Network Transport Circuit Breakers (BCP)

draft-ietf-tsvwg-circuit-breaker

G. Fairhurst

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Current Status

draft-has approved by the IESG!

Current -14 version responds to IESG comments;

A lot of changes to the text, mostly editorial, see:

https://www.ietf.org/rfcdiff?url1=draft-ietf-tsvwg-circuit-breaker-13&url2=draft-ietf-tsvwg-circuit-breaker-14

The next two slides highlight two of the changes

requirement #1 of section 4

- The "MUST" statement in requirement #1 was removed between the -13 and -14 versions:

  - The CB MUST trigger if there is a failure of the communication path used for the control messages. That is, the feedback indicating a congested period needs to be designed so that the CB is triggered when it fails to receive measurement reports that indicate an absence of congestion, rather than relying on the successful transmission of a "congested" signal back to the sender. (The feedback signal could itself be lost under congestion).

- WG list discussion in October concluded this was not the right thing to do when the control path is different from the data path. This is now covered (extensively) by requirement #16 in section 4:

  - The preferred CB design is one that triggers when it fails to receive measurement reports that indicate an absence of congestion, in contrast to relying on the successful transmission of a "congested" signal back to the sender. (The feedback signal could itself be lost under congestion).

    - in-Band: An in-band control method SHOULD assume that loss of control messages is an indication of potential congestion on the path, and repeated loss ought to cause the CB to be triggered. [... snip ...]

    - Out-of-Band: An out-of-band control method SHOULD NOT trigger CB reaction when there is loss of control messages (e.g., a loss of measurements). This avoids failure amplification/ propagation when the measurement and data paths fail independently.

reordering of requirements in section 4

rev 13	rev 14
1	1 (changed)
2	2
3	3
4	4
5	5
6	7
7	8
8	10
9	6

rev 13	rev 14
10	11
11	removed
12	12
13	13
14	14
15	15
16	18 (updated)
17	17 (updated)
18	16 (updated)

Requirement 9 in rev 14 needs to be deleted (duplicated).

next steps

Revise to:
  Remove Requirement 9

  Add "See Appendix A of [ID-ietf-pals-congcons] for further discussion." to end of 5.3.2

  Incorporate comments from the list/AD if needed.

Submit to RFC-Ed