

MPTCP Implementation Challenges: Use cases and Opportunities

A.Palanivelan Chetan Harsha

Senthil Sivakumar

(palanivelan.appanasamy@intl.verizon.com)

(chetan.harsha@intl.verizon.com)

(ssenthil@cisco.com)

What is this about?

- Document use cases (Draft-01)
- Prioritize use cases (WG discussion)
- Design recommendations/solutions (new draft?)

Use cases

- *Reliability*
 - Fall back to TCP (On MPTCP errors)
 - Frequent switching across channels(Most efficient)
 - Roaming subscriber
- *Security*
 - Impact on existing monitoring and security tools
 - Address Correlation
 - Potential phishing attacks

Use cases

- *Short/long lived flows*
 - Throughput/Performance
 - Window size, adaptive buffering
 - Custom Optimization Techniques
- *Path selection*
 - Congested vs RTT
 - Optimal number of paths (Too many vs Too less)
 - Application based path selection
 - Load balancing vs performance

Use cases

- *Middle box*
 - Web Caching
 - Different types of Proxy
 - NAT & Firewall

THANK YOU