

# Apple Deployment InDEPth

Apple Management Nirvana Awaits!



# Who is this guy?

Long-time Mac guy, former Apple employee, recovering sys-admin.



# Macjutsu





# Consultant



JAMF  
software





# Conferences



March 11 - 14, 2015



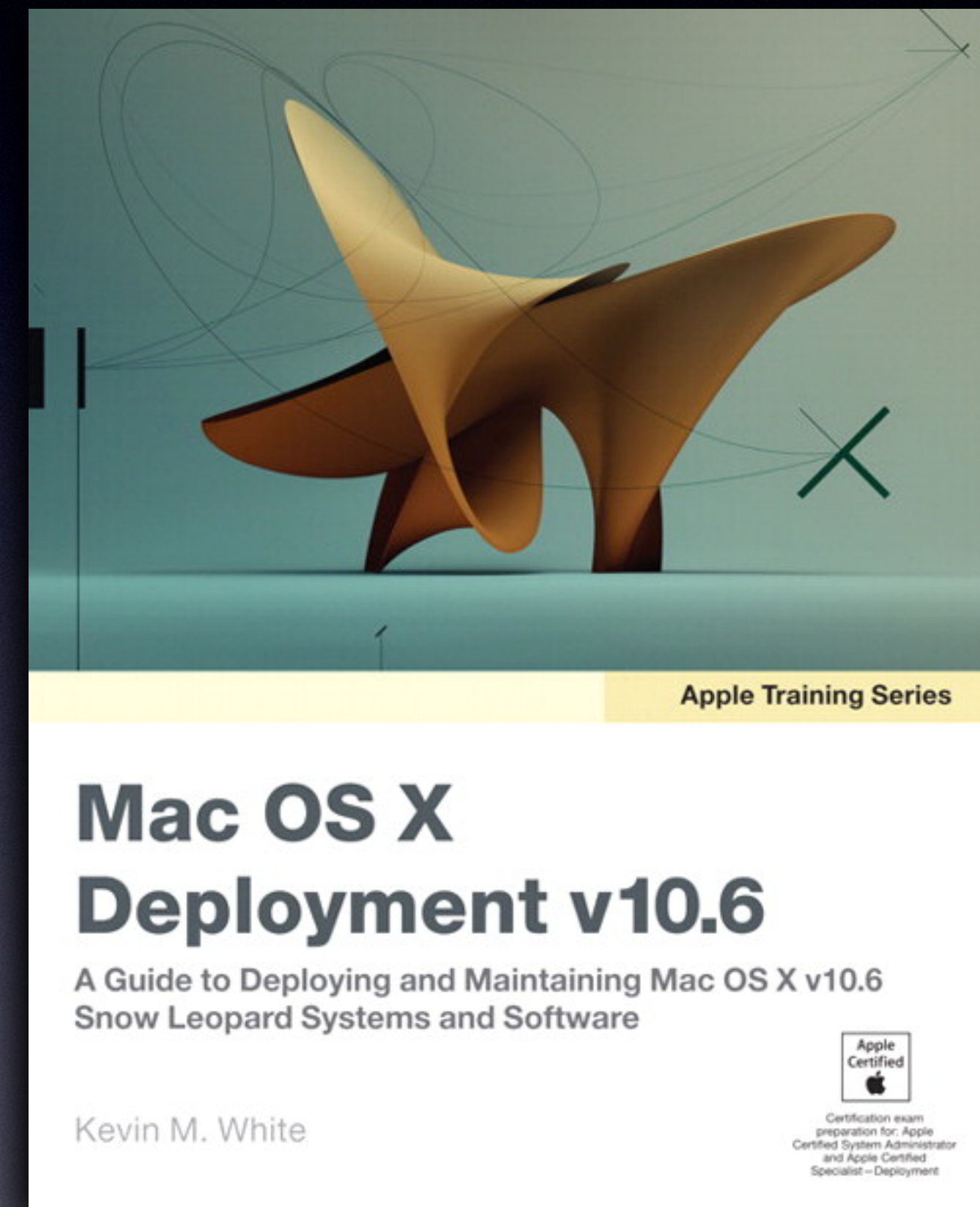
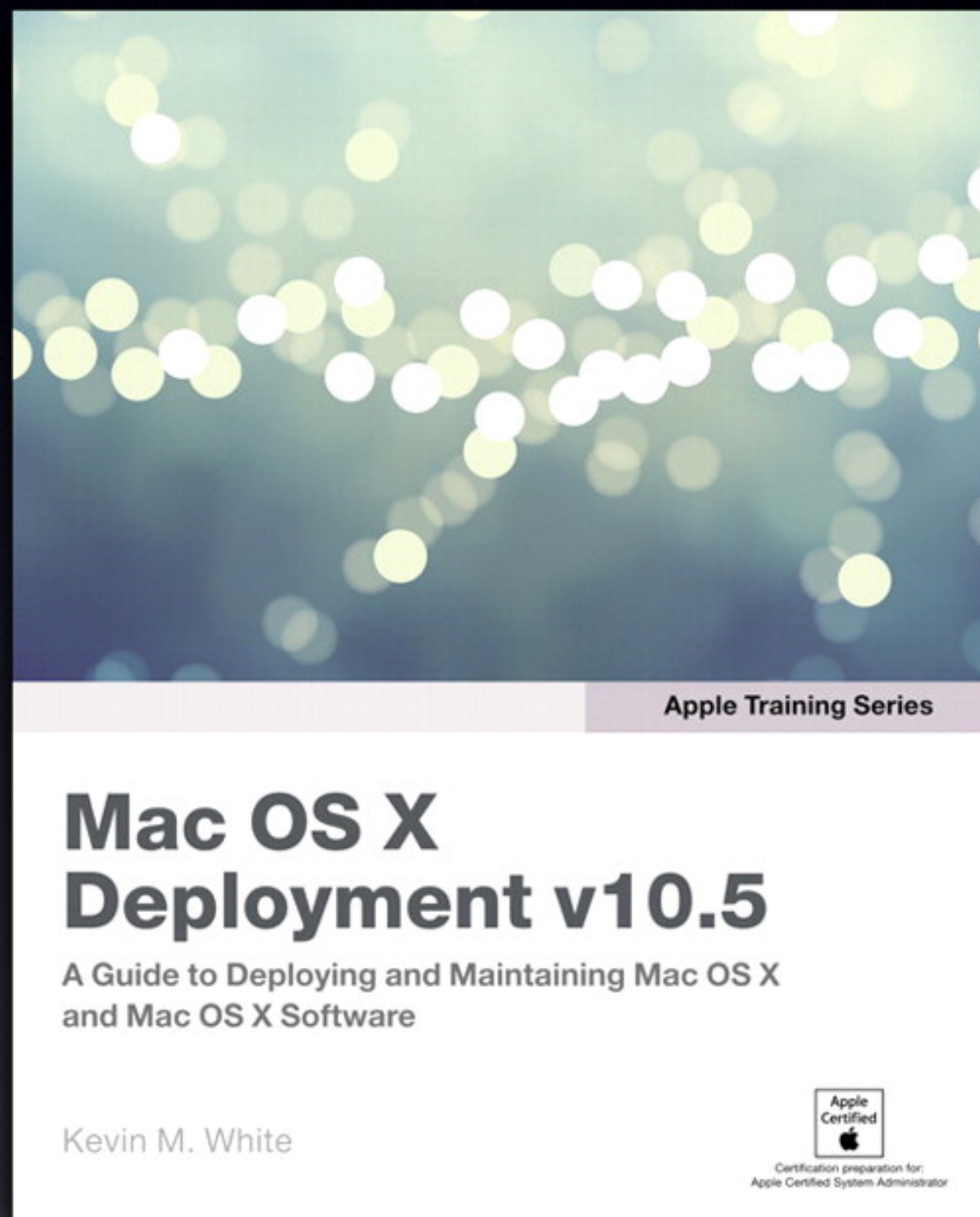
# Author - Support Essentials



OS X Yosemite  
Late Fall 2014

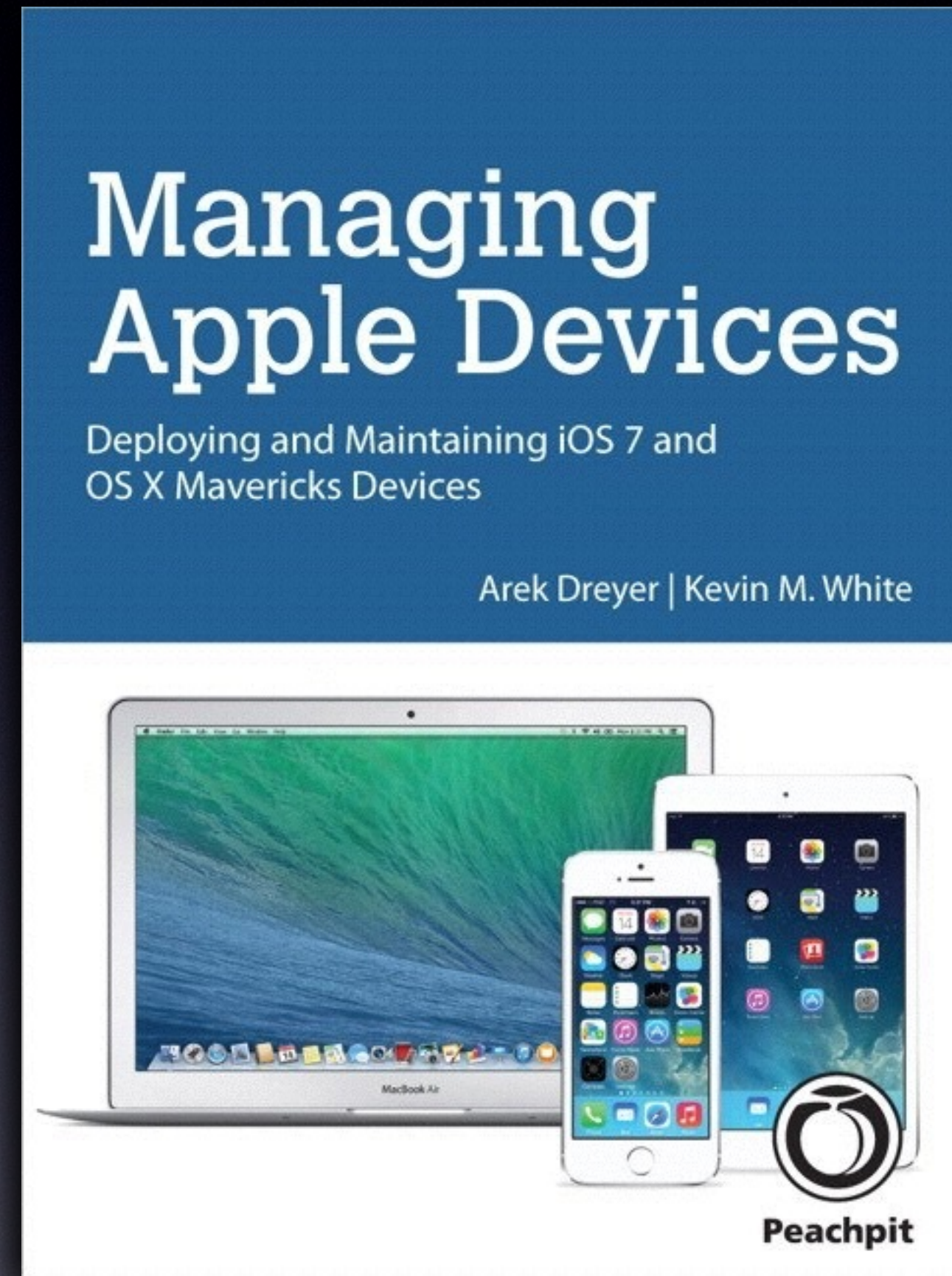


# Author - Deployment





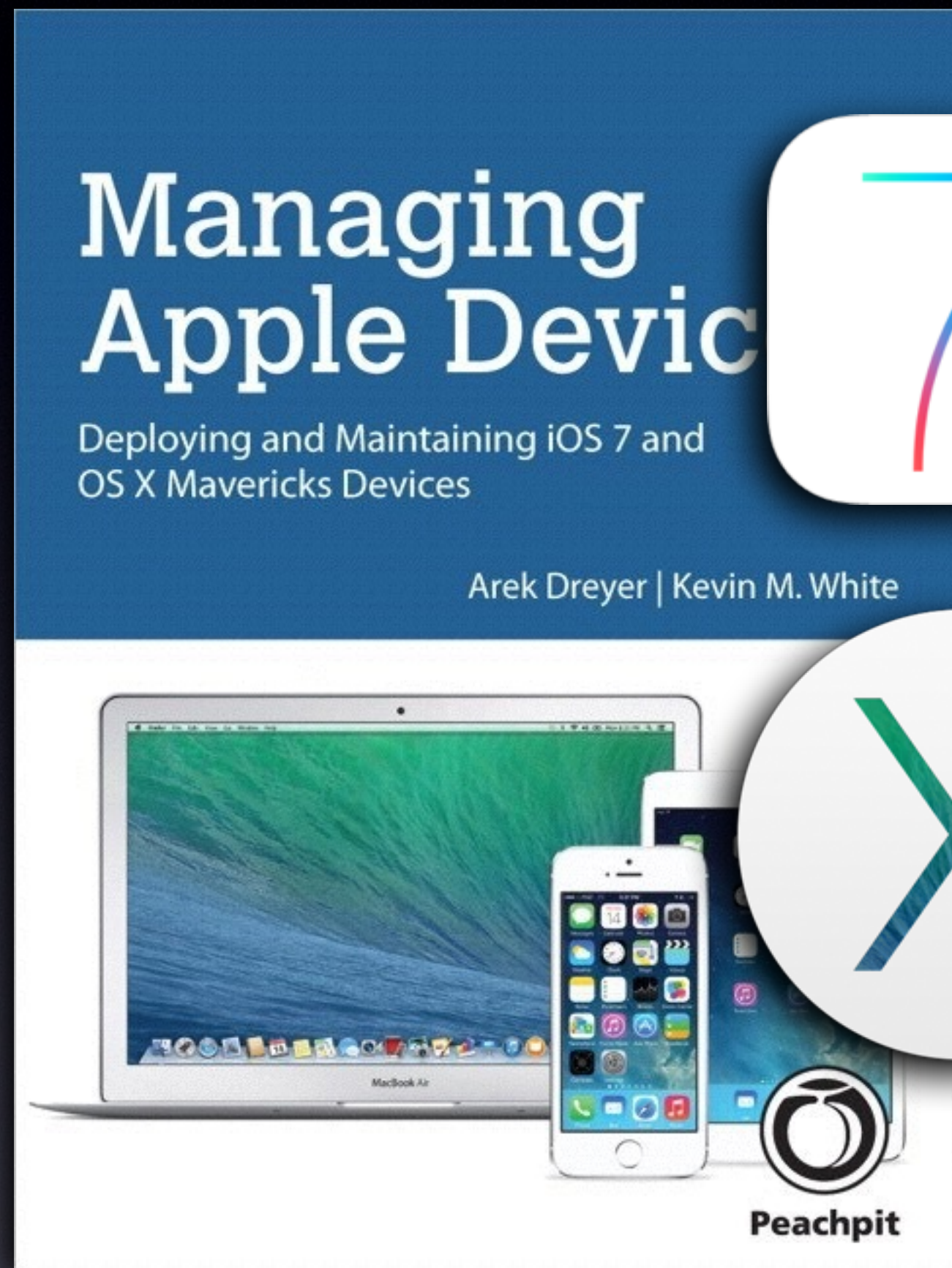
# Author - Deployment



iOS 7 & Mavericks



# Author - Deployment



iOS 8 & Yosemite  
Late Fall 2014



# Why are we here?

Aside from the free drinks...



# Stop trying to fight against Apple.

The central theme of my session at MacSysAdmin 2013



# Be mindful of Apple's primary goal.

Besides making money...



To provide the best possible  
customer experience.

"Create moments of surprise and delight."



# Who *is* Apple's customer?

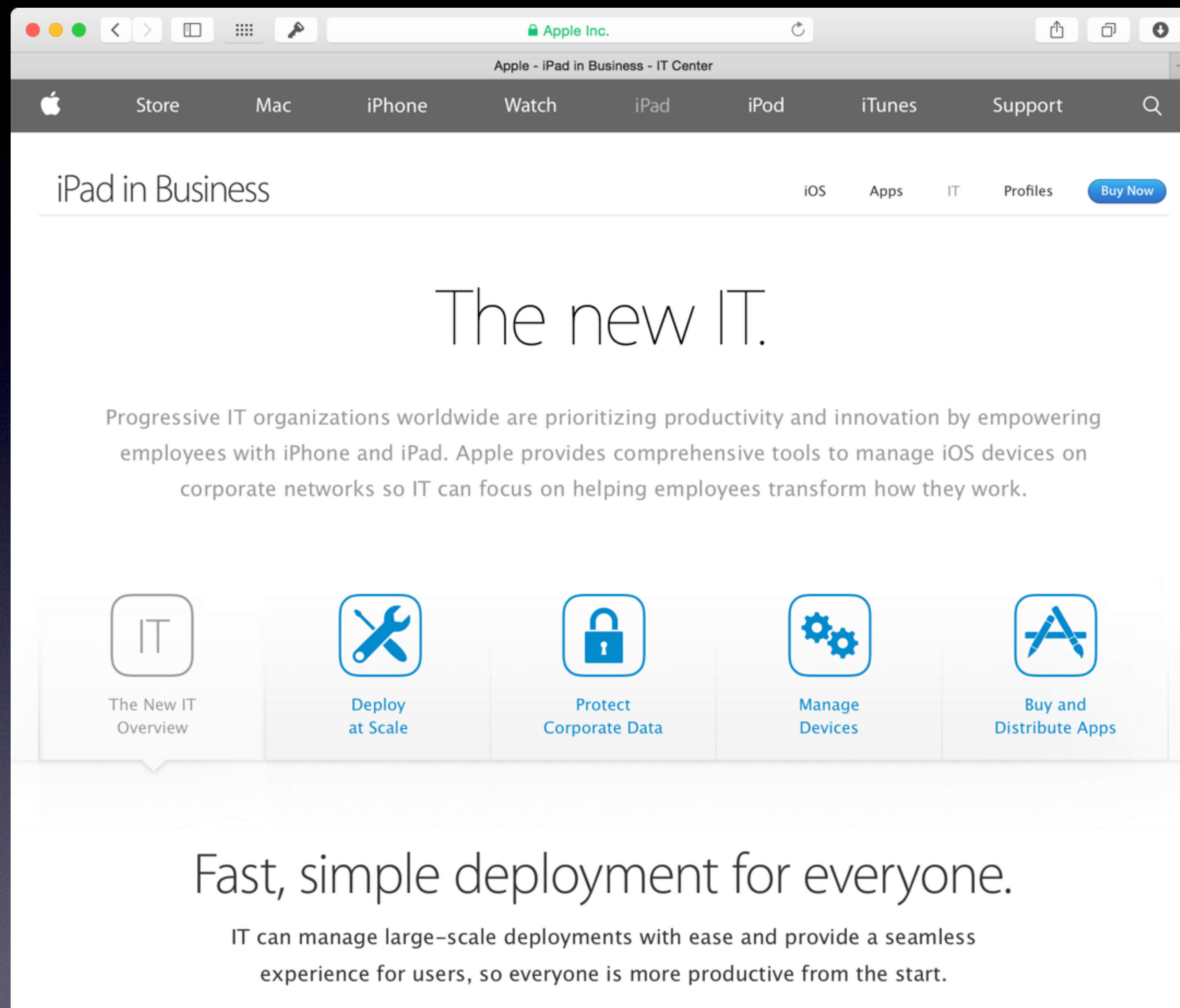
If you have to ask... it's probably not you.



The *user* is Apple's customer!

So get out of the way.







# Apple Deployment InDEPth

- Define Core Concepts
- Managing iOS Setup Assistant
- Device Enrollment Program
- Managing Activation Lock
- VPP Managed Distribution





# Deployment Scenarios

- Individual Personal Device
- Institutional Personal Device
- Institutional Shared Device





# Apple ID

- Identifies a user to Apple
- Any verifiable email address
- Access to Apple services
- Required for VPP Managed Distribution
- Apple ID for Students  
(under 13 yrs.)





# Institutional Apple ID

- APNS Certificate Creation
- Apple ID for Configurator  
Deployment Systems
- Apple Deployment Services
- Enterprise Developer  
Facilitators
- GSX Program Facilitators





# Device Supervision

- iOS mode that proves institutional ownership
- Required for more invasive management features
- Apple Configurator via USB
- Over-the-air via DEP





# Profile Manager 3

- Mavericks Server MDM
- iOS 7.1 & OS X Mavericks
- DEP and VPP define the future Apple management workflow
- Use the best tool for the job  
(not always Profile Manager)





# Managing Setup Assistant

- Skip Setup Assistant steps
- User-based MDM Enrollment
- Apple Configurator via USB  
(iOS only)
- Over-the-air via DEP  
(iOS and OS X)





# Managing iOS Settings Assistant via Apple Configurator

For those people who just can't get into DEP...

**DEMO**



# Configurator Issues

- Enrollment is optional
- Enrollment easily removed
- Still requires physical USB connection to Configurator





# Device Enrollment Program (DEP)

- Streamlined OTA enrollment during Setup Assistant
- Must prove institutional ownership to Apple
- Both new purchases and up to a three year history
- Both iOS and OS X devices





# DEP Account Enrollment

- “Program Agent” Apple ID
- Newly created Apple ID with two-step authentication
- Your institution must be verifiable by Apple process
- DEP program agent verification via phone call





# DEP Service Assignment

- Setup MDM service for DEP
- Assign server in DEP portal
- “Import” assigned devices
- Define Setup Assistant and Enrollment settings on MDM





# Managing iOS Settings Assistant via Device Enrollment Program

Apple Apps belong to us...

**DEMO**



# DEP Issues

- Institutional or channel authorization issues
- Easily bypassed in OS X
- DEP and restoring an iOS backup don't play nice





# Activation Lock

- Activation Lock is theft deterrence for iOS devices
- Part of iCloud Find my Device
- Prevents unauthorized new (or reset) device activation
- Disabled by default on supervised iOS devices





# Managing Activation Lock

- MDM + supervision =  
Managed Activation Lock
- Allow Activation Lock for  
supervised devices
- Collect the Recovery Code
- Clear the Activation Lock





# Managing Acquisition Lock

to you, people don't belong to them...

**DEMO**



# Activation Lock Issues

- Remember to automatically allow Activation Lock
- Requires iCloud
- Can't tell who locked device from MDM inventory





# VPP Managed Distribution

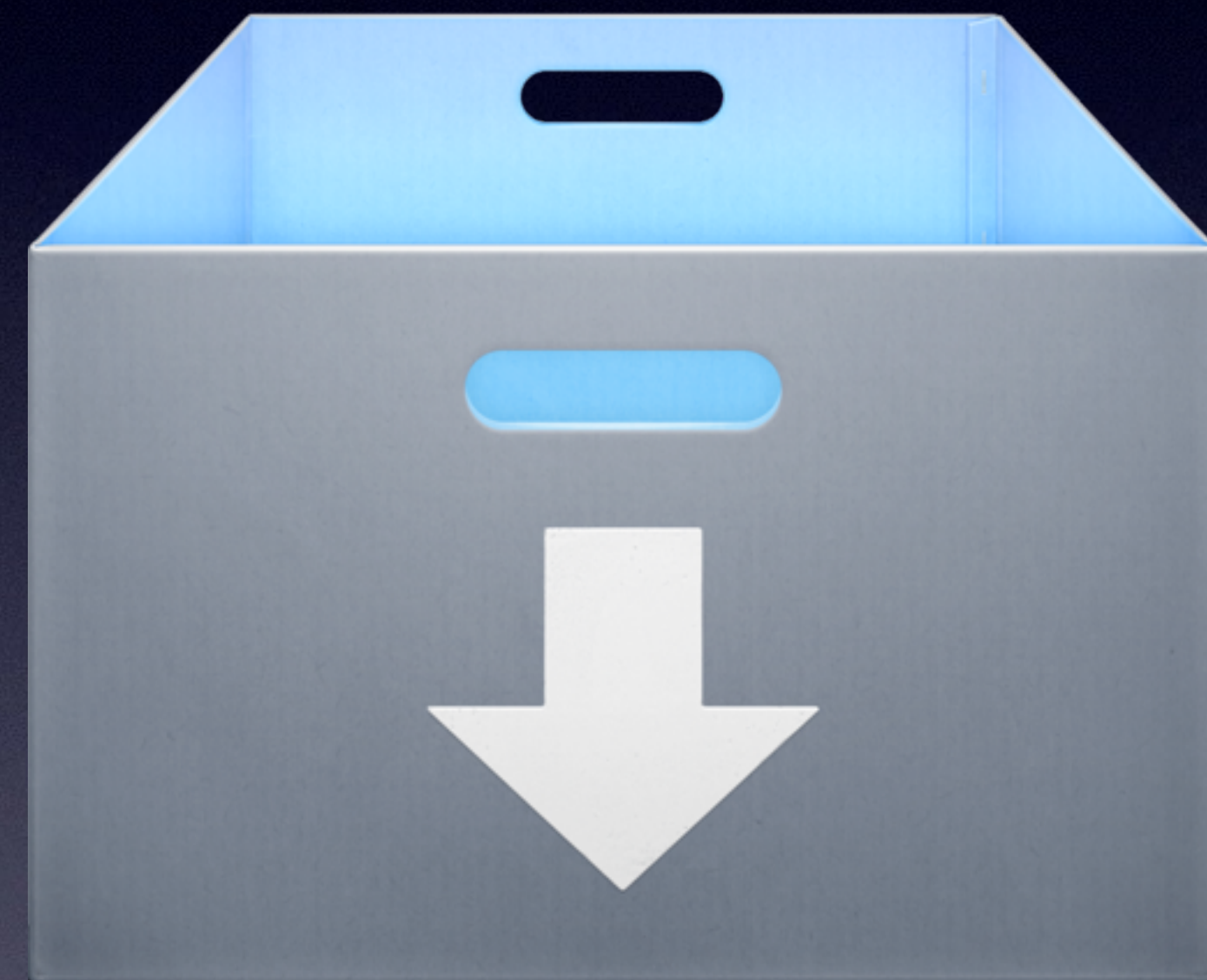
- Apps, iBooks, and B2B Apps
- Enterprise or Business
- VPP “Program Agent” must be authorized to sign legal documents for an institution





# Apple Caching Server 2

- Saves ISP bandwidth
- Increases installation speed
- NOT software update control
- Automatic client configuration
- Caches many types of Apple content: HT6018





# VPP Managed Distribution

- Setup MDM service for VPP
- Send users VPP invitations
- Purchase VPP items for Managed Distribution
- Assign purchased VPP licenses to users (or groups)
- Revoke VPP licenses if needed





# VPP Managed Distribution

Our Apps are belong to us...

**DEMO**



# VPP Service Issues

- Users must authenticate an Apple ID to the App Store
- Doesn't do in-app purchases
- iBooks are non-revokable
- Free Apps are “gifted” to the Apple ID after revocation





# VPP Client Issues

- MDM can't inventory the Apple ID invited to VPP
- Your VPP assets can be installed anywhere by user
- iBooks are never installed (or pushed) automatically
- Apps may not be installed (or pushed) automatically





# Tack.

Thanks and I hope to see you again next year!