Simplifying Device Enrollment and Content Distribution

Using Apple Programs for Device Enrollment and Volume Purchasing with Jamf Pro

jamf

Contents

Introduction

Target Audience

This guide is designed for IT administrators who use the following Apple programs:

- Apple School Manager (ASM)
- Apple Business Manager (ABM)
- Device Enrollment
- Volume Purchasing

> **Note:** For information on whether an Apple program is available in your country or region, see the following article from Apple's support website:
> https://support.apple.com/HT207305

This guide applies to organizations that have enrolled directly in Apple School Manager or Apple Business Manager, or have upgraded from Apple Deployment Programs. For information on how to upgrade from Apple Deployment Programs, see the following articles from Apple's support website:

- Upgrade your organization to Apple Business Manager
  https://support.apple.com/HT208817
- Upgrade your institution to Apple School Manager
  https://support.apple.com/HT206960

What's in This Guide

This guide provides a step-by-step workflow for automating and customizing the enrollment of new, institutionally owned iOS, macOS, and tvOS devices, and then assigning apps and books to users and revoking and reassigning apps purchased in volume.

> **Note:** Some settings and user interface names were changed in Jamf Pro 10.17.0. If you are using an earlier version of Jamf Pro, the names will not match the updated names in this guide.

Important Concepts

Before using the instructions in this guide, make sure you are familiar with the following Jamf Pro-related concepts:

- Scope
- Smart and static computer and mobile device groups
- Simple and advanced computer and mobile device searches

- Computer and mobile device enrollment

Additional Resources

For more information about the applications, concepts, and processes mentioned in this guide, see the following documentation:

- *Jamf Pro Administrator's Guide*
- Apple School Manager Help
  https://help.apple.com/schoolmanager
- Apple Business Manager Help
  https://help.apple.com/businessmanager
- Apple Deployment Programs Help
  http://help.apple.com/deployment/business

Overview

In conjunction with Apple programs for business and education, such as Apple School Manager and Apple Business Manager, Jamf Pro allows you to preconfigure the device enrollment process, customize the user setup experience, and distribute content to devices without even taking the devices out of the box before you hand them to users. The process is streamlined and cost-effective. You can decide what steps users will take when they set up their devices, and assign content to users so that the content becomes available as soon as the users register with volume purchasing in Jamf Pro. Additionally, when you assign apps to users, your organization retains ownership of the apps so that you can revoke and reassign them to new users at any time.

There are several steps involved in enrolling devices and distributing content with Apple Programs and Jamf Pro:

1. **Integrate with Automated Device Enrollment (formerly DEP).** This allows you to automate and streamline the device enrollment process in Jamf Pro.

2. **Prepare devices for enrollment and customize the user setup experience.** This allows you to preconfigure device enrollment and customize the user setup experience by creating a PreStage enrollment. As a result, devices are silently enrolled with Jamf Pro when the user turns on their device for the first time and completes the Setup Assistant.

3. **Integrate with volume purchasing (formerly VPP).** This allows you to distribute apps and books purchased in volume and to invite users to register with volume purchasing and assign content to them.

4. **Invite users to register with volume purchasing.** This allows users to register with volume purchasing so that the content that is assigned to users will become available on their devices when it is distributed to them.

5. **Assign content to users.** This allows you to specify the content that you want to assign to each user so that it can be distributed quickly. Content is assigned to users through a volume purchasing assignment in Jamf Pro.

6. **Distribute content.** This makes apps and books assigned to each user available on their devices or available to install from Jamf Self Service.

7. **Revoke apps.** This allows you to revoke apps from users and reassign them to new users.

Requirements

Automated Device Enrollment works on the following types of devices:

- Computers with macOS 10.9 or later
- iOS devices with iOS 7 or later
- Apple TV devices (4th generation or later) with tvOS 10.2 or later

To enroll computers and mobile devices, and distribute content using the instructions in this guide, you need:

- Jamf Pro 9.6 or later
- A service token (.vpptoken) from Apple
- A service token file (.p7m) from Apple
- A push certificate in Jamf Pro

Note: If you upgraded from Jamf Pro 9.2.x and have not yet completed the user migration process, you need to assign users to computers or devices. This allows you to track users assigned to each computer or mobile device and assign the desired content. For related information about how to assign users to computers and devices, see User Assignments in the *Jamf Pro Administrator's Guide.*

Integrating with Automated Device Enrollment

Integrating with Automated Device Enrollment (formerly DEP) allows you to configure automatic device enrollment in Jamf Pro and customize the user setup experience without the need to remove the devices from their original wrapping.

To configure an Automated Device Enrollment instance in Jamf Pro, you need to upload the server token file (.p7m) you received from Apple. (For information, see the Integrating with Apple's Device Enrollment section in the *Jamf Pro Administrator's Guide*.) To meet the needs of your organization, you can repeat the process to create multiple instances.

Configuring a Device Enrollment Instance

1. Log in to Jamf Pro.

2. In the top-right corner of the page, click **Settings** ⚙ .

3. Click **Global Management**.

4. Click **Automated Device Enrollment** 🔲 .

5. Click **New** (+ New) .

6. Enter a display name for the Automated Device Enrollment instance.

7. Click **Upload Server Token File** to upload the server token file you downloaded from Apple. This creates one Automated Device Enrollment instance in Jamf Pro.
   The information contained in the server token file is displayed.

8. Click **Save**.

9. To configure another instance, repeat steps 5-8.

> **Note:** A single server token file can only be assigned to one Automated Device Enrollment instance in Jamf Pro.

Preparing for Device Enrollment and Customizing the User Setup Experience

A PreStage enrollment allows you to store device enrollment settings and customize the user setup experience. As a result, the amount of time and interaction it takes to prepare devices for use is reduced, and devices are silently enrolled with Jamf Pro when users complete the Setup Assistant. Before you can use a PreStage enrollment, you need to create it in Jamf Pro.

Using a PreStage enrollment to add a mobile device to Jamf Pro manages the device. Using a PreStage enrollment to add a computer with macOS 10.10 or later to Jamf Pro manages the computer if user-initiated enrollment is enabled in Jamf Pro. For more information, see Computer PreStage Enrollments in the *Jamf Pro Administrator's Guide*.

Note: To enroll devices using a PreStage enrollment, the devices must be connected to the Internet during the Setup Assistant.

Configuring a Mobile Device PreStage Enrollment

1. Log in to Jamf Pro.
2. Click **Devices** at the top of the page.
3. Click **PreStage Enrollments**.
4. Click **New** (+ New) .
5. Use the General payload to configure basic settings for the PreStage enrollment and customize the user setup experience.
   To customize the user setup experience, select which steps you want to skip in the Setup Assistant. If you choose to skip steps, the user can enable these settings after the device is configured unless otherwise restricted.
6. Click the **Scope** tab and configure the scope of the PreStage enrollment by selecting the checkbox next to each mobile device you want to add to the scope.

   > **Note:** The devices listed on the Scope tab are the devices that are associated with the Automated Device Enrollment instance (formerly DEP) via the server token file (.p7m) you downloaded from Apple School Manager or Apple Business Manager.

7. Click **Save**.

Configuring a Computer PreStage Enrollment

1. Log in to Jamf Pro.

2. Click **Computers** at the top of the page.

3. Click **PreStage Enrollments**.

4. Click **New** (+ New) .

5. Use the General payload to configure basic settings for the PreStage enrollment and customize the user setup experience.
   To customize the user setup experience, select which steps you want to skip in the Setup Assistant. If you choose to skip steps, the user can enable these settings after the computer is configured unless otherwise restricted.

6. Click the **Scope** tab and configure the scope of the PreStage enrollment by selecting the checkbox next to each computer you want to add to the scope.

   > **Note:** The computers listed on the Scope tab are the computers that are associated with the Automated Device Enrollment instance (formerly DEP) via the server token file (.p7m) you downloaded from Apple School Manager or Apple Business Manager.

7. Click **Save**.

Integrating with Volume Purchasing

Integrating Jamf Pro with volume purchasing (formerly VPP), allows you to invite users to register with volume purchasing, assign apps and books, and revoke and reassign apps to users. Adding one or more locations to Jamf Pro enables the integration.

> **Note**: Jamf Pro supports Apps and Books features. For information on how to migrate to Apps and Books in Apple School Manager or Apple Business Manager, see the following article from Apple's support website:
> https://support.apple.com/HT208257.

When you add a location to Jamf Pro, you upload the service token that you obtained from Apple and specify the country. You can also specify other information, such as the contact person and Apple ID.

For more information on how to configure volume purchasing, see "Volume Purchase Location Considerations" in the Integrating with Apple's Volume Purchasing section of the *Jamf Pro Administrator's Guide*.

Adding a Location

1. Log in to Jamf Pro.

2. In the top-right corner of the page, click **Settings** ⚙ .

3. Click **Global Management**.
   On a smartphone or iPod touch, this option is in the pop-up menu.

4. Click **Volume Purchasing** .

5. Click **New** + New .

6. Enter a display name for the account.

7. Click **Upload Service Token** and upload the service token (.vpptoken) for the account.

8. Choose the country that is associated with the account.

9. (Optional) Select **Automatically Populate Purchased Content** if you want content purchased in volume to be populated in the app and eBook catalogs.

10. (Optional) Select **Notify users when an app is no longer assigned to them** if you want to send a notification to users when an app is revoked.

11. (Optional) Enter additional information about the account, including the contact person and Apple ID.

12. Click **Save**.

Inviting Users to Register with Volume Purchasing

Before you can assign content to users, the users must be register with volume purchasing by accepting an invitation. You can invite users to register by sending an invitation that prompts them to access a registration page where they are guided through the steps for registering. Once users are registered, they can receive the content that is assigned to them.

Sending an Invitation

1. Log in to Jamf Pro.
2. Click **Users** at the top of the page.
3. **Click Invitations**.
4. Click **New** (+ New) .
5. Enter a display name for the invitation.
6. Select the location to register users with.
7. Choose "Prompt users on their mobile devices" from the **Method** pop-up menu.

   > Note: The invitation is automatically added to the site that the location belongs to.

8. Click the **Scope** tab and configure the scope of the invitation.
9. Click **Save**.
   An invitation is immediately sent to the users you specified.

   You can view the status of the invitation in the list of invitations.

Assigning Content to Users

User assignments allow you to assign content purchased in volume to users. This allows you to specify the content that you want to assign to each user so that it can be quickly distributed.

When you create a User assignments in Jamf Pro, you choose a location, and all content purchased for managed distribution using the account is automatically available. Then you specify the content that you want to assign, and the users you want to assign it to.

Creating a Volume Assignment

1. Log in to Jamf Pro.
2. Click **Users** at the top of the page.
3. Click **Volume Assignments**.
4. Click **New** (+ New) .
5. Use the General payload to configure basic settings for the assignment, including the location.

   > **Note:** The assignment is automatically added to the site that the location belongs to.

6. Select the Apps payload and then select the checkbox for each app you want to assign.
7. Select the eBooks payload and then select the checkbox for each book you want to assign.
8. Click the **Scope** tab and configure the scope of the assignment.
9. Click **Save**.

Distributing Content

To make content available to users, you distribute it to devices. When content is distributed to users, it becomes available on their devices immediately after they register with volume purchasing.

Distributing an App to a Mobile Device

1. Log in to Jamf Pro.
2. Click **Devices** at the top of the page.
3. Click **Mobile Device Apps**.
4. Click **New** (+ New) .
5. Select **App Store app or apps purchased in volume** and click **Next**.
6. Browse the App Store, and do the following:
   a. Enter the name of the app.
   b. Choose an App Store country, and click **Next**.
   c. Click **Add** for the app you want to add.
7. Use the **General** pane to configure basic settings for the app, including the display name.
8. Choose "Install Automatically/Prompt Users to Install" from the **Distribution Method** pop-up menu.
9. Click the **Scope** tab and configure the scope of the app.
10. Click **Save**.

   The app is distributed the next time mobile devices in the scope contact Jamf Pro.

Distributing a Mac App Store App to a Computer

1. Log in to Jamf Pro.
2. Click **Computers** at the top of the page.
3. Click **Mac App Store Apps**.
4. Click **New** (+ New) .

5. Do the following:

    a. Enter the name of the app.

    b. Choose an App Store country, and click **Next**.

    c. Click **Add** for the app you want to add.

6. Use the **General** pane to configure settings for the app.

7. Choose "Install Automatically/Prompt Users to Install" from the **Distribution Method** pop-up menu.

8. Click the **Scope** tab and configure the scope of the app.

9. Click **Save**.

The app is distributed the next time computers in the scope contact Jamf Pro.

Distributing a Book

1. Log in to Jamf Pro.

2. Click **Users** at the top of the page.

3. Click **eBook available in the iBooks Store**.

4. Click **New** (+ New) .

5. Select **eBook available in the iBooks Store** and click **Next**.

6. Browse the iBooks Store, and do the following:

    a. Enter the name of the book.

    b. Choose an iBooks Store country, and click **Next**.

    c. Click **Add** for the book you want to add.

> **Note:** iBooks files (.ibooks) may need to be added manually.

7. Use the General pane to configure distribution settings for the book, including the display name.

8. Choose "Make available in Self Service" from the **Distribution Method** pop-up menu.

9. Click the **Scope** tab and configure the scope of the book.

10. Click the Self Service tab and customize the settings for the book, including the display icon.

11. Click **Save**.

The book is available in Self Service for users to install the next time the app is launched.

The User Experience

When users turn on their devices for the first time, they are prompted to choose a language. Mobile device users are required to connect their devices to Wi-Fi. Computer users are prompted to connect their devices to Wi-Fi, but are not required to do so.

> **Note** : To enroll devices using a PreStage enrollment, the devices must be connected to the Internet during the Setup Assistant.

Users then complete the Setup Assistant using the device enrollment and user setup experience settings that you preconfigured using a PreStage enrollment.

After devices are enrolled with Jamf Pro and setup is complete, the user is prompted to register with volume purchasing, which causes the content that you assigned to them to become available on their devices.

Revoking Apps

Revoking apps and reassigning them to other users saves your organization money by reducing the need to pay for new apps. To revoke one or more specific apps from users, you remove the apps from the VPP assignment. To revoke all the apps in a volume assignment from one or more users, you remove the users from the scope of the volume assignment. Apps that have been revoked can be reassigned to other users when needed.

Users are notified on their device when an app is no longer assigned to them. The app may or may not be removed from their device. If an app is not removed from the user's device, it can be removed by an administrator.

Revoking a Single App from Users

1. Log in to Jamf Pro.

   > **Note:** All app data is deleted when an app is revoked and removed from a device. Before revoking an app, remind users to get any important data out of the app.

2. Click **Users** at the top of the page.

3. Click **Volume Assignments**.

4. Click the volume assignment you want to revoke.

5. Select the Apps payload and remove apps from the assignment as needed.

6. Click the **Scope** tab and remove users from the scope as needed.

7. Click **Save**.
   If the **Notify users when an app is no longer assigned to them** checkbox is selected for the location, a notification is sent to users.

Revoking All Apps from Users

For each location, you can revoke all apps that have been assigned to users.

1. Log in to Jamf Pro.

2. In the top-right corner of the page, click **Settings** ⚙ .

3. Click **Global Management**.
   On a smartphone or iPod touch, this option is in the pop-up menu.

4. Click **Volume Purchasing** .

5. Click the location for which you want to revoke all apps.

6. Click **Revoke All** and then click **OK** to confirm.
   If the **Notify users when an app is no longer assigned to them** checkbox is selected for the VPP account, a notification is sent to users.