

Effective Incident Response Workflows with Jamf



Stijn Brattinga

System Engineer
Jamf



Elmo Kuisma

System Engineer
Jamf



Rene Stiel

Senior System Engineer
Jamf

Agenda

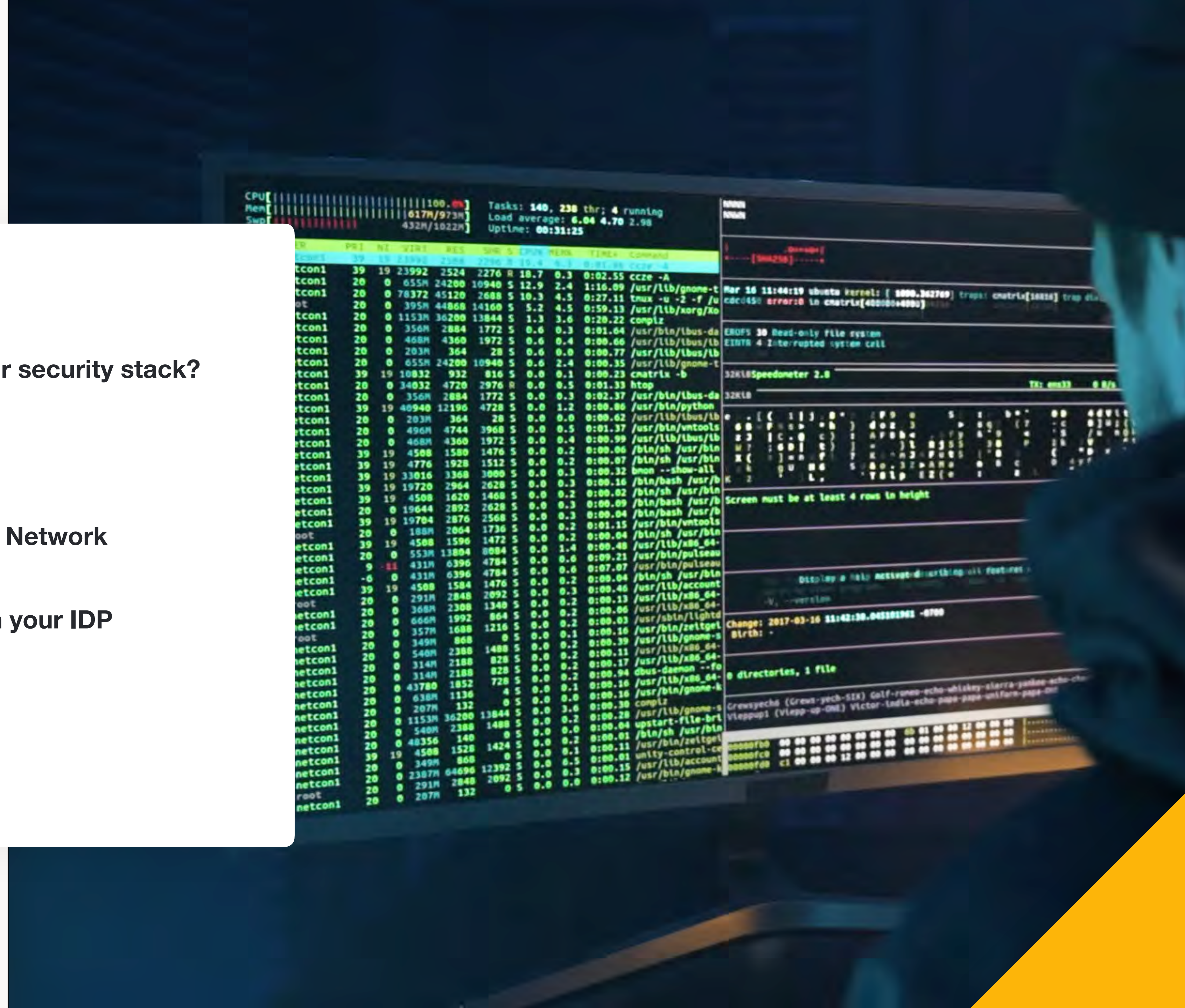
1 | Why add automation to your security stack?

2 | Automated Remediation

3 | Isolating Devices from your Network

4 | Integrating Risk Levels with your IDP

5 |  Don't Do this at home!





Let's start with the basics



“Incident Response enables security teams
to limit or prevent damage from cyberattacks
or security breaches”

[IBM.com](https://www.ibm.com)

Why automate your security workflows?

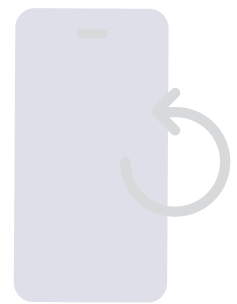
Save time (& resources) when it really matters

Integrating best in class software

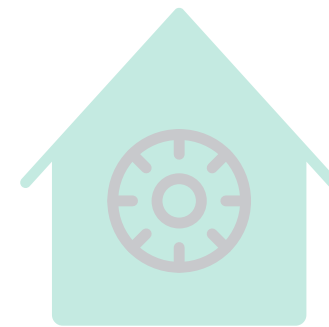
Evolving Threat Landscape

**Who is already using
automated incident response
workflows?**

Examples of Automated Incident Response



Block access from insecure BYOD mobile devices



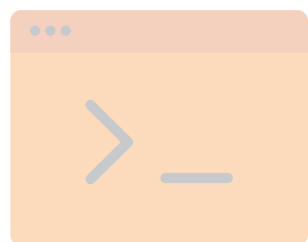
Deny physical access if device is compromised



Monitor vulnerability of Installed applications



Gather forensic data after malware detection



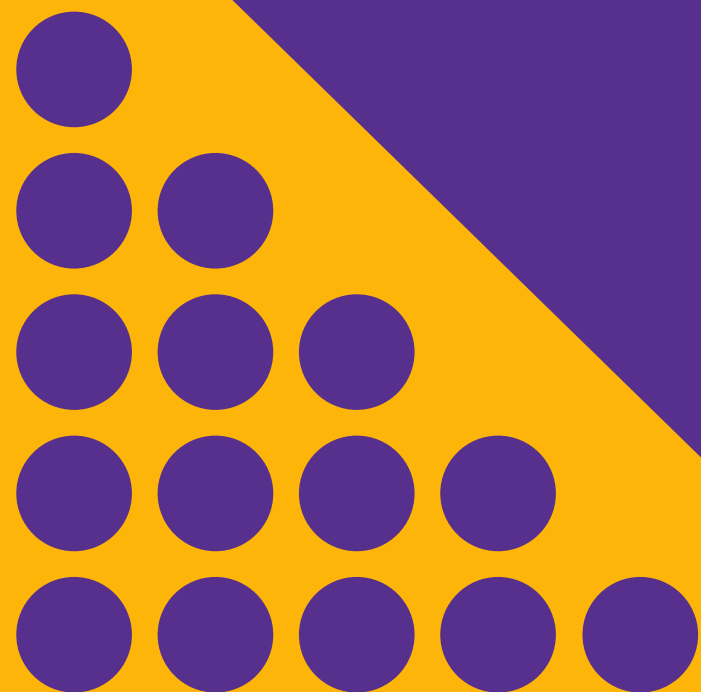
Automatically block malicious content



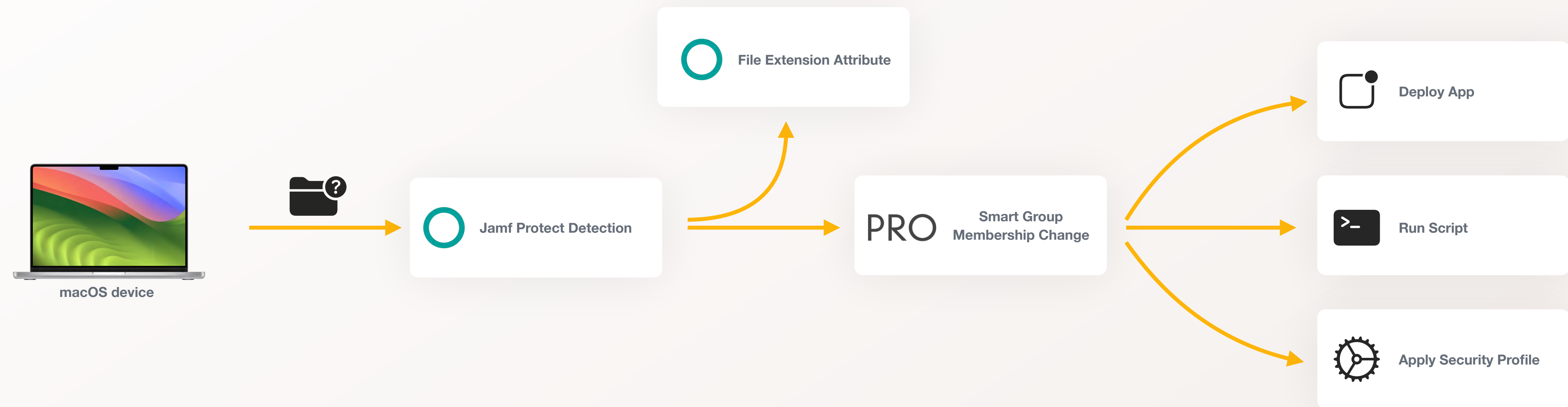
Lock user account after DLP notification

And many more..

Workflow Automated Remediation



Jamf Protect automated workflow



Jamf Protect automated workflow

Remediation

- ▶ Jamf Protect detects screenshot being taken
- ▶ Populates Extension Attribute to Jamf Pro
- ▶ SmartGroup membership change triggers a Policy
- ▶ Policy deletes associated screenshot



Workflow Take-Away



Analytics

Monitor for activity specific to your security needs. Create your own custom analytic to trigger these automated workflows.



Editable End User Prompts

Leverage custom Jamf Helper, or SwiftDialog prompts via Jamf Pro to alert and inform end users of security events occurring on their device.

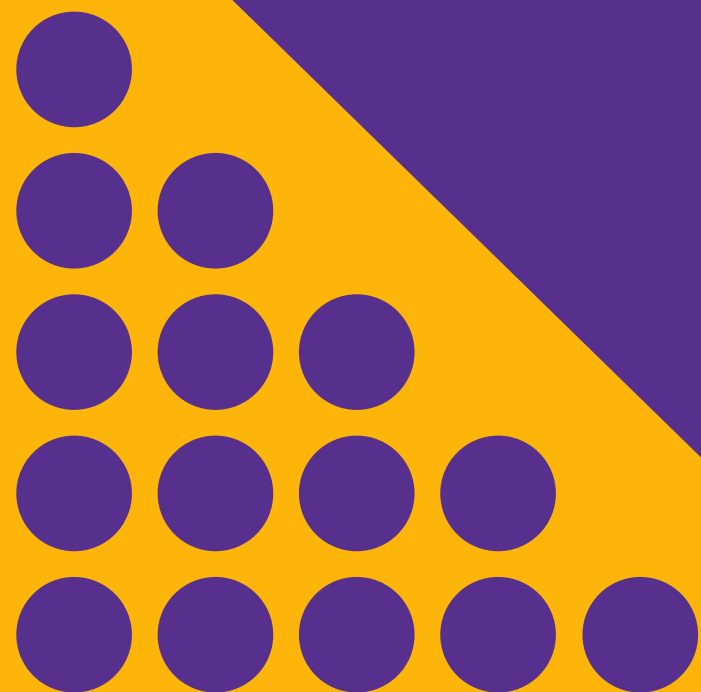


Alerts & Logging

In Jamf Protect, alerts created by these events can be searched for and filtered by Alert Actions such as “SmartGroup”.

Workflow

Limiting access to resources & websites

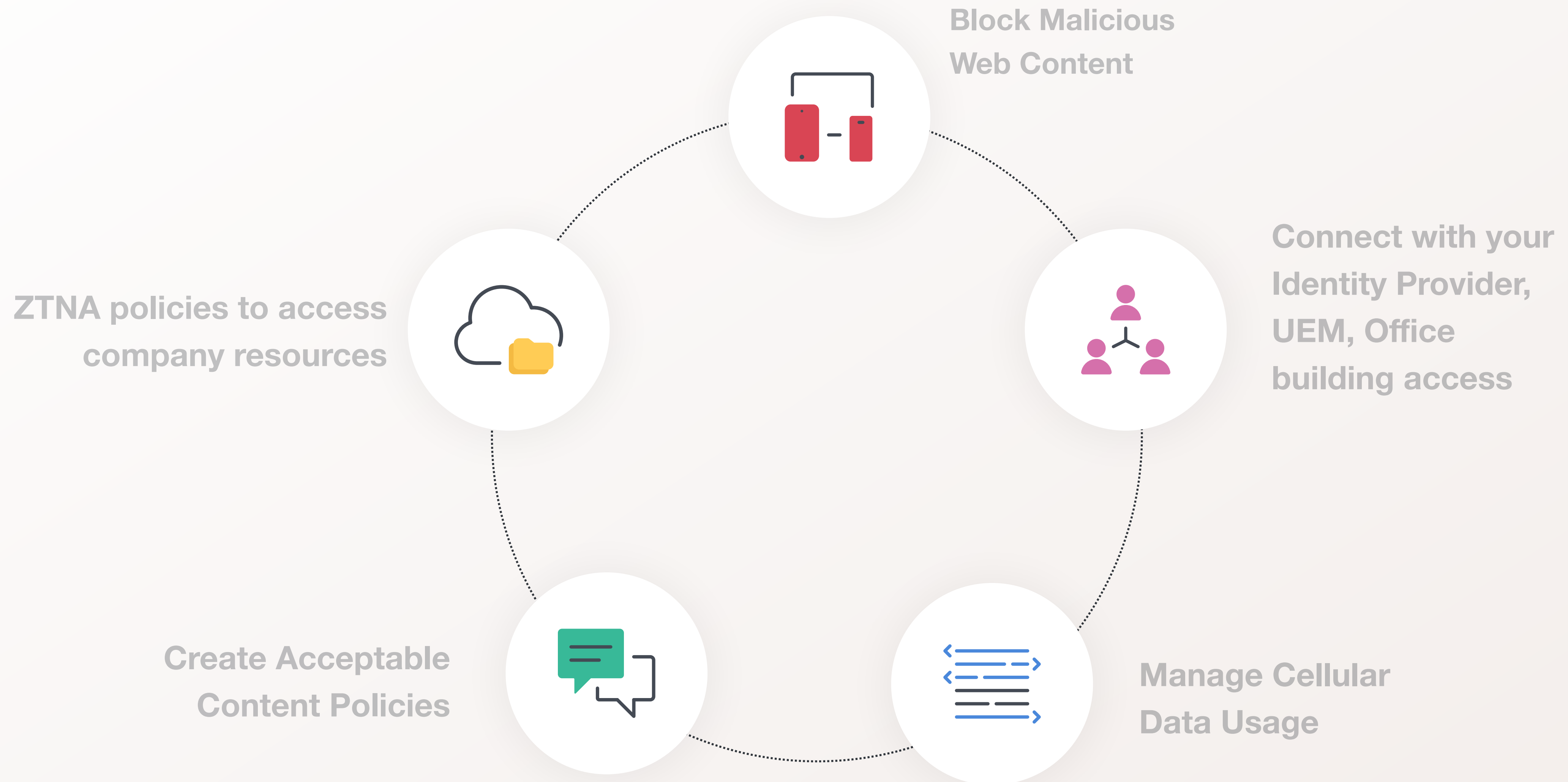


What do we want?

- ▶ Restrict access to pre-defined destinations
- ▶ Inform the end user
- ▶ Keep connectivity to MDM & other tools
- ▶ Restore access after remediation



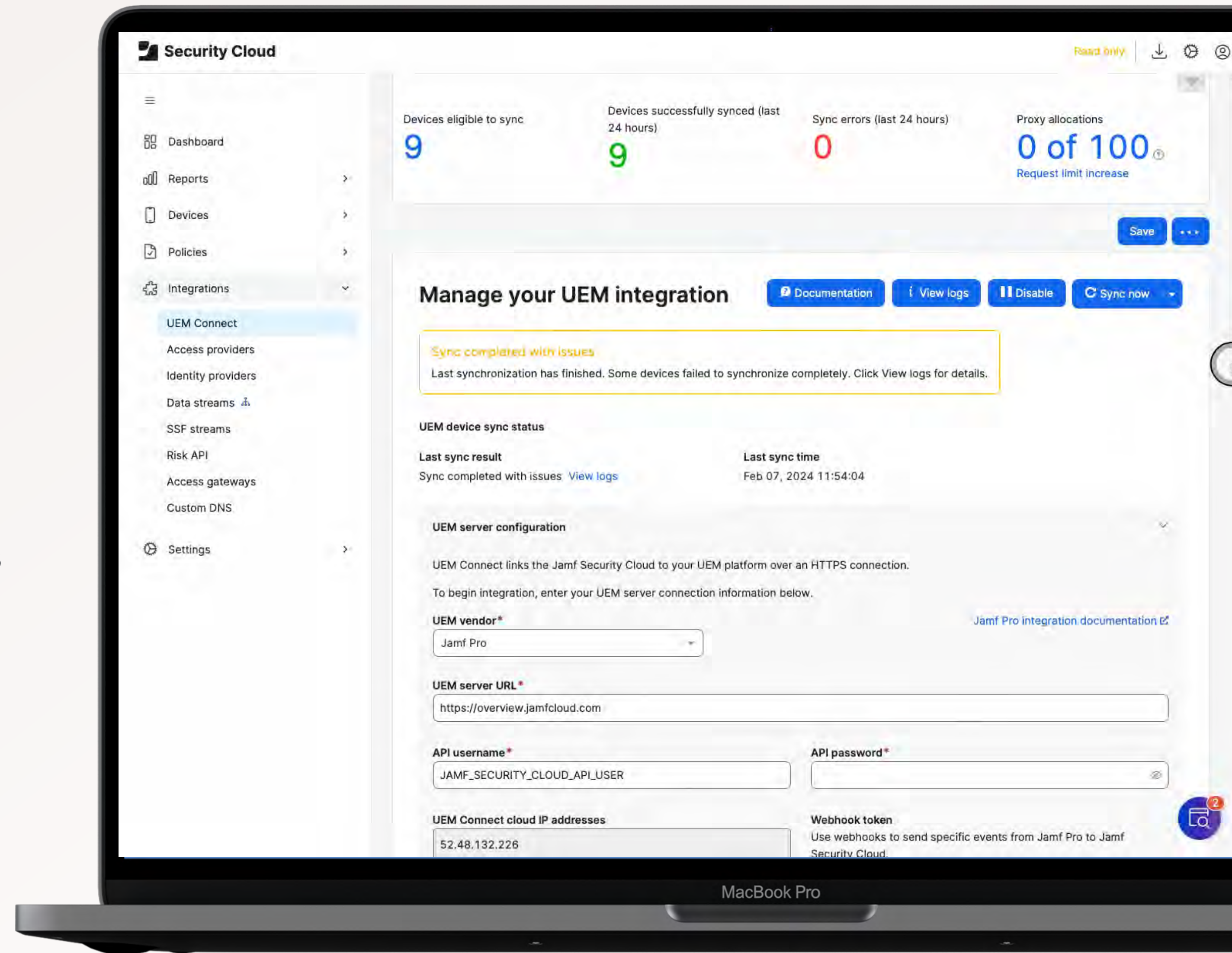
Jamf Security Cloud



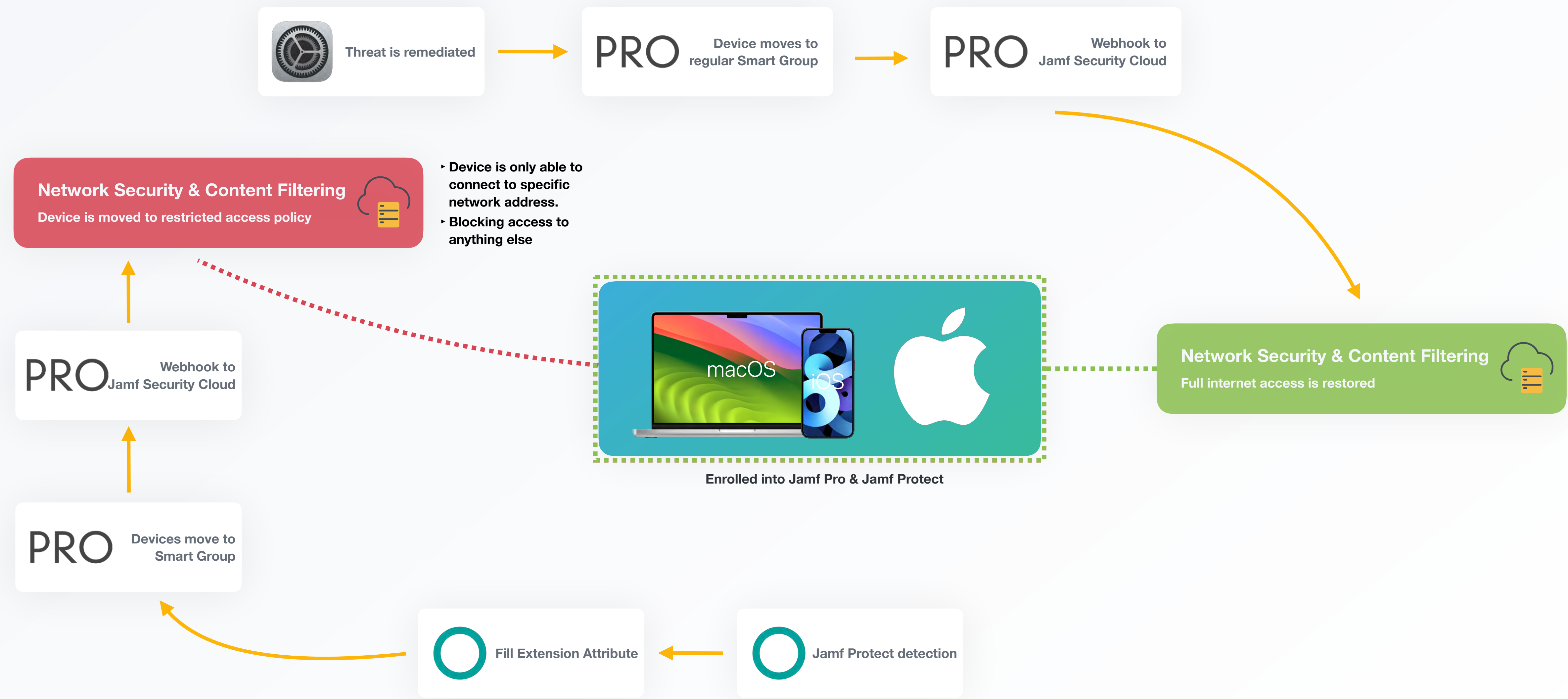
Jamf Pro Webhook Remediations

Released in January, 2024

- ▶ **Enhanced UEM Connect integration** allows ad-hoc sync from Jamf Pro to Jamf Security Cloud
- ▶ **Trigger real-time workflows** based on **events** in Jamf Pro

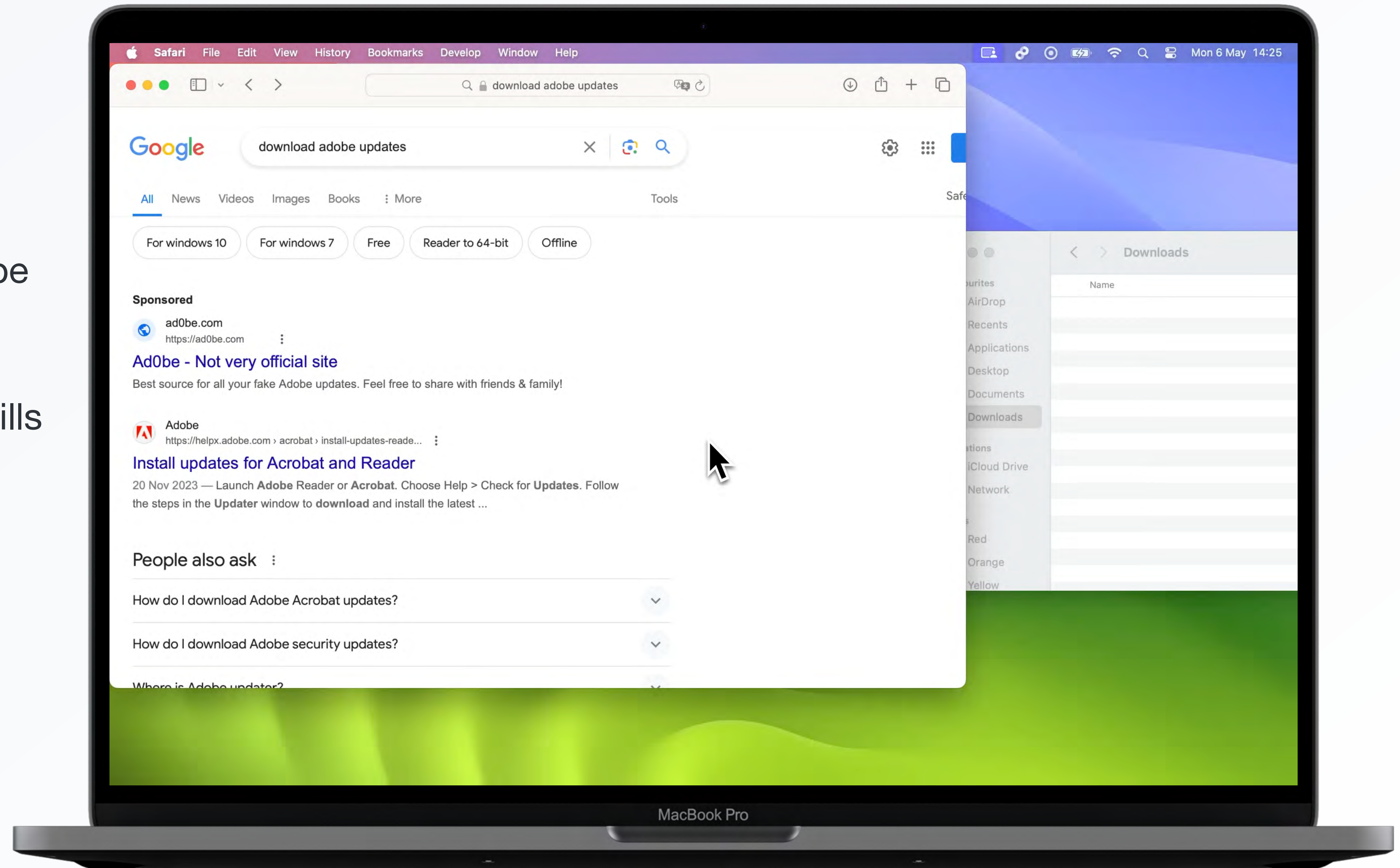


Network Isolation workflow



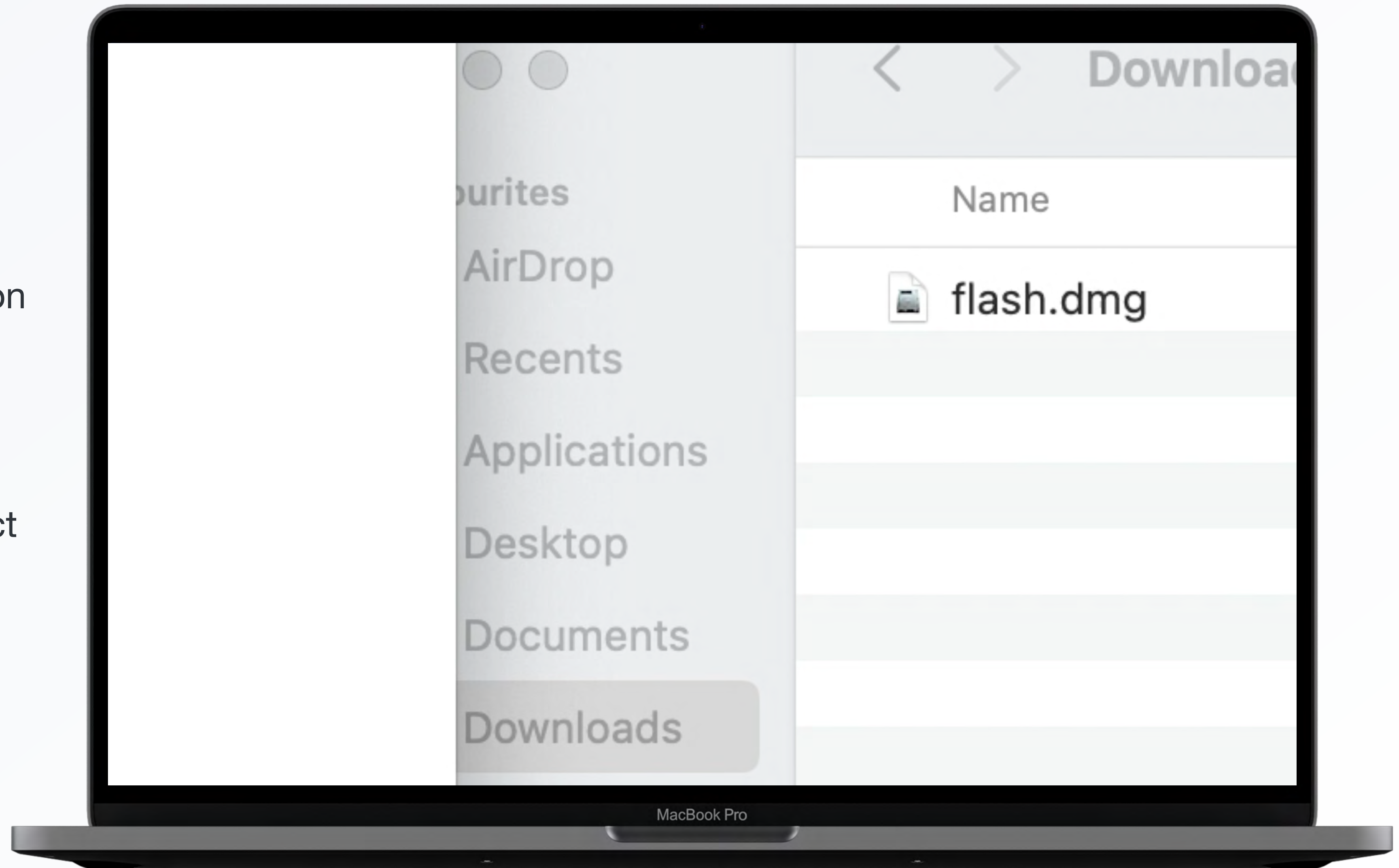
Network Isolation: Threat Simulation

- ▶ User downloads fake Adobe update via Malvertising
- ▶ Jamf Protect detects and fills Extension Attribute



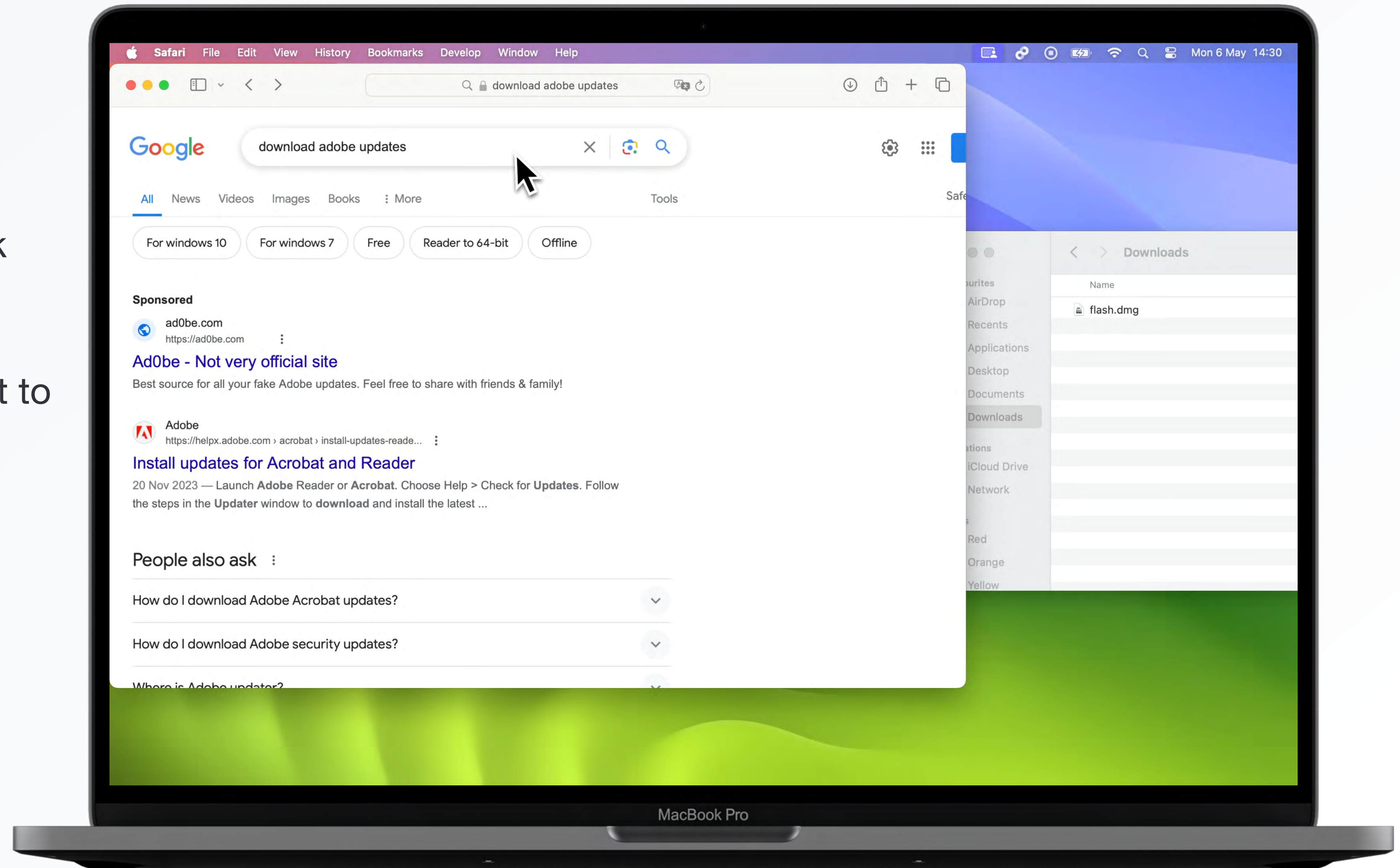
Network Isolation: Remediation

- ▶ Smart Group triggers action
- ▶ User is notified
- ▶ Jamf Pro shares event information to Jamf Protect



Network Isolation: Blocking

- ▶ Jamf Protect limits network access
- ▶ Endpoint is able to connect to allowed destinations



Workflow Take-Away



Security & Management Integration

With security and MDM working together automations are made easier and devices are kept more secure.



Smart Group Webhook Triggers

Smart group membership changes trigger webhooks events. Both the trigger & event can be customised to create custom remediations.

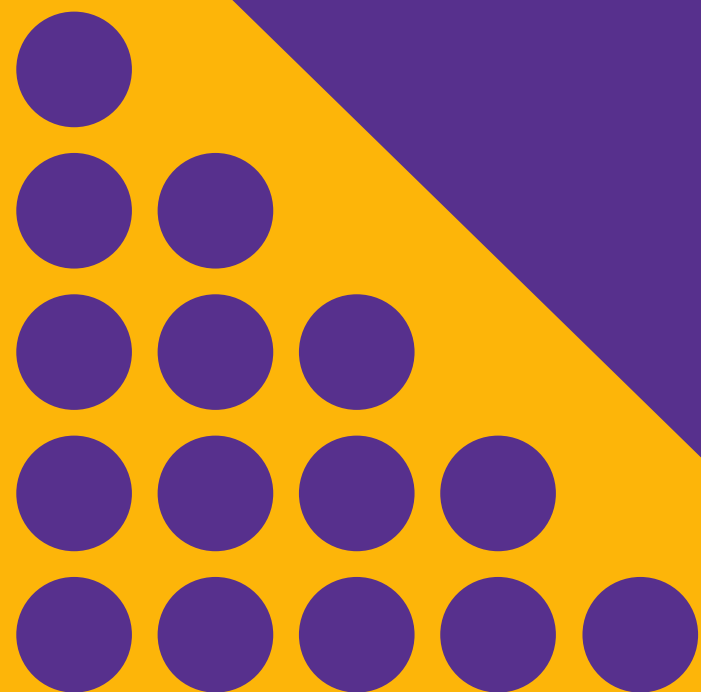


Network Security & Content Filtering

Risky devices are moved into a restricted access group, blocking access to network resources via content filtering.

Workflow

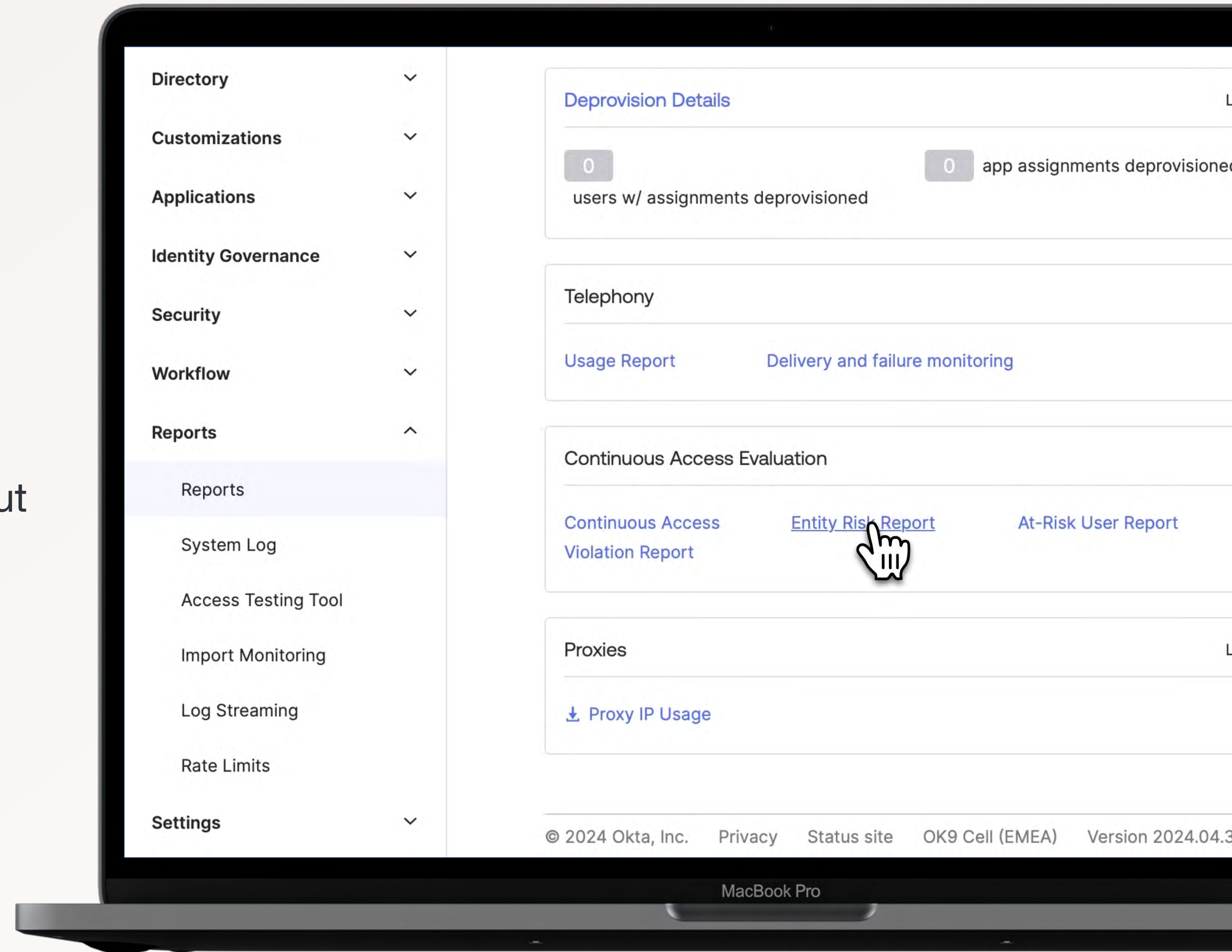
Sharing risk levels with Identity Providers



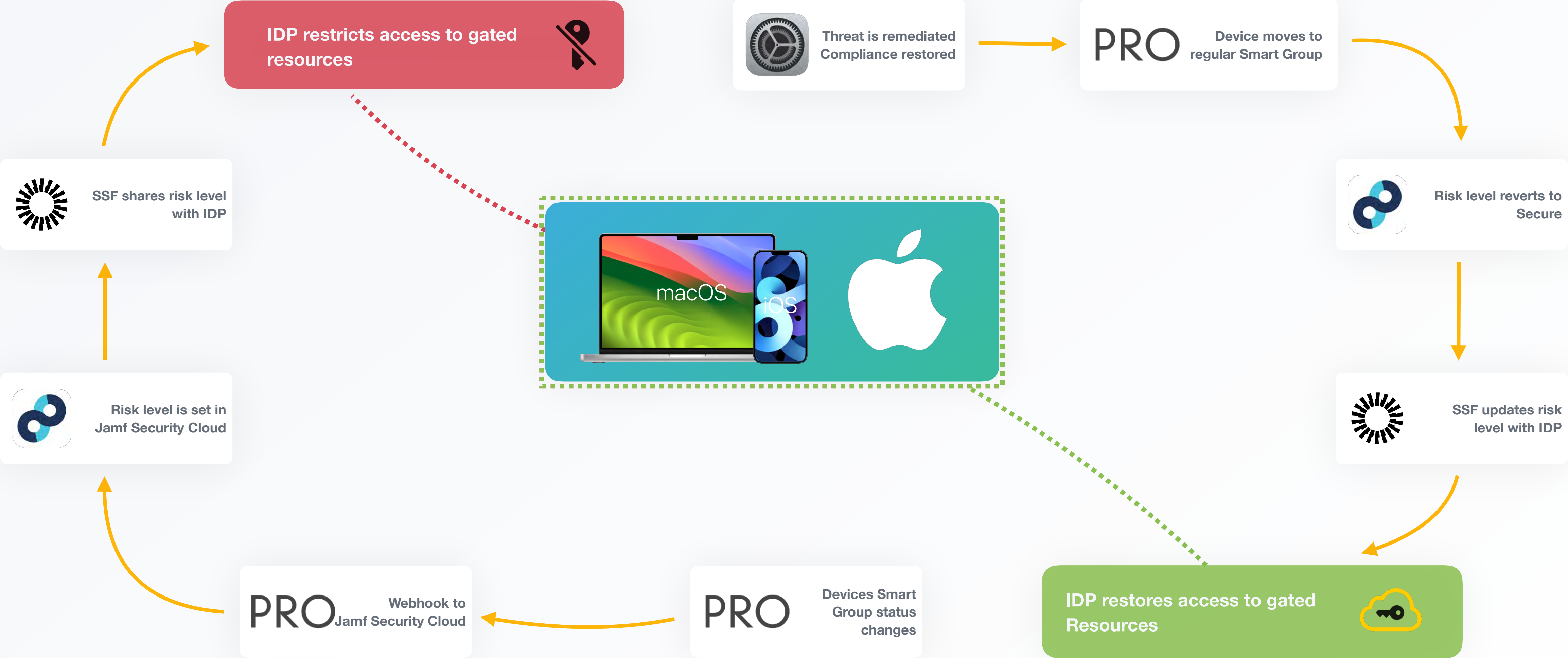
Shared Signal Framework integration

Released in January, 2024

- ▶ New Jamf Security Cloud integration support for establishing a **Shared Signals Framework (SSF)** stream with third party vendors like Okta
- ▶ It allows Jamf to **continuously share events** about device risk level changes
- ▶ Feature available in limited early access in Okta

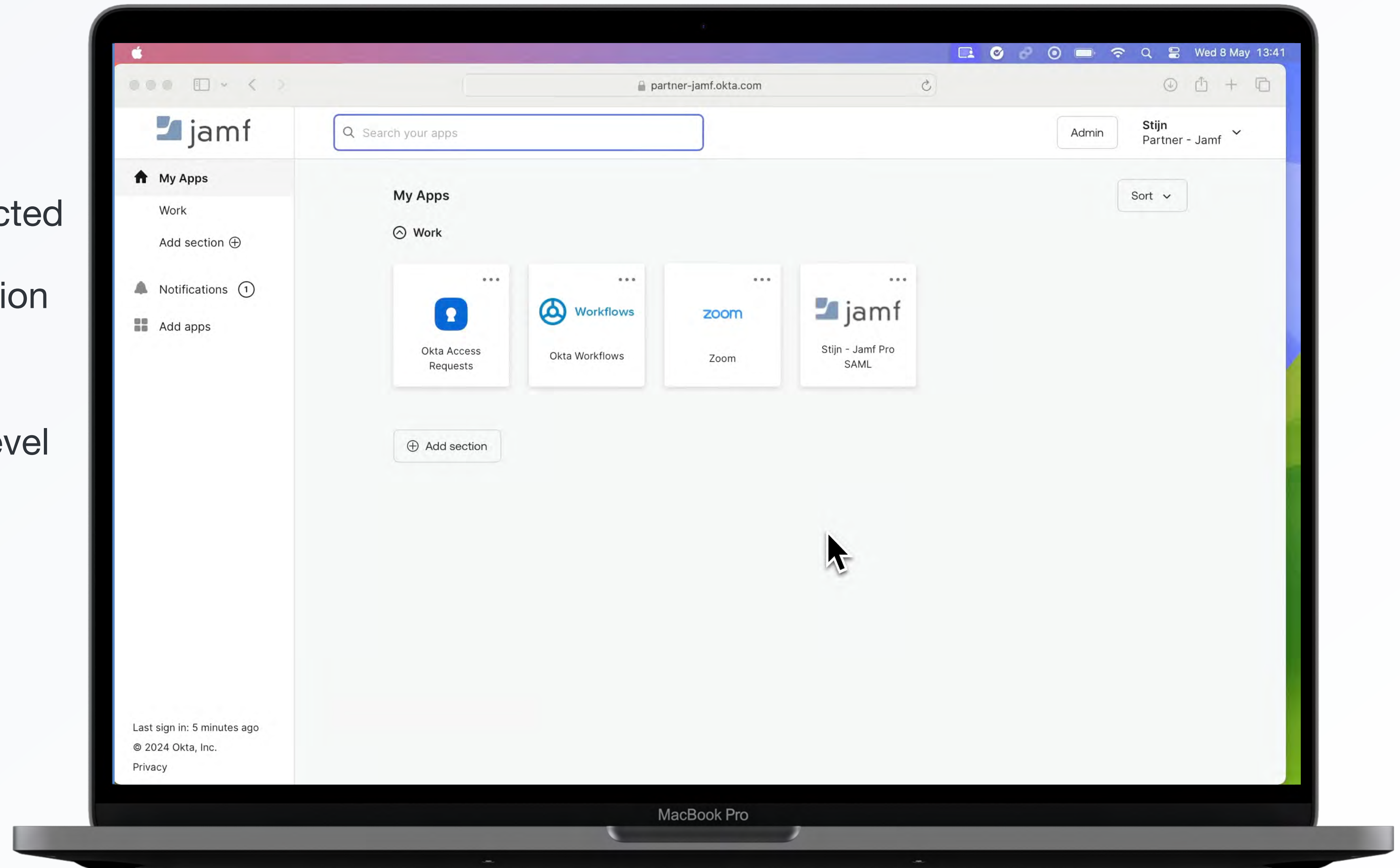


SSF Workflow



Shared Signal Framework Enduser Experience

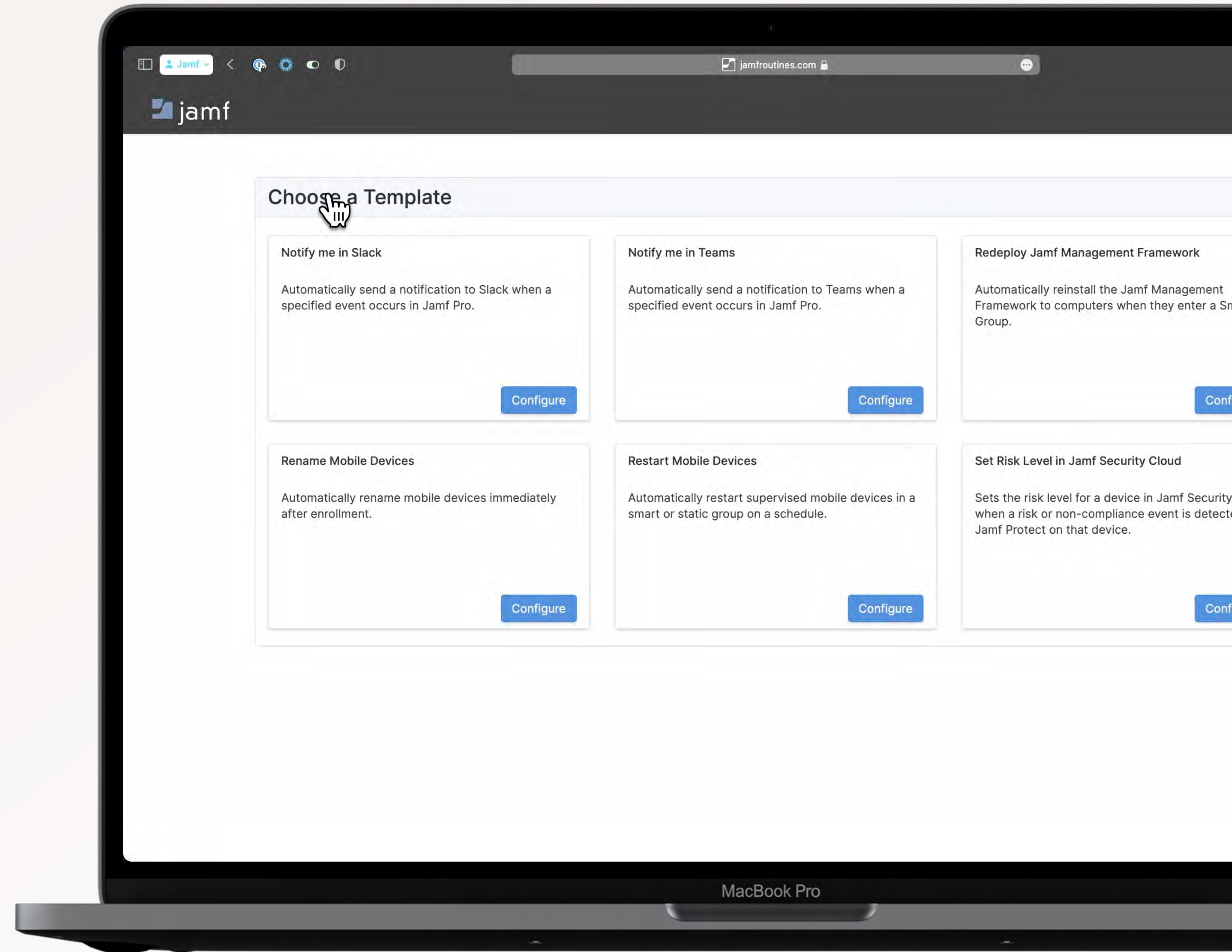
- ▶ Compliance change detected
- ▶ Webhook shares information to Security Cloud
- ▶ Jamf shares device risk level with Okta
- ▶ Users Okta access is restricted



Jamf Routines: Setup Automation

Released in April, 2024

- ▶ Create **automated workflows** by connecting Jamf Pro to third-party tools
- ▶ **6 templates** available
- ▶ Open to **Business and Enterprise plan** customers



Workflow Take-Away



IDP Integration

Establish shared signal frameworks with 3rd party IDP providers from Jamf Security Cloud.



Risk Level Sharing

Automate the setting of devices risk levels through Jamf Routines. Device risk levels can then be shared with your IDP through the SSF.

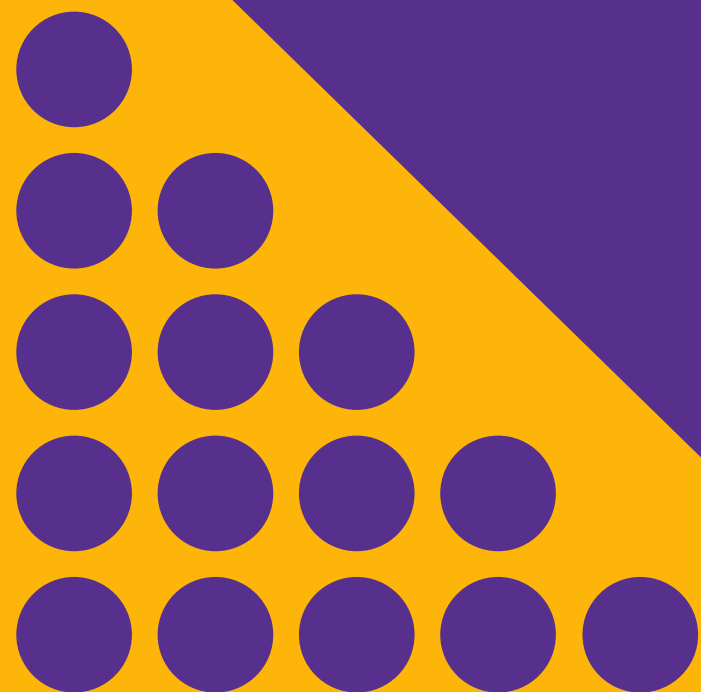


Compliance

Restrict IDP resources in real time from non-compliant devices. Outline compliance using Jamf Pro Smart Groups.

Workflow

Gathering post-attack data



A firefighter in full gear, including a helmet and jacket with reflective stripes, stands in profile on the right side of the image. The background is a misty forest of tall evergreen trees at sunset, with a warm orange and red glow. The word "Aftermath" is written in a stylized, yellow, 3D font with a black outline and a white dashed border, centered horizontally in the middle of the image.

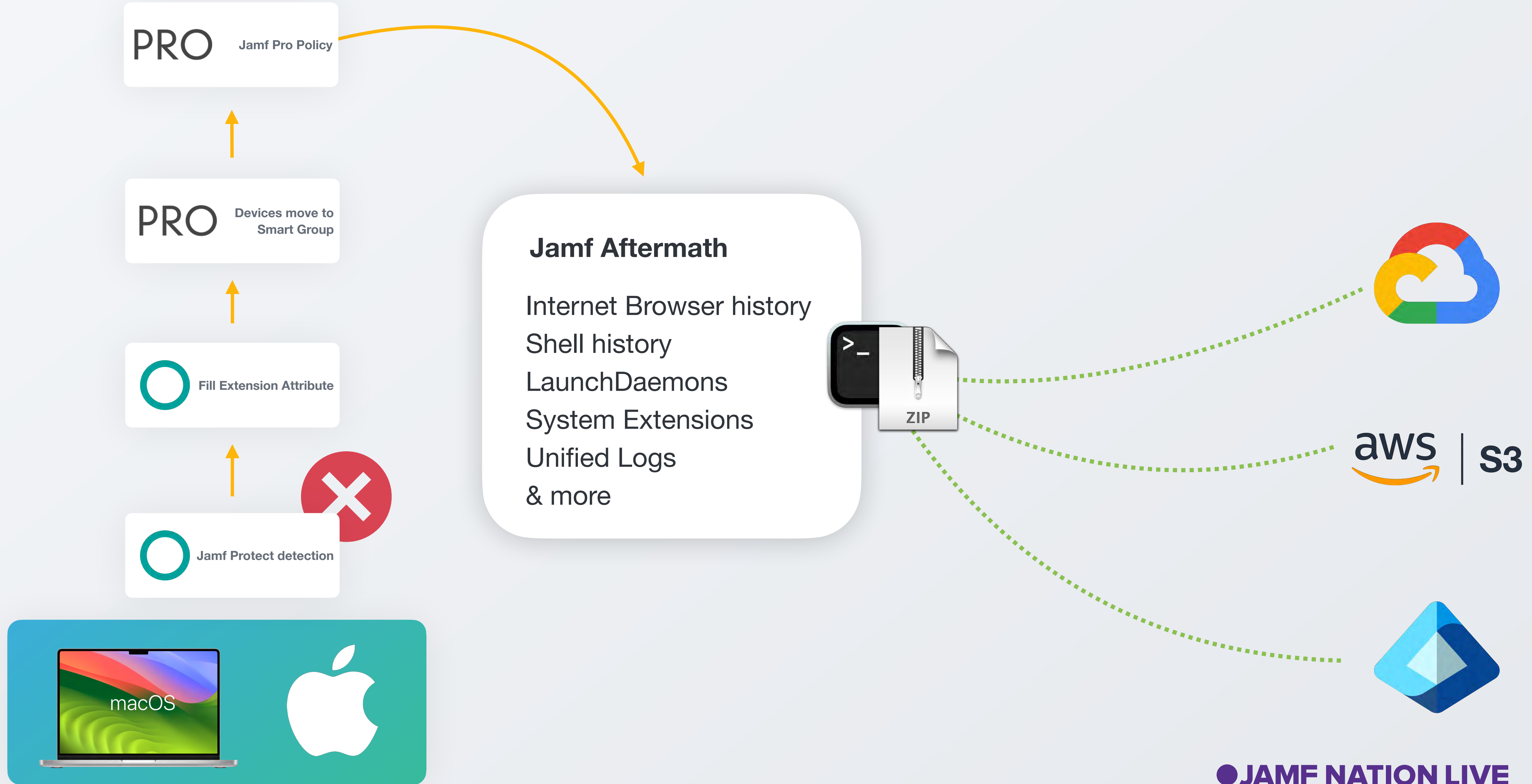
Aftermath

Open source
Incident Response Framework

How can Aftermath help?

- ▶ Gather post-incident forensics
- ▶ Provides a complete storyline
- ▶ Easily deployed from Jamf Pro
- ▶ Scripts & Playbooks available





Jamf Aftermath

Internet Browser history

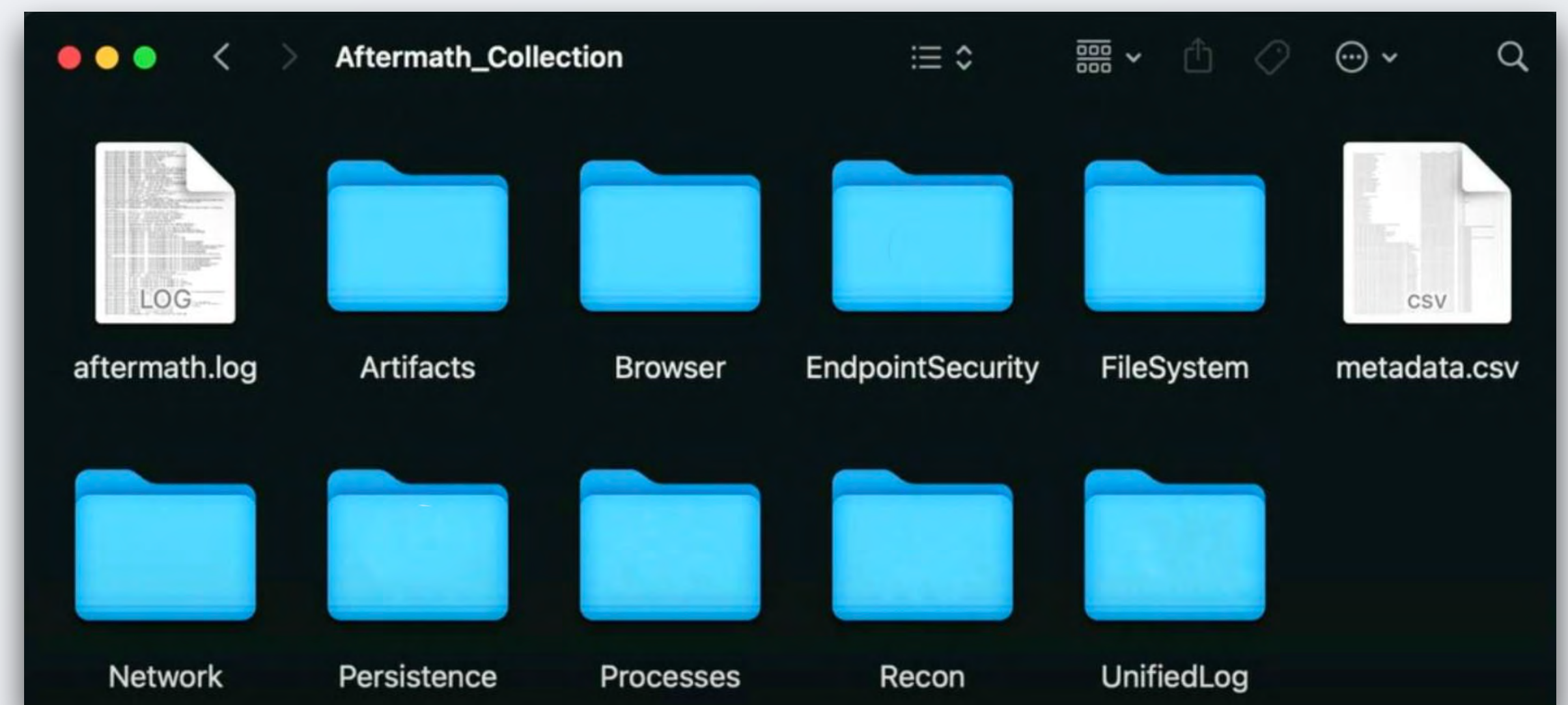
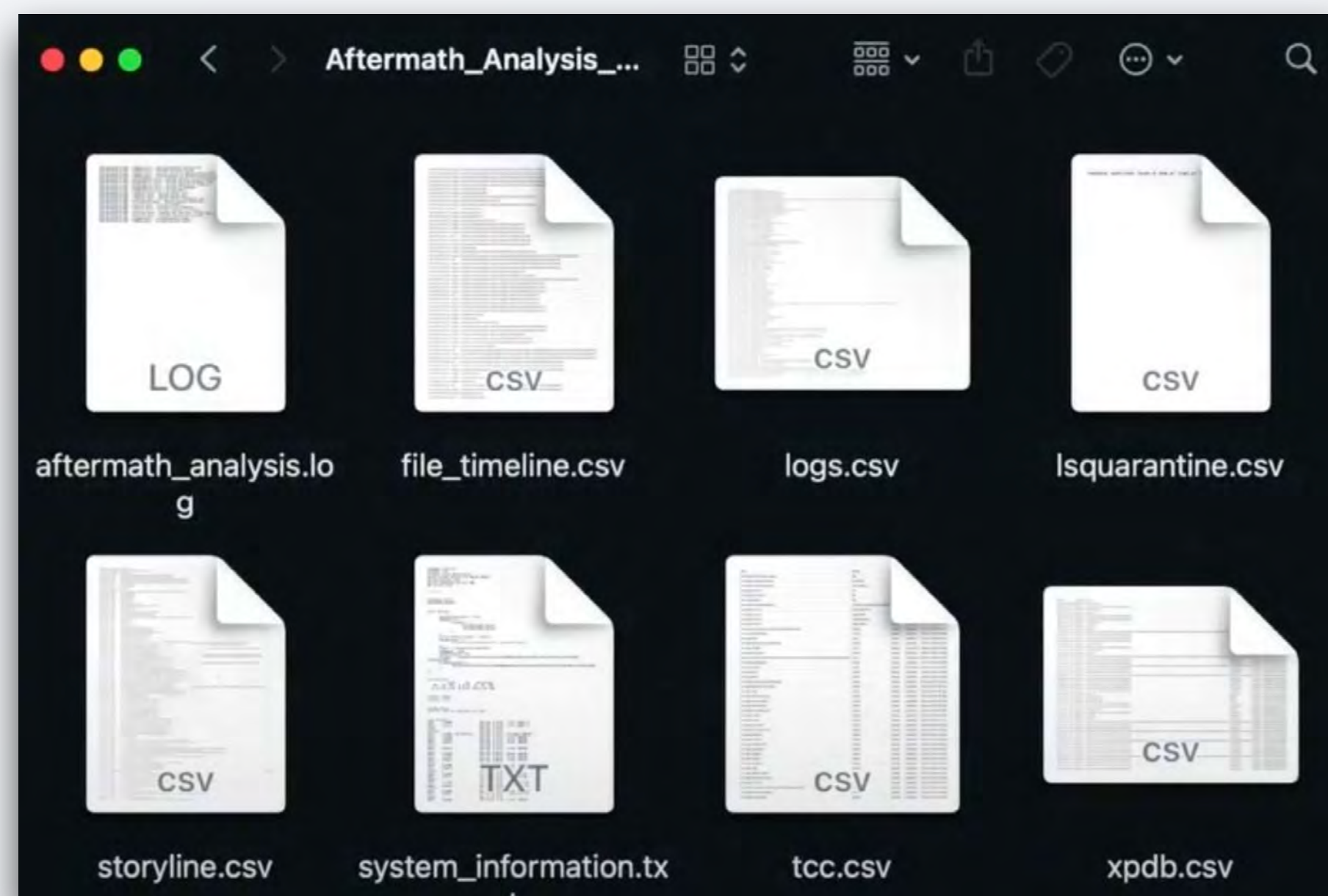
Shell history

LaunchDaemons

System Extensions

Unified Logs

& more



**What can you bring
home?**

Custom Workflows

Post Incident Response

SIEM

Endpoint & Network Security

Risk Level

Isolation

Aftermath

Content Filtering

Zero Trust Network Access

Jamf Routines

Threat Prevention

Jamf Protect

Security Cloud

Jamf Connect

Custom Analytic Remediations

Compliance Baselines

Jamf Pro

Shared Signal Framework

Jamf Security Cloud

Smart Group Actions

Compliance Editor

Routines

Unified Logs

Jamf Threat Labs

Workflows

Okta

Extension Attributes

Risk Levels

**All the resources you need to start
testing in your own environment**



Thank you