



CAMPUS MANAGEMENT TEAM RECOMMENDATION

Process: Technical Strategy for Interfaces

Description of Recommendation:

A variety of systems interact with the current student information system to both provide data and retrieve data. These interfaces will need to be continued under Campus Management (CM). Examples of feeds into CM that will need to be supported are test scores, holds, student id information, A/R data, and housing information (address updates). Examples of feeds from CM to other systems are student data snapshots. The *Student ID/Business Partner Assignment* team documented these interfaces, and the results are available at the web address, www.olemiss.edu/projects/first/cm/recommendations/survey.xls.

This recommendation proposes a technical strategy for implementing these interfaces in CM. The primary points are as follows:

- The interfaces will be designed to be as general as possible to handle multiple needs. Interfaces that provide data feeds from CM to external systems should include flags in the request that allow the caller to indicate which kinds of data to retrieve.
- The interfaces will be implemented over a secure network connection either through a secure software protocol such as HTTPS, a private network, or other.
- Appropriate authorization checks will be built into the SAP R/3 functions that update and retrieve data. The authorization checks must take into account FERPA students.
- CM will use a new student number rather than SSN as a key field for student records; however, some external systems (such as financial aid and student health) require SSN for reporting purposes. Even those that do not require SSN will need a transition period to move from SSN to student number as the key field. For these reasons, all interfaces into and out of CM will need to include SSN as part of the student record. For uploads, the interface will handle the mapping of SSN to student number so that the external system can submit either as the key.
- Where possible, the interfaces will support both XML and spreadsheet formats as inputs and outputs.
- The interfaces will be implemented using a servlet-type approach so that they can be initiated programmatically or manually by means of a web form. Viable

options are SAP's Business Connector product or Web Application Server (WAS).

- Any interface applications that perform updates will include the capability to perform checks on data prior to initiating the actual update. The check routine needs to provide appropriate error handling, e.g., data validation and checks for the existence of students in CM.
- IT staff members will create high-level design documents that define the required interfaces, import and export structures, invocation methods, etc. They will get buy-in from project team members before initiating any programming. This documentation will be made available to the departments that must use the interfaces.

Underlying Opportunities:

Many of interfaces to the current student information system require manual intervention by IT staff members. Ideally, the new interfaces will allow for end-to-end automated processing as well as the ability for end users with appropriate authorization to initiate their own feeds.

Pros Supporting the Recommendation:

The interfaces must be continued in CM. The inclusion of SSN allows departments to make gradual transitions to the new student number. The methods outlined here use current technologies.

Cons Against the Recommendation:

Staff resources must be allocated to the development of the interfaces, and there are associated learning curves.

Issues, Concerns, or Currently Unresolved Aspects of the Recommendation:

- The next level of detail needs to be fleshed out. At that point we may find that for certain kinds of data there are technical restrictions that prevent implementation of the interfaces as described above.

Date Submitted: July 2nd, 2002

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