



The Casper Suite

One-to-One iPad Deployments in Education



Many school districts are undertaking projects to provide one iPad for every teacher and student in an entire district, school, or grade. These projects make this exciting Apple technology available to students of all backgrounds, ages, and learning styles. With new apps and eBooks being published for students every day, we currently sit at the beginning of a new era in educational tools.

For IT professionals, new technologies often bring along new challenges. At JAMF Software, we have worked with hundreds of school districts as they have implemented iPad pilots and programs. Our experiences navigating these technical waters with educators have taught us a few lessons. There are many implementation decisions to be made when starting a new one-to-one program. We have found that answering one simple question becomes the basis for all other decisions: does your district or school need to retain ownership of all apps and content purchased by the organization?

By making informed and thoughtful decisions about ownership models, organizations are more likely to achieve success as they open up new worlds of learning to students.

Institutional or Personal Ownership

In some school districts, the question of ownership of apps and content may be answered by law or policy controlled by the school board or other governmental body. If your school district is mandated to retain ownership of apps or content purchased by the district, this requirement will help clarify the structure of your one-to-one implementation. If, however, the school is able to classify and budget apps and content as consumables that are used and retained by the students, other technical management and support options become available to you.

Why is this question so critical to your technical solution architecture? The answer lies in how iPad apps and eBooks are sold through Apple's App Store or iBookstore. When an iPad contacts the App Store or iBookstore, an Apple ID is required to purchase content or to redeem VPP codes. An Apple ID is tied to a specific email address and a password. Once content is purchased using an Apple ID, it cannot be transferred to another account and remains with that account in perpetuity. Thus, which Apple ID is associated with the purchase of an app or other content determines who owns the content in the future – the institution or the student end user.

So it bears careful consideration at the outset of your one-to-one program on how this question will be answered for your organization. Below, we have summarized the best-case technical support scenarios for one-to-ones with different answers to this question. If your organization is able to transfer ownership of apps and content to end users, we consider this the Personal Ownership model and have summarized the technical recommendations, benefits, and considerations of this solution. If your organization must retain ownership of institution purchased assets, we consider this the Institutional Ownership model and have summarized the technical recommendations, benefits, and considerations of this solution as well.



Ownership Models



Institutional

or



Personal

Organizations should carefully consider the ownership model they adapt for ownership of apps and eBooks. By making informed and thoughtful decisions, organizations increase the likelihood of successful one-to-one programs.

Typical Institutional Ownership Components

Benefits

- Organization retains ownership of apps and content
- Restrict ability of end users to download additional content
- Works for students under 13 years old
- Retain maximum control over the device and its contents, including settings not available via MDM
- Ability to uninstall apps from devices

Considerations

- Devices must sync manually to receive any new content
- Cost of sync station hardware*
- Time and expertise required to provision and maintain sync stations

*The Casper Suite for OS X enables you to efficiently manage your sync stations, providing iOS, app, and eBook distribution for iOS devices. Once a sync station is configured, the initial setup of iOS devices is handled by tethering them via USB cable to this computer.

Management Tools

For a one-to-one iPad program using the Institutional Ownership model, we recommend adopting a sync station workflow. Activation, enrollment, initial provisioning, and ongoing app and eBook distribution are performed in a tethered mode. We further recommend using an OS X computer managed by the Casper Suite as the sync station computer. The charts below show which tool is recommend for each task in managing the iPads, as well as setting up and supporting the Mac OS X sync station computers.

iOS Management Tools		
		
Activation	 	
Enrollment	 	
Configuration	 	
Security Management	N/A	 
App Distribution	 	
eBook Distribution	N/A	
Inventory		
App Updates	 	
Backups	 	
Restore	  	N/A
iOS Updates	  	

Sync Station Management	
	Target
Settings	Imaging 
	Inventory 
	Settings Management 
	Software Distribution 
	Settings for Backup 
	Settings for Restore 
Content	Content (Apps, eBooks) 
	Updates (Apps, eBooks) 
	Configuration Profiles  
	Enrollment Profiles  
	iOS Updates 

Typical Personal Ownership Components

Benefits

- Ability to distribute App Store apps and iBookstore content over-the-air using VPP codes*
- Ability for end users to download personal content
- Most efficient use of IT resources

*Volume Purchase Program (VPP): VPP code management capabilities are limited to eligible organizations that have registered for Apple's Volume Purchase Program (VPP).

Considerations

- End user must be 13 years old or older to legally create and maintain an Apple ID, or a parental Apple ID must be used
- Ownership of apps and eBooks purchased by the institution are transferred to the end user
- Students may be able to load non-approved apps or eBooks to the device (iTunes Parental Control settings may address concerns)
- Unmanaged apps cannot be uninstalled

Management Tools

For a one-to-one iPad program using the Personal Ownership model, we recommend adopting a workflow that allows the end user to set up and support the device using a personal Apple ID, supported by IT via the Casper Suite. As such, we recommend that all tasks use tools that work over-the-air with a reliance upon the Casper Suite's Self Service console for distribution of content.

iOS Management Tools		
	USB	Over-the-Air
Activation	 	
Enrollment	 	
Configuration	 	
Security Management	N/A	 
App Distribution	 	
eBook Distribution		
Inventory		
App Updates		
Backups	 	
iOS Updates	  	

