MP-DCCP progress

draft-ietf-tsvwg-multipath-dccp-06

Markus Amend on behalf of the authors, TSVWG @IETF115
Draft maturity state

Author’s freezed feature state already with -04.

Work from/with external reviewers led to major update cumulated in -06 version

Remaining minor work

• Include editorial suggestions from Simone's review
• Include editorial suggestions from IANA review
Main changes since IETF114 (-05 → -06)

Editorial: #111, #114, #115, #116, #117, #143

Define order of MP_HMAC and associated MP option #112
Mp prio len #128
Clarification HMAC belonging to MP_JOIN procedure triggers fallback #136
MP_CONFIRM triggered by valid receipt of an MP option requiring confi... #137
Add recommendation for releasing Address ID #139
Update MP_CONFIRM to use MP_SEQ #138
Update references in Operation Overviews #148
Optimize wording for MP_ADDADDR w/o specified port #150
Change MP_PRIO to be path specific #151
Conisten Length field across MP suboptions #156

address UDP and non-TCP traffic suitability of MP-DCCP #152
clarify policy for key type assignment #154
added suboption for experimental use #153
clarification on amount of addresses needed and that path management ... #145
version number entry detailed in IANA section #146
added IANA considerations for future suboptions #147
Specify MP_RTT usage #149
Implementation specific proposal to limit number of paths #157
Notification of peer why path was discarded #158
Informative guidance when not to send MP_ADDADDR #159
Characterise subflow to use unique 4-tuple #144

Full Changelog: draft-ietf-05...draft-ietf-06
## Comparison draft status and prototype

<table>
<thead>
<tr>
<th>Function/Mechanism</th>
<th>Draft</th>
<th>Prototype</th>
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</thead>
<tbody>
<tr>
<td>Handshaking</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>MP Capable Feature</td>
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<td>✓</td>
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<tr>
<td>MP_KEY</td>
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<tr>
<td>MP_SEQ</td>
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<td>MP_HMAC</td>
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<tr>
<td>MP_ADDADDR</td>
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<tr>
<td>MP_REMOVEADDR</td>
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- **MP_KEY is implemented, but only "plain text" type is supported.**

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<tr>
<td>Fallback mechanism</td>
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<td>MP_FAST_CLOSE</td>
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<tr>
<td>MP_CLOSE</td>
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**Implementation completed**

**Interoperability verified**

- ✓ Finalized, ready for review/testing
- --- Work on, contribution is welcome
- ✗ Not implemented, contribution is welcome
Xiaomi implemented MP-DCCP in Android 13, see presentation before this. For this they

- ported MP-DCCP Linux reference implementation based on 5.10. Kernel solving multiple issues
- verified code matches MP-DCCP specification
- Run successful interoperability tests between Android 13 and DT hosted MP-DCCP proxy using Kernel 4.14 based MP-DCCP implementation

**Wireshark MP-DCCP dissector available**
- Improved during Hackathon -> [PR#1](https://www.example.com)

**WGLC requested on TSVWG mailing list**

**Move from EXP to PS requested on TSVWG mailing list**