

Intuneomator and IntuneLogWatch

Open source tools to help you manage macOS
devices in Intune

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The information presented here in no way shape or form
represents the views of my employer



Introduction to Intuneomator

Automating macOS App Deployment in Intune



- **Streamlined macOS App Deployment:**
Intuneomator automates the packaging, uploading, and assignment of macOS apps within Microsoft Intune, reducing manual overhead for IT admins.
- **Built on Installomator:**
Leverages 900+ predefined labels from Installomator, enabling rapid deployment of common macOS applications without custom scripting.
- **Simplifies Enterprise Management:**
Provides IT teams with consistent, repeatable, and scalable workflows for app distribution across small or large macOS fleets.



Finding it on the web

- GitHub Project:
<https://github.com/gilburns/Intuneomator>
- Wiki:
<https://github.com/gilburns/Intuneomator/wiki>

Intuneomator
Main
Service does
Interface
the real work

Intuneomator v1.0.0.162 Daemon: ●

 ● Name  Arch  Label  Source  Team ID 

 ● 1Password CLI Universal   1passwordcli pkg 2BUA8C4...

Activity Monitor
All Processes, Hierarchically

CPU Memory Energy Disk Network 🔍 intuneomator

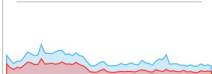
Process Name	% CPU	CPU Time	Threads	Idle Wake Ups	Kind	% GPU	GPU Time	P...	User
kernel_task	18.6	106:35:03.0%	685	2841	Apple	0.0	0.00	0	root
launchd	4.4	13:56:40.76	4	1	Apple	0.0	0.00	1	root
 Intuneomator	0.2	0.76	3	2	Apple	0.0	0.00	76014	gilburns
IntuneomatorService	0.0	4.96	3	0	Apple	0.0	0.00	8052	root

System: 7.86%

User: 8.34%

Idle: 83.80%

CPU LOAD

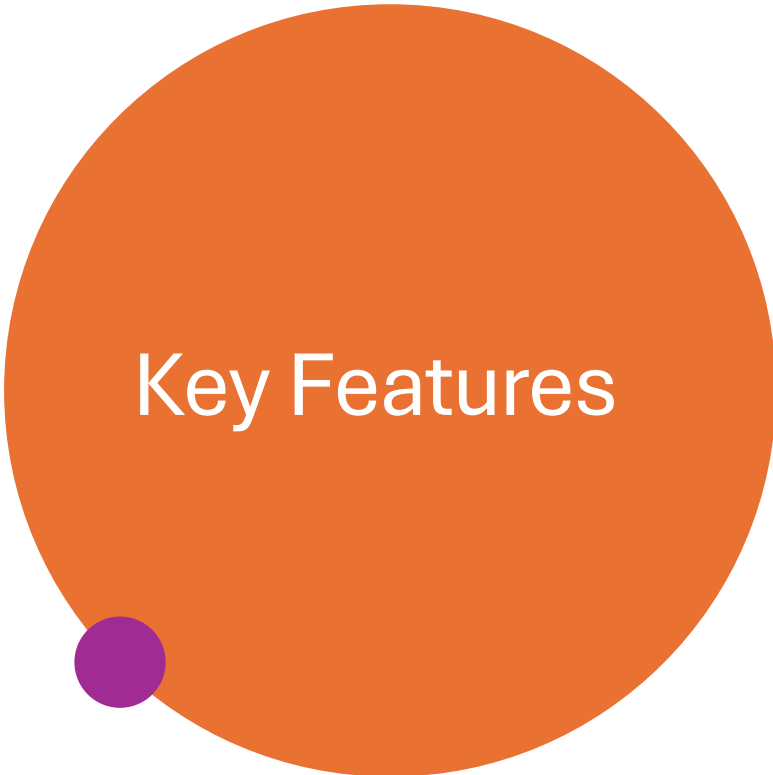


Threads: 4,958

Processes: 760

 ● Cyberduck Universal   cyberduck zip G69SCX9...

Intuneomator v1.0.0.162



Key Features

- **Installomator Integration:** Supports 900+ pre-configured application labels
- **Multiple Deployment Types:** DMG, PKG, and Line of Business (LOB) delivery
- **Architecture Support:** Universal, ARM64, and Intel targeting
- **PKG Building:** Convert DMG to PKG to utilize the pre/post script functionality
- **Universal PKG:** Convert two separate apps (ARM and Intel) into a single universal PKG
- **Script Support:** Pre/post installation scripts for PKG type deployments
- **Group Targeting:** Precise user and device group assignments
- **Filters:** Add targeting filters with groups for LOB deployments
- **Multiple Auth types:** Choose between supported authentication types: Certificates or Secret Keys
- **Teams Integration:** Automated notifications and reporting



Setup Requirements

Mac Requirements

- macOS: 14.6 (Sonoma) or later
- Arm64: Apple Silicon M1 or greater
- Memory: 8GB RAM minimum, 16GB recommended
- Storage: 5GB free space for app and automation data.
- Each app you automate requires storage space
- Network: Reliable internet connection for Graph API calls

Microsoft Requirements

- Microsoft Intune: Active subscription
- Azure Active Directory
- Administrative Access: To setup an Enterprise App registration

First Run – Setup Wizard

Intuneomator Entra ID Wizard



- ☐ Introduction
- ☐ Entra ID Setup
- ☒ **Authentication**
- ☐ Entra ID Settings
- ☐ Notification Settings

Intuneomator Authentication to Microsoft Cloud Services

For Intuneomator to be able to automate software uploads and assignment, it requires access to Microsoft services.

☒ **Use Certificate Based Authentication** Import Certificate .p12 File

Certificate can be used to prove the client identity to the Authorization server. The idea of certificate is based on asymmetric cryptography, which utilize public and private key pair.

Intuneomator can generate a key pair for you, or you can provide your own. Import it here. Generate a Certificate

The Public certificate key should be uploaded to Entra ID under the Intuneomator app registration, while the Private will need to be available for application to use.

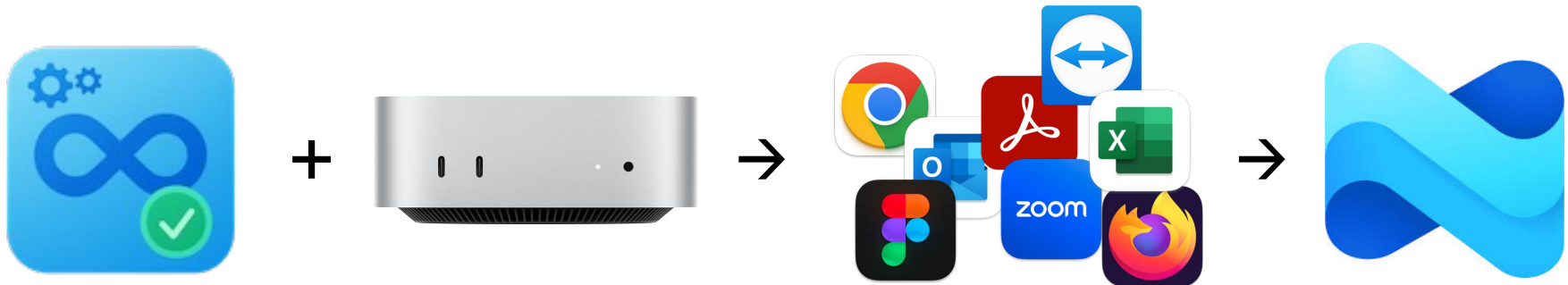
☐ **Use Secret Key Based Authentication** Set Entra ID Secret Key

The idea of a client secret is very straightforward. Entra ID generates a secret (password) for the Intuneomator App registration. Then Intuneomator uses the secret to request a token from the Authorization Server. If provided secret matches, the Authorization Server returns the access token to the application. (If you choose this option, we'll ask for the secret key later.)

Microsoft recommends certificate based authentication when possible.

Go Back Next

Putting it together



- Automatic metadata lookups and icons for most **Installomator** labels
- Entra ID group assignments
- Intune App Categories
- Custom Labels
- Universal Packages
- Adobe CC Supported
- Teams Notifications

Special Features



Universal Packages: Takes the ARM version and Intel versions and automatically packages both into a single PKG with intelligence to install the correct version at deployment time (You can get this with PhatPKG too)



Adobe Creative Cloud: Handles the multiple required files and command-line call for: `"Install.app/Contents/MacOS/Install" --mode=silent"`



Script Library: Pre-coded script included to use with PKG deployments. Add your own scripts to the library for reuse. Automatic variable substitution for given items like application name and application bundle id



App delivery: App items from vendors in non-supported formats are automatically transformed into Intune supported types. Non-PKG types can be optionally be automatically transformed into PKG for use of preinstall and postinstall scripts.

Management & Reporting

App Installation Status

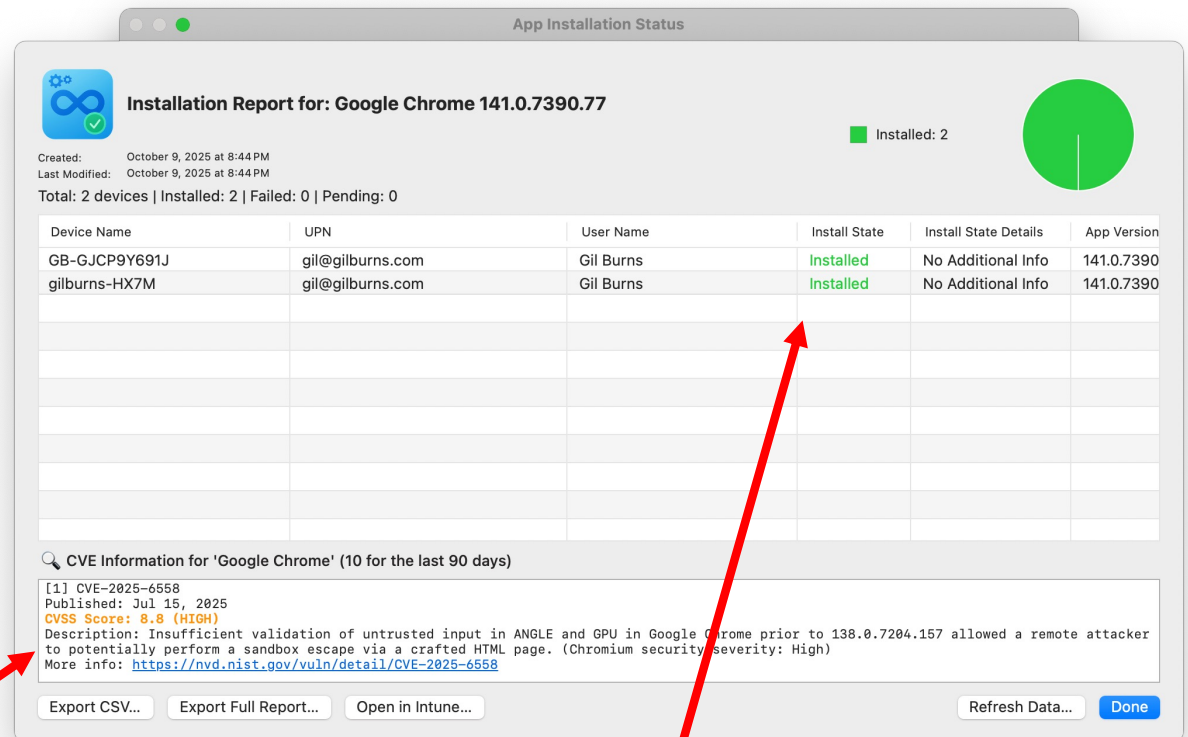
App Discovery

Custom Attributes and Shell Scripts

Web Clips

Intune report export and scheduled delivery

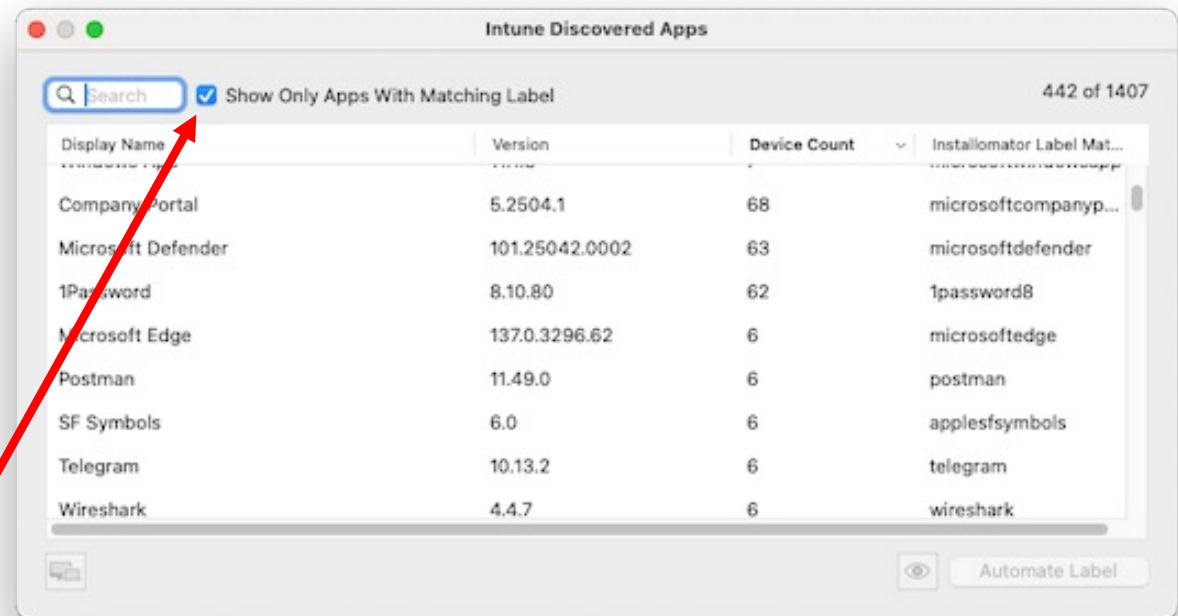
App Install Status



Related CVEs

Devices and status

App Discovery



Intune Discovered Apps

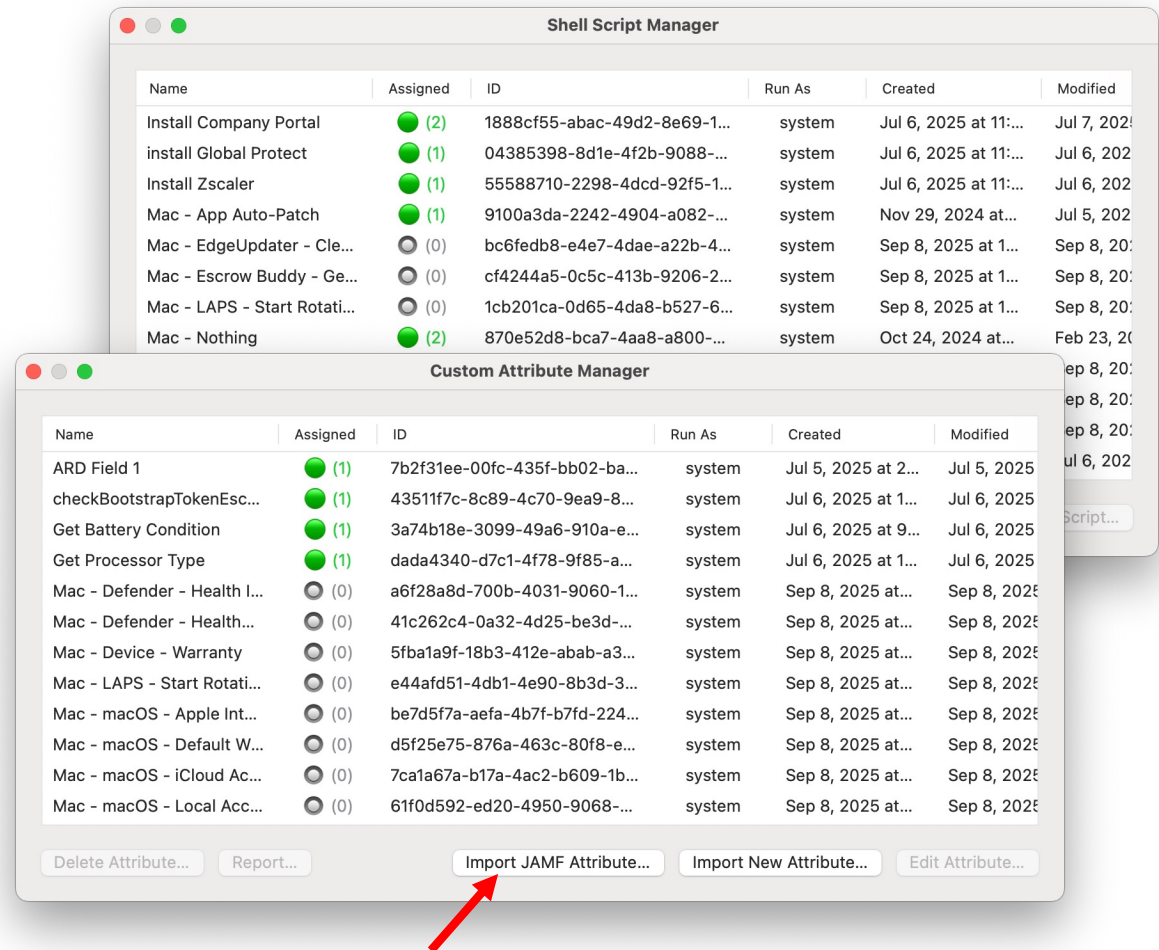
Search ☒ Show Only Apps With Matching Label 442 of 1407

Display Name	Version	Device Count	Installomator Label Mat...
Company Portal	5.2504.1	68	microsoftcompany...
Microsoft Defender	101.25042.0002	63	microsoftdefender
1Password	8.10.80	62	1password8
Microsoft Edge	137.0.3296.62	6	microsoftedge
Postman	11.49.0	6	postman
SF Symbols	6.0	6	applesfsymbols
Telegram	10.13.2	6	telegram
Wireshark	4.4.7	6	wireshark

Automate Label

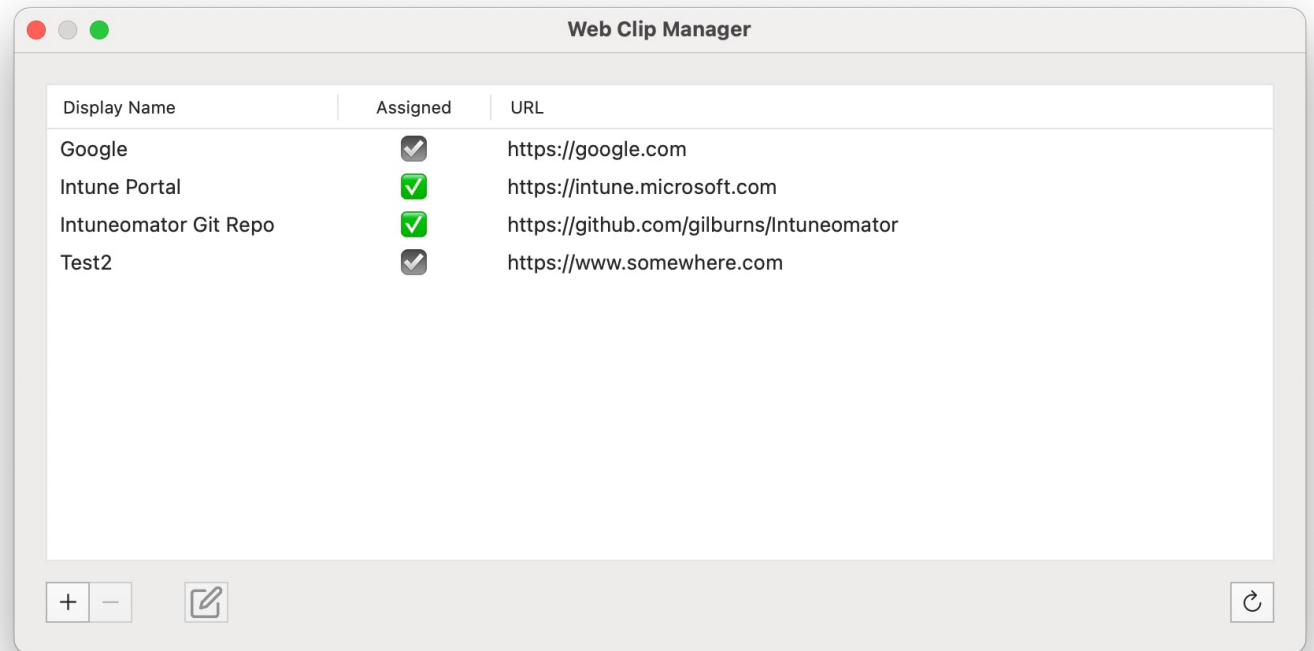
Titles with matching labels

Custom Attributes & Shell Scripts

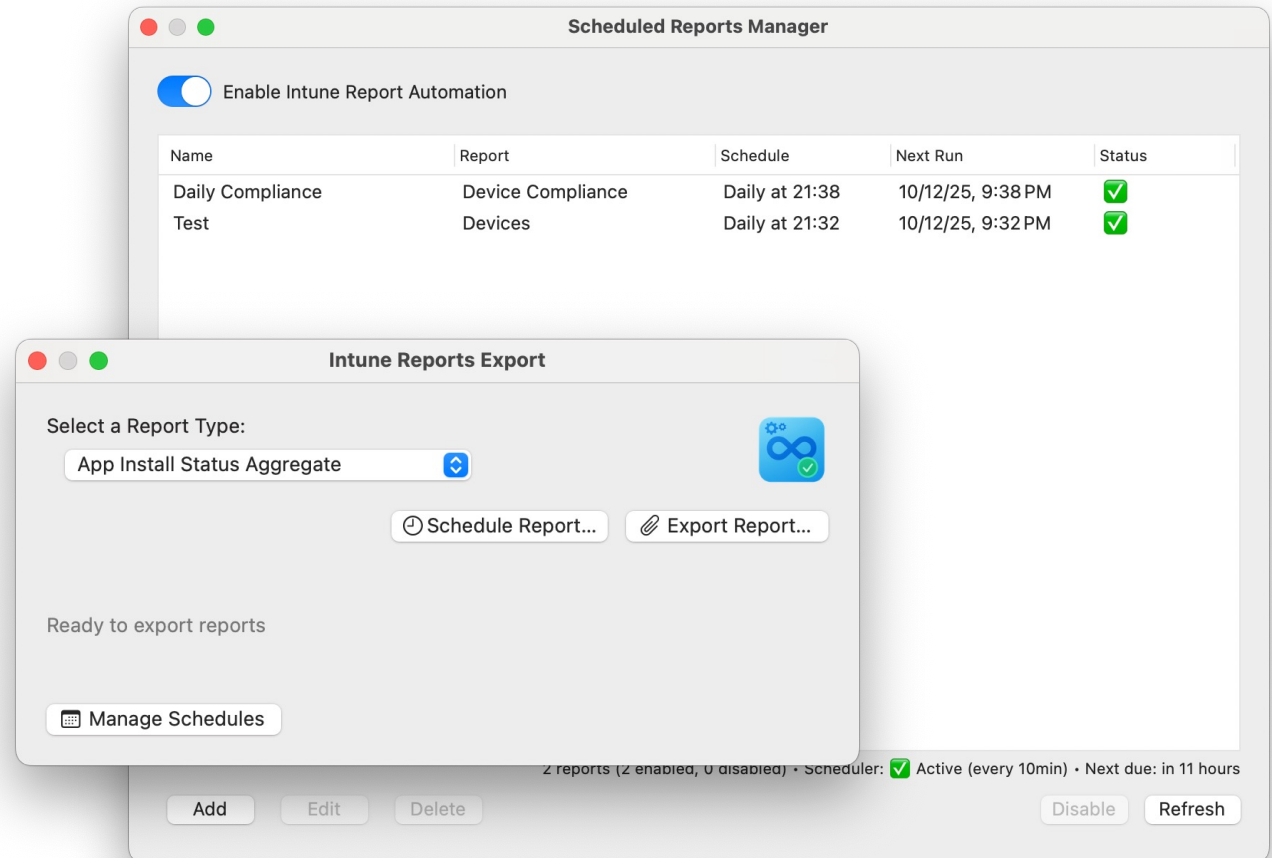


Import JAMF extension attributes

Web Clips



Intune Reports Export & Delivery



Scheduled reports requires Azure storage for delivery

Live Demo



Deployment Example

Demonstrate converting a common macOS apps into an Intune deployments.

Group Assignment

Show how the app is assigned to a specific groups for deployment.

Status Verification

Review **Intune** console and/or **Company Portal** to confirm deployment success.



App Management Alternatives

- **PatchMyPC** (86 titles)
<https://patchmypc.com/feature/mac-os/>
- **IntuneBrew** (510 titles)
<https://www.intunebrew.com>
- **Intune Uploader** (autopkg processor)
<https://github.com/almenscorner/intune-uploader>

These all can work in the cloud and potentially don't require any on-prem infrastructure.

IntuneLogWatch



A macOS application for analyzing Microsoft Intune logs with human-readable insights

The screenshot displays the IntuneLogWatch v1.4.1 application window. On the left, a sidebar contains navigation links: Enrollment Status, Network Connectivity, and Analysis Summary. The Analysis Summary section shows 61,310 log entries, with 5 sync events, 5 completed events, and 0 failed events. The main panel, titled 'Local Intune Logs (10 files)', lists various sync events. The selected event is 'Sync Event (FullSyncWorkflow)' from 10/10/25 at 9:40:05 PM. Below this, a table lists policies for 'PlistEdit Pro 1.10', 'Amazon Chime 5.23.22440', 'EW Installation Center 1.5.1', 'Dialog 2.5.6', and 'CreativeCloud 6.7.0.278 arm64'. The bottom of the main panel shows the 'Spotify 1.2.74.477' app policy, which is 'COMPLETED'. On the right, a detailed view of the Spotify policy is shown, including its ID, duration, and a 'Raw Logs' section with 31 entries. The raw logs show a sequence of events: 'AppPolicyHandler' (Thread 1503308365), 'AppDetector' (Thread 1503308367), and 'SpotlightSearcher' (Thread 1503308368).

Local Intune Logs (10 files)

Open Log File... Reload Local Logs Inspect MDM Certificate

Local Intune Logs (10 files)

Sync Event (FullSyncWorkflow) 10/10/25, 9:40:05 PM

15 Total Policies 13 Completed 3 Warnings 2m 13s Duration

Policy Type: All Policies App Policies (9) Script Policies (6) Search policies...

PlistEdit Pro 1.10 com.fatcatsoftware.pledpro App Policy DMG REQUIRED Completed 9:40:06 PM • 7.8s

Amazon Chime 5.23.22440 com.amazon.Amazon-Chime App Policy DMG REQUIRED Completed 9:40:06 PM • 55.9s

EW Installation Center 1.5.1 com.eastwest.ic App Policy PKG AVAILABLE Completed 9:40:06 PM • 34ms

Dialog 2.5.6 au.csiro.dialog App Policy PKG REQUIRED Completed 9:40:06 PM • 35ms

CreativeCloud 6.7.0.278 arm64 com.adobe.acc.AdobeCreativeCloud App Policy PKG AVAILABLE Completed 9:40:06 PM • 35ms

Spotify 1.2.74.477 com.spotify.client App Policy DMG REQUIRED Completed 9:40:06 PM • 2m 11s

Spotify 1.2.74.477 com.spotify.client COMPLETED

Started 9:40:06 PM Completed 9:42:18 PM Duration 2 min 11 sec

Policy ID 78a7817a-d2da-4769-964c-268d4a253963 Copy ID

No Issues Detected

Raw Logs 31 log entries

(Double click on a log entry to view or copy details)

- 9:40:06 PM AppPolicyHandler Thread 1503308365 Handling app policy. PolicyID: 78a7817a-d2da-4769-964c-268d4a253963, Primary BundleID: com.spotify.client, IgnoreVersion: false, Count: 1, AppType: PKG, App Policy Intent: RequiredInstall
- 9:40:06 PM AppDetector Thread 1503308367 Detecting app with specific bundle ID. PolicyID: 78a7817a-d2da-4769-964c-268d4a253963, AppName: Spotify 1.2.74.477, BundleID: com.spotify.client, AppType: PKG, IgnoreVersion: false
- 9:40:06 PM SpotlightSearcher Thread 1503308368 Found app with NSWorkspace PolicyID: 78a7817a-d2da-4769-964c-268d4a253963, AppName: Spotify 1.2.74.477, AppType: PKG, BundleID: com.spotify.client
- 9:40:06 PM AppDetector Thread 1503308368 Found bundle path URL for PKG app. PolicyID: 78a7817a-d2da-4769-964c-268d4a253963, AppName: Spotify 1.2.74.477, BundleID: com.spotify.client, AppType: PKG, IgnoreVersion: false



Finding it on the web

- GitHub Project:
<https://github.com/gilburns/IntuneLogWatch>
- Wiki:
<https://github.com/gilburns/IntuneLogWatch/wiki>



IntuneLogWatch on LinkedIn



Neil Johnson ✓ • 1st

2w ...

Empowering Apple & Android Enterprise with Intune | Podcast ...

Can I just say how AWESOME this tool is, I use it virtually every day and it's a total game changer!

Love · ❤️ 1 | Reply · 1 reply



Jason Kraft ✓ • Following

1w ...

Senior Software Engineer at Microsoft

This is so cool! I just shared it with the client team as well. I'm gonna give it a whirl next time I get a customer incident.

Love · ❤️ 1 | Reply · 1 reply

Key Features



Three-Pane Analysis Interface

- **Left Pane:** Sync events with status indicators and timing
- **Center Pane:** Policies executed during each sync
- **Right Pane:** Detailed log entries and timeline view



Smart Log Analysis

- **Automatically correlates events by Policy ID (GUID)**
- **Shows Started/Completed/Duration**
- **Click the clipboard icon to copy the GUID to search in the Intune console**



Policy Information Bubbles

- **App Type:** PKG or DMG installations
- **Script Type:** SCRIPT or ATTR
- **Intent:** Required, Available, or Uninstall
- **Context:** Root or User execution for scripts



App Icon Integration

- **Displays actual app icons for installed applications**
- **Automatically retrieves icons from the system**
- **Fallback icons for system policies and scripts**



Interface Guide

The screenshot displays the IntuneLogWatch v1.4.1 application interface. On the left, a sidebar contains navigation links: Enrollment Status, Network Connectivity, and Analysis Summary. The main area is divided into several sections. At the top, a status bar indicates 'Parsed 61,310 log entries'. Below this, a 'Sync Event (FullSyncWorkflow)' section shows a summary of 15 total policies, with 13 completed and 3 warnings, taking 2m 13s. A table lists policies, including 'CreativeCloud 6.7.0.278 arm64' and 'dockutil 3.1.3'. A red box highlights the 'Policies in selected sync event' section. To the right, a detailed view of the 'CreativeCloud 6.7.0.278 arm64' policy is shown, indicating it is 'COMPLETED'. A red box highlights the '13 log entries' section. Below this, a 'Raw Logs' section displays individual log entries, including one from 'AppPolicyHandler' and another from 'AppDetector'. Red arrows point from the labels below to specific parts of the interface: 'Sync Events' points to the sync event summary, 'Policies in selected sync event' points to the policy table, and 'Logs for selected policy' points to the raw logs section.

IntuneLogWatch v1.4.1

Enrollment Status

Network Connectivity

Analysis Summary

Parsed 61,310 log entries

Local Intune Logs (10 files)

Open Log File... Reload Local Logs Inspect MDM Certificate

Sync Event (FullSyncWorkflow) 10/10/25, 9:40:05 PM

15 Total Policies 13 Completed 3 Warnings 2m 13s Duration

Policy Type: All Policies App Policies (9) Script Policies (6) Search policies...

Dialog 2.5.0 au.csiro.dialog

CreativeCloud 6.7.0.278 arm64 COMPLETED

Started 9:40:06 PM 9:40:06 PM

Policy ID e33551de-0398-4441-98b4-d8b6de28a4cd

No Issues Detected

Raw Logs 13 log entries

(Double click on a log entry to view or copy details)

9:40:06 PM AppPolicyHandler Thread 1503308363

Handling app policy. PolicyID: e33551de-0398-4441-98b4-d8b6de28a4cd, Primary BundleID: com.adobe.acc.AdobeCreativeCloud, IgnoreVersion: false, Count: 1, AppType: PKG, App Policy Intent: Available

9:40:06 PM AppDetector Thread 1503308368

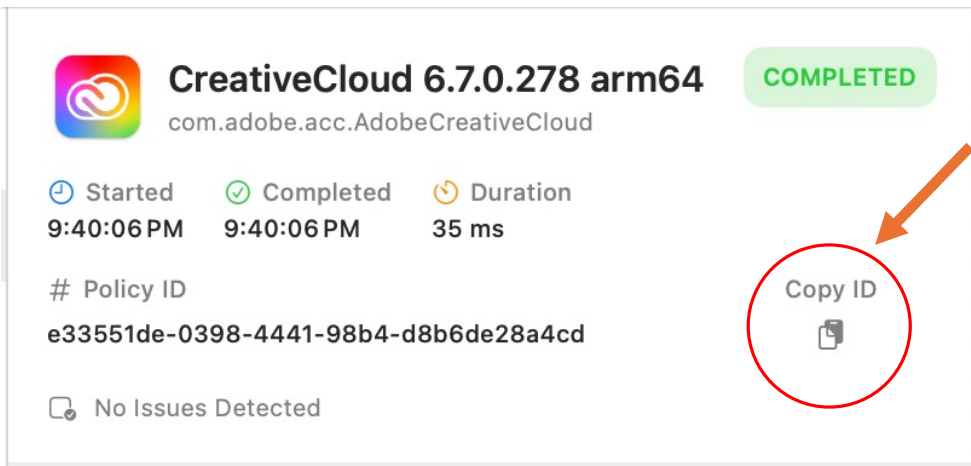
Detecting app with specific bundle ID. PolicyID: e33551de-0398-4441-98b4-d8b6de28a4cd, AppName: CreativeCloud 6.7.0.278 arm64, BundleID:

Sync Events

Policies in selected sync event

Logs for selected policy

Copy Options



 **CreativeCloud 6.7.0.278 arm64** COMPLETED
com.adobe.acc.AdobeCreativeCloud

🕒 Started	✅ Completed	🕒 Duration
9:40:06 PM	9:40:06 PM	35 ms

Policy ID
e33551de-0398-4441-98b4-d8b6de28a4cd

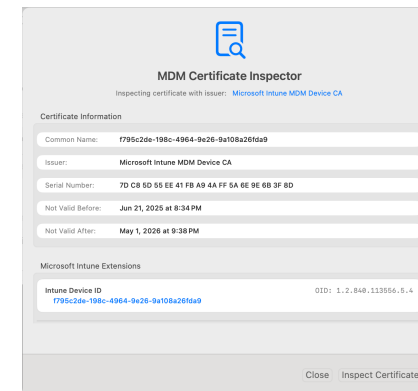
🔍 No Issues Detected

Copy ID 

- **Standard Click:** Copy Policy ID (GUID) to clipboard
- **Option+Click:** Copy Graph Explorer URL for API access or scripting
- **Control+Click:** Copy Intune Portal URL for direct policy editing
-

MDM Certificate Inspection

- Built into the GUI
- Command line tool included in the app bundle
- You can run the CLI tool from here:
/Applications/IntuneLogWatch.app/Contents/
MacOS/intunelogwatch-cli



```
MDM Certificate Information
=====
Common Name: f795c2de-198c-4964-9e26-9a108a26fda9
Issuer: Microsoft Intune MDM Device CA
Serial Number: 7D C8 5D 55 EE 41 FB A9 4A FF 5A 6E 9E 6B 3F 8D
Not Valid Before: Jun 21, 2025 at 8:34 PM
Not Valid After: May 1, 2026 at 9:38 PM

Microsoft Intune Extensions
=====
Intune Device ID: f795c2de-198c-4964-9e26-9a108a26fda9
```


Inspect Intune MDM certificate from the command line

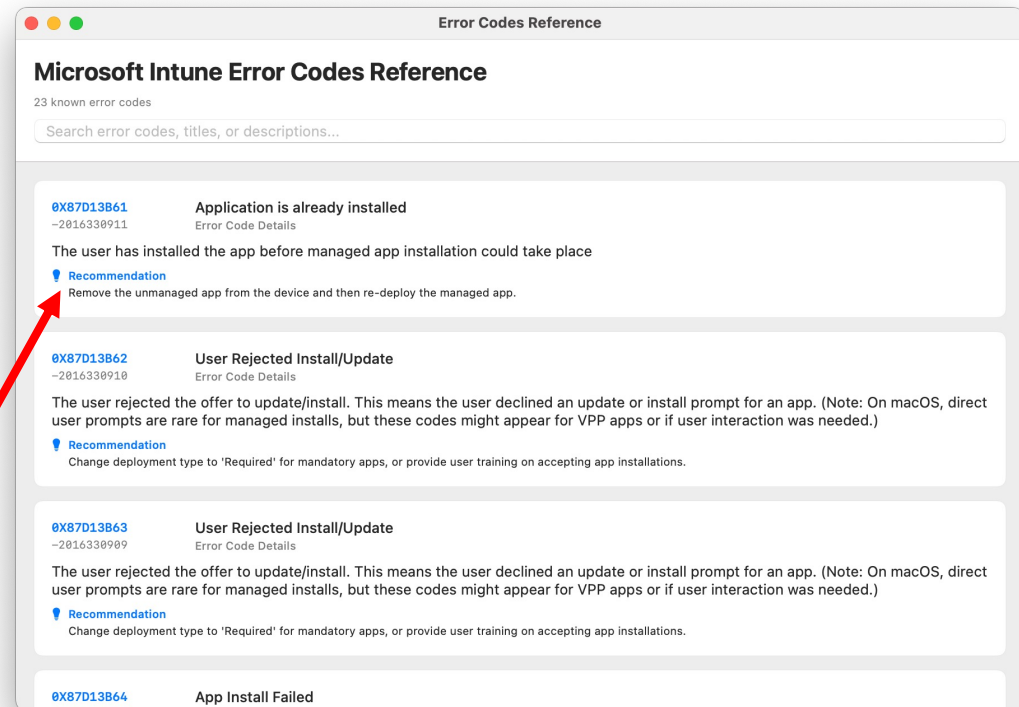
USAGE: intunelogwatch-cli [--json] [--field <field>]
[--list-extensions] [--verbose] [--values-only]

OPTIONS:

-j, --json	Output in JSON format
-f, --field <field> (commonName, serialNumber, tenantId, etc.)	Extract specific field
--list-extensions	List all available extensions
-v, --verbose	Enable verbose output
--values-only	Show only extension values without names
--version	Show the version.
-h, --help	Show help information.

```
gilburns@gilburns-HX7M ~ % /Applications/IntuneLogWatch.app/Contents/MacOS/intunelogwatch-cli --field deviceId  
D4C1A127-8B03-401E-A846-0ED8865066D9  
gilburns@gilburns-HX7M ~ %
```

Built-In Intune Error Code Reference



Includes actionable recommendations for every error code

Live Demo



Load the local logs

Demonstrate the three-panel interface and show the events, policies and connected log entries

Error Code Reference

Demonstrate the built in searchable Error Code Reference pane that includes recommendations for handling errors.

MDM Certificate Inspection

Demonstrate the built in MDM certificate inspector. Extract various attributes with the built in command line too.

Intuneomator



IntuneLogWatch



Any Questions?