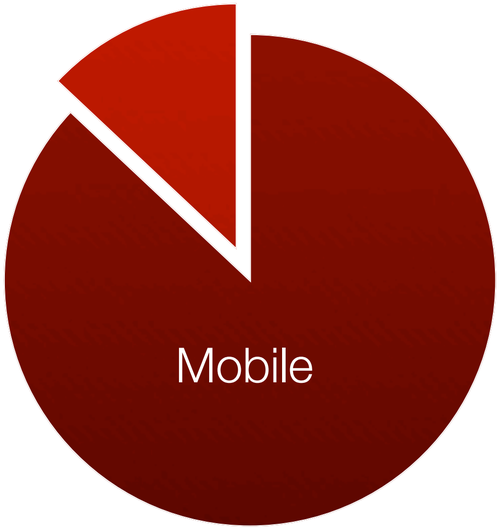
Capstan Networks

2010 CompTIA survey reported that 87% of SMB's surveyed had employees they consider "mobile".



http://www.eweek.com/c/a/Midmarket/Small-Businesses-More-Aggressive-in-Technology-Adoption-Study-Finds-208180/

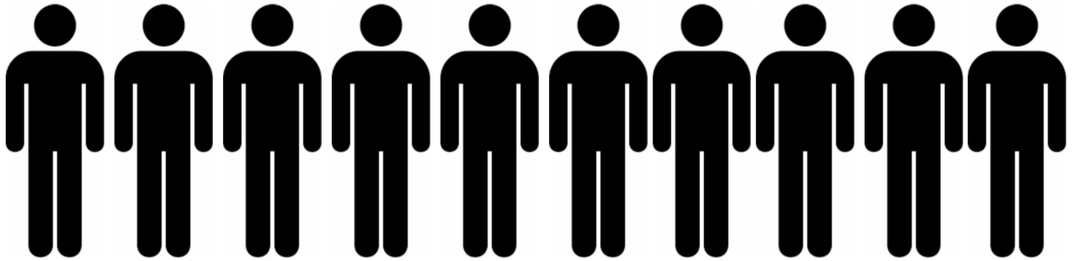
Same survey cited “managing ever-increasing numbers of devices and networks” a top priority.

http://www.eweek.com/c/a/Midmarket/Small-Businesses-More-Aggressive-in-Technology-Adoption-Study-Finds-208180/

71% of SMBs are willing to pay a premium for new solutions with a proven return on investment.

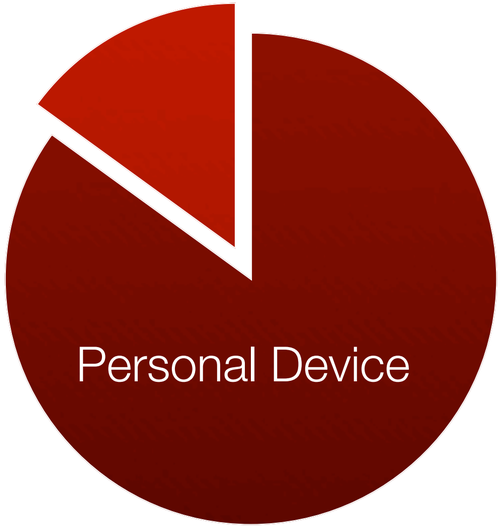
http://www.eweek.com/c/a/Midmarket/Small-Businesses-More-Aggressive-in-Technology-Adoption-Study-Finds-208180/

7 out of 10 SMBs plan on increasing their tech spending in the next 12 months.



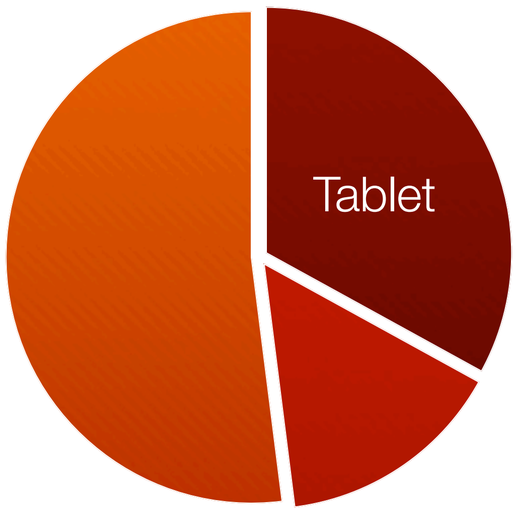
http://www.eweek.com/c/a/Midmarket/Small-Businesses-More-Aggressive-in-Technology-Adoption-Study-Finds-208180/

85% of SMBs report that their employees use personal technology for business.



http://www.comptia.org/news/pressreleases/11-07-27/Technology_Enabling_SMBs_to_Become_More_Mobile_and_Competitive_New_CompTIA_Study_Finds.aspx

Laptops and smartphones are the most popular, but 38% reported employees using personal tablets.



http://www.comptia.org/news/pressreleases/11-07-27/Technology_Enabling_SMBs_to_Become_More_Mobile_and_Competitive_New_CompTIA_Study_Finds.aspx

This “personal tech trend” is a concern for 82% of SMBs. Top concerns are security (virus and customer data), and support time spent on these devices.

http://www.comptia.org/news/pressreleases/11-07-27/Technology_Enabling_SMBs_to_Become_More_Mobile_and_Competitive_New_CompTIA_Study_Finds.aspx

Mobility for Small Business

Andrew MacKenzie
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How I got here

- Education background
  - High School Teacher & Tech Coord
  - Systems Engineer, Apple Education
- Capstan Networks
  - Schools, Creatives, Small Business, Bretford

Planning

Understanding Customer Needs

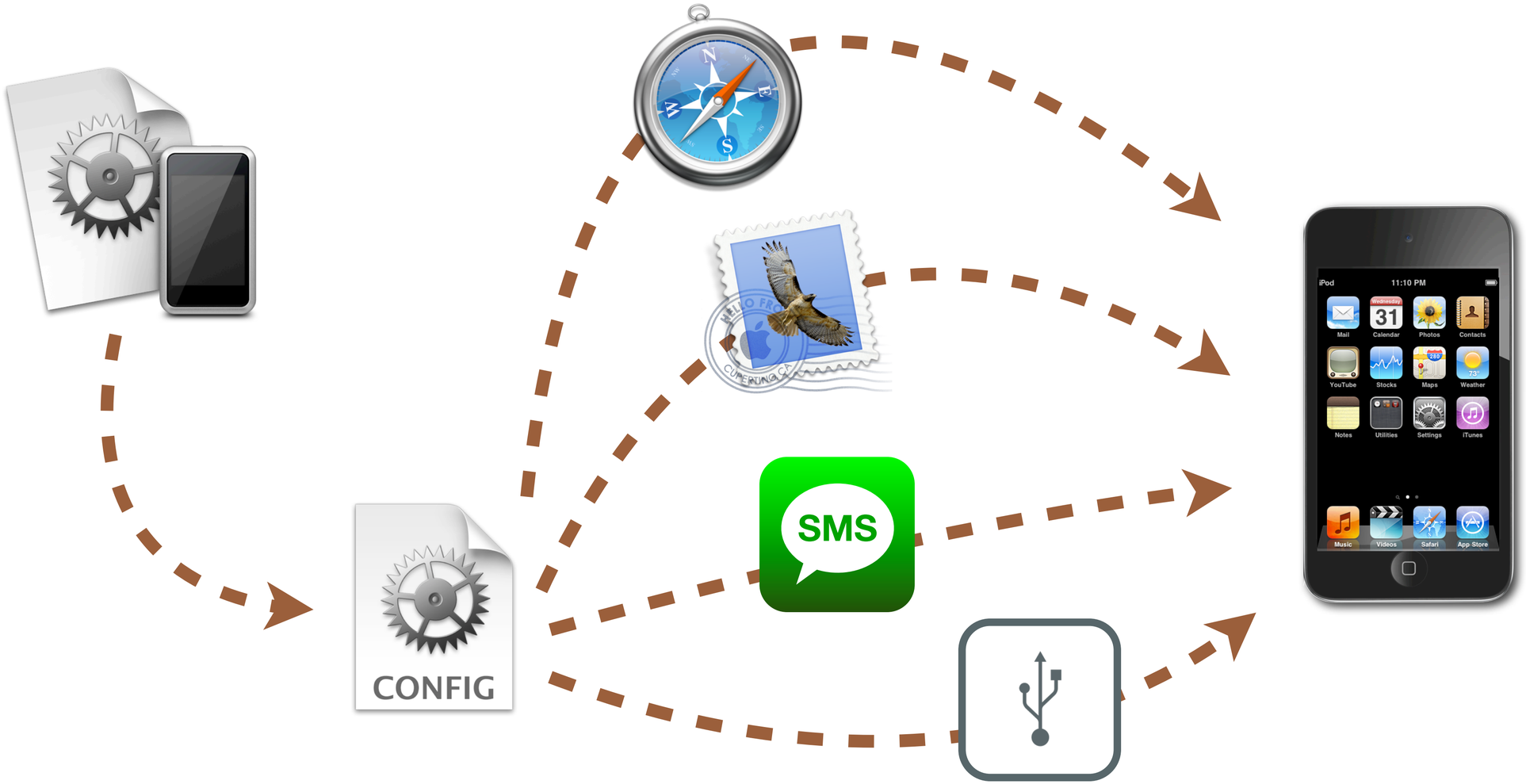
- One-to-One business tool
- Many-to-Many resource
- Will the devices be used with customers?
- Device Management
- Budget
- Timeline
- Are there existing Apps that meet client needs?

Helping Set Policy for the Customer

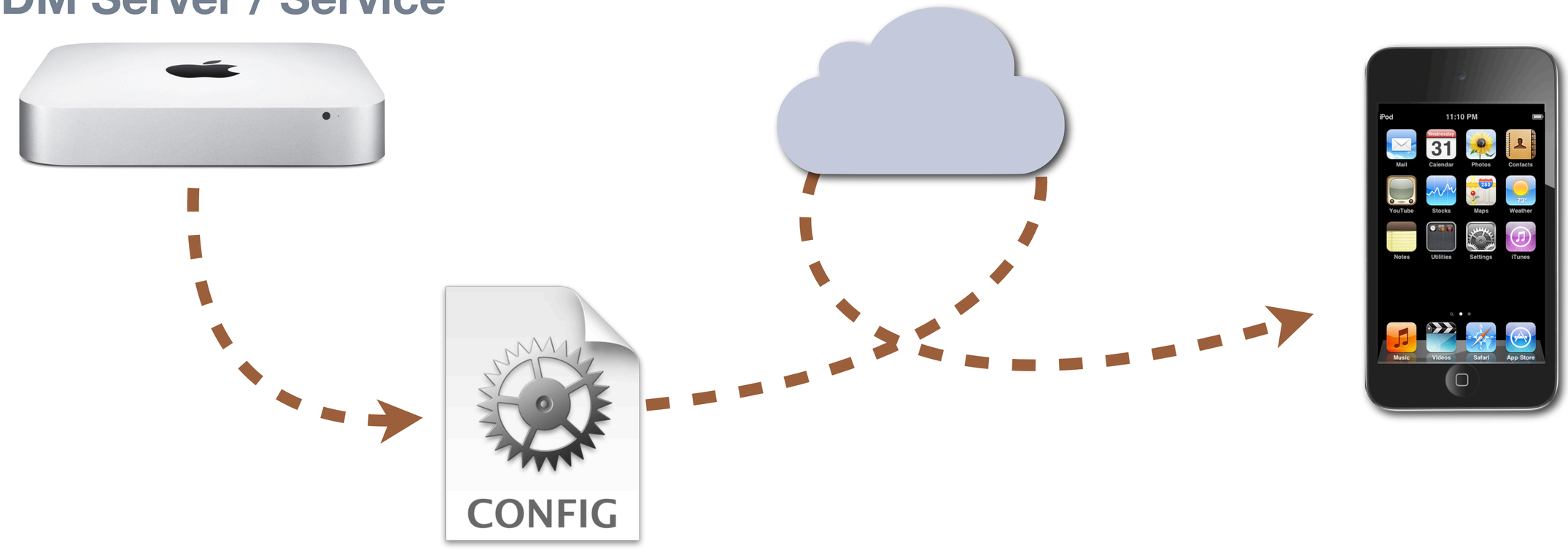
- Are employees allowed to store/access personal email on business devices?
- Business email on personal devices?
- Personal devices allowed on business network?
- Who owns the Apple ID and Apps?

Planning Device Management

- iPhone Configuration Utility
- Find My iPhone
- MDM Solution
  - Per user/device policy
  - Remote wipe & lock
  - Easily updated policy


CONFIG
SMS
iPod
11:10 PM
Mail
Calendar
Photos
Contacts
YouTube
Stocks
Maps
Weather
Notes
Utilities
Settings
iTunes
Music
Videos
Safari
App Store

MDM Server / Service



Install vs Enroll

- **Installing a Config Profile**
  - Easy
  - Tools are free
  - BUT, you need to touch each device to change settings.
- **Enrolling in MDM Server**
  - Easy
  - Affordable, not free
  - Send out changes without touching each device.

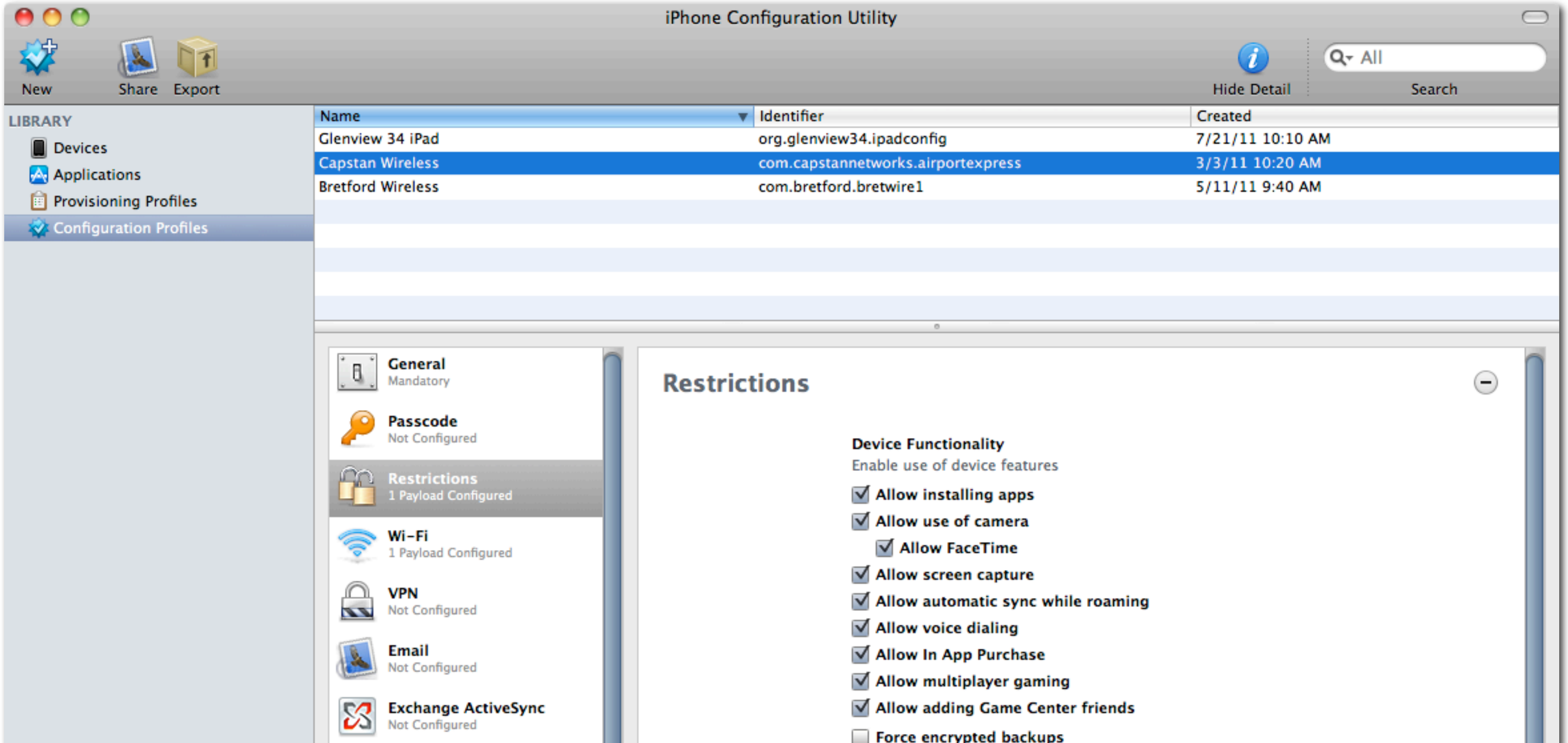
19 MDMs and Counting

There are 19 MDM providers at www.apple.com/iphone/business

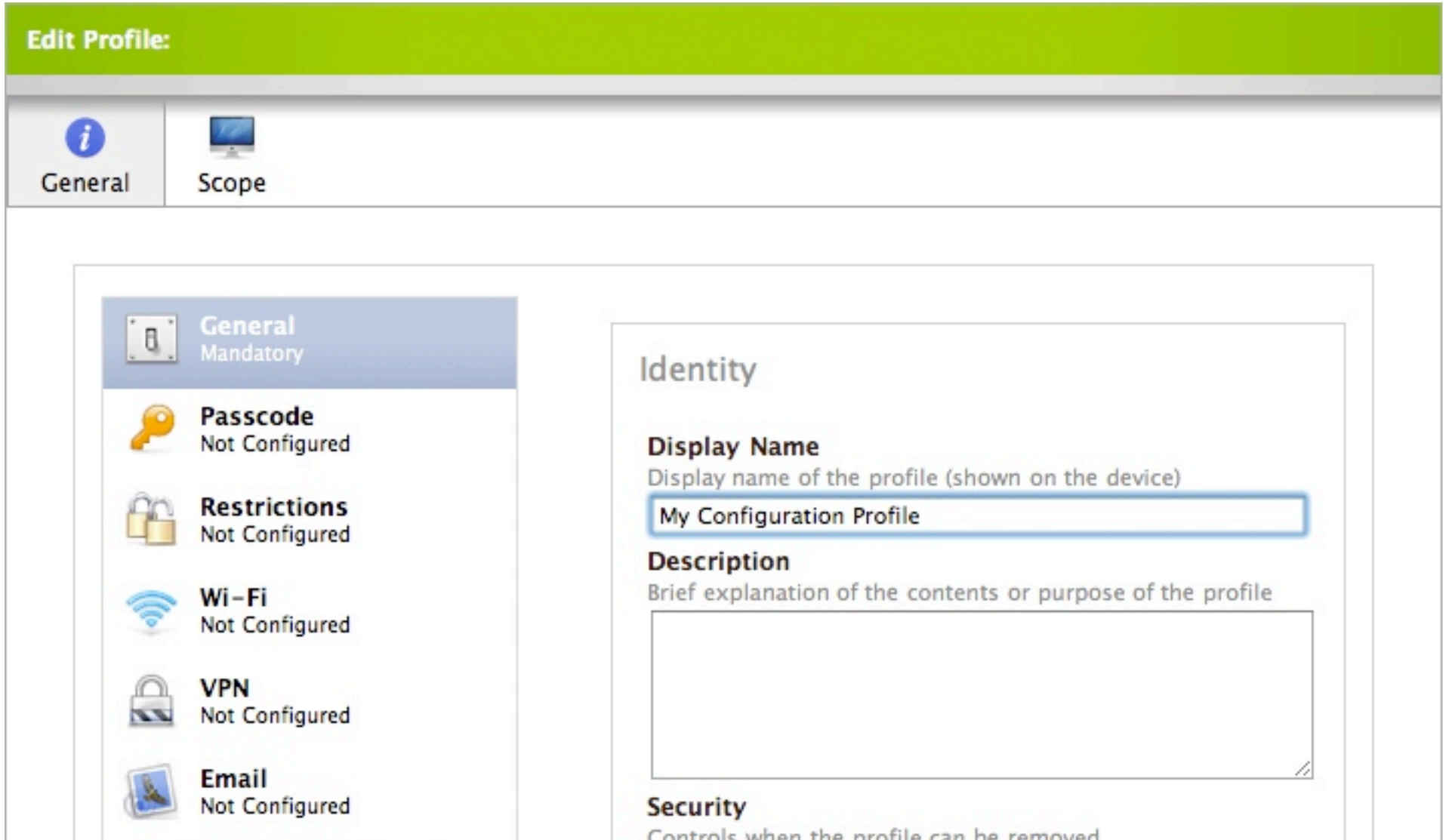
- Hosted Casper Suite from Forget Computers
- Lion Server as Profile Manager Appliance

casper SUITE

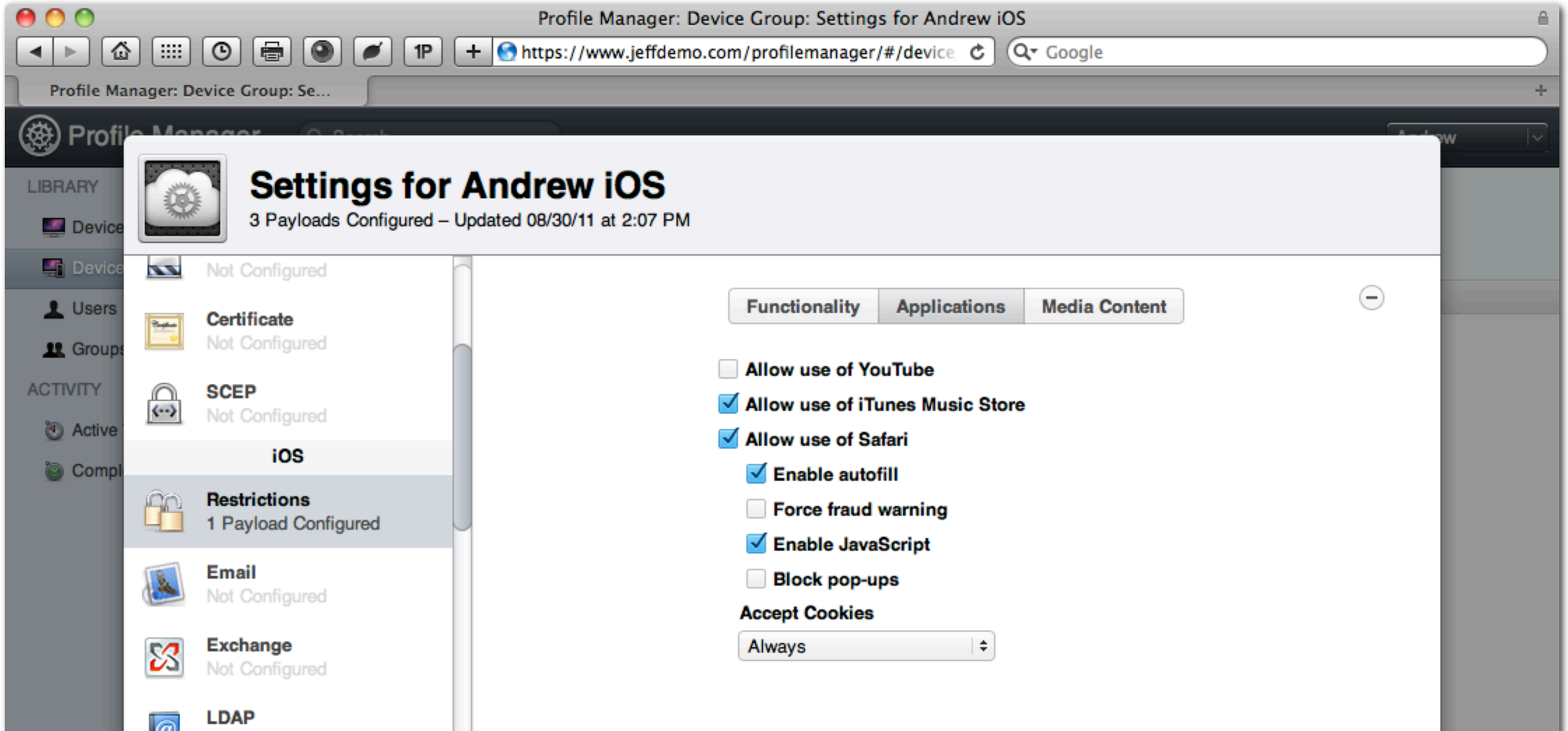
iPhone Configuration Utility



JAMF Casper Suite



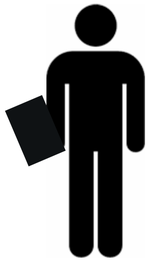
Lion Server - Profile Manager



Profile Manager Demo

One to One Deployments

One to One Deployments



- Regardless of size, treat it like a real deployment, maintain your attention to detail
- Users will likely have multiple devices, some personal
- Document procedure for additional devices.
- Always go with server or cloud for email, contacts, calendar
- After initial config, sync with employee's iTunes Library

Carrot on the Stick

When the user wants access on their personal device

- Consider policy that provides access, but has requirements
- Passcode protects sensitive data
- Enroll in MDM so we can wipe device if it's lost
- Volume Purchase Program for Business

Many to Many Deployments

Many to Many

- No assignments, just a collection of devices to use.
- If gathering customer data, ensure airtight containers for their info.
- Volume Purchase Program for Business
- After initial config, all devices sync with the same iTunes Library

Multi-Device Syncing

- Bretford PowerSync Tray for iPad
- 10 iOS Devices
- Full 2.1A charging
- MFi certified
- Lockable Security Lid

Initial iOS Setup

Activate Your Devices

- Activating your iOS devices takes them from “plug me into iTunes” mode into their normal usable state, so you can either:
  - Install a Configuration Profile
  - Enroll in your MDM Server (more on this later)

iTunes Activation-only Mode

- defaults write com.apple.iTunes StoreActivationMode -integer 1
- Requires an internet connection.
- http://support.apple.com/kb/HT4335

Navigate to Easy URL

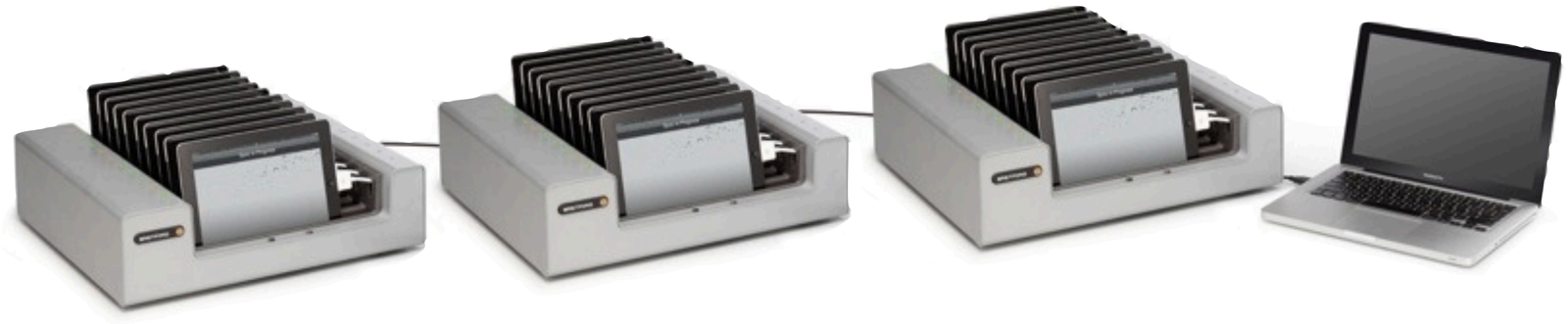
- Safari will trigger your iOS device to join a wireless network.
- For this purpose, make sure you have an “open” wireless network available.
- Navigate to a site that hosts your initial Configuration Profile.

Configure Accounts

- Configure Email, Contacts, Calendars
- Important to set default accounts for new contacts, events, email
- “On My iPad” creates confusion, especially for multiple devices.

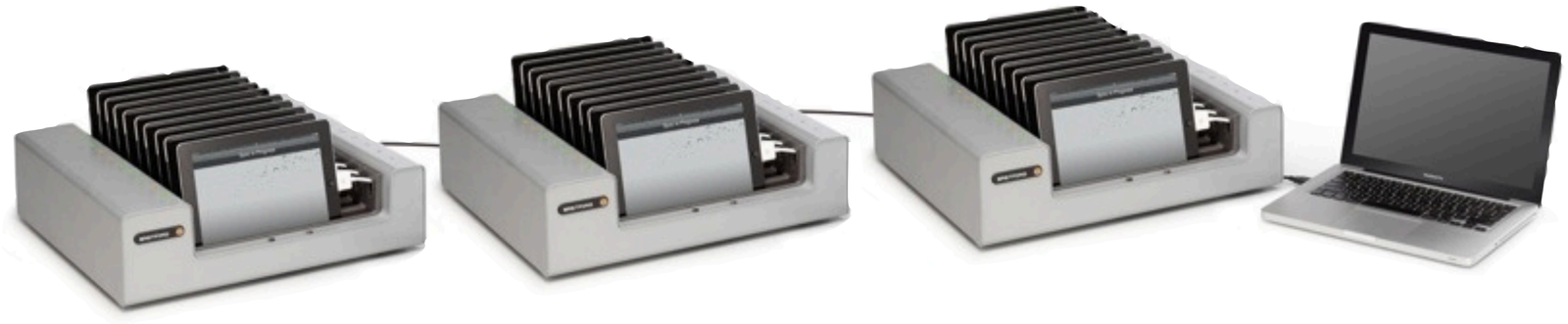
Configure Syncing (Many to Many)

- You may be able to ignore Email, Contacts, Calendars
- Register each device with Apple, configure Sync settings in iTunes



Backup & Restore (Many to Many)

- iTunes backups can be restored to multiple devices, one at a time
- Configure settings on one, backup, restore to the next.
- All devices will have the same iTunes content and device settings.



Lastly, Learn from the Teachers

Apple Classrooms of Tomorrow

- **Entry**: Learn the facts of using the new technology.
- **Adoption**: Use new technology to support traditional practice. *Solitaire*.
- **Adaptation**: Integrate new technology into traditional practice, increasing productivity and efficiency. Word Processing, Spreadsheets, etc.
- **Appropriation**: Focus on cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as of one of many tools. Requires mastery of the technology.
- **Invention**: Discover new uses for technology tools, for example, developing spreadsheet macros for teaching algebra or designing projects that combine multiple technologies.

Source: "The Evolution of Teachers' Instructional Beliefs and Practices in High-Access-to-Technology Classrooms First–Fourth Year Findings", http://www.apple.com/euro/pdfs/acotlibrary/rpt8.pdf

Apple Classrooms of Tomorrow

Entry - Learning the facts of using the new technology

- Turn on, turn off
- Syncing
- Buying Apps
- Updating Apps
- Volume Purchase Program for Business
- How do I….?

Apple Classrooms of Tomorrow

Adoption - Begin *to use* the technology, not just plug it in.

- Continue to use technology, mostly to accomplish the same things you're already familiar with doing.
- Mail, Safari, iCal, iBooks, Solitaire
- Put the wine list on iPad.

Photo: http://www.nytimes.com/2010/09/15/dining/15ipad.html

Apple Classrooms of Tomorrow

Adaptation - The emergence of productivity

- Continue to use technology, mostly to accomplish the same things you used to do by hand.
- Efficiency gives your clients more time to go deeper with their customers.
- Modern tools give a modern impression.

Apple Classrooms of Tomorrow

Appropriation - Technology as a tool.

- This stage hinges on personal mastery of the technology.
- Users comfortable creating and sharing documents, photos, and other content
- Repertoire of tools expands
- You show up, and your customer has purchased the Camera Connection Kit.

Apple Classrooms of Tomorrow

Invention - Building new systems and workflows.

- Your customer joins ADC and writes an app.
- Apple Showcase “Crescent Construction Services”
- PunchList now available in the App Store

Resources

- **Managing iOS Devices with OS X Lion Server**, Arek Dreyer, iBook Store, $5
- **Enterprise Deployment Resources**
  http://www.apple.com/support/iphone/enterprise/
- **iOS 4 Educatoin Deployment Guide**
  http://images.apple.com/education/docs/20110727_IOS_4_Education_Deployment_Guide.pdf

Thank you.

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