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EQUIPMENT FOR D-STAR

What is available?

- ⦿ D-STAR radios (mobiles, handhelds) first commercially produced by ICOM
- ⦿ New independently produced radio may be introduced here at Dayton
- ⦿ DV Dongle is non-radio device allowing access to repeaters and reflectors via Internet
- ⦿ DV Access Point (DVAP) creates low power hotspot via Internet
- ⦿ Node Adapters converts FM transceiver to D-STAR hotspot via Internet



Icom Radios

- Offers line of mobiles and handhelds
- Most radios are dual band (2m, 70cm)
 - ID-31A is 70cm only
 - ID-1 is 23cm only, allows high speed data
- All Icom radios have built-in serial port for data transmission
- Some offer GPS as built-in, a part of speaker/mic or connection via serial port



Icom Mobiles



- IC-2200 and ID-800 were initial D-STAR radios
 - D-STAR board can be added to IC-2200 allowing four D-STAR memories
- ID-880 updated ID-800 with improved user functions
 - Dual-band, single receive mobile
- IC-2820 is top of the line mobile
 - Dual-band, dual receive
 - Built-in GPS with antenna



Icom Handhelds

- ⦿ IC-91AD was initial D-STAR handheld
 - Dual-band, dual receive
- ⦿ IC-92AD replaced 91AD
 - Dual-band, dual receive
 - Slightly larger frame with more heat sink
 - Waterproof
 - GPS spkr/mic optional accessory
- ⦿ IC-80 introduced as lower cost handheld
 - Dual-band, single receive
 - GPS spkr/mic accessory available
- ⦿ ID-31A is latest handheld
 - 70cm only
 - Waterproof
 - SD card for memory storage, update memory from downloads
 - Built-in GPS
 - User friendly UI, locate closest repeater



ID-1 for 1.2 GHz Voice and Data

- Allows voice, low speed data, high speed data in 23cm band only
- High speed data connection is Ethernet compatible



DV Dongle

- Provides access to D-STAR repeaters via PC without radio
- Small module connects to PC via USB
- Uses PC sound card for mic/speaker audio
- Windows software runs efficiently on PCs, Netbooks
- Coming to Android tablets, smartphones)
- Java-based software for Mac, Linux
- Connect to repeaters, reflectors, send data, view history.



DV Access Point

- ⦿ Creates instant local access point for limited area without D-STAR repeater
- ⦿ Connects to PC via USB
- ⦿ Includes 10mw 2m transceiver and stubby antenna
- ⦿ Use HT, other D-STAR radio nearby for full network access without local repeater
- ⦿ Windows software module for configuration and operation

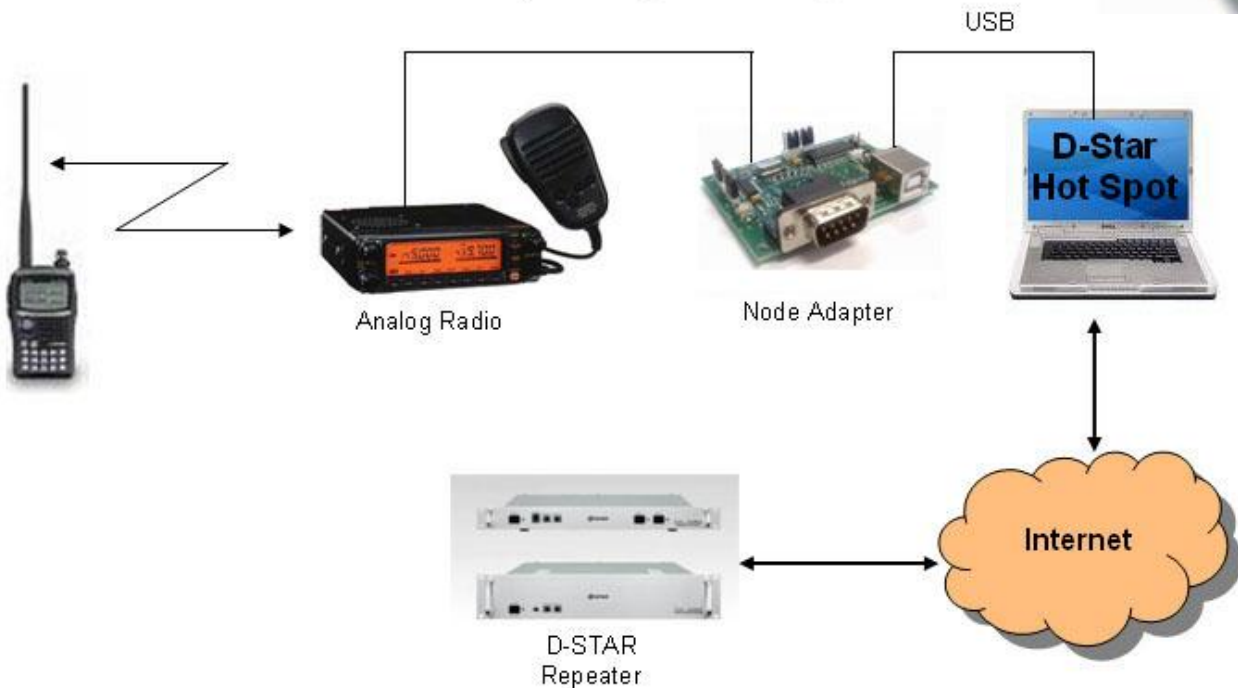


DV Node Adapters

- Provides D-STAR interface to FM radio
- Can be used to create hotspot or repeater



D-STAR Hot Spot - System Diagram



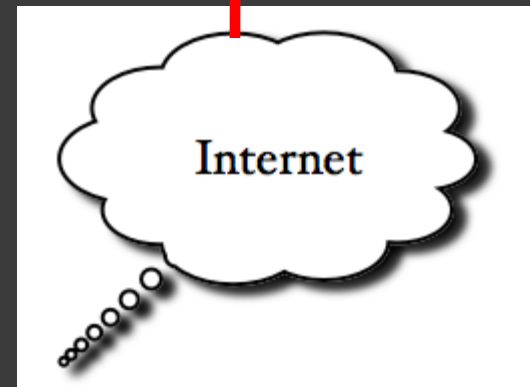
D-STAR Repeater Architecture



Linux Gateway PC



Runs third-party apps, Dongle, DVAP



Internet

