

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. The radio stations and network enable radio amateurs to send and receive emails via radio, using standard email addresses.

For example:

Ruth, W1MOM in Pullman would have a Winlink email address of w1mom@winlink.org

Bill, WB7UCI in Loon Lake would have a Winlink email address of wb7uci@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, Ruth and Bill 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. This would include, of course, the Washington State Emergency Management EOC at Camp Murray.

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

If internet connections are lost, Bill and Ruth can still exchange “emails” with each other if they connect to a common **Winlink RMS (Radio Message Server) Station**.

Generic Packet Software

Hams who want to do radio email can use their regular packet software, probably already on their computer. This is done by Connecting to a Winlink Gateway. The Winlink Gateway will prompt the user with a Greeting and then ask for a Command. Attachments are not supported. *This is the simplest and easiest method to try out the Winlink 2000 radio email system.*

- | | |
|---------------|---|
| H | will give the Help files |
| I | will give information about the Winlink 2000 RMS station which links the Winlink Gateway station to the internet. |
| LM | will list message numbers for the user. |
| RM | will Read all messages for the user. |
| R xxxx | will read the message with the number of xxxx. |
| K xxxx | will kill (delete) the message with the number of xxxx |
| KM | will kill (delete) all messages for the user |

SP SMTP: address@xyz.com will initiate a process to create and send an email to : address@xyz.com . Multiple addresses are separated by commas or semi-colons.

BYE Disconnects

AirMail

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 HF" Stations are gateways to the Winlink 2000 system on HF frequencies.

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 95. AirMail software is free.

Paclink

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 HF) 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 (no longer supported).

RMS Packet

Software which is used by a VHF/UHF “Winlink Gateway” station, to enable VHF/UHF packet users to access the email part of the internet. It is NOT installed on the computer of the VHF/UHF packet user. It is installed on the computer of a ham who wants to act as a local gateway to the internet for local users who want to do radio email.

The “Winlink Gateway” does not have to be a 24/7 operation. It will work best if the station is located on a high local spot, and users can connect directly, however it will work fine, but slower, if accessed through a digipeater or node. It is recommended that the installation of a Winlink Gateway station (or stations) be your #1 priority for ARES/RACES implementation in your area. Multiple RMS Pactor stations, operating on different frequencies, will provide additional through-put capability and redundancy.

The easiest option, of two, to create a Winlink Gateway, is to use the RMS Packet software directly with a Kantronics or MFJ TNC.

It will also work with most any brand of TNC or Sound Card, if used with the AGWPE “middle-ware” software.

The minimum operating system is Windows 2000. RMS Packet software is free.

The predecessor to RMS Packet was “Telpac” (no longer supported).

WINMOR

This is a new communication protocol, currently being beta tested. 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. “RMS HF” Stations will be able to communicate with stations using either pactor or WINMOR.

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.

Don Felgenhauer, K7BFL
Section Traffic Manager, Eastern Washington
K7BFL@earthlink.net

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