Monitoring at 100G

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Monitoring the firehose

- Challenges inherent in 100G monitoring
 - You'll shoot your eye out kid!



- Counters are counters
- 100G traffic generators
- These help but aren't the complete picture





Monitoring

- Intrusion detection / high-fidelity monitoring potentially challenging
- Divide and conquer use parallelism
- FlowScale uses OpenFlow to distribute input traffic





Applications on the Network

- What do you expect and are you getting it?
- In the old days I used to say "it's easy to predict available bandwidth. If I use it all measuring, then the remainder available for you is 0."
- Revisiting application calibration, and multiple measurement correlation





Host Effects

- High-fidelity host monitoring matters!
- Many of the performance effects are at the edge
 - or at least include the edge
- Relatively recently, we showed end to end monitoring beginning to effectively detect bottlenecks
 - For 1G and 10G networks!



