Apple Specific Considerations

FileWave loves Apple, and so do our customers. If you happen to be one of the organizations that have chosen to incorporate Apple devices into their infrastructure, from iPads to MacBooks, here are some crucial considerations for a successful refresh and (re)Enrollment:

The Apple Program Considerations

You no doubt already know about the various Apple Programs, such as ABM/ASM/VPP/DEP/MDM and even APN. Each of these programs, explained below, provide critical roles during device enrollment. As with everything else (re)enrollment, pre-work is good work, and each program has it's own pre-requisites (and sometimes lead-time). You'll want to review the specifics of each below:

Apple Push Notification (APN)

Apple Push Notifications are the method by which FileWave initiates communication with your devices through the Apple MDM framework. Every FileWave server must have a valid APN token assigned, and it must be refreshed annually. Before any major project, you should make sure your APN has plenty of life left (and you can renew early).

Apple School Manager/Apple Business Manager Integration (ASM/ABM)

Apple School Manager (for educational institutions) and Apple Business Manager (for businesses) are central to the administration of Apple devices. When integrated with FileWave, these platforms provide granular control and enhanced capabilities. They allow you to:

- Purchase and distribute apps and books in volume: Ensuring the right apps are available for the right users at the right time.
- Create Managed Apple IDs for students and staff: Managed Apple IDs provide a suite of services, including iCloud, collaboration with iWork, and Classroom for student-teacher interaction.
- Configure and update device settings: You can set up device configurations, restrictions, and more, ensuring the devices align with the organization's security policies and operational needs.

But, you can't use these programs if they aren't established and integrated with FileWave. So, in particular if you are setting up a new environment, you'll want to give yourself plenty of time before your project to enroll.

Volume Purchase Program (VPP) and Device Enrollment Program (DEP)

The VPP (Volume Purchase Program) and DEP (Working with Apple's Device Enrollment Program) play a critical role in managing applications and automating device enrollments. Their integration with FileWave allows for:

- Pre-assignment of essential apps/licenses: Save time by pre-assigning devices with required software before they land in the user's hands.
- Automatic device enrollment: With DEP, devices are automatically enrolled into your management system when activated, ensuring they are immediately ready for use, and remain under management

VPP and DEP also require initial setup, and shouldn't be left to the last minute. DEP profiles control device configuration at setup time, and you'll want to make sure you procure all licenses through VPP well ahead of time to avoid last-minute congestion on Apple systems. (Remember you aren't the only organization enrolling 5,000 devices today).

Using FileWave's DEP profile assignment wizard is a great way to pre-configure your devices automatically, even before they leave the box.

Apple MDM Framework (and known issues)

Apple were very innovative with the creation of the MDM framework, and it allows for controlled management of endpoints through known, controlled mechanisms. It is very structured, and means that MDM vendors provide support in very common and defined manners. Knowing for instance that an MDM command to InstallApplication X won't be able to run until the push notification is able to be sent to the device plays into your capacity planning for (re)enrollment. So, it is structured, but it (like any other system) isn't perfect and there are some additional recommendations we'd make to ensure success:

- Work ahead as much as possible, especially with application licenses...during times of very larger enrollments (particularly in schools in the early fall) there can be tremendous load on Apple services, slowing down throughput...but if you licensed 3 days before you need them, you have no worries
- Only purchase what you actually need
  - Many customers say "the license is free, so I'll buy 10,000 even though I need 100". Don't do that. Every license you purchase does create system load, even if you don't end up using it. It can massively impact VPP sync time, so less is more here.
- Eliminate Antiquated applications
  - There have been reports of iPads, in particular, having an issue when applications are assigned to them that are no longer available in the App store. In certain circumstances, attempted installation of these apps can make the mdm client stop responding on the device, and a reboot required.
  - For best results, try to keep your list of applications in the environment as lean as you can...organization standards and approval processes here can be quite useful
  - Identify and remove "no longer available" applications from your device assignments
- Keep a mindful eye
  - There have been reports (and we have witnessed it internally as well) of macOS mdm clients dying over time. We believe Apple are working on addressing this issue, but in the meantime, please see the below articles on working around this particular issue
- Work around some known OS Update issues: Reported Issues with macOS Software Updates

- We know that Apple MDM can get stalled: <u>Address Stalled MDM Commands</u> which can cause a slowdown for you and make it harder to patch systems. Review that article for a workaround, but ideally open a ticket with <u>Customer Technical Support</u> and with Apple so that we can all push harder for a fix from Apple.
  - <u>Nudge for macOS Software Updates (macOS Script)</u> is one workaround that many people like for macOS patching.
  - <u>S.U.P.E.R.M.A.N. for macOS Software Updates (macOS Script)</u> is another workaround that is also really great.

Non-VPP Apps

Everyone has some apps that aren't in VPP that they need to push out. If filesets, fileset magic, .APP installs and custom filesets aren't quite enough options for you :), take a look at <u>Installomator - The one installer script to rule them all (macOS Script)</u> to easily push out over 450 different applications. Completely opensource, and completely super!

Use the Kiosk

With all platforms, but particularly iOS/iPadOS, using the Kiosk (<u>Kiosk</u>) to allow your customers to easily and effectively install pre-approved applications and profiles will help you both:

- Maintain your sanity
- Mean that your customers can install any needed app, whenever they need it

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