OSG Discussions with Potential Industry Partners

V2

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With thanks to Lothar Bauerdick for use of his slides from ISGC'13

and Rob Gardner for use of slides from the CIC Workshop

Open Science Grid

Objectives for discussion

- Exchange information on "what we are about"
  - Assumes some existing knowledge of each others activities
- Explore a couple of potential areas of collaboration/mutual benefit.
  - Especially understand any beneficial interaction through the STTR/SBIR program

Open Science Grid advances science through open distributed computing.

Multi-disciplinary partnership federating local, regional, community and national cyberinfrastructures to meet the needs of research and academic communities at all scales.

Project Operates high-throughput cyber-infrastructure. Provides integrated Software suite. Support consulting for users and sites.

Consortium *Includes all organizations and people who benefit from the OSG (use, supply, contribute, study etc.).*

Council *Governs the project and represents all Consortium members.*

OSG, Partners, and Industry Partners

Satellite projects

Independent activities with declared connections to OSG for mutually beneficial work. e.g. DOE ASCR funded dV/DT computer science research to provide new capabilities.

Partners

Peers in ci, science, CS. E.g. OSG as an XD/XSEDE Service Provider.

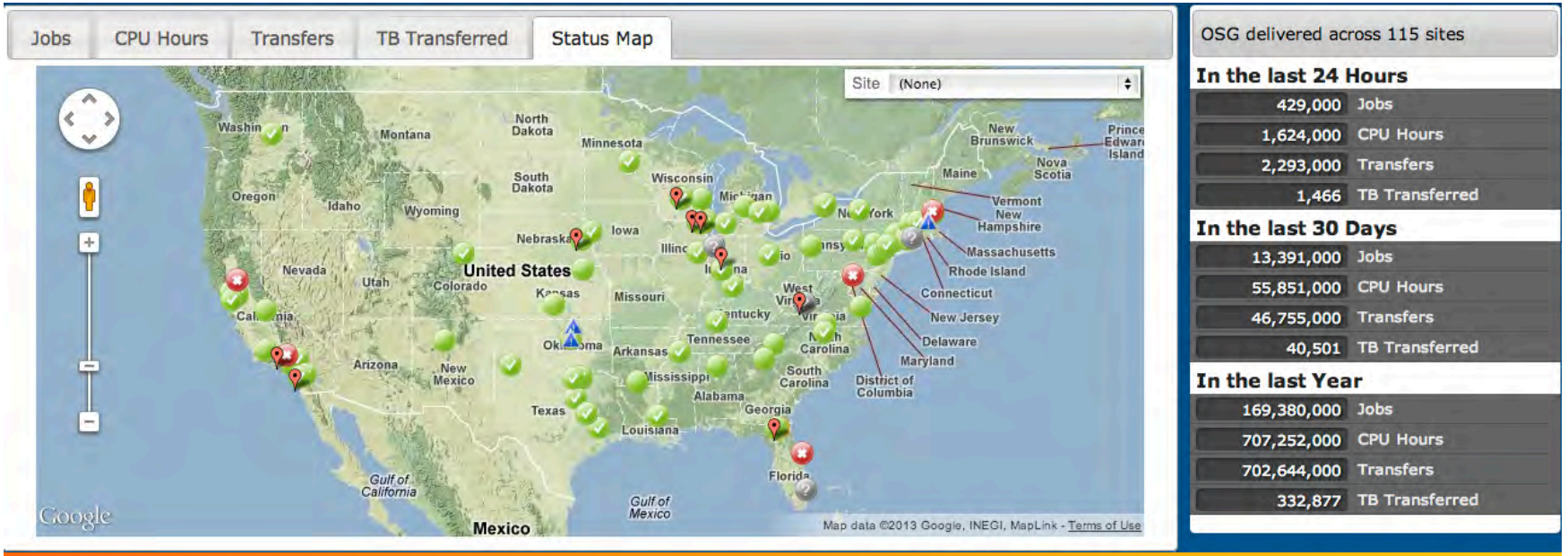
Industry Partners

New idea…open for discussion and trial

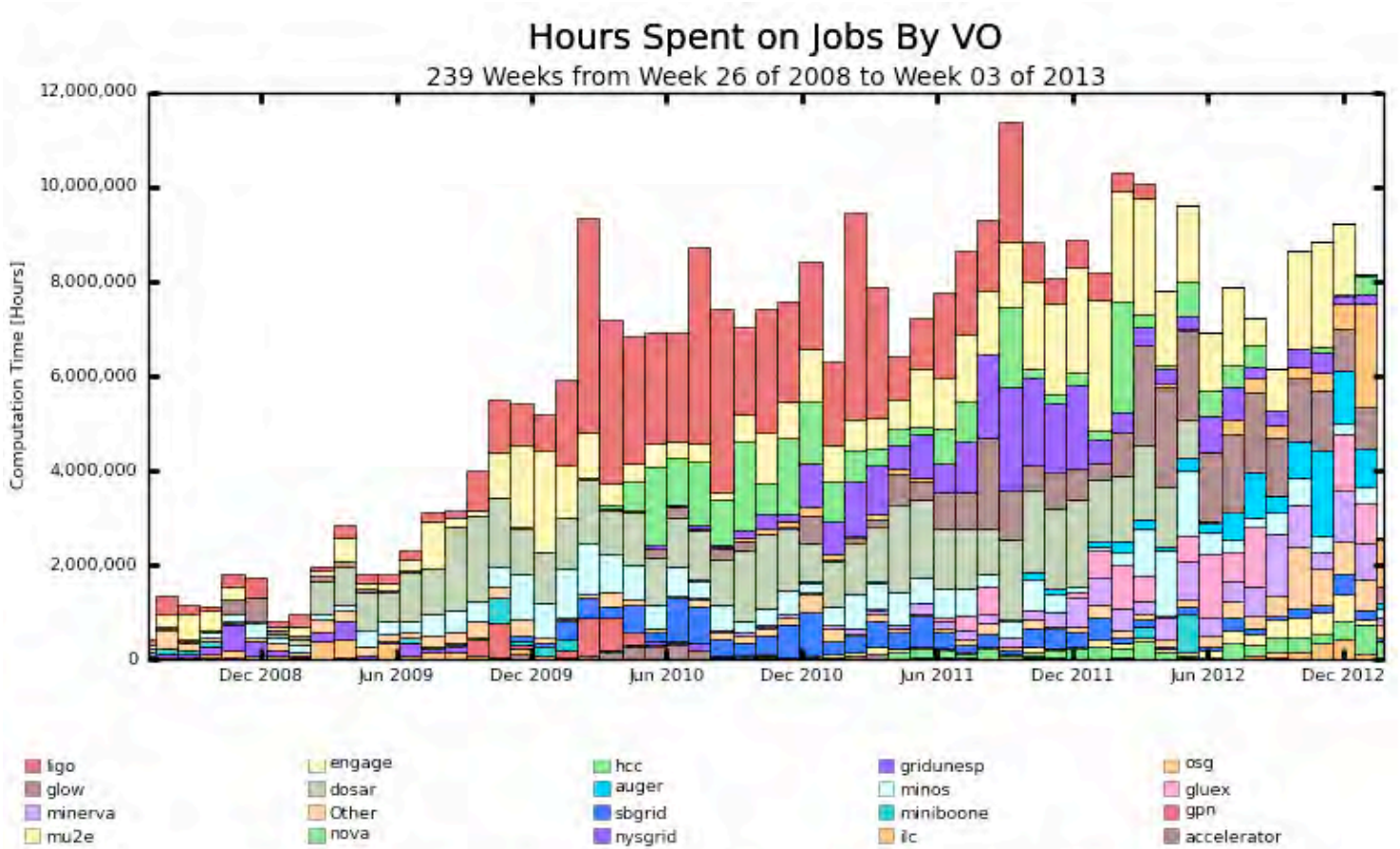
Current Usage Models

US component of the World Wide LHC Computing Grid

- ~2M Cpu-hours/day
  - 60% LHC, rest to ~20 other physics and non-physics users
- ~1 Petabyte/day data movement
- ~100 Campuses

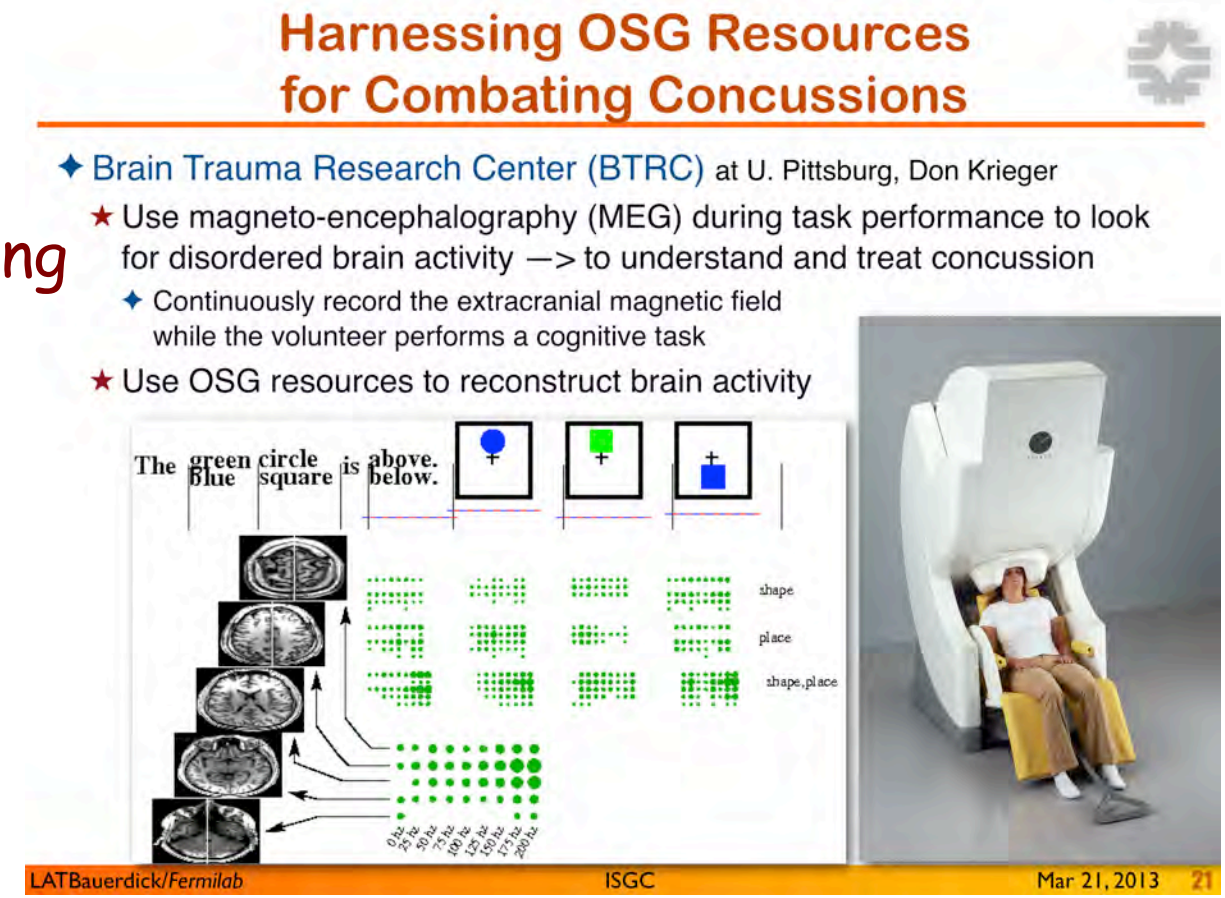


Not Only the LHC
in 2012 ~100M cpuhours for ~20 other communities.

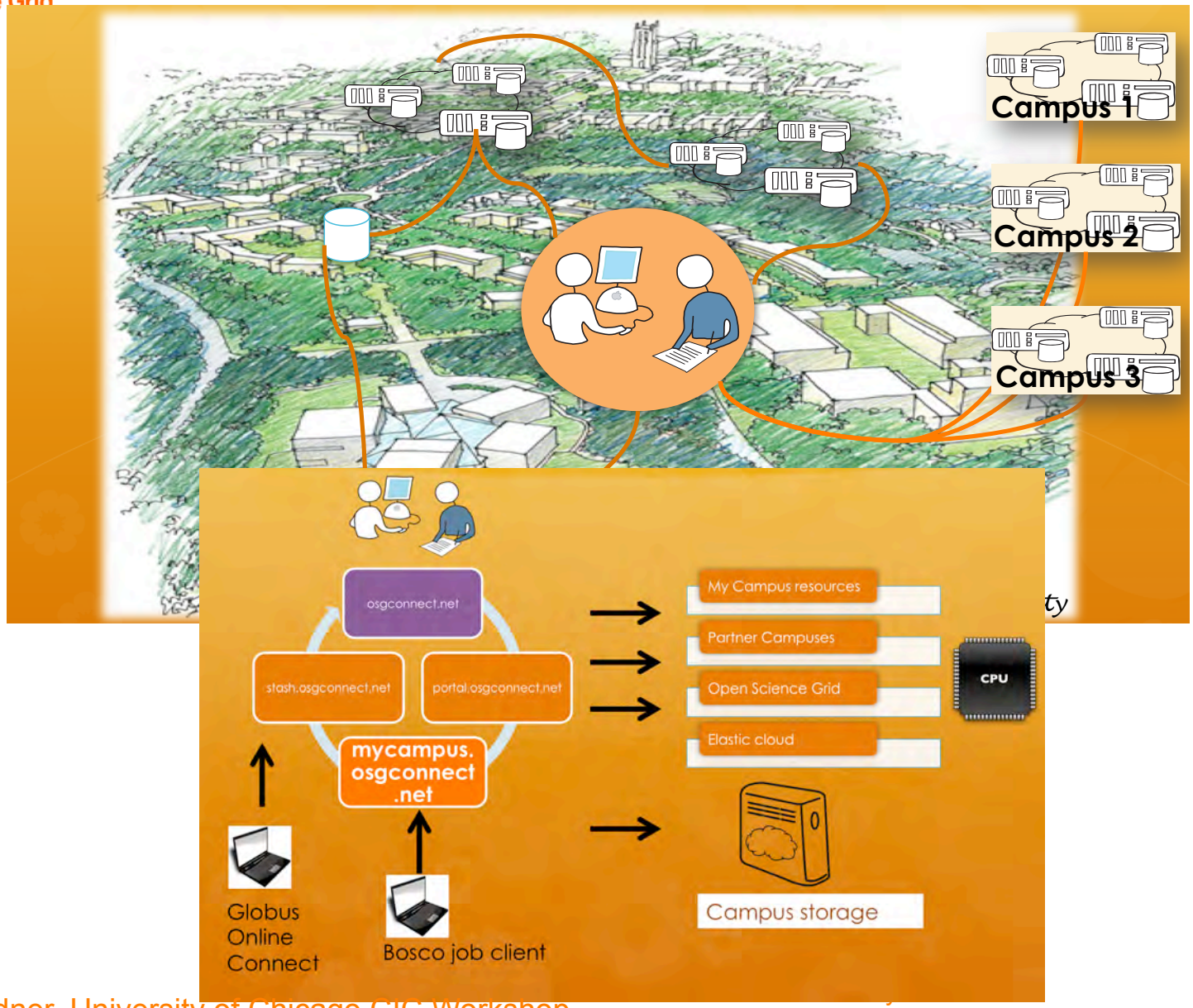


Example of non-physics user, approaching OSG through XSEDE Allocation request

Request increasing to >10M CPUhours/year for this single user.



Campus Connections - focus in FY14/FY15



Other current areas of work

Access to resources through cloud interfaces.

Explore new models for authentication and authorization.

Extend existing pilot to full use of multi-core and HPC.

Provide transparent federated data management for all types of resources.

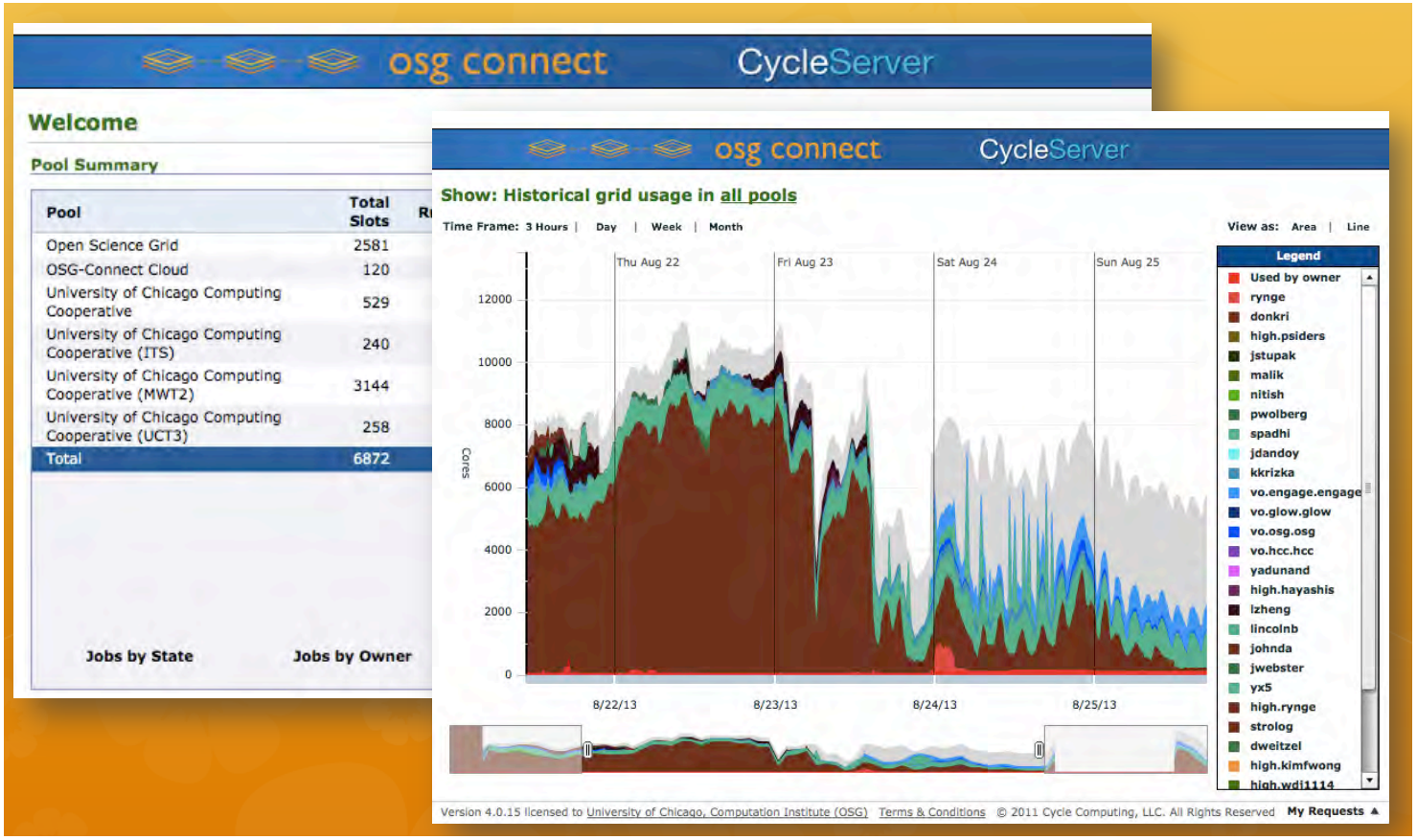
Support for production use of virtualized resources.

Sustainability of open source software, including "orphans"

Potential Industry Partnerships

OSG contract to DigiCert for X509 certificate issuance a first example of depending on commercial operations services

Individual Site usage of Cycle Server for monitoring and troubleshooting



Increased encouragement to explore potential of SBIR/STTRs

Offers opportunities to extend and evolve to mutual benefit.

Today's meeting to explore the possibilities of these by engaging with several potential industry partners.