<u>CSC2209</u> Computer Networks

Network Measurement

Stefan Saroiu Computer Science University of Toronto

Administrivia

- All should have received feedback about presentation
 Any questions?
- TONS on Friday at 3pm:
 - Enhancing the Security of Corporate Wi-Fi Networks Using DAIR
 - Alec Wolman, Microsoft Research
- Tuesday's lecture on workload measurement
 - Alec will give the lecture

Why Measure?

Brief History of Measurement in Nets

- 1969 Arpanet is built, Kleinrock asked to put together measurement center to analyze performance
- 70s-80s lots of measurement both by users and providers
 - Lots of sharing studies, access to raw data, etc...
- 90s Internet is becoming more commercialized (ISPs)
 - Rise of competition leads to secretive mentality
 - Privacy concerns cited as well
- V. hard to measure the Internet today
 - New technique: using existing protocols and systems in unanticipated ways

Paxson's Work

- Marked a turn in Internet measurement
 - Edge measurement can tell you lots about the network
 - Lots of findings with important implications
- Received 2006 Sigcomm's Test of Time Award

Causes of Path Inflation