
Public Review for

Principles for Measurability in Protocol Design

Mark Allman, Robert Beverly, and Brian Trammell

This paper calls for making measurements a first-class citizen of the network stack. The authors propose a framework, IPIM, which comprises of in-band measurement primitives that are coupled with today's network protocols, such as TCP. The reviewers particularly liked how the authors provide a lucid articulation of the desired properties of a measurement framework and demonstrate how IPIM's relatively simple primitives satisfy these properties. In general, IPIM should be viewed as a first-step towards the larger goal of integrating measurements within the network stack – it opens up several interesting avenues for future research, such as identifying other use-cases for IPIM's measurement primitives, incorporating the role of ISPs and adversaries, and designing similar measurement primitives for other emerging protocols.

Public review written by
Fahad R. Dogar
Tufts University