

## INSTALLING PAT, A WINLINK CLIENT, ON LINUX

Pat is a Winlink client written in Go so it will operate on Windows, Linux, or MacOS. Its web site is:

<http://getpat.io/>

The best source of how-to information for installing Pat on a Raspberry Pi is a set of YouTube videos by KM4ACK:

<https://www.youtube.com/playlist?list=PL1QTYT4Qo9cY98NFmxrTvtGyWI9pgxFq>

These videos also provide generally useful information for other platforms.

Note that Pat's documents are Linux oriented so if you are using another platform, "some adaptation may be needed."

The basic steps are:

1. Download Pat from <https://github.com/la5nta/pat/releases>
2. Install Pat. For OS specific instruction, see <https://github.com/la5nta/pat/wiki/Install-FAQ>
3. Configure Pat. Use the command "pat configure" See for details: <https://github.com/la5nta/pat/wiki/The-command-line-interface#configure>
4. Run Pat from a command line <https://github.com/la5nta/pat/wiki/The-command-line-interface> or from the web GUI <https://github.com/la5nta/pat/wiki/The-web-GUI>
5. In the web GUI, compose an email using Action > Compose and send an email using Action > Connect and select:  
transport: telnet  
to send the email using the Internet

If you want to install Pat for a radio connection, the steps depend on the connection and platform.

For example, to install Pat on Linux for a serial Byonics TT4 TNC:

1. Determine the serial port. Plug in the TNC, then run command:

```
$ ls -l /dev/serial/by-id
```

In this case, the port is /dev/ttyUSB0

2. install ax.25:

```
$ sudo apt install ax25-tools ax25-apps
```

3. Edit /axports file using  
\$ sudo nano /etc/ax25/axports

```
# name    callsign      speed paclen window  description
w12k     AA6BD-10      19200 255    7      TNC USB TT4
```

Above, 19200 is the baud rate of /dev/ttyUSB0 between the Pi and TNC. Below, 1200 is the baud rate between the TNC and the RF transceiver, and must match the remote Winlink RMS.

4. Edit /default/ax25 using  
\$ sudo nano /etc/default/ax25

```
# Configuration for AX.25 systemd unit file from Pat.
```

```
# The axport from /etc/ax25/axports to bring up.
AXPORT=w12k
```

```
# The AX.25 baudrate the TNC is configured for.
# Make sure this matches the HBAUD setting of your TNC.
HBAUD=1200
```

```
# The TNC serial path.
DEV=/dev/ttyUSB0
```

5. # Install the systemd script  
\$ sudo /usr/share/pat/ax25/install-systemd-ax25-unit.bash

```
# Bring up the device
$ sudo systemctl start ax25
# Check status/error log
$ sudo systemctl status ax25 -l
# (optional) Enable the AX.25 interface on startup
$ sudo systemctl enable ax25
```

*Psst: Execute sudo systemctl stop ax25 to bring down the interface.*

6. \$pat configure

Example configuration:

```
{
  "ax25": {
    "port": "w12k",
    "beacon": {
      "every": 3600,
```

```
"message": "Winlink P2P",  
"destination": "IDENT"  
}  
},  
...  
}
```

Pay extra attention to the "port" attribute, this must match the intended axport defined in /etc/ax25/axports.

For more details, see <https://github.com/la5nta/pat/wiki/AX25-Linux>

7. If your rig can be controlled from your computer, you can set up rig control:  
<https://github.com/la5nta/pat/wiki/Rig-control>

See the Pat Wiki for information on other modes at <https://github.com/la5nta/pat/wiki>

Note that Pat does not have templates like Winlink Express, so you will need to compose messages in text.