A Migration Guide for

Switching Mobile Device Management Solutions
Get more out of iPad and Mac with an Apple-exclusive solution

As the makers of Jamf Pro — an Apple management solution used by nearly 5,000 schools to enable three million students — we have helped many organizations smoothly transition their iPad and Mac devices to Jamf. And when schools move to Jamf, more than 93 percent of them renew when their contract is up.

So how do these schools switch to Jamf?

This guide prepares you for the change, providing the necessary steps to transition MDMs in a way that minimizes disruptions to faculty, teachers and students.
Ace your migration with a manageable timeline

Once the decision is made to switch MDM solutions, the first step is to construct a logical, achievable timeline. The timeline should include critical milestones, financial considerations, school breaks, or any other factors that may impact implementation success. Choose a time when devices can be out of use in order to give IT time to make the transition without impacting users.

Only one MDM profile can be on a device at a time, meaning you’ll need to remove the existing MDM profile before enrolling into the new — more on that later.

To help construct your timeline, we consulted several customers who have successfully made the switch to Jamf. Based on their feedback, we’ve created a model timeline for your MDM migration.

Ample time from solution purchase to migration completion is suggested, but note that this process can happen as quickly or as slowly as you’d like. It is important to allot time for testing throughout the migration process to catch any miscues before the first day of school.

Spring

DAY 1 Purchase of new MDM
Purchase order signed with your new provider.

DAY 2 Attend live primers
Schedule your implementation before you require a live production server.

WEEK 1 Prepare infrastructure
Prepare your on-premises environment if necessary. Disregard if utilizing a hosted solution.

WEEK 1 Document production workflows
Evaluate and compile thorough documentation on how you currently use your MDM.

WEEK 2 Export assets
Remove assets from current MDM to prepare for transitioning to the new MDM.

WEEK 3 Store device data
Decide what data needs to be kept and select how and where to store it.
WEEK 4  **Device turn in (if applicable)**  
Collect devices prior to the last day of school. If allowing students to keep their device over the summer, notify them that access will be unavailable while you wipe and reset their iPad.

WEEK 4  **Un-enroll devices from current MDM**  
Transfer Apple’s Device Enrollment Program (DEP) and Volume Purchase Program (VPP) tokens (if applicable) and reset each device.

WEEK 5  **Enroll devices into Jamf Pro**  
Assign previous DEP and VPP tokens (if applicable), import information and enroll devices into new MDM.

WEEK 5  **Hand out devices**  
Provide teachers and students with full access to their newly enrolled device.

WEEK 6  **Post-migration checks**  
Check device inventory to ensure data transfer and device enrollment.
A real-world transition timeline from Minnetonka Public Schools

What are DEP, VPP and Apple School Manager?

Apple’s Device Enrollment Program (DEP) automates enrollment into MDM during the Setup Assistant process for devices purchased through Apple. Apple’s Volume Purchase Program (VPP) allows schools to buy apps in bulk from the Apple App Store. Both DEP, VPP and Manage Apple IDs are becoming part of Apple School Manager, which launched into Preview with iOS 9.3 and is expected to become generally available in 2017.
Preparing for the MDM transition

Whether you are migrating your Macs or iPads or both, this guide applies. The following steps address the process for iOS. For Mac, the migration process is even easier.

If you haven’t already...

Prior to configuring your new MDM to your specifications, it is essential to prepare your current management solution for the migration. Compile thorough documentation (if you haven’t already) about how you currently use your MDM and identify any critical workflows.

This is also the perfect opportunity to re-evaluate your existing MDM strategy to identify gaps and potential areas for improvement. Once documentation is in place, begin the process of removing items from your current MDM and preparing to rebuild them in your new solution.
Preparing for the MDM transition

What about Mac?

Jamf for Mac management goes beyond MDM by installing an agent for management. This means you don’t always have to erase your Macs to get them under management. Organizations can approach switching Macs in three ways:

1. If the Macs are associated with DEP (now Apple School Manager) and you are comfortable erasing them, then restore Macs to factory settings and they will automatically be enrolled into Jamf during setup — similar to the iPad process described in this guide.

2. If you’d prefer not to erase them, you can install a package file that will enroll the Mac and establish management trust to your Jamf server. You can choose to install this package file manually or use a tool like Apple Remote Desktop.

3. Alternatively, you can direct your users to download that same package file from an enrollment website that is set up for you with Jamf. This gives users the flexibility to install on their own.

Note: The first option removes the old MDM during reformatting. For options 2 and 3, you can remove the old management tool by sending a command via Jamf, which Jamf can do on your behalf.
Preparing end users for the transition

Transparency into the MDM switching process is essential to ensure device users do not lose valuable resources and precious classroom time. As such, inform them of the change and associated process early.

Communication considerations include:

- Why this transition is taking place.
- What users can expect throughout the migration.
- What a user’s role is in the process.
- A timeline for the process.

The last point is particularly important, especially if users will be required to wipe and re-enroll their own device. Since this is a manual process, we don’t recommend having users wipe and re-enroll their devices. In fact, most schools have gone so far as to disable this feature so that students are unable to un-enroll their device from management. But, if you’d like to have students and faculty participate in the process, draft a thorough step-by-step guide to ensure they fully understand their assignment. Doing this will help alleviate union concerns for many school districts.
A step-by-step workflow

Now that you have thought through your timeline, compiled the appropriate documentation, and notified impacted parties, it is time to get your devices un-enrolled from one tool and enrolled with your new tool.

**EXPORT ASSETS**, including:

- Wi-Fi profiles
- Security certificates
- Scripts or other workflow objects
- Packages and apps
- Device inventory
- Configuration profiles
- Group memberships and users

**Don’t forget about your data**

You’ll also need to prepare for transitioning your data to the new MDM. When migrating iPad devices that have been enrolled in DEP or Apple School Manager, you’ll want to wipe all content from the device.

Prior to doing so, decide what data needs to be kept and how to accomplish that. Consider what data is local to the device and what data is hosted elsewhere. For example, email is often stored on a IMAP or Exchange server, so it can easily be re-downloaded after device setup, while other files may be stored in cloud services and retrieved at a time of your choosing.
A step-by-step workflow

**STORE DATA** in your preferred cloud storage service so you aren’t relying on users to back up their data. A few examples of cloud storage providers include:

- iCloud
- Dropbox
- Box
- Google Drive

**Note:** Restoring an iCloud backup on devices has posed problems for schools in the past. When doing this step, consult an Apple IT community such as Jamf Nation for assistance with any questions or reach out to Jamf directly.

**Note:** If your current solution doesn’t support Activation Lock reset, ensure users log out of iCloud prior to turning in their device.

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**Remember Activation Lock too!**

When wiping devices, some MDM providers automatically reset Activation Lock — an iOS 7 feature that prevents someone from activating an iPad or iPhone if it is lost or stolen. To keep your devices as secure as possible, test your MDM to ensure if Activation Lock is reset automatically or not. This is often true for FileVault encryption keys that you have escrowed as well.
A step-by-step workflow

UN-ENROLLING FROM YOUR CURRENT MDM

With assets exported, data stored and users informed of the migration, begin removing devices from the current MDM. Depending on whether you enrolled your devices using Apple School Manager (formerly DEP), you have two paths to choose from.

OPTION A  Using DEP or Apple School Manager

1 Move DEP and VPP tokens to new MDM
   • Your DEP token is a record of all devices purchased at your school.
   • Your VPP token keeps track of all app purchases.

2 Un-enroll or wipe devices
   • Utilize a mass wipe command. This can be the last command you submit in your current MDM. Automating this process ensures that all devices are wiped and un-enrolled properly.
   □ OR □
   • Have each student and faculty member reset their iPad by erasing all content and settings in the Settings app. Ensure you have a method to guarantee Activation Lock is disabled.

During setup, end users will need to join a wireless network as the SSID is lost during the wipe. Further, wiping devices triggers the DEP functionality to begin.

OPTION B  Not Using DEP or Apple School Manager

1 Un-enroll or wipe devices
   • Utilize a mass wipe command if your current MDM offers it. This can be the last command you submit in your current MDM. Automating this process ensures that all devices are wiped and un-enrolled properly.
   □ OR □
   • Have each student and faculty member reset their iPad by erasing all content and settings in the Settings app. Ensure you have a method to guarantee Activation Lock is disabled.

While not using DEP or Apple School Manager may appear to be a shorter route to migration completion, in reality, it is the exact opposite.

This process is manual and requires you to physically touch each device. At roughly 30 seconds to one minute per iPad, the hours quickly add up. Utilizing DEP or Apple School Manager make this an automated, zero-touch process.
## MIGRATING TO JAMF PRO

It’s time to begin formally transitioning your Apple devices to your new MDM solution — Jamf Pro. Once again, the path you choose is dependent on whether or not you utilize Apple’s deployment programs.

### OPTION A: Using Apple’s Deployment Programs

1. **Assign previous DEP and VPP tokens to Jamf Pro**
   - Your DEP tokens identify the devices owned by the organization. Transferring these to the new solution automates the assignment process for each device.
   - Once you add your VPP token to the new MDM service, the apps are removed from all devices on the old MDM. Ownership of the apps remain intact. Upon uploading the token to Jamf, you can reassign all apps without needing to re-purchase.

2. **Import information that you previously exported from your old MDM**
   - This may require custom scripts, so make sure to test before importing.

3. **Create your pre-stage enrollment**
   - Check the “Supervised” box during pre-stage enrollment.

### OPTION B: Not Using Apple’s Deployment Programs

1. **Not applicable**

Since you’ll be migrating manually and not using Apple’s deployment programs.

### What is Supervision?

Supervision enables a greater level of iPad management compared to simply using MDM enrollment. Without Supervision, you are unable to disable “Enable Restrictions” which removes the ability for the user to access the restrictions menu in Settings.
# RE-ENROLLING DEVICES

The last step is to start managing your devices in Jamf Pro by re-enrolling them. This can be a very easy process if you are utilizing Apple’s deployment programs. Follow the Apple Configurator steps for the manual process.

## Using Apple’s Deployment Programs

1. **Re-enroll devices into management**
   - All students and faculty need to do is walk through the short setup process via the Setup Assistant when they first turn on their device and they are automatically enrolled.
   - After devices have been enrolled, you can deploy profiles, apps, configurations and resources with your new solution.

   **Note:** It may take a short time for apps and resources to be available to students. The length of time varies based on the amount of apps that need to be deployed.

   **Note:** Utilize an open Wi-Fi network during enrollment. This ensures students are connected to your network and enrollment is not interrupted.

## Not Using Apple’s Deployment Programs

1. **Enroll with Apple Configurator or have users visit a web URL**

   Once again, this may seem like a shorter route to completion, but you’ll need to do step 5 for each of your devices as opposed to utilizing Apple’s deployment programs to complete the enrollment process for all devices with one step.

   With this path, you’ll need to dedicate staff and their time to handle each device to enroll in the new management solution.

   **Warning:** When not using Apple’s deployment programs, students can undo IT settings and have an unmanaged iPad.
Beyond device migration

Ensure student and teacher device success
The faster you get iPad devices into students’ and teachers’ hands, the better. Ideally, you’d accomplish this prior to the first day of school, especially if your school provides preconfigured apps and loads them accordingly on every student device. By providing devices in advance, you can test and ensure that all apps have been successfully downloaded onto each iPad prior to the start of the school year or semester. This allows teachers and students to focus on education and not the technology.

Post-migration checks
Shortly after migration, compare your exported device inventory with the device inventory in Jamf Pro to confirm that everything enrolled and transferred properly. This is also a good time to have students log into their iPads using their iCloud or Managed Apple ID to restore any cloud hosted data to applicable apps.
Migration checklist

- Create a logical timeline for the entire process
- Evaluate and document all production workflows
- Prepare end users for the transition
- Export assets from the old MDM
- Store device data in preferred cloud storage service
- Conduct device turn in or notify students (if applicable)
- Move DEP and VPP tokens to new MDM (if applicable)
- Un-enroll or wipe devices
- Assign previous DEP and VPP tokens to Jamf Pro (if applicable)
- Import assets and data information into the new MDM
- Re-enroll devices into management using preferred method
- Conduct device handout (if applicable)
- Check device inventory to ensure data transfer and device enrollment
Know-how to seamlessly migrate to a better solution

While undertaking an MDM migration may seem daunting, this guide hopefully provides you with the insight and confidence necessary to leave behind your previous solution and transition to one with the capabilities you’ve always wanted. With Jamf, you’re never alone during the transition. From our implementation process — known as a JumpStart — to our world-class support, professional service and zero-day support for all Apple features, we’ll ensure you have the resources you need to hit the ground running during and following your smooth migration.

Request a demo