



**macOS**

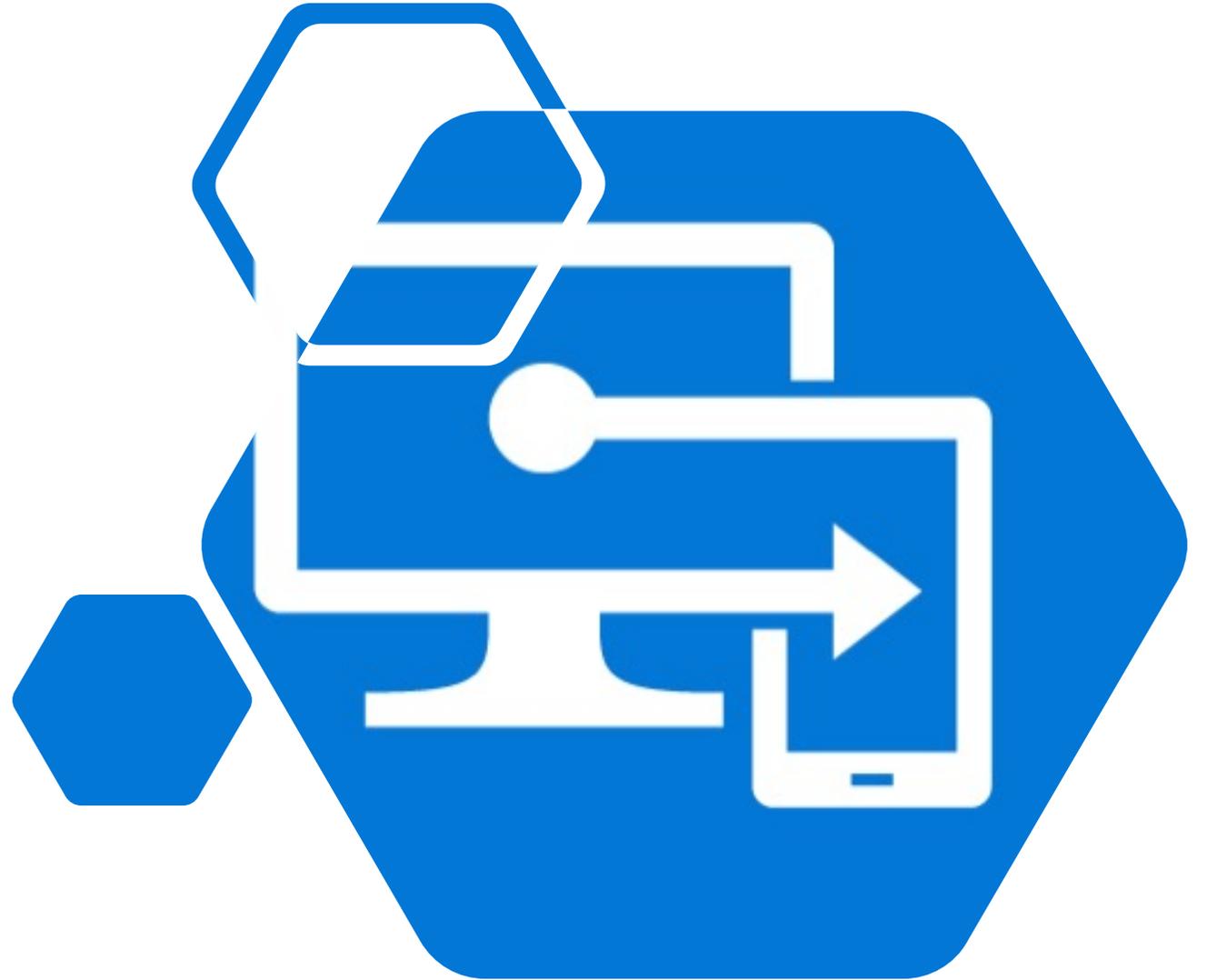
Mac Sys Admin 2021

# Managing macOS with Intune

**Neil Johnson and Marc Nahum**

# Agenda

- Enrolment
- Applications
- Configuration
- Scripting
- Roadmap



# Enrolment and Compliance

# Intune Enrolment 101 | User Driven

- Requires macOS 10.14\*
  - Same as Office 2019 for Mac
- Driven by Intune Company Portal
  - [aka.ms/enrollmymac](https://aka.ms/enrollmymac)
- User must be local admin to install and enrol
- Company Portal now Universal



\*Once macOS 12 is GA Intune minimum supported macOS version will change to 10.15 from 10.13

# Intune Enrolment 101 | ADE

- Apple Automated Device Enrolment Program
  - Company Portal required if Conditional Access is in use
    - Can be deployed via script agent
    - User must sign-in to create workplace join record
  - Supports modern authentication against Azure Active Directory
- Limits
  - 2,000 ADE tokens per Intune tenant
  - 1,000 ADE profiles per token
  - 200,000 devices per token
  - Approx. 3,000 devices sync'd per minute

## Management Settings [Edit](#)

### User Affinity & Authentication Method

User affinity	Yes
Authentication Method	Setup Assistant with modern authentication
Management Options	
Locked enrollment	Yes

## Setup Assistant [Edit](#)

Department	Numberwang IT
Department Phone	1234567
Setup Assistant Screens	
Location Services	Hide
Restore	Hide
Apple ID	Show
Terms and conditions	Hide
Touch ID	Hide
Apple Pay	Hide
Siri	Hide
Diagnostics Data	Hide
FileVault	Hide
iCloud Diagnostics	Hide
iCloud Storage	Hide
Display Tone	Hide
Appearance	Hide
Registration	Hide
Screen Time	Hide
Privacy	Hide
Accessibility	Hide

# Intune Compliance

- Device Health
  - Require System Integrity Protection
- Device Properties
  - Min OS and build version
- System Security Settings
  - Password policy
  - Encryption
- Device Security
  - Firewall
- Gatekeeper
  - Allow apps downloaded from these locations



# Compliance with MDE

/\* In Private Preview \*/



Microsoft Endpoint Manager admin center

Home > Compliance policies >

## Mac compliance policy

macOS

Basics Compliance settings Actions for noncompliance Assignments Review + create

Device Health

Device Properties

Microsoft Defender for Endpoint

Microsoft Defender for Endpoint rules

Require the device to be at or under the machine risk score: ①

System Security

Not configured

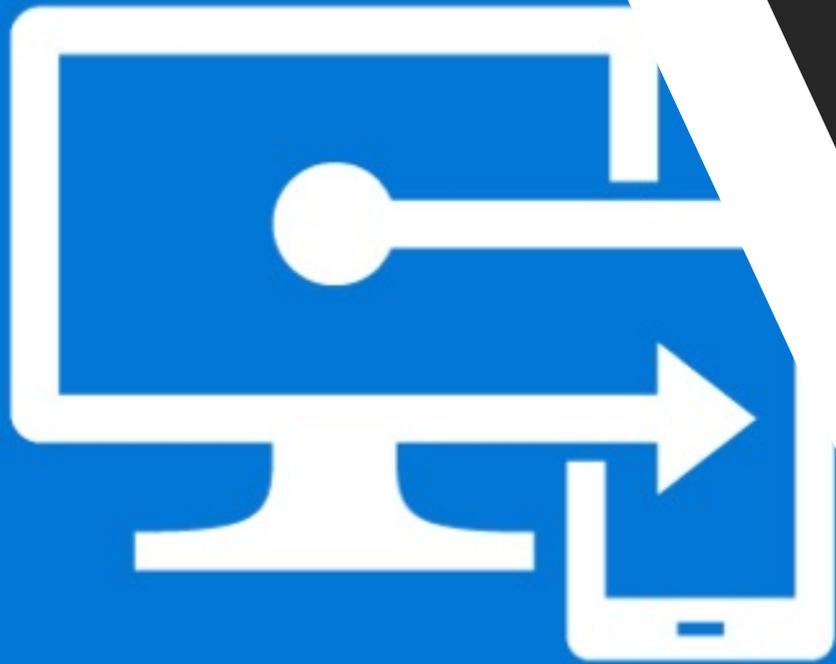
Not configured

Clear

Low

Medium

High



# DEMO

Compliance with Defender for Endpoint



## Select Your Country or Region

- United Kingdom
- Afghanistan
- Åland Islands
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antarctica
- Antigua & Barbuda

Back

Continue

Press the Escape key to hear how to set up your Mac with VoiceOver.

Triple-click Touch ID to view accessibility options.

Applications

# Application Deployment

- Apple VPP
- Intune Microsoft CDN
- Intune LoB
- Intune Script Agent

# Application Configuration

- Preference File (plist)
  - Intune native
  - Mobileconfig file (custom profile)
- Script
  - Write json or plist in specific location

com.microsoft.Outlook

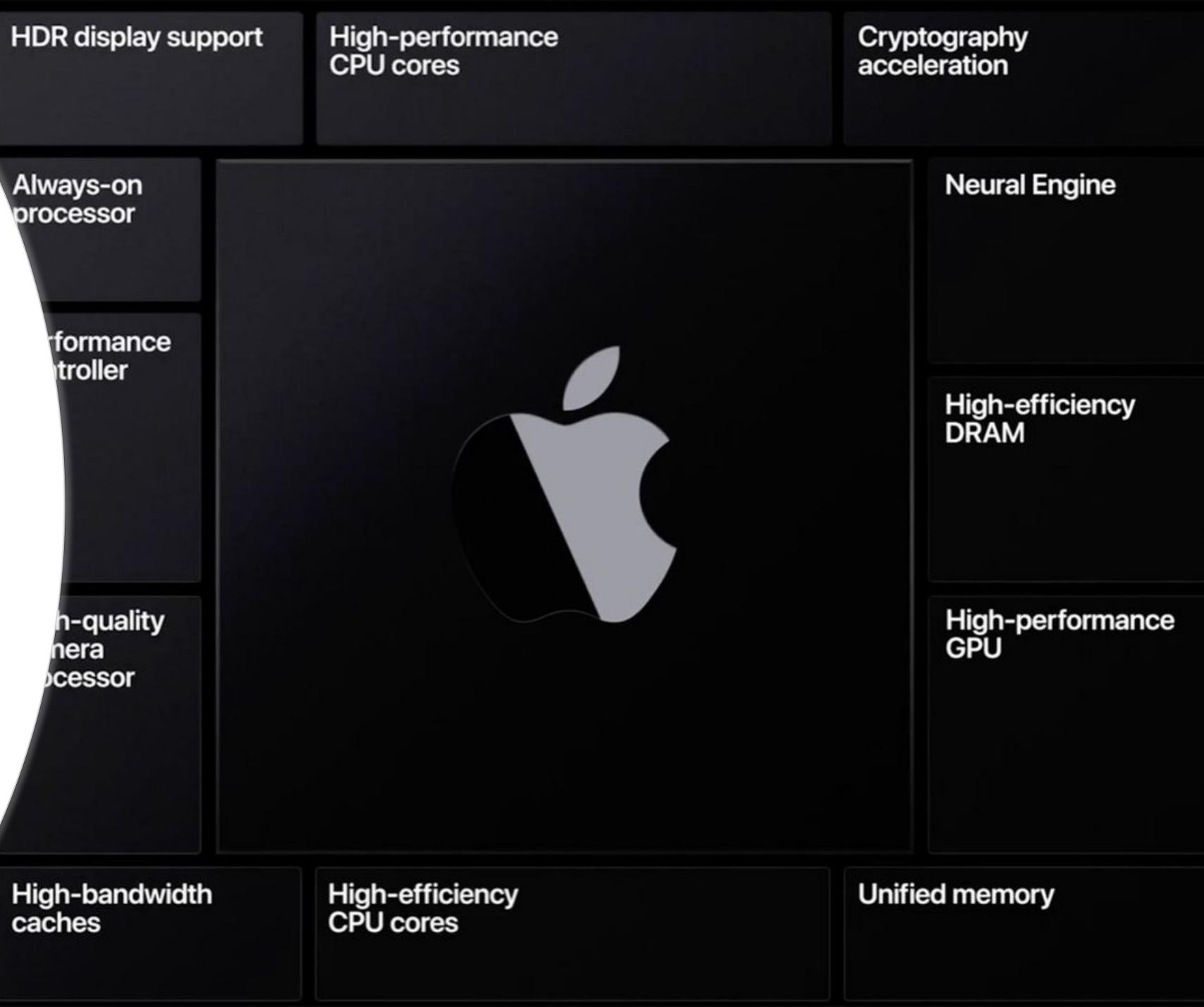
```
1 <key>DisableImport</key>
2 <true/>
3 <key>DisableExport</key>
4 <true/>
5 <key>DisableSkypeMeeting</key>
6 <true/>
7 <key>AutomaticallyDownloadExternalContent</key>
8 <integer>1</integer>
9 <key>CalendarFirstDayOfWeek</key>
10 <integer>2</integer>
--
```

Managed Preferences

Name	Date Modified	Size	Kind
com.apple.desktop.plist	Today at 08:29	158 bytes	property list
com.apple.extensiblesso.plist	Today at 08:29	539 bytes	property list
com.apple.loginwindow.plist	Today at 08:29	599 bytes	property list
com.apple.notificationsettings.plist	Today at 08:29	2 KB	property list
com.apple.screensaver.plist	Today at 08:29	260 bytes	property list
com.apple.security.firewall.plist	Today at 08:29	142 bytes	property list
com.apple.syspolicy.kernel-extension-policy.plist	Today at 08:29	289 bytes	property list
com.apple.system-extension-policy.plist	Today at 08:29	204 bytes	property list
com.apple.systempolicy.control.plist	Today at 08:29	154 bytes	property list
com.apple.systempolicy.managed.plist	Today at 08:29	120 bytes	property list
com.apple.TCC.configuration-profile-policy.plist	Today at 08:29	570 bytes	property list
com.apple.webcontent-filter.plist	Today at 08:29	97 bytes	property list
com.microsoft.autoupdate2.plist	Today at 08:29	412 bytes	property list
com.microsoft.Edge.plist	Today at 08:29	460 bytes	property list
com.microsoft.office.plist	Today at 08:29	66 bytes	property list
com.microsoft.Outlook.plist	Today at 08:29	245 bytes	property list
com.microsoft.wdav.atp.plist	Today at 08:29	8 KB	property list
com.microsoft.wdav.plist	Today at 08:29	380 bytes	property list
jamessawyer	Today at 08:29	--	Folder

# Apple Silicon

- Universal Apps
  - All Intune apps and agent
  - Microsoft Office (not Teams)
  - Microsoft Edge
  - Defender



Activity Monitor  
All Processes



CPU Memory Energy Disk Network

Microsoft

Process Name	% CPU	CPU Time	Threads	Idle Wake-Ups	Kind	% GPU	GPU Time	PID	User
com.apple.appkit.xpc.openAndSave...	0.0	1.81	3	0	Apple	0.0	0.00	31157	neiljohnson
<b>Microsoft Defender</b>	<b>0.0</b>	<b>0.53</b>	<b>5</b>	<b>0</b>	<b>Apple</b>	<b>0.0</b>	<b>0.00</b>	<b>4003</b>	<b>neiljohnson</b>
Microsoft Edge	0.1	36.85	72	2	Apple	0.0	0.00	1131	neiljohnson
Microsoft Edge Helper	0.0	14.47	9	0	Apple	0.0	0.00	1187	neiljohnson
Microsoft Edge Helper	0.0	0.25	7	1	Apple	0.0	0.00	1193	neiljohnson
Microsoft Edge Helper (GPU)	0.4	1:24.87	10	0	Apple	0.0	22.34	1186	neiljohnson
Microsoft Edge Helper (Renderer)	0.0	0.25	15	0	Apple	0.0	0.00	3556	neiljohnson
Microsoft Edge Helper (Renderer)	0.0	0.35	15	0	Apple	0.0	0.00	3579	neiljohnson
Microsoft Edge Helper (Renderer)	0.0	2.07	15	0	Apple	0.0	0.00	1216	neiljohnson
Microsoft Edge Helper (Renderer)	0.2	13.38	15	4	Apple	0.0	0.00	1207	neiljohnson
Microsoft Edge Helper (Renderer)	0.0	3.39	19	0	Apple	0.0	0.00	3582	neiljohnson
Microsoft Excel	0.0	9.00	24	7	Apple	0.0	0.00	30695	neiljohnson
Microsoft OneNote	0.5	21.50	106	13	Apple	0.0	0.00	30701	neiljohnson
Microsoft Outlook	0.9	10:40.58	21	14	Apple	0.0	0.00	30690	neiljohnson
Microsoft PowerPoint	7.4	4:51.54	62	103	Apple	0.0	0.17	30696	neiljohnson
Microsoft Update Assistant	0.0	30.83	7	2	Apple	0.0	0.00	2785	neiljohnson
Microsoft Word	0.0	10.04	18	6	Apple	0.0	0.00	30694	neiljohnson
QuickLookUIService (com.apple.ap...	0.0	0.07	3	0	Apple	0.0	0.00	31159	neiljohnson



# DEMO

Application Configuration

- Home
- Dashboard
- All services
- FAVORITES
- Devices
- Apps
- Endpoint security
- Reports
- Users
- Groups
- Tenant administration
- Troubleshooting + support

# Numberwang LTD (numberwang.net)

Home Microsoft Managed Desktop

## Status

Errors/failures	4	Healthy	1
Client apps	1 installation failure		
Connector status	1 error		
Device compliance	4 devices not in compliance		
Service health	Unhealthy		
Account status	Active		

## Guided scenarios [See all >](#)

### Deploy Edge for mobile

Configure Edge for use at work and deploy it to the iOS and Android devices managed by your organization.

Start

## News



**Increase productivity with Cloud PCs**

Easily provision virtual Windows PCs and manage them alongside your physical devices.

[Explore](#)

### Intune Customer Success blog [See all >](#)

[Success with remote Windows Autopilot and hybrid Azure Active Directory join](#)

[Updated support flow in Microsoft Endpoint Manager](#)

[Back to School 2021-22 - Intune for Education](#)

### Deploy Windows 10 and later in cloud configuration

Optimize devices running Windows 10 or later for the cloud with a simple, secure, standardized configuration fit for your needs.

Start

## What's happening in Intune

[What's new in Microsoft Intune](#)

# Configuration

# Configuration | What's new

- Configuration profiles all now verified
- Enhancements to native payload capabilities
- Support for user channel custom profile
- Investment into settings catalog
- Azure AD Single Sign-on profile

# Configuration Templates

## Template name

Custom ⓘ

Device features ⓘ

Device restrictions ⓘ

Endpoint protection ⓘ

Extensions ⓘ

PKCS certificate ⓘ

PKCS imported certificate ⓘ

Preference file ⓘ

SCEP certificate ⓘ

Trusted certificate ⓘ

VPN ⓘ

Wi-Fi ⓘ

Wired Network

# Device Restrictions

## Device restrictions ⋮

macOS

**1** Configuration settings ② Review + save

---

∨ App Store, Doc Viewing, Gaming

---

∨ Built-in Apps

---

∨ Cloud and Storage

---

∨ Connected Devices

---

∨ Domains

---

∨ General

---

∨ Password

---

∨ Privacy preferences

---

∨ Restricted Apps

---

# Custom Profiles

Home > Devices > macOS >

× Custom ...  
macOS

✓ Basics 2 Configuration settings 3 Scope tags 4 Assignments 5 Review + create

Custom configuration profile name \* ⓘ Not configured

Deployment channel \* ⓘ Device channel

Configuration profile file \* Device channel

User channel

Select a configuration profile file

# Configuration Settings Catalog

## Settings picker

Use commas "," among search terms to lookup settings by their keywords

### Browse by category

Microsoft Defender - Antivirus engine

Microsoft Defender - Cloud delivered protection preferences

Microsoft Defender - EDR preferences

Microsoft Defender - Network protection

Microsoft Defender - User interface preferences

Microsoft Edge - Additional

Microsoft Edge - All

Microsoft Edge - Content settings

Microsoft Edge - Password manager and protection

# Azure AD Single Sign-On

## Microsoft Azure AD

Key	Type	Value
browser_sso_interaction_enabled	Integer	1
disable_explicit_app_prompt	Integer	1
useSSOExtensionOnly	Boolean	true
AppPrefixAllowList	String	com.microsoft.
browser_sso_disable_mfa	Integer	1



# DEMO

Application Configuration



Scripting

# Intune Script Agent

- Updated universal binary
- Bugfixes
  - Improved bootstrap
  - Improved recovery behaviour
- Now deployed to all Intune managed Macs
- Intune Script GitHub Repo
  - [github.com/microsoft/shell-intune-samples](https://github.com/microsoft/shell-intune-samples)

# macOS | Scripting

- Deploy any script to the Mac
- Can run as end user
- Can run as root
- Can be scheduled
- Log gathering back to Intune

Home > Devices > macOS | Shell scripts >

## Add script

macOS

✓ Basics **2 Script settings** ③ Scope tags ④ Assignments ⑤ Review + add

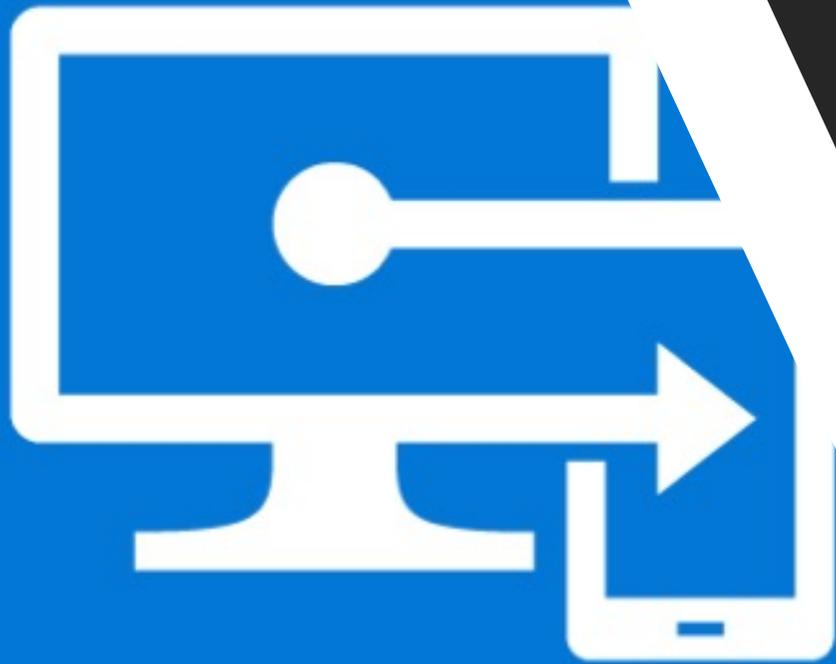
Upload script \* ⓘ  

Run script as signed-in user ⓘ  Yes  No

Hide script notifications on devices ⓘ  ▼

Script frequency ⓘ  ▼

Max number of times to retry if script fails  ▼



# DEMO

Application Configuration

- Home
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# Home > Devices | Overview

Search (Cmd+)

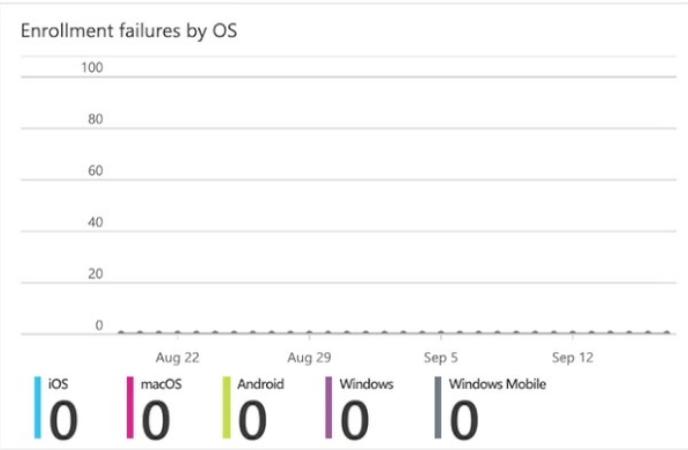
- Overview
- All devices
- Monitor
- By platform
  - Windows
  - iOS/iPadOS
  - macOS
  - Android
- Device enrollment
  - Enroll devices
- Provisioning
  - Windows 365
- Policy
  - Compliance policies
  - Conditional access
  - Configuration profiles
  - Scripts
  - Group Policy analytics (preview)
  - Update rings for Windows 10 and later

Enrollment status | Enrollment alerts | Compliance status | Configuration status | Software update status

### Intune enrolled devices

LAST UPDATED 18/09/2021, 10:21:36

Platform	Devices
iOS/iPadOS	4
macOS	4
Android	2
Windows	0
Windows Mobile	0
Total	10



### Top enrollment failures this week

No data to display

# Roadmap

# Intune Active Work for CY2021H2

- macOS 12.x day zero work (2110)
  - Enrolment flow
  - WebCP
  - New restrictions policies
  - New software update policies
  - Deprecation of Intune support for 10.14 (Xcode dependency)
- CP Version change
  - iOS and macOS to align on versions from 2109
- MDE
  - Universal Binary support (2110)
  - Compliance Integration
- Updates to AAD SSO extension properties
- Native DMG support
  - Preview this year
- Bootstrap Token
  - Required for M1 device management scenarios
  - Provides seamless FileVault Encryption enablement

macOS  
Intune |  
Useful links

- [aka.ms/intunewhatsnew](https://aka.ms/intunewhatsnew)
- [aka.ms/intuneindex](https://aka.ms/intuneindex)
- [aka.ms/intunecustomersuccess](https://aka.ms/intunecustomersuccess)
- [@IntuneSuppTeam](https://twitter.com/IntuneSuppTeam) (twitter)



T<sub>1</sub>

H<sub>4</sub>

A<sub>1</sub>

N<sub>1</sub>

K<sub>5</sub>

Y<sub>4</sub>

O<sub>1</sub>

U<sub>1</sub>

S<sub>1</sub>

A<sub>1</sub>

E<sub>1</sub>

G<sub>2</sub>

C<sub>3</sub>

H<sub>4</sub>

R<sub>1</sub>

A

L