



Multiplexing UDP-based protocols with QUIC

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Multiplexing QUIC and RFC 7983

Problem: People want to use QUIC for things like WebRTC
multiplexing with STUN, TURN and SRTP
not using QUIC *for* RTP as in draft-rtpfolks-...

0-3	STUN
16-19	ZRTP
20-63	DTLS
64-79	TURN Channel
128-191	SRTP

Current spec

Long Header

```
 0 1 2 3 4 5 6 7
+-+--+--+--+--+--+
|1|   Type (7)   |
+-+--+--+--+--+--+
```

Short Header

```
 0 1 2 3 4 5 6 7
+-+--+--+--+--+--+
|0|C|K|  Type (5) |
+-+--+--+--+--+--+
```

Long header packet types use 127 and down

Octet 0: 255 - 128

Collides with SRTP, can live with this

Short header types use 31 and down

Assuming C is 1 (CID always absent),

Octet 0: 127 - 64

Collides with TURN Channel, don't care

0-3	STUN
16-19	ZRTP
20-63	DTLS
64-79	TURN Channel
128-191	SRTP

Greasing

Greasing applies to type field.

Endpoint may grease more bits if it isn't multiplexing with other protocols.

(More in Martin's presentation)

Decision

Can we live with this arrangement?

Caveat Emptor: These carve-outs are not invariant