

System IT Board Report

June 12, 2024

Financial Aid Upgrades

The FAFSA simplification initiated by the Department of Education necessitated the rework of the ISIR load process and introduced stricter requirements related to the handling of sensitive data, including Federal Tax Information coming directly from the IRS. The ISIR load process loads the data from each student's FAFSA application along with additional data from the Federal government. As vendors adjusted their software solutions to meet these requirements and colleges and universities began to apply upgrades in their environments, the Department of Education continued to refine the process. This resulted in the need for vendors and colleges and universities to continuously monitor and adjust to these changes over a period of several months.

System IT had identified and documented a plan for applying Banner Financial Aid upgrades and a small set of related dependencies into our environments. Ellucian's Banner software is our enterprise administrative system and includes all our Student information, Financial Aid, Finance and Human Resources and Payroll. The plan was communicated to the functional user groups at the colleges and plans for testing the upgrades were developed. As the work progressed, we learned that additional dependencies had been added on two different occasions, causing the upgrade plan to be adjusted twice while the work was already underway.

The complexity of the Financial Aid upgrade and dependencies was far-reaching and included several components:

- An upgrade to the TD Client software provided by the U.S. Department of Education. This software is utilized by the colleges for the daily sending and receiving of files. This upgrade added the need to upgrade our operating system to Linux RHEL 8 and to upgrade our Banner JobSub server. The JobSub server is used to process all of our Banner batch jobs, over 6,300 jobs each day. Each of these upgrades involved the work of several team members to investigate, plan, apply and test in each of three environments representing Development, User Testing and Production (DEVL, USRE and PROD).
- Multiple Banner Financial Aid upgrades and patch releases were applied. This required monitoring for enhancements and defects, researching dependencies, planning, applying the upgrades and testing in each of our environments. Dependencies impacted all of the functional areas and included upgrades to HR/Payroll, Finance, Accounts Receivable and the Student areas. This required communication and planning with each of these functional areas to test the upgrades in the USRE environment prior to applying the upgrades in PROD.
- A new data type and security/handling regulations for IRS data referred to as "Federal Tax Information" (FTI) and its required labeling resulted in the need to work with the System IT Cyber Security team and the System Administrators to redesign the approach used to pull down the ISIRs and store them securely.

- New Banner security classes were developed and assigned to existing users after determining the appropriate classes and roles to remain compliant with new federal regulations.
- The Financial Aid upgrades required a significant amount of configuration adjustments within Banner, including the rework of algorithms created to manage identification of defined populations of students in order to efficiently process aid for these students.
- All of the newly introduced Banner Financial Aid JobSubs had to be configured and scheduled to run at the appropriate timeframes via the Automic scheduler.

System IT Application Developers checked for impact of the upgrades on CCCS customizations and prepared updates to these customizations three times due to the changes introduced as the upgrades were underway.

System IT Business Technology Project Managers and Quality Assurance Analysts monitored appropriate sites related to upcoming changes, identified and verified dependencies, provided internal testing, prepared test plans and communicated and coordinated testing with functional end-users.

System IT System Administrators and DBAs ensured the environments were prepared for the Banner upgrades, upgraded to RHEL 8, upgraded TD Client and contributed their expertise in designing the new approach to handling sensitive data in order to comply with new federal requirements.

System IT Change and Instance Management provided support for adjusting the project plan as changes were introduced, ensured that change management best practices were applied consistently, determined an optimal approach for setting up new Banner Security classes and roles to be compliant with federal regulations, and configured and scheduled the new Banner JobSubs to run via Automic.

System IT Cyber Security monitored federal requirements and provided their expertise in designing the new approach to handling sensitive data to comply with new federal requirements.

System IT Business Intelligence checked documentation for upgrade dependencies to ensure they were certified for the Operational Data Store (ODS) by Ellucian. The ODS is our primary source for Banner data for reporting. The team also tested for the impact of upgrades on the ODS.