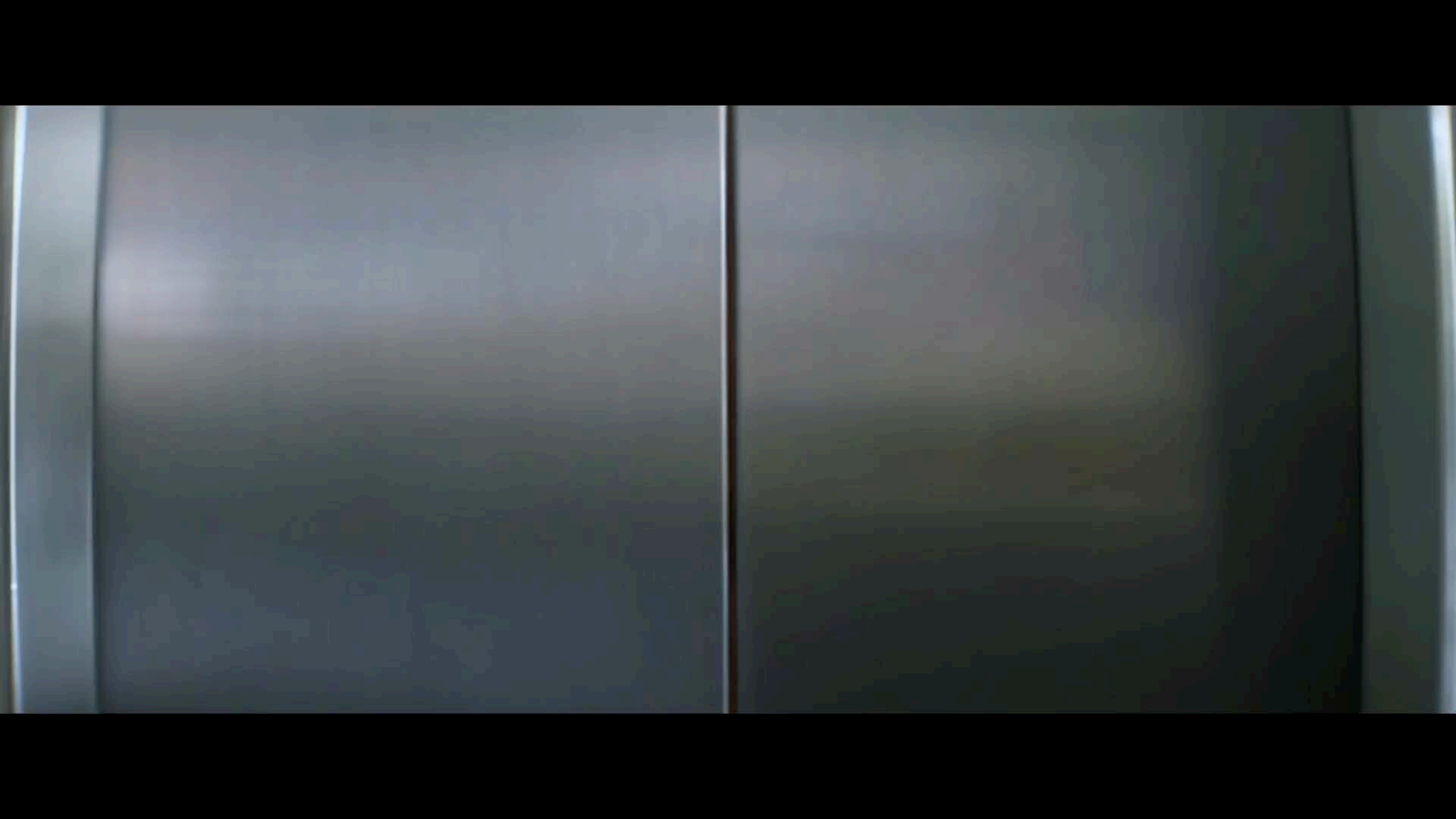


#WWDC19

What's New in Managing Apple Devices

Todd Fernandez, Senior Manager, Device Management




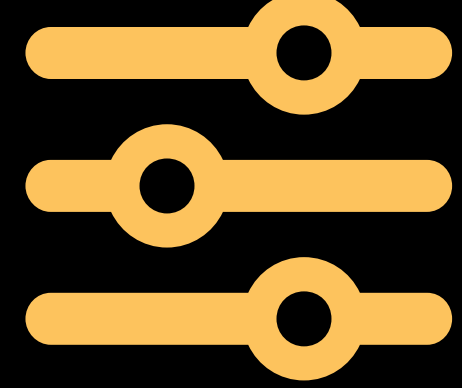




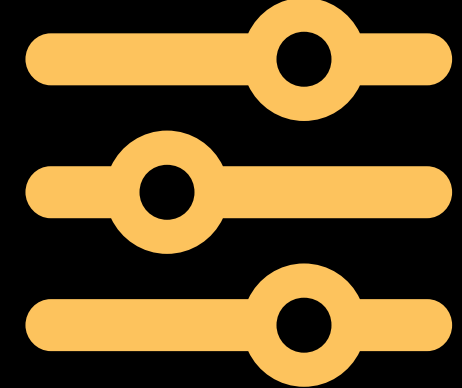



 Same tools for all

 Same tools for all

 Balance values

-  Same tools for all
-  Balance values
-  Fits in and stands out

-  Same tools for all
-  Balance values
-  Fits in and stands out

 Same tools for all

business.apple.com

Apple Business

Organization

Activity

Locations

People

Accounts

Roles

Devices

Device Assignments

Assignment History

Content

Apps and Books

Custom Apps

Settings

7 Total

Travel
Acme, Inc. • iOS App
★★★★★ \$0.00 Unlimited

Vacations
Acme, Inc. • iOS App
★★★★★ \$0.00 Unlimited

Directory
Acme, Inc. • iOS App
★★★★★ \$0.00 Unlimited

Help Desk
Acme, Inc. • iOS App
★★★★★ \$0.00 Unlimited

Requisition
Acme, Inc. • iOS App
★★★★★ \$0.00 Unlimited

Mobile
Acme, Inc. • iOS App
★★★★★ \$0.00 Unlimited

Enterprise
Acme, Inc. • iOS App
★★★★★ \$0.00 Unlimited

Travel
Acme, Inc. • iOS App • Custom App
✓ Device Assignable

Buy Licenses

License Type: Managed
Assign to: Choose a Location

Price: \$0.00
Quantity: 0

Total Cost: \$0.00 [Get](#)

Manage Licenses ?

Location	In Use	Available	
Homestead 1	0	10	Transfer
Homestead 2	0	20	Transfer

business.apple.com

Apple Business

Organization

Activity

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People

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Device Assignments

Assignment History

Content

Apps and Books

Settings

Search Accounts

Sort by Last Name

20 Accounts
All Accounts at Apple Inc.

BA Bryan Alvarez
Content Manager · Apple Inc.

GA Greg Apodaca
People Manager · Apple Inc.

JA Johnny Appleseed (Me)
Administrator · Apple Inc.

AC Allison Cain
Administrator · Apple Inc.

JC Joe Calonje
People Manager · Apple Inc.

TD Tejo Dama
2 Roles · Apple Inc.

DE Dave Elfving
Staff · Apple Inc.

CF Cynthia Fong
Staff · Apple Inc.

JG Janelle Gee
Staff · Apple Inc.

KK Kim Kilgo
Device Manager · Apple Inc.

JK Jeena Kim
Device Manager · Apple Inc.

Johnny Appleseed

20 Accounts

Sign-Ins
Create and send new sign-ins for people with new accounts or lost credentials. [Create](#)

Account Status
Deactivate, reactivate or delete these accounts. [Change](#)

Account Info
Add a new Role and Location to these accounts. [Add](#)

Accounts
Edit the username and domain of each Managed Apple ID. [Edit](#)

Search Accounts

Sort by Last Name

20 Accounts
All Accounts at Apple Inc.

BA **Bryan Alvarez**
Content Manager · Apple Inc.

GA **Greg Apodaca**
People Manager · Apple Inc.

JA **Johnny Appleseed (Me)**
Administrator · Apple Inc.

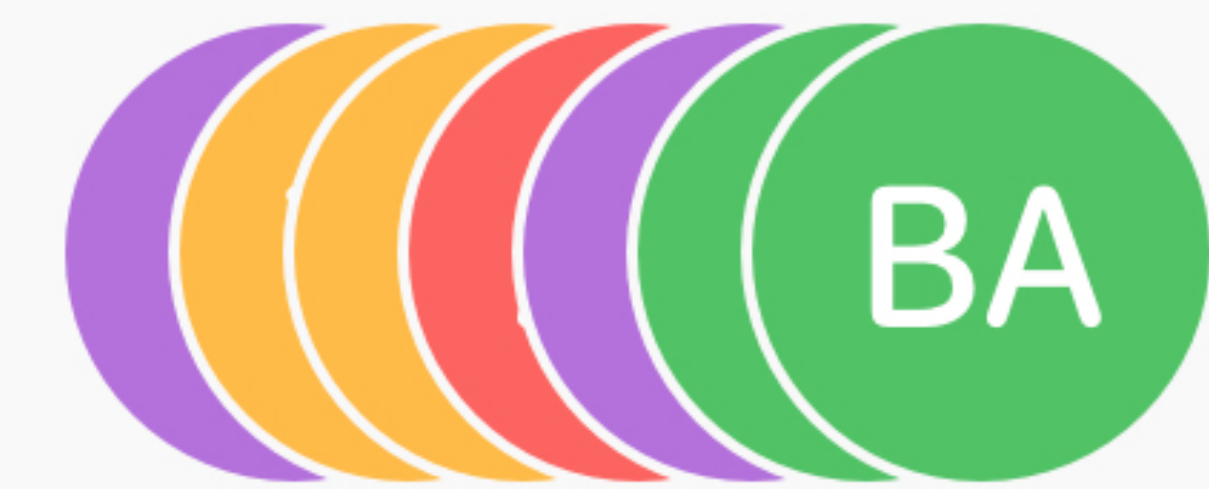
AC **Allison Cain**
Administrator · Apple Inc.

JC **Joe Calonje**
People Manager · Apple Inc.

TD **Tejo Dama**
2 Roles · Apple Inc.

DE **Dave Elfving**
Staff · Apple Inc.

CF **Cynthia Fong**



20 Accounts



Sign-Ins

Create and send new sign-ins for people with new accounts or lost credentials.

Create



Account Status

Deactivate, reactivate or delete these accounts.

Change



Account Info

Add

idmsac.apple.com




Johnny Appleseed

Deployment Programs

- Admins
- Locations
- Device Enrollment Program
- Volume Purchase Program
- Terms and Conditions

Welcome back, Johnny

Device Enrollment Program and Volume Purchase Program have a new home:

-  Device Enrollment Program [Get Started >](#)
-  Apple School Manager
Educational Customers can enroll at: school.apple.com
-  Volume Purchase Program [Get Started >](#)

AppleSeed for IT

Apple Business Manager and Apple School Manager

Access with Managed Apple ID

Access software, documentation, and test plans

Associate feedback with your organization



System Preferences Edit View Window Help

Classroom

Classroom allows teachers to access and control your Mac, including opening apps and navigating to websites, chapters, and pages.

Classes Permissions

New Class Invitations

- History Mr. Roland

Classes

- Science Mrs. Abeles
- Reading Ms. Davis
- Geography Ms. Burke
- Writing Mr. Jones

Science Remove Class...

Teacher

Mrs. Abeles

My Information

Use Name & Photo from My Card

Aaron Barnes

9:41 AM Mon Jun 3 100%

End Class Science Select

Open Navigate Lock Mute Screens Add Group Sharing

All (29) Safari (14) Books (8) Notes (7)

Aaron Notes	Addison Safari	Aiden Books	Alex Books	Anthony Safari	Aubrey Notes
Ava Safari	Avery Books	Brayden Notes	Brooklyn Books	Chloe Notes	Claire Safari
Elizabeth Safari	Ella Books	Gabriel Safari	Gavin Safari	Isabella Safari	Julia Books
Kaelyn Notes	Logan Safari	Lucas Safari	Mason Books	Mia Safari	Natalie Safari
Noah Notes	Owen Safari	Riley Notes	Tristan Books	Zoe Safari	

MacBook Pro

Bring Existing iOS Restrictions to macOS Classroom

Automatically join classes

Request permission to leave classes

Don't prompt for app and device lock

Don't prompt for screen observation



Bring Existing iOS Restrictions to macOS

Screen viewing

Allow remote screen observation

Allow screenshot

Affects

- Remote Desktop
- Screen Sharing
- Screenshot

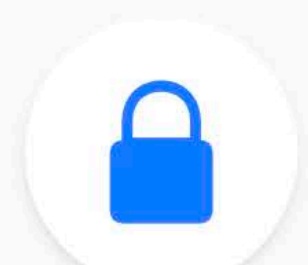




Open



Navigate



Lock



Mute



Hide



Screens



Group



All (33)



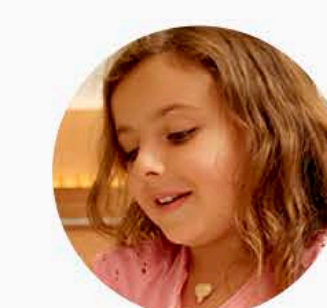
Books (22)



Safari (8)



Pages (3)



Group (1)



Aaron
Safari



Amy
Books



Chris
Safari



Craig
Safari



Dallas
Books



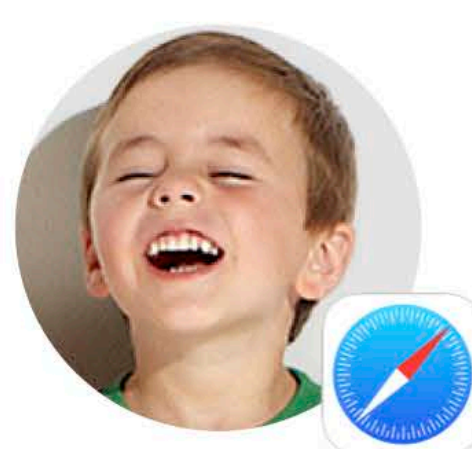
Damian
Books



Emily
Books



Erin
Books



Jaden
Safari



Jane A.
Books



Jane G.
Pages



Ken
Safari



Linda
Safari



Luci
Safari



Matthew
Pages



Max
Safari & Pages



Natalia
Books



Nicolas
Books



Paul
Books



Peter
Books



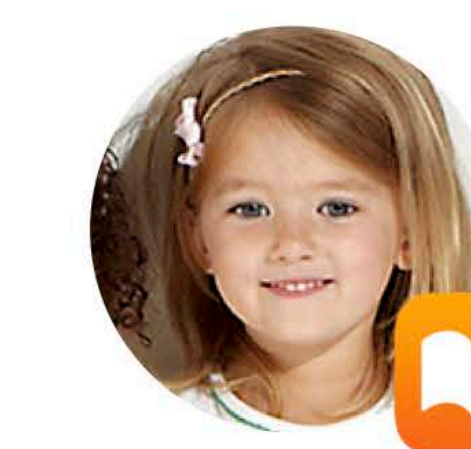
Raymond
Display off



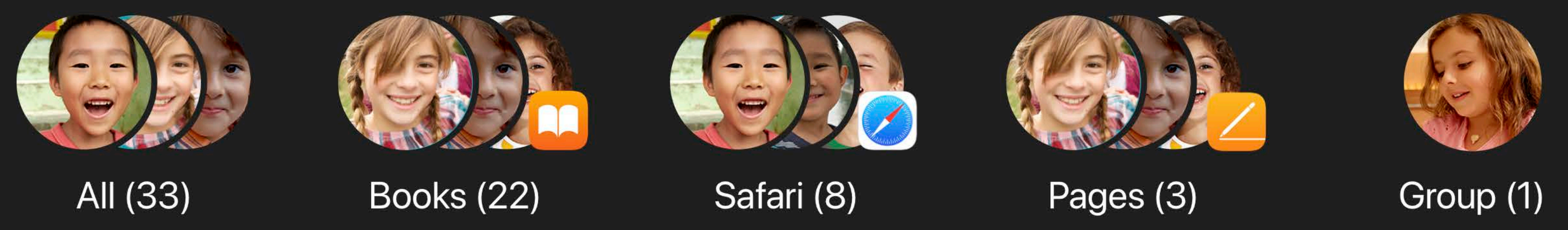
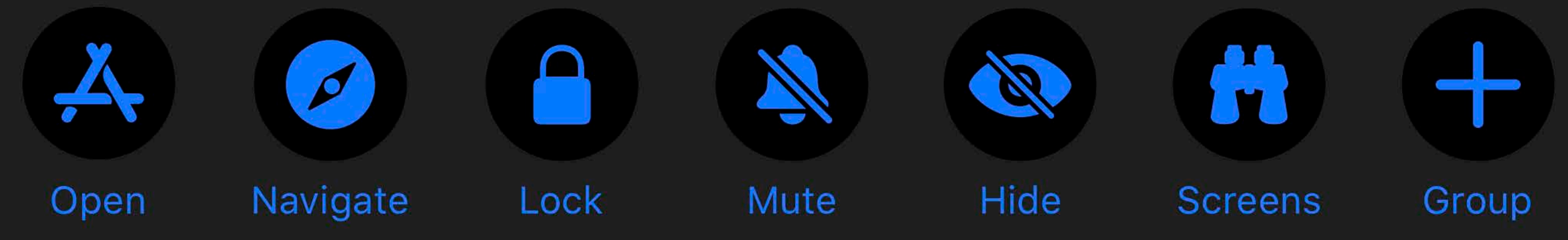
Sam
Books



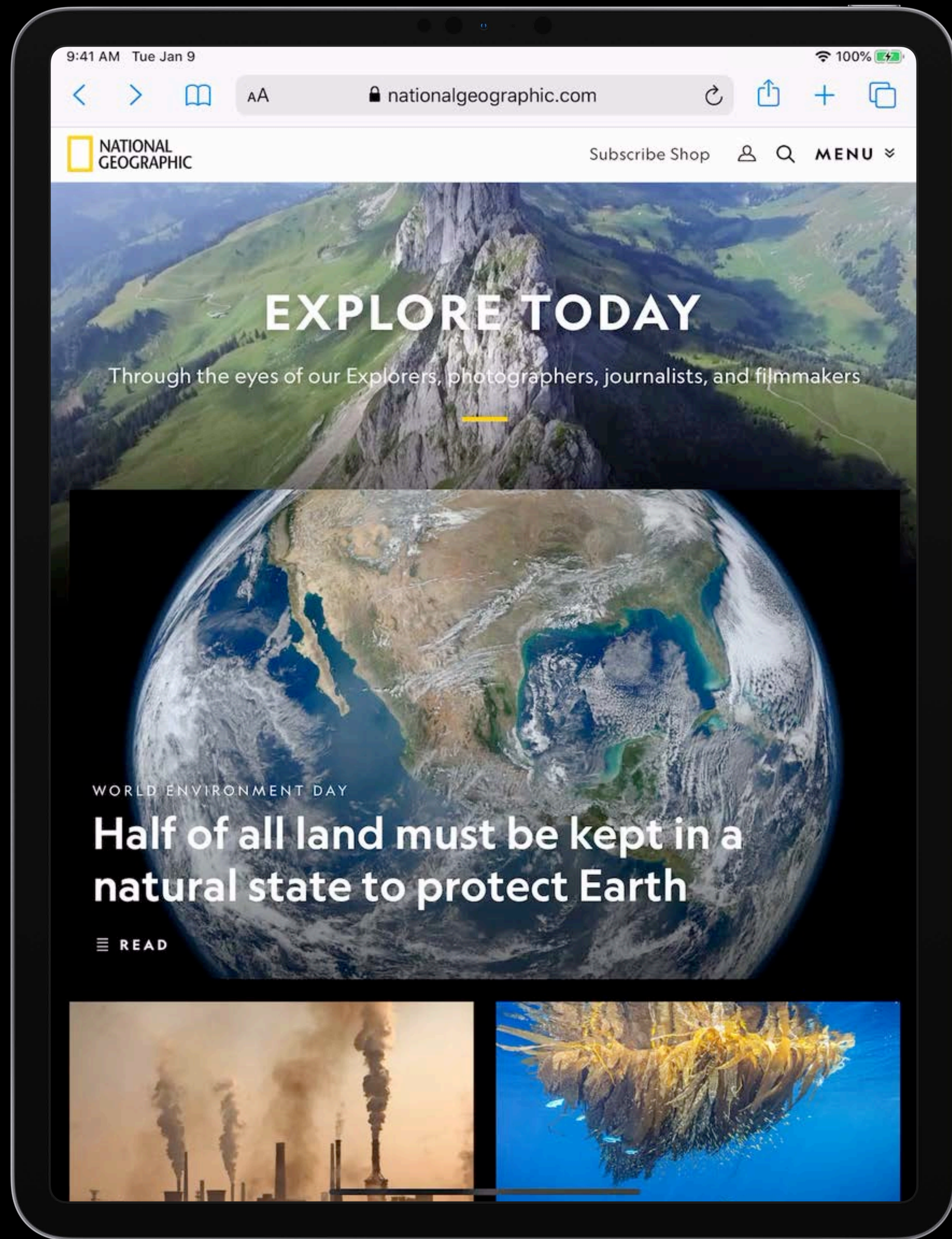
Stephanie
AirPlay



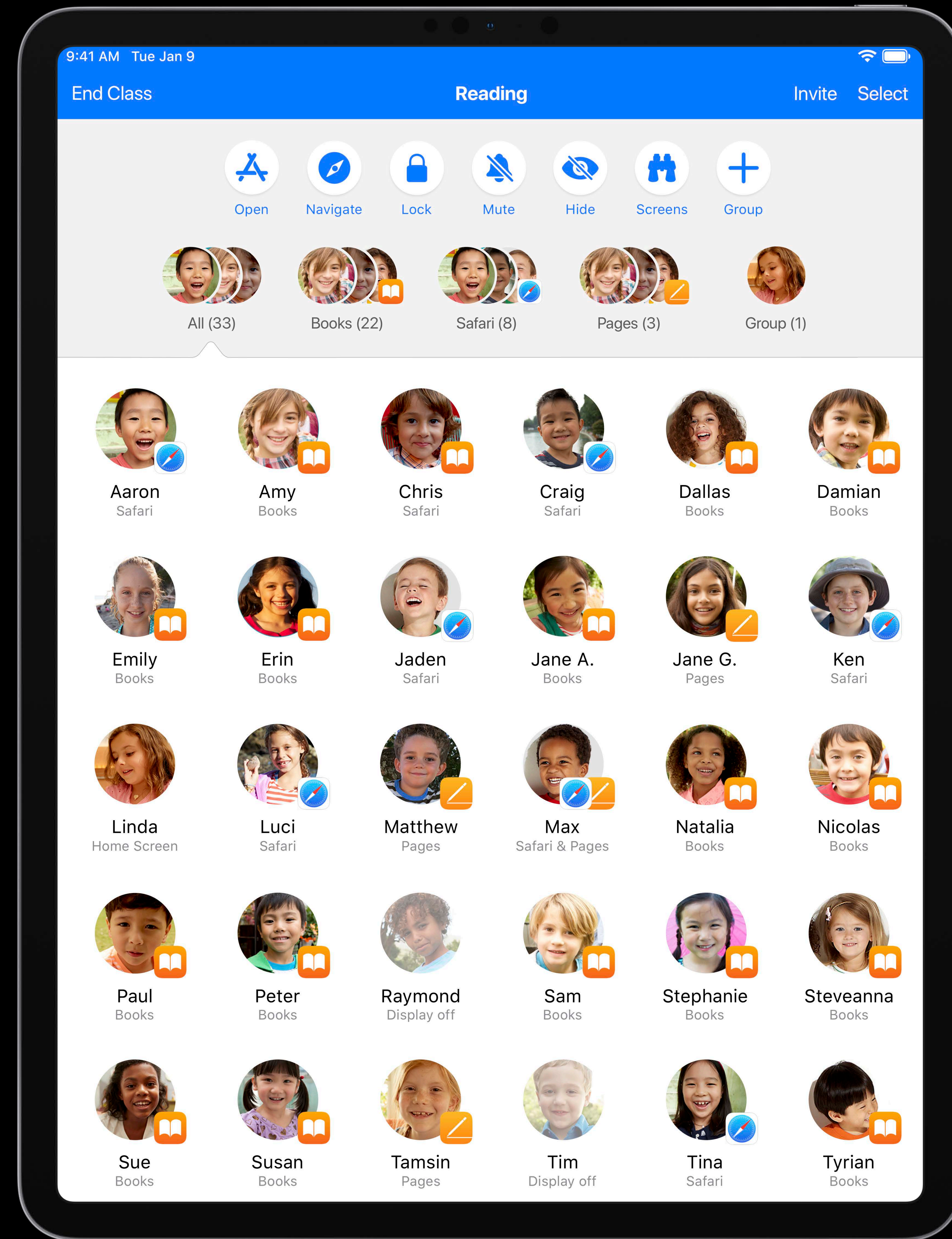
Steveanna
Books



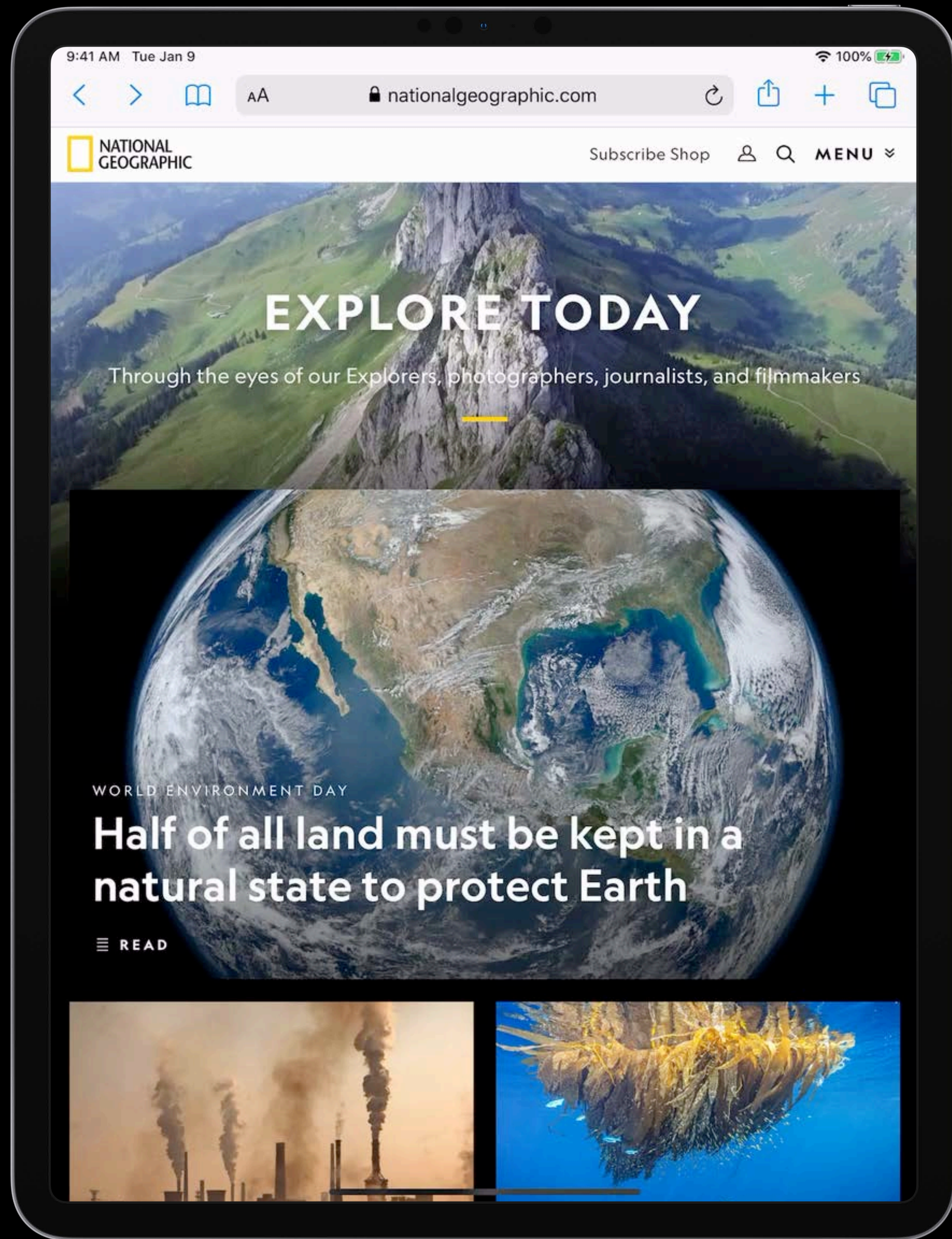
- | | | | | | | | |
|------------------|------------------|------------------|-----------------|------------------------|-----------------|----------------------|-----------------------|
| Aaron
Safari | Amy
Books | Chris
Safari | Craig
Safari | Dallas
Books | Damian
Books | Emily
Books | Erin
Books |
| Jaden
Safari | Jane A.
Books | Jane G.
Pages | Ken
Safari | Linda
Safari | Luci
Safari | Matthew
Pages | Max
Safari & Pages |
| Natalia
Books | Nicolas
Books | Paul
Books | Peter
Books | Raymond
Display off | Sam
Books | Stephanie
AirPlay | Steveanna
Books |



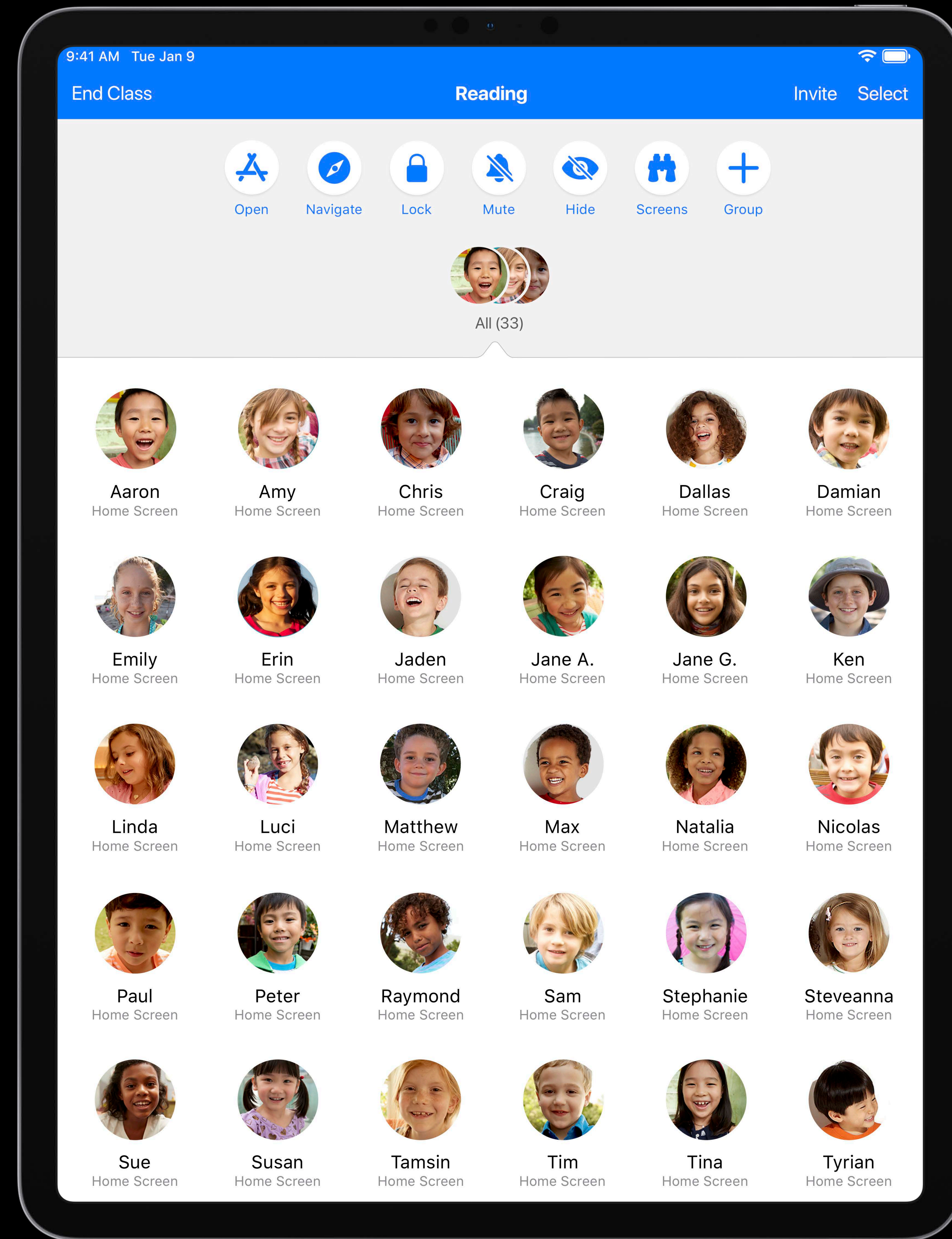
Student



Teacher



Student



Teacher

Desktop-Class Browsing on iPad

NEW

iPad identifies as Mac

May break MDM UI or enrollment flows

✘ Stop using UserAgent



Desktop-Class Browsing on iPad

NEW

iPad identifies as Mac

May break MDM UI or enrollment flows

✘ Stop using UserAgent



Platform Parity

tvOS


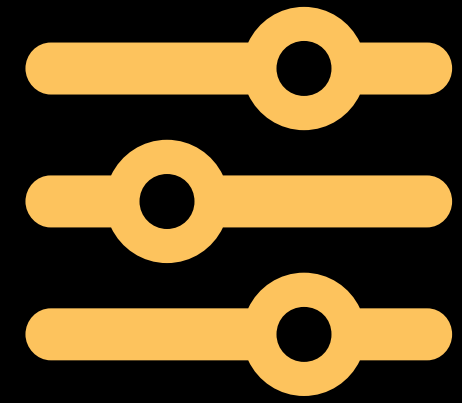

Managed Software Updates

Force automatic date and time

Content Caching for screen savers



 Same tools for all

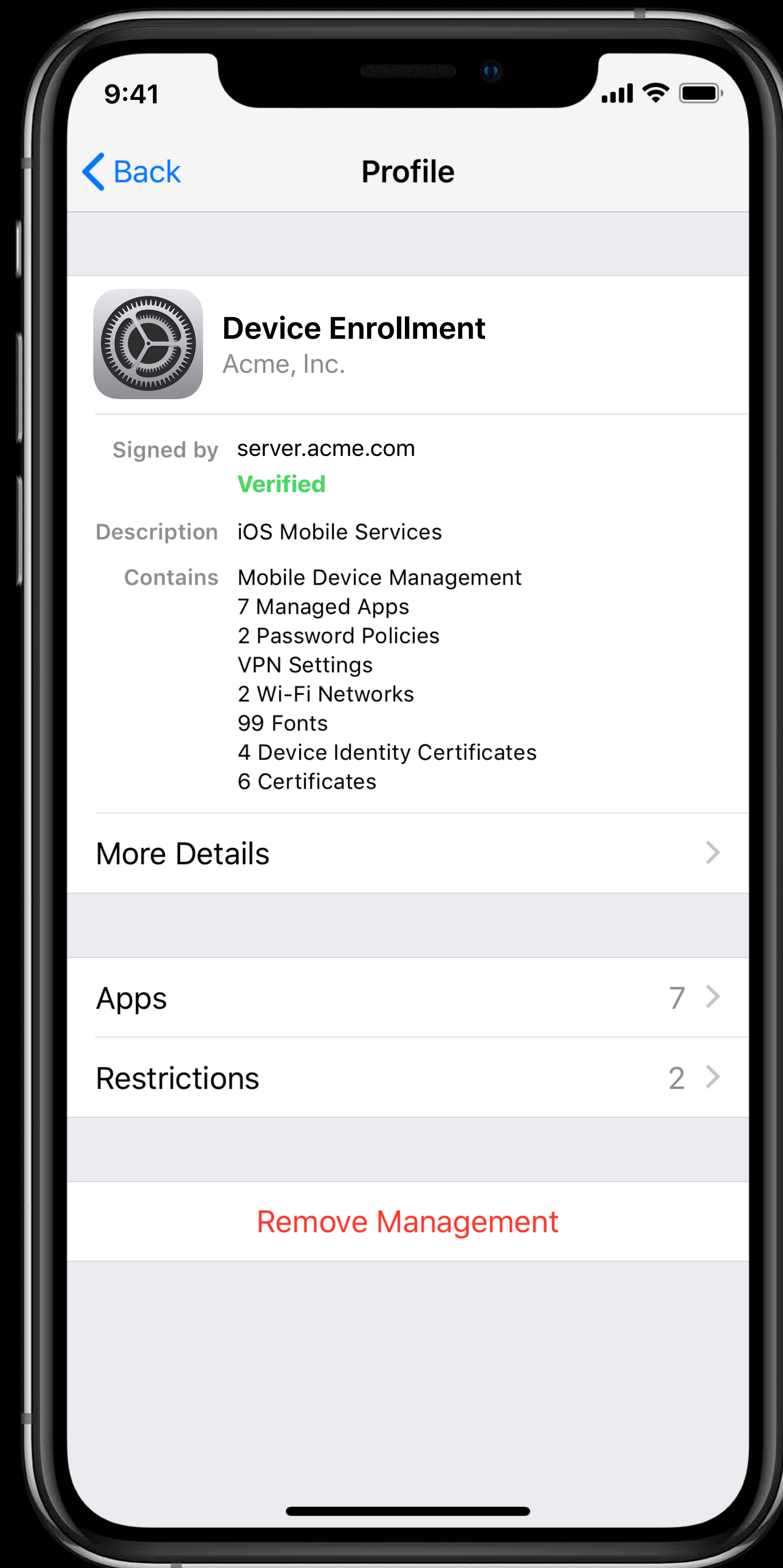
-  Same tools for all
-  Balance values
-  Fits in and stands out



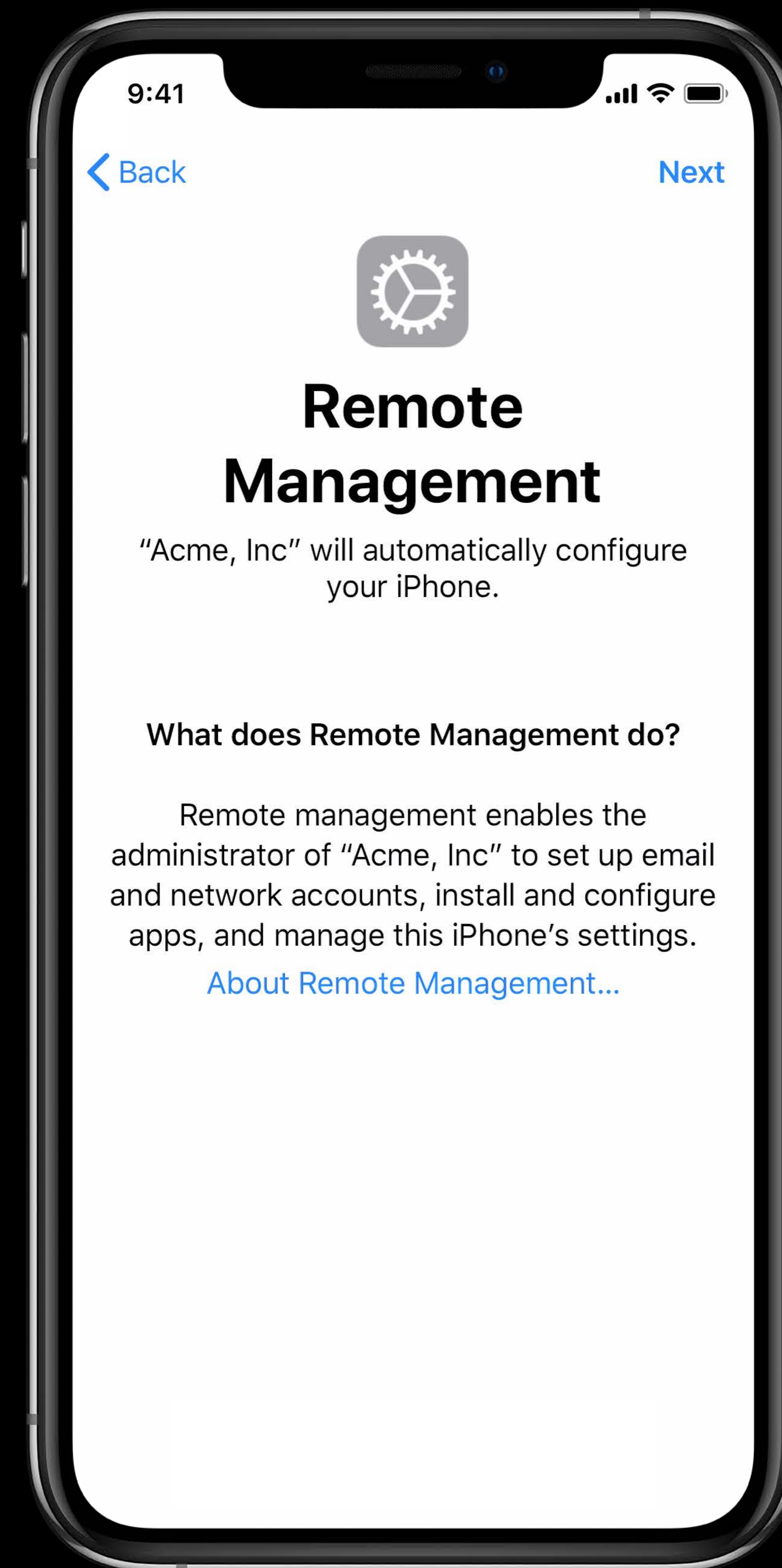
Balance values

User Enrollment

Bob Whiteman, Senior Device Management Engineer



Device Enrollment

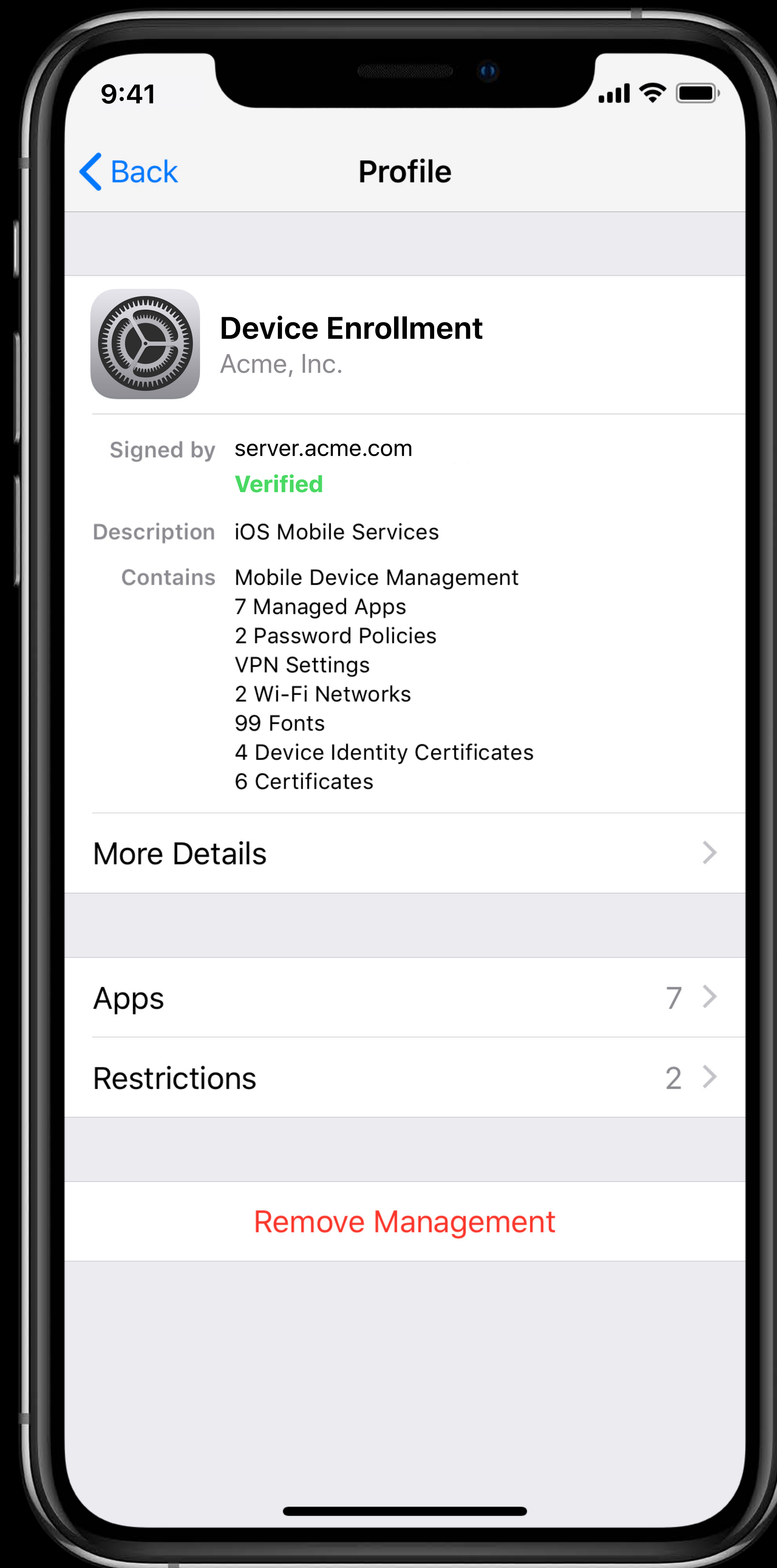


Automated
Device Enrollment

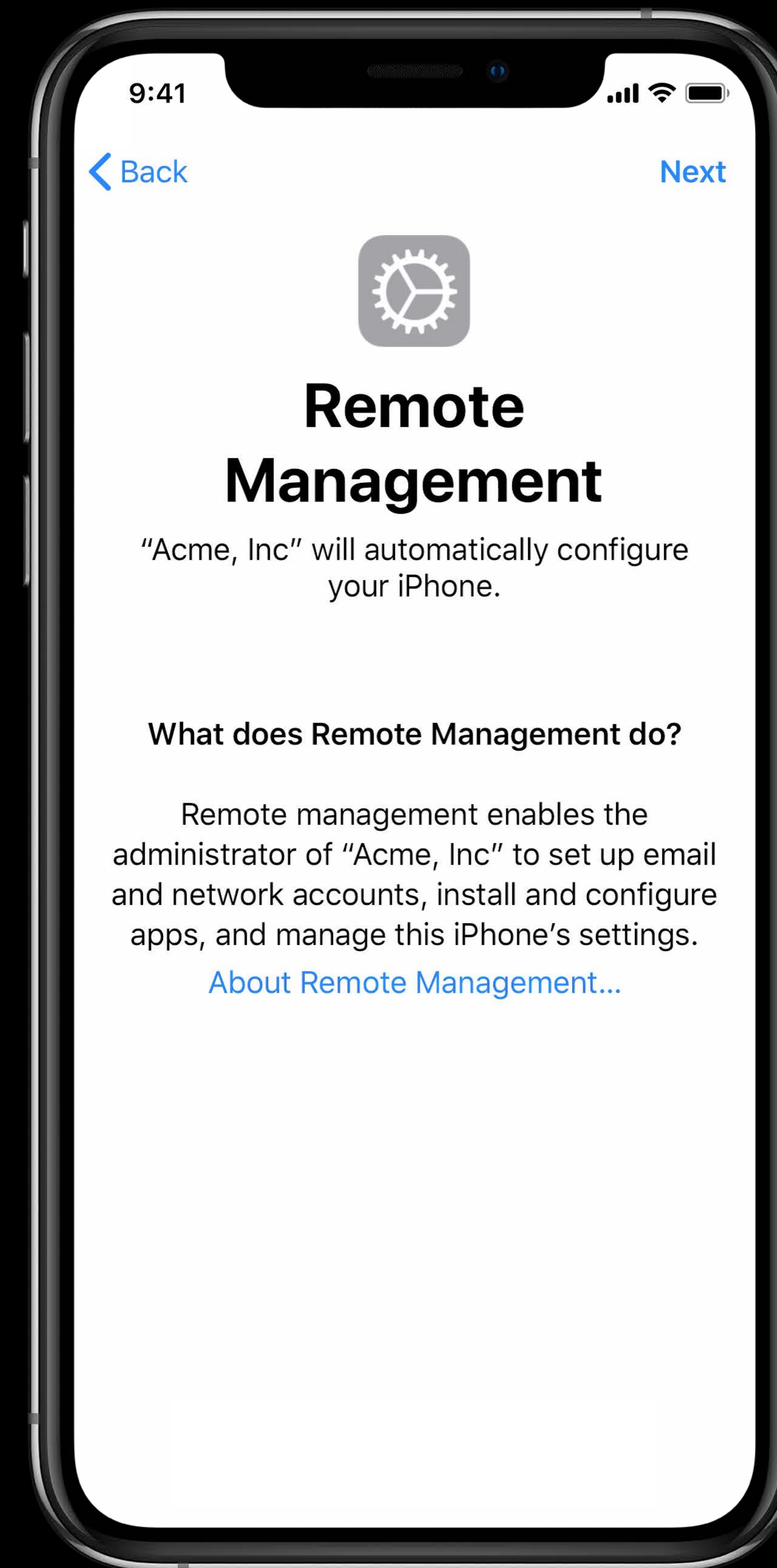
SUPERVISED



BYOD

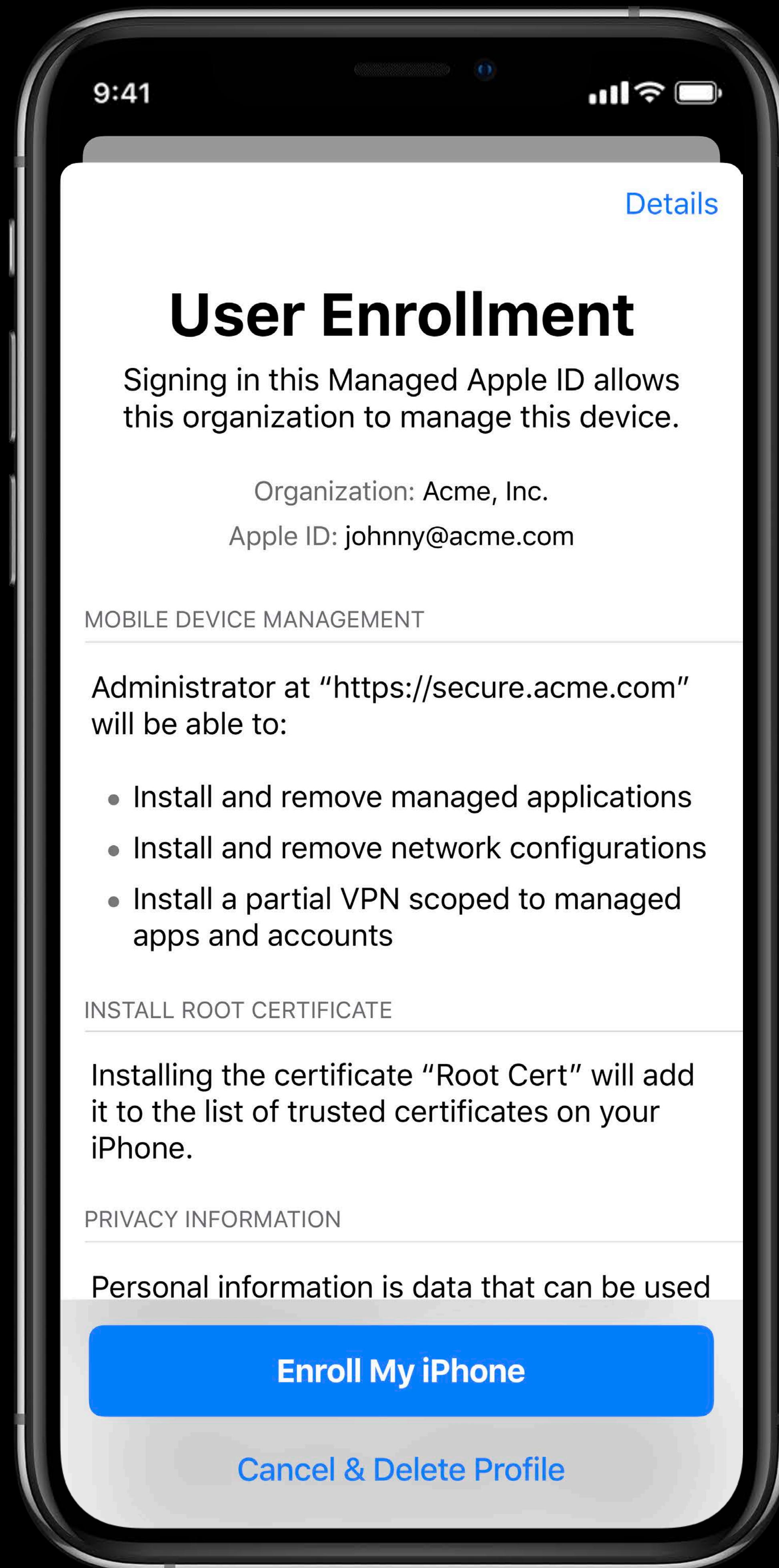


Device Enrollment

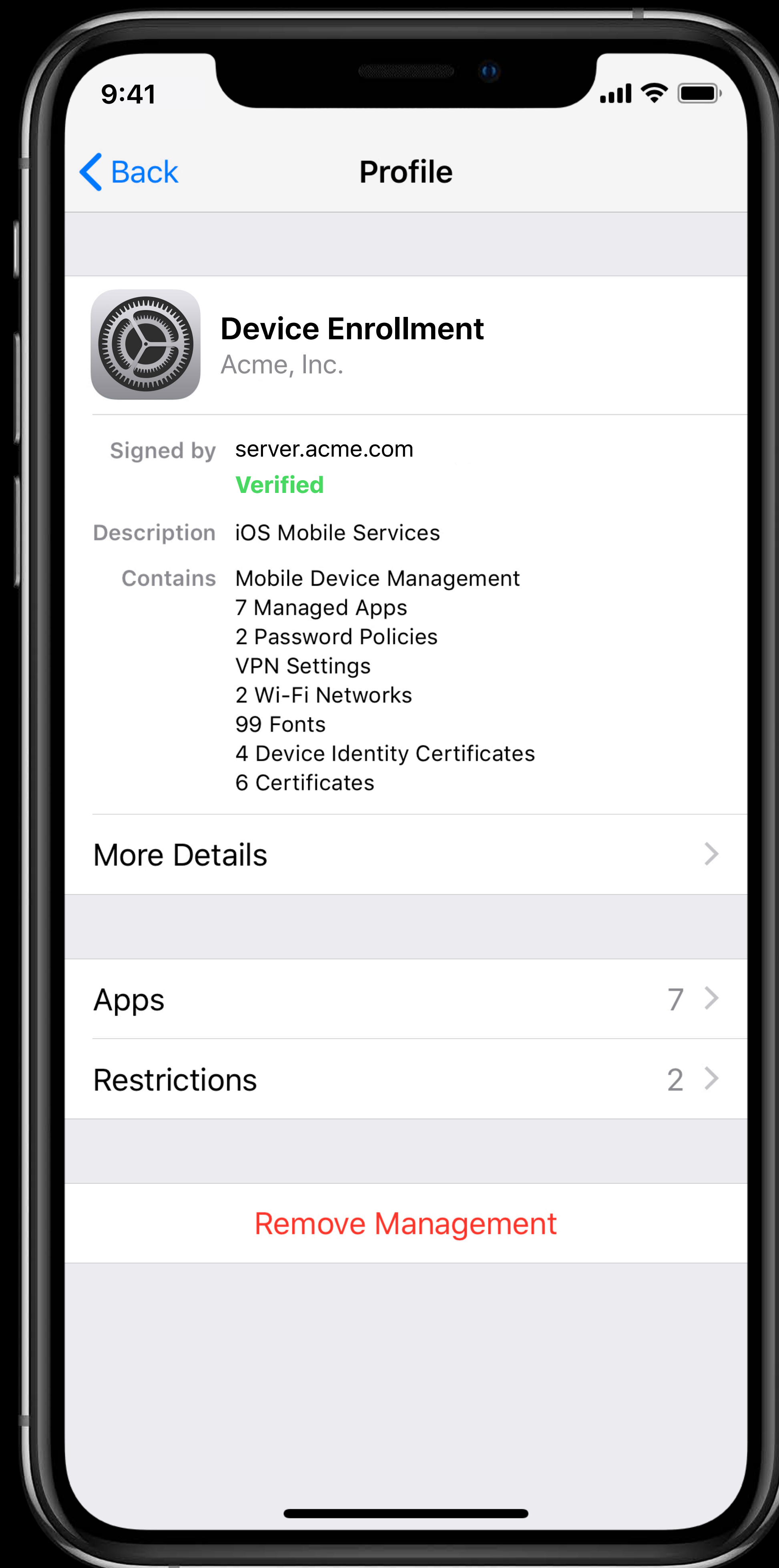


Automated
Device Enrollment

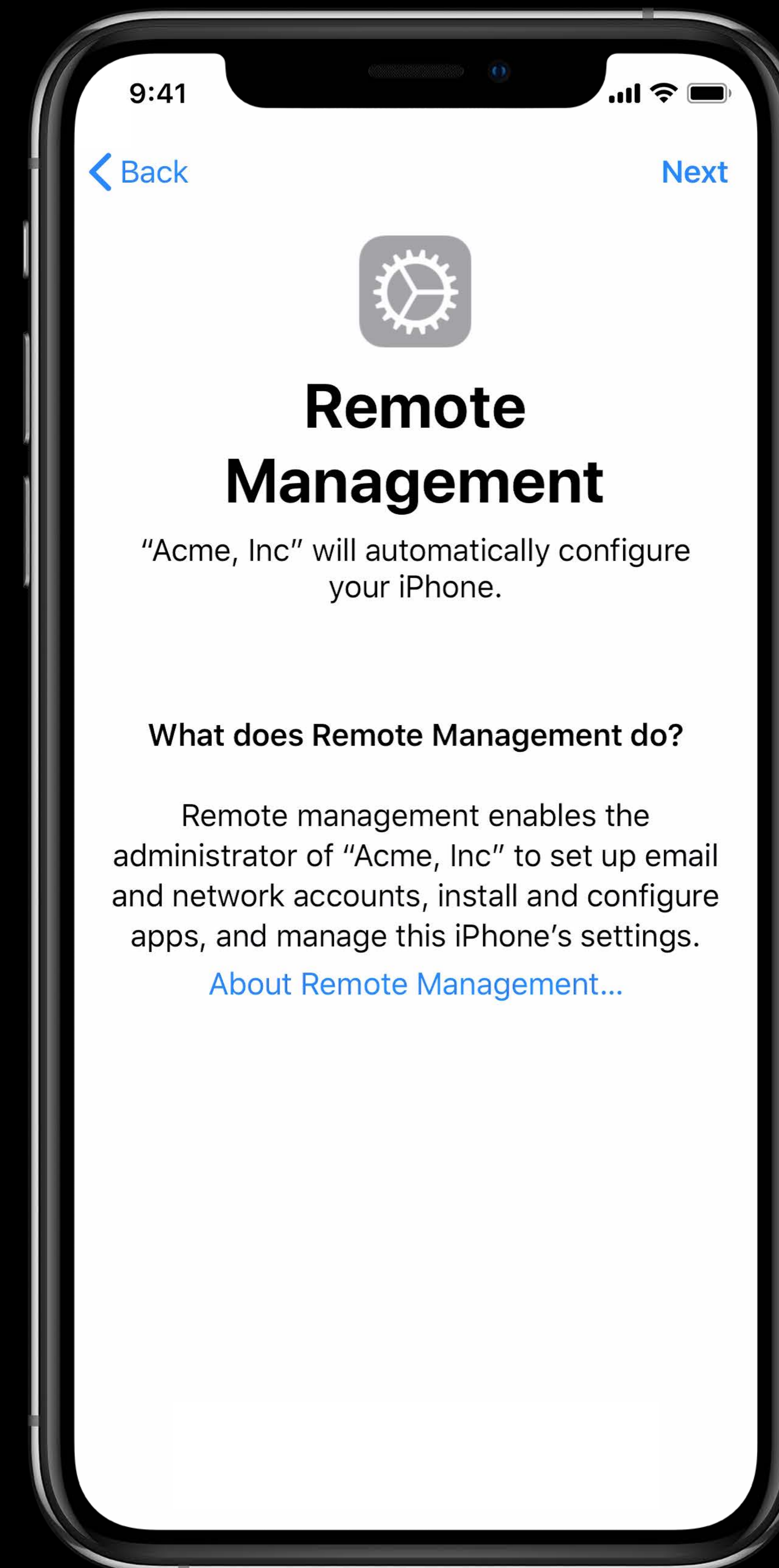
SUPERVISED



User Enrollment



Device Enrollment



Automated
Device Enrollment

SUPERVISED

User Enrollment

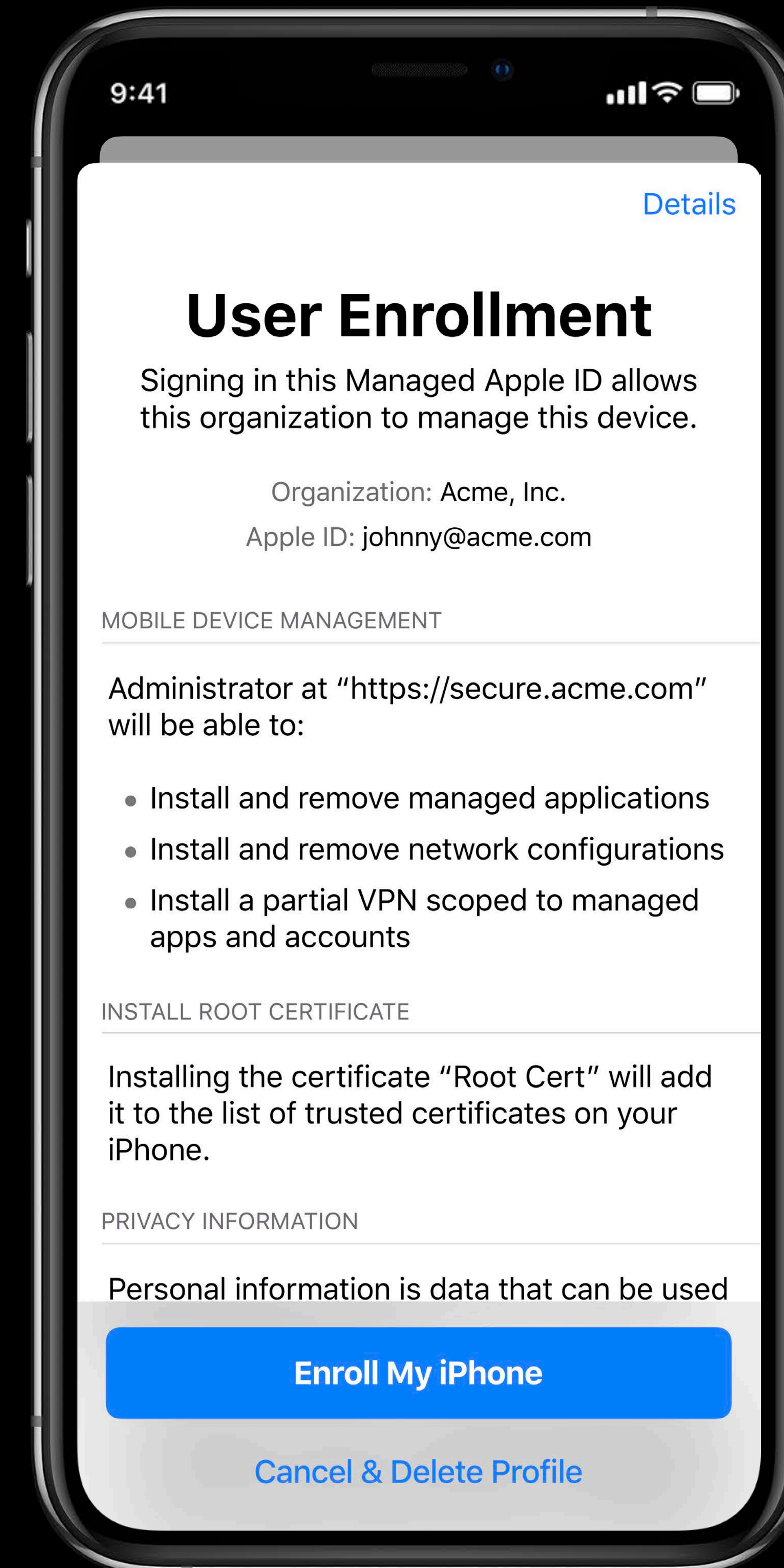
NEW

New MDM enrollment option

Better balance for BYOD

Protects privacy of personal data

Secures corporate data





Managed
Apple ID



Data
Separation



Management
Capabilities

User Enrollment and Apple IDs

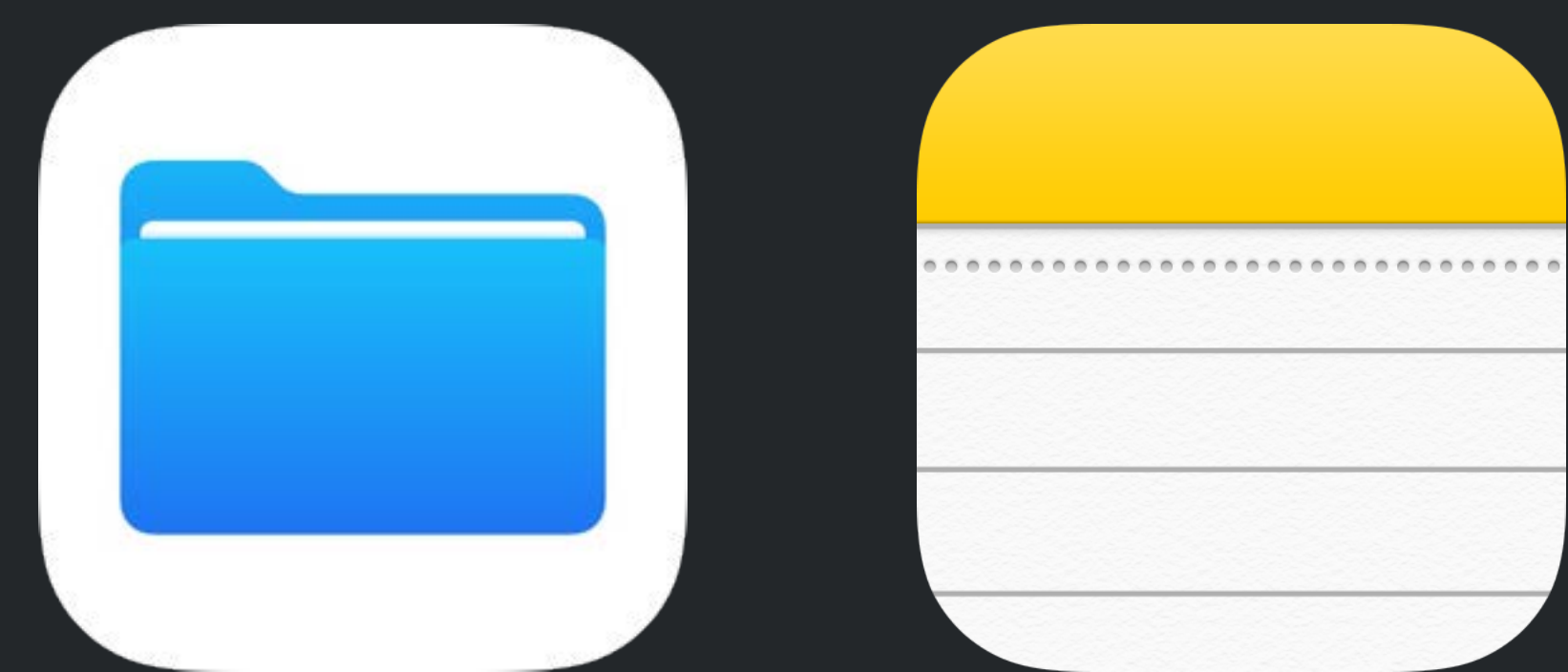
Managed Apple ID required

Apps and accounts use correct Apple ID

Unenrolling removes Managed Apple ID



Managed Apple ID



Data Separation

Personal Apple ID







Data Separation

Managed APFS volume created during user enrollment

Unenrolling destroys the volume and its cryptographic keys



How is data separated?

Managed APFS volume contains managed:

- App containers
- Notes
- iCloud Drive documents
- Keychain
- Mail attachments and full email bodies
- Calendar attachments







```
// Enrollment profile
```

```
<plist version="1.0">
```

```
<dict>
```

```
  <key>PayloadContent</key>
```

```
  <array>
```

```
    <dict>
```

```
      <key>PayloadType</key>
```

```
      <string>com.apple.mdm</string>
```

```
      <key>ManagedAppleID</key>
```

```
      <string>RickW@example.com</string>
```

```
      <key>PayloadOrganization</key>
```

```
      <string>Example, Inc.</string>
```

```
      <key>CheckInURL</key>
```

```
      <string>https://mdm.example.com:2001/checkin</string>
```

```
      <key>ServerURL</key>
```

```
      <string>https://mdm.example.com:2001/mdm</string>
```

```
      <key>CheckOutWhenRemoved</key>
```

```
      <true/>
```

```
      <key>IdentityCertificateUUID</key>
```



NEW

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```
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```

```
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```

```
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NEW

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```

```
      <key>CheckOutWhenRemoved</key>
```

```
      <true/>
```

```
      <key>IdentityCertificateUUID</key>
```



NEW

User Enrollment — Protocol

- ✘ Profile Service Profiles
- ⌚ UDID or other persistent device identifiers
 - EnrollmentID
 - EASDeviceIdentifier
- ✘ Unlock Token in TokenUpdate



User Enrollment — Commands

- ✘ EraseDevice, ActiveSync RemoteWipe
- ~ Managed results only:

```
InstalledApplicationList  
CertificateList ProfileList  
ProvisioningProfileList
```



User Enrollment — Commands

- ~ `InstallApplication`
 - App is always removed on unenroll
 - Enterprise app distribution or user-based VPP with `PurchaseMethod 1`
- ✗ Commands related to cellular



User Enrollment — Payloads

- ~ Per-app VPN
 - ✓ MailDomains, ContactsDomains, CalendarDomains
- ~ Passcode - 6 digit, non-simple
- ~ Wi-Fi - use WPAD for proxying
- ✗ Defaults, Logging not supported



User Enrollment — Restrictions

Limited set of restrictions

- ✓ Managed Open In, allowLockScreen*, forceEncryptedBackup
- ✗ Any supervised restriction
- ✗ ratings*, allowCloud*



Demo

User Enrollment

Huiyuan Ren, Device Management Engineer

User Enrollment — macOS

User Enrollment with Managed Apple ID

Managed APFS volume

Notes data separation

Management capabilities similar



It's time to evolve BYOD.

Certificate Transparency

iOS, macOS, tvOS, and watchOS

Security enhancement

Opt out sensitive certificates or domains

New payload

Multiple payloads unioned together



WPA3

iOS, macOS, and tvOS

NEW

Wi-Fi payload supports WPA3 security type

- Personal
- Enterprise



Apple Push Notification Service

Support for token-based authentication



Device Enrollment Settings

iOS, macOS, and tvOS

NEW

Now always

- Supervised
- Mandatory

✘ `allow_pairing` deprecated

✔ Use configuration profile restriction



Apple Remote Desktop

macOS

Enable and disable via MDM

Sets Remote Management to All Users

Enables options

- observe
- control
- show observe



Manage SecureTokens

macOS

NEW

Allow mobile accounts to boot FileVault system

MDM Server manages bootstrap token

Used to generate SecureToken when user signs in



Privacy Policy

macOS

NEW

Enable key loggers

Enable screen recording

Whitelist non-notarized internal apps



FileVault

macOS

NEW

Now requires user-approved MDM enrollment

✘ Can't pass username/password auth to fdesetup

Changes may break scripts or MDM agents



Activation Lock

macOS

NEW

Clear Activation Lock via MDM

Same endpoint and API as iOS

MDM server APIs available soon

Service available later this summer



Deprecations

macOS

NEW

Non-UI profile installation

Parental Controls Application Access

User-channel-only enrollments



Deprecated Unsupervised Restrictions

iOS

NEW

For transition period

- Remain in effect after upgrade
- Not honored after backup and restore

MDM servers

- ✘ Don't install on unsupervised devices
- ✘ Don't assume they will take effect



Unlock Token

iOS



NEW

Available only in first token update after enrollment

- ✓ Remember it and don't count on getting one later

Also affects Apple Configurator

- Only available before passcode is set



Balance values

- 🔗 Same tools for all
- 🔧 Balance values
- ★ Fits in and stands out

★ Fits in and stands out

Single Sign-On

Matt Chanda, Consulting Engineer

Too Many Methods, Too Many Places

OpenID Connect

2FA

Kerberos

SAML

Smart Cards

PKINIT

Cloud

OAuth

WS-Fed

Federation



Why Single Sign-On?

Suite of apps and web sites

Improved user experience

No passwords

Trust score data



What is Single Sign-On?

NEW

iOS and macOS

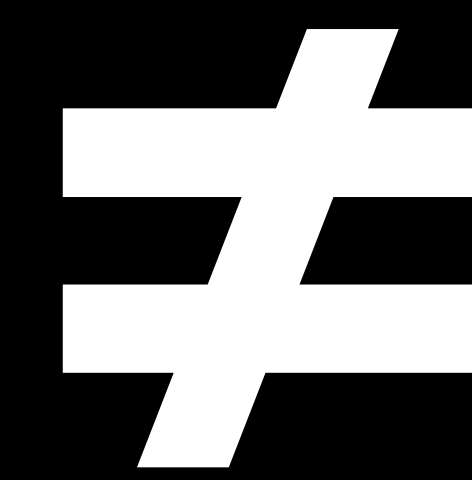
Native apps and Safari

MDM managed

UI can be native, web, or silent



Single Sign-On



 Sign In with Apple

Single Sign-On Components



Apps and Web Sites



Single Sign-On
Extension



Identity Provider

Single Sign-On Components



Apps and Web Sites



Single Sign-On
Extension



Identity Provider



Redirect



Credential



Redirect



Credential

Redirect Extensions

Modern authentication

OpenID Connect, OAuth, or SAML2

HTTP based

Federation



Safari — Redirect Extension

Safari — Redirect Extension



Safari

Safari — Redirect Extension



Safari

Request



Single Sign-On
Extension

Safari — Redirect Extension



Safari



Single Sign-On
Extension



Identity
Provider

Safari — Redirect Extension



Safari



Single Sign-On
Extension



Identity
Provider



Safari — Redirect Extension



Safari

URL Response



Single Sign-On
Extension



Identity
Provider

Safari — Redirect Extension



Safari



Single Sign-On
Extension



Identity
Provider

What Can Extensions Do?

Native screen

Multifactors

SEP generated keys

Trust score data

Federated auth

WebAuthN



Native App — Redirect

Native Apps can send operations

Better fit into the app flow

Authentication library not needed



Native — Redirect Extension

Native — Redirect Extension



Native App

Native — Redirect Extension



Native App

"Login"



Single Sign-On
Extension

Native — Redirect Extension



Native App



Single Sign-On
Extension



Identity
Provider

Native — Redirect Extension



Native App



Single Sign-On
Extension



Identity
Provider



Native — Redirect Extension



Native App



Single Sign-On
Extension



Identity
Provider

URL Response
And Tokens

Native — Redirect Extension



Native App



Single Sign-On
Extension



Identity
Provider

```
//Extensible SSO Profile
```



NEW

```
<dict>
  <key>PayloadType</key>
  <string>com.apple.extensiblesso</string>
  <key>ExtensionIdentifier</key>
  <string>com.example.sso.redirect</string>
  <key>TeamIdentifier</key>
  <string>4JMSJJRMAD</string>
  <key>Type</key>
  <string>Redirect</string>
  <key>URLs</key>
  <array>
    <string>https://auth.example.com/connect/authorize</string>
    <string>https://auth.example.com/connect/token</string>
  </array>
  <key>ExtensionData</key>
  <dict>
    <key>UserName</key>
    <string>john.appleseed@example.com</string>
```

```
//Extensible SSO Profile
```

A green circular badge with the word "NEW" in white capital letters.

```
<dict>
```

```
  <key>PayloadType</key>
```

```
  <string>com.apple.extensiblesso</string>
```

```
  <key>ExtensionIdentifier</key>
```

```
  <string>com.example.sso.redirect</string>
```

```
  <key>TeamIdentifier</key>
```

```
  <string>4JMSJJRMAD</string>
```

```
  <key>Type</key>
```

```
  <string>Redirect</string>
```

```
  <key>URLs</key>
```

```
  <array>
```

```
    <string>https://auth.example.com/connect/authorize</string>
```

```
    <string>https://auth.example.com/connect/token</string>
```

```
  </array>
```

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  <key>ExtensionData</key>
```

```
  <dict>
```

```
    <key>UserName</key>
```

```
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  <key>Type</key>
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  <array>
    <string>https://auth.example.com/connect/authorize</string>
    <string>https://auth.example.com/connect/token</string>
  </array>
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  </dict>
</dict>
</dict>
```



NEW


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  </array>
  <key>ExtensionData</key>
  <dict>
    <key>UserName</key>
    <string>john.appleseed@example.com</string>
  </dict>
</dict>
</dict>
```



NEW

```
<dict>
  <key>PayloadType</key>
  <string>com.apple.extensiblesso</string>
  <key>ExtensionIdentifier</key>
  <string>com.example.sso.redirect</string>
  <key>TeamIdentifier</key>
  <string>4JMSJJRMAD</string>
  <key>Type</key>
  <string>Redirect</string>
  <key>URLs</key>
  <array>
    <string>https://auth.example.com/connect/authorize</string>
    <string>https://auth.example.com/connect/token</string>
  </array>
  <key>ExtensionData</key>
  <dict>
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NEW



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</dict>
```

OpenIDExample | Build OpenIDExample: Succeeded | Today at 7:58 AM

OpenIDExample

- OpenIDExample (M)
 - OpenIDClient (M)
 - OpenIDExample
 - OpenIDExample.entitlements (A)
 - AppDelegate.swift
 - ViewController.swift (M)
 - Main.storyboard (M)
 - Assets.xcassets
 - LaunchScreen.storyboard
 - Info.plist
 - OpenIDExampleRedirect
 - OpenIDExamp...ect.entitlements (A)
 - Media.xcassets
 - SSOViewController.xib (M)
 - SSOViewController.swift (M)
 - Info.plist (M)
 - Products
 - Frameworks

General Signing & Capabilities Resource Tags Info Build Settings Build Phases Build Rules

PROJECT: OpenIDExample

TARGETS: OpenIDExample, OIDCAuth, OpenIDExampleRe...

Capabilities: All, Debug, Release

Signing

Associated Domains

Domains: authsrv:auth.example.com

Identity and Type

Name: OpenIDExample

Location: Absolute

Full Path: /Volumes/MacintoshHD2/Developer/WWDC2019/OpenIDExample/OpenIDExample.xcodeproj

Project Document

Project Format: Xcode 9.3-compatible

Organization: Apple

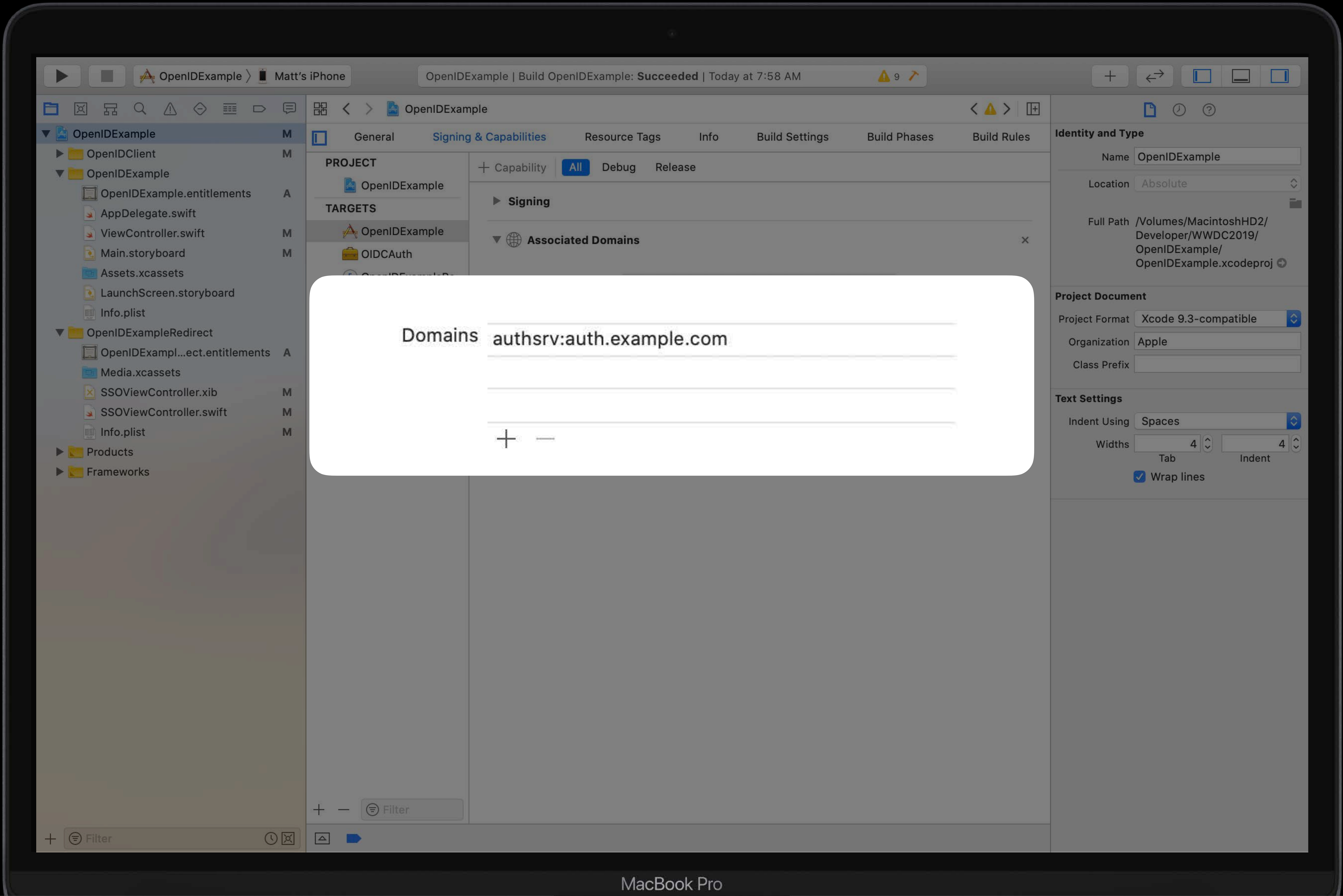
Class Prefix:

Text Settings

Indent Using: Spaces

Widths: Tab: 4, Indent: 4

Wrap lines:



Domains

MacBook Pro

Security and Privacy

Associated domains

Requires Site Association File on Server

- auth.example.com/.well-known/apple-app-site-association

```
{
  "authsrv": {
    "apps": [ "4JMSJJRMAD.com.example.sso" ]
  }
}
```

Security and Privacy

NEW

Use managed associated domains on macOS

```
<key>ApplicationIdentifier</key>
<string>4JMSJJRMAD.com.example.sso</string>
<key>AssociatedDomains</key>
<array>
  <string>authserv:auth.example.com</string>
</array>
```

Security and Privacy

NEW

Use managed ApplicationAttributes on iOS

```
<key>AssociatedDomains</key>
<array>
  <string>authserv:auth.example.com</string>
</array>
```

OpenIDExample | Build OpenIDExample: Succeeded | Today at 7:58 AM

OpenIDExample > OpenIDExample > OpenIDExample.entitlements > No Selection

Key	Type	Value
▼ Entitlements File		
com.apple.developer.associated-domains.mdm-managed	Boolean	YES
▼ Associated Domains		
App Sandbox	Boolean	YES

Identity and Type

Name: OpenIDExample.entitlements
Type: Default - Entitlements Plist
Location: Relative to Group
Full Path: /Volumes/MacintoshHD2/Developer/WWDC2019/OpenIDExample/OpenIDExample/OpenIDExample.entitlements

On Demand Resource Tags

Add to a target to enable tagging

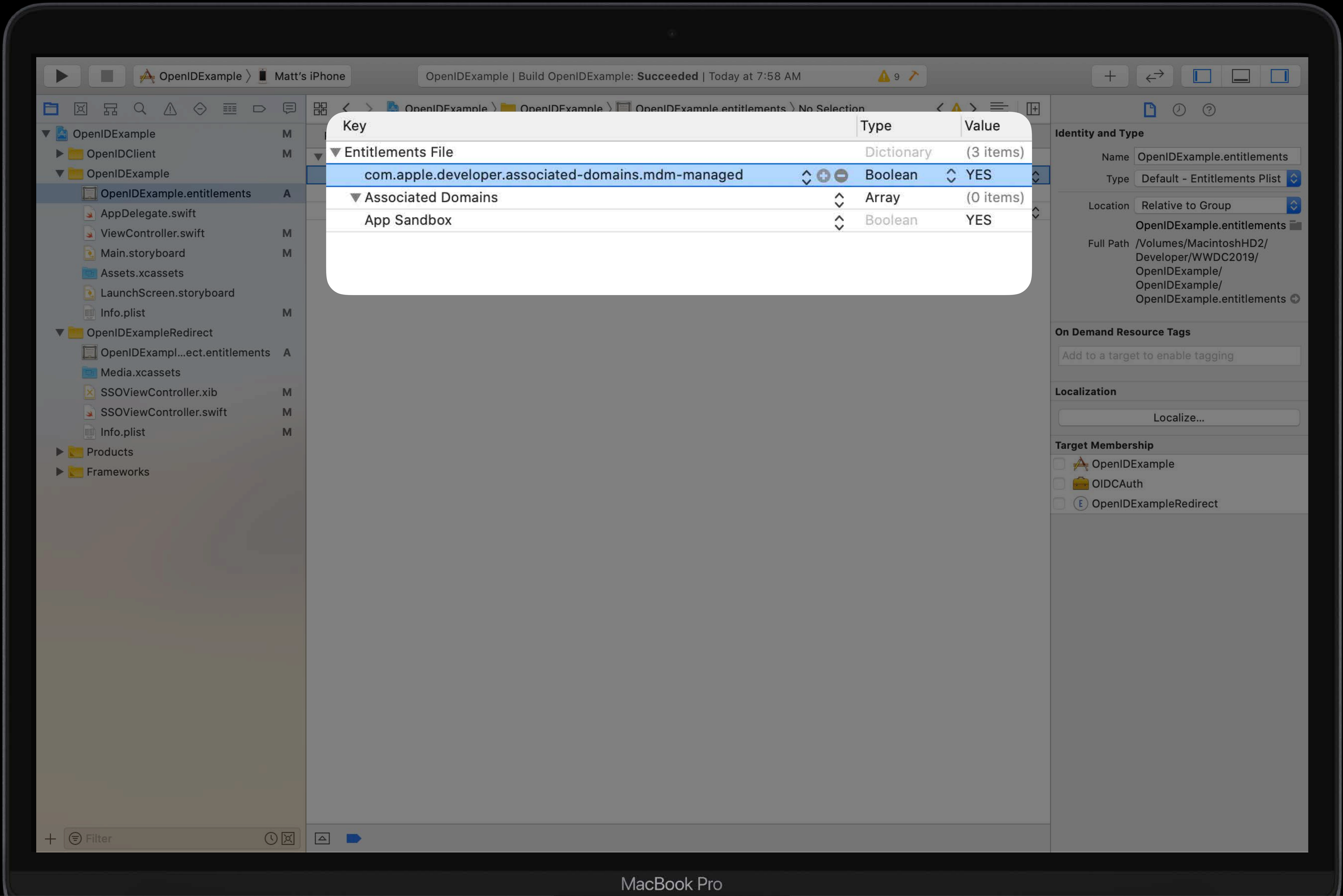
Localization

Localize...

Target Membership

- OpenIDExample
- OIDCAuth
- OpenIDExampleRedirect

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Key	Type	Value
▼ Entitlements File	Dictionary	(3 items)
com.apple.developer.associated-domains.mdm-managed	Boolean	YES
▼ Associated Domains	Array	(0 items)
App Sandbox	Boolean	YES

Identity and Type

Name: OpenIDExample.entitlements
Type: Default - Entitlements Plist
Location: Relative to Group
OpenIDExample.entitlements
Full Path: /Volumes/MacintoshHD2/Developer/WWDC2019/OpenIDExample/OpenIDExample/OpenIDExample.entitlements

On Demand Resource Tags

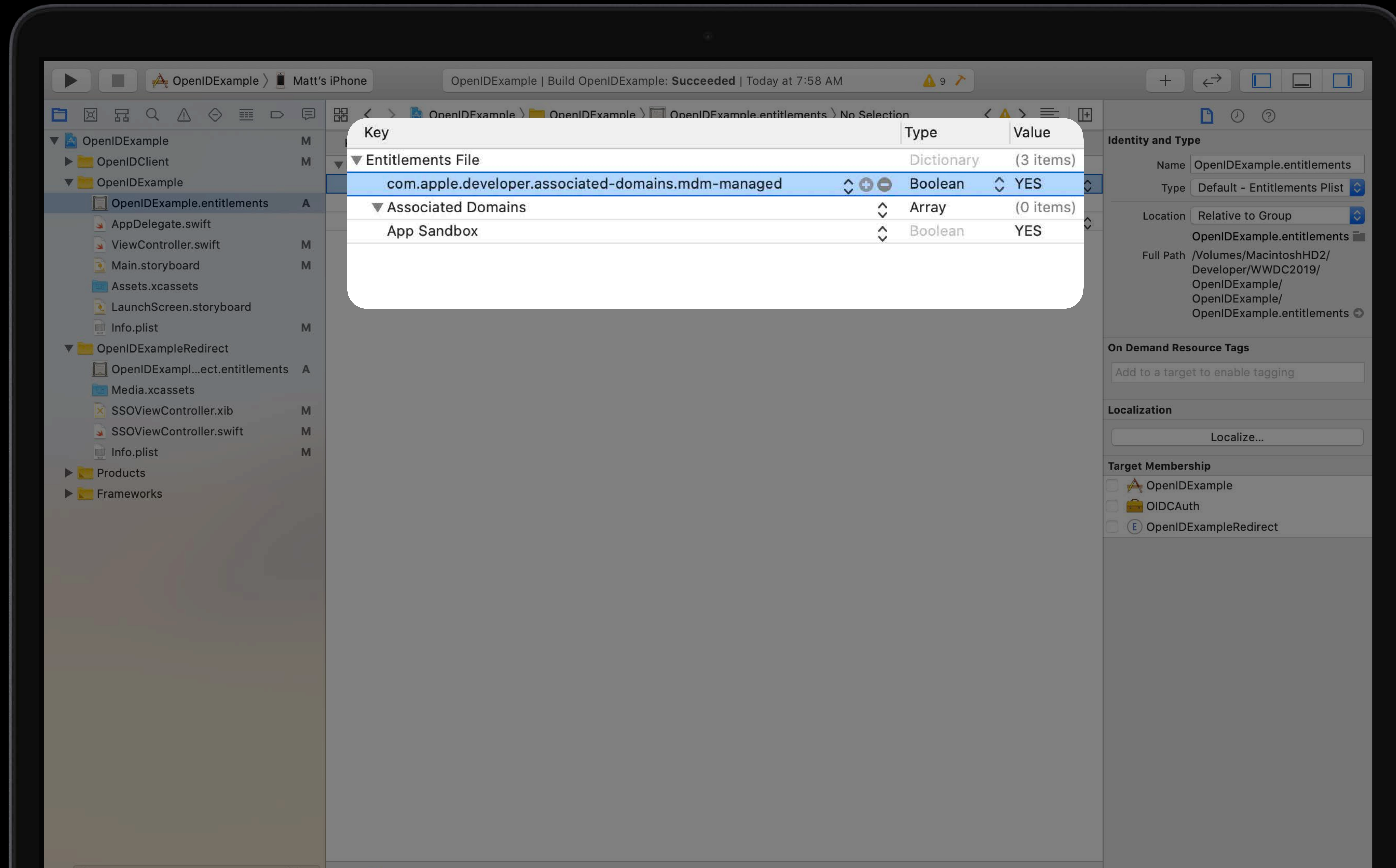
Add to a target to enable tagging

Localization

Localize...

Target Membership

- OpenIDExample
- OIDCAuth
- OpenIDExampleRedirect





Redirect



Credential



Redirect



Credential

Credential Extensions

Challenge/response authentication

Kerberos

Custom challenges



Credential Extensions

HTTP challenge

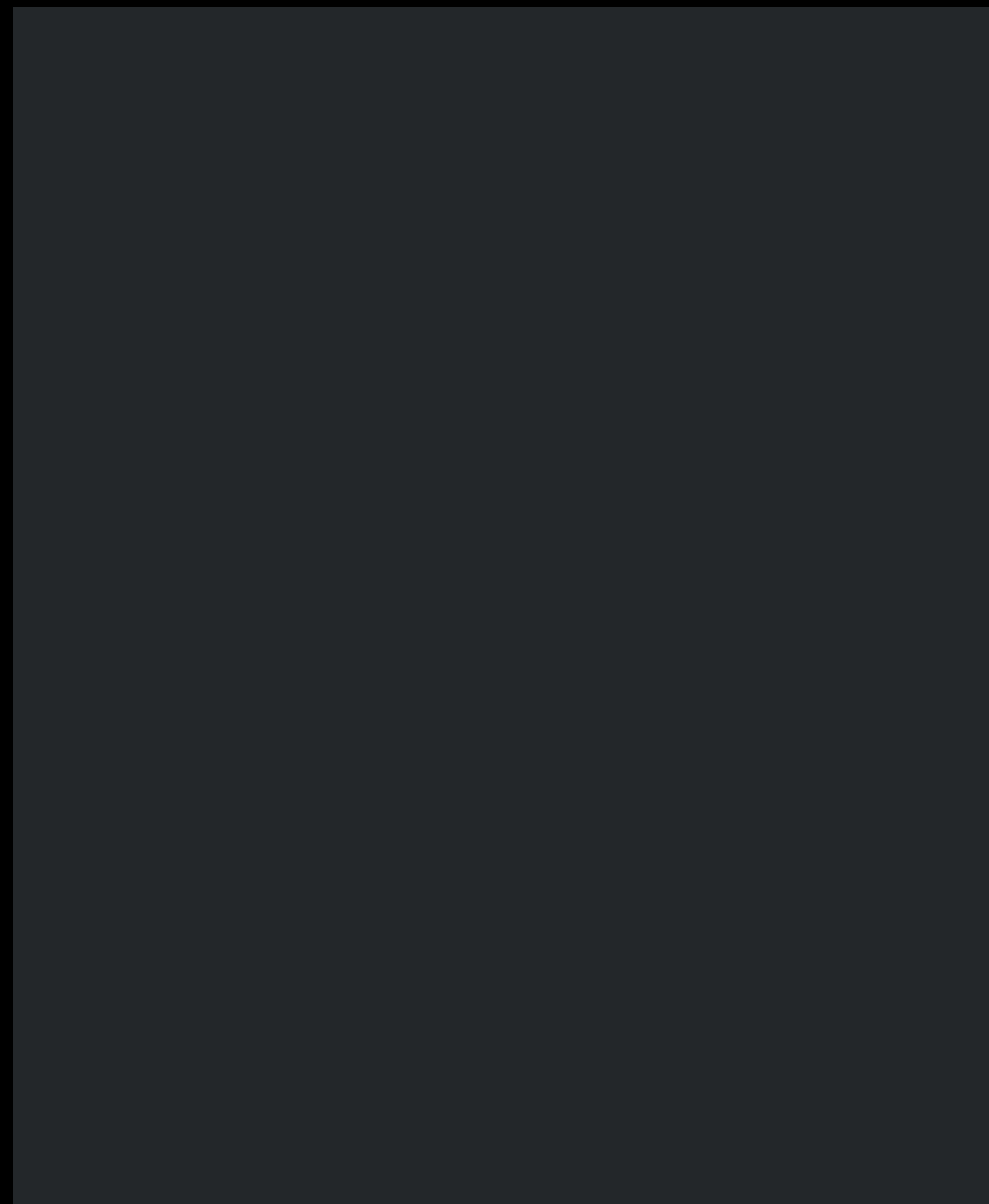
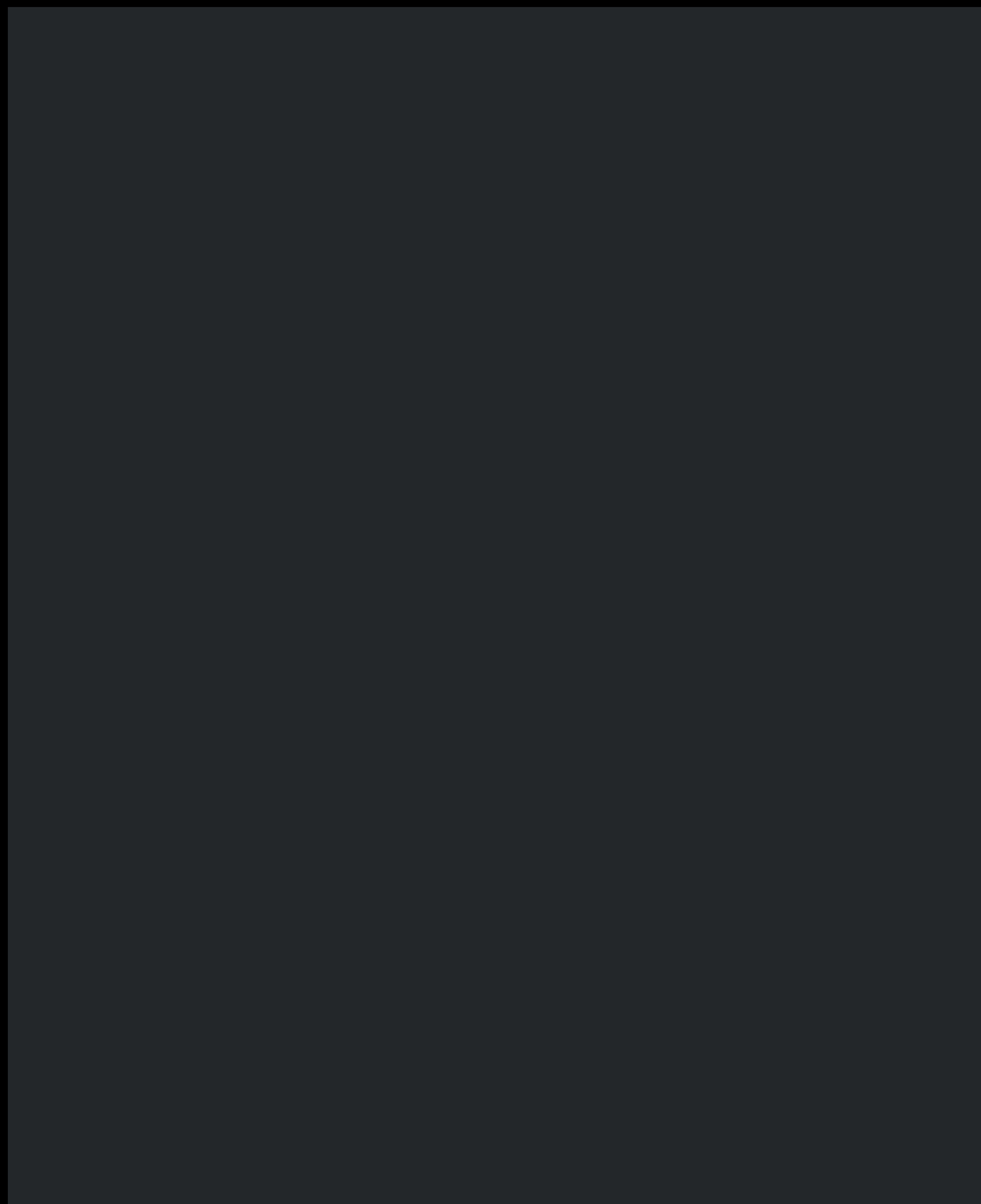
Hosts or host suffixes

Operations are supported

No associated domains



Any App — Credential Extension

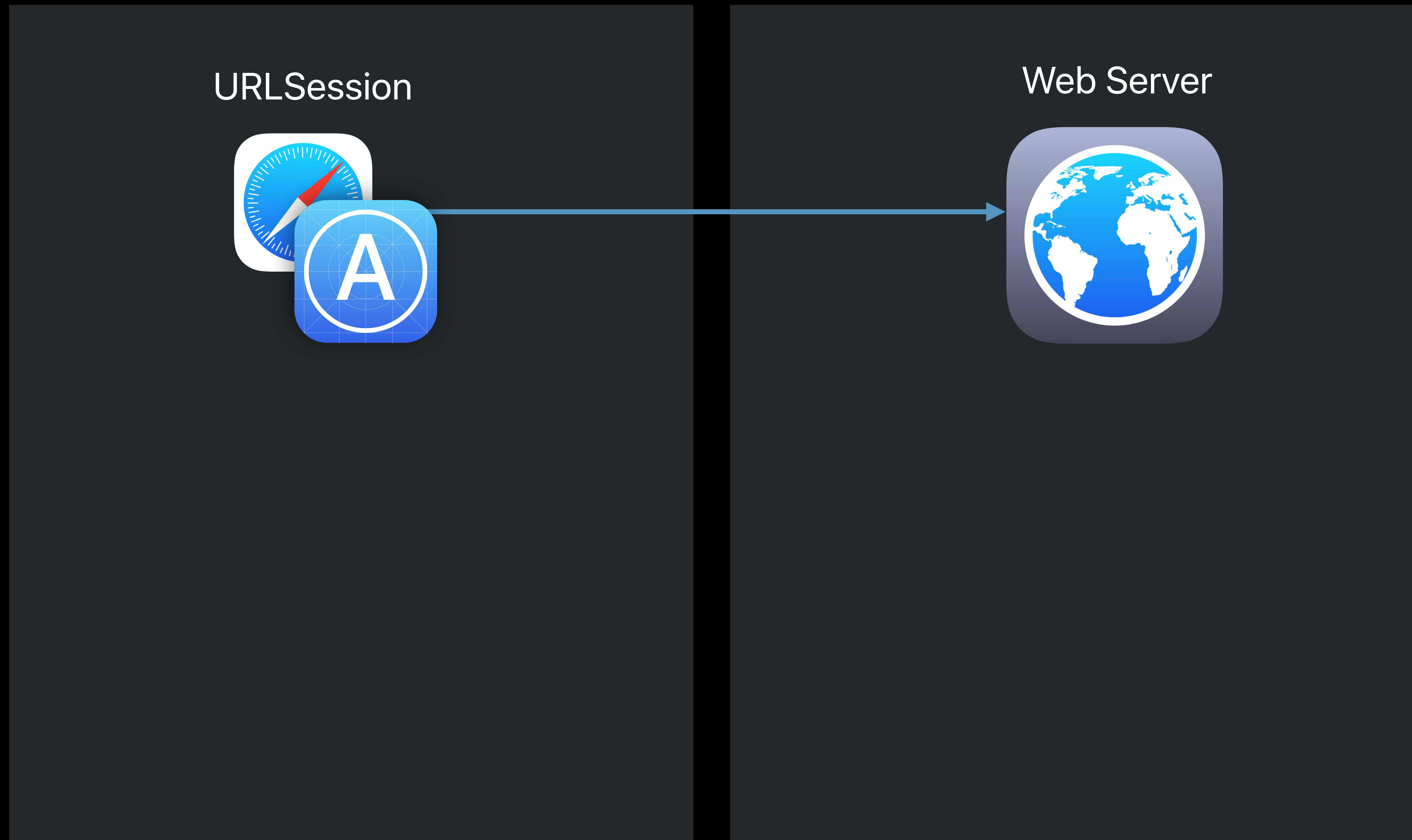


Any App — Credential Extension

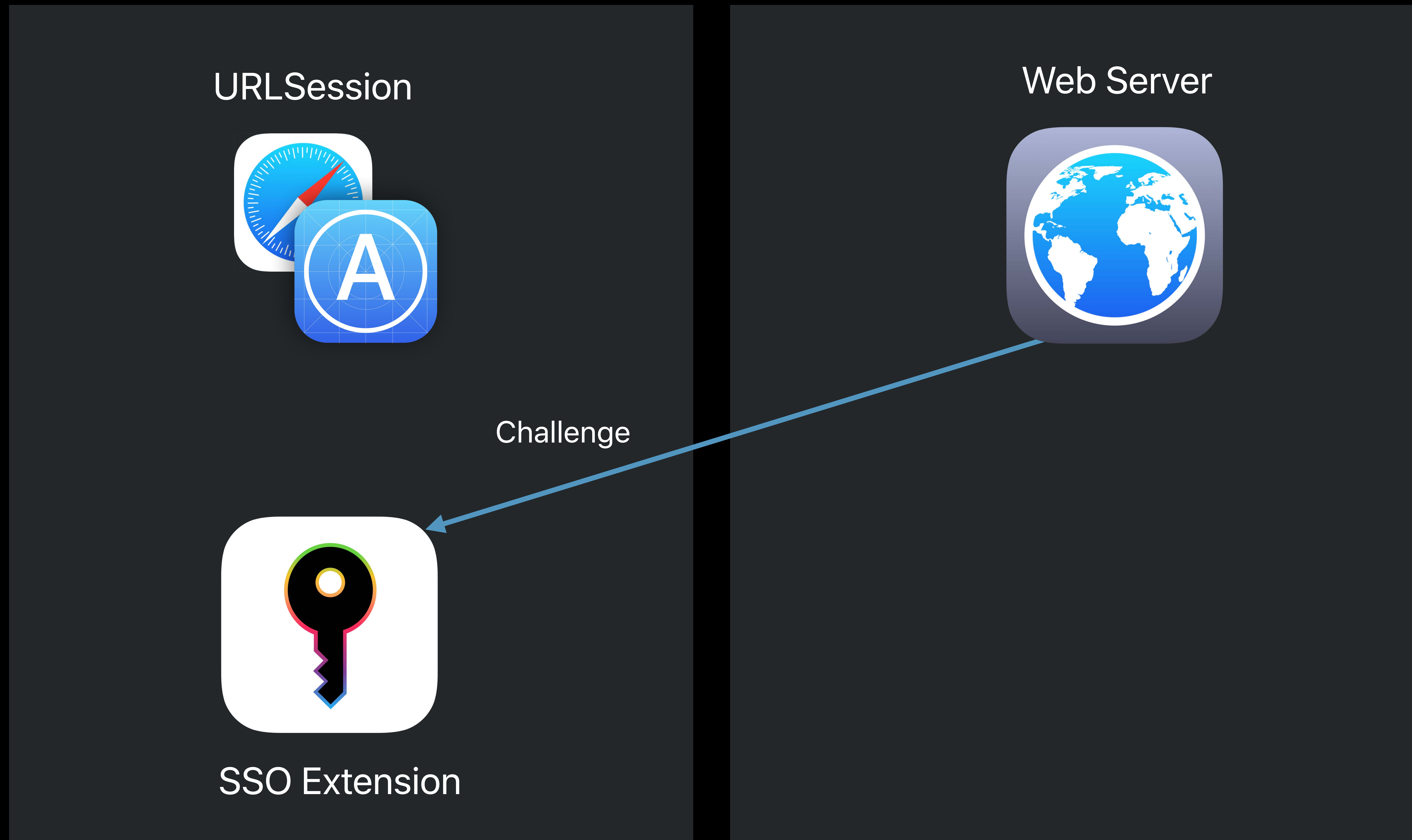
NSURLSession



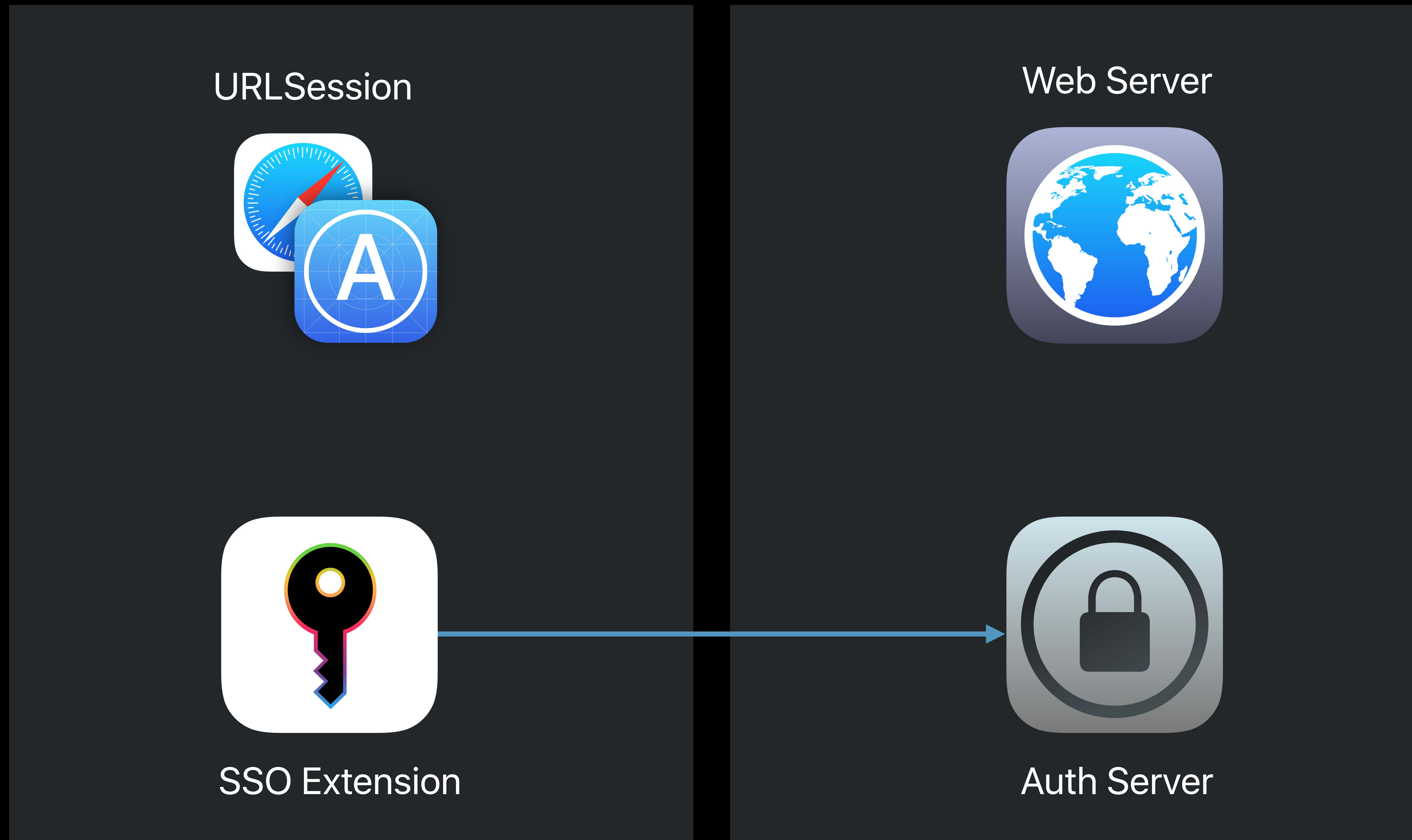
Any App — Credential Extension



Any App — Credential Extension



Any App — Credential Extension



Any App — Credential Extension

URLSession



SSO Extension

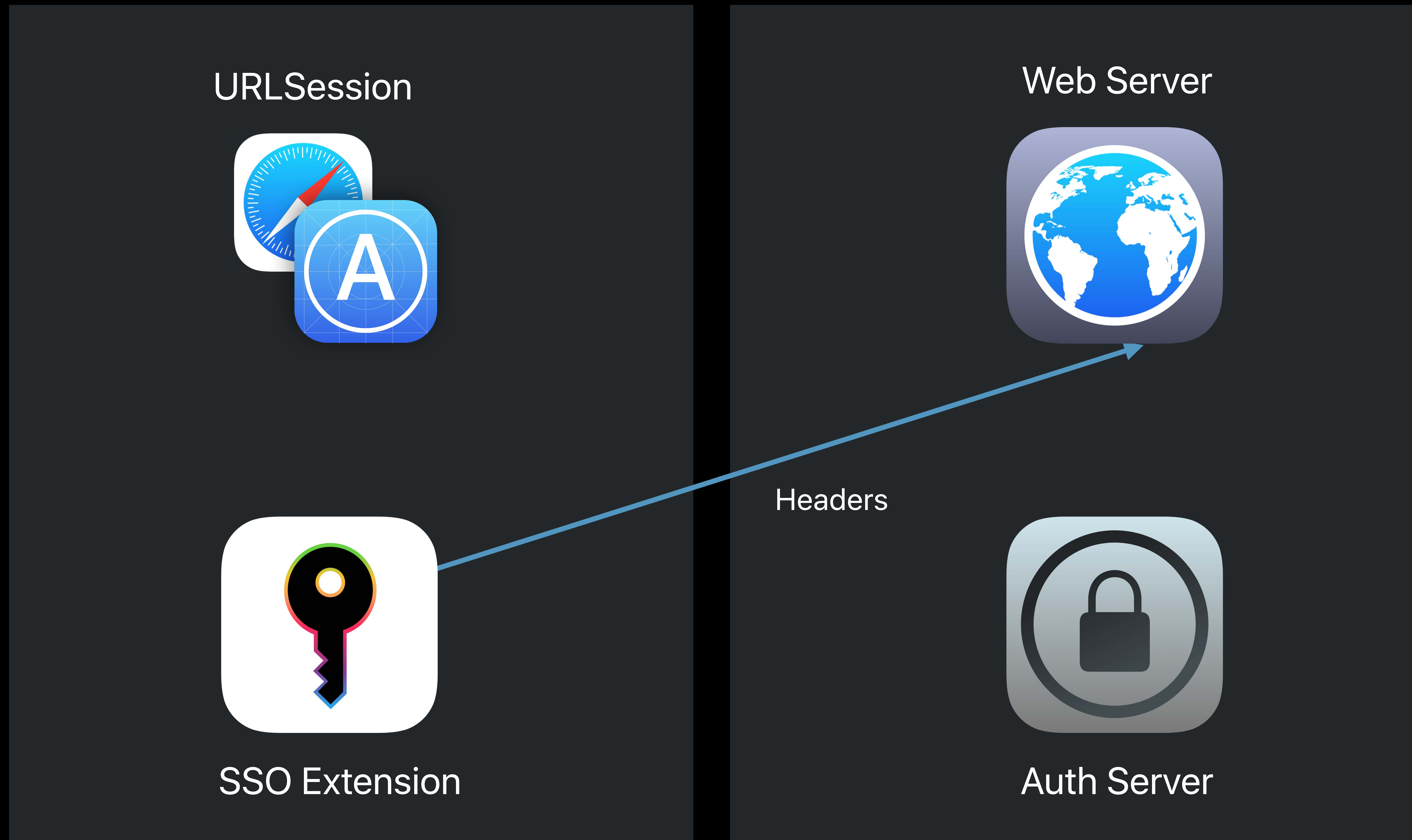
Web Server



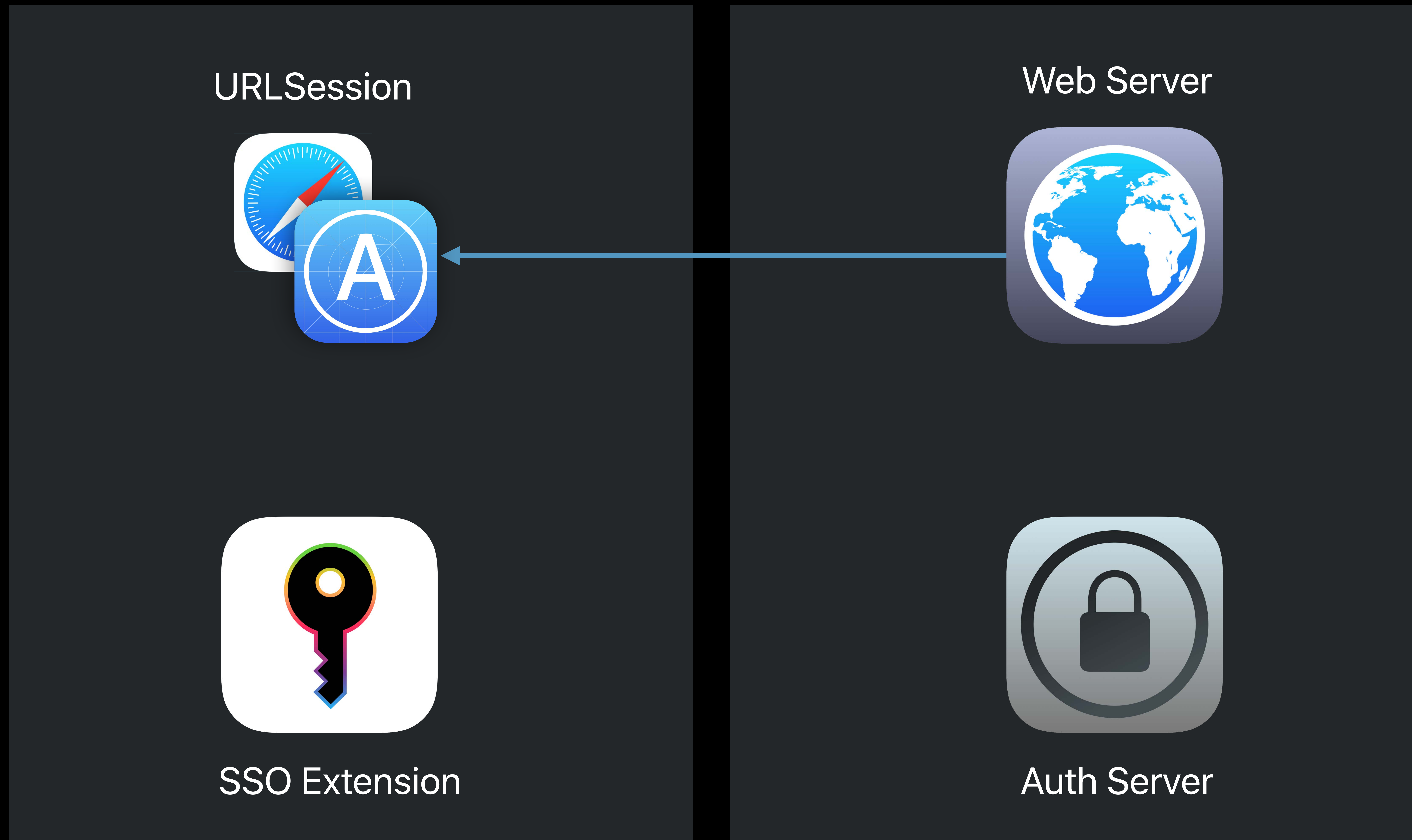
Auth Server



Any App — Credential Extension



Any App — Credential Extension



Demo

Credential mode extension

Rick Lemmon, Services Consulting Engineer

Kerberos Extension

NEW

Included with macOS Catalina and iOS 13

Provides Active Directory password management and local password sync

Smart card and certificate-based authentication support





Redirect



Credential



Redirect



Credential

Single Sign-On

Summary

Enables Single Sign-On for apps and web sites

macOS and iOS

Two types available

Let's see what you do with them!

Watch Single Sign-On video for more details



Associated Domains

Can manage via MDM

Not just for Single Sign-On!

Other service types supported



Associated Domains

Can manage via MDM

Not just for Single Sign-On!

Other service types supported



Federated Authentication

Supports Microsoft Azure Active Directory

Managed Apple ID coming to ABM

User Enrollment requires Managed Apple ID



Enrollment Customization

NEW

Provide custom web UI for enrollment

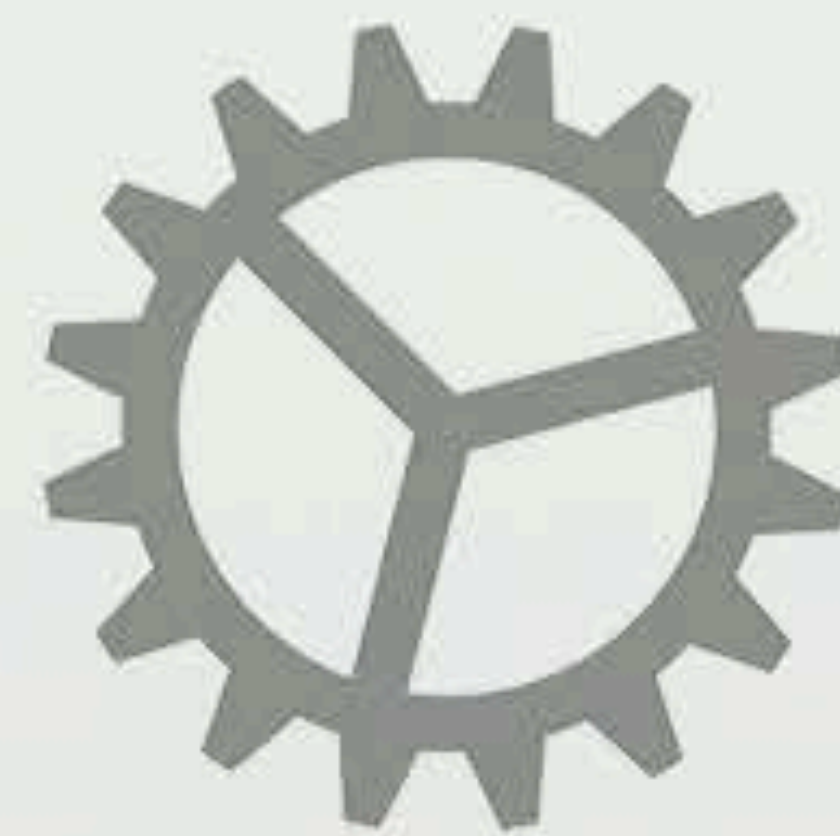
Use for

- Authentication
- Branding
- Consent text
- Privacy policy



Remote Management

Remote management enables the administrator of "Acme, Inc" to set up email and network accounts, install and configure apps, and manage this computer's settings.



"Acme, Inc" can automatically configure your computer.

[Learn more about remote management](#)



Back



Continue

9:41

[Back](#)

[Next](#)



Remote Management

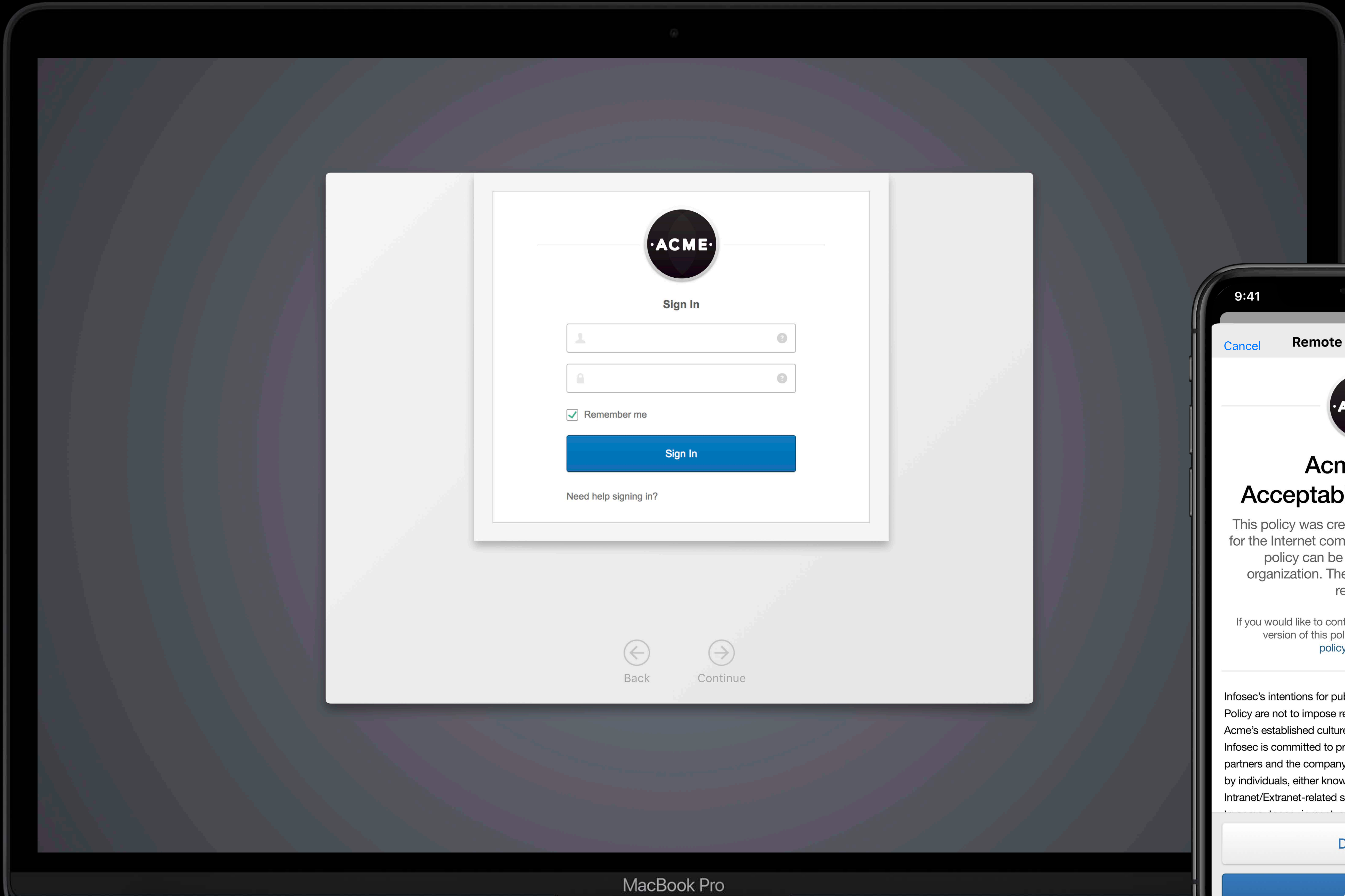
"Acme, Inc" will automatically configure your iPhone.

What does Remote Management do?

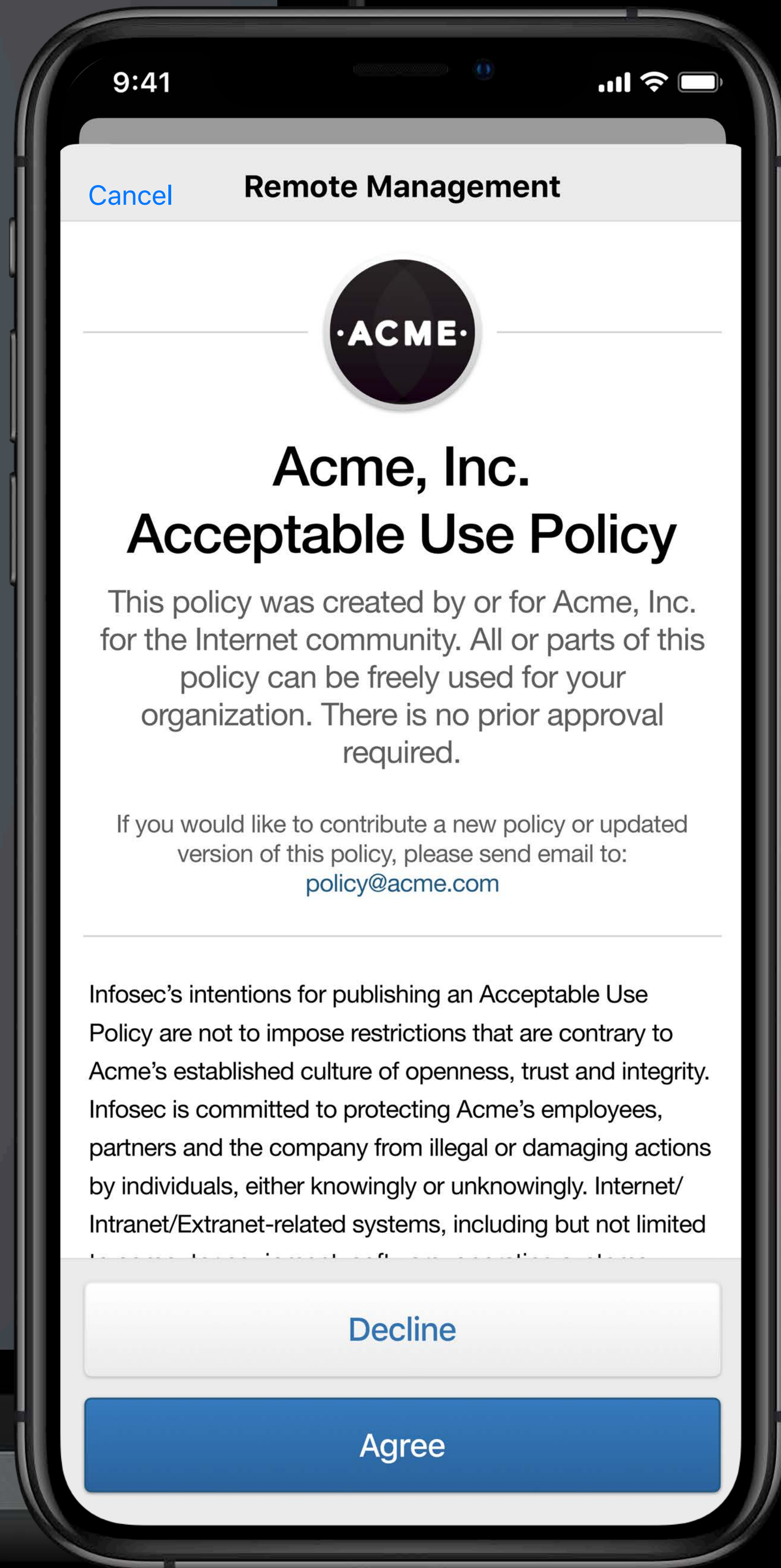
Remote management enables the administrator of "Acme, Inc" to set up email and network accounts, install and configure apps, and manage this iPhone's settings.

[About Remote Management...](#)

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9:41

Cancel Remote Management



Acme, Inc. Acceptable Use Policy

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Decline

Agree

Content Caching

NEW

Configure for best effort vs infrastructure

Tell devices to prefer specific content caches



Setup Assistant iOS

NEW

Skip Dark Mode pane in Setup Assistant

Skip Welcome pane in Setup Assistant



Setup Assistant macOS

NEW

Skip Screen Time pane after enrollment

Skip Screen Time or Touch ID pane in Setup
Assistant payload



Exchange ActiveSync iOS

NEW

Enable Mail, Calendar, Contacts, and Reminders individually for managed accounts



Supervised-Only Restrictions

iOS

NEW

Allow Hotspot Modification

Allow Find My Devices

Allow Find My Friends

Allow QuickPath keyboard

Allow Wi-Fi modification



Supervised-Only Restriction tvOS

NEW

Have Apple TV always ready to AirPlay

Allow Device Sleep



TargetDeviceType

iOS, macOS, tvOS, and watchOS

Avoids iOS destination prompt

Target type must match device type





Documentation

Documentation

Import new keys and values from code

Format matches developer documentation

Highlight changes in OS releases



Demo

Device Management Documentation

Graham McLuhan, Device Management Engineer

Web Service

Device Management

Remotely manage devices within your organization.

On This Page

[Overview](#)

[Topics](#)

Overview

Apple devices can be securely and remotely configured after they're enrolled in mobile device management (MDM). Users can enroll their own devices, and organization-owned devices can be enrolled using Apple School Manager or Apple Business Manager. With MDM, you can update software and device settings, monitor compliance with organizational policies, remotely erase or lock devices, and install apps and books developed in-house or purchased through Apple School Manager or Apple Business Manager.

Topics

Configuration Profiles [Using Configuration Profiles](#)

Create and deploy configuration profiles to users within your organization.

Summary

Support Single Sign-On and Data Separation

Enable enrollment customization

Support new payloads and restrictions

Don't rely on UserAgent

Handle newly supervised-only restrictions

More Information

developer.apple.com/wwdc19/303

Device Management Lab

Friday, 1:00

What's New in Universal Links

WWDC 2019

Introducing Desktop-Class Browsing on iPad

WWDC 2019

 WWDC19