

MPTCP Protocol

draft-ietf-mptcp-multiaddressed-07

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WGLC Complete

- Thanks to Christoph Paasch for detailed comments and discussion

Recent Technical Changes

- -03 to -04: added path ID to MP_PRIO
- -05 to -06: added Fast Close (MP_FASTCLOSE) mechanism

Fast Close Mechanism

- Derived from long-running discussion with Georg Hampel, started in Quebec
- Analogous to (ab)use of TCP RST as 'Fast Close'
 - i.e. allow instant drop of state for all subflows
 - Says “no more data will be accepted for this subflow”
- Mechanism:
 - Host A sends ACK+MP_FASTCLOSE on one subflow, and RST on remainder
 - Host B responds with RST on subflow
 - Upon receipt of RST in this situation, or of another MP_FASTCLOSE, Host A tears down state
 - Host A SHOULD retransmit MP_FASTCLOSE if not RST is received in one RTO

Various Clarifications

- Notably:
 - Clarified retransmissions and ACK mechanism for MP_CAPABLE and MP_JOIN exchanges
 - Revert to TCP three-way-handshake
 - Reverted changes of presence of keys
 - Clarified when to send data on new subflows
 - Clarified negotiation of checksums
 - Clarified rationale for DATA_ACK
 - Clarified fallback mechanisms: rationale and scenarios

Next steps...