

OSG Operations and Interoperations

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Open Science Grid Operations
Center - Indiana University

EGEE Operations Meeting

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Outline

- How We Operate
- How We Interoperate
- What We Still Need to Do



The Open Science Grid Operations Center (GOC)



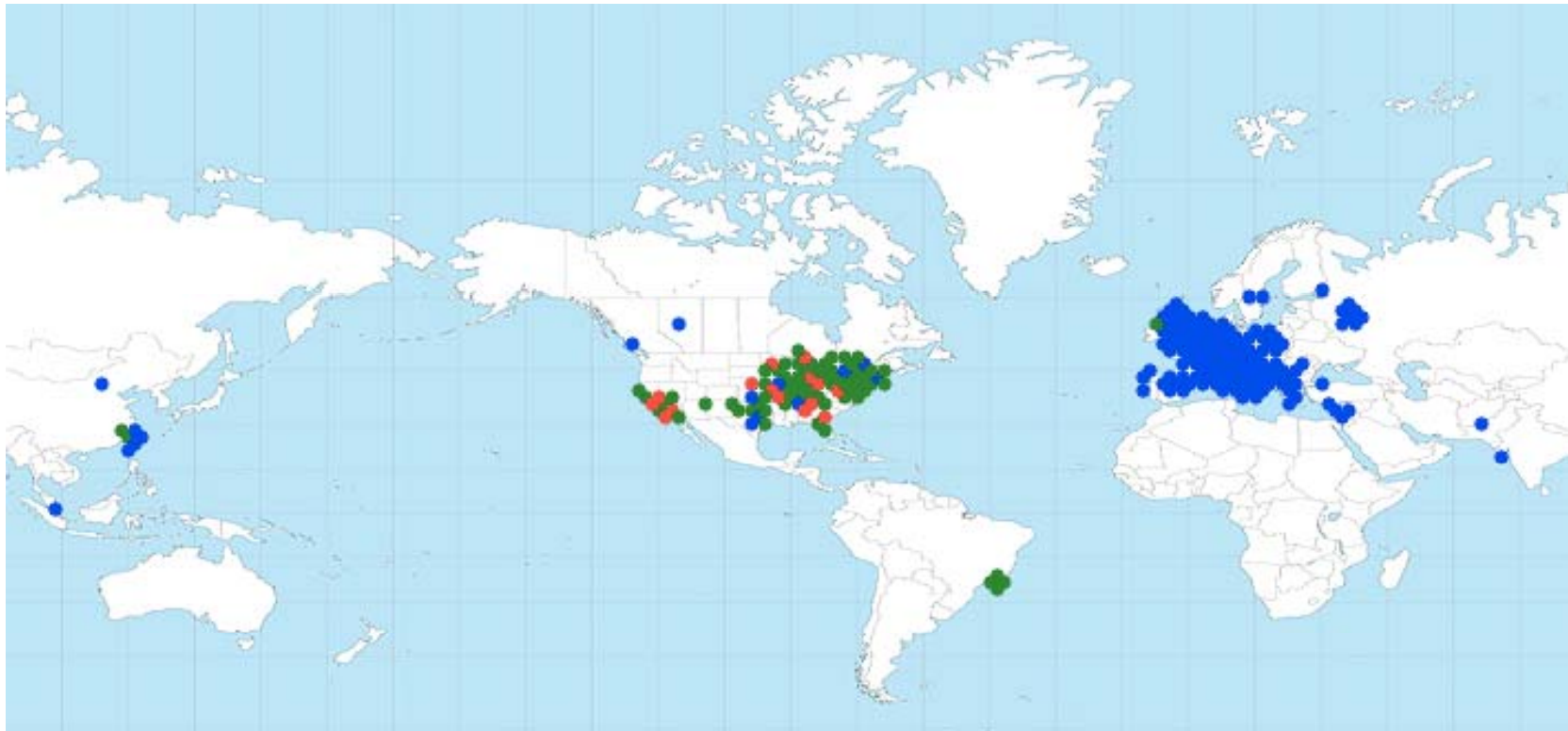


The Open Science Grid Operations Center (GOC)

- Critical Service Support
- Communication Hub
- Security Incident Response
- Provide Software Caches
- Coordinate Grid Wide Policy
- Problem Tracking and Resolution

Critical Services

- Virtual Organization Resource Selector (VORS)



Other Existing Information Services

- CEMon/BDII Integrated Server
- VOMS Monitor
- GIP Validator
- Gratia Account Data (FNAL)
- GridCat (Deprecated with Next Release)
- MonALISA (Deprecated with Next Release)
- Duplicated for Integration Test Bed

Other Infrastructure Services

- VOMS (Infrastructure and Small VOs)
- Site Maintenance Tool
- Registration Database
- Critical Service Monitoring (Nagios)



OSG Communication Hub

- Trouble Ticketing System (Footprints)
- 24x7 Trouble Reporting and Ticket Creation
- OSG Twiki
- RSS Operations News Feed
- GOC Information Web Pages (www.grid.iu.edu)
- Weekly Operations Meeting (WLCG and OSG)
- Various Mailing Lists (osg-operations@opensciencegrid.org)

Security Response

- Technician on-call 24/7/365 to evaluate security incidents.
 - Critical Incidents are Immediately Addressed with OSG Security Officer
 - security@, incident@, abuse@
opensciencegrid.org
 - 24/7/365 phone availability

OSG Software Cache

- OSG and ITB Caches
 - Compute Element
 - Configuration of Condor, PBS, LSF, SGE
 - Worker Node Client
 - Client
 - VOMS
 - GUMS
 - Patches and Optional Components
 - Coming Soon GOC Developed Packages Including Monitoring Probes



Coordinate OSG Wide Policy

- Standard Operating Procedures
- Administrative Registration Information
- Policy Enforcement





Problem Tracking and Solution

- OSG Ticketing System
 - All Problems that cross out of a VO get ticketed. This includes peering grids (EGEE).
- GOC Operators follow up on all tickets to assure acceptable solution is found.
- Automated Exchange of tickets with some Larger VOs, Service Providers, and Peering Grids.

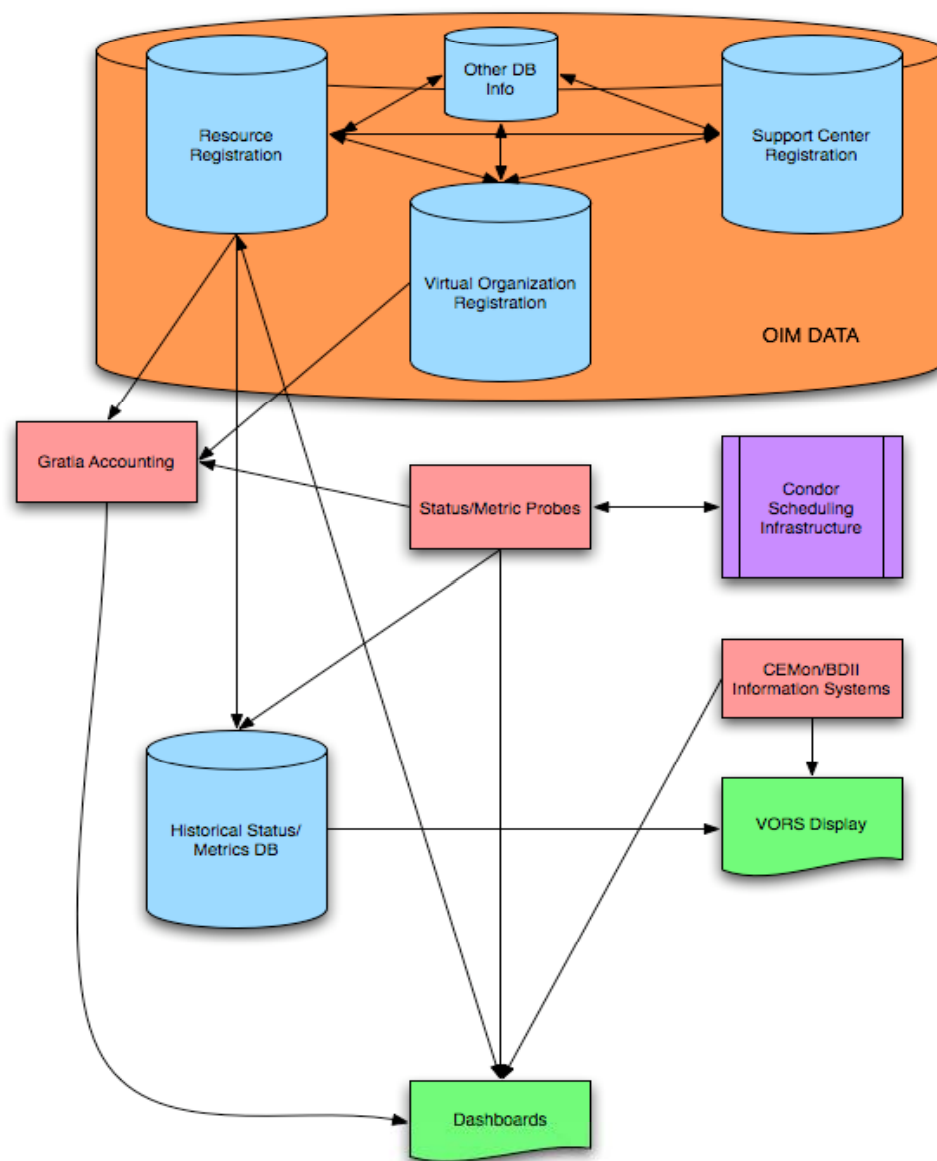
The Near Future for the OSG GOC

- Site Availability and Validation Project
 - Focus on Getting Site Administrators Involved and Feeling Responsible for Maintaining a “Good Site”
 - Series of probes based on standards of Grid Monitoring Working Group
 - Probe data will eventually feed VORS and SAM
 - Infrastructure being developed



OSG Information Management Project

- Consolidating Information Within the OSG
- Schema Being Developed
- Data Will Feed OSG Monitoring Tools (VORS, Information and Accounting Services)
- Project Includes Dashboards for Site Admins, Operations, VO Admins, and Others Views yet to be defined



Other Projects

- Redundancy of Critical Services (Indianapolis and Bloomington)
- Ticket Metrics and Trending
- Smooth VO Additions
- Defining a “Good Site” and getting Site Admins interested in maintaining one
- Syslog-ng central log collection

Interoperability

- Trouble Ticket Exchange with GGUS is in place.
 - This has been in place ~1 year, time to revisit and add more functionality?
 - Automatic routing to proper OSG Support Center
 - Increased Reliability
- Weekly WLCG Operations Call
- Joint WLCG Operations Meeting

OSG Site Reporting to WLCG SAM

- Probe data exchange being discussed by Grid Monitoring Working Group
- Testing of Data Gathering and Exchange to be tested on next OSG ITB Release
- Reverse Flow of Status Data (Display in VORS?)

Critical Services

- Virtual Organization Resource Selector (VORS)



What Next?

- We communicate on an administrative and operational level...
- We exchange trouble tickets...
- We will exchange status data...
- None of these things make us interoperable!
- Do we want jobs running cross grid boundaries?

Thank You

- Special Thanks GOC Team: John Rosheck, Tim Silvers, Kyle Gross, and Arvind Gopu
- www.opensciencegrid.org
- www.grid.iu.edu