

DNSSD WG

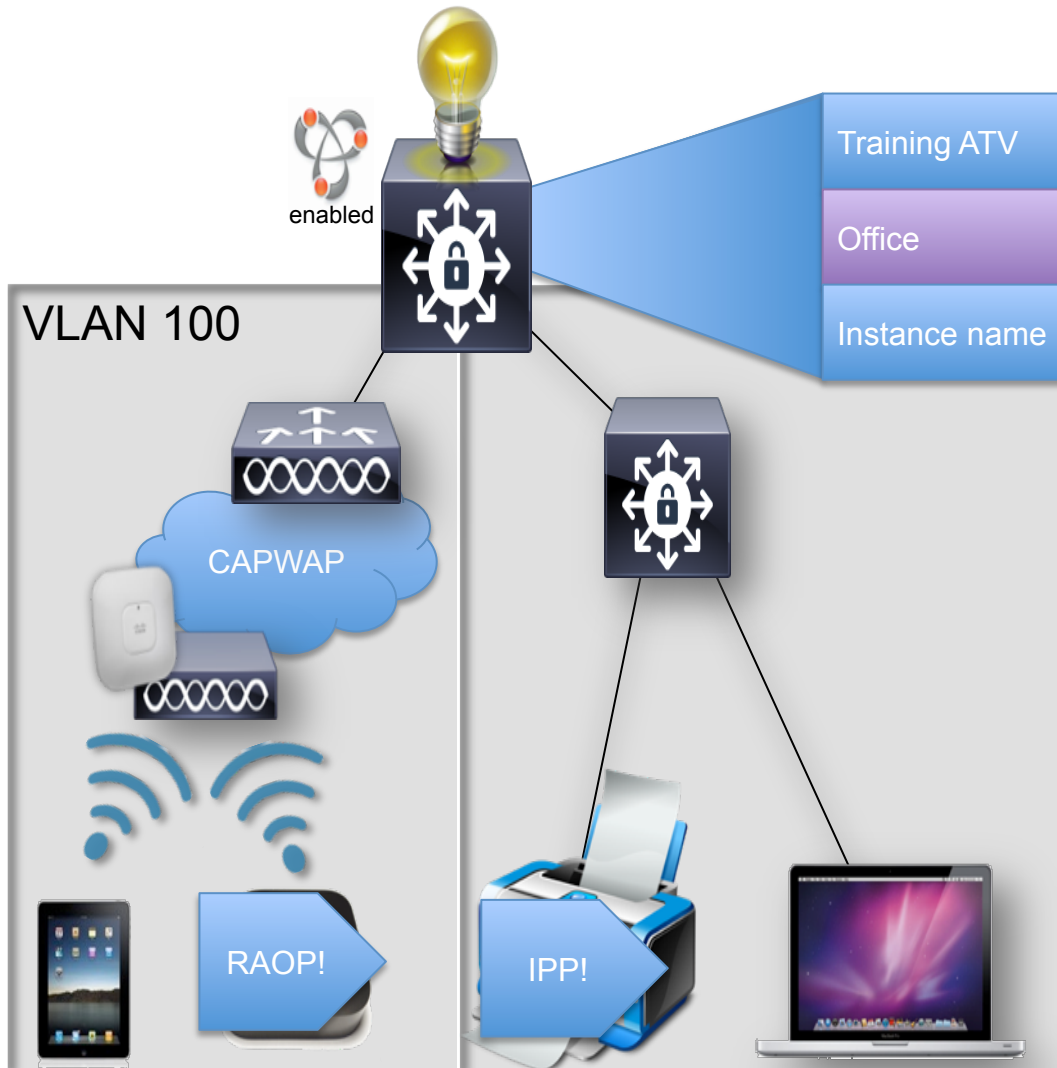
IETF 89

Extending multicast DNS across local links in
Campus and Enterprise

networks

draft-bhandari-dnssd-mdns-gateway-00

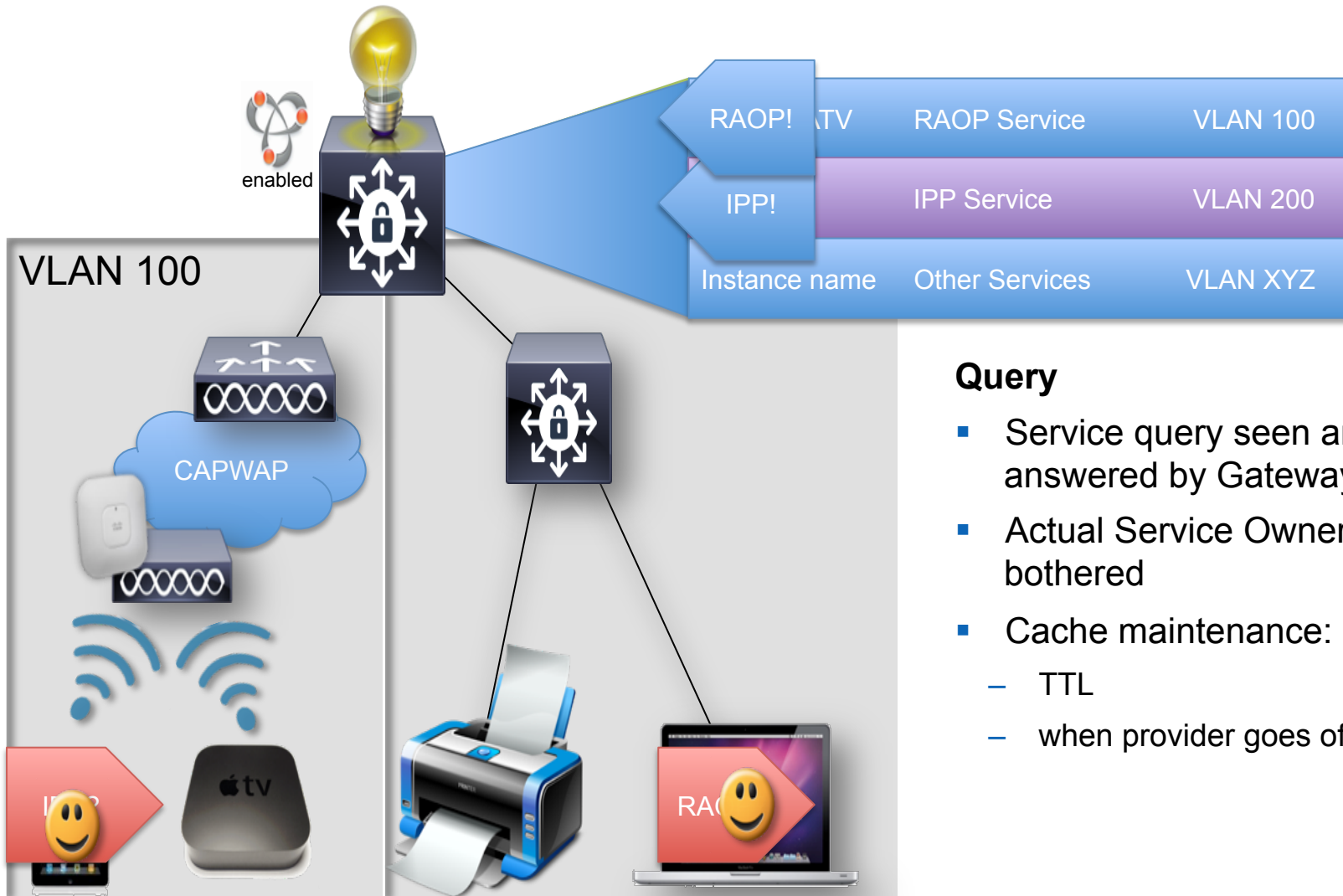
Service Discovery across Subnets



Advertisement

- Link Local Multicast seen in SAME VLAN only
- Cached at Gateway
- Instance Name, Type, Interface Name, TTL, Resource Record data etc.

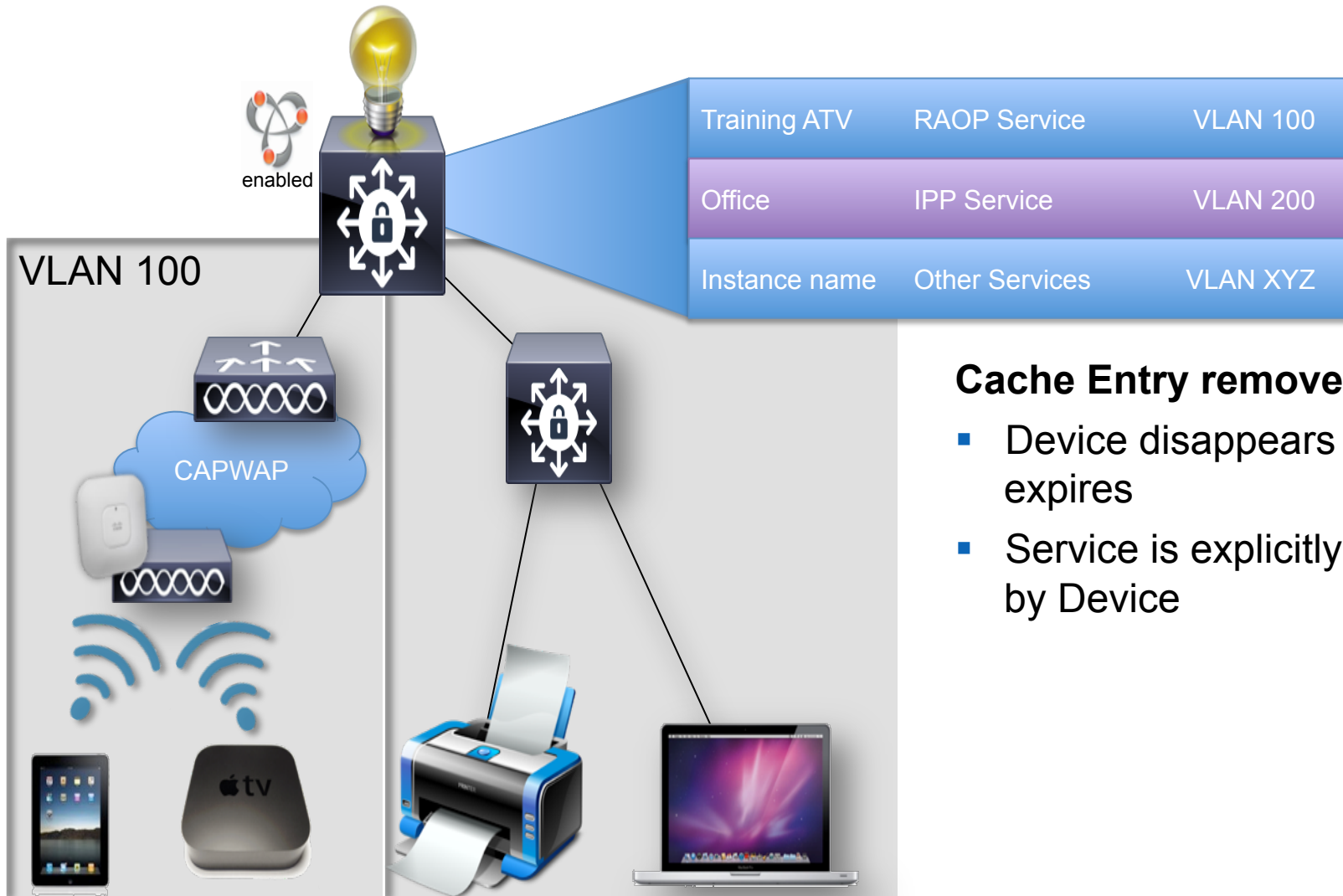
Service Discovery across Subnets



Query

- Service query seen and answered by Gateway
- Actual Service Owner not bothered
- Cache maintenance:
 - TTL
 - when provider goes offline

Service Discovery across Subnets

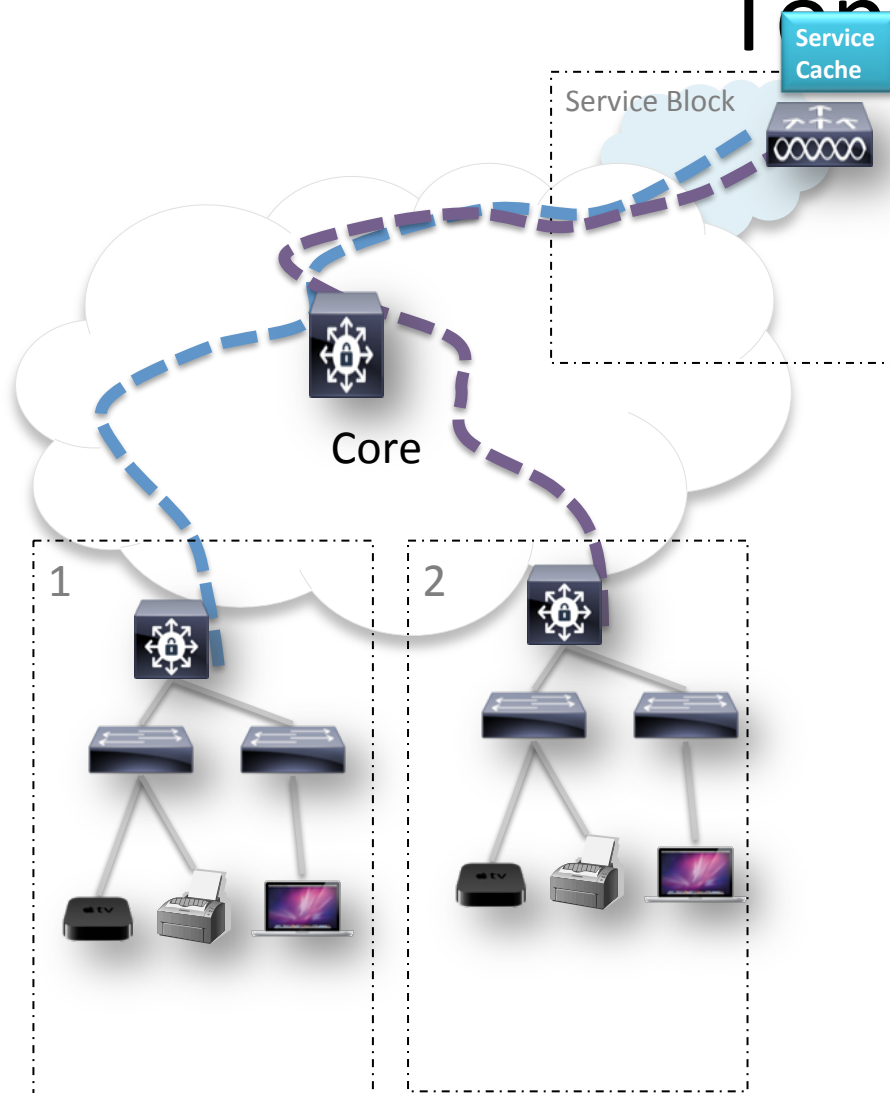


Cache Entry removed when

- Device disappears / TTL expires
- Service is explicitly removed by Device

Extending Services across multi-hop

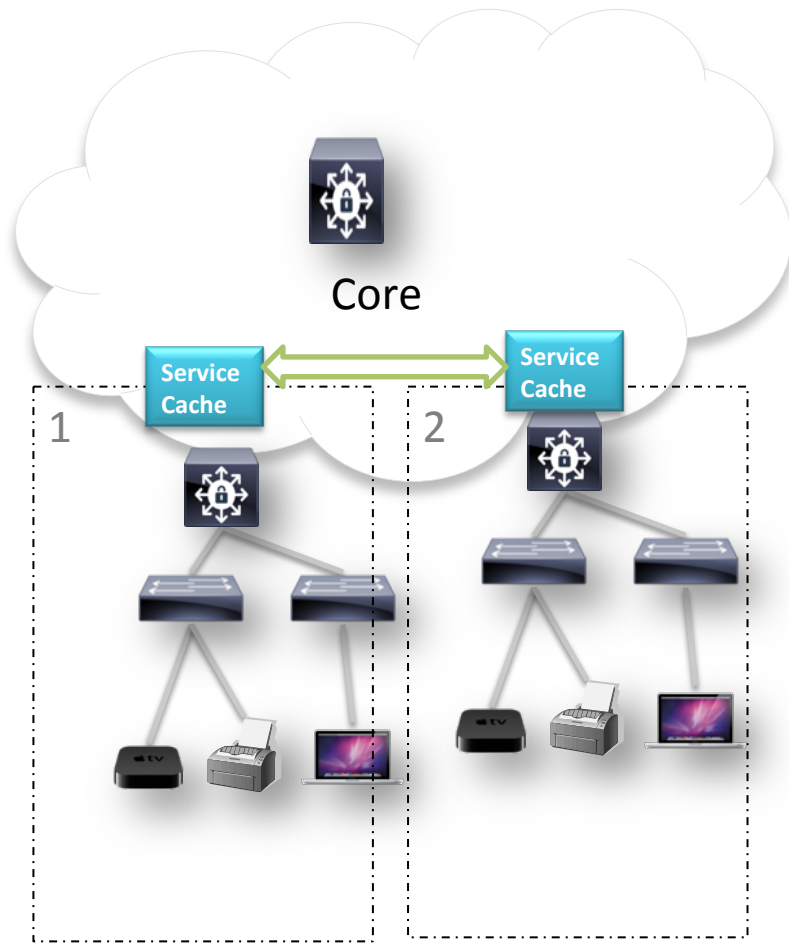
Topology



- **Option-1:** Span services VLAN across domain

Extending Services across multi-hop Topology

- **Option-2:** Exchange Services across the service discovery gateways



Requirements

1. Topology independent service discovery across L3 boundaries – [REQ6]
2. Ease of provisioning – Servers/Proxies, Clients [REQ1,REQ2,REQ3, REQ8]
3. Service cache resiliency
4. Service Selection: Limit services based on Location and proximity, Indication of where the service resides to clients
5. Filter services (advertisements and responses) based on user role, location
6. Effectively handle roaming of mobile devices (especially when they advertise services) [REQ9]

Next Steps: Solution for 3,4,5 and standardization of gaps

*REQn from draft-ietf-dnssd-requirements-01