MAGIC Meeting Minutes
January 6, 2016

Attendees

Bob Bohn	NIST
Rich Carlson	DOE/SC
Wo Chang	NIST
Jill Gemmill	Clemson
Dan Gunter	LBL
Shantenu Ja	Rutgers U
Dan Katz	NSF
Miron Livny	U. Wisconsin
Dave Martin	ANL
Grant Miller	NCO
Derek Simmell	PSSC
Frank Wuerthwein	UCSD

Action Items

1. Grant Miller will send the MAGIC members the Draft Charter for MAGIC for their review. MAGIC members will provide comments on the Draft Charter.

Proceedings

The meeting was chaired by Rich Carlson, DOE and Dan Katz of the NSF. Bob Bohn of NIST presented NIST Cloud Computing programs. Wo Chang of NIST presented NIST Big Data programs

NIST Cloud Computing programs: Bob Bohn

NIST's goal is to accelerate the Federal government's adoption of cloud computing by building a USG Cloud Computing Technology Roadmap and by leading efforts to develop standards and guidelines. NIST starts from a NIST definition of Cloud Computing (SP 800-145) and a reference architecture for cloud computing.

NIST defines cloud computing as "a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers,storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction." There are 3 service models (SAAS, PAAS, IAAS), and 4 deployment models (public, private, community, hybrid). There are 5 essential characteristics (on-demand self service, broad network access, resource pooling, rapid elasticity, and measured service).

Building a roadmap engaged industry, academia, government agencies, and several public working groups. The roadmap contains 10 requirements and priority action plans and technical output for the public working groups. The requirements contain standards, security, technical specifications, categorized cloud services, frameworks, organization policy, and other requirements (See NIST SP 500-293). The cloud computing reference architecture defines roles for the cloud consumer, cloud auditor, cloud carrier, cloud provider, and the cloud broker. Security and privacy are the responsibility of all these entities. A cloud security reference architecture is defined (NIST SP 500-299).

NIST is currently working on cloud metrics, cloud accessibility, descriptor of cloud services, SLA taxonomy development, interoperability and portability, security, and other issues. The NIST program seeks to assure reliable, trusted, and measurable cloud services as a foundational element for the global economy.

Cloud Service Level Agreements (SLAs) document technical performance promises, dispute mitigation, and performance failure remediation. Currenty no standard cloud computing contract exists.

For the complete presentation please see:
https://www.nitrd.gov/nitrdgroups/index.php?title=Middleware_And_Grid_Interagency_Coordination_(MAGIC)#title
Under the January 2016 meeting.

NIST Big Data Standardization Activities: Wo Chang

The NIST Big Data standardization activity was initiated in June, 2013. It is developing, for Big Data:

- Definitions
- Taxonomies
- Use cases and requirements
- Security and privacy requirements
- Architecture survey
- Reference architecture
- Security and privacy architecture
- Standards roadmap

NIST has established a Big Data Public Working Group (NBD-PWG) to define definitions and taxonomies, user cases and requirements, security and privacy, reference architecture, and a standards roadmap. Architectures of Big data vendors provide one basis for developing the Big Data reference architecture. The public working groups selects use cases (data sets and analytic codes) for analysis. NIST is exploring collaboration by working inclusively with industry, academic, and government groups to define common ground.

For the complete presentation please see:
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Under the January 2016 meeting.

MAGIC Charter

The NSTC has asked for all NITRD groups to be rechartered. Focus is on activities and primary interests and programs of the groups over the next two years (charters are to be redrafted every 2 years). MAGIC members are asked to review the current draft chaters for MAGIC to assure that it represents the interests of the MAGIC members and includes activities of the members for the next 2 years.

AI: Grant Miller will send the MAGIC members the Draft Charter for MAGIC for their review. MAGIC members will provide comments on the Draft Charter.

Discussion among the MAGIC members

How do we define response time in an environment where we are trying not to define terms too stringently?

Procurement of services is a big challenge. If I issue a request for resources and contract for the resources the costs may change and the resource provider may discontinue providing me with resources. If my services are terminated, is this cloud resources?

When I contract for resources, how long are they available for and under what conditions?

Next MAGIC Meeting

February 3, 2016, 2:00-4:00 Eastern, NSF Room II-575