StateNets and RONs: Bringing the big pipes to your doorstep

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Collaboration through Networking

Three-Tier Network Model

- Campus ↔ Regional ↔ National
- Regional Networks are the middle tier and bridge of the Three-Tier Model
- There is a critical role to be performed between a national net and a campus
- Highlighting this role will be a major focus of this morning’s session
Important migration to Regional Optical Networks (RONs)

- Now providing sufficient bandwidth to support new classes of end-to-end service
  - Ultra- broadband last mile connectivity
  - Connectors/Gigapops delivering unlimited bandwidth in a cost effective manner, and
  - Providing more value added services such as peering and dynamic waves
Performance Strides in the Regional Tier are making new applications possible

- Large-scale network attached storage/DR
- Video-on-demand content repositories
- Centrally hosted course management
  - Sakai, Moodle, Blackboard, WebCT
- Shared GRIDS and research repositories
- Federated identity management
REGIONAL NETWORKS

LEARNING CENTERED APPLICATIONS
- instructional & curricular integration
- digital libraries, CMS & simulations

SUPPORT
- training, consulting, technical assistance
- faculty development, community building

SHARED SERVICES
- layer-3 data services, videoconferencing, voice
- online digital resources, shared library systems
- middleware, quality of service, metadata tools

TRANSPORT
- campus/school access; state/regional network backbone
- aggregation, Internet services, national network connector