

Name: _____

This week's readings

- [1] Lixin Gao. On inferring autonomous system relationships in the Internet. *IEEE/ACM Transactions on Networking*, 9(6):733–745, December 2001. URL <http://www-unix.ecs.umass.edu/~lgao/ton.ps>.
- [2] Ramesh Govindan and Hongsuda Tangmunarunkit. Heuristics for Internet map discovery. In *Proceedings of the IEEE Joint Conference of the IEEE Computer and Communications Societies (INFOCOM)*, pages 1371–1380. Tel Aviv, Israel, March 2000. URL http://www.isi.edu/div7/publication_files/heuristics.pdf.
- [3] Vern Paxson. Strategies for sound Internet measurement. In *Proceedings of the ACM SIGCOMM Internet Measurement Conference (IMC)*, pages 263–271. Taormina, Sicily, Italy, October 2004. URL <http://www.icir.org/vern/papers/meas-strategies-imc04.pdf>.
- [4] Allen B. Downey. Using pathchar to estimate Internet link characteristics. In *Proceedings of the ACM SIGCOMM Conference on Applications, Technologies, Architectures, and Protocols for Computer Communication*, pages 241–250. Cambridge, MA, September 1999. URL <http://allendowney.com/research/clink/downey.ps.gz>.

1. NTP, the network time protocol, can help and hurt network measurements – how does it hurt?

2. Why did Vern write his paper about sound Internet measurement?

3. What was the primary problem of pathchar Downey attempted to solve by developing clink?

4. Why might measuring the bandwidth capacity of network links become untenable as those links become faster?