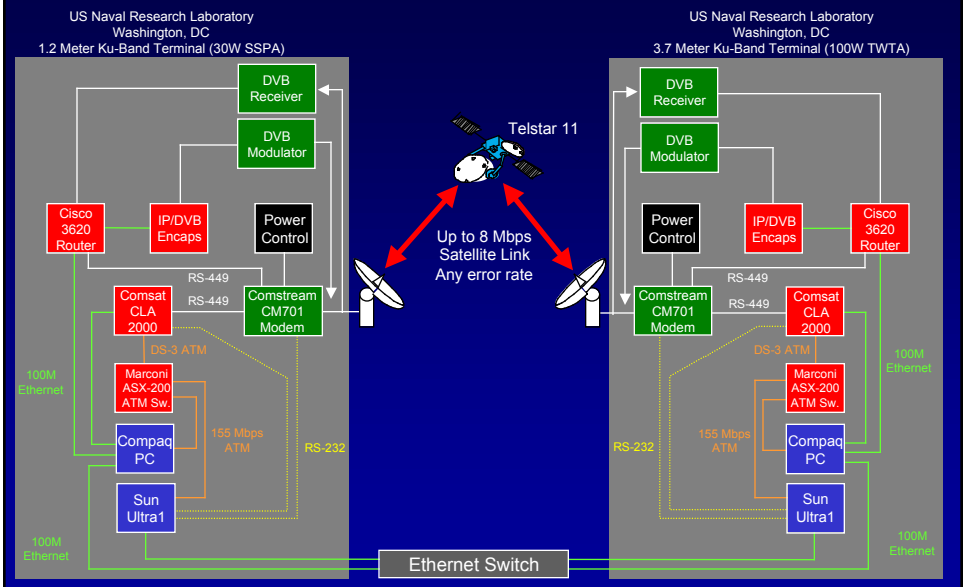
CoSTAR Satellite Protocol Testbed

Consortium for Satellite/Terrestrial Applied Research



The laboratory will also be equipped with a full complement of DVB video hardware Provided by Harmonic, Inc.

CoSTAR Research Interests

- TCP Performance over very high Bandwidth*Delay Product networks
- Study of mechanisms that distinguish between errors and congestion in end-to-end TCP flows
- Study of Protocol Enhancing Proxies (PEPs)
- Satellite-Based Storage Area Networks
- Comparison of transport protocol efficiencies (ATM, DVB, HDLC, CCSDS)
- TCP Direct-to-Ground Asymmetry experiments

- Adaptive Uplink Power Control
- Reliable Multicast Mechanisms
- CDMA and Dynamic Access
- System Interoperability

Funding provided by NASA
Funding provided by Office of Naval Research

Current Active Participants in the CoSTAR Testbed

- Infinite Global Infrastructures, LLC (Lead)
- NASA Glenn Research Center
- NASA Johnson Space Center
- NASA Goddard Space Flight Center
- NASA Ames Research Center
- US Naval Research Laboratory
- Boeing Satellite Systems
- Boeing Connexion
- Lockheed Martin Space Operations
- Lockheed Martin Commercial Space
- Spectrum Astro
- Georgia Tech.
- New Mexico State University
- UCLA
- University of Maryland
- Cisco Systems
- Marconi Communications
- Ampex Data Systems
- Harmonic Data Systems / Harmonic, Inc.
- Norsat Interational
- SkyStream
- Radyne-Comstream
- Newtec America
- Ktech, Inc
- Compaq Computer Corporation
- Sun Microsystems
- NetEx Software
- IBM *
- Hewlett-Packard *
- Intel *
- Microsoft *

* Indicates past key contributor not presently active in the project