



How to choose an OSG Site

Michael Kirby
FIFE Workshop
20th-21st June 2016

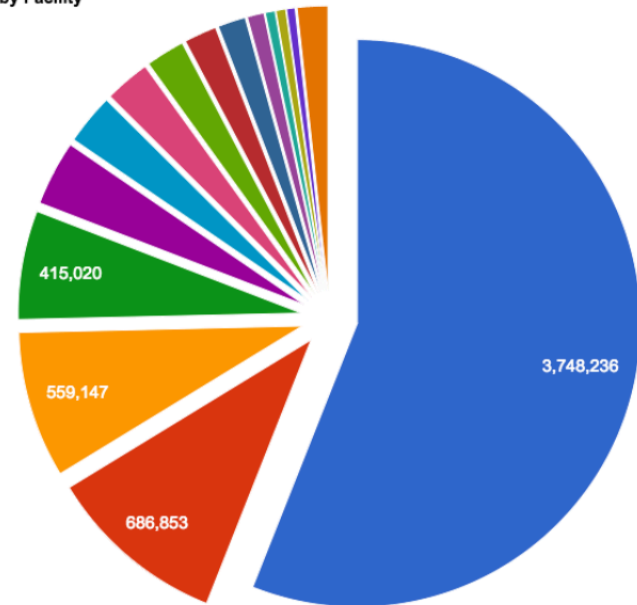
Primary advice

DON'T

Why you shouldn't choose an OSG site

- The point of the OSG is that you can advertise your needs
- You don't want to keep track of 15 different sites
- If you pick a site, it may be busy and you have to wait days for access
- FIFE/OSG Ops groups are monitoring remote sites for downtimes and blacklisting them
- FIFE/OSG Ops groups will also whitelist remote sites when they become available again
- FIFE group will integrate new sites you may not know about

NOvA Wall Hours by Facility



What resources does an OSG site have?

- You're asking the wrong question...
What resources do my jobs need?
- Memory footprint of job? (default is 2000 MB != 2 GB)
- Local working disk space? (default is 35 GB == 35 GB)
- How long will the jobs run? (default is 8 hours)
- All sites provide access to CVMFS code distribution
- **Information on OSG Sites**

Site Name	--site option (sorted)	Supported Experiments	Known limitations	Estimated maximum job lifetime
Brookhaven National Laboratory	BNL	All	jobsub defaults are OK	24 h
Caltech T2	Caltech	All	jobsub defaults are OK; can go up to --memory=3000MB	25 h
Clemson	Clemson	All	jobsub defaults are OK	24 h
Cornell	Cornell	All	jobsub defaults are OK	unknown
GPGrid	FNAL	All+CDF+LSST+D0	new GPGrid accessed via FNAL Feb 2016, but job could end up on CMS T1 Can get up to --memory=16000MB	96 h

What else do you need to know?

- Specify what you really need!!! Cannot emphasize this enough – saying you need 8 hours when you never run over 30 minutes is extremely limiting
- Understand that some sites may preempt jobs and some sites don't support all VOs
- Should incorporate mechanism to recover from those into workflow – SAM has recovery datasets that are easy to use
- Some worker nodes are “SLF6” nodes with 3.x kernels – we can teach you how to fix the UPS setup to override this
- Need to make sure your software runs on a bare OSG node – utilize gpgtest.fnal.gov to test your software
- Example - Know that there are X11 libs not installed you might need for larsoft or root

How best to utilize the OSG?

- Be greedy and ask for resources from everyone!
- Make sure to specify what you need
- Design your workflow to be flexible and site agnostic
- Let FIFE and OSG take care of adding and removing sites
- But also let us know when a site “misbehaves” or falsely advertises
- We’ll deal with them...

