**SSO Login** | Test Plan

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## **User Story and Goals**

As a user of Jama, I would like to log in to Jama using SSO/Active Directory authentication, instead of Jama authentication, so that logging into Jama is simpler.

There will be three Jama Web Apps being connected through SSO. They are Jama App X, Jama App Y, and Jama App Z.

We will be using the OneLogin SSO identification provider. They have many options on how to implement their services, we will be using the ‘Customized Login Page’ option. More information can be found here <https://developers.onelogin.com/quickstart/authentication>.

## **Scope**

**In Scope:**

Service Providers:

* Jama Web App X
* Jama Web App Y
* Jama Web App Z

Identification Providers:

* OneLogin

Functional Requirements:

1. Old login service (update after risks/questions wiki signed off on for this functionality)
   * Customers using old service have been migrated to the new system in a way that is simple for them to understand and use.
   * Users are not able to access the old system in any way.
2. New login service
   * Old system customers can use the new system
   * New users can sign up/in with the new system
   * Form validation and errors
   * Interactions with all Jama web apps
   * UI for new pages and emails

Compatibility Matrix

* + Browser & versions we support [linkToCompanySupportWiki]

API Requirements:

* GET/POST/PUT/DELETE endpoints for App Resources
* GET endpoints for Connectors
* GET/POST/PUT/DELETE endpoints for Users
* GET endpoints for Events
* POST/GET endpoints for Auth Tokens
* GET endpoints for Roles
* GET endpoints for Groups
* Post endpoints for Invites

Deployment and Environment testing:

* As the service is deployed up the environment stack, run smoke tests and document any issues encountered in the deployment plan.

Non-Functional Requirements:

* Security (The majority of security testing will be done by a specialized external team. But we (or allow them) should test some of the core issues that may cause large delays in the schedule as early as possible)
* XSS attacks (<script> tags not allowed in DB)
* DB commands not allowed (drop tables)
* GDPR (we have a mechanism to send users any data and/or delete them from the new login system if they request it)
* Passwords are stored safely with encryption

**Out of Scope:**

Identification Providers:

* LinkedIn, Facebook, Github are other SSO options we are investigating but will not be implemented in this initial rollout. See ticket/wiki linked here for more info about those options [LinkTicket/Wiki].

Non-Functional Requirements:

* Metrics
  + collecting any metrics about the login process will be handled in an unrelated effort
* Security
  + an external security team will handle the testing and security concerns
* Performance
  + An external team will do performance and load testing for this service.

Web Compatibility

* We don’t support a mobile view
* We don’t support X browsers & versions [linkToCompanySupportWiki]

## **Schedule**

Goal: We would like to have this service ready for our users at the start of 2020.

|  |  |  |
| --- | --- | --- |
| Phases & Features | Time | Notes |
| Requirements | 3 Months  (Q1 2019 - Q2 2019) | * User research * Story outlines * Wires and UX |
| Development | 3 Months  (Q2 2019 - Q3 2019) | * Ops/System configuration * Backend development * Frontend development |
| Testing | 3 Months  (Q3 2019 - Q4 2019) | * Test planning (2 week) * API test execution (1 week) * UI test execution (6 weeks) * Company bug bash (1 week) * Exploratory testing (1 week) * Review and last minute bug fixes (1 week) |
| Deployment | 1 week  (Q4 2019 - Q1 2020) | * Deployment successful (1 day) * Monitor logs and support any critical issues (2 days) * Field any last minutes issues / questions from other teams (2 days) * We should make sure the whole company understands the new system and how to use it. (2 days) |

## **Roles & Responsibilities**

|  |  |
| --- | --- |
| Roles | Responsibilities |
| Team member: John Doe  Role: PM  Team: Jama Roadmap Team X | * Communicate with external teams for any support needed * Work with Team lead to communicate risk management * Create deployment schedule with stakeholders * Leads standups, demos, retrospectives * Triage bugs/design change requests as needed * Support UX in user testing initiative * Manage company training efforts |
| Team member: Jane Doe  Role: Dev lead / Team Lead  Team: Jama Roadmap Team X | * Manage unit testing efforts * Support PM/Dev/Test/UX communication with external teams for technical support and risk management * Support more Jr developers |
| Team member: John Deer  Role: Backend Developer  Team: Jama Roadmap Team X | * Implement Server & APIs * Implement API/Unit tests and reporting tool, review with QE |
| Team member: Mr. Plum  Role: QE  Team: Jama Roadmap Team X | * Support API testing effort w/ Backend developer * Support UI testing effort w/ Frontend developer * Run bug bash and exploratory testing efforts * Perform functional UI testing * Deliver test/deployment/risk reports |
| Team member: Mrs. Scarlett  Role: UX  Team: Shared Jama UX team | * Provide wireframes for stories and support with any design updates needed * Run user testing effort as soon as POC is available |
| Team member: Mr. Mustard  Role: FrontEnd Developer  Team: Jama Roadmap Team X | * Create all new frontend pages for feature * Implement frontend unit/UI tests and reporting tool, review with QE * Implement POC and support UX with user testing effort |
| Team member (external): Mr. Plum  Role: OneLogin POC  Team: OneLogin support  Email: wehaveaquestion@onelogin.com | * Assigned to Jama for any service related issues we encounter. |
| Team member: Mrs. White  Role: Operations and DB admin specialist  Team: Shared Jama Ops team | * Support Jama Roadmap Team X with DB and operations support for new feature * Works with Team Lead and PM to define initial technical implementation requirements |

## **Deliverables**

* Stories/Epics
* Test Plans
* Test Cases
* Test reports
* Technical wiki on implementation
* Deployment plan with rollback options
* Company Training
* AN AMAZING NEW SERVICE! :0)

## **Environments**

This deployment and environments flow is an assumption, update once related action item is complete in risks section.

Deployment flow is expected to be: Test Env > Staging Env > Hotfix Env > Production Env

|  |  |  |
| --- | --- | --- |
| Environment: **‘TEST’** www.jamalogin.test.com | | |
| Jama Apps | SSO | Notes: |
| Jama Apps X,Y,Z | Sandbox Env | * List of credentials for jama and sso envs listed here. |
| Environment: **‘STAGING’** www.jamalogin.staging.com | | |
| Jama Apps | SSO | Notes: |
| Jama Apps X,Y,Z | Sandbox Env | * List of credentials for jama and sso envs listed here. |
| Environment: **‘HOTFIX’** www.jamalogin.hotfix.com | | |
| Jama Apps | SSO | Notes: |
| Jama Apps X,Y,Z | Production Env | * List of credentials for jama and sso envs listed here. * **RISK**: This will be the first env where we have the Jama web apps talking to the production sso service. * **RISK:** If a hotfix comes up in production while we are using this environment, it will likely need to be rolled back to gain confidence in any hotfix testing needed |
| Environment: **‘PRODUCTION’** www.jamalogin.com | | |
| Jama Apps X,Y,Z | Production Env | * List of credentials for jama and sso envs listed here. |

## **Risks & Questions**

* Risks are outlined at a high level below. More info such as outstanding questions, action items, task owners, and discussions can be found in the linked wiki for each risk

|  |  |
| --- | --- |
| Risk | Status |
| **Risk:** **How will migration work for old customers?**  Migrating from one login system to the other is complicated.  We should get a sense of the amount of users and types of data that will be migrated. We should also outline how this migration plan can be tested. Things such as how long we should keep the old info/DB around should be considered.  Will we support both types of sign in for a period of time?  Will only some Jama Web apps be using the new system?  How long might a migration take? | @InProgress  [WikiLink] |
| **Risk: How will this new service be deployed?**  Creating new services is complicated, and getting the deployment process down for other environments is crucial.  We should get a sense of how, when, and what teams will be involved with deploying this new service. We should outline specific deployment issues, risks, rollback plans that we discover as we develop and test the system. We should get a feel for when exactly we can do a test with the Jama web apps (on our test env) configured for the SSO production service and what that looks like. We should decide if there will be scheduled downtime that needs to be communicated to the customers. | @InReview  [WikiLink] |
| **Risk: What flexibility does this system allow in the future?**  In the future we may want to add other SSO options (Facebook, LinkedIn, Github) to our platform, we should do some initial research to see how complicated this is and if we need to lay any ground work in the initial pass to allow for modularity in the future.  We may need to add more Jama Web Apps to log into later, we should do some research to see how difficult that is as well. | @InProgress  [WikiLink] |
| **Risk: Out of Scope Testing**  This service is critical to our application. We should outline a plan to communicate efficiently and understand a schedule of when/how external teams may be doing additional testing that is out of scope for our team. (performance, load, security, accessibility). We may be able to provide them with critical documents, environments, credentials, that will be needed for their testing efforts. | @InReview  [WikiLink] |
| **Risk: We need a sandbox test env for our SSO provider**  We need a sandbox env for our sso provider, we have never used this system or environment before. Expect delays as we learn how to use and configure it. Make sure to outline risks around testing on a sandbox env and when we can properly test on a production like configuration.  Make sure to outline specific tasks related to deploying the service. | @NotStarted  [WikiLink] |
| **Risk: Emails with old login urls**  Many times emails have links related to login, we should make sure we figure out if the team is responsible for these changes as well. | @NotStarted  [WikiLink] |
| **Risk: Employee to own new service.**  Large important services like this should have some owner that is responsible for periodically reviewing any upkeep items that are needed once it’s live.  Outline a wiki and find an owner for this service, things that may be considered include:   * Any Certs that may expire * External API changes and upgrades to services we rely on * Test/sandbox environment upkeep and maintenance | @NotStarted  [WikiLink] |
| **Risk: Multiple Jama web apps**  There are multiple Jama web apps that will be integrated into the new signin system. We should outline and make sure we know exactly how this new service interacts with each web app.  Things to consider include;   * Can we deploy the SSO service prior to deploying the Web apps and still have them work on the old system. * Do we need to deploy all the Jama web apps together with the new SSO service. Or will we do one at a time. | @InProgress  [WikiLink] |
| **Risk: SSO provider’s management platform.**  Does the SSO provider have it’s own management platform that we can log into for things such as registering and unregistering users, revoking app certs? Will testing this platform be in scope or will we only be testing functionality that is built into the Jama Web app front end and apis using the SSO provided backend. Update in scope/out of scope after review. | @NotStarted  [WikiLink] |
| **Question: Auto timeout?**  Does our system automatically log the user out after a certain period of time? If so do we have a way to test this without waiting for the full time limit? | @NotStarted  [WikiLink] |
| **Question: Forgot password scope?**  Research more about how password resets work for OneLogin service. If you go through the forgot password flow for app X and are sent a temp password in an email, can you just log in on app Y with the new temp password? | @InProgress  [WikiLink] |

## **Dependencies**

This section will be updated after risk assessment activities have concluded.

* OneLogin environments and services
* External testing teams (performance, load, security)
* We need to create some existing user accounts on the old login service to run deployment tests. Make sure there is a sufficient amount on each environment.

## **Exit Criteria**

**Requirements Phase:**

1. Test plan, Feature tickets, and any other related documents are created and reviewed by all team members. All team members understand the scope and objectives of the project.
2. There are no outstanding risks, dependencies, questions that people feel uncomfortable about moving forward with.

**Development Phase:**

1. Test cases have been created and reviewed by all team members.
2. API/Unit tests have been created and reviewed.
3. Any relevant plans/documents have been updated with new info learned from this phase.
4. Technical implementation document has been created that outlines exactly how the services work together, API interactions, Certificate creation and revokes, protocols used, etc. It has been reviewed by all team members.

**Testing Phase:**

1. All UI golden path tests have been ran on the full browser compatibility matrix.
2. All UI tests have been ran on the single most popular browser.
3. 80% of UI tests have been ran on the full compatibility matrix.
4. All API testing has been completed and passing.
5. All high sev/pri bugs have been closed.
6. Company bug bash has been completed.
7. Any unresolved low sev/pri bugs have been triaged by project manager.
8. No team members have any outstanding questions or concerns. Everyone feels comfortable deploying this new service to production.
9. All testing has occurred on lower environments (Test, Staging) and the deploy process has been practiced at least once as we deploy to new environments.
10. UX has signed off on final visuals and performed any user testing they have scheduled.
11. PM has company training ready for rollout (preferred that training occur before deploying to production so support team can hit the ground running and also development time isn’t affected for other teams)

**Deployment:**

1. All testing/product/development artifacts (plans, outlines, checklists, test cases, api test collections, test scripts) have been delivered to any external teams (security, release certification, product, change log copy writers, marketers) that need them. External teams have signed off on deployment.
2. A deployment plan/schedule has been created and signed off on by all team members and stakeholders that will be impacted by it.
3. Production deployment has occurred, all team members were present and did any relevant testing/investigation they felt was needed. All team members feel comfortable and the service is live.

## **References:**

OneLogin References:

* Developer Info: <https://developers.onelogin.com/>
* Sample Postman collections: <https://developers.onelogin.com/api-docs/1/getting-started/postman-collections>
* API info: <https://developers.onelogin.com/api-docs/1/getting-started/dev-overview>

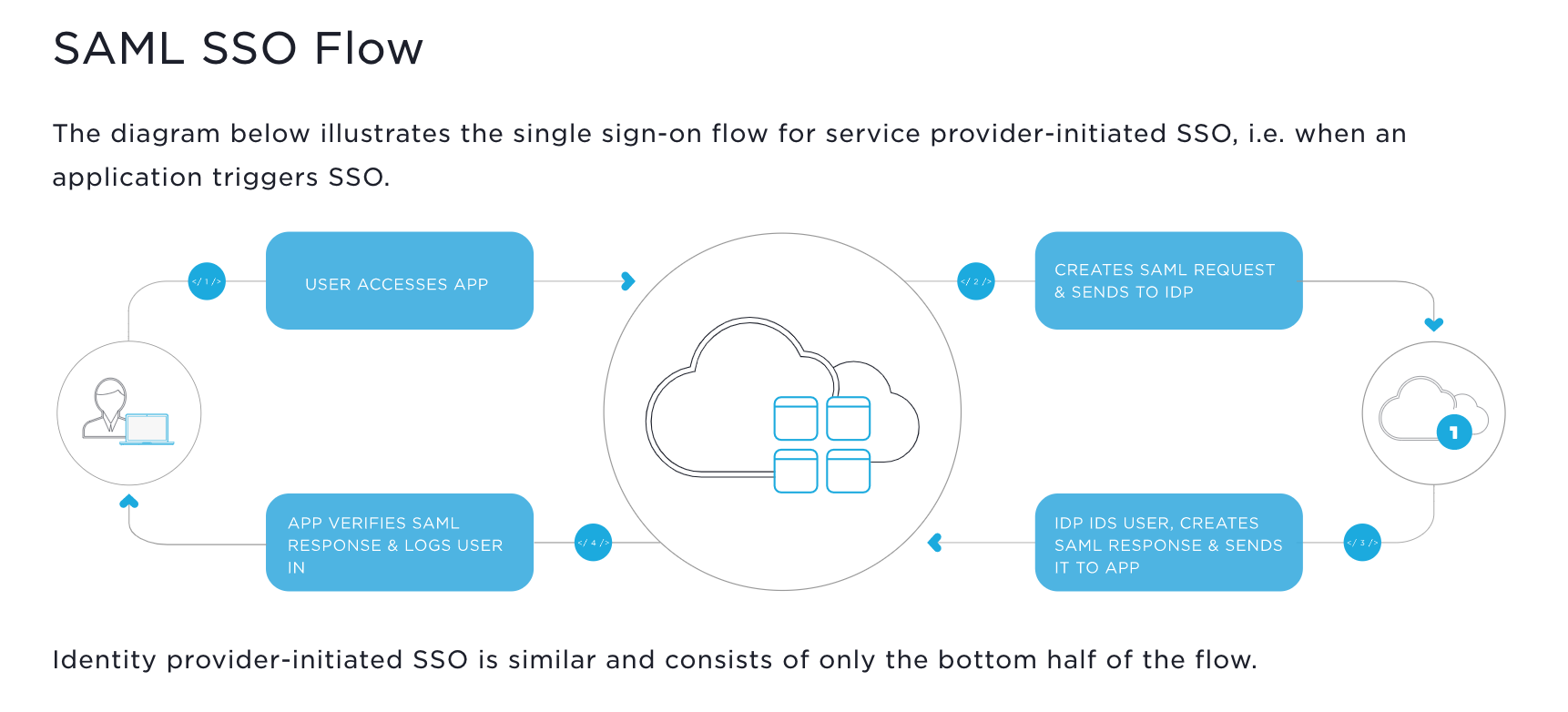
Development References:

* Database and Schema info [wikiPageLink]
* Technical flow chart of services [wikiPageLink]
* Technical explanation of migration plan [wikiPageLink]
* Wiki outlining new service owner and responsibilities included with these new processes

Testing References:

* Test plan [wikiPageLink]
* Test cases
* Test reports

Simple Flow Chart of new Service:



## **ChangeLog**

|  |  |  |
| --- | --- | --- |
| Team Member | Date | Updates |
| @RobbyEast | 12-18-2019 | * Initial draft of Test Plan |