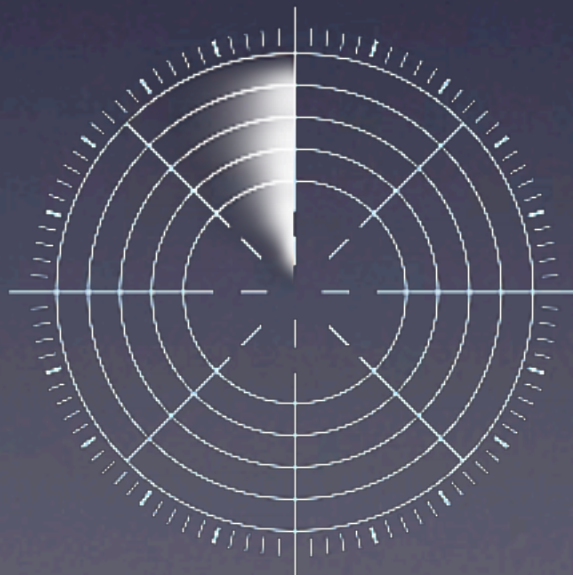


# Mobile Device Management Overview

Russell Poucher  
Senior System Engineer



# MDM Defined

**Mobile Device Management (MDM)** software secures, monitors, manages and supports mobile devices deployed across mobile operators, service providers and enterprises. MDM functionality typically includes over-the-air distribution of applications, data and configuration settings for all types of mobile devices, including mobile phones, smartphones, tablet computers, ruggedized mobile computers, mobile printers, mobile POS devices, etc. These policies apply to both company-owned and employee-owned devices across the enterprise or mobile devices owned by consumers.

By controlling and protecting the data and configuration settings for all mobile devices in the network, MDM can greatly reduce support costs and business risks. The intent of MDM is to optimize the functionality and security of a mobile communications network while minimizing cost and downtime.

With mobile devices becoming ubiquitous and applications flooding the market, mobile monitoring is growing in importance. Numerous vendors help mobile device manufacturers, content portals and developers, test and monitor the delivery of their mobile content, applications and services. This testing of content is done real time by simulating the action of thousands of customers and detecting and correcting bugs in the applications.





# Managing iOS Devices

- Apple's Ballgame
  - Rules can (and will) change quite often
  - iOS makes up 61.64% of the market share
  - What can be managed
  - iOS = individual - company does not "own"



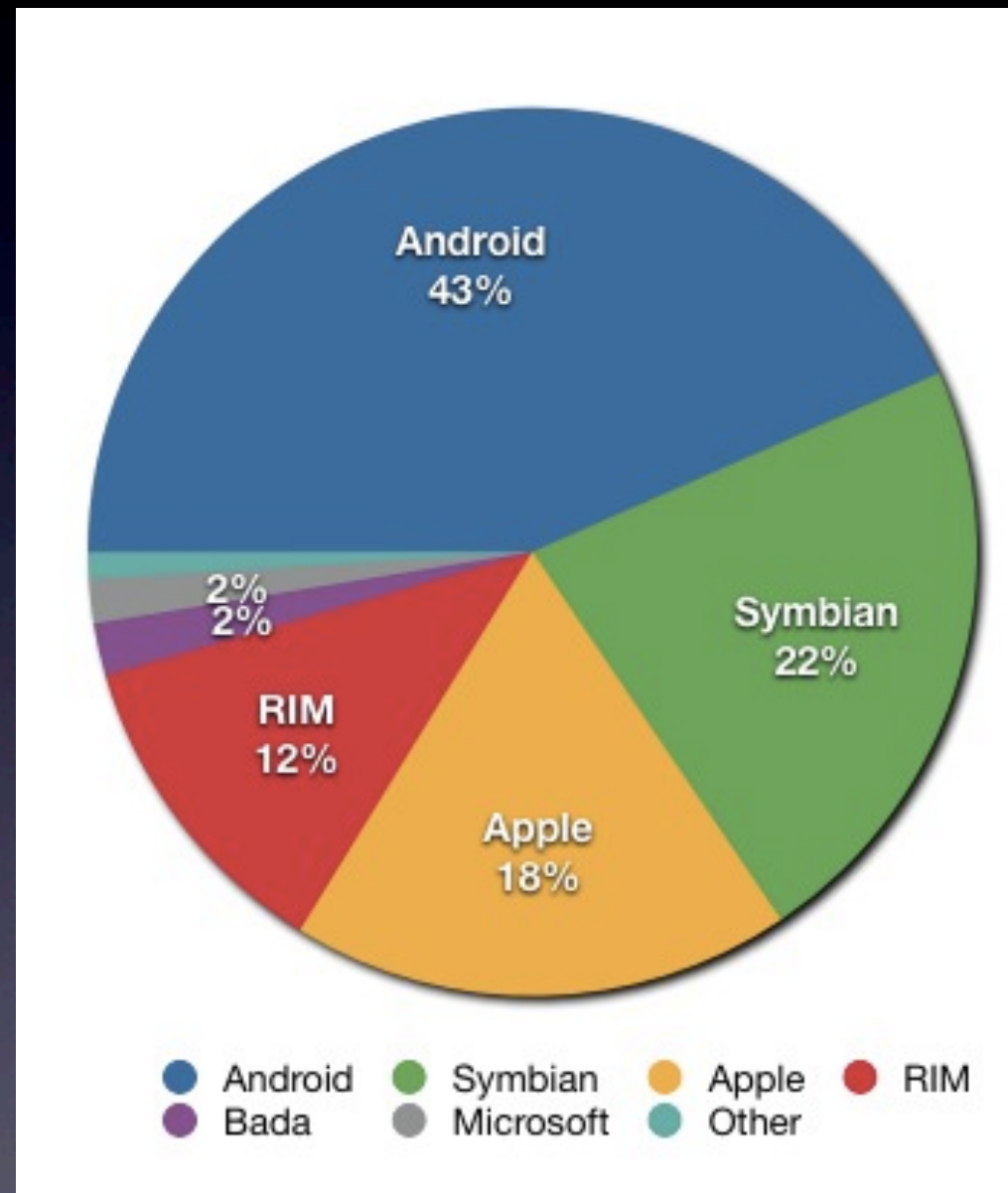
# Managing other devices and platforms

- Android (18.90%)
- Java ME (12.84%)
- Symbian (3.48%)
- BlackBerry (2.48%)
- Windows Mobile (0.20%)
- Other (0.46%) - webOS, bada, MeeGo, Brew, etc.





# Smartphone Market



# Setting up MDM

- MacTech MDM Primer
- Research
  - What platforms do you need to support
  - Will infrastructure need to be modified
  - Who owns the devices
  - Handling malware, break-fix, updates, apps





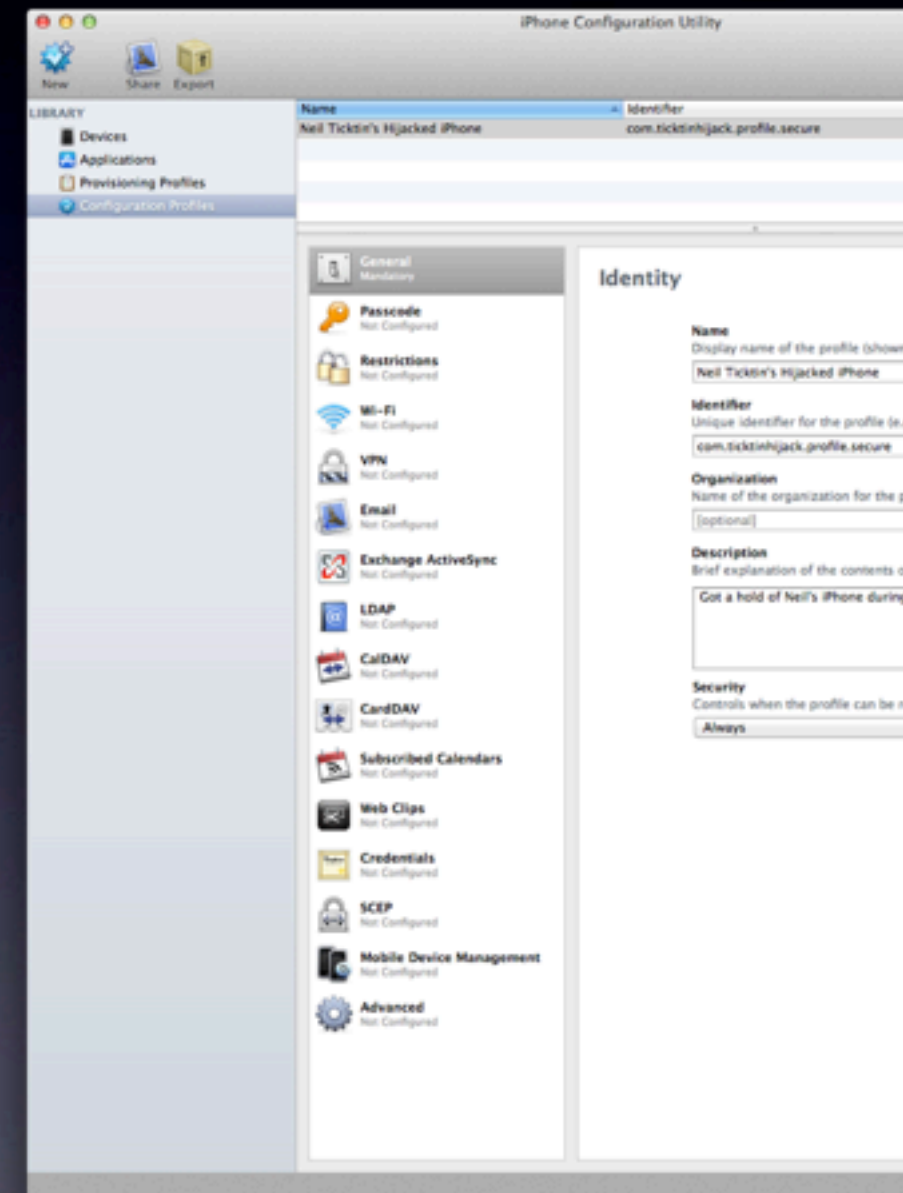
# MDM Landscape

- Where did it come from?
- Defining the players and platforms
  - Technologies used in management
  - Limitations of control
  - Scope of management
- Where is MDM heading
- Address MDM before IT is circumvented!



# iPhone Configuration Utility

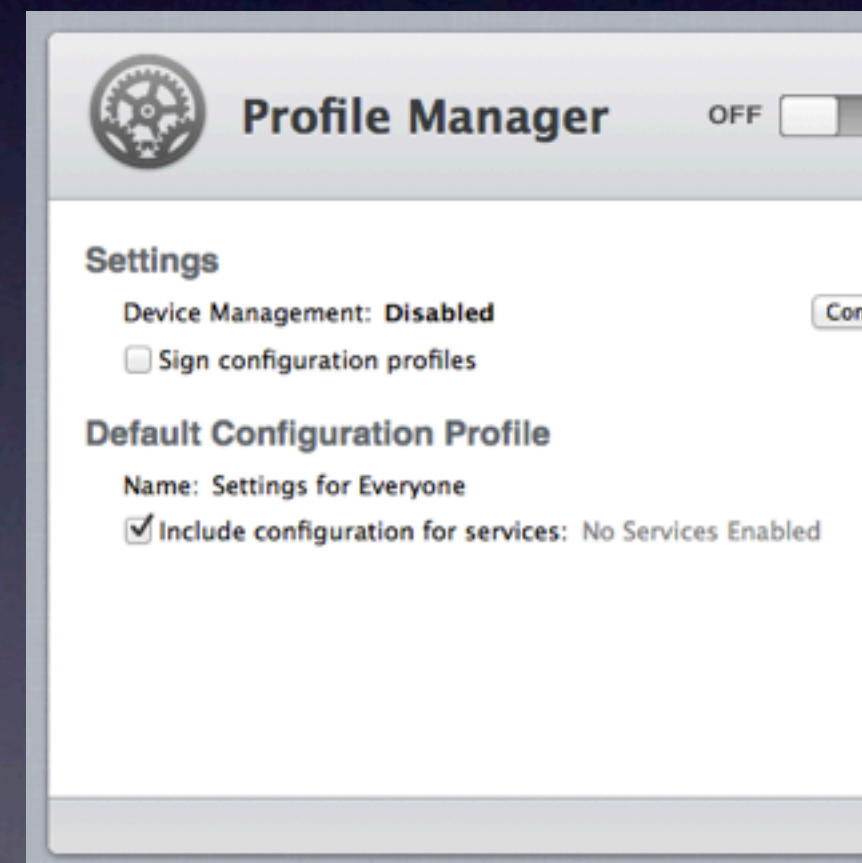
- Set it and forget it
- Basis of all MDM solutions
- Ability to lock a profile
- No on-going management
- Useful for one-time deployments





# Profile Manager

- Free, with Lion Server
- Ability to manage small groups of devices (both iOS and Lion computers)
- 200 device maximum
- Less robust than commercial apps
- Additional tools required



# Apple Push Notification Service Certificate

Server

Get an Apple Push Notification Service certificate

Profile Manager requires an Apple Push Notification certificate to deliver push notifications to devices.

Apple ID:

Password:

Need an Apple ID for your organization? [Create one now](#)

Default Configuration Profile

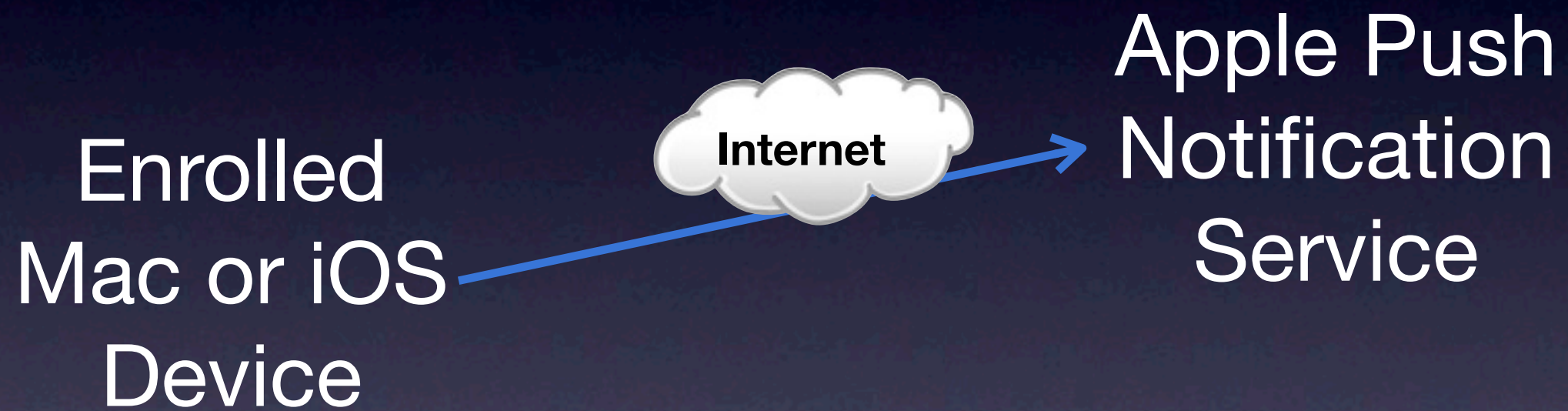
Name: Settings for Everyone

☒ Include configuration for services: [See Services List](#)

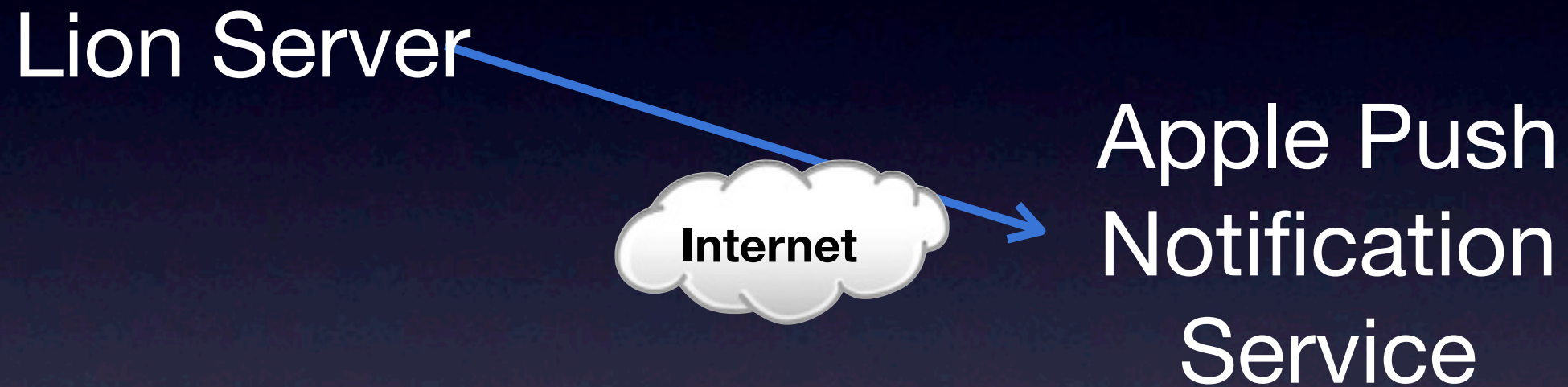
Click next to install a push certificate on your server.



# APNS in Action

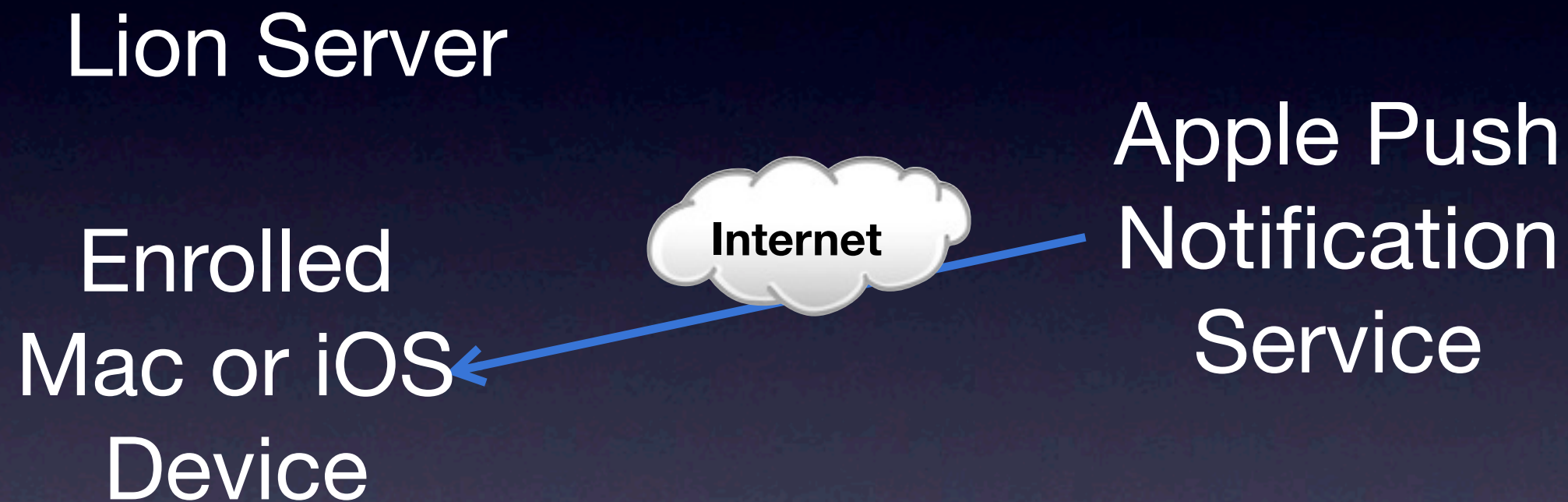


# APNS in Action

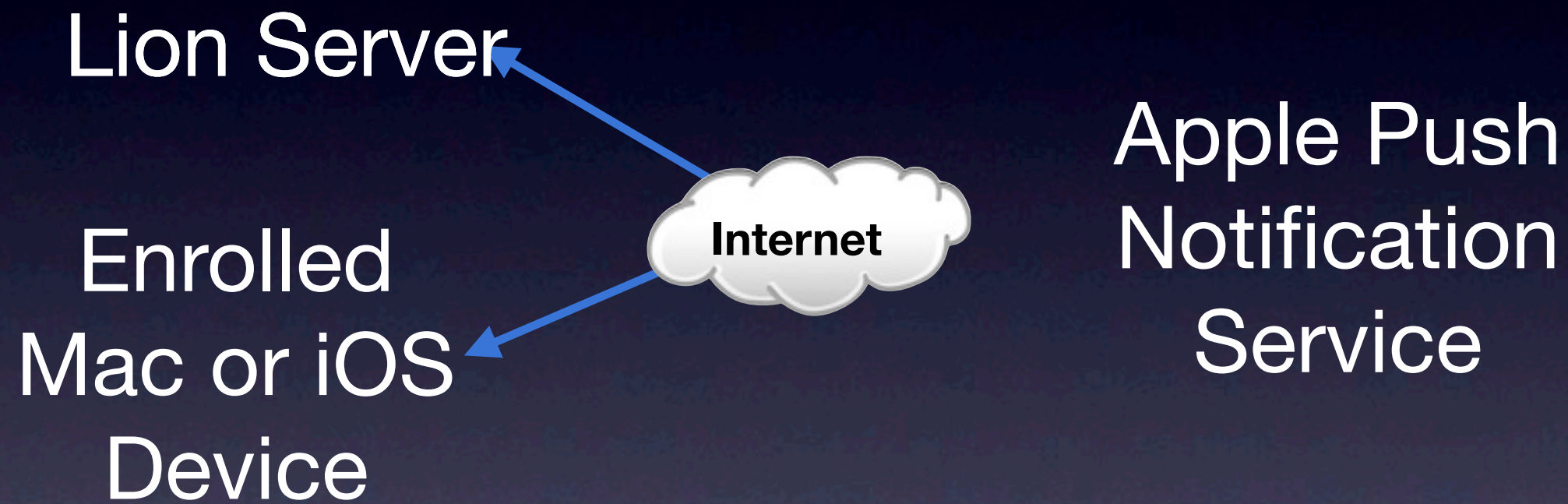




# APNS in Action



# APNS in Action





# Third Party MDM Solutions

- Players and Platforms Supported
  - Absolute Manage, Airwatch, BoxTone, Casper, DME, Maas360, Filewave, Good, McAfee, Mformation, Mobile Active Defense, MobileIron, Notify Technology, RIM (Ubitexx), SOTI, Sybase, Tangoe, Tarmac, Zenprise
  - Enterpriseios.com comparison
  - Assess costs, hardware and needs



# Third Party MDM Solutions

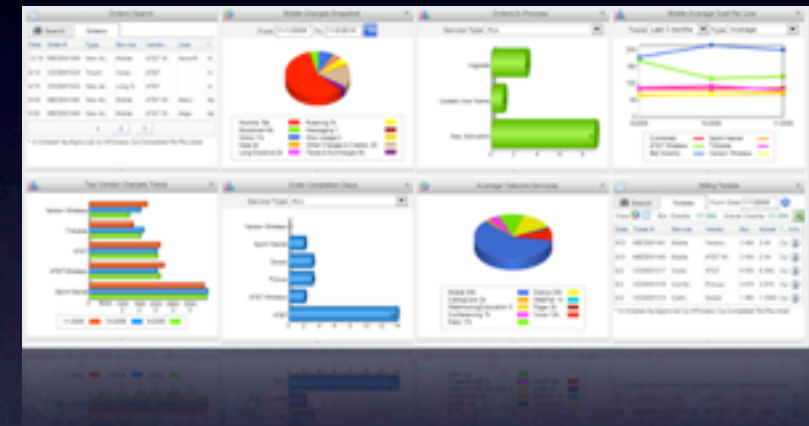
- Limitations of management
  - Some are inherent to the platform (i.e. iOS)
  - Pushing updates, apps, data and payloads
  - Take internet speeds into account (corporate pipeline)
  - Multiple levels of administration (IT)
  - Classes of users
  - Test, test, test and test again





# Third Party MDM Solutions

- What you can expect
  - Reporting
  - Management of devices
  - Scalability
  - Device wipe (theft or termination)
  - Constant changes



# Managed vs. Hosted

- Building out the Infrastructure
  - Communication/Collaboration setup
  - Zoning for Security
  - Current monitoring of infrastructure
  - Current redundancy of internal equipment
  - Future needs





# Managed vs. Hosted

- Building the payloads
  - Each department creates lists of needs
  - IT creates list of security requirements
  - IT builds the payloads to correspond to agreed upon payloads
  - Do a test deployment (minimal amount of devices)
  - Correct and lock in profile(s)/setups

# Managed vs. Hosted

- Long-term management
  - Decide when to bring it in-house
  - Build infrastructure and servers with redundancy
  - Real SSL certificates!
  - Keep up on maintenance and updates
  - Each update, from MDM provider, long list of changes



# Managed vs. Hosted

- Moving from one solution to another
  - You are not locked in
  - Easy to go from hosted to managed and vice-versa
  - Industry-standard XML files
    - May take some tweaking to pull in
  - All devices should re-enroll
  - Test, test, test and test again!



# Managed vs. Hosted

- Cost breakdown
  - Hosted charges —
    - License Fees, one-time Setup Fees, Monthly Charges
  - Managed charges —
    - License Fees, Server Fees (software)
    - Hardware (server and infrastructure fees)
    - Training of IT staff
    - Time to deploy and expertise





# Questio



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