

ADAM 16.05.2016: APPLE MDM AND DEP

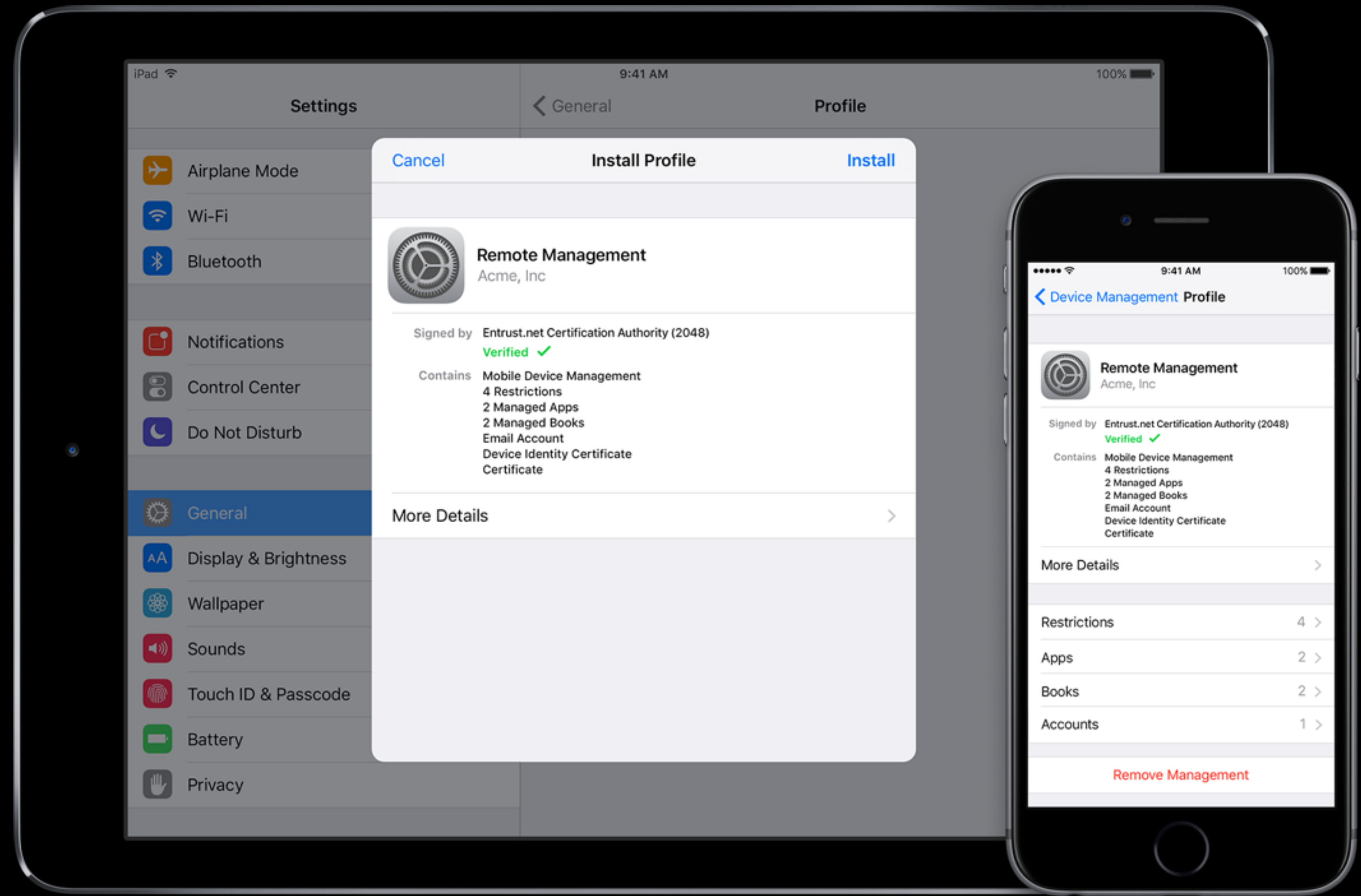


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- Overview:
 - Mobile Device Management / MDM
 - Configuration Profiles: what they can do, how to deploy, some use cases
 - Device Enrolment Program / DEP
 - How DEP and MDM fit into the 'Zero Touch' workflow
 - Case study live demo: iPads at Blavatnik School of Government
 - MDM Server options

WHAT IS APPLE MOBILE DEVICE MANAGEMENT?

- Frameworks to push instructions and collect information
- Manage settings and content on devices
- Security (e.g. encryption, passcodes, Touch ID)
- Remote commands (e.g. remote wipe)
- Asset tracking and reporting
- Meet IT policy requirements

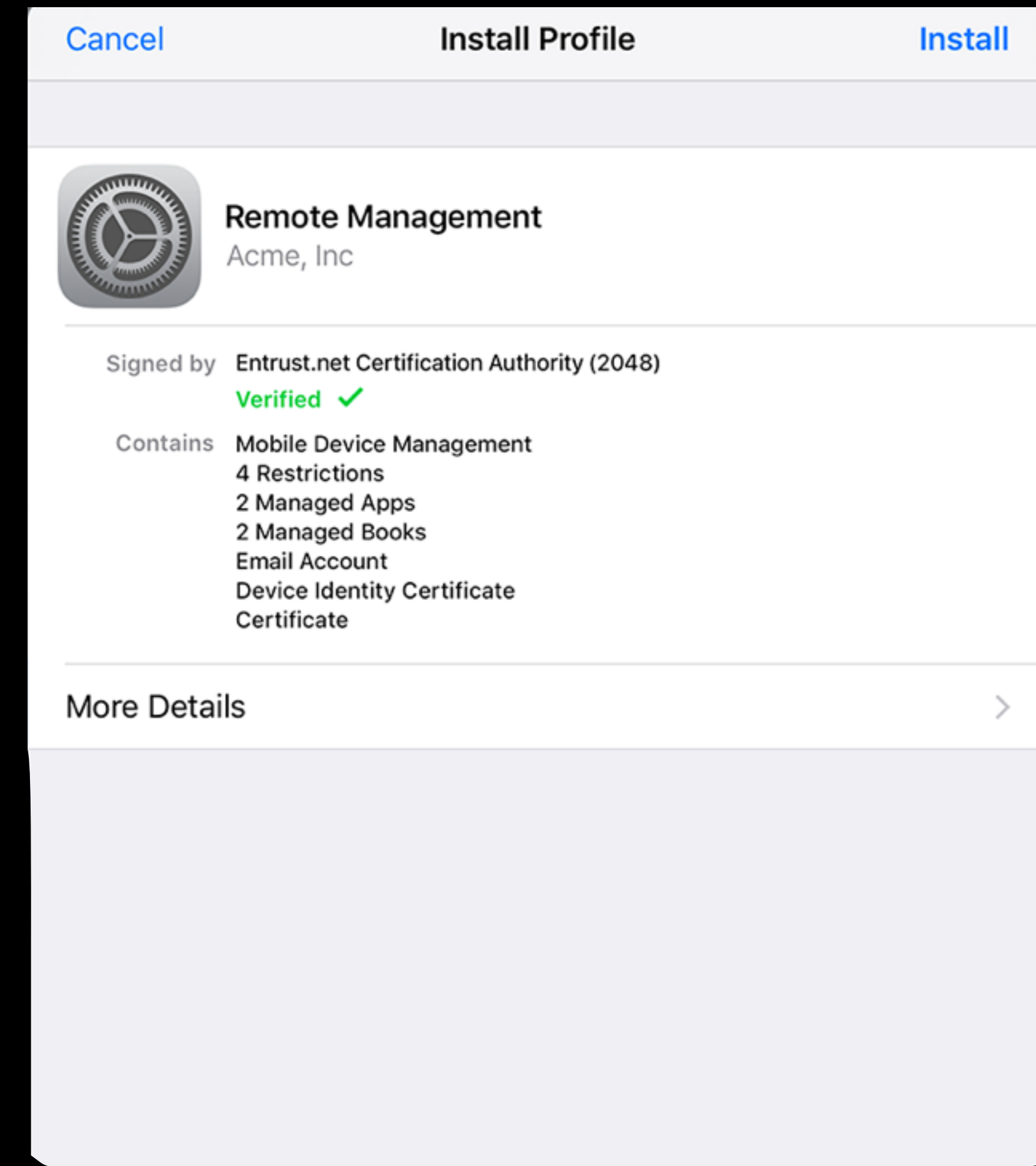




CONFIGURATION PROFILES

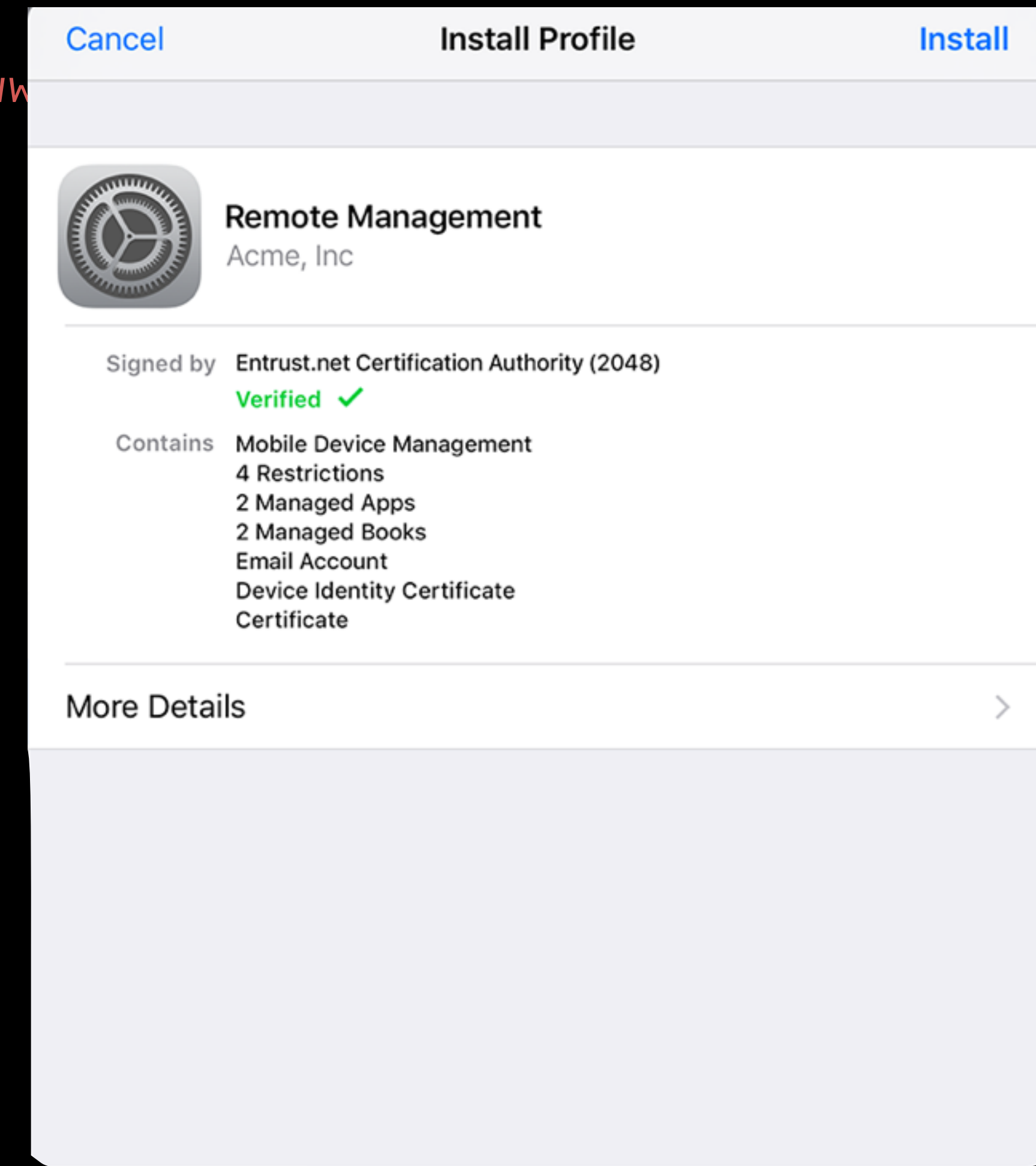
CONFIGURATION PROFILES

- XML containing one or more payloads, plus certificates
- Payloads for configuring most features of iOS (and now OS X)
- **Configuration Profile reference:** <https://developer.apple.com/library/ios/featuredarticles/iPhoneConfigurationProfileRef/Introduction/Introduction.html>
- Development of Managed Preferences (MCX) for OS X



CONFIGURATION PROFILES

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www
PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
  <key>PayloadIdentifier</key>
  <string>com.acme.profile.remote-management</string>
  <key>PayloadRemovalDisallowed</key>
  <true/>
  <key>PayloadScope</key>
  <string>System</string>
  <key>PayloadType</key>
  <string>Configuration</string>
  <key>PayloadUUID</key>
  <string>48a39070-1e4c-0131-c321-000c2944c108</string>
  <key>PayloadOrganization</key>
  <string>Acme, Inc.</string>
  <key>PayloadVersion</key>
  <integer>1</integer>
  <key>PayloadDisplayName</key>
  <string>Remote Management</string>
  [...]
```

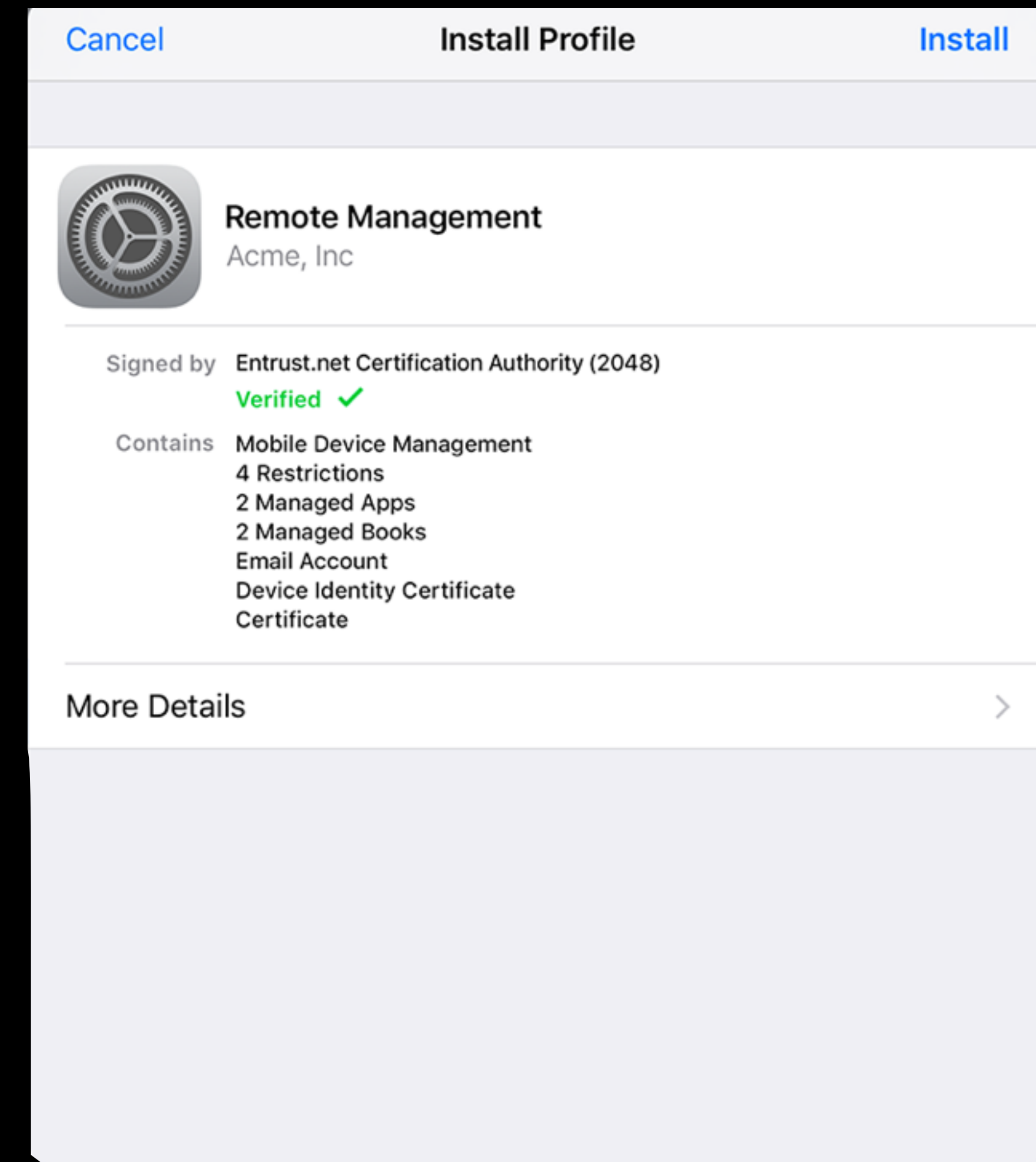


CONFIGURATION PROFILES





```
<key>PayloadContent</key>
<array>
<dict>
  <key>PayloadType</key>
  <string>com.apple.applicationaccess</string>
  <key>PayloadVersion</key>
  <integer>1</integer>
  <key>PayloadEnabled</key>
  <true/>
  <key>allowCamera</key>
  <false/>
</dict>
<dict>
  <key>PayloadType</key>
  <string>com.apple.applicationaccess</string>
  <key>PayloadVersion</key>
  <integer>1</integer>
  <key>PayloadEnabled</key>
  <true/>
  <key>allowPhotoStream</key>
  <false/>
</dict>
[...]
```

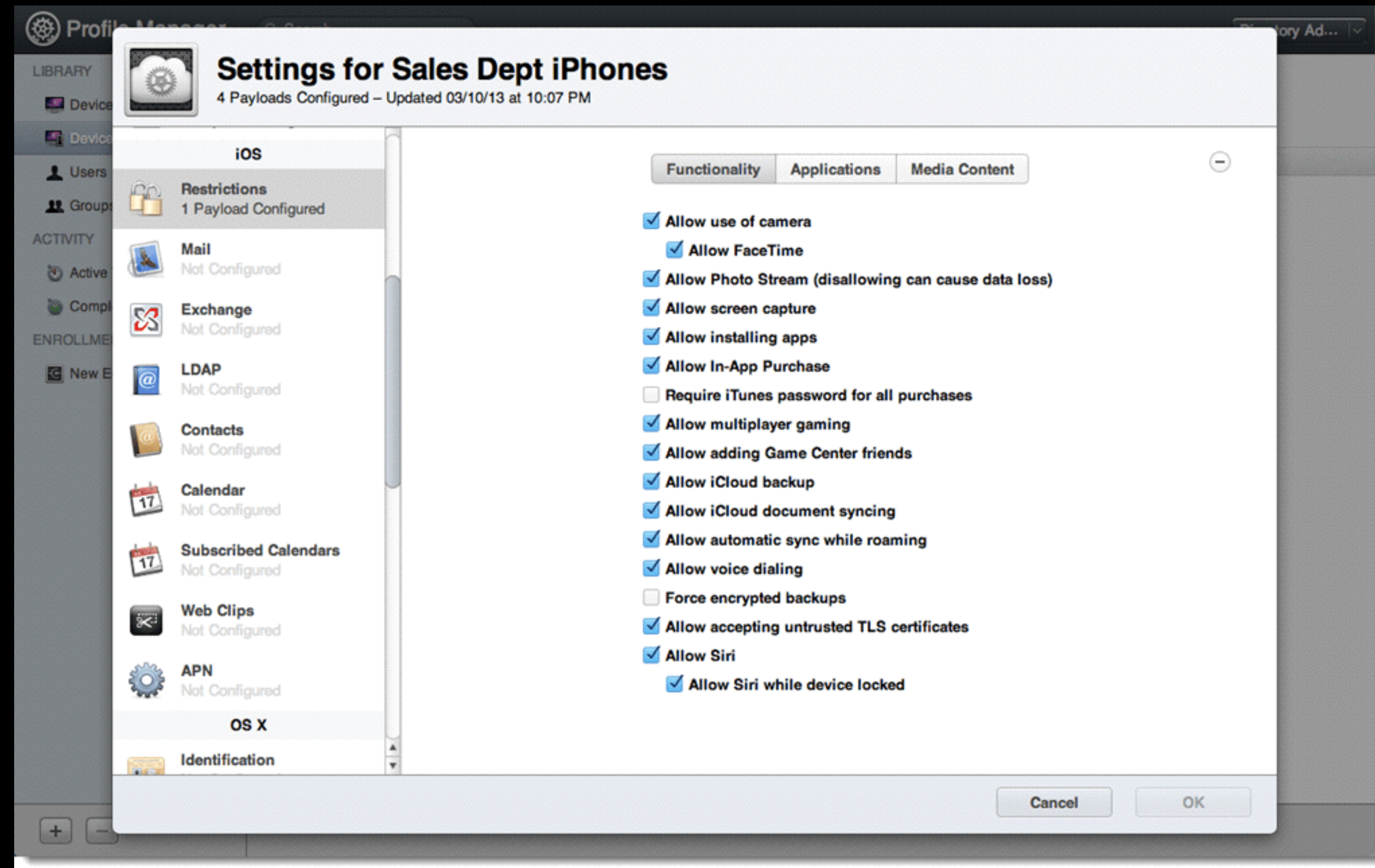
```
</array>
</dict></plist>
```



DEPLOYING CONFIGURATION PROFILES



1. Using Apple Configurator 
2. In an email message or on a webpage
3. Over-the-air configuration using a Mobile Device Management Server (e.g. Apple Profile Manager in OS X Server) 



DEVICE ENROLMENT PROGRAM (DEP)



- Fast, streamlined way to deploy organisation-owned devices
 - Automated enrolment in an MDM Server
 - Enables 'zero touch' deployment
- Mac or iOS devices purchased directly from Apple or through participating Apple Authorised Resellers
- Sign up at <http://deploy.apple.com> using an Apple ID belonging to your organisation



'ZERO TOUCH' DEPLOYMENT WORKFLOW



Procure
to DEP enabled account



Ship
directly to user



DEP
automatic MDM enrolment



MDM
Profiles, remote commands



VPP
manage Apps, eBooks






BLAVATNIK SCHOOL OF GOVERNMENT iPADS



- All Apple learning environment
- 1:1 Student iPad program
- BSG App = WebLearn, SOLO, timetables etc
- Secure, reliable, easy to use learning platform
- Full student cohort receives iPads in one day, 2015 intake was 140 students
- Students receive brand new iPad and instruction pack
- Live demo then technical breakdown



MDM SERVER OPTIONS

- OS X Server and Profile Manager 
- VMware Airwatch 
<https://www.filewave.com/>
- JAMF Casper Suite 
<http://www.jamfsoftware.com/products/casper-suite/>
- Centrify, FileWave, MobileIron, etc 
- Project IMAS / OSS MDM 
<https://github.com/project-imas/mdm-server>
<https://hub.docker.com/r/bruienne/mdm-server/>
- Comparison of iOS MDM solutions at <http://enterpriseios.com/>

