DNS Zone Viewer

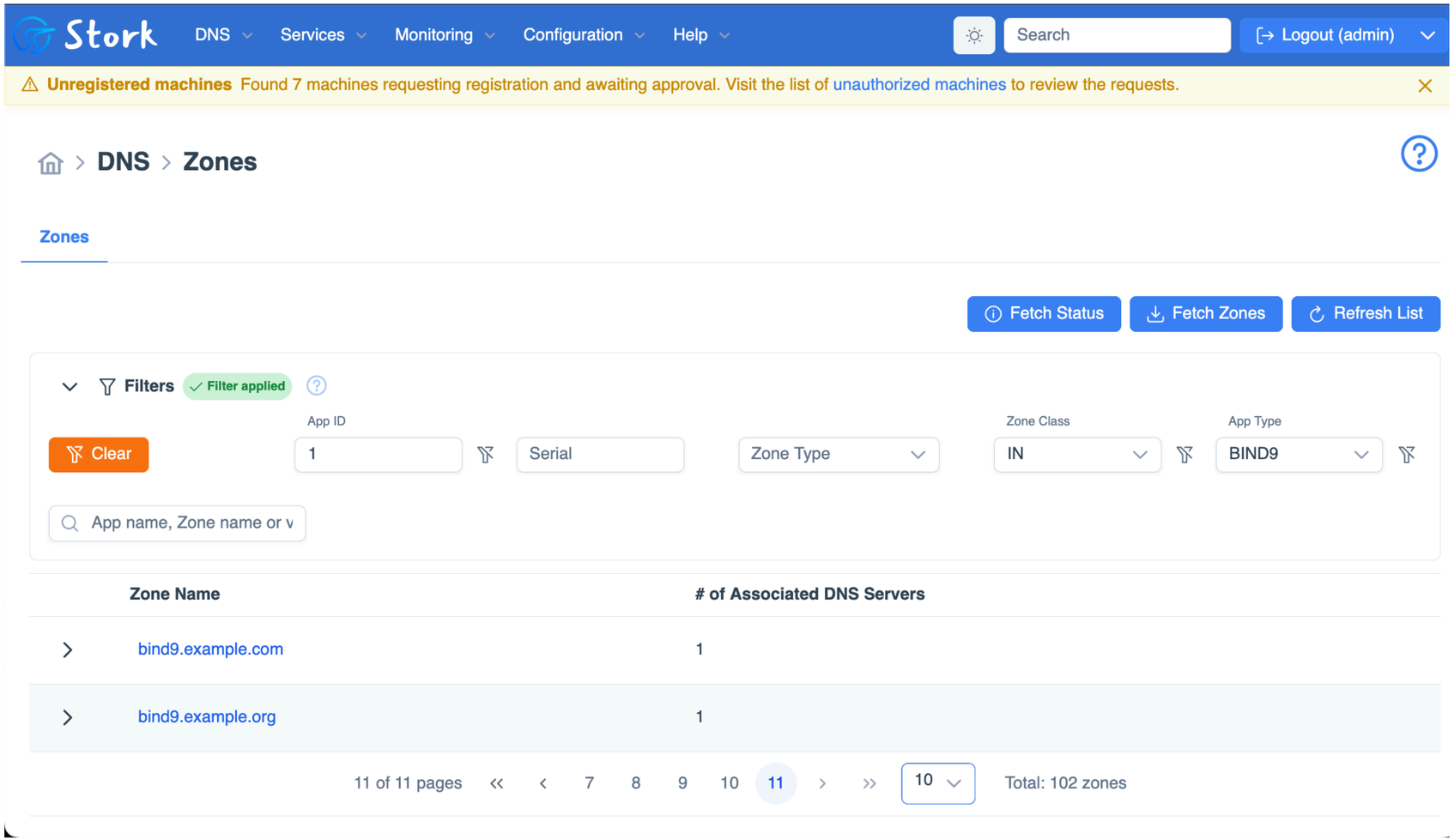
/ Stork + PowerDNS /

DNS Hackathon, Stockholm April 15-16, 2025

Background

- Stork (stork.isc.org) is an open-source project for monitoring and controlling DHCP and DNS servers.
- Basic integration with BIND9 includes: gathering information about named instances and exporting some statistics to Prometheus and Grafana.
- Zone viewer and DNS dashboard started in early 2025 for BIND9.
- A groundwork for more sophisticated features.

Zone Viewer


Stork
DNS
Services
Monitoring
Configuration
Help
Search
Logout (admin)
Unregistered machines Found 7 machines requesting registration and awaiting approval. Visit the list of unauthorized machines to review the requests.
DNS > Zones
Zones
Fetch Status
Fetch Zones
Refresh List
Filters
Filter applied
App ID
Clear
1
Serial
Zone Type
Zone Class
IN
App Type
BIND9
App name, Zone name or v
Zone Name
# of Associated DNS Servers
bind9.example.com
1
bind9.example.org
1
11 of 11 pages
7
8
9
10
11
10
Total: 102 zones

Motivation (Stork + PDNS)

- Operators can differentiate DNS server implementations in their networks for scalability, security, and resiliency.

- Monitoring solutions should integrate with diverse DNS servers to be useful in such environments.

Hackathon Goals

- Try to integrate PowerDNS with Stork.
- Identify any roadblocks and difficulties for such integration.
- Specifically, find deficiencies in the DNS servers' APIs and differences between different server implementations.
- Try using DNS protocols, such as AXFR to collect zone data from different server implementations.
- Document issues and propose improvements to the APIs.

Links

- https://github.com/DNS-Hackathon/Stork-DNS-Zone-Viewer
- https://gitlab.isc.org/isc-projects/stork
- https://stork.isc.org/