What happened to /dev/ttyq0-/dev/ptyq0 and the likes?

Greetings;

In the newer linux systems, the pseudo tty's have been eliminated for a more dynamic structure as needed using a master /dev/ptmx pseudo terminal. There are many 'hacks' available on how to do this. Personally I find creating a static terminal helps eliminate any configuration issues and is easier to debug! Also instead of using the infamous FPAC based ax25-up/ax25-down scripts, you can do this all in one script that's SYSV compatable! I place this in /usr/local/bin and call it simply "ax25".

I also create hardcoded pseudo terminals using the "socat" package. This package allows you to create the old devices in /dev you're used to seeing before and also allow you to hard-code your ax25ipd.conf to a specific device you can use all the time. This package is not part of a default install so you will need to use apt or yum, or whatever package management system for your disto is to retrieve it, or compile the source. For each pair of terminals you'll need two lines. You will see them in the script. The script follows:

```
#! /bin/sh

case "$1" in
  start)
        modprobe mkiss
        modprobe ax25
        modprobe netrom

        # create pseudo tty devices:
        socat PIPE:/dev/ttyq0 PIPE:/dev/ptyq0 &
        socat PTY,link=/dev/ttyq0 PTY,link=/dev/ptyq0 &
        sleep 3

        /usr/local/sbin/kissattach -m 256 /dev/ptyq0 ax0 44.88.0.14
        /usr/local/sbin/ax25ipd -c /etc/ax25/ax25ipd.conf > /tmp/axip

        ifconfig ax0 44.88.0.14 netmask 255.255.255.0 up
        ifconfig nr0 down
        nrattach -i 44.88.0.14 -m 512 nr0
        ifconfig nr0 44.88.0.14 netmask 255.255.255.0 hw netrom N1URO-12 up
        /usr/local/sbin/ax25d
        /usr/local/sbin/netromd -c -i -p 1 -t 15
        /usr/local/sbin/mheardd
        exit 0
        ;;

  stop)
        killall -TERM mheardd
        killall -TERM netromd
        killall -TERM ax25d
        killall -TERM ax25ipd
        killall -TERM kissattach
        killall -TERM socat
        ifconfig nr0 down
        ifconfig ax0 down
        modprobe -r netrom
        modprobe -r ax25
        modprobe -r mkiss
        exit 0
```

```
        ;;

  *)
        echo "Usage: ax25 {start|stop}"
        exit 0
        ;;

esac

exit 0
```

You can add anything else you require into this script such as your favorite ripv2 daemon, ip route commands, iptables commands, etc. I hope this has helped get you going!

73 de N1URO