

Administrative Unit Review Summary and Timeline

Department: Enterprise Application Management

Dates of Plan: 2021-2022

Department Mission: The Application Systems Team develops, maintains, and supports software applications utilized by faculty and staff to foster students' academic success, improve college operations, and enhance community enrichment.

Annual Report Due: May 2022

Outcome	Activity(s) and Measurements What are you doing to accomplish outcomes? When and how will you assess effectiveness?		Data Report Schedule When will you collect and report data to PAT Lead?
Review and update documentation for Applications Systems team as measured by number of new/modified/removed documents from OneNote.	Term/Year 2021-2022 academic year	As in the 2020-2021 academic year, we will use OneNote statistics (revision information) to capture progress on these, as counts of documentation records created, modified, or archived. Two things we noted as limitations of this approach: 1. OneNote conflates created/modified into a single stat. For our reporting needs, this is fine. 2. OneNote does not update the modified timestamp on documents when they are moved to another Notebook (the archive notebook in our case). To allow us to count this, we will establish a standard for "touching" an archived page to allow them to be counted. As this is an outcome that carries over from the previous year, we will assess effectiveness by comparing to the previous report.	Term/Year Before the 2022 reporting deadline
Establish manageable standards for documentation, as measured by the number of areas identified for documentation standardization and by the number of those areas for which we have created style	2021-2022 academic year	We will schedule team meetings in May to review our current documentation areas and list the top candidates for establishing or revising documentation standards and templates. Initial style guide and/or template creation tasks will be assigned to members of the team. Going forward we will expect all documentation in these areas to be built accordingly. Of course, as we start using said templates, or as needs change, we will continue to evolve them.	Before the 2022 reporting deadline

<p>guides and/or templates.</p>		<p>Examples of areas that might benefit from such standardization include our validation checklists, integration summaries, troubleshooting guides, information pages, process instructions etc. We will assess effectiveness by the number of areas identified for improvement and the number of standardized templates created or improved.</p>	
<p>Modernize the way data is exchanged between COCC's connected application systems, promoting more robust, secure, and data-current integrations, as measured by the ratio of API-based integrations over more ad-hoc file passing mechanisms.</p>	<p>2021-2022 academic year</p>	<p>Many of the application systems in use at COCC require data from other applications. The most common form of this involves ongoing data transfers from our ERP system (Banner) to dependent applications. However, we sometimes wish to transfer data back as well. The typical way this is done, at present, is with ad-hoc script/programs/queries which produce extract files, from Banner, in a form suitable for upload into the application requiring data. These files are often transferred from system to system via secure file transfer processes, and exports/imports are scheduled by systems task schedulers. While this approach works, it has many moving parts, isn't a particularly modern methodology, and can mean that the data is somewhat stale (until the next transfer). A more modern approach to connecting applications is via API. This sort of direct connection promotes more robust systems and the data exchange can be more real time, leading to better data currency. We will assess effectiveness by the number of API-based integrations as well as the overall percentage of our integrations that are using the newer means of exchanging data.</p>	<p>Before the 2022 reporting deadline</p>

ADMINISTRATIVE DEPARTMENT REVIEW REPORT OVERVIEW

Report to be submitted annually.

Data and analysis from three annual report will inform a new assessment plan.

Section 6a: Measurement Tool and Timeline

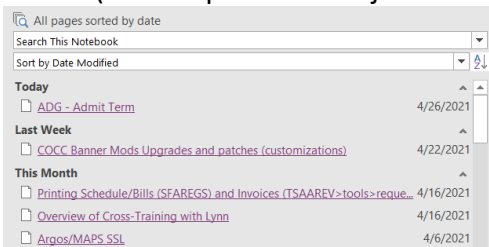
How did you measure your success toward the 1-3 outcomes and mission fulfillment? What tools did you use? How frequently did you gather relevant data? Provide any data references that you used.

EAM response:

1. Review and update documentation for Enterprise Application Management team as measured by number of new/modified/removed documents from OneNote.

Our intent was to use statistics as available in OneNote to count documentation pages created, modified, or archived. We discuss, in this report, some identified shortcomings of this approach. We further note that measures of content deletion and page archival are just as useful, as documentation-quality improvement metrics, as counts of document creations or additions. Sometimes cleaning up obsolete documentation can greatly improve the quality of the overall document corpus.

One of our primary team documentation resources in the "MIS Documentation" (previous team name) Notebook in OneNote. OneNote, through its History functions provides dated lists of pages modified. It does not give further info about the nature or type of modification (i.e. content added/remove) nor the extent (minor update vs. major overhaul). The provided info looks like this:



We measured our progress towards this outcome, for this academic year, by manually counting the number of documentation pages we added or edited using the dated modification list provided by OneNote.

Our intent was to use the same OneNote feature for counting the number of documentation pages we archived. Our archival process involves moving obsolete documents to a different notebook "Archived Legacy Documentation". Unfortunately, it appears that OneNote does not timestamp a document as modified when it is transferred from one notebook to another. Thus we were not able to count these as a meaningful metric to report for the current academic year. However, we do have a strategy for keeping this information going forward.

2. Continue to identify and address Argos security and data integrity as measured by completed steps in Argos review.

This project was broken down into sub-tasks, the following were identified as useful aims within this security audit:

1. Clean up existing connections

2. Review “stale” reports/datablocks
 3. Confirm necessity of datablocks writing to the DB
 4. Discuss use of the “Datablock Designer” role outside of EAM
 5. Audit existing users by role and group to determine if any users exceed appropriate authority
 6. Create a template for use in datablocks/reports
 7. Discuss training/requirements for all report writer/datablock designer users
 8. Add Argos User removal to process for terminated employee/users
 9. Determine regular schedule and list of activities for repeat audits to maintain “clean” system.
3. Define our team's role in business processes as measured by meetings with functional users from each department.

The original idea behind this AUR outcome was to improve the relationships and connections between functional stake-holders on campus and the EAM personnel supporting them. There is often a lack of understanding, in both directions, about what processes are taking place and what data is being utilized by the "other side" of these collaborations. As a step towards better understanding each other's requirements, responsibilities, resources, etc., we planned to schedule face-to-face meetings to foster greater unity and improve understanding and communication.

Due to the pandemic and the remote nature of our operations, we did not pursue this outcome during this academic year. As such, we did not make direct progress towards this goal.

Section 7: Data

What data have you gathered that inform your department’s effectiveness?

EAM response:

[Note: this report will be submitted 1.5 months prior to the end of the reporting period, thus should be considered partial results.]

- Review and update documentation for Applications Systems team as measured by number of new/modified/removed documents from OneNote.

Total number of OneNote pages created or updated in MIS Documentation:

70

Total number of OneNote pages archived from MIS Documentation:

Due to an issue in our tracking methodology, we could not accurately count of archived pages. This issue is described in 6A above.

- Continue to identify and address Argos security and data integrity as measured by completed steps in Argos review.
 1. Clean up existing connections
 - a. Created report to list all connection and manually reviewed. We were able to remove several and list of connections is current on Argos TEST And PROD.
 2. Review “stale” reports/datablocks
 - a. Ran query by last run date for all. Identified 30 datablocks that had not been run ever and 42 that had not been run for at least 2 years. We were able to remove some of those datablocks. The rest were identified as “required.”
 3. Confirm necessity of datablocks writing to the DB

- a. Identified 33 items (dashboard queries mostly) that are writing data to PROD via insert, delete, update statements
- b. After EAM team review, determined all of these are low risk
- c. Discussed the possibility of creating separate connection to segregate this authority, but was deemed infeasible.
- d. Status quo was determined acceptable.
4. Discuss use of the “Datablock Designer” role outside of EAM
 - a. Inconclusive, determined status quo is acceptable
5. Audit existing users by role and group to determine if any users exceed appropriate authority.
 - a. This project was set aside due to COVID restrictions
 - b. Also had call with eVisions to discuss contracting for this audit and realignment of users/roles/groups. eVisions does not have a best practice for this and the engagement was deemed infeasible as the outcome wasn’t clearly defined.
6. Create a template for use in datablocks/reports
 - a. Team discussions did not yield consensus on elements or deployment. This template was never published to EAM documentation, but is sporadically in use. This one is to be revisited.
7. Discuss training/requirements for all report writer/datablock designer users
 - a. Noted lack of cohesive literacy and standards for building/modifying objects in Argos.
 - b. This was deemed not a priority item
8. Add Argos User removal to process for terminated employee/users.
 - a. This is now part of our standard offboarding procedure
9. Determine regular schedule and list of activities for repeat audits to maintain “clean” system.
 - a. This was inconclusive as many of the initial audit findings were deemed non-priority or acceptable status quo and EAM resources are limited.

While the above list includes several items that resulted in no change, that does not mean that they constitute lack of progress. Many of the steps were to investigate our practices involving Argos, and the data access it allows, to determine if any of those practices should be changed. It was not our intent to change any that were deemed acceptable. Having a greater understanding of how Argos is being used to access data is a positive result in its own right.

- Define our team's role in business processes as measured by meetings with functional users from each department.

As mentioned in 6a, due to extenuating circumstances we did not pursue this outcome in the current academic year. Thus, we do not have data to report.

Section 8: Summary and Analysis

What do these data suggest about your department’s effectiveness? Which measurements are strong and affirming? Consider the following:

- Have you accomplished your outcomes? Is there a need for a new direction?
- Which measurements indicate an area that you would like to focus on for improvement?
- Identify the goals and improvements that your department is committing to over the next year to help you accomplish your outcomes.

- What support do you need from the college to carry out your planned improvements? Identify your biggest area(s) of need to help accomplish outcomes. Review question #2, including staffing, budget, services, and location.

EAM response:

EAM has made significant progress on 2 of our 3 outcomes.

The first of our outcomes for the 2020-2021 academic year was intended to monitor our progress in improving our internal documentation. With significant turn-over to the group in the last few years, a fair amount of institutional knowledge has been lost. Though EAM has documentation repositories, many processes and procedures were (are) not documented in sufficient detail so as to be reproducible by new team members. Many such documents were (are) out-of-date. In such cases this knowledge has to be rediscovered/relearned, making the processes significantly less efficient. Some knowledge was held by only certain members of our team. Our goal here was to better preserve such knowledge, and to better share it among our members. That would help the team be less dependent on any single member's expertise.

As this was our first year monitoring this outcome, we cannot compare to prior year(s) metrics. That said, the count of added or modified pages, within our team OneNote notebook, is sufficient to suggest that we have made a concerted effort over this past academic year towards cleaning and augmenting our documentation. This process is ongoing and is by-no-means complete. Our current aim is that each time we work through a new or existing process, we simultaneously create or clean-up the associated documentation as needed.

Towards our second goal, the security audit of Argos, EAM has also made significant progress. Some of our steps were to review our current practices. In some such cases we decided against making changes, but these still represent progress towards a greater understanding of Argos users and the data they access or can access. We were able to clean out a significant number of users who should no longer have access to that system, and to augment our employee offboarding process to include Argos access termination. We were also able to review all processes that had write access to Banner.

As this project is largely complete, at least in terms of our original AUR scope, we do not anticipate carrying this outcome forward into the next academic year. There are, however, a couple of Argos efforts that we intend to revisit in the future; a user access-level audit as well as the project of creating datablock templates such that they will be better self-documenting. This latter effort should reduce mis-reporting by making the data behind the reports more transparent.

Our 3rd outcome pertained to improving communication and understanding between functional users of Banner (or other COCC integrations) and the technical personnel supporting them in EAM. As has already been mentioned, this outcome has not been met as it was put on-hold due to extenuating circumstances (the remote nature of our workforce during this past academic year). While it is still a worthwhile goal, and while we still intend to pursue it, the aims of this outcome were not sufficiently defined and we do not intend to carry it forward as an AUR outcome in the upcoming academic year.

The EAM plans to adjust our outcomes for the upcoming academic year. We will carry over the outcome of monitoring the creation, augmentation, and archival of shared documentation repository. We will remove the AUR outcome that we have largely completed (the Argos audit) as well as the one that we did not pursue this year (bridging the understanding between functional and technical users). The latter is being removed largely for the purpose of replacing it with better defined and more timely projects facing EAM in the coming year.

Here is our new list of outcomes for 2021-2022:

1. Review and update documentation for Applications Systems team as measured by number of new/modified/removed documents from OneNote.
2. Establish manageable standards for documentation, as measured by the number of areas identified for documentation standardization and by the number of those areas for which we have created style guides and/or templates.
3. Modernize the way data is exchanged between COCC's connected application systems, promoting more robust, secure, and data-current integrations, as measured by the ratio of API-based integrations over more ad-hoc file passing mechanisms.

The primary resource that we require, from the college, to help us meet the above outcome goals, is the filling of our vacant team position. Each of our outcomes requires personnel resources. We will be able to make better or greater progress towards these outcomes when EAM is once again fully staffed.