Project Closeout

Project Details

Project Name: Identity Management
Project Team Leads: Mike Noel, Brandon Mills, Jordan O’Konek
Project Manager: Mike Frangi
TeamDynamix Project Number: 241151

Project Overview (What were the goals)

Leverage Identity and Access Management (IAM) solutions to provide more efficient and supportable campus services through consolidation, standardization, and application of best practices. Projects include identity life cycle management for electronic and physical identities, service access management, directory services, and ID Card and electronic door access automations. To accomplish this the following set of sub-projects were initiated:

- SP1 – Migration of Dentistry and Public Health Resource Domains to the IOWA domain
- SP2 – Migration of external forests to the UIOWA forest and IOWA domain
  - Campus survey to identify any additional opportunities for forest consolidations
  - Migration of 3 College of Engineering external forests into the UIOWA forest
- SP3 – Operational streamlining of Iowa domain credential management
  - Extension of IAM to support UNIX systems including Active directory, administrative tools, and processes
  - Flattening of ID management to reduce administrator effort
- SP4 – Enhancement and extension of enterprise-level provisioning/deprovisioning of services
  - Completion of IAM infrastructure refresh
  - Integration of enterprise login tools with the federation toolset
  - Creation of integrated set of self-service IdM services
  - Development of solution for external identities
- SP5 – Enhancement and extension of the Campus IowaOne ID Card system infrastructure
  - Development of a self-service photo upload system
  - Enablement of additional UIHC card types for door access
- SP6 – Enhancement and extension of Electronic Door Access Control Systems
  - Upgrade access control infrastructure in non-UIHC buildings to leverage single ID card technology
- SP7 – Expansion of automated role-based electronic door access management
  - Leverage and expand institutional data feeds to implement additional automated AMAG access codes

Project Accomplishments (What was accomplished)
Project Closeout

The Identity Management Project team has accomplished the following items. These accomplishments are tied back to the requirements that were outlined at project kickoff in the Identity Management Project Charter Document.

SP1
- College of Dentistry AD domain was migrated
  - 1197 workstations and laptops were migrated
  - 25 servers were migrated or retired
- College of Public health AD domain was migrated
  - 1206 workstations and laptops were migrated
  - 104 servers were migrated or retired

SP2
- Surveyed campus to identify forests outside of the UIOWA forest
  - ITAdmins and OneIT leaders were surveyed. No new AD forest were identified.
  - Security scan on the network was performed to identify domain controllers. No new AD forest were identified.
- Migrated three College of Engineering external forests into the Iowa domain
  - Microsoft AD RAP of Engineering’s network and system was performed to locate any underlying issues before migration.
  - Audit of process was conducted by UI Internal Audit to prepare any additional work before migration.
  - CCAD domain was migrated
    - 204 workstation and laptops were migrated
    - 32 servers were migrated or retired
  - ENGIN domain was migrated
    - 1134 workstation and laptops were migrated
    - 138 servers were migrated or retired
  - IIBI migration (target completion on or before 2018/07/31)
    - 118 workstation and laptops were migrated
    - 22 servers were migrated or retired
  - Leveraged central IAM platform for provisioning of Engineering services (home drives, Unix services), retiring Hitachi IdM software

SP3
- Extend IAM to support UNIX systems including Active directory, administrative tools and processes
  - Unix systems are able to authenticate and authorize users against the Iowa Domain
  - Unix systems are able to leverage the automated enterprise provisioning/de-provisioning of HawkIDs, group membership and other attributes in AD
  - Deployed a system for self-service management of Unix shell attributes
- Simplify and Automate HawkID and Service ID Management
  - Increased automation and improved notification process for management of employee HawkIDs IDs in and out of administrative unit OUs
  - Developed a model for greater centralization of HawkIDs, eliminating additional manual effort.
Project Closeout

- As part of self-service account creation platform, developed tools to request and create service and admin IDs

SP4
- Completed IAM infrastructure refresh
  - Virtualization of all physical hardware
- Upgraded operating systems and SQL DBs to current versions.
- Retirement of legacy processes
- Explored integration of HawkID login tools with federation toolset
- Created an integrated set of self-service Identity Management services
  - Replaced vended software (Anixis) with locally developed password management tool
- Developed solution for external identities
  - As part of larger account creation platform, deployed a self-service solution to invite external individuals to create HawkIDs

SP5
- Enabled usage of multiple UIHC cards for door access by faculty, staff, and students
- Developed an ID photo upload system
  - Ability for people to upload a photo for their ID Card. Currently in use for incoming students, with discussions to expand to additional cardholders.
  - Enhanced the ID Card web service to leverage modern technologies, improve performance, auditing, access management, and provide access to multiple types of ID photos for class lists and other campus applications (e.g. Rec Serv memberships)

SP6
- Upgraded multiple systems to support usage of a single card across campus
  - Application software upgrades
  - Reader Firmware upgrades
  - Provisioning solution expanded to include UIHC badges (charging cards only)
  - Migration of user access from 26-bit credentials to the Iowa One card or UIHC badge
- In partnership with College of Engineering, explored management of legacy Millennium door locking infrastructure with AMAG software and/or building controllers

SP7
- Expanded service definition to formalize the automated role-based request and approval process
- Extended automation of role-based access control in AMAG
- Automated Doors at:
  - College of Engineering
  - College of Law
  - College of Public Health
  - Information Technology Centers
  - University Housing and Dining
Project Closeout

Recommendations for Further Action (What tasks are still left to do)

- Retirement of Engineering and IIBI domains will be completed by July 31, 2018
- Continue to evangelize and expand deployment of automated door access management

What Could Have Been Improved (What would you have done different)

Resources from the DNA team were used extensively on multiple OneIT projects. Interdependency and amount of effort was not fully understood at initiation, which led to extended deadlines in a number of areas. Given the external forces, rapid development of OneIT, and transition of workgroup leadership, this was somewhat inevitable, but nonetheless worth observation.

Scope deviated somewhat from initial objectives, due largely in part to identification of additional opportunities as the project progressed. Some initial tasks did not prove fruitful, feasible, or provide a reasonable return on investment. This did not materially impact savings targets and was more than offset by additional opportunities brought into scope.

Recommendations for Process Improvement (What can be done better on future projects)

OneIT governance and project management has evolved significantly over the lifecycle of this project. Observed recommendations during this project have already been addressed as part of these larger overall efforts.

☐ Project Closeout Approval Date 05/24/18