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Improving the Round Trip Time Estimation in Internet Routers

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ABSTRACT. We review in this paper the concept of TCP-friendliness and we debate one of its weaknesses. Unfortunately, this weakness reduces the practical applicability of the TCP-friendliness equation. For a very high percent of the Internet flows, the TCP-friendliness test may have wrong results. We suggest in this paper a router algorithm that improves the efficiency of the TCP-friendliness equation for some UDP flows. This algorithm uses the additional information retrieved by the router from competing TCP flows in order to obtain a better approximation for the round trip time as used in the TCP-friendliness test.

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