IETF Hackathon: PPR

(Preferred Path Routing)

IETF 105 20-21 July 2019 Montreal



Hackathon Plan

- Open Source PPR implementation in FRRouting (frrouting.org)
- Working on PPR interop and topology testing
 - Interop testing PPR:
 https://datatracker.ietf.org/doc/draft-chunduri-lsr-isis-preferred-path-routing/
 - YANG Model testing:
 https://datatracker.ietf.org/doc/draft-qct-lsr-ppr-yang/
- Problems to solve:
 - Shake out the specification issues with PPR draft.
- Techniques used:
 - VMs and auto topology generation
 - Improve Debugging tools

What got done

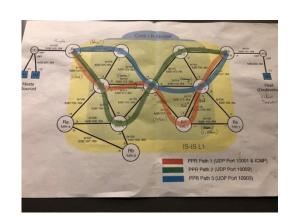
- Key Results
 - Wireshark Decoder for PPR TLVs and sub-TLVs in IS-IS
 - Fixed issues with:
 - Added support for Interface PDEs
 - Better processing for new / deleted / modified TLVs
 - New "show isis ppr [detail]" command for troubleshooting
 - wiki page how-to configure and verify PPR operation:

https://github.com/opensourcerouting/frr/wiki/PPR---Basic-Test-Topology

What we learned – It works















Wrap Up

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First timers @ IETF/Hackathon: