

Crosslayer Indications for Transport Protocols

<draft-sarolahti-tsvwg-crosslayer-00>

Pasi Sarolahti and Sally Floyd

IETF-67 / San Diego, CA / November 7th 2006

Background

- Several related BOFs in the past
- TERNLI Bar-BOF in IETF-66
 - “IETF does not have a good collective memory”
- Recent experience from the Quick-Start work
 - Many problems are common with other similar schemes
- Informative overview of the past work could be useful
 - Not specifying new protocols
 - Document and classify the known problems in crosslayer mechanisms
 - Some background for future proposals of new crosslayer schemes and BOFs

Overview

- Focusing on mechanisms that require network interaction
- Classification of cross-layer communication mechanisms
 - In-band vs. Out-of-band
 - Router support
 - 1) Require support from all routers?
 - 2) Use information from some routers?
 - 3) Exchanging information just between the end-hosts?
- Past work
 - Not going to be a full research index of all past work
 - Focusing on IETF work (BOFs, Internet-Drafts, RFCs)
 - Referencing selected interesting papers
- Description of known problems
- Discussion of possible future steps

Next Steps

- Wanted to get -00 version out quickly to hear first impressions
 - Next version to add missing sections from the -00 version
- Feedback has been positive
 - Taxonomy could be organized differently
 - Consider IEEE 802.1au that standardizes ECN-like mechanism in 802.x space
 - Text on IP tunnels could use some work
 - Terminology should be clarified
 - Pointers to related work
 - Editorial notes
- Further community feedback and contributions would be useful
- Should this be a tsvwg working group draft?