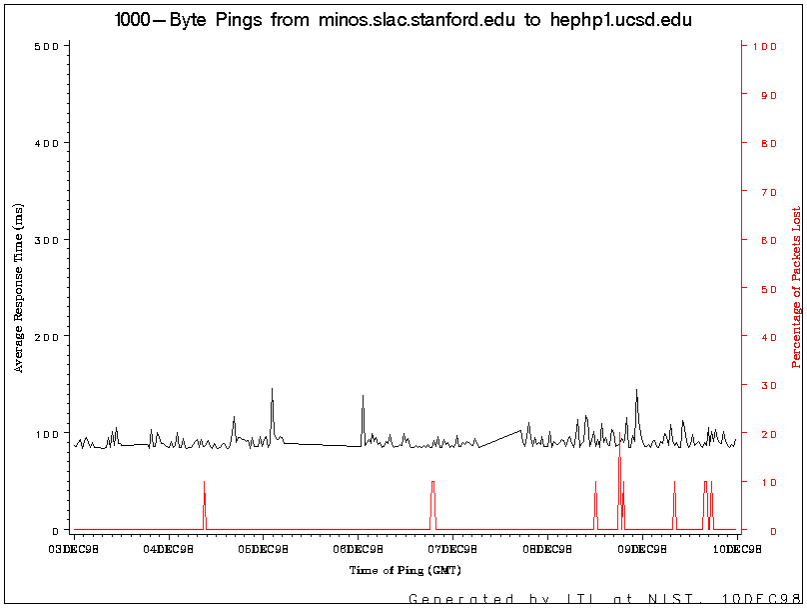
Internet Performance Measurement



Goal

To advance the state of the art in Internet performance measurement through improved statistical analysis of the data that is collected and through improved data collection techniques.

Technical Objectives

- Improve measurement methodologies to support the industry demand for enforceable Internet Service Level Agreements (SLAs)
- Develop and deploy an Internet Performance Measurement toolkit.
- Develop passive measurement techniques.
- Improve data analysis.

Impact

- Reliable performance measurements permit consumers to evaluate the quality of the service they receive thus providing impetus for quality improvements.
- Passive measurement will reduce the perturbation caused by measuring the network performance.

Collaborators

Cross Industry Working Team (XIWT)
High Performance Systems Division
Statistics Division
Stanford Linear Accelerator (SLAC)
Advanced Network Systems (ANS)

Products and Results

- Established a test node and the data archive and analysis site for the XIWT/IPWT
  FY98
- Analyzed the “pinger” data and reported to the XIWT
  FY98
- Work performed to enhance the accuracy of the timestamp mechanism in the ANS Surveyor Probe device
  FY98
- GITS Internet Performance Measurement Toolkit developed FY99
- GITS measurement systems deployed in the field
  FY00