An Introduction to AllStarLink

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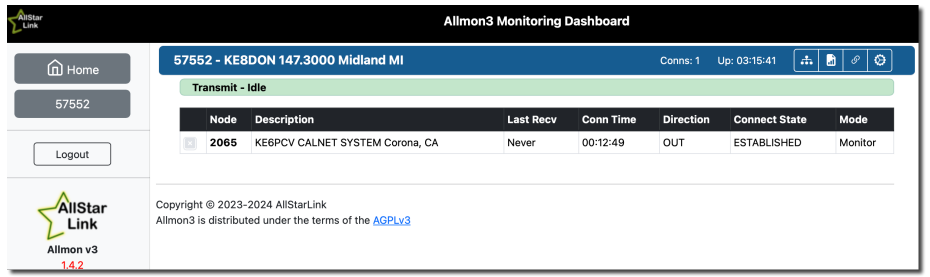
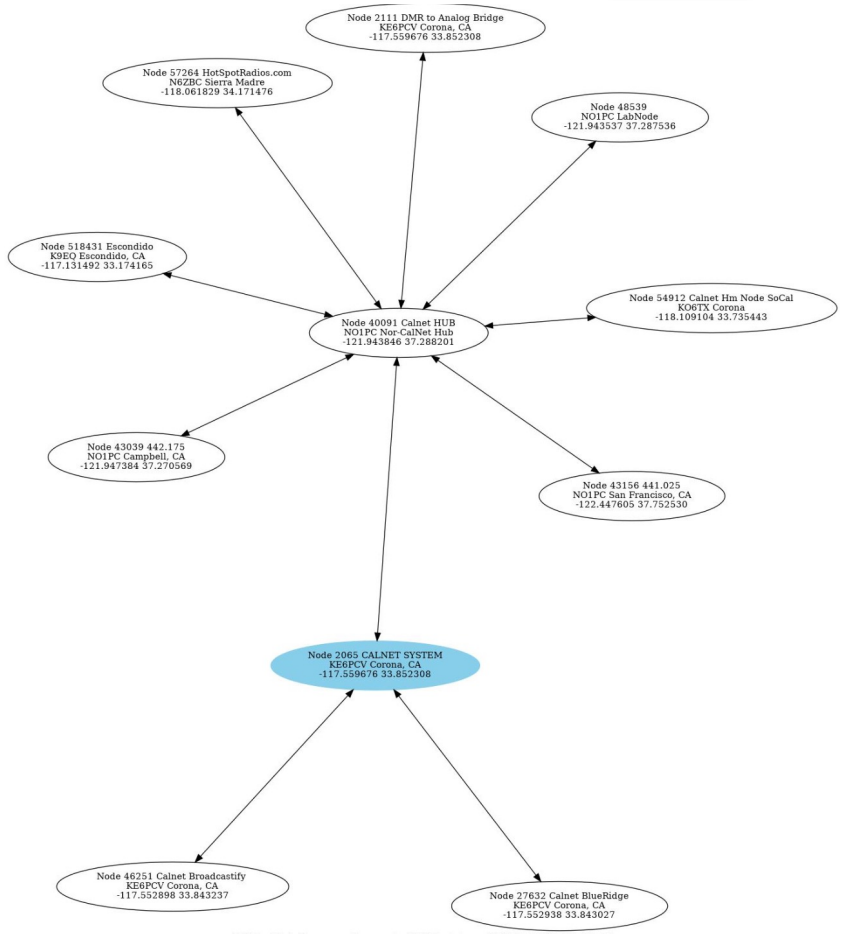


What is AllStarLink?

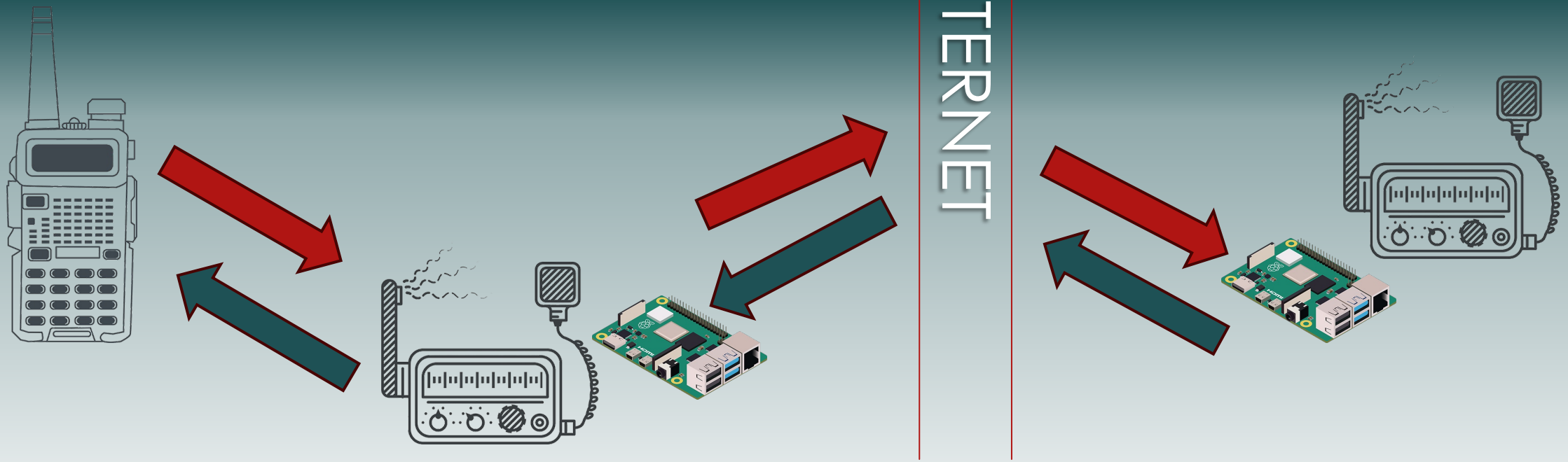
- A network of repeaters, remote base stations, and hot spots accessible via Voice over Internet Protocol (VOIP)
- Underlying components
  - asterisk and app_rpt (node communication)
  - asl-menu (configuration of node to AllStarLink)
  - Allmon3 (connection management)
- Not for the faint of heart



From AllStarLink About Page

Once again, this technology is not intended to be implemented by the end-user or those light at heart. It takes serious commitment and resources (that which is required to put a radio system on the air to begin with, and to maintain it) by either a group, club, or maybe even a single, dedicated, talented (not to mention monied) individual. The assumption made with AllStarLink is that the purpose of this work and level of dedication is to share the goodness and great benefits with others, and to promote continuation of doing so.

AllStarLink Architecture



Requirements for a Node

- Linux system
  - Raspberry Pi 3, 4, 5
  - PC (currently only x86 or amd architecture)
- 2M or 70cm radio capable of supporting the interface (see below)
- Appropriate interface: www.repeater-builder.com/products/usb-rim-lite.html
- A Node ID registered at: www.allstarlink.org

AllStar Link

Building the Node

- Detailed instructions are available at allstarlink.github.io/user-guide/pi-detailed
- Install Raspberry Pi Imager: www.raspberrypi.com/software
- Get the latest image: repo.allstarlink.org/images/pi
- Create the image on a micro-SD card (4GB minimum, 8GB recommended)
- Insert the micro-SD, connect everything, and fire it up
- Point your browser at <your new node>.local

AllStar Link

Configure the Node

- Node type: Hotspot
- Call sign, node ID, and password from AllStarLink
- Radio interface type: SimpleUSB
- Tune the interface to optimize transmit/receive
- Restart asterisk