ICE vs. ANAT

Jonathan Rosenberg
Cisco

Question: Relationship of ICE and ANAT

- Option 1 (ICE): ICE deprecates ANAT, used as the v4/v6 transition technique
- Option 2 (ANAT/+ICE): ANAT is the v4/v6 transition technique, can add ICE ontop of it
- Option 3 (SDPCap/+ICE): SDPCap deprecates ANAT, can add ICE ontop of it

Pros/Cons

- ICE
  - (+) V4/v6 selection dynamic – deals with v6 connectivity breaks – good for transition
  - (+) wouldn't need to add something for FW/NAT
  - (+) allows path characteristic based v4/v6 selection
  - (+) Can use RFC 3484 with it
  - (-) complex
  - (-) will need ICE even if there is no NAT/FW anymore
  - (+) will be on endpoints anyway

- ANAT/+ICE
  - (+) ANAT simpler than ICE if you only need static v4/v6 selection
  - (+) already specified
  - (-) Must always use ANAT even when ICE is used too for backwards compatibility - ANAT adds no value there
  - (-) Doesn't work with RFC 3484
  - (-) static selection doesn't allow fallback in case of path problems
  - (-) no path based selection

Hums

- Option I:
  - V4/v6 sipping document uses ICE as the transition technique
  - ICE deprecates ANAT

- Option II:
  - V4/V6 document uses ANAT as the transition technique (as it does now)
  - ICE describes usage with ANAT