Where to go and what to do next — OSG, resources, help, mentors
Thursday afternoon, 4:30pm
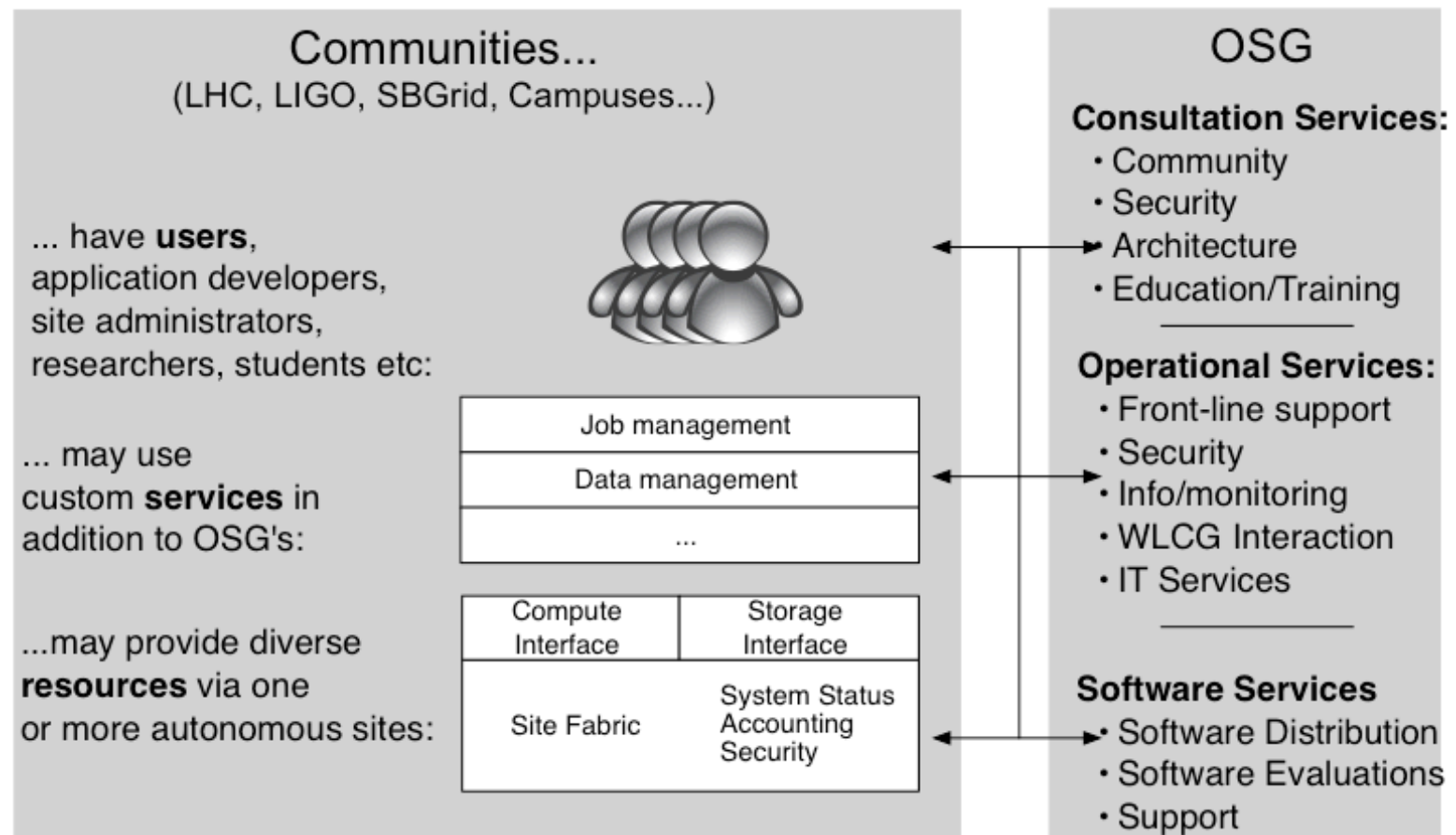
Jim Weichel <jweichel@fnal.gov>

OSG Special Projects

Fermi National Laboratory, University of Florida

Open Science Grid

- We are a community and people are available to help do science with DHTC

- A consortium of users, resource providers, and software providers

- We are Open – available to people to use resources, contribute resources, contribute solutions and software, form virtual organizations ….
  - Members maintain local authority on their resources
  - Interwork with EGI (Europe), NGDF (Nordic), TeraGrid (US)

OSG

Communities...
(LHC, LIGO, SBGrid, Campuses...)

... have **users**,
application developers,
site administrators,
researchers, students etc:

... may use
custom **services** in
addition to OSG's:

...may provide diverse
resources via one
or more autonomous sites:

| Job management |
| Data management |
| ... |

| Compute Interface | Storage Interface |
| Site Fabric | System Status Accounting Security |

OSG

Consultation Services:
- Community
- Security
- Architecture
- Education/Training

Operational Services:
- Front-line support
- Security
- Info/monitoring
- WLCG Interaction
- IT Services

Software Services
- Software Distribution
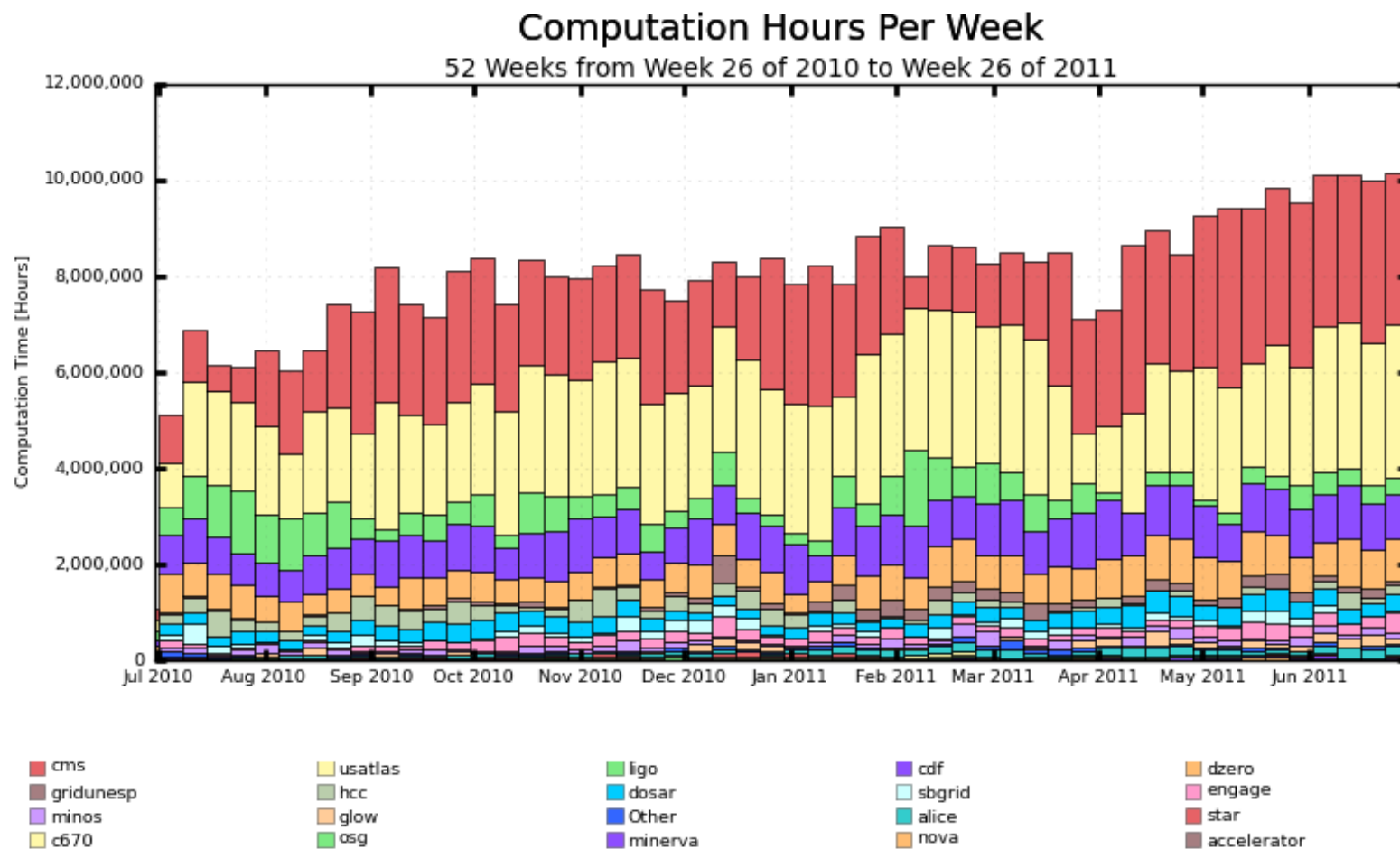- Software Evaluations
- Support

There is a sharing of software, operational services,
and knowledge between the communities
and OSG in each of these areas.

OSG Facts

- ~70,000 cores accessible
- ~29 Petabytes addressable storage
- Move 0.6 Petabytes/day, peaks 1.2 PB
- Users consume >1.3M CPU hours/day
- ~400,000 hours/day are opportunistic
- Includes 9 campus grids

OSG Usage

Computation Hours Per Week
52 Weeks from Week 26 of 2010 to Week 26 of 2011

Legend: cms, usatlas, ligo, cdf, dzero, gridunesp, hcc, dosar, sbgrid, engage, minos, glow, Other, alice, star, c670, osg, minerva, nova, accelerator

Maximum: 10,149,325 Hours, Minimum: 1,073,883 Hours, Average: 7,989,502 Hours, Current: 10,149,325 Hours

OSG in North America

OSG in South America

OSG in Asia

For Universities – Campus Grids

- Enable campuses to distribute workloads throughout the campus and to OSG
  - Campus credentials for campus access, grid credentials enable OSG access with same job submission framework

- Uses
  - Condor Flocking
  - Campus Factory Overlay using glideins

- Email: campusgrids@fnal.gov

- Info: https://twiki.grid.iu.edu/bin/view/CampusGrids/WebHome

Keep in Contact

- TG11 – more later

- All Hands Meeting (AHM) – Mar 19-22 in Lincoln, NE – Participate in a session highlighting your work and use of HTC

- Condor Week – May 1-4 in Madison

- Subscribe to iSGTW for interesting updates on science using distributed computing – www.isgtw.org

- Mentors – more later

Final Assignment

- Write how you will apply what your learned this week to your science/computational problem.
  - Due: End of July
  - Send to: Tim cat@cs.wisc.edu, copy your Mentor
  - https://twiki.grid.iu.edu/bin/view/Education/ OSGSS2011Assignment

- Might leverage this to make a poster for TG11
  - Poster becomes the assignment
  - Contact Laura McGinnis lfm@psc.edu by July 8th, copy Tim, Jim, and Mentor
  - Maximum 4' x 4' poster

TG11

- July 17-22, 2011
- Exciting Technology and Science Program
  - July 17-22, 2011, Salt Lake City
  - https://www.teragrid.org/web/tg11/program/schedule
- Many of you are attending & I will also, including tutorials on Monday
  - We can meet for dinner on Monday night
  - Or arrange to meet at the reception Tuesday

Mentors

Each of you will have a Mentor

- Mentor should work with you on how he can best help

  - Use email, periodic phone call ….
  - Mentor can help link you to the right person
  - We plan a conference call in October with you and the mentors

Help When You Get Home

- ## Mail Lists
  - gridschool-2011@opensciencegrid.org will still exist
  - vdt-support@opensciencegrid.org (software support)
  - goc@opensciencegrid.org (operations center)
  - sites@opensciencegrid.org (setting up sites)

- ## Useful Websites
  - www.cs.wisc.edu/condor Condor homepage
  - www.cs.wisc.edu/condor/manual Condor manual
  - www.opensciencegrid.org OSG homepage
  - twiki.grid.iu.edu OSG Collaborative site/Documentation
  - https://myosg.grid.iu.edu/about OSG Information Source (VOs, Resource Status, Status map, Usage, etc.)

- ## People and Mentors

Mentor Assignments

Ahmed	- Tim	Inna	- Alain
Alain	- Zach	Javier	- Tim
Alexey	- Alain	Julio	- Igor
Amos	- Jim	Kartik	- Brian
Daniel	- Igor	Ray	- Igor
David	- Brian	Seo-Young	- Tim
Diego	- Tim	Terry	- Jim
Dima	- Brian	Wayne	- Brian
Dipongkar	- Alain	Weiwei	- Jim
Eduardo	- Igor	Yanli	- Tim
Erich	- Jim	Yao	- Zach
Haiyang	- Alain	Yasi	- Zach
Igor	- Zach		

Also in Student List: https://twiki.grid.iu.edu/bin/view/Education/OSGSS2011Students

We hope you enjoyed the learning!

Please continue to work with us

- Do and/or support research

- Use our software

- Use our resources

- Contribute to our collaboration and team

- We look forward to supplying new solutions based on your needs

Questions?

- Questions? Comments?
  - My contact info:

    Jim, jweichel@fnal.gov, jdweichel on AIM, jweichel on Skype