Notes from the U.S. Department of Education's
FSA Software Developers Conference
Arlington, Virginia USA August 11, 2005

Summary

- The U.S. Department of Education will be assigning Student Identifiers (SID) to all students applying for federal financial aid. The identifier must be used in all data exchanges with the Department. The likely implementation would be 2007 or 2008.

- FSA is aware of, but not participating in the U.S. "National Information Exchange Model" project that can produce standards for personal profile information to be used by all U.S. departments and agencies (via a NIST Federal Information Processing Standard).

- FSA is bringing its systems into an enterprise architecture consistent with, and in some respects leading, the federal enterprise architecture (under the Office of Management and Budget).

- FSA will be including XML and SOA (services oriented architecture) technical training sessions in the Fall Electronic Access Conferences.

- So far as they know, NSLDS data is not being accessed by the Department of Homeland Security and there is no estimate of the accuracy of the historical data, but it is considered "good," likely exceeding 90%.

Background

Each year the U.S. Department of Education's Federal Student Aid holds an open meeting on the processing of student aid data for the coming academic year. The meeting is in August for processing beginning in January of the following year for enrollments that begin on or after July 1st of that year.

Historically the conference has been dominated by financial aid software vendors and the student loan industry. Representatives from some schools that either maintain their own systems or use the FSA-provided software attend. The meetings have been especially important the past few years as FSA began requiring some data exchanges to be XML files instead of "flat files." More important, however, is the change from separate reporting to each program-based system to reporting by student for all federal programs.[1]

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[1] A change begun in the banking industry in the late 1960s lead by Hogan Systems; the software is currently available from Computer Sciences Corporation. In 1996 Continuum Software Inc. acquired Hogan Systems Inc. and was subsequent acquired by Computer Sciences Corporation. The reorganization of processing in the banking industry from financial products to customer is not yet complete and continues to command substantial maintenance resources for "ad hoc" integration needed to meet customer expectations.

This year there were few changes in FSA data exchanges with colleges and universities. FSA is focusing on stability, data integrity, and integration of FSA systems. Because the program was only four hours long, FSA permitted and 25 did attend via telephone. The presentations were distributed before the conference.

The current focus is the ADvance project—an update and integration of the aid delivery system. Some changes were made to the NSLDS (National Student Loan Data System) that has become a historical record of federal and federal guaranteed student loans. Some minor improvements are scheduled for COD (Common Origination and Disbursements) and CPS (Central Processing Services).

Tim Bornholtz gave a presentation on XML and the XML repository. This presentation gave insight into the long-term plans of FSA and the federal government. The XML repository serves the same function as classical data dictionaries plus XML schemas and is a tool used in integration design and development. FSA is building XML repository entries for current systems as needed for their software projects. And developing XML schemas for new and modified systems. FSA is following the Federal Enterprise Architecture, especially the recently released Reference Data Model.

Tim is exceptionally qualified for this work. He lead the implementation of the Meteor Project that brought XML, SOAP messaging, and Shibboleth-based security to high volume data exchanges among student lenders and guarantee agencies and schools, colleges, and universities in 2001. He has implemented all of the technologies now described as "leading edge" Web services. His advice on performance has been especially helpful to the software suppliers and colleges and universities implementing COD—that remains a file system exchange.

In his summary, CIO Jerry Schubert commented that a technical track would be added to the EAC (Electronic Access Conference) conferences to share their knowledge with college and university technical staff. (I would encourage any college or university to send staff to these training sessions, whether they have any connection to financial aid or not, to learn how to deploy the technologies).

Questions and Answers

To better understand the future direction, I asked the following questions:

1. Renee Wade: Can you confirm FSA will be using IBM's WebSphere as their portal software? Yes.

2. Will students have the ability to use the current identifier (Social Security Number, Birth Date and first two letters of the last name) to access their records when FSA SIDs are implemented (since they may know these by memory)? Yes.

3. Is the FSA authentication being integrated with the federal e-Authentication that permits users authenticated to one federal agency to use that authentication for an application of another agency? The FSA authentication can be used for other applications; authentication of other departments cannot be used for FSA. Tim Bornholtz pointed out the FSA authentication is a federal Level Two authentication, not a Level Three authentication I had mentioned.

4. In 2002 at an FSA Townhall Meeting Bernie Gleason suggested FSA permit access used local campus authentication—then labeled "transitive trust." He observed as colleges were implementing enterprise portals, the user is authenticated and this authentication could be used via a Web service. When he made this suggestion, Gleason was the visionary initiating the JA-SIG uPortal effort and aware of the success of the Meteor project.

   Is FSA considering the of use local campus authentication for access to federal financial aid information? Jerry Schubert responded: Colleges and universities are a major source of authentication; we continue to review how this could be used. We are aware of the suggestion and the possible benefits. [There is no immediate requirement to change the authentication procedures used by FSA. With the possibility of some changes because of NIEMS, no action should be taken at this time].

5. Ron Bennett: Does the U.S. Department of Homeland Security use NSLDS? Jerry Schubert responded: Not that we know of. How accurate is NSLDS data? Data from our sources is more than 90% valid. [The question should have been phrased: If NSLDS data is used to represent the status of a *student* on repaying his federal student loans, how frequently would the response be incorrect? This is equivalent to asking the question how accurate are credit reports].

6. During the break I asked FSA Chief Information Officer Jerry Shubert this question: At the GJXDM (Global Justice XML Data Model, a proposed federal standard for information about people) Conference in June [sponsored by the Departments of Homeland Security and Justice and the National Institute of Standards and Technology] NIEM (National Information Exchange Model) was described with the implication it would be mandated. Are you aware of the project? If so would the Department comply (it has operated under an exemption of complying with the Federal Information Processing Standards until recently)? What effect would it have? We are aware of the national efforts on data standardization, but couldn't at this time speculate on what may be done by other Departments.[2]

7. In a discussion with FSA's Marilyn LeBlanc I asked if the verification suggestions in the Advisory Committee's January report been discussed. She said yes, but both authorization to access IRS and regulatory changes would be

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[2] One slide From the GJXMS Conference suggests that the Department of Education is not participating in NIEM.

required. She said IRS will not release data to a Department if it becomes available to contractors such as the call centers operated by FSA and it could not be released to financial aid administrators. We discussed the possibility of asking the IRS to confirm data with a simple yes or no. She said that was one possibly though not helpful when the answer is no.

In the general Question and Answer period, Jerry Schubert confirmed that anyone could attend the EAC; "non-financial aid" technical staff would be welcome. I suggested that FSA was one of the few successful large-scale implementation of XML and Web services bus technology; it would be useful to the colleges and universities to have a history of the FSA work and some "lesson learned."

Comments

Blair Combs from Idaho State University commented adopting SIDs (federal student identifier) would require change to the institution's student system to store the SID and changes in work processes. He pointed out the SID would become available from the Department only after the financial aid process may have begun on campus.

In response to the question how long would it take to implement SIDs in software, Adele Marsh from the lending community said two years; there was general consensus this was the shortest reasonable period of time.