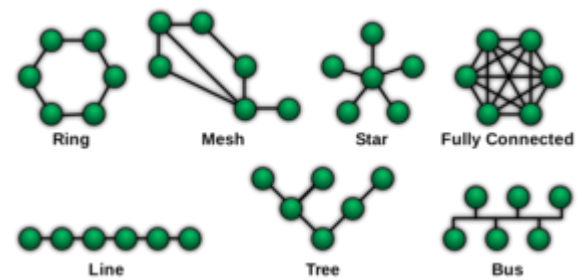


Network Topology

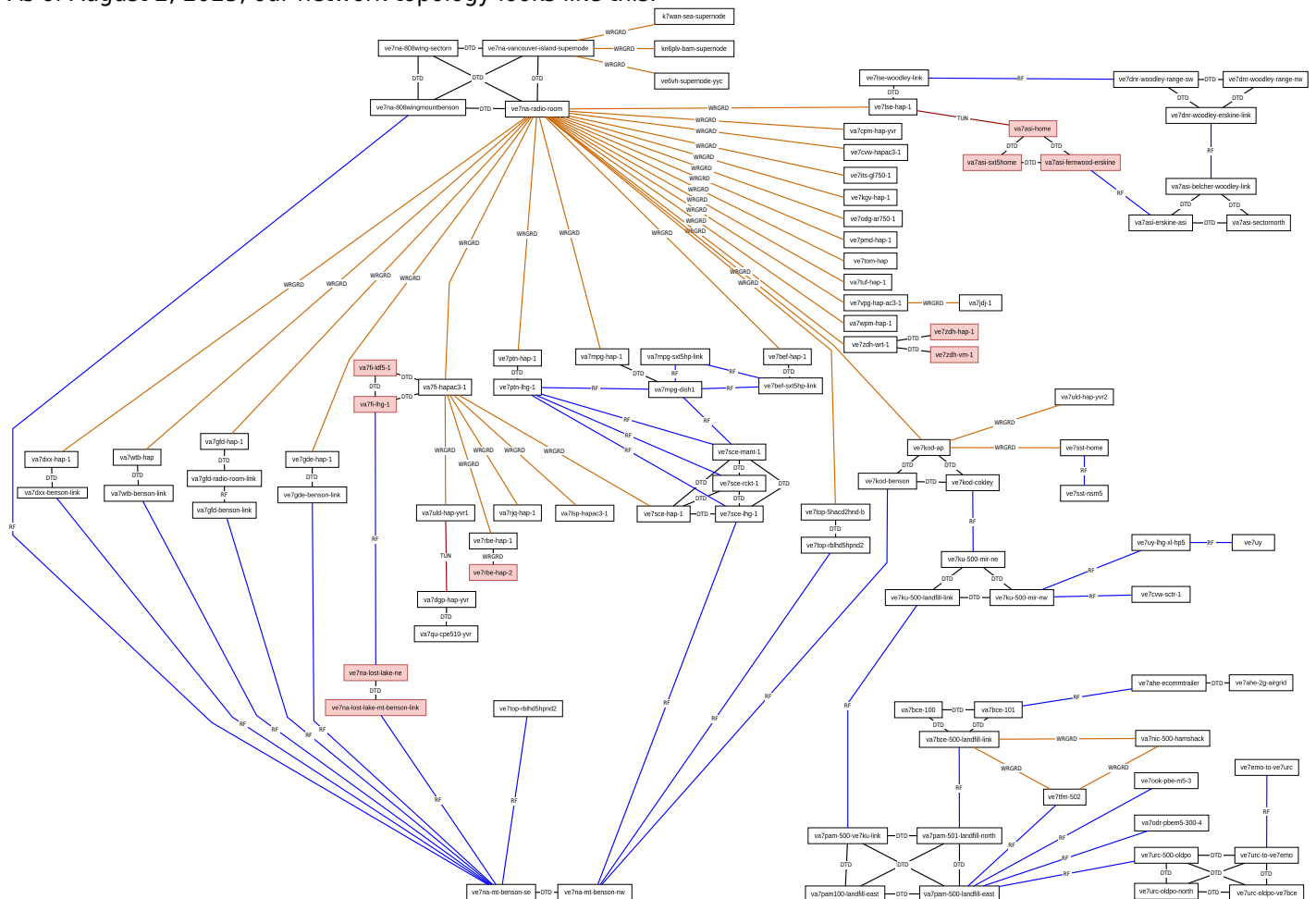


A  **Network Topology** is the arrangement of the elements (links, nodes, etc.) of a communication network.

There is no ideal network topology; each have their **pros and cons** depending on the application.

Current Topology

As of August 2, 2025, our network topology looks like this:¹⁾



About the Diagram

It takes three steps to create the diagram above:

1. Create a text file of the topology using a python script (quick).
2. Import that text file into <https://app.diagrams.net> (quick).
3. Format it so that the edges (links) do not intersect too much (slow).

Python Script

The Python script can be downloaded from [GitHub](#).

- It loads the json files of all the nodes visible from a given station.
- Here is an example of what the json file looks like:
`http://VE7NA-RADIO-ROOM.local.mesh/cgi-bin/sysinfo.json?link_info=1&hosts=1.`
- Once the script has all the nodes' json files in memory, it creates output text files that summarizes some of the information.

diagrams.net AKA draw.io

From  [diagrams.net](https://app.diagrams.net):

diagrams.net (previously **draw.io**) is a free and open source cross-platform graph drawing software developed in HTML5 and JavaScript.

diagrams.net is available as online as cross-browser web app, and as offline desktop application for Linux, macOS, and Windows. The web app does not require online login or registration, and can open from and save to the local hard drive.

To create a chart from the output of the python script:

- Go to <https://app.diagrams.net>
- Select Save diagrams to: Device
- Create New Diagrams
- Create a Blank Diagram
- Click the + sign in the tool bar at the top
- Select Advanced → From Text...
- Select Diagram instead of List
- Replace the example with the output from the script and click Insert
- Click Edit → Select Edges
- On the right hand side, replace the arrows by lines.

1)

In Firefox, you can view the topology diagram better by right clicking on the image and selecting This Frame → Open Frame in New Tab. Then, **Ctrl**+**+** will zoom in and **Ctrl**+**-** will zoom out.