The Guide to Mac OS X Deployments in Business

JAMF software

So your organization is about to deploy Mac computers to your employees, and you're not sure where to start? That's where the Apple Management Experts can help. Since 2002, JAMF Software—and our Casper Suite solution—have helped organizations across the globe ensure their Apple programs are a success.

This guide highlights the steps needed to successfully deploy Mac computers in your organization, using the Casper Suite and Apple's user-friendly deployment programs.

Follow these **5 steps** to success.

Step 1	Step 2	Step 3	Step 4	Step 5
Prepare	**Configure**	**Purchase Apps & Books**	**Deploy**	**Manage**

Step 1 Prepare

1. Sign up for Apple's Device Enrollment Program (DEP) 📱 and Volume Purchase Program (VPP) 🔵

› Enroll your organization at deploy.apple.com.

› Get your Apple Customer Number from Apple or your Reseller–this is required for DEP.

› Use a shared email address for your Apple ID (ex: appleid@company.com).

› Define who has access to the DEP portal page via Admin setting within the DEP site.
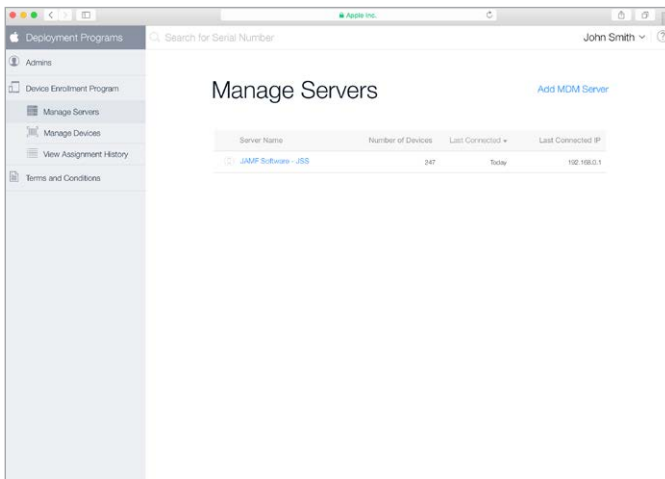
2. Consider your Apple ID strategy 🆔

› With OS X 10.11 and later, you can choose to deploy apps to either users' Apple IDs or directly to a device. Choose whether or not to use Apple IDs based on your app deployment preference.

› For user-based deployments, an individual Apple ID per user is recommended.

› Apple IDs require an email address, so consider using users' work email or their personal email.

› Users can create a new Apple ID during the setup of the Mac or here.

3. Ensure stable Wi-Fi and networking 📶

› Strong Wi-Fi and modern networking are critical for a successful deployment. Make sure your organization has enough bandwidth and wireless routers to handle all your new devices.

› The Casper Suite needs to communicate to your Mac computers over the network for management.

› You will need to select how you plan to host the Casper Suite on your network.

4. Link Casper Suite to DEP 🔶 📱

› Add the Casper Suite as your MDM server via "Manage Servers" on the DEP site.

› You will need to download a public key from the JAMF Software Server (JSS) and a Server Token from the DEP site. Details on this step can be found here.

› Once linked, you can assign new devices to be managed by serial or order number on the DEP site.

What is the Casper Suite?

› The Casper Suite is a collection of Mac and iOS management tools.

› The core of the suite is the JAMF Software Server (JSS) that acts just like a web server.

› The JSS can be hosted on any existing OS X, Windows, or Linux server on-premise.

› JSS hosting is also offered via our JAMF Cloud subscription.

1. **Build your Configuration Profiles**

Configuration Profiles are XML files that act like a recipe for your device settings and are deployed via the Casper Suite.

› Build your profile ingredients in the JSS with settings such as: Wi-Fi, Email, and VPN.

Policies are a more advanced method to configure OS X by talking directly to the OS and executing commands such as:

› Managing software updates, setting up printers, and enabling FileVault 2 disk encryption.

Both Profiles and Policies are built and deployed within the JSS.

› Both can contain security settings and restrictions for the Mac.

› Consider building different policies and profiles for different work groups.

2. **Configure the Casper Suite for Initial Setup Options**

› The PreStage Enrollment Settings in the JSS lets you define how the Mac behaves upon the first boot up.

› From here select options to manage devices, lock profiles, and skip startup steps.

› Additionally, you can associate employees with their Mac using a Directory Service (like Active Directory).

3. **Plan how to prepare your Macs. The Casper Suite has the ability to prepare Macs, just like other tools for PCs.**

Zero Touch Provisioning

› With zero-touch, user-driven provisioning, organizations can leverage DEP to automatically enroll Macs to the Casper Suite, which triggers policies and profiles to install apps and configure settings. User-driven provisioning is the ideal method to prepare Macs.

IT Assisted Provisioning

› If your organization doesn't have access to DEP, you can leverage IT-assisted provisioning to build smaller modules on top of an existing OS X instance. Additional settings and apps are then added via Policies and Profiles.

What about existing Mac computers on your network?

› Recon is an app that is included with the Casper Suite, designed to scan your network for Mac computers that are not managed by the Casper Suite.

› The network scanner in Recon allows you to remotely enroll multiple OS X computers. It scans specified IP ranges and enrolls any computers that it can connect to over SSH (Remote Login).

1. **Purchase Mac App Store Apps and Books using Apple's Volume Purchase Program (VPP)**

There are two ways to purchase content:

› **Managed Distribution (recommended):** License the content to your users. You retain ownership of Apps (but not books), allowing you to revoke and reassign them as needed.

› **Redeemable codes:** Download a spreadsheet containing redeemable codes that you can then provide to your users. This method permanently transfers an App or book to the Apple ID that redeems the code.

2. **There are two ways to assign apps. The following steps outline both user-based (Apple ID required) and device-based VPP app deployments.**

Assign to devices (device-based VPP):

› Apps will be deployed directly to devices. No invitations necessary.

› Device-based VPP requires OS X 10.11 or higher devices.

› Scope apps and other content directly to devices within the JSS.

› Assigned content will automatically download to the device.

Assign to users (user-based VPP):

› Apps will be deployed to end users.

› User-based VPP requires OS X 10.9 or higher devices.

› Create a VPP invitation email within the JSS and scope to desired users.

› Users receive an email with a registration link and are guided through the process of downloading their content.

› Details on the process are here.

3. **Build packages for additional Apps**

› Not all Apps are sold via the Mac App Store—this is why we built Composer.

› Composer is part of the Casper Suite and lets you create custom packages (.pkg/.dmg).

› Since Composer uses a snapshot method for package building, you can deploy Apps with customizations. For example: Set the default homepage on Chrome, or the default font on Word.

What is Self Service?

› Self Service is an App that acts like an internal App Store for your organization.

› Self Service can contain Apps linked to VPP, packaged Apps, eBooks, printer settings, Configuration Profiles, and custom Policies.

› If you disable App install rights for a user, Self Service can serve as a white list for approved Apps.

Deploy

Building a plan for handing out new Mac computers is crucial for a successful deployment. Consider 2 different levels of IT Involvement when building your plan:

1. IT Assisted (Provisioning) 📦

1. IT builds policies and profiles in the JSS.

2. IT receives a new Mac, unboxes, sets up local account.

3. Enrollment package is added on top of the standard OS X install.

4. Additional policies and profiles are applied over the air for settings and software.

5. New Mac is handed to the end user.

2. Zero-touch, user-driven (Device Enrollment Program) 📱

1. IT builds policies and profiles in the JSS.

2. New Mac computers are sent directly to end users.

3. End users unbox and setup the local account.

4. Enrollment package is automatically applied over the air via DEP.

5. Policies and profiles are applied over the air for settings and software.

! Integrate with Directory Services

› The Casper Suite integrates with common directory services like Active Directory for user data and group memberships.

› Users can authenticate to Self Service using their directory service credentials.

› You can also scope profiles, Apps, and books to directory user groups.

› Use the set up assistant in the JSS to configure your directory services automatically.
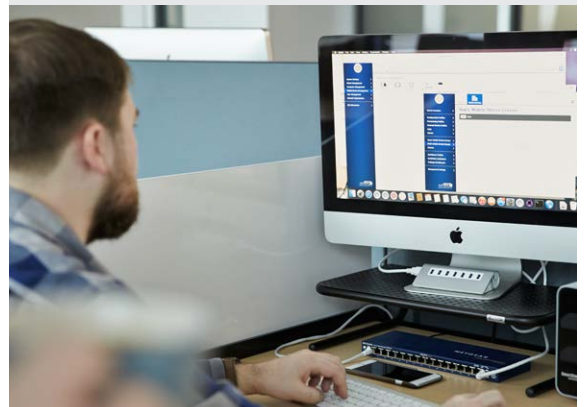
1. **Enable your end users, give control to IT**

> › Update Self Service with new content to encourage usage.

> › Leverage Push Notifications to push important messages directly to devices.

> › Customize the JSS with smart groups and advanced reporting.

2. **Maintain the Mac by managing software patches**

> › Keep your Mac computers up to date with OS and application patches.

> › Build your patches via Composer and use the JSS to distribute your package files.

> › Use dynamic inventory data in the JSS to determine which Mac needs patches.
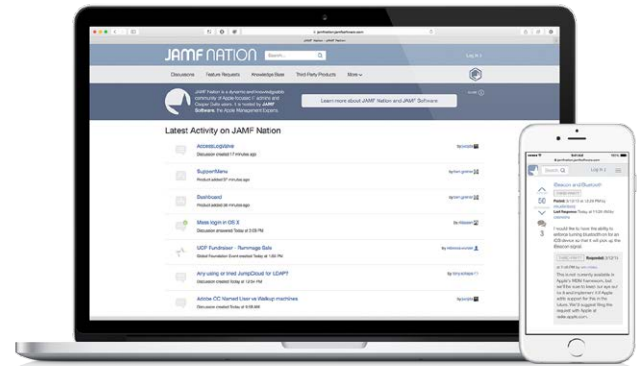
3. **Join JAMF Nation for ideas on how to improve your deployment**

> › JAMF Nation is a knowledgeable community of Casper Suite users helping each other.

> › This is a free service, open to all, whether you are a JAMF Software customer or not.

> › Learn from other organizations about their Mac deployment and share best practices.

Ready to get started?

We're happy to help. Reach out to us at info@jamfsoftware.com or give us a call today.

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