

Bandwidth Challenges or "How fast can we really drive a Network?"

To give some idea of current network capabilities, the talk will show some of the winning results from the SuperComputing 2005 Bandwidth Challenge. This is followed by a comparison of the operation and performance of the academic production IP packet switched network and LightPaths or Bandwidth Channels. We will then discuss some of the issues relating to the TCP transport protocol relating to Long Distance High Bandwidth transfers. Finally we will show some case studies to illustrate how real users and applications interact with the network.