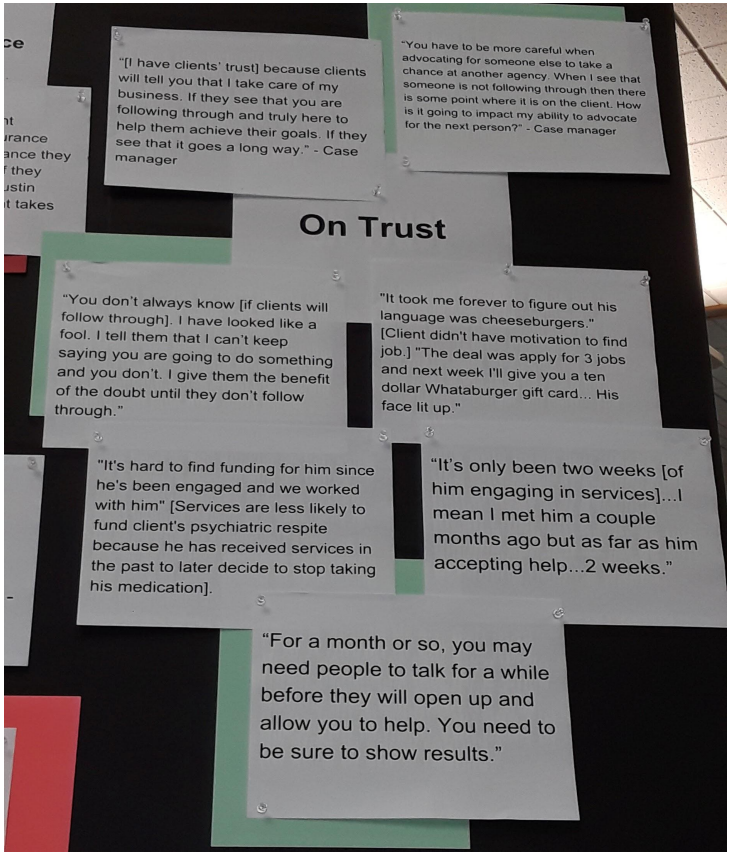
Mayor’s Blockchain Challenge

Team Compass

[Team Compass]



Describing Our Team

- Longtime crypto enthusiasts and developers (mostly IBM)
- Deep connections to Austin and desire to improve quality of life for all residents
- Starting with trust

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Problem

[Problem: Tony's story & Julian's concerns]

- Person Experiencing Homelessness--Proof of Identity
  - Always controlling your own data
  - Electronically managing documents in case of loss

- Provider--Validating clients and proving eligibility for services

- Creating a low-friction experience making it easier to access & provide services

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Why use a blockchain?

[Why use blockchain? Why not just a database?]

- **Agency:** trust that you own data at all times, control over documentation that belongs to you

- **No single central authority:** data kept secure through a distributed network, documents only viewable by user and user's chosen providers

- **Secured data**: encrypted end to end, giving you the ability to control personal information

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Mission

[Mission]

- Help user manage and control documents digitally...

  ...while providing guidance and direction to get support needed

- Enable service providers to quickly verify IDs and expedite process of serving clients

[Platform]

- Amazon S3
  - with encrypted document
- Python API
- Ionic
  - cross-platform web app
- Factom
  - Data blockchain (based in Austin)
- Event sourcing (domain-driven design)
- PostgreSQL
    - Event store for primary documents

Services packages addressed

Getting a MAP card & applying for housing

- Foundational element
- Approachable and within scope
- Complex workflow

Three Prototypes

- Event API
- Blockchain portion
- Front-end web app

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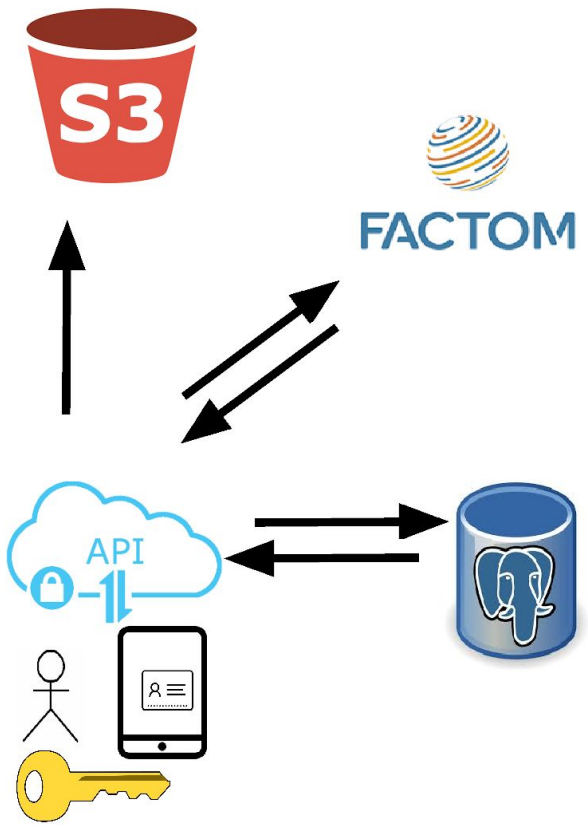
myPass Wallet

[Solution Diagram]



- An online app accessible anywhere a PEH uses to upload docs & control access to personal data
- Helping users understand resources available and how to access them

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Test Results

[What we learned]

Trust

- Assuming trust in some institutions
- The adversarial nature of experiencing homelessness and continual threat of loss

Privacy implications (GDPR)

- Unique privacy concerns for PEH, particularly over time

- Importance of being able to delete information and/or revoke access to your wallet

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Future Concerns

[Next Steps]

- Buy in from institutions as scope expands
  - Greater area, more types of documents, involving more public agencies
- Revoking access to documents
  - User needs ability to limit access to data a provider no longer needs
- Updating or changing documents
  - Maintenance over time as details change

[Art of the Possible]

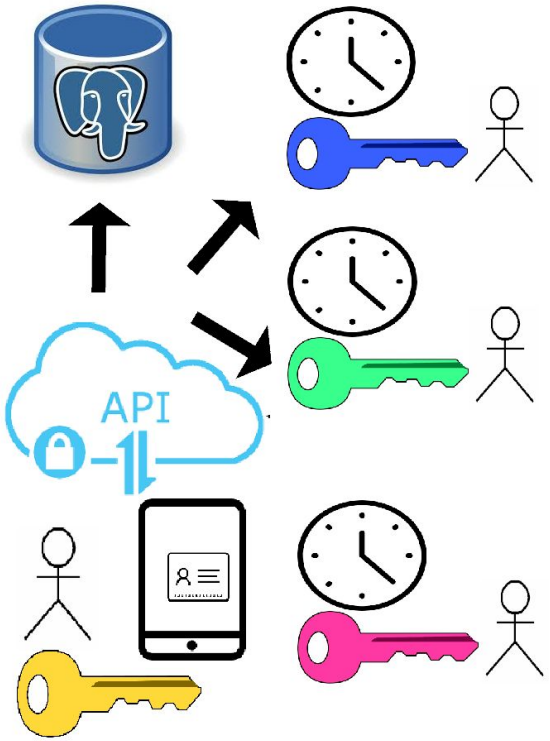
- We chose to focus on the problem defined in the requirements, rather than dig into things beyond them
- We continually used feedback to narrow our scope, which allowed us to fully realize our goals
- We don’t offer a perfect solution, but a helpful improvement

If we make enough small improvements it can translate to real change

Thank You!

We’d be glad to take your questions.

[Key Expiration]

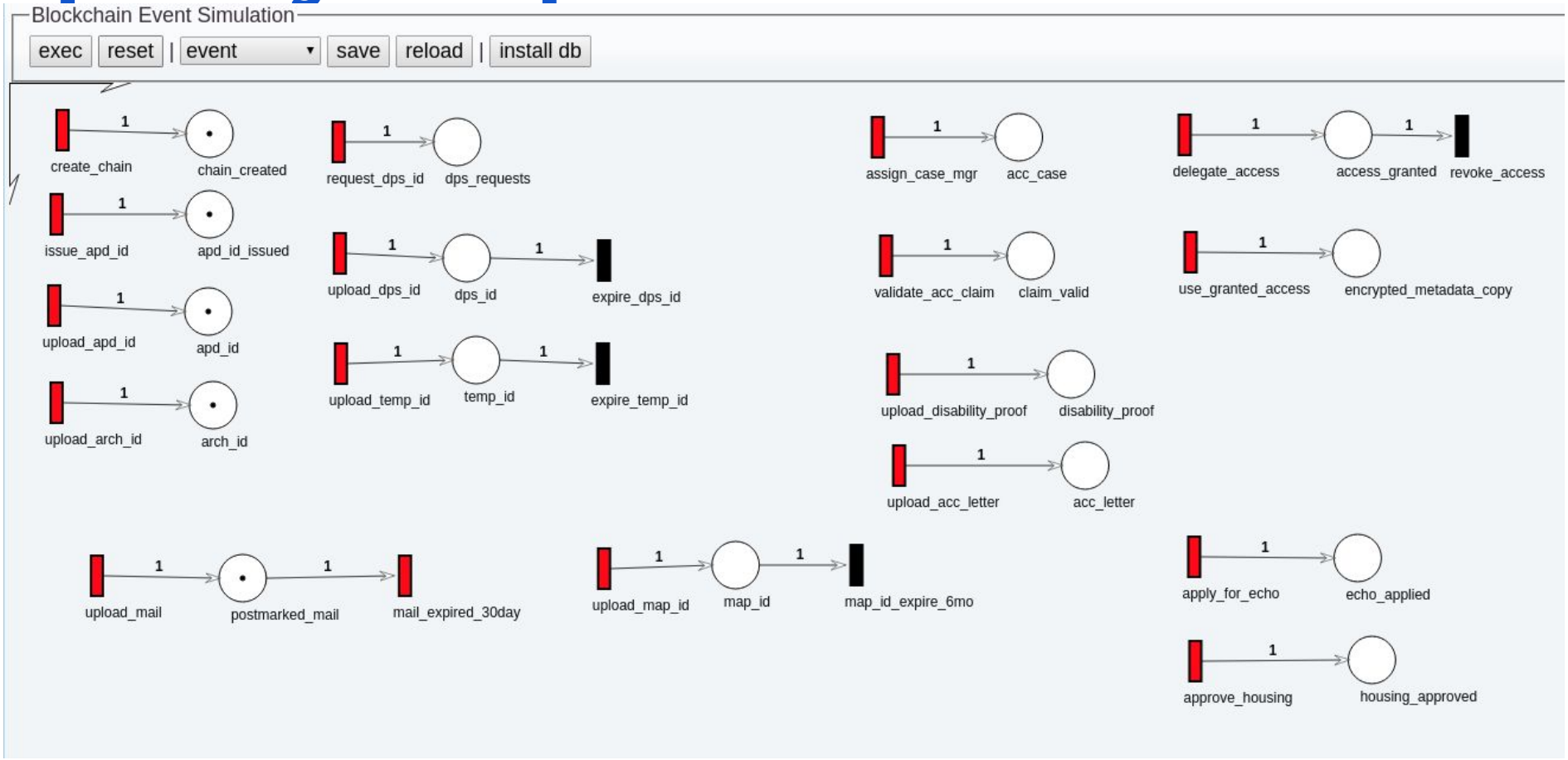


A new key is generated from Master when metadata is shared with other entites.

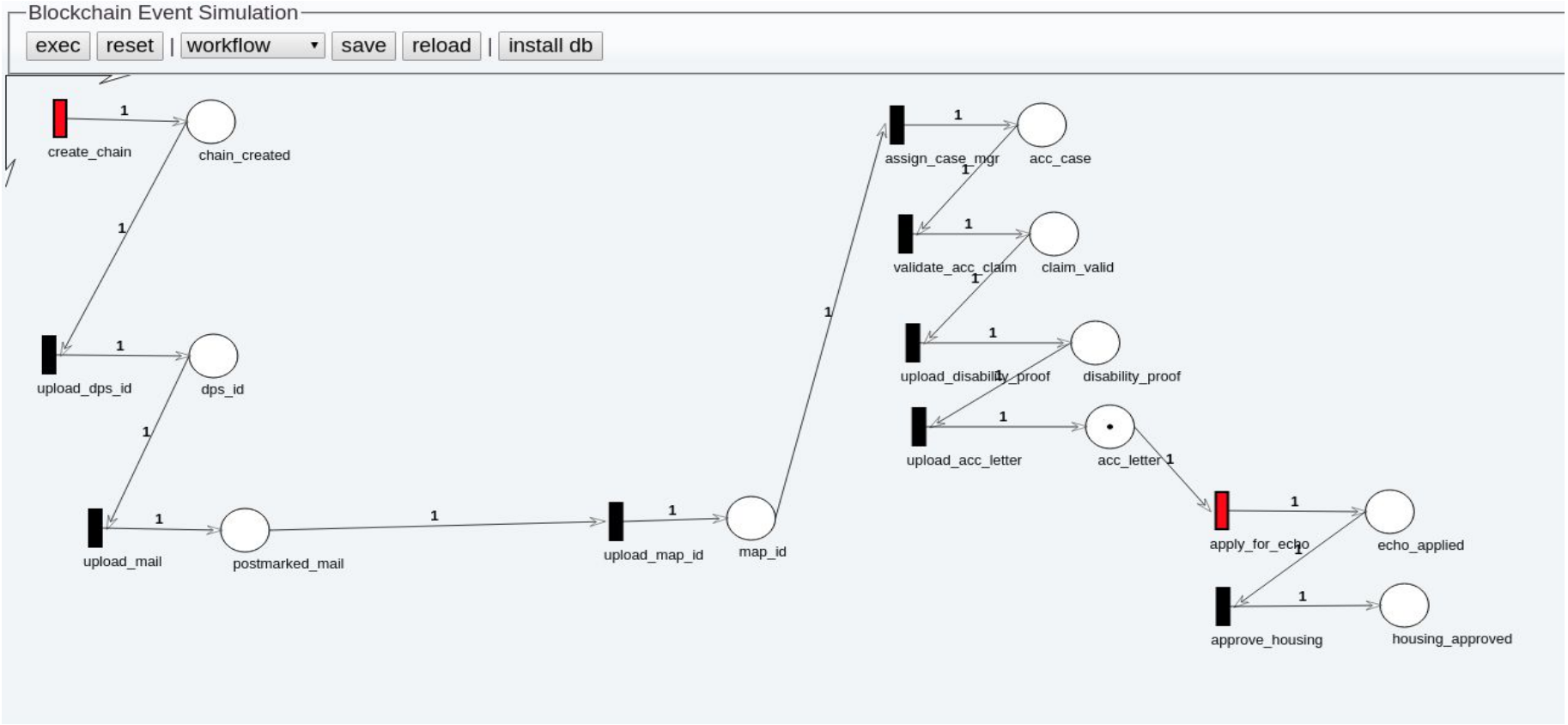
These keys expire from the Database.

- Only Metadata is shared
- Users can remove primary uploaded documents
- Downloads are secured by keys

[Defining Events]



[Event Workflow]



Github Repo

https://github.com/Splitix/Id_Manager