Transport Information Header

draft-ohanlon-transport-info-header

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What is it?

• Response header providing server transport metrics
  • Server only metrics: sender cwnd
  • Shared state: rtt, rttvar

• Useful for clients which can’t access this information directly
  • E.g. An approach for clients to infer transport rate, etc

• Not exclusive to TCP, could represent QUIC or other state

• Allows multiple samples per header
  • With H2+ one can provide arbitrary interval responses i.e. higher resolution
Examples

Transport-Info: ExampleEdge; ts=1567176968.69; cwnd=24; rtt=250;

Transport-Info: "origin.example.com"; alpn="http/1.1";
ts=1574155886.23; rtt=95,
"edge.example.com"; alpn="h2";
ts=1574155889.14; rtt=208;
Known Issues

• HTTP CONNECT Proxies?
• ALPN is problematic for inferring TLS
• Choice of appropriate time representation/resolution
  • Use Timestamps format [RFC3339]?
• Which other optional metrics to include – or just leave it flexible?

https://github.com/bbc/draft-ohanlon-transport-info-header/issues
Questions?