AllStar Link on the RPI2

After a few attempts to configure a Raspberry PI 2 to be an AllStar Link node, I finally settled on using the ARCH version that is discussed here:
http://crompton.com/hamradio/BeagleBoneBlackAllstar/

There is a group reflector that supports the users of this version of the AllStar Link system and it is found here:
http://lists.hamvoip.org/pipermail/arm-allstar/

KB4FXC and WA3DSP seem to be the active developers of this ARCH Linux AllStar Link system for the Raspberry PI 2. They have modified the app_rpt.so module to correct certain issues that seem common to other Raspberry PI and ARM processor implimentations of the software.

If you decided to install the AllStar Link software on a Raspberry PI 2 or BBB, and having successfully installed it, then if you are interested in some of my configurations read on.

The ARCH image is minimal as it is delivered. Everything you need for the service is there and then some, but if you want something else, well then it might be a problem because if you update the repositories you will bring in dependencies that are not compatible and will break the software. For example I wanted the terminal shell called “Screen”. If you use Screen you know why, if you don’t well then it might not matter, but the example of how I installed it will be useful to you for other things you might want to add. There are archived repositories available for ARCH and you can find the appropriate versions of software to match with the ARCH image you are using.
http://fraggod.net/static/mirror/packages/archlinuxarm/armv7h/
This link should take you to the program archives that contain useful programs for the RPi2_VER1.0_ALLSTAR.zip image,

if that is the one you have installed. If not, you will need to ask on the reflector for the correct archive… Next you need to try to determine which program version will work with the dependencies already installed on your system. I guessed by checking version and date info on gcc.

[root@AllStar-KA7U ~]# gcc –version
gcc (GCC) 4.9.2 20141224 (prerelease)

Then a scan of the gcc versions available in the archive led me to believe the install package dated around Nov-Dec of 2014. Then scanning the *Screen* versions I found one that was created in that time frame and took a chance that it was good in the system. I found this one: screen-4.2.1-3-armv7h.pkg.tar.xz 12-Nov-2014 03:37 , and so it would be installed using:

pacman -U http://fraggod.net/static/mirror/packages/archlinuxarm/armv7h/screen-4.2.1-3-armv7h.pkg.tar.xz

and that worked just fine.

Once the AllStar Link system is installed and configured with the first boot and login, I wanted to configure a telephone system to work with it. The AllStar Link system is an Asterisk PBX and functions for that purpose, but newer versions of Asterisk (ver.13 at this time) offer better security and NAT traversal without port forwarding, as well as voice mail and all the other modern features of telephone systems, so I decided to setup another Raspberry Pi2 running Asterisk ver.13 and use a SIP bridge to connect them. This configuration is involved and will be covered in another post.

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