PiHole – Home DNS

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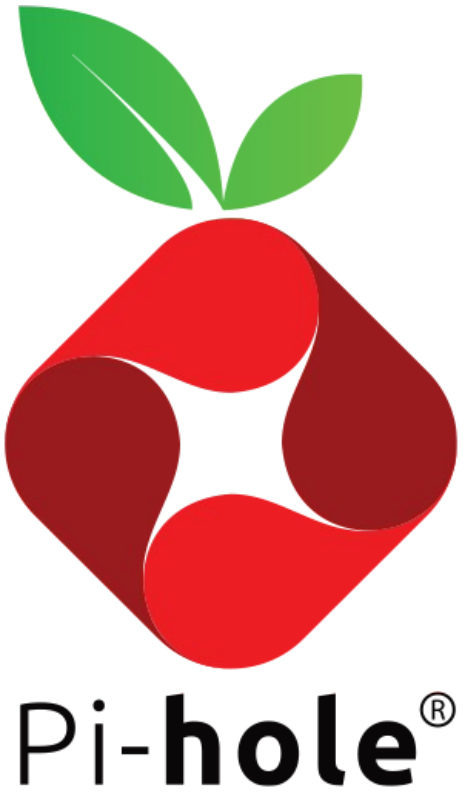
HV Open September 2020 Meeting



Why PiHole

- ISP problems:
  - Your ISP hijacks DNS
  - You don’t trust your ISP’s DNS

- Privacy:
  - Ad blocking
  - Choose your DNS provider
  - Use multiple DNS providers

- Replace Broken or Limited Home Network Equipment

Features

- Allow and Block Lists
- Logging
- Auditing
- Monitoring
- Statistics
- DHCP Server

Tech

- Lightweight, but scalable with larger hardware
  - 2GB storage, 4GB recommended
  - 512MB RAM

- Underlying bits:
  - dnsmasq
  - curl
  - lighttpd
  - php
  - AdminLTE dashboard
  - sqlite3

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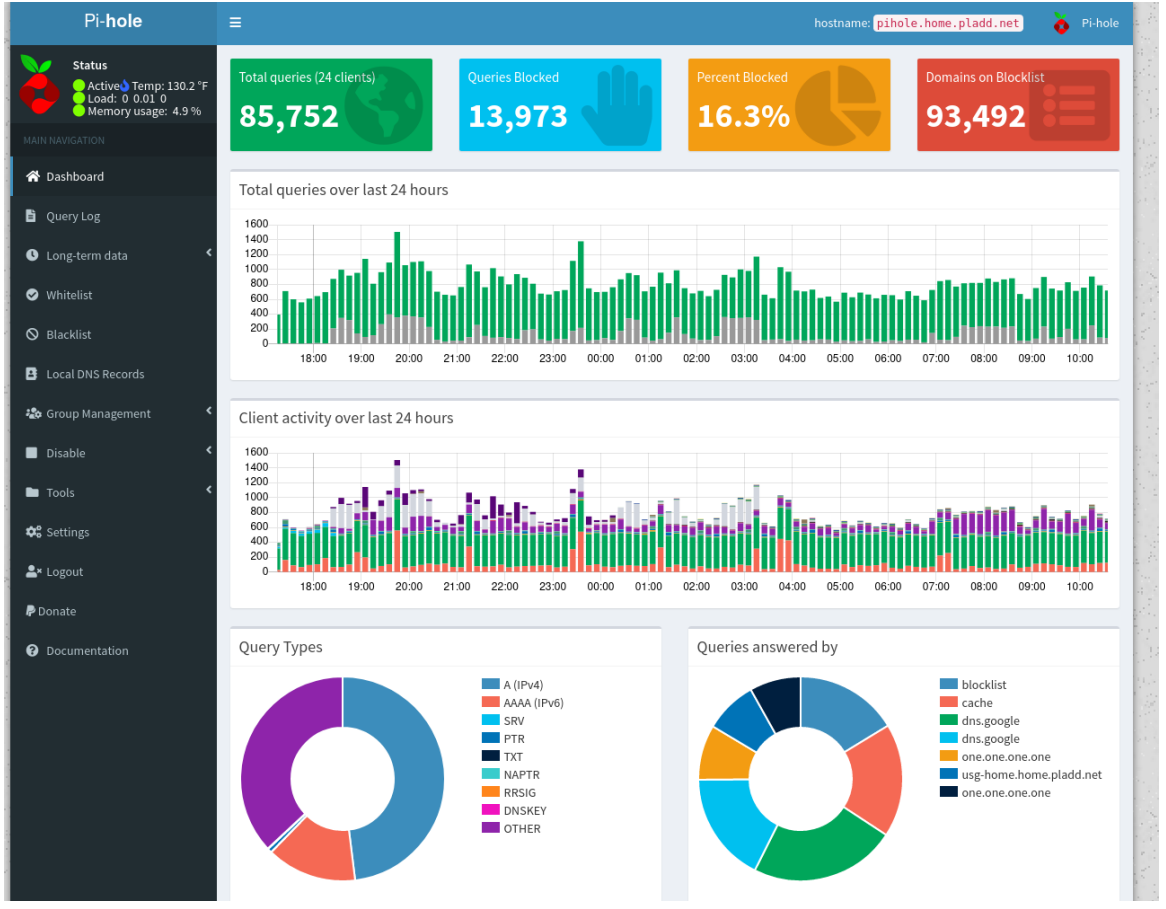
Dashboard



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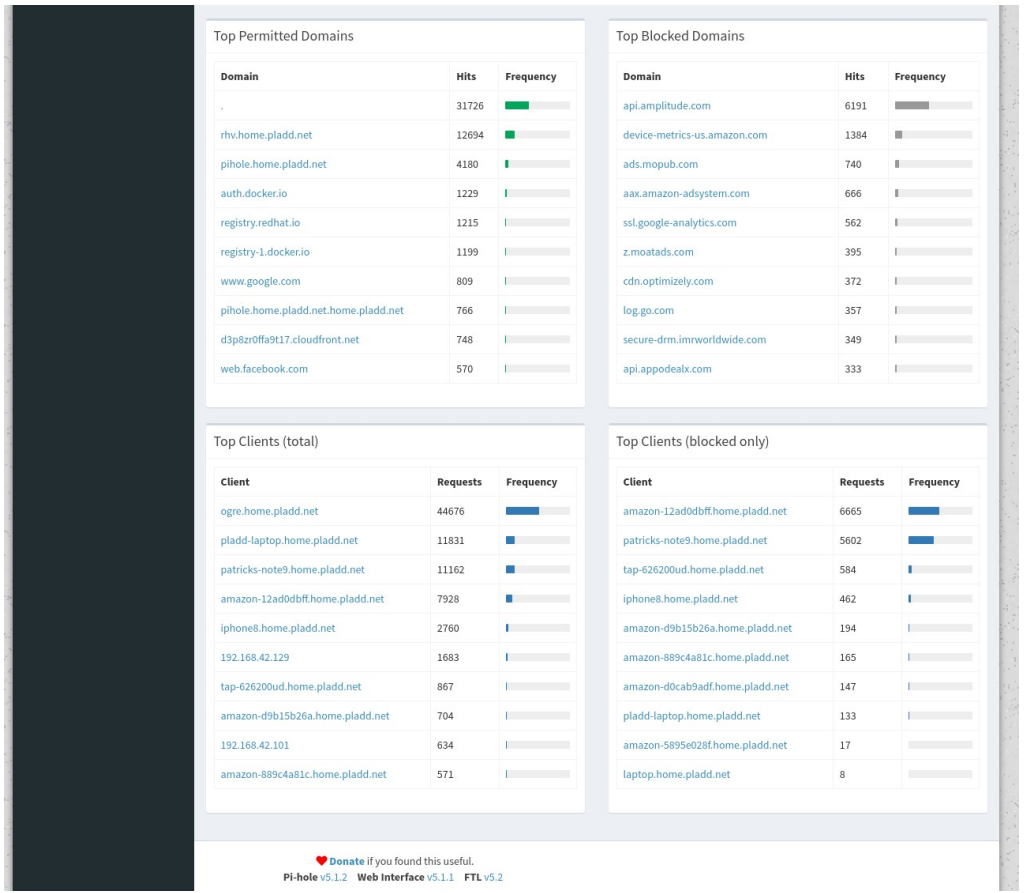
Dashboard (cont’d)



Top Permitted Domains

Domain	Hits	Frequency
.	31726	
rhv.home.pladd.net	12694	
pihole.home.pladd.net	4180	
auth.docker.io	1229	
registry.redhat.io	1215	
registry-1.docker.io	1199	
www.google.com	809	
pihole.home.pladd.net.home.pladd.net	766	
d3p8zr0ffa9t17.cloudfront.net	748	
web.facebook.com	570	

Top Blocked Domains

Domain	Hits	Frequency
api.amplitude.com	6191	
device-metrics-us.amazon.com	1384	
ads.mopub.com	740	
aax.amazon-adsystem.com	666	
ssl.google-analytics.com	562	
z.moatads.com	395	
cdn.optimizely.com	372	
log.go.com	357	
secure-drm.imrworldwide.com	349	
api.appodealx.com	333	

Top Clients (total)

Client	Requests	Frequency
ogre.home.pladd.net	44676	
pladd-laptop.home.pladd.net	11831	
patricks-note9.home.pladd.net	11162	
amazon-12ad0dbff.home.pladd.net	7928	
iphone8.home.pladd.net	2760	
192.168.42.129	1683	
tap-626200ud.home.pladd.net	867	
amazon-d9b15b26a.home.pladd.net	704	
192.168.42.101	634	
amazon-889c4a81c.home.pladd.net	571	

Top Clients (blocked only)

Client	Requests	Frequency
amazon-12ad0dbff.home.pladd.net	6665	
patricks-note9.home.pladd.net	5602	
tap-626200ud.home.pladd.net	584	
iphone8.home.pladd.net	462	
amazon-d9b15b26a.home.pladd.net	194	
amazon-889c4a81c.home.pladd.net	165	
amazon-d0cab9adf.home.pladd.net	147	
pladd-laptop.home.pladd.net	133	
amazon-5895e028f.home.pladd.net	17	
laptop.home.pladd.net	8	

Donate if you found this useful.
Pi-hole v5.1.2 Web Interface v5.1.1 FTL v5.2

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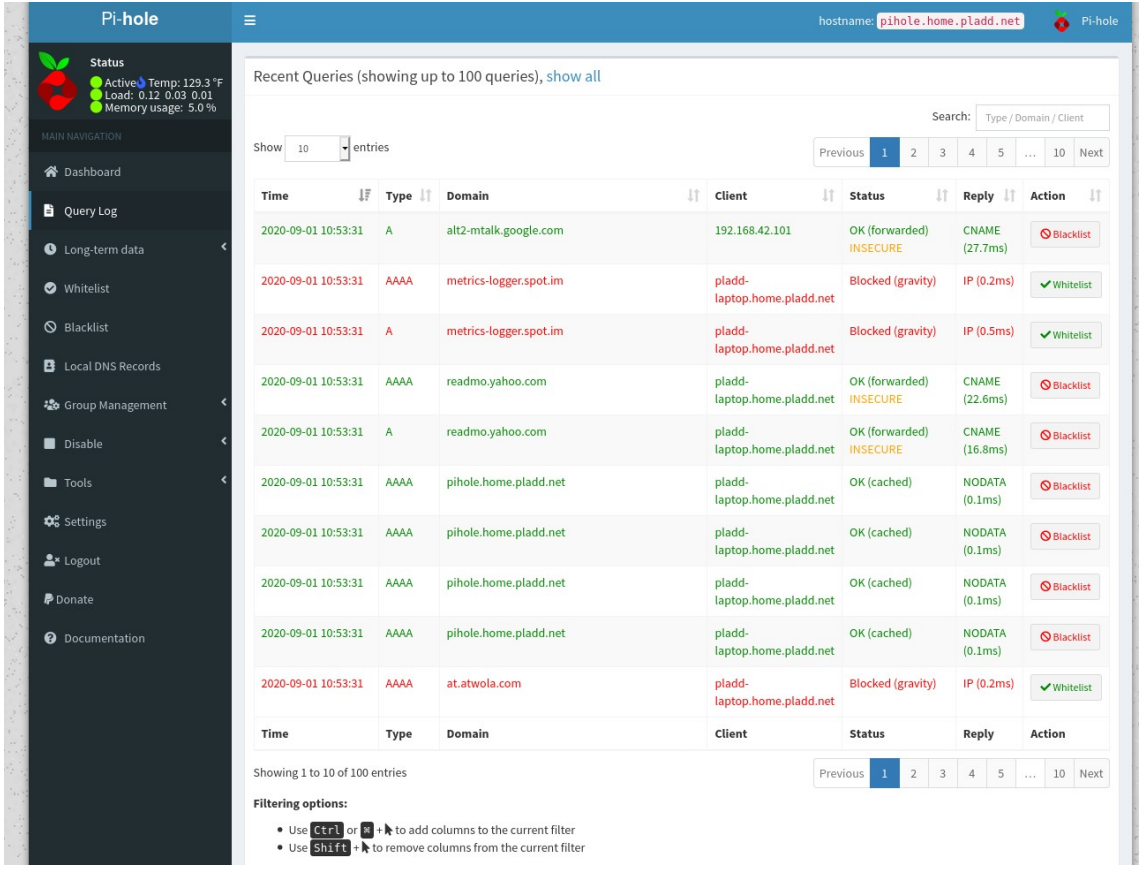
Query Log



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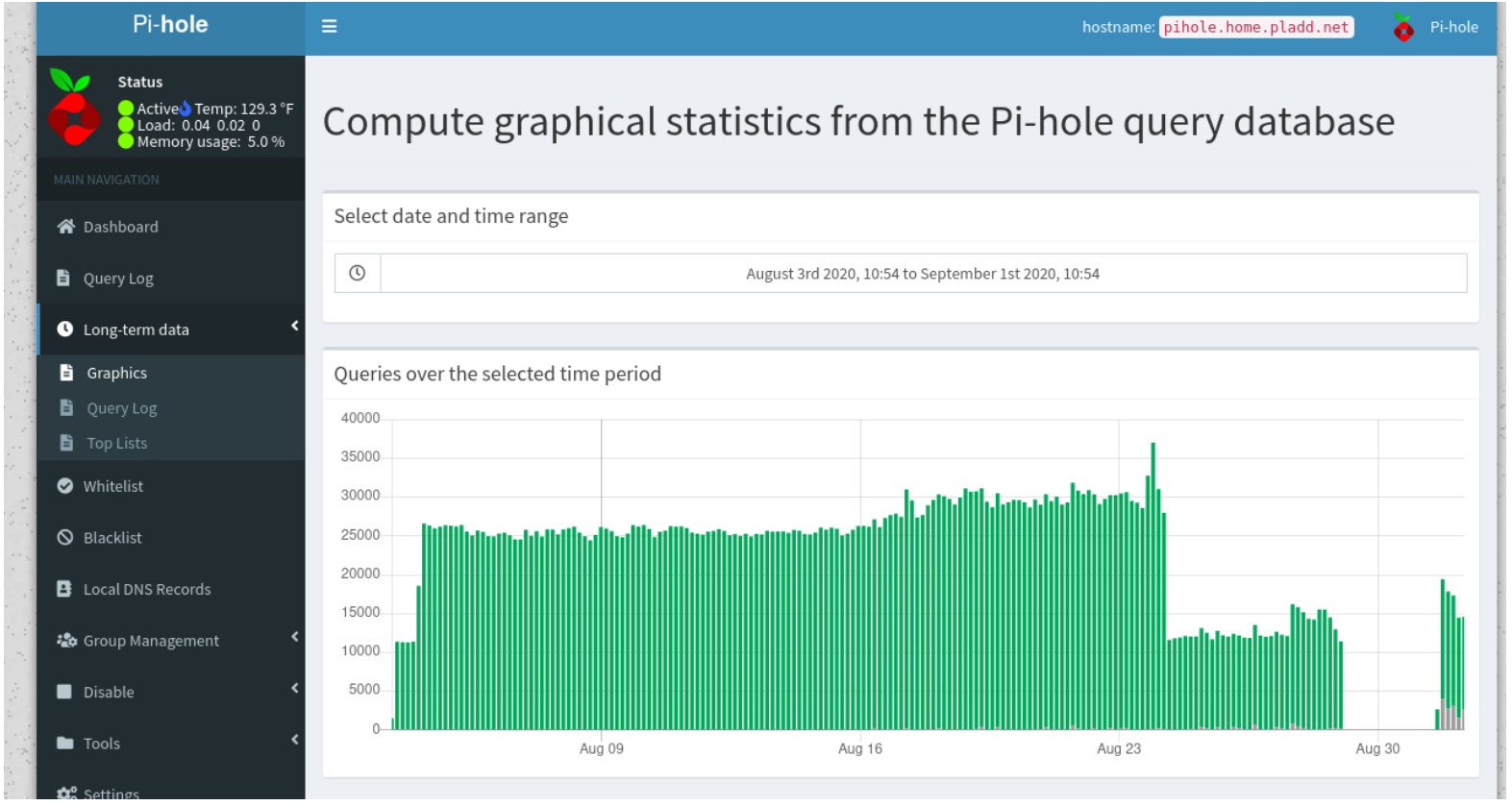
Graphical Log Summary



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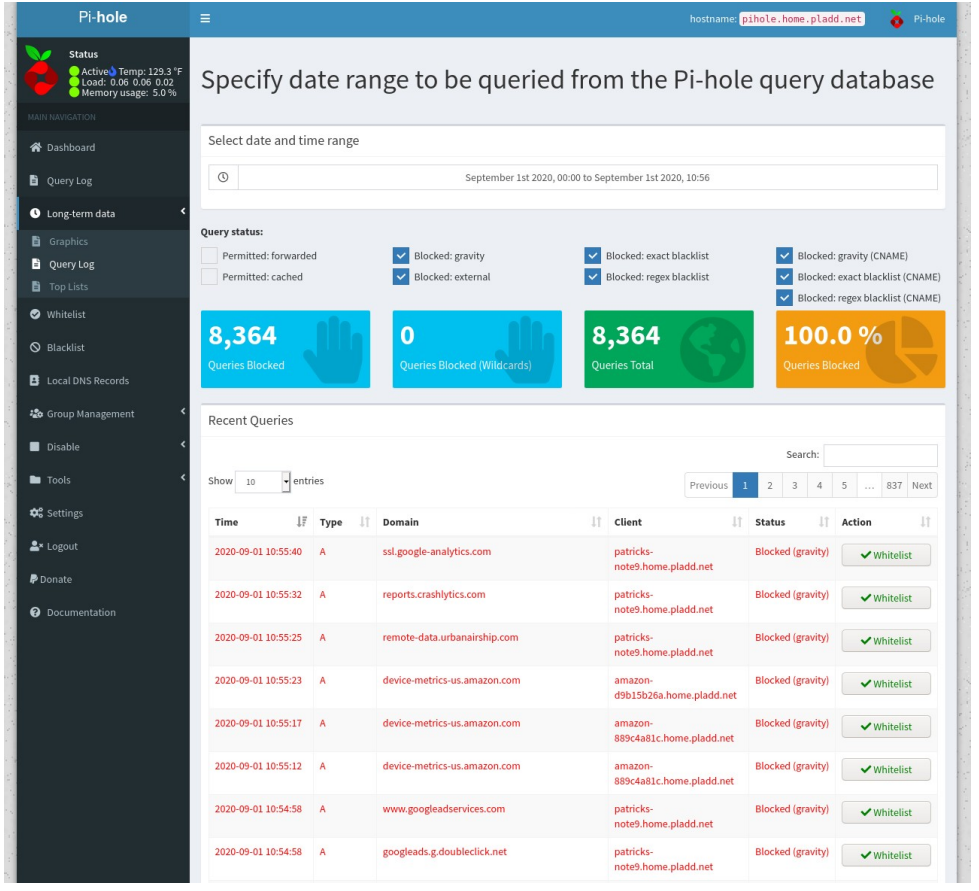
Log Search



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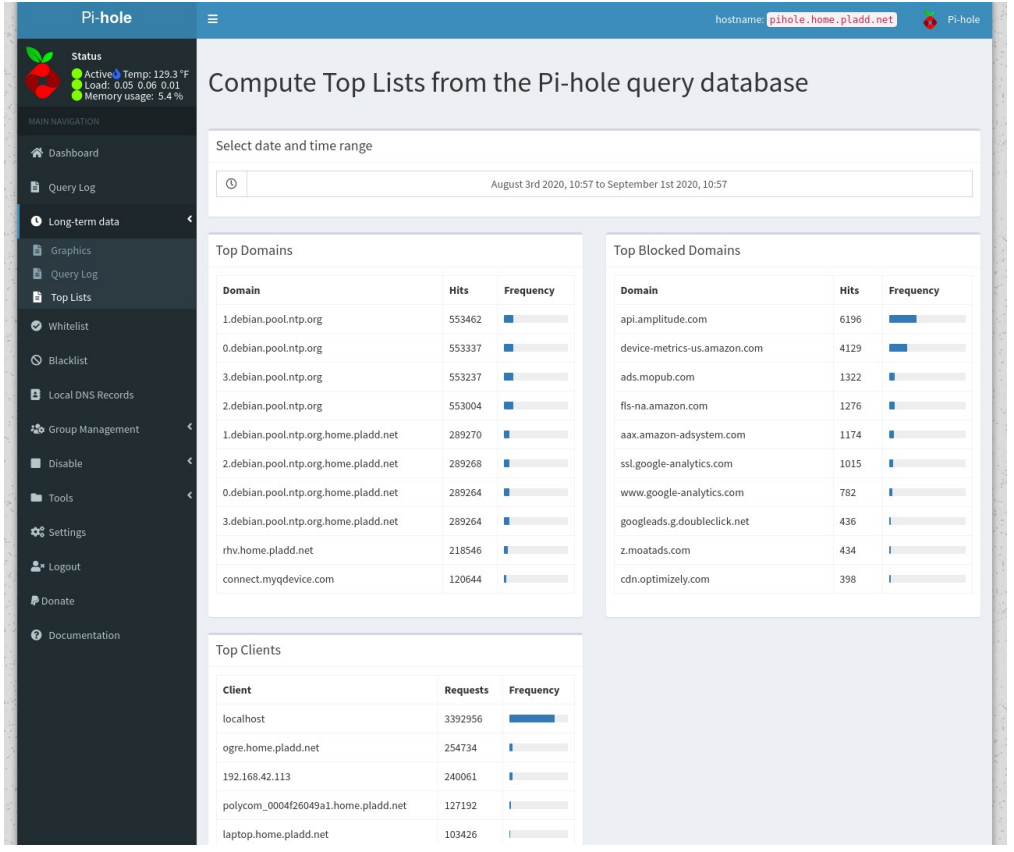
Top Lists



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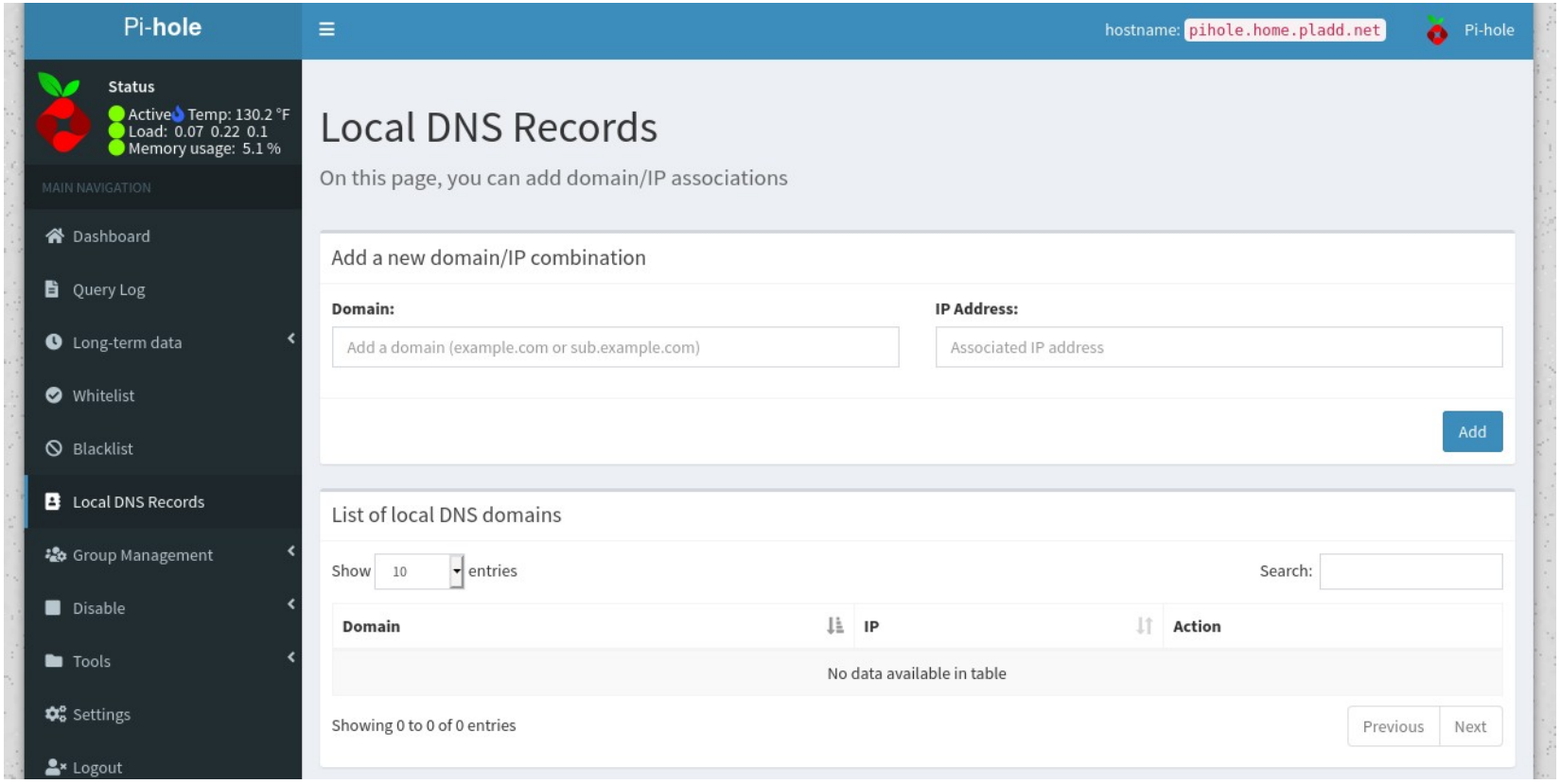
Local DNS



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Audit

Network List

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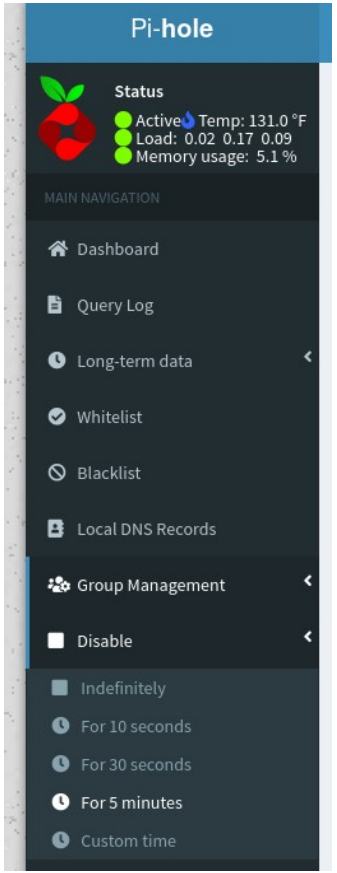
Temporary Disable



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Install

One-Step Automated Install

Those who want to get started quickly and conveniently may install Pi-hole using the following command:

```
curl -sSL https://install.pi-hole.net | bash
Info
Piping to bash is a controversial topic, as it prevents you from
reading code that is about to run on your system.
If you would prefer to review the code before installation, we provide these alternative
installation methods.
```

Alternative 1: Clone our repository and run

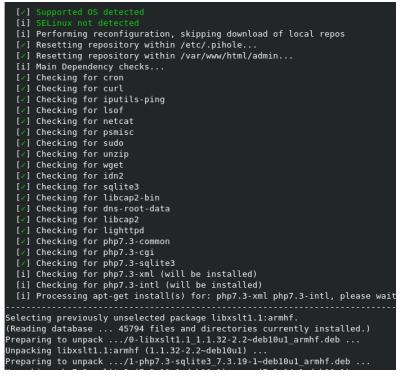
```
git clone --depth 1 https://github.com/pi-hole/pi-hole.git Pi-hole
cd "Pi-hole/automated install/"
sudo bash basic-install.sh
```

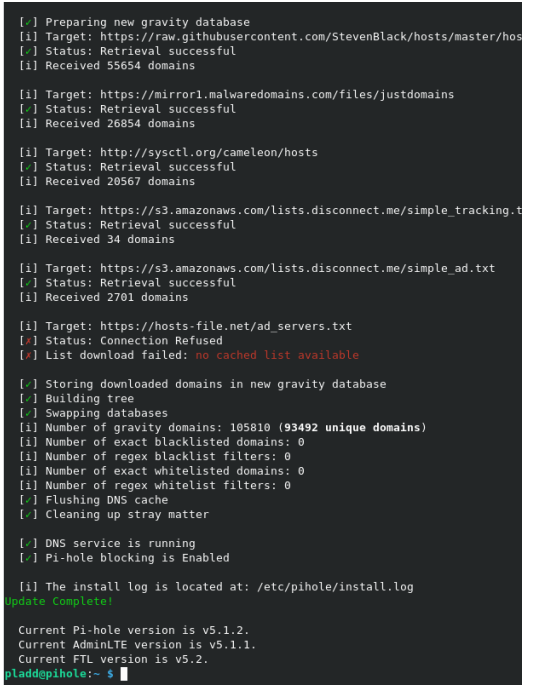
Alternative 2: Manually download the installer and run

```
wget -O basic-install.sh https://install.pi-hole.net
sudo bash basic-install.sh
```

Post-Install

- **Configure DHCP server to point to PiHole IP address**
- **Updates:**
  - **Run** `sudo pihole -up; sudo apt upgrade`





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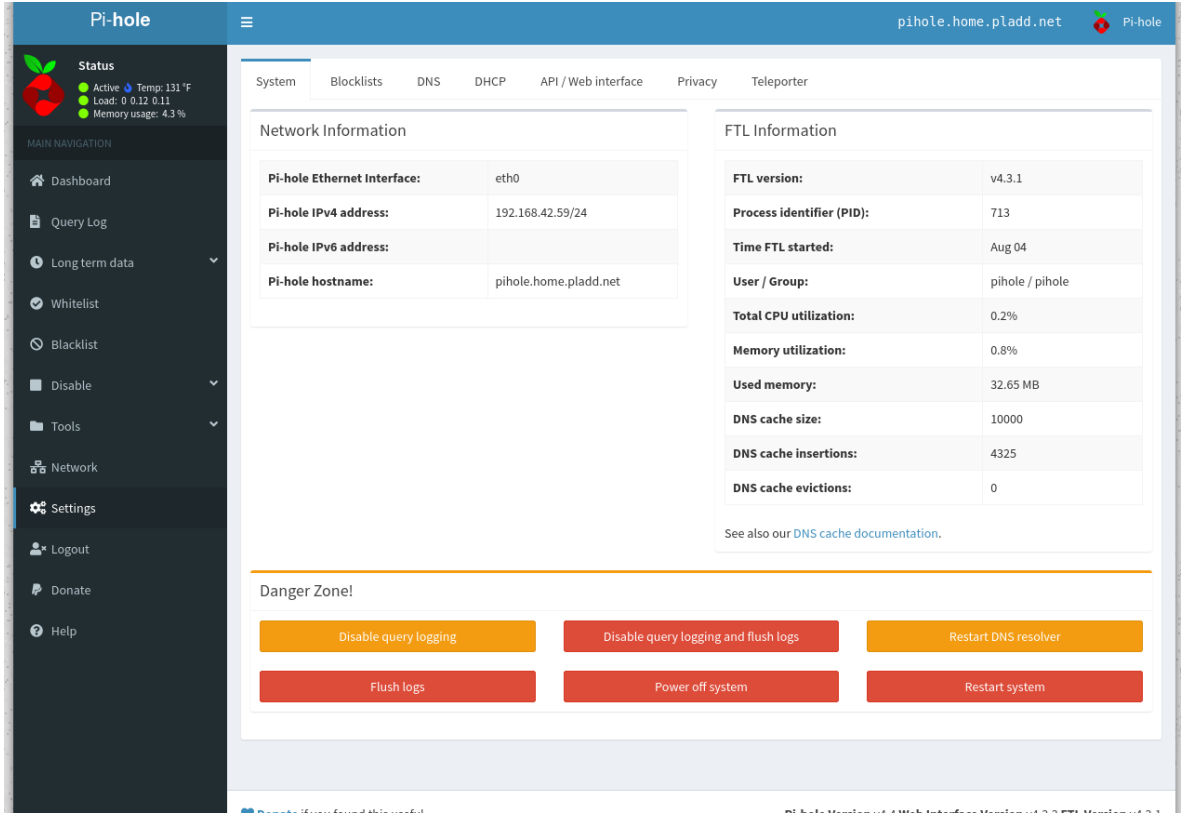
Settings



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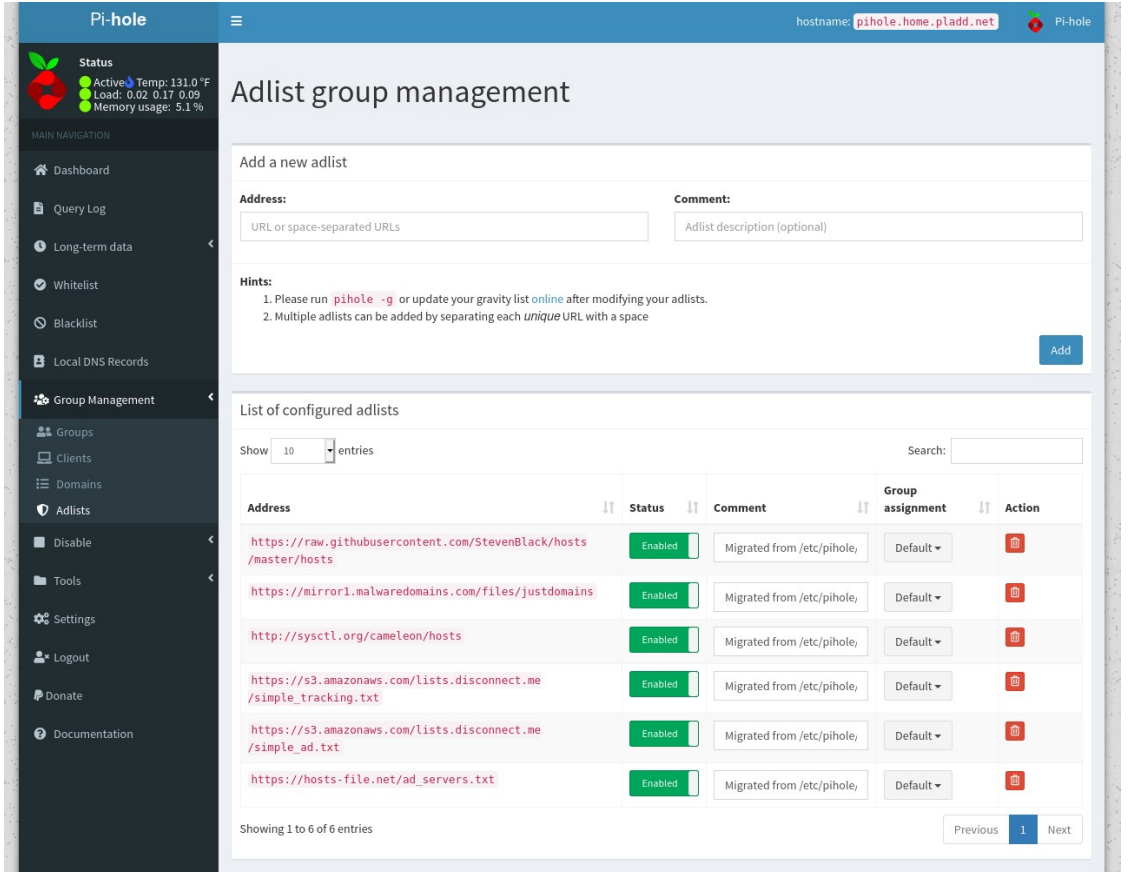
Settings (Lists)



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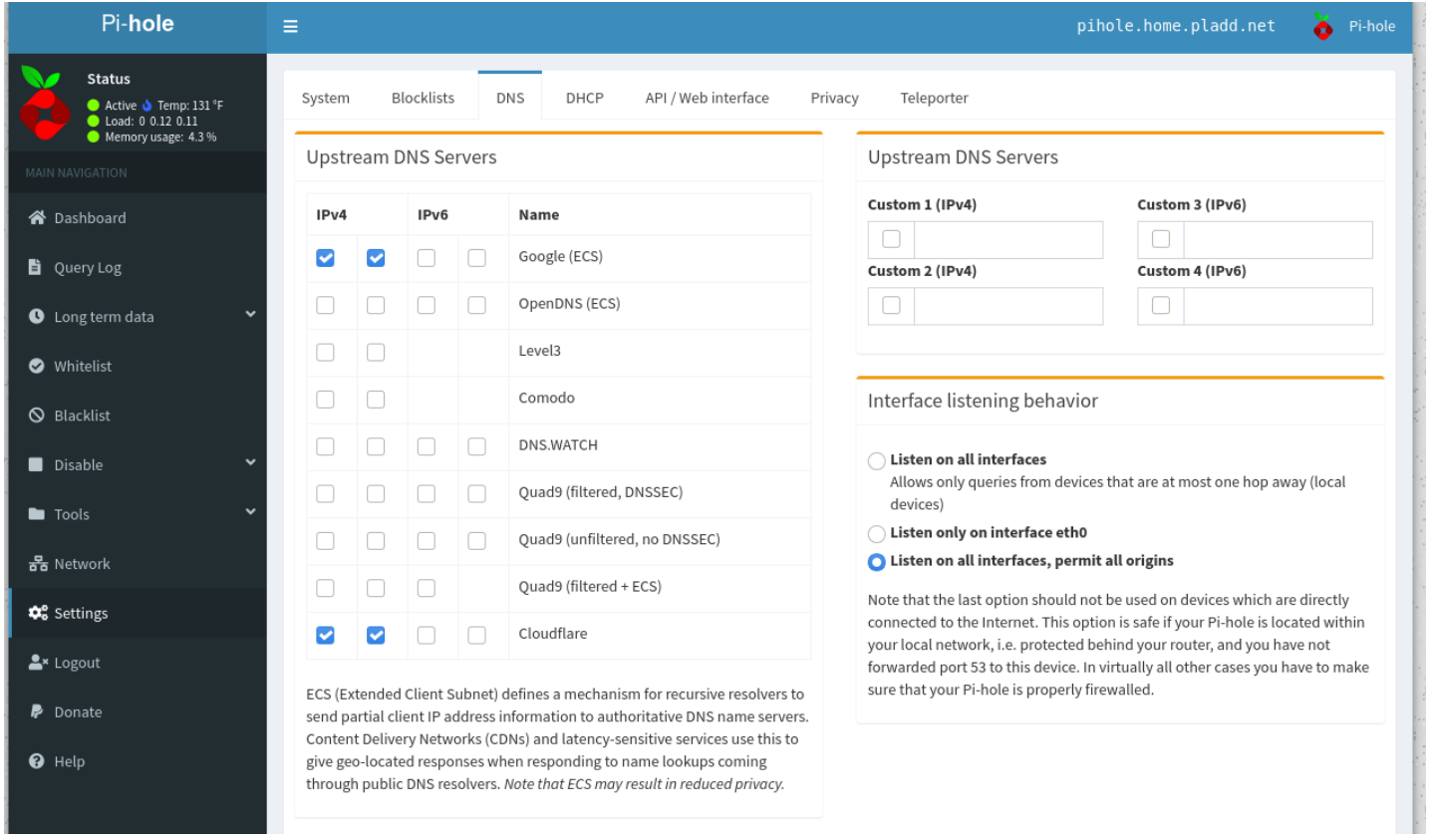
Settings (DNS)



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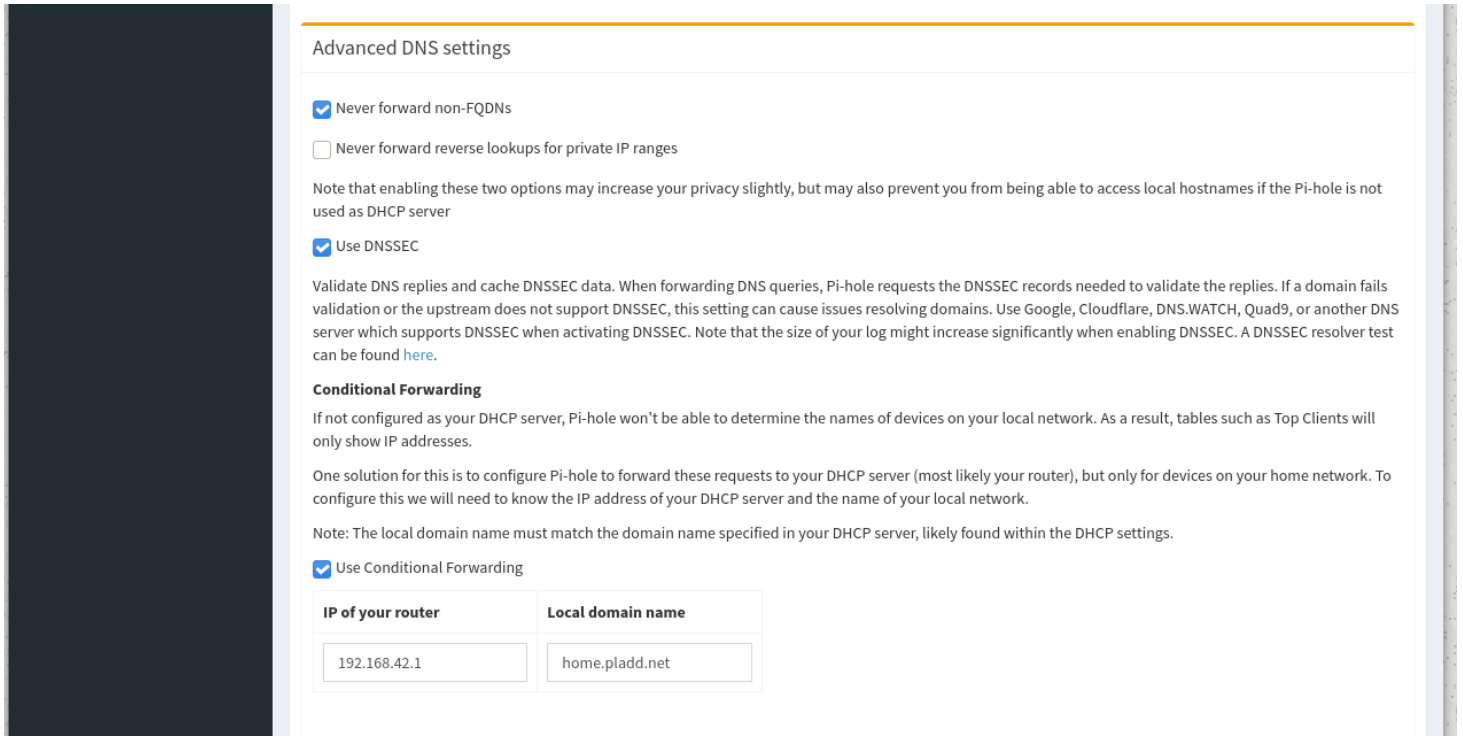
Settings (Advanced DNS)



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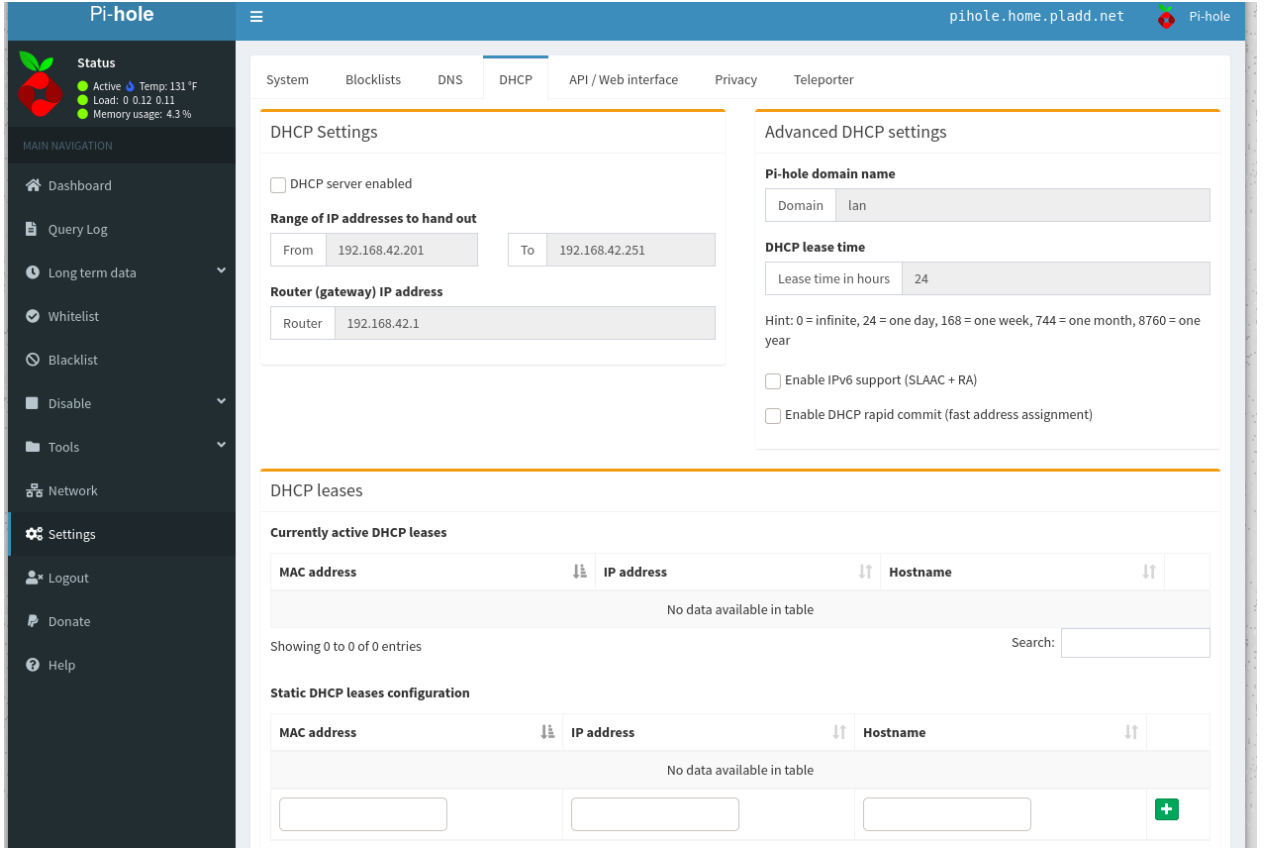
Settings (DHCP)



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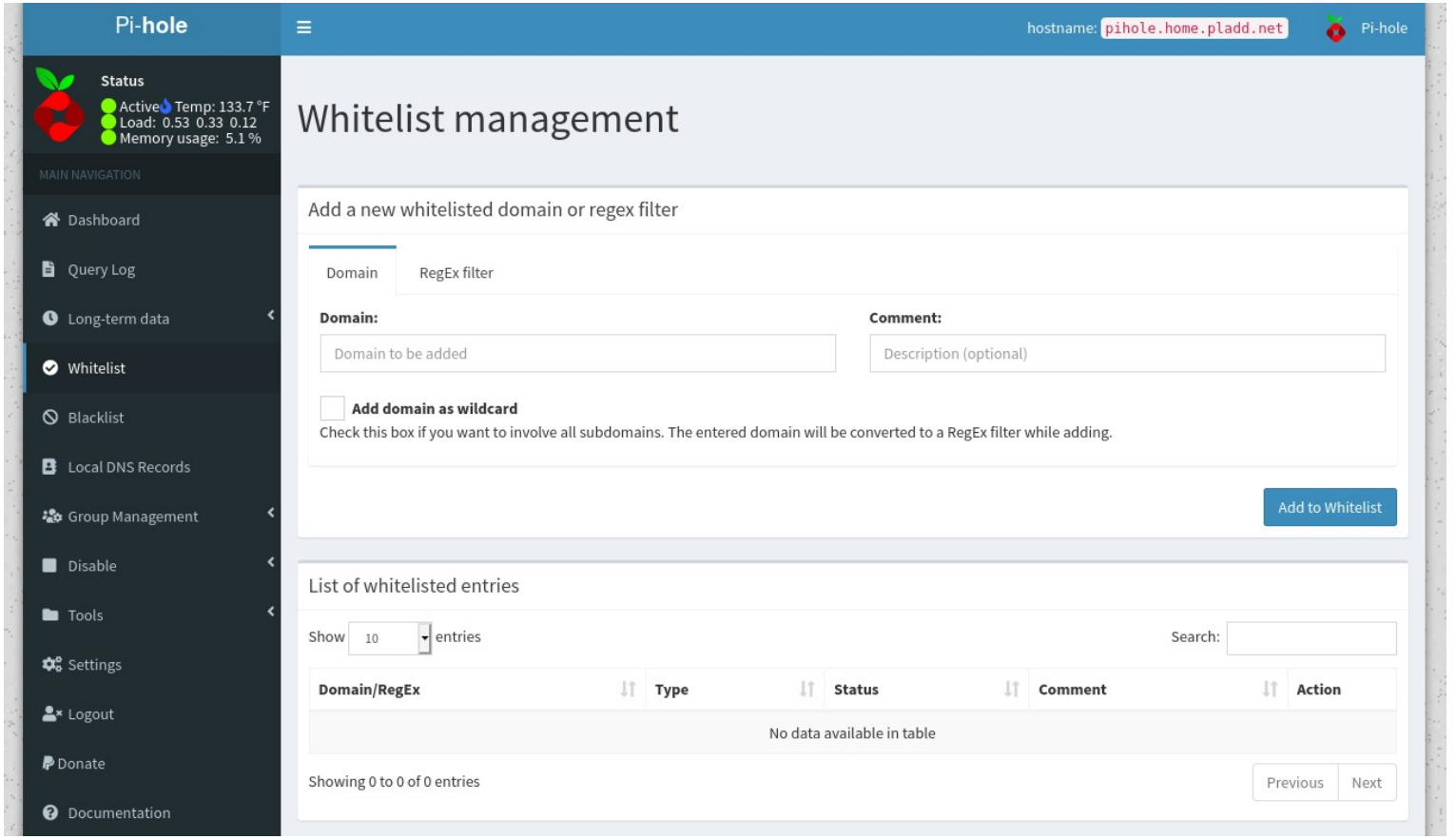
Settings (Allow List)



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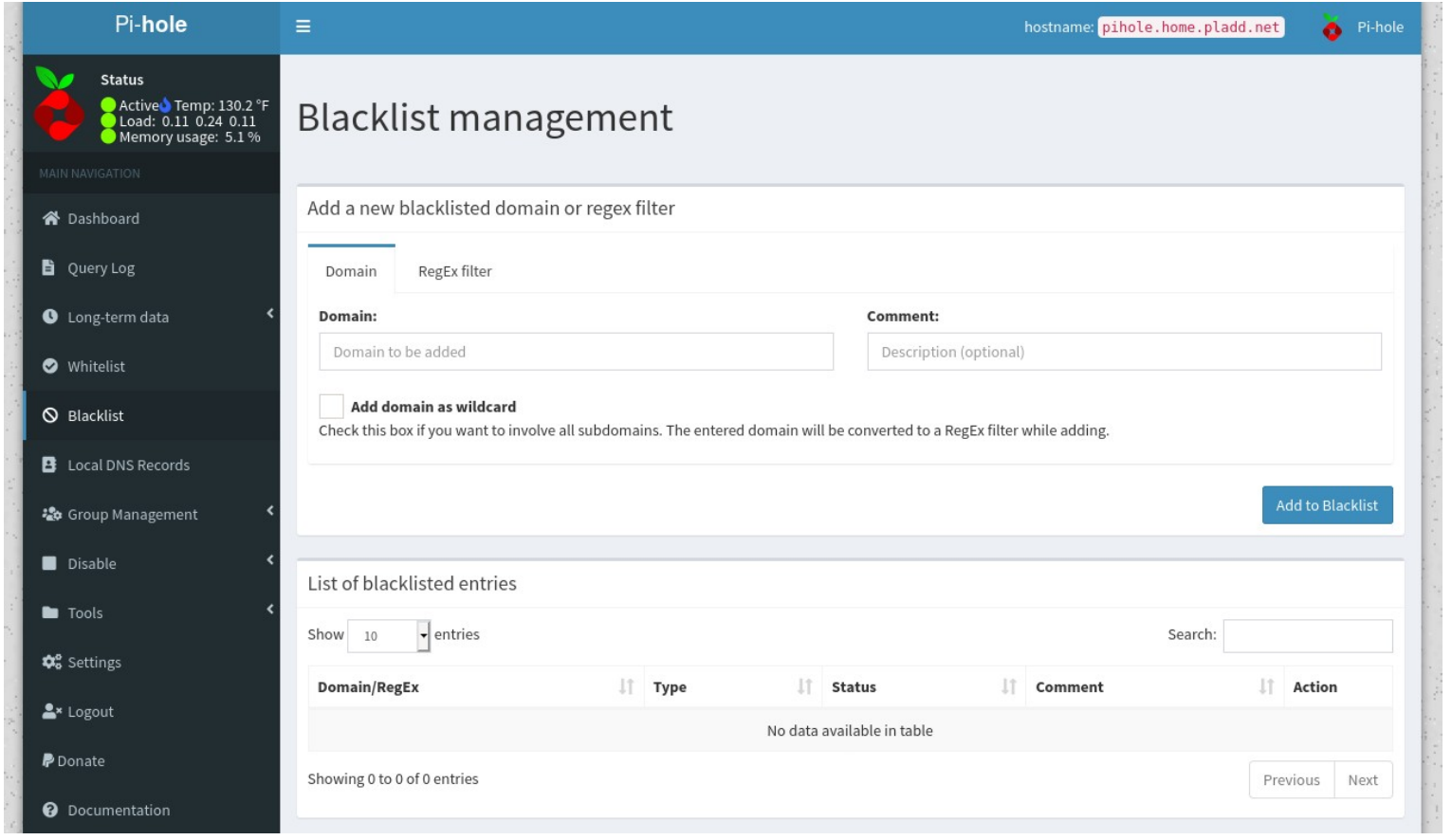
Settings (Block List)



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