

NMI Integration Testbed Status Report

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M.F. Yafchak, maryfran@sura.org

Program deadline extended

The NSF approved a no-cost extension of the Cooperative Agreement supporting the NMI Integration Testbed Program. Originally scheduled to end August 31, 2004, the program will now continue through February 2005 with Testbed site contracts extended through November 30, 2004. The extension will enable SURA and the NMI Testbed sites to more fully document and disseminate program results, to extend some REU student experiences into the 2004 fall semester, and to further the impact of deliverables coming out of the NMI Testbed Grid sub-project.

Testbed evaluation status

Testbed sites evaluated NMI Release 4 for the first four months of 2004, submitting 50 evaluation reports to NMI developers. Evaluation centered around those components that had undergone significant revision, were highlighted for specific attention by the NMI management team, or were capable of providing added functionality to key integration efforts at Testbed sites. Evaluation commitments and Component Testing Guidelines for R4 are available under Component Evaluation on the NMI Testbed Web site: http://www.nsf-middleware.org/testbed/testbed_status.asp#eval/. This was the final cycle of evaluation for Testbed sites, as the NMI Testbed Manager and NMI Management team agreed that sites' energy and resources should be applied to documentation and dissemination of overall results for the remaining months of the program.

Workshops to disseminate final results

At two recent major academic community events, NMI Testbed sites presented perspectives and knowledge gained over their full 2-1/2 years of NMI middleware integration and evaluation:

- Testbed "Finale" Results workshop, September 29 & October 1 in Austin, TX, immediately following the close of the Internet2 Members' meeting. Presentations are available on the NMI Testbed Web site: <http://www.nsf-middleware.org/testbed/meetings/I2workshop04/agenda.html>. The workshop was also archived in digital video by the University of Michigan WLAP project and is available for viewing at <http://www.wlap.org/browser.php?ID=internet2-2004-nmi>.
- "Perspectives from Campus and Research Middleware Integration," a full day pre-conference seminar of EDUCAUSE 2004, October 19 in Denver, CO. Presentations are available on the EDUCAUSE Web site at <http://www.educause.edu/conference/annual/2004>.

Case study documentation

Writers Melyssa Fratkin and Kate Barzee joined the NMI Integration Testbed program for the remaining months to capture and disseminate the many case studies of middleware integration, completed or in progress, at NMI Testbed sites. This NMI Integration Testbed Case Study Series is being written from the users' point of view with emphasis on the value of NMI middleware to real life applications and decision points for successful deployment. The series will highlight middleware planning and implementation in various stages as well as the influence of NMI component evaluation on the development of other middleware products and services. As case studies are completed, they will be made available on the NMI Testbed Web site (http://www.nsf-middleware.org/testbed/testbed_status.asp#studies). Initial case studies were

also distributed at the Testbed results dissemination workshops noted above and are planned for distribution at SuperComputing 2004 in Pittsburgh, PA, November 8 – 12.

Results from the NMI Testbed REU program

NMI Integration Testbed program student positions funded under the NSF Research Experiences for Undergraduates (REU) program have completed or are nearing their close. Through this program, six undergraduate students at four NMI Testbed sites have been able to work with evolving NMI components, informing and influencing the development and integration of these components in a number of research settings. Each student contributed as an individual researcher in collaboration with their NMI Testbed site team to the benefit of the students, the research applications and the NMI. Students are completing their experiences with a greater understanding of the utility and importance of middleware, and the potential of middleware to change the way scientific research is performed. The role of the REU experiences within the NMI Integration Testbed program are captured in a case study for the NMI Testbed Case Study series noted above.

SURA NMI Testbed Grid Project

The SURA NMI Testbed Grid project has been gaining visibility and meeting important milestones. Current status and results were presented at several recent events:

- Presentation at the Internet2 Members' meeting, April 2004 – A shared session with NSF NMI Program Director, Kevin Thompson, and the UK initiative, JISC, on important and current directions for supporting Virtual Organizations, <http://events.internet2.edu/2004/spring-mm/>.
- Presentation and application demonstration at the Internet2 Fall 2004 Members' meeting, September 2004, <http://events.internet2.edu/2004/fall-mm/>.
- Presentation and poster session at the Oklahoma SuperComputing Symposium, October 2004, <http://ou.poss.com>.
- Individual poster session and additional collaborative demonstration (w/LSU) at SuperComputing, November 2004, <http://www.sc-conference.org/sc2004/>.

The project has also added new participants as a result of interest generated from the presentations above and through a call for expanded participation to the SURA IT Committee in July. The University of Arkansas, Duke University, George Mason University, Georgia Institute of Technology, the University of South Carolina, Texas Tech University, Tulane University, and the Great Plains Network are joining the initial NMI Testbed sites for further collaboration. NMI Testbed Grid objectives also overlap strongly with several focus areas in SURA's new HPC-Grid Initiative and the project will continue under that strategic umbrella beyond the NMI program.