

# Intune Mac Management

## What's new

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# Key takeaways

## Security above all else

Establishing new standards across our products, operations, and culture to better protect ourselves and our customers.

## Best managed Mac experience for M365 customers

Cloud-native management delivering scalable, reliable, and secure macOS experiences.

## Simplify and consolidate endpoint management

Cut cost and complexity while unifying endpoint management and security tools – All you need is Microsoft 365.

## Generative AI and automation simplify IT

Unlock better outcomes for IT and end-users through data, end-to-end context and automation.

# How Intune manages Macs

*“Create the best managed Mac experience for Microsoft 365 customers.”*

## Platform-first

Native apps  
Day zero support for new macOS versions  
Supports next-gen declarative management

## MDM+

Intune agent enhances native macOS MDM  
Extends admin control

## Secure productivity

Microsoft 365  
Conditional Access  
Phish-resistant auth  
Comprehensive security, compliance and data governance tooling with Defender, Sentinel, Purview

# Intune macOS capabilities

## Endpoint Security

- Firewall
- FileVault (Disk Encryption)
- Gatekeeper
- Activation Lock
- Rapid Security Response

## Conditional Access

- Device Compliance

## Enrollment

- ADE with Modern Authentication
- Local Account Management
- Await final configuration
- Platform SSO and passkeys
- Hardware-bound Entra registration

## Scripting

- User / Root scripts with schedules
- Can use any interpreter (Bash, ZSH, Python, etc.)
- Custom attribute collection using scripts
- Log collection

## Configuration

- Entra ID Single Sign-on Extension
- LDAP (AD)
- Restrictions policies
- Custom Policy support (iMazing)
- Passcode policies
- Software Update
- Enterprise Certificates / PKI
- Network configuration / Proxy server
- Login Window
- Managed Login Items
- Content Caching
- Settings picker
- Device Actions (Erase, Restart, etc.)
- DDM Software Update
- FileVault during Setup Assistant

## Intune Suite

- Remote Help with full control
- Cloud PKI

## Apps

- DMG, PKG support with available assignment
- Custom PKG pre-install and post-install scripts
- Volume-purchased apps
- Native integrations for Edge, Office and Defender
- Config for Edge, Office, Defender and OneDrive
- Custom Preference

## 3<sup>rd</sup> Party Integration

- Munki integration (App Lifecycle)
- Privileges (Elevation control)
- Santa (Binary Access control)
- Octory (Onboarding splash screen)
- Nudge (OS Update Controls)

## Coming soon

- Managed device attestation with ACME
- macOS Recovery lock management
- User channel support for resource access profiles
- JIT compliance remediation
- Custom app detection
- Script size increase to 1 MB

# Intune Mac Onboarding

Demo

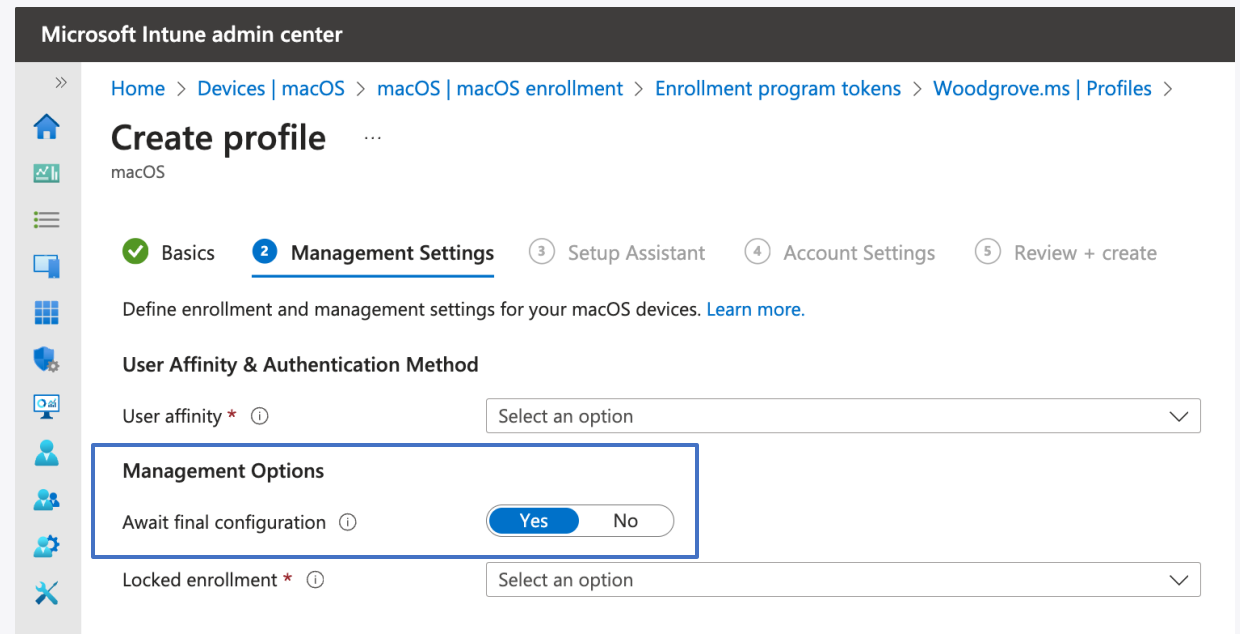
# Managed device attestation with ACME

- ACME: Automated Certificate Management Environment (macOS 13.1+).
  - More secure than SCEP.
  - Bound to Secure Enclave.
- Attestation is the strongest proof of hardware-bound device identity that is attested to by Apple (macOS 14+).
  - Managed Macs can provide the trusted attestation to prove device identity to servers.
  - Initiated via MDM, it protects the Intune enrollment cert against spoofing.
  - The security benefits also extend to Resource Access profiles.



# Await configuration after Automated Device Enrollment

- Create a more secure onboarding experience by guaranteeing that the Mac is configured before releasing to the user.
- User remains within Setup Assistant experience until first device check-in completes.



# Account management

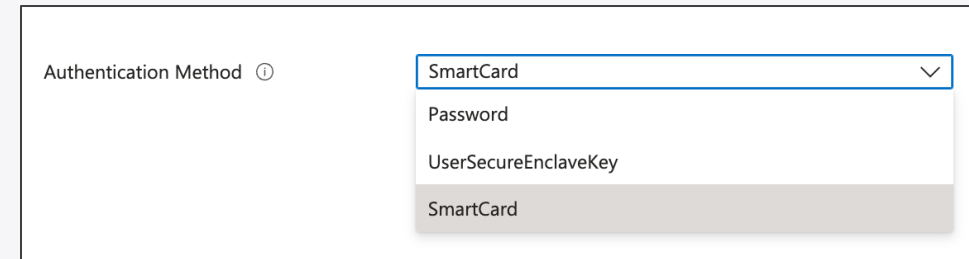
- Create and configure local admin & primary account on auto-enrolled Macs during enrollment.
- Standardize how local accounts are named.

The screenshot shows the Microsoft Intune admin center interface for creating a macOS profile. The breadcrumb trail is: Home > Devices | macOS > macOS | macOS enrollment > Enrollment program tokens > Woodgrove.ms | Profiles >. The main heading is 'Create profile' for macOS. The progress bar shows five steps: Basics (checked), Management Settings (checked), Setup Assistant (checked), Account Settings (active), and Review + create (5). A blue information box states: 'If you create a local account, Await final configuration is set to Yes regardless of any other configuration even if the toggle for this setting in Management settings displays No. Learn more about local account management'. The 'Local primary account (preview)' section includes: 'Create a local primary account \*' (dropdown set to 'Yes'), 'Prefill account info' (radio buttons for 'Yes' and 'Not configured'), 'Primary account name \*' (text input with placeholder '{{partialupn}}'), 'Supported variables: {{partialupn}}', 'Primary account full name \*' (text input with placeholder '{{username}}'), 'Supported variables: {{username}}', and 'Restrict editing' (radio buttons for 'Yes' and 'Not configured').



# Platform SSO: Overview

- Entra ID platform's integration with built-in macOS APIs on macOS 13+.
  - Included with Intune.
- Extends auth with Entra ID to the macOS lock screen, provided WHfB-like sign-in & SSO experiences.
- Leverages the [Enterprise SSO Plug-in](#) enabled via SSO extension profile.
- Choose **one** of the supported authentication methods:
  - **Password synchronization** with Entra ID
  - **Password-less SSO** on device, enabled by hardware-backed credential – analogous to WHfB (Microsoft recommends)
  - **Smart card-based** device sign-in
- Rights management for Entra users on the Mac.



# Platform SSO & Passkeys

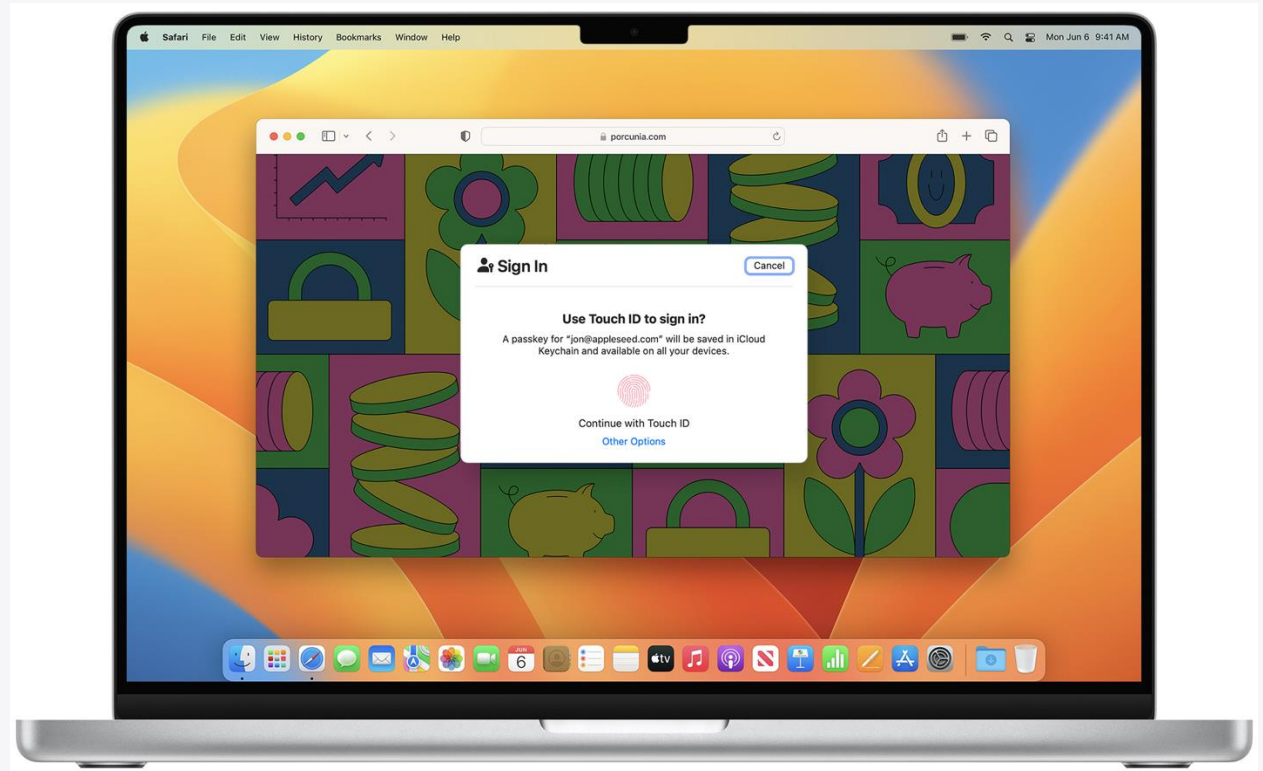
Passkeys can't be phished and replaces passwords.

Allows using Touch ID or Face ID to sign in to apps and websites.

**Passkeys for managed accounts** are enabled using Platform SSO, when “Secure Enclave” is chosen as the authentication method.

Managed identities don't sync to personal iCloud.

**Passkeys for enrollment** are enabled using Entra Authentication Methods.



# Authentication method strengths in PSSO

	Good: Password	Better: SmartCard	Best: Secure Enclave
Local account password sync with Entra ID	✓	✗	✗
Federation support	✓	✓	✓
MFA required for registration	✗	✓	✓
Phishing resistant	✗	✓	✓
Phishing resistant via built-in Apple hardware	✗	✗	✓
Passkey usage	✗	✗	✓

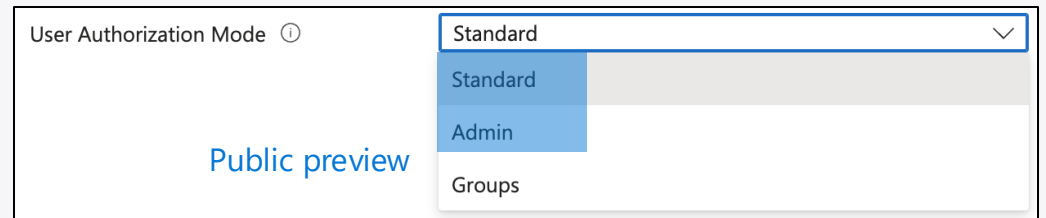
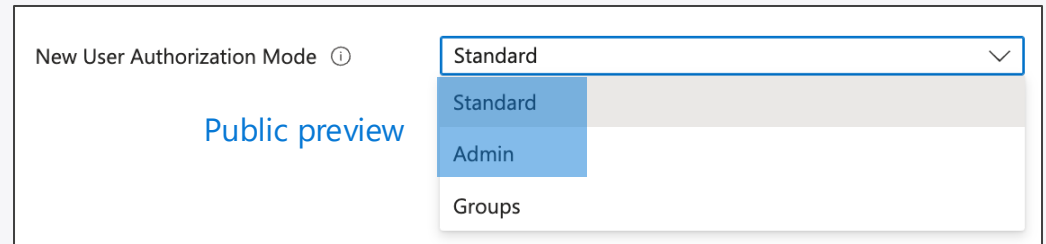
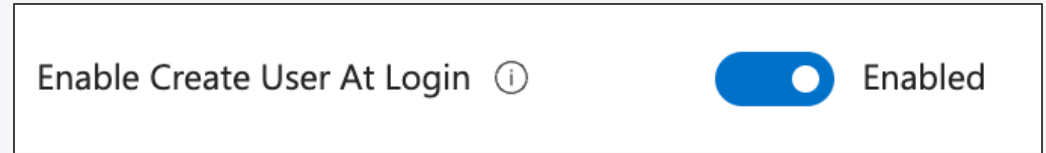
- Microsoft recommends Secure Enclave as the authentication method.
- Better/best options are superior to password-sync solutions even when using MFA.
- US federal govt is mandating phish-resistant auth.

# Passkey in Automated Enrollment

Demo

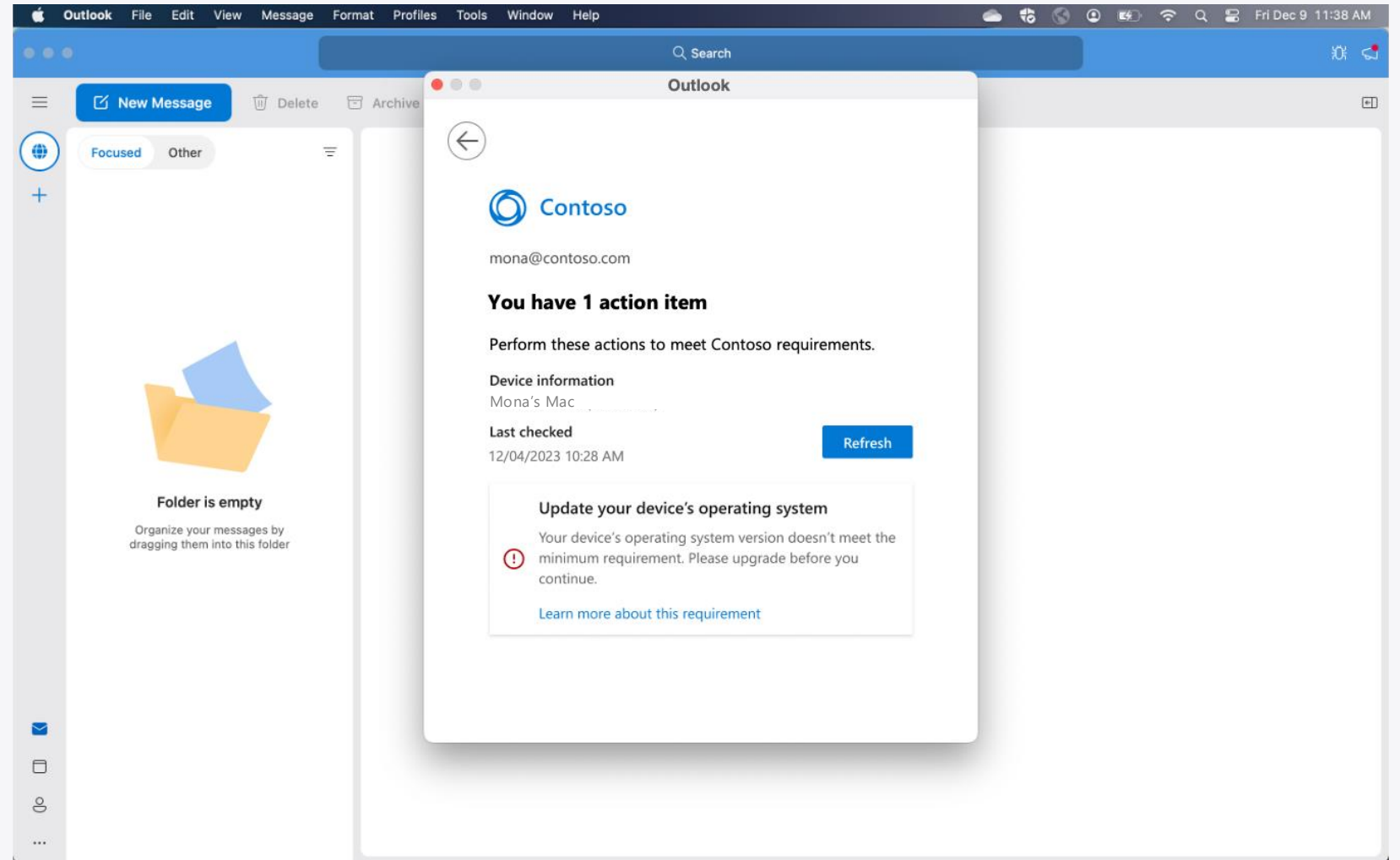
# Platform SSO: User creation & privileges

- Enable Entra ID user creation at login window.
  - Requires deploying login items payload to show “other” user option.
- New user authorization mode.
  - User rights for the first session.
- User authorization mode.
  - Persistent user rights for second session onwards.
  - Can be manipulated to elevate privileges for a session.



# “Just-in-time” Compliance

- Noncompliance detection and remediation experience from within protected apps.
- Company Portal app is not required!



# Settings Catalog

- Automated settings ingestion system.
- **Built for day-zero support:**
  - Minimized time to develop new settings from 8+ weeks to:
    - ~3 days for Sonoma
    - ~24 hours for Sequoia
  - Microsoft app preferences including variables
- Once ingested, new payloads are immediately tested for deployment.
- **Built for the future:**
  - DDM declarations
  - Data reference architecture

The screenshot displays the 'Settings Catalog' interface. At the top, there are two steps: '1 Configuration settings' and '2 Review + save'. Below this, there is a '+ Add settings' button. The main content is organized into categories. The first category is 'Microsoft Office', which has a 'Remove category' link. Underneath, there is a 'Microsoft Office' subcategory with a 'Remove subcategory' link. A blue information bar indicates '18 of 20 settings in this subcategory are not configured'. Below this, there are three settings: 'Enable automatic sign-in' (a toggle switch set to 'True'), 'Office Activation Email Address' (a text input field containing '{{mail}}'), and 'Microsoft Outlook' (a subcategory with a 'Remove subcategory' link). Another blue information bar indicates '22 of 24 settings in this subcategory are not configured'. Below this, there are two more settings: 'Enable New Outlook' (a dropdown menu set to 'New Outlook only') and 'Hide the 'Get started with Outlook' control in the task pane' (a toggle switch set to 'True'). The 'Office Activation Email Address' setting is highlighted with a red rectangular border.

# Settings catalog in action

```

title: Disk Management:Settings
description: Use this configuration to install disk management settings on the device.
payload:
  declarationtype: com.apple.configuration.diskmanagement.settings
supportedOS:
  iOS:
    introduced: n/a
  macOS:
    introduced: '15.0'
    allowed-enrollments:
      - supervised
      - local
    allowed-scopes:
      - system
  
```

```

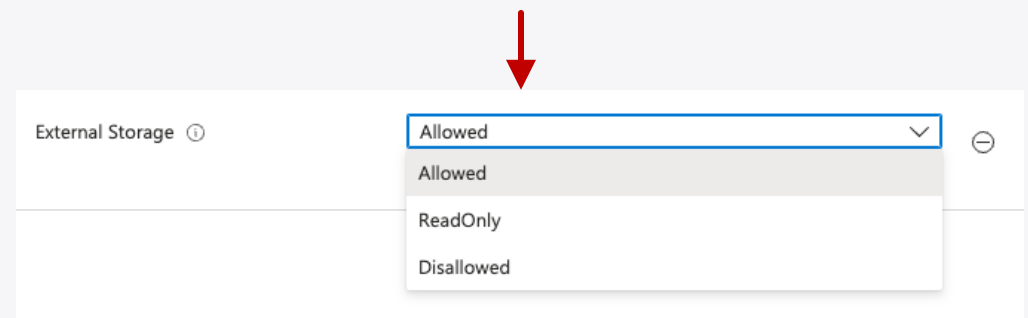
- key: ExternalStorage
  title: External Storage
  type: <string>
  presence: optional
  rangelist:
    - Allowed
    - ReadOnly
    - Disallowed
  
```

1. Apple YAML

```

{Name": "com.apple.configuration.diskmanagement.settings"
  "Applicability":
    "VersionApplicabilities": [
      {
        "InternalVersionRange": "[15.0,)",
        "DeviceType": 4,
        "Constraints": 0
      }
    ],
  "FriendlyName": "External Storage",
  "Description": "Specifies the mount policy for external storage:
    "OptionValue": {
      "OptionType": "String",
      "Value": "Allowed"
    },
    "OptionValue": {
      "OptionType": "String",
      "Value": "ReadOnly"
    },
    "OptionValue": {
      "OptionType": "String",
      "Value": "Disallowed"
    }
  },
  
```

2. Processed JSON understood by Apple Settings Catalog





# New in setting catalog

The image displays a screenshot of a settings catalog interface. It features several overlapping panels representing different categories of settings:

- 13 settings in "Extensible Single..."**: A partially visible panel on the left.
- 41 settings in "Extensible Single..."**: A central panel showing a list of settings with a "Setting name" header and a dropdown arrow.
- 7 settings in "Safari..."**: A smaller panel nested within the "41 settings" panel, also showing a "Setting name" header and a dropdown arrow.
- 3 settings in "..."**: A very small panel nested within the "7 settings" panel, showing a "Setting name" header and a dropdown arrow.
- 78 settings in "Restrictions" category**: A large panel on the right showing a list of 78 settings, each with a checkbox and a "Setting name" header. The settings listed are:
  - allow Genmoji
  - Allow Image Playground
  - Allow Internet Sharing Modification
  - Allow iPhone Mirroring
  - Allow iTunes File Sharing
  - Allow Local User Creation
  - Allow Multiplayer Gaming
  - Allow Music Service
  - Allow Passcode Modification
  - Allow Password Auto Fill
  - Allow Password Proximity Requests
  - Allow Password Sharing
  - Allow Printer Sharing Modification

# Declarative software updates

- DDM configuration for software update enforcement.
- Specify OS version or build to install by an exact time.
- System notifications and deadline are managed by macOS.

## Create profile

macOS - Settings catalog

✓ Basics   **2 Configuration settings**   ③ Scope tags   ④ Assignments   ...

+ Add settings ⓘ

---

^ Declarative Device Management (preview) [Remove category](#)

These settings configure the declarations used by Apple's declarative device management feature. These settings are separate from older MDM settings and only apply to a device enabled for declarative management. Learn more about declarative management at [developer.apple.com](https://developer.apple.com)

**Software Update** [Remove subcategory](#)

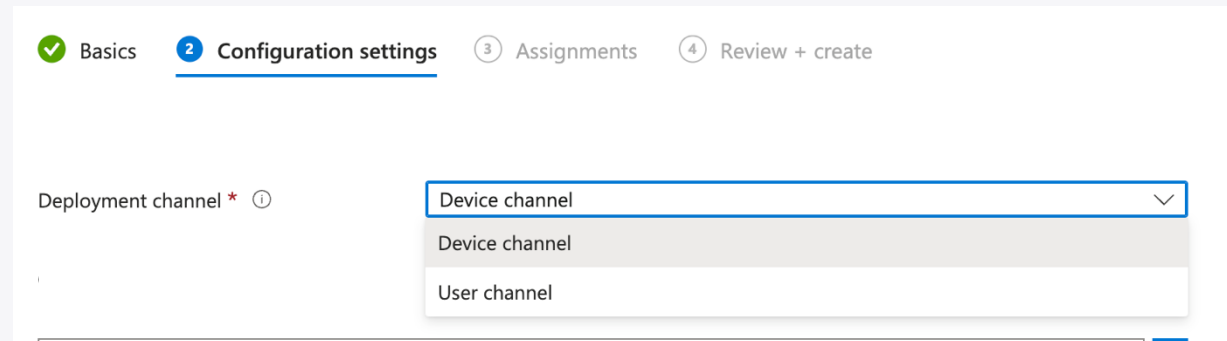
Details URL ⓘ	<input type="text" value="https://support.apple.com/en-us/HT213895"/> ✓	⊖
Target Build Version ⓘ	<input type="text" value="23B81"/> ✓	⊖
Target Local Date Time * ⓘ	<input type="text" value="12/15/2023"/> <input type="text" value="12:00 AM"/>	
Target OS Version ⓘ	<input type="text" value="14.1.1"/> ✓	

# Declarative Software Updates

Demo

# Resource access profiles via user channel

- Enable admins to choose in which keychain (device/user) RA profiles or certificates are delivered.
- By default, “device channel” is used, and the profile applies to any user logging in.
- Profiles in scope:
  - SCEP
  - PKCS
  - WiFi
  - VPN
  - Wired network
  - Trusted (root) certificate



The screenshot shows a configuration page with four steps: 1. Basics (checked), 2. Configuration settings (active), 3. Assignments, and 4. Review + create. The 'Deployment channel' field is highlighted, and a dropdown menu is open, showing three options: 'Device channel' (selected), 'Device channel', and 'User channel'.

# macOS app management

## Managed apps

Flat PKGs installed using MDM.

Simplified app upload.

Intune app wrapping tool is no longer needed.

Will take advantage of DDM improvements.

Purchased and custom apps are also supported.

## DMG apps

Most common Mac apps.

Easy to create with macOS Disk Utility.

Intune supports DMGs containing one or more apps (not .zip).

Deployed using Intune agent.

Expanded up to 8 GB per app.

## Flexible PKG installers

Great for deploying unsigned, component, or custom (non-flat) packages.

Uses built-in installer command.

Pre and post install scripts.

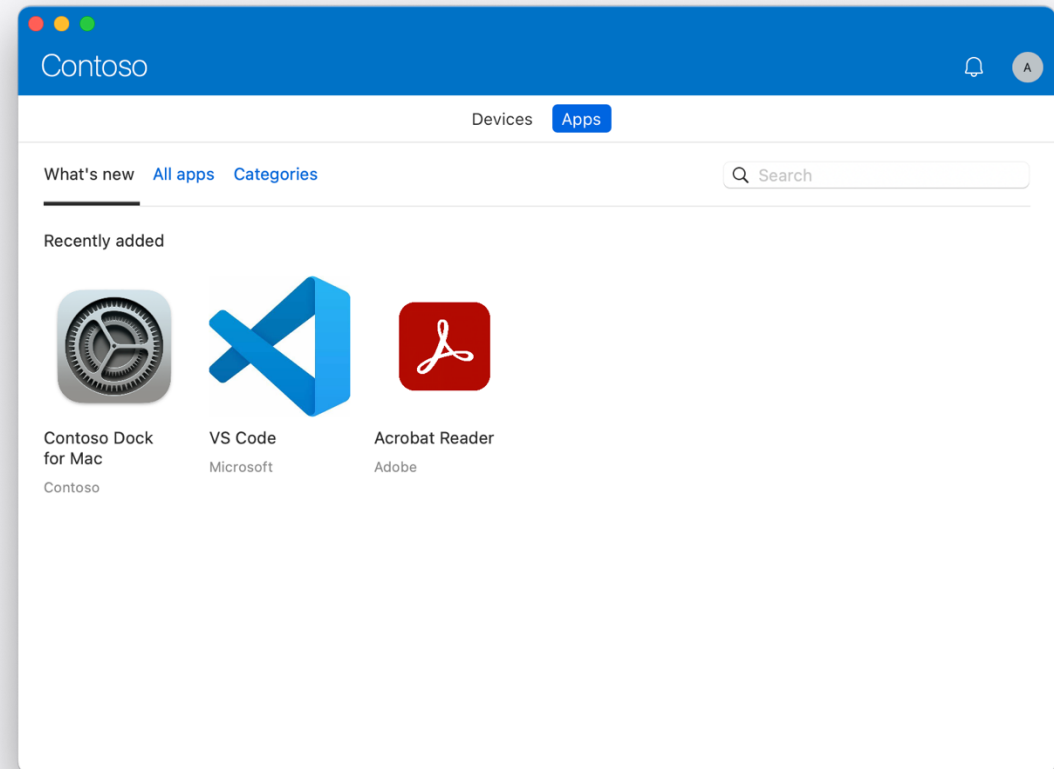
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Custom app detection – **Coming soon**

# Agent-installed PKG & DMG as available apps

- Brings the flexibility of app browsing and on-demand install to end-users on Mac Company Portal
- Payload-free packages can be deployed for self-service actions in Company Portal
- How agent-installed apps are detected:
  - (1) built-in search OR (2) Spotlight (`mdfind`) OR (3) install receipt



# Available apps & actions

Demo

# Custom app detection for PKGs

- Provide greater flexibility for admins to define detection logic for PKGs using shell scripts within PKG app policy.
- Admin will be able to choose between “built-in” and “custom” detection options.
- “Custom” option will require a script that will be run before and after the PKG is installed.
- Reporting options:
  - return 0 = success
  - return 1 = failed



# Intune Analytics and Automation Roadmap

1

## Data as the foundation of modern IT



### Asset discovery and Inventory

A rich catalog of attributes from Intune managed entities (devices, apps)



### Audit logs

Track and monitor events within your organization with a comprehensive record of all actions taken within Intune



### Custom attributes

Subscribe to additional attributes from an extensive catalog with contributions by OEMs and partners

2

## End To End Context



### Device querying

Quickly assess the state of devices in your environment with filtering and aggregation



### Custom dashboarding

Summarize large amounts of data and generate a visual representation of any part or aspect of your IT infrastructure



### AI/ML Analytics

Feed data for clustering, anomaly detection, and other algorithms

3

## Automation to simplify IT



### Execute one-time action

Run a device or backend action, script, remediation -- against a list of devices



### Apply configuration

Send a permanent payload or configure policy to each device meeting the specified criteria (e.g., upgrade app version, block app)



### Dynamic workflows

Orchestrate policy, app, device configuration workflows based on attributes through a modern, no-code interface

## Cross-platform



# Resource explorer

Demo

# Device query

Demo

# Key takeaways

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