



WLCG Needs from OSG

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Status

CMS just completed Computing Software and Analysis Challenge 2006 (CSA06)

- ➔ 25% of scale for many of the computing system components

ATLAS has been performing transfers at an even higher scale

Both groups will continue to attempt to improve the performance and efficiency of transfers between tiers over the first half of 2007

- ➔ OSG WBS item 1.1.5.1.6
- ➔ Ensure a smooth transition to SRM V2.2 SE on the OSG sites
- ➔ Ensure continued interoperability of SRM V2 on EGEE SEs
- ➔ OSG sites downloading data from EGEE sites will be expected to use FTS to access the remote resources
- Ensuring the needed components of the gLite client tools are available to initiate FTS transfers
 - This is an issue for the OSG Tier-2 centers for CMS, but potentially a larger issues for the Tier-3s
 - Work with EGEE to establish a scalable solution



CMS Processing Activities

One of the successes of CSA06 was the demonstrated ability to reach 55k job submissions per day using a combination of Condor-G and the gLite WMS

- ➔ We need to ensure that the gLite bulk submission is interoperable with OSG sites
 - Information provider
 - ensure reliability
 - Interface effort
 - ensure the components remain interoperable
- ➔ From the user perspective the worker node environment important
 - CMS uses a very limited set of the gLite client functionality
 - Basically the components for copying individual files to user specified CE
 - srmcp is supported, but for some classic SE we still make use of components like lcg-cr
- ➔ CMS has an additional factor of 2 in submission rate before the summer. Making sure gatekeepers will scale (WBS 1.3.2.1)



Opportunistic Computing

CMS would like to ramp up opportunistic access to non-CMS provided centers for simulation production

- ➔ The production infrastructure relies on the presence of a local storage element for output results
- Final data products are exported from the site to a Tier-I center for archiving
 - It would not be impossible to export the intermediate data products, but it would be an inefficient use of the network since the file size is small
- CMS will start pile-up production at sites.
 - The pile-up sample needs to be served from a local SE
- ➔ The centralized installation of the CMS software in the \$app area is reasonably well automated
- Continued access to ~5GB of space accessible from all worker nodes is required.



General Services

Over the first few months of 2007 CMS will be attempting to more scientifically monitor the performance of the sites

- ➡ We will define a set of CMS specific metrics and insert these into the WLCG SAM infrastructure
 - Monitor the individual site performance
 - The tests will be CMS workflows
 - We would like to monitor the metrics on the OSG sites in the same way of the EGEE sites
 - Information system and interoperability work

Accounting of resources at Tier-2 centers will be increasingly more important

- ➡ CMS will be pushing more analysis work down to Tier-2s
 - Allowing us to demonstrate delivered computing will be important