# Running ntopng from Source on Raspberry Pi 5 (ARM64)

**Date:** June 4th, 2025
**Category:** Network/Security

**Backlink:** LibreNMS Docker Deployment on Raspberry Pi 5

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## Overview

This guide details how I installed and configured the open-source network traffic monitor **ntopng** on my **Raspberry Pi 5 (ARM64)**. The goal was to gain full LAN visibility using packet inspection via the Pi's wireless interface. LibreNMS is already in place for SNMP-based metrics, and ntopng complements it by showing real-time traffic flows and bandwidth usage.

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## Why Build from Source?

The official Docker images for `ntop/ntopng` were built for `amd64`, which is incompatible with the Pi 5's `arm64` architecture. Since no prebuilt stable ARM image was available, I opted to build ntopng from source.

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## Install Prerequisites

```
sudo apt update && sudo apt upgrade -y
sudo apt install -y \
  build-essential cmake libtool autoconf automake pkg-config \
  libzmq3-dev libsqlite3-dev libhiredis-dev libmaxminddb-dev \
  libpcap-dev libcurl4-openssl-dev libssl-dev libnghttp2-dev \
  libmariadb-dev-compat libmariadb-dev libnats-dev libcap-dev \
  redis git
```

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## Clone and Build nDPI

```
cd ~
git clone https://github.com/ntop/nDPI.git
cd nDPI
./autogen.sh
make
```

# Clone and Build ntopng

```
cd ~
git clone https://github.com/ntop/ntopng.git
cd ntopng
./configure
make
sudo make install
```

# Create Systemd Service File

```
# /etc/systemd/system/ntopng.service

[Unit]
Description=NtopNG Community Edition (custom build)
After=network.target

[Service]
ExecStart=/usr/local/bin/ntopng --dont-change-user --interface=wlan0 --http-port=3000
WorkingDirectory=/var/lib/ntopng
User=root
Restart=on-failure

[Install]
WantedBy=multi-user.target
```

# Enable and Start Service

```
sudo mkdir -p /var/lib/ntopng
sudo systemctl daemon-reload
sudo systemctl enable ntopng
```

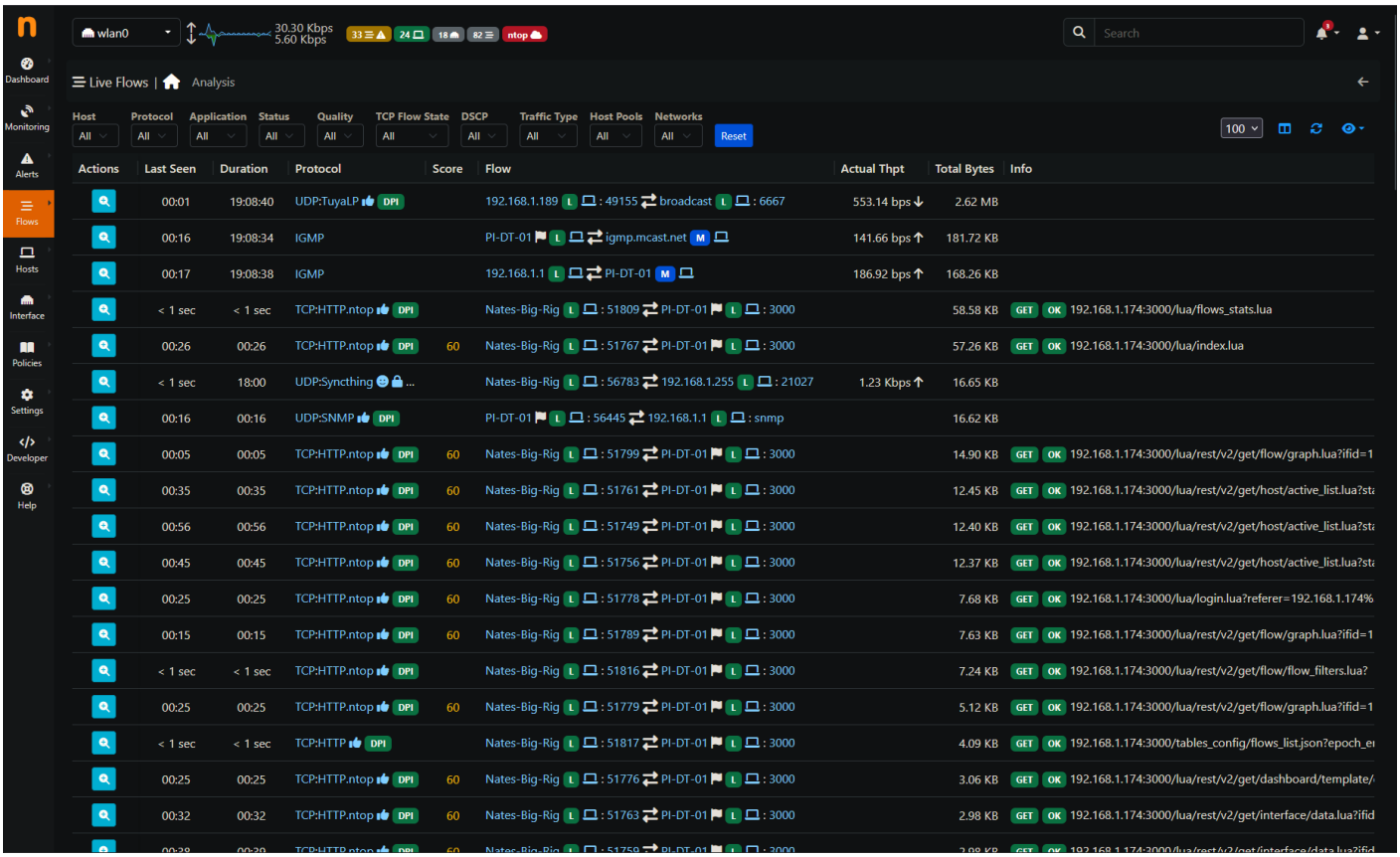
```
sudo systemctl start ntopng
```

# Web Access

- Open your browser to:
  `http://<Pi5-IP>:3000`
  In my case: `http://192.168.1.174:3000`

If the page doesn't load, check:

```
sudo systemctl status ntopng
sudo journalctl -u ntopng --no-pager
```

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