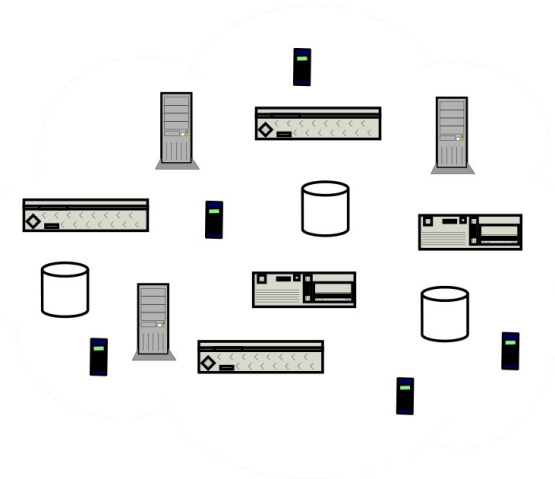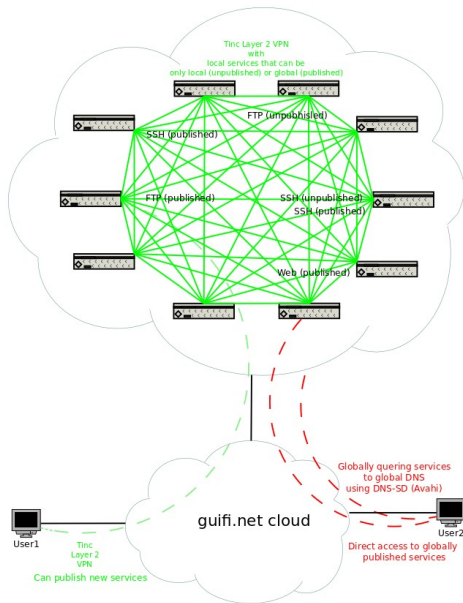# Automated Sharing and Location of Services

Lightning talk Battlemesh v6
15:00-16:30; Friday, 19th of April
Aalborg University, Aalborg, Denmark

Speaker: Francisco Javier Jiménez Gómez

Fundació Privada per a la Xarxa Oberta, Lliure i Neutral guifi.net

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- **Distributed services announcement**
  - Automatic
    - Configuration
    - Share
    - Discovery
  - Decentralisation

Available considered options

- **Zeroconf (ad-hoc)**
  - FOSS Systems
  - OLPC
  - Compatible technology in proprietary systems

- **Classic DNS (static)**
  - Centralised
  - Needed to know it previously

Chosen solution

- ![AVAHI logo] **AVAHI**
  - Zeroconf implementation (compatible)
  - Free Software
  - All the nodes can to be servers and clients
    - Automatic IP without DHCP Servers
    - No centralised DNS (in small networks)
  - Self publication of services
    - avahi-publish-service
  - Browse all self-published services
    - avahi-browse

Where we arrived?

- Ad-hoc local network (<= 1,000 nodes):
  - Automatic IP address without DHCP server
  - Node self-registration of services
  - De-centralised browse of all services
- WAN (> 1,000 nodes)
  - Centralised DNS server
    - Required a with a well known address
    - Service discovery querying centralised DNS server
  - No auto-discovery of remote services

Future

- Choose a technology to allow access remote networks services without need of a centralised (well-known and fixed) DNS service. Allows automation and gives freedom.

  – Considered options

    - DHT
    - Proposal: Jump-and-query (compatible Avahi nodes required).

Finished lightning talk

- Routing needed :-)
    - Questions
    - Suggestions
    - Proposals

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