

RMS VHF Gateway / Relay Setup

Thanks to Rick (AJ4FW) for being the RMS Relay VHF only pioneer, being the first to get this operational. And to his team that tested the installation: Les (N4LPK), Bob (KJ4SV), Brent (W8XG) and John (KM4EJE)

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Background:

Winlink gateways, such as N4SER-10, normally transfer emails between a radio equipped with a TNC or soundcard modem and an internet server (CMS). If the internet is down a gateway will refuse connections. The Winlink Hybrid system ([Link](#)) was created to handle situations when the internet is unavailable to a gateway.

This document is a tutorial on how to set up a gateway that is running RMS Packet ([Link](#)) so it will accept and hold incoming messages when the internet is down. When the internet is restored the messages will be forwarded to a CMS as usual. If a local station should check in over the air while the internet is down, any messages held for them will be downloaded to them.

RMS Relay is the program that manages a gateway when the internet is down.

Instruction on how RMS Express behaves when connected to a gateway without the internet can be found at the end of this tutorial.

Install RMS Relay

- As a computer administrator log into your sysop Winlink account

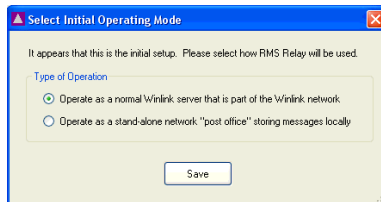
- Navigate to the Sysop Software
- At the bottom of the page click Winlink FTP site
- Click Sysop Programs
- Click RMS_Relay_install_xxx.zip where xxx is a date.
- The software will download.
- Unzip the file and run the setup as administrator
- You will have to navigate to the RMS Relay folder and create a shortcut and place it on the desktop.

Install VOACAP program << this may not be necessary

- Even though this installation will not be using HF the Voice of America propagation prediction program VOACAP may be installed. RMS Relay will display warning messages if this is not installed. Installing it will do no harm to the system.
- At this time it can be found on the WinLink Hybrid program page (<http://www.winlink.org/HybridNetwork>) or via FTP (ftp://autoupdate.winlink.org/User%20Programs/itshfbc_120722.zip)
- Follow the installation instructions accepting the defaults.
- VOACAP will install into C:\itshfbc.
- An icon will be placed on your desktop.

Initial run of RMS Relay

- Run RMS Relay and this screen appears:



- Select “Operate as a normal ...
- Click Save

Fill in the Site properties to match the settings in RMS Packet

RMS Relay Site Properties

Base Callsign (no SSID): N4SER Password:

Site Callsign: N4SER

Site Grid Square: EL86SH

Service codes: PUBLIC

Incoming connection port: 8772 (Default is 8772)

Automatically install field-test (beta) versions of RMS Relay

Inhibit automatic updates

Expiration Periods

Keep local users listed for 7 days after last seen Purge all local users

Expire and delete messages after this many days: 21

Expire and delete log files after this many days: 14

Manually enter off-line registration key

Update Cancel

Base Callsign - The sysop's call sign without prefix, suffix, or SSID. Example: W1ABC The base call sign and its associated password **must** exist in the Winlink data base.

Site Callsign - The callsign used by this program to identify itself on the air. In order to participate in the Winlink Hybrid Network, the callsign must be no longer than 6 characters, and it must *not* contain a SSID extension (i.e., "-nn").

Password - Letters and numbers between 4 and 12 characters long. This is your Winlink 2000 password.

Grid Square - A six character grid square to indicate the location of this site.

Service Codes: This is the code (or codes, separated by space). For amateur use use PUBLIC.

"Keep local users..." - Packet users connecting through RMS Relay are normally remembered in the "Local Users.txt" file for 7 days from the last time the station connected through RMS Relay. The "Local Users.txt" file controls what addresses are downloaded to RMS Relay from the CMS when using HF backup. You may change the length of time a local user remains on the list by altering this value.

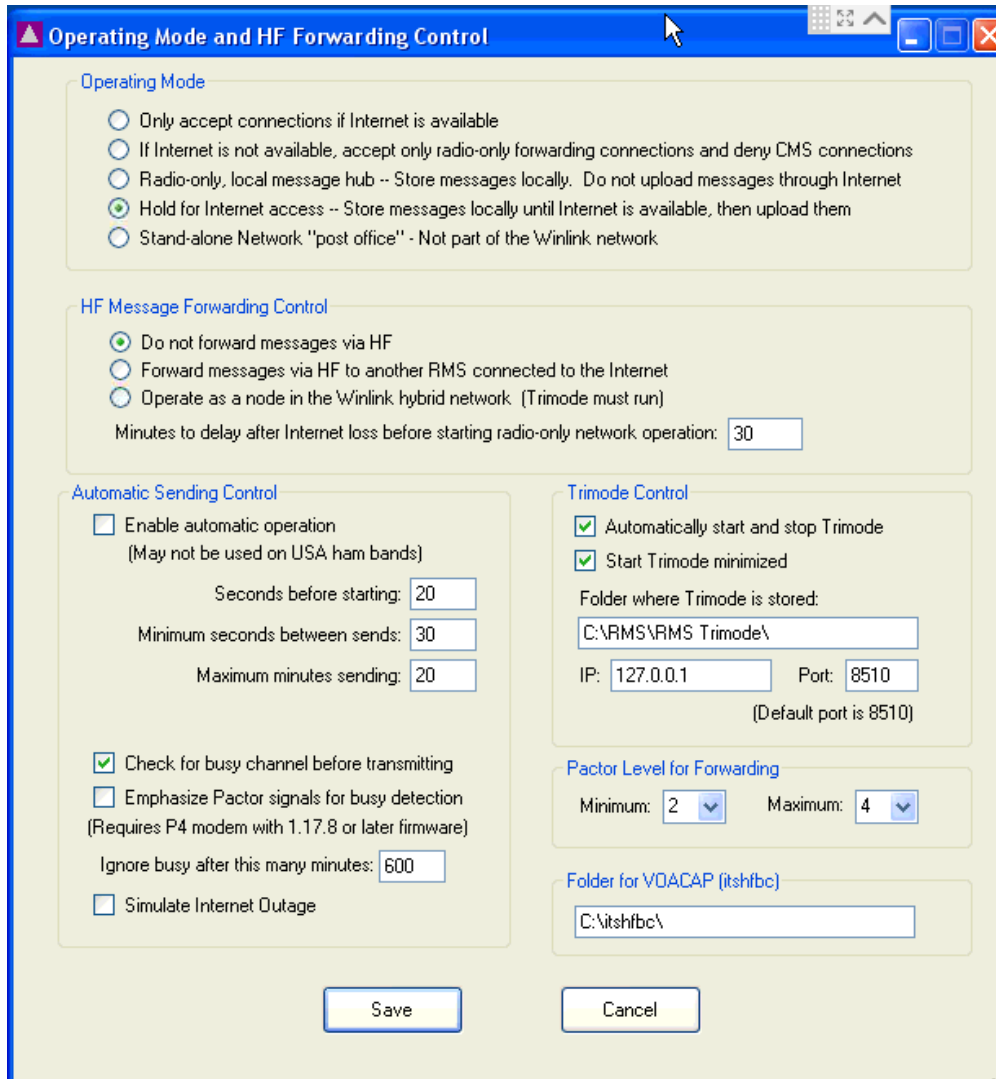
"Expire and delete messages after this many days" - Messages stored in the local RMS Relay database are retained for this number of days and then deleted.

"Expire and delete log files after this many days" - RMS Relay generates several log files to record what it's doing. The log files will be expired and deleted after this many days.

"Manually enter off-line registration key" - Normally, RMS Relay connects through the Internet to verify that a station is authorized for gateway access. However, for RMS that are operating without an Internet connection, it is possible to obtain an off-line registration key from the Winlink System Administrator that may be entered to register the program.

The installation will not proceed until this menu is correctly filled in. This information will be stored in the .ini file and in the SysopRecords table in the WLWMaster database. *From the Help file: Configuration / Setting the Site Properties*

- Click Settings then Operating Mode & HF Forwarding and set up as follows:



- Minutes to delay ... 30 is questionable.
- Trimode Automatic Start clicked or unclicked?
- Click Save

RMS Packet

- Open RMS packet and then the File / Site Properties Configuration Window
- Click 'Use RMS Express'. A checkmark should appear in the box in front of the option.
- Click Update, then Close.

Site Properties

Site Data

Base Callign (no SSID): N4SER
Password: [REDACTED]
Grid square (6 character): EL87SH
Operating Hours: 24/7
Start Minimized:
Archive Old Logs:
TCP/IP Timeout (seconds): 8
Use direct access to TNC:
Use AGW Packet Engine to Access TNC:
Use BPO32 to Access TNC:
Report disabled channels:
Request permission before installing updates:
Allow diagnostic information to be sent to the Winlink Development Team:
Use RMS Relay:
RMS Relay Address: localhost

Site Operation / Service Code
Public: Private: EmComm:
Custom Service Code: PUBLIC

Sysop Data

Sysop Name: Den Spiess
Street address 1: 604 Tarpon Way
Street address 2:
City: Nokomis
State/Province: FL
Country: USA
Postal code: 34275
Sysop email (non-Winlink): W2DEN@comcast.net
Sysop Web Site URL (optional): www.n4ser.org
Phone numbers (optional):
Additional information (optional): N4SER-10 Red Cross Winlink, Sarasota FL

Update Close Help

RMS Express

- Properties: Make sure that "Warn about connections to stations holding messages" is NOT checked

Recalculate HF path quality if SFI changes more than: 30

Keep logs for 2 weeks. Keep deleted messages for 30 days

Display list of pending incoming messages prior to download

Warn about connections to stations holding messages

Disable Peer-To-Peer Message Transfer

Allow diagnostic information to be sent to the Winlink Development Team

Automatically install field-test (beta) versions of RMS Express

Force a gateway into radio mode only,

- RMS Relay / Settings / Operating Mode & HF Forwarding / check: Simulate Internet Outage

Simulate Internet Outage

Connecting to an RMS Relay / Packet Gateway when the internet is down, or in test mode.

- You will see this message, or something very similar appear on the RMS Express Session Screen

No CMS connection is currently available. Messages will be held until the Internet connection is available and then forwarded.

- Then if the RMS Relay / Packet station is in test mode the following window will open:



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- You can:
 - 'Connect to this server' if you must get the e-mail delivered.
 - 'Cancel the connection' then nothing happens. Your e-mail will not be uploaded
 - Choose not to see the message again then when the system is in the radio only test mode messages will be delivered to the gateway and held until:
 - The internet is restored by turning off radio only mode
 - The recipient logs in and retrieves the message.