Alt-SvcB

SVCB got it right
Key Findings

• Protocol capabilities (including versions) belong in DNS
• Server knows when it should NOT be the endpoint in use:
  • Can’t continue serving: GOAWAY
  • Can continue serving: Alt-Svc
• Records should be cached until network or server config changes
  • Clients have partial visibility into network changes
  • Clients have almost no visibility into server config changes
• Without some amount of stickiness, clients will flip-flop between the origin and alternative
Delegate to SVCB/HTTPS

Alt-SvcB: “betterhost.example.com”
Act on a single hostname

• For this connection:
  • Go resolve HTTPS records for that hostname
  • Do normal alternative selection and connection from the results on that lookup
  • If successful, replace the current connection with the new one

• For future connections:
  • Remember the set of ServiceMode target names from the alternative resolution
  • If those names occur in the resolution for the origin, prefer them
  • Clear preference cache on known network change, no match, or new Alt-Svc
Multiple ways to spell it

• New header
  • Deprecate Alt-Svc, ALTSVC (h2)?
  • Unadopt ALTSVC (h3)?
  • Define new header (and frames?) to replace them

• Shoehorn: New ALPN value
  • Defined to mean use this one; ignore everything else

• Shoehorn: Bare hostname in Alt-Svc header
  • Legacy clients will fail to parse
  • Nothing could possibly go wrong!