RFC 793bis

https://datatracker.ietf.org/doc/draft-ietf-tcpm-rfc793bis/

Wes Eddy (wes@mti-systems.com)
Background

• RFC 793 is really old

• Goal since adopting the work item in TCPM is to incorporate existing consensus updates
  • Accepted errata (i.e. “Verified” and “Hold For Document Update” states)
  • Reflect the parts of RFCs that update 793
  • Scope does NOT include opening up TCP for new protocol changes or enhancements

• Trying to re-use exact text from 793, 1122, etc. wherever possible
Latest Status

• Revision 13 posted
  • Very small updates:
    • Add reference to clarify triggering of ERROR_REPORT for different ICMP types
    • Help to clarify remaining open issue (see next chart)
    • Take out “TODO” on IANA considerations – I think there is nothing more to be done

• Revision 14 in-work
  • https://bitbucket.org/weddy/rfc793bis/commits/
  • Fixes from Greg Skinner’s review to TCPM
  • Fix one xml2rfc reference generation

• Will add fixes from Michael Scharf’s review to TCPM from 7/21
Other Recent Changes

• Added labels and references to requirements checklist for all uses of requirements language (e.g. “SHOULD”, “MUST”, etc)
  • In versions 11 and 12
Issue – Error Reporting on Excessive Retransmissions

• There is a note marked “TODO” in the document for clarifying this issue
  • The issue is around the generic “ERROR_REPORT” functionality described, being triggered after a threshold number of retransmissions, to notify the application

• RFC 1122 seems internally inconsistent
  • One section (4.2.4.1) says “MUST” trigger reports and another “SHOULD” on seemingly the same issue (4.2.3.5 bullet “d” – the second one)
    • Note that RFC 1122 section 4.2.3.5 has two bullets labelled “d”, compounding confusion!
    • Or maybe I’m just not reading correctly, and someone can straighten me out

• It seems like MUST is probably what’s needed in order to enable applications to be responsive?
Recent Comments

• From Michael Scharf:
  • Add cross-reference for “security level” and “compartment” terms
  • De-duplicate Nagle description
  • Remove “SVCs, UUOs, EMTs” reference
    • SVC – Supervisor Call (from IBM S/360)
    • UUO - Unimplemented User Operation (DEC-10 system monitor call)
    • EMT - Emulator Trap (from PDP-11)
  • Question about errata referencing
    • My own thought is that if the Errata ID is helpful to lookup for more information or rationale, then we can include it, but this is not needed for all errata, nor are many of them of value to reference
  • Remove stale glossary terms

• These are pretty small ... maybe we are in decent overall shape?
Next Steps

• Changes are increasingly minor for the last year or so

• Need to get to a WGLC

• Identify some specific reviewers?

• Should any early cross-area or directorate reviews be asked for?