

TURN Server Auto Discovery

draft-patil-tram-turn-serv-disc-00

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v3

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

Other considerations

- WPAD
 - Defacto standard

Multiple TURN Servers

- Let's pretend ISP, ITSP, and configuration all point at different TURN servers
- How to choose “best” one?
 - better user experience (e.g., reduced latency)
 - reduce backhaul cost for ISP
 - Shortest path != “best” path
- Seems a separate problem?

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Next Steps?