

Weather Message

WxDataSave
Database Archive Utility

Users Guide V1.1
October 10, 2004

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1. Software Overview

Weather Message's WxDataSave is a standalone database archival utility. WxDataSave receives weather text files and stores them in a Microsoft Access database. It runs quietly in your system tray processing files as they are received.

WxDataSave requires that another program received the weather text files from a NWS data stream and store them in a directory. We recommend Weather Message for this purpose. The Weather Message Ingest programs can store received weather files in multiple directories.

As the text files are received they are stored in a standard Microsoft Access database. You can use this database to provide data to a website or for local archiving. WxDataSave can store a number of copies of the same product identifier.

Weather Message – WxDataSave can be downloaded from the Internet and has a 60-day evaluation period. You can download it at <http://www.wxmesg.com>.

Note: Due to the nature of the Internet and the National Weather Service's Internet servers, data may not be available or current at all times. This situation is beyond the control of Weather Message.

2. Software Installation

WxDataSave can be purchased on CD or downloaded from the Internet. The CD should 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 WxDataSave program from the previous release. It cannot be used for a full installation.

Note: The program only updates are incremental updates. If you presently have version 1.0 and want to upgrade to 1.2, you will need to install the 1.1 and 1.1 program only updates.

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

Note: If your installation will use multiple user login names/profiles, we recommend that you install WxDataSave using the administrator login.

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

WxDataSave

The installation program will go through the steps for installing the software. We recommend that the software be installed on the same computer that is running Weather Message.

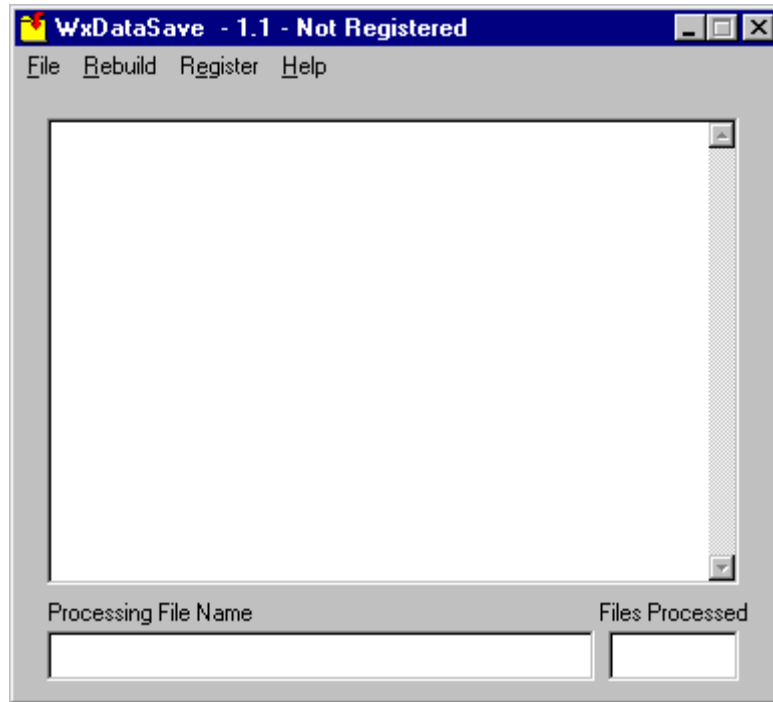
The following files are installed in the WxMesg directory.

WxRecProd.mdb	Access Database for storing the messages.
WxDataSave.ini	WxDataSave configuration file.
Recprod.asp	Sample asp script.
Showprod.asp	Sample asp script.
WxDataSave.exe	The WxDataSave executable file.

After you have installed this software, it will appear in your Start Programs menu under the title "Weather Message".

3. WxDataSave Operation

After installing WxDataSave, you are now ready to setup the software to process weather data. First start WxDataSave, this is done by clicking on Start, Programs, Weather Message, then WxDataSave. The following screen will be displayed.

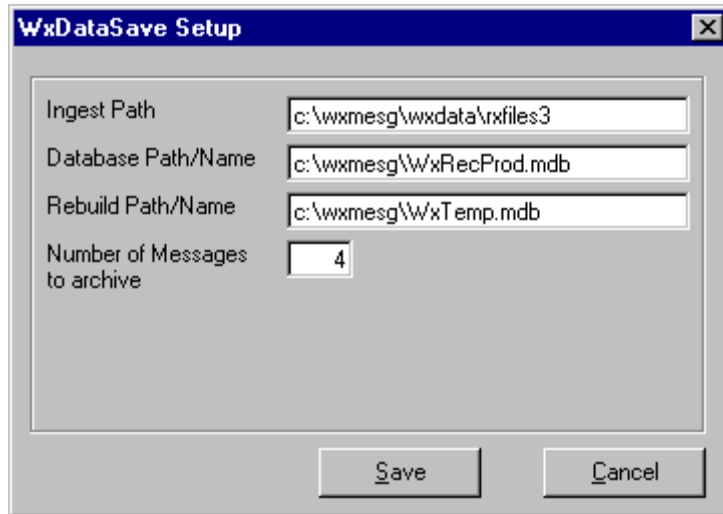


The buttons on this screen perform these functions.

- a. The *File* menu option allows you to Setup the program, or Exit the program.
 1. The *Setup* button is used to establish program parameters.
 2. The *Exit* button stops the program.
- b. The *Rebuild* button rebuilds the WxRecProd.mdb database.
- c. The Register button registers the software.
- d. The *Help* button tells information about the program.

Setup

Click on the *File* button and select *Setup*. You will see this screen.



This screen is used to setup the operation of the program.

The *Ingest Path* field is the path to the directory that contains the weather data files to process. This is the same directory that you setup in WxIngest or WxByte as an additional ingest directory.

The *Database Path/Name* is the path to the Access Database that will store the weather messages. The system defaults this to the installation directory.

The *Rebuild Path/Name* is the path to a temporary database that is used when rebuilding the main database.

The Number of Messages to Archive is the number of messages to archive for each product received. This number indicates how many of previous versions of a product that will be kept in the database.

Note: The system defaults to 1, which indicates that only one version of each product will be stored in the database.

Warning: Increasing the Number of Messages to Archive requires more computer power for processing. Storing additional messages requires more disk access and computer processing time. We have found that a 2.5 Ghz computer with a standard IDE drive, storing the full EMWIN data stream can archive a maximum of 7 old products. Increasing the number above 7 resulted in a backlog of products in the ingest directory.

Hint: You can use the archive option of weather message to store only the products that you desire in the ingest directory of WxDataSave.

Using this option will allow you to increase the number of messages to archive.

Operation

After the initial setup, the program will run quietly in your system tray. As each new product is received, it will be stored in the database. Other applications can then access the database to process the messages.

Each night at midnight, the program will automatically compress the Access database. Any third-party software that uses this database will need to release the database during this rebuild.

See the section on the WxRecProd database for the database structure.

4. Database Structure

The WxRecProd database contains 3 tables; Messages, Product, and WFO.

The Messages table contains the received weather products. The structure of the table follows:

Messages : Table			
	Field Name	Data Type	
PK	MsgNbr	AutoNumber	
	FileName	Text	File Name
	FileSequence	Number	File Name Sequence Number
	DateReceived	Date/Time	Date/Time Last Received
	DateOriginal	Date/Time	Date/Time Originally Received
	WMO	Text	WMO Type
	WFO	Text	Forecast Office
	IssueDate	Date/Time	Issue Date/Time
	AFOS	Text	AFOS Type
	MsgText	Memo	Text of Message
	MsgBinary	Memo	Binary Data

Note: The MsgBinary field is not currently populated.

The index for this table follows:

Index Name	Field Name	Sort Order
FileKey	FileName	Ascending
	FileSequence	Ascending
PrimaryKey	MsgNbr	Ascending
WFOKey	WFO	Ascending

Index Properties

The name for this index. Each index can use up to 10 fields.

The Products table contains the AWIPS product identifiers and descriptions. This table can be used to retrieve the product descriptions. The structure of the table follows:

Field Name	Data Type	
ID	AutoNumber	
AWIPS	Text	AWIPS product identifier
WMO	Text	WMO identifier
Desc	Text	Product Description

The WFO table contains the weather forecast office identifiers and names. The structure of the table follows:

Field Name	Data Type	
ID	AutoNumber	
wfo	Text	Wfo code
WfoName	Text	Wfo Name
WfoState	Text	Wfo State

5. Asp Samples

The distribution contains two sample asp scripts. These scripts can be used to display the messages contained in the database.

The reprod.asp displays a list of products for a specific WFO. The showprod.asp displays the text of a message selected from the list of products.

A discussion of the operation of these scripts is beyond the scope of this manual. If you want to use this option, you will need to consult someone familiar with asp and web programming.

6. Future Direction

This software will be enhanced only by user recommendations. If you would like for it to do something different, please let me know.

7. Program Assistance

You can contact the program author by email at this address danny@wxmesg.com. If you use mail, sent correspondence to Danny Lloyd, 203 Old Shepard Road, Dadeville, Alabama 36853.

8. Known Problems

There are no known program problems at the time of this software release.

Notes:

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