

# Winlink for EmComm



## Denver ARES (Amateur Radio Emergency Services)

# What is Winlink

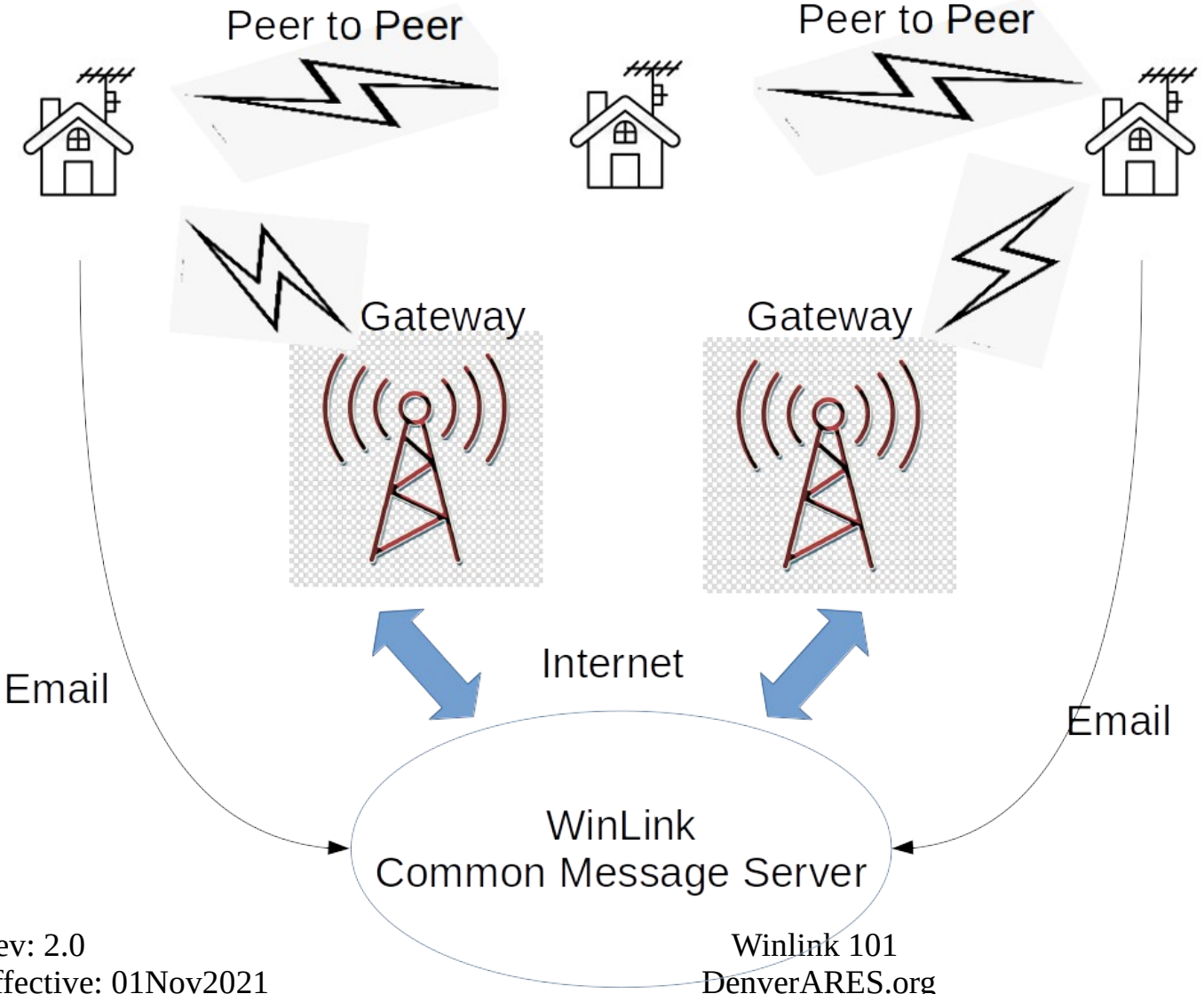


- An email system designed to work with amateur radio
- Supports all basic email functions
- Has special features for standard forms (ICS)
- Works in multiple modes
  - Internet, special radio gateways, peer to peer radio

# Why use Winlink



- Provides a single common interface, regardless of how the messages are being delivered
  - Learn once, use anywhere
- Provides specific support for EmComm documents
- Provides a common protocol across jurisdictions
- Integrates radio with standard emails



# Simplest Station Setup

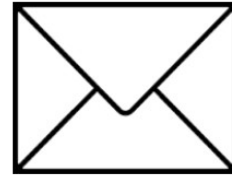
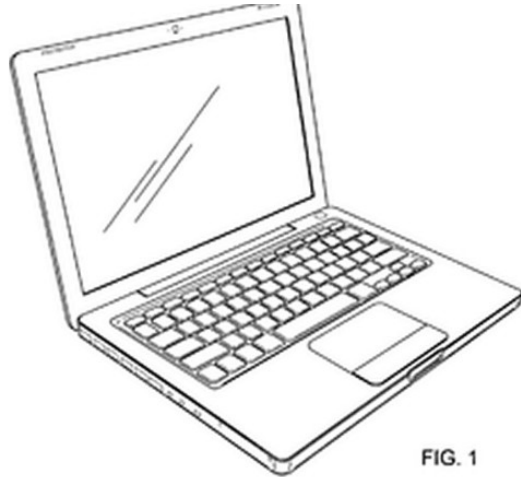
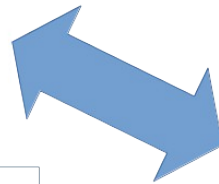


FIG. 1

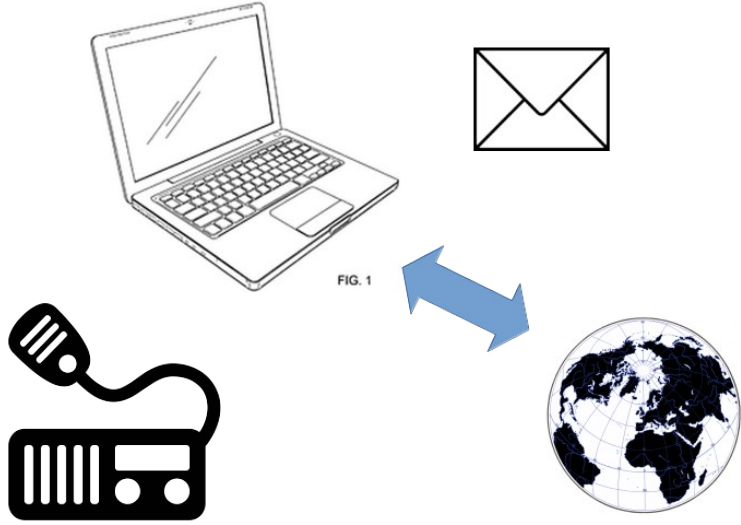


WinInk Express,  
Internet  
  
Done



Winlink 101  
DenverARES.org

# Simple Relay Station



Radio,  
WinInk Express,  
Internet

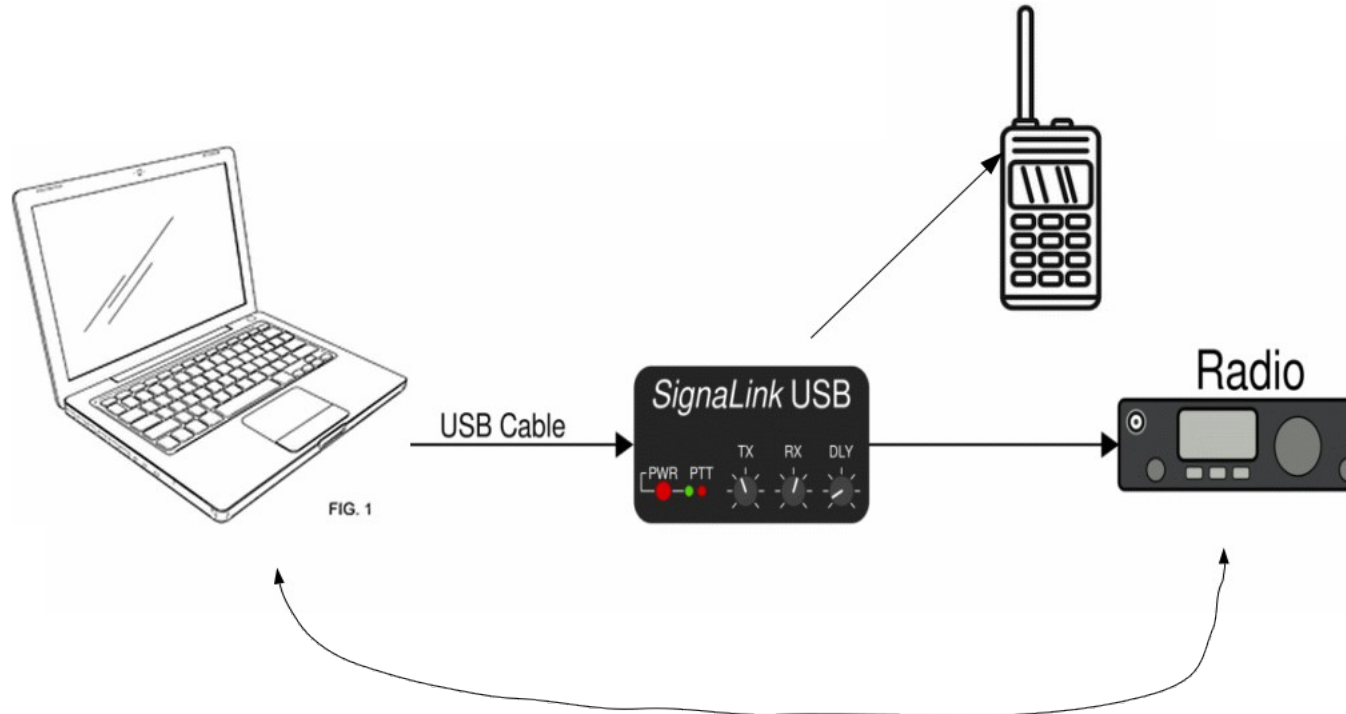
Winlink Relay Station

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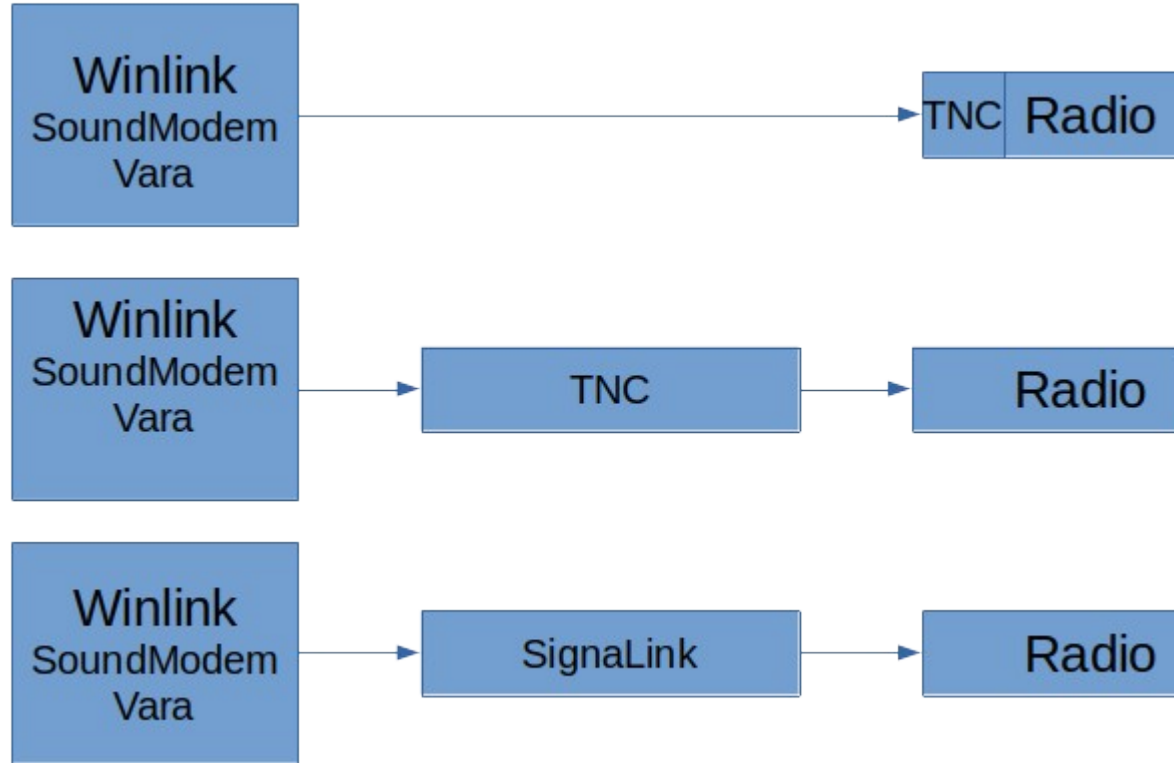




# No Internet Station Setup



# Different station configurations





# Software Setup



- Winlink Express
- Packet Assembler
  - Soundmodem
  - Direwolf
  - Vara
  - ARDOP

The image shows a screenshot of the Winlink Express 1.5.28.0 software interface. The main window displays a list of messages in a table format. The table has columns for Date/Time, Message ID, Size, Source, Sender, Recipient, and Subject. The first message is from KEOTWC to ADOZM with subject '213-Winlink Training'. Below the table, the details of the selected message are shown, including the message ID, date, time, and subject. A 'Packet Winlink Session' window is overlaid on the main window, showing session statistics such as 'Received: 134 Sent: 2581' and 'Time to next Autoconnect = Disabled'. The session window also displays a log of messages being sent and received, including message IDs and sizes. At the bottom of the session window, there is a table with columns for MyCall, DestCall, Status, Sent pkts, Sent bytes, Rcvd pkts, and Rcvd bytes. The background of the session window shows a blue and white pattern, likely representing a signal or data stream.

Rev: 2.0  
Effective: 01Nov2021

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# Soundmodem



SoundModem by UZ7HO - Ver 1.00b - [AFSK AX.25 120...]

Settings View Clear monitor Calibration About

A: [AFSK AX.25 1200bd] [1700] [DCD threshold]

```

1EESBIEa:3XMYNF«U9V8.eE1:2U5U4E>Iz Nã oZÁdIFP%IRN;2QIPÖiÖAENVx*@TRÄ
P#P1VÞ4Ä &¿EÞ4PDI <cãIãFç88<*>Äü?
1:Fm ADQZM To KONT5-10 <I C R6 S7 Pid=F0 Len=128> [14:13:14T]
»NIIID4 I'4I&Ä["NÞæQ(iu'6sNtiüi)~"jÖÜU ~"kévY(gjUÜ,d.zIFK lsc."#IRI(r
P%IIIv.ê%ðIaQOM5öVj8IçjN)Þ0N-08ö'ü>mP@
1:Fm ADQZM To KONT5-10 <I C R6 S0 Pid=F0 Len=128> [14:13:15T]
I5Ä&uR03in"INÄ(SI<e,j/h#I3U&30ya%ku IEOdLU VAM=5ö6x$z-<Xç90. r0QÜ
üÜ7 [(üDv<I@A)I]@äKöYk.ä65IiIçSæ4I6IÖIäUSb
1:Fm KONT5-10 To ADQZM <RR R R0> [14:13:18R] [+++]
1:Fm ADQZM To KONT5-10 <I C R6 S1 Pid=F0 Len=128> [14:13:19T]
"WIO]8jDrgCvFFiB!i'j_iÜIIV#cNCctyQIolojZWGy87?<Iq>:%MÄEN_YÖ boÄÄ(j
$YÄöI] >%ÄæI@P7^,ÉgD ö^VFRè EÄæm<KIHID
1:Fm ADQZM To KONT5-10 <I C R6 S2 Pid=F0 Len=7> [14:13:19T]
I&Ä
1:Fm KONT5-10 To ADQZM <RR R R3> [14:13:22R] [+++]
1:Fm KONT5-10 To ADQZM <I C P R3 S6 Pid=F0 Len=3> [14:13:22R] [+++]
FF

1:Fm ADQZM To KONT5-10 <RR R F R7> [14:13:23T]
1:Fm ADQZM To KONT5-10 <I C R7 S3 Pid=F0 Len=3> [14:13:23T]
FQ

1:Fm KONT5-10 To ADQZM <RR R R4> [14:13:25R] [+++]
1:Fm KONT5-10 To ADQZM <DISC C P> [14:13:31R] [+++]
1:Fm ADQZM To KONT5-10 <UA R F> [14:13:32T]
1:Fm WÖTX To BEACON Via K8ZTT <UI R Pid=F0 Len=44> [14:14:56R] [+++]
Denver Radio Club 14.105 <> 145.050 Gateway

1:Fm KÖLAI To BEACON Via DRLNOD*ACÖVC-2 <UI R Pid=F0 Len=24> [14:15:52R] [+++]
KÖLAI Larry in Lakewood
    
```

MyCall	DestCall	Status	Sent pkts	Sent bytes	Rcvd pkts	Rcvd bytes	R

# Winlink Main



Winlink Express 1.5.28.0 - AD0ZM

AD0ZM 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)	2020/05/09 14:37	3ZZ2YM93PQ43	1175	KE0TWC	KE0TWC	AD0ZM	213-Winlink Training-
Read Items (0)	2020/05/07 17:22	10AH5OSLLU64	959	KF0JB	KF0JB	AD0ZM	Re: Winlink Capabilit
Outbox (0)	2020/05/07 17:18	2PENPN0GBY4B	2767	KF0JB	KF0JB	ABOVZ...	Survey - State HF So
Sent Items (76)	2020/05/06 21:43	EIEM1F1HUJ7	674	NOVE	NOVE	AD0ZM	Re: 213-Winlink test-C
Saved Items (4)	2020/05/06 21:41	X9BG3CV1ZRSN	2665	NOVE	NOVE	AD0ZM	Re: 213-Winlink test-C
Deleted Items (0)	2020/05/01 23:56	DP59ZBWG1VPY	578	KF0JB	KF0JB	AD0ZM	Re: Winlink Capabilit
Drafts (0)							
Personal Folders							
Global Folders							
Contacts							

Message ID: 3ZZ2YM93PQ43  
 Date: 2020/05/09 14:37  
 From: KE0TWC  
 To: AD0ZM  
 Source: KE0TWC  
 Downloaded-from: RMS:K0NTS-10  
 Subject: 213-Winlink Training-TNC Setup - 2020-05-09 08:32

GENERAL MESSAGE (ICS 213)

1. Incident Name: Winlink Training
2. To (Name and Position): AD0ZM
3. From (Name and Position): KE0TWC
4. Subject: TNC Setup
5. Date: 2020-05-09
6. Time: 08:32
7. Message:

Dear Jim,

I don't see where to tell Winlink which TNC I have a Kantronics KAM XL so the signal link tutorial don't seem to apply. Please cover this during the class or if it seems like it doesn't apply to the others lets talk some other time that works for you.

Traci

# Winlink Session



Packet Winlink Session

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

Connection type: Direct K0NTS-10 Via ,

Connection script: Edit script Add script Remove script

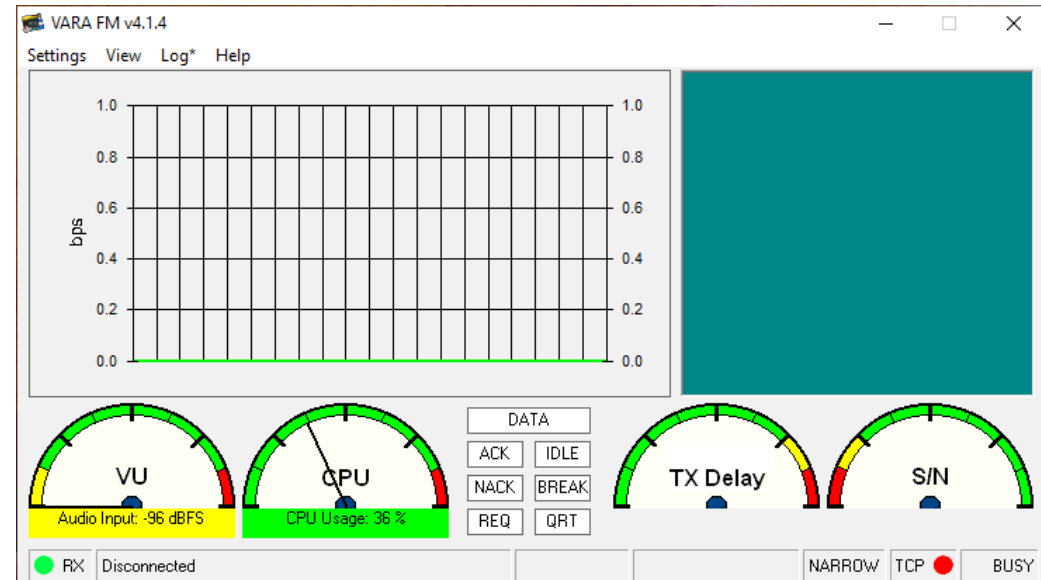
Received: 134 Sent: 2581 Time to next Autoconnect = Disabled

```
*** Sending WRVH4LIT48ZD.  
*** Sending 4V3IE3VEZFRK.  
FF  
*** Completed send of message WRVH4LIT48ZD  
*** Completed send of message 4V3IE3VEZFRK  
*** Sent 2 messages. Bytes: 2428, Time: 00:40, bytes/minute: 3641  
FQ  
*** -- End of session at 2020/05/09 20:13:26 --  
*** Messages sent: 2. Total bytes sent: 2428, Time: 01:02, bytes/minute: 2346  
*** Messages Received: 0. Total bytes received: 0, Total session time: 01:02, bytes/minute: 0  
*** Disconnecting  
*** Disconnected at 2020/05/09 20:13:31  
  
*** Disconnect reported.
```



# Vara is the new standard

- More robust
- Higher throughput
- Better tools
- But, no monitor function (yet)



# Moving Forward



- Denver ARES
  - <http://denverares.org>
- EmComm Winlink Training – weekly
  - <https://emcomm-training.groups.io>
- WinLink
  - <https://winlink.org/>