IAM Committee
Meeting Agenda
06/11/2018

Attending: Cam Beasley, CW Belcher, Hatty Bogucki, Graham Chapman, Tim Fackler, Cesar de La Garza, Ed Horowitz, Ty Lehman, Darin Mattke, Jason Mayhew, Mike McIntosh, Olu Kole-James, Steve Rung, Charles Soto

Absent: Dash Ballarta, Alison Lee, Felipe Lee, Shelly Powers, Dustin Slater

IAM Team Members Present: Michele Graham, Justin Hill, Marta Lang, Mario Leal, Reece Price, Autumn Shields

1. Introductions (Including phone attendees)
2. Project Updates:
   A. UTLogin Stability Roadmap Progress (Marta Lang)
      - Handout included
      - In the last month we made a major decision to implement ForgeRock AM version 6.0 instead of 5.5
        - 6.0 was released in May
        - 5.5 had a few issues that we knew would be addressed in 6.0
        - We looked at timeline and transition schedule, and we knew that we wanted to stay as up to date as possible
        - A few issues have come up and we have been working with the vendor to get those resolved
        - The testing schedule has been readjusted to account for the upgrade and the need to share a testing resource with our Workday readiness effort
      - Verification of TEST environment should still be done by end of August
      - Modernized AHV (Authentication History Viewer)
        - We are finalizing the design and build schedule.
      - Establish the UTLogin Identity Store (to isolate UTLogin from TED)
        - There is some work that needs to happen with our Identity Management team
        - This will take some coordination because of Workday readiness

   B. IAM Workday Readiness Coordination (Marta Lang)
      - No handout
      - There has been a lot of testing activity in this area
        - E2E (end-to-end) and DY (mainframe data replication) testing has been underway for last several weeks
        - Wrap up testing by end of next week for the current testing window
      - The major systems that are still outstanding are
        - SailPoint
          - We still have a number of test scenarios we have to execute.
- Additional testing window at the end of July
  - Apollo and DPUSER testing this week
  - Merge Objections

**Q:** Any TED testing? Yes, TED is part of our E2E testing for SailPoint. After we get data from Workday we test it all the way to TIM, TED, TOM, and WHIPS

**Q:** Any testing downstream of TED? We have not done any testing downstream of TED
  - We are also working on our communication plan. At Workday go-live we know that there are going to be impacts to our systems that we need to let customers know about
    - We are currently incorporating internal feedback to the plan. The plan will be sent out to the committee this week asking for your input.
    - You will start seeing communication from the IAM team within the next couple weeks.
  - We are also planning our Workday Go-Live cut-over activities
    - TIM, SailPoint, and ID Card System are some of the systems that will be affected
    - We need to have a very detailed cut-over plan to say what is going to happen when
      - The team has been working to put those events and activities in order and figure out the best order.
      - We will be putting this in timeline format so then we can develop very detailed playbooks.

**C.** Retirement of position-based authorizations in Apollo and OHSC (Michele Graham)
  - No handout
  - Changes to Apollo and OHSC have been deployed to QUAL
  - We have received feedback from one campus group that the change to OHSC is going to cause a large impact their systems.
  - Please talk to your team and try to understand what the impact of these changes will be
    - We will work you to figure out solutions ahead of time
    - Please reach out with any questions or concerns

Graham: HR is the area the raised concern. We are trying to reduce the number of changes before Workday go-live, so process changes only happen once
  - Based on this feedback, we may have to change to the dates that we have been communicating. We will let you know once we have a decision.

**D.** SailPoint IdentityIQ 7.2 Upgrade (Autumn Shields)
  - No Handouts
  - Sailpoint 7.2 Upgrade
• We are finalizing the performance and accessibility review
• PROD release will be July 11th

E. Password Security Improvements (Autumn Shields)
   ▪ Password work has been delayed because of resource constraints
     ▪ We are working on plan to implement password rule changes before Workday Go-live
       o These changes will allow passphrases and other rule adjustments
     ▪ The effort to require people to change their password will be delayed in till after Workday Go-live.

Q: When will the password rule changes occur?
A: It’s looking like September. We originally wanted to do that in July, but we should be able to get to it by early fall.

Q: Any news on focus groups?
We have not scheduled that yet, there will be more around efforts to get people to change their password.

Q: Has the CIO told CFO about the timeline changes? I know the CFO was very interested in password rule changes.
A: We are working to get a specific plan nailed down and will share it when it has been finalized.

3. IAM Roadmap Renewal – Review Brainstorming Results (CW Belcher)
   ▪ Thanks to the folks that completed the survey
     o We received 45 suggestions
   ▪ In handout is a set of mind maps organized by 5 topic areas
     o We have taken input from the IAM team, the Committee, and customers
     o No surprises, you can see themes
       ▪ Authentication (Login Experience)
       ▪ Password management / 2 factor authentication
       ▪ Guest account management
       ▪ Authorization and access management
   ▪ We are going to take these suggestions and pain points and work with the IAM Team and Managers to come up with a list of potential projects that would address these
   ▪ At the July committee meeting, we have work to priority these potential projects
   ▪ At the August committee meeting, we will we have an action plan to present

Cam - UT System is pushing new guidelines that talk about 2FA rules and we expect the first round of changes to have a compliance date of November. This could cover services like Box and Workday, and we have talked about reducing the friction with two factor and reducing the number of times two factor is used. It sounds like this function is still a ways off. Is that correct?
A: Yes it may be possible. We are going to develop a proof of concept and do some testing to help direct our efforts.

4. Other Initiatives/Updates

   A. IAM Team Staffing (Mario Leal)
      • 1 position open – Project Manager,
         ▪ We are currently reviewing applications

   B. IAM Integrations (Justin Hill)
      i. Start (May 1): 23
      ii. 1 New: (DMS-Tableau)
      iii. 0 Reopened: ()
      iv. -2 Completed: (Everbridge, Zoom)
      v. 0 Cancelled: ()
      vi. End (May 31): 22

         ▪ Evan Fuhr has been on boarded and that is providing some flexibility in meeting the demand for new integrations
         ▪ The numbers don’t show it, but we are starting to see an uptick in integrations, with people getting ready for next semester
Action 1: Stabilize Current UTLogin Environment (Complete) - As of June 8, 2017, the IAM team disabled the self-service Realm Policy Agent and put the existing UTLogin environment in a “critical fix only” mode. Efforts will now focus on Action 2.

Action 2: Simplify & Standardize UTLogin Environment (In Progress) - The team has decided to upgrade from version 5.5 to version 6 ahead of verifying the TEST environment to provide enhanced features and better stability. Testing to verify the TEST environment is in progress and scheduled to complete in late-August 2018. Build of the QUAL environment will begin in mid-June 2018.

Action 3: Measure & Report Progress (Ongoing) - KPIs have been identified and are being published on a weekly basis (See: http://iamservices.utexas.edu/projects/utlogin-stability-report/). Monthly status updates will be provided outlining incidents, KPI’s, and project status.

<table>
<thead>
<tr>
<th>Project</th>
<th>Planned Start</th>
<th>Actual Start</th>
<th>Planned Finish</th>
<th>Projected Finish</th>
<th>Actual Finish</th>
<th>Status against Schedule</th>
<th>BUDGET</th>
<th>ACTUAL</th>
<th>ETC Remaining Work</th>
<th>FAC ACT + ETC</th>
<th>VAC BUDGET - EAC</th>
<th>Status against Budget</th>
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<tbody>
<tr>
<td>IAM Project - UTLogin Stability Roadmap</td>
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UTLogin Availability
This graph represents UTLogin’s overall availability since February 8, 2018 along with UTLogin’s published SLO of 99.42%. This data shows that since UTLogin was put into critical/fix only mode on June 8, 2017, the number of service disruptions has decreased. There were no service disruptions for the month of May.
Historical data and other Key Performance Indicators (KPI’s) which reflect the stability of UTLogin are published every Friday. The weekly report is viewable here: [https://iamservices.utexas.edu/projects/utlogin-stability-report/](https://iamservices.utexas.edu/projects/utlogin-stability-report/).
End User Experience

EIDs for Other People
- Difficult to provision EIDs for other people
- EID Web Tools
  - Update/modernize IAM Services website
  - Improve EID Admin tool (Qwicap)
  - Update/modeernize IAM Services website
- EIDs for Other People
  - Difficult to provision EIDs for other people

Stakeholder Relationships
- Increase transparency to stakeholders about IAM projects
- Training on new applications or new features

Platforms
- Move off mainframe

ID Cards / Photos
- Let students upload/submit for approval own official photo
- New GUI for ID Card System and get off mainframe
- Let ID card holders pay with credit card at ID Center

Directory Services Access
- Streamline process for requesting access to TED
- Graphical TED queries
- Let ID card holders pay with credit card at ID Center

Data Propagation
- Data propagation times across systems can be slow (batch jobs)

Authentication Integrations
- Use one repository for all integration artifacts
- Automate the integrations process
- WPA upgrade process is hard
- One email list for requesting any IAM service – “Who should I email?”
- Have more standard request forms for IAM services in ServiceNow
- One-stop shop for access requests

Getting Help
- Increase transparency to stakeholders about IAM projects
- Training on new applications or new features
- Move off mainframe

Password Management
- Make it easier to remember passwords (one stop shop for end users)
- Only have the help desk reset passwords
- Data propagation times across systems can be slow (batch jobs)
- Graphical TED queries

Two-Factor Authentication
- Fine-tune Duo KB articles in advance of Workday
- Keep 2nd factor sprawl under control and within reason – negatively impacts productivity
- Consider authN architectures to mitigate impact

Guest Accounts
- Make it easier for guests, alumni, prospects, donors to sign in
- Enable Social IDs/BYOId
- Lightweight authentication

Authorization & Access Management
- Make it easier to see who is authorized for systems
- Make it faster and easier to get and remove authorizations
- Authorizations are difficult to keep track of and remove when someone leaves

Authentication/Login Experience
- Pain point: per-resource authn/authz using SAML, i.e. allowing public access of webpage, until you hit a certain path
- Login takes too long or is inconsistent
- Big difference in what fac/staff and student/alumni need – Maybe don’t do them the same way
- Too many redirects to utexas.edu in UTLogin
- SSO between UTLogin and Shibboleth. Separate sessions for Shib and UTLogin are confusing
- Use of biometrics

Platforms
- Move off mainframe

Training
- Training on new applications or new features

Stakeholder Relationships
- Increase transparency to stakeholders about IAM projects

Getting Help
- One-stop shop for access requests
- Have more standard request forms for IAM services in ServiceNow
- One email list for requesting any IAM service - “Who should I email?”
Don't impede access to MS Cortana or other Microsoft OS enhancements

Academics needs unfettered access to existing resources, such as entire O365 portfolio

Be ready for more security for research
Add additional biometric authentication to protect confidential research, including facial recognition

Need better, more modern options for user-defined access control (without IAM developers). "I want to control access to X for my students."
Not beholden to our timelines.

Authorization management that's non-technical for researches and assistants
Map authentication/authorization options to government regs (e.g., ITAR)
Two-factor authentication based on geographical location
Collaborate with ISO regarding geolocation restrictions on authentication
More collaborative efforts with ISO around security and access

IAM for IoT – will become an issue soon
Academics needs unfettered access to existing resources, such as entire O365 portfolio
Don't impede access to MS Cortana or other Microsoft OS enhancements

Authentication & Authorization

Involvement with Academic and Research Units

Partner with the Center for Identity
Participate in student/class learning, seminar, guest speaker, real-life anecdote, application of computer science
We are not in touch with the research side of UT
More interaction to understand needs
Continuing with integrations that help faculty/staff
Make it easy to give non-UT researchers access to UT resources – support user provided credentials (email of their choice)
Research collaboration authentication
More ways to share data with peer institutions
Easy collaboration with others outside of UT, other universities, institutions, etc.
(sharing of data, apps, documents, etc.)
Guest/temporary access – social login
Address international partners
Address GDPR

Collaboration Outside UT

Address GDPR
Investigate integration with login.gov or whatever they're using
Participate in more SSO federations

SSO Federation

Participate in more SSO federations
Investigate integration with login.gov or whatever they're using

HPC
IAM for decentralized HPC?
Administrative & Business Documentation & Help
Lacks because of the way ServiceNow is set up

Non-Person Identities
Non-person EID approach

Legacy Transitions
Maintain bridges and integrations for IAM functions across legacy and new systems to make transitions less painful

Platform
Enable end-users with DIY culture
Heavily bias towards industry tools rather than custom code
Use Active Directory for authN and authZ for Admin & Business areas
Use different solution for faculty/staff/alumni
Better integration with O365
Better integration with IAM functions

Identity Data
More attributes in TED from more source systems (or primary + MV)

Administrative areas need to be able to consume data attribute changes (e.g., losing an entitlement) with a messaging service

Authentication
Smoother ID Card System integration

Password Management
Better EID password reset process for resetters

Authorization
Better reporting (e.g., SailPoint IIQ)
Get rid of mainframe and get on the cloud

ID Cards
Revenue streams. Use ID for BevoBucks at vending outlets.

Documenting & Help
Documentation and help desk support lags because of the way ServiceNow is set up

Testing
Automated testing framework

Collaboration
Common use of collaboration tools (MS Teams, etc.)

Authentication
Provide one-stop shop to report on who’s logging into what services

Privacy
GDPR compliance (and other similar laws/regs)

Authorization
Better ability to charge for IAM services

Methodology & Process
Focus on simple processes
Common methodology between our systems
Security & Risk

Authentication

- Geolocation authentication
- Adaptive authentication
- Biometric authentication support
- Yubikey support
- UT ID card as smart card (as in govt)
- Multi-Factor Authentication
- Automate 2FA with smartphones

Passwords

- Proactive scan of online hacked credentials lists
- Need to make it easier to transition from one password hash to another when needed
- Get rid of unnecessary password data
- Retire old password hashes
- Increased security around who can access hashes
- Allow departments to opt-in all their SSO connected applications to 2FA
- More two-factor authentication
- More two-factor protected sites
- Two-factor everywhere
- Implement some sort of third-factor for "high" risk
- Two-factor authentication for command line access to IAM services

Authorization

- Track and review authorizations for all systems that house sensitive data
- Use SailPoint for reviews of authorizations, certification campaigns
- More public outreach efforts in conjunction with ISO ("Consider changing your password")
- General marketing campaign on IAM best practices for campus
- Human Factors training
- More training on security/cybersecurity for IAM team members
- Everyone runs old and bad OSes, software versions
- Improve security awareness in context of Workday where so much more is exposed to users and most data available for download
- Do better job explaining why poor security practices are bad, don't just finger-wave and say "bad!"

Security Awareness

- Review AUPs across IAM
- AUPs
- Compliance tools – separation of duties
- Continue separation of duties within the help desk

Separation of Duties

- Machine learning to detect attacks – with ISO
- Backup and failover plans to keep highest level of uptime
- Do better job explaining why poor security practices are bad, don't just finger-wave and say "bad!"

Operations

- Reduce points of failure between systems
- Transcend legacy and idiosyncratic systems to enable more robust and resilient system (biased toward cloud-centric)

Testing

- Better automated testing
- AUPs
- Review AUPs across IAM
- Compliance tools – separation of duties
- Continue separation of duties within the help desk

Biometric authentication support

- Improve authentication standards
- Provide guidance and ability to require higher authN depending on the task at hand (looking at a single record versus downloading 50K records)
- More two-factor authentication
- More two-factor protected sites
- Two-factor everywhere
- Implement some sort of third-factor for "high" risk
- Automate 2FA with smartphones
- Biometric authentication support
- Yubikey support
- UT ID card as smart card (as in govt)
Move to cloud resources to improve resilience
- Authentication cloud resiliency
- Cloud Everything or Cloud/On-Premise Everything
- Mature in area of “self-healing” systems
- CARE project

Consider latency and vendor issues when considering cloud systems
Consider impact of loss of off-campus internet on access to cloud services

Zenoss alternative
- Zenoss is useless and annoying for services (MFA is just a ping and the ping doesn't work)
- Better system monitoring solutions
- Standardized health monitoring tools for all services (since Zenoss is intended to be smaller and smaller)
- Move away from emailing system errors
- Better monitoring via Splunk

Technical Health

Resiliency

Updates & Upgrades
- Systems up to date with patching
- Auto-patching for quarterly OS patchings
- Ensure planning allows for regular upgrades

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Monitoring & Error Reporting

Training
- Cross training to balance technical knowledge across teams and team members
- Continued professional development of staff

Standards
- Staying on current/open standards enables flexibility
- More standards, less customization

Code Reviews
- More code reviews (even of old code)
- Regular, scheduled efforts to reduce technical debt for services
- Streamline processes – less cumbersome technical flow

Technical Debt
- Over burden of technical debt

Productivity Tools
- Make Outlook less slow

Team Structure
- Expand the Ops team

Analytics
- Automated analytics for products/services that currently do not have much

Testing
- Automated testing across all products

Configuration Management
- Full adoption of ServiceNow CMDB

Platforms & Tools
- Use of standard angular CLI Service Worker setup currently prevented by the way UTLogin works
- Use industry standard tools rather than custom code
- Pay greater attention to how Microsoft services fit in our identity ecosystem. Active Directory (in particular, Azure AD) should be part of our roadmap.

Modernize with containers
- Tight integration with cloud-based service offerings, Shibboleth, and the Microsoft Azure Active Directory ecosystem are key to our need to be able to operate seamlessly internally and with an increasing set of international partners
- Microsoft Teams could & should be a centerpiece

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