SCIENCE/PROJECT ACCOUNTING





Project Name for XSEDE

- Requested by OSG to monitor and report XSEDE allocation usage
- Supported on osg-xsede submission node:
 - The condor wrapper script that rejects any job that doesn't provide a valid project name developed by Mats Rynge
 - Login banner that provides a reminder:

```
You have an active project you can charge jobs to.

Project Name
Balance (CPU Hours) End Date
------
OSG-Staff
46847 Never

When submitting jobs, please specify what project to charge to with a +ProjectName line in your HTCondor submit file. For example: +ProjectName = "OSG-Staff"
```

- Condor Gratia Probe is:
 - configured to with VOOverride="OSG"
 - reports ProjectName and ResourceType="BatchPilot"
- Gratia Collector accept JobUsageRecord with ProjectName and use ProjectName for summarization (in production since Feb 2013)
- GratiaWeb allows to query Gratia by ProjectName (see http://gratiaweb.grid.iu.edu/gratia/project)

Who needs Science Field/Project Name Accounting?

- Fermilab
- Nebraska
- OSG
- Campus Grid

Requirements (so far)

- Registration service that allows to register a PI, Institution Affiliation, Science Field
 - requests approval from GOC(?)
 - generates an unique Project Name. A ProjectName corresponds to a PI and could be shared by multiple users working on the same project.
 - doesn't require a certificate for registration
 - provides means to enter publication links
 - provides API to access information

Campus Grid:

- Registers with OIM, provides VOOverride info
- Runs gratia condor probe on submission node with VOOverride set to VO identified in OIM. This will tag all the records as coming from that submit host and allow gratia queries to zoom in on the records of interest for that Campus (or community)
- Campus Grid that is serving multi-science community may request to add ProjectName in users' job submission file (see osg-xsede)

Gratiweb enhancement:

- Sites should be able to see what science is being supported at their sites.
- Campus users should be able access the information related to their jobs (VOOverride and Project Name)
- Add a query to the registration service to correlate ScienceField and PI with a ProjectName

Open issues

- Should we enforce usage of ProjectName for multiscience? The incentive will be better accounting but will that be enough?
- Semantic of Project Name (e.g xsede is using TG-)
- Rob Gardner wants to have accounting at the user level. For users without certs this information only available at the JobUsageRecord and will put a huge load on the gratia database node. Should campus have a local collector in this case and forward summary records to OSG?

Efforts

- Tanya will lead the project but doesn't have any development efforts.
- Will GOC provide the development efforts for registration service and run the service (Chander suggestion)
- The development efforts for gratia web should come from Nebraska.