Grid Fabric Sub-theme Break-out session

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Initial Areas of interest

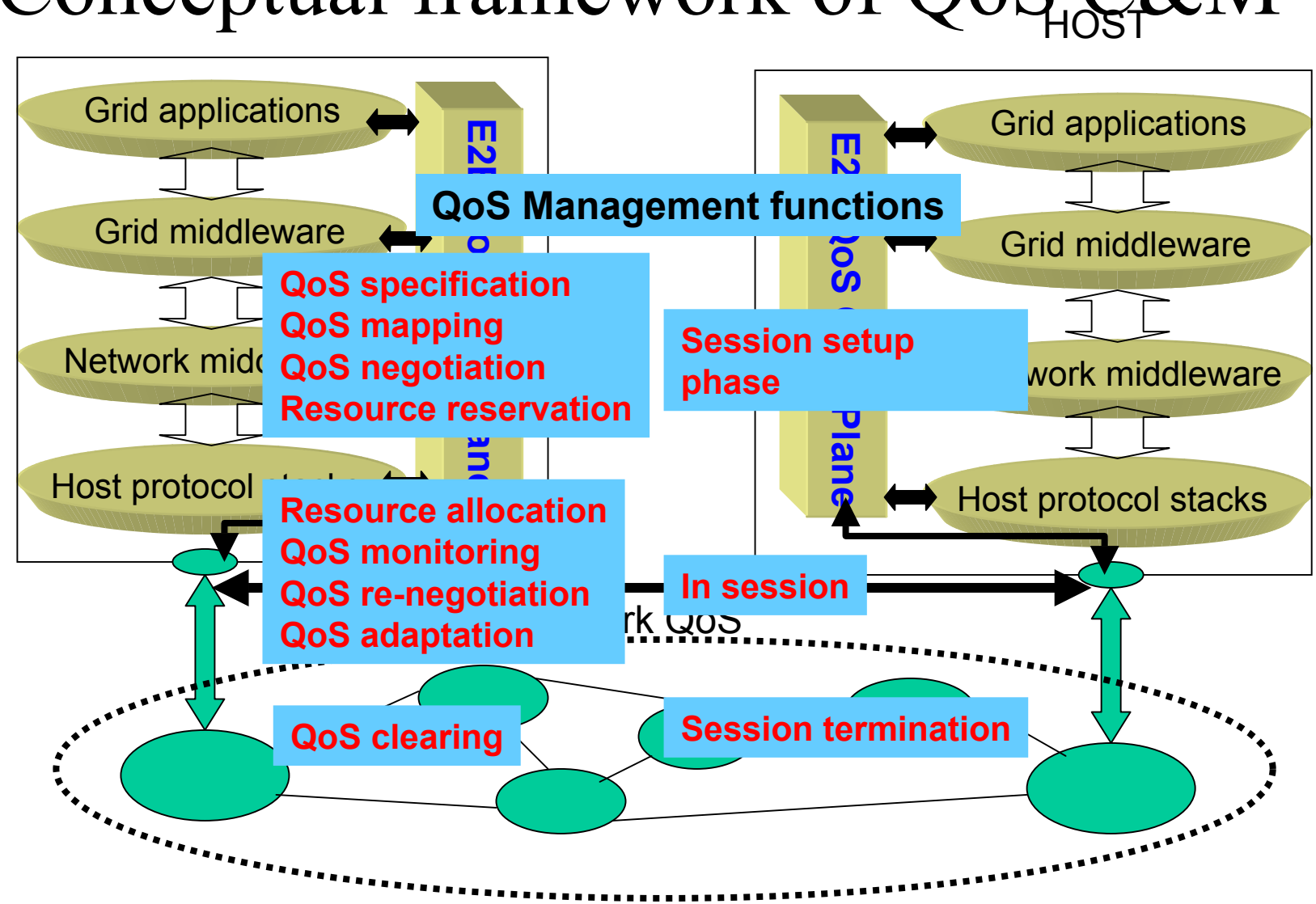
- Qos
- Layer 2,3&4 and IPv6
- Optical
- Storage
- Mobile Grid
- *Instrumentation
- *Above layer 4
- *Interface
- *Standard

Adaptive Qos Grid fabric

Qos

- Cut across all layers.
- Meta-modeling
- Discovery
- Performance Measurement and metric
- Management and control plane
- Adaptive.

Conceptual framework of QoS C&M

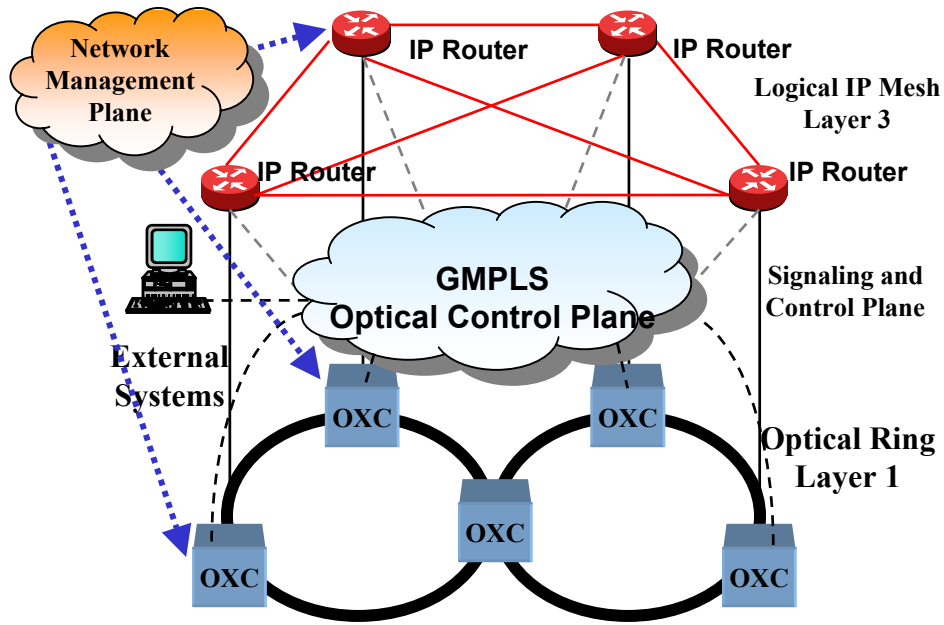


Layer 2 &3 &4 and IPv6

- Adaptive intelligent protocols
- Essential for communication
- Fast TCP and reliable UDP or alternative protocols.
- New types of Routing protocol

Optical Internet: IP over WDM

- Optical Internet is the future network fabric for GRID computing.
- Three research focuses in the area:
  - *Optical Virtual Private Network
  - *Optical Multicast
  - *Optical Burst Scheduling Traffic engineering and management



Storage

- Intelligent storage
- Qos base Storage
- Data management
- Data in Network
- File system

Objective/Vision of Mobile Grid

- A Next Generation Grid Computing Infrastructure that
  - Aggregates resources (including computation and storage) of mobile and wireless devices across heterogeneous wireless access networks
  - Supports dynamic resource management in a secure and mobile environment
  - Provides dynamic session management in a secure and mobile environment

Infrastructure requirements

- National test-bed for research
- Links to international efforts