

TransCloud

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TransCloud Today



TransCloud: Based on iGENI and GENICloud

- Transcontinental Federation of Cloud Systems
- Slice-Based Federation Architecture for sign on and trans-cluster slice management
- SFA cluster manager at each site
 - Currently, enhanced Eucalyptus
- Private 10 Gb/s transcontinental network linking sites
 - Thanks to GLIF, NLR, NetherLight, CAVEWave, StarLight, DFN

Roadmap

- Accept experimenters **now**
- Federation expansion
 - TU Amsterdam immediately
 - Brazil, Asia by July
 - All interested parties at any time
- Full integration with PlanetLab Control Framework (July)
- High-level programming environment based on RePy and NaCl
- High-level distributed query environment

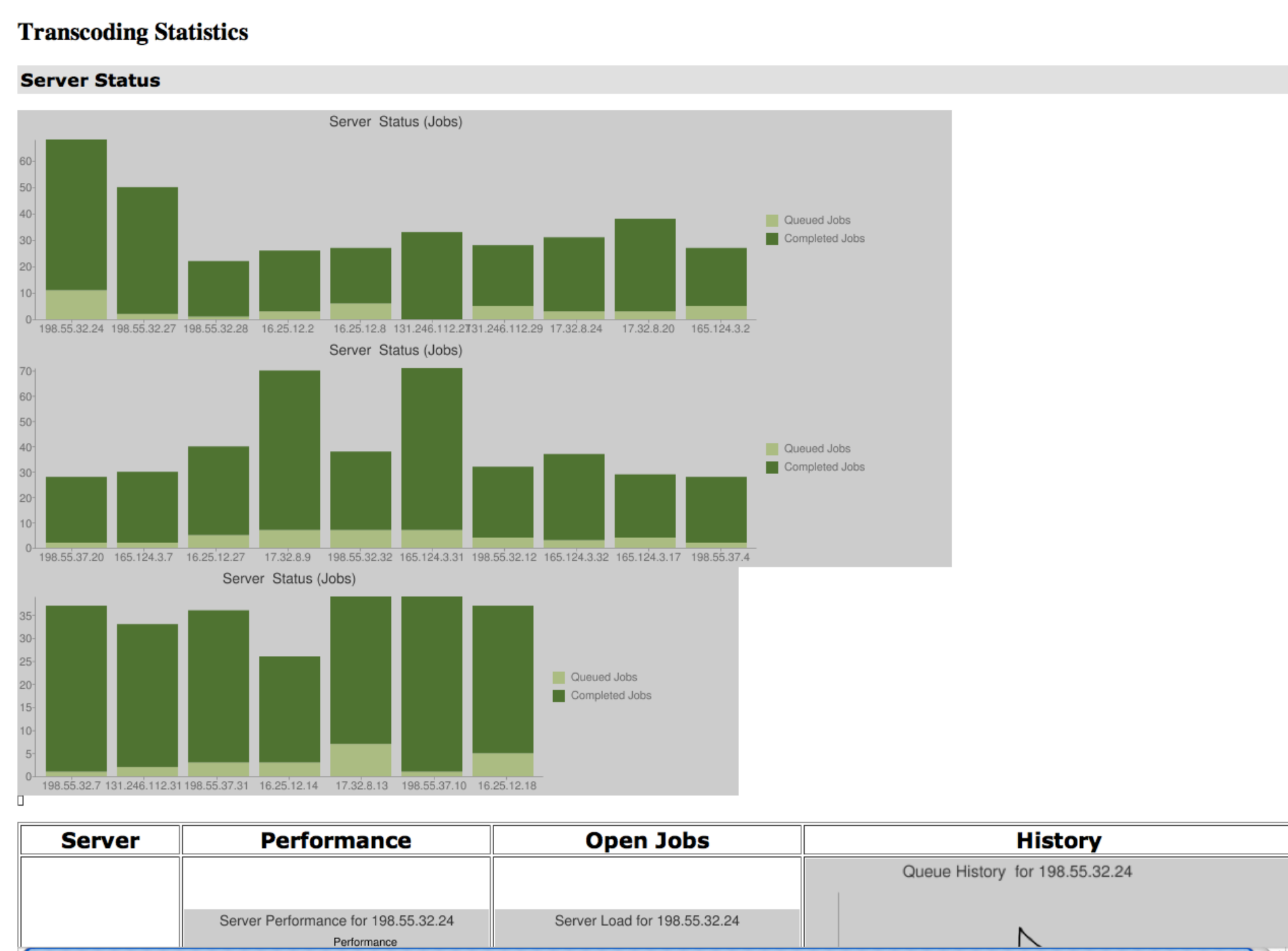
Example of working in the TransCloud

[1] Build trans-continental applications spanning clouds:

- Distributed query application based on Hadoop/Pig
- Store archived Network trace data using HDFS
- Query data using Pig over Hadoop clusters

[2] Perform distributed query on TransCloud, which currently spans the following sites:

- HP OpenCirrus
- Northwestern OpenCloud
- UC San Diego
- Kaiserslautern



Demo: <http://tcdemo.dyndns.org/>