

# Mobility and Profiles

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# Topics

- Technology overview
- Implementation thoughts
- Apple tech demo
- Q&A




# Mobile Device Management (MDM)

- In today's parlance (from jamf)
  - Inventory
  - Configuration (Profiles)
  - Security Management (Profiles)
  - Distribution



# Inventory

**iPad**  
GB019G3TETU

ProfileActivityAbout

▼ General

Capacity28.6 GB  
Software Version5.1.1  
Software Build Version9B206  
Serial NumberGB019G3TETU

▼ Details

Build9B206  
UDIDdbe94d785ea842669d75bc6ab798434d3b3b16e8  
IMEI01 222300 042939 3  
Wi-Fi MACd8:30:62:9f:4e:fe  
Bluetooth MACd8:30:62:9f:4e:ff  
Last Checkin Time03/04/13 at 7:57 PM  
TypeiPad  
Modem07.11.01  
Phone+13603622648  
Model NumberMC496LL  
Sim Carrier NetworkAT&T  
ICCID8901 4104 2432 2119 2087  
Carrier Settings Version12.0  
Available Capacity28.1 GB  
Remaining Battery Life89%

▼ Security

Hardware EncryptionBoth Block-level and File-level Capable  
Passcode CompliantBoth Profiles and Accounts  
Passcode PresentNot Present

► Restrictions

▼ Installed Applications

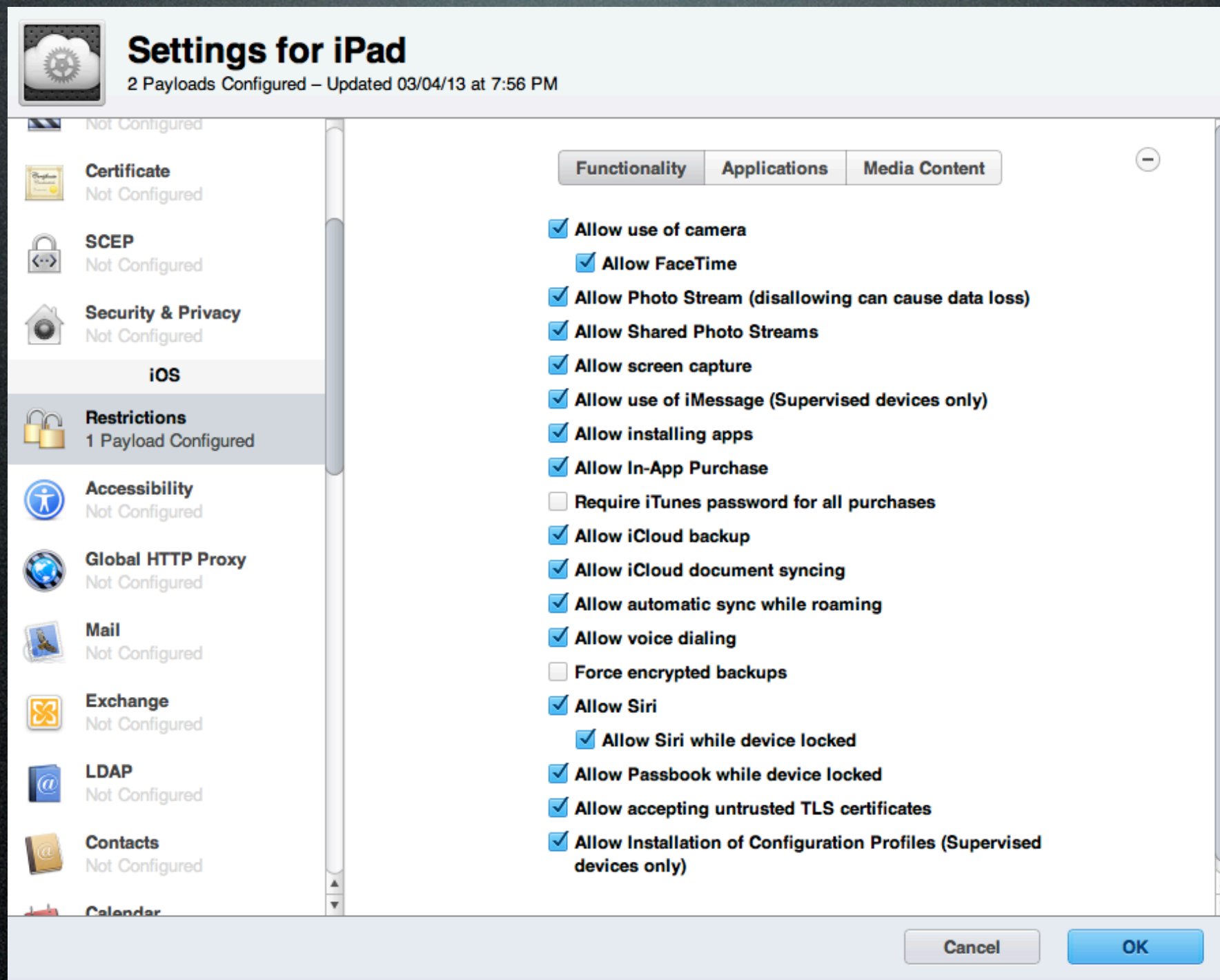
No additional applications installed

► In Device Groups

► Certificates

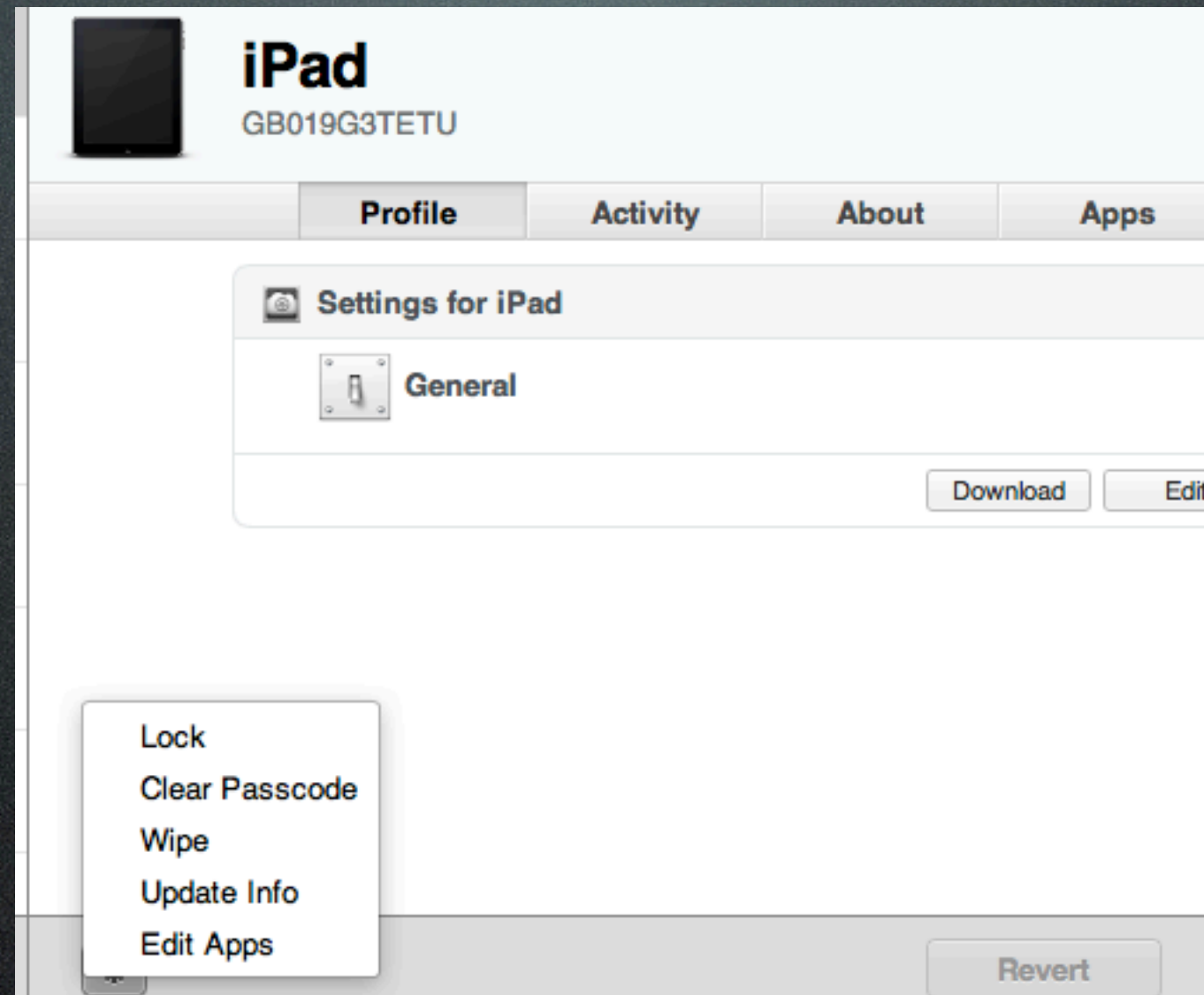


# Configuration





# Security Management





# Distribution

Inventory

Management

Logs

Settings

Search JSS Topics

Logout admin

Mobile Device App Catalog

Add App

In-house Apps

	App Name	Version		
	Chart Visualizer	1.0	<a href="#">Edit</a>	<a href="#">Delete</a>
	Focus On Health	1.0	<a href="#">Edit</a>	<a href="#">Delete</a>
	Personnel Records	1.0	<a href="#">Edit</a>	<a href="#">Delete</a>
	Prescription Tracker	1.0	<a href="#">Edit</a>	<a href="#">Delete</a>
	Track Your Time	1.0	<a href="#">Edit</a>	<a href="#">Delete</a>

App Store Apps

	App Name	Version		
	CNN App for iPhone	1.1.1	<a href="#">Edit</a>	<a href="#">Delete</a>
	JSS Mobile	7.3	<a href="#">Edit</a>	<a href="#">Delete</a>
	JSS Mobile for iPad	7.3	<a href="#">Edit</a>	<a href="#">Delete</a>
	Pages	1.2	<a href="#">Edit</a>	<a href="#">Delete</a>



# MDM landscape

- Early it was all about email
  - Blackberry BES
  - Exchange ActiveSync
- Now a logical extension of desktop management (w/all the mobile requirements)
- Moving towards isolation of personal data/apps from company data/apps



# MDM innards

- Web Service/Database
- Directory (AD/LDAP)
- Certificates
- Profile Generator for all device functionality
- Connected to Apple Push Notification Service (APNs) to notify devices of updates
- Link to use Apple Volume Purchase Program (VPP)



# Apple's solutions

- Dare I say it - iCloud...
- Apple Configurator - the USBDM?
- OS X Server Profile Manager (10.8)



# Third Party MDM solutions

- JAMF's Casper Suite, Absolute Software, Airwatch, MobileIron, and 10,000 others....
- Apple or Third Party MDM?
  - Non iOS Devices
  - Features
    - Granular control
    - OTA Application Deployment
    - GeoFencing!!!
  - Money



# Yours vs. Hosted

- Building out the infrastructure
- Solution mobility
- Cost
  - Yours - server+server software+you
  - Hosted Casper - robotcloud.net = \$5/month/device



# Business drives implementation

- BYOD (Bring your own device)?
- Who owns the equipment?
- Who controls the equipment?



# Deployment

- Devices already out there
- Mass Deployment



# iCloud MDM

- Inventory - self!
- Configuration - self!
  - also does backups!
- Security Management
  - Find My iThing
- Distribution - App Store
  - You already have to use your Apple ID!
  - Provide redemption codes via email



# Apple Configurator

- Everything you wanted in a MDM, except the M
- Prepare mode - imaging
- Supervise mode - imaging + app management
  - The ONLY solution for app distribution where you can revoke applications and redemption code can be re-used



# MDM vs Configurator

[www.enterpriseios.com](http://www.enterpriseios.com)

	MDM	Configurator (unsupervised)	Configurator (supervised)
Installation	web page or (sometimes) app	USB	USB
Delivery of Updates	OTA Push	USB from original computer	USB from original computer
Multi-user devices?	No	No	Yes, with short backup-and-restore cycle
Set up mobileconfig restrictions, web clips, email, VPN, etc.?	Yes, with push updates and changes	Yes, only during initial config	Yes, only during initial config
Update iOS	No	Yes	Yes
Set Lock Screen Image	No	Yes, with optional device name	Yes, with device and/or user name and/or user photo
Set Wallpaper	No	Yes	Yes
Install free apps	Yes	Yes	Yes
Owner (Apple ID) of free apps	End User	Installer	Installer
Install Paid Apps with VPP Codes	Yes	Yes	Yes
Owner of Paid Apps	End-User	?	Device
Revokable and Reuse VPP Codes?	No	Yes (if device erased by ACfg)	Yes
Passwords entries needed for N app installs on a single device?	N (most implementations) or 1 (some implementations)	0	0
Can push documents?	Not through MDM (some have companion app)	Yes, as part of initial image	Yes, per-user docs backed up and saved
Query installed apps	Yes	No	No
Remote Wipe	Yes	No	No
Ideal for	<a href="#">BYOD</a> and/or widely-dispersed users	Initial configuration and deployments, especially when paired with MDM	Classrooms, loaner units, trainings, kiosks



# OS X Server Profile Manager

- Everything you wanted in an MDM, except app management
- Reference for iOS profiles
- Automatically sets up Apple Push Notification Service (APNs), and certs/profiles for device enrollment
- \$49!



# BYOD Demo

- Apple Configurator
  - Backup
  - Name Device
  - Install Profiles for auto MDM enrollment
- OS X Server Profile Manager
  - Inventory
  - Now Available to wipe/lock
  - Set company passcode standards/webclip



# Jamf Casper Suite

- Casper App Management



# Issues

- Apple ID
  - From MacWorld - “...An Apple ID is for an individual person, and Apple has no concept of a corporate ID. You don't get around that, you surrender to it.”
  - You **MUST** have a strategy for managing
- Apple Push Notification Service integration



# More Issues

- Application purchasing (see Apple ID)
  - Apple's Volume Purchasing Program
  - You thought managing Adobe apps was hard...
- Certificates - Used everywhere to establish trust, and they are hard to generate, hard to import, hard to export, and they expire
- Wiping can destroy personal data



# References

- <http://www.enterpriseios.com>
- <http://www.apple.com/ipad/business/it-center/>
- <http://www.jamfsoftware.com/products/casper-suite>
- <http://robotcloud.net>



# Q&A





## Apple Configurator



Prepare



Supervise



Assign

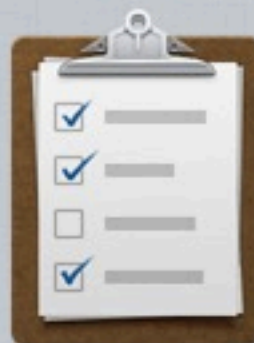


### Prepare Devices

Prep your iOS devices for mass deployment.

Configure your organization's devices. Quickly update them to the latest iOS version, install profiles, install free and volume purchased apps, or restore a device backup.

[Learn more](#)



### Supervise Devices

Enforce a standard configuration on your iOS devices.

Maintain control over groups of devices that share common apps, settings, and profiles. Automatically restore devices to the specified configuration when reconnected.

[Learn more](#)



### Assign Devices

Assign iOS devices to users in your organization.

Create and manage users and groups. Assign supervised devices to individual users, back up and restore users' content and settings, and distribute and retrieve users' documents. [Learn more](#)

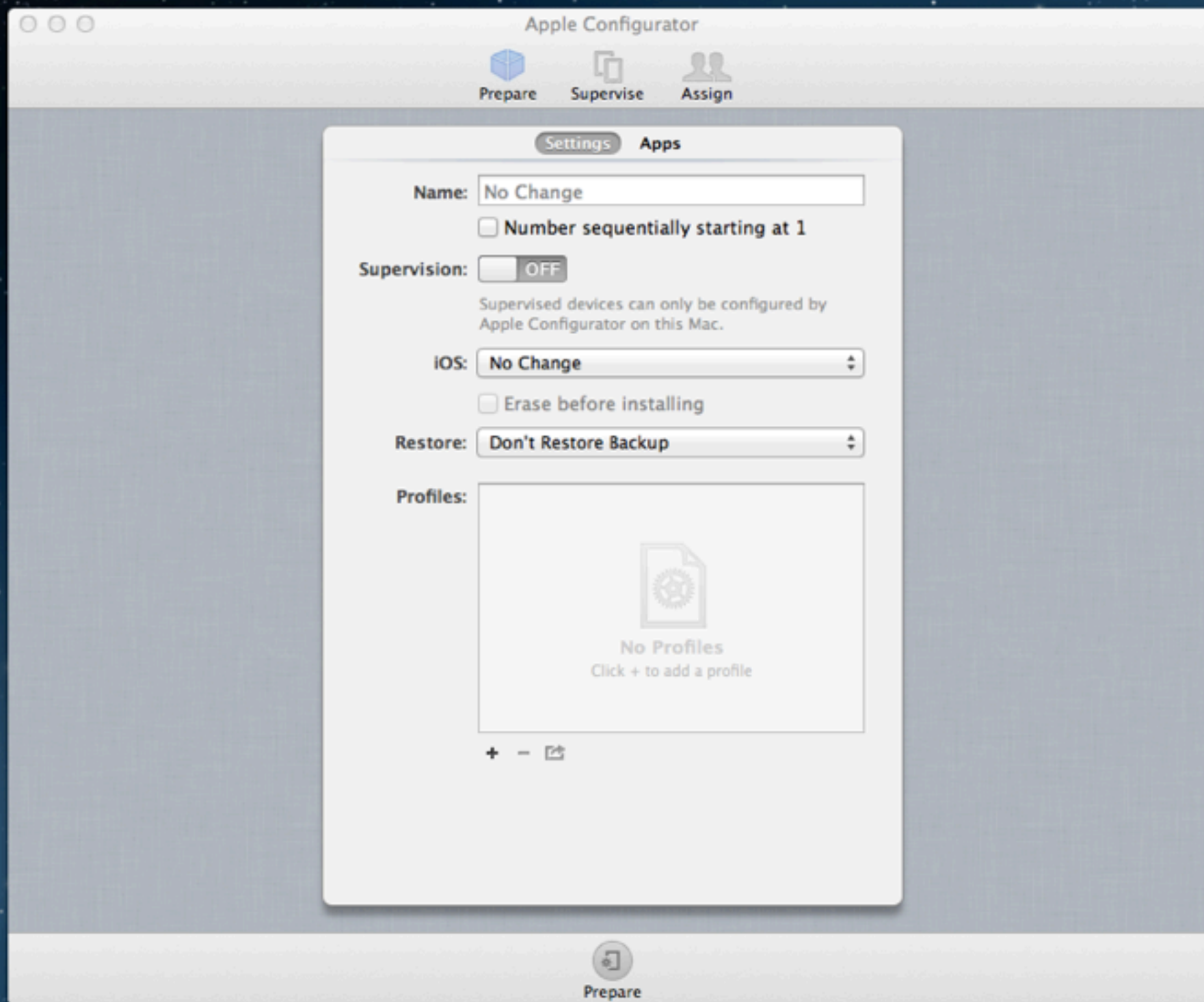
## Welcome to Apple Configurator

iOS device configuration, supervision and assignment made easy.

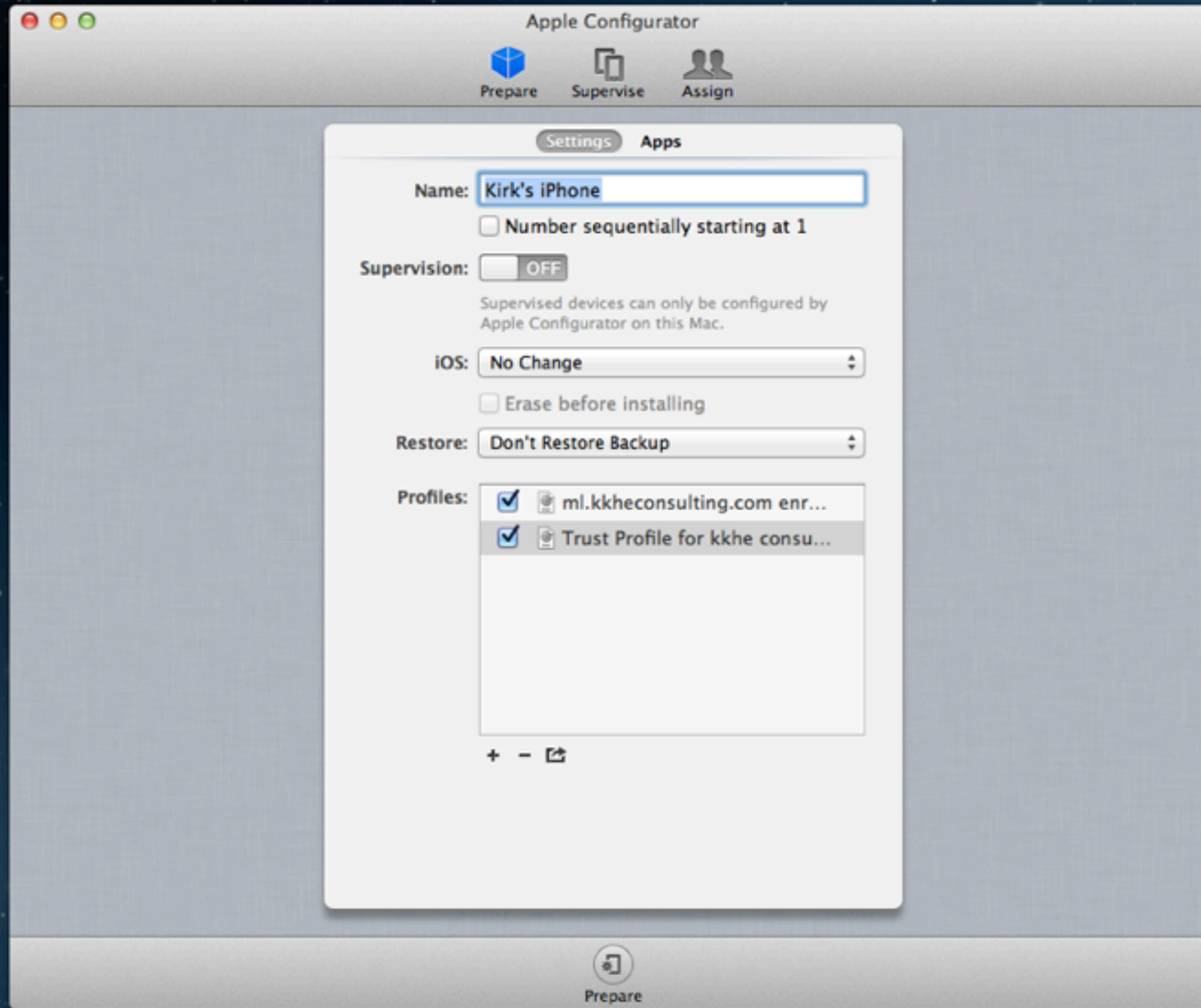


Start Preparing Devices

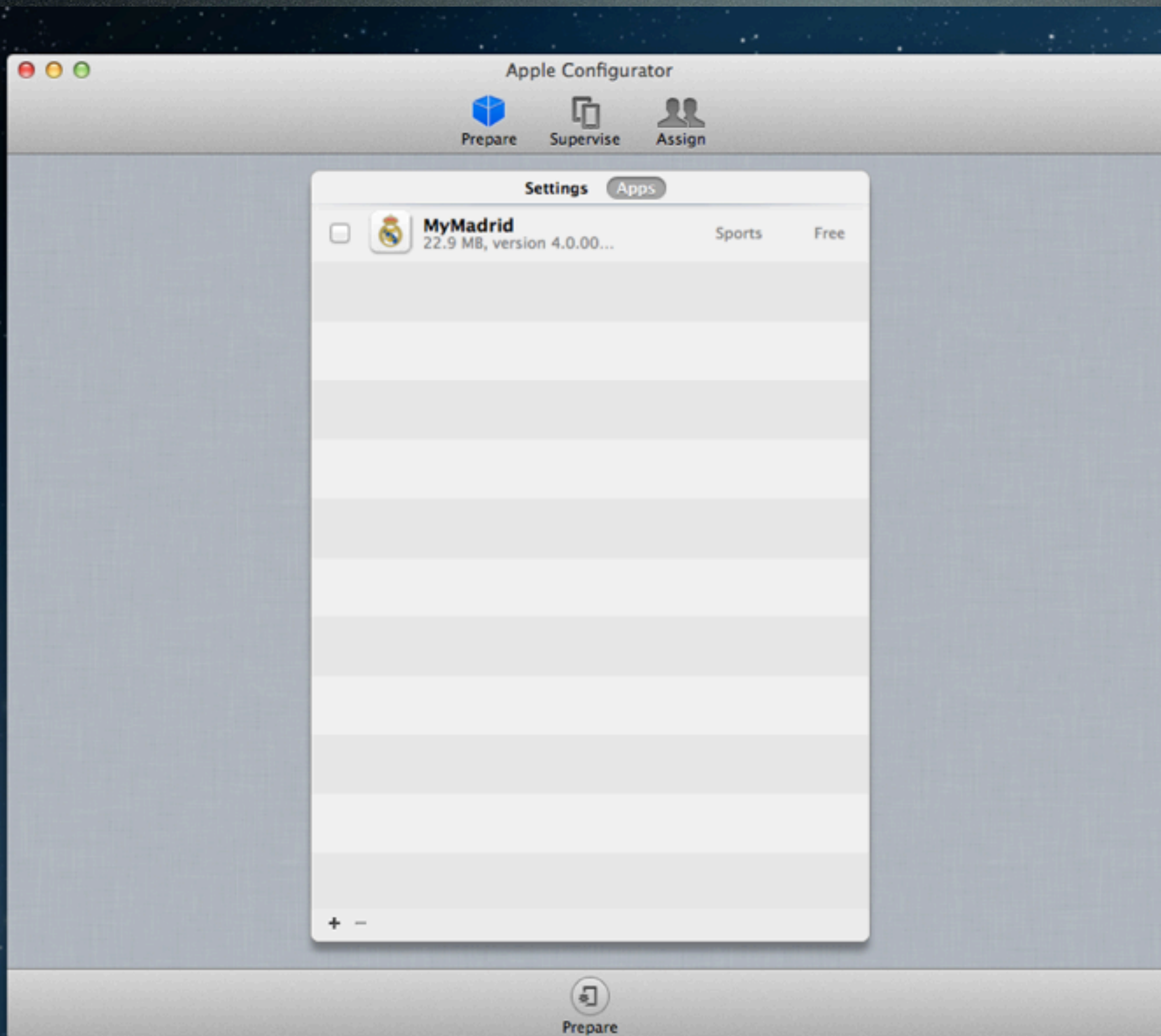




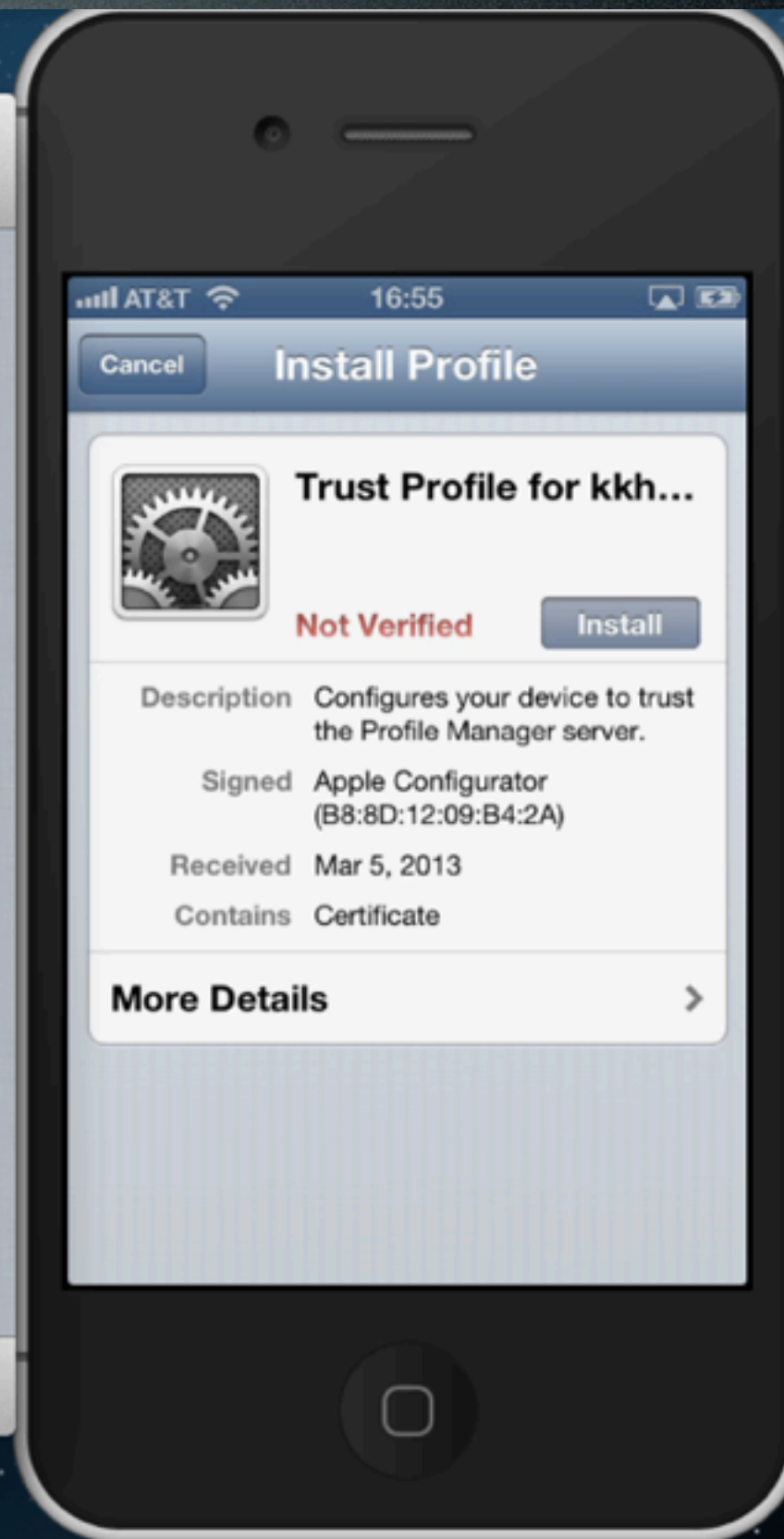
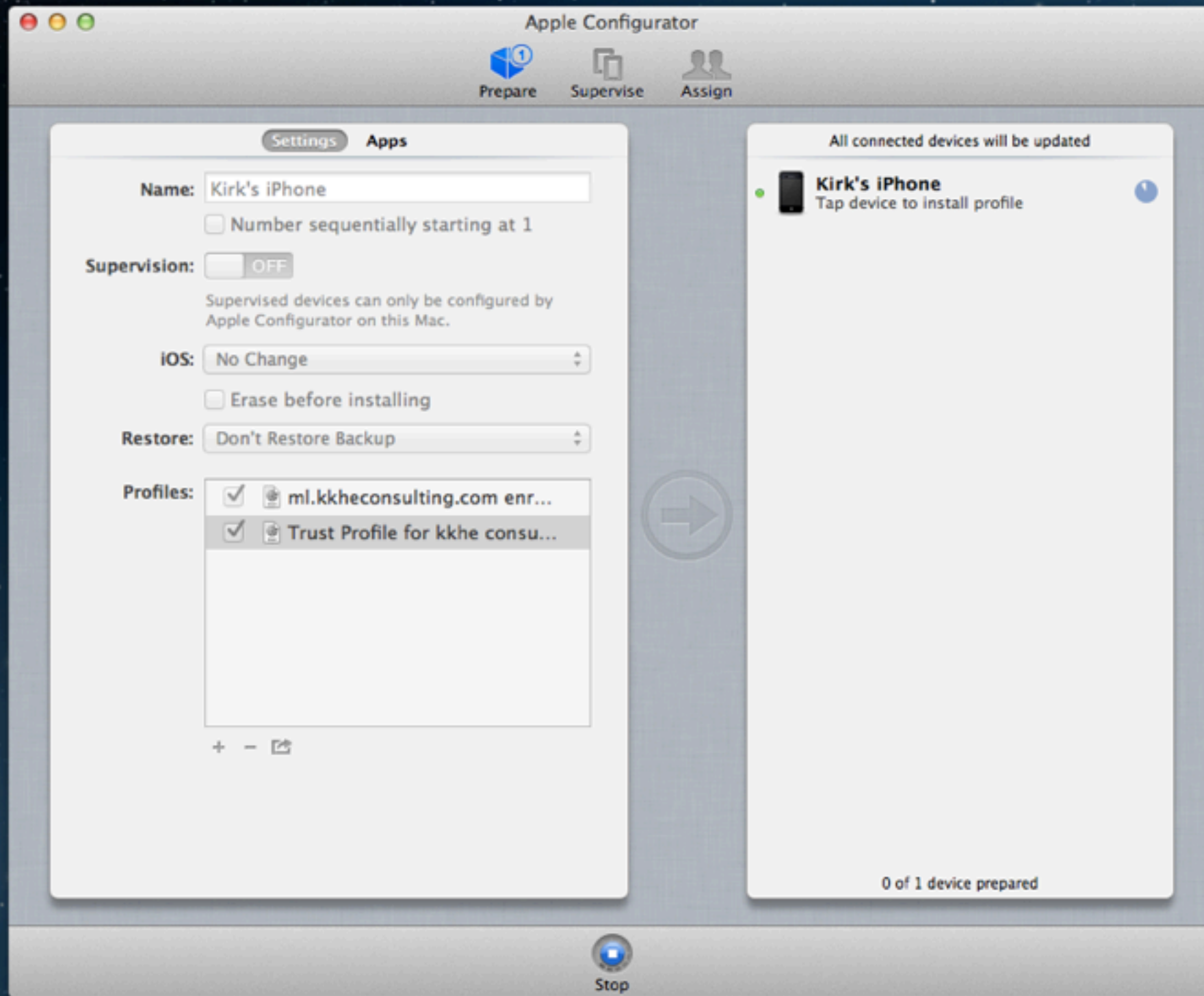




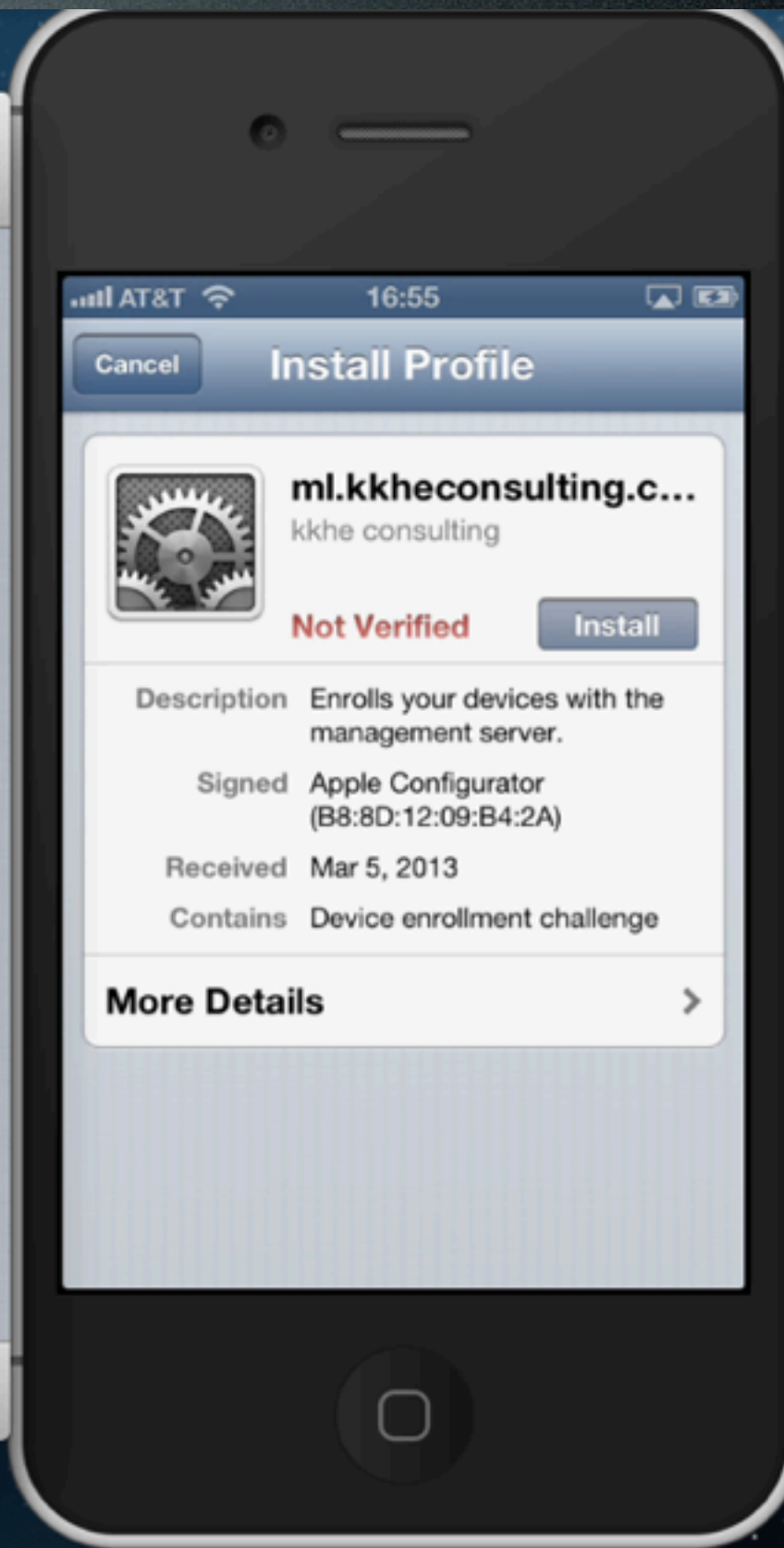




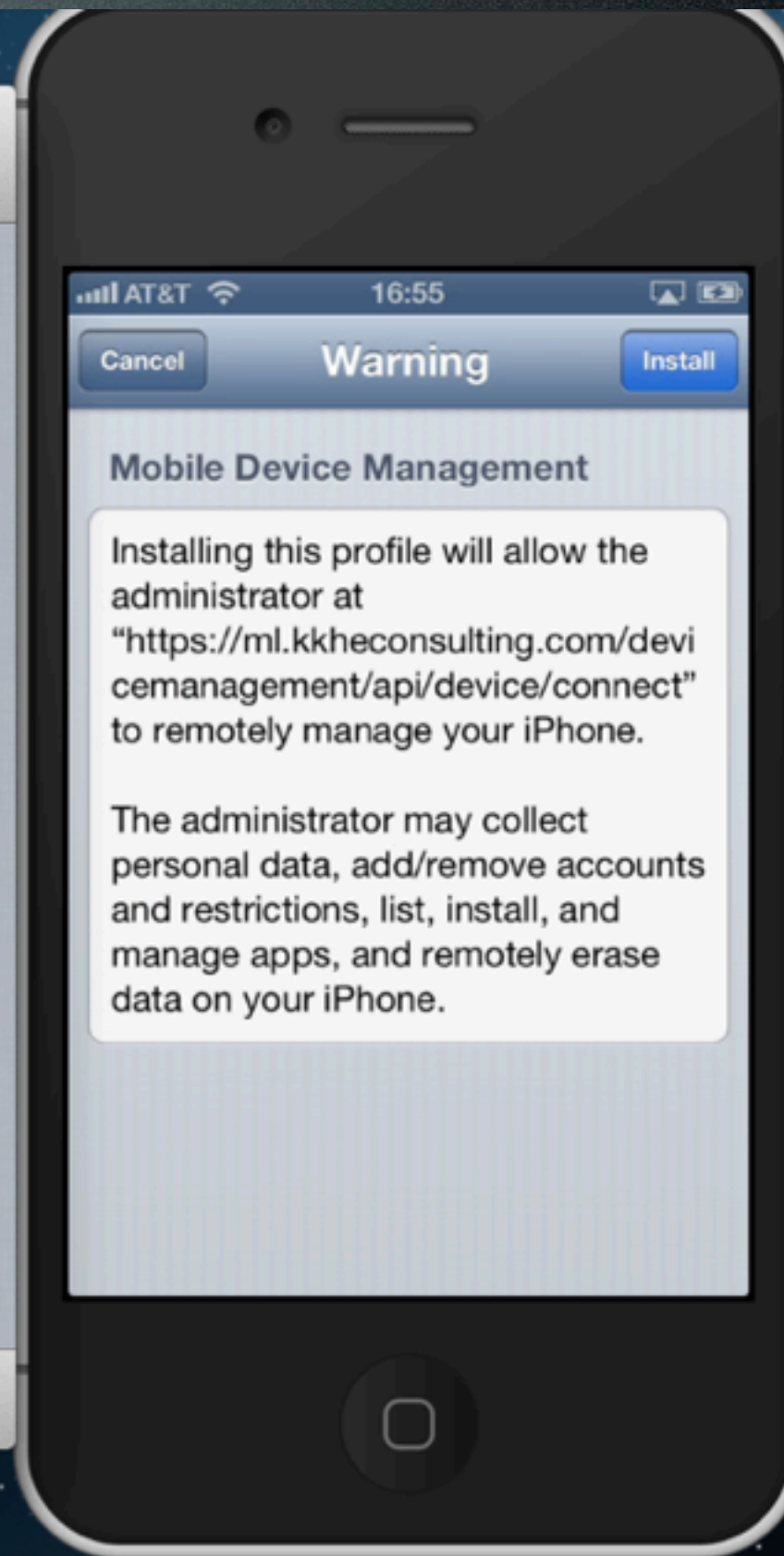
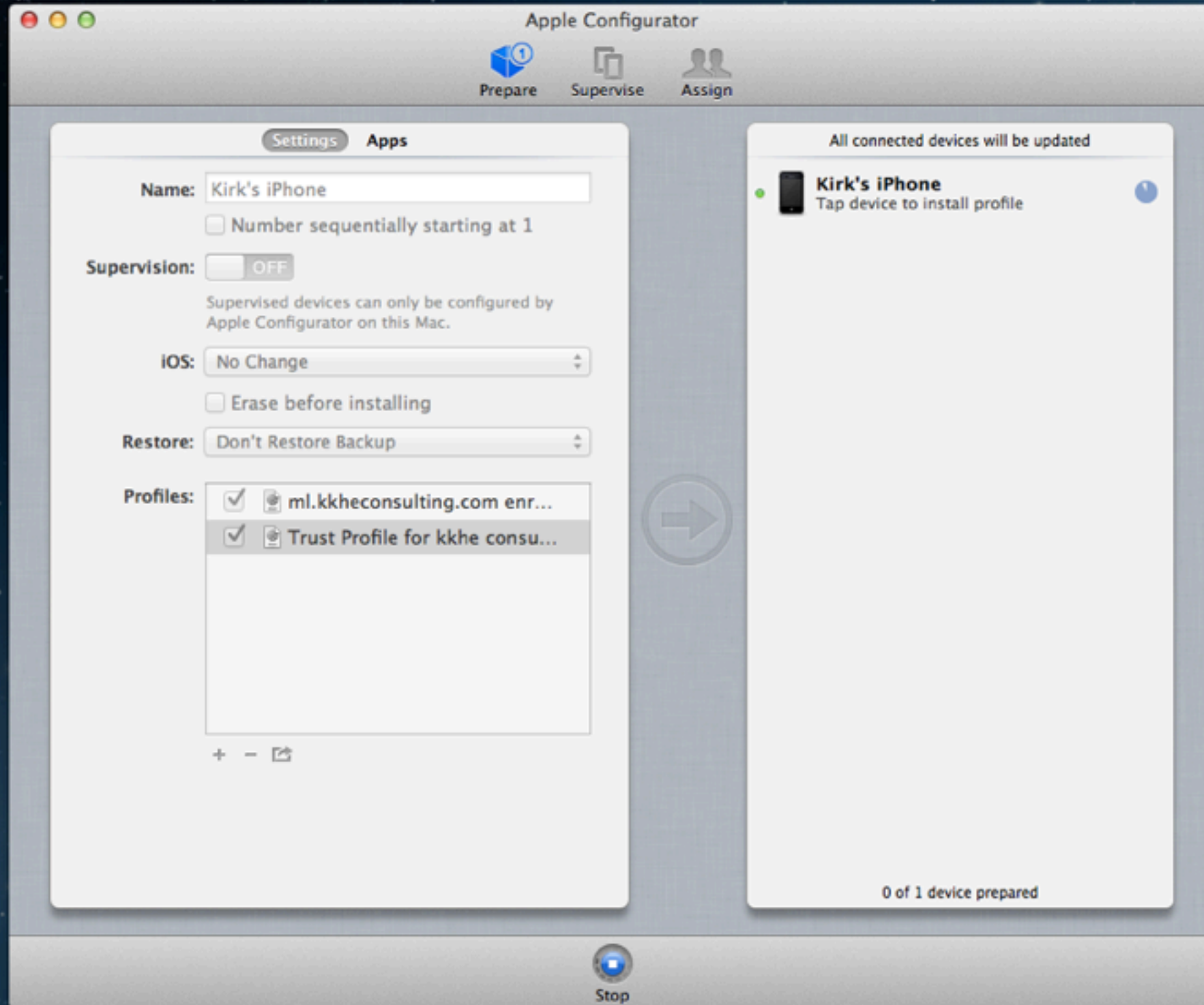




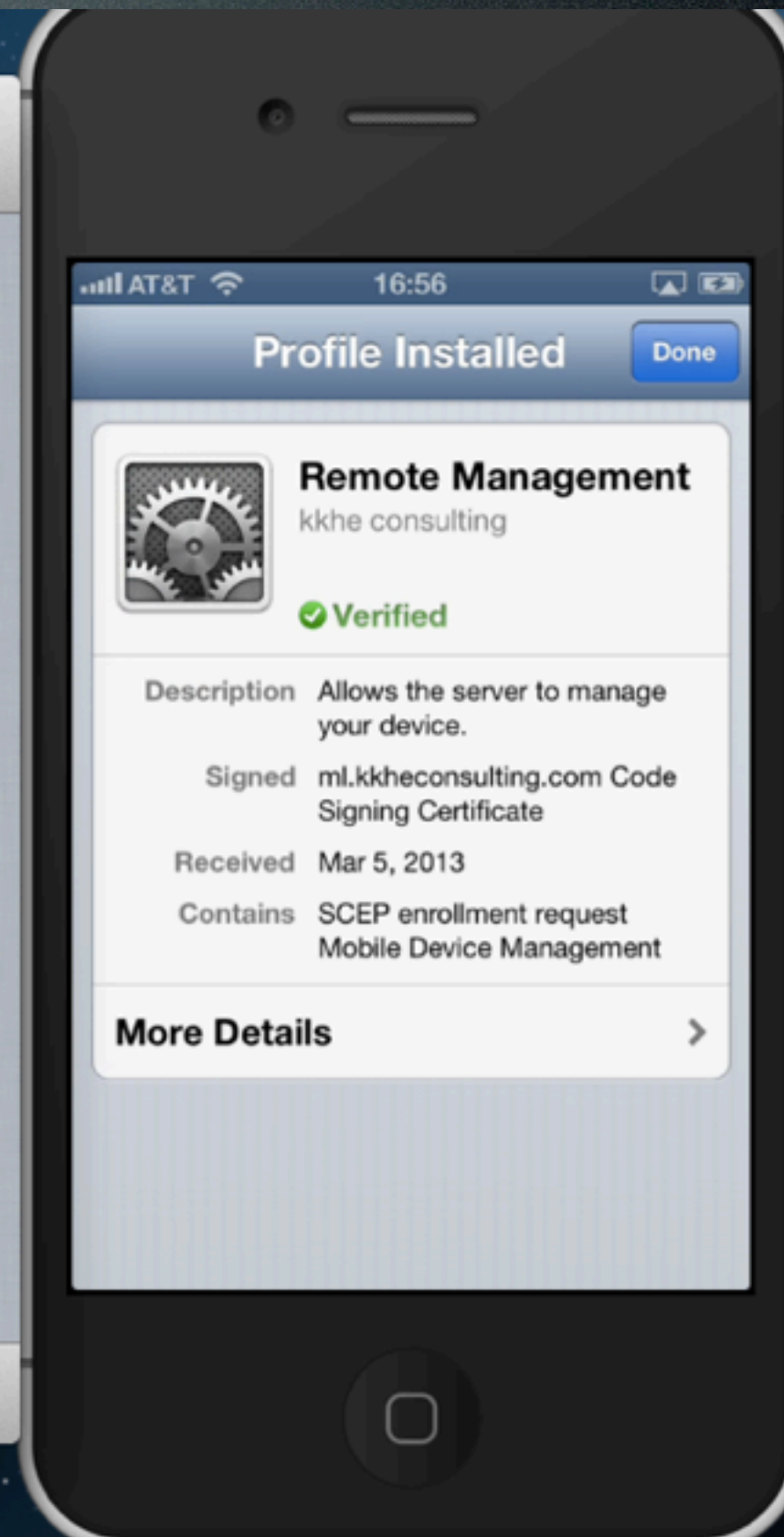
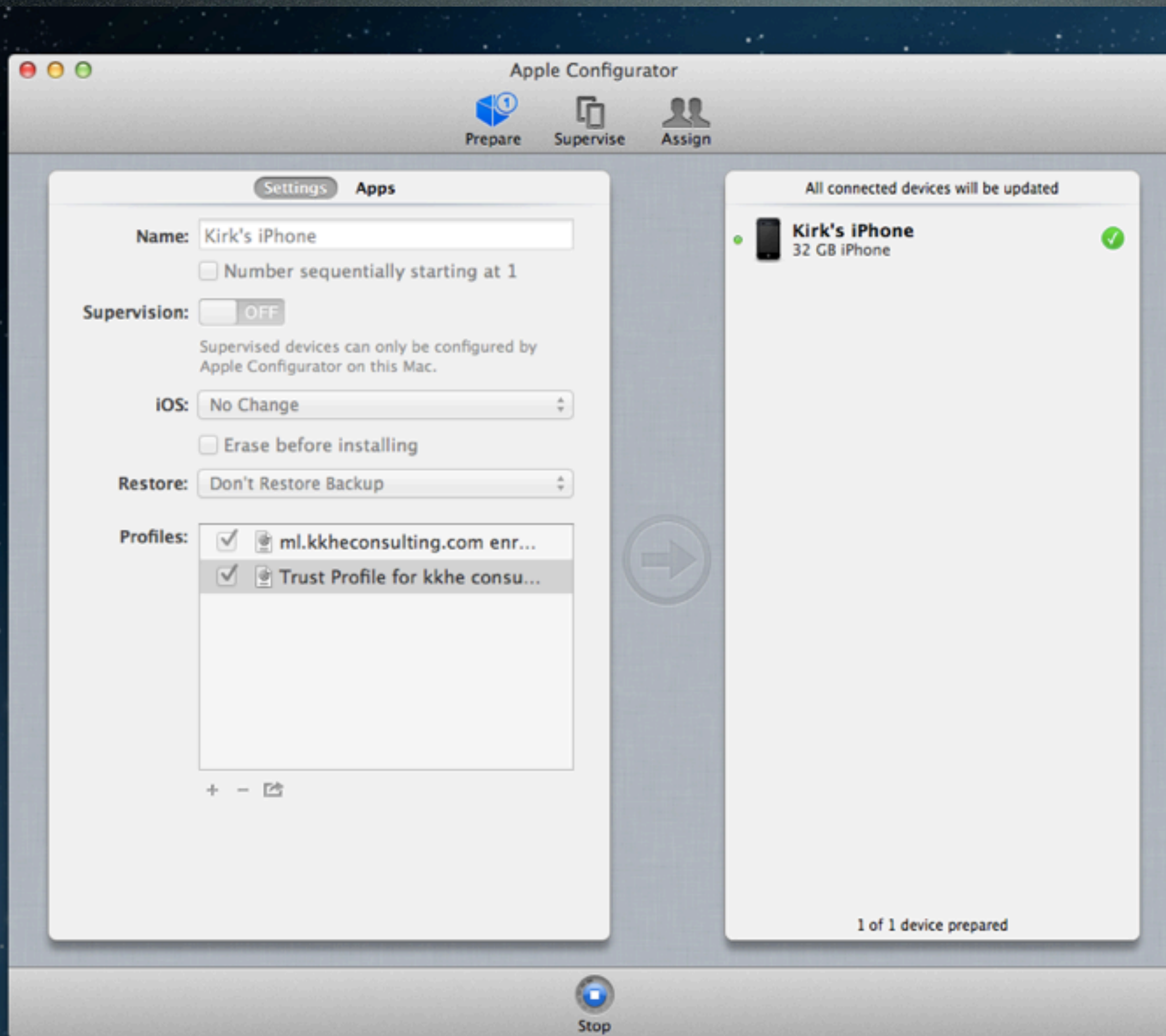




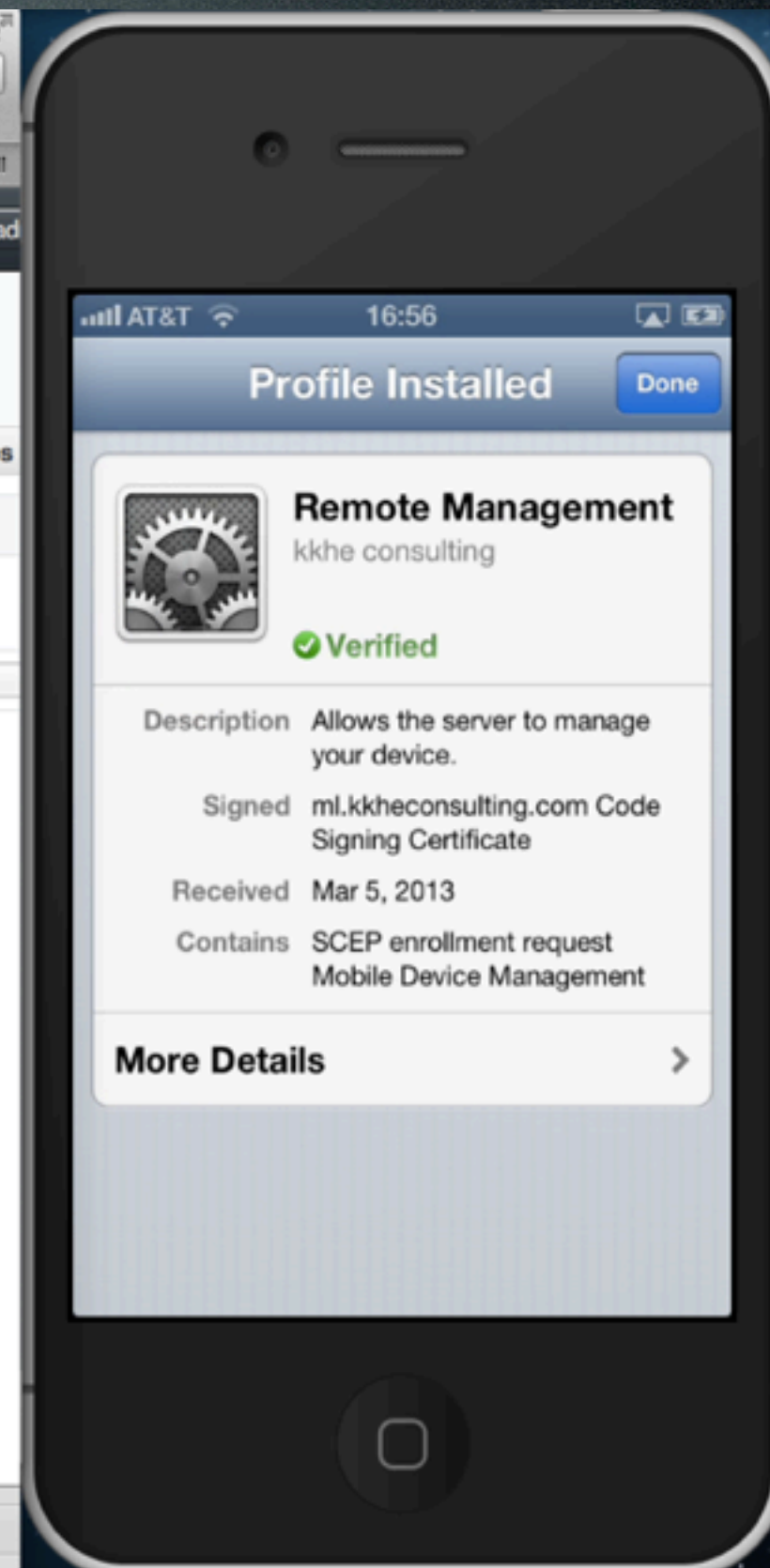
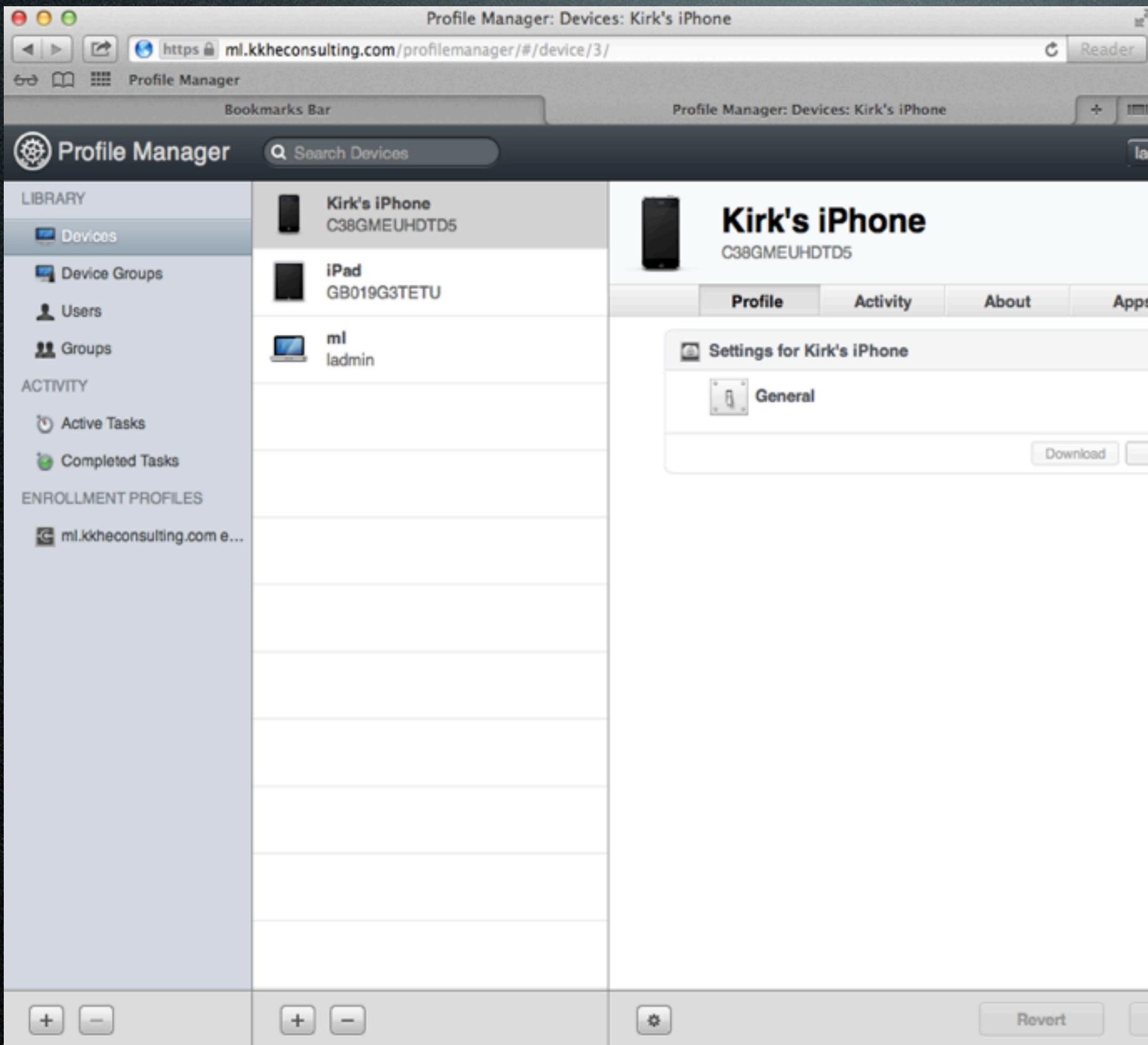
















LIBRARY

 Devices

 Device Groups

 Users


 Groups

ACTIVITY


 Active Tasks

 Completed Tasks

ENROLLMENT PROFILES

 ml.kkheconsulting.com e...

 **All iPads**  
1 Member

 **iPhones**  
No Members

 **iPhones**  
No Members

Profile

**Members**

Activity

About

Apps

 Kirk's iPhone





# Settings for iPhones

2 Payloads Configured – Updated 03/05/13 at 4:41 PM

## OS X and iOS



### General

1 Payload Configured



### Passcode

1 Payload Configured



### Network

Not Configured



### VPN

Not Configured



### Certificate

Not Configured



### SCEP

Not Configured



### Security & Privacy

Not Configured

## iOS



### Restrictions

Not Configured



### Accessibility

Not Configured



### Global HTTP Proxy

#### ☒ Allow simple value

Permit the use of repeating, ascending, and descending character sequences

#### ☐ Require alphanumeric value

Requires passcode to contain at least one letter

4

#### Minimum passcode length

Minimum number of passcode characters allowed

--

#### Minimum number of complex characters

Minimum number of non-alphanumeric characters allowed

730

#### Maximum passcode age

Days (1-730) after which the passcode must be changed

--

#### Maximum Auto-Lock

Device automatically locks when minutes elapse

#### Passcode history (iOS only)

Number (1-50) of unique passcodes before reuse

--

#### Maximum grace period for device lock (iOS only)

Maximum amount of time the device can be locked without prompting for passcode on unlock

--

#### Maximum number of failed attempts

Number of passcode entry attempts allowed before all data on device will be erased

Cancel

OK



LIBRARY

Devices

Device Groups

Users

Groups

ACTIVITY

Active Tasks

Completed Tasks

ENROLLMENT PROFILES

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All iPads  
1 Member

iPhones  
No Members



# iPhones

No Members

Profile

Members

Activity

About

Apps

Settings for iPhones

General

Barcode

Download

Edit

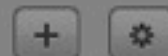


## Save Changes?

This might cause settings to be pushed to devices.

Cancel

Save



Revert

Save...



Profile Manager

Search Completed Tasks

admin

LIBRARY

Devices

Device Groups

Users

Groups

ACTIVITY

Active Tasks

Completed Tasks

ENROLLMENT PROFILES

ml.kkheconsulting.com e...

Update Info

1 succeeded

Push Settings: Settings for iP...

1 succeeded

Update Info: Kirk's iPhone

Succeeded

Update Info: Kirk's iPhone

Succeeded

Update Info: Kirk's iPhone

Succeeded

Update Info: Kirk's iPhone

Succeeded

Push Settings: Settings for iP...

1 succeeded

Update Info

1 succeeded

Push Settings

1 succeeded

Push Settings

1 succeeded

Push Settings

1 succeeded

Push Settings

1 succeeded

Push Settings

1 succeeded

Update Info

1 succeeded

Devices

Kirk's iPhone

Succeeded

03/05/13 at 4:59 PM

AT&T 17:00

General Profiles

Configuration Profiles

TestFlight WebClip

testflightapp.com

Trust Profile for kkhe co...

Remote Management

kkhe consulting

Settings for iPhones

kkhe consulting

Provisioning Profiles

Team Provisioning Profile

Expires on Feb 27, 2014

MACTECH



