

# Incident Audit

Incident: Exposed Pi-Hole Admin Page

Date Written: 2.11.25

Status: Fixed

## Summary:

In my home network, I discovered that the pi-hole admin login page was exposed to the internet through my domain.

I discovered this when reviewing my own attack surface, trying several admin paths and then verifying that the Pi-hole panel was reachable from outside the network.

## Environment:

Web server: running Apache and NGINX, with cloudflared as a reverse proxy

1-Pi-Hole instance

2-Public facing website

with public access via: <https://www.highlion.net>

both the website and the Pi-hole were behind the same server.

## How I found it:

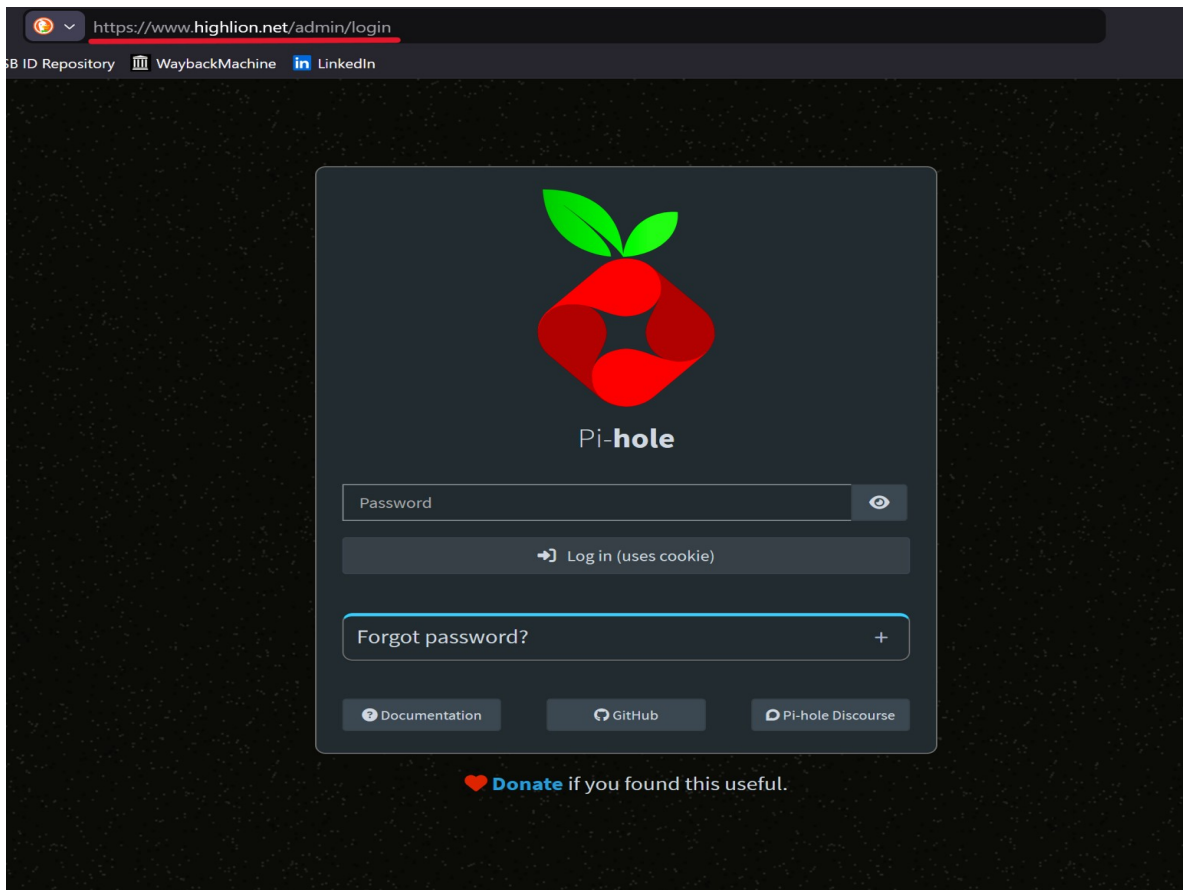
As part of my self testing my own network, I checked my domain from the outside.

I Browsed to the domain, and tried various admin paths including:

/admin

/admin/login

The latter directed me to the Pi-hole admin login page. I then confirmed the exposure from another external network to make sure it was not just a routing or DNS issue.



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```
admin@HIGHLION:~$ head /var/log/pihole.log
93.95.18.201 - - [22/Oct/2025:19:41:12 +0000] "GET /admin/login HTTP/1.1" 200 4523 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64)"
146.235.18.201 - - [22/Oct/2025:19:42:03 +0000] "GET /admin/ HTTP/1.1" 200 4389 "-" "Mozilla/5.0 (X11; Linux x86_64)"
admin@HIGHLION:~$
```

## The cause:

The issue came from my reverse proxy configuration:

- Both the website and Pi-hole were running on the same server.
- The proxy rules for the domain did not include a proper catch all restriction.
- The proxy misconfiguration acted as a fallback for /admin/login.

Because of this, HTTP requests to <https://www.highlion.net/admin/login> were routed to the Pi-hole backend, and the admin panel, which was meant to be purely internal, was exposed to the internet.

## Fixes and Lessons:

In order to fix the found vulnerability and harden the network, I took these steps:

- 1-Fixed the configuration, by creating a catch-all for any non public facing pages.
- 2-Moved the Pi-hole service to a different host, instead of sharing the server with the public website.
- 3-Limited Pi-hole admin access to specific admin IPs and verified that /admin and /admin/login no longer expose the panel and return a 404.

```
# catch all
location = / { try_files /index.html =404; }

# static /pages
location / { try_files $uri $uri/ =404; }
```

