DNS Resolver

> To really and fully utilize your SSL environment you need a local DNS resolver that knows your home network...

There are various ways to successfully implement this technology (DNS), even with "in-house knowledge".

1. hosts File

You can define your devices in a hosts file and, for example, distribute this manually to all hosts files of the affected devices. However, this can quickly turn into time-consuming work and is prone to errors! Furthermore, there are devices (e.g. IOT, network devices, TVs) that do not offer manual hosts management at all.

2. Resolver

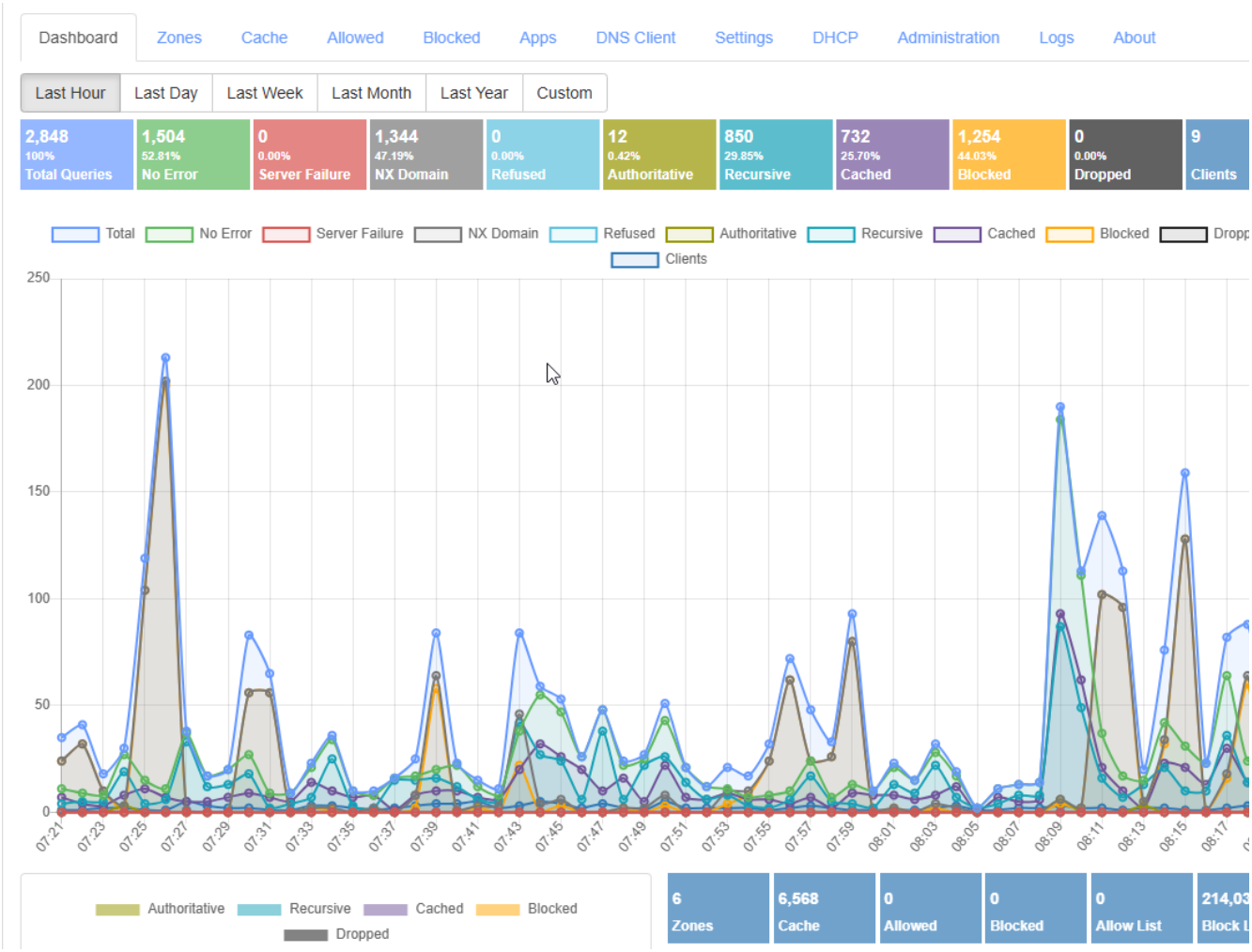
The standard tools such as bind9, dnsmasq could be considered here. However, availability is questionable depending on the operating system. In addition, "failure" is usually pre-programmed, as the technology and tools should be, let's say, semi-professional.

3. Hybrid Applications

The best-known tools here are PI-Hole and AdGuard. Please keep in mind that these tools were created for a different reason: Ad Blocker!!!!!! Due to the concept (foundation, structure), it is becoming increasingly difficult for the tools to follow modern DNS concepts, i.e. to implement the technologies (e.g. DNSSEC) with all possible methods (e.g. DNS-over-HTTPS or DNS-over-QUIC).

A currently less well-known but all the more remarkable application is Technitium. It combines all the "home computer scientist" requirements of a modern, customizable, sustainable DNS resolver solution. It can provide ad blocking with flexibility and customizability, a really easy to set up and maintain resolver implementation and, if desired, an extensive analysis and reporting environment. Hm, the only disadvantage could be the application language: English. However, this is very technical and English is always better than any botched German translations. The linked video is also very helpful!!!!!

Dashboard



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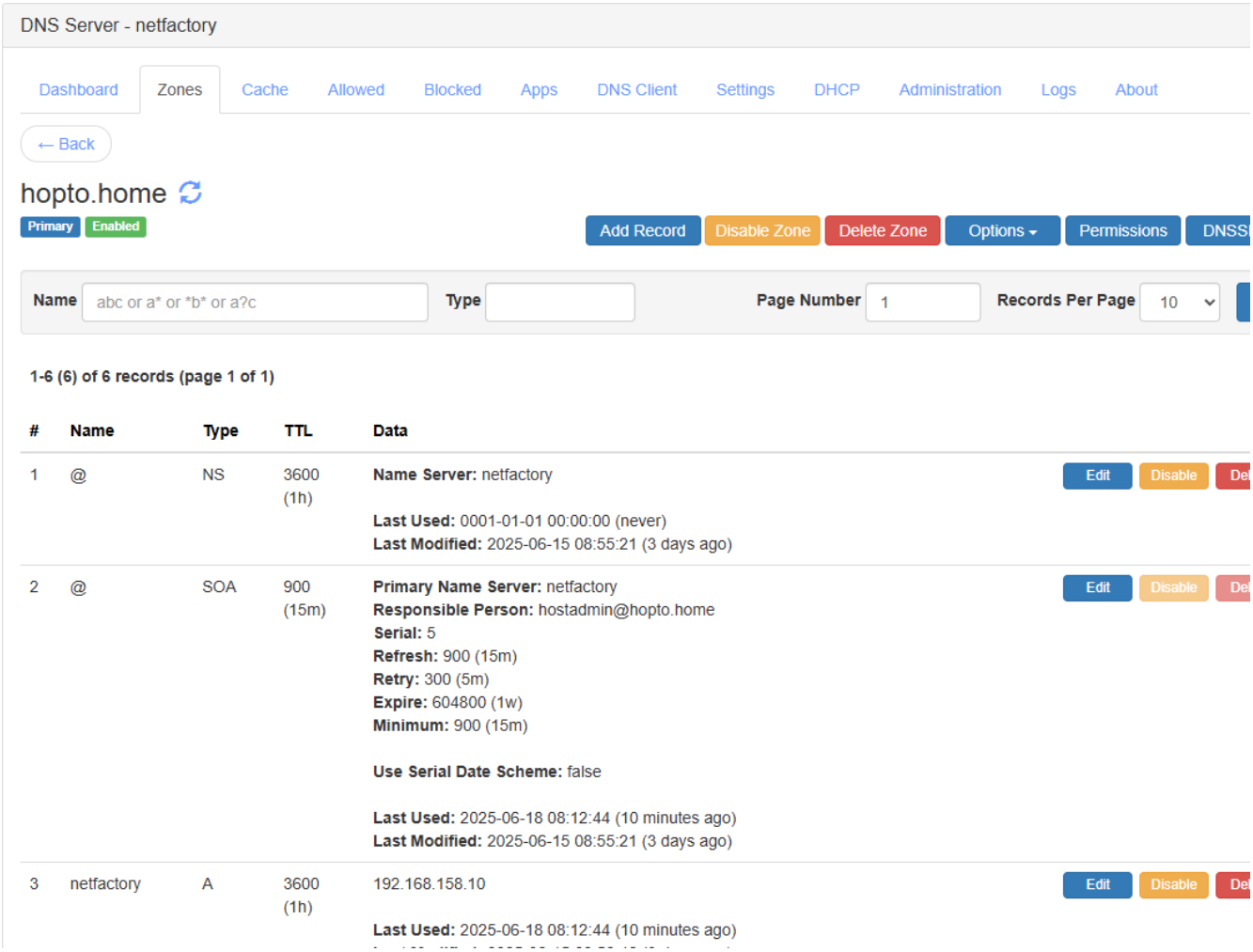
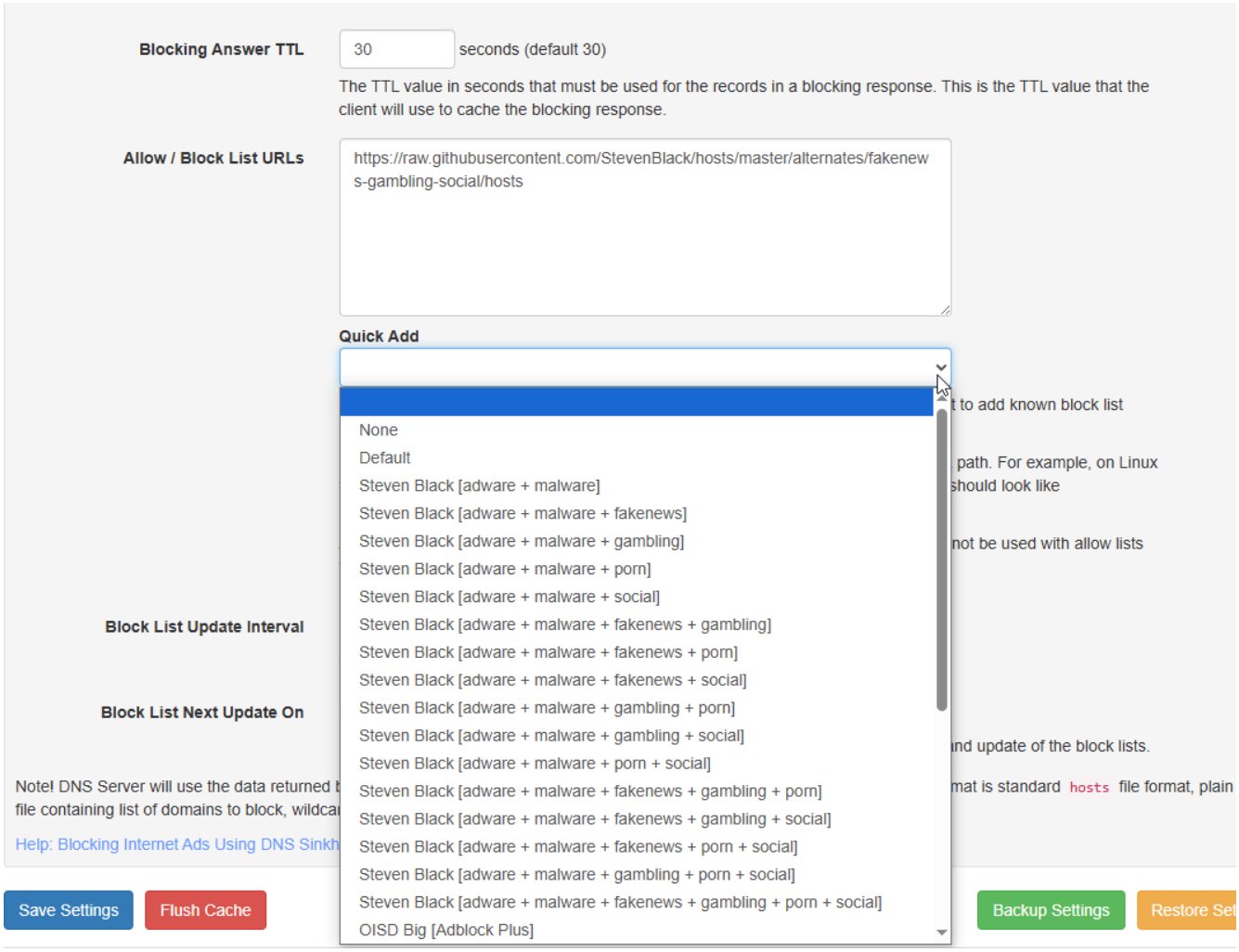

DNS Server - netfactory
Dashboard
Zones
Cache
Allowed
Blocked
Apps
DNS Client
Settings
DHCP
Administration
Logs
About
← Back
hopto.home
Primary
Enabled
Add Record
Disable Zone
Delete Zone
Options
Permissions
Name
abc or a* or *b* or a?c
Type
Page Number
1
Records Per Page
10
1-6 (6) of 6 records (page 1 of 1)
Name Type TTL Data
1 @ NS 3600 (1h)
Name Server: netfactory
Last Used: 0001-01-01 00:00:00 (never)
Last Modified: 2025-06-15 08:55:21 (3 days ago)
Edit
Disable
2 @ SOA 900 (15m)
Primary Name Server: netfactory
Responsible Person: hostadmin@hopto.home
Serial: 5
Refresh: 900 (15m)
Retry: 300 (5m)
Expire: 604800 (1w)
Minimum: 900 (15m)
Use Serial Date Scheme: false
Last Used: 2025-06-18 08:12:44 (10 minutes ago)
Last Modified: 2025-06-15 08:55:21 (3 days ago)
Edit
Disable
3 netfactory A 3600 (1h)
192.168.158.10
Last Used: 2025-06-18 08:12:44 (10 minutes ago)
Edit
Disable

Ad Blocking



> “ my recommendation: Technitium

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