Winlink made Simple

Winlink can get kind of complicated, mostly because of the similar names for the software. Reviewing the names and uses:

Winlink 2000
This the name of an internet network, with associated amateur radio stations, MARS stations, and SHARES service stations. The radio stations and network enable Users to send and receive emails via radio, using standard email addresses. Protocols supported by the Winlink 2000 system are packet, pactor 1, pactor 2, pactor 3, pactor 4, Robust Packet, and WINMOR. Winlink 2000 can be described as a "private" email system.

WINMOR is a new communication protocol. It is designed to function with the Sound Card on computers, without the need of a TNC. It is designed to be used on HF, as an alternative to pactor. The throughput speed of WINMOR is between that of pactor 2 and pactor 3. Winlink Gateway Stations, using WINMOR, enable users to send and receive emails via radio, such as is done with packet and pactor.

Many WINMOR users use a "Sound Card Interface" device such as SignaLink, RIGblaster, or Rascal between their computer and radio. Such devices are also an alternative to a hardware TNC for using packet.

For example: Jim, KE7HTU in Davenport would have a Winlink email address of KE7HTU@winlink.org.
Heidi, KC7CCL in College Place would have a Winlink email address of KC7CCL@winlink.org.

If they each were operating "portable" and connected via packet to their local VHF/UHF **Winlink Gateway** station, and both of those gateway stations had communications to the internet, Jim and Heidi could exchange emails with each other. In fact they could exchange emails with someone in any country in the world which allowed Third Party Traffic, and had an email address.

ARRL Radiograms, ICS Forms, etc. can be imbedded in the email directly, or as Attachments.

Winlink Express (User software)
This is a User program, specifically written to handle the WINMOR protocol. It is used to do radio email on VHF/UHF (packet) or HF (pactor or WINMOR). It would access either a Winlink Gateway station (RMS Packet or RMS Pactor or RMS WINMOR) or if an internet connection is available, directly to the Winlink email server. The hardware required for use with Winlink Express is most any TNC or Sound Card.

Winlink Express has its own internal database of messages (In Box, Out Box, etc.) similar to what is used with AirMail. Attachments are supported.

System Requirements: 32 or 64 bit Windows OS (Windows Vista and newer, or under Windows on the Mac using a VM engine or dual boot arrangement. There are minimal CPU demands with the exception of WINMOR operation. The heavy DSP demands of WINMOR require a computer of at least 700 MHz Pentium/Celeron class and at least 512 Meg of memory. If multiple applications are running concurrently a faster computer and more RAM may be required.

AirMail (User software)
This is a User program, used to enable radio email, either on HF, or on VHF/UHF. On VHF /UHF it would access a Winlink Gateway which would have RMS Packet software installed and running.

The hardware required for use with AirMail on VHF/UHF is any packet TNC or Sound Card. Sounds Cards and many TNC's require the additional installation of the "AMPE" and "AGW Packet Engine" softwares.

AirMail will work on HF very nicely, using short messages, with a Timewave PK232-MBX TNC, using Pactor 1. AirMail will work on HF certain Kantronics, Timewave, and MFJ TNC's. Best performance is obtained by using Pactor 2 or 3 with a TNC made by SCS. "RMS Pactor" Stations are gateways to the Winlink 2000 system on HF frequencies for users of pactor.

AirMail can be used to exchange messages with another ham station, which is also using AirMail, without using the internet. This is called "peer-to-peer". AirMail handles Attachments.

AirMail can also be configured to access the Winlink 2000 system directly, without using a radio, by using a "telnet" (Internet Access) connection.

AirMail uses a "handshaking" protocol, which results in a very fast and automatic transfer of emails to be Sent and Received, after being composed offline.

The minimum operating system is Windows Vista. AirMail software is free.

Paclink (User software)
This is a User program, used to do radio email on VHF/UHF (packet) or HF (pactor). It would access either a Winlink Gateway station (RMS Packet or RMS Pactor) or if an internet

connection is available, directly to the Winlink email server. Paclink uses a fast and efficient "handshaking" protocol.

The hardware required for use with Paclink is most any TNC or Sound Card. Your regular email software (i.e., Outlook) is the user program which would be the Message Window, from which you would compose emails and do SENDS and RECEIVES, with Attachments.

Other needed software is .NET Framework 1.0 (or 1.1) and 2.0 (or later.) You need both; 2.0 is not a replacement for 1.0. Both are available free from Microsoft.

Depending on your TNC, you may also need AGW Packet Engine software. AGWPE is a "middle-ware" program which functions between Paclink and the TNC device you have selected. There is a free version and a $49 paid version.

The minimum operating system needed is Windows 2000. Paclink is free.

The predecessors of Paclink were Paclink AGW and Paclink MP (both no longer supported).

Paclink UNIX (User software)
This is a User program, used to do radio email on VHF/UHF (packet) or HF (pactor). It is written by Nicholas Castellano, N2QZ. It is specifically written to be used with the Linux operating system. It has features similar to Paclink

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All of the software mentioned can be downloaded or linked from www.winlink.org

Much additional information about Winlink 2000 is also available from that website.

Much more detailed information regarding the various components of Winlink 2000 is described in a FAQ type file, available from:

http://www.winlink.org/content/winlink_faq_frequently_asked_questions_answers

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