DoP (DNS Over RaspberryPi):
Running DNS hierarchy using Raspberry Pi
DNSathon: Hackathon on DNS

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#BeninDNS
www.dnsforum.bj

Benin DNS Forum: who we are?

- **Local Forum on Domain Name System and Internet**, inspired from Africa DNS Forum. **Build a strong local ecosystem** on Internet and DNS issues, improve engagement, gender & diversity on IG, and improve technical capability and entrepreneurship.

- **Open** : 5 local associations work together

- **5 days event with various activities** :

  1. Woman DNS Academy,

  2. Multi-stakeholder meeting for managers,

  3. **DNSathon (hackathon on DNS),**

  4. Public forum with panels and tutorials (Parakou and Cotonou),

  5. Internet City.

- **Reports available** at https://dnsforum.bj/rapports/

4ème Edition du Bénin DNS FORUM
Évolution de participation de 2015 à 2018

| Homme | Femme | Total |
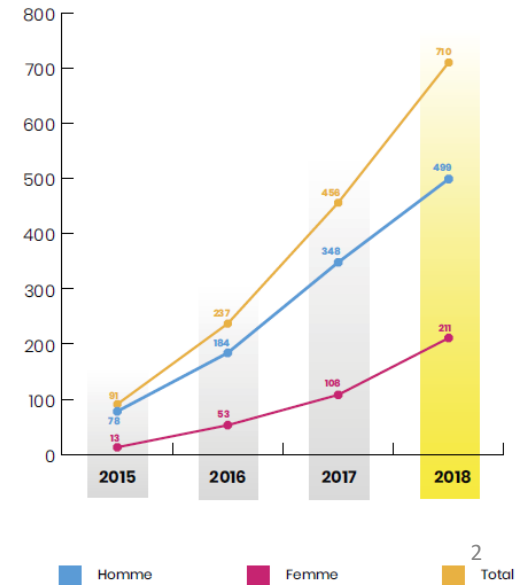
You say DNSathon!

- DNS + Hackathon or hackathon on DNS,

- Introduced in BDF 2017 agenda following the **local community's interest** in learning and **understanding the technical implementation** of the DNS hierarchy,

- Each edition composed of **50 to 60 engaged participants** with a high **collaborative approach** contribute to the implementation of a prototype of the end-to-end **DNS 4R Infrastructure** with DNSSEC,

- Use **Raspberry Pi 3** devices and produce a **white book** to help other communities.

Building the DNS hierarchy!

- **6 Groups:** network, 4R, documentation,

- 1 coach and 3 assistants,

- Brainstorming on the roadmap and debriefing sessions,

- Stay almost closest to real world: Bind, PDNS, Unbound, VLAN, resilience, …

Building the DNS hierarchy!
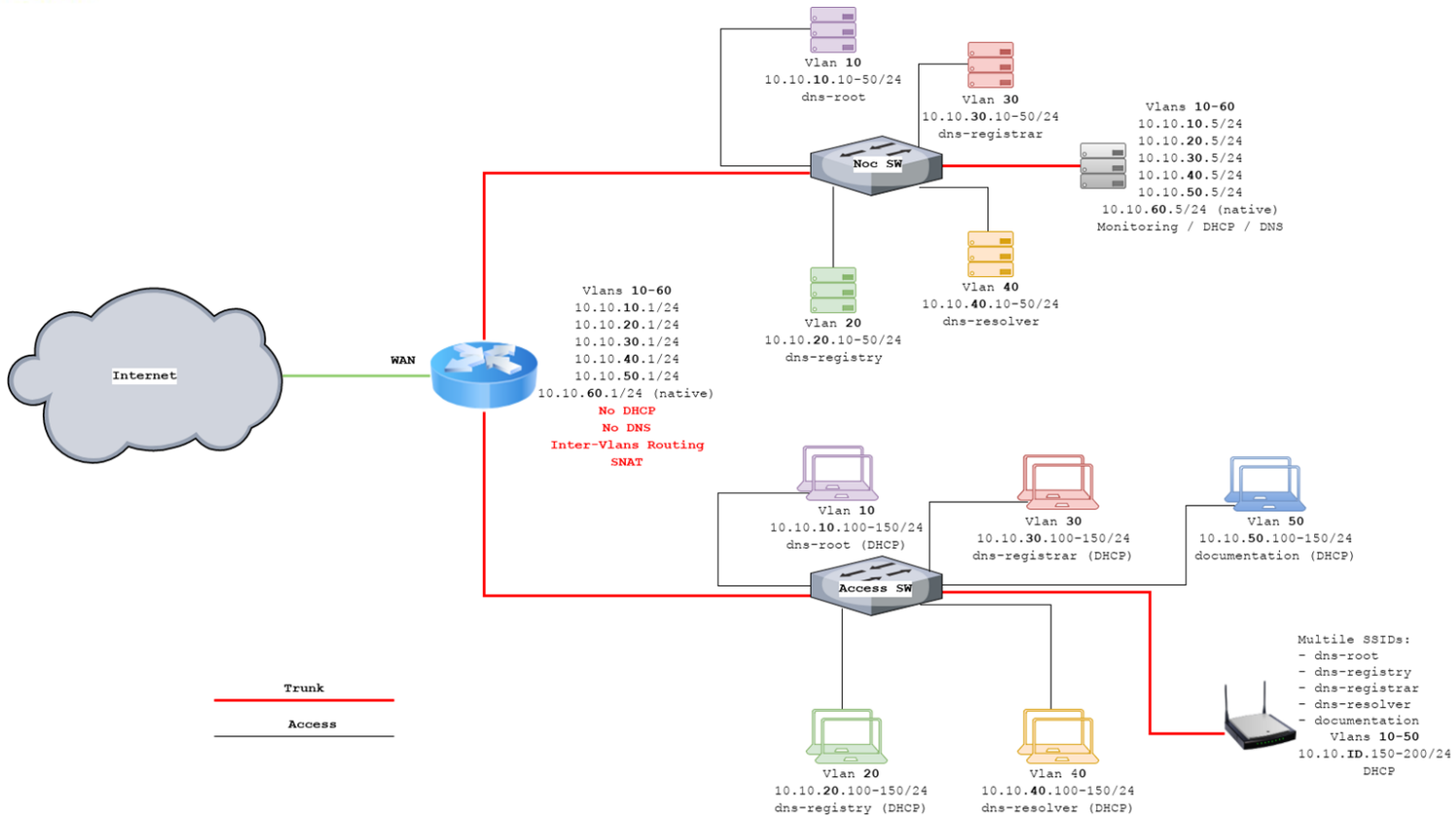
Building the DNS hierarchy: activities

- **Infrastructure:** build the network and connect resources;

- **Root**: install & configure authoritative NS ., create zone file, custom root hints and distribute;

- **Registry**: install & configure authoritative NS TLD, create zone file, HTTP API;

- **Registrar**: create domain registration portal and connect to registry API: http, php, Python, database;

- **Resolver**: install and configure resolver, root hints;

- **Documentation**: collects data from teams for consolidation.

Building the DNS hierarchy: outcomes

- **Better understanding** of how things work**.**

- **More confidence.**

- **A 100% working system**

- **All results consolidated and publicly shared in the Github of the Coach**:

  https://github.com/AlfredArouna/DNSathon

- A **white book** is being finalized (1st edition in french but will be translated in english Later). Quick overview here

Building the DNS hierarchy: what next?

- Dual stack infrastructure

- DNSSEC

- DoT/DoH

- …

➢ Available to support other communities to reproduce.

➢ Motivation to learn and engagement to organize.

DNSathon: hackathon on DNS

Thank you, Merci, Akpé, E chéoun, Mi wanou.

DNS Task Forces / DNS Class

Quelques Sponsors et Partenaires