What is DSTAR ircDDB?

<u>ircDDB is</u> an IRC-based communication platform for Amateur Radio DSTAR Digital Voice and data systems to exchange routing and other information between DSTAR gateways - It is a <u>no-trust</u> system.

ircDDB is the acronym for IRC-based Distributed DataBase.

<u>ircDDB</u> enables homebrew DSTAR gateways to work and communicate with all other attached gateways using call sign routing. This is without being attached to any proprietary trust server system such as mainstream DSTAR.

Mainstream DSTAR systems can install a free ircDDB software add-on to allow communications with ircDDB gateways

The USA QuadNet IRC Network

Built and maintained by the Amateur Radio Experimenter's Group <u>Administrators</u>: Will/W4WWM, Mike/KB2ITR, Dedric/KF5MIF, and Gary/K7EK

The <u>Amateur Radio Experimenter's Group</u> consists of like minded amateur radio operators that embrace the experimental and homebrew aspects of digital voice and data communications, utilizing inexpensive and easily acquired hardware and open source software. Check out our status page at <u>http://quadnet.no-ip.org/status.html</u>. This is a work in progress, so check back often.

Our network is open to all licensed amateur radio licensees. Unlike the European ircDDB Network, a club station call sign is <u>not required</u> to utilize our system. Routing time is about 1 second or less to reach your destination.

For the sake of redundancy, our four DSTAR ircDDB network servers are located across the United States:

- a. <u>SERVER 1</u> is located in Huntsville, Alabama; host name is <u>itsn-s1.no-ip.org</u>
- b. <u>SERVER 2</u> is located in East Strasburg, Pennsylvania ; host name is <u>stn570.dyndns.org</u>
- <u>SERVER 3</u> is located in Jackson, Mississippi; host name is <u>itsns3.no-ip.org</u>
- d. <u>SERVER 4</u> is located in Spanaway, Washington; host name is <u>itsn-s4.no-ip.org</u>

You can point your DSTAR client, gateway, or hotspot to any of these severs. If one server goes down you can easily switch to one of the others listed above.

Also, we operate several XREFLECTORS, XRF587, XRF707, and XRF901, which are always linked. These XREF's are spread out across the United States, similar to the ircDDB QuadNet Servers.

There are three available routing methods that you should be aware of:

a. <u>The first method</u> is **Call Sign Routing**. In the UR field of your D-Star radio, place the call sign of the ham radio operator you are trying to contact (e.g. KB2ITR). Once input has been completed , tap the PTT button once to establish the connection.

b. <u>The second method</u> is **Zone Routing** or **Repeater Routing**. Place the group or club call sign and the repeater module in the UR field of your radio with a forward slash (e.g. **/KJ4NYH C**) and then depress the PTT button.

c. <u>The third method</u> is **Group Routing**. This consists of a tactical call sign and its module. (e.g. **QNET20 C**). Place it in the radio UR field, key the mic, and then

begin talking. Pay special attention to the placement of the module letter in the UR field. It must be in the 8th position to correctly route.

This group routing system is actually called StartNet Digital and was introduced by John Hays, K7VE of Washington State. Our **QNET20** group routing server runs on a RASPBERRY PI mini PC. It supports three channels: **QNET20 B**, **QNET20 C** and **QNET20 D**. Route through any of them as needed.

To log off of the **B module**, simply add "**QNET20 T**" to your UR field and push the PTT. Similarly, to log off of the C module, place "**QNET20 Z**" in the UR field and push the PTT button. And, to log off of the D module, place "**QNET20 O**" in the UR filed and push PTT.

IMPORTANT NOTE: In order to utilize the **QNET20** Group Routing Server, you must be connected to one of the four ircDDB servers in <u>The USA QuadNet IRC</u> <u>System</u> listed above, not to the European ircDDB System.



Please note that this is a fluid document which will be updated as necessary. Please check back from time to time.