

Experimental RFCs on Congestion Control

- This has been done before.
 - RFC 5033 guidance was a good thing raised on the list.
 - Quick-Start (RFC 4782) is one useful example (touching in-network and end-host behaviors). There are others too.
- The goal is always to “not break the Internet”.
 - This will be Experimental for Internet use (i.e. not just in some specific operator networks).
- There can be significant open questions and more work to do.
 - That’s why it’s Experimental, not Proposed Standard.
 - But we need consensus that if it goes badly, the Internet will survive. For instance, proper safety valves are in place (e.g. fall back to Reno on loss), scope and how an operator/sysadmin monitors & manages it are understood, etc.

Progress towards WGLC

- Issues list in IETF “trac” populated after last meeting.
 - <https://trac.ietf.org/trac/tsvwg/report/1>
 - Please keep main discussion on mailing list.
 - Use trac to record the main status, pointers to important bits (webpages, papers, mail threads, etc).
- Next page “stoplight chart” is just my own interpretation of status.
 - Many question marks! Feedback welcome!
- “Closing” issues in trac
 - Indicates that we don’t think the current status blocks holding a WGLC.
 - Not indicating that everything is perfect.
 - It could still be a fair issue to discuss in the WGLC, IETF LC, etc., and there may need to be identified “open issues” and “future work” in the drafts.
- As co-chair + doc shepherd:
 - Progress on L4S publication should not be gated on SCE work.

Trac Ticket #	Title	Progress Summary	Work Still Needed?	Ready for WGLC? (given a doc revision cycle)
#16	L4S – Interaction w/ 3168-only ECN AQMs	<ul style="list-style-type: none"> Multiple test results posted based on Prague code. Arxiv paper on design for detection & fallback. 	None? Issue is understood for Prague. Section A.1.4 of I4s-id draft covers this well.	Remaining work is in Prague?
#17	Interaction w/ FQ AQMs	<ul style="list-style-type: none"> Multiple test results posted based on Prague code. Bug fixed in Prague. 	None?	
#18	Loss detection in time units	<ul style="list-style-type: none"> Scoped to “reordering-prone networks” in I4s-id -08 revision. 	None? Section A.1.7 of I4s-id draft has detailed discussion.	
#19	Single codepoint for both latency & resequencing tolerance	Explanation that resequencing tolerance is needed for scalability.	None? (given applicability changes were made from issue #18)	
#20	Objection to ECT(1) codepoint usage	<ul style="list-style-type: none"> Proposed that issue #16 resolution addresses this by proxy. Coexistence w/ SCE seems feasible (Jonathan Morton has worked some initial analysis on this) 	None? (if we agree that both #16 is going to be adequately worked in Prague & that this suffices)	
#21	CE codepoint semantics	Proposed to combine this w/ #16, since this would be a valid RFC 8311 experiment.	Not sure we have any agreement on this, or if it even is a separate issue.	No clear agreement on this.
#22	Deployment feasibility	Proposed to combine this w/ #16.	Section 6.3 of I4s-arch doc may need to include current thinking wrt. Prague?	
#23	Implementation status	Updated Linux code made publicly available.	None?	
#24	Evaluation / Testing results	<ul style="list-style-type: none"> Two independent public sets of results w/ common scenarios. Other SDOs evaluating. 	Not all ranges of parameters, environments, etc. advocated by RFC 5033 tested, but enough to justify experimental specs?	Not likely to have agreement on this, but work done is comparable to other Exp. RFCs (e.g. Quick-Start, etc.).
#25	IPR concerns	Much discussion in IETF 105 timeframe.	All declarations have been properly discussed.	May not be full happiness, but situation is understood.
#26	Admission control / untrusted marking	<ul style="list-style-type: none"> Two approaches available. Still seems to be contention that abuse is possible. 	Available approaches satisfy L4S adopters, so not clear anything more is needed.	Proceed knowing there is work here for operators?
#27	Terminology improvements	<ul style="list-style-type: none"> TCPM & TSVWG mailing list discussion on “classic”, “normal”, “non-L4S”, and others. 	Not sure mail list is converging. Agreed to fix “classic TCP”. Not sure about “scalable”.	Could be ongoing discussion as part of WGLC?