1. Change to root

   sudo su

2. Setup system to install DXSpider

   groupadd spider

   useradd –m sysop –G spider

   usermod –g spider sysop

3. If you are not prompted for a password enter the following

   passwd sysop

   adduser sysop sudo

4. Install perl libraries

   apt-get update

   apt-get install libtimedate-perl libnet-telnet-perl libcurses-perl libdigest-sha-perl libdata-dumper-simple-perl

5. Finalize and restart RPi

   cd ~sysop

   ln -s /home/sysop/spider /spider

   shutdown –r now

6. After restart, login as sysop. Load DXSpider software

   cd ~

   mkdir spider

   git clone git://scm.dxcluster.org/scm/spider spider.new

   cp -a /home/sysop/spider.new/.git /spider

   rm -rf spider.new

   cd /spider

git reset --hard

7.   Set permissions on DXSpider files

sudo su

cd /home/sysop

chown -R sysop:spider spider

find . -type d -exec chmod 2775 {} \;

find . -type f -exec chmod 775 {} \;

exit

8.   Setup DXSpider initialization and parameter files

cd /spider

mkdir local

mkdir local_cmd

cp perl/DXVars.pm.issue local/DXVars.pm

cp perl/Listeners.pm local/Listeners.pm

cd local

9.   Edit DXVars.pm to suit your station, station location info, etc., following instructions in the comments. Ctrl X to exit and save file.

nano DXVars.pm

Pay special attention to the following and insert your callsign data, not mine as shown:

mycall = "K0PIR-2";

myalias = "K0PIR";

myemail = "Rich\@k0pir.us";

10. Edit Listeners.pm to remove "#" from the line for the port. Should look something like this. Ctrl X to exit and save file.

nano Listeners.pm

@listen = (

["0.0.0.0", 7300],

);

11. Begin DXSpider setup

    cd /spider/perl/

    ./create_sysop.pl

    cd /tmp

    wget http://ftp.w1nr.net/usdbraw.gz

12. Begin setup of usdbraw file

    /spider/perl/create_usdb.pl /tmp/usdbraw.gz

13. Compile DXSpider client, will take a few minutes.

    cd /spider/src

    make

14. Launch DXSpider

    cd /spider/perl

    ./cluster.pl

15. Launch another SSH console window and login as sysop

    /spider/perl/console.pl

Next, to receive DX spots you will need to arrange with another Sysop. It's very easy and they are happy to help. Join the DXSpider support list. Then send a message with the subject "Partner Link Request" to the support list. You might be surprised, but you should get at least one or two maybe more responses back.

You'll want to send your info. In this example the host is set to "dxc" and my domain is "k0pir.us", so I would send the partner "K0PIR-2 at dxc.k0pir.us port 7300"

If you have a FQDN and access to your DNS you can send traffic for host "dxc" to your home routers external IP address, see below.

A (Host)

dxc   96.2.58.94   14400

The home router is configured with the local IP 192.168.0.73 as the DMZ, so traffic passes through to my Raspberry pi.

If you don't have a static IP or FQDN you can use a service. See here.

Continue to the next section… "Running Raspberry Pi 3 DXSpider Node and Link Partners"