



W6TRW Amateur Radio Club

Home of the W6TRW ARC in Redondo Beach California

Winlink Overview & Demo

Bob

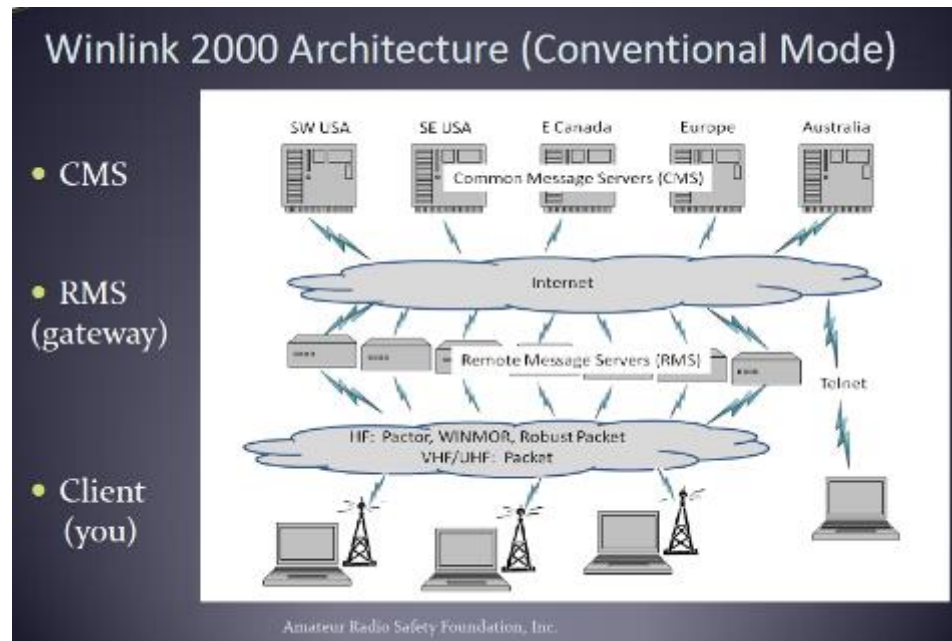
W6TRW General Meeting
Tuesday, 9 July 2019 @ 5:30 pm
Roundtable Pizza,
4330 Redondo Bch Blvd, Torrance CA





Winlink Overview and Demo

- **History – Tom’s briefing March 2018**
- **Cables and setup**
- **Installing Winlink**
- **Telnet Winlink**
- **Packet to a Winlink Node (RMS then to/from CMS and back)**
- **Packet to Packet with another Radio Operator**





History

- Tom briefed winlink to the Aerospace club in Feb 2017
- <http://www.aeaclubs.org/w6ago/> or ask Bob for a copy



The A2 Shack Setup





Cables & Setup

- Ordered a RS-232 to Kenwood Comm cable \$50? – one week
- Ordered a USB to RS-232 cable \$20 – one week
- Plug the cable in to laptop, it will download drivers (be connected to the internet)
 - It will set up a Comm port (might need if for troubleshooting)
 - Find the comm port using the hardware detection – comm port 5
 - Think each usb port has it's own comm port



Installing Winlink

- Go to website – <https://www.winlink.org/>
- Download Winlink Express
- My big issue – it needs Microsoft .Net 3.5 framework to operate (this is the software that does the port mapping, USB, and data control)
 - Took about 30 – 45 mins to install

Winlink is...

...a worldwide radio email service that uses radio pathways where the Internet is not present, and is capable of operating completely without the Internet—automatically using an internet radio relay. Winlink provides its users email, file attachments, position reporting, weather and information bulletins, and is well known for its role in emergency and disaster relief communications. Licensed Winlink operators/stations use both amateur radio and government radio frequencies worldwide. The system is built, operated and maintained entirely by licensed amateur operators. The system is provided by the Amateur Radio Society Foundation, Inc., a US 501(c)(3) non profit, public benefit entity. Winlink Global Radio Email is a US registered trademark of the Amateur Radio Society Foundation, Inc.

Gert Kmet, OE3ZK, SK

The Winlink Development Team is sad to report that on the 19th of January 2019 Mr. Gert Kmet, OE3ZK, became a permanent resident in an unexpected short-term but serious health complication.

Gert was our world-renowned radio trader and fellow member of the W1C1. Gert and his team operated the former C48 server in Vienna, Austria, and contributed regularly and frequently to matters large and small in

Fast info...

- Support Winlink: Register your program
- Lost Registration Key? Log in: its on your account page.
- Callgrid idempot? What is it: How to do it
- Why Winlink? What is it: How to do it
- Become a Winlink Gateway Sysop

Get Winlink Express

The only client program with everything Winlink offers. Easy to set up, learn and use. Fully supported. Free Download

Winlink Was There...

Lives and property saved, damage mitigated: Why Winlink volunteers do what they do.

Microsoft .NET Framework 3.5 Service Pack 1

Important! Selecting a language below will dynamically change the complete page content to that language.

Select Language:

Download

Microsoft .NET Framework 3.5 Service Pack 1 is a full cumulative update that contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents.

- + Details
- + System Requirements
- + Install Instructions
- + Additional Information
- + Related Resources



Install / Boot Up Winlink

Winlink Express Properties

Call Signs

My Callsign: Password:

Call sign suffix (optional): (used for country code)

Password recovery e-mail: (Non-Winlink e-mail address where password will be sent when requested)

Auxiliary Callsigns and Tactical Addresses

My Grid Square:

Winlink Express registration key:

Service Codes

(Use PUBLIC for ham call signs. Separate multiple service codes by spaces.)
If you change service codes, you must update the list of channels.

Contact Information (Optional)

Name:

Street address 1:

Street address 2:

City:

State/Province:

Country:

Postal code:

Web Site URL (optional):

Phone number:

Non-Winlink e-mail:

Additional information (optional):

Recalculate HF path quality if SFI changes more than:

Keep logs for weeks. Keep deleted messages for days.

Display list of pending incoming messages prior to download

Warn about connections to stations holding messages

Allow diagnostic information to be sent to the Winlink Development Team

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

- Install winlink
- Will take you right into Setup
- Create account and password
- call sign @ winlink.org
- Know your 6 letter Grid Square or know your Lat/ Long



Nag screen ...

You will get a nag screen when you open the application again. The Nag screen will make you wait a bit, before it lets you select “remind me later”, but you don’t have to buy the program or get a registration key.

Winlink Express Registration

Winlink Express is made possible through the Amateur Radio Safety Foundation Inc. Your registration of Winlink Express and support for the ARSF makes the Winlink system possible. Registering Winlink Express also registers your callsign to use the Winmor TNC.

Registration Site URL (click):
<http://www.arsfi.org/express.aspx>

Enter Registration Key

Call Sign: XYZ-123

Registration Key:



Create an Email

The screenshot displays the Winlink Express 1.5.18.0 interface. The 'Message' menu is open, with 'New Message...' selected and circled in red. The 'Enter a new message' dialog box is also shown, with the 'Post to Outbox' button circled in red. The dialog box contains the following fields:

- From: KK
- Send as: Winlink Message
- To: l address@aol.com
- Cc:
- Subject: test
- Attach:

The main text area of the dialog contains the text: "This is a test" and "Bob".



Post Message to Outbox

The screenshot displays the Winlink Express 1.5.18.0 interface. The main window title is "Winlink Express 1.5.18.0 - KK...". The menu bar includes "File", "Home", "Share", and "View". The toolbar contains icons for "Help", "Go", "Ch", "Open", and "Search". The main area shows a "No active session..." message. A table with columns "Date/Time", "Message ID", "Size", "Source", "Sender", "Recipient", and "Subject" is visible. A "Post to Outbox" dialog box is open, with the "Post to Outbox" button highlighted in a red circle. The dialog box contains the following fields and options:

- Buttons: Close, Select Template, Attachments, **Post to Outbox**, Spell Check, Save in Drafts
- From: KK ...
- Send as: Winlink Message
- Request read receipt
- Set De...
- To: email@email.com
- Cc:
- Subject: test
- Attach:

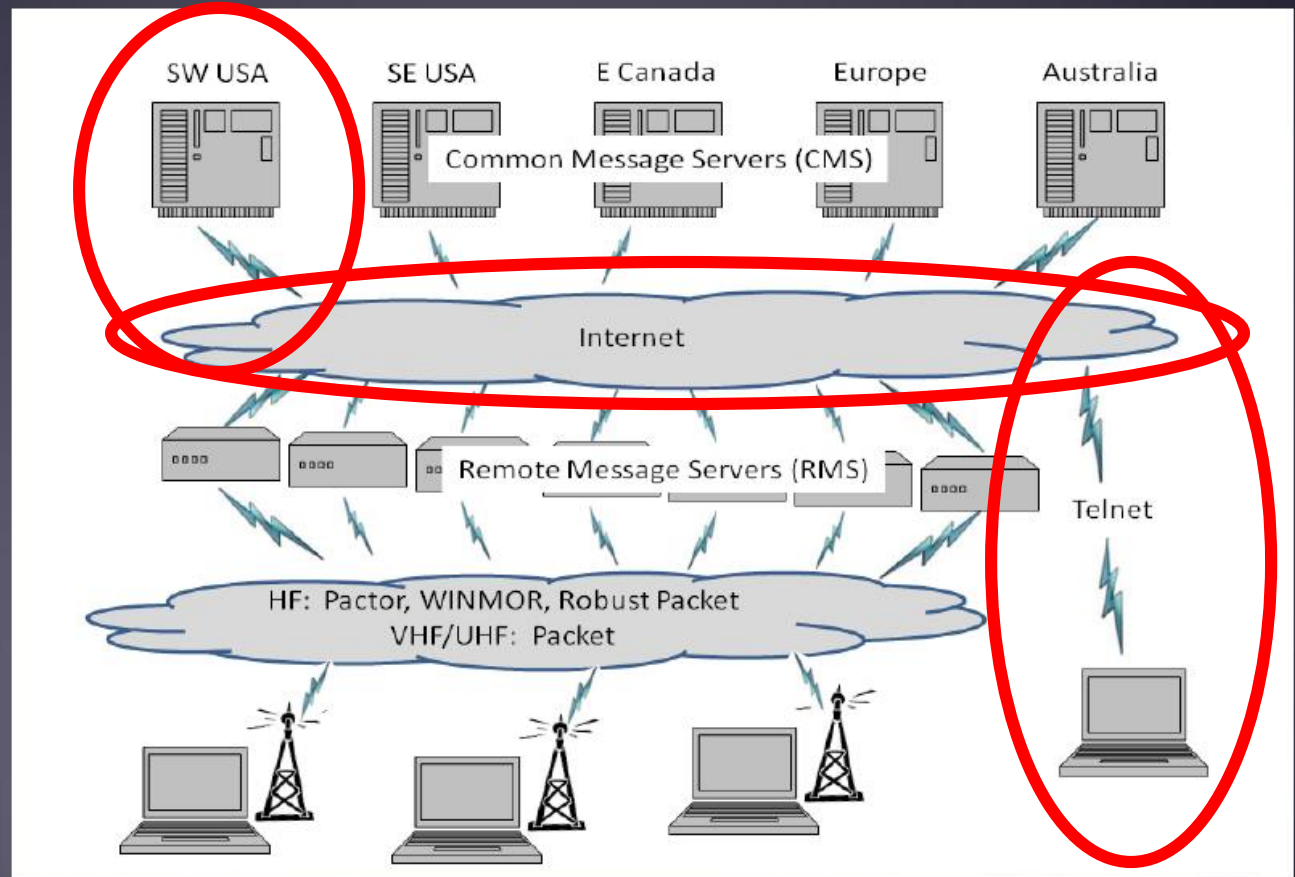
The message body contains the text: "This is a test." followed by "Bob".



Now - Try a Telnet Email

Winlink 2000 Architecture (Conventional Mode)

- CMS
- RMS (gateway)
- Client (you)





Open a Telnet session

The screenshot shows the Winlink Express 1.5.18.0 - KK6... application window. The interface includes a menu bar with 'File', 'Home', 'Share', and 'View'. Below the menu bar, there are buttons for 'Settings', 'Message', 'Attachments', 'Move To: Saved Items', 'Delete', 'Open Session: Telnet Winlink', and 'Logs'. The 'Open Session: Telnet Winlink' dropdown menu is circled in red. Below the menu bar, there is a toolbar with various icons, including a blue arrow icon pointing right, which is also circled in red. Below the toolbar, there is a section labeled 'No active session...' with an 'Open session' button. Below this, there is a table with columns for 'Date/Time', 'Size', 'Source', 'Sender', 'Recipient', and 'Subject'. The table is currently empty. On the left side, there is a sidebar with folders: 'System Folders' (Inbox (0 unread), Read Items (0), Outbox (1), Sent Items (0), Saved Items (0), Deleted Items (0), Drafts (0)), 'Personal Folders', 'Global Folders', and 'Contacts'.

Make sure you have an internet connected. Test to see that your email works.



Telnet Session

```
Telnet Winlink Session
Exit  Settings  Start  Stop  Time to next Autoconnect = Disabled
*** Connecting to a CMS...
*** Connected to AWS at 2018/10/05 18:51:10
[WL2K-5.0-B2FWIHJMS]
:PQ: 20902194
CMS>
:FW: KK6 ...
[RMS Express-1.5.12.0-B2FHMS]
:PR: 20456386
:WL2K DE KK--- (DM03TV)
FC EM 3V0D40HSADEC 192 173 0
F> C8
FS Y
*** Sending 3V0D40HSADEC.
FF
*** Completed send of message 3V0D40HSADEC
*** Sent 1 message. Bytes: 206, Time: 00:00, bytes/minute: 46532
FQ
```



SMTP Feedback

Winlink Express 1.5.18.0 - KK

KKI Settings Message Attachments Move To: Saved Items Delete Open Session: Packet Winlink Logs Help

In Packet Winlink session.

System Folders	Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
Inbox (1 unread)	2019/01/23 0...	2761T17J3JKA	467	SMTP	SMTP:fa...	KK	Re: //WL2K 2nd UHF/VHF message via Winlink
Read Items (0)	2019/01/23 02:44	8GH21R179YBH	462	CMS	SERVICE	KKI	Service Advice Message
Outbox (0)	2019/01/19 18:34	BZ2U96B3YZ80	267	SMTP	SMTP:bob	KKI	Re: //WL2K test

Personal Folders

Global Folders

Contacts

Message ID: 8GH21R179YBH
Date: 2019/01/23 02:44
From: SERVICE
To: KKI
Source: CMS
Downloaded-from: RMS:K6CCR-10
Subject: Service Advice Message

Some data removed

Email to Kirk Failed ...

We have been unable to deliver your message:
MessageId: GQAZNT6XBJNP
To: SMTP:kirk. @ .com
Subject: //WL2K 2nd UHF/VHF message via Winlink
for the reason given below by the remote mail server.

"550-5.1.1 The email account that you tried to reach does not exist. Please try"

This advice applies only to SMTP:kirk. @ .com. Other addressees of the same message may have been successfully forwarded.



Tom's Reply

Winlink Express 1.5.18.0 - KK

KKI Settings Message Attachments Move To: Saved Items Delete Open Session: Packet Winlink Logs Help

In Packet Winlink session.

System Folders	Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
Inbox (0 unread)	2019/01/23 02:45	2761T17J3JKA	467	SMTP	SMTP [redacted]	KK [redacted]	Re: //WL2K 2nd UHF/VHF message via Winlink
Read Items (0)	2019/01/23 02:44	8GH21R179YBH	462	CMS	SERVICE	KK ...	Service Advice Message
Outbox (0)	2019/01/19 18:34	BZ2U96B3YZ80	267	SMTP	SMTP:bob	KKI	Re: //WL2K test
Sent Items (3)							
Saved Items (0)							
Deleted Items (0)							
Drafts (0)							

Personal Folders

Global Folders

Contacts

Message ID: 2761T17J3JKA
Date: 2019/01/23 02:45
From: [redacted]@ [redacted].com
To: KK
Source: SMTP
Downloaded-from: RMS:K6CCR-10
Subject: Re: //WL2K 2nd UHF/VHF message via Winlink

FB OM 73!

Tom [redacted]

On Jan 22, 2019, 6:44 PM -0800, KK [redacted]@winlink.org, wrote:

- > Hi Guys,
- >
- > Took a couple of hours, but I was finally able to send email via the Culver city CCAR Winlink email system.
- >
- > Now I need to build a briefing and try to capture all the setting, so this works at my demo next week.
- >
- > thnx,
- > Bob
- >

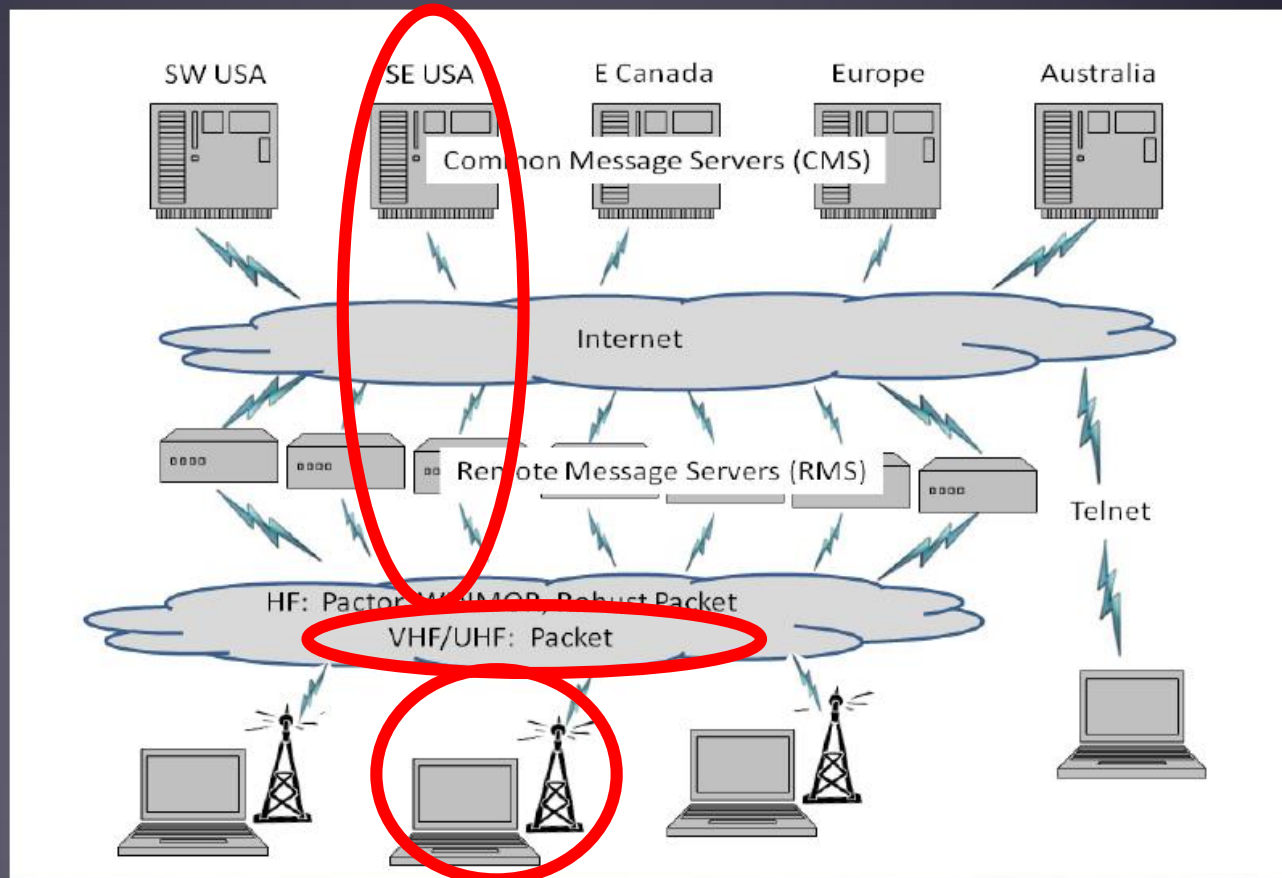
some data removed



Now - Try a Radio Email

Winlink 2000 Architecture (Conventional Mode)

- CMS
- RMS (gateway)
- Client (you)





Find a station

Packet Winlink Session

Exit Settings Switch to Peer-to-Peer Session Channel Selection Baud Start Stop

Connection type: Direct K6CCR-10 Via

Connection script: Edit script Add script Remove script

Time to next Autoconnect = Disconnected

*** Starting WL2K packet session...
*** Initializing Kenwood TM-D710 B...
*** Initialization failed - *** Failed to...

Packet Channel Selector

Exit Select Channel Update Table Via Internet Update Table Via Radio

Stations found within 160 kilometers of your grid square.

Callsign	Frequency (MHz)	Baud	Grid Square	Group	Distance (mi)	Bearing (Degrees)
K6CCR-10	145.050	1200	DM04TA	PUBLIC	006	000
K6CCR-10	145.050	1200	DM04TA	PUBLIC	006	000
AJ7C-10	431.125	9600	DM04TA	PUBLIC	006	000
W2NP-10	145.050	1200	DM04UC	PUBLIC	012	025
KE6WEZ-10	145.050	1200	DM04PG	PUBLIC	030	320
W6ACS-11	431.125	9600	DM13CW	PUBLIC	034	090
K6NBR-10	431.475	9600	DM13BO	PUBLIC	037	129
K6NBR-10	145.050	1200	DM13BO	PUBLIC	037	129
W6ACS-10	431.475	9600	DM13DS	PUBLIC	040	107
KK6MTQ-10	145.630	1200	DM04VM	PUBLIC	041	014
AG6MO-10	145.090	1200	DM14EC	PUBLIC	044	075
WB6TT-10	144.970	1200	DM13FU	PUBLIC	048	097
W6ACS-12	431.075	9600	DM13EK	PUBLIC	055	128
KE6NYT-10	145.050	1200	DM04LM	PUBLIC	055	317
WM6T-10	145.090	1200	DM14JG	PUBLIC	071	071
KG6HSQ-10	145.050	1200	DM13JJ	PUBLIC	077	119
KD6ILO-10	145.050	1200	DM13IF	PUBLIC	080	128
N6CWP-10	145.050	1200	DM13LM	PUBLIC	082	119

1. Need internet
2. Pick a station,
 - Close is good
 - Notice Data Rate
 - 2 meter vs 70 cm



Find a Station

← → ↻ ⓘ Not secure | ccares.net/about/

📱 Apps 🌐 Google 📄 ms2labs 🔥 torproject 📄 VirusTotal 📄 ms2labs-25 📄 SB-WASP mt-up 📄 PublicVerse 📄 ccar

Amateur Radio Operator and will agree to support CCARES during disaster operations.

Frequencies

The K6CCR repeater is located near the Baldwin Hills Scenic Overlook and is on:

445.6 MHz, CTCSS code 131.8, standard offset of -5 MHz.

[CCARES Essential Channel List](#)

CCARES has a Winlink Packet Gateway Station, K6CCR-10, which operates 24/7 on **145.05 MHz/1200bps.**



Set up

Packet Winlink/P2P Setup

TNC Connection

Packet TNC Type: Kenwood TM-D710 B-Band

Packet TNC Model: [] AutoConnect Time: Disabled

Serial Port: COM5

Serial Port Baud: 9600

If Auto Connect is enabled, open session when Winlink Express is started

TNC Parameters

1200 Baud 9600 Baud

TX Delay (Milliseconds):	400	300
Maximum Packet Length:	128	255
Maximum Frames:	2	7
Frack:	2	2
Persistence:	160	224
Slot time:	30	20
Maximum Retries:	5	5

Disable Xmt Level Adjust Transmit Level: 100

Update Cancel

- Radio and Band
- Port
- TNC parameters

- Important, listen to the channel, set your squelch properly.
- Your radio won't transmit if it hears a busy channel !!



Create an Email, Select Message Type and post to Outbox

The image illustrates the steps to create and post an email in Winlink Express 1.5.18.0:

- Step 1:** Open the 'Message' menu and select 'New Message...' (highlighted with a red circle).
- Step 2:** In the 'Enter a new message' dialog box, select 'Send as: Winlink Message' (highlighted with a red circle).
- Step 3:** In the 'Enter a new message' dialog box, click 'Post to Outbox' (highlighted with a red circle).

The email content shown in the screenshots is:

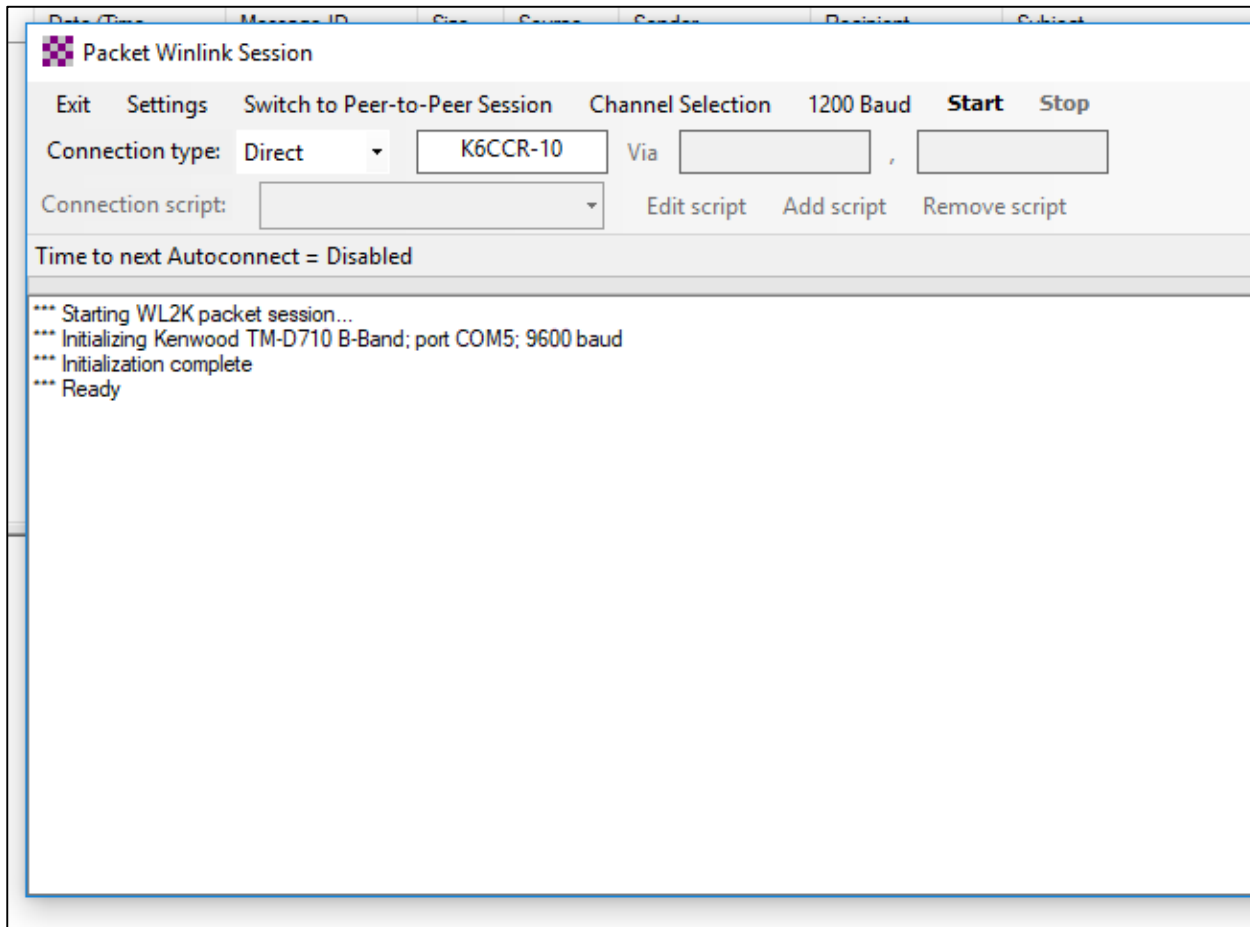
This is a test
Bob



Set up – Connect to the radio

- Radio and Band
- Port
- TNC parameters

- Important, listen to the channel, set your squelch properly.
- Your radio won't transmit if it hears a busy channel !!





A successful connection !!

Packet Winlink Session

Exit Settings Switch to Peer-to-Peer Session Channel Selection 1200 Baud Start Stop

Connection type: Direct K6CCR-10 Via ,

Connection script: Edit script Add script Remove script

Received: 468 Sent: 304 Time to next Autoconnect = Disabled

```
*** Starting to call K6CCR-10
*** Opening serial port COM5: 9600 baud; Kenwood TM-D710 B-Band
*** Connecting to K6CCR-10
*** Connected to K6CCR-10 at 2019/01/23 02:31:07

Culver City ARES RMS Packet Gateway 145.05 | DM04ta
[WL2K-5.0-B2FWIHJMS]
:PQ: 31456252
CMS via K6CCR >
:FW KK - cont Data in Boxes
[RMS Express-1.5.18.0-B2FHMS] removed
:PR: 35389784
: K6CCR-10 DE KK (DM03TW)
FC EM OQD2RXB3BFV7 168 155 0
F> B4
:PM KK... BZ2U96B3YZ80 231 bob @ com Re: //WL2K test
FS Y
*** Sending OQD2RXB3BFV7.
FC EM BZ2U96B3YZ80 271 231 0
*** Completed send of message OQD2RXB3BFV7
*** Sent 1 message. Bytes: 175, Time: 00:06, bytes/minute: 1545
F> B6
FS Y
*** Receiving BZ2U96B3YZ80
*** BZ2U96B3YZ80 - 286/243 bytes received
*** Bytes: 255, Time: 00:01, bytes/minute: 14278
FF
FQ
*** -- End of session at 2019/01/23 02:31:55 --
*** Messages sent: 1. Total bytes sent: 175, Time: 00:47, bytes/minute: 220
*** Messages Received: 1. Total bytes received: 255, Total session time: 00:47, bytes/minute: 320
*** Disconnecting at 2019/01/23 02:32:03
*** Disconnect reported.
```

Hit Start ...



Mailbox updates – Kirk email Failed

It sends email waiting in your outbox ... Here is the Sent items

Winlink Express 1.5.18.0 - KK

Settings Message Attachments Move To: Saved Items Delete Open Session: Packet Winlink Logs Help

In Packet Winlink session.

System Folders	Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
Inbox (0 unread)	2019/01/23 02:39	GOAZNT6XBJNP	433	KK	KK		//WL2K 2nd UHF/VHF message via Winlink
Read Items (0)	2019/01/23 01:25	OQD2RXB38FV7	175	KK	KK		//WL2K test
Outbox (0)							
Sent Items (2)							
Saved Items (0)							
Deleted Items (0)							
Drafts (0)							
Personal Folders							
Global Folders							
Contacts							

Some email addresses and call signs removed

Message ID: GOAZNT6XBJNP
Date: 2019/01/23 02:39
From: KK6WYW
To: [redacted]@axrl.net; [redacted]@gmail.com; [redacted]@aero.com
Cc: [redacted]@gmail.com
Source: KK
Subject: //WL2K 2nd UHF/VHF message via Winlink

Hi Guys,

Took a couple of hours, but I was finally able to send email via the Culver city CCAR Winlink email system.

Now I need to build a briefing and try to capture all the setting, so this works at my demo next week.

thnx,
Bob



Mailbox updates

Winlink picks up any email that is sitting in the CMS (via internet), and moves it thru your RMS (internet), then via radio back to you, if addressed to you.

Winlink Express 1.5.18.0 - KK

KKI Settings Message Attachments Move To: Saved Items Delete Open Session: Packet P2P Logs Help

No active session...

System Folders	Date	Message ID	Size	Source	Sender	Recipient	Subject
Inbox (0 unread)	2019/01/27 22:46	DGELC8QMDHUX	164	KKI	KKI	N6... (P2P)	test 4
Read Items (0)	2019/01/27 22:43	29LWZR6NX83X	191	KKI	KKI	N6... (P2P)	test #3
Outbox (1)	2019/01/27 22:40	GMM3PQUY4R...	178	KKI	KKI	N6... (P2P)	test 2
Sent Items (6)	2019/01/24 02:36	JIDEP08YPB78	168	KKI	KKI	bob. i@g..	//WL2K test3
Saved Items (0)	2019/01/23 02:39	GQAZNT6XBJNP	433	KKI	KKI	kl @amf.net...	//WL2K 2nd UHF/VHF message via Winlink
Deleted Items (0)	2019/01/23 01:25	OQD2RXB3BFV7	175	KKI	KKI	bob @g..	//WL2K test
Drafts (0)							

Message ID: 29LWZR6NX83X
Date: 2019/01/27 22:43
From: KKI
To: N6
Source: KKI
P2P: True
Subject: test #3

this is test 3 from Bob, kk

431.475 mhz, p2p

data deleted

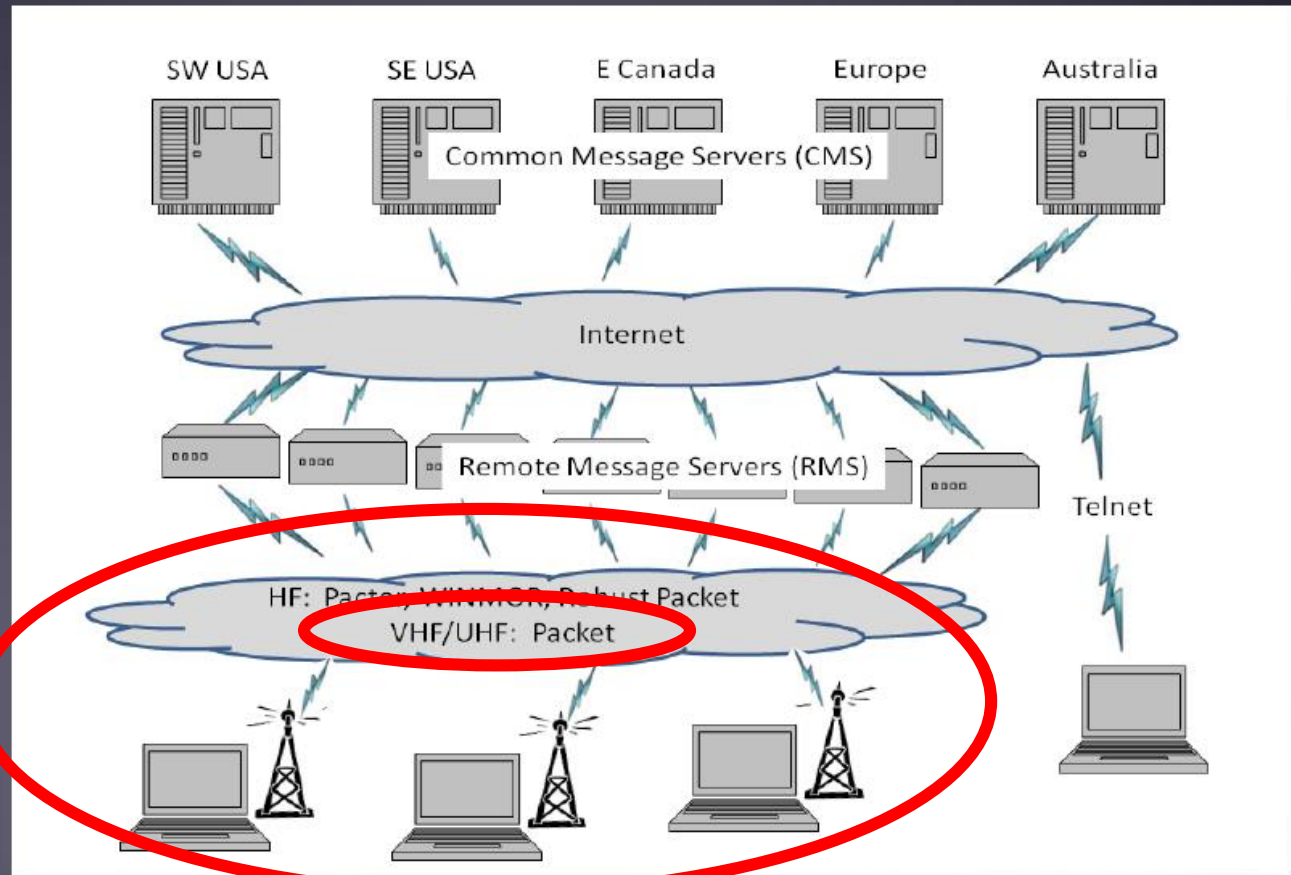
Note Mode type



Now - Try a Radio P2P Email

Winlink 2000 Architecture (Conventional Mode)

- CMS
- RMS (gateway)
- Client (you)

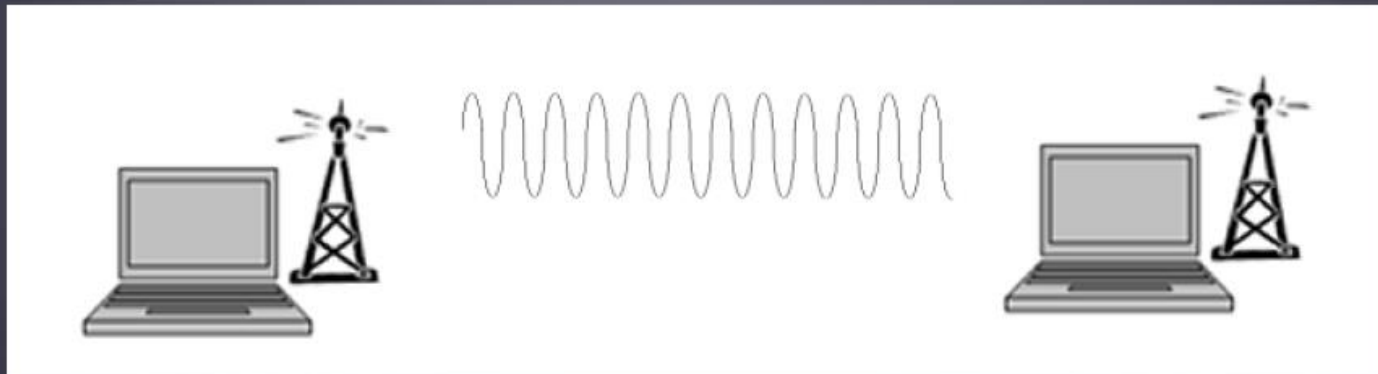




P2P Radio Only

Winlink Peer-To-Peer Radio-Only Operation

- Peer-to-peer: direct radio connection between end-users
- The Internet is not used, all communication by radio.
- Only the two client stations are involved.
- 100% error-free transmission and file attachments.





Set up Kenwood Radio



- Talking on the w6HA repeater
- And sending Winlink packets
- Point to Point with Mike V



Make Sure you address your email for P2P, post to outbox

Winlink Express 1.5.18.0 - KK

KK Settings Message Attachments Move To: Saved Items Delete **Open Session: Packet P2P** Logs Help

No active session...

Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
2019/01/27 22:55	N3K6FUXDLIP1	200	KK	KK	N6 (P2P)	test 6

System Folders: Inbox (0 unread), Read Items (0), **Outbox (1)**, Sent Items (6), Saved Items (0), Deleted Items (0), Drafts (0)

Personal Folders

Global Folders

Contacts

Message: Date: 2019/01/27 22:55, From: KK, To: N6, Source: Mike, this is a test, P2P: True, Subject: A test of Bob's first P2P email.

Mike, this is a test of Bob's first P2P email.

Bob - KK via P2P

A test of Bob's first P2P email.

Bob - KK

Winlink Express 1.5.18.0 - K3

K3 Settings Message Attachments Move To: Saved Items Delete Open Session: [] Logs Help

No active session...

Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
-----------	------------	------	--------	--------	-----------	---------

System Folders: **Inbox (0 unread)**, Read Items (0), Outbox (0), Sent Items (0), Saved Items (0), Deleted Items (0), Drafts (0)

Personal Folders

Global Folders

Contacts

Enter a new message

Close Select Template Attachments **Post to Outbox** Spell Check Save in Drafts

From: K3EYVW Send as: **Winlink Message** Request read receipt Set Defaults

To: bob

Cc:

Subject: test

Attach:

This is a test

Bob



Connect your radio

1. Connect your radio
2. Either you send or the other person sends, when connect to the radio, it's in listen mode
3. Important, listen to the channel, set your squelch properly, your radio won't transmit if it hears a busy channel !!

Packet Winlink Session

Exit Settings Switch to Peer-to-Peer Session Channel Selection 9600 Baud Start Stop

Connection type: Direct W6ACS-10 Via

Connection script: Edit script Add script Remove script

Received: 120 Sent: 121 Time to next Autoconnect = Disabled

*** Starting to call W6ACS-10
*** Opening serial port COM5; 9600 baud; Kenwood TM-D710 B-Band
*** Connecting to W6ACS-10
*** Connected to W6ACS-10 at 2019/01/24 02:33:12

WELCOME TO THE ORANGE COUNTY RACES LOMA RIDGE RMS SITE. 431.475 MHz
[WL2K-5.0-B2FWIHJM\$]
:PQ: 28058089
CMS via W6ACS >
:FW: [KK]
[RMS Express-1.5.18.0-B2FHM\$]
:PR: 31861625
: W6ACS-10 DE [KK] (DM03TW)
FC EM QFRN31N3DJH6 155 147 0
F> A9
*** Disconnected at 2019/01/24 02:34:26
*** Disconnect reported.

This isn't a P2P Session, it's a 431 Mhz attempt to Orange County Races – with squelch set wrong

I don't think I have any screen prints of the P2P sessions (sigh)



Mailbox updates

It sends email waiting in your outbox, for the recipient (didn't check if it sends others, but I doubt it, we aren't set up to be an RMS)
Recipient sends you email, You send him an email also.

The screenshot shows the Winlink Express 1.5.18.0 interface. The top menu bar includes 'Settings', 'Message', 'Attachments', 'Move To: Saved Items', 'Delete', 'Open Session: Packet P2P', 'Logs', and 'Help'. The left sidebar shows 'System Folders' with 'Outbox (1)' selected. The main window displays a table of messages:

Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
2019/01/27 22:46	DGELC8QMDHUX	164	KK	KK6	NG (P2P)	test 4
2019/01/27 22:43	29LWZR6NX83X	191	KK	KK	NG (P2P)	test #3
2019/01/27 22:40	GMM3PQUY4R...	178	KK	KK	NG (P2P)	test 2
2019/01/24 02:36	JIDEP08YPB78	168	KK	KK	bob @g..	//WL2K test3
2019/01/23 02:39	GQAZNT6XBJNP	433	KK	KK	kb @arl.net..	//WL2K 2nd UHF/VHF message via Winlink
2019/01/23 01:25	OQD2RXB3BFV7	175	KK	KKL	bol @g	//WL2K test

The detailed view of the selected message (Message ID: 29LWZR6NX83X) shows the following metadata:

Message ID: 29LWZR6NX83X
Date: 2019/01/27 22:43
From: KK
To: NG
Source: KK
P2P: True
Subject: test #3

The message body contains the text: "this is test 3 from Bob, kk".

Some email & call signs removed



Other Transmission Modes

I've show three transmission Modes, Telnet Winklink, Packet P2P and Packet Winlink, there are many more modes, see below.

The screenshot shows the Winlink Express 1.5.22.0 interface. The 'Open Session:' dropdown menu is open, displaying the following options:

- Winmor Winlink
- Telnet Winlink
- Packet Winlink
- Pactor Winlink
- Robust Packet Winlink
- Winmor Winlink
- Ardop Winlink
- Vara Winlink
- Vara FM Winlink
- Iridium GO Winlink
-
- Packet P2P
- Pactor P2P
- Robust Packet P2P
- Winmor P2P
- Ardop P2P
- Vara P2P
- Vara FM P2P
- Telnet P2P
-
- Pactor Radio-only

The inset window on the right shows the 'Open Session:' dropdown menu with the following options:

- Winmor Winlink
- Vara Winlink
- Vara FM Winlink
- Iridium GO Winlink
-
- Packet P2P
- Pactor P2P
- Robust Packet P2P
- Winmor P2P
- Ardop P2P
- Vara P2P
- Vara FM P2P
- Telnet P2P
-
- Pactor Radio-only
- Winmor Radio-only
- Vara Radio-only
- Telnet Radio-only
-
- Telnet Post Office



Questions?





Backup slides



.Net and Devices

