From: MAGIC co-chairs

To: MAGIC participants

Subject: MAGIC team goals and objectives

Dear Colleagues;

The MAGIC (Middleware And Grid Infrastructure Coordination) team was established in 2002 to improve coordination activities between Federal Agencies, Academic researchers, Industry providers and scientific user communities. MAGIC, part of the NITRD structure, reports to the Large Scale Network (LSN) coordination group[[1]](#footnote-1), and thus plays an essential role is setting the national program for IT Research and Development. A key objective of MAGIC is to promote cross-agency information sharing and interactions to ensure coordinated programs and directions.

To achieve this objective, the MAGIC team endeavors to serve the various stakeholders, to increase participation by current members, and to encourage new participants to join. The MAGIC team will hold monthly telecom meetings, the first Wednesday of every month. Team members in the DC metro area are encouraged to attend the meeting in person. We will also utilize the Webex video teleconferencing tools to engage remote team members. In addition, the team will utilize the NITRD Wiki to help members prepare for meetings and the LinkedIn social media site to encourage discussions between formal meeting times. The MAGIC team will focus on 3 core elements:

1. Middleware services and tools. This element deals with the architecture, interfaces and principles of individual tools or services that can be used to simplify access to or use of the network and computers.
2. Grid and Cloud computing services. This element deals with the architecture, interfaces and principles of tools and services needed to build, operate, enhance, provision, or use scientific grid/cloud computing systems.
3. Collaboration services. This element deals with the architecture, interfaces and principles of tools and services needed to build, enhance, operate, or use distributed scientific collaboration environments.

To accomplish these goals, MAGIC team will focus on 6 organizational tasks.

1. Research Challenges. The MAGIC team will identify, discuss, and prioritize major open research challenges and themes. Members can exchange information and questions about these tasks via monthly MAGIC telecons and the MAGIC Wiki site, Members are also encouraged to join the MAGIC discussion group on LinkedIn[[2]](#footnote-2). MAGIC may also sponsor federally funded workshops to explore specific topics in depth, and facilitate joint efforts to address identified needs.
2. Standards work. The MAGIC team will encourage the development and use of current and future national/internationals standards for Grid/Cloud computing environments. These standards should describe common approaches and best practices for middleware services, schemes that define how a service works, or protocols that implement a specific schema. Specific topics include, but are not limited to, scientific grid and cloud computing, identity management, and collaboration services.
3. Information sharing. The MAGIC meetings will provide a venue for members and invited guests to share research results, report on agency programs, raise questions, and discuss topics of mutual interest. The results of this information sharing will be captured as small “micro-reports” on the MAGIC wiki site.
4. Planning and outreach. The MAGIC meetings will provide a venue for members to hold in-depth discussions on topics of interest including, but not limited to, adoption and deployment of specific tools and services across federal agencies, mechanisms for testing specific tools and services across agency boundaries, and creating or informing agency policies with respect to scientific cloud computing. MAGIC can be regarded as the US equivalent to the EEF Infrastructure Forum[[3]](#endnote-1) and promote international discussion at this level.
5. Operational infrastructures. The MAGIC meetings will allow high-level interchange of case studies and lessons learned from federal agency projects that operate large-scale infrastructures for science. In this process, MAGIC will identify needs and the potential for common approaches, especially where such exchanges can produce substantial improvements in operational efficiency, cost savings, or increased mission capability for science productivity and support.
6. Interoperability. The MAGIC team will discuss and consider recommendations to encourage interoperability between the various large-scale infrastructures that are operated by different agencies, with the goals of: a) working towards a common interface to the infrastructures, possibly through standards, allowing users to more easily use any of them; and b) moving from common approaches towards actual interoperation, to further improve the efficiency and utilization of the infrastructures.

Meeting structure:

1. MAGIC meetings will consist of 2 major parts. A business section where team members can provide an update on current activities or address issues of general interest to the MAGIC members. The 2nd section will be a guided discussion on a specific topic of interest as defined below.
2. For the 2nd section, the co-chairs will accept and/or propose the topics. Sample topics include: What are the gaps in research for fault tolerance of distributed services? What are the highest priority gaps in CI functionality needs across the members? Discuss a specific cross-agency CI technology initiative that could benefit the broader community[[4]](#endnote-2)
3. For each chosen topic, individuals and agencies will have an opportunity to summarize their position in a short response paper. These response papers will be posted on the MAGIC wiki site along with background information on the topic.
4. The co-chairs will lead a guided discussion on this topic, capturing all input from participants. The discussions will be recorded in the meeting minutes.
5. The MAGIC wiki will serve as the hub for group events and history. Agendas, minutes, discussion outcomes, and response papers will be posted on the MAGIC wiki site (rather than sent in email), and tagged according to the project[[5]](#endnote-3)they are associated with.
6. In general, project/program presentations will be kept short: 5 slides or less. On occasion, a longer presentation may be given on a matter of interest to the MAGIC team members.

By taking these steps, the MAGIC team, and its team members, will have a profound effect on the creation, operation, and development of scientific computing environments. Please make your voice heard and make future MAGIC meetings valuable.

Co-Chairs

Gabrielle Allen (NSF – OCI)

Richard Carlson (DOE SC-ASCR)

1. http://www.nitrd.gov/subcommittee/lsn/magic/index.aspx [↑](#footnote-ref-1)
2. http://www.linkedin.com/groups/NITRD-Middleware-Grid-Infrastructure-Coordination-3896942 [↑](#footnote-ref-2)
3. http://www.einfrastructure-forum.eu/ [↑](#endnote-ref-1)
4. [↑](#endnote-ref-2)
5. Current projects are listed on the web site as:

   * Coordinating R&D program directions for Grid and cloud applications and middleware
   * Coordinating technical activities and sharing of resources among projects and programs
   * Expediting operations and resolving emerging problems and technical issues
   * Promoting interoperability, identifying best practices, and encouraging technical consensus
   * Coordinating international issues such as Grid federations
   * Coordinating Identity Management best practices, standards, and community outreach
   * Addressing issues of persistence and long-term support for tools and infrastructure

   Providing outreach and information to potential users [↑](#endnote-ref-3)