Updating RFC 793 (draft-eddy-rfc793bis)

Wes Eddy

MTI Systems

wes@mti-systems.com

History

- Notion of replacing RFC 793 was hinted at several times over the years
 - Mostly as a joke
- draft-eddy-rfc793bis-00 discussed on TCPM list in late 2013
 - Discussed at IETF 88 (Vancouver)
- Several more revisions posted since then
 - 05 revision posted February 2015
- Time to adopt as a WG item!

Proposed Plan

- Using 793 as basis, patch in text from existing RFCs with only very little modification (to make text and sections from different documents gel together)
 - 793 normative portions
 - 1122 (parts that update 793)
 - Other RFCs that update 793, 1122, etc
- Incorporate errata on 793 and other relevant RFCs
- Do not introduce any new changes that have not already been approved by past consensus
 - Minimizes potential to do something bad
 - Minimizes potential for difficult areas that we may lack consensus on

Current State

- Protocol spec from 793 brought into XML2RFC (in draft version -01)
- Addressed list of 793 errata (in version -02)
- Brought in Urgent Pointer updates from 1122, 6093/1011, and added 1122 requirements checklist (in version -03)
- Brought in ISN generation from 6528 (in version 04)
- Brought in discussion on MSS & PMTU topics from other RFCs (in version -05)

Forward Plan

- Incorporate other 1122 additions
- Point to major additional docs like 1323bis and 5681 that are part of TCP now
- Incorporate relevant parts of 3168 (ECN)
- Address Errata 3305 (related to draft-gont-tcpmtcp-seq-validation)
- Point-to or mention several other documents that impact the state machine (5461, 5961, 6161, 6429, etc)
- ... (see draft section 4 for a more complete list)

Summary

- I think this is progressing ...
 - Not quickly, but is there urgency?
- Feedback has been pretty much positive
- Please adopt as a working group draft [©]
- I think it doesn't need to be a hard or scary task if we stick to the scope I suggest (leveraging existing RFC and errata text, grafted together as needed)