

Minutes  
MAGIC Meeting  
March 4, 2009, 2:00-4:00  
NSF, Room 1160

**Attendance:**

Doug Baggett	NSF	<a href="mailto:dbaggett@nsf.gov">dbaggett@nsf.gov</a>
Frederica Darema	NSF	<a href="mailto:fdarema@nsf.gov">fdarema@nsf.gov</a>
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David Martin	IBM	<a href="mailto:martinde@us.ibm.com">martinde@us.ibm.com</a>
Grant Miller	NCO	<a href="mailto:miller@nitrd.gov">miller@nitrd.gov</a>
Mike Nelson	GU	<a href="mailto:mnelson@pobox.com">mnelson@pobox.com</a>
Susan Turnbull	DOE/SC	<a href="mailto:susan.turnbull@ascr.doe.gov">susan.turnbull@ascr.doe.gov</a>

**Action Items**

1. Grant Miller will facilitate the development of calendaring for MAGIC events.
2. MAGIC participants should indicate who they would like to present to the MAGIC meetings.

**Proceedings**

This meeting of MAGIC was chaired by Susan Turnbull of DOE

**Grid Rapid Application Virtualization Interface (gRAVI)**

Ravi Madduri gave a presentation on the gRAVI service. Service-Oriented Science enables people to create services (data, functions) that other people can discover and use to develop a new function/application that can then be published as a new service. The service oriented platform hosts services so users do not have to become experts in operating services and computers. The service manages critical functions including security, reliability, scalability, version control and other capabilities.

Introduce is a framework that enables creation of Globus-based Grid services. It provides a user-friendly graphical service authoring tool and hides the Grid nature of the application from the user. It uses a best-practice layered Grid service architecture and integrates with other core Grid services and architecture components such as:

- GAARDS Security infrastructure
- Globus Index Service
- Global Model Exchange
- Cancer data standards repository
- It provides an extension framework for integrating with other architecture components

Introduce supports features including:

- Advertisement (to enable discovery)
- Discovery
- Invocation

- Security
- Stateful resources

GRAVI builds on Introduce by:

- Defining the service
- Creating a skeleton
- Discovering type
- Adding operations
- Configuring security

Discovering services include:

- Access to billions of services
- Semantics
- Permissions
- Reputation

GRAVI has been used to support the cancer BioInformatics Grid (caBIG). gRAVI uses JDSL for application description. It generates a method on the generated service; generates an implementation, and uses the bootstrap community credential to run the application as a Grid program.

Lessons learned indicate the gRAVI is a good way to build a sustainable infrastructure. It works well with existing IT infrastructure. It enables workflows and is scalable. Provenance is an important attribute in the bioinformatics field. Vendor lock-in should be avoided and it can be avoided.

gRAVI researchers will be carrying out outreach to user communities such as Oak Ridge National Laboratory and NERSC. gRAVI will be considering developing an improved discovery service including resources from additional groups and agencies.

The full briefing on gRAVI may be found at:

[http://colab.cim3.net/file/work/rm/Madduri\\_gravi\\_03\\_03\\_09.ppt](http://colab.cim3.net/file/work/rm/Madduri_gravi_03_03_09.ppt)

## **Grid Roundtable**

### **CEDPS**

Susan Turnbull visited the CEDPS facilities and helped the CEDPS project identify opportunities to work with SMS and new use cases from the NERSC community.. SMS just started up and provide and will provide a briefing on their activities at a later date. They are working with the ABS researchers.

### **Open Science Grid (OSG)**

Their annual meeting began today. They will be holding a series of workshops on virtualization and data management to try to bring in large user communities such as Atlas and CMS.

AAAS Meeting in Chicago had 80-100 attendees at a panel on Grid and Cloud Computing that had presentations from Rick Stevens, Mike Nelson, Ian Foster, and Tom DeFanti. Extensive discussion focused on how you secure cloud resources. Next year

the AAAS meeting will be in San Diego. They are soliciting for ideas to present. (Contact Mike Nelson).

### **SAML/Shib**

There are now 3 million users in In/Common at 125 universities and 37 additional universities plan to join by the end of April. The ACT Transition report discusses ID management in government. GSA will be holding a workshop this fall on attributes focused on Principle Investigators to identify if there is a common basis for reporting on research.

IETF asked Shibboleth if they can include OpenID. GENIE testbeds plan to be open to international researchers but how do you secure their privacy. Several commercial providers have indicated that if the government takes a presence in ID management, the commercial sector will adopt it.

The National Research Council is addressing how you control access to research data in a very fine-grained approach.

### **ESG**

The Earth Systems Grid is developing testbed gateways for laboratories. They have a target of June/July 2009 as a major milestone. Data versioning is being discussed.

### **Meetings of Interest**

March 11: NITRD Subcommittee meeting at NIST

April 6-8 at NIST, Interoperability conference focused on metadata.

April 14-16 NIST conference on federated ID sponsored by OASIS, NIST, and Internet2

April 14-16 ESnet workshop to identify user requirements, particularly for the OSCARS environment

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### **Next MAGIC Meetings**

April 1, 2:00-3:30, NSF, Room 1150

May 6, 2:00-3:30, NSF, Room 1150