



# Slevin's Guide to Setting up ADSBCOT for a TAK Server

## Install adsbcot:

```
wget https://github.com/snstac/aircot/releases/latest/download/aircot_latest_all.deb  
sudo apt install -f ./aircot_latest_all.deb  
  
wget https://github.com/snstac/pytak/releases/latest/download/pytak_latest_all.deb  
sudo apt install -f ./pytak_latest_all.deb  
  
wget https://github.com/snstac/adsbcot/releases/latest/download/adsbcot_latest_all.deb  
sudo apt install -f ./adsbcot_latest_all.deb  
  
sudo python3 -m pip install adsbcot[with_pymodes]  
python -m pip install pyusb
```

## Create the adsbcot.ini file:

```
sudo nano /etc/adsbcot.ini  
  
#add the following:  
  
[adsbcot]  
  
COT_URL = tcp://YOURTAKSERVERIP:8088  
FEED_URL = http://127.0.0.1/tar1090/data/aircraft.json  
  
#COT_URL is the IP address of your TAK server  
  
#Feed_URL is the IP address of your dump1090 feeder. Can use 127.0.0.1 if it is on same machine  
as adsbcot  
  
#save and exit
```

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## Create the adsbcot service:

```
sudo nano /etc/systemd/system/adsbcot.service
```

```
# Add the following content to the file (the part between the *****):
```

```
*****
```

```
[Unit]
```

```
Description=ADSBCOT - Display Aircraft in TAK
```

```
Documentation=https://adsbcot.rtfid.io
```

```
Wants=network.target
```

```
After=network.target
```

```
# Uncomment this line if you're running dump1090 & adsbcot on the same computer:
```

```
# After=dump1090-fa.service
```

```
[Service]
```

```
RuntimeDirectoryMode=0755
```

```
ExecStart=/usr/bin/adsbcot -c /etc/adsbcot.ini
```

```
SyslogIdentifier=adsbcot
```

```
Type=simple
```

```
Restart=always
```

```
RestartSec=30
```

```
RestartPreventExitStatus=64
```

```
Nice=-5
```

```
[Install]
```

```
WantedBy=default.target
```

```
*****
```

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# Pay special attention to the ExecStart line above. You'll need to provide the full local filesystem path to both your adsbcot executable & adsbcot configuration files. You can use the following command to get the path to your executable: which adsbcot

### **After creating the service, reload daemon and enable the service:**

```
sudo systemctl daemon-reload  
sudo systemctl enable adsbcot
```

### **Install a dump1090 feeder. I used Wiedehopf readsb:**

```
sudo bash -c "$(wget -O - https://github.com/wiedehopf/adsb-scripts/raw/master/readsb-install.sh)"
```

# After it installs, check the URL it creates and make sure you are getting ads-b data on the map

### **Reboot your device and run adsbcot:**

```
sudo reboot -n  
sudo systemctl start adsbcot
```

### **Troubleshooting:**

```
sudo systemctl status adsbcot  
which adsbcot
```

#### **For signal stats:**

```
grep -sh . /run/{dump1090-fa,readsb}/stats.json | jq '.total.local | ((.accepted | add), .strong_signals, .signal, .noise)' | xargs -n4 echo | awk '{printf "\nPercentage of strong messages: %.3f\nSignal: %.1f\nNoise: %.1f\n", $(2) * 100 / $(1), $(3), $(4)}'
```

#### **Image Files for common ads-b feeder apps:**

<https://adsb.im/home>

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