Netflix Performance on Top Networks

NANOG 51
January 31, 2011
Netflix on ISP Networks
How?

- All Netflix streaming clients are written by us or based on our SDK
- Our log spec includes lots of information about performance
- We capture client IP/ASN
- Using ASN, we assign performance metrics to networks
How?

AWS

Netflix Server

Hadoop Map Reduce

Processed data

Netflix

Reporting Server

Processed data

Data Warehouse
Why?

- Unique insight to hundreds millions of hours of long-duration, high-definition video streams
- We get a lot of questions about how performance varies
- Avoids speculation about traffic manipulation
- Helps us understand changes over time
Room for Improvement

- Better way to display lots of data on one slide
- Split out fiber/DSL offerings (Verizon, AT&T)?
- Embarq + CenturyTel = CenturyLink
- Look at other interesting metrics over time
- Add more Canadian ISPs
- Much more
Netflix Performance on Top Networks - USA

- Qwest
- Verizon
- Windstream
- Cablevision
- Suddenlink
- Charter
- Comcast
- Cox
- AT&T
- Embarq
- Frontier
- Bellsouth
- Clearwire
- Time Warner

kilobits per second
Questions?