draft-ietf-tsvwg-rtcweb-qos: DiffServ Code Points (DSCPs)

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(on behalf of draft authors)

Draft state: Good, Bad and Ugly

Data Type	Very Low	Low	Medium	High
Audio	CS1 (8)	DF (0)	EF (46)	EF (46)
Interactive Video with or without audio	CS1 (8)	DF (0)	AF42, AF43 (36, 38)	AF41, AF42 (34, 36)
Non-Interactive Video with or without audio	CS1 (8)	DF (0)	AF32, AF33 (28, 30)	AF31, AF32 (26, 28)
Data	CS1 (8)	DF (0)	AF1x (10, 12, 14)	AF2x (18, 20, 22)

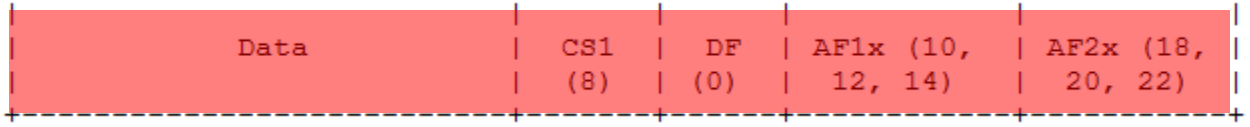
- Good: Audio & Video: Low-High DSCPs are ok.
- Bad: Very Low – Nastier CS1 warnings coming
- Ugly: Data (SCTP DSCP scope) – Next slide ...

Web RTC Data Channel QoS

Data Type	Very Low	Low	Medium	High
Audio	CS1 (8)	DF (0)	EF (46)	EF (46)
Interactive Video with or without audio	CS1 (8)	DF (0)	AF42, AF43 (36, 38)	AF41, AF42 (34, 36)
Non-Interactive Video with or without audio	CS1 (8)	DF (0)	AF32, AF33 (28, 30)	AF31, AF32 (26, 28)
Data	CS1 (8)	DF (0)	AF1x (10, 12, 14)	AF2x (18, 20, 22)

- SCTP: Single DSCP per association (not stream)
  - See draft-ietf-dart-dscp-rtp (at RFC Editor)
- How many SCTP associations do you want today?
  - Eight is more than enough (hint)

Data DSCPs: Proposed changes



- Use AF11 and AF21, remove other 4 AF DSCPs
  - Result: CS1, CS0, AF11, AF21
  - [CS0 = correct DSCP acronym for Default Forwarding (DF)]
- Use nastier warning for CS1
  - Network may treat as “best effort”
- Concerns for rtcweb WG (Friday):
  - How many SCTP associations?
    - Currently one per Web RTC session
  - Does application priority drive SCTP stream scheduler priority?
  - API implications? Implementation guidance/warnings?