National Optical Networking: Progress Report

Internet2 Member Meeting

11 April 2003
The Need for Optical Infrastructure

- Higher Education & Research Community Has Demonstrated an Ever-Increasing Requirement for Network Capacity
  - Requires combined packet & optical circuit switching
- Some Applications Communities and Network Research Projects Require Dedicated End-to-End Facilities
- Next Step in Evolution of Advanced Networking
  - NSFNet, vBNS, Abilene
The Time Is Now

- Interest of Corporate Partners
- Availability of Unlit Fiber, Optronics
- Funded Research Requirements
  - NSF Extensible Terascale Facility
  - e-VLBI
  - NSF Network Research Testbed
  - NSF Experimental Infrastructure Network
  - NIH & DOE requirements
- Cyberinfrastructure Report
- Costs of Fragmented Approaches
Internet2’s Role

- Participate in Funding Using Abilene Capital Reserves
- Provide Member Access to Optical Facilities
- Encourage Complementary and Cooperative Effort among Community-based & Regional Initiatives
What Hasn’t Changed

- Higher Education Leadership
- Commitment to Core Internet Values
- Community Grounded in Partnership
- Focus on Advanced Networking Capabilities
- Accomplishing Together the Things We Can’t Do Alone
Status Report

- Fiberco, State & Northern Tier Initiatives – Steve Corbato (Internet2)
- USA Waves – Jerry Draayer (SURA)
- National LambdaRail – Tom West (CENIC)

Discussion