

Weather Message

WxLocal

Version 3.8

Weather Alerting Software for your network.

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Weather Message - WxLocal - Local Weather Conditions

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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's WxLocal is a standalone current weather conditions receiving package. WxLocal runs from your system tray and provides current weather conditions from reporting stations around the world. You can even see one stations temperature in the system tray.

WxLocal works by retrieving weather conditions from the National Weather Service's web servers. This information is decoded and presented for easy use. You can configure WxLocal to show you the reporting stations and weather elements you want.

In addition to providing information on your computer, WxLocal can save the received conditions to an external file for processing by other programs. It saves the received conditions as a standard [National Weather Service message, XML file](#), or wave file. [Graphics](#) for the current conditions can be created for uploading to a website. It is commonly used with Weather Message software.

Why would you want to use WxLocal? It allows you to receive current weather conditions, view the current temperature in the system tray and does not have any annoying ads. Because you can control the time the program requests data, it has a low impact on your Internet connection.

Weather Message – WxLocal can be downloaded from the Internet and has a 60-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 Internet 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.

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 WxLocal 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.

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 WxLocal 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.

WxLocal features a full 60 day fully functional evaluation. During the evaluation period, all aspects of the software function normally. At the end of the 60 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 WxLocal before installing an updated software version. Uninstalling the software will delete your operating setup information.*

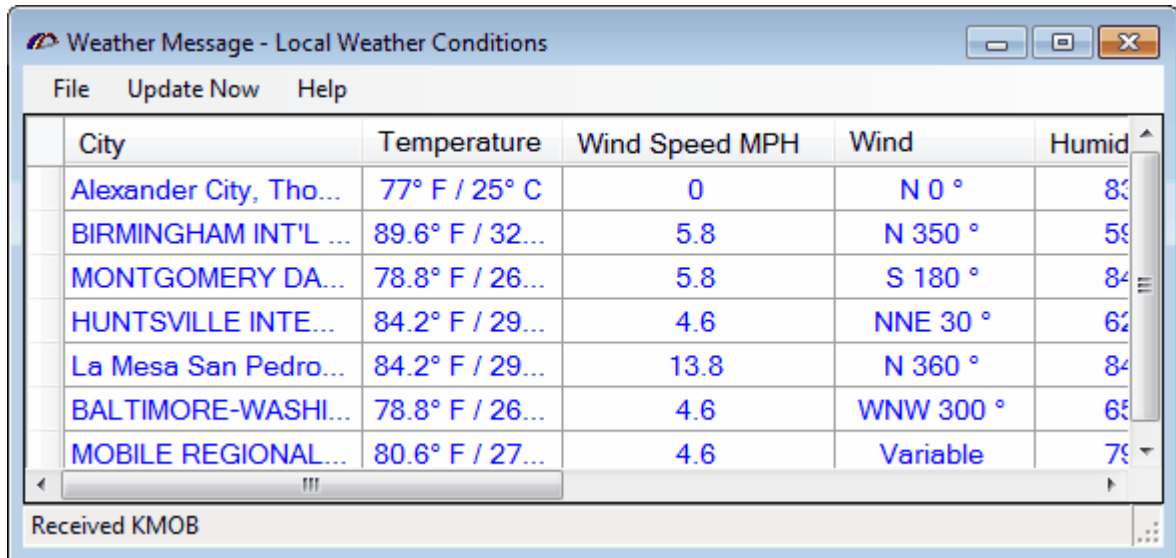
Part



2 WxLocal

Enter topic text here.

2.1 Overview



The screenshot shows a window titled "Weather Message - Local Weather Conditions" with a menu bar containing "File", "Update Now", and "Help". The main area contains a table with the following data:

City	Temperature	Wind Speed MPH	Wind	Humid
Alexander City, Tho...	77° F / 25° C	0	N 0 °	80
BIRMINGHAM INT'L ...	89.6° F / 32...	5.8	N 350 °	59
MONTGOMERY DA...	78.8° F / 26...	5.8	S 180 °	84
HUNTSVILLE INTE...	84.2° F / 29...	4.6	NNE 30 °	62
La Mesa San Pedro...	84.2° F / 29...	13.8	N 360 °	84
BALTIMORE-WASHI...	78.8° F / 26...	4.6	WNW 300 °	65
MOBILE REGIONAL...	80.6° F / 27...	4.6	Variable	79

At the bottom of the window, there is a status bar that says "Received KMOB".


The main window displays the weather information for the stations you have selected. To see [detailed information](#) click on a station.

The height of each row can be changed by moving the mouse over the bottom line of the row, left clicking and holding down the mouse while pulling down the line. You can also change the width of the columns the same way by placing the mouse over the vertical column lines.

If you enable the option to show the temperature in the system tray, the temperature of the first reporting station in the grid is displayed in the system tray.

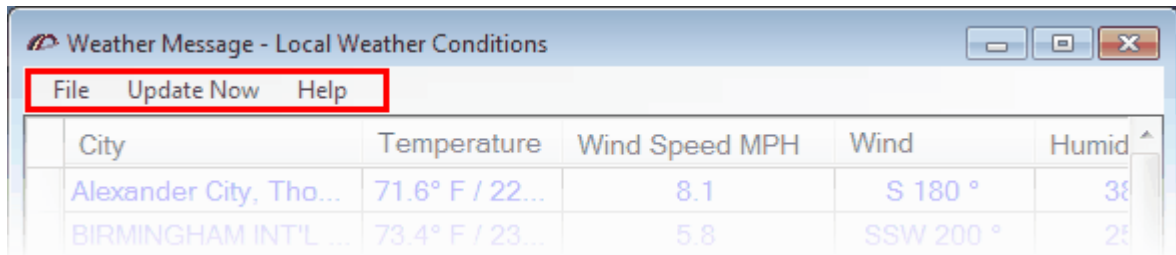
Note: *If WxLocal is stopped with the window minimized, the next time it is started, it will start minimized.*

System Tray

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

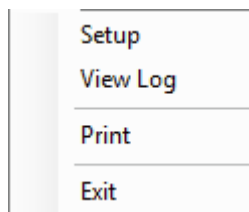
Copyright © 2011 Weather Message Software

2.2 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.

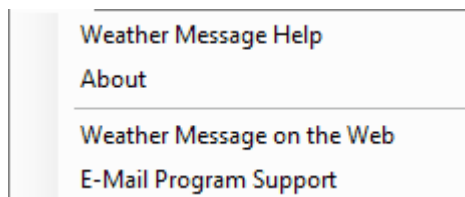


- The **Setup** option opens the [Setup window](#).
- The **View Logfile** displays the log file in notepad.
- The **Print** option prints the received weather data on your default printer.
- The **Exit** option shuts down WxLocal.

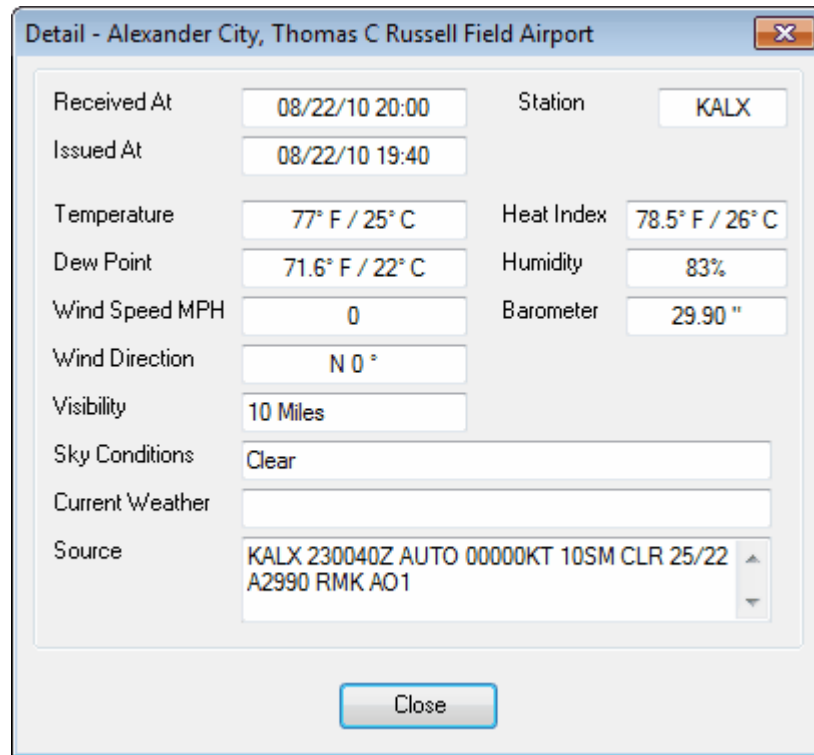
The **Update Now** menu forces the application to start a update cycle.

The **Register** menu allows you to [register](#) WxLocal. 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.



2.3 Detail Information



The screenshot shows a software window titled "Detail - Alexander City, Thomas C Russell Field Airport". The window contains a grid of weather data fields, each with a text input box. The fields and their values are:

Received At	08/22/10 20:00	Station	KALX
Issued At	08/22/10 19:40		
Temperature	77° F / 25° C	Heat Index	78.5° F / 26° C
Dew Point	71.6° F / 22° C	Humidity	83%
Wind Speed MPH	0	Barometer	29.90 "
Wind Direction	N 0°		
Visibility	10 Miles		
Sky Conditions	Clear		
Current Weather			
Source	KALX 230040Z AUTO 0000KT 10SM CLR 25/22 A2990 RMK AO1		

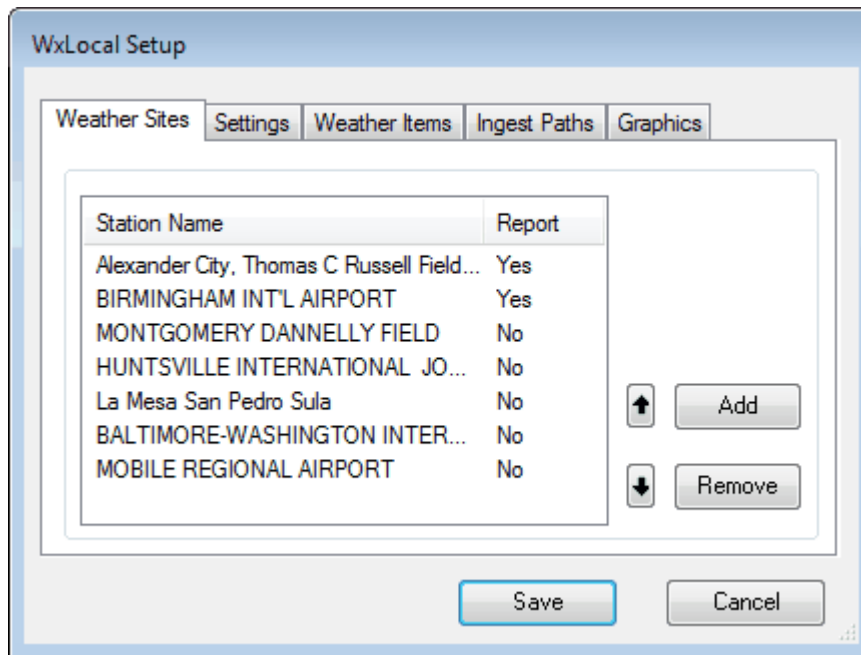
At the bottom center of the window is a "Close" button.

The Detail Information window displays all of the decoded information.

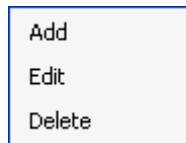
2.4 Setup

2.4.1 Weather Sites Tab

The Weather Sites Tab allows you to maintain the sites that you want retrieved.



Stations can be added by clicking **Add** or right clicking in the grid. To **Edit** an existing station, double click the station. The following menu is displayed when you right click inside the grid.



To delete a Station Name, click on the line that you want to delete and then click the **Remove** button or right click and use the menu Delete option.

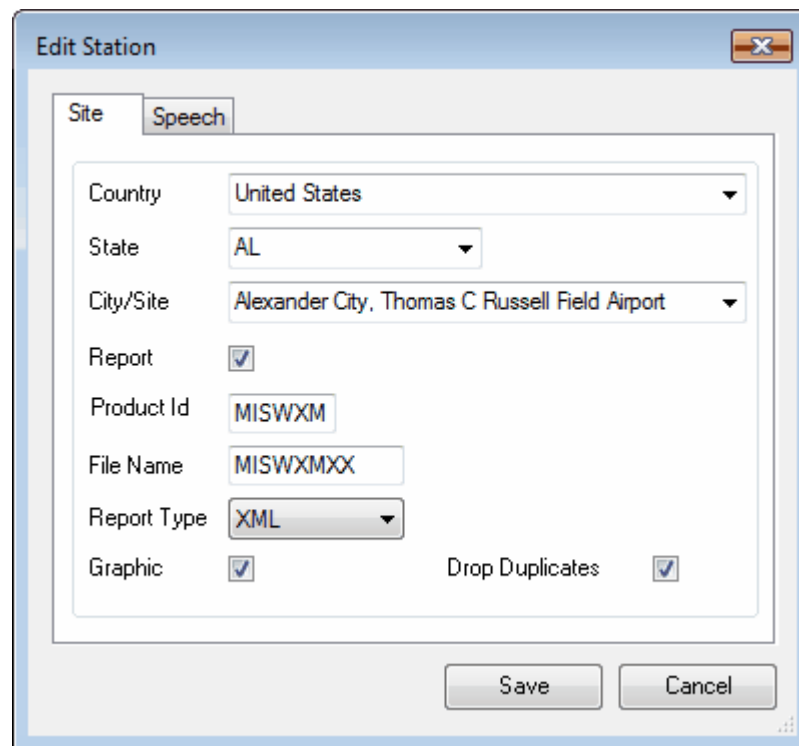
You can position the sites within your list by using the **Up** and **Down** arrows to the left of the Add and Remove buttons.

Note: *If you want the temperature for one station to appear in your system tray, make sure that station is the first one in the list. You can position that station by using the up and down arrow buttons to the left of the Add and Remove buttons.*

2.4.2 Adding / Editing Sites

2.4.2.1 Edit Site

When you edit or add a new station, the following window appears.



The screenshot shows a dialog box titled "Edit Station" with two tabs: "Site" and "Speech". The "Site" tab is active. The dialog contains the following fields and controls:

- Country: United States (dropdown)
- State: AL (dropdown)
- City/Site: Alexander City, Thomas C Russell Field Airport (dropdown)
- Report:
- Product Id: MISWXM (text input)
- File Name: MISWXMXX (text input)
- Report Type: XML (dropdown)
- Graphic:
- Drop Duplicates:

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

The **Site** tab select the site along with your reporting requirements.

Select the country using the **Country** box. You can type part of the country name to begin the selection, or use the drop down arrow.

After selecting the Country, select a **State**. You can type part of the state name to begin the selection, or use the drop down arrow.

After selecting the State, select the **City/Site** (weather reporting station). You can type part of the city/site name to begin the selection or use the drop down arrow.

The **Report** check box controls whether the program creates a text or xml file with weather information for processing by other programs. See the [Example](#) section for an example of the file created.

The **Product Id** field allows you to specify the product identifier (AWIPS Product) that will appear in the created report. This should be a 6 character identifier. The default is MISWXM.

The **File Name** field allows you to specify the file name that is used for reports and graphics. The field is limited to 8 characters. You do not need to enter an extension, the program will automatically add the appropriate extension based on the type of file being created.

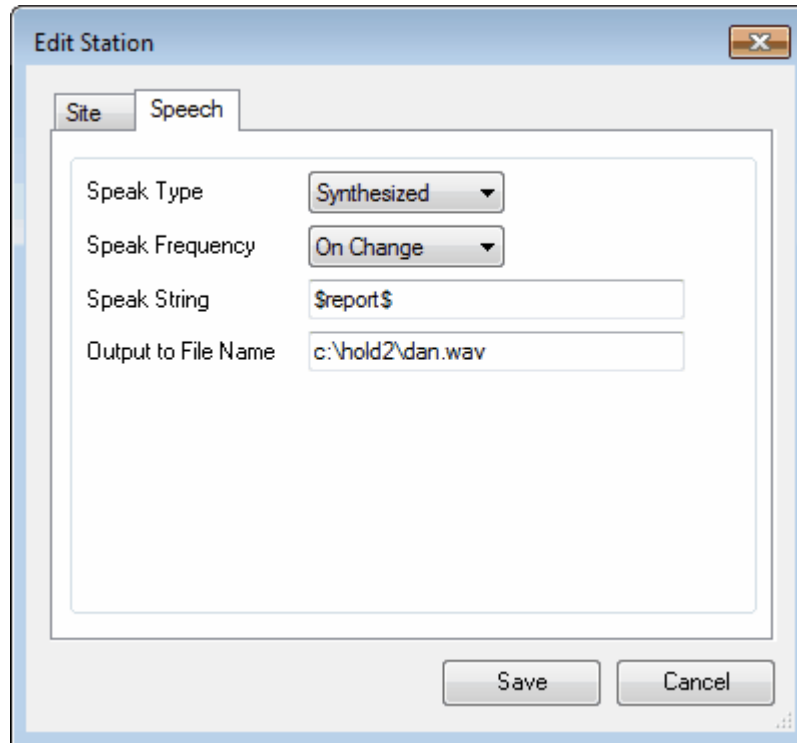
The **Report Type** combo box allows you to select the format of the file created. The Text option creates a standard National Weather Service message. The XML option creates a xml file. The xml file contains the raw weather data.

The **Graphic** check box controls whether the program creates a graphic containing the weather information for this station. The graphic is a 150 by 150 pixel image. See the [Example](#) section to see a sample graphic.

The **Drop Duplicates** option controls whether the program processes duplicate reports.

Normally this option would be enabled / checked.

The **Speech** tab allows you to select speech options for this station.



The **Speak Type** combo box allows you to determine if this station's report should be spoken. Select **Off** to turn off the speech options; **Synthesized** to speak the station's report using text to speech; or **From Wave** to create the report using custom wave files created for each word. See the [Custom Wave Files](#) section for more information about the From Wave option.

The Speak Frequency combo box select the frequency that the reports are spoken. Select **On Change** to speak the report when the temperature changes, **Quarter Hour** to speak the report every 15 minutes, **Half Hour** to speak the report every 30 minutes, or **Hourly** to speak the report at the top of each hour.

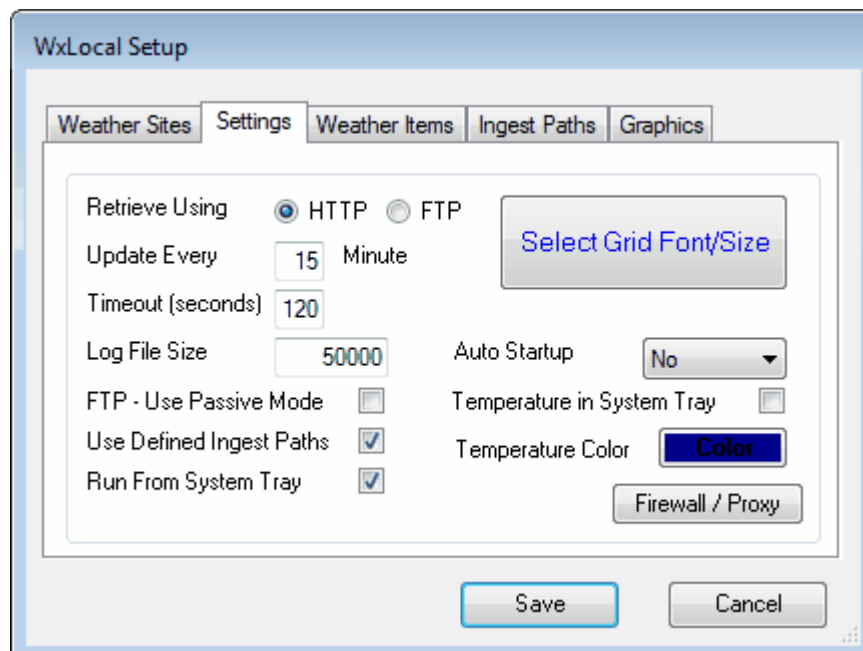
The **Speak String** field specifies the information that will be included in the spoken report.

<u>Variable</u>	<u>Description</u>
\$Report\$	Complete report
\$MetarId\$	Station identifier
\$Station\$	Station name
\$IssuedDate\$	Report issued date and time
\$ReceivedDate\$	Report received date and time
\$TemperatureF\$	Temperature in degrees F
\$TemperatureC\$	Temperature in degrees C
\$ChillHeatIndexF\$	Wind Chill or Heat Index in degrees F
\$ChillHeatIndexC\$	Wind Chill or Heat Index in degrees C
\$DewPointF\$	Dewpoint in degrees F
\$DewPointC\$	Dewpoint in degrees C
\$Humidity\$	Relative humidity
\$WindSpeed\$	Wind speed in miles per hour
\$WindDirection\$	Wind direction
\$Barometer\$	Barometric pressure

The **Output to File Name** option allows you to specify a directory path and file name to save the created synthesized speech or custom wave file. The created wave file can be used for other applications for further automation of weather reports.

2.4.3 Settings Tab

The Settings Tab is used to define general program operation.



The **Retrieve Using** option selects the protocol that will be used to retrieve the weather reports. Select HTTP or FTP.

Note: *The HTTP protocol retrieves the reports faster and is the default option.*

The **Update Every Minute** option is used to specify how often the program will retrieve data. The suggested setting is 20 minutes. This is the standard reporting rate for most stations.

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, LocalLog.txt. The default is 50,000 bytes.

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 **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 **Run from System Tray** option controls whether the program runs from the system tray or the task bar. Put a check mark here to run from the system tray.

The **Select Grid Font/Size** button is used to select the font, font size, and color of the text appearing in the reporting grid. Click this button to select any of these options.

The **Auto Startup** option allows you to specify whether WxLocal is automatically started when Windows starts. The options are No; Yes, for the current user; and Everyone, for any user.

Note: *The options available for **Auto Startup** are based on your user permissions. Administrator and Power users will have all of the options. Other users may only have the Yes option.*

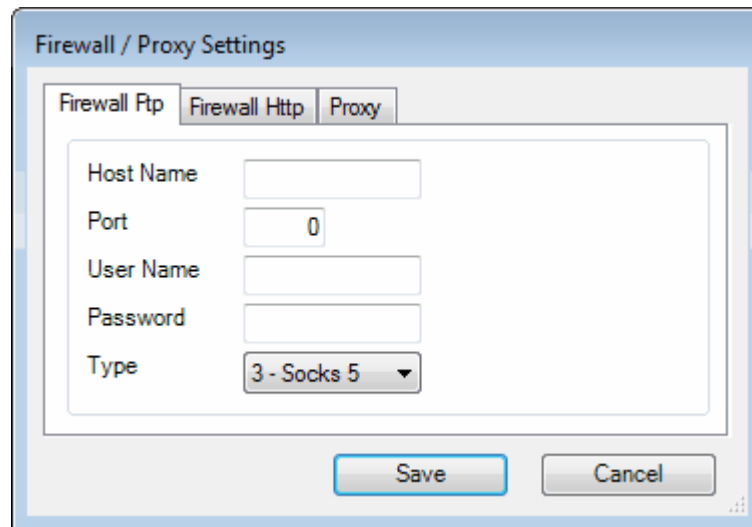
The **Temperature in System Tray** option controls whether the program displays the temperature for the first reporting station in the system tray. Put a check mark here to show the temperature for the first station in the grid.

The **Temperature Color** button allows you to select the color that will be used for the temperature icon that appears in the system tray.

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

2.4.3.1 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:

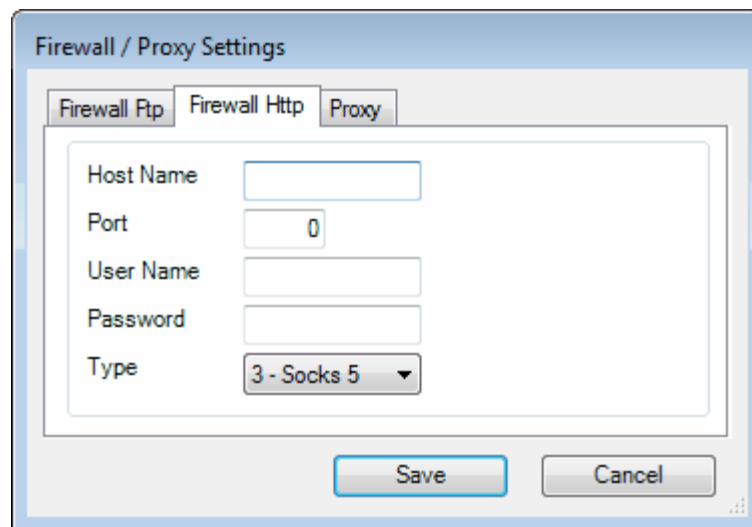
- Host Name:
- Port:
- User Name:
- Password:
- Type:
- Buttons: Save, Cancel

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:

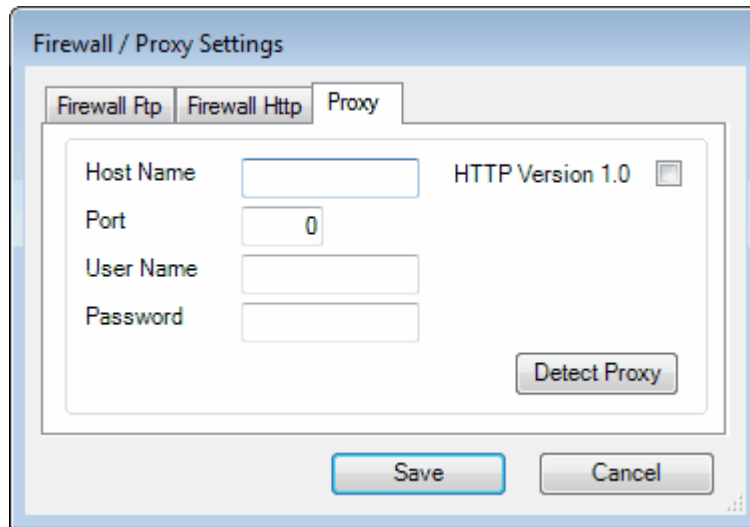
- Host Name:
- Port:
- User Name:
- Password:
- Type:
- Buttons: Save, Cancel

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.



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.

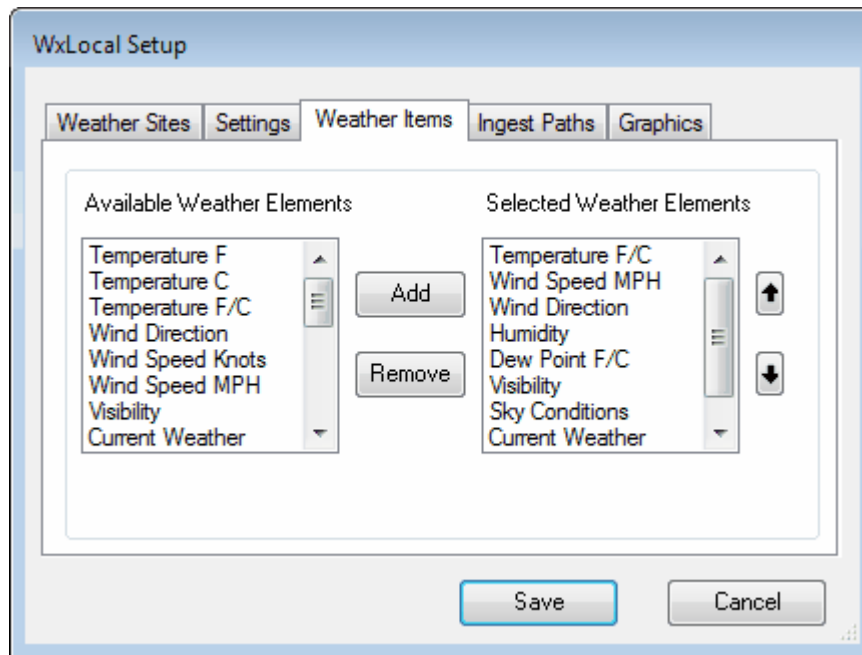
If **HTTP version 1.0** is required for the proxy server, check this box.

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.*

2.4.4 Weather Items Tab

The Weather Items Tab allows you to select the weather elements to display in the main grid.



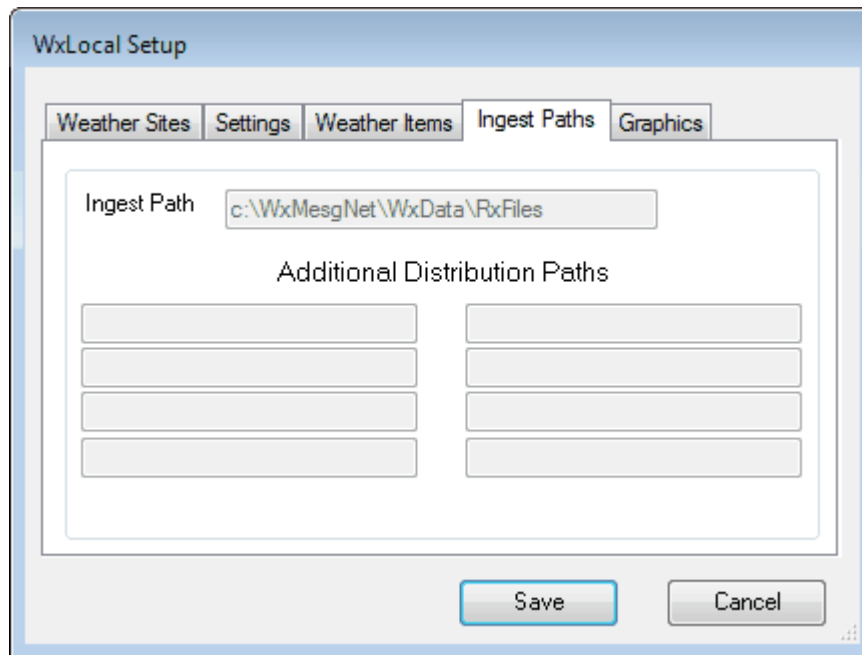
The items displayed in the right pane, titled **Selected Weather Elements**, will appear in the reporting grid. You can add items by clicking on an **Available Weather Element** in the left pane and then click the Add button.

You can remove Selected Weather Elements by clicking on the item and then clicking Remove.

You can position the Selected Weather Elements by clicking on an item and the using **Up** and **Down** arrow buttons to move the item.

2.4.5 Ingest Paths Tab

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



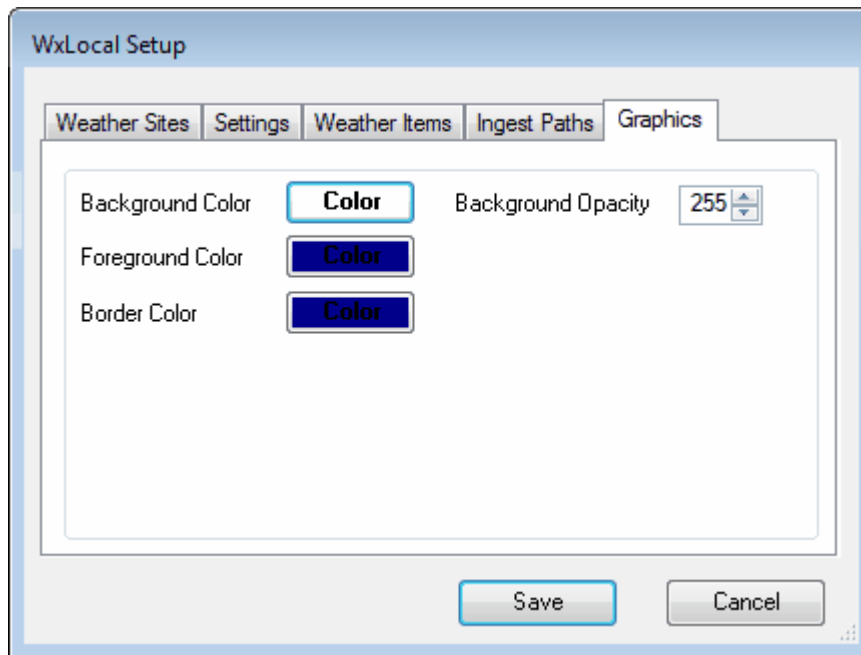
The **Ingest Path** is defined in the Weather Message Server setup screen and would not normally be entered here.

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.*

2.4.6 Graphic Tab

The Graphics Tab is used to define the colors that are used when creating a graphic image.



The **Background Color** specifies the color for the image background.

The **Foreground Color** specifies the color the text placed on the image.

The **Border Color** specifies the color for the border around the graphic.

Note: *If you do not want a border, change the border color to the same color used for the Background.*

The **Background Opacity** allows you to specify the opacity for the background and border. A value of zero will make the background completely transparent, while a value of 255 represents no transparency.

The icons that are used to indicate the weather conditions on the graphic are located in the Program Files\WxMesgNet\WxLocalIcons directory. These icons can be replaced with other icons as long as you use the same name.

2.5 Example

Example text file.

```

AXXX01 KWXM 020247
MISWXM

LOCAL WEATHER CONDITIONS
WEATHER MESSAGE
847 PM CST THU JAN 1 2009

LOCAL WEATHER CONDITIONS AT
Alexander City, Thomas C Russell Field Airport

Temperature      48.2 F / 9 C
Dew Point        30.2 F / -1 C
Humidity         50%
Wind Speed       4.6
Wind Direction   SE 130 Degrees
Visibility       10 Miles
Sky Conditions   broken at 3300 feet
Current Weather
Barometer        30.14 Inches
Issued At        01/01/2009 20:40

$$

```

Example xml file. Weather Message Server can be used to send the xml portion of the file to a website for further processing. Use the Selected No Head archive option.

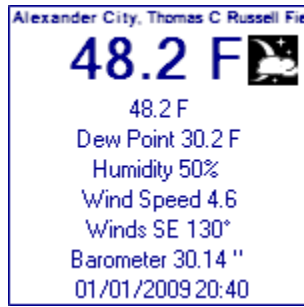
```

AXXX01 KWXM 020248
MISWXM

LOCAL WEATHER CONDITIONS
WEATHER MESSAGE
848 PM CST THU JAN 1 2009
<?xml version="1.0" encoding="utf-8"
standalone="yes"?>
<!--Created with Weather Message WxLocal-->
<Metar ID="KALX">
  <Station>KALX</Station>
  <StationName>Alexander City, Thomas C Russell
Field Airport</StationName>
  <IssuedDate>01/01/2009 20:40</IssuedDate>
  <ReceivedDate>01/01/2009 20:48</ReceivedDate>
  <TemperatureF>48.2</TemperatureF>
  <TemperatureC>9</TemperatureC>
  <WindChillF></WindChillF>
  <WindChillC></WindChillC>
  <HeatIndexF></HeatIndexF>
  <HeatIndexC></HeatIndexC>
  <DewPointF>30.2</DewPointF>
  <DewPointC>-1</DewPointC>
  <Humidity>50</Humidity>
  <WindSpeed>4.6</WindSpeed>
  <WindGustTo>0</WindGustTo>
  <WindDirection>SE</WindDirection>
  <WindVarying></WindVarying>
  <Visibility>10 Miles</Visibility>
  <Sky> broken at 3300 feet </Sky>
  <CurrentWeather></CurrentWeather>
  <Barometer>30.14</Barometer>
</Metar>

```

Example graphic.



2.6 Custom Wave Files

The [From Wave](#) option can be used to generate a wave file based on your own voice. To use this option, you must create wave files that match the words and numbers in generated report. The software will match the words in the report to the custom wave files and combine them to produce the custom wave file. The wave files for your voice must be saved in the c:\program files\wxmesgnet\WxLocalWave directory.

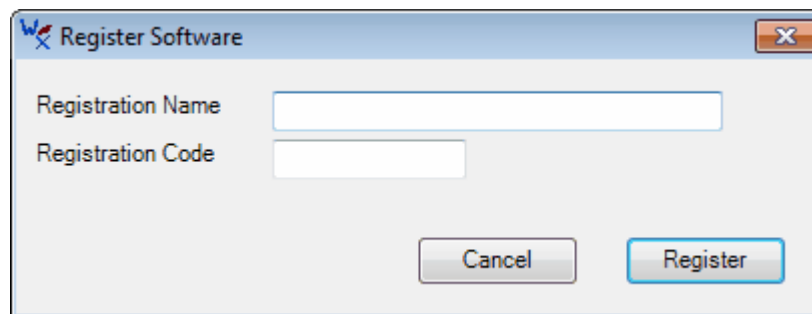
For example, if the report contains this text "The Temperature is 36 degrees". You will need these waves files: the.wav, temperature.wav, is.wav, thirty.wav, six.wav and degrees.wav.

The wave files for your voice must be recorded using the same sampling rate. For better quality sound, you should also use the same bits per channel and number of channels.

Note: Contact [Weather Message](#) for a default set of wave files.

2.7 Register Software

The Register menu option allows you to register your software.



When you purchase Weather Message WxLocal, 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



3 Software License

LICENSE AGREEMENT

I. LICENSE GRANT.

Danny Lloyd, hereafter referred to as Author, grants you a non-exclusive license to use the software known as WxMesg, or Weather Message, hereafter referred to as Software.

II. DISCLAIMER OF WARRANTY.

Software is provided on an "AS IS" basis, without warranty of any kind, including without limitation the warranties of merchantability, fitness for a particular purpose and non-infringement. The entire risk as to the quality and performance of the Software is borne by you. Should the Software prove defective, you and not Author assume the entire cost of any service and repair. In addition, the security mechanisms implemented by Author software have inherent limitations, and you must determine that the Software sufficiently meets your requirements. This disclaimer of warranty constitutes an essential part of the agreement. SOME JURISDICTIONS DO NOT ALLOW EXCLUSIONS OF AN IMPLIED WARRANTY, SO THIS DISCLAIMER MAY NOT APPLY TO YOU AND YOU MAY HAVE OTHER LEGAL RIGHTS THAT VARY BY JURISDICTION.

III. SCOPE OF GRANT.

You may:

- use the Weather Message Server on one computer;
- use the Weather Message Message Client and Map Client on any number of computers, up to the capacity of Weather Message Server.
- copy the Software for archival purposes, provided any copy must contain all of the original Software's proprietary notices.

You may not:

- permit other individuals to use the Software except under the terms listed above;
- modify, translate, reverse engineer, decompile, disassemble (except to the extent applicable laws specifically prohibit such restriction), or create derivative works based on the Software;
- rent, lease, grant a security interest in, or otherwise transfer rights to the Software; or
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