Fermilab Federated Identity Project

Mine Altunay

WoTBAn&Az

October 18, 2021

Federated Identity Project at Fermilab

- The goal of our project is to provide our scientific collaborators with federated access to our lab's scientific infrastructure and resources.
    - Our collaborators will access the lab's resources by using their identity credentials issued by our partner institutions.
- There are two phases of the project.
    - We are in Phase 1, where we design and build the architecture based on OAuth and JSON Web Tokens, and will only allow access to users with Fermilab accounts.
    - In Phase 2, we will develop policy and procedures to design how to extend the federated access to users at our partner institutions.

New Architecture
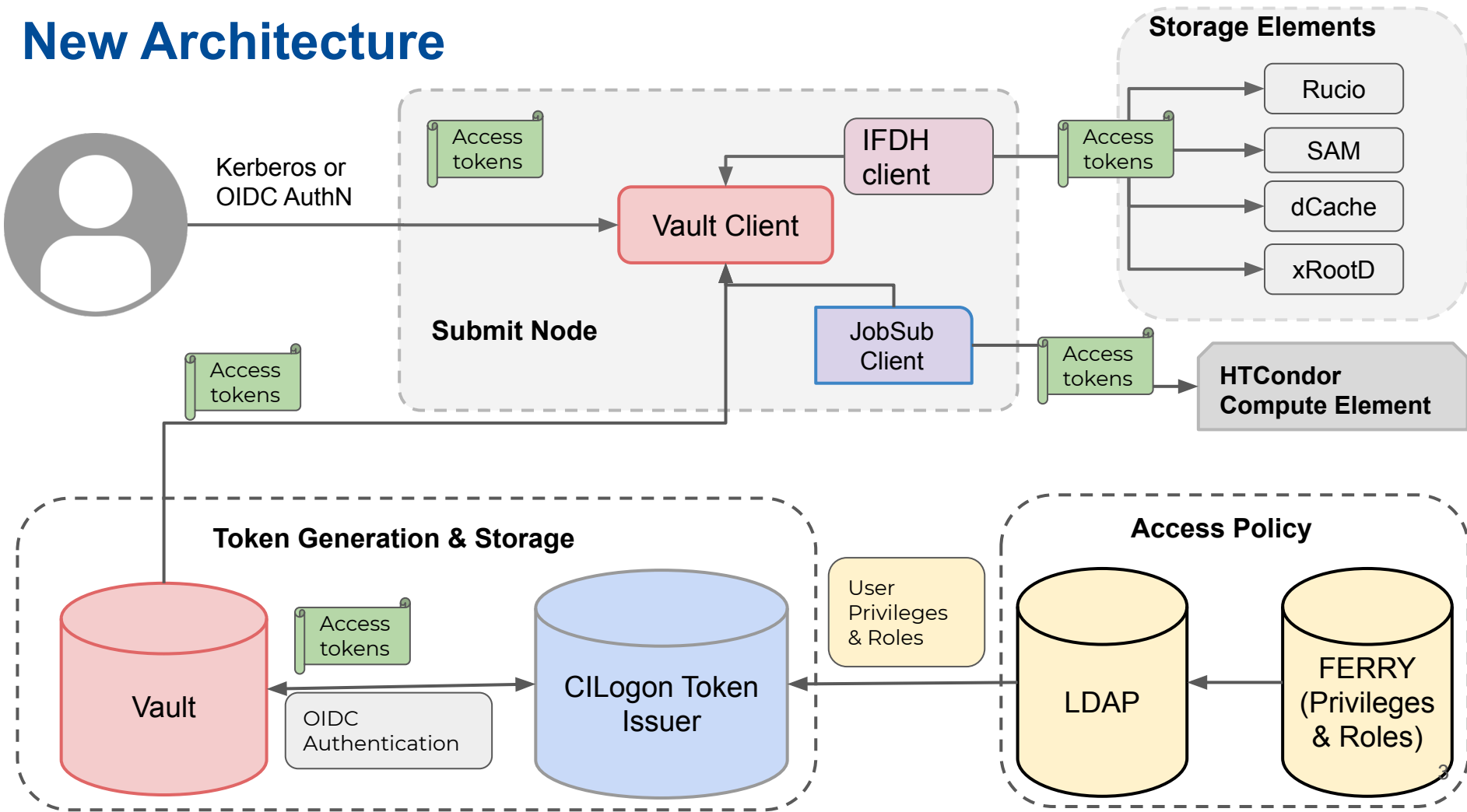
Transition To Tokens

- All of our software development is completed except for patches.
- We are moving our components into production.
  - CILogon/LDAP is already moved to production servers.
  - Ferry is in the process of moving.
  - However, we are not in production yet, since we have not completed our tests yet.
- We created a Token Task Force Group composed of experiment members, meeting biweekly
  - Invited experiments to obtain a token and conduct basic tests.

Experiment Feedback

- We have a number of VOs at Fermilab, and we cannot allocate an individual Token Issuer for each of them.
  - 5 of our international VOs will get their own Token Issuers.
  - The rest of our VOs will be served by the same Fermilab CILogon Token Issuer.
- Our 5 VOs with individual Token Issuers can obtain tokens and use the tokens to submit basic jobs and access data.
- We will do more in depth testing for the remaining VOs.

Experiment Transition

- Our earlier plan was to finish all experiments testing by January 2022.
- However, we found issues with user mapping for FNAL SubVOs. We are currently working on this issue.
    - Our testing schedule will be pushed back a few months.
- Our goal is to finish experiment testing by the end of Spring 2022.
- We will start creating a transition plan once all patches/fixes are in place and our architecture is finalized.
- We plan to start transitioning first VOs to tokens in the summer. We will operate our infrastructure in a hybrid mode, where some VOs will use tokens and some will use certificates.