CDIGS: Community Driven Improvement of Globus Software

http://www.cdigs.org

Funded under NSF’s Cyberinfrastructure Initiative, the CDIGS (Community Driven Improvement of Globus Software) project ensures the continued development and support of the Globus Toolkit – the leading open source platform for Grid infrastructure. While the primary focus of CDIGS is the National Science Foundation user community, CDIGS also benefits the Grid community at large. CDIGS is in its first year of operation.

CDIGS has the following goals:

- Evolve and enhance Globus functionality, performance, scalability, and robustness
- Improve usability and manageability, so as to decrease the cost and complexity of using Globus infrastructure
- Support NSF users and communities
- Expand the Globus community

Encouraging Open Development

The Globus Toolkit has been developed under an open source license from its inception in 1996. The CDIGS project enhances this openness via the adoption of a transparent development process as described in the handout on the Globus Development Roadmap. Software status, feature lists, development plans, and timelines are readily available to the community at large. This open model of development allows users of Globus software to have an important say in defining its development directions and its future. Developers can contribute software, modules, documents, solutions, and implementations to the existing body of work, leading to a bigger and more robust Globus community along with a useful suite of software. All software is available under a standard open source license. For more information, please look at the Web pages and the handout on dev.globus and the Globus Incubator Process.

Involving the Community

CDIGS has established an explicit outreach effort for those who are part of the NSF user community or an NSF project. The goal of this effort is to engage current and prospective Globus users in order to identify a set of user requirements, meet those needs, and adapt Globus
development and activities in order to continue to meet changing requirements. We have begun interacting with NSF user communities via individual project meetings, interviews, workshops, tutorials, and presentations to establish a tight coupling and to set up a continuous two-way exchange.

The CDIGS targets key community events to reach current and potential Globus users. If you are a scientific user or developer, you can join the CDIGS efforts by downloading and trying the software, participating on the mailing lists, and using the dev.globus and the Incubator processes to provide feedback, suggestions, directions, and software contributions.

Highlights of CDIGS Achievements

Software Releases
During the past year the CDIGS team has produced three releases of the Globus Toolkit: two incremental releases from the stable branch (4.0.2, 4.0.3) and one development release (4.1.0). The releases contain new features, security enhancements, and improvements in usability, performance, and reliability. The team has also made several improvements to documentation, including the creation of how-to guides, glossaries, and other documents aimed at improving usability.

Globus Development Roadmap
As part of its efforts to promote transparency and encourage input from the community, the CDIGS team published its development work plans in the newly created Globus Development Roadmap.

Creation of dev.globus
Recent work of the CDIGS team included the creation of the dev.globus community forum, a new home for open development of Globus software. Modeled on Apache Jakarta, dev.globus comprises the policies, processes, and infrastructure (mailing lists, issue trackers, Web pages, and source repositories) that enable on-demand user support and facilitate community participation at all levels and stages of Globus development.

Community Expansion and Outreach
The new dev.globus Incubator process, established to open and expand the Globus community, has met with great success. Several new Globus Incubator projects are now operational, bringing new ideas and directions for Globus-related development. In the area of outreach, CDIGS staff members have assessed the needs of key scientific communities by conducting numerous presentations and workshops and participating actively in several meetings.

Opportunities for Interaction at SuperComputing 2006
Several CDIGS staff members are attending SuperComputing 2006 and participating in a variety of sessions, making presentations, demonstrations and talks. In addition, the CDIGS team can also be found at the Globus area of the Argonne National Laboratory booth (#1925). Please take the opportunity this week to talk with us face-to-face, asking questions, explaining your requirements and sharing your ideas for how CDIGS might further support your efforts.