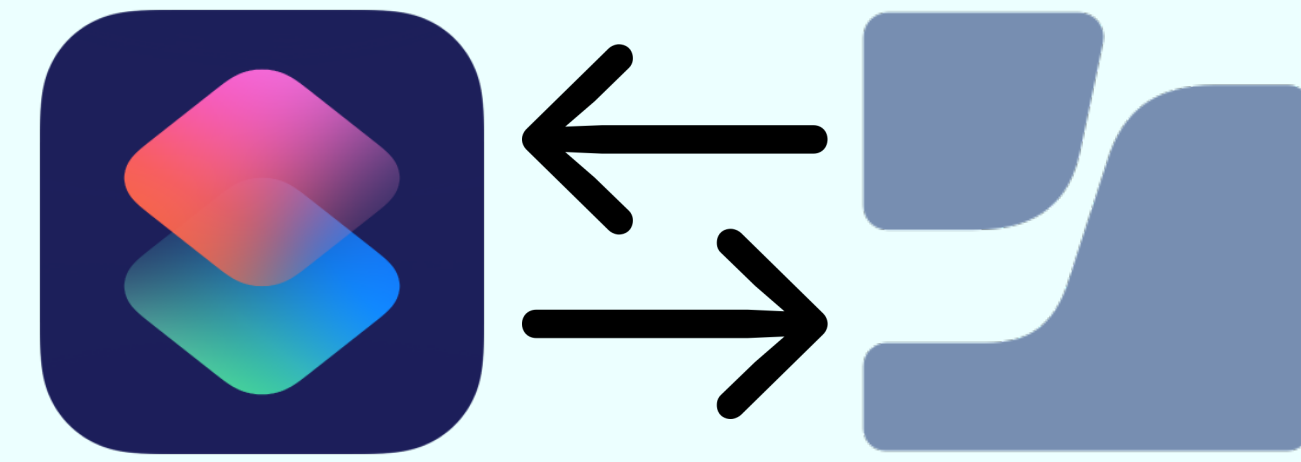


# Apple Shortcuts and the Jamf Pro API



# Introduction

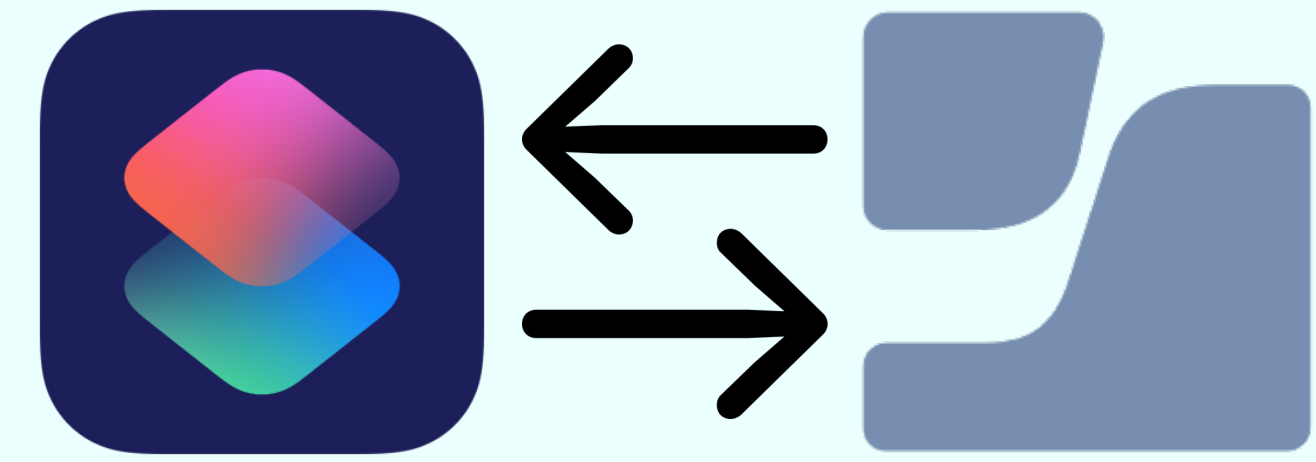
Robert Schroeder - Senior Mac Engineer II



- Began IT career in 2006, working mostly with Windows computers
- Managing Apple devices since 2013
- Experience in Corporate, Enterprise, Education, and MSP spaces
- Passionate about Apple Management and automation



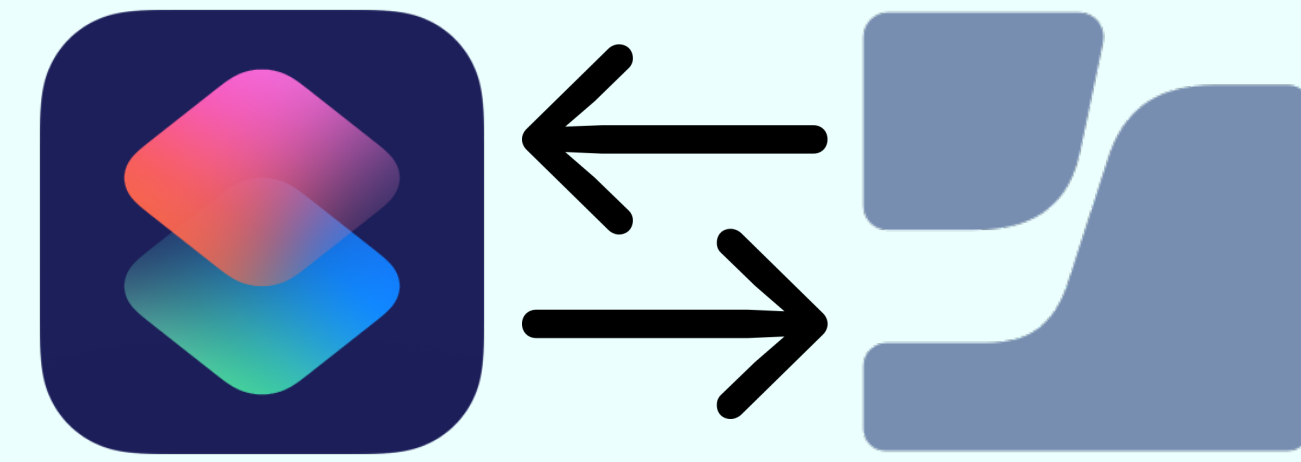
# Agenda



- Apple Shortcuts Background
- Management Challenges
- Getting Started
- Demonstration of Shortcuts
- Resources

# Background

## Introduction to Shortcuts

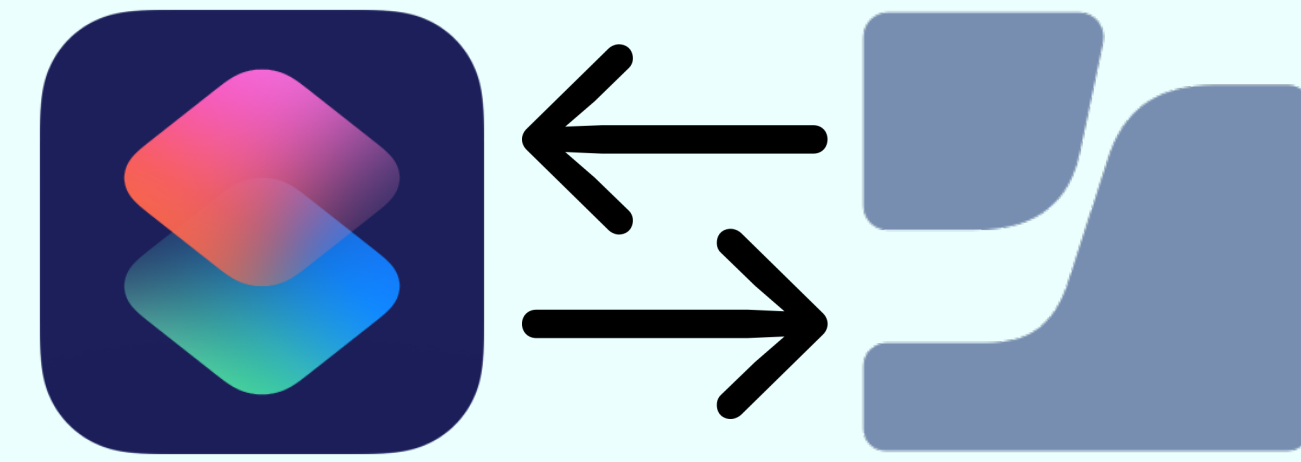


- Originally called Workflow, a project from the University of Michigan's MHacks (2015)
- Apple acquired Workflow (2017)
- Workflow became Shortcuts for iOS 12 (2018)
- Shortcuts became a default iOS app for iOS 13 (2019)
- Shortcuts app announced for macOS (2021)
- Shortcuts is an automation tool for macOS, iOS, and iPadOS, allowing users to automate tasks. A combination of actions and shortcuts can be used to create complex workflows integrating different services and apps.



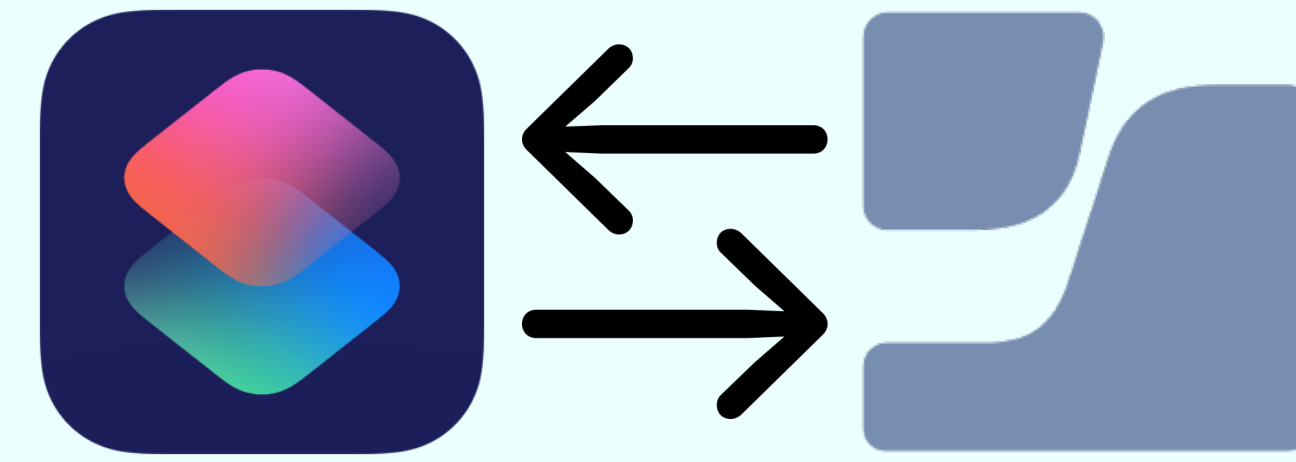
# Challenges

## Why Shortcuts?

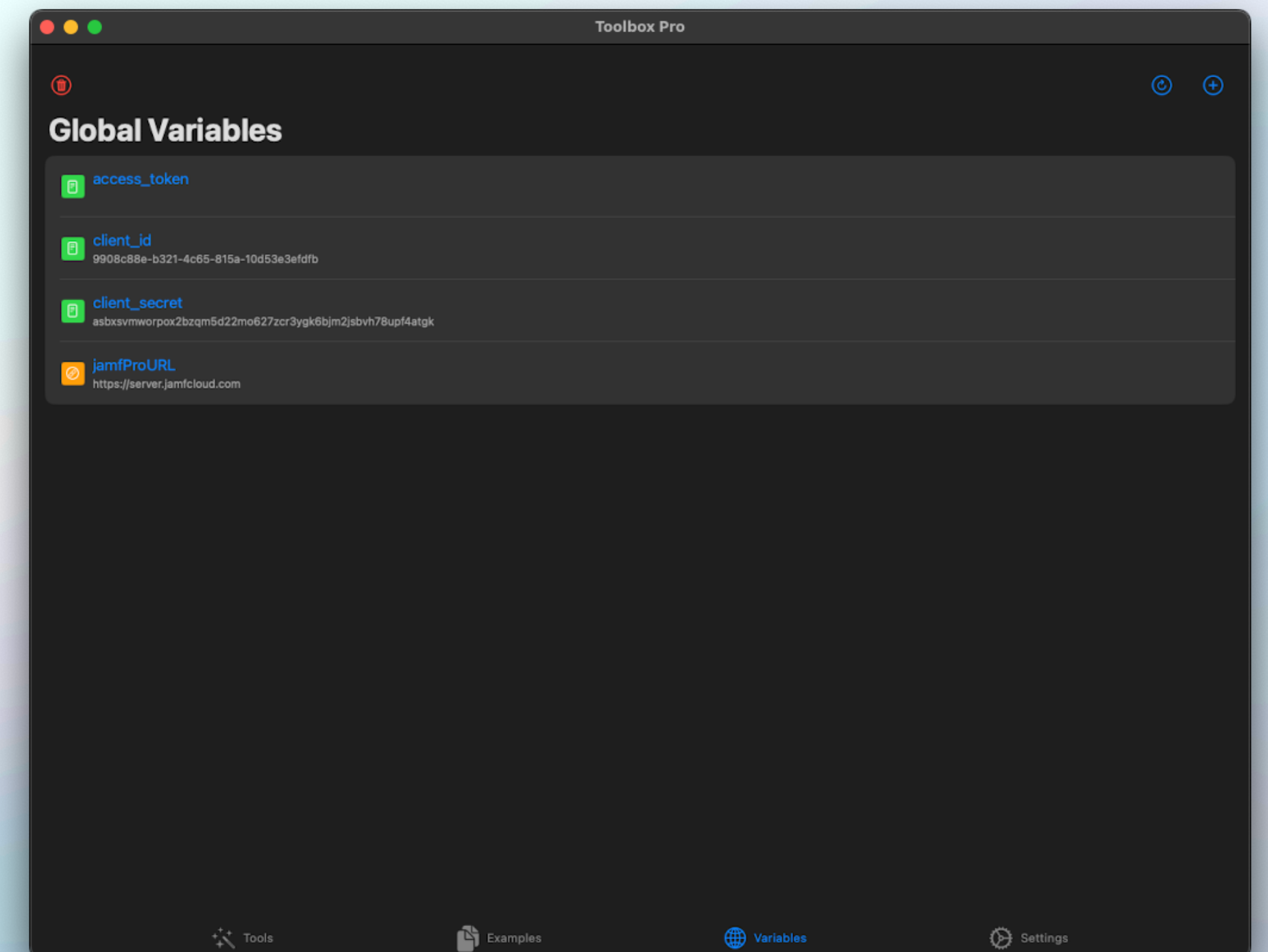


- **Efficiency and Time Savings:** Automation with Shortcuts can streamline repetitive tasks
- **Consistency and Accuracy:** Minimizes human error, ensuring that actions are performed consistently and accurately
- **Customization and Flexibility:** Shortcuts offer the ability to create custom automation workflows tailored to specific organizational needs
- **User Empowerment:** Allowing non-Jamf Pro Administrators to perform management tasks through user-friendly shortcuts
- Overall, using Shortcuts with the Jamf Pro API can lead to a more efficient, accurate, and scalable management process for Apple devices in an organization.

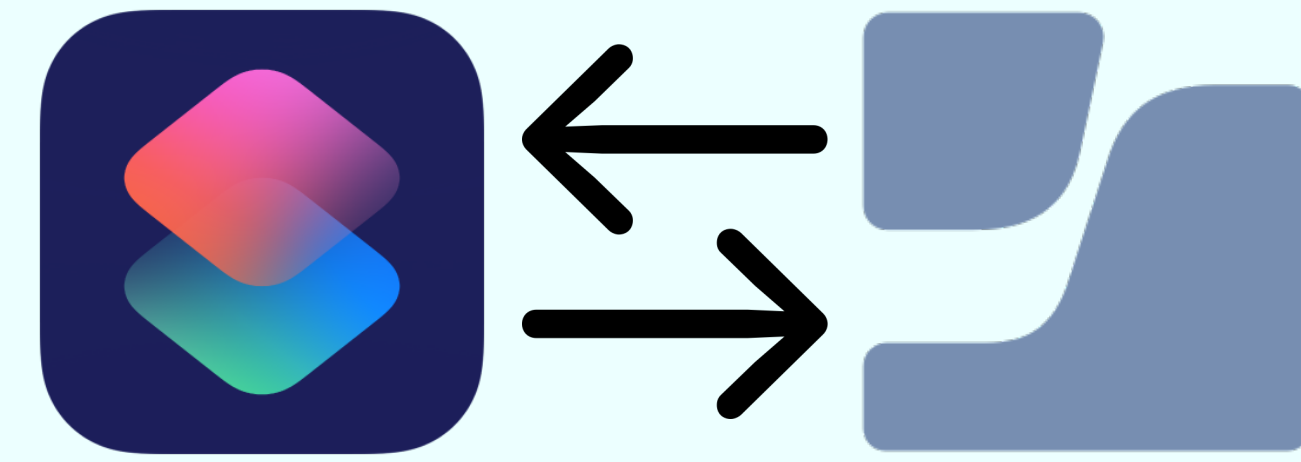
# Getting Started



- **Companion App:** Toolbox Pro, adds new actions to use within the Shortcuts app. No need to complete the in-app purchase to use the Global Variables feature
- **Set Up Authentication Variables:** Within the Toolbox Pro app, choose *Variables* and create the following:
  - *client\_id*
  - *client\_secret*
  - *jamfProURL*
  - *access\_token*



# Getting Started

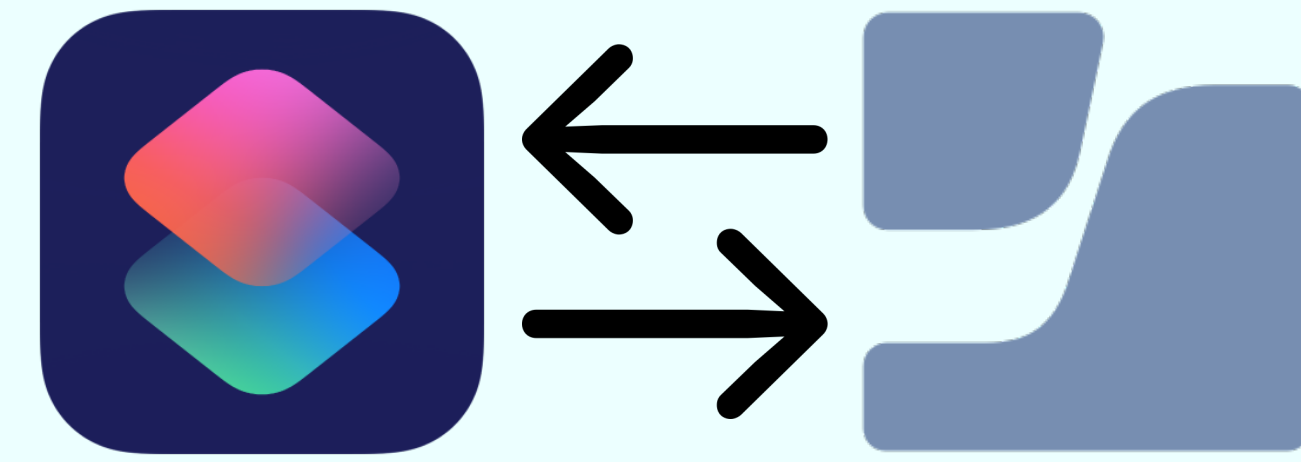


- **Download Shortcuts: [GitHub - Jamf Pro API Shortcuts](#)**

- Within the Shortcuts app, I have organized my Jamf Pro shortcuts into two containers, *Jamf Pro Modules* and *Jamf Pro Actions*
  - *Jamf Pro Modules* - Contains shortcuts that are meant to be re-used and called by the actions shortcuts
  - *Jamf Pro Actions* - Contains individual asks that you are requesting from Jamf Pro



# Getting Started



**Jamf Pro Modules**

Name	Actions	Last Modified
JPAPI - Device - Choose Command Fr...	7 actions	2/21/24, 8:57 AM
JPAPI - Get Device Record From Serial	4 actions	2/21/24, 8:57 AM
JPAPI - Get User Record From Userna...	4 actions	2/21/24, 8:57 AM
JPAPI - Mac Choose Command From L...	20 actions	2/21/24, 8:57 AM
JPAPI - Get Computer Record From Se...	4 actions	2/24/24, 7:24 AM
JPAPI - Get Server Version	4 actions	2/21/24, 8:28 AM
JPAPI - Get Server Start Up Status	4 actions	2/21/24, 8:28 AM
JPAPI - Get Server Basic Information	4 actions	2/21/24, 8:28 AM
JPAPI - Get Activation Code	4 actions	2/21/24, 8:28 AM
JPAPI - Get Inventory Information	4 actions	2/21/24, 8:28 AM
JPAPI - Get Notifications	4 actions	2/21/24, 8:28 AM
Mac/Device - Get Serial	13 actions	2/21/24, 9:12 AM
JPAPI - Invalidate Token	4 actions	2/21/24, 8:28 AM
JPAPI - Get Access Token - API Role/C...	6 actions	2/21/24, 9:15 AM
JPAPI - Get Bearer Token - Basic Auth	6 actions	2/21/24, 8:28 AM

**Jamf Pro Actions**

- All Shortcuts 86
- Share Sheet 2
- Quick Actions 1
- Menu Bar
- Widget 4
- Starter Shortcuts 4
- Jamf Pro Tutorial 15
- Jamf Pro Modules 15
- Jamf Pro Actions 8**

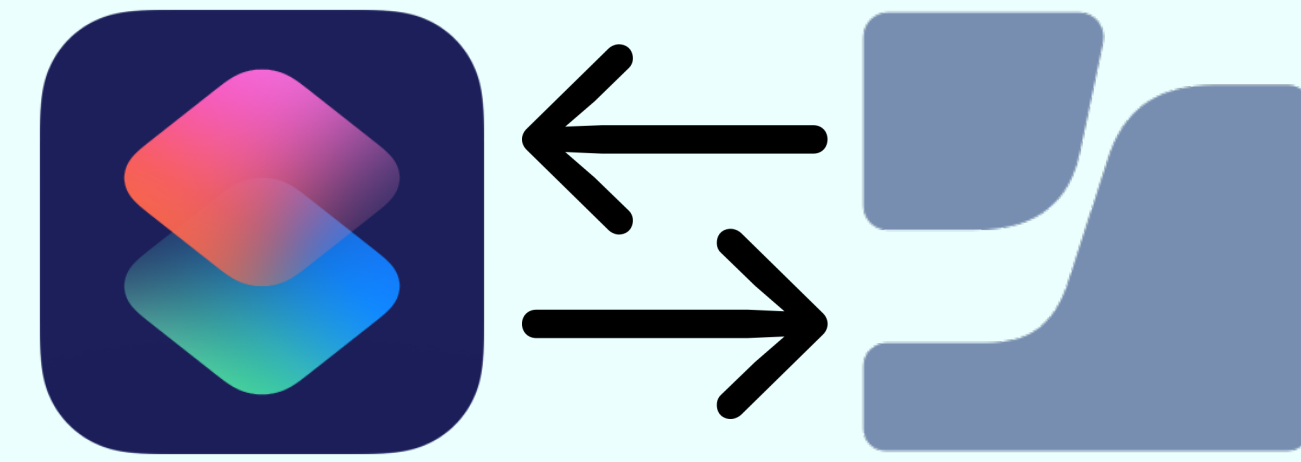
**Jamf Pro Actions**

Name	Actions	Last Modified
Mac - Add Computer to Static Group	11 actions	2/24/24, 7:23 AM
Mac - Get Computer & User Info	30 actions	2/21/24, 8:57 AM
Mac - Send Command	7 actions	2/22/24, 1:04 PM
Mac - Redeploy Jamf Framework	13 actions	Yesterday, 2:00 PM
Mac - Delete Computer Record	10 actions	2/24/24, 7:26 AM
Device - Get Device & User Info	28 actions	2/21/24, 8:56 AM
Device - Send Command	7 actions	2/21/24, 8:56 AM
Get Jamf Pro Server Information	9 actions	2/24/24, 7:27 AM











# Demonstration

## Computer User Look Up



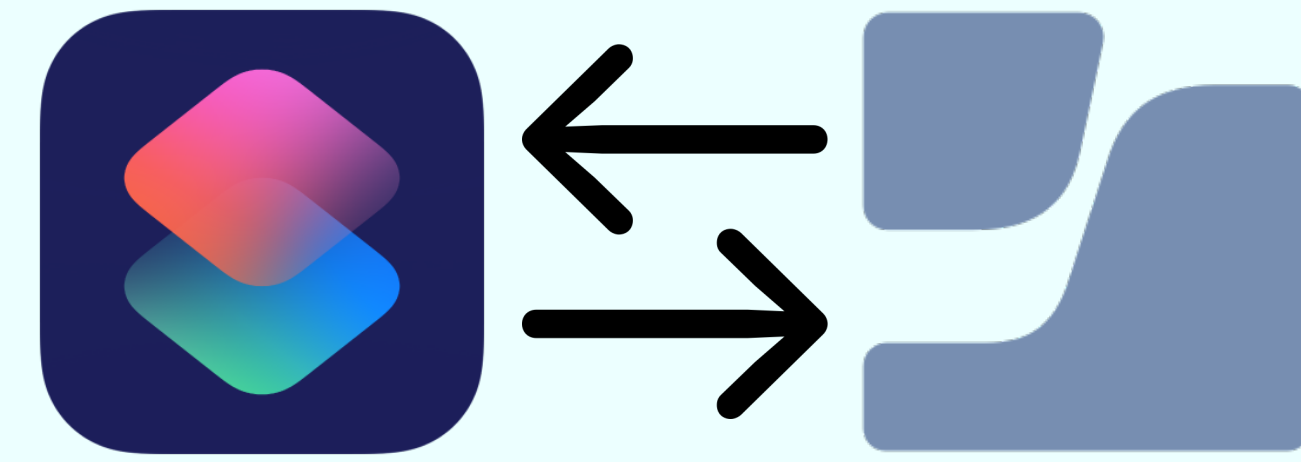
**Jamf Pro Actions** + ☰ ☰ ☰

Name	Actions	Last Modified
 Mac - Add Computer to Static Group	11 actions	2/24/24, 7:23 AM
 Mac - Get Computer & User Info	30 actions	Today, 8:03 AM
 Mac - Send Command	7 actions	2/28/24, 3:42 PM
 Mac - Redeploy Jamf Framework	13 actions	2/27/24, 2:00 PM
 Mac - Delete Computer Record	10 actions	2/28/24, 3:44 PM
 Device - Get Device & User Info	28 actions	Today, 7:55 AM
 Device - Send Command	7 actions	2/21/24, 8:56 AM
 Get Jamf Pro Server Information	9 actions	2/24/24, 7:27 AM



# Demonstration

## Redeploy Jamf Framework

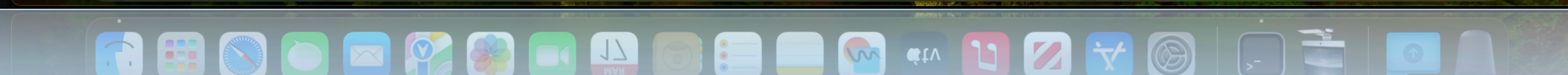


**Jamf Pro Actions**

Name	Actions	Last Modified
Mac - Add Computer to Static Group	11 actions	2/24/24, 7:23 AM
Mac - Get Computer & User Info	30 actions	Today, 8:04 AM
Mac - Send Command	7 actions	Today, 8:05 AM
Mac - Redeploy Jamf Framework	13 actions	Today, 8:10 AM
Mac - Delete Computer Record	10 actions	2/28/24, 3:44 PM
Device - Get Device & User Info	28 actions	Today, 7:55 AM
Device - Send Command	7 actions	2/21/24, 8:56 AM
Get Jamf Pro Server Information	9 actions	2/24/24, 7:27 AM

Terminal Shell Edit View Window Help

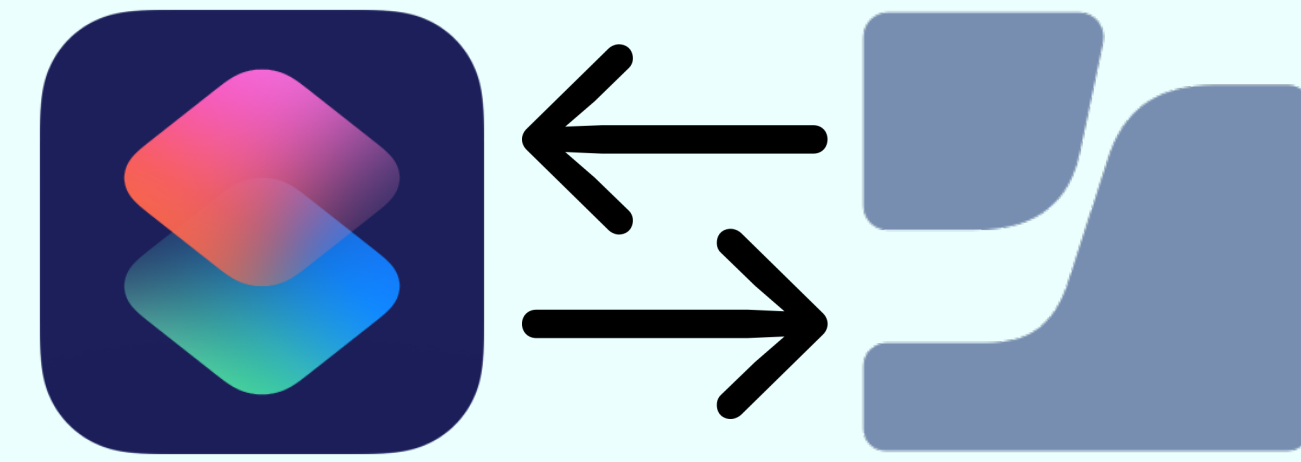
```
mac@ZR3M7H2T72 ~ % sudo log stream --info --debug --predicate 'subsystem == "com.apple.ManagedClient" AND category == "ManagedApps"'
Filtering the log data using "subsystem == "com.apple.ManagedClient" AND category == "ManagedApps"
Timestamp          Thread             Type              Activity          PID    TTL
2024-03-17 07:13:51.159922-0700 0x55df           Debug            0x0              3383   0
mdmclient: [com.apple.ManagedClient:ManagedApps] <private>
```





# Demonstration

## Lock Computer



Jamf Pro Actions

Name	Actions	Last Modified
Mac - Add Computer to Static Group	11 actions	2/24/24, 7:23 AM
Mac - Get Computer & User Info	30 actions	Today, 8:04 AM
Mac - Send Command	7 actions	Today, 8:15 AM
Mac - Redeploy Jamf Framework	13 actions	Today, 8:14 AM
Mac - Delete Computer Record	10 actions	2/28/24, 3:44 PM
Device - Get Device & User Info	28 actions	Today, 7:55 AM
Device - Send Command	7 actions	2/21/24, 8:56 AM
Get Jamf Pro Server Information	9 actions	2/24/24, 7:27 AM

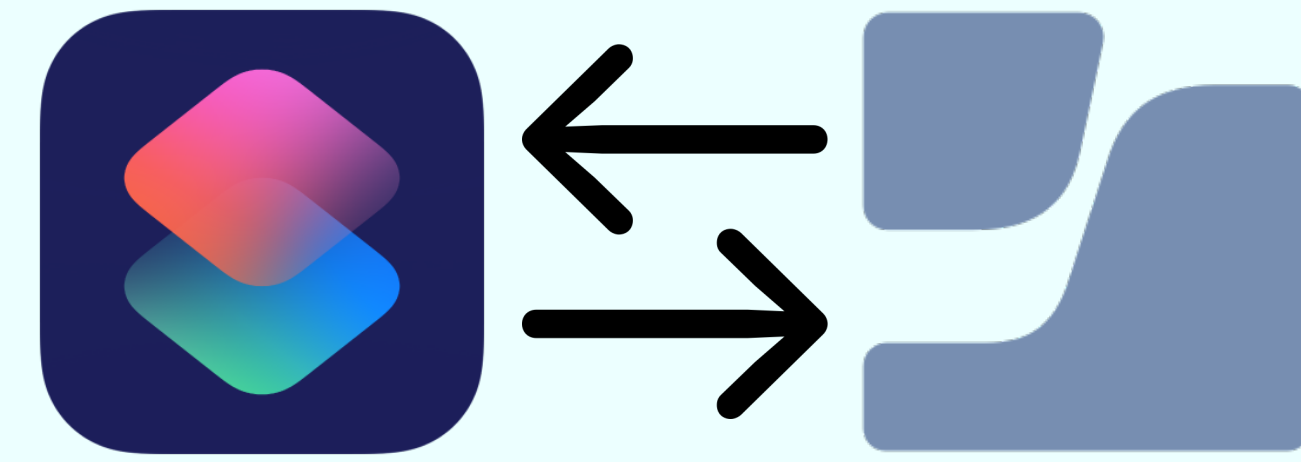
macOS - Shortcuts Demo

Finder File Edit View Go Window Help

Sun Mar 17 7:16 AM



# Resources



- **Shortcuts on Github**

- <https://github.com/robjschroeder/Shortcuts/tree/main/Jamf%20Pro%20API>

- **JNUC 2022 Shortcuts Presentation**

- <https://www.youtube.com/watch?v=56ej8gZfj38>

- **MacAdmins Slack**

- #shortcuts



Jamf Pro API Shortcuts - GH