

Influence of traffic in the stochastic behavior of latency

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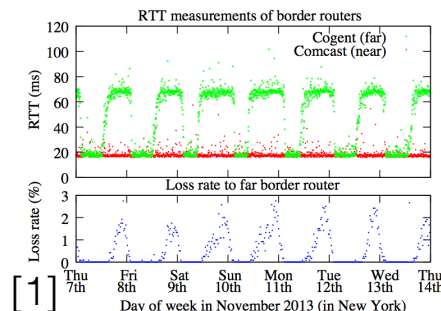
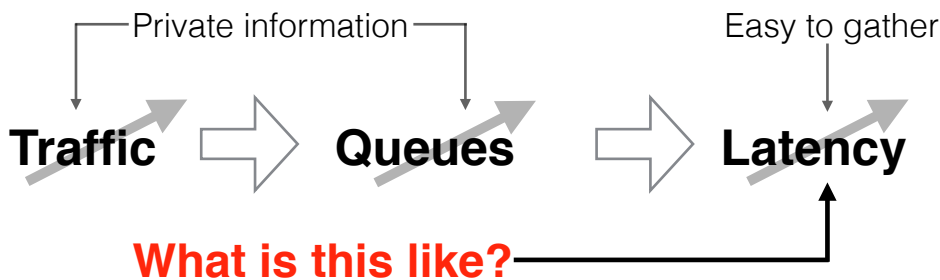
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Latency and congestion



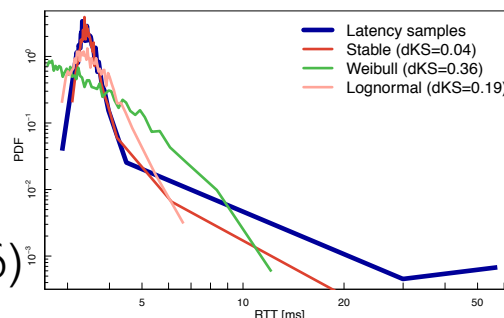
Stable distribution

Some previous latency models

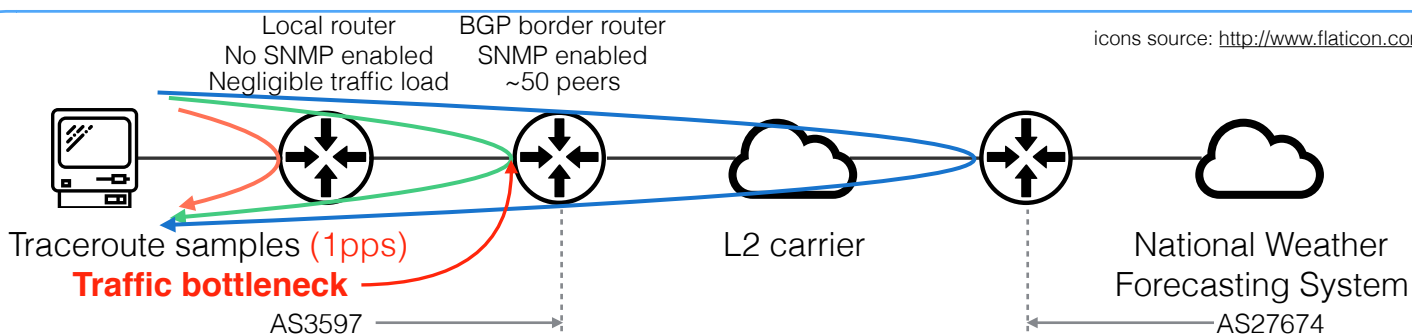
- Weibull [2]
- Lognormal [3]

Neither fits well in some cases

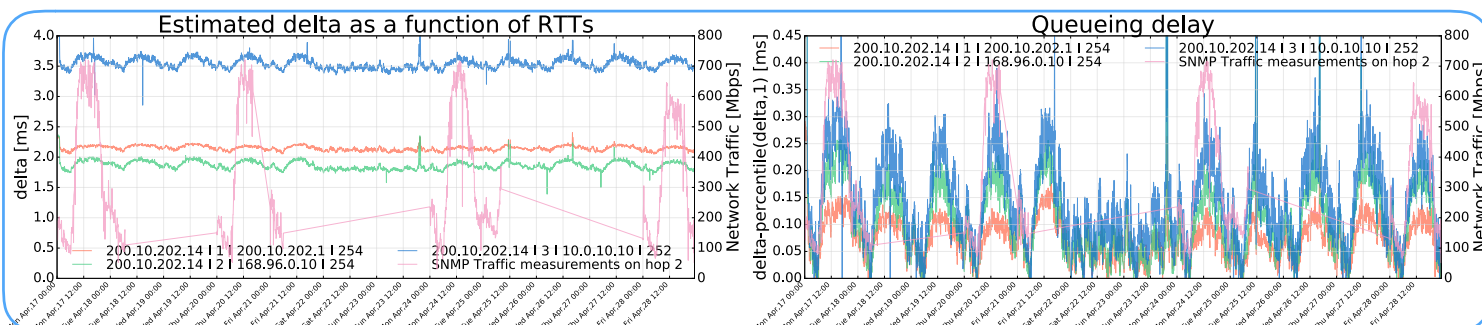
Proposal \Rightarrow **Stable distribution** $S(\alpha, \beta, \gamma, \delta)$



Measurements scheme



Results



[1] M. Luckie, A. Dhamdhere, D. Clark, B. Huffaker, et al. Challenges in inferring internet interdomain congestion. In 2014 IMC, pages 15–22. ACM, 2014.

[2] K. Papagiannaki, S. Moon, C. Fraleigh, P. Thiran, and C. Diot. Measurement and analysis of single-hop delay on an ip backbone network. J. Sel. Areas Commun., 21(6):908–921, 2003.

[3] R. Fontugne, J. Mazel, and K. Fukuda. An empirical mixture model for large-scale rt measurements. In INFOCOM, pages 2470–2478. IEEE, 2015.