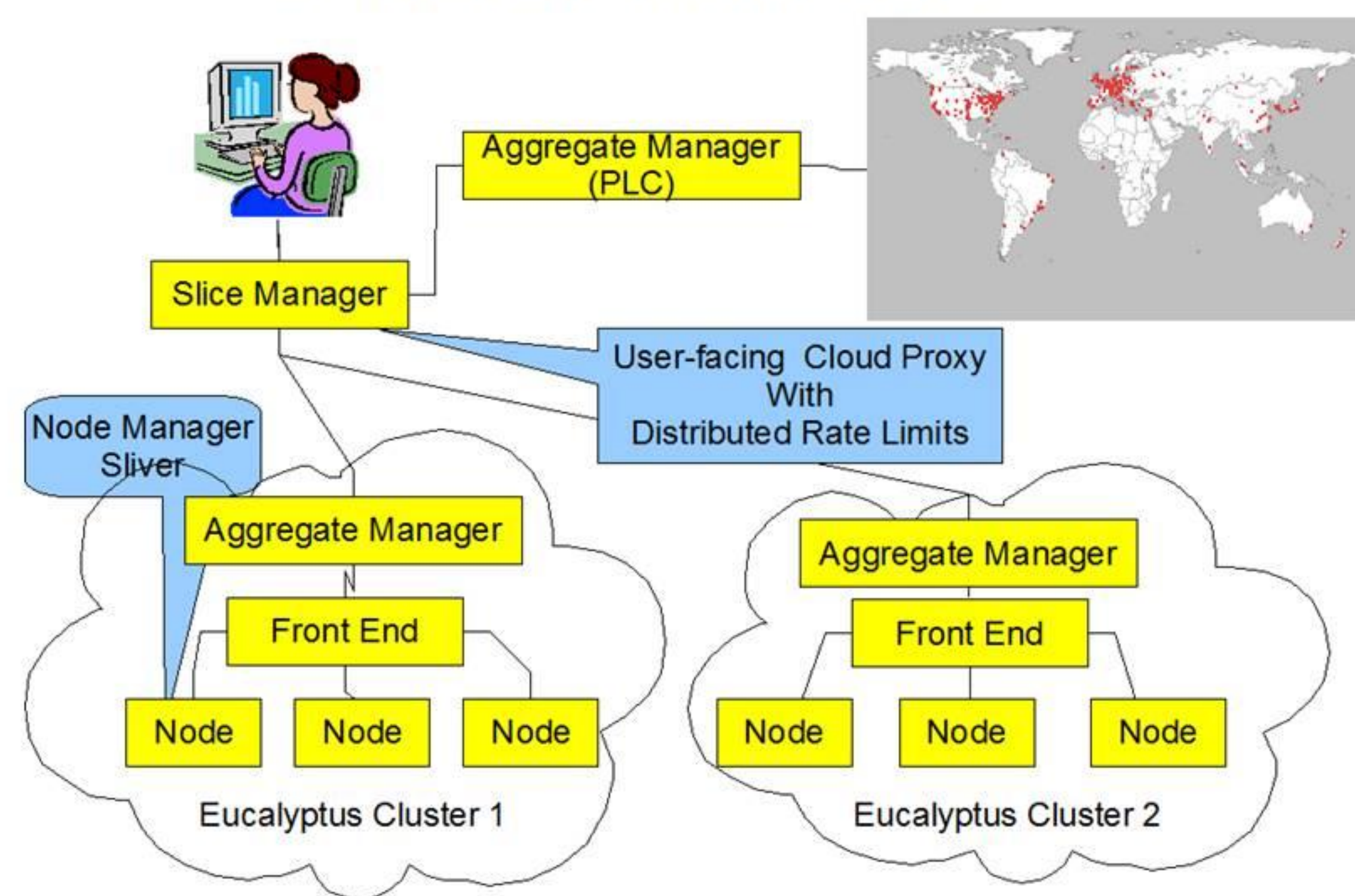


GENICloud



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GENICloud Architecture



Current Status

- SFA-compatible Eucalyptus Implementation
 - Added Slices (aggregate management of VMs)
 - VM Management and Walrus Storage System
- Delegation Primitive in SFA
 - Permits Cloud Manager Development
- New UI for PlanetLab Control Framework
- Operating Cloud Infrastructure at HP OpenCirrus

Roadmap

- Open to GENI Experimenters (March 2011)
- Integration with PlanetLab Control Framework (July 2011)
- Host Federated Open Structured Data (tentative) July 2011
- Distributed Rate Limiting (November 2011)

The screenshot shows the GENICloud web interface. The top part is a transcoding form with fields for YouTube URL source, target resolution (set to iPhone 3GS 4G), and destination IP address. Below the form is a 'Cloudboard: system information' section with a 'Server Status' graph and a table of server performance and open jobs. The bottom part is a 'Cloudboard: job information' table.

| Cluster | Capacity | Pending | Complete |
|---------------|----------|---------|----------|
| 198.55.32.75 | 41 | 4 | 34 |
| 165.124.3.121 | 10 | 2 | 13 |

Transcoding videos at three clouds:

- HP OpenCirrus
- Northwestern OpenCloud
- UCSD



Demo: Transcoding in the Cloud <http://sd-euca-02.sysnet.ucsd.edu/>