

VA.gov Testing Discovery V2

Discovery Sprint Follow Up

James Chasia, Naomi Marcussen, Keifer Furzland, Peter Hill // **Dec 17, 2019**



DIGITAL SERVICE at VA

Problem Statement

We do not have a scalable solution for the challenges teams face performing tests and demos on VA.gov.

User Goals

How might we enable:

- VFS teams QA all user scenarios for their product.
- Call center reps to easily replicate user issues.
- VFS teams to demo their apps.

Recommendation

Focus on solving pain points around finding test accounts on staging in order to:

- Reduce the time it takes VFS teams to QA their products.
- Make it easier to demo pre-production features and products.
- Enable call center reps to better familiarize themselves with VA.gov.

Getting production test accounts is a lower priority at this time because:

- The pain points call center reps have replicating user issues can be addressed by existing solutions.
- Does not address pre-release testing and demo'ing use cases.

Hypothesis

The current set of staging test accounts will meet teams' QA and demo needs if we do the following:

1. Make it easier to find the right test account for a user scenario.
2. Ensure the state of those accounts can be maintained.
3. Ensure availability of staging backends is at an acceptable level.

Rationale for Recommendation

- 1 Prioritization of Pain Points
- 2 Assessment of Solution Options
- 3 Solution Approach
- 4 KPIs
- 5 Separate Initiatives

Prioritized Pain Points

[Link to full list of pain points](#)

Pain Point	Persona	Severity	Addressed by the Solution Approach	Identified an Alternative Solution
Can't find test users viable for the scenarios they need	QA	High	x	
Spot checking a list of 200 users to find hopefully 1 that will work is tedious, frustrating, not effective	QA	High	x	
Not knowing which test accounts had data for which applications in staging	QA	High	x	
Sometimes there is no endpoint in staging so we can't test at all	QA	High	x	
Dependent services down a lot in staging so not possible to test	QA	High	x	
Possible ways to test super varied and not much info available about functionality or data of the options (harnesses vs prod endpoints)	QA	High	x	
Can't use the same user at the same time as someone else	QA	High	x	
Everybody is using the same account and if password gets reset, you're locked out	QA	High	x	
Lack of defined user scenarios leads to testing gaps	QA	High		x
No one has robust user stories	QA	High		x
The main blocker was not knowing which test accounts had data for which applications in staging, or or having sufficient access to non VA.gov tools to DEMO something intended to be migrated to VA.gov	Demo	High	x	
Knowledge articles aren't current with state of website	Call center	High		x

Solution Options Pros & Cons

Existing Users on Staging

PROs

- User data already exists, we're making better use of it
- **High usability for future efforts**

CONs

- Political lift of getting dependent services to improve/maintain uptime in staging.
- Potential for data collision if testing with the same user

Production Test Users

PROs

- Testing and training with VA.gov prod experience
- Avoid using personal vet logins

CONs

- Political lift of getting dependent services to provide and maintain test users for us.
- Data integrity is at risk of drift, if multiple users/teams are utilizing

Mock Users

PROs

- Full control over the mock user data flow

CONs

- **Lift to implement mock servers**
- W/o actually hitting live staging/dev services for testing, may miss bugs
- If an API has changed, we'd have to remock that endpoint in order to test it and we often don't know when changes occur
- More infrastructure == more costs

Solution Approach

Build a tool for finding an existing staging test account for your user scenario.

- Got positive feedback on prototype during [discovery](#)

Next steps for further solution validation:

1. Assess state of existing test user accounts.
2. Talk to key external service providers about:
 - Availability of staging instances
 - Behavior of staging vs. production backends

Separate Initiatives

To address other pain points:

- For call center reps replicating user issues - deploy tool to replay user sessions.
- For post-launch testing - talk to external service providers about providing and maintain test production users
- For QA - user story documentation guidelines

KPIs

We want to measure the following:

- Reduction in time to find a test account to QA a new test case.
- Reduced # of questions on Slack about how to find a test user.
- Reduced abandonment of test cases because people cannot find the right test account or staging is down.
- Increase in demos being done on staging.
- Increase in job satisfaction from call center reps.

Test Account Tool MVP

Features	Priority	Justification
Ability to reset account	High	This is tied to: <ul style="list-style-type: none">• test user data drift issue• naming accounts with use case
Ensure integrity of test accounts (is what you expect it to be and/or data drift in sub-systems)	High	Critical dependency for tool to be useful
Ability to create new accounts	High	For testing and demo'ing new products pre-release
Mechanism for managing/logging changes to test user accounts	High	Tied to test user data drift issue
Check-in/out account system	Medium	Will be needed when tool has a significant volume of users
Provide account verification info if required to log in	Medium	May be needed for multi-factor authentication use cases
UI enhancements based on user feedback	Medium	Make tool easier to use

ROADMAP

Additional features

- Enable keyword search queries
- Support deep linking
- Filter by login type
- Auto login

RETRO

Service Design Discovery Sprint - Testing on VA.gov Set the context of the retrospective here...

Share New column

Went well

Hearing from diverse experts was awesome
Collaborative brainstorming
Getting feedback on the prototype is valuable
Small team
Doing a survey in the beginning to gather all input on the problem
Fast-paced decision-making
pain points, they're everywhere.. motivating to us
Rapid prioritization of problems to solve
Ending up with a prototype is great!
Getting to a solution quickly and get user feedback

To improve

Wish we had a zoom pro account
Wish we had coordinated with other Discovery Sprint members to have this as their sprint objective.
Wish I had a team meeting a week or 2 prior to beginning the sprint to break the ice, start discussing the problem space and identifying experts and users to interview.
Wish we started scheduling meetings earlier
Are there parallel / overlapping efforts in process elsewhere on the platform?
Wish we were able to talk to more VFS team members
Wish I could start to build the dang thing
Wish I had used Optimal workshop for surveys on Slack instead of Polly
Wish we could get time with more end users to test the prototype
Wish we had been able to start on a prototype earlier than Thurs afternoon
Wish there was a decision point where we decide if we want to continue with tech discussions or go on to prototyping.

Action items

How might we scale this process for smaller/larger problem spaces.

Appendix

- [VSP topology](#)
- [External service staging vs. prod backends](#)
- [Upstream Service Map](#)
- [Discovery Readout v1](#)
- [Feedback from Discovery Readout v1](#)
- [Prioritized list of pain points](#)
- [Prototype Feedback](#)
- [Survey](#)
- [Empathy Map](#)
- [As-Is-Experience Maps - QA](#)
- [As-Is-Experience Maps - Call Center Rep](#)
- [Discovery Sprint Findings](#)
- [Session Replay Tool](#) (for call centers)

Thank you/Feedback