

# **TURN Server Auto Discovery**

**draft-patil-tram-turn-serv-disc-01**

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# Discovery mechanisms

- Retrieving the domain name
  - DHCP
  - IP Address PTR lookup
  - **From own identity (new!)**
- Resolution
- **SOA (new!)**

# Changes from 00 - 01

- Two new discovery mechanisms
  1. SOA from reverse zone
  2. SIP/XMPP/email identity

# 1. Discovery using SOA

- Acquire SOA record for reverse zone
- S-NAPTR lookup on SOA-MNAME

100.51.198.in-addr.arpa IN SOA dns1.isp.example.net.  
hostmaster.isp.example.net. (

1 ; Serial  
604800 ; Refresh  
86400 ; Retry  
2419200 ; Expire  
604800 ) ; Negative Cache TTL

## 2. Discovery using identity

- Extract domain from own SIP/XMPP/  
email identity
  - E.g., **dwing@example.com**

# Changes from 00 - 01

- Anycast is great, but TURN is stateful
- Introduced 300 Try Alternate server
  - to point to unicast address

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Adopt?

# Backup

# Discovery Procedure

1. Local Configuration
2. Service Resolution
  - Operated by enterprise, access ISP, or ITSP
3. Anycast
  - Operated by enterprise, access ISP

Discovery procedure is performed on each interface and each address family

# Discovery: Local Configuration

- Configuration within application

# Discovery: Service Resolution

## 1. Obtain Domain Name via DHCP

- ISP/Enterprise: LIS Option (RFC5986) (in our draft)
- ISP/Enterprise: Domain Search Option (RFC3397)
- ITSP: Extract from own SIP/XMPP/email identity
  - E.g., `dwing@example.com`

## 2. Look up S-NAPTR TURN service

- `IN NAPTR 100 10 "" RELAY:turn.udp "" example.net.`

Derived from ALTO Server discovery, draft-ietf-alto-server-discovery

# Discovery: Anycast

- Send TURN allocate request to IANA-assigned TURN anycast address.
- A concern: that address is far away
- Yes; TURN is least-preferred candidate
- Yes; related to choosing best TURN server