Notes from a Meeting
Texas Guaranteed Student Loan Corporation for the Meteor Project
Austin, Texas, 14 January 2003

The meeting with Meteor Project technical lead Will Thien and technologist John Gill was to discuss the forthcoming deployment of the Meteor student loan software to colleges and universities. Other TGSLC staff joined in for parts of the meeting.

This meeting was in conjunction with the Common Solutions Group meeting and a separately reported meeting with the University of Texas EDI Server team.

Background

Meteor software is used to access student loan data. The sources of the data are identified from an index and a reconciled display is provided to the student or financial aid professional. The Meteor Project was developed as a Web Services prototype and demonstrated to the National Council of Higher Education Loan Programs (NCHELP) at the January 2001 CEO Meeting. The prototype was in response to questions about the performance of on-line real-time information retrieval and presentation raised at the November 2000 meeting of the Postsecondary Electronic Standards Council (PESC) by Citibank Student Loan Corporation (that forecast 1 to 2 minutes; the prototype average was 23 milliseconds for request/response). The prototype software was designed as a Java application using the Apache Foundation SOAP transport by uPortal architect Peter Kharchenko and designer Justin Tilton.

The project was sponsored by an increasing number of student loan organizations and firms "as a gift to the higher education community."[1] In addition to the leading-edge technology, this was "open source, open standards" provided to colleges and universities so a student could access student loan information as a portal portlet or channel, or adaptor on the school's Web site.

The concept included the use of the National Student Clearinghouse's loan database as an index followed by direct real-time access to the lender, guarantor, or servicer data.

Following the prototype, a Meteor Advisory Team was formed to provide design guidance. The software was developed and contributed by Priority Technologies, Inc. Omaha, Nebraska. http://www.prioritytech.com/. In 2002 the software was completed and deployed to the student loan industry both as sources of data—data providers—and Web sites where financial aid professionals could obtain data—access providers. The software includes complex algorithms to determine the current status of loans that may have been serviced by several different entities, and for managing access security in an environment where a student may have several different logon identifiers and passwords. Comprehensive documentation is available.

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[1] The prototype was done by a budget less than $40,000. The 2002 NCHELP President's report said the total project cost was less than $200,000.

In a December report, the Meteor Advisory Team described a forthcoming roll-out of the software to colleges and universities and the interest in "transitive trust."

Comment: Note the Meteor Project will meet two of Bernie Gleason's (Boston College)[2] criteria: (1) The student will access services through the school's portal, not by linking to different sites. (2) Meteor may implement "transitive trust" that Bernie described at the May 2002 U.S. Department of Education's Federal Student Aid CIO Update. A successful implementation of Meteor would (1) establish a focus of the student's Web experience at the college or university's portal, and (2) develop a working model of "transitive trust" in exchanging data among colleges and universities and with agencies and businesses.

It is important to note the Meteor prototype and the subsequent development came before standards such as SAML, WS-Security and Shibboleth were published. The Meteor Advisory Team did receive guidance from Steve Carmody (Brown University) on the SAML assertions used in Shibboleth and the OpenSAML open-source development from Scott Cantor, Ohio State University. (Scott gave a presentation on his work at the September 30 FSA CIO Update).

Meteor Deployment

In confirming plans for Meteor deployment to colleges and universities, Will Thien observed that he was not able to attend the last JA-SIG Conference. He believes it is important to have contact with the CIOs as well as the financial aid administrators. I mentioned the recent Campus Computing survey showed many IT departments have received budget reductions (when the demand for services is increasing) and there has been further reductions. (Only a few days before the Common Solutions Group meeting, I had suggested a Meteor presentation. MIT's Nate Johnson said the agenda was full and was unable to find a slot). I also said the INS SEVIS implementations were receiving higher priority that financial aid and may delay further implementations of the Department of Education's Common Origination and Disbursement system. (SEVIS is mandated for foreign student visas with implementation dates as early as January 30, 2003. This date has subsequently been extended).

Will confirmed the interest in "transitive trust" to leverage campus-based identity. He also was aware that new standards had been completed that appeared—primarily because of Microsoft, IBM, and Sun Microsystems support—would be widely implemented in the near future.

I commented that the Meteor Access Provider agreement may deter some colleges and universities from implementing Meteor. Since the loan data is covered by federal law and regulations (Department of Education regulations for federal and federal-guaranteed

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[2] Bernard Gleason is a JA-SOG Board Member and also works with the Boston Consortium on information technology matters. He has written on Web Services for the NACUBO and EDUCAUSE journals.

student loans and law for other loans), the Meteor Advisory Team may want to seek CIO comments before deployment.

Data Transport

John Gill said Meteor was built upon the NCHELP "high performance channel 1.0." A second version would be defined and deployed in the near future. He was interested in what changes should be made to align the industry real-time data transport with college and university implementations. There are other projects—the California eTranscript, the libraries' Z39.50 (2001), and infiNET's EFT and credit card processing—which have forthcoming deployments. Convergence would benefit the colleges and universities (reduced implementation and maintenance costs) and could encourage implementation.

John asked how can they get community comments on their work to ensure the widespread adoption of the SOAP-based "high performance channel." Because of short implementation schedules, getting suggestions and reviews of interested and knowledgeable higher education developers is difficult.

Comment: The JA-SIG development community has been effective in commenting on the work of each other. This has been true both with the uPortal framework and now with channel development. In raising the general question, JA-SIG may be able to respond to John with a process that would encourage collaboration with the JA-SIG development community.

John gave me a copy of the high performance channel specifications. It may be useful to circulate this to the JA-SIG developers for comment.

Security

We discussed the recent WS-Security standard and its applicability to Meteor. I said it would be used in California for eTranscript. We should try to achieve convergence on the SAML assertions that are used in Shibboleth, Liberty Alliance, and the new applications.

Will noted the U.S. Department of Education is no longer commenting about implementing "transitive trust." I commented that the Department's budget for IT development has been sharply reduced. In Bernie Gleason's meeting with FSA's Andy Boots, an alternative—agreement with the Department of how transitive trust would be implemented—would serve the community as well as a mandated implementation.

Action Items

Will asked that I provide him with information about the other Web Services projects, especially the University of Texas electronic transcript exchange server initiative and the California eTranscript. I will also provide him with a brief on infiNET's IFX standards plan.

We are going to seek opportunities for the community to learn more about Meteor, both the technology and the concepts that match college and university preferences.

I will see what we can do toward an immediate review of the high performance channel specification.