

OSG Technology Plans and Direction

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Outline

- Activities and Rationale
- Updates since last AHM
 - Blueprint May 2010
 - Campus CI Blueprint October 2010
 - Blueprint November 2010
- Example Idea Lifecycle
- Future Plans
- References
- Questions/Discussion

Blueprint/Technology Activity

- Flexible forum for brainstorming the evolution of the OSG design/architecture.
- Closely related to Technology Investigations (Brian, Igor, and Alain)
- Maintain a “Blueprint” document clarifying OSG principles, design, and implementation.
- Formally an advisory group to OSG Technical Director (Miron)
- Core participants are Miron, Ruth, Brian Bockelman, Alain Roy, and myself, with input from a dozen others.

May 2010 Blueprint

- Relatively small: Alain, me, Ruth, Miron, Dan, with visits from M.Ernst,J.Caballero,T. Cartwright, B. Holzman.
- Primary Topic: Configuration Management
 - Integration with native packaging.
- Secondary Topics:
 - CEMon/CEMon collector/BDII issues with publishing to WLCG.
 - Submit hosts as first-class node types.

Campus CI Blueprint Meeting

- Organized by Dan Fraser
- Focussed on providing the means for seamless access to Campus-based clusters and OSG-based resources.
- Active efforts and demonstrators currently in place to permit intra- and cross-campus resource sharing via Condor flocking.
- More Tuesday in AM.

November 2010 Blueprint

- Larger meeting (>12 people)
- Wide range of topics:
 - OSG-based Global BDII
 - Information system future
 - Generic data management for non-HEP VOs.
 - Various Testing issues
 - Path(s) to Cloud Computing on OSG
 - Future ID management

Example Idea Lifecycle

- Someone (VO member, OSG personnel, etc) says “What about external testing of my site?”
- We discuss it at a Blueprint...
 - VOs have the ability to set up a global RSV system now. But what about smaller VOs?
 - Miron: Can/Should OSG provide system platforms for VOs to use?
 - Somebody else says “Maybe pre-made RSV-installed VMs would make this easier.”
- Miron suggests to Rob Q. that he investigate the feasibility of providing VM-based instances at the GOC.
- He reports back, and further discussions determine if more effort is justified. Etc...

Recent/Ongoing Work

- Rewrite OSG Blueprint document as a reference for the OSG' proposal (Brian B.)
- Refine diagrams of various components and interactions.
- Various action items from November Blueprint:
 - Global OSG BDII rollout at GOC.
 - Stand-alone VDT Squid and Condor support for cached stage-in.
 - Gratia multi-tier functionality.
 - GOC-based VMs for external testing.
 - CILogon-compatible LDAP for OSG?

Future Plans

- The Blueprint document will now be considered “living”.
- More interaction between Blueprint and Technology Investigations.
- Continued prototyping at Nebraska.
- Beginning of technology investigations at BNL.

References/Links

- <http://twiki.grid.iu.edu/bin/view/Blueprint/WebHome>
- <http://twiki.grid.iu.edu/twiki/pub/Blueprint/BlueprintNovember/blueprint-november-2010-minutes.pdf>

Questions, Discussion, Get Involved

- What novel directions, if any, do you hope/expect OSG to take? Which are more important? E.g.,
 - Cloud Computing /VMs
 - Native Packaging/Configuration Management?
 - Federated identity management/auth (CILogon, OpenID, portals?)
- Anyone with interesting ideas is encouraged to get involved.