

TSR and SRP

Replication: Why, why, why?

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Request

- Working group adoption of
 - draft-lemon-srp-replication
 - draft-tllq-tsr
- But why do we want these?

TSR

- TSR allows an advertising proxy to say when it heard from an SRP client
- Without SRP Replication:
 - Two advertising proxies, not sharing information
 - SRP client registers with server A
 - SRP client registers new data with server B
 - With TSR, the new data wins.
 - Without TSR, the stale data wins.
- With SRP replication
 - The same scenario as above, just shorter-lived

Why do we care?

- The way mDNS deals with stale data is to change names
- So we wind up renaming devices simply because they published new data
- This looks really bad
- It's hard to keep track of devices automatically when their names are constantly changing
- This makes IoT really hard
- We don't want to make IoT really hard

Okay, great, what about replication?

- No current CE router supports DNSSD+SRP
 - Well, actually I think Eero does, but not in a cooperative way, because we haven't defined how to cooperate
- The devices that support DNSSD+SRP generally aren't treated by the user as infrastructure devices
- This means that they might get powered off
- We have no way to predict which device will survive
- Best approach in this case is to replicate data so that outages don't cause us to lose it

Authoritative Name Service

- DNSSD over DNS relies on having an authoritative name server
- If there is no “server” that has stable storage and can be depended upon, we need to provide this in some other way
- SRP replication allows us to treat a collection of data as authoritative, and to let whichever server(s) happen to currently be maintaining copies of that data together to act collectively as an authoritative DNS server

Thotz?

- Can we do the work? Can we? Huh? Huh?
- Discuss on mailing list?