Multipath QUIC Interop

draft-ietf-quic-multipath

Interop testing of Multipath QUIC

Draft: <u>draft-ietf-quic-multipath-05</u>

Implementations: Five, four onsite

Testing:

- Connection establishment and negotiation of support
- Validating establishment of multiple paths
- Sending data over different paths
- Acknowledgement of data over the different paths
- Abandoning paths
- Path Status message

Interop Result

$server \rightarrow$					
client \downarrow	Ericsson-aioquic	xquic	picoquic	Rask	quiche
	HVDA		HVDA	HVDA	
Ericsson-aioquic					HVDA
xquic	HVDA	HDVACS	HVDA	Н	HVDA
picoquic					
Rask	HVDA		HVDA	HVDA	HVDA
quiche	HVDAC		HVDAC		HVDACS

Feature	code	details
Handshake	Н	The handshake completes with successful negotiation of enable_multipath transport parameter (both ends indicate 0x01)
Path Validation	V	Client sends PATH_CHALLENGE frame to open a new path and server replies with PATH_RESPONSE
Send data	D	Stream data (of one of more streams) is send on all paths; ACK_MP frames are sent and processed
Path Close	С	Client closes a path with PATH_ABANDON frame
Path status	S	Client sends PATH_STATUS frame
Multipath ACK	Α	One endpoint sends data and the other endpoints sends ACK (randomly) on all path independent of where data is received