

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”



For illustration purposes only

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!