

# rfc7180bis: Further TRILL Clarifications, Corrections, and Updates

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# RFC 7180 bis

- RFC 7180  
TRILL: Clarifications, Corrections, and Updates, covers a variety of topics; however, because of normative dependency RFC publishing delays, it was already a little bit out of date when it was published.
- draft-eastlake-trill-rfc7180bis-01 updates RFC 7180.
  - At some point we may wish to revise the base protocol specification, RFC 6325, but for now, I believe an rfc7180bis document is the way to go for now.

# RFC 7180 bis

- The remainder of this presentation lists
  - Material added,
  - Material that remains to be added,
  - Material deleted, and
  - Material retained with no technical changes in rfc7180bis compared with RFC 7180.

# RFC 7180 bis

- Material added in current draft:
  - Add support for E-L1FS Extended Level 1 Flooding Scope LSP/CSNP/PSNPs. This increases the number of fragments and maximum TLV size from  $2^{**}8$  to  $2^{**}16$ . See RFC 7356.
    - Each future specific TRILL use of E-L1FS is required to address backwards compatibility.
  - Advice to silently ignore unknown IS-IS PDUs.
    - The universe of IS-IS PDUs used to be very stable but TRILL added MTU-probe and MTU-ack while RFC 7356 added Flooding Scope versions of LSP, CSNP, and PSNP.

# RFC 7180 bis

- More material added in current draft:
  - Optional alternative Reverse Path Forwarding Check as discussed on the mailing list. See <http://www.ietf.org/mail-archive/web/trill/current/msg01852.html> and subsequent messages.
  - Add an optional Nickname Flags APPsub-TLV and specify an “ingress flag” therein that indicate a nickname will be used as the ingress in TRILL Headers.
  - Advice concerning the relative priority of control packets.

# RFC 7180 bis

- More material added in current draft:
  - Deprecate extending the TRILL Header beyond the one word extension of flags specified in RFC 7179. Make all but the lowest bit of the Op-Length field in the TRILL Header Reserved.
  - Add optional header fields added
    - Color bits
    - Extended hop count
  - Informative appendices added:
    - Discussion of Appointed Forwarder Status Lost Counter and whether you need to pay attention to it
    - “Life Cycle of a TRILL Switch Port”.

# RFC 7180 bis

- Material to be added:
  - Appendix giving the hex for some sample TRILL PDUs to clearly answer any bit ordering questions.
  - Precise summary of what the draft changes in the RFCs it updates.

# RFC 7180 bis

- Material in RFC 7180 removed in the current draft:
  - Changes to RFC 6327 (Adjacency). These changes were rolled into RFC 7177 (Adjacency) which obsoleted RFC 6327 and so can be removed in rfc7180bis.
  - Changes to RFC 6439 (Appointed Forwarder). These changes should be moved into an rfc6439bis and so could be removed in rfc7180bis.



# RFC 7180 bis

- Other material from RFC 7180 is being retained in rfc7180bis with any minor updates that are warranted.

# RFC 7180 bis

Status of the draft:

In call for WG adoption issued October 31<sup>st</sup>:

<http://www.ietf.org/mail-archive/web/trill/current/msg06494.html>