

Midcoast Maine Packet Network v2.0

With the recent addition of the new node in Waldoboro, the Midcoast Maine Packet Network has been re-engineered to have more capacity than the previous version and will be less susceptible to overloading by end-users.

The October 2019 SET demonstrated the weakness of the v1 packet network to overloading, due to a common VHF node frequency. The v2 arrangement, illustrated in Figure 1, has nodes at different VHF frequencies, whilst maintaining compatibility and connectivity with the surrounding VHF packet network at 145.01 MHz, shown in blue. Messages destined for different nodes travel over the UHF backbone, shown in green; this backbone network is optimized for persistence, packet length, etc, as the end-points are known.

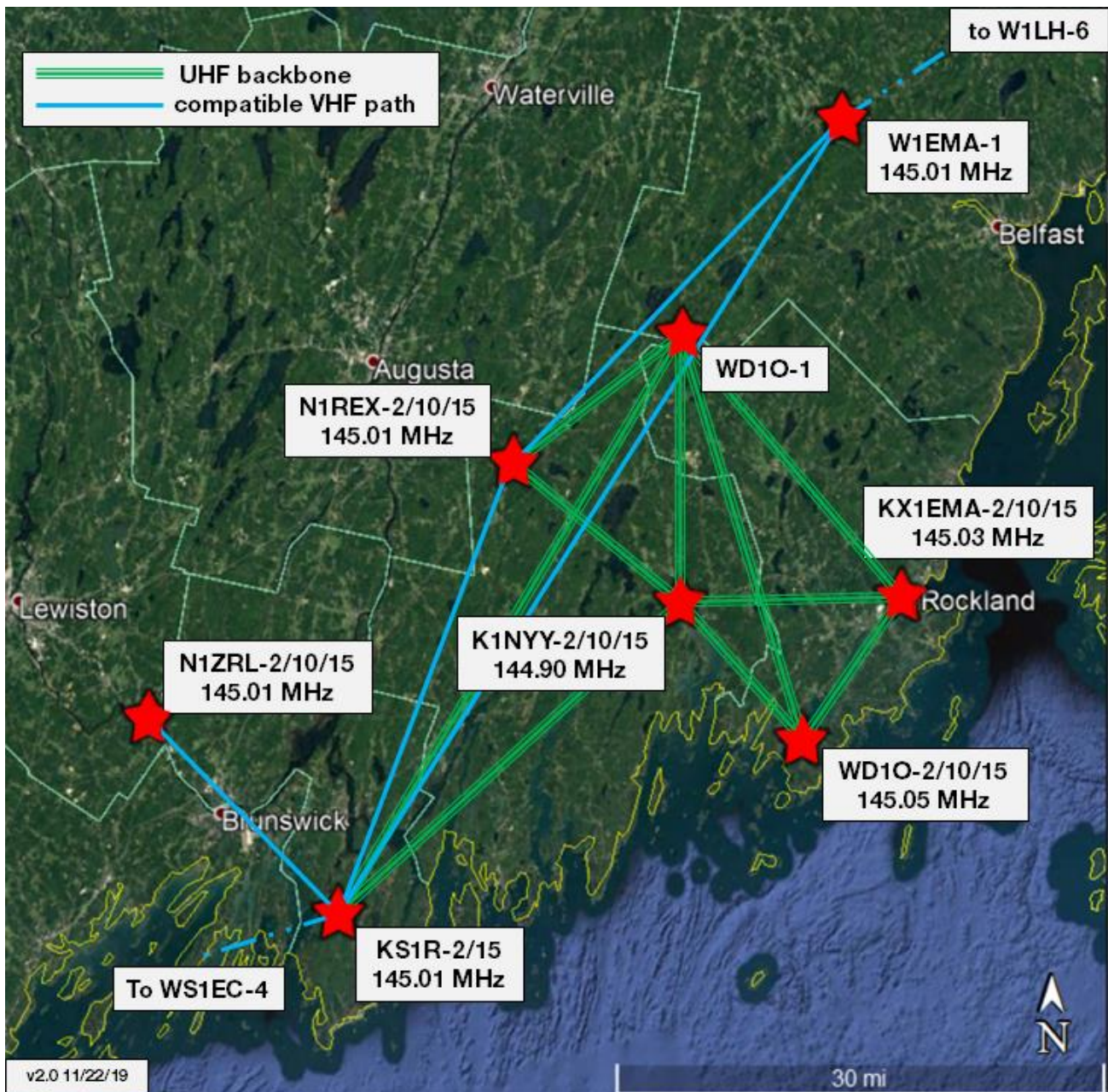


Figure 1 Midcoast Packet Network v2.0 with Non-Interfering VHF nodes and UHF Backbone

There follows the frequency and location details of the various nodes:

Node	VHF Frequency	Location
K1NYY	144.900 MHz	Waldoboro
KS1R	145.010 MHz	Phippsburg
KX1EMA	145.030 MHz	Rockland
N1REX	145.010 MHz	Whitefield
WD1O	145.050 MHz	St. George

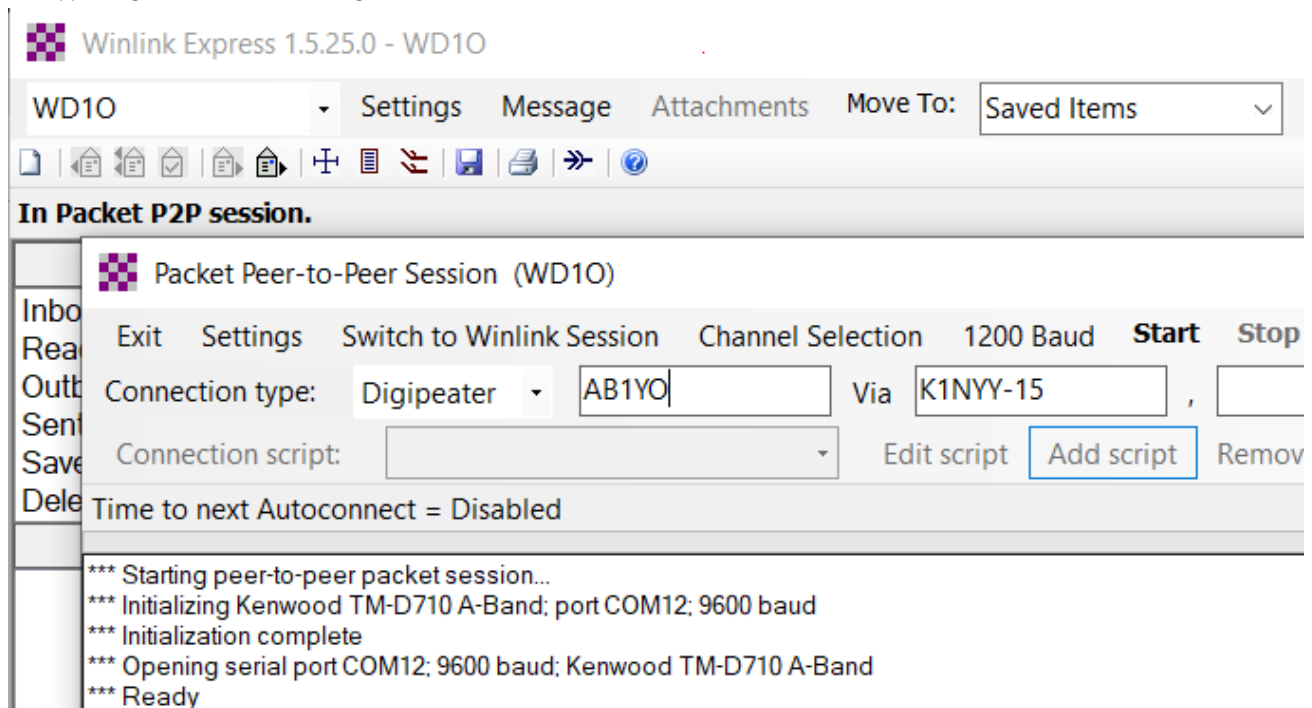
Each node has these capabilities¹:

Suffix	Capability
-15	Digipeater
-10	Winlink RMS node
-2	Networked BBS

Note that the digipeater function is a new feature to the network and allows Peer-to-Peer sessions using the Winlink client.

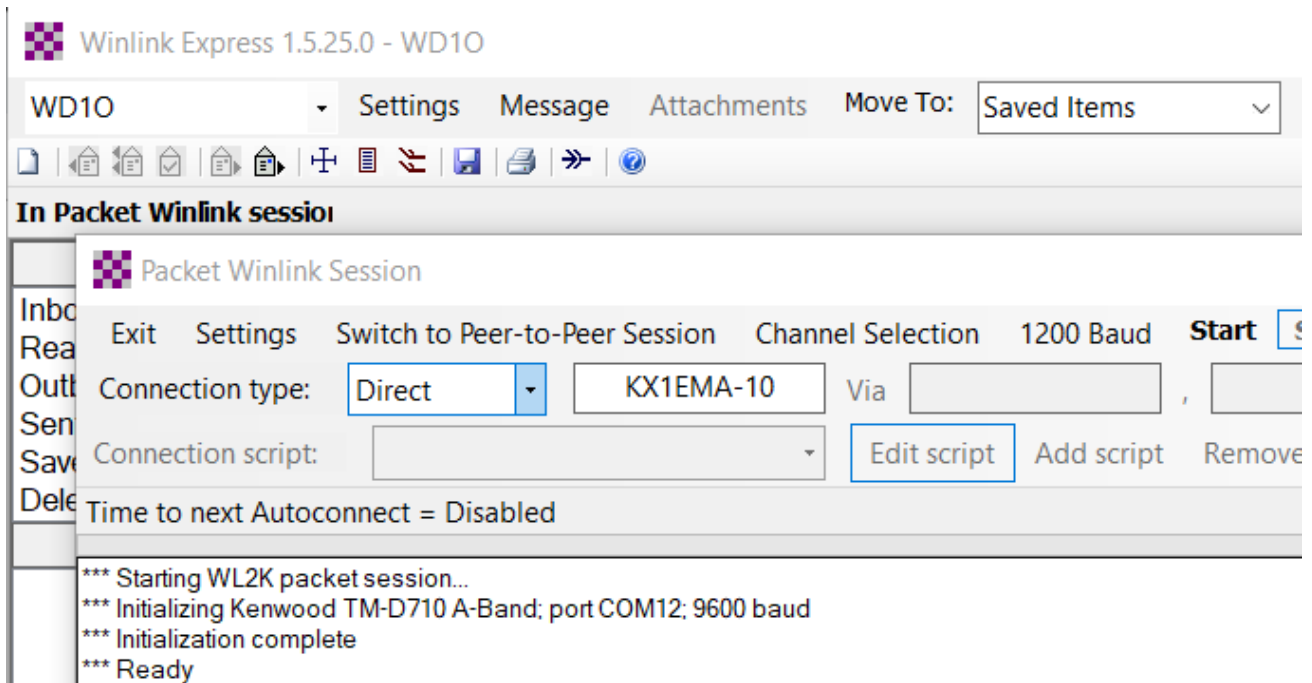
There follows four examples, showing the Winlink Express client session window, to illustrate how the node callsigns and their suffixes may be used:

1. Using the Waldoboro node as a digipeater, K1NYY-15 in a Peer-to-Peer session from user WD1O to user AB1YO

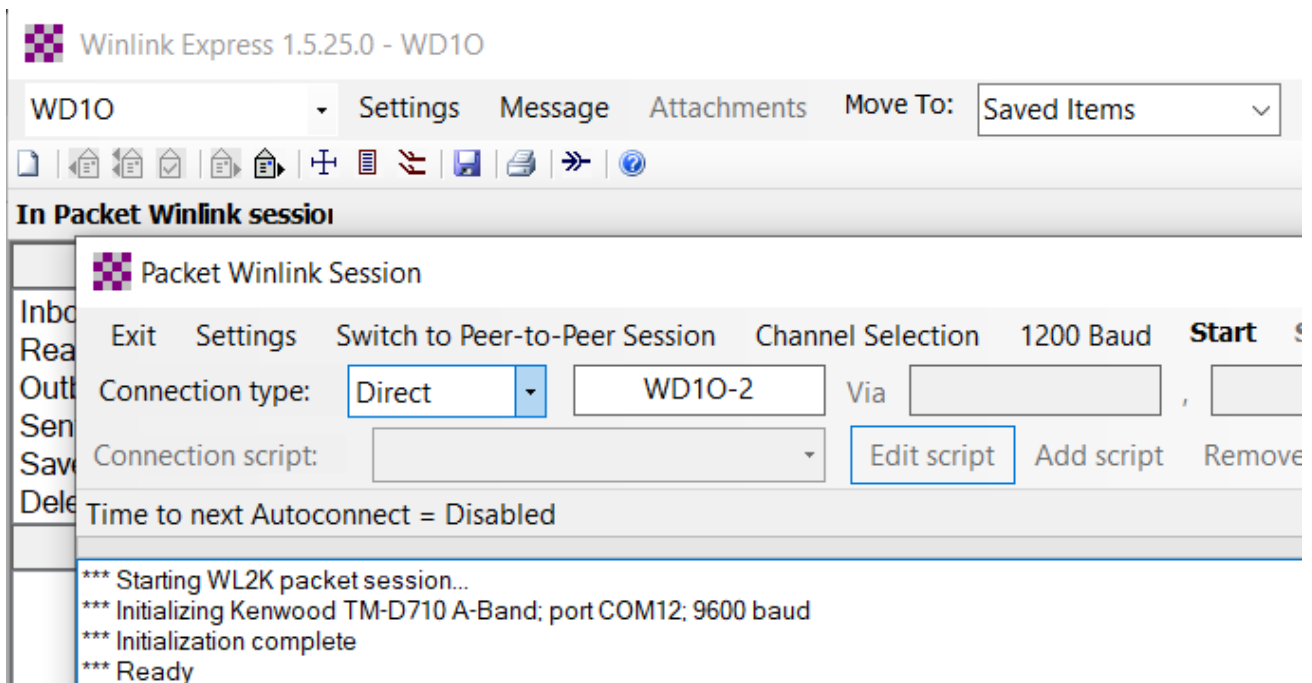


¹ Except KS1R which is not a Winlink RMS node

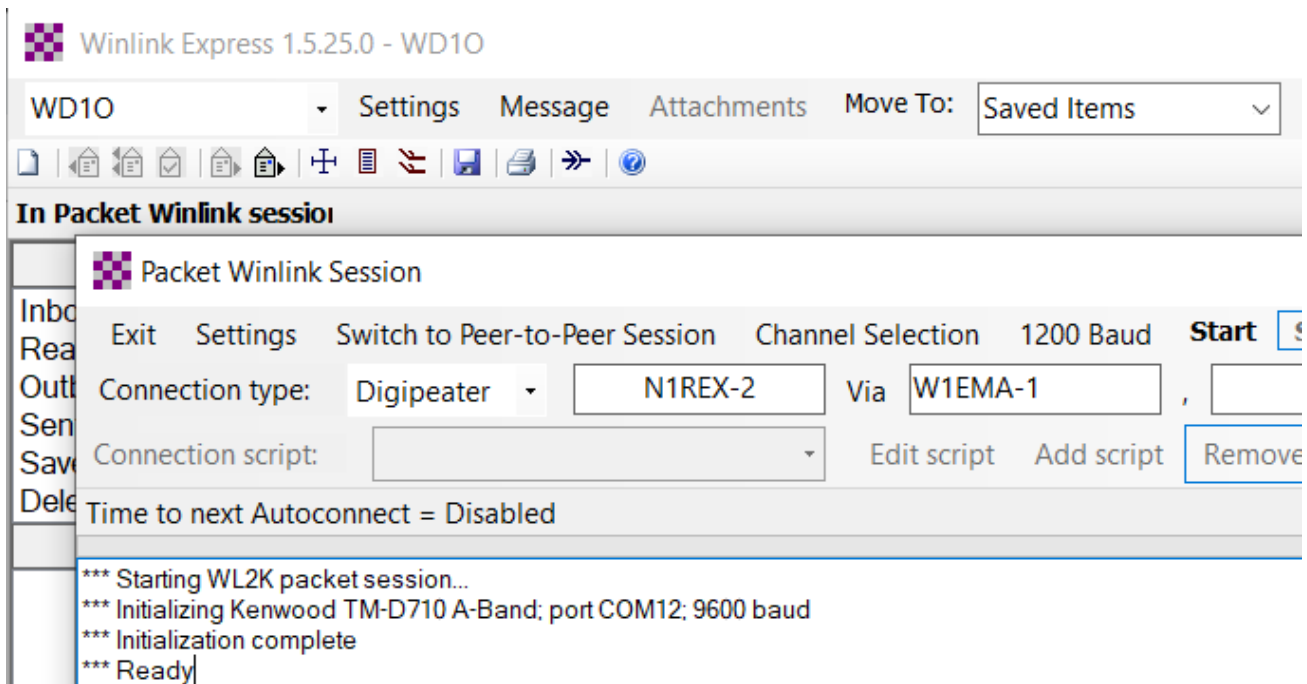
- Using the Rockland node, KX1EMA-10 to send mail into the Internet via the Winlink system



- Using the St. George node, WD10-2 to send mail via the BBS network



- 4. Using the Whitefield node, N1REX-2 via the digipeater W1EMA-1 to send mail via the BBS network.



Finally, Figure 2 shows an annotated map taken from the [Winlink website](#), with the “Maidenhead Grid Square” locations of the four RMS stations.



Figure 2 Midcoast Packet Network v2.0 – location of Winlink RMS Nodes