



macOS

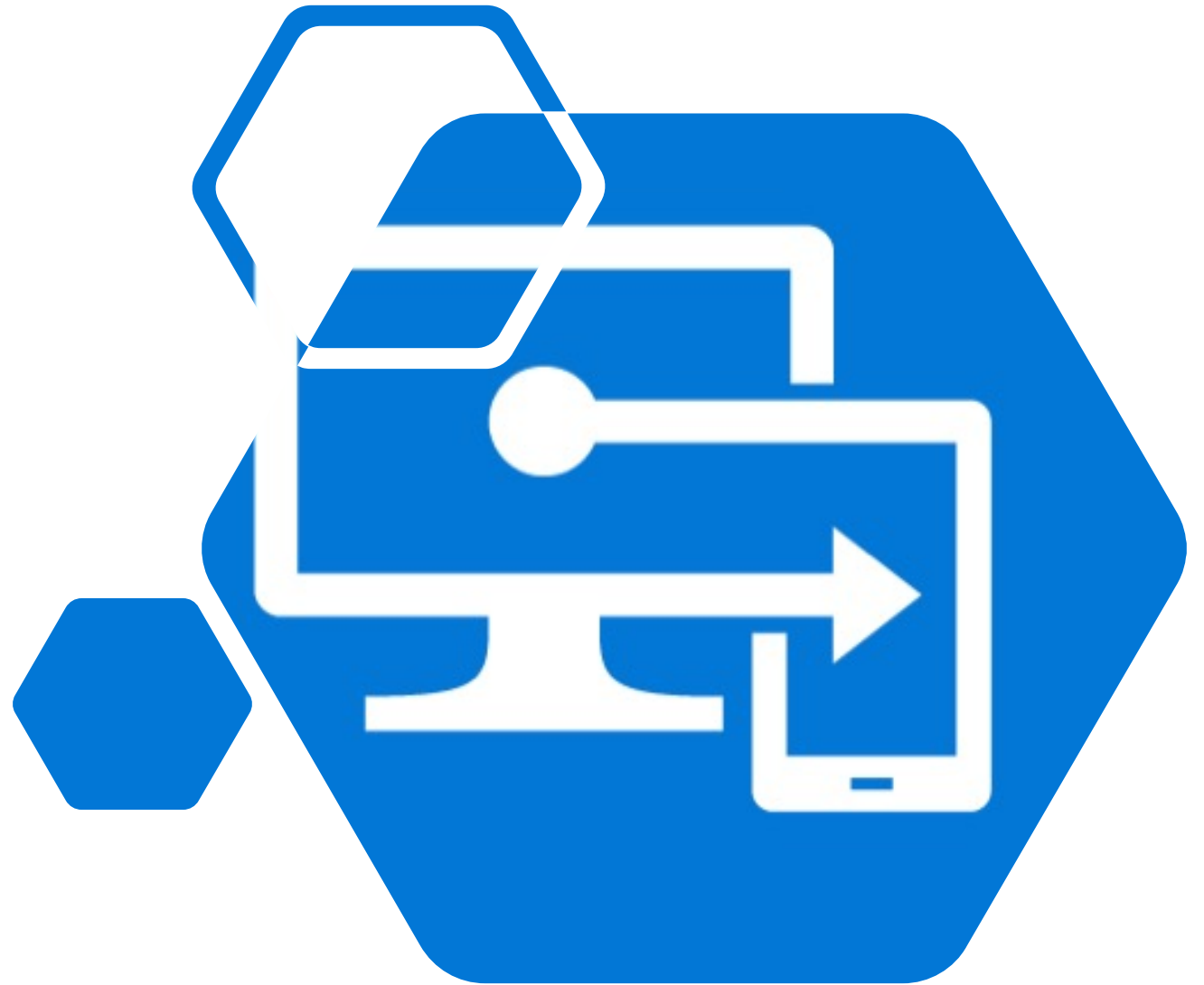
Mac Sys Admin 2021

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
- 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

1 Basics 2 Compliance settings 3 Actions for noncompliance 4 Assignments 5 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
 - Not configured
 - Not configured
 - Clear
 - Low
 - Medium
 - High
- System Security



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

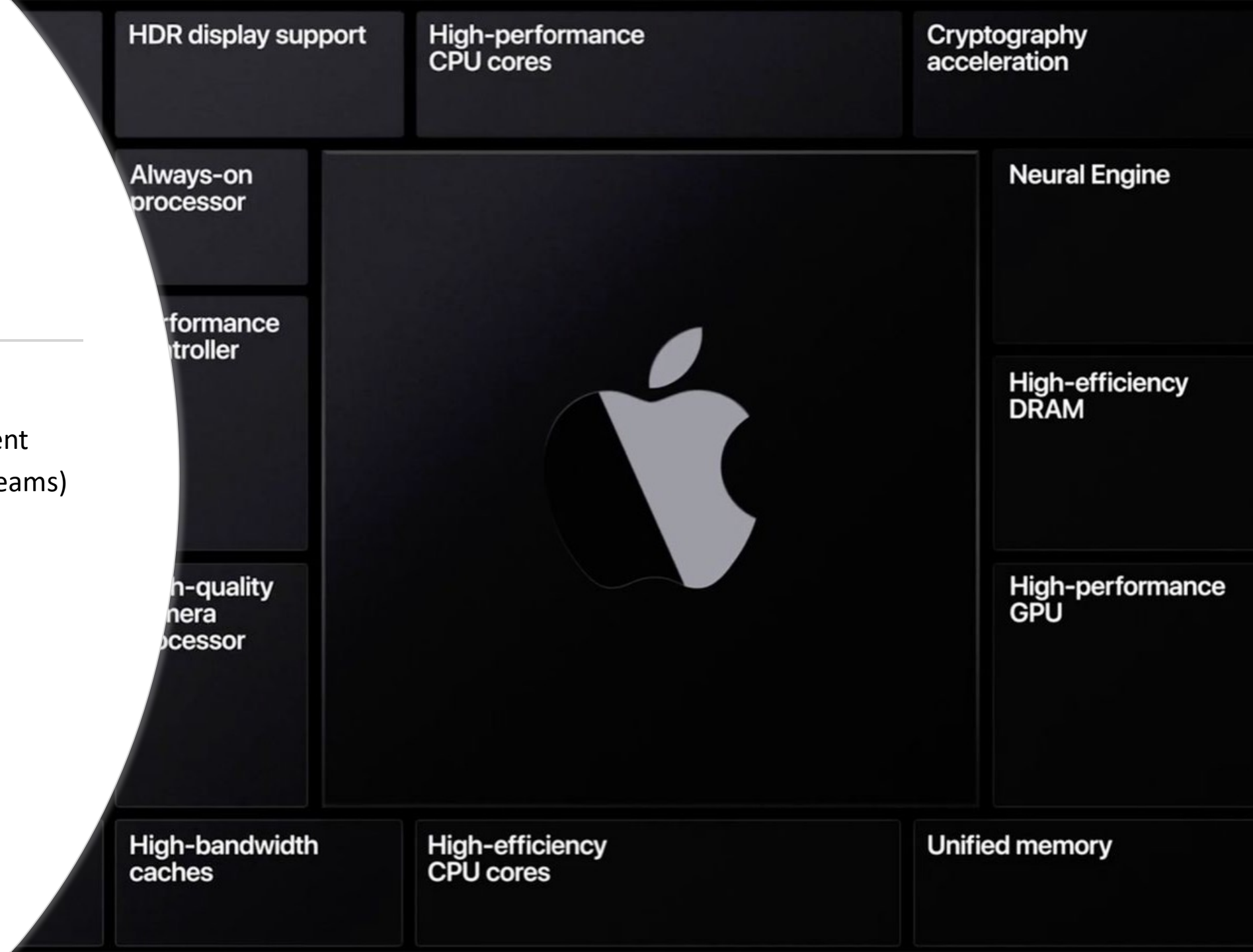
```
1 <key>DisableImport</key>
2 <true/>
3 <key>DisableExport</key>
4 <true/>
5 <key>DisableSkypeMeeting</key>
6 <true/>
7 <key>AutomaticallyDownloadExternalContent</key>
8 <integer>1</integer>
9 <key>CalendarFirstDayOfWeek</key>
10 <integer>2</integer>
```

< > 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



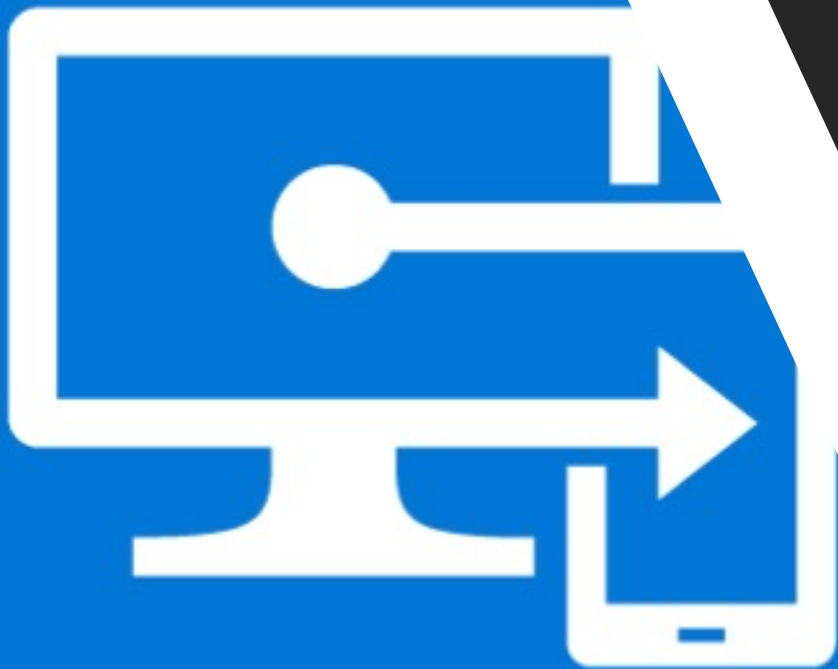
Activity Monitor
All Processes



CPU Memory Energy Disk Network

Search 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
Microsoft Defender	0.0	0.53	5	0	Apple	0.0	0.00	4003	neiljohnson
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
4Healthy
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](#)

What's happening in Intune

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

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](#)

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
Device channel
User channel

Configuration profile file *
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



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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

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

 Devices | 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

Intune enrolled devices

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

Platform	Devices
----------	---------

iOS/iPadOS	4
------------	---

macOS	4
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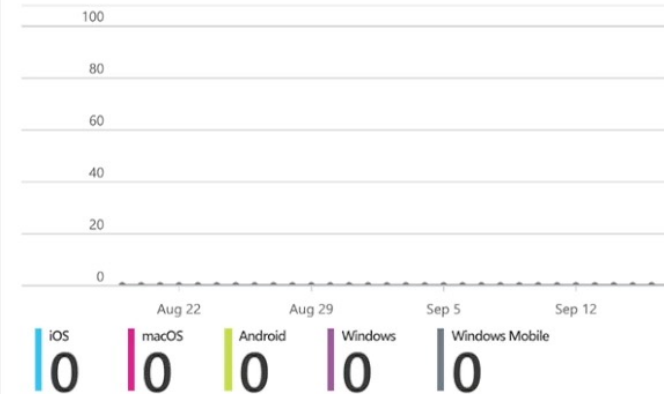
Android  2

Windows 0

Windows Mobile 0

Total	10
-------	----

Enrollment failures by OS



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

