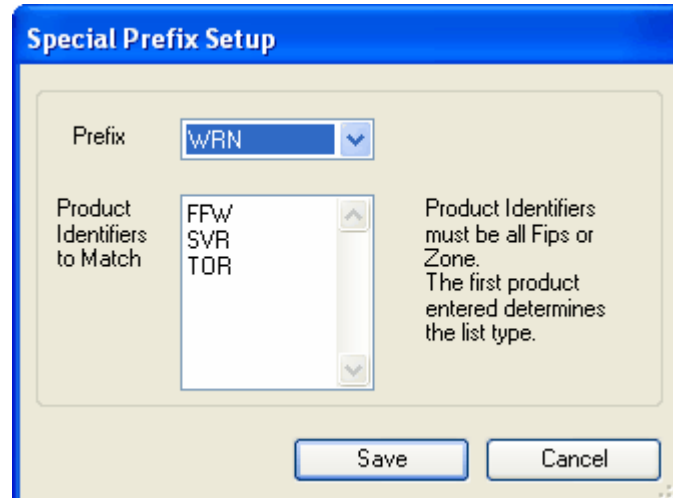


Click the **Default Printer** menu item to select a default printer.

Click the **Default Font** menu item to select a default font.

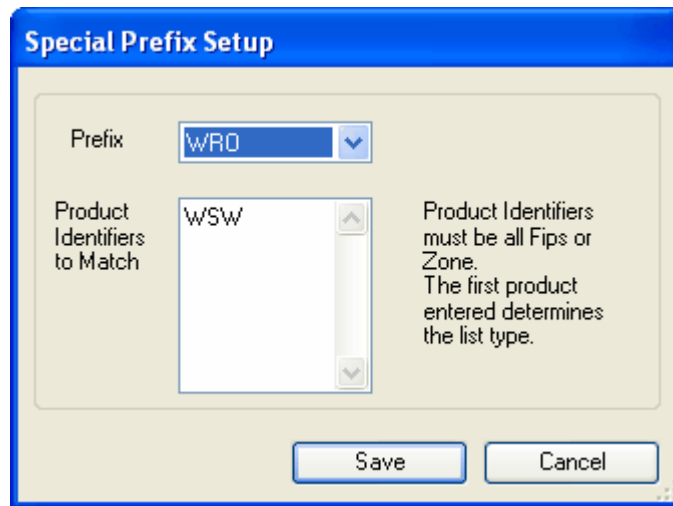
2.4.7 Special Prefix

The Special Prefix window allows you select products to be serviced by the WRN, WRO, WRP, and WRQ prefixes. These special prefixes are designed to assist you in alarming a group of messages. These prefixes can be used to reduce the number of alarms needed for commonly alarmed products.



The prefix WRN defaults to the products FFW, SVR and TOR. Enter additional products by typing them into the list.

Note: *All of the products in this list must use the same UGC coding sequence - zone or FIPS.*



The prefixes WRO, WRP and WRQ have no assigned default values. Select one of these prefixes and enter products by typing them into the list.

Note: All of the products assigned to each list must use the same UGC coding sequence - zone or FIPS.

2.4.8 Product Specifications

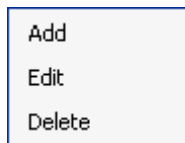
The Product Specifications window allows you establish short message formats for products. These specifications are used to create a short message for email, paging and archive operations.



The **Default** product specification is used for any short message that does not match a product in the list.

Note: You cannot delete the Default product.

To edit an existing Product, double click the product. For other options, select the Product and right click to see these menu options.



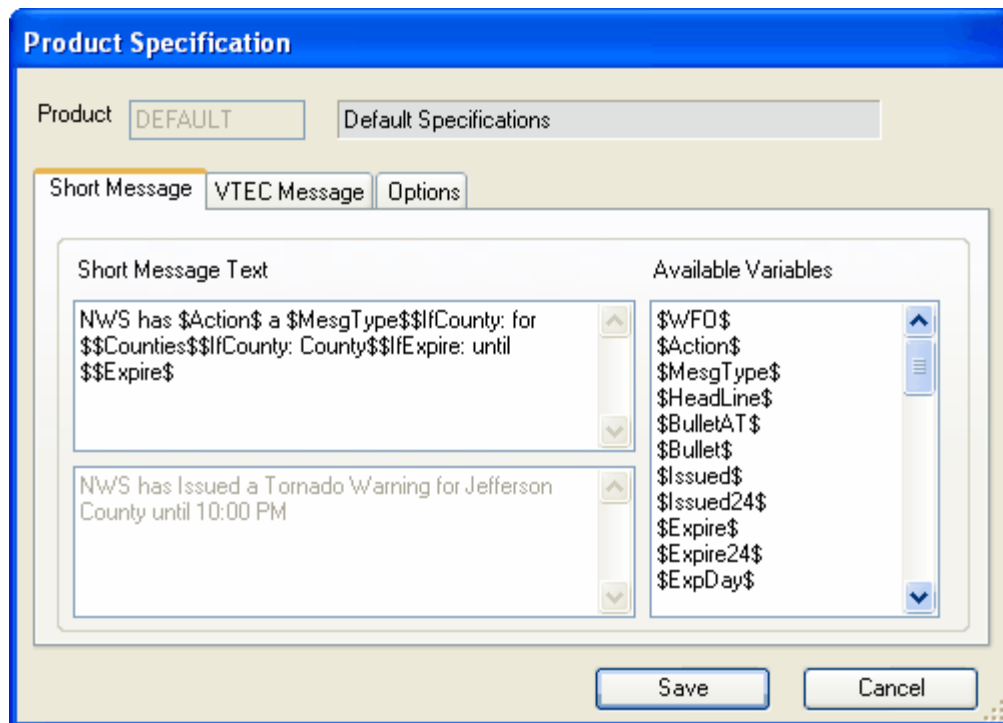
- The **Add** option will add a new product specification.
- The **Edit** option will edit the selected product.
- The **Delete** option will delete the selected product specification.

When adding, or editing, the [Product Specification](#) ³⁸ window is displayed.

Hint: *Product Specifications can be entered for a three character product identifier, or a complete 6 character product plus WFO identifier.*

2.4.8.1 Short Message Tab

The Short Message Tab allows you to establish a short message.



The **Product** field allows you to enter a product identifier. This field is disabled for the Default product. The description of the product entered is displayed to the right of the product field.

The format of the message is established by typing words and codes in the first text box. To the right of the first text box, you will see a list of codes that can be used in the message. The text box at the bottom of the window shows a sample of the decoded format.

The following is a list of the codes available and their meaning:

The `$IfCounty:word$` and `$IfExpire:word$` codes can be used to insert words if the message will include county names and/or an expiration time. In the example shown above, the code `"$IfCounty: for $"`, means to include the word "for", if county names are available, otherwise do not include the word. The `"$IfCounty: County $"`, does the same, means to include the word "County", if county names are available.

Using these codes you could construct a message that reads: From Lee County EMA: At 13:30 NWS BHM issued a Tornado Warning for Lee County expiring at 14:00. This flexibility allows you to have a shorter or longer message, based on your requirements.

The `$HeadLines$` code will include any headlines found in the alarmed message. Headlines are lines that begin with "..." and end with "...". Headlines are not present in every weather message.

The `$BulletAT$` code will include any text found in the alarmed message after the text "** AT". This code is useful with TOR (tornado) and SVR (severe thunderstorm) messages. It captures the location of the weather system causing the alarm.

The `$Bullet$` code will include any text found in the alarmed message after the text "* ". This code is useful with several types of messages. It captures the location of the weather system or event causing the alarm.

The `$Today$` and `$Tonight$` codes will include the today and/or tonight information from the Zone Forecast product. Specifically, `$Today$` will pull all of the text associated with a line that starts with ".TODAY" or ".THIS". `$Tonight$` will pull all of the text associated with a line that starts with ".TONIGHT".

The `$DayOne$` and `$Spotter$` codes will include the day one and spotter attention lines from the Hazardous Weather Outlook. Specifically, `$DayOne$` will pull the first paragraph after the ".DAY ONE" header. `$Spotter$` will pull the first paragraph after the ".SPOTTER" header.

The `$UserDef1$` code will include a paragraph of text, starting at the point where a user definable string is found. See the Options tab to setup the user definable string.

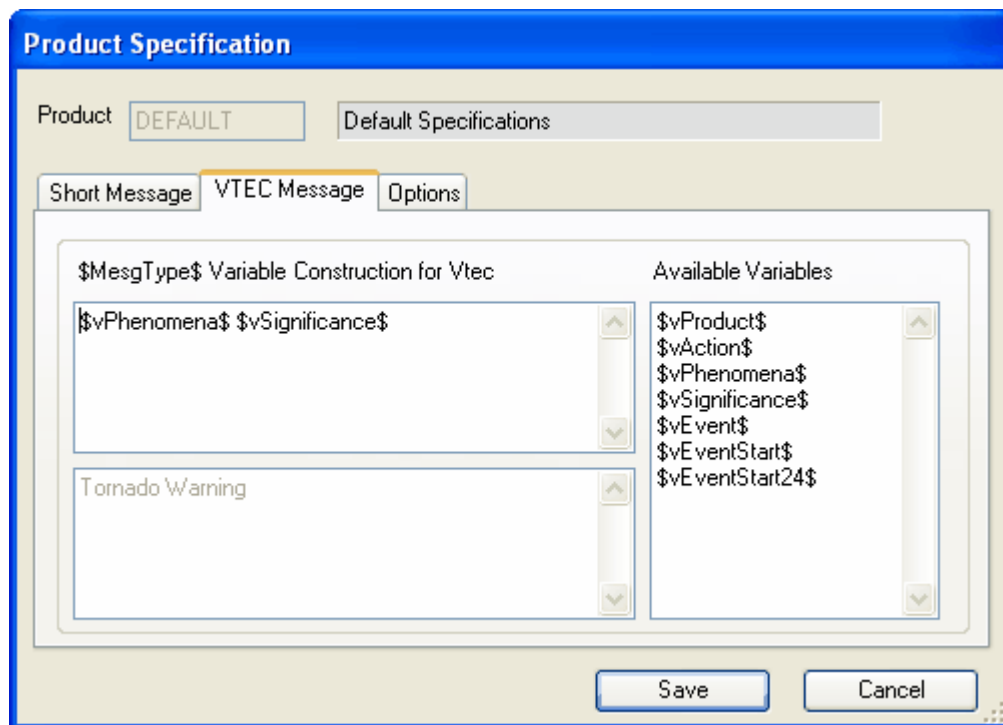
The `$Lines:x,y$` code will include a fixed number of lines from a specified starting line in the message. X is the starting line in the message and Y is the number of lines to include.

Note: The `$Start` variables can be blank if the incoming message is coded with no event start time.

Note: The HVTEC variables are only populated when the alarmed message contains HVTEC encoding.

2.4.8.2 VTEC Tab

The VTEC Tab allows you specify a format for the description associated with VTEC coded messages.



The format of the `$MsgType$` code is established by typing words and codes in the first text box. To the right of the first text box, you will see a list of codes that can be used. The text box at the bottom of the window shows a sample of the decoded format.

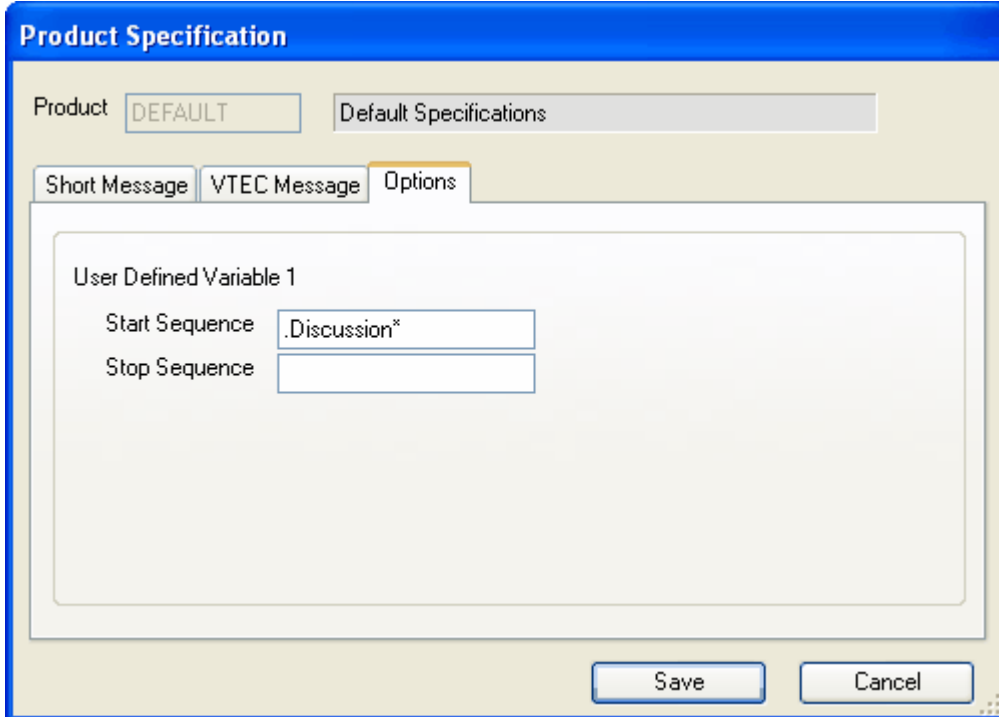
The following is a list of the codes available and their meaning:

<code>\$vProduct\$</code>	Product type – Operational, Experimental, etc.
<code>\$vAction\$</code>	Action – New, Cancelled, Extended, etc.
<code>\$vPhenomena\$</code>	Phenomena – Severe Thunderstorm, Tornado, etc.
<code>\$vSignificance\$</code>	Significance – Watch, Warning, etc.
<code>\$vEvent\$</code>	Event number used to track this message.
<code>\$vEventStart\$</code>	Event start time in local AM/PM format.
<code>\$vEventStart24\$</code>	Event start time in 24 hour format.

Note: The `$vEventStart` variables can be blank if the incoming message is coded with no event start time.

2.4.8.3 Options Tab

The Options Tab allows you to setup user definable text that will be used to populate the `$UserDef1$` short message code.



The screenshot shows a dialog box titled "Product Specification" with a blue header. At the top, there is a "Product" dropdown menu set to "DEFAULT" and a "Default Specifications" button. Below this are three tabs: "Short Message", "VTEC Message", and "Options", with "Options" being the active tab. The main area of the dialog is titled "User Defined Variable 1" and contains two text input fields. The "Start Sequence" field contains the text ".Discussion*" and the "Stop Sequence" field is empty. At the bottom right of the dialog are "Save" and "Cancel" buttons.

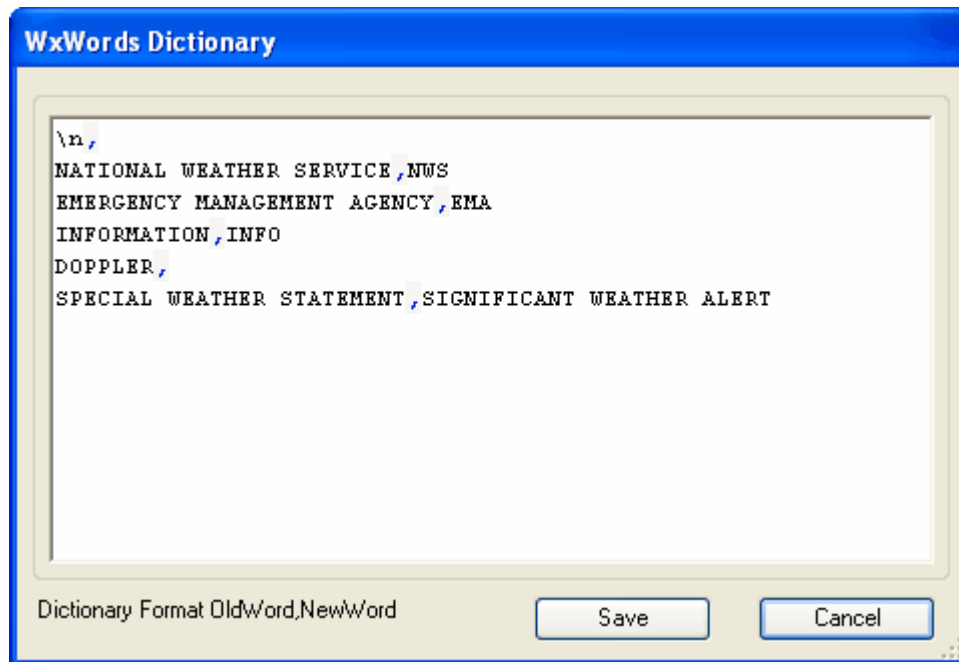
Enter the starting string sequence in the **Start Sequence** field and the stopping string sequence in the **Stop Sequence** field.

These sequences must match the text exactly. In the example above, the program will look for a line that begins with ".Discussion" and is followed by any number of characters. The "*" character is used to indicate any number of characters. It will stop capturing text from the message when a blank line is encountered.

***Hint:** If you want to find text that is in the middle of a line use the "*" character before and after the text that you want to find.*

2.4.9 WxWords

The WxWords Window is used to establish word substitutions. These entries are used when the Parse option is enabled on Fax, Email and Paging groups. This capability is specifically designed to reduce the size of paged messages.



The format for WxWords is original word(s), replacement word. There must be a comma between the original word and replacement word. You will notice that the comma is shown in a different color.

Note: The words are not case sensitive, however the program will replace the words in the case that you use in WxWords.

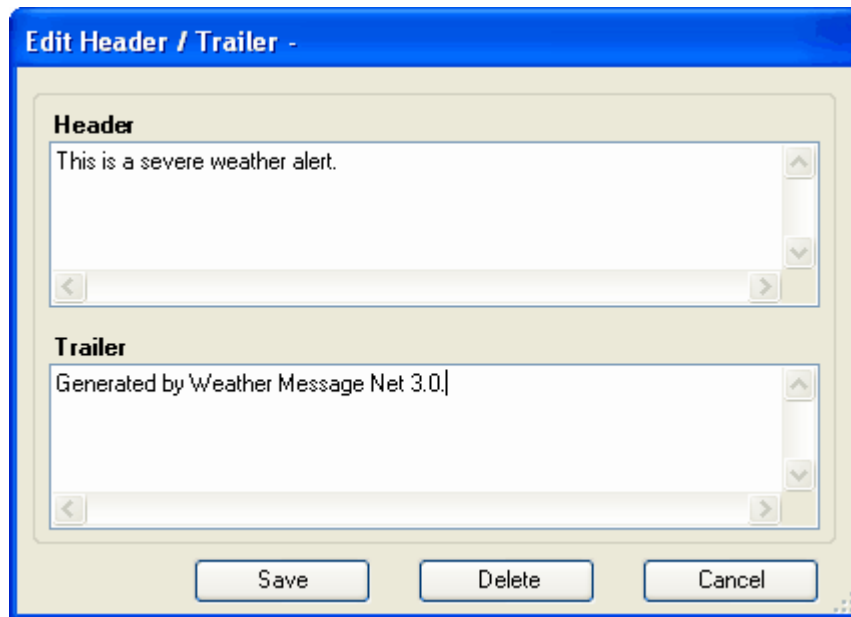
Note: A sample WxWords.dat file is available on the Weather Message Additional Downloads webpage. This file contains the most common abbreviations, <http://www.wxmsg.com/misdownloads.htm>.

Since the format for WxWords uses a comma to separate the original word(s) and replacement word(s), a special procedure should be used to replace a comma. To replace a comma, you must enclose the comma character with single quotes. For example – to replace the comma with a semicolon, your entry in WxWords would be ',;'. To replace a semicolon with a comma, your entry in WxWords would be ';,'.

In order to remove carriage return and line feed characters, enter the line \n, . The \n string will match any carriage return line feed characters, which can be replaced with nothing or any other character string, include a blank space.

2.4.10 Message Header/Trailer

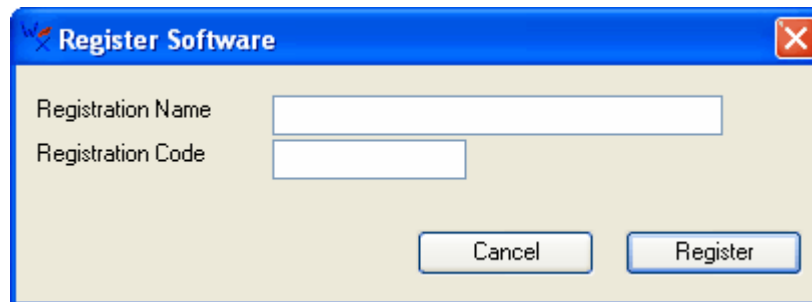
The Edit Header / Trailer window allows you to enter text that will be added to the beginning and ending of a fax, email or pager message.



The Header and Trailer are optional.

2.5 Register Software

The Register menu option allows you to register your software.



When you purchase Weather Message, you will be supplied with a **Registration Name** and **Registration Code**. Enter these exactly as they are printed. These fields are case sensitive.

After the software is registered, we recommend that you stop and restart the software.

To purchase the software go to <http://www.wxmesg.com/purchpay.htm>.

2.6 Maintaining Alarms

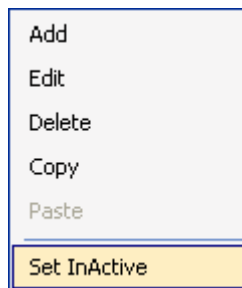
2.6.1 The Alarm Grid

The alarm grid allows you to add, edit, delete, copy, paste and set alarms inactive.

	Product	State	County(s)	Client	Map	Alarm Type	Pager Group(s)	E
▶	??????			Yes	No	0	None	N
	WRN???			No	Yes	0	None	N
	TORBMX	AL	ALC123	No	No	0	None	N

Hint: Alarms that appear with a yellow background are inactive.

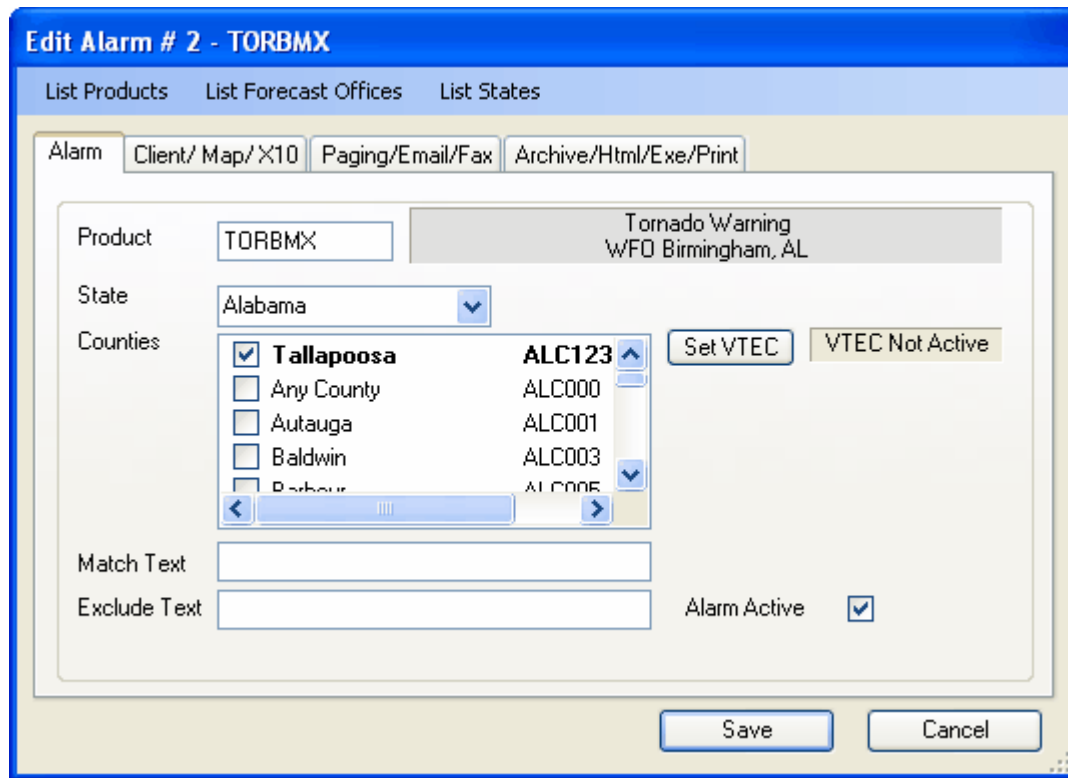
To edit an exiting alarm, double click the alarm. For other options, select the alarm and right click to see these menu options.



- The **Add** option will add a new alarm.
- The **Edit** option will edit the selected alarm.
- The **Delete** option will delete the select alarm.
- The **Copy** option will copy the selected option.
- The **Paste** option will paste the last copied alarm as a new alarm.
- The **Set InActive** option will disable an alarm. You can also set and alarm inactive on the alarm screen.

2.6.2 Alarm Tab

When adding or editing an alarm, this window is displayed. The alarm tab contains the information for selecting the weather products to [alarm](#).



The **Product** field contains the product identifier that you want to alarm. The product identifier is assigned by the National Weather Service. It is commonly referred to as an AWIPS identifier. Weather product codes / AWIPS identifiers are listed in [Text Product Abbreviations](#).

Text message product codes are generally composed of a three-character message type, followed by a three-character weather forecast office code. There are some product identifiers are four or five characters in length. For example, the regional weather round up for Alabama is RWRAL. If you do not know whether a product uses four, five or six characters, look up the weather forecast office's products using this Internet address <http://www.wxmesg.com/asp/recprod.asp>.

Hint: The product code can be an actual product code, or can contain question mark(s) (?) or asterisk (*) for wildcard operation.

Hint: The special prefix, WRN, can be entered in the product code field to catch all of the standard warnings. It includes SVR, TOR and FFW. This can be a time saver when establishing your alarms. Three additional special prefixes, WRO, WRP and WRQ, can also be used. These prefixes are not defined and can be setup using the Support Setup, [Special Prefix](#) menu option.

Hint: To alarm METAR products, enter MTR as the first three letters of the product identifier, followed by the four-letter station identifier. For example to alarm the METAR for KALX, enter MTRKALX for the product identifier.

Note: If a message does not contain a valid Product identifier, the program will use the first six characters of the WMO header. This allows you to alarm products that do not have Product identifiers.

In addition to text products, you can setup alarms for graphic products. Graphic products cannot be sent to the map, or paged. They can be sent to the message client, emailed, archived and

passed to an external exe program. To alarm a graphic product, use its 8-character EMWIN file name.

Hint: *The product identifier GRAPHI will match all graphic products.*

To aid you with the entry of product identifiers, you can click on **List Products** to view and select a product. To view or select a weather forecast office, click on **List Forecast Offices**.

Note: *The product and forecast office list may not include all products or forecast offices distributed by EMWIN, NWWS or NOAAPort. The National Weather Service routinely updates these lists. As they are updated, they are incorporated into the next Weather Message software release. Check the Weather Message website for updates to these lists.*

State / County / Marine Zone Selection

To select a specific state or marine zone, select the state or marine zone abbreviation from the drop down list. To aid you with the state or marine zone abbreviations, you can click on List States to view and select a state or marine zone.

Note: *When using state or county selections, the weather message must contain the appropriate Universal Generic Code (UGC) lines. If you select a specific state or county and the message does not contain a UGC line, it will be not be alarmed. The only exception is the SAW product. Weather Message decodes the text in the SAW product so it can be alarmed by state.*

You can select any number of counties to be matched, for the selected state. If no counties are selected, the message will be alarmed if the state abbreviation is found in the message UGC lines.

Hint: *A warning message will be displayed if you attempt to enter state or county information for a message that does not normally contain UGC lines.*

Hint: *The reason for allowing multiple counties on one alarm is to cover adjacent counties with only one alarm. This assists with the creation of a short pager message. If no county is specified, the short message will not contain any county names.*

Text Matching

In addition to state and county preferences, you can require a message to have a specified text phrase before it is alarmed. The **Match Text** field allows you to enter a word or phrase that should be found in the message before it is alarmed.

This feature can be used with messages that contain different content. For example, the SPS (Special Weather Statement) is used for different purposes. One use of this message is to announce thunderstorm advisories. Entering `"*THUNDERSTORM ADVISORY*"` in this field, for an SPS alarm, will require it to contain these words before it would be alarmed.

The **Exclude Text** field allows you to enter a word or phrase that if found, would cause the message to not be alarmed. This feature can be used to prevent the alarming of test messages. For example entering the word `"*TEST*"` in this field would prevent any message containing the word "TEST" from being alarmed.

Hint: *The Match and Exclude fields use wildcards for matching. Be sure to prepend and append an `"*"`. The matching mechanism supports `?` to match Any single character, `*` to match Zero or more characters, `#` to match Any single digit (0–9), `[charlist]` to match Any single character in charlist and `[!charlist]` to match Any single character not in charlist.*

Alarm Active Option

The Alarm Active option is used to enable / disable an alarm. When an alarm is disabled, it is shown in the main alarm grid with a yellow background.

VTEC – Valid Time Event Code

The [Set VTEC](#) ^[47] button is used to setup specific [VTEC](#) events, primary and hydrologic, to be matched for this product.

2.6.2.1 VTEC Option

The VTEC Settings window allows you to further define your alarm requirements for the product. [VTEC](#) is not implemented in all messages. A warning box is displayed if you attempt to set [VTEC](#) options for a product that does not support this feature.

Products	Actions	Phenomena	Significance
Operational <input checked="" type="checkbox"/>	New <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Tornado	Warning <input checked="" type="checkbox"/>
Test <input type="checkbox"/>	Continued <input type="checkbox"/>	<input type="checkbox"/> Air Stagnation	Watch <input type="checkbox"/>
Experimental <input type="checkbox"/>	Extend Time <input type="checkbox"/>	<input type="checkbox"/> Areal Flood	Advisory <input type="checkbox"/>
VTEC <input type="checkbox"/>	Extend Area <input type="checkbox"/>	<input type="checkbox"/> Ashfall	Statement <input type="checkbox"/>
Experimental <input type="checkbox"/>	Extend Both <input type="checkbox"/>	<input type="checkbox"/> Avalanche	Outlook <input type="checkbox"/>
	Canceled <input checked="" type="checkbox"/>	<input type="checkbox"/> Blizzard	Forecast <input type="checkbox"/>
	Upgraded <input type="checkbox"/>		Synopsis <input type="checkbox"/>
	Expired <input type="checkbox"/>		
	Correction <input type="checkbox"/>		
	Routine <input type="checkbox"/>		

Primary VTEC

In order to use Primary VTEC, you must select at least one item from **Products**, **Actions**, **Phenomena** and **Significance**. You can select multiple items from each category.

The **Select All Actions** button will select all action items. The **Select All Significance** button will select all significance items. The **Clear Selections** button will reset all selections for both Primary and Hydrologic.

Note: You can select Phenomena that may not be included in the message that is being alarmed. You need to verify that the message you are alarming can contain the Phenomena that you select.

Note: When you use the Primary VTEC option, the received message must contain the Primary VTEC items you select, otherwise the message will not be alarmed.

Hydrologic VTEC

The screenshot shows the 'VTEC Settings' dialog box with the 'Hydrologic VTEC' tab selected. The 'Site Identifier' section contains a list of items with checkboxes and a dropdown menu. The 'Flood Severity' section contains a list of severity levels with checkboxes.

Site Identifier	Flood Severity
<input checked="" type="checkbox"/> HBPA1 AL Tallapoosa River at Horseshoe Bend	None <input type="checkbox"/>
<input type="checkbox"/> 00000 Areal Flood or Flash Flood	No Observation <input type="checkbox"/>
<input type="checkbox"/> AAKA2 AK Antler River near Antler river	Minor <input type="checkbox"/>
<input type="checkbox"/> ABLA2 AK Kobuk River at Ambler	Moderate <input type="checkbox"/>
<input type="checkbox"/> ACSA2 AK Susitna River at Alexander Creek	Major <input checked="" type="checkbox"/>
<input type="checkbox"/> ALKA2 AK Alesek River at Walker Glacier	Unknown <input type="checkbox"/>
<input type="checkbox"/> ALLA2 AK Koyukuk River at Allakaket	
<input type="checkbox"/> APBA2 AK Anchor River at Anchor Point	
<input type="checkbox"/> APTA2 AK Anchor River at New Sterling Hwy	

Buttons at the bottom: Clear Selections, Save, Cancel

Enter **Site Identifier(s)** for the flood area. Select **Flood Severity(ies)** from the drop down list.

Note: *Hydrologic VTEC is only found in hydrologic products.*

Note: *These settings are optional. If they are left blank, the software will alarm all products that match your other alarm criteria.*

Note: *When you use the Hydrologic VTEC option, the received message must contain the Hydrologic VTEC items you select, otherwise the message will not be alarmed.*

2.6.3 Client / Map / X10 Tab

The Client/ Map/ X10 tab is used to specify an alarm action for these categories.

The screenshot shows the 'X10 Settings' tab of the Weather Message Server Setup dialog. The 'To Client' and 'To Map' fields are both set to 'Yes'. The 'Alarm Type' is set to '3'. A note states: 'Alarm type is used to play sounds and/or control printing.' The 'X10 Settings' section includes a 'House Code' dropdown set to 'A', a 'Command' dropdown set to 'Blink', and a 'Duration' text box set to '1'. There is a grid of checkboxes for units 1 through 16. Units 5 and 6 are checked, while all other units are unchecked.

Field	Value
To Client	Yes
To Map	Yes
Alarm Type	3
House Code	A
Command	Blink
Duration	1
Unit 1	<input type="checkbox"/>
Unit 2	<input type="checkbox"/>
Unit 3	<input type="checkbox"/>
Unit 4	<input type="checkbox"/>
Unit 5	<input checked="" type="checkbox"/>
Unit 6	<input checked="" type="checkbox"/>
Unit 7	<input type="checkbox"/>
Unit 8	<input type="checkbox"/>
Unit 9	<input type="checkbox"/>
Unit 10	<input type="checkbox"/>
Unit 11	<input type="checkbox"/>
Unit 12	<input type="checkbox"/>
Unit 13	<input type="checkbox"/>
Unit 14	<input type="checkbox"/>
Unit 15	<input type="checkbox"/>
Unit 16	<input type="checkbox"/>

Message Client

The **To Client** field is used to indicate whether you want this alarm sent to the Message Client(s) connected to the server. Select "Yes" to send the alarm to all Message Clients, or select an individual Message Client identifier. Each Message Client can be set to a different identifier. This allows you to send different alarms to individual Message Clients.

The **Alarm Type** field designates an alarm number for this alarm. The Message Client and Map Client use the Alarm Type to determine the sound that is played when the alarm arrives. The Message Client and Map Client will also use this Alarm Type to determine if their windows should be made visible, if they are hidden. Indicate your choice in the Alarm Type field. The Message Client and Map Client can play no sound, or your choice of 20. You could assign alarm type 1 to tornado warnings, type 2 to tornado watches, type 3 to severe thunderstorm warnings, 4 to severe thunderstorm watches, etc. The actual wave files that will be played and window popup options are setup in each Weather Message Client.

Leaving the Alarm Type blank will cause the Message Client to show the message in it's text box, however, if the screen is minimized, it will not popup the window to display the message. For types 1 through 20, the Message Client will popup it's window, based on the client settings, if the program is minimized. See the Message Client and Map Client sections for additional information on Alarm Types.

Map Client

The **To Map** field is used to indicate whether you want this alarm sent to the Map Client computers connected to the server. Select "Yes" to send the alarm to all Map Clients, or select an individual Map Client identifier. Each Map Client can be set to a different identifier. This will allow you to send different alarms to individual Map Clients.

Note: Only messages with UGC lines will be sent to the map client.

X10 Settings

The **X10 Settings**, along with the associated X10 hardware, can be used to activate electrical devices when an alarm occurs. Select a **House Code**, **Command**, **Duration** and appropriate **Units** to activate.

The software supports the commands On, Off, All On, All Off, and Blink.

Hint: *The Blink option is implemented in software and works best with the CM11a controller.*

The **Duration** field allows you to specify the number of minutes that a device should remain activated. Enter 0 (zero) for it to remain active until turned off.

Hint: *With VTEC coded messages; it is possible to turn on a device when a watch is issued and off when the watch expires.*

Note: *You should set the X10 Port and X10 Device in Support Setup Options before entering alarms for X10 devices.*

See the Weather Message website for additional [X10 information](#) and sources for X10 hardware.

2.6.4 Paging/Email/Fax Tab

The Paging/Email/Fax tab is used to specify an alarm action for these categories.

Paging

To send a message to a pager, you first have to establish your paging groups. Weather Message supports TAP, SNPP, WCTP protocols, along with a number of other speciality formats. See the section on setting up paging groups. After the groups have been established, select one or more of the groups from the list.

Upon receiving a valid alarm for a pager group, Weather Message will send a message to the pager group(s) based on the style you selected for the group.

If you selected the short message format and a "TORBHM" was issued with counties, ALC123 and ALC037, the paging message will read "NWS has issued a Tornado Warning for Tallapoosa Coosa County until 07:00 PM". Examples of the message formats can be seen in [Paging / E-Mail Formats](#).

Note: *If the alarm was only for Tallapoosa County, only the name Tallapoosa will appear.*

The same goes for Coosa. If both counties are in the weather message, then both will appear. The format of this short message format can be changed from the Support Setup menu.

Note: It is possible for you to select counties that may be in different groups in the alarmed message. Some weather products contain multiple groups that each contains counties. In the event that you select multiple counties and they are in different groups, you will get one message for each group that contains a matching county.

If you use the Any County code, for example "ALC000", the short message will contain a list of every county appearing in the weather message. This can make the short message longer than what will fit on a pager's display.

Note: It is not recommended to use the all county code when you are sending "Selected" or "Full" message text. Doing so will result in an email/page being generated for each UGC line in the weather message.

The file Product.dat, in the WxMesgNet directory, contains the descriptions of all weather products. This description appears in the short message and on the Message Client screen. You can change any of these product descriptions to fit your particular application / need.

E-Mail

To Email a message, you first have to establish your e-mail groups. See the section on setting up email groups. After the groups have been established, select one or more of the groups from the list. E-mail alarms work just like the pager and have the same format options. Upon receiving a valid alarm for an e-mail group(s), Weather Message will send a message to the e-mail group(s) based on the style you selected for the group.

Hint: Graphic products can be alarm to an Email group. The graphic is attached to the Email as an in-line file.

Fax

To fax a message, you first have to establish your fax groups. See the section on setting up fax groups. After the groups have been established, select one or more of the group(s) from the list. Fax alarms work just like the pager and have the same format options. Upon receiving a valid alarm for a fax group, Weather Message will send a message to the fax group based on the style you selected for the group.

Time Restrict or Delaying Paging / E-Mail / Fax

The **Time Restrict**, **Time Begin**, **Time End**, and **Days of Week** fields are used to limit or delay the times and days that a page, e-mail or fax can be sent for a particular alarm. To restrict a message to a defined time period, set the Time Restrict field to Yes. Enter the begging time you want to send the page, e-mail or fax. Enter the time to stop sending the page, email or fax. Select the days of the week that you want the page, e-mail or fax sent.

For example, you may not want an alarm paged or emailed from 22:00 hours through 07:00 hours. The Time Begin field should be the time that you want paging/emailing started, in this example 07:00. The Time End field should be the time that you want paging, emailing or faxing stopped, in this example 22:00. Check all of the days of the week to receive that you want the message sent. From 22:00 through 07:00, messages will not be paged or emailed.

To delay a message until a later time, set the Time Restrict field to Hold. Using the above example, you want all message received from 22:00 through 07:00 to be delayed until 07:00. The Time Begin field should be the time that you want paging/emailing started, in this example 07:00. The Time Begin time is also the time that any held messages would be sent. The Time

End field should be the time that you want paging, emailing or faxing stopped, in this example 22:00. From 22:00 through 07:00 messages will be held until 07:00. At 07:00 any held messages will be sent. Any messages that arrive from 07:00 through 22:00 it will be paged, emailed or faxed as soon as they arrive.

When the Time Restrict option is used, you must select the Days of Week that you want the message sent. Check the days that you want the message sent. If a day is unchecked, the message will not be sent.

2.6.5 Archive/Html/Exe/Print Tab

The Archive/Html/Exe/Print tab is used to specify an alarm action for these categories.

The **Archive Action** field indicates the style of message to archive. Select **No** for no archiving; **Short** for a short message; **Selected** for selected text from the alarmed UGC group; **Selected No Head** for selected text from the alarmed UGC group without the header; **Full** for Full Text; **Full No Head** for Full Text without header; or Raw for raw data.

Hint: The No Head style option removes the heading lines from the messages. This option removes all of the heading text from the first line in the message or UGC group down to the issued date/time line.

Hint: For graphic products, use the Full option.

Note: The Raw option is used by WxLoader to reconstruct a message from the individual parts of a message.

The **Archive Type** field is automatically selected by the software based on the protocols selected on the [HTML Template](#) ^[54] window. This field can be blank or one of these options: Local, Http, or FTP

The **Archive Path** field contains the directory and file name to save. The default archive type is Local. To save a file to a local directory, simply enter the directory path and file name to save in the Archive Path field. To use the Ftp or Http protocols, press the HTML Template button.

An example of archiving to a local directory using the original EMWIN file name along with the message expiration date/time would be "c:\weather\\${FileName}\${Expire}\${FileExt}". This would result in a file with a eight character EMWIN file name appended with the expiration date/time in the format MMDDYYHHMM followed by the extension for the file.

Path / File Name Variables

The following variables are supported in the path / file name.

- \$MM\$ for the current two digit month.
- \$DD\$ for the current two digit day.
- \$YY\$ for the current two digit year.
- \$FileName\$ for the EMWIN base file name.
- \$FileExt\$ for the file extension.
- \$Expire\$ for the message expiration date and time.
- \$Issue\$ for the message issued date and time.


Hint: The \$MM\$, \$DD\$, and \$YY\$ variables can be used to archive files to a directory structure that includes one of the numeric date variables. The variables are two digits in all cases and have a leading zero when single digit is encountered.

Note: The software does not create directories. You will need to create the directory structure prior to setting up the alarm.

Hint: The program normally overwrites duplicate files. You can use the No Overwrite Archive Option to add a sequential number between the file name and extension.

The **Archive Options** control whether the resulting message is overwritten or made unique if it already exists. Selecting the Overwrite option will cause the program to overwrite any existing message. The No Overwrite option will cause the program to insert a sequential number to the message to make the file name unique.

HTML Template Button

The [HTML Template](#)  button will launch the HTML Setup window. It can be used to create html templates, select upload protocols and set your server options.

Execute External Program

The Exe Program field is used to start a third-party program when an alarm occurs. Enter the full path and program name for the third-party program. Weather Message can pass the file name of the message that caused the alarm. To do this put one space after the program name and enter the characters "\$1". For example, to start Notepad each time an alarm is triggered, enter "Notepad.exe \$1" in the Exe Program field.

Hint: If the path to the executable contains a space, you should enclose the path and program name in quotes. For example: "c:\program files\myprogram.exe" \$1

Print Action

To print a text or graphic product to a printer setup on the computer running Weather Message Server, select one of these print options. Select **No** for no printing; **Short** for a short message; **Selected** for selected text from the alarmed UGC group; **Selected No Head** for selected text from the alarmed UGC group without the header; **Full** for Full Text; or **Full No Head** for Full Text without header.

2.6.5.1 Html Template

The Html Setup is used to select upload protocols and associate an optional html template for merging weather text.

HTML Setup

Settings

Template File Name: xMesg\WxDData\Template\Template.htm

Destination File Name: torbmx.htm

Save To: Local FTP HTTP

Server Address: www.wxmesg.com Port: 21

User Name: username

Password: password

HTML Code

```
<html>
<head>
<title>Sample Template File</title>
</head>
<body>
<p align="center">Test Weather Message</p>
<p align="center">&nbsp;</p>
<p align="left"><PRE>$MESSAGE$</PRE>
```

Use \$MESSAGE\$ to include weather text in your html code.

The **Template File Name** is the name of the html file that contains your template. The **Browse** button can be used to locate the template file. The program automatically defaults to ..\WxMesgNet\WxDData\Template for template files. You can place templates in any directory. The Template File Name is not required. Leave this blank if you want to send the weather text without html encoding.

If you have not established a template file, enter a name for a new template file. This file will be created, using the html code you specify when the **Save** button is clicked.

The **Destination File Name** is the name you want the resulting message to be named on your server. This field is required. You can use variables in the path and file name, see [Path / File Name Variables](#) ^[52]

Select the **Save To** type, Local, FTP or HTTP. If FTP or HTTP is selected, the program will allow you to enter information about your FTP or HTTP server. Enter the FTP Server address, Port number, User Name and Password. These settings will be used to log into your server.

The **HTML Code** box is used to enter the html code to encapsulate the weather text. Remember to use the variable \$MESSAGE\$ in this code as a place marker for your text.

The **Save** button will save your html template and update the Archive Path field.

Note: *If a html template is specified, the program will change any html reserved-characters in*

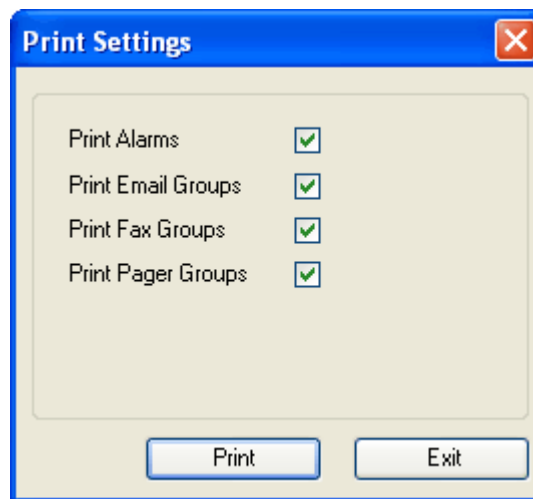
the weather text to their corresponding html abbreviation. This prevents html browsers from misinterpreting the weather text as html code.

Note: The http PUT command requires write access to the directory specified in the command.

Note: See [Publishing Data to a Web Page](#) for examples.

2.7 Print Settings

The Print Settings window allows you to print you print Alarms, Email Groups, Fax Groups, and Pager Groups.



Select the items to print and click the **Print** button.

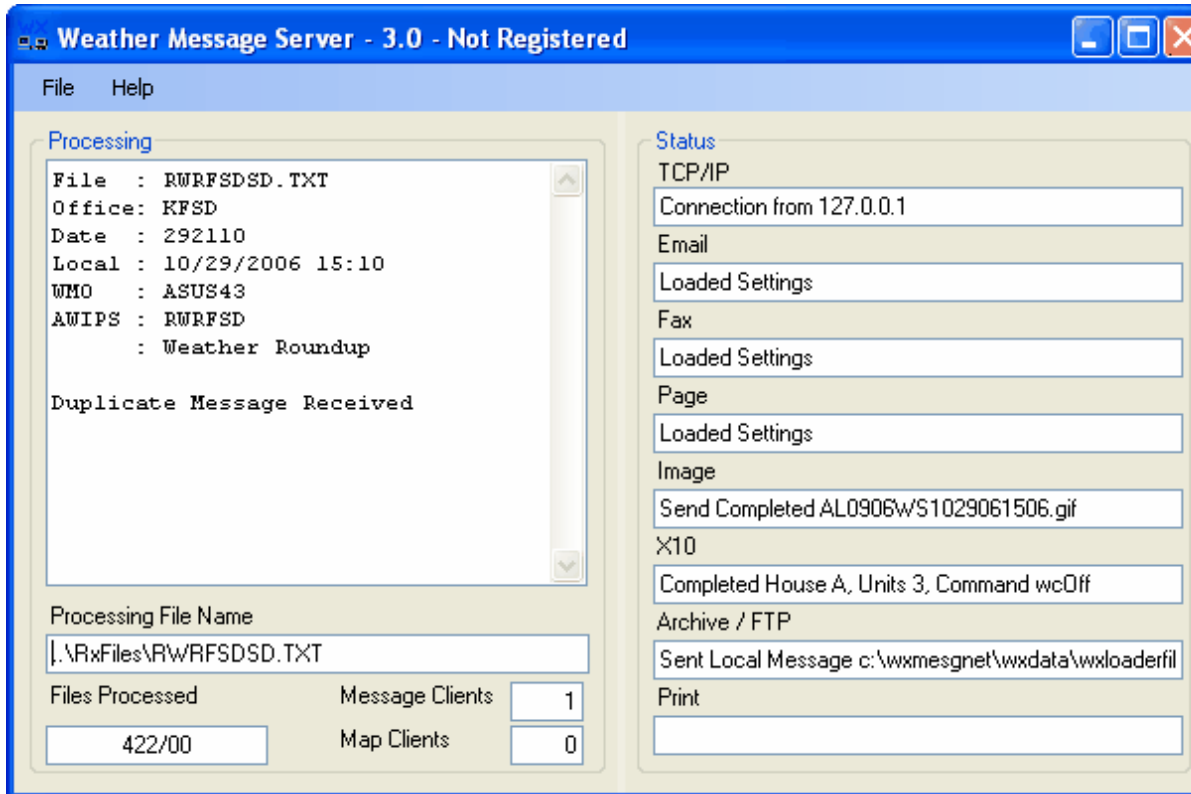
Part



3 Weather Message Server

3.1 Overview

Weather Message Server is the heart of the Weather Message applications. When you start the Weather Message Server, it runs from the system tray. When it starts, it will automatically start the ingest program(s) that you selected in Weather Message Setup.



Processing

The left pane contains the current processing information. The last decoded message information is displayed. This file currently being processed is displayed in the **Processing File Name** box.

The **Files Processed** box shows the number of alarms or messages that have been received since the server was started. The number to the right of the slash is the number of messages that are queued for processing, but have not been processed.

The **Message Clients** box contains the number of connected message clients. The **Map Clients** box contains the number of connected map clients.

Note: *Weather Message currently allows for 50 client connections. This can be increased to 100 or 250 by purchasing a 100 or 250-user license.*

Note: *If Weather Message is stopped with the window minimized, the next time it is started, it*

will start minimized.


Note: Weather Message will process files with the extensions txt, gif, jpg, zis, zip, bmp, png and tif. Other extensions will be handled as a regular text file.

Status

The right pane contains status messages from the subsystems. Each subsystem displays status messages as they process messages that meet your alarm criteria.

Hint: The left and right pane can be resized by dragging the white separator line between the panes.

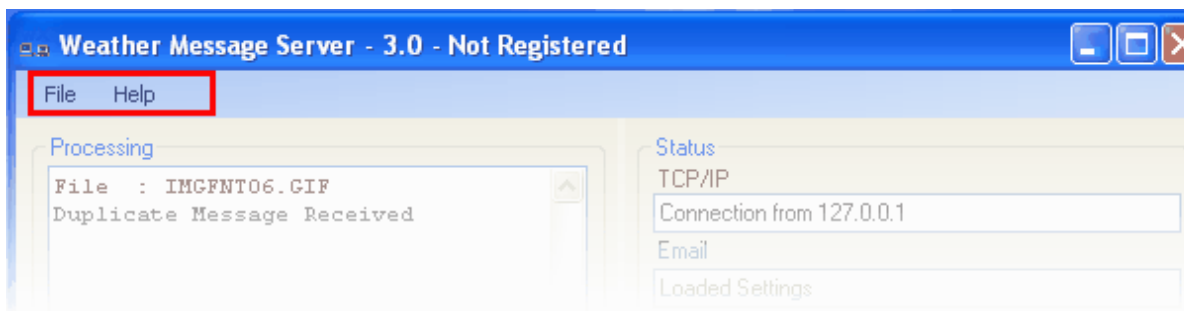
System Tray

When Weather Message Server is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

Special Keys

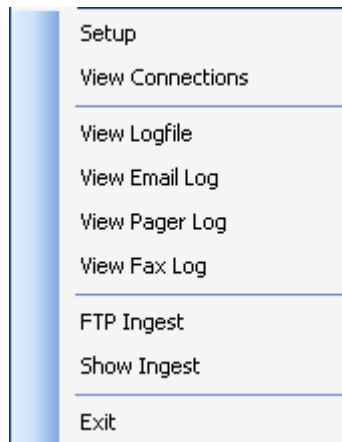
Pressing control-u while the main window has focus causes the program to start a file purge cycle.

3.2 Menu Options



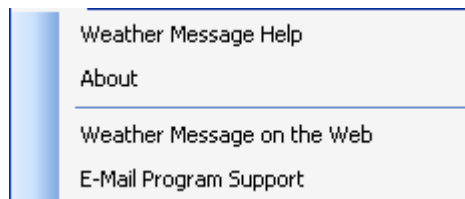
The menu buttons on this screen perform these functions:

The **File** menu allows you to setup the server, view connections, log files, show the active ingest programs and exit the program.



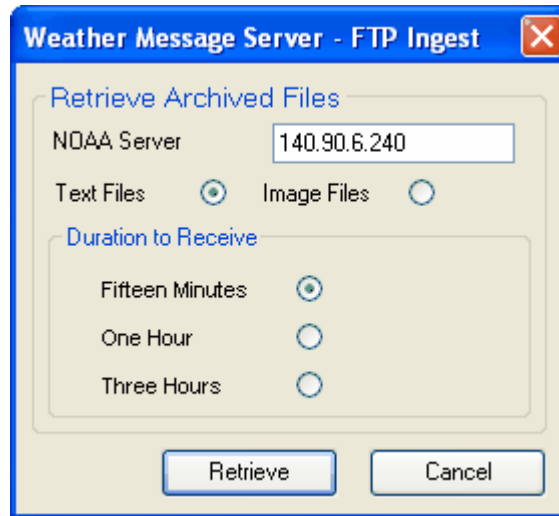
- The **Setup** option launches the [Weather Message Server Setup](#)^[12] application.
- The **View Connections** option displays a window with the [Active Connections](#)^[61].
- The **View Logfile** displays the server log file in notepad.
- The **View Email Log** displays the email log in notepad.
- The **View Pager Log** displays the pager log in notepad.
- The **View Fax Log** displays the fax log in notepad.
- The **FTP Ingest** option display a window to manually request a [FTP file ingest](#)^[60].
- The **Show Ingest** option shows the main window of each ingest program running the background.
- The **Exit** option shuts down Weather Message Server.

The **Help** menu allows you to see this manual, and display information about the program.



3.3 FTP Ingest

The FTP Ingest window is used to manually request a FTP ingest of weather products. This option requires an Internet connection. NOAA current offers text and image products for these durations; fifteen minutes, one hour and three hours.



The **NOAA Server** address is locked and can only be changed by modifying a registry value. Select the file type and duration that you want to retrieve and click on the **Retrieve** button.

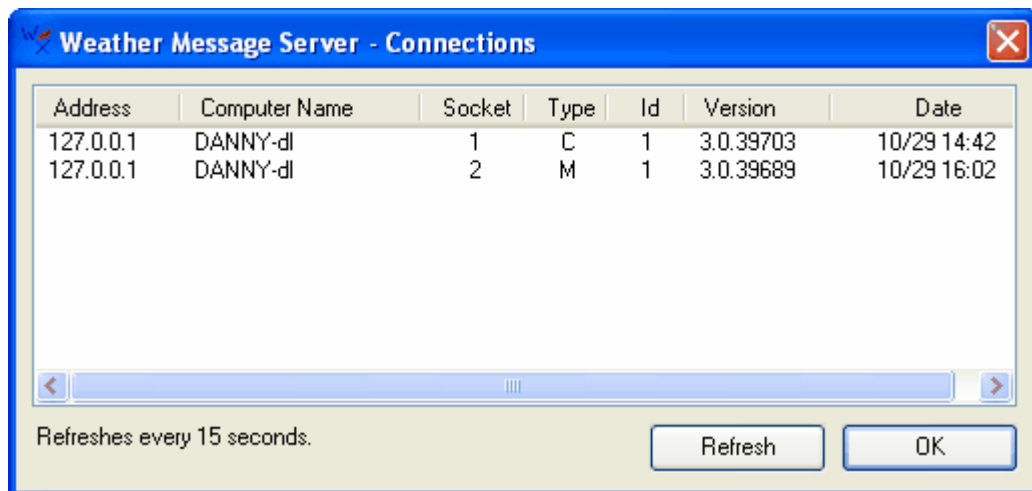
The Server's Archive / FTP status line is updated as the file is downloaded.

Note: Since the one and three hour files can be quite large, it may take some time for them to be retrieved and uncompressed.

Note: On occasion, you may see a "permission denied" message when you attempt to retrieve products. This error message is returned by the NWS ftp server when it is updating files. If this occurs, wait a few minutes and try again.

3.4 Active Connections

The Active Connections window displays a list of clients connected to the server.



The **Address** column contains the TCP/IP address of the connected client. The **Computer Name** column contains the computer name. The **Socket** column contains the internal socket number associated with the client. The **Type** column contains a C for message clients or a M for

map clients. The **Id** column contains the client's client identifier. The **Version** column contains the version number of the client software being used. The **Date** column contains the date and time that the client connected.

This window automatically updates every 15 seconds. The **Refresh** button can be used to force a refresh immediately.

3.5 Testing Alarms

In order to test your alarms, a message that matches your alarms must be received. Included with Weather Message is the application Weather Text Creator. This application allows you to create test messages. See the section on [WxMesgText Message Creator](#) for specific program operation.

3.6 Log Files

Weather Message creates a number of log files to record the operation of the software. For Weather Message Server, the main log file is named LogFile.txt. This log file records alarms activated for pagers, emails, faxes, clients, archives and print requests. This file is located in the WxMesgNet directory. It also contains connection requests from clients and disconnect request from clients. You will also find any program error messages encountered, when processing weather messages.

If you send messages to an email, paging or fax group, a log file is created for these operations. Email activity is recorded in EmailLog.txt; pager activity is recorded in PagerLog.txt; fax activity is recorded in FaxLog.txt.

The Weather Message Server Setup screen allows you to change the log file size. The default size is 50,000 bytes. Once it reaches this limit, it is copied to the file LogFile.old and a new log file is created. This prevents your hard drive from filling up with large log files. If you have the Daily Logs option enabled, the log files are stored in the WxLogs directory.

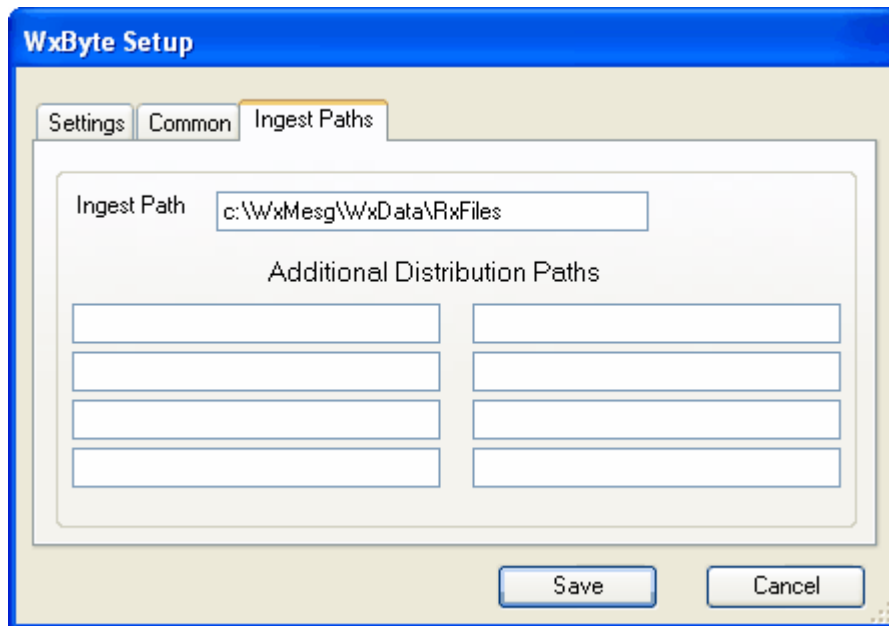
Part



4 Third-party Applications

Weather Message can be setup to provide data for use by other third-party programs. The ingest programs have the ability to copy received files to multiple directories. This ability allows third-party programs to have their own dedicated ingest directory.

To setup the Weather Message Ingest programs for multiple directory support, see the section on WxIngest, WxByte, WxWw2000, or WxPort. The Paths tab in the ingest programs allows you to specify additional distribution paths for third-party programs to pick up the arriving files.



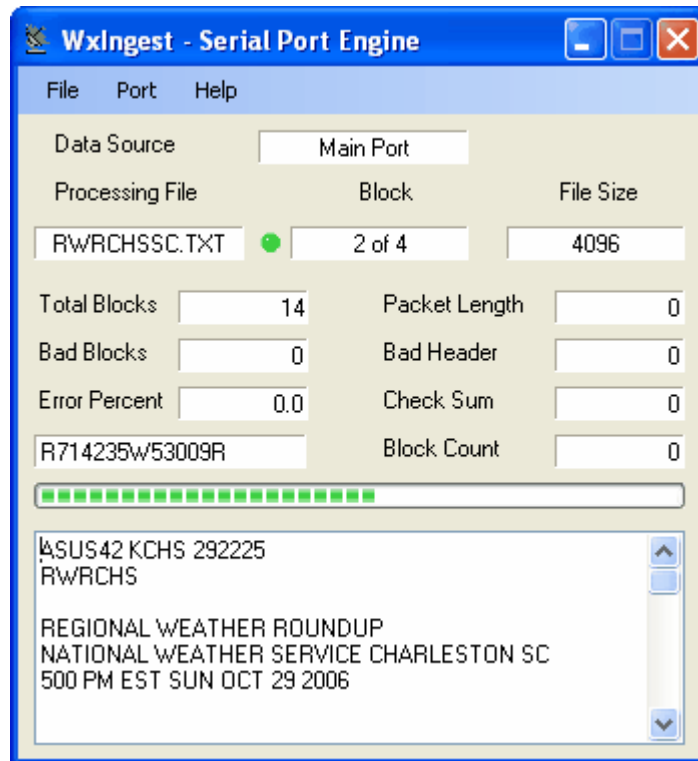
Part



5 WxIngest - EMWIN Serial Ingest

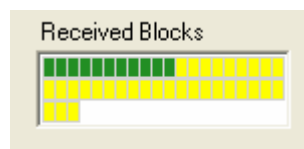
5.1 Overview

WxIngest is used by Weather Message for serial port based EMWIN feeds. These normally originate from a satellite receiver or radio modem. The ingest program can be started automatically by the Weather Message Server or manually.



The main screen shows the status of incoming messages. The **Data Source** field indicates which source is being used to receive the EMWIN data. Should the program stop receiving data, it will display **Data Alert** to the right of the Data Source field.

The **Processing File**, **Block** and **File Size** fields show information about the received file. A **green** or **red** led appears to the right of the Processing File field. This led will normally appear green. If any of the blocks received for this message are defective, the led will change to red. To monitor the received blocks, click on the green or red **led**. The following image will appear over the receive statistics. Click the **led** again to toggle back to the statistics.



The **Total Blocks** field shows the total number of blocks received for a one-hour period, the **Bad Blocks** field shows how many of the total blocks received were defective. The bad blocks field is a total of the Packet Length, Bad Header and Check Sum fields. The **Block Count** field counts

the number of messages that any blocks missing.

The **Error Percent** field shows the error percentage of the blocks received verses bad blocks. You want this field as low as possible. The background color of this field will change based on the quality of the received data. If the background is white, the received data has 10% or fewer errors. If the background is yellow, the received data has between 10% and 20% errors. If the background is red, the received data has an error rate greater than 20%.

If the received message is text, you will see the first 1024 characters of the message in the text box. This shows the text for the block just received, it does not show the complete message.

The ingest program will attempt to repair defective messages, if a duplicate message is received.

WxIngest supports a backup satellite system, retransmission receiver and/or backup by Internet, using WxByte. This option is enabled using Setup.

Note: *It is recommended that you run the ingest program on a computer that will not be used for normal user programs. The processing of serial data can be interrupted by other software programs, which can result in lost weather products.*


Note: *If WxIngest is stopped with the window minimized, the next time it is started, it will start minimized.*

Note: *While the program is using WxByte as a backup data source, the fields on the screen may not be updated. They will resume showing data when the main serial port begins to receive data.*

Note: *The program supports a second log file. The second format uses a fixed field size for easy analysis. This log file is never purged and remains until the user deletes the log files. To enable this logging option, create the directory "NwsLogs" in the c:\program files\WxMesgNet directory.*

Note: *Some computers may detect your satellite receiver as a serial mouse. This generally occurs when the satellite receiver is turned on when booting the computer. If this occurs, your mouse will begin to move on it's own. To correct this problem, turn off the satellite receiver. Download the comdisable tool from Microsoft at this web address <http://support.microsoft.com/default.aspx?scid=kb;en-us;819036>.*

System Tray

When WxIngest is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

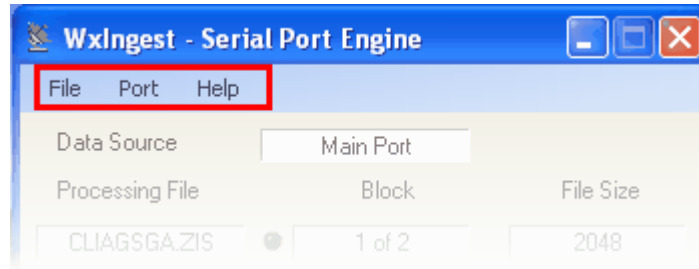
Data Alert Notification

Should the program stop receiving serial data, you will see the following message appear above the system tray icon.



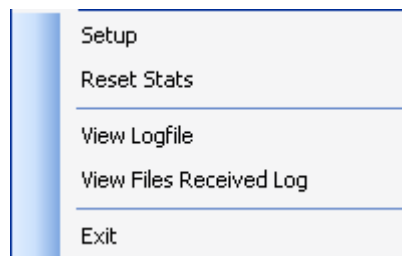
Copyright © 2007 Weather Message Software

5.2 Menu Options



The menu buttons on this screen perform these functions:

The **File** menu allows you to setup this program, reset statistics, view logfiles, and exit the program.

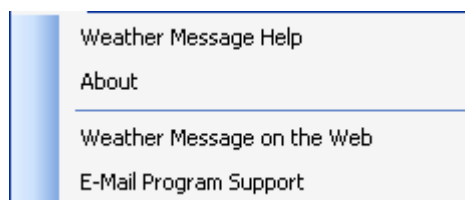


- The **Setup** option opens the [Setup window](#)^[69].
- The **Reset Stats** option resets the application statistics.
- The **View Logfile** displays the ingest log file, WsLog.txt, in notepad.
- The **View Files Received Log** displays the received files log, WsFiles.txt, in notepad.
- The **Exit** option shuts down WxIngest.

Note: *In order to view the Files Received Log, the Log Received Files option must be enabled.*

The **Port** menu, when present, allows you to switch between the main serial port and a backup serial port.

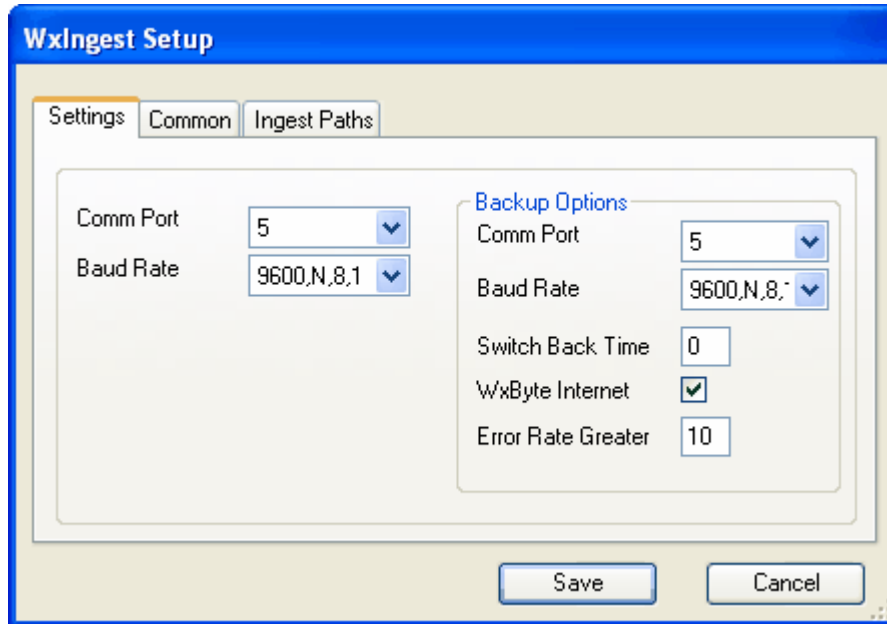
The **Help** menu allows you to see this manual, and display information about the program.



5.3 Setup

5.3.1 Settings Tab

The Settings Tab is used to define the communication port, backup options and other general operations.



Primary Receiver

Select the **Comm Port** (communications port or serial port) for your satellite receiver, along with the **Baud Rate** for that device. For EMWIN satellite reception, select a baud rate of 9600,N,8,1.

Secondary Receiver / Backup Options

If you have a second satellite system or retransmission receiver, enter the **Comm Port** and **Baud Rate** under the backup options. Also, if you want to use WxByte (internet ingest) as a backup, check that option. The **Switch Back Time** is used to specify the number of minutes that the program should check back to see if the main port is functioning, when using a second serial port.

The **Error Rate Greater** field sets the error rate percentage for switch over to backup. This field can be set from 5 to 95 percent. Should the error rate, of the received data, exceed the set amount, the program will switch over to the backup port or WxByte.

If the main port stops sending data for 15 seconds, the program will switch to the backup port, if one is specified. If the backup port does not send data for 15 seconds, it will switch to WxByte, if that option is selected. If the backup port is not specified, it will switch from the main port directly to WxByte, if that option is selected.

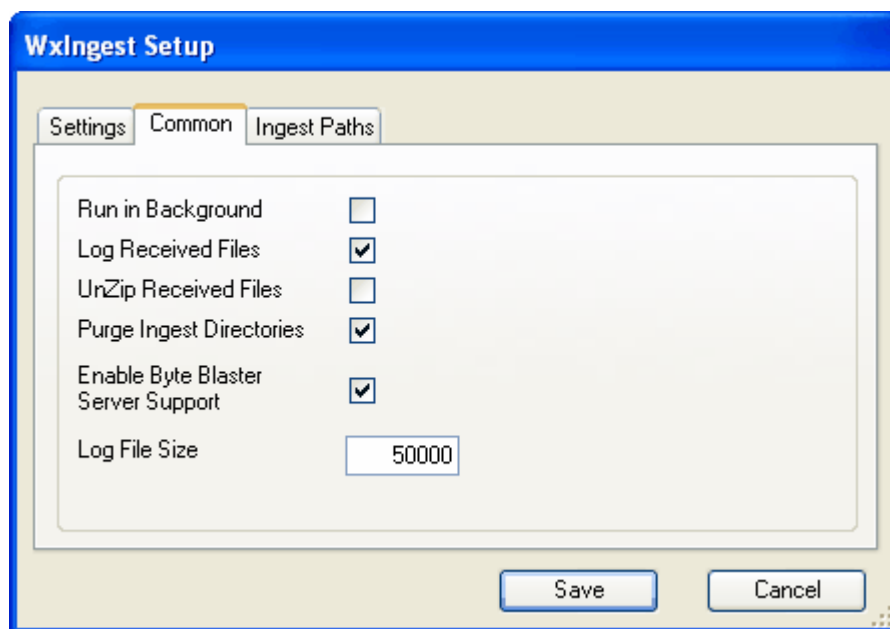
Based on the Switch Back Time specified, it will change back over to the main port. The process will start all over again. If no data is received in 15 seconds, it will switch to the backup port and/or WxByte.

Note: Once WxByte is started, it will not be stopped until the program begins to receive valid data from one of the serial ports.

When the program switches from serial ingest to WxByte, it will create a notification message in each ingest directory. The product identifier for this message is ADMWXM. If you want to be alerted when the program switches between ingest sources, alarm the product ADMWXM, with no state or county selected. The notification message contains the current ingest method and computer name.

5.3.2 Common Tab

The Common Tab is used to define options common or shared by all ingest programs.



The **Run in Background** check box allows you to specify whether you want the ingest programs to run in the background. When this box is checked, the ingest programs will not show in the system tray. Once this option is enabled, you will not see the ingest programs running. In order to see the ingest screen, you will need to use the Show Ingest menu option in Weather Message Server.

Note: Changing this option does not take effect until the next time the ingest programs are started.

The **Log Received Files** option causes the program to record the name of each weather file received. The names are recorded in WsFiles.txt.

The **UnZip Received Files** option, when checked, will cause the program to unzip any compressed files. This option is normally left unchecked as the Weather Message programs automatically unzip compressed files. In some applications it may be desirable to unzip the files before they are copied to the ingest directory(s).

The **Purge Ingest Directories** option, when checked, will cause the program to automatically purge the ingest directories after 24 hours.

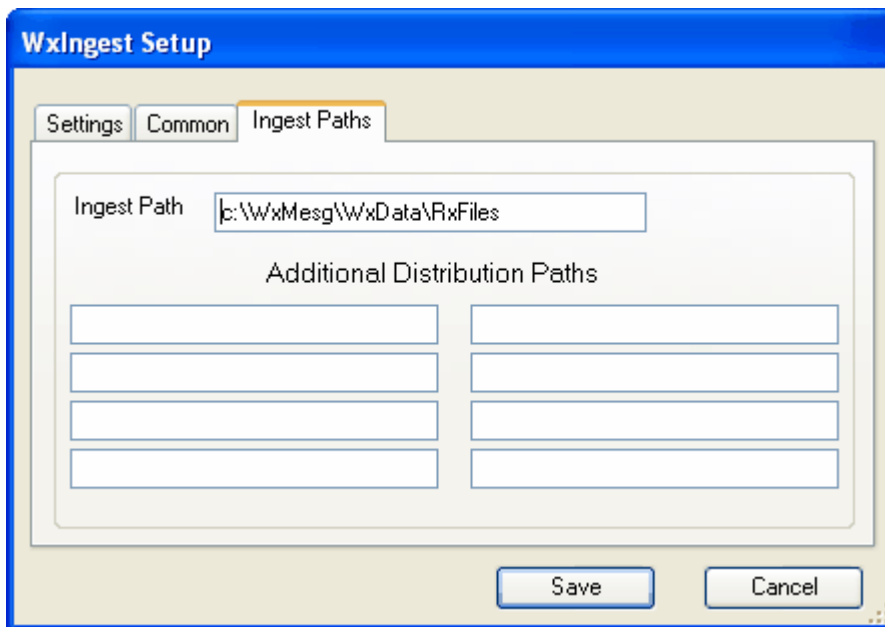
If you are running the Byte Blaster server, WxBBSrvr, check the **Enable Byte Blaster Server Support** box. This will cause the ingest program to create data records for processing by the Byte Blaster server.

Note: This program communicates with WxBBSrvr using UDP port 9510 on the local loop back address.

The **Log File Size** field allows you to specify this size of your ingest log file, WsLog.txt. The default is 50,000 bytes.

5.3.3 Ingest Paths Tab

The Ingest Paths Tab is used to define the directories that will store the received weather products for processing.



The **Ingest Path** is defined in the Weather Message Server setup screen and would not normally be entered here.

Note: The Ingest Path can be changed if you want to deposit the received messages in a directory other than the one established for Weather Message Server.

The **Additional Distribution Paths** can be used to place a copy of the received weather text in different directories for processing by other programs. For example, if you use Weather Message to receive your weather data, you can put a copy of the received messages in a second or third directory for processing by RealEMWIN or the Weather Message Retransmission program.

Note: Changing the Ingest and Additional Distribution Paths on this screen will automatically change them for WxByte, WxPort, and WxWW2000.

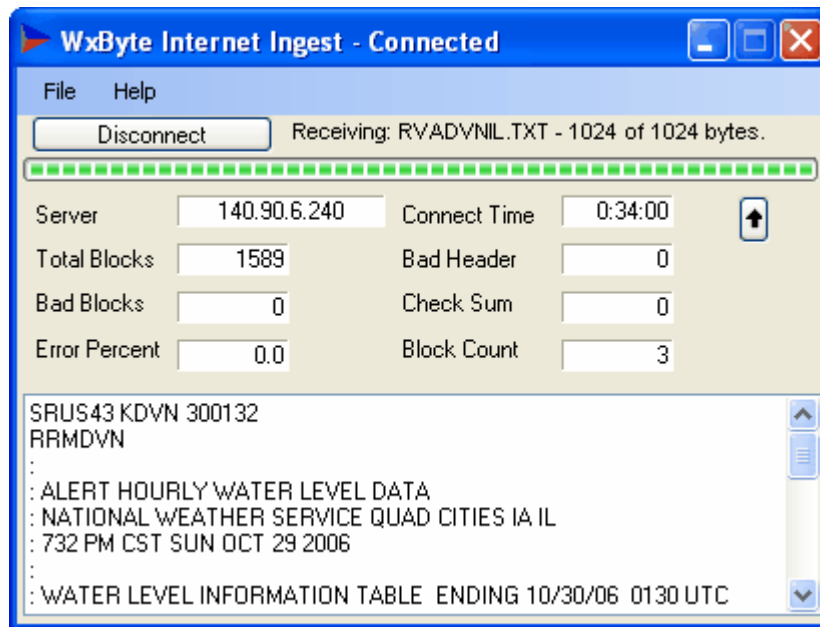
Part



6 WxByte - EMWIN Internet Ingest

6.1 Overview

WxByte is used by Weather Message for Internet based EMWIN data feeds. The ingest program can be started automatically by the Weather Message Server or manually.



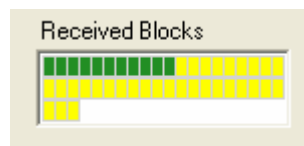
The main screen shows the status of incoming messages.

WxByte uses information from Internet weather servers to maintain a list of available servers. It attempts to connect to the first available server. Should a server stop functioning, WxByte will attempt to contact the next available server. Every 10 minutes, WxByte receives an updated list of servers.

WxByte uses TCP/IP port 1000 to communication with the servers. If you have a firewall, port 1000 must be open for WxByte to work.

The **Server** field displays the TCP/IP address of the server providing EMWIN data. The **Connect Time** is the amount of time that you have been connected to this server.

The **Processing File**, **Block** and **File Size** fields show information about the received file. A **green** or **red** led appears to the right of the Processing File field. This led will normally appear green. If any of the blocks received for this message are defective, the led will change to red. To monitor the received blocks, click on the **Receiving** label. The following image will appear over the receive statistics. Click the **Receiving** label again to toggle back to the statistics.



The **Total Blocks** field shows the total number of blocks received for a one-hour period, the **Bad Blocks** field shows how many of the total blocks received were defective. The bad blocks field is a total of the Bad Header and Check Sum fields. The **Block Count** field counts the number of messages that any blocks missing.

The **Error Percent** field shows the error percentage of the blocks received verses bad blocks.


If the received message is text, you will see the first 1024 characters of the message in the text box. This shows the text for the block just received, it does not show the complete message.

The status information, included the decoded message display can be removed by clicking on the up button or resizing the screen. To show the status information and decoded message drag down on the bottom of the window, or use the Show Details menu option.

Note: *If WxByte is stopped with the window minimized, the next time it is started, it will start minimized.*

Note: *The program supports a second log file. The second format uses a fixed field size for easy analysis. This log file is never purged and remains until the user deletes the log files. To enable this logging option, create the directory "NwsLogs" in the c:\program files\WxMesgNet directory.*

System Tray

When WxByte is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

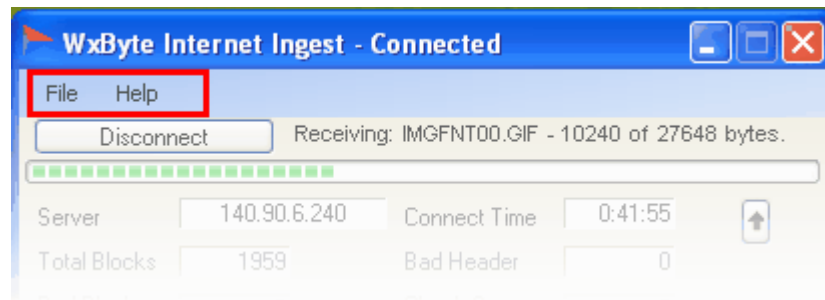
Data Alert Notification

Should the program stop receiving data, you will see the following message appear above the system tray icon.



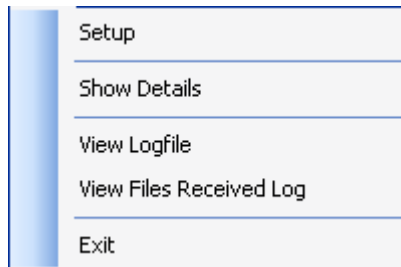
Copyright © 2007 Weather Message Software

6.2 Menu Options



The menu buttons on this screen perform these functions:

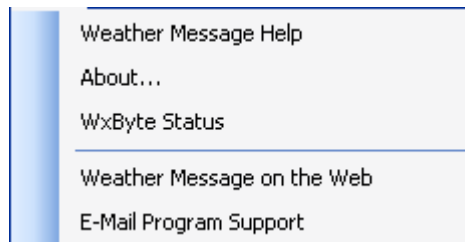
The **File** menu allows you to setup this program, show details, view logfiles, and exit the program.



- The **Setup** option opens the [Setup window](#)⁶⁹.
- The **Reset Stats** option resets the application statistics.
- The **View Logfile** displays the ingest log file, WiLog.txt, in notepad.
- The **View Files Received Log** displays the received files log, WiFiles.txt, in notepad.
- The **Exit** option shuts down WxIngest.

Note: *In order to view the Files Received Log, the Log Received Files option must be enabled.*

The **Help** menu allows you to see this manual, and display information about the program.

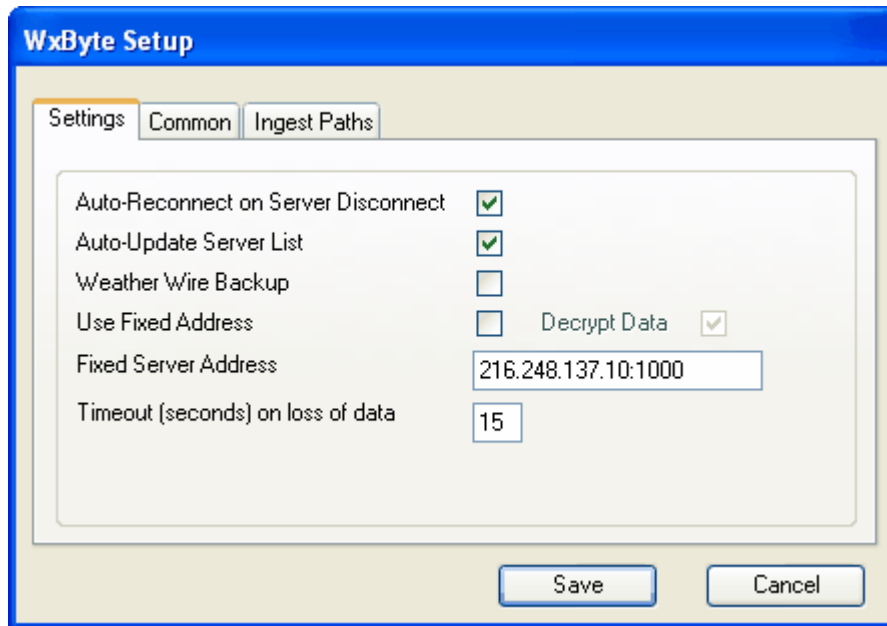


The **WxByte Status** window displays a list of Internet EMWIN Servers. See [Server Status](#)⁷⁹.

6.3 Setup

6.3.1 Settings Tab

The Settings Tab is used to define the communication port, backup options and other general operations.



The **Auto-Reconnect on Server Disconnect** should be checked if you want WxByte to try to connect to another server if it is disconnected from the current server. The **Auto-Update Server List** should be checked if you want WxByte to automatically maintain a list of available servers. If WxByte does not maintain this list, you will need to manually update the WxSvrus.txt file to include the servers that you want it to use.

Note: This program communicates with WxBBSrvr using UDP port 9510 on the local loop back address.

The **Weather Wire Backup** check box allows you to use Weather Wire as a backup for EMWIN. Checking this box will cause the program to automatically start WxWW2000 when EMWIN data is not available. This requires registration for Weather Wire. See the Weather Wire help for details.

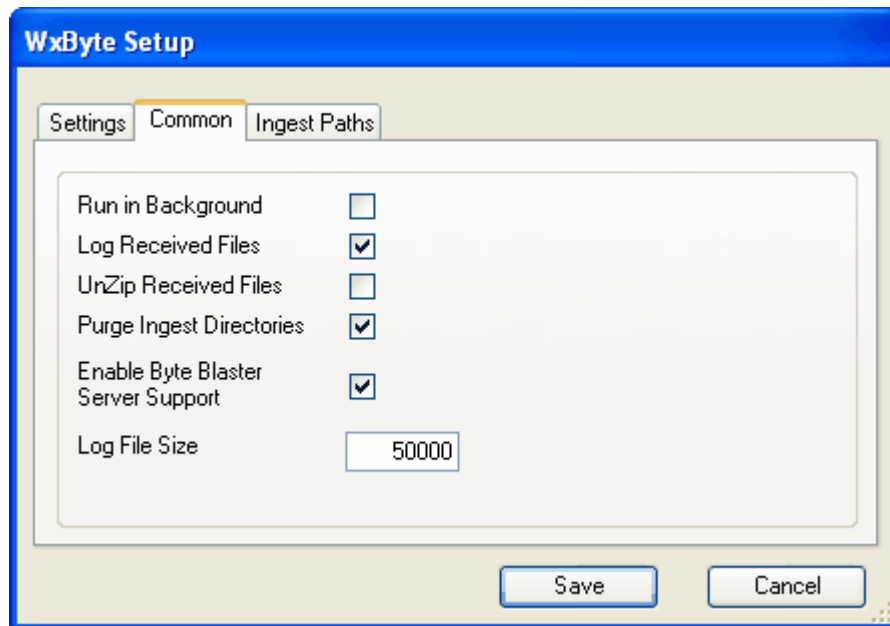
When the program switches from WxByte to WxWW2000, it will create a notification message in each ingest directory. The product identifier for this message is ADMWXM. If you want to be alerted when the program switches between ingest sources, alarm the product ADMWXM, with no state or county selected. The notification message contains the current ingest method and computer name.

A fixed TCP/IP server address can be used. Enter the fixed TCP/IP address in the **Enter Fixed Address** field. Click on **Use Fixed Address**, to only connect to that specific server. When you use a fixed address, the **Decrypt Data** option is activated. This option indicates whether you want WxByte to decryption the received data. This option should be checked when connecting to a ByteBlaster Server. Uncheck this option if you are connecting to the EMWIN software defined receiver.

The **Timeout seconds on loss of data** is set by default to 15 seconds. You can change this within the range of 15 to 600 seconds.

6.3.2 Common Tab

The Common Tab is used to define options common or shared by all ingest programs.



The **Run in Background** check box allows you to specify whether you want the ingest programs to run in the background. When this box is checked, the ingest programs will not show in the system tray. Once this option is enabled, you will not see the ingest programs running. In order to see the ingest screen, you will need to use the Show Ingest menu option in Weather Message Server.

***Note:** Changing this option does not take effect until the next time the ingest programs are started.*

The **Log Received Files** option causes the program to record the name of each weather file received. The names are recorded in WiFiles.txt.

The **UnZip Received Files** option, when checked, will cause the program to unzip any compressed files. This option is normally left unchecked as the Weather Message programs automatically unzip compressed files. In some applications it may be desirable to unzip the files before they are copied to the ingest directory(s).

The **Purge Ingest Directories** option, when checked, will cause the program to automatically purge the ingest directories after 24 hours.

If you are running the Byte Blaster server, WxBBSrvr, check the **Enable Byte Blaster Server Support** box. This will cause the ingest program to create data records for processing by the Byte Blaster server.

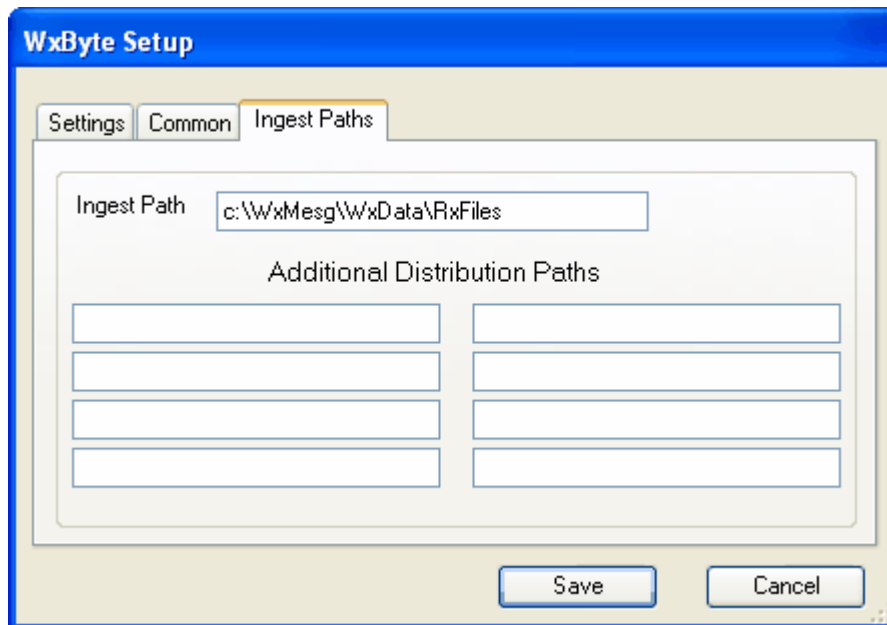
***Note:** This program communicates with WxBBSrvr using UDP port 9510 on the local loop back*

address.

The **Log File Size** field allows you to specify this size of your ingest log file, WILog.txt. The default is 50,000 bytes.

6.3.3 Ingest Paths Tab

The Ingest Paths Tab is used to define the directories that will store the received weather products for processing.



The **Ingest Path** is defined in the Weather Message Server setup screen and would not normally be entered here.

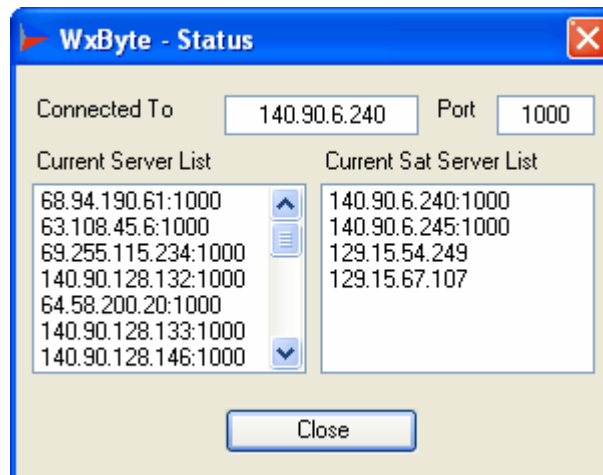
Note: The Ingest Path can be changed if you want to deposit the received messages in a directory other than the one established for Weather Message Server.

The **Additional Distribution Paths** can be used to place a copy of the received weather text in different directories for processing by other programs. For example, if you use Weather Message to receive your weather data, you can put a copy of the received messages in a second or third directory for processing by RealEMWIN or the Weather Message Retransmission program.

Note: Changing the Ingest and Additional Distribution Paths on this screen will automatically change them for WxIngest, WxPort, and WxWW2000.

6.4 Server Status

The WxByte Status window display the status of the EMWIN Internet Servers.



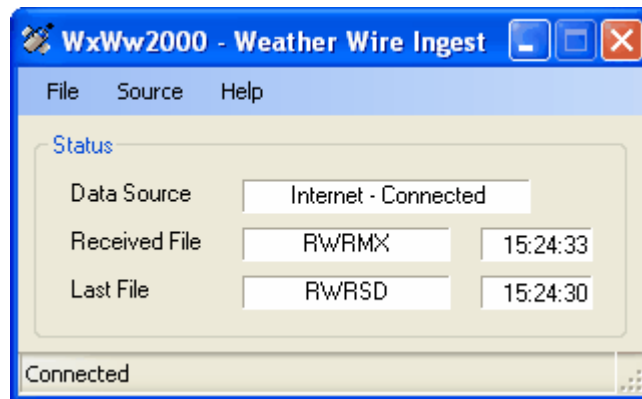
Part



7 WxWw2000 - Weather Wire Ingest

7.1 Overview

WxWW2000 is used by Weather Message for Internet or serial port Weather Wire data feeds. The ingest program can be started automatically by the Weather Message Server or manually.



The main screen shows the status of incoming messages.

The **Data Source** field shows type connection type; Internet or Serial Port.


The **Received File** and **Last File** fields display the product identifier of the current and last files received along with their respective received times.

Note: Before WxWw2000 will connect to an Internet server you must enter your user name and password in the setup screen. For information on obtaining a user name and password, see [What is Weather Wire](#).

Note: If you are using the Internet ingest option, the program will alternate the program icon in the system tray to let you know that it is connected.

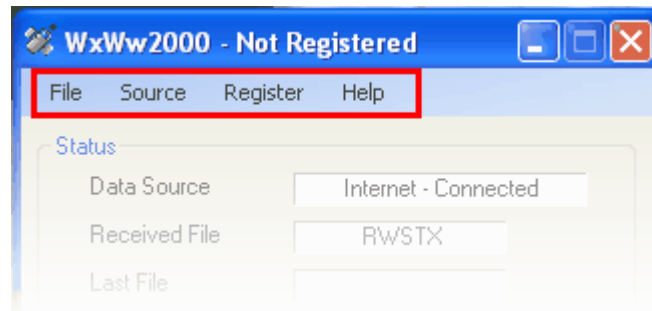
Note: If WxWw2000 is stopped with the window minimized, the next time it is started, it will start minimized.

System Tray

When WxWw2000 is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

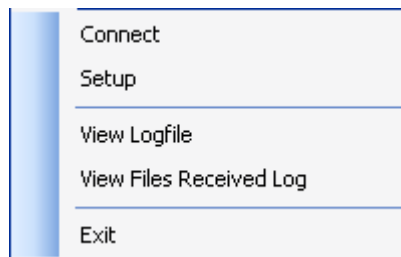
Copyright © 2007 Weather Message Software

7.2 Menu Options



The menu buttons on this screen perform these functions:

The **File** menu allows you to setup this program, show details, view logfiles, and exit the program.



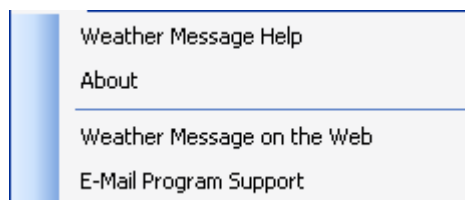
- The **Connect** option starts a connection to the Internet servers.
- The **Setup** option opens the [Setup window](#)⁶⁹⁷.
- The **View Logfile** displays the ingest log file in notepad.
- The **View Files Received Log** displays the received files log in notepad.
- The **Exit** option shuts down WxIngest.

Note: *In order to view the Files Received Log, the Log Received Files option must be enabled.*

The **Source** menu allows you to toggle between the Internet servers and serial port connection.

The **Register** menu allows you to [register](#)⁴³¹ WxWW2000. This button does not appear if the software is registered. Note: If the software is not registered after 60 days, it will stop functioning.

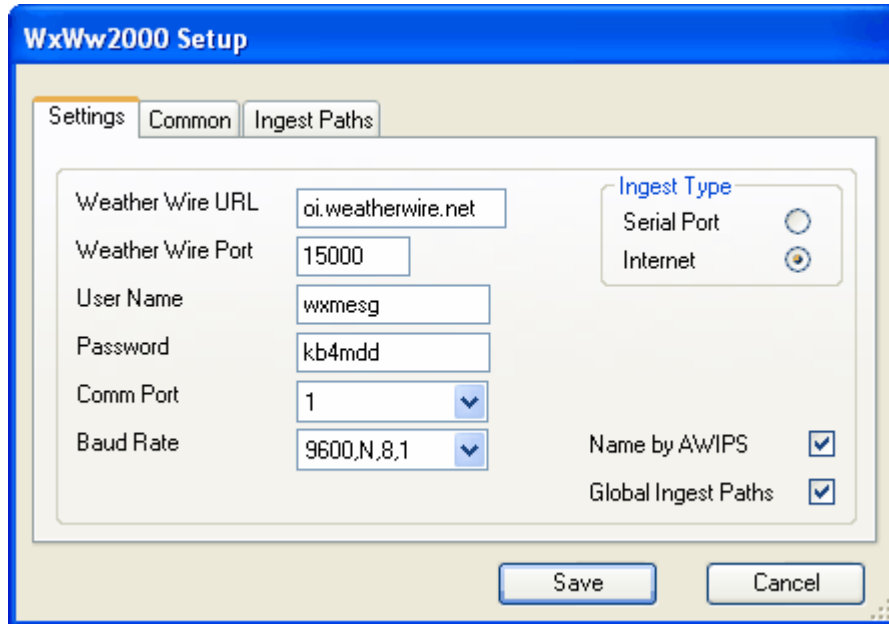
The **Help** menu allows you to see this manual, and display information about the program.



7.3 Setup

7.3.1 Settings Tab

The Settings Tab is used to define the Internet settings, user name, password, communications port and other general operations.



Select the **Ingest Type**; **Serial Port** or **Internet**.

For Internet ingesting, you must specify the **Weather Wire URL**, **Weather Wire Port**, **User Name** and **Password**. The program will provide defaults for the URL and port. You will need to enter the User Name and Password that you supplied to DynaCorp when you signed up for this service.

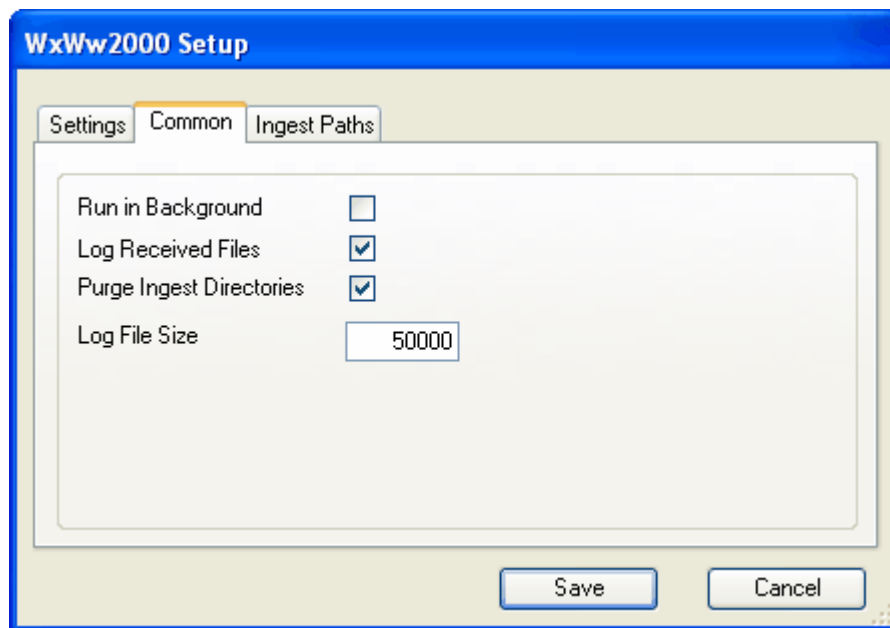
For Serial Port ingesting, select the appropriate **Comm Port** and **Baud Rate**.

The **Name by AWIPS** option, when checked, causes the program to name the received files using the AWIPS identifier found in the message, followed by the originating station's state abbreviation. When it is not checked, the received files are named using the first 3 characters of the AWIPS identifier, followed by the originating station's 3 character abbreviation, followed by the originating station's state abbreviation.

The **Global Ingest Paths** option controls whether WxWw2000 uses global ingest paths. Global ingest paths are shared between all of the ingest programs. Unchecking this box will allow you to define ingest paths that are different from the global ingest paths.

7.3.2 Common Tab

The Common Tab is used to define options common or shared by all ingest programs.



The **Run in Background** check box allows you to specify whether you want the ingest programs to run in the background. When this box is checked, the ingest programs will not show in the system tray. Once this option is enabled, you will not see the ingest programs running. In order to see the ingest screen, you will need to use the Show Ingest menu option in Weather Message Server.

***Note:** Changing this option does not take effect until the next time the ingest programs are started.*

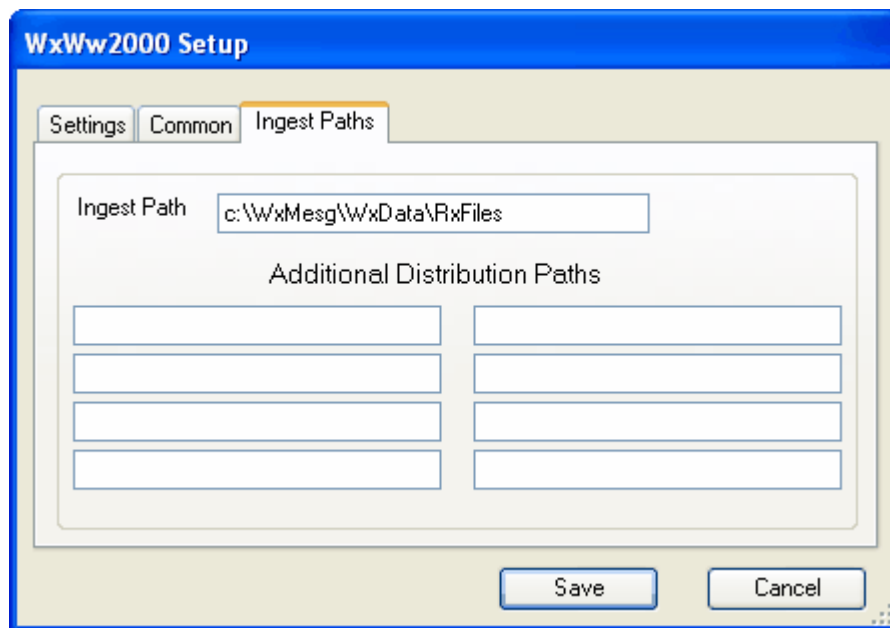
The **Log Received Files** option causes the program to record the name of each weather file received. The names are recorded in IBFiles.txt.

The **Purge Ingest Directories** option, when checked, will cause the program to automatically purge the ingest directories after 24 hours.

The **Log File Size** field allows you to specify this size of your ingest log file, IBLog.txt. The default is 50,000 bytes.

7.3.3 Ingest Paths Tab

The Ingest Paths Tab is used to define the directories that will store the received weather products for processing.



The **Ingest Path** is defined in the Weather Message Server setup screen and would not normally be entered here.

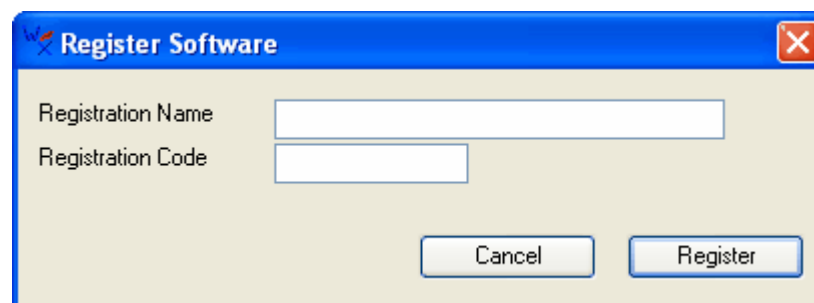
Note: The *Ingest Path* can be changed if you want to deposit the received messages in a directory other than the one established for Weather Message Server.

The **Additional Distribution Paths** can be used to place a copy of the received weather text in different directories for processing by other programs. For example, if you use Weather Message to receive your weather data, you can put a copy of the received messages in a second or third directory for processing by RealEMWIN or the Weather Message Retransmission program.

Note: Changing the *Ingest* and *Additional Distribution Paths* on this screen will automatically change them for *WxByte*, *WxIngest*, and *WxPort*.

7.4 Register Software

The Register menu option allows you to register your software.

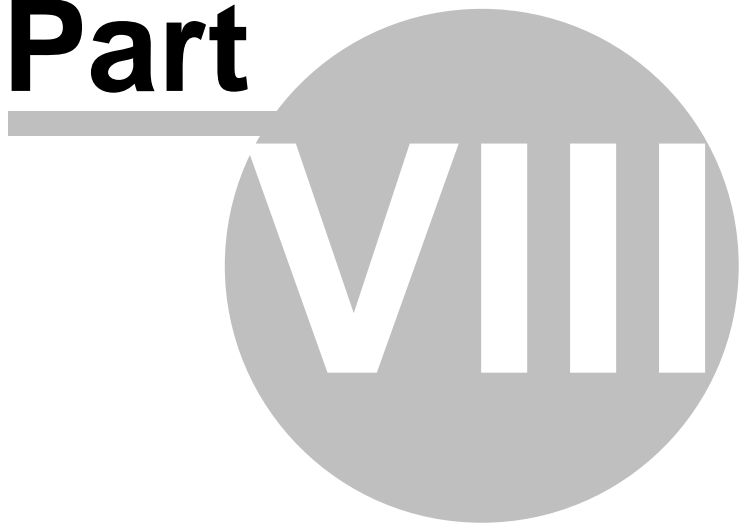


When you purchase WxWw2000, you will be supplied with a **Registration Name** and **Registration Code**. Enter these exactly as they are printed. These fields are case sensitive.

After the software is registered, we recommend that you stop and restart the software.

To purchase the software go to <http://www.wxmesg.com/purchpay.htm>.

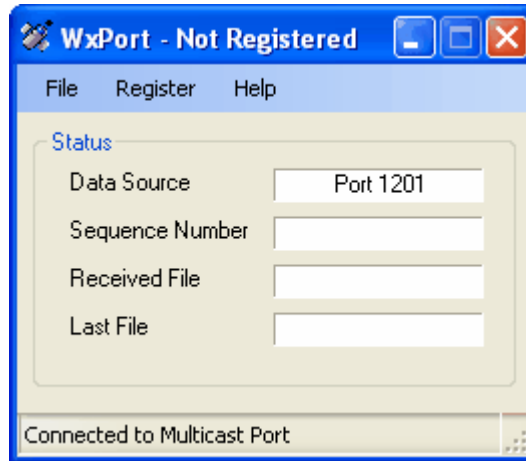
Part



8 WxPort - NOAAPort Ingest

8.1 Overview

WxPort is used by Weather Message to receive NOAAPort data. WxPort can process one TCP/IP multicast port from the NOAAPort data stream. The ingest program can be started automatically by the Weather Message Server or manually.



The main screen shows the status of incoming messages.


The **Data Source** field displays the multicast port used to receive NOAAPort data.

The **Sequence** field displays the last sequence number received.

The **Received File** and **Last File** fields displays the current and last file received.

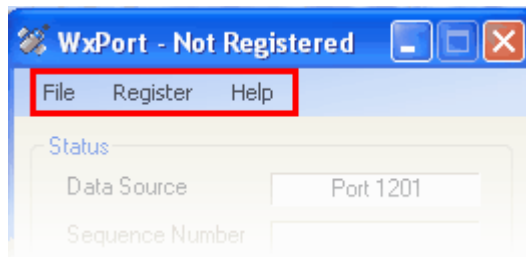
Note: *If WxPort is stopped with the window minimized, the next time it is started, it will start minimized.*

System Tray

When WxPort is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

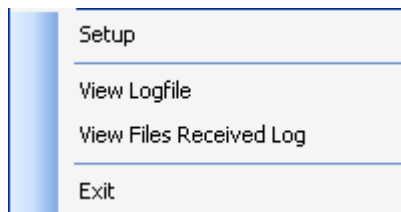
Copyright © 2007 Weather Message Software

8.2 Menu Options



The menu buttons on this screen perform these functions:

The **File** menu allows you to setup this program, view logfiles, and exit the program.

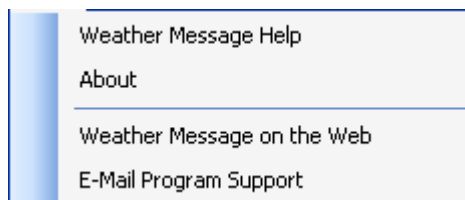


- The **Setup** option opens the [Setup window](#)⁶⁹.
- The **View Logfile** displays the ingest log file in notepad.
- The **View Files Received Log** displays the received files log in notepad.
- The **Exit** option shuts down WxPort.

Note: *In order to view the Files Received Log, the Log Received Files option must be enabled.*

The **Register** menu allows you to [register](#)⁴³ the WxPort software. This button does not appear if the software is registered. Note: If the software is not registered after 60 days, it will stop functioning.

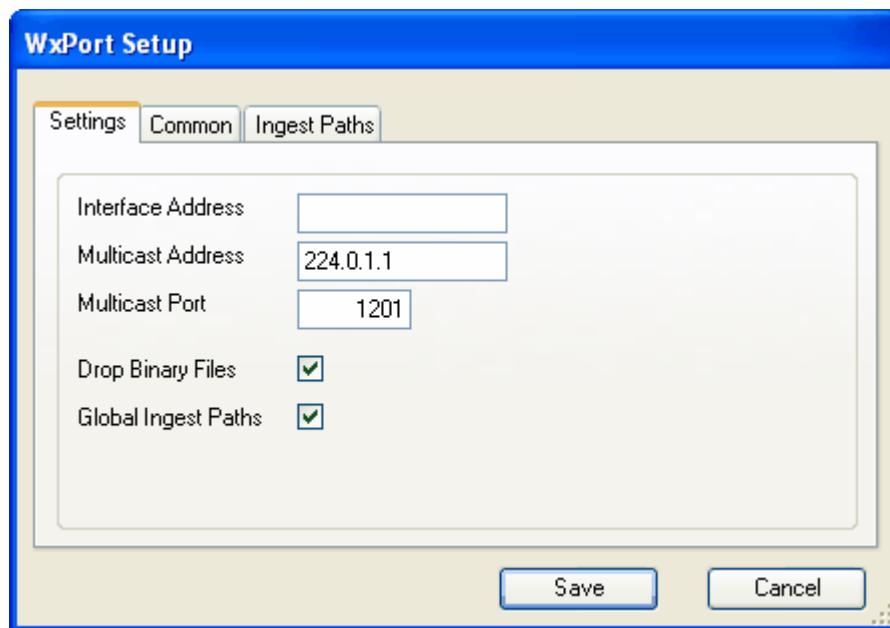
The **Help** menu allows you to see this manual, and display information about the program.



8.3 Setup

8.3.1 Settings Tab

The Settings Tab is used to define the communication port, backup options and other general operations.



The **Interface Address** is the TCP/IP address of the network device that will be providing the multicast packets.

The **Multicast Address** is the address of the NOAAPort data channel that you want to decode. The Multicast Port must be specified along with this address. Here is the breakdown of the Multicast addresses and ports:

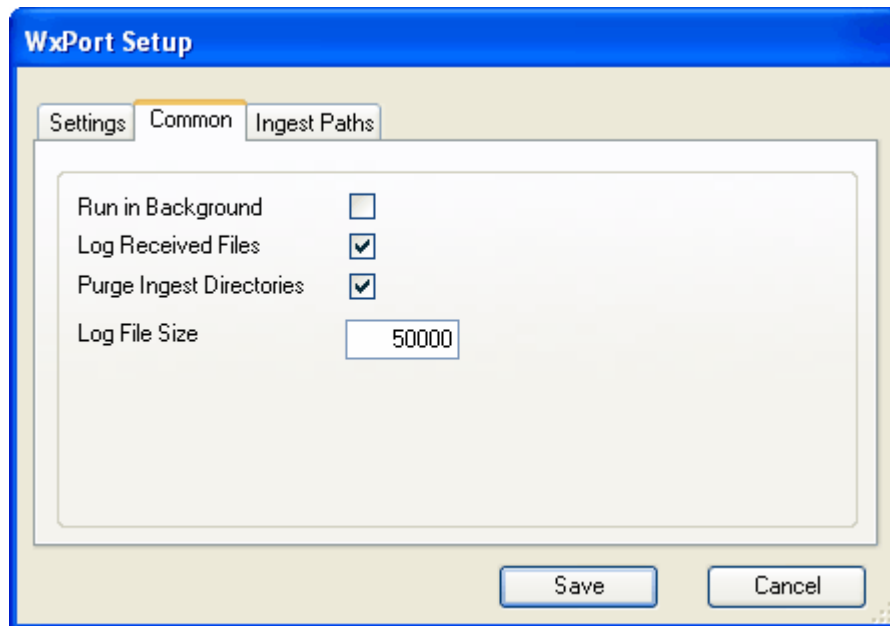
Channel	Address	Port
NWSTG	224.0.1.1	1201
GOES	224.0.1.2	1202
NWSTG2	224.0.1.3	1203
OCONUS	224.0.1.4	1204

The **Global Ingest Paths** option controls whether WxPort uses global ingest paths. Global ingest paths are shared between all of the ingest programs. Unchecking this box will allow you to define ingest paths that are different from the global ingest paths.

The **Drop Binary Files** check box allows you to specify whether WxPort should process messages that contain binary data. If you do not want the messages with binary data, check this box and they will not be processed.

8.3.2 Common Tab

The Common Tab is used to define options common or shared by all ingest programs.



The **Run in Background** check box allows you to specify whether you want the ingest programs to run in the background. When this box is checked, the ingest programs will not show in the system tray. Once this option is enabled, you will not see the ingest programs running. In order to see the ingest screen, you will need to use the Show Ingest menu option in Weather Message Server.

***Note:** Changing this option does not take effect until the next time the ingest programs are started.*

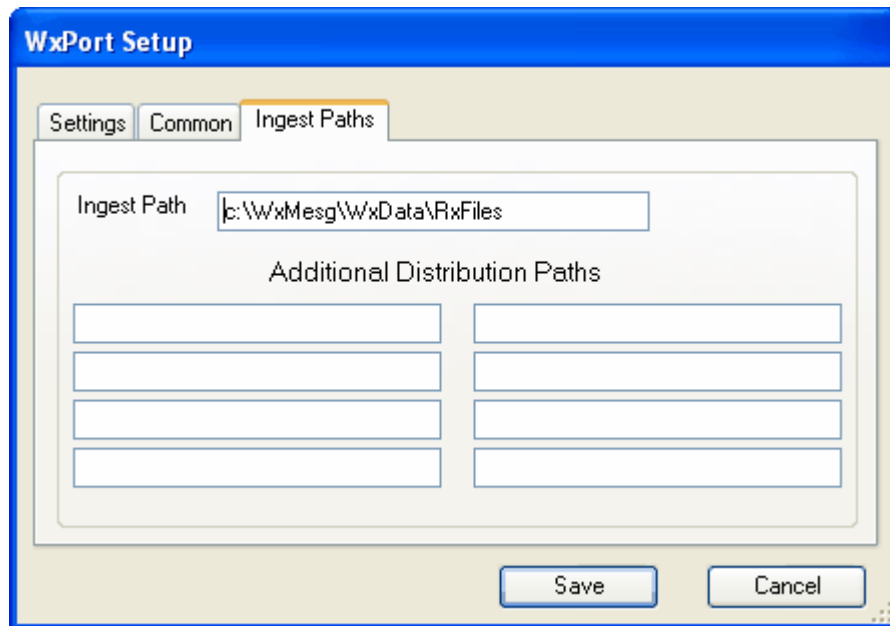
The **Log Received Files** option causes the program to record the name of each weather file received. The names are recorded in IBFiles.txt.

The **Purge Ingest Directories** option, when checked, will cause the program to automatically purge the ingest directories after 24 hours.

The **Log File Size** field allows you to specify this size of your ingest log file, IBLog.txt. The default is 50,000 bytes.

8.3.3 Ingest Paths Tab

The Ingest Paths Tab is used to define the directories that will store the received weather products for processing.



The **Ingest Path** is defined in the Weather Message Server setup screen and would not normally be entered here.

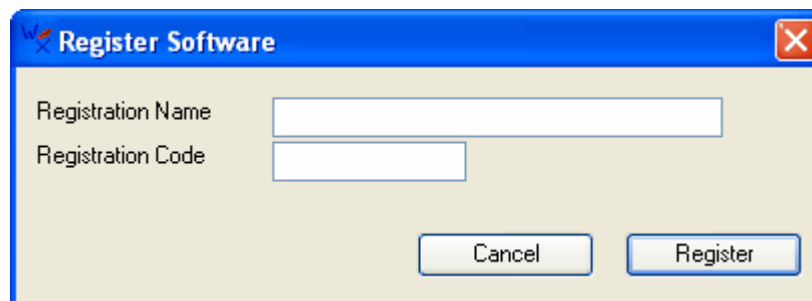
Note: The *Ingest Path* can be changed if you want to deposit the received messages in a directory other than the one established for Weather Message Server.

The **Additional Distribution Paths** can be used to place a copy of the received weather text in different directories for processing by other programs. For example, if you use Weather Message to receive your weather data, you can put a copy of the received messages in a second or third directory for processing by RealEMWIN or the Weather Message Retransmission program.

Note: Changing the *Ingest* and *Additional Distribution Paths* on this screen will automatically change them for *WxByte*, *WxIngest*, and *WxWW2000*.

8.4 Register Software

The Register menu option allows you to register your software.



When you purchase WxPort, you will be supplied with a **Registration Name** and **Registration Code**. Enter these exactly as they are printed. These fields are case sensitive.

After the software is registered, we recommend that you stop and restart the software.

To purchase the software go to <http://www.wxmesg.com/purchpay.htm>.

Part

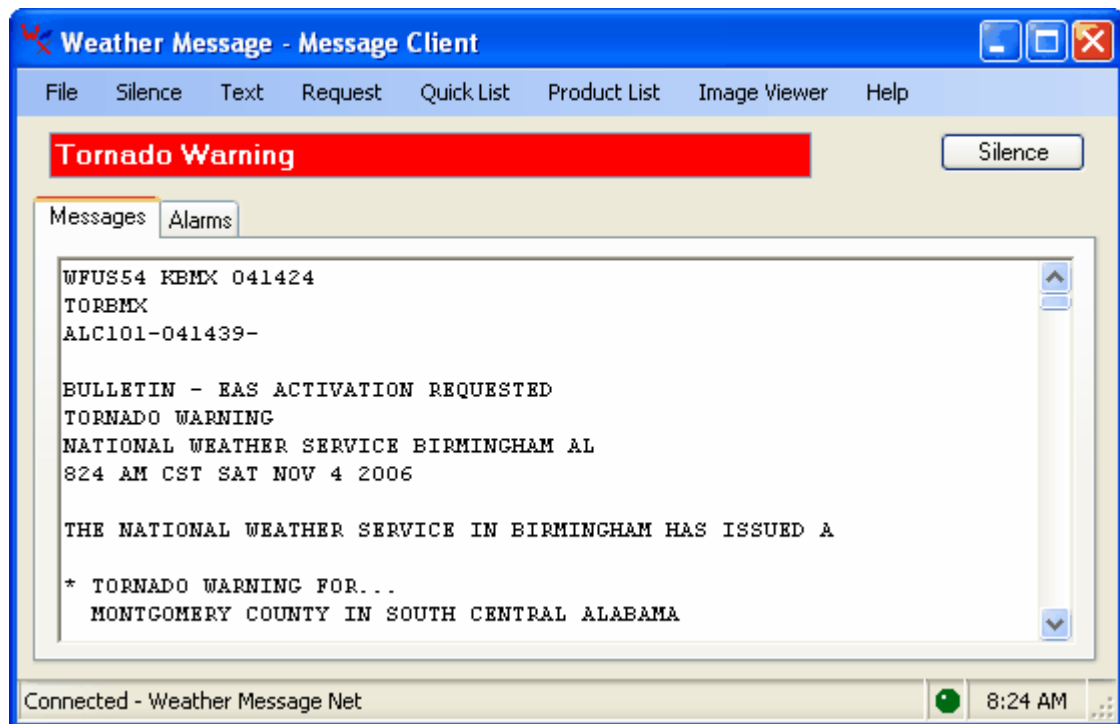


9 Message Client

9.1 Overview

The Weather Message Message Client, WxMcli, is used to receive processed text and graphic products from Weather Message Server. The Message Client can be installed on any computer attached to a TCP/IP network. Based on your alarms and settings, the Message Client can pop up a window and play different sounds.

The Message Client should be automatically started when your computer is started. The Message Client runs from the system tray.



Hint: If the Password for Setup/Exit option has been enabled, this program cannot be terminated with the X button, without a password. This feature insures that the user does not accidentally stop weather alerts.


Hint: If the system tray icon is outlined with a red circle or a red led appears in the status bar, the program is not communicating with the Weather Message Server.

Note: The Silence button to the right of message description only appears when a one-minute or continuous sound plays. It disappears when the sound finishes or Silence is clicked.

Note: If WxMcli is stopped with the window minimized, the next time it is started, it will start minimized.

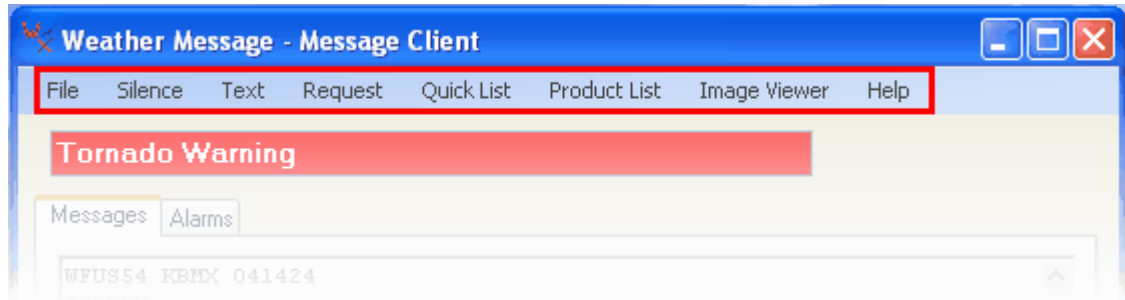
System Tray

When WxMcli is minimized, you can restore the main screen by right clicking on the system tray

icon , then select open.

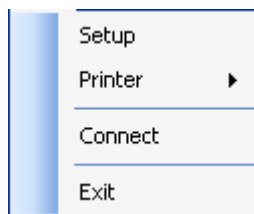
Copyright © 2007 Weather Message Software

9.2 Menu Options



The menu buttons on this screen perform these functions:

The **File** menu allows you to setup this program, show details, view logfiles, and exit the program.

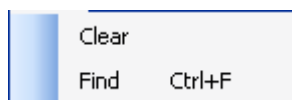


- The **Setup** option opens the [Setup Window](#)^[106].
- The **Printer** option selects the default printer and font size.
- The **Connect** option forces the application to attempt a connection to the server.
- The **Exit** option shuts down the Message Client.

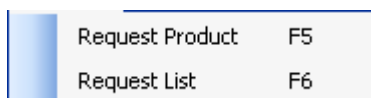
Note: *If you enable the Password for Setup/Exit, you will have to enter the a password to access the setup screen or exit the program.*

The **Silence** menu option allows you to stop a sound that is playing.

The **Text** menu allows you to clear the main window and search for a word or phrase.



The **Request** menu allows you to request a specific product or a list of products.



- See [Request Product](#)^[104].
- See [Request Product List](#)^[105].

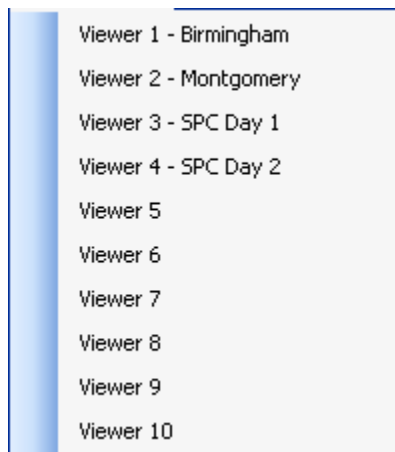
The **Quick List** menu allows you to quickly request predefined products.



- See [Quick List](#)^[111] setup tab.

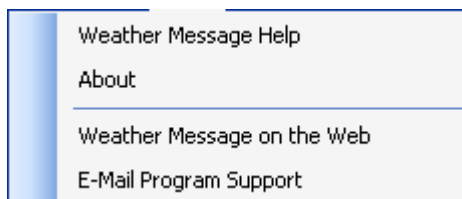
The **Product List** menu option opens the floating product list.

The **Image Viewer** menu allows you to select from 1 to 10 image viewers. The menu shows the last image viewed with each viewer.

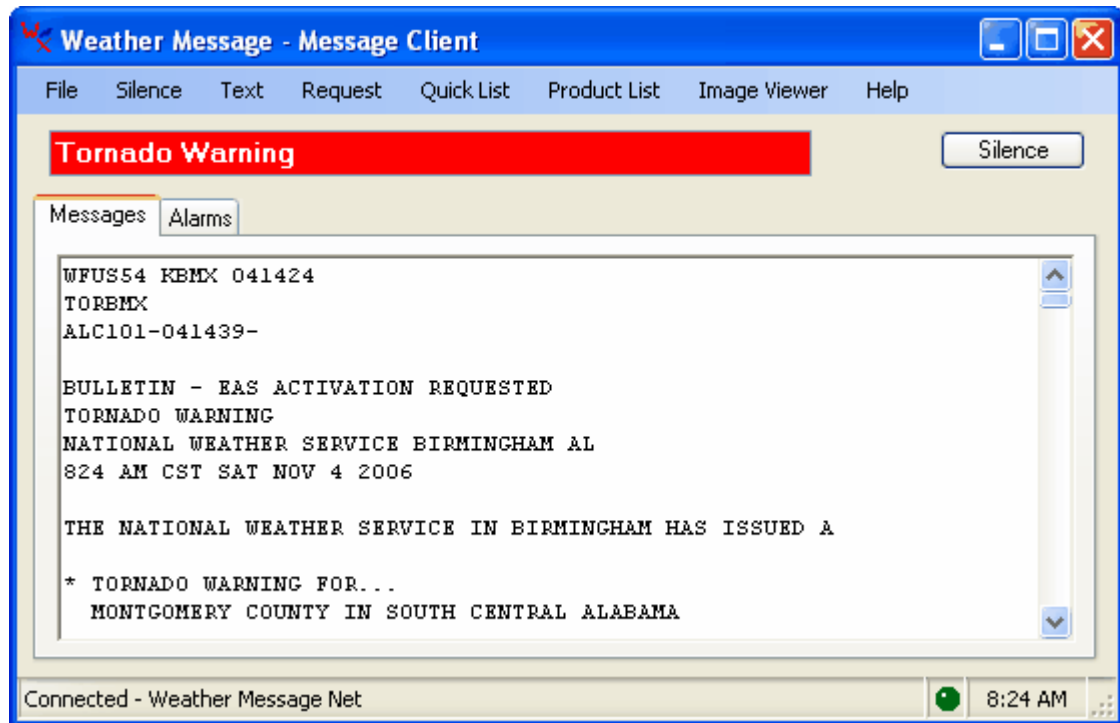


- See [Image Viewer](#)^[114].

The **Help** menu allows you to see this manual, and display information about the program.

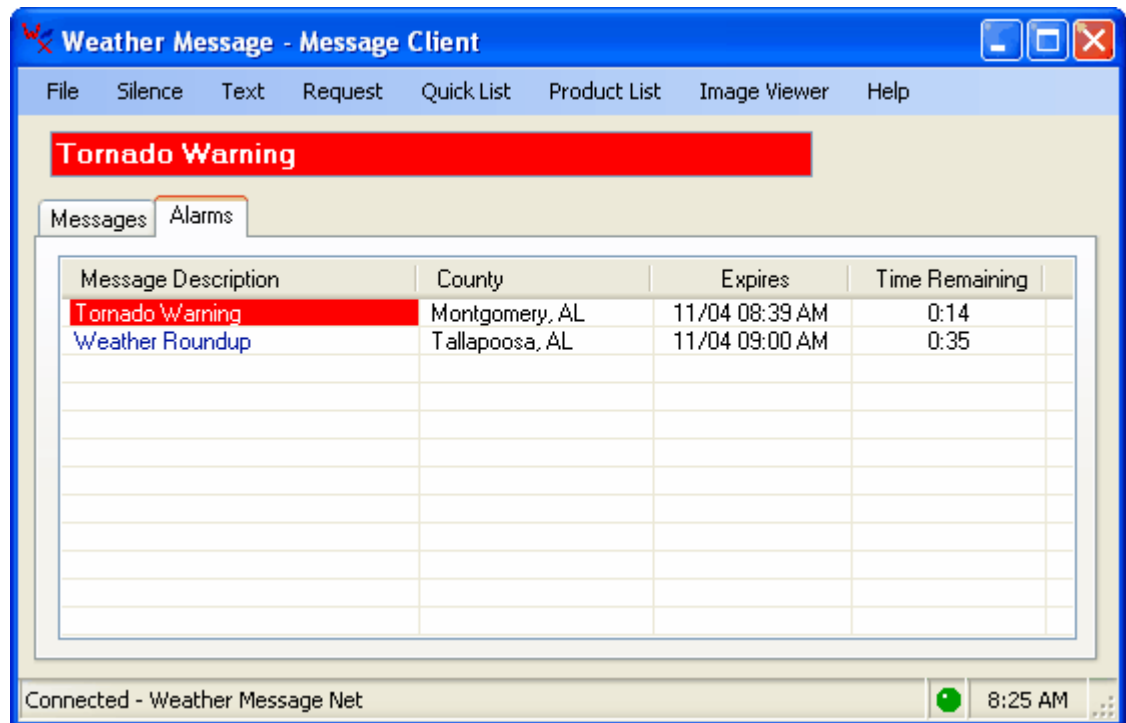


9.3 Main Window



The Messages Tab displays a scrolling text box of received weather products. The last message received is at the top. The size of the scrolling buffer can be change in [Setup](#)^[69]. To view an incoming message in a separate window, click on the message and a new window will open.

The status bar at the bottom of the window display connection information. Normally you will see a green led, which indicates you are connected to Weather Message Server. If the program is not connected, you will see a red led and the system tray icon will show a red circle.



The Alarms Tab contains a list of active alarms. It displays the message description, counties, and expiration information. When an alarm is received, the system tray icon changes to the color red, until all alarms have expired. When alarms expire, the time remaining field changes to "expired". Expired items remain in this list for 15 minutes.

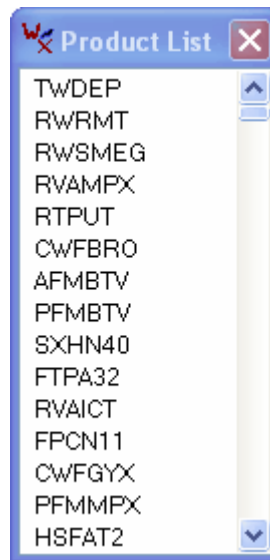
Click on a row in the list to read the message that caused the alarm.

9.4 Product List

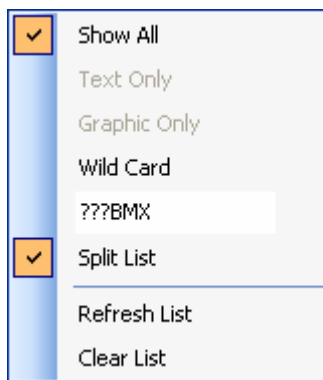
The Message Client features a floating received products window. You can minimize the main window and keep this small window open to monitor received products. You can click on any of the received products to see the text or image associated with the product name.

To see a list of products received with the same product identifier, hold down the shift key before clicking on the received product.

Note: For products to appear in this list, an alarm must be established in Weather Message Server.



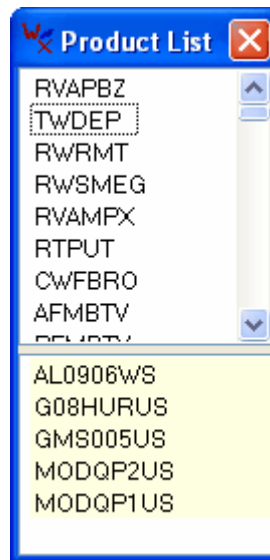
The default product list has several options. To see a list of options, right click to see this menu.



The default option is to show all products in a single list. If you only want to see text products in your list, click the **Text Only** option. To only want to see graphic products, click the **Graphic Only** option.

The **Wild Card** option allows you filter the list using a wildcard. Enter a wildcard expression in the menu text box, then click on the **Wild Card** option.

The **Split List** option changes the standard product list into two lists. The top list contains text products and the bottom list the graphic products.



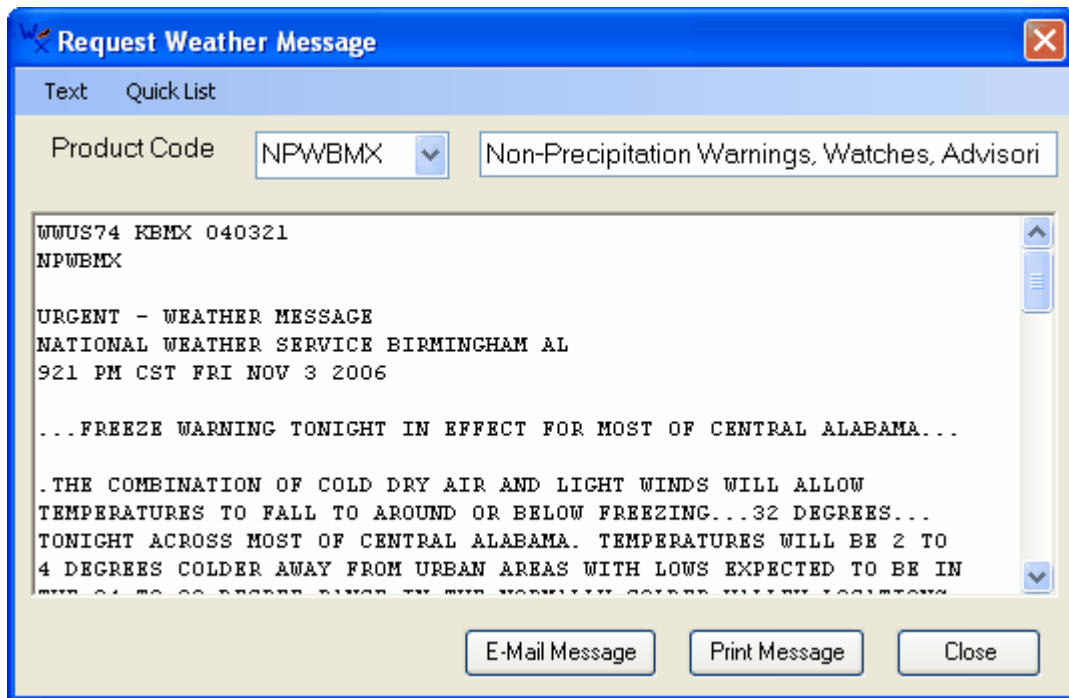
The **Refresh List** option sends a request to the server to refresh the text product received during the last two hours. The graphic products are refreshed from the clients local cache.

The **Clear List** option clears the received products list.

Note: *When you shutdown Message Client, the application will store the items in the product list. The next time you start Message Client, the product list will be populated with the items it contained the last time it was shutdown.*

9.5 Request Product

The Request Product window allows you to request a product by identifier.



The product codes are composed of a 3-character weather product code and either a 2-character state or forecast office code. See [Weather Forecast Offices](#) for a list of the forecast office codes. See [Text Product Abbreviations](#) for a list of weather product codes. For example a special weather statement for Birmingham, Alabama is coded SPSBMX. This code can be entered in the **Product Code** field to get the last special weather statement issued.

The **Product Code** field also contains a list of the last 20 products received. To view and/or select an item from this list, click on the down arrow in the Product Code field.

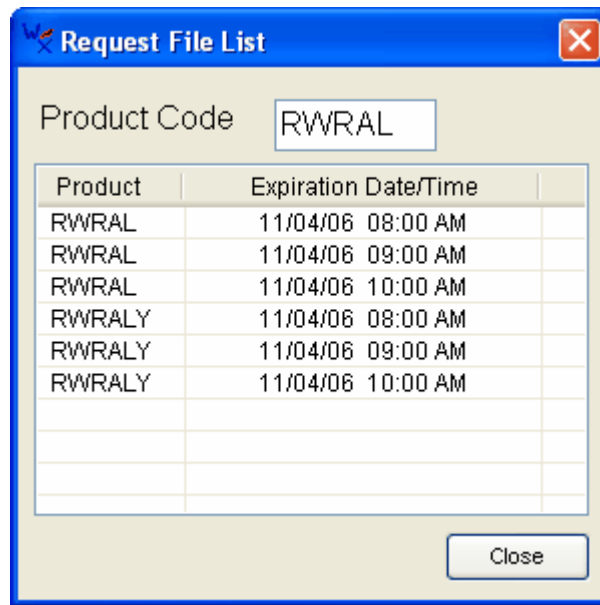
The **E-Mail Message** button opens your email application and inserts the message text in the body of the message.

The **Print Message** button prints the message text to your default printer.

The **Close** button closes this window.

9.6 Request Product List

The Request File List window allows you to request a list of products by identifier.



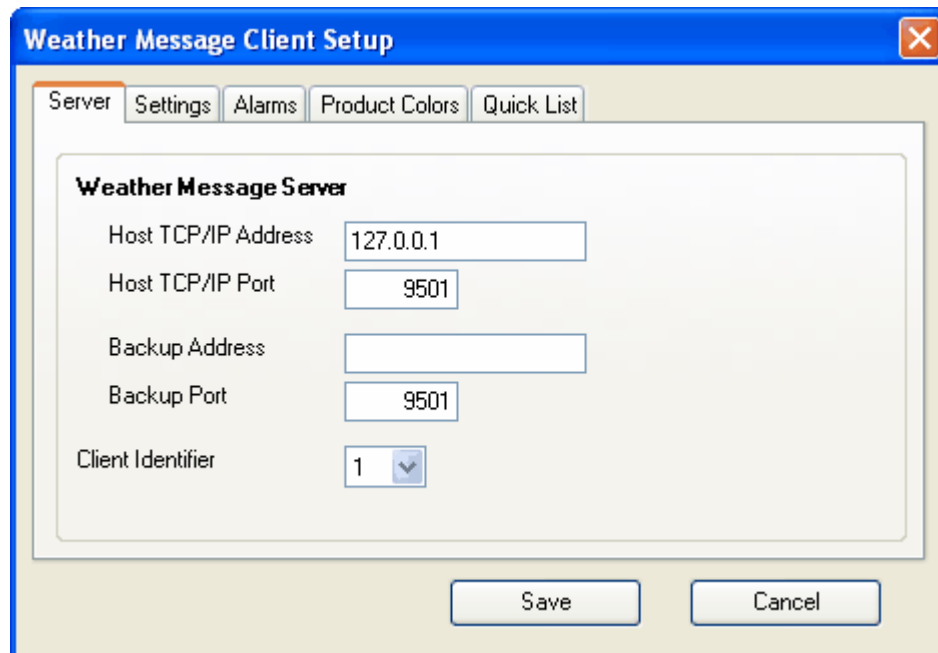
The product codes are composed of a 3-character weather product code and either a 2-character state or forecast office code. See [Weather Forecast Offices](#) for a list of the forecast office codes. See [Text Product Abbreviations](#) for a list of weather product codes. For example a special weather statement for Birmingham, Alabama is coded SPSBMX. This code can be entered in the request field to get a list of the special weather statements for Birmingham currently stored in Weather Message.

To view one of the listed messages, click on the message identifier in the product column. Clicking on the expiration date column will sort the list in ascending or descending order.

9.7 Setup

9.7.1 Server Tab

The Server Tab is used to define the communications information to Weather Message Server.



The screenshot shows a dialog box titled "Weather Message Client Setup" with a blue border and a close button in the top right corner. The dialog has five tabs: "Server", "Settings", "Alarms", "Product Colors", and "Quick List". The "Settings" tab is selected. Inside the dialog, there is a section titled "Weather Message Server" with the following fields:

- Host TCP/IP Address: 127.0.0.1
- Host TCP/IP Port: 9501
- Backup Address: (empty)
- Backup Port: 9501
- Client Identifier: 1 (dropdown menu)

At the bottom of the dialog, there are two buttons: "Save" and "Cancel".

The **Host TCP/IP Address** is the address of the Weather Message Server. Enter the address of your primary server in this field. The default is 127.0.0.1 for the local computer.

The **Host TCP/IP Port** is the port defined by Weather Message Server for connections. The default is 9501.

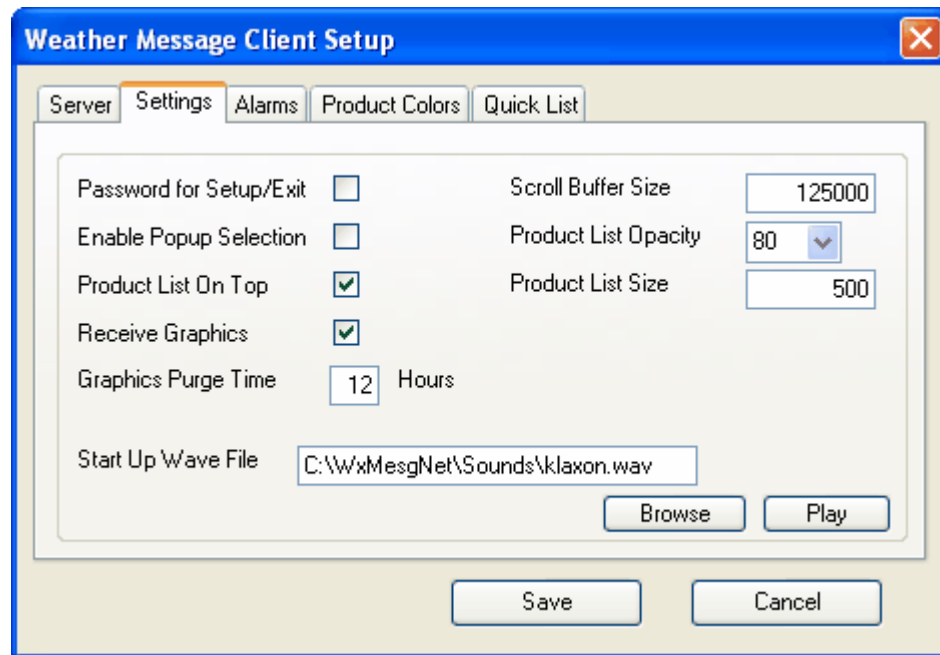
The **Backup Address** is the TCP/IP address of your backup Weather Message Server. Do not enter an address in this field if you do not have a backup Weather Message Server. This address is used when the program cannot contact your primary Weather Message Server.

The **Backup Port** is the port defined for use by the backup Weather Message Server. The default is 9501.

The **Client Identifier** field allows you to assign each Message Client a different identification number. This identifier can be used to send a specific alarm to a specific client or group of clients.

9.7.2 Settings Tab

The Settings Tab is used to set operational information for the Message Client.



The **Password for Setup/Exit** option allows you to require a password to access the Setup menu or exit the program.

The **Enable Popup Selection**, when checked, will give the user the capability to enable or disable the applications popup operation. The Enable/Disable option will appear on the system tray menu.

The **Product List On Top** field causes the product list, when shown, to appear on top of all other windows.

The **Receive Graphics** field should be checked, if you want to receive weather graphics.

Note: *Weather Message Server would also have to be setup to send graphic files.*

The **Graphics Purge Time** field defines the amount of time, in hours, to retain graphic images. After an image exceeds this time, it is deleted.

The **Start Up Wave File** allows you to specify a wave file to play when the program is started. Use the **Browse** button to locate a wave file. If you do not want a wave file to play at startup, enter **None** in this field. To hear the wave file, click **Play**.

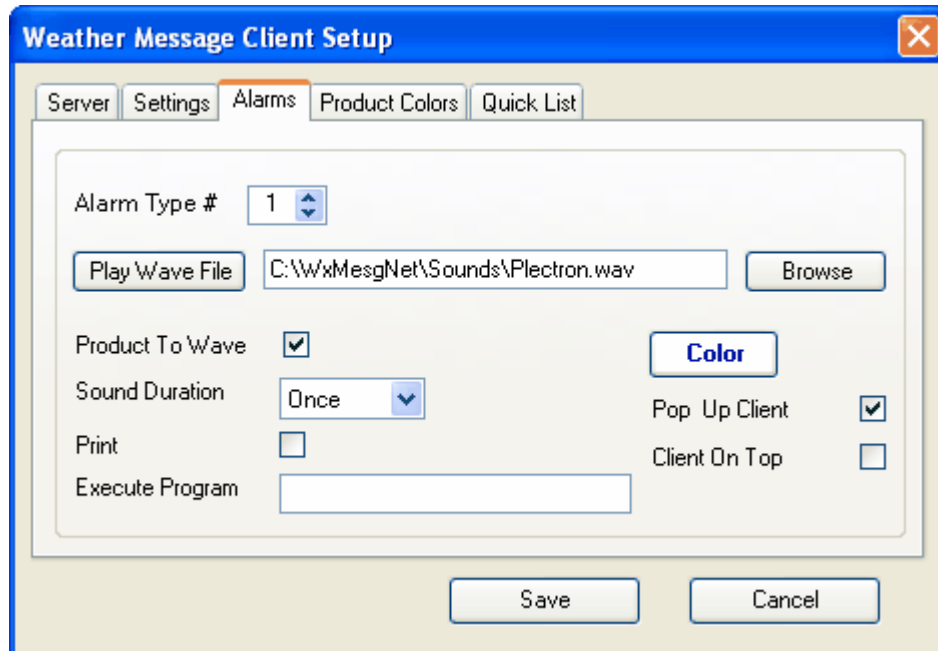
The **Scroll Buffer Size** defines the number of characters to keep in the main text window.

The **Product List Opacity** allows you to setting the opacity or transparency of the product list. 100 represents a normal window. The lower the value the more transparent the product list becomes. This allows you to see through the product list when it is positioned on top of other windows.

The **Product List Size** allows you to determine the number of products that are contained in the product list.

9.7.3 Alarms Tab

The Alarms Tab is used to set sounds, colors, print and popup options for 20 alarms.



The Weather Message Server Setup program allows you to associate an **Alarm Type** for each alarm that is sent to the Message Client. This **Alarm Type** causes the Message Client to play a wave file and pop-up a minimized screen, based on your settings. In addition, it uses the color associated with the alarm type to display the message description on the status line and in the Product List window.

Message Client supports up to 20 different alarm types. To select a specific alarm type, click on the up or down buttons adjacent to the Type # field. Click on the **Browse** button to select a wave file. Each wave file can be played, **Once**, for **1 minute**, or **Continuous**. To hear the sound associated with the alarm, click the **Play Wave File** button. Alarms can be silenced, by clicking on the Silence button. The number of the alarm to be played is determined when the Alarm is established in Weather Message Server Setup.

The **Product to Wave** option is used when you want a specific sound to be played based on the product identifier. When using this option, you will create a wave file that has the same name as the product identifier. This wave file should be saved in the "Sounds" directory located in the WxMesgNet directory.

When this option is enabled, the program will look for a wave file in the "Sounds" directory that is named like the product being received. It will first look for the complete 6 character product identifier and play that file. If the 6 character product identifier is not found, it will look for a file with the first 3 characters of the product identifier and play that file. If neither are found, it will play the default wave file associated with this alarm.

Here are some examples of using the Product to Wave option. The following files are stored in the "Sounds" directory; "TORBHM.wav", "TOR.wav". With the Product to Wave enabled for Alarm Type 1, the program will look at each received product associated with Alarm Type 1. If the incoming message contains the product identifier "TORBHM", the program will play the file "TORBHM.wav". If it receives "TORHUN", it will play the file "TOR.wav" since it cannot locate a

file labeled "TORHUN.wav".

The **Print** option, if checked, will print out the received weather product to your default printer.

The **Execute Program** option allows you to start a third-party program when an alarm occurs. Enter the full path and program name for the third-party program. The Message Client can create a temporary file with the text so that it can be passed to the external program as a command line argument. To do this, put one space after the program name and enter the characters "\$1". For example, to start Notepad each time an alarm is triggered, enter "Notepad.exe \$1" in the Execute Program field.

Hint: If the path to the executable contains a space, you should enclose the path and program name in quotes. For example: "c:\program files\myprogram.exe" \$1

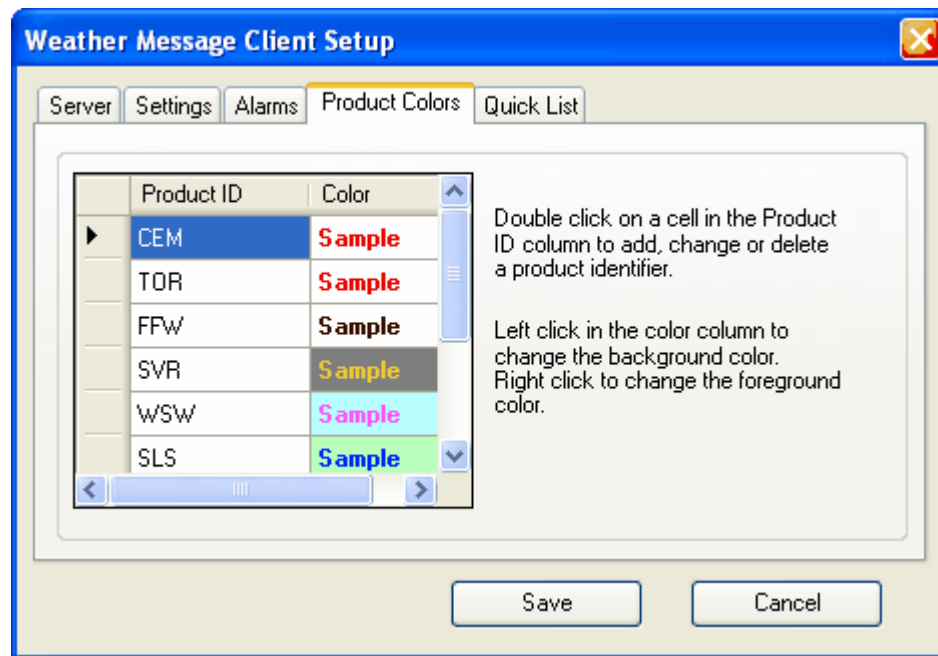
The **Color** button, allows you to select a foreground and background color for the weather product description. Left click to change the background color. Right click to change the foreground color.

The **Pop Up Client** option specifies whether Message Client pops up a minimized window when this alarm arrives.

The **Client On Top** setting can be used to make the Message Client window the window that appears on top of all other windows. If you use this option, an alarm will cause Message Client to appear on top of all other running programs.

9.7.4 Product Colors Tab

The Product Colors Tab is used to .



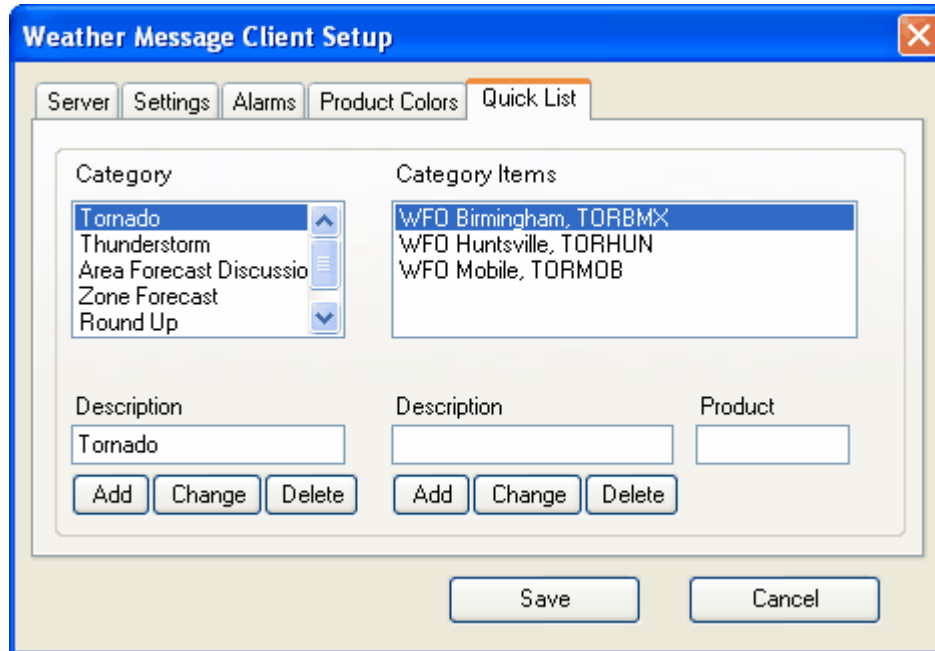
The Product ID column contains the first three letters of the AWIPS identifier to be colored. To add a new product identifier, scroll down to a blank cell and click in the cell. Enter the product identifier and press enter. Then right click in color column to change the foreground (text) color

or left click to change the background color.

The colors associated with the alarms, established under the Alarms tab, will override these default colors.

9.7.5 Quick List Tab

The Quick List Tab is used to .



To add a category, enter the category description and click Add. To change a category, click on the category, make any changes and click on Change. To delete a category, click on the category and press the keyboard delete key or the Delete button.

To add a category item, first select the category. Enter the category item description and product description then click Add. To change a category item, first select the category, then the category item. Make any changes and click on Change. To delete a category item, first select the category, then the category item and press the keyboard delete key or click the Delete button.

Hint: If you suffix the product name with "*", the program will display a list of products, instead of the last product received. The default option of the quick list is similar to the Request Product option. When the product name contains an "*", it operates similar to the Request List option.

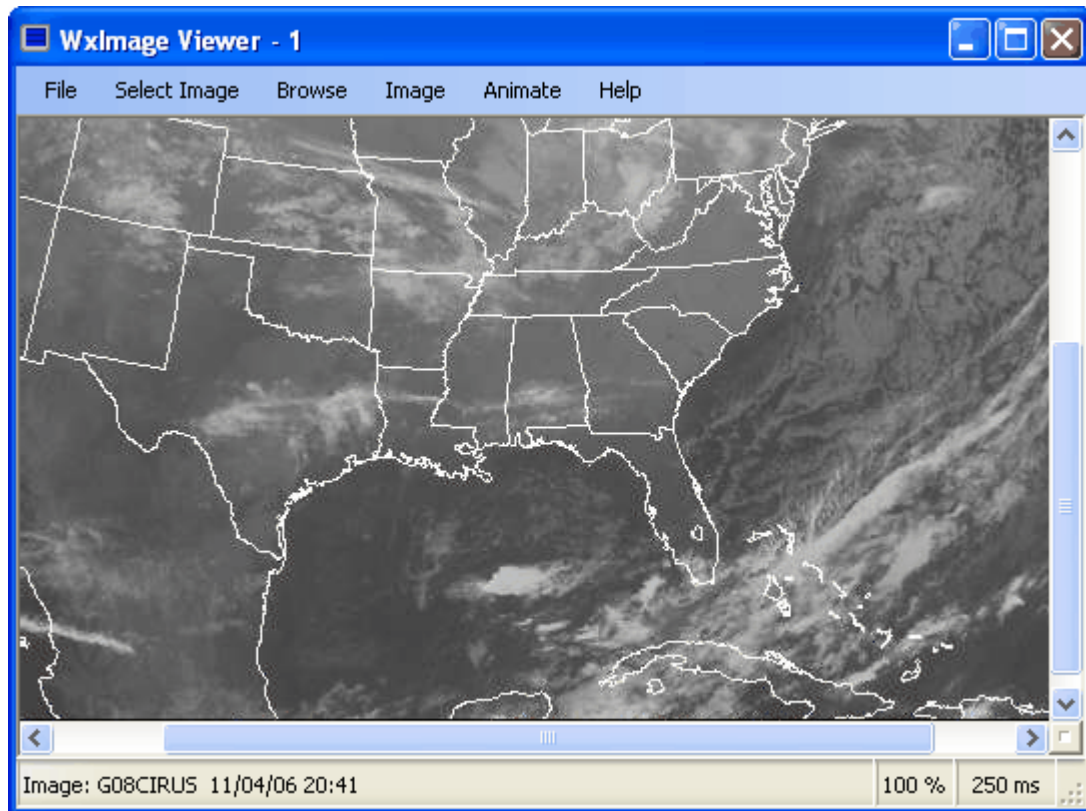
Part



10 Image Viewer

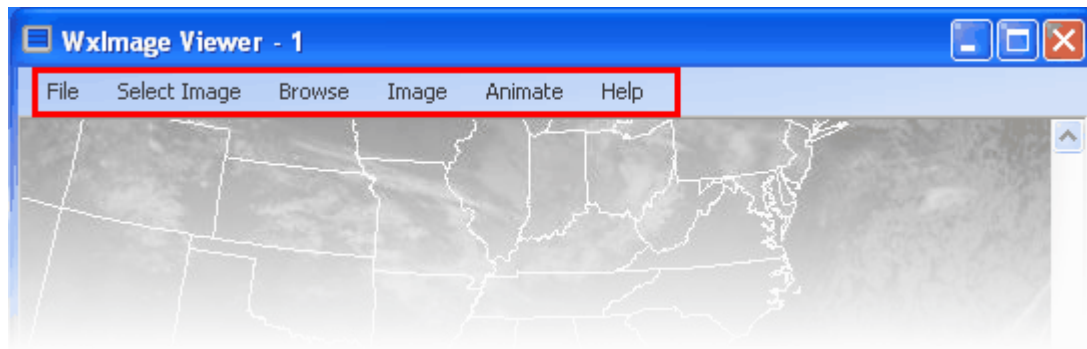
10.1 Overview

The Image Viewer allows you to view received weather graphics and locally processed radar images. The Image Viewer is started by clicking on the Image Viewer menu option in Message Client and selecting one of the 10 viewers.

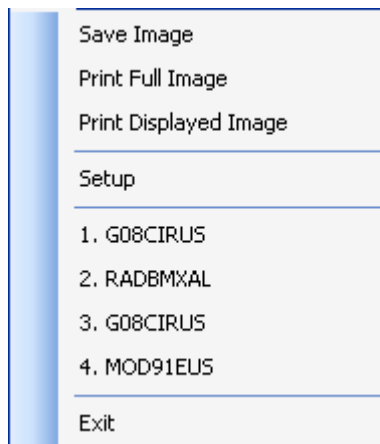


Each Image Viewer instance (1 to 10) remembers the last image you viewed, along with the size of the viewer window and the last position of the scroll bars. When you access that viewer again, it will automatically display the last image viewed.

10.2 Menu Options



The **File** menu allows you to save the displayed image, print the image, setup this program, retrieve previously viewed images, and exit the program.



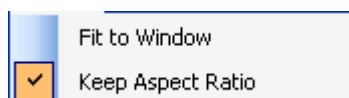
- The **Save Image** option is used to save the currently displayed image. Images can be saved in GIF, JPG, PNG, TIF and BMP format.
- The **Print Full Image** option will print the entire image to your default printer.
- The **Print Displayed Image** option will print the image visible in the Image Viewer window to your default printer.
- The **Setup** option opens the [Setup Window](#)^[119].
- Items 1 through 4 act as a recent image viewed list. Select a previously viewed image to see it again.
- The **Exit** option shuts down the Message Client.

Note: If you enable the Password for Setup/Exit, you will have to enter the a password to access the setup screen or exit the program.

The **Select Image** menu launches the [Select Image](#)^[117] window.

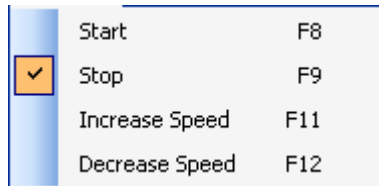
The **Browse** menu launches the [Image Browser](#)^[118]. It is used to see a thumbnail of the images recently received.

The **Image** menu allows you to alter the sizing and resizing behavior of the displayed image.



- The **Fit to Window** option, when checked, will cause the displayed image to fit the size of the image viewer.
- The **Keep Aspect Ratio**, when checked, will cause the viewer to retain the aspect ratio of the displayed imaging. Un-checking this option can cause the image to be distorted.

The **Animate** menu will start an animation of images. The button only appears if more than one image is available for animation.

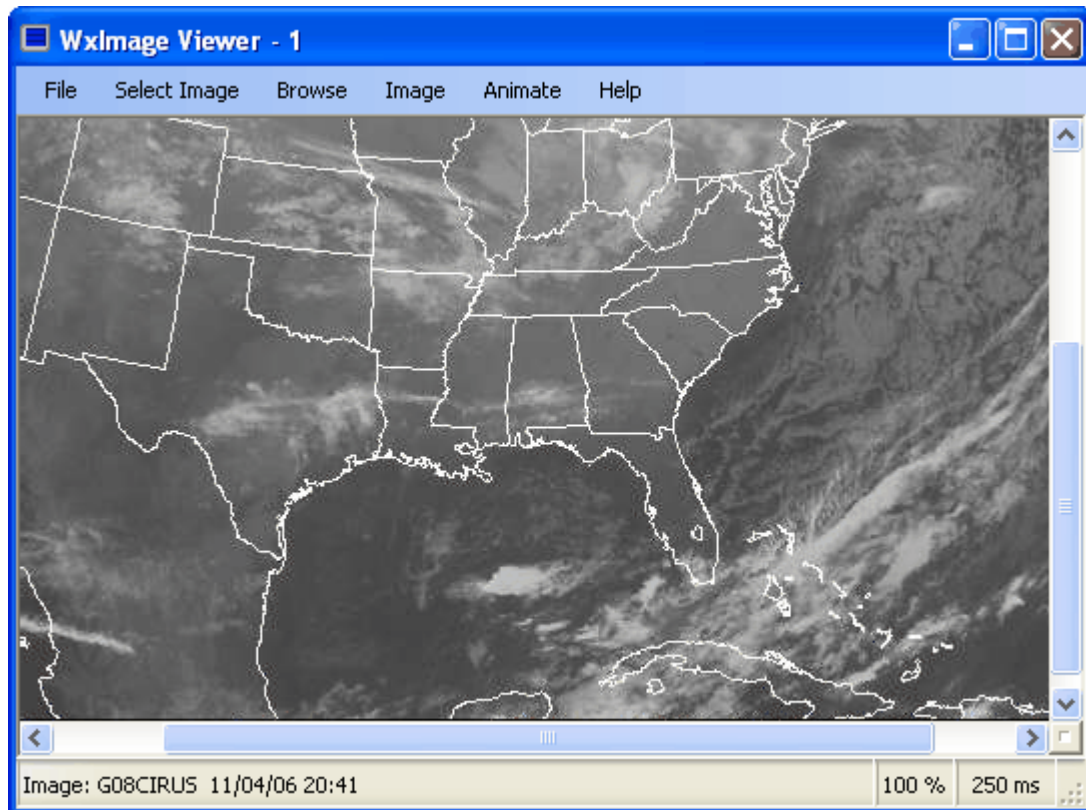


- The **Start** option or F8 function key starts the animation.
- The **Stop** option or F9 function key stops the animation.
- The **Increase Speed** option or F11 function key increases the animation speed.
- The **Decrease Speed** option or F12 function key decreases the animation speed.

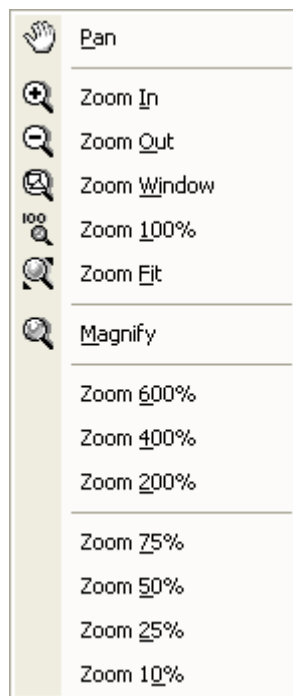
The **Help** menu allows you to see this manual.

10.3 Image Options

The displayed image can automatically be resize by selecting on of the [Image](#) ⁶⁵⁷ menu options.



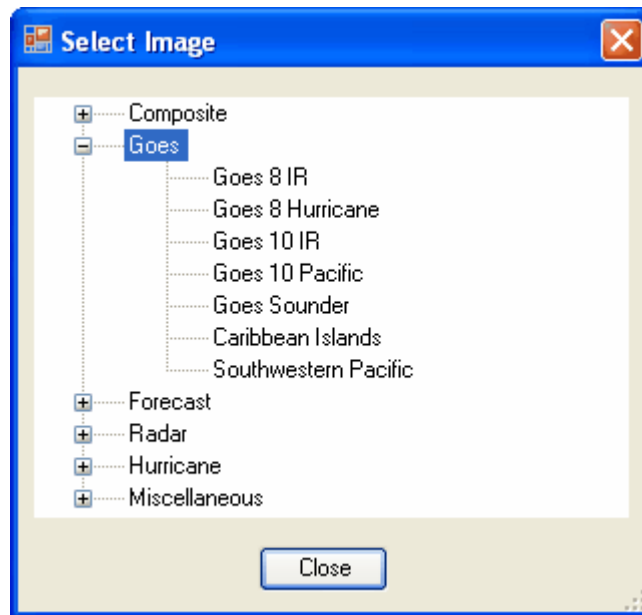
There are also a number of zoom options available by right clicking on the image. Right click on the image to see this menu.



The default view is Zoom 100%.

10.4 Selecting Images

Images are selected by either clicking on a graphics product in the Product List, selecting a recently viewed image from the File menu, browsing for an image using the Image Browser or using the Select Image window.

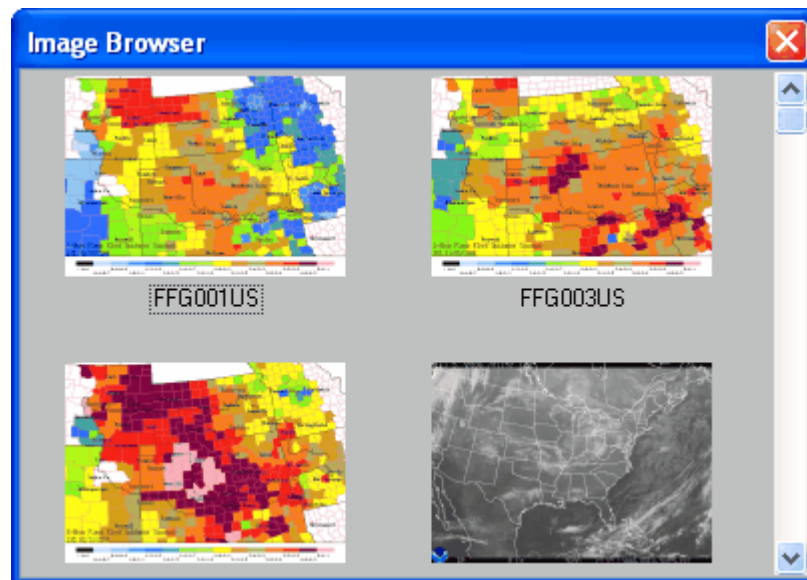


Images are broken down into six categories. Click on one of the categories to see a list of images available. When an image is selected, the program will display the image, if it is available. If the Auto Animate option is enabled, the image will automatically begin animation.

The Miscellaneous category contains a slide show option. This can be used with the animate option to show all images.

10.5 Image Browser

The Image Browser allows you to browser received images.



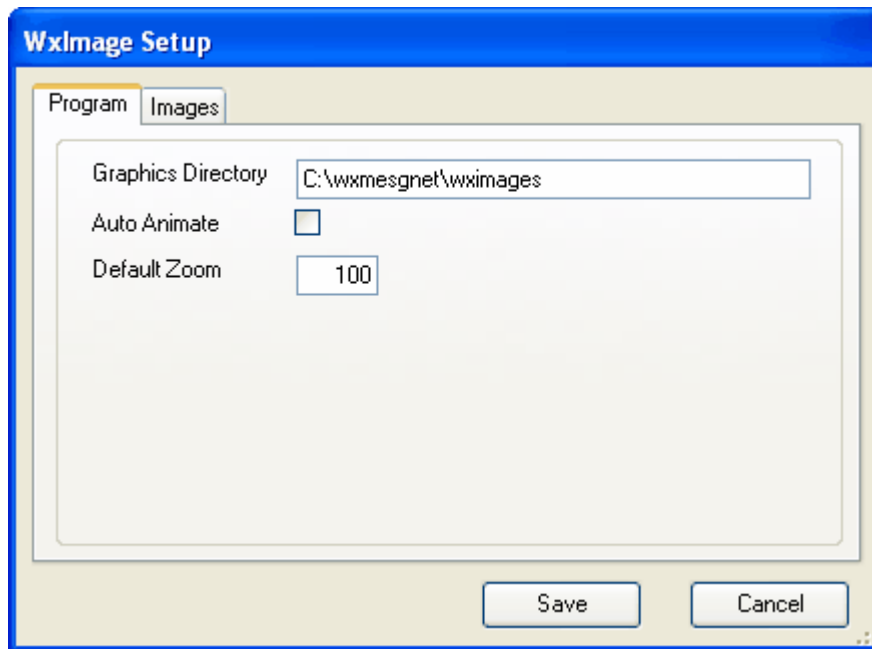
Click on a image to load it into the Image Viewer.

Note: If you have received a large number of images, it may take several seconds for this screen to populate.

10.6 Setup

10.6.1 Program Tab

The Program Tab is used to set the graphics directory and other program defaults.



The **Graphics Directory** is automatically setup by the system. This directory should not have to be changed under normal situations.

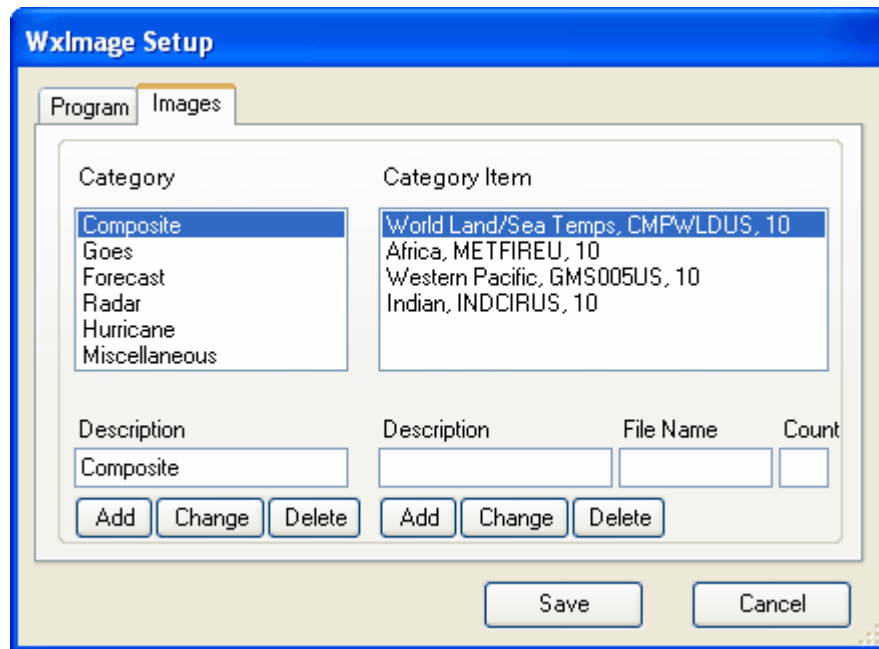
The **Auto Animate** option, when checked, will make the program automatically start image animation when an image is selected.

The **Default Zoom** field allows you to specify the zoom factor that is used when the image viewer is initially loaded.

Note: If you are running the Message Client on the same computer as Weather Message Server, the graphic products will be stored in two different directories. One directory is used for the Server and another for the Message Client. You can eliminate the double storage on the server by disabling the "Receive Graphics" option on the message client. Then change the graphic directory path on the Image Viewer to the Servers graphic directory. This should not be an issue for most users, unless disk space is limited.

10.6.2 Images Tab

The Images Tab is used to

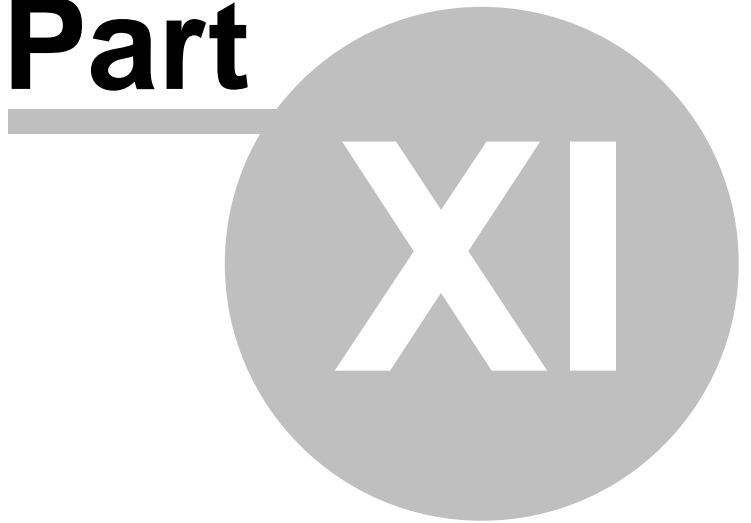


To add a category, enter the category description and click Add. To change a category, click on the category, make any changes and click on Change. To delete a category, click on the category and press the keyboard delete key or click on the Delete button.

To add a category item, first select the category. Enter the category item description, file name and count (images to animate), then click Add. To change a category item, first select the category, then the category item. Make any changes and click on Change. To delete a category item, first select the category, then the category item and press the keyboard delete key or click on the Delete button.

Note: *The program will not allow you to enter a duplicate file name.*

Part



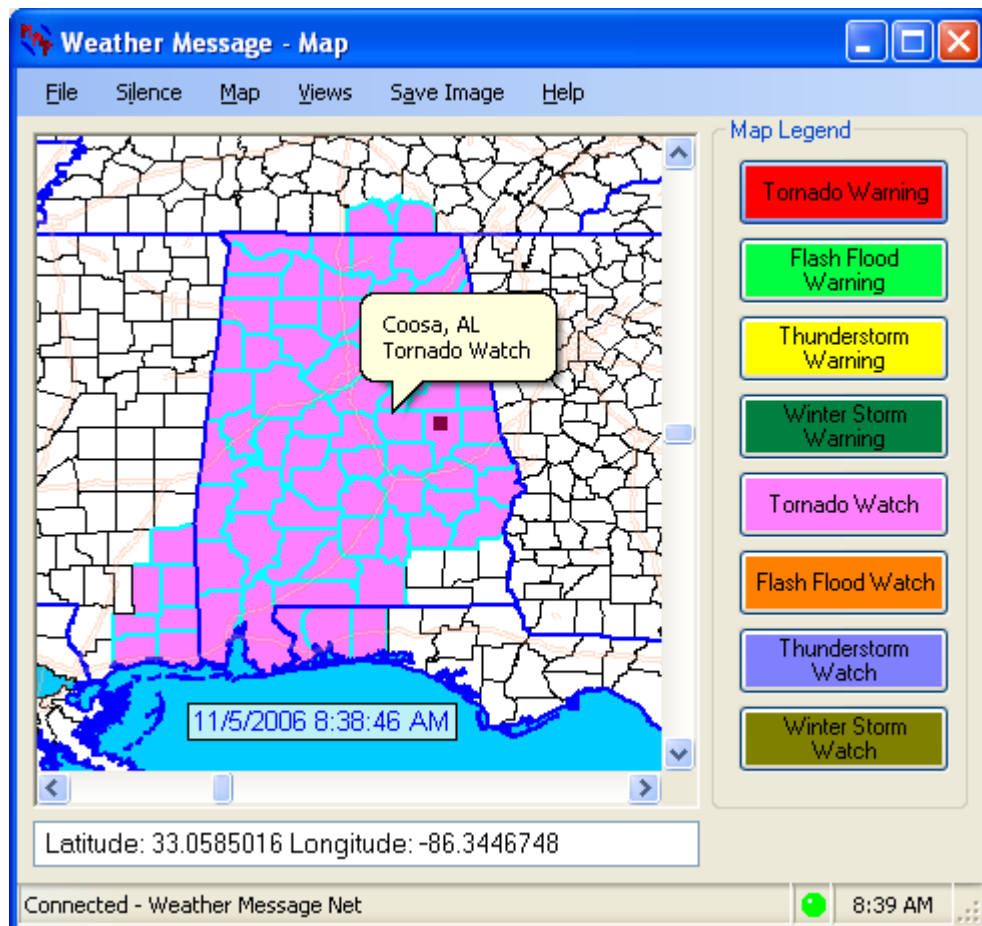
11 WxMap Client

11.1 Overview

The Weather Message Mapping application, WxMap, is used to visually plot received weather products from Weather Message Server on a graphical map. WxMap uses GIS technology to allow you to view any part of the United States map and its possessions. WxMap can be installed on any computer attached to a TCP/IP network. Based on your alarms and settings, WxMap can pop up a window and play different sounds.

WxMap should be automatically started when your computer is started. WxMap runs from the system tray.

The map included with the default installation does not show interstate roads. To add this capability, download and install the optional map layers from your CD or the Weather Message downloads page.




Hint: If the Password for Setup/Exit option has been enabled, this program cannot be terminated with the X button, without a password. This feature insures that the user does not accidentally stop weather alerts.

Hint: If the system tray icon is outlined with a red circle or a red led appears in the status bar,

the program is not communicating with the Weather Message Server.

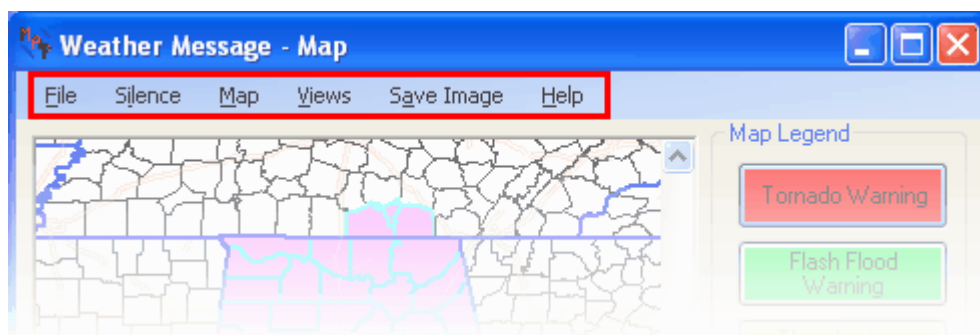
Note: *If WxMap is stopped with the window minimized, the next time it is started, it will start minimized.*

System Tray

When WxMap is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

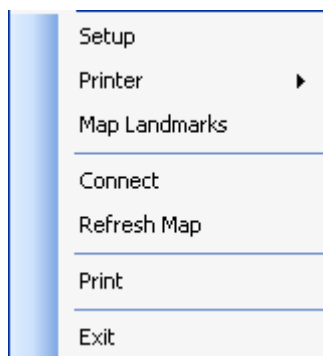
Copyright © 2007 Weather Message Software

11.2 Menu Options



The menu buttons on this screen perform these functions:

The **File** menu allows you to setup this program, show details, view logfiles, and exit the program.



- The **Setup** option opens the [Setup Window](#) (106).
- The **Printer** option selects the default printer and font size.
- The **Map Landmarks** option opens the Landmarks Window.
- The **Connect** option forces the application to attempt a connection to the server.
- The **Refresh Map** option clears the map of any active alarms and sends a refresh request

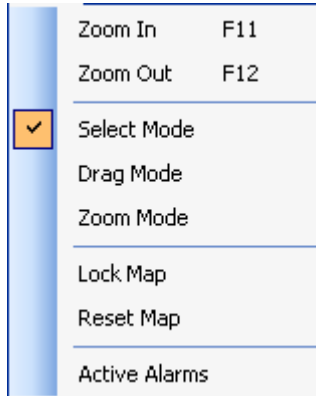
to Weather Message Server.

- The **Print** option prints an image of the map window.
- The **Exit** option shuts down the Message Client.

Note: *If you enable the Password for Setup/Exit, you will have to enter the a password to access the setup screen or exit the program.*

The **Silence** menu option allows you to stop a sound that is playing.

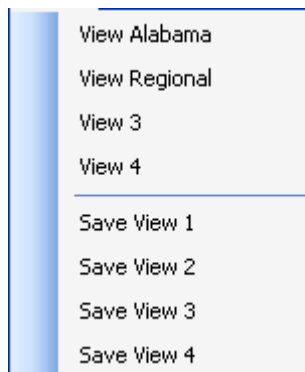
The **Map** menu allows you to make adjustments to the displayed map and see the active alarms.



- The **Zoom In** option or F11 function key zooms in the map.
- The **Zoom Out** option or F12 function key zooms out the map.
- The **Select Mode** is the default mode. This mode allows you to click on counties to see active weather products.
- The **Drag Mode** changes the cursor to a hand and allows you to drag the map.
- The **Zoom Mode** changes the cursor to a hand with a pointing finger. This allows you to draw a box around an area and zoom in the drawn area.
- The **Lock Map** option, when checked, locks the map. When locked, the map cannot be zoomed, or moved.
- The **Reset Map** option, resizes the map showing all of the United States.
- The **Active Alarms** option displays the [Active Alarms](#) ^[130] window.

Note: *If you are in the drag or zoom mode, you will not be able to click on a county to see the county's information.*

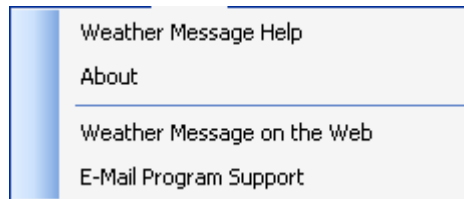
The Views menu allows you to quickly change and save the map view to one of four user defined areas.



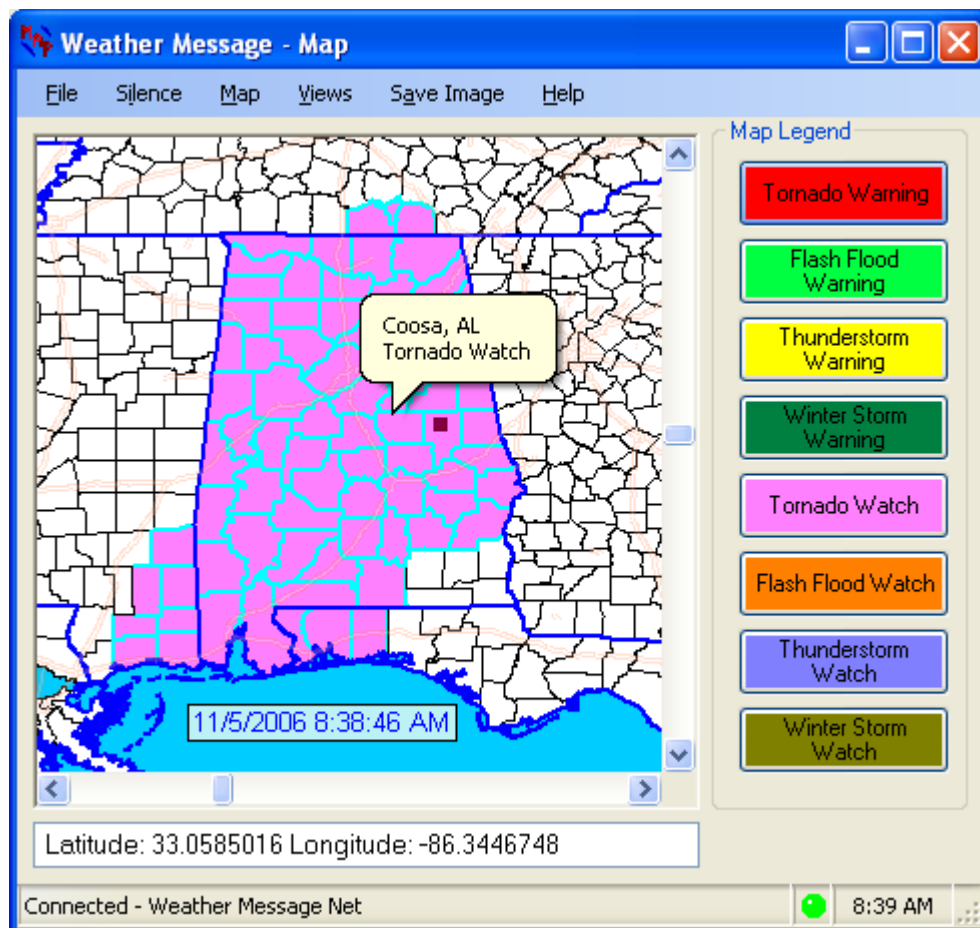
- See [Views](#)^[129].

The **Save Image** option saves the current map image to ..\WxMesgNet\MapImage.jpg.

The **Help** menu allows you to see this manual, and display information about the program.



11.3 Main Window



You can click in the map legend, on any of the weather type buttons, to see a list of active warnings or watches for that weather type. You can also identify a county's name and current alarms by moving the mouse pointer over the county and pausing. After a short pause, the county name and state will appear, along with a list of active alarms.

Left Click once on a county and a window will be displayed showing the [actual weather text](#)^[127]

that caused the alarm. If more than one alarm is active, you will see each message associated with the active alarms.

Note: *Received warnings and watches color the map based on the map legend priority. The first item in the legend, Tornado Warning, has the highest priority. To change the priority, see the Setup section.*

Note: *In order for weather products to be displayed on the map, they must be setup in Weather Message server. WxMap recognizes these products: TOR, FFW, SVR, WSW, SLS, WOU and FFA. Other products can be sent to WxMap and associated with a color, see the setup section for more information.*

To assist you with identifying counties that have been recently placed under a watch or warning, the application will draw a highlighted line around the county. This line will remain for 5 minutes. When there are many counties under watches or warnings, you will be able to easily see which ones were just placed under a watch or warning.

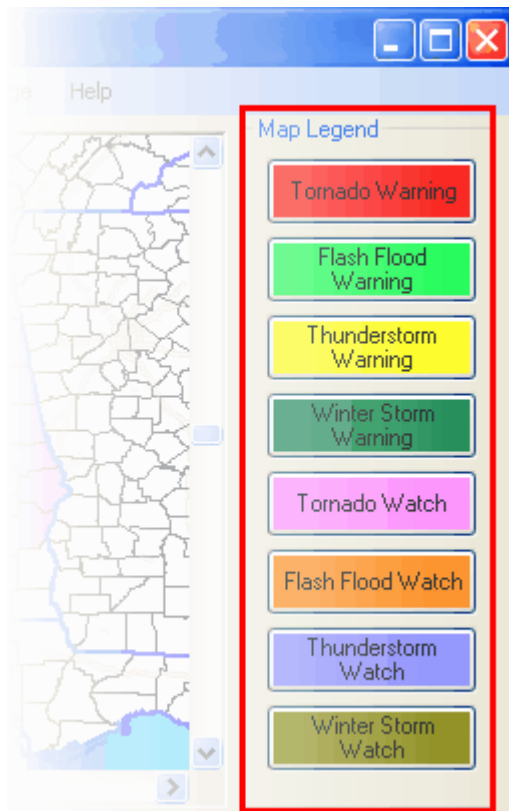
The application will also draw a dark blue line around counties that have alarms which are about to expire. Five minutes before the alarm is to expire, the program will outline the county. This will assist you with identifying counties that have alarms about to expire.

Special Keys

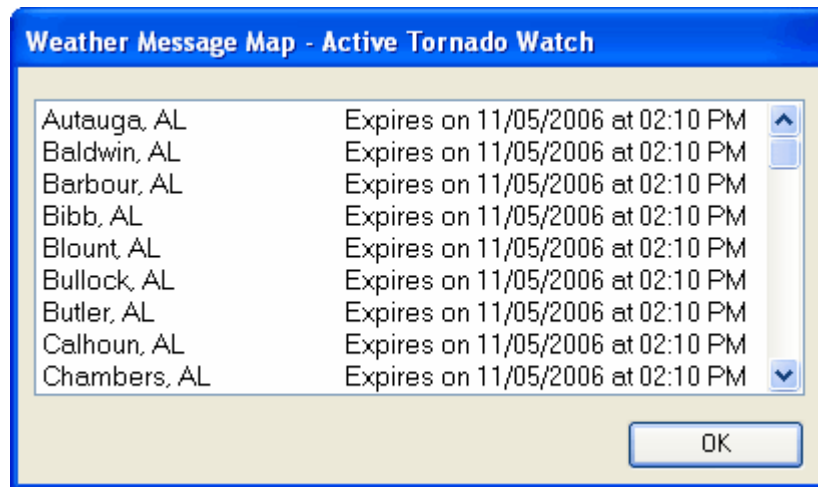
Pressing control-s while the main window has focus causes the program to save the map image using the information setup for images.

11.4 Map Legend

The Map Legend buttons allow you to quickly get a list of counties included in a specific weather type.



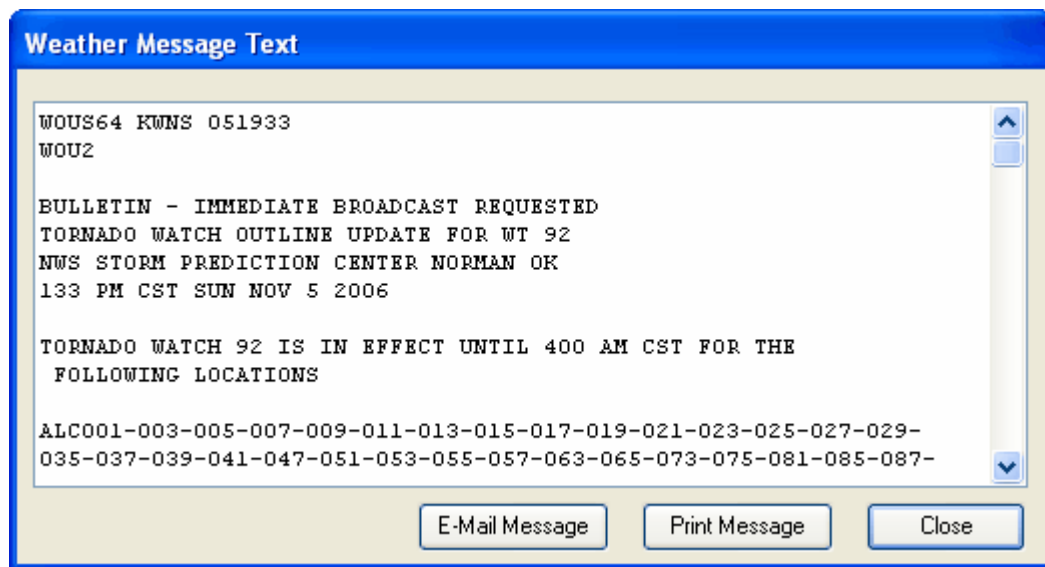
Click on one of the weather type buttons to see the active counties.



This window displays the county name and state, along with the expiration date and time. Click on a county name to read the weather text associated with the county.

11.5 County Information

Left Clicking on a county displays a window showing the messages associated with the current alarms.

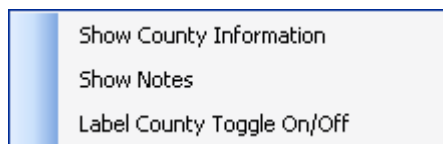


The **E-Mail Message** button opens your email application and inserts the message text in the body of the message.

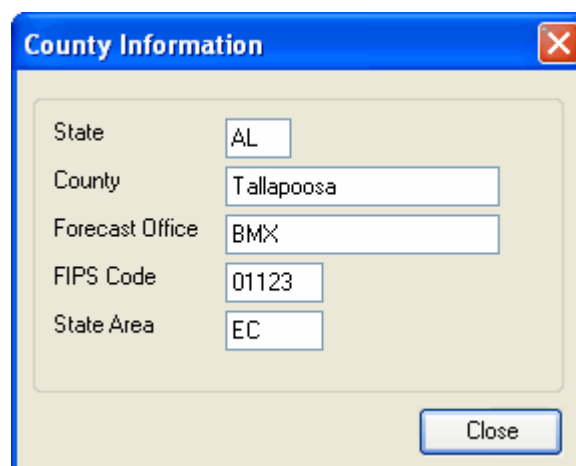
The **Print Message** button prints the message text to your default printer.

The **Close** button closes this window.

Right Clicking on a county displays this menu.

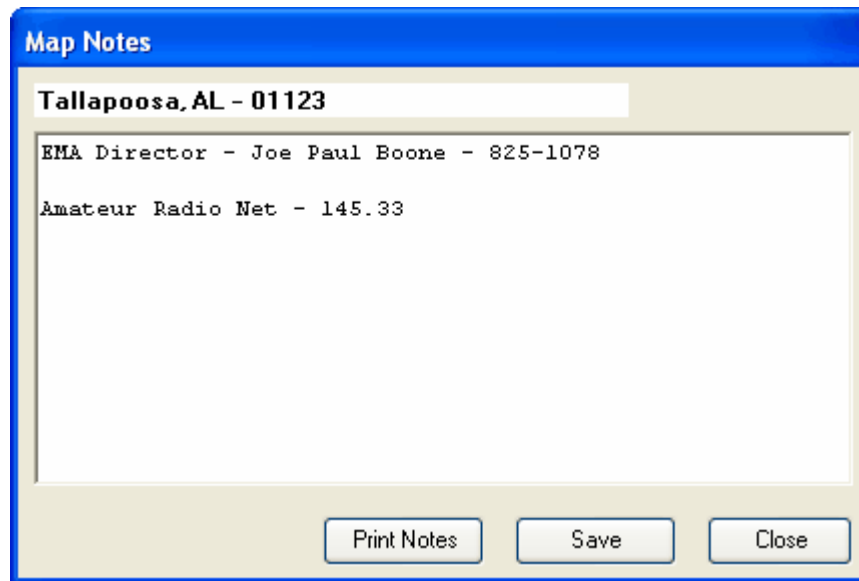


Select **Show County Information** to display National Weather Service information about the county.



Hint: This screen can help you identify the Forecast Office assigned to your county.

The **Show Notes** option opens a window that allow you to record information about that county.



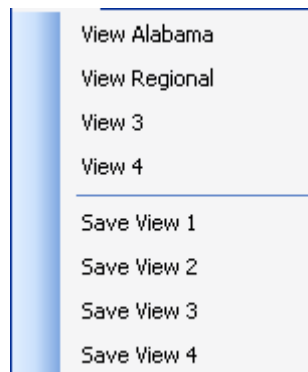
The **Print Notes** button prints the displayed notes to your default printer. Click **Save** to save any changes and **Close** to close this window.

Note: *The notes for each county are stored in the ..\WxMesgNet\MapNotes directory. They are stored as rich text (RTF) files and can be edited with any RTF editor. Fonts and colors can be included when using an external editor.*

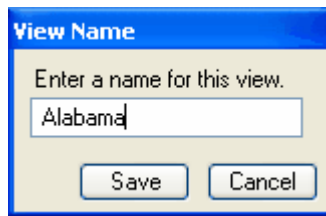
The **Label County Toggle On/Off**, when On for a county, causes the county's name to be displayed on the map.

11.6 Views

The Views Menu option allows you to preset different map views. This capability allows you to establish 4 different views to quickly reposition the map to the defined areas.



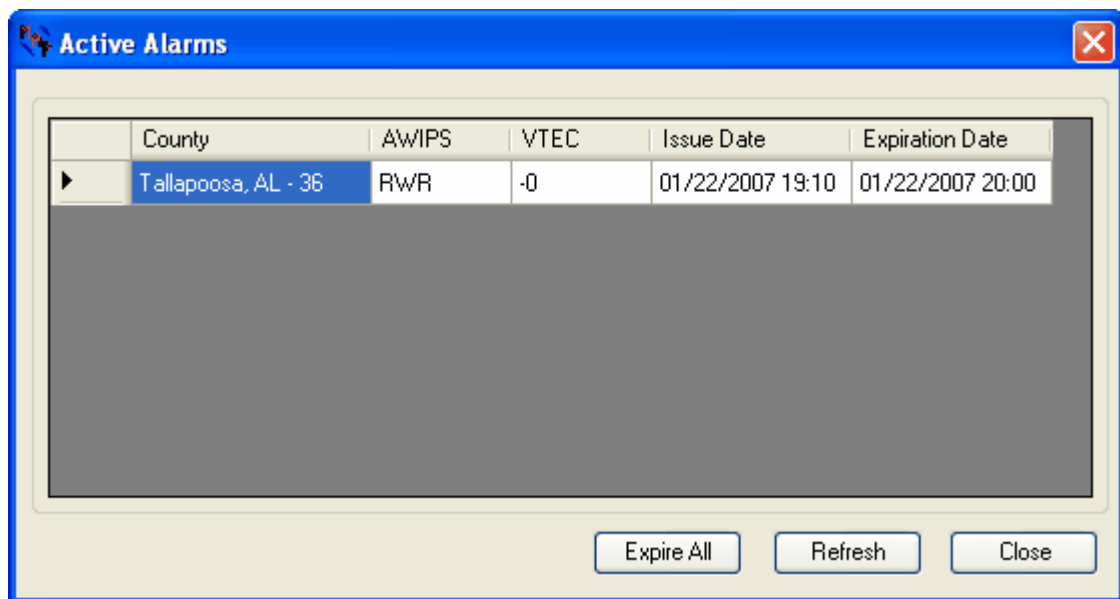
To preset one of the four views, position the map for the area to be included in the view. Click on one of the Save View items. You will be prompted to enter a name for this view.



The name you entered will now be displayed in the View menu.

11.7 Active Alarms

The Active Alarms Menu option allows you to view the current alarms.



The alarm grid display information about each active alarm. The columns and rows can be expanded to show hidden information. The columns and rows can be extended by clicking a row or column line and dragging the line. You can also sort the information by clicking on the column identifier.

Right click an entry to expire a product or click the **Expire All** button to expire all active alarms.

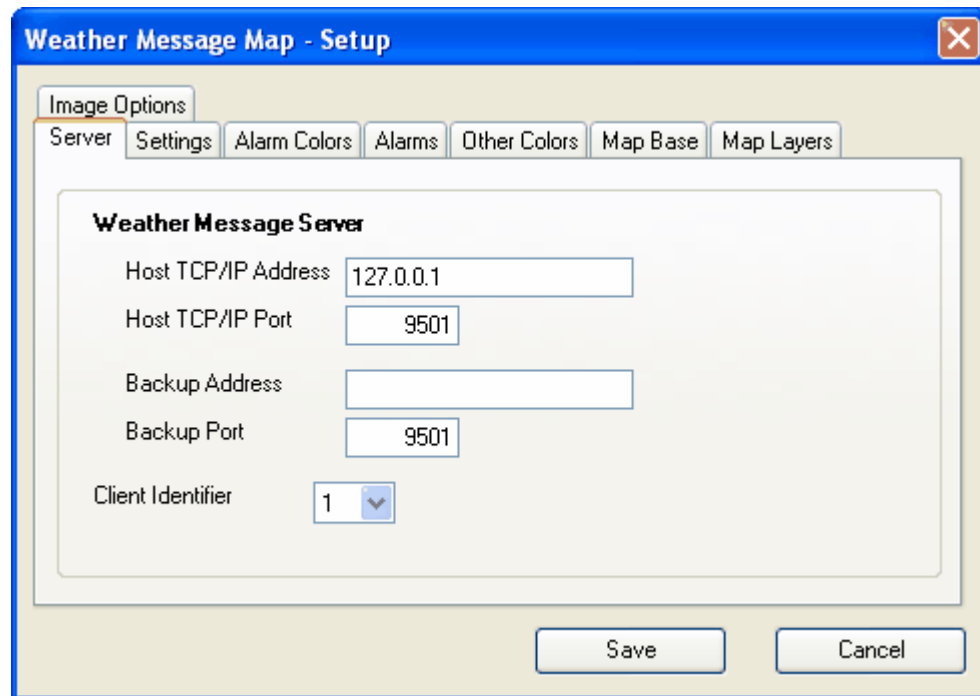
The **Refresh** button will refresh the alarm grid.

Note: *The alarm grid will automatically refresh every 30 seconds.*

11.8 Setup

11.8.1 Server Tab

The Server Tab is used to define the communications information to Weather Message Server.



The **Host TCP/IP Address** is the address of the Weather Message Server. Enter the address of your primary server in this field. The default is 127.0.0.1 for the local computer.

The **Host TCP/IP Port** is the port defined by Weather Message Server for connections. The default is 9501.

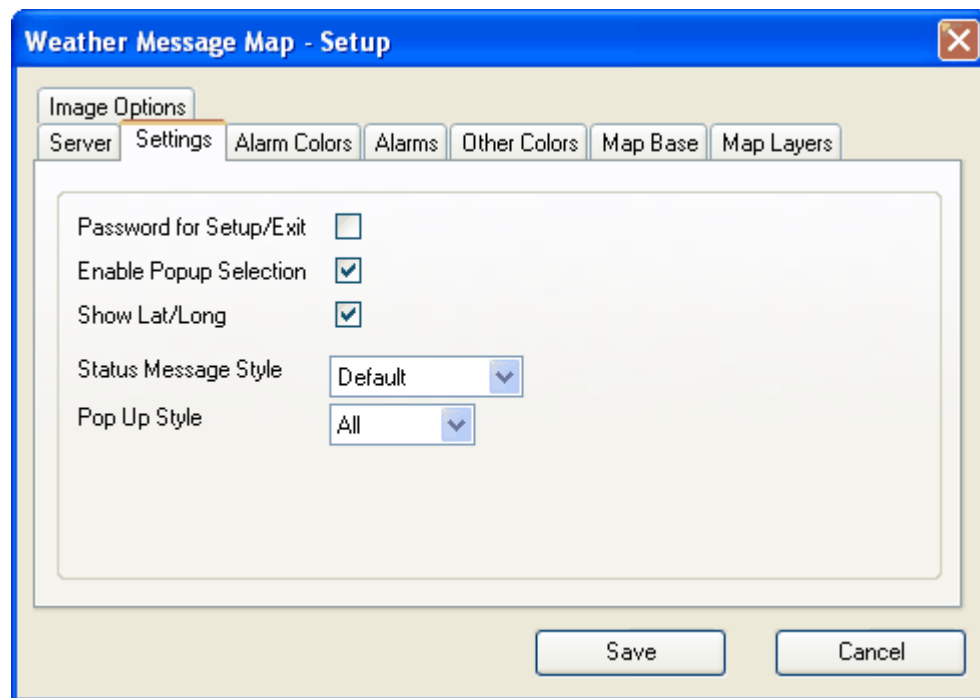
The **Backup Address** is the TCP/IP address of your backup Weather Message Server. Do not enter an address in this field if you do not have a backup Weather Message Server. This address is used when the program cannot contact your primary Weather Message Server.

The **Backup Port** is the port defined for use by the backup Weather Message Server. The default is 9501.

The **Client Identifier** field allows you to assign each Message Client a different identification number. This identifier can be used to send a specific alarm to a specific client or group of clients.

11.8.2 Settings Tab

The Settings Tab is used to operational information for WxMap.



The **Password for Setup/Exit** option allows you to require a password to access the Setup menu or exit the program.

The **Enable Popup Selection**, when checked, will give the user the capability to enable or disable the applications popup operation. The Enable/Disable option will appear on the system tray menu.

The **Show Lat/Long**, when checked, displays the latitude and longitude for the mouse cursor in the status bar.

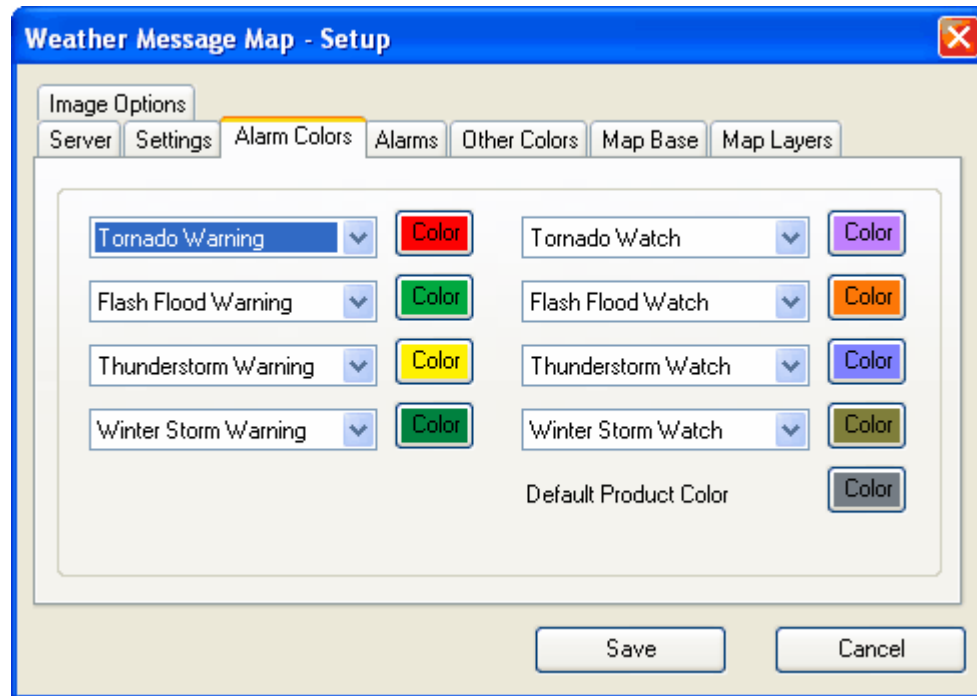
The **Status Message Style** allows you to select the color scheme used for the status message box. The status message shows new alarms as they are received. You can select whether to show these messages in the color of the type of alarm that is being received. Messages not related to arriving alarms are displayed with a white background and black text. The Status Message Style can be set to Default – background is white, text is black; Map Color – background is text color, text is map color; or Text Color – background is map color, text is text color.

The **Pop Up Style** allows you to determine how WxMap window reacts to arriving alarms. The settings are All, All On Top, Alarms and Never. The All setting causes WxMap to popup the main window if it is minimized. The All On Top setting causes WxMap to popup the main window if it is minimized and makes the WxMap window the window that appears on top of all other open windows. If you use this option, any alarm will cause WxMap to appear on top of all other running programs and be the active program. The Alarms setting uses the popup and on top option on the Alarm tab to determine when the main window should be displayed. The Never setting causes WxMap to not popup a minimized window when an alarm arrives.

11.8.3 Alarm Colors Tab

The Alarm Colors Tab is used to set the priority and colors for weather types displayed in the

map legend.



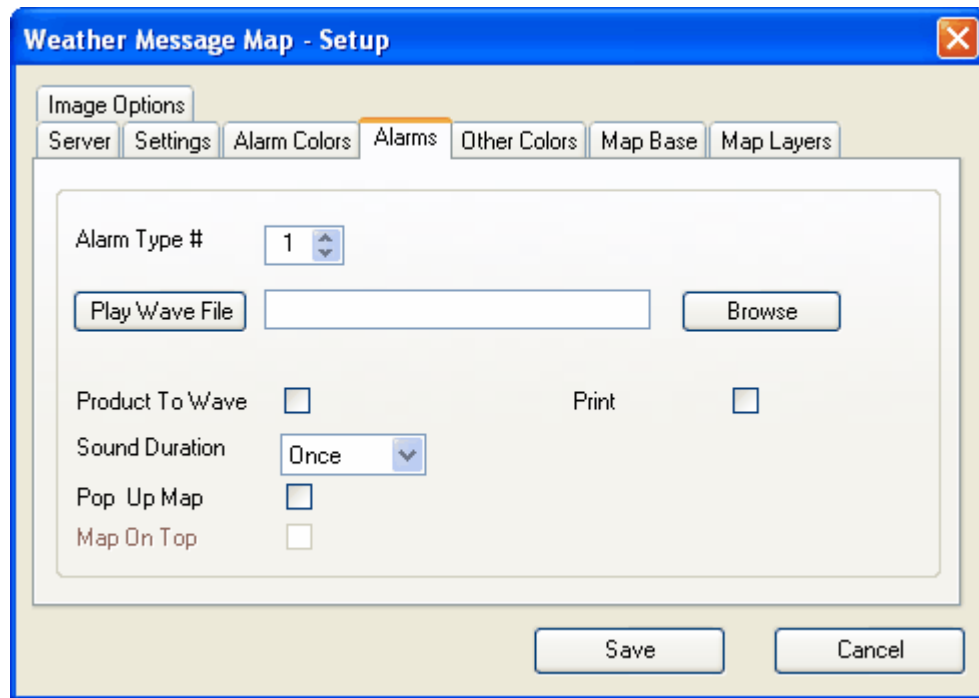
The order of warning and watch products can be changed. To rearrange the products, use the down arrow next to each item to select a different product order.

To change a background color, left click on the Color button you want to change. To change the text color, right click on the Color button.

Products sent to WxMap, with no associated color, will be colored in the Default Product Color. See the [Other Colors Tab](#) ¹³⁵ to establish colors for other products.

11.8.4 Alarms Tab

The Alarms Tab is used to set sounds, colors, print and popup options for 20 alarms.



The Weather Message Server Setup program allows you to associate an **Alarm Type** for each alarm that is sent to the Message Client. This **Alarm Type** causes WxMap to play a wave file and pop-up a minimized screen, based on your settings.

Note: *The Message Client and WxMap use the same alarm type.*

WxMap supports up to 20 different alarm types. To select a specific alarm type, click on the up or down buttons adjacent to the Type # field. Click on the **Browse** button to select a wave file. Each wave file can be played, **Once**, for **1 minute**, or **Continuous**. To hear the sound associated with the alarm, click the **Play Wave File** button. Alarms can be silenced, by clicking on the Silence button. The number of the alarm to be played is determined when the Alarm is established in Weather Message Server Setup.

The **Product to Wave** option is used when you want a specific sound to be played based on the product identifier. When using this option, you will create a wave file that has the same name as the product identifier. This wave file should be saved in the "Sounds" directory located in the WxMesgNet directory.

When this option is enabled, the program will look for a wave file in the "Sounds" directory that is named like the product being received. It will first look for the complete 6 character product identifier and play that file. If the 6 character product identifier is not found, it will look for a file with the first 3 characters of the product identifier and play that file. If neither are found, it will play the default wave file associated with this alarm.

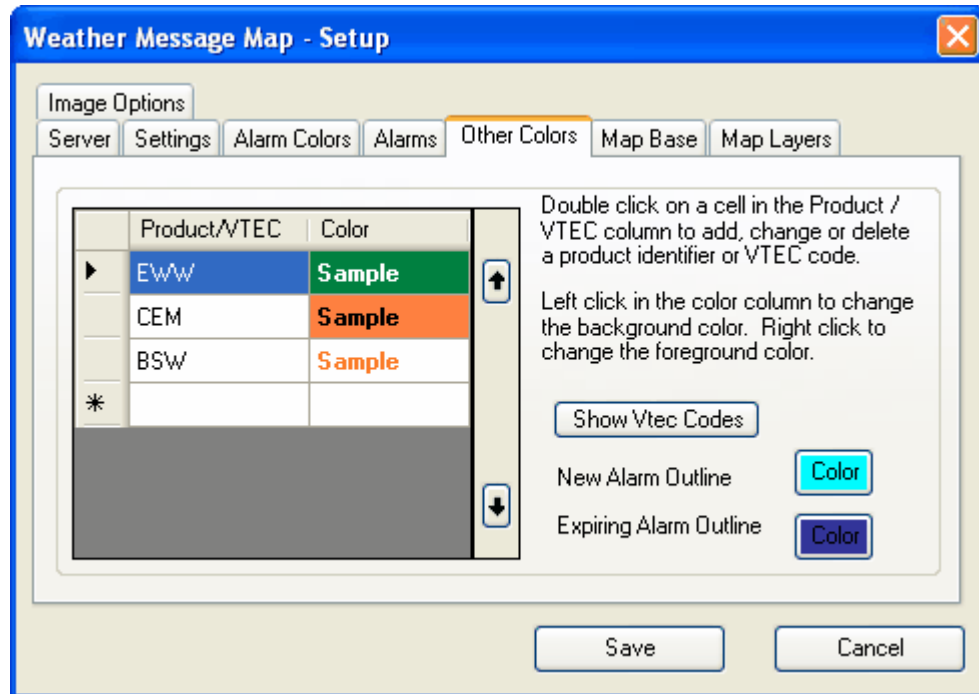
Here are some examples of using the Product to Wave option. The following files are stored in the "Sounds" directory; "TORBHM.wav", "TOR.wav". With the Product to Wave enabled for Alarm Type 1, the program will look at each received product associated with Alarm Type 1. If the incoming message contains the product identifier "TORBHM", the program will play the file "TORBHM.wav". If it receives "TORHUN", it will play the file "TOR.wav" since it cannot locate a file labeled "TORHUN.wav".

The **Pop Up Map** option specifies whether WxMap pops up a minimized window when this alarm

arrives. The **Map On Top** setting can be used to make the WxMap window the window that appears on top of all other windows. If you use this option, an alarm will cause WxMap to appear on top of all other running programs.

11.8.5 Other Colors Tab

The Other Colors Tab is used to establish colors for products not listed in the map legend.



The Product / VTEC column contains the first three letters of the AWIPS identifier or a two letter VTEC phenomena followed by a one-letter significance to be colored. To add a new product identifier or VTEC code, scroll down to a blank cell and click in the cell. Enter the product identifier and press enter. Then right click in color column to change the foreground (text) color or left click to change the background color.

The order of products in this list controls the priority. Items at the top of the list have a higher priority than products at the bottom of the list. To change the order, select a product and use the up and down arrows to the right of the color column.

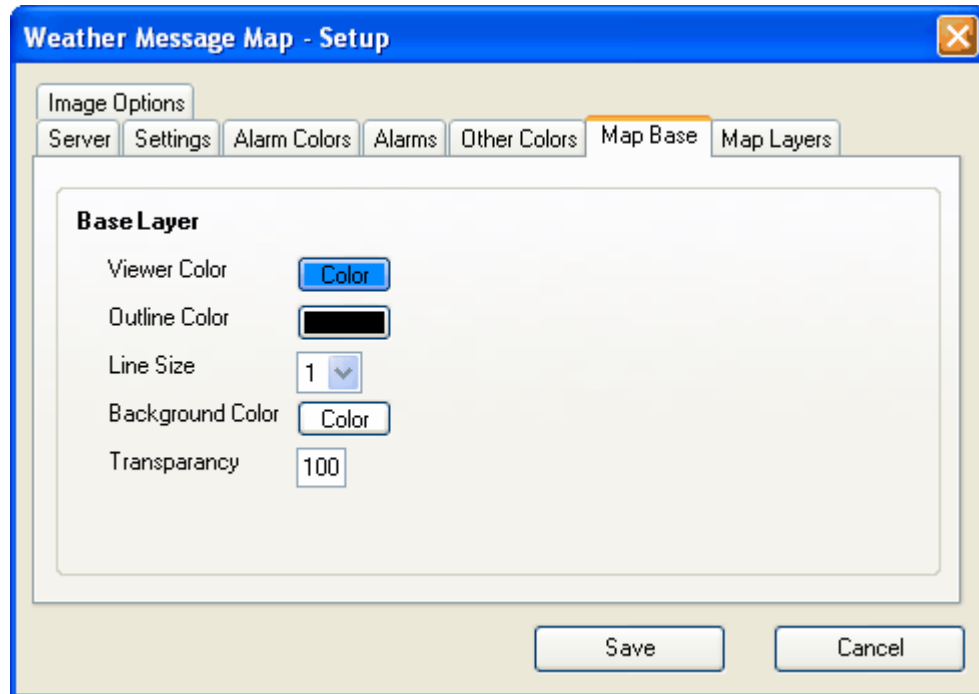
To view a list of VTEC phenomena and significances, click on the **Show Vtec Codes** button. Using the VTEC phenomena and significance codes allows you to color the many different phenomena contained in WSW (winter weather) and NPW (non-precipitation) messages.

The New Alarm Outline color specifies the border color for new products. Click on the Color button to change this color.

The Expiring Alarm Outline color specifies the border color for expiring products. Click on the Color button to change this color.

11.8.6 Map Base Tab

The Map Base Tab is used to set colors and options for the base map.



The **Viewer Color** button allows you to change the color of the areas outside of the map. This is normally the color of the oceans.

The **Outline Color** button allows you to change the outline color of the counties.

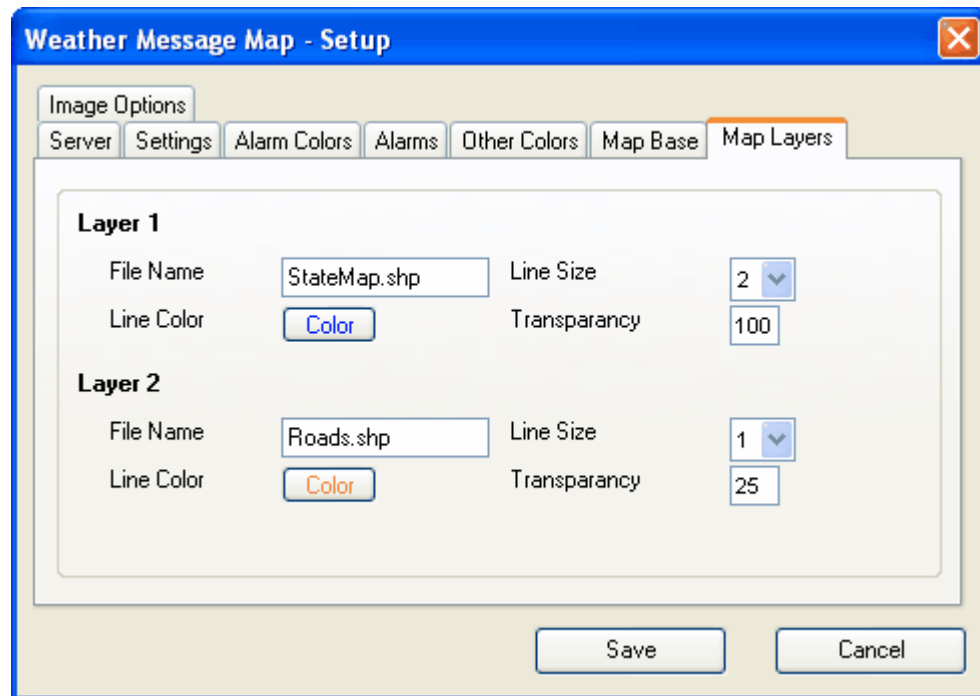
The **Line Size** field specifies the size of the line used to draw the county outline.

The **Background Color** button allows you to change the background of the counties.

The **Transparency** field allows you to control how the layer is painted over the viewer. One hundred ("100") is a completely transparent background, while zero ("0") is no transparent background.

11.8.7 Map Layers Tab

The Map Layers Tab is used to setup additional map layers.



The default installation includes the state map layer. This layer is used to outline the states. The Weather Message website has an optional map layer download that contains interstate roads. T

The **File Name** field contains the name of the map layer.

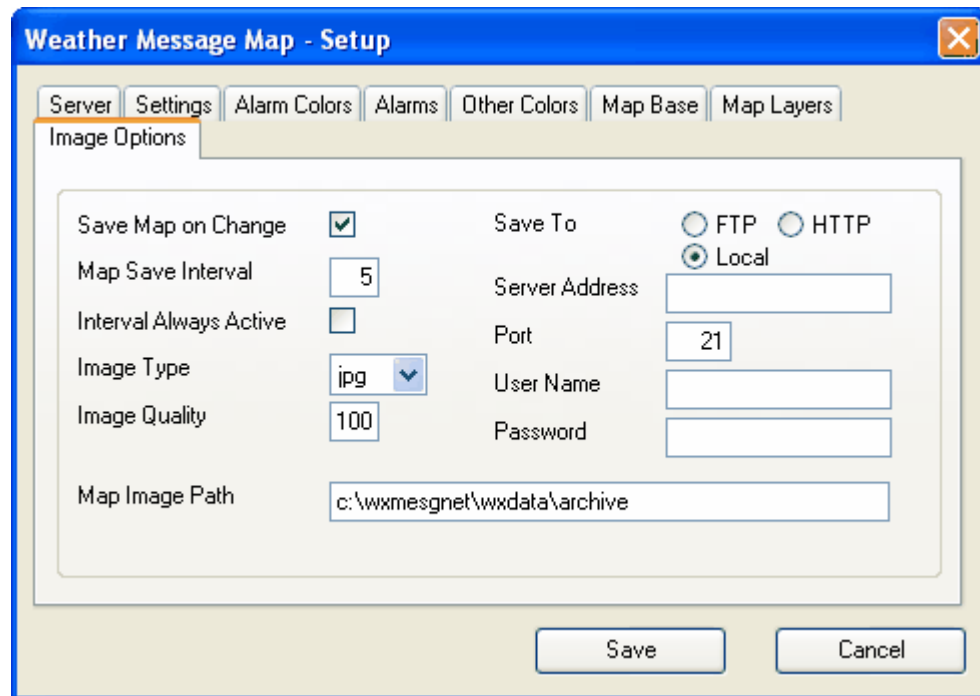
The **Line Size** field specifies the size of the lines in the layer.

The **Transparency** field allows you to control how the layer is painted over the county map layer. One hundred ("100") is a completely transparent background, while zero ("0") is no transparent background.

Hint: The optional map layers must be located in the `..\WxMesgNet\Maps` directory.

11.8.8 Image Options Tab

The Image Options Tab is used to



The **Save Map on Change** option will cause the program to save an image of the map each time it changes.

The **Map Save Interval** field sets the amount of time in minutes that the program will automatically save the map image, when the Save Map on Change option is enabled. You can set this interval to zero. When it is set to zero, the program will only save the map when it changes.

The **Interval Always Active** causes the program to save the map image, at the specified interval, even if there are no active watch/warnings. When this option is unchecked, the program will only save the map image when there is a change or active watch/warnings.

The **Image Type** field allows you to select the format of the saved image. Select JPG, PNG, BMP or TIF.

The **Image Quality** field allows you to specify the quality of the saved image. For JPG images, zero ("0") represents the lowest quality, while one hundred ("100") represents the highest quality. For PNG images, zero ("0") represents no compression, while one hundred ("100") represents full compression. You can enter a number in the range of zero to one hundred.

The **Map Image Path** is the local or server directory where the map image should be stored. The application will automatically add the name, "MapImage.xxx", when it saves the image.

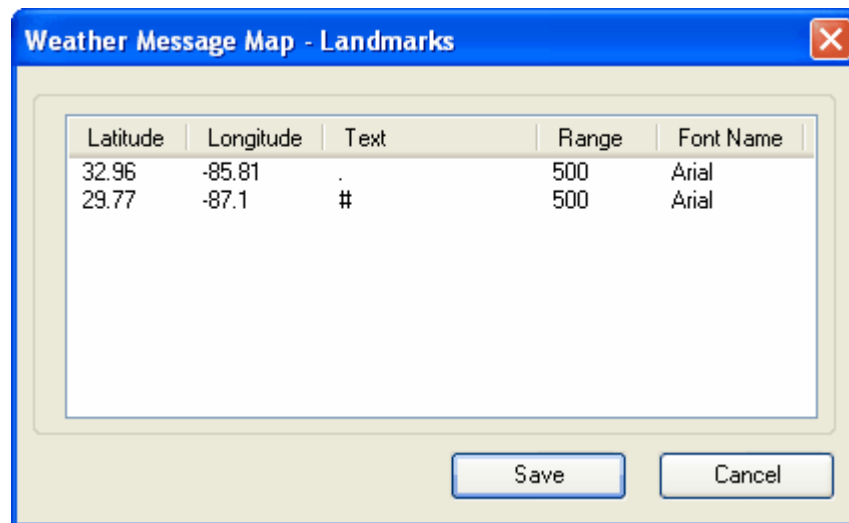
Select the **Save To** type, Local, FTP or HTTP. If FTP or HTTP is selected, the program will allow you to enter information about your FTP or HTTP server. Enter the FTP Server address, Port number, User Name and Password. These settings will be used to log into your server.

11.9 Map Landmarks

Enter topic text here.

11.9.1 Overview

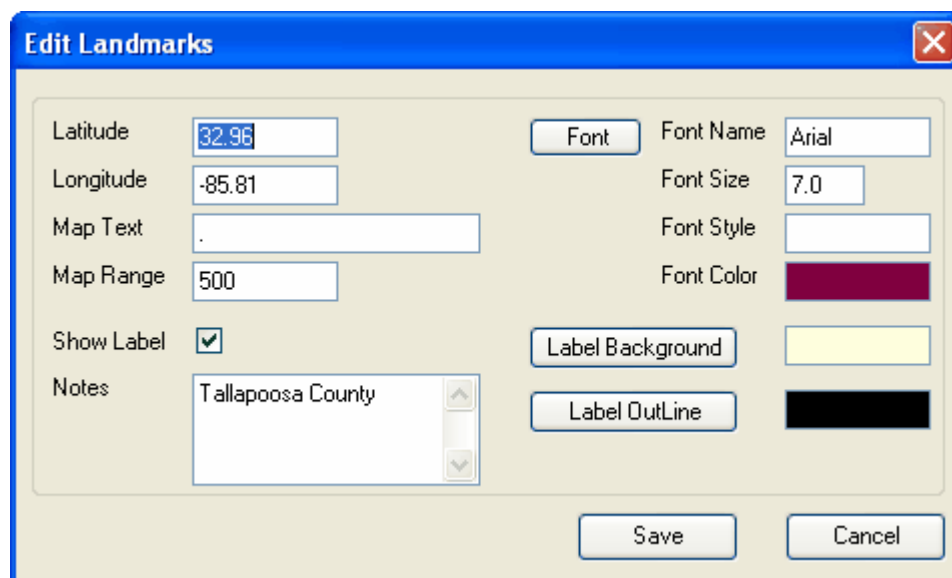
You can setup landmarks to be displayed on the map. These landmarks can be a simple point, a name, or the current date and time.



To add, change or delete a landmark, click on the line that you want to modify and right click, then select the appropriate function, Add, Edit or Delete.

When adding or editing a landmark, the [Edit Landmark](#) ⁽¹³⁹⁾ window is displayed.

11.9.2 Landmark



Enter the **Latitude** and **Longitude** for the landmark. This coordinate will be the center position for the landmark. The **Map Text** field contains the text to be displayed on the map. This field supports two special codes. Enter a . (period) to display a point (appears as a small square) on the map, or a # (pound sign) to display the current date and time.

The **Map Range** field allows you to specify the range at which the landmark should be displayed. The program determines the number of miles the currently displayed map is in width. This is the map range. If the range you specify, for this landmark, is greater than or equal to the current map range, it will be shown.

The **Show Label** option indicates whether you want a box drawn around the text. Check this box to draw an outline.

The **Notes** field allows you to enter comments about this landmark. This field is not otherwise used by the software.

The font for the landmark can be selected by clicking on the **Font** button. Although each font field can be manually changed, the recommended method is to use the Font button to select the font. The color of the font can be selected by clicking on the color shown next to the **Font Color** label.

The **Label Background** and **Label Outline** buttons allow you to establish colors for these respective items.

Part

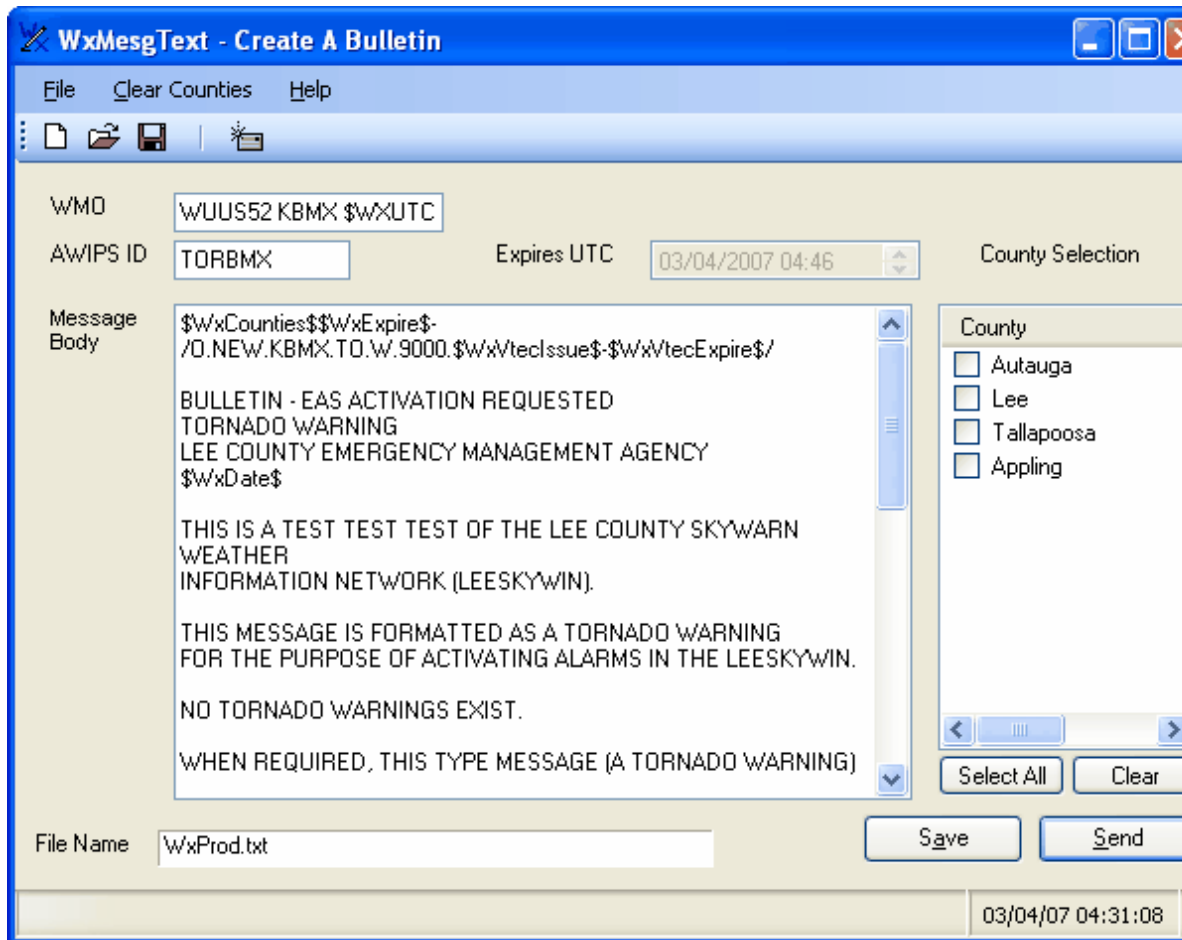


XII

12 WxMesgText

12.1 Overview

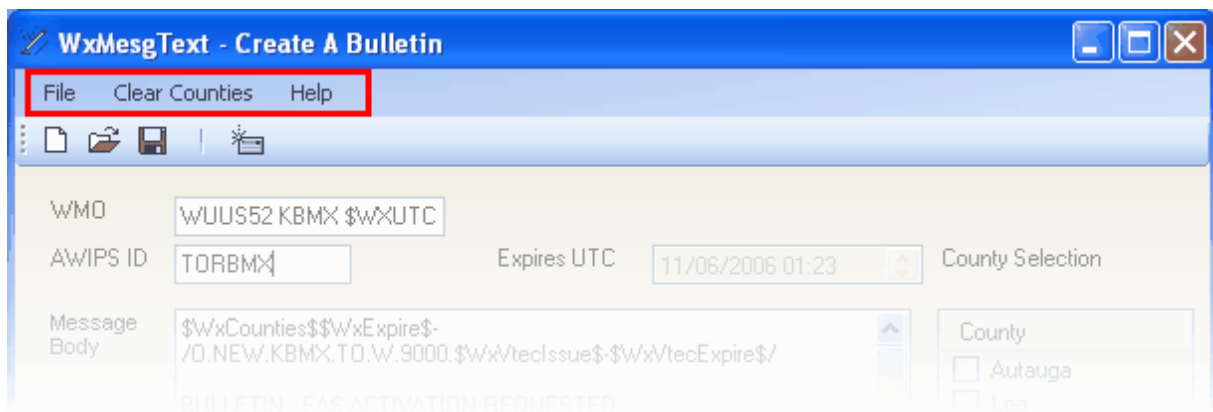
Weather Message - Message Creator is a support application that can be used to create test weather messages. These message can be used to test your alarms, or create local messages for other alerting purposes.



Message Creator has two modes of operation; Expert and Simple. The Expert mode allows you the most flexibility in creating a message. The Simple mode is more suited for first time users.

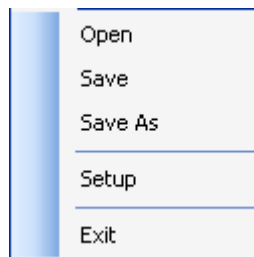
Copyright © 2007 Weather Message Software

12.2 Menu Options



The menu buttons on this screen perform these functions:

The **File** menu allows you to setup this program, show details, view logfiles, and exit the program.

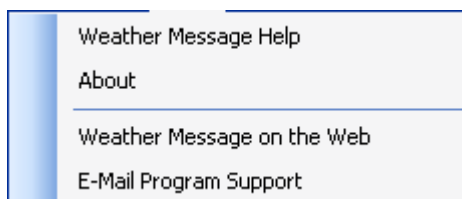


- The **Open** option opens a file dialog box for you to select a message template.
- The **Save** option saves the message that you open with the original file name.
- The **Save As** option saves the message that you entered and allows you to enter a file name.
- The Setup option opens the [Setup](#) window.
- The **Exit** option shuts down the Message Creator.

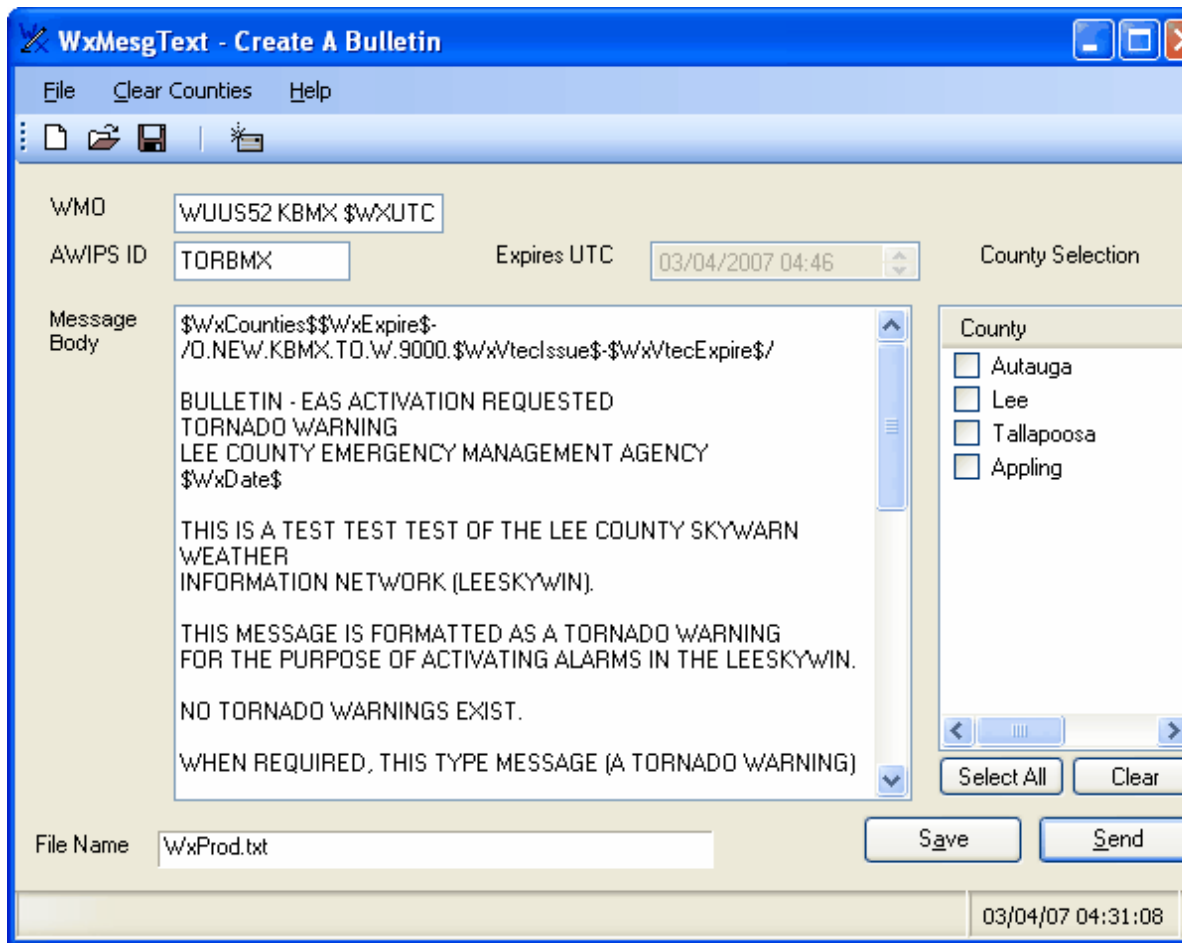
Note: The Open option defaults to the `..\WxMesgNet\WxData\WxLocal` directory. This is the suggested directory for storing message templates.

The **Clear Counties** menu, clears any counties selected in the County Selection box.

The **Help** menu allows you to see this manual, and display information about the program.



12.3 Expert Mode



In the Expert mode, the application attempts to load the default message template file WxProd.txt from the directory ..\WxMesgNet\WxData\WxLocal. This directory is used when Opening and Saving message templates.

The message must be formatted like a standard National Weather Service Message. You can view actual NWS products at <http://www.wxmesg.com/asp/recprod.asp>. The actual messages can be used as examples for formatting.

The following special codes can be used in the message:

\$WxUTC\$	Current UTC time, in the format ddhhmm
\$WxExpire\$	Expiration time, in the format ddhhmm
\$WxDate\$	Current local date and time.
\$WxVtecIssue\$	Issue time for the VTEC line.
\$WxVtecExpire\$	Expiration time for the VTEC line.
\$WxCounties\$	The counties selected for this message.

By using these codes, the program will automatically substitute the current UTC time, message expiration time and the current local date and time in the test message. This keeps you from having to manually enter those parameters. The expiration time is set to 15 minutes after the current time. Look at the screen shot above for the proper location of these variables.

You can change the AWIPS ID and other information to agree with the alarm that you want to test. To test an alarm, the AWIPS identifier and associated counties must match your alarm in Weather Message.

The **Select All** button will select all of the listed counties. The **Clear** button will clear the county selections.

After you have the test message formatted and worded properly, you can now save the message for future reference. Clicking the **Save** button will save the message using the file name displayed.

To send the message to Weather Message Server for processing, click the **Send** button.

12.4 Simple Mode

The Simple mode, as the name implies, is easier to use than the expert mode. The program builds the message based on the information that you select or enter on this screen.

The **Select All** button will select all of the listed counties. The **Clear** button will clear the county selections.

After entering the information for your message, click the **Send** button to send the message to Weather Message Server for processing.

Note: *If the product selected does not support VTEC encoding, the VTEC related boxes will*

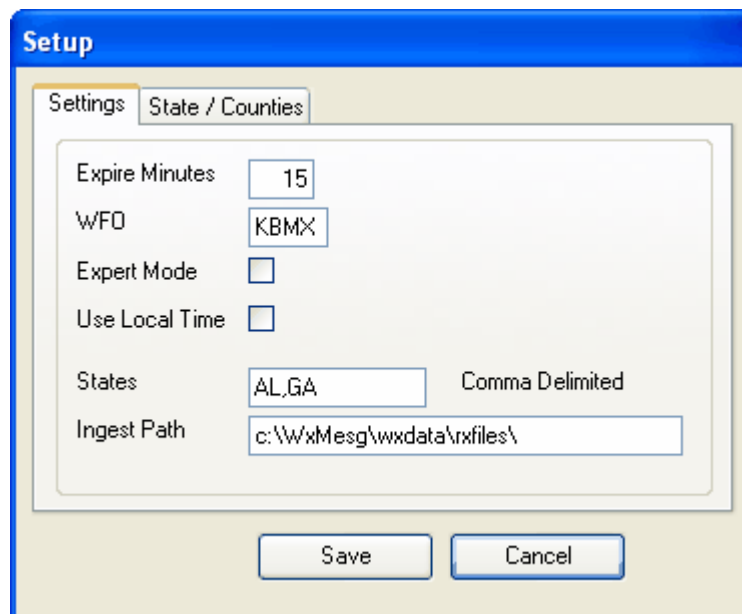
be disabled.

12.5 Setup

Enter topic text here.

12.5.1 Settings Tab

The Settings Tab is used to set operational information for the Message Creator.



The screenshot shows a Windows-style dialog box titled "Setup". It has two tabs: "Settings" (selected) and "State / Counties". The "Settings" tab contains the following fields and controls:

- Expire Minutes:** A text box containing the value "15".
- WFO:** A text box containing the value "KBMX".
- Expert Mode:** An unchecked checkbox.
- Use Local Time:** An unchecked checkbox.
- States:** A text box containing "AL,GA" and a label "Comma Delimited" to its right.
- Ingest Path:** A text box containing the path "c:\WxMesg\wxdata\rxfiles\".

At the bottom of the dialog are two buttons: "Save" and "Cancel".

The **Expire Minutes** field allows you to specify the default number of minutes for the message expiration. These minutes are added to the current time to calculate the message expiration date/time.

Enter your WFO designator in the **WFO** field.

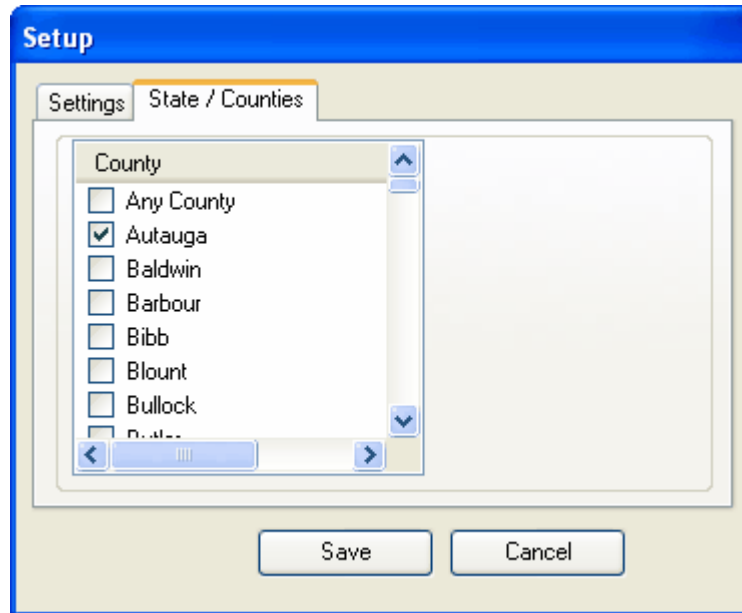
The **Expert Mode**, when checked, puts the application in **Expert**^[143] mode. When it is unchecked, the application operates in the **Simple**^[145] mode.

In order to select counties on the State / Counties Tab, you must enter one or more states in the **State** field. If you enter multiple states, they must be delimited by commas.

The **Ingest Path** should contain the path to the Weather Message Server received files directory. This field should be populated by default.

12.5.2 State / Counties Tab

The Settings Tab is used to select the counties that appear in the County Selection list box.



Place a check mark next to each county that you want to appear in the County Selection list box.

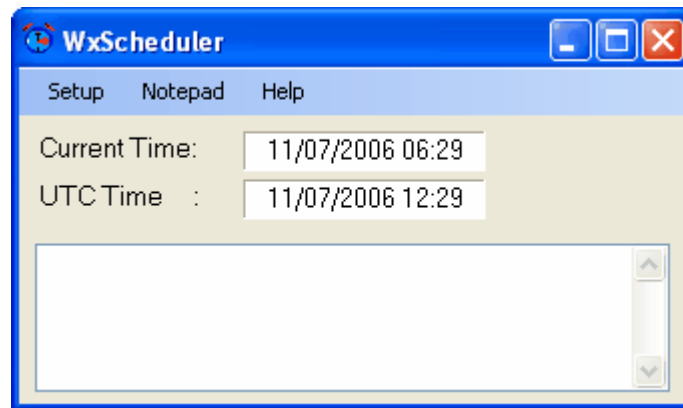
Part



13 WxScheduler

13.1 Overview

The Weather Message Scheduling application, WxScheduler, is used to schedule user-defined messages or retrieve internet products



WxScheduler is generally used for two purposes: to schedule monthly tests of the software and download weather text or graphics from the Internet. By allowing text and graphics to be downloaded from the Internet, weather products not available from EMWIN or Weather Wire can still be obtained for local use and processing.


You can establish schedules to retrieve messages or graphics from local directories, or from the Internet using the FTP or HTTP protocol. The retrieved products are automatically copied to the ingest directory at the user defined time or interval.

The main processing window shows the current status of WxScheduler. When it is processing a message, you will see information about the message scroll in the text box.

To establish schedules see the [Schedule Tab](#)¹⁵².

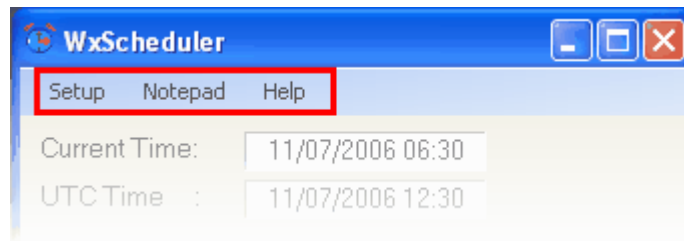
Note: *If WxScheduler is stopped with the window minimized, the next time it is started, it will start minimized.*

System Tray

When WxScheduler is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

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13.2 Menu Options

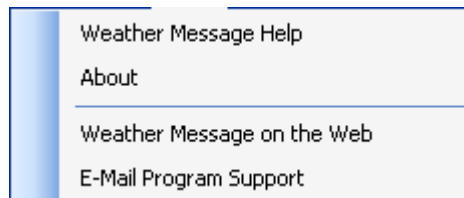


The menu buttons on this screen perform these functions:

The **Setup** menu opens the [Setup Window](#)^[152].

The **Notepad** menu opens notepad. This can be used to edit message templates.

The **Help** menu allows you to see this manual, and display information about the program.



13.3 Creating Text Messages

Before you can begin scheduling user-defined text messages, you must create the messages. First select or create a directory to store your messages. You can use C:\Program Files\WxMesgNet\WxData\WxLocal to store your user-defined messages. This directory is automatically created for use by Message Text Creator and can be shared by WxScheduler. You can use the Notepad menu option to launch Notepad to create the message.

Hint: *WxMesgText and WxScheduler use the same text message format. Messages created can be used by both programs.*

Sample Message

The following screen shows a sample message being created for a monthly system test.

```

TestTor - Notepad
File Edit Format View Help
WUUS52 KBMX $wxUTC$
TORBMX
ALC081-$wxExpire$-
/O.NEW.KBMX.TO.W.9000.$wxvtecIssue$-$wxvtecExpire$/

BULLETIN - EAS ACTIVATION REQUESTED
TORNADO WARNING
LEE COUNTY EMERGENCY MANAGEMENT AGENCY
$wxDate$

THIS IS A TEST TEST TEST OF THE LEE COUNTY SKYWARN WEATHER
INFORMATION NETWORK (LEESKYWIN).

This message is formatted as a TORNADO warning for the
purpose of activating alarms in the LEESKYWIN.
NO TORNADO WARNING EXIST.

```

The file name for the message must end with the extension ".txt". You will also notice that some special program codes are used in the message. These special codes tell WxScheduler where to put special text in the message.

The message must be formatted like a standard National Weather Service Message. You can view actual NWS products at <http://www.wxmesg.com/asp/recprod.asp>. The actual messages can be used as examples for formatting.

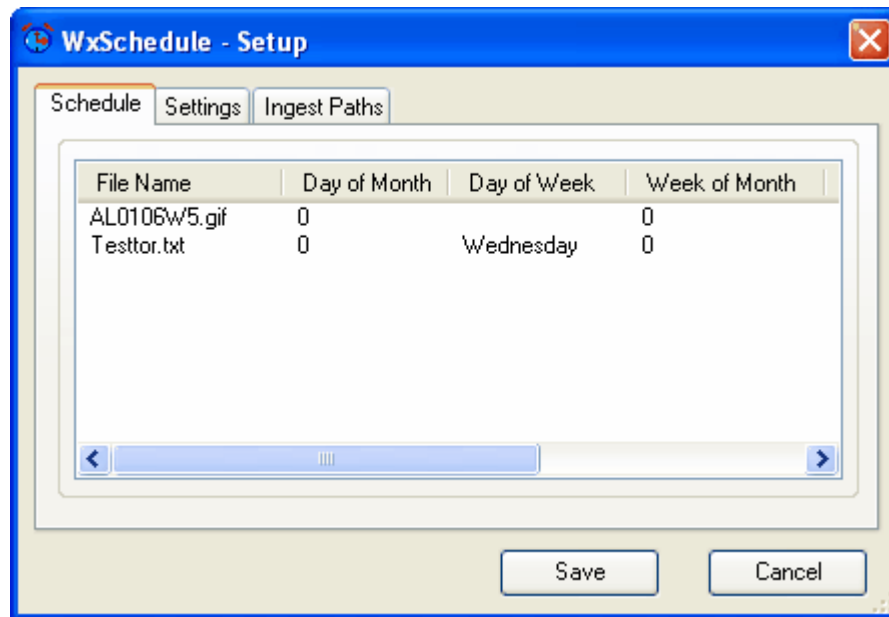
The following special codes can be used in the message:

\$WxUTC\$	Current UTC time, in the format ddhhmm
\$WxExpire\$	Expiration time, in the format ddhhmm
\$WxDate\$	Current local date and time.
\$WxVtecIssue\$	Issue time for the VTEC line.
\$WxVtecExpire\$	Expiration time for the VTEC line.

13.4 Setup

13.4.1 Schedule Tab

The Schedule Tab is used to establish schedules.



To add, change or delete a scheduled item, click on the line that you want to modify and right click, then select the appropriate function, Edit or Delete. When changing an entry, the [Edit Scheduled Item](#) window is displayed.

Hint: To send the message immediately, right click and select the Send Now option.

13.4.1.1 Edit Scheduled Item

The Edit Scheduled Item window allows you to enter the specifics about the item being scheduled.

Select the **Server Type** for this alarm: Local, HTTP or FTP. In the above example, the message will be obtained locally.

The **Server Address**, **Port**, **User Name** and **Password** fields are used when you select the server type HTTP or FTP. When using HTTP or FTP, enter the appropriate Server Address, Port, User Name and Password.

Enter the path and name of the file in the **File Name** field. For local files, you can use the **Browse** button to locate the file. For HTTP or FTP files, enter the location of the file.

In the **Ingest File Name** field, enter the name of the file as it should appear when it is copied to the ingest directory. The base name of the file should not exceed eight characters. The total file name length, including the extension, should be no longer than 12 characters.

Now enter the scheduling information for this message. The **Day of Month**, **Day of Week**, **Week of Month** and **Month** fields can be left blank to indicate "Any". In the above example, for a weekly test, the Day of Month, Week of Month and Month fields are left blank. The Day of Week is specified.

Hint: Make sure that the combinations of Day of Month, Day of Week, Week of Month and Month will occur. If you select the first day of the month and the second week of the month, the criteria for this alarm will never occur.

Before entering a time, select the **At This Time** or **Every Time** to indicate if this item should be processed at a specific time or time interval. Then enter the **Time** or **Time Interval** for this item. The Time must be in 24-hour notation and in the format HH:MM.

The **Duration** field is used to establish an expiration time for text messages that contain UGC lines. It is used to populate the \$WxExpire\$ variable. Enter the length of time for this message. The Duration field must be in the format HH:MM.

The **Send Now** field is used to send this scheduled item immediately. Placing a check mark in this field and saving the item will cause the scheduler to immediately send this item.

Note: *You must exit back to the main screen before it will be sent. The scheduler does not work while you are editing items.*

The **Disabled** field is used to temporarily disable a scheduled item. When this option is checked, the scheduled item will not be processed.

Hint: *The Disabled option is useful when you want to send a message on demand. You can setup the message with a schedule and then disable the message. When you want to send the message, you can right click on the schedule grid and select Send Now.*

The **Drop Duplicates** check box, when checked, will create a CRC32 checksum for each processed file. If the next file processed, for a scheduled item, is a duplicate, the program will not process the file. This option is useful if you are using WxScheduler to retrieve graphics from web sites. In most cases, you do not know when a web site file will change. This option will allow you to retrieve a file on a schedule and only process the file when it has changed.

Edit Scheduled Item

Server Type: Local HTTP FTP

Server Address: Port:

User Name: Password:

File Name:

Ingest File Name:

Schedule

Day of Month: Day of Week:

Week of Month: Month:

Time Interval: At This Time: Every Time:

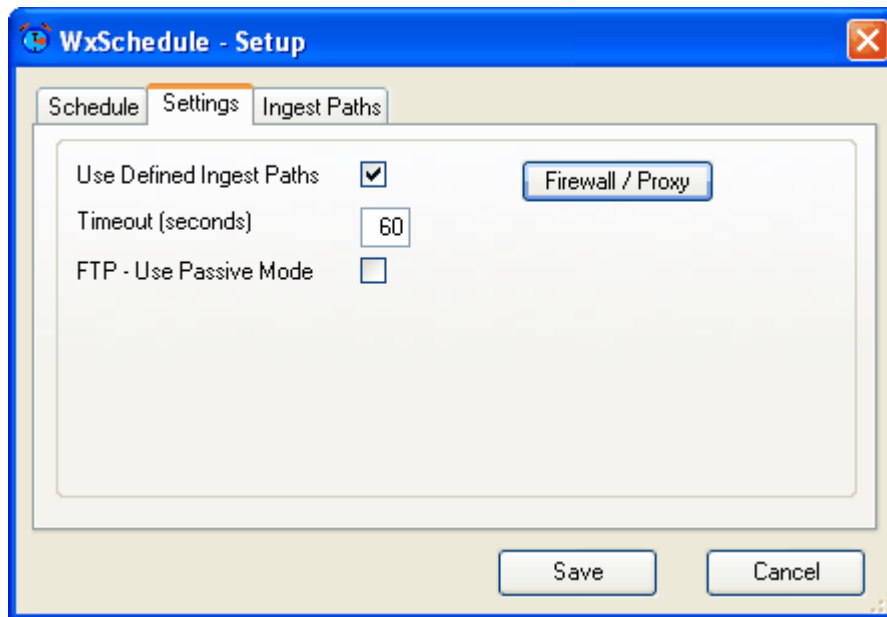
Message Duration:

Send Now: Disabled: Drop Duplicates:

The above screen shows a graphic, from the National Hurricane Center, that is scheduled to be retrieved from the Internet every 15 minutes, using HTTP.

13.4.2 Settings Tab

The Settings Tab is used to establish general program option.



The **Use Defined Ingest Paths** check box, when checked, will cause the program to use the ingest paths defined in the ingest programs. If you want to define your own ingest paths for the scheduler, uncheck this box.

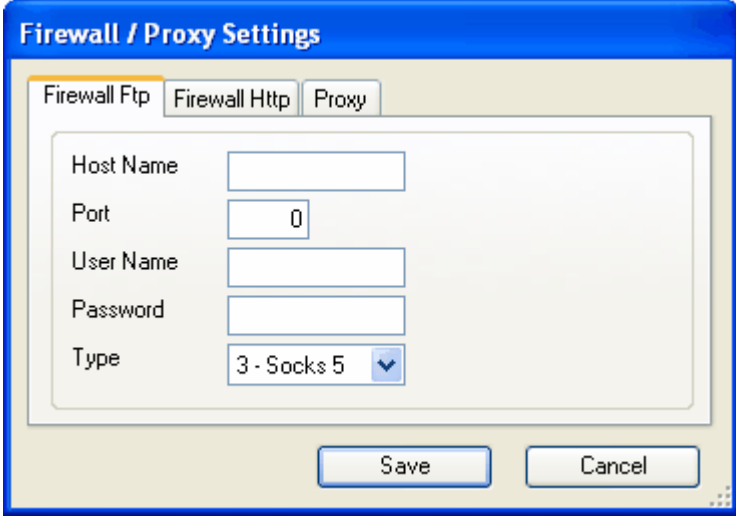
The **Timeout** field allows you to specify the maximum amount of time the program will wait for the HTTP or FTP servers to respond.

The **FTP – Use Passive Mode** option, when checked, will cause the ftp program to use the passive mode. This option may be needed for firewalls that restrict incoming connections.

The **Firewall / Proxy** button allows you to configure Firewall and Proxy settings for your computer. See [Firewall / Proxy](#)^[33].

13.4.2.1 Firewall / Proxy

The Firewall / Proxy window allows you to configure firewall / proxy information for your computer.



The screenshot shows the 'Firewall / Proxy Settings' dialog box with the 'Firewall Ftp' tab selected. The dialog contains the following fields and controls:

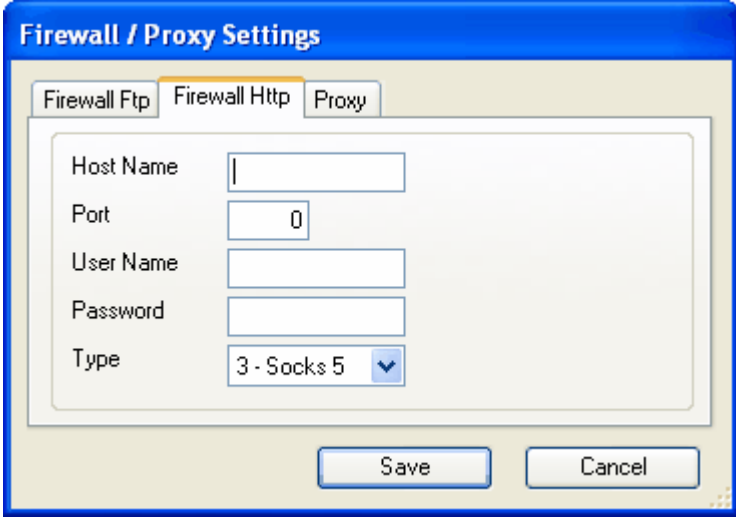
- Host Name:
- Port:
- User Name:
- Password:
- Type: (dropdown menu)
- Buttons: Save, Cancel

For a FTP firewall, enter the domain name or TCP/IP address of the firewall in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup in the firewall.

Select the **Type** of firewall. Valid entries are 1-Tunnel, 2-Socks version 4, or 3-Socks version 5.



The screenshot shows the 'Firewall / Proxy Settings' dialog box with the 'Firewall Http' tab selected. The dialog contains the following fields and controls:

- Host Name:
- Port:
- User Name:
- Password:
- Type: (dropdown menu)
- Buttons: Save, Cancel

For a HTTP firewall, enter the domain name or TCP/IP address of the firewall in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup in the firewall.

Select the **Type** of firewall. Valid entries are 1-Tunnel, 2-Socks version 4, or 3-Socks version 5.

The screenshot shows a dialog box titled "Firewall / Proxy Settings". It has three tabs: "Firewall Ftp", "Firewall Http", and "Proxy", with "Proxy" being the active tab. The dialog contains the following fields and controls:

- Host Name:** A text box containing "192.168.0.1".
- Port:** A text box containing "87".
- User Name:** An empty text box.
- Password:** An empty text box.
- HTTP Version 1.0:** A checkbox that is currently unchecked.
- Buttons:** "Detect Proxy", "Save", and "Cancel".

For a Proxy access, enter the domain name or TCP/IP address of the proxy in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup for the proxy.

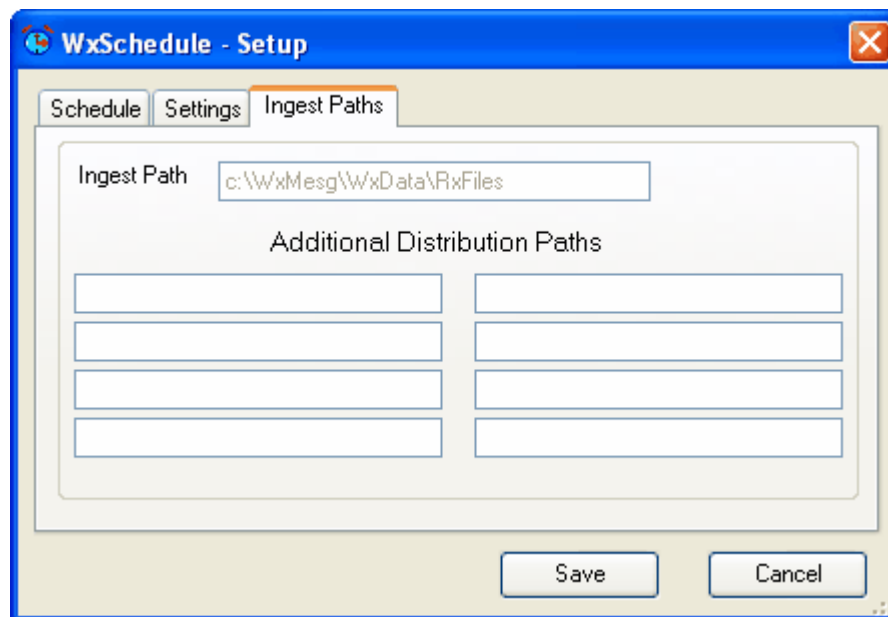
If **HTTP version 1.0** is required for the proxy server, check this box.

The **Detect Proxy** button will automatically detect the proxy settings for your computer and populate the host name and port fields.

Note: *The Firewall / Proxy settings are common to all Weather Message applications. Changing these settings will automatically change them for the other applications.*

13.4.3 Ingest Paths Tab

The Ingest Paths Tab is used to define the directories that will store the received weather products for processing.



The **Ingest Path** is defined in the Weather Message Server setup screen and would not normally be entered here.

The **Additional Distribution Paths** can be used to place a copy of the received weather text in different directories for processing by other programs. For example, if you use Weather Message to receive your weather data, you can put a copy of the received messages in a second or third directory for processing by RealEMWIN or the Weather Message Retransmission program.

Note: *If the Use Defined Ingest Paths setting is checked, you will not be able to change the paths listed.*

Part

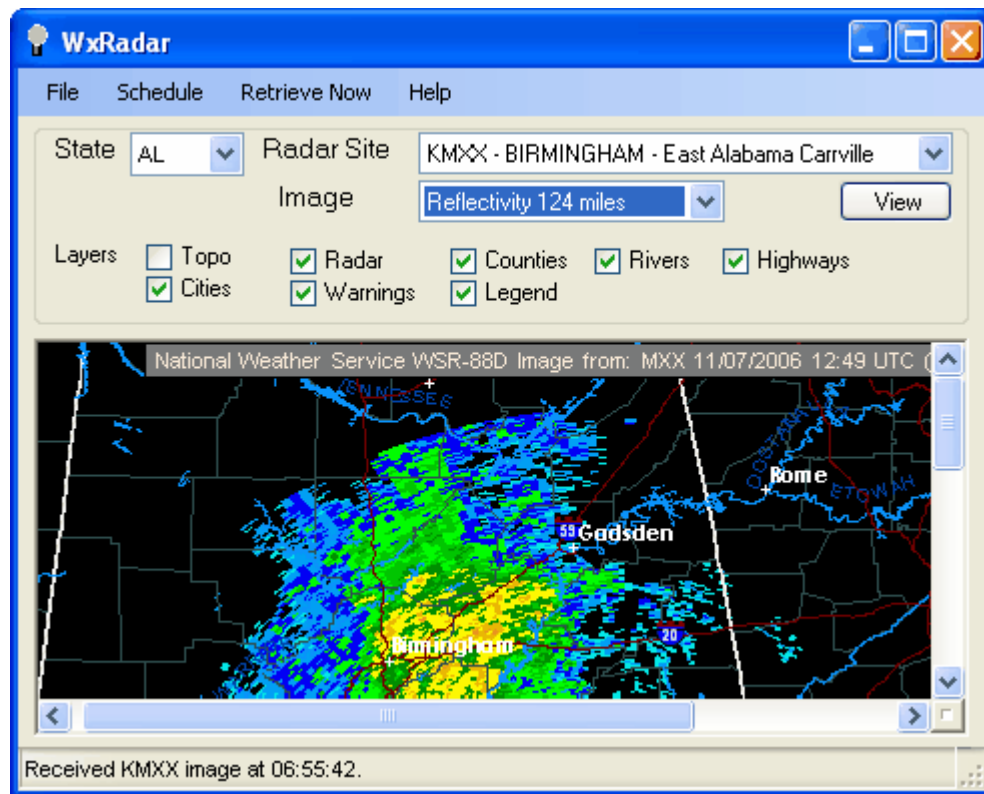


14 WxRadar

14.1 Overview

WxRadar is a support application that can be used to automatically retrieve radar images. It can retrieve a specific radar site for viewing on the screen, or schedule single or multiple radar sites for ingesting by Weather Message or other programs. WxRadar requires Internet access.

If you plan to use WxRadar to retrieve images on a schedule, it should be placed in the startup box in Windows. This will insure that the program is automatically started each time the computer is booted.




When scheduling radar images, the images that are received will be copied to directories for other programs to process. You can use it in conjunction with Weather Message to FTP images to a website or WxReTran for EMWIN retransmission. See [Scheduling](#) [165].

Images processed by Weather Message Server can be made available to the Weather Message Client Image Viewer. The Image Viewer can then be used to animate the received radar images.

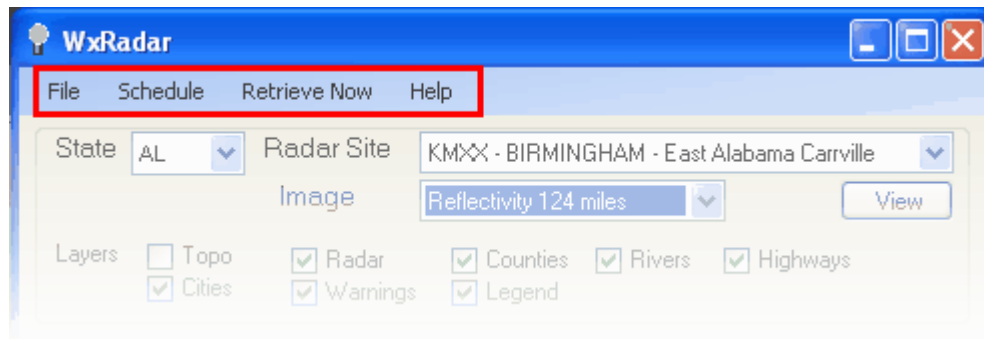
Note: *If WxRadar is stopped with the window minimized, the next time it is started, it will start minimized.*

System Tray

When WxRadar is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

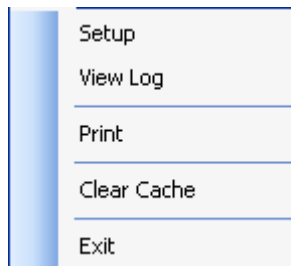
Copyright © 2007 Weather Message Software

14.2 Menu Options



The menu buttons on this screen perform these functions:

The **File** menu allows you to setup this program, view logfile, print the current radar image and exit the program.

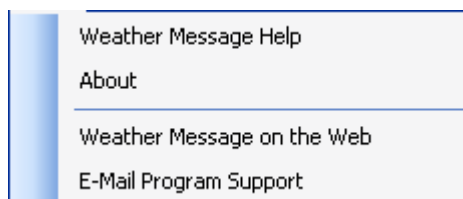


- The **Setup** option opens the [Setup window](#)¹⁶⁹.
- The **View Logfile** displays the radar log file in notepad.
- The **Print** option prints the current radar image on your default printer.
- The **Clear Cache** option clears the radar cache directory of all static image overlays.
- The **Exit** option shuts down WxRadar.

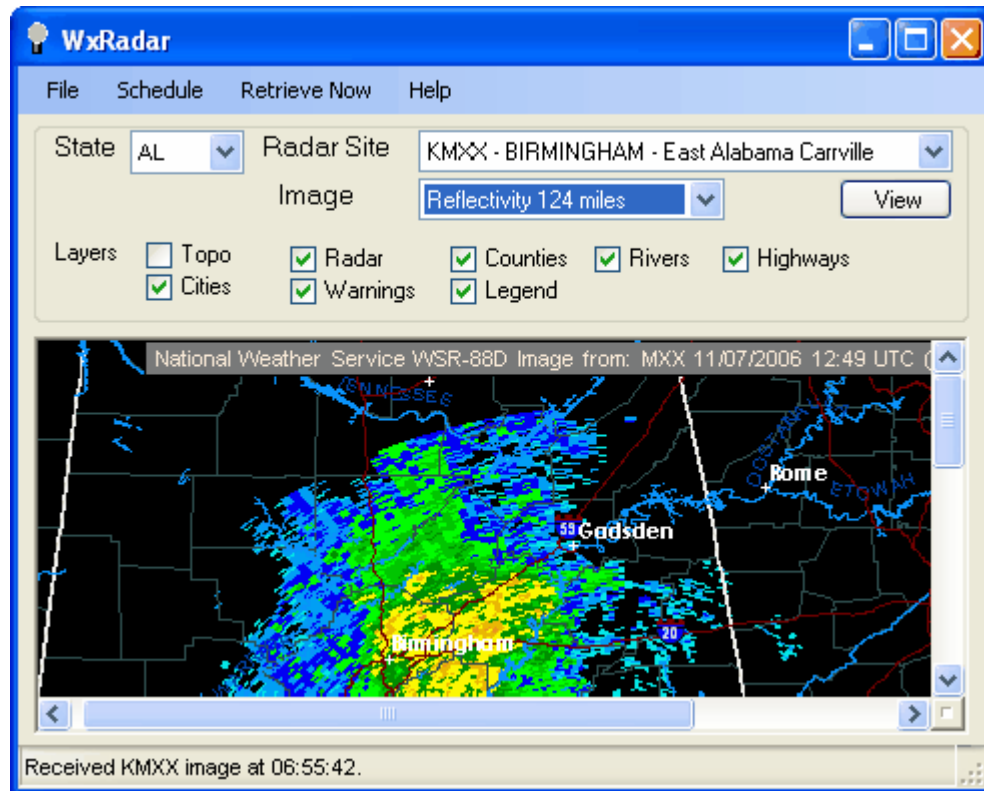
The **Schedule** menu allows you to establish a [schedule](#)¹⁶⁵ to retrieve radar images.

The **Retrieve Now** menu forces the application to start a retrieve cycle.

The **Help** menu allows you to see this manual, and display information about the program.



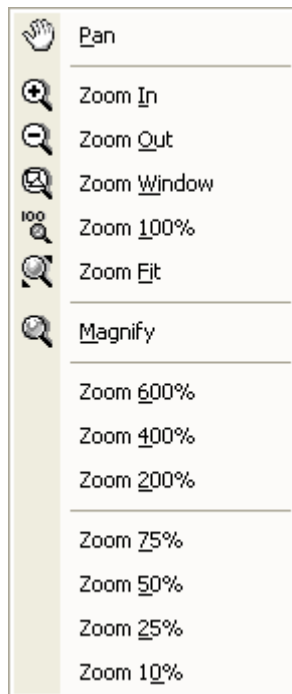
14.3 Main Window



The main window allows you to quickly retrieve a radar image. Select the **State**, **Radar Site**, **Image** type and **Layers**. Click the **View** button to retrieve the image selected.

Hint: To receive national radar products, select the state abbreviation NA.

The image can be resized to fit the display window or zoomed for closer inspection. To activate these features, right click on the image and select one of the displayed options.



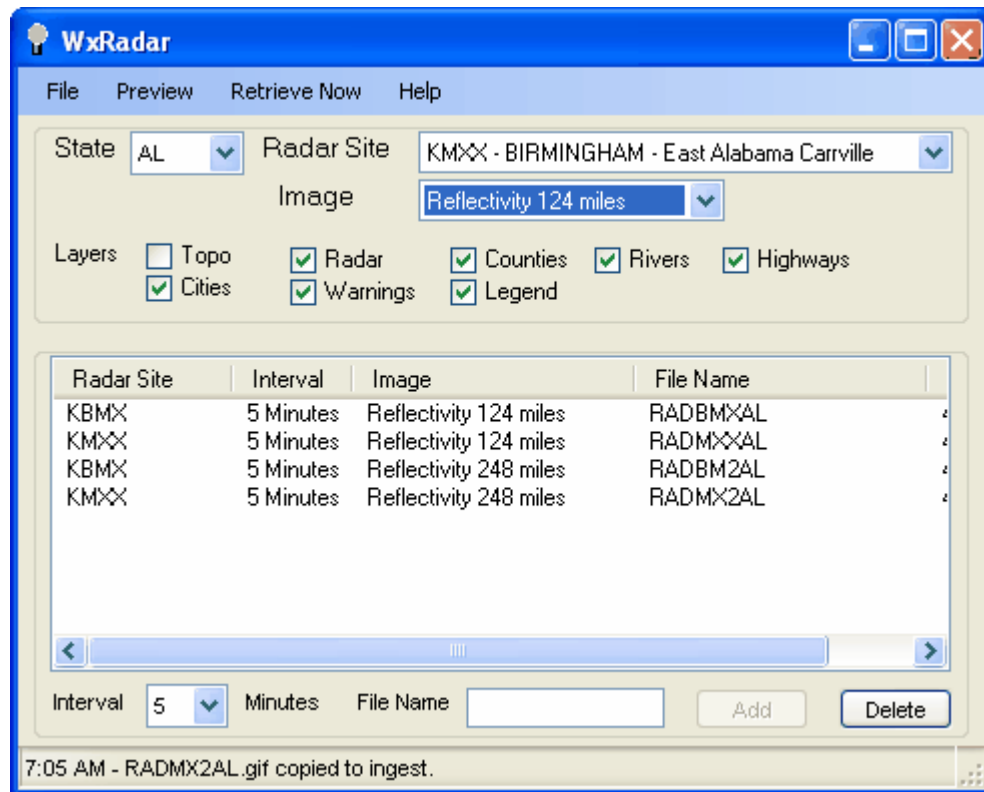
The default view is Zoom 100%.

To print the displayed image, click on the File menu and select Print. The image will be printed to your default printer.

Note: If WxRadar cannot download the requested radar image, a "Radar Unavailable" image will be displayed. The "Radar Unavailable" image can be customized by changing the "RadUnavl.gif" file.

14.4 Scheduling

To schedule radar images for automatic retrieval, click on the Schedule menu. The main window will change to allow you to setup schedules.



Select the **State**, **Radar Site**, **Image**, **Layers**, **File Name** for ingest and **Interval** to retrieve. Click on the **Add** button to schedule that radar site. To remove a site, click on the site in the list and click the **Delete** button.

Hint: To receive national radar products, select the state abbreviation NA.

Note: If you do not enter a file name, WxRadar will create the radar file name in the format, "RAD" plus the last three letters of the radar site plus the 2 digit state abbreviation plus ".gif". For example, the file name for KMXX would be RADMXXAL.gif.

The scheduled radar images will be retrieved based on the interval period specified. Valid intervals are 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 25, 30, 35, 40, 45, 50, 55 and 60 minutes.

The results of each scheduled retrieve is logged to the file RadLog.txt. To view this log file, click on File and View Log. The log file will contain an entry for each time it attempts to retrieve a radar image. It will also contain any error conditions.

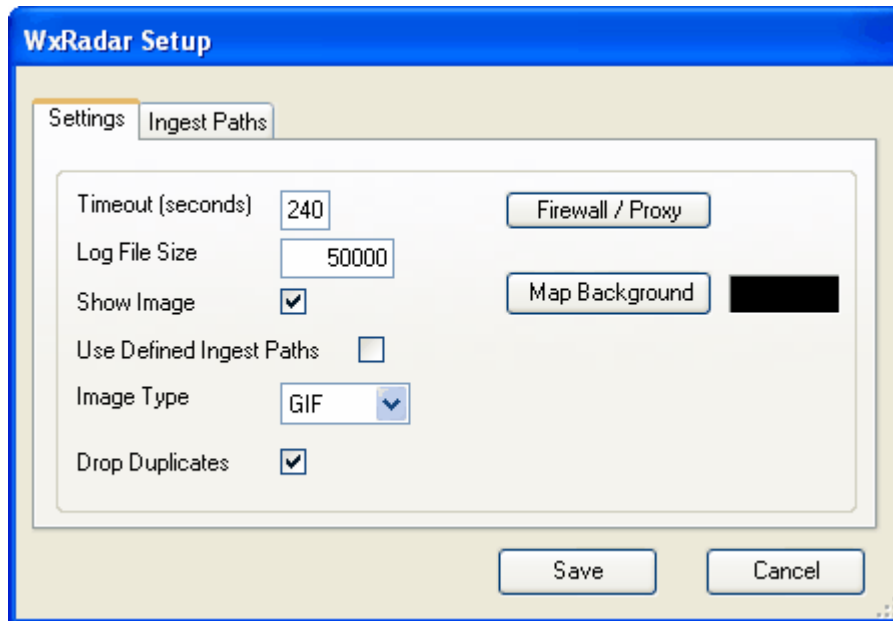
Hint: The scheduled images will be retrieved according to the schedule you establish. If you want to retrieve all images immediately, click on the Retrieve Now menu button.

When you are finished entering your schedule, click on the Preview menu. This returns you to the [Main Window](#) ⁽¹⁰⁷⁾.

14.5 Setup

14.5.1 Settings Tab

The Settings Tab is used to define general program operation.



The **Timeout** field allows you to specify the maximum amount of time the program will wait on the NOAA servers to respond.

The **Log File Size** field allows you to specify this size of your log file, RadLog.txt. The default is 50,000 bytes.

When the program retrieves images from the defined schedule, it does not display these images in the preview window. The **Show Image** check box, when checked, causes the program to show each image as it is received.

The **Use Defined Ingest Paths** check box, when checked, will cause the program to use the ingest paths defined in the ingest programs, WxByte and WxIngest. If you want to define your own ingest paths for WxRadar, remove this check.

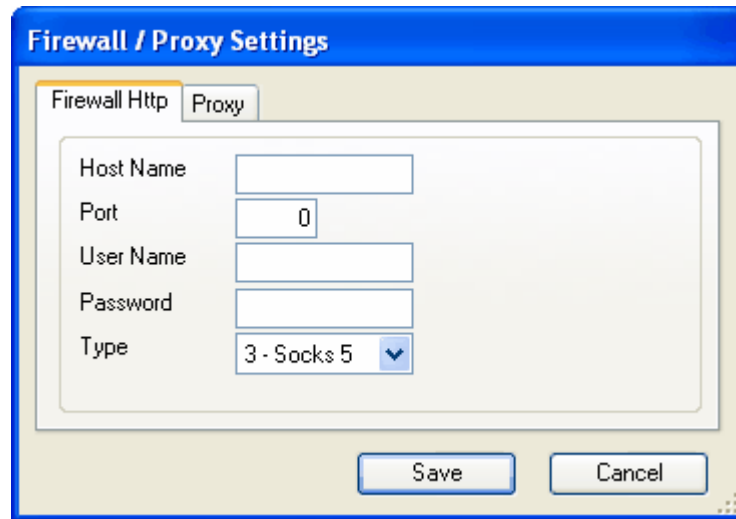
The **Firewall / Proxy** button allows you to configure Firewall and Proxy settings for your computer. See [Firewall / Proxy](#)^[33].

The **Image Type** list allows you to select an image format for the received image. Radar images are received by default in GIF format. You can select GIF, JPG, PNG, BMP, and TIF formats.

The **Drop Duplicates** check box, when checked, will create a CRC32 checksum on each received image. If the next image received is a duplicate, the program will not process the image.

14.5.1.1 Firewall / Proxy

The Firewall / Proxy window allows you to configure firewall / proxy information for your computer.



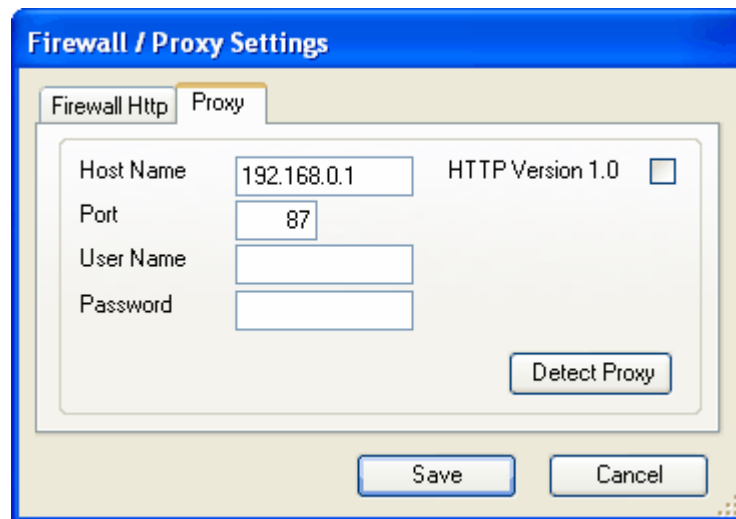
The screenshot shows the "Firewall / Proxy Settings" dialog box with the "Firewall Http" tab selected. The "Proxy" tab is also visible. The fields are: Host Name (empty), Port (0), User Name (empty), Password (empty), and Type (3 - Socks 5). There are "Save" and "Cancel" buttons at the bottom.

For a HTTP firewall, enter the domain name or TCP/IP address of the firewall in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup in the firewall.

Select the **Type** of firewall. Valid entries are 1-Tunnel, 2-Socks version 4, or 3-Socks version 5.



The screenshot shows the "Firewall / Proxy Settings" dialog box with the "Proxy" tab selected. The fields are: Host Name (192.168.0.1), Port (87), User Name (empty), Password (empty), and HTTP Version 1.0 (unchecked). There is a "Detect Proxy" button. There are "Save" and "Cancel" buttons at the bottom.

For a Proxy access, enter the domain name or TCP/IP address of the proxy in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup for the proxy.

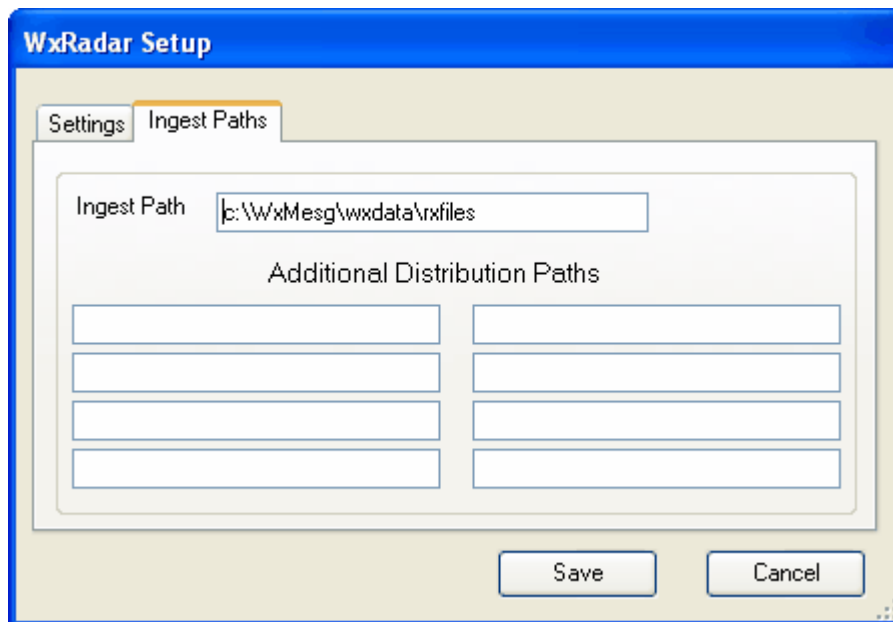
If **HTTP version 1.0** is required for the proxy server, check this box.

The **Detect Proxy** button will automatically detect the proxy settings for your computer and populate the host name and port fields.

Note: *The Firewall / Proxy settings are common to all Weather Message applications. Changing these settings will automatically change them for the other applications.*

14.5.2 Ingest Paths Tab

The Ingest Paths Tab is used to define the directories that will store the received weather products for processing.



The **Ingest Path** is defined in the Weather Message Server setup screen and would not normally be entered here.

The **Additional Distribution Paths** can be used to place a copy of the received weather text in different directories for processing by other programs. For example, if you use Weather Message to receive your weather data, you can put a copy of the received messages in a second or third directory for processing by RealEMWIN or the Weather Message Retransmission program.

Note: *If the Use Defined Ingest Paths setting is checked, you will not be able to change the paths listed.*

Part

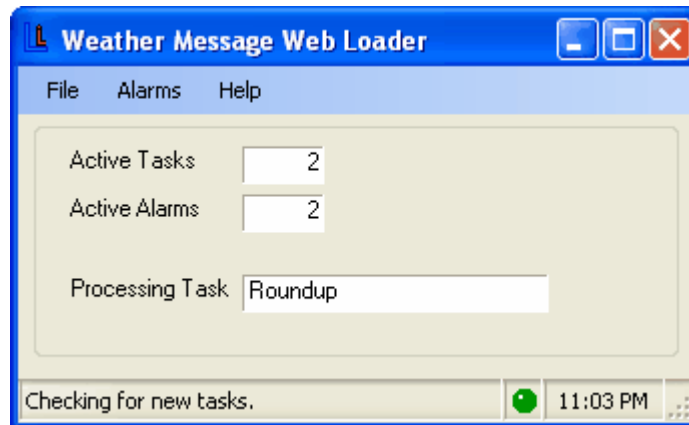


15 WxLoader

15.1 Overview

WxLoader is a support application that can be used to manage weather content for websites or provide data for other third-party applications.

If you plan to use WxLoader, it should be placed in the startup box in Windows. This will insure that the program is automatically started each time the computer is booted.




Although Weather Message has provisions for uploading weather text and graphics, it does not monitor expiration dates/times for the uploaded products. WxLoader, working in conjunction with Weather Message Server, has the ability to upload text products and monitor the expiration date/times of these products. This allows WxLoader to remove expired products and/or replace the message with user defined text.

WxLoader connects to Weather Message server using TCP/IP and processes the same products sent to the map client.

Hint: *If the system tray icon is outlined with a red circle or a red led appears in the status bar, the program is not communicating with the Weather Message Server.*

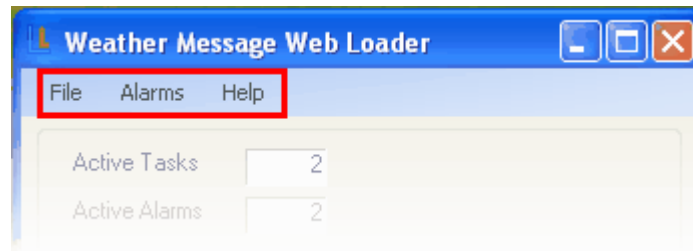
Note: *If WxLoader is stopped with the window minimized, the next time it is started, it will start minimized.*

System Tray

When WxLoader is minimized, you can restore the main screen by right clicking on the system tray icon , then select open.

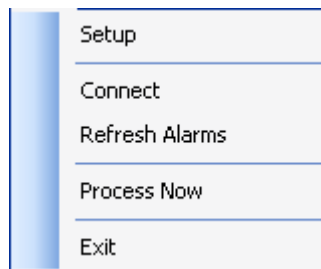
Copyright © 2007 Weather Message Software

15.2 Menu Options



The menu buttons on this screen perform these functions:

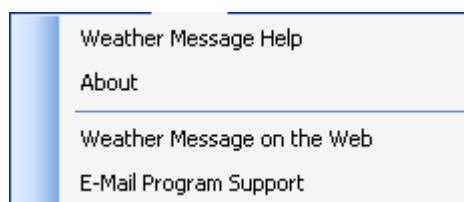
The **File** menu allows you to setup this program, start a processing cycle and exit the program.



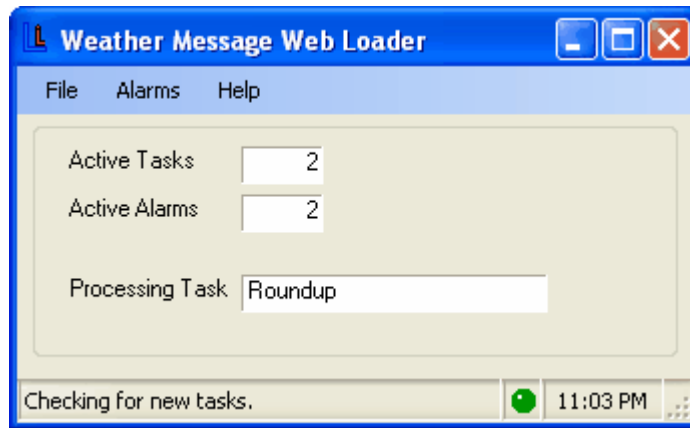
- The **Setup** option opens the [Setup window](#)^[176].
- The **Connect** option forces the application to attempt a connection to the server.
- The **Refresh Alarm** option clears any active alarms and sends a refresh request to Weather Message Server.
- The **Process Now** forces the program to start a processing cycle.
- The **Exit** option shuts down WxLoader.

The **Alarms** option displays the [Active Alarms](#)^[130] window.

The **Help** menu allows you to see this manual, and display information about the program.



15.3 Main Window

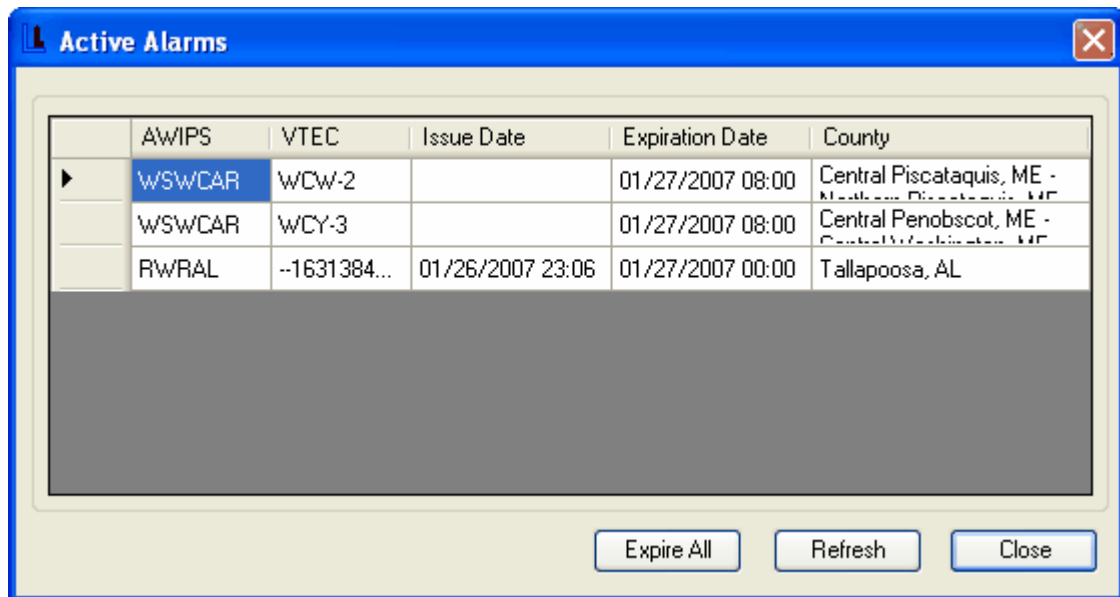


The main processing window shows the status of WxLoader. When it is processing tasks, you will see status messages in the status bar.

WxLoader works by processing products that have been [alarmed](#)¹⁸³ to the map client. This allows Weather Message Server to handle the alarms and message content while WxLoader handles uploads and message expirations.

15.4 Alarms

The Active Alarms Menu option allows you to view the current alarms.



The alarm grid display information about each active alarm. The columns and rows can be expanded to show hidden information. The columns and rows can be extended by clicking a row or column line and dragging the line. You can also sort the information by clicking on the column identifier.

Right click an entry to expire a product or click the **Expire All** button to expire all active alarms.

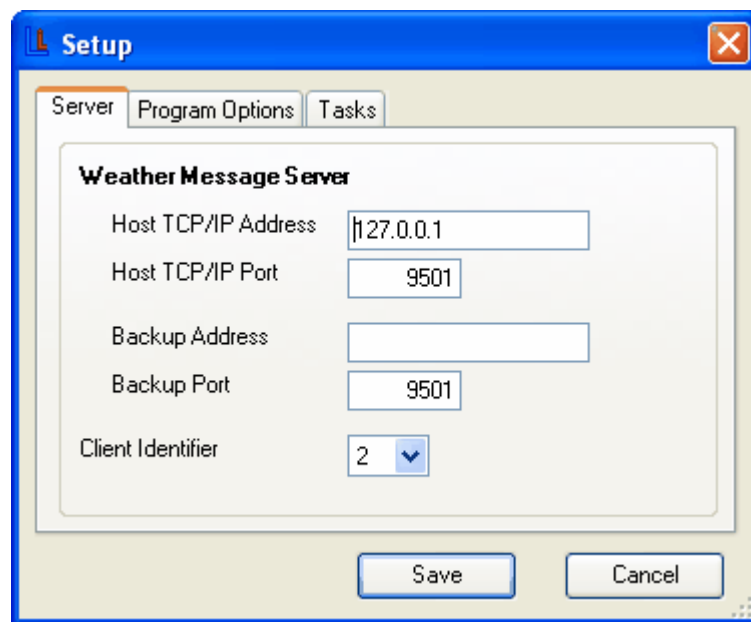
The **Refresh** button will refresh the alarm grid.

Note: *The alarm grid will automatically refresh every 30 seconds.*

15.5 Setup

15.5.1 Server Tab

The Server Tab is used to define the communications information to Weather Message Server.



The **Host TCP/IP Address** is the address of the Weather Message Server. Enter the address of your primary server in this field. The default is 127.0.0.1 for the local computer.

The **Host TCP/IP Port** is the port defined by Weather Message Server for connections. The default is 9501.

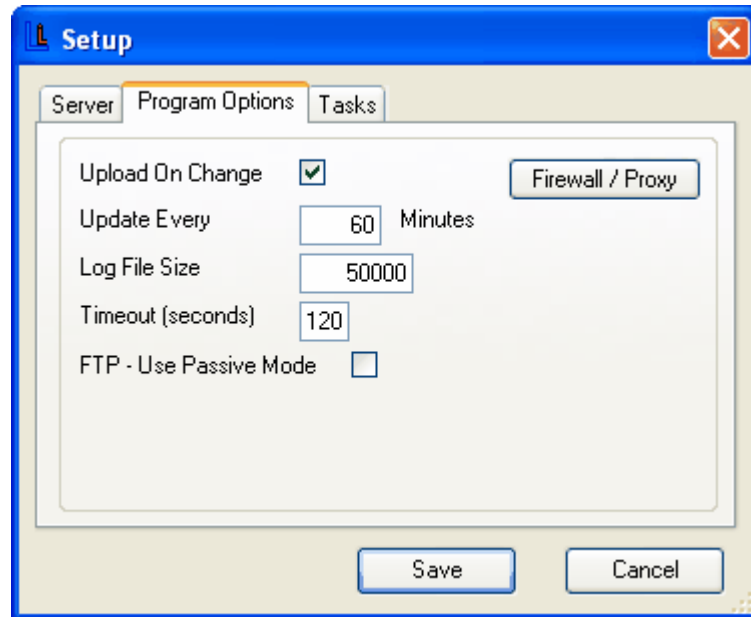
The **Backup Address** is the TCP/IP address of your backup Weather Message Server. Do not enter an address in this field if you do not have a backup Weather Message Server. This address is used when the program cannot contact your primary Weather Message Server.

The **Backup Port** is the port defined for use by the backup Weather Message Server. The default is 9501.

The **Client Identifier** field allows you to assign an identification number to WxLoader. This identifier can be used, when setting up your [alarms](#)¹⁸³, to send a specific product to WxLoader.

15.5.2 Program Options Tab

The Settings Tab is used to set operational information for WxLoader.



The **Upload On Change** option indicates whether WxLoader should process tasks when a new file arrives or a product expires. Check this option if you want the program to process tasks when a new file arrives or a product expires. If this option is not checked, the process task cycle will occur based on the **Update Every Minutes** setting.

The **Update Every Minutes** option establishes the amount of time, in minutes, to process tasks. The task processing cycle time can be set from 0 to 60 minutes. If you set this field to zero minutes, you must check the **Upload On Change** option. Care should be used when setting this value. When the specified amount of time lapses, the program will process and upload each task.

Note: *Setting this value too low can cause the program to get behind when you have a slow internet connection.*

The **Log File Size** field allows you to specify this size of your log file, LoadLog.txt. The default is 50,000 bytes.

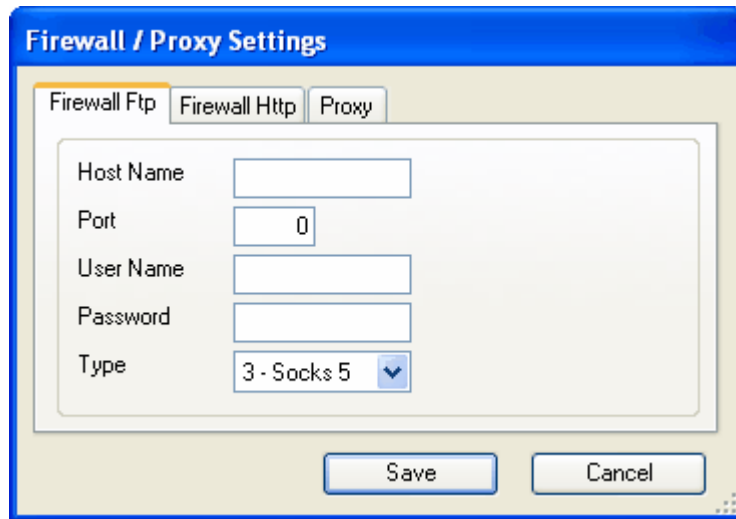
The **Timeout** field allows you to specify the maximum amount of time the program will wait on the HTTP or FTP servers to respond.

The **FTP – Use Passive Mode** option, when checked, will cause the ftp program to use the passive mode. This option may be needed for firewalls that restrict incoming connections.

The **Firewall / Proxy** button allows you to configure Firewall and Proxy settings for your computer. See [Firewall / Proxy](#)^[33].

15.5.2.1 Firewall / Proxy

The Firewall / Proxy window allows you to configure firewall / proxy information for your computer.



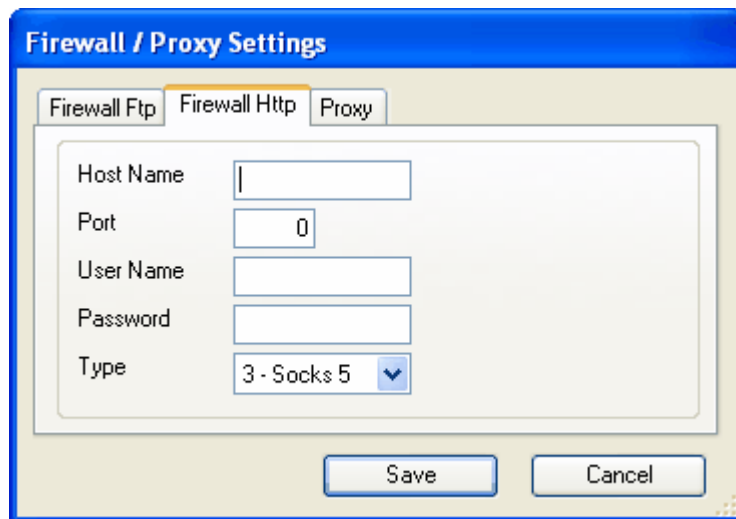
The screenshot shows the 'Firewall / Proxy Settings' dialog box with the 'Firewall Ftp' tab selected. The dialog has three tabs: 'Firewall Ftp', 'Firewall Http', and 'Proxy'. The 'Firewall Ftp' tab is active. The fields are: 'Host Name' (empty text box), 'Port' (text box containing '0'), 'User Name' (empty text box), 'Password' (empty text box), and 'Type' (dropdown menu showing '3 - Socks 5'). At the bottom are 'Save' and 'Cancel' buttons.

For a FTP firewall, enter the domain name or TCP/IP address of the firewall in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup in the firewall.

Select the **Type** of firewall. Valid entries are 1-Tunnel, 2-Socks version 4, or 3-Socks version 5.



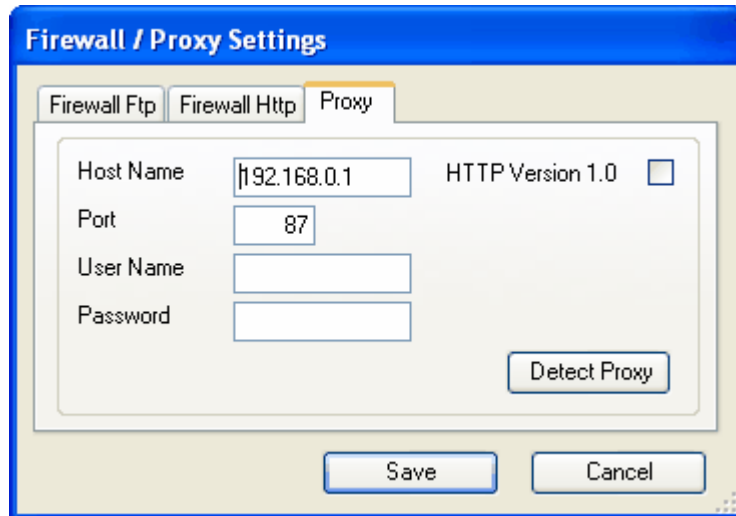
The screenshot shows the 'Firewall / Proxy Settings' dialog box with the 'Firewall Http' tab selected. The dialog has three tabs: 'Firewall Ftp', 'Firewall Http', and 'Proxy'. The 'Firewall Http' tab is active. The fields are: 'Host Name' (empty text box), 'Port' (text box containing '0'), 'User Name' (empty text box), 'Password' (empty text box), and 'Type' (dropdown menu showing '3 - Socks 5'). At the bottom are 'Save' and 'Cancel' buttons.

For a HTTP firewall, enter the domain name or TCP/IP address of the firewall in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup in the firewall.

Select the **Type** of firewall. Valid entries are 1-Tunnel, 2-Socks version 4, or 3-Socks version 5.



For a Proxy access, enter the domain name or TCP/IP address of the proxy in the **Host Name** field.

Enter the **Port** number for the firewall.

If required, enter a **User Name** and **Password**. This should be a user name and password setup for the proxy.

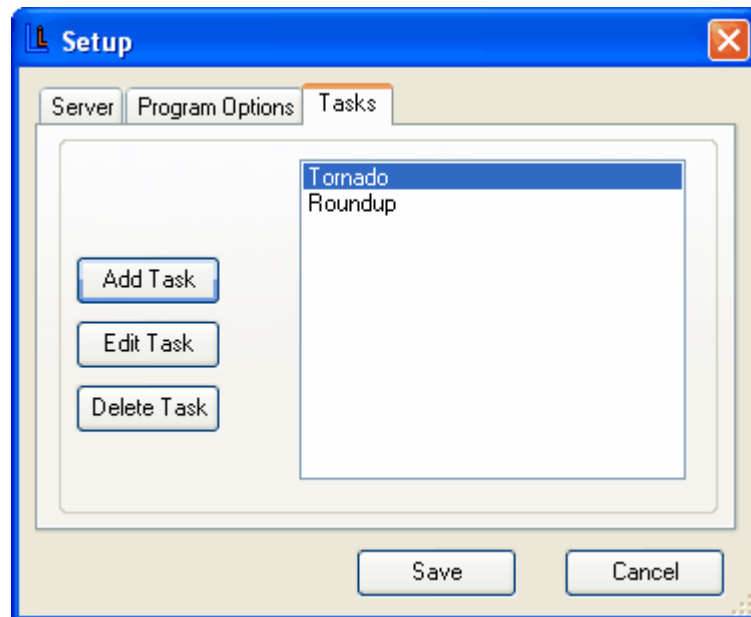
If **HTTP version 1.0** is required for the proxy server, check this box.

The **Detect Proxy** button will automatically detect the proxy settings for your computer and populate the host name and port fields.

Note: *The Firewall / Proxy settings are common to all Weather Message applications. Changing these settings will automatically change them for the other applications.*

15.5.3 Tasks Tab

The Tasks Tab is used to maintain WxLoader [tasks](#).

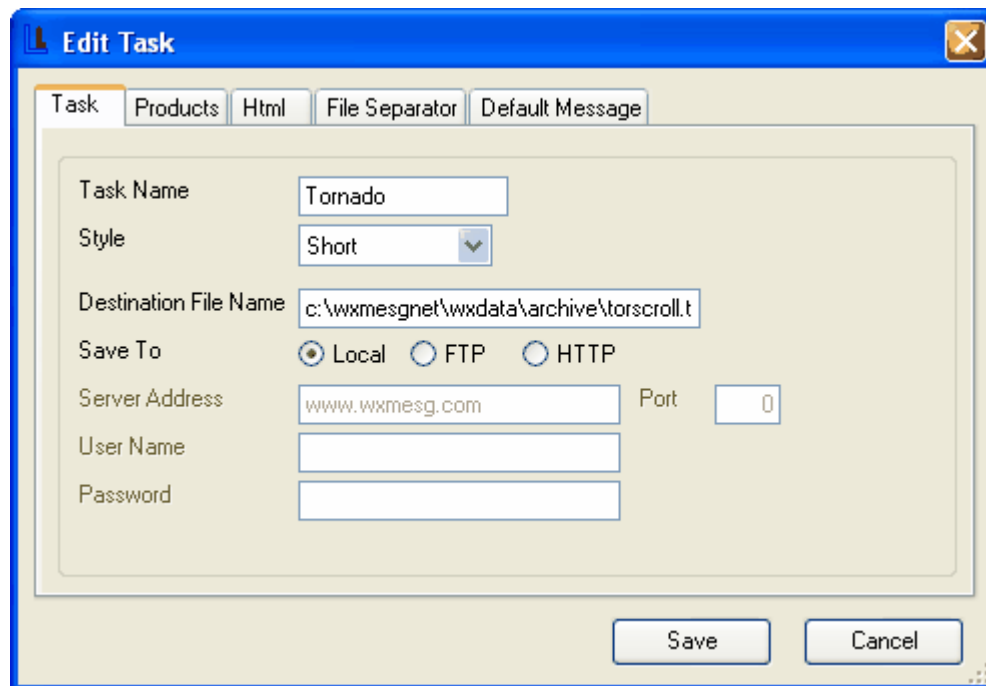


The **Add**, **Edit** and **Delete** Task buttons are used to create, change and remove tasks. You can also edit tasks by double clicking on the listed task.

15.5.3.1 Editing a Task

15.5.3.1.1 Task Tab

The Edit Task window is used to setup information for a new or selected task.



The **Task Name** field describes this task. Use short descriptive names to identify your tasks.

The **Style** option is used to specify the type of message to create. Select **Short** for a short message or **Full** for a full text message.

Here is an example message created with the Short option.

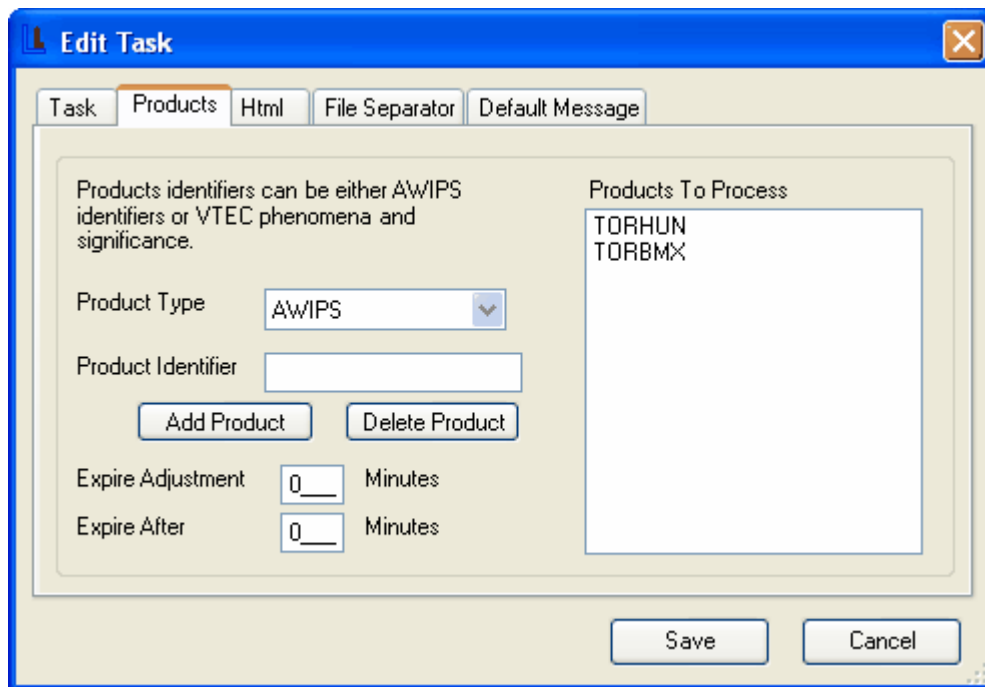
```
A Tornado Warning has been issued for Tallapoosa county until 9:20 PM. A
Severe Thunderstorm Watch has been issued for Tallapoosa county until 9:20
PM.
```

The **Destination File Name** is the path and file name that you want the created message to be named on your server or directory. This field is required.

Select the type of save, Local, FTP or HTTP. If FTP or HTTP is selected, the program will allow you to enter information about your ftp or HTTP server. Enter the FTP Server address, Port number, User Name and Password. These settings will be used to log into your server.

15.5.3.1.2 Products Tab

The Products Tab allows you to specify the products that should be processed for this task.



Select the type of Product Identifiers that you intend to load in the Products To Process list. **Product Type** can be AWIPS / VTEC, AWIPS or VTEC.

Enter an AWIPS identifier or VTEC phenomena and significance to process in the **Product Identifier** field. Click the **Add Product** button to add this product to the list.

Note: *This product must be alarmed to the map client.*

Hint: *Product identifiers can contain the wild card characters * and ?.*

Hint: AWIPS identifiers can include WFO abbreviations as shown above. VTEC phenomena and significance codes do not allow WFO identifiers.

To delete a product, highlight the product and click **Delete Product** or press the Delete key.

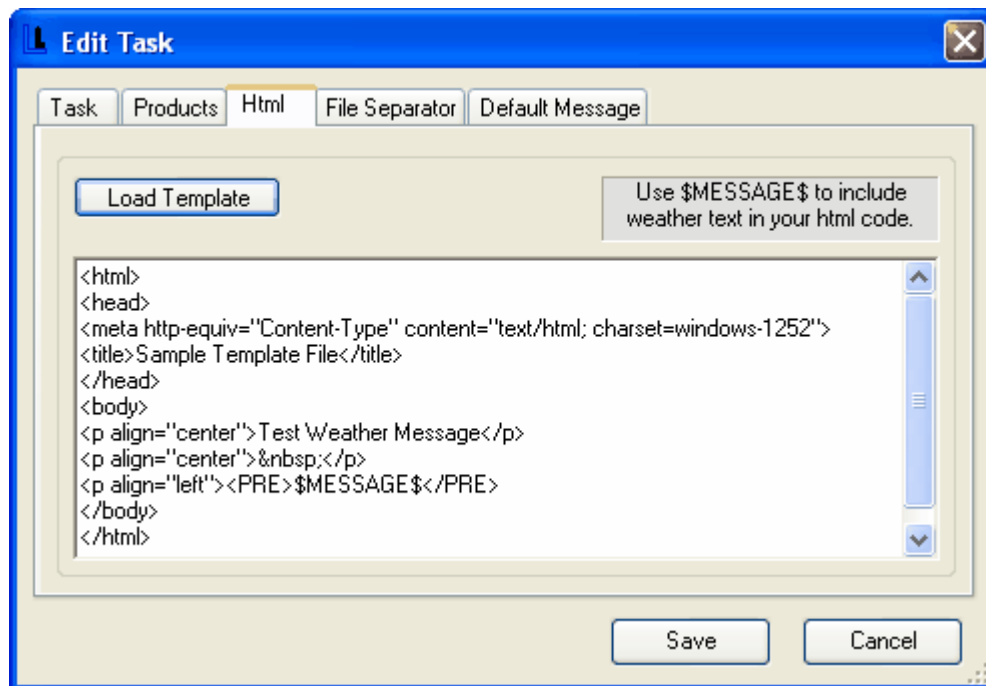
The **Expire Adjustment** field allows you to modify the expiration times of received products. For example you could specify -10 or +10 minutes. In some applications, you may want the message to remain active longer than the actual expiration time. In other applications, you may want the message to expire before the actual expiration time.

The **Expire After Minutes** option is used to expire products that do not contain an expiration date/time. Products that do not contain UGC lines do not have an expiration date/time. The amount of time specified for this option will be added to the product issue date/time to determine the expiration date/time. This value does not effect products that contain UGC lines.

Hint: If you alarm products that do not contain UGC lines, you should enter a value in the *Expire After Minutes* field. Failing to do so will result in the message expiring immediately.

15.5.3.1.3 HTML Tab

The HTML Tab allows you to enter HTML code to be included when processing this task. Normally, HTML code is used to encapsulate the message.



If you will be using HTML code, enter the HTML code in the text box. Remember to use the variable \$MESSAGE\$ in this code as a place marker for your text. The **Load Template** button can be used to load a template file or a file containing html code. When loading templates, the program automatically looks for templates in ..\WxMesgNet\WxData\Template.

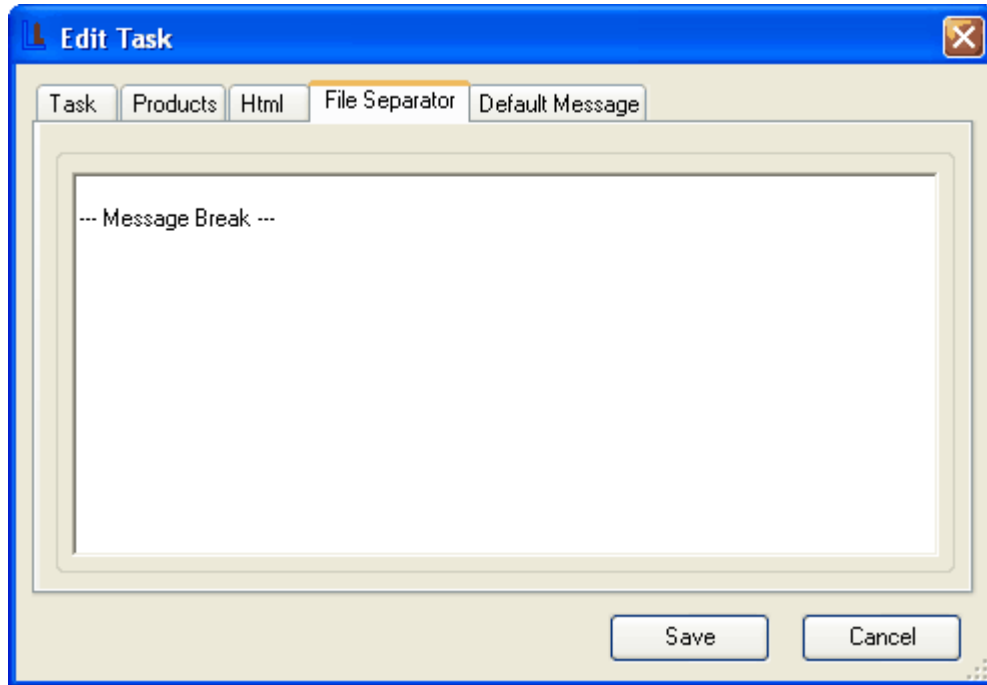
Note: If a html template is specified, the program will change any html reserved-characters in

the weather text to their corresponding html abbreviation. This prevents html browsers from misinterpreting the weather text as html code.

Note: See [Publishing Data to a Web Page](#) for examples.

15.5.3.1.4 File Separator Tab

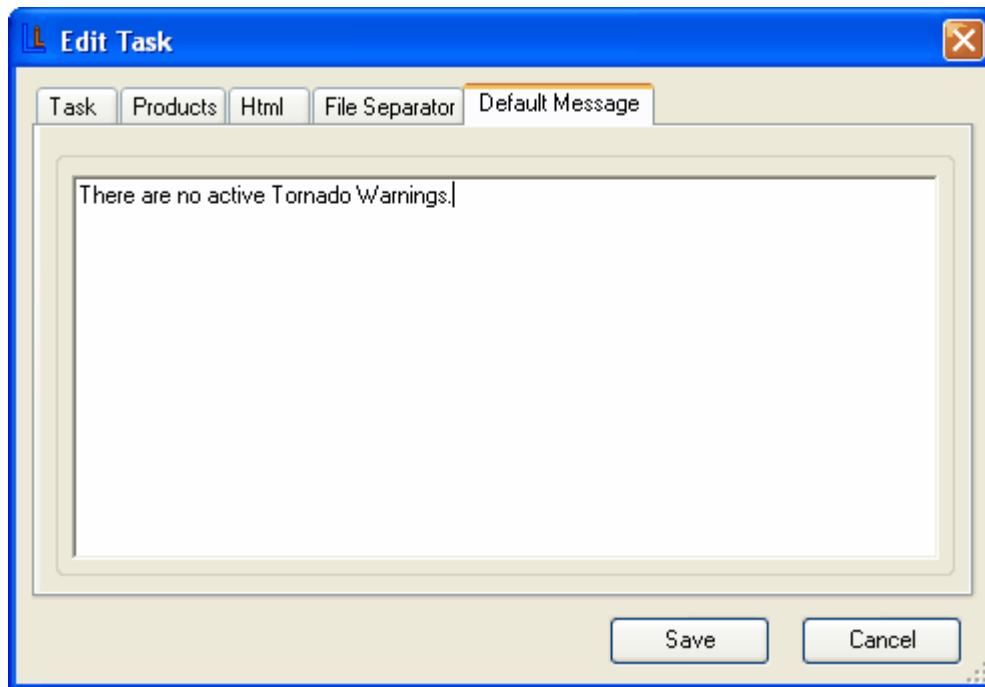
The File Separator Tab allows you to enter text to be inserted between each product.



If you want text inserted between each product, enter it in the text box. This field is not required and can be left blank.

15.5.3.1.5 Default Message Tab

The Default Message Tab allows you to specify text to be uploaded when there are no active messages for this task.



Enter the default message text in the text box. This field is not required and can be left blank.

15.6 Alarm Setup

In order for WxLoader to have products to process, the desired products must be alarmed in Weather Message Server. This is accomplished by setting up an alarm in Weather Message and sending the product to the map client.

Edit Alarm # 14 - TORBMX

List Products List Forecast Offices List States

Alarm Client/Map/X10 Paging/Email/Fax Archive/Html/Exe/Print

To Client: No Alarm Type: Alarm type is used to play sounds and/or control printing.

To Map: Yes

X10 Settings

House Code		Unit 1	<input type="checkbox"/>	Unit 5	<input type="checkbox"/>	Unit 9	<input type="checkbox"/>	Unit 13	<input type="checkbox"/>
Command		Unit 2	<input type="checkbox"/>	Unit 6	<input type="checkbox"/>	Unit 10	<input type="checkbox"/>	Unit 14	<input type="checkbox"/>
Duration	0	Unit 3	<input type="checkbox"/>	Unit 7	<input type="checkbox"/>	Unit 11	<input type="checkbox"/>	Unit 15	<input type="checkbox"/>
		Unit 4	<input type="checkbox"/>	Unit 8	<input type="checkbox"/>	Unit 12	<input type="checkbox"/>	Unit 16	<input type="checkbox"/>

Save Cancel

If you only want to alarm a product to WxLoader, select the client identifier in the To Map box. This is the same client identifier selected on the [Server Tab](#)^[106].

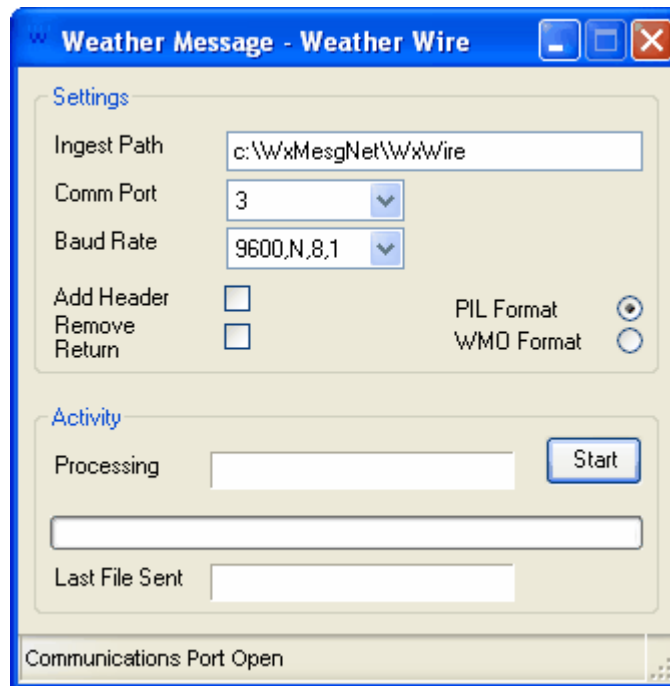
Part



16 WxWire - Weather Wire Utility

16.1 Overview

WxWire is a support application that can be used to send messages to a serial port in weather wire format.



The **Ingest Path** is the directory path where WxWire should pickup the files archived by Weather Message Server. This path is initially empty. You will need to decide on a common directory path that will be used by WxWire to receive files and Weather Message Server to store files. The suggested path, "C:\Program Files\WxMesgNet\WxWire", can be used for this purpose.

Set the **Comm Port** and **Baud Rate** as required by your external equipment or software.

The **Add Header** option, when selected, will add an expanded header to the first line of the message. This option expands the AWIPS identifier and makes it the first line in the message.

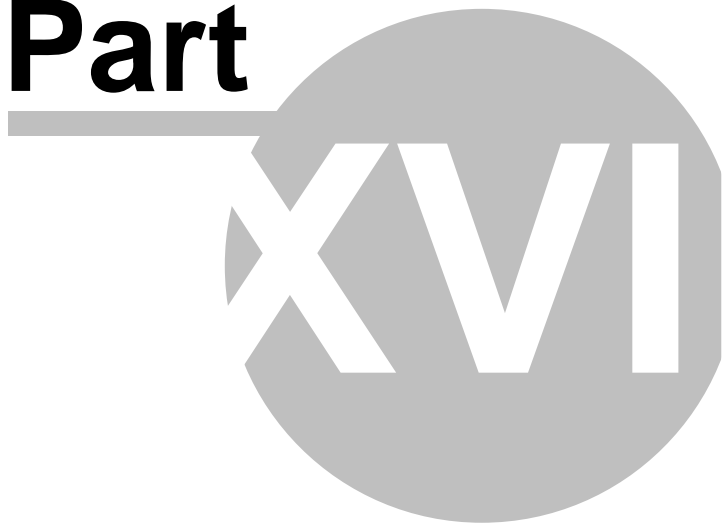
The **Remove Return** option, when selected, will remove the extra return character from processed messages.

Click on **PIL Format** to send messages in PIL format. Click on **WMO Format** to send messages in WMO format. This setting depends on the application that will be receiving the data.

The **Stop** button can be used to pause the file that is currently being sent. This button will toggle between Stop and Start.

Note: You must click the Stop button to make changes to the Settings.

Part



17 Supplement

17.1 Weather Forecast Office Abbreviations

17.2 Text Product Abbreviations

17.3 State / Marine Zone Abbreviations

17.4 Graphical Product Names

17.5 Paging / E-Mail Formats

Weather Message supports a number of paging and e-mail formats, ranging from the full message text to a short message for pagers/cell-phones. This section gives examples of the different formats.

The following paging / e-mail formats are available: Full, Full No Head, Selected, Selected No Head and Short. In addition, the message can be broken down into a number of packets for distribution to pagers / cell-phones. The system will allow you to specify the size of these packets and the number of packets to send.

For messages sent via e-mail, you can specify the type of subject line sent. You can send no subject line, the product identifier, or a text description of the product.

Regardless of the format selected, the system has a parse option that allows you to abbreviate or remove words from the paged / e-mailed message.

The following tornado warning will be used in the examples.

```
WFUS54 KBMX 192255
TORBHM
ALC113-192330-

BULLETIN - EAS ACTIVATION REQUESTED
TORNADO WARNING
NATIONAL WEATHER SERVICE BIRMINGHAM AL
455 PM CST WED MAR 19 2003

THE NATIONAL WEATHER SERVICE IN BIRMINGHAM HAS ISSUED A

* TORNADO WARNING FOR...
  RUSSELL COUNTY IN SOUTHEAST ALABAMA

* UNTIL 530 PM CST

* AT 455 PM CST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A
  TORNADO NEAR FORT MITCHELL...MOVING NORTHEAST AT 25 MPH. THIS STORM
  WILL AFFECT RURAL EASTERN RUSSELL COUNTY.

IF YOU ARE NEAR THE PATH OF THIS TORNADO...TAKE COVER IN AN INTERIOR
  ROOM ON THE LOWEST FLOOR...OR A BASEMENT. ABANDON MOBILE HOMES AND
  VEHICLES FOR MORE SUBSTANTIAL SHELTER.

CALL 1-800-856-0758 TO REPORT SEVERE WEATHER.

LAT...LON 3229 8514 3213 8504 3226 8492 3247 8499

$$
```

The Full option will send the message above exactly as printed.

The Full No Head option will be sent without the heading information. Here is an example.

```
THE NATIONAL WEATHER SERVICE IN BIRMINGHAM HAS ISSUED A

* TORNADO WARNING FOR...
  RUSSELL COUNTY IN SOUTHEAST ALABAMA

* UNTIL 530 PM CST

* AT 455 PM CST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A
```

TORNADO NEAR FORT MITCHELL...MOVING NORTHEAST AT 25 MPH. THIS STORM WILL AFFECT RURAL EASTERN RUSSELL COUNTY.

IF YOU ARE NEAR THE PATH OF THIS TORNADO...TAKE COVER IN AN INTERIOR ROOM ON THE LOWEST FLOOR...OR A BASEMENT. ABANDON MOBILE HOMES AND VEHICLES FOR MORE SUBSTANTIAL SHELTER.

CALL 1-800-856-0758 TO REPORT SEVERE WEATHER.

LAT...LON 3229 8514 3213 8504 3226 8492 3247 8499

\$\$

The Short format allows you to select certain elements of the message to send. For example, if you set up your short message format as follows:

NWS \$WFO\$ has issued a \$MsgType\$ \$HeadLine\$\$IfCounty: for \$\$Counties\$\$IfCounty: County\$\$IfExpire: Until \$\$Expire\$ - \$BulletAT\$

Results in a message like this:

NWS BHM has issued a Tornado Warning for Russell County Until 05:30 PM - AT 455 PM CST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A TORNADO NEAR FORT MITCHELL...MOVING NORTHEAST AT 25 MPH. THIS STORM WILL AFFECT RURAL EASTERN RUSSELL COUNTY.

The Selected option only sends the text associated with the UGC group associated with the county that was alarmed. Some messages contain multiple groups. A good example is the zone forecast. It contains multiple groups

FPUS54 KBMX 052153
ZFPBHM

ZONE FORECAST PRODUCT
NATIONAL WEATHER SERVICE BIRMINGHAM AL
405 PM CST SAT APR 5 2003

ALZ011>015-017-060930-
BLOUNT-FAYETTE-LAMAR-MARION-WALKER-WINSTON-
INCLUDING THE CITIES OF...DOUBLE SPRINGS...FAYETTE...HAMILTON...
JASPER...ONEONTA...VERNON
405 PM CST SAT APR 5 2003

.TONIGHT...INCREASING CLOUDS. A SLIGHT CHANCE OF A SHOWER AFTER MIDNIGHT. LOWS IN THE LOWER 50S. NORTHEAST WINDS 5 TO 10 MPH. CHANCE OF RAIN 20 PERCENT.
.SUNDAY...MOSTLY CLOUDY WITH SHOWERS AND THUNDERSTORMS LIKELY BY AFTERNOON. STORMS POSSIBLY SEVERE IN THE AFTERNOON. HIGHS IN THE LOWER 70S. EAST WINDS 10 TO 15 MPH...BECOMING SOUTHEAST IN THE AFTERNOON. CHANCE OF RAIN 70 PERCENT.
.SUNDAY NIGHT...SHOWERS AND THUNDERSTORMS. STORMS POSSIBLY SEVERE. LOWS IN THE LOWER 60S. SOUTHEAST WINDS 10 TO 15 MPH. CHANCE OF RAIN 80 PERCENT.
.MONDAY...VARIABLE CLOUDINESS WITH A CHANCE OF THUNDERSTORMS. HIGHS IN THE UPPER 70S. CHANCE OF RAIN 30 PERCENT.
.MONDAY NIGHT...PARTLY CLOUDY WITH A SLIGHT CHANCE OF SHOWERS. LOWS IN THE MID 50S. CHANCE OF RAIN 20 PERCENT.
.TUESDAY...MOSTLY CLOUDY AND COOLER WITH A CHANCE OF SHOWERS. HIGHS 60 TO 65. CHANCE OF RAIN 30 PERCENT.
.WEDNESDAY AND THURSDAY...MOSTLY CLOUDY WITH A CHANCE OF SHOWERS EACH DAY. LOWS IN THE MID 40S. HIGHS 60 TO 65.
.FRIDAY...PARTLY CLOUDY. LOWS IN THE MID 40S. HIGHS 65 TO 70.
.SATURDAY...PARTLY CLOUDY. LOWS NEAR 50. HIGHS IN THE MID 70S.

\$\$

ALZ018>020-022>024-026-060930-
 CALHOUN-CHEROKEE-ETOWAH-JEFFERSON-PICKENS-ST CLAIR-TUSCALOOSA-
 INCLUDING THE CITIES OF...ANNISTON-JACKSONVILLE...
 BIRMINGHAM-HOOVER...CARROLLTON...CENTRE...GADSDEN...
 PELL CITY-ASHVILLE...TUSCALOOSA
 405 PM CST SAT APR 5 2003

.TONIGHT...VARIABLE CLOUDINESS WITH A SLIGHT CHANCE OF A
 SHOWER. LOWS IN THE MID 50S. LIGHT WINDS. CHANCE OF RAIN 20
 PERCENT.

.SUNDAY...MOSTLY CLOUDY WITH SHOWERS AND THUNDERSTORMS LIKELY BY
 AFTERNOON. STORMS POSSIBLY SEVERE IN THE AFTERNOON. HIGHS 73 TO
 77. EAST WINDS 10 TO 15 MPH...BECOMING SOUTHEAST IN THE AFTERNOON.
 CHANCE OF RAIN 70 PERCENT.

.SUNDAY NIGHT...SHOWERS AND THUNDERSTORMS. STORMS POSSIBLY SEVERE.
 LOWS IN THE MID 60S. SOUTHEAST WINDS 10 TO 15 MPH. CHANCE OF
 RAIN 80 PERCENT.

.MONDAY...VARIABLE CLOUDINESS WITH A CHANCE OF THUNDERSTORMS. HIGHS
 IN THE UPPER 70S. CHANCE OF RAIN 30 PERCENT.

.MONDAY NIGHT...PARTLY CLOUDY WITH A SLIGHT CHANCE OF SHOWERS.
 LOWS IN THE MID 50S. CHANCE OF RAIN 20 PERCENT.

.TUESDAY...MOSTLY CLOUDY AND COOLER WITH A CHANCE OF SHOWERS. HIGHS
 IN THE MID 60S. CHANCE OF RAIN 30 PERCENT.

.WEDNESDAY AND THURSDAY...MOSTLY CLOUDY WITH A CHANCE OF SHOWERS
 EACH DAY. LOWS IN THE MID 40S. HIGHS 60 TO 65.

.FRIDAY...PARTLY CLOUDY. LOWS IN THE MID 40S. HIGHS 65 TO 70.

.SATURDAY...PARTLY CLOUDY. LOWS NEAR 50. HIGHS IN THE MID 70S.

\$\$

You will notice that this message contains two groups. Each group starts with the code "ALZ". Using the Selected option and alarming for ALZ011, Blount County, you will receive the following text:

BLOUNT-FAYETTE-LAMAR-MARION-WALKER-WINSTON-
 INCLUDING THE CITIES OF...DOUBLE SPRINGS...FAYETTE...HAMILTON...
 JASPER...ONEONTA...VERNON
 405 PM CST SAT APR 5 2003

.TONIGHT...INCREASING CLOUDS. A SLIGHT CHANCE OF A SHOWER AFTER
 MIDNIGHT. LOWS IN THE LOWER 50S. NORTHEAST WINDS 5 TO 10 MPH.
 CHANCE OF RAIN 20 PERCENT.

.SUNDAY...MOSTLY CLOUDY WITH SHOWERS AND THUNDERSTORMS LIKELY BY
 AFTERNOON. STORMS POSSIBLY SEVERE IN THE AFTERNOON. HIGHS IN
 THE LOWER 70S. EAST WINDS 10 TO 15 MPH...BECOMING SOUTHEAST IN THE
 AFTERNOON. CHANCE OF RAIN 70 PERCENT.

.SUNDAY NIGHT...SHOWERS AND THUNDERSTORMS. STORMS POSSIBLY SEVERE.
 LOWS IN THE LOWER 60S. SOUTHEAST WINDS 10 TO 15 MPH. CHANCE OF RAIN
 80 PERCENT.

.MONDAY...VARIABLE CLOUDINESS WITH A CHANCE OF THUNDERSTORMS. HIGHS
 IN THE UPPER 70S. CHANCE OF RAIN 30 PERCENT.

.MONDAY NIGHT...PARTLY CLOUDY WITH A SLIGHT CHANCE OF SHOWERS.
 LOWS IN THE MID 50S. CHANCE OF RAIN 20 PERCENT.

.TUESDAY...MOSTLY CLOUDY AND COOLER WITH A CHANCE OF SHOWERS. HIGHS
 60 TO 65. CHANCE OF RAIN 30 PERCENT.

.WEDNESDAY AND THURSDAY...MOSTLY CLOUDY WITH A CHANCE OF SHOWERS
 EACH DAY. LOWS IN THE MID 40S. HIGHS 60 TO 65.

.FRIDAY...PARTLY CLOUDY. LOWS IN THE MID 40S. HIGHS 65 TO 70.

.SATURDAY...PARTLY CLOUDY. LOWS NEAR 50. HIGHS IN THE MID 70S.

The Selected No Head will result in:

```
.TONIGHT...INCREASING CLOUDS.  A SLIGHT CHANCE OF A SHOWER AFTER
MIDNIGHT.  LOWS IN THE LOWER 50S.  NORTHEAST WINDS 5 TO 10 MPH.
CHANCE OF RAIN 20 PERCENT.
.SUNDAY...MOSTLY CLOUDY WITH SHOWERS AND THUNDERSTORMS LIKELY BY
AFTERNOON.  STORMS POSSIBLY SEVERE IN THE AFTERNOON.  HIGHS IN
THE LOWER 70S.  EAST WINDS 10 TO 15 MPH...BECOMING SOUTHEAST IN THE
AFTERNOON.  CHANCE OF RAIN 70 PERCENT.
.SUNDAY NIGHT...SHOWERS AND THUNDERSTORMS.  STORMS POSSIBLY SEVERE.
LOWS IN THE LOWER 60S.  SOUTHEAST WINDS 10 TO 15 MPH.  CHANCE OF RAIN
80 PERCENT.
.MONDAY...VARIABLE CLOUDINESS WITH A CHANCE OF THUNDERSTORMS.  HIGHS
IN THE UPPER 70S.  CHANCE OF RAIN 30 PERCENT.
.MONDAY NIGHT...PARTLY CLOUDY WITH A SLIGHT CHANCE OF SHOWERS.
LOWS IN THE MID 50S.  CHANCE OF RAIN 20 PERCENT.
.TUESDAY...MOSTLY CLOUDY AND COOLER WITH A CHANCE OF SHOWERS.  HIGHS
60 TO 65.  CHANCE OF RAIN 30 PERCENT.
.WEDNESDAY AND THURSDAY...MOSTLY CLOUDY WITH A CHANCE OF SHOWERS
EACH DAY.  LOWS IN THE MID 40S.  HIGHS 60 TO 65.
.FRIDAY...PARTLY CLOUDY.  LOWS IN THE MID 40S.  HIGHS 65 TO 70.
.SATURDAY...PARTLY CLOUDY.  LOWS NEAR 50.  HIGHS IN THE MID 70S.
```

With each of the above messages, the parse option can be used to remove and shorten some of the words in the weather text. Replacement words are entered in the WxWords.dat file. For example to replace "NATIONAL WEATHER SERVICE" with "NWS", you would enter "NATIONAL WEATHER SERVICE,NWS" in your WxWords file.

Using our short message format from above:

```
NWS BHM has issued a Tornado Warning  for Russell County Until 05:30 PM - AT
455 PM CST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A TORNADO NEAR
FORT MITCHELL...MOVING NORTHEAST AT 25 MPH. THIS STORM WILL AFFECT RURAL
EASTERN RUSSELL COUNTY.
```

This message could be changed to.

```
NWS BHM has issued a Tornado Warning  for Russell County Until 05:30 PM - AT
455 PM ...NWS RADAR INDICATED A TORNADO NEAR FT MITCHELL...MOVING NE AT 25
MPH. STORM WILL AFFECT RURAL E RUSSELL COUNTY.
```

The parser is case sensitive, so consider this as you setup your WxWords. COUNTY will not match County.

Several Weather Message users have already created extensive WxWords.dat libraries. If you want a file that is pre-loaded with words, check the [Weather Message Miscellaneous Downloads](#) or send e-mail to the Weather Message Yahoo group.

17.6 Publishing Data to a Web Page

You can send files or html to a website by putting a ftp command in the Archive Path field on the alarm setup screen. Here are the steps to ftp weather messages.

1. Setup an alarm for the product to be sent to the website.
2. Select the type of archive, Selected or Full. (Full sends the complete weather message).
3. On this alarm, select the HTML Template option and enter your ftp server information.

To send a HTML file, you will need to create a template file and place it in the WxMesgNet\WxData\Template directory. In your html template, enter the code \$MESSAGE\$ where you want the weather text to be inserted. You will change the HTML Template option to include the name of your template file.

Here is some additional information on creating a web page with Weather Message.

Server Side Includes

The sample weather page, on the Weather Message website was created by using server-side includes (SSI). If your web server supports this capability, it can help you make a nice page. Feel free to use the html code on the WxMesg sample page, <http://www.wxmesg.com/weather/currentweather.shtml>

Basically SSI allows you to copy (include) text files into a web page. Here is some of the html code used to show the state weather round up.

```
<textarea rows="5" name="SWRAL" cols="74"><!--#include file="swral"--></textarea>
```

The `<!--#include file="swral"-->` statement actually copies the swral file into the web page, when a user requests the page. By including the file when the user requests the web page, they will always get the latest messages.

HTML Templates

A html template is a web page that will be used by Weather Message to insert the weather text. Weather Message takes your html template and searches for the code \$MESSAGE\$ and replaces that code with the weather text.

I use FrontPage to create a blank page, or one with some text/formatting and put the code \$MESSAGE\$ where I want the weather text to appear. This "template" is stored in the WxMesg directory. The ftp command will need to include the template name. Weather Message will take this template, insert the weather text and then ftp that html file to the server. You will need to have a main web page that has a link to this uploaded html file.

Note: If you use the html tags `<PRE>` `</PRE>` around the weather text, the text will be properly formatted.

Here is a sample template.

```
<html>
<head>
<meta http-equiv="Content-Language" content="en-us">
<meta http-equiv="Content-Type" content="text/html; charset=windows-1252">
<title>Weather Message Sample Template</title>
</head>
<body>
<p align="center">Weather Message Sample Template</p>
<p align="center">Weather Text Follows</p>
<p align="center">&nbsp;</p>
<p align="left"><PRE>$MESSAGE$</PRE></p>
</body>
</html>
```

When you use the template option, you only get one message per template. For this reason, most people will want to use server side includes. With server side includes, you are not limited.

Note: *The first line of the template should begin with <html>. When a template begins with <html>, Weather Message will replace any HTML reserved-characters, found in the weather text, with their appropriate HTML abbreviation. This prevents html browsers from misinterpreting the weather text as html code.*

17.7 Sending HTML Email

Weather Message allows you to send HTML encoded email. This is accomplished by setting up a Header and Trailer for the email group.

Enter the HTML code that should precede the weather text. Here is some sample code:

```
<html>
<head>
<META http-equiv=Content-Type content="text/html; charset=iso-8859-1">
<META content="MSHTML" name=GENERATOR>
</head>
<body bgColor=#ffffff>
<p align="center">Test Weather Message</p>
<p align="center">&nbsp;</p>
<p align="left"><PRE>
```

Next enter the HTML code that should follow the weather text. Here is some sample code:

```
</PRE>
</body>
</html>
```

HTML coding allows you to include links to other websites and format the message with different fonts and colors.

Note: *The first line of the Header should begin with <html>. When a Header begins with <html>, Weather Message will replace any HTML reserved-characters, found in the weather text, with their appropriate HTML abbreviation. This prevents html browsers from misinterpreting the weather text as html code.*

17.8 What is EMWIN

EMWIN stands for the Emergency Managers Weather Information Network. It is a service provided free by the National Weather Service. EMWIN is a data stream broadcasted by the National Weather Service for use by emergency managers and others. This data stream contains current weather warnings, watches, images, advisories and forecasts issued by the National Weather Service.

The information present in the EMWIN data stream originates from local weather service offices and other sources. This information is collected at the National Weather Service office in Silver Spring, Maryland. From there, it is up-linked to the GOES weather satellites from a transmission site in Wallops Island, Virginia.

There are three methods to receive EMWIN data. You can obtain it directly from the GOES weather satellites with a satellite receiver. If the EMWIN signal is being broadcasted on a VHF or UHF frequency in your area, you can receive it using a low cost scanner and decoder. It is also available through an Internet connection. Each method requires different hardware and/or

software combinations. A list of hardware vendors is available from the National Weather Service EMWIN Vendors web page.

Who can benefit from EMWIN?

- Emergency Management Directors
- Public Safety Officials
- Amateur Radio Operators
- Business Owners
- Media Outlets
- Weather Hobbyists
- Schools
- Hospitals
-

Anyone who has a need for up-to-date weather information can benefit from EMWIN.

For additional information on EMWIN, visit the National Weather Service's EMWIN Information web page.

Weather Message uses this data stream to provide desktop alerts of impending weather situations.

17.9 What is Weather Wire

The National Oceanic and Atmospheric Administration Weather Wire Service, NWWS, is a satellite broadcast system that delivers critical National Weather Service information. CSC Systems & Solutions operates NWWS. This service is available using their proprietary C-band service or Internet connection. This system routinely delivers 99 percent of all messages within six seconds.

Established in October 2000, the system collects data from 141 U.S. Weather Centers and special centers around the country and broadcasts a continuous stream of alphanumeric information. Users may receive as much of the information as they want, for a low, fixed annual fee. Current customers include radio, television and cable stations; universities; state and federal emergency management services; and many other government agencies.

For more information on NWWS see DynCorp's website at <http://www.weatherwire.net> or NOAA's website at <http://www.nws.noaa.gov/nwws/>.

17.10 What is NOAAPort

The National Oceanic and Atmospheric Administration's NOAAPORT broadcast system provides a one-way broadcast of NOAA environmental data and information in near-real time to NOAA and external users. This broadcast service is implemented by communications utilizing C-band.

The NOAAPORT data stream is located on Satellite AMC-4, transponder 13C. It is broadcast using DBV formatting, allowing inexpensive equipment to be used to demodulate the data.

This transponder presently has 4 logical channels, NCEP/NWSTG, GOES, NCEP/NWSTG2, and Non-GOES Imagery/DCP Data. The NCEP/NWSTG, GOES, and NCEP/NWSTG2 channels have a data rate of 1.536 Mbps, while the Non-GOES Imagery/DCP Data channel has a data rate of 768 Kbps.

For more information on NOAAPort see NOAA's website at <http://www.nws.noaa.gov/noaaport/html/noaaport.shtml>. Weather Message's WxPort ingest engine processes one of the 4 data streams for use by Weather Message and other software applications.

Part



18 Software License

LICENSE AGREEMENT

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