Configuring Winlink for use on the ham radio mesh network

Prerequisites:

- You already have a connection in your ham shack to the mesh network.
- Your Winlink computer has an IP address from the mesh network.
  If those aren't met, see https://vc-acs.groups.io/g/main/files/Packet%20and%20other%20Digital/AREDN_Beginners_Guide-v13.pdf
- Winlink is installed and operational.

There are two methods of moving Winlink traffic via the ham network, via a Winlink Post Office, or point-to-point between two Winlink Clients.

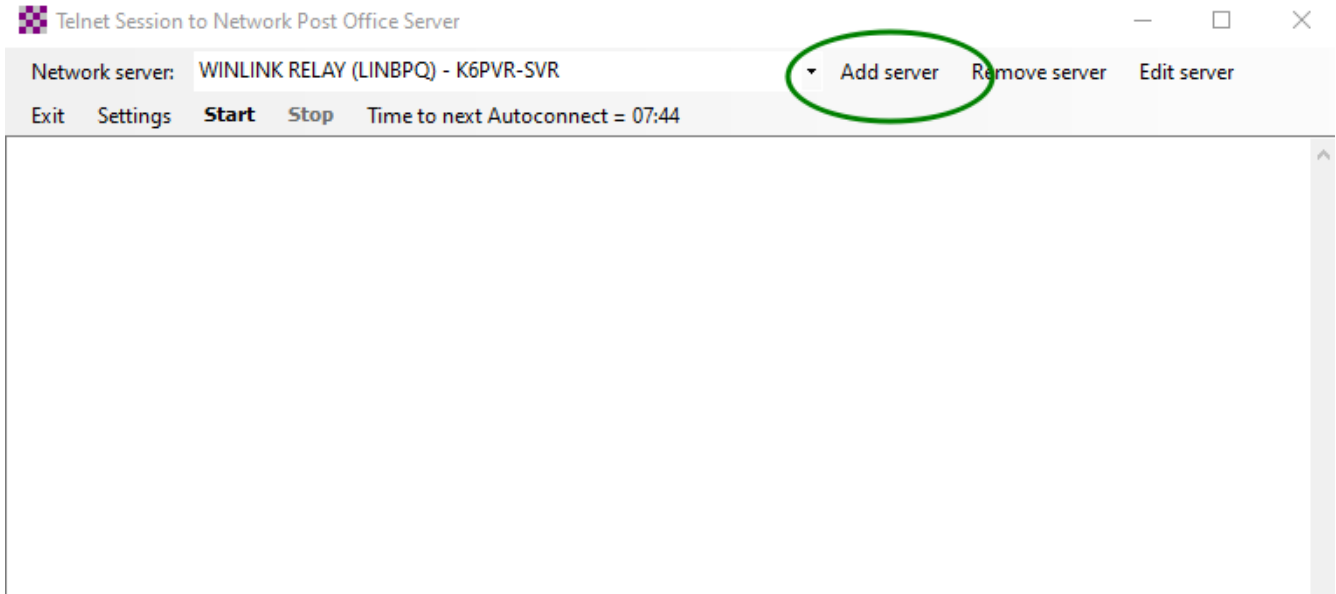**Sending traffic to a Post Office over the ham network**

There are an increasing number of Post Offices listening on the mesh network.   For best results, we'll pick a local one.

In order to find a local Post Office, open a session to a Telnet Post Office:
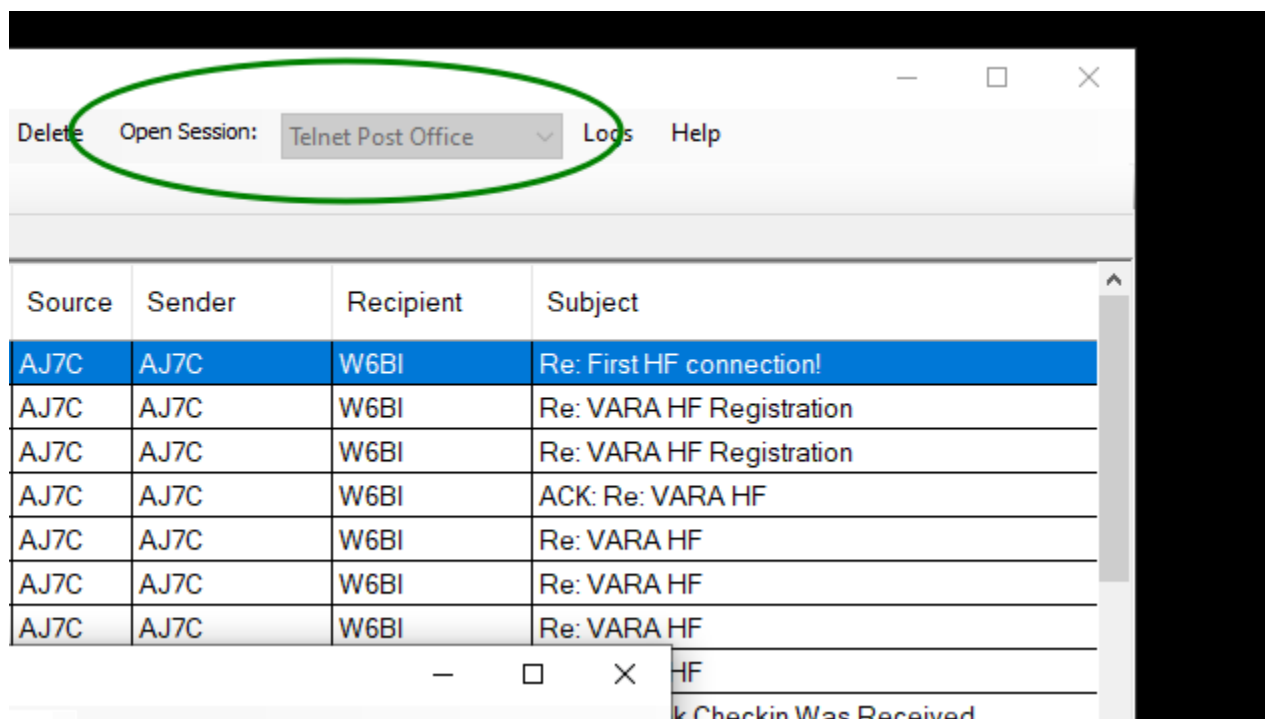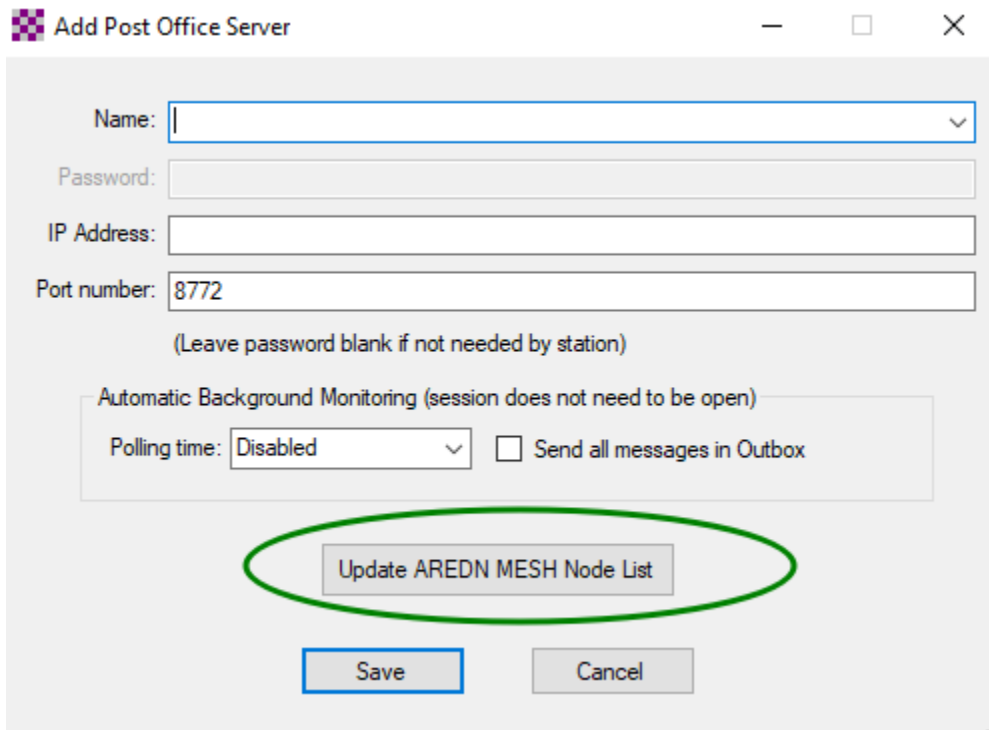

In the window that opens select Add Server:

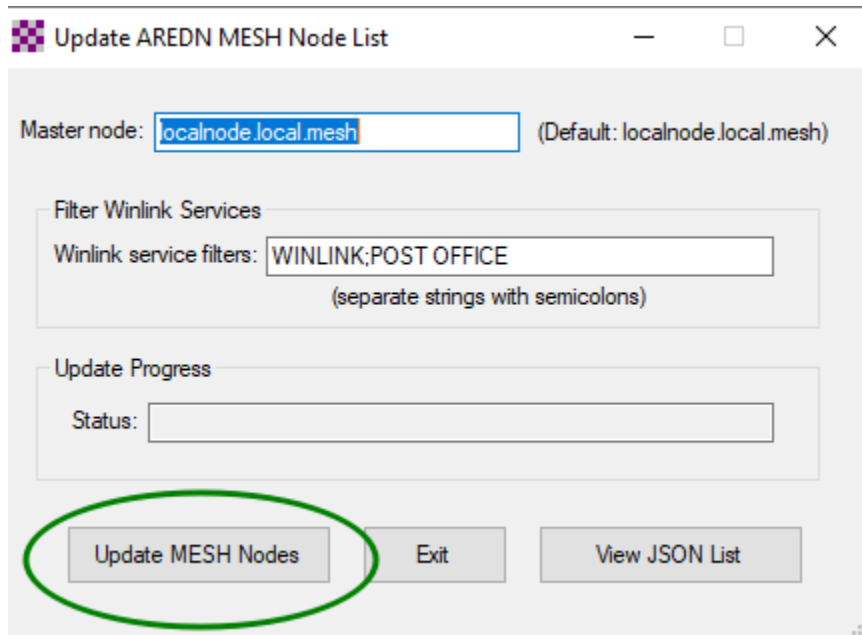# Configuring Winlink for use on the ham radio mesh network

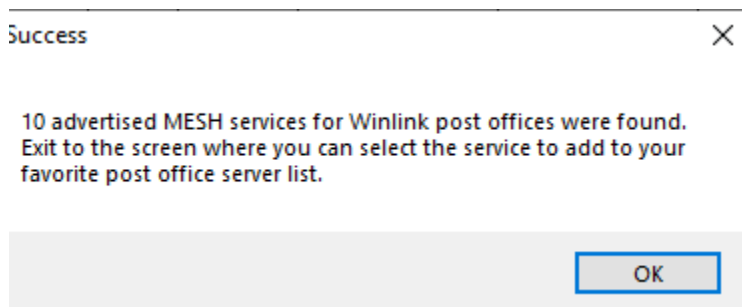In the window that opens, click on Update AREDN MESH Node List

In the window that opens, click on Update MESH Nodes

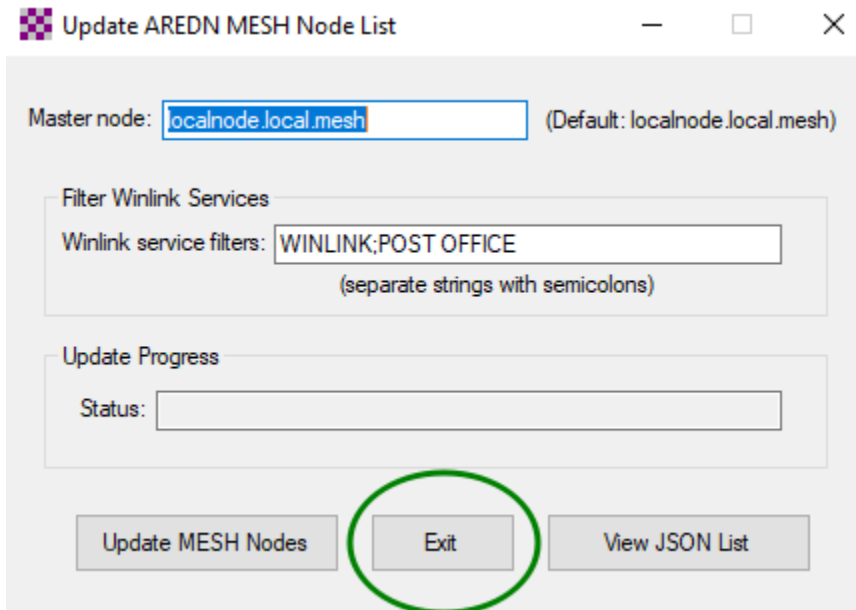# Configuring Winlink for use on the ham radio mesh network

You should see this pop-up window.   Note: the number of post offices found will vary as they come and go.

Click on OK.

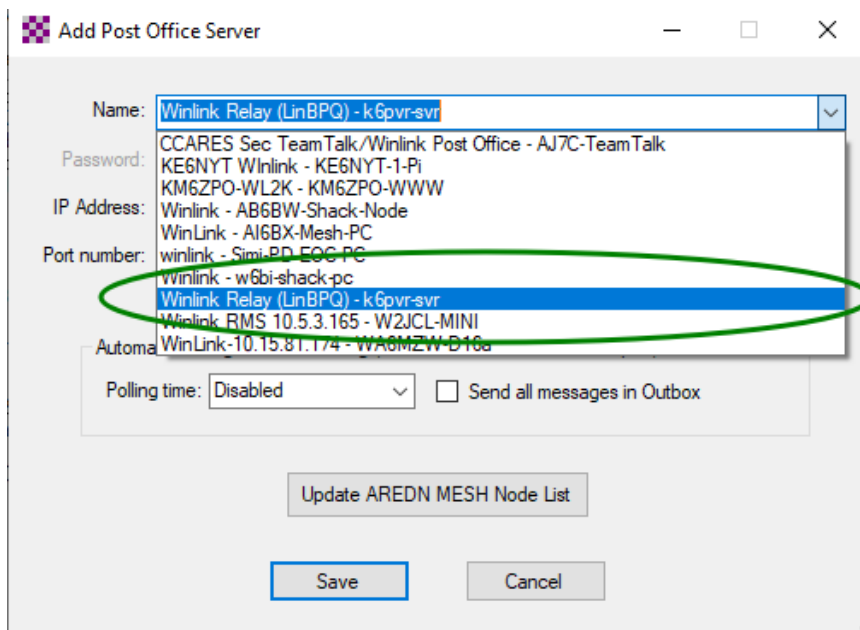# Configuring Winlink for use on the ham radio mesh network

Click on Exit.

You'll be returned to the Add Post Office Server window. In the Name: drop-down, select the k6pvr-svr Winlink Relay.   (You could select any one of them, but the k6pvr-svr post office sits right on the mesh backbone at the Sulphur Mountain site, has backup power and a fast Internet connection.)

Note – if you leave your Winlink app on all the time, set the Polling time to something other than Disabled, so you'll pull in Winlink email destined for you periodically.

Click on Save.

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You'll be returned to the "Telnet Session to Network Post Office Server" window.   K6PVR-SVR should be selected as your Network Server.

If you've selected a Polling period, the "Time to next Autoconnect" should be counting down.

In order to test it, click on Start to start a connection cycle. If successful, you should see the connection sequence shown below. It should take less than 10 seconds – a bit longer if there's mail waiting for you.

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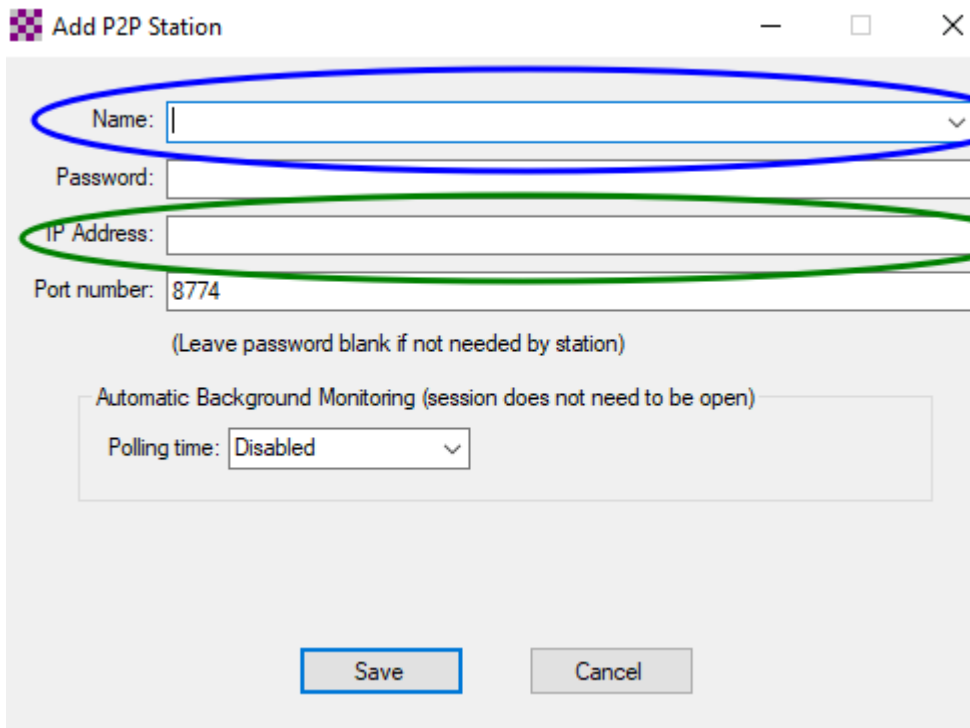**Sending traffic to another Winlink client over the ham network**

Sending traffic point to point is different from sending it to a post office (regardless of how it's sent). You first have to create the destination station. To do that, you need to know the IP address of the PC that's running the destination Winlink program. You can find that by either asking the station operator, or frequently it's advertised on their mesh node, and you can determine its IP address by pinging it on the command line.

```
C:\Users\orvbe>ping AJ7C-10-QTH

Pinging AJ7C-10-QTH.local.mesh [10.8.157.38] with 32 bytes of data:
Reply from 10.8.157.38: bytes=32 time=23ms TTL=63
Reply from 10.8.157.38: bytes=32 time=19ms TTL=63
Reply from 10.8.157.38: bytes=32 time=18ms TTL=63

Ping statistics for 10.8.157.38:
    Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 18ms, Maximum = 23ms, Average = 20ms
```

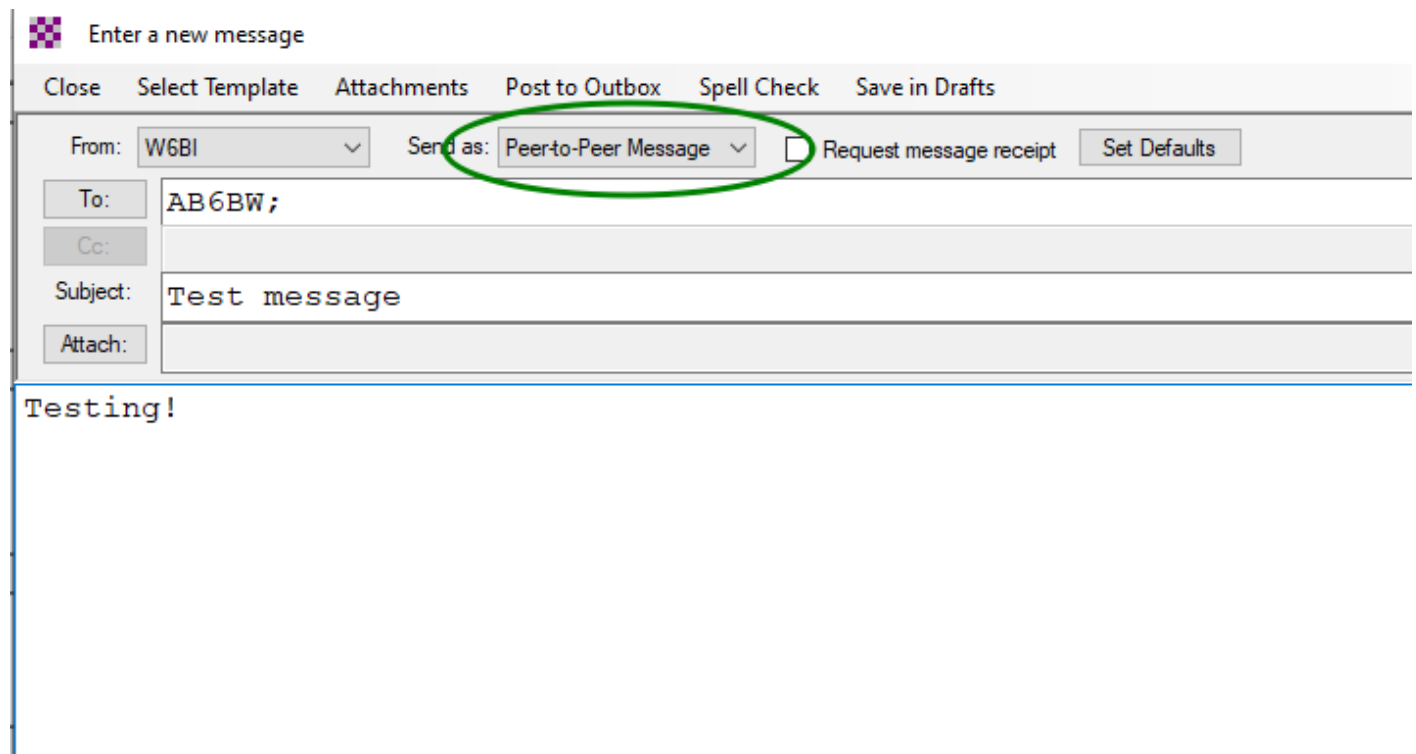Once you've determined the destination computer's IP address, open a session to Telnet Peer to Peer and click on Add station.

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Enter the IP Address.   The Name does not have to be the hostname of the destination computer. It's a tactical name – it could be "Bob's Winlink" or "Red Cross Chapter", whatever is meaningful to you.
If you want to set a Polling time, it can be done in this screen.   Save it.

When you've completed creating a message to go direct to a local station, it must be saved as a Peer-to-Peer Message.   You can then post it to the Outbox as usual.
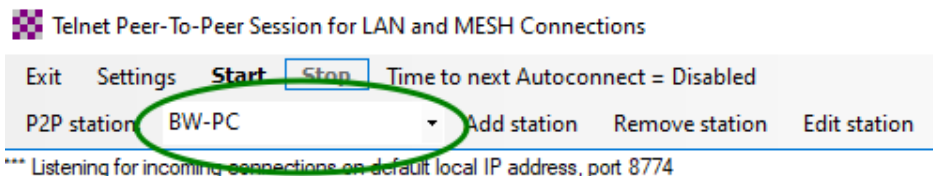
You can then open a session to Telnet Peer-to-Peer Session. Ensure your destination station is selected, and **Start** the session. Your Winlink client will connect to the destination and transfer your message(s).