Research Infrastructure for Integrated Quality of Service Management in Multimedia Computing Environments

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MSI – Architectural Overview

Applications: Telemedicine, Vet, POL
Distributed Multimedia Documents
Multimedia Databases
Operating Systems/Storage
Networks/Middleware

SECURITY

Specification
Translation
Negotiation

QoS Management
**Research Outcome**

To develop an infrastructure that will integrate key information technologies which include database and storage management, OS, networking and security in order to provide a comprehensive end-to-end QoS management framework for distributed multimedia applications.

**Educational Outcomes**

- Training graduate students and researchers (16 GRAs, 5 Postdocs)
- Yearly summer workshop/internship program for students from HBCUs.
- New courses introduced as part of RI and related grants.
Leveraging of RI Grant

- Federal Agencies: NSF, ARO.
- State: 21st Century Grant.
- Industry: IBM, NCR/Walmart, HP, Telcordia, Siemens, Intel, Cisco.
- Purdue: CERIAS, PRF.

Wish List...if we had more money

- Better technical and administrative support.
- Professional staff for outreach and tech transfer.
Barriers....

- Simplified software licensing agreements.
- Better access to real data for experiments.
- Access to University network infrastructure including dark fiber.
- Need for authentication/authorization infrastructure both within campus and external collaborators (internet middleware initiative).
- Adequate space needs.

NSF Interdisciplinary Programs

- Existing programs are essential because they fulfill diverse needs.
- Possible change is to increase RI budgets to distinguish them from MRI.
- Existing balance among RI and individual grants is appropriate.