

System Information Technology Board Report

August, 2021

Housekeeping and General Maintenance

A lot of the work that System Information Technology (IT) does is project-based, and a lot of the Board reports reflect this project-based activity. By project-based, we mean information technology performs work that enhances or automates business processes, adds new technology that allows for new or improved business processes, supports our system-wide strategic goals, or implements new technology systems such as EAB Navigate or Ellucian CRM Recruit. However, there is much work that System IT does that isn't evident to our user community. This behind-the-scenes work doesn't typically improve existing capabilities or add new technology. But if we don't do this work, our systems may not work correctly, maybe less secure, or result in erroneous data. This is the IT housekeeping work of installing software version updates, security patches, and bug fixes, that keep critical IT infrastructure current or in compliance. This IT housekeeping also includes modifying integrations with third-party IT systems or extracts due to changes in vendor or data requirements and ensuring our technology infrastructure is secure and operating at peak performance. On average, System IT spends approximately 25% of its time on these maintenance activities.

Over the last two months, along with the major projects that occupy much of System IT staff time, many hours have been spent on these housekeeping and maintenance activities. Most of these activities require quite a bit of planning and testing. For example, with Banner, upgrades are applied four times – first in our development (DEVL) environment, then our internal testing environment (VTRN), then in our user testing/pre-production environment (USRE) and then in our production environment (PROD). Not only does this ensure that the updates are thoroughly tested by IT and system and college functional staff, but it also ensure the process of applying the upgrades is thorough tested, documented and replicable and mitigates the risk of adversely impacting data and business processes. Server and security updates and patches are usually applied in a similar manner across all of our technology infrastructure. In addition, all of the server upgrades are applied and/or migrated for both the Lowry and OneNeck data centers to make sure our business continuity and disaster recovery systems are current.

Some of the most recent upgrades include the following:

- Banner Financial Aid Upgrades for the next Aid year
- Banner Self Service upgrades
- Server operating system and security patching for Microsoft and Linux servers
- Firewall maintenance and security patching
- Security and system patches for our Voice over Internet Protocol (VoIP) phone system and Call Manager
- Network access control upgrades
- Oracle patches to Banner and data warehouse databases

- Minor patches and updates to Cognos for data warehouse reporting
- CRM Recruit Upgrades (although applied by the vendor, extensive coordination and testing is required by System IT and the colleges)
- Conversion of interfaces and processes from the State switching from CitiBank to US Bank for Purchasing Cards (PCards) and Travel cards
- Conversion of interfaces and processes due to changes in bookstore vendors at Lamar Community College and Community College of Denver
- Changes to the data feeds for our insurance and benefit providers
- In early August we will apply the major Banner upgrades that are a part of our annual maintenance cycle. These upgrades touch almost every aspect of our Banner modules including Student, Financial Aid, Finance and HR/Payroll.

None of these activities are as exciting as implementing new technology or a major enhancement to our technology that improves or automates business processes, eliminates work load from faculty or staff, or improves success for our students. But all of this work is necessary to keep our enterprise technology operating efficiently and securely.