We are a team of Veterans, Creators, and Innovators dedicated to ensuring Veterans and their families get access to the benefits they've earned and deserve.

VA.gov Identity Team Sprint 8 Release Notes

April 27th - May 10th, 2023

Overview:

This sprint we continued to clean up a lot of the aftermath of the EKS and Datadog Log Syntax changes. This was unplanned work and interrupted most of deliverables as we needed to prioritize monitoring of VA.gov authentication over building new features. We were able to wrap up a few research studies and will release the findings in the next sprint. One item we were able to make a big step forward on was the Sign in Service isolation. We are close to having a dev app running within the Platform EKS cluster, more to follow next sprint.

For more information on previous release reports please visit our Github Page.

New Features and Improvements:

- Sign in Service Microservice Infrastructure
- Prometheus alerts replaced by Datadog alerts
- Proactive Migration and FWA Research concluded
- Real time FWA alerting

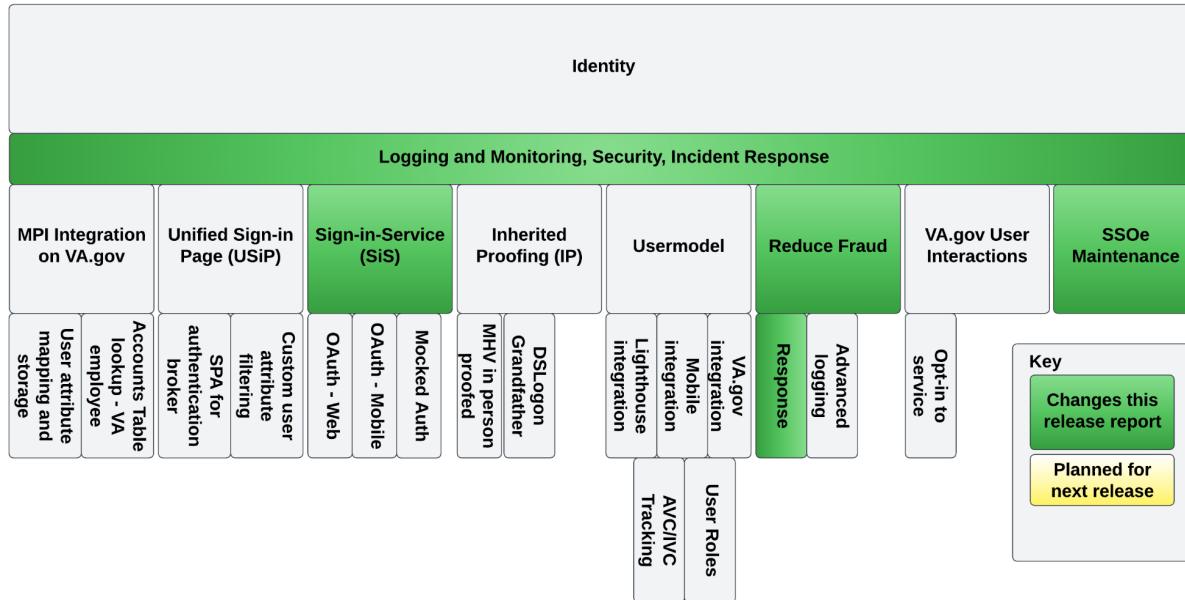### Bug Fixes:

- Everything is running smoothly this sprint.

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Table of Contents

Refer to the Key below to see the changes in this Release Report highlighted in green.

Note: See **link** to Identity Capabilities definitions.

Identity								
Logging and Monitoring, Security, Incident Response								
MPI Integration on VA.gov	**Unified Sign-in Page (USiP)**	**Sign-in-Service (SiS)**	**Inherited Proofing (IP)**	**Usermodel**		**Reduce Fraud**	**VA.gov User Interactions**	**SSOe Maintenance**

Sub-components:
- MPI Integration on VA.gov: User attribute mapping and storage; Accounts Table lookup - VA employee
- Unified Sign-in Page (USiP): SPA for authentication broker; Custom user attribute filtering
- Sign-in-Service (SiS): OAuth - Web; OAuth - Mobile; Mocked Auth
- Inherited Proofing (IP): MHV in person proofed; DSLogon Grandfather
- Usermodel: Lighthouse integration; Mobile integration; VA.gov integration; AVC/IVC Tracking; User Roles
- Reduce Fraud: Response; Advanced logging
- VA.gov User Interactions: Opt-in to service

Key
- Changes this release report
- Planned for next release

Featured Releases and Updates

Sign in Service Isolation Infrastructure:

Summary: This work embodies the effort to migrate Sign in Service functionality from the vets-api monolith, into a separate microservice structure. This includes isolating various infrastructure components, including Rails code, and AWS resources, such as Postgres and Redis.

How to use it: When this work is complete, any client of Sign in Service will automatically be using the service on the new infrastructure.

Who is impacted: Clients, Developers, and even Veterans will be impacted by the change in infrastructure. However, the intention is to disrupt as little as possible during this transition.

What are the benefits: Isolating the Sign in Service from the rest of the vets-api monolith will allow for more direct control of the components of the solution, more rapid development, and general increase in stability, as Sign in Service won't be affected by issues that may plague the rest of the vets-api platform.

Why did we make the change: As Sign in Service is integrated with clients that may not necessarily be directly associated with vets-api, it fundamentally makes more sense for it to exist in a separate environment. This will support concerns of ownership as well as increased stability due to functional isolation.

Version, and planned release dates: This work is still in an early stage, as the infrastructure migration is just the first step of a series of milestones. The first milestone is to deploy an arbitrary application on an isolated infrastructure, and this is nearly complete.

What's next (most immediate next sprint): In the upcoming sprint, our primary focus will be on deploying the Sign-In Service dev app to the Platform EKS infrastructure.

Transfer of Prometheus Alerts to Datadog:

Summary: After the VA Platform backend transition to an EKS infrastructure, the Prometheus monitoring system stopped collecting metrics. This prevented identity related alerts from occurring, as well as certain banners on the frontend that would show during service downtime. We fixed this by transferring the alerts from Prometheus to Datadog.

How to use it: The Identity team and VA Platform are currently integrated with the alerts, now that they have been transferred. Alerting and downtime banners should work normally.

Who is impacted: Identity team members who are watching for downtime alerts, and Veterans who are informed by the downtime banners on the VA.gov website.

What are the benefits: Downtime alerts are imperative for monitoring and triage, so it is important that they continue to operate normally.

Version, and planned release dates: We are currently completed with this transition, so this functionality is already completed and there is no planned further work.

New Fraud Detection and Alerting Capability:

Summary: A new alert was added to our suite of solutions that we provide to the BDPR team. This solution allows for near real time response when a suspicious direct deposit change has been made. This change should significantly reduce the MTTR of fraudulent transactions.

How to use it: The alert is configured to notify the BDPR team and is set up as a dashboard widget in Datadog for monitoring and historical tracking purposes.

Who is impacted: Veterans and BDPR team.

What are the benefits: Significant reduction in time to respond and remediate fraudulent direct deposit changes. This will result in a reduction in lost funds to bad actors.

Why did we make the change: BDPR Team requested the new feature and we now have the ability to perform the detection.

Version, and planned release dates: We will continue to iterate on these capabilities and monitor their effectiveness. There are no planned future releases to announce at this time.

Proactive Migration Research:

Summary: This research will consider terms and phrases that will help us better speak to Veterans about the upcoming CSP migration. We're also seeking ways to encourage

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Veterans to migrate to a modern CSP on their own. Prior to any announcement about sunsetting legacy credentials.

Who is impacted: UX folks from both the Identity Core and LGA teams.

What are the benefits: To understand what language is more clear to Veterans around account creation, verification, and authentication. Knowing that we can communicate to Veterans using words and phrases they will understand to reduce confusion.

Version, and planned release dates: Research sessions with Veterans are complete. Analysis of data is underway.

What's next (most immediate next sprint): Synthesis report and read out to follow.

Fraud Waste and Abuse Research

Summary: Determine how the identity team can help VA achieve some of their goals as it pertains to Fraud, Waste, and Abuse (FWA) reduction and response, as well as the goals for cybersecurity. Requirements have been gathered and initial plans to collect information to determine the feasibility of these proposed ideas.

Who is impacted: All users of VA.gov.

What are the benefits: Potential reduction in FWA within VA.

Version, and planned release dates: Research is ongoing, meetings have been planned with the FWA team to understand needs and gather data points. No changes at this time.

What's next (most immediate next sprint): Continuing research on what the analysts will need with access to datadog.

Decision Update:

Structure of **Identity Dashboard** will consist of:
- Single repository with frontend and backend components fully separated
- Monolith backend instance
- Shared frontend framework with modular feature components

Product Managers Update:

We have continued to complete and provide key deliverables on tasking surrounding our top initiatives. We made significant progress on Sign in Service Infrastructure and Microservicing. Additionally we continued with valuable research as it pertains to Fraud, Waste, and Abuse and creation of the FWA Dashboard. New work has started around In Person Proofing based on research completed.

Issues/Limitations/Challenges:

We lost forward momentum this sprint due to EKS changes. The way statistics and logs are sent to Datadog, significantly impacted our engineers' time to work on new features and ix bugs. The main reason for this was, the syntax for stats was changed due to a new service being used for consuming the stats, and the lack of prometheus being moved over which

was used for monitoring production authentication stats.

How to provide feedback:

[Open a feature request ticket](#).

Basic feedback can be discussed within the [Slack](#) #vsp-identity.

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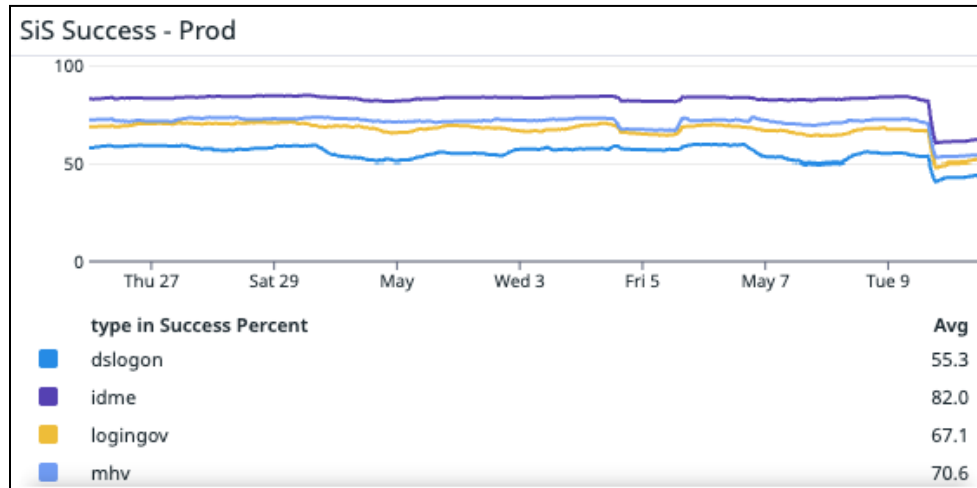# APPENDIX A- Ticket Issues Completed

- *Cert: Review all full documentation for certificates support for Identity team ([#57854](#)) - understand fully whole the process of certificate support, what type of certs are used to communicate with the partners, who we make handshakes to*
- *EKS Cluster: Review the ArgoCD applications being deployed in EKS cluster in Staging & Prod ([#57902](#)) - understand what applications and features are being deploy via ArgoCD in the EKS clusters now that I have access to argoCD UI.*
- *Seed credential list in vets-api-mockdata ([#57635](#)) - Now that Mocked Auth feature is live, we needed to add more credentials in the mocked credential list*
- *SPIKE:Video Conferencing Support (For Verification Account Creation) ([#55986](#)) - investigated a solution and provided support, for remote/video verification and the account creation process*
- *Add pagerduty banner alert for login.gov ([#38358](#)) - Created a metric within prometheus that measures the success rate of login.gov in production*
- *Sign-in Service App - Create application in devops repo ([#56537](#))*
- *FWA - Set up front end framework and GitHub repo ([#912](#))*
- *SPIKE: developer page with documentation ([#55969](#)) - investigated what this developer page will look like, what the content will consist of and where it will live*
- *FWA Dashboard - Block Out Basic Front End ([#919](#))*
- *Storyboard the views for SiS Dashboard implementation ([#56428](#))*
- *Setup for mono-repo structure ([#57847](#))*
- *Bug - Remove downtime banners for Direct Deposity & Disability ([#57874](#))*
- *Align with USPS Pilot for Login.gov verification ([#53879](#))*
- *Sign-in Service App - GHA - Build and push docker image ECR ([#56104](#))*
- *Setup Repository for SiS Auth Library ([#56393](#))*
- *get the sip-form-saved Google analytics event added back ([#57764](#))*
- *Review Cerner Auto-login ([#56514](#))*
- *Transfer Identity Prometheus alerts to Datadog ([#12499](#))*
- *Create list of verified apps on va.gov ([#57644](#))*
- *Rotate MPI certs ([#57601](#))*
- *Create Github Actions Self-hosted runner to automatically update mock data (dev/staging) ([#48581](#))*
- *Spike: Investigate Microservice Structure for Sign in Service developer dashboard ([#57325](#))*
- *Cert: Validate existing documentation provided for mvi-mpi-fwdproxy-certs ([#57851](#))*
- *Use Settings.betamocks.cache_dir instead of separate Settings.sign_in.mock_credential_dir ([#12511](#))*
- *Review datadog log ingestion rules to preserve original querying ([#57321](#))*

APPENDIX B- VA.gov Authentication Performance

SiS Success - Prod

type in Success Percent		Avg
■	dslogon	55.3
■	idme	82.0
■	logingov	67.1
■	mhv	70.6

SAML Requests/Responses

TYPE	REQUESTS	RESPONSES	↓ PERCENT
idme	1,315k	976k	74.2
mhv	838k	569k	68.0
logingov	543k	359k	66.1
dslogon	777k	453k	58.3

SiS Success - Prod

TYPE	↓ SUCCESS PERCENT
idme	80.7
mhv	69.6
logingov	66.2
dslogon	54.8

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Ongoing Count of Auth Success SiS
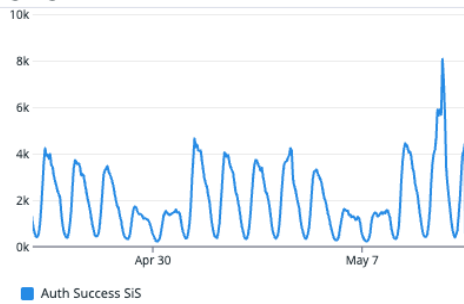
- Auth Success SiS

Numbers of MHV or DSLogon users adding Login.gov or IDme accounts

- ivc added - avc added
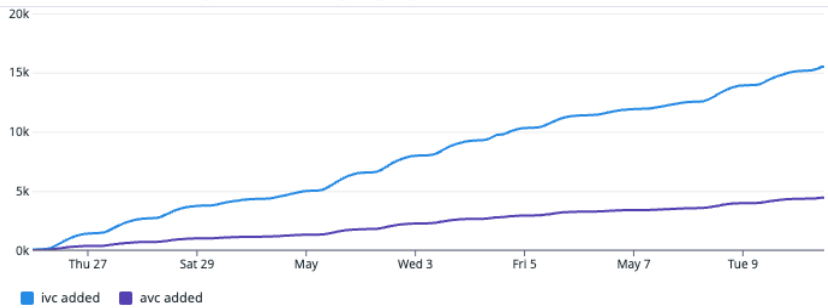
SiS Success - Prod

TYPE	↓ AUTH NEW	TOKEN SUCCESS	REFRESH SUCCE...	CALLBACK SUC...	CALLBACK FAIL...	TOTAL CALLBACK	RETURN PERCE...
idme	285k	—	—	230.2k	—	—	—
mhv	192k	—	—	133.8k	—	—	—
dslogon	108k	—	—	59.2k	—	—	—
logingov	91k	—	—	60.2k	—	—	—
N/A	—	—	—	—	33.0k	516k	76.3
N/A	—	476k	2.06M	—	—	—	—

SSOe Outbound Auth Return Rate by Context

context in autosmooth(((sum:vets_api.statsd.api_auth_login_success{context IN (...	Avg
custom	94.3
dslogon	62.2
idme	79.8
logingov	70.8

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