

Mobility and Profiles

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Current MDM Types

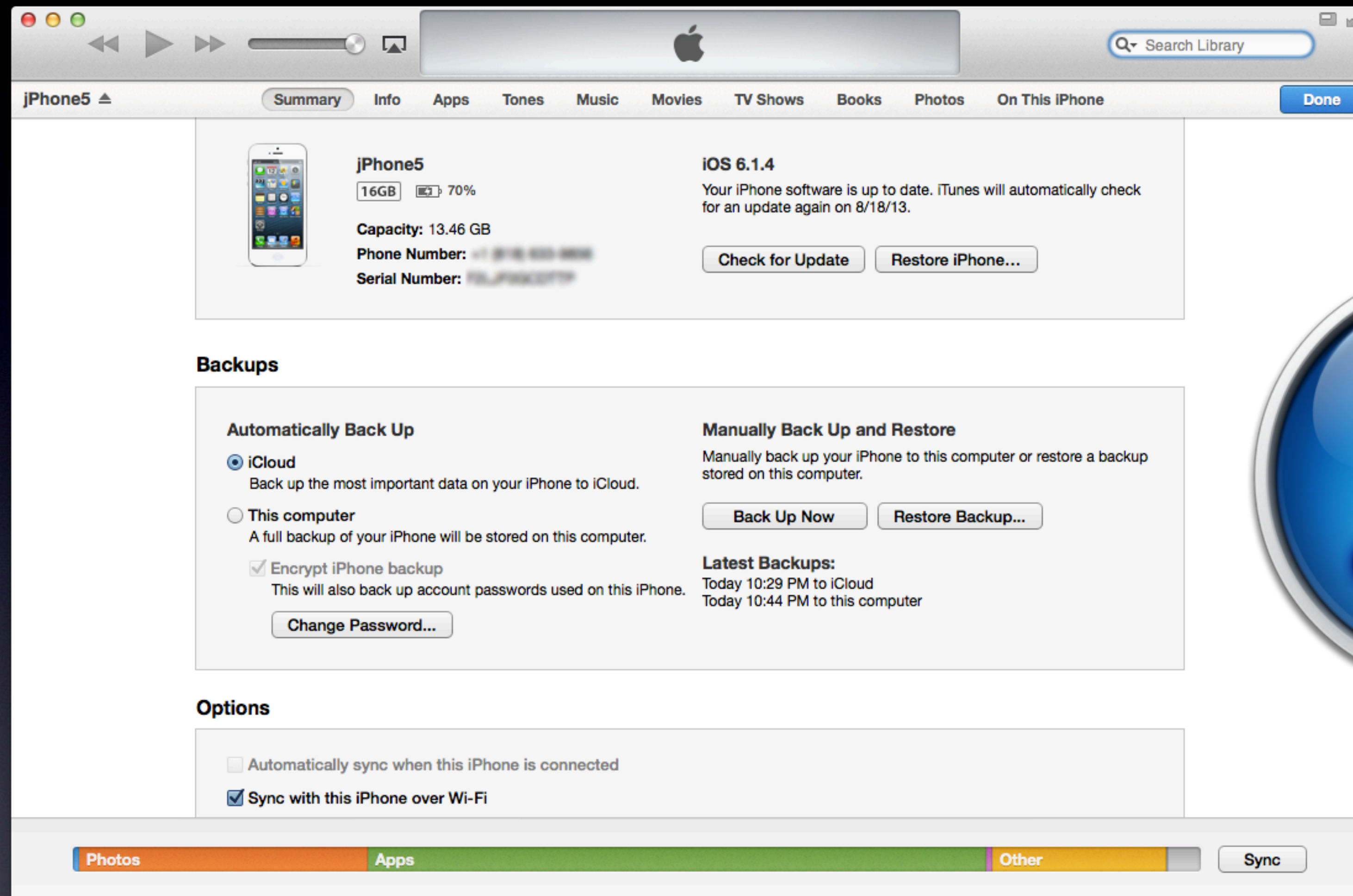
- Over the wire (USB)
 - Apple Configurator
- OTA Server or Cloud based
 - Profile Manager 2
 - JAMF Casper, Airwatch etc.
- Better together



iTunes

- Personal use
- Works with one iOS device over USB
- OTA apps and backups possible
- Encrypted backups
- Backup forking





iPhone Configuration Utility

- One iOS device over USB
- Special uses
 - Can list apps
 - Can copy IMEI and ECID
 - Logs
 - Device type ID



+

Add

Share

Export

i

Hide Detail

Q All

Search

LIBRARY

Devices

Applications

Provisioning Profiles

Configuration Profiles

DEVICES

? iPhone5

Name	Serial Number	Identifier	Type	OS Version	Owner Name
jPhone4	83138791A45	0B13A4249B5c4935a726c70773e22	iPhone3,1	5.1.1 (9B206)	
jPhone5	F44F96C07F9	0B13A4249B5c4935a726c70773e22	iPhone5,1	6.1.4 (10B350)	

Summary

Configuration Profiles

Provisioning Profiles

Applications

Device



Name: iPhone4

Capacity: 13.75 GB

Software Version: 5.1.1 (9B206)

Serial Number: 83138791A45

Identifier: 0B13A4249B5c4935a726c70773e22

ECID: 0000000000000000

IMEI: 83138791A45

MEID: Unknown

WiFi MAC Address: 08:00:27:00:00:00

Bluetooth MAC Address: 08:00:27:00:00:00

Last Connected: September 13, 2012 8:56 AM

Contact

Phone Number: +1 (818) 633-8834

Name:

Email Address: @

Certificate



BE893E5F-D623-481C-9A44-66A70834DC4F

Issued by: iPhone Configuration Utility (77BE9804-98ED-473F-AD1B-B375F43E9955)

Expires: Saturday, December 14, 2013 11:01:13 PM Pacific Standard Time



Apple Configurator

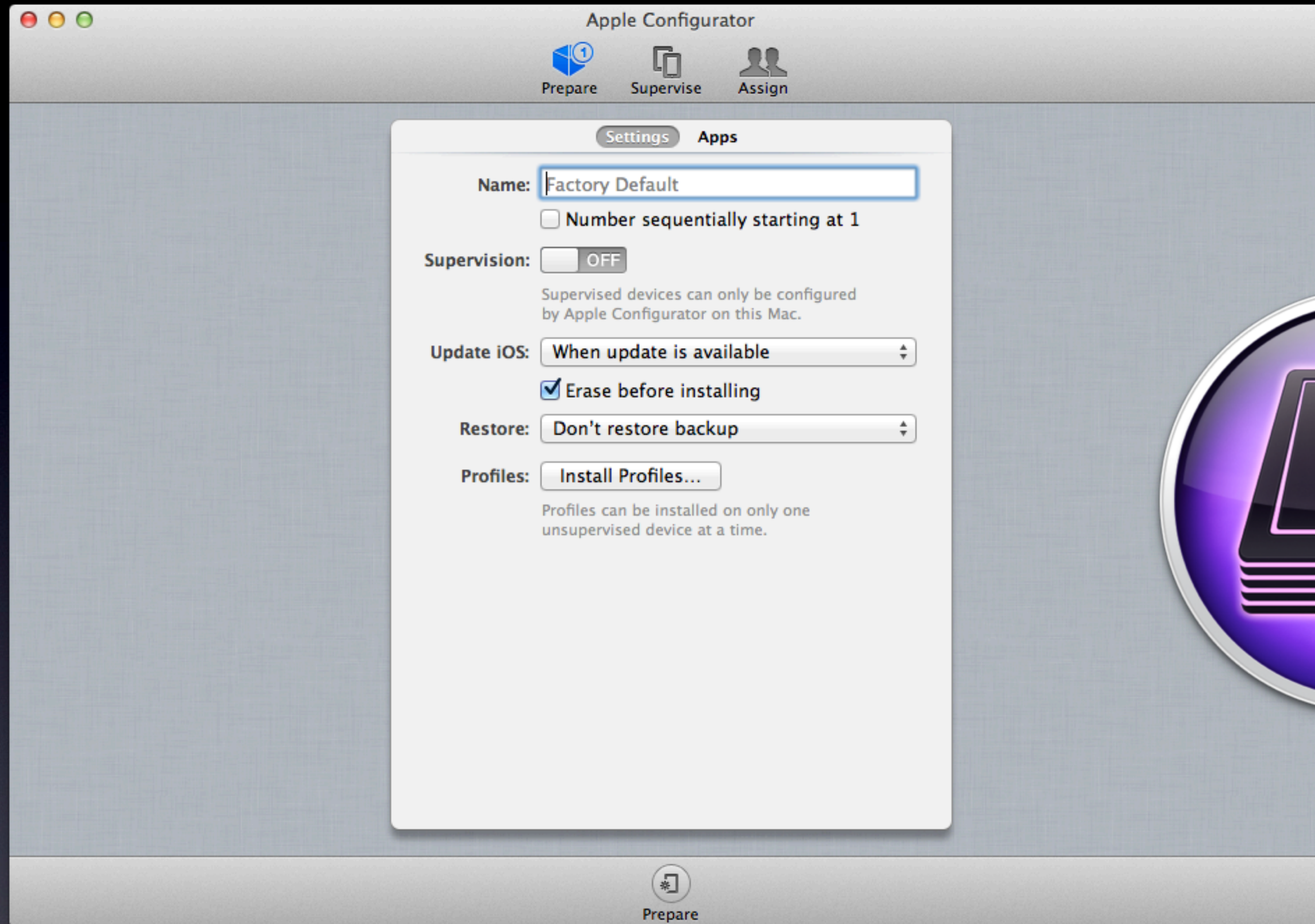
- Multiple iOS devices over USB
- Internet is required
- Three interrelated steps
 - Prepare, Supervise, Assign



Prepare

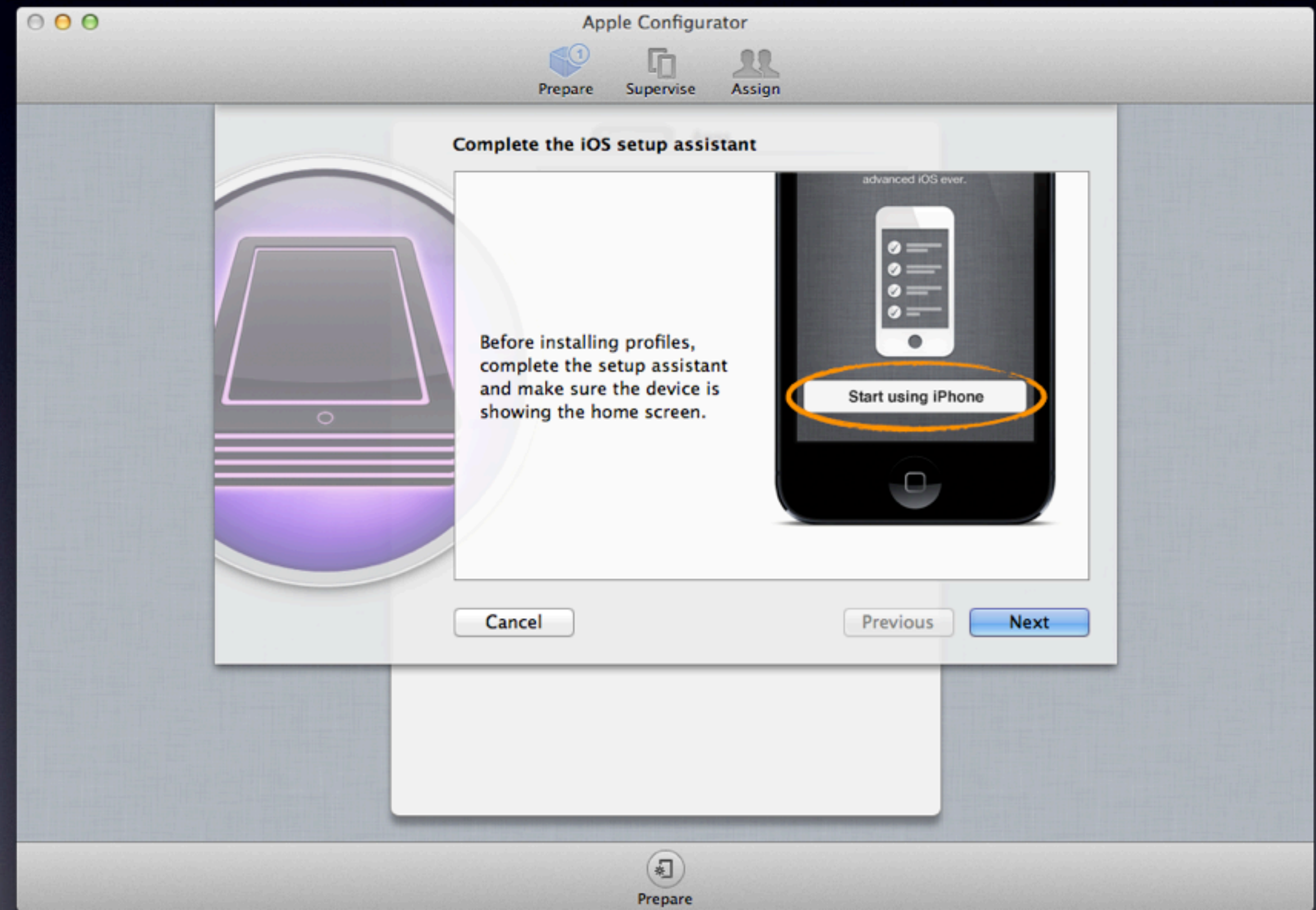
- Name and auto-number devices
- With or without supervision
- Update iOS
- Restore from backup
- Install apps and profiles





Profiles via Prepare

- Requires user level approval
- Time sensitive
- Best for:
 - One-off
 - AppleTV



Supervise

- Silent profile installation
- Manage VPP apps
- Device data export and device groups
- Custom lock screen
- Prevents iTunes Sync



Supervise

- Greatly extended profile capabilities
- Lock to App
- Conformance options



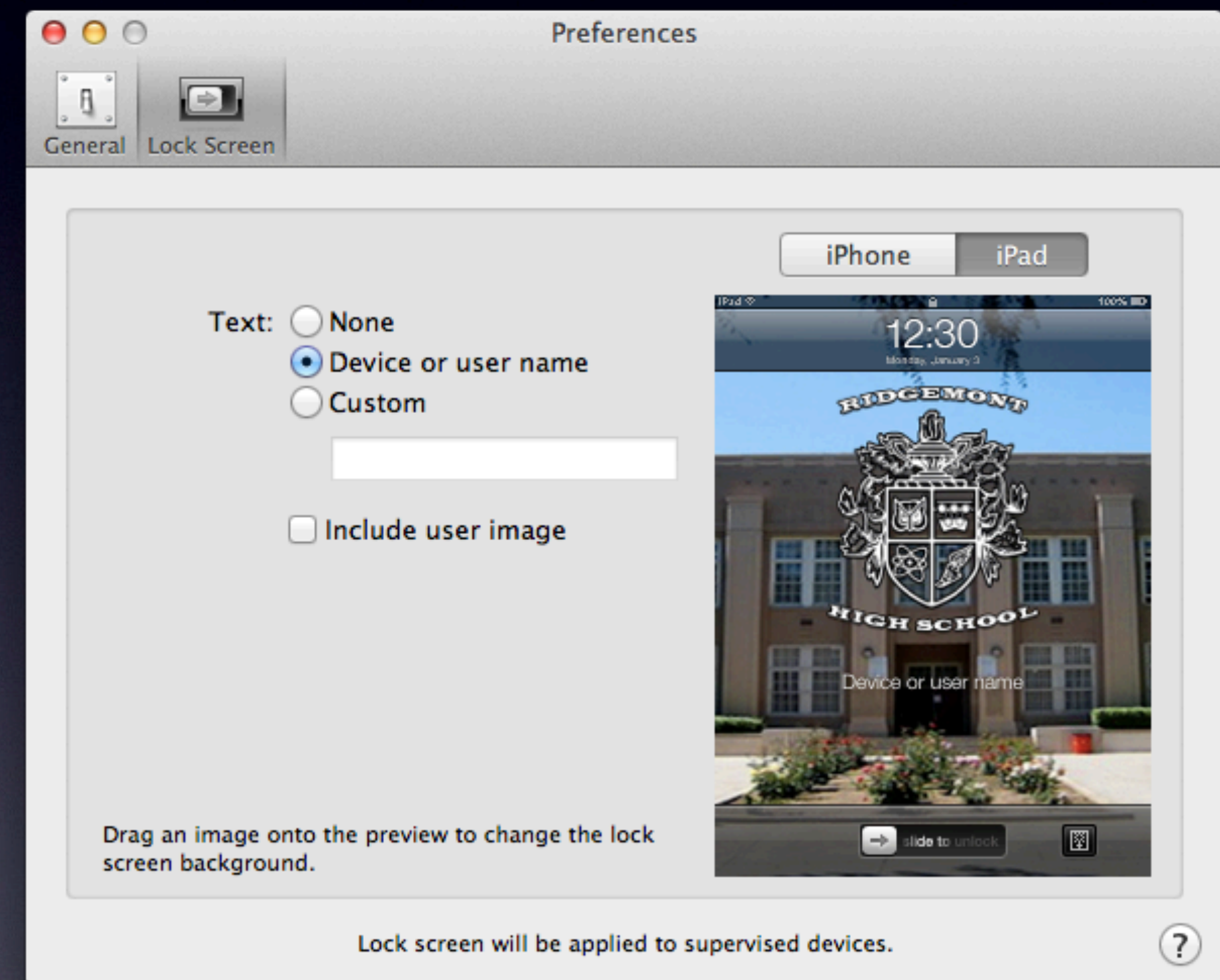
Configurator Preferences

- Automatic refresh
 - Enforces restore from backup
- Other conformance
 - Remove user apps and profiles
- Play sound on completion



Lock Screen Preferences

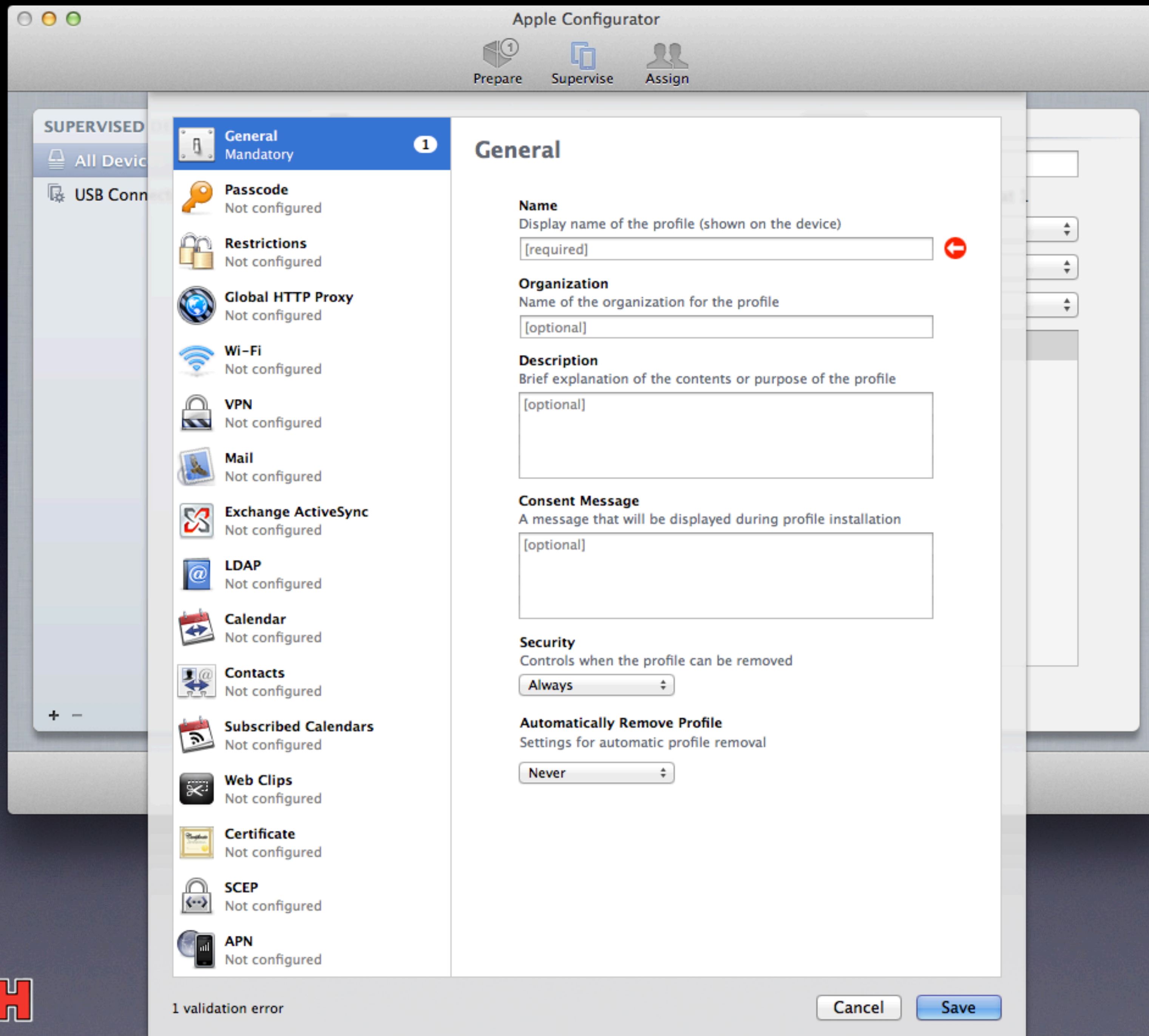
- Drag and drop images
- Show device or user name
- User images (if assigned)



Profiles in Configurator

- MDM Enrollment
- Wi-Fi Network(s)
- Restrictions
- Mail, Contacts, and Calendars
- Web clips
- Certificates

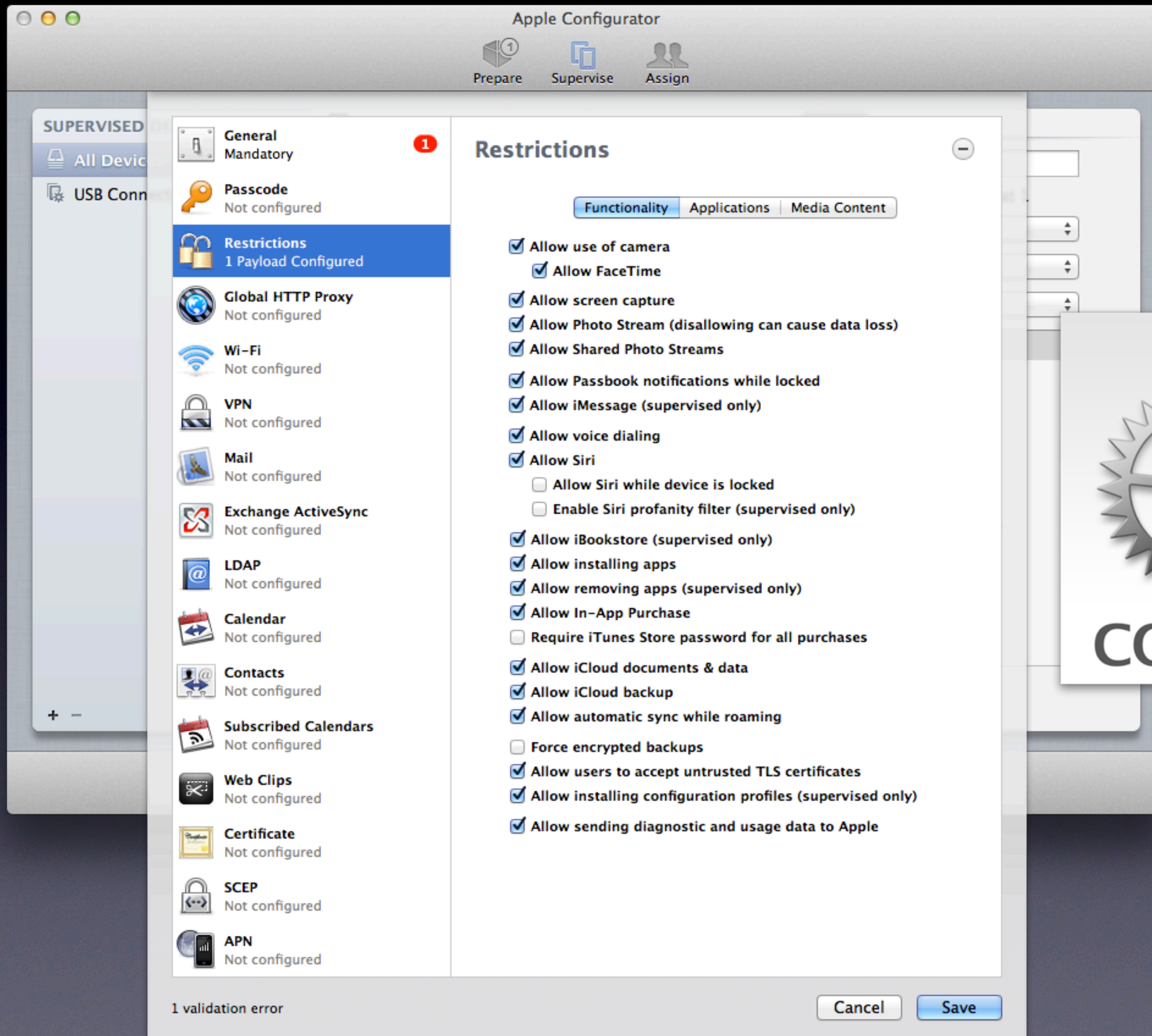


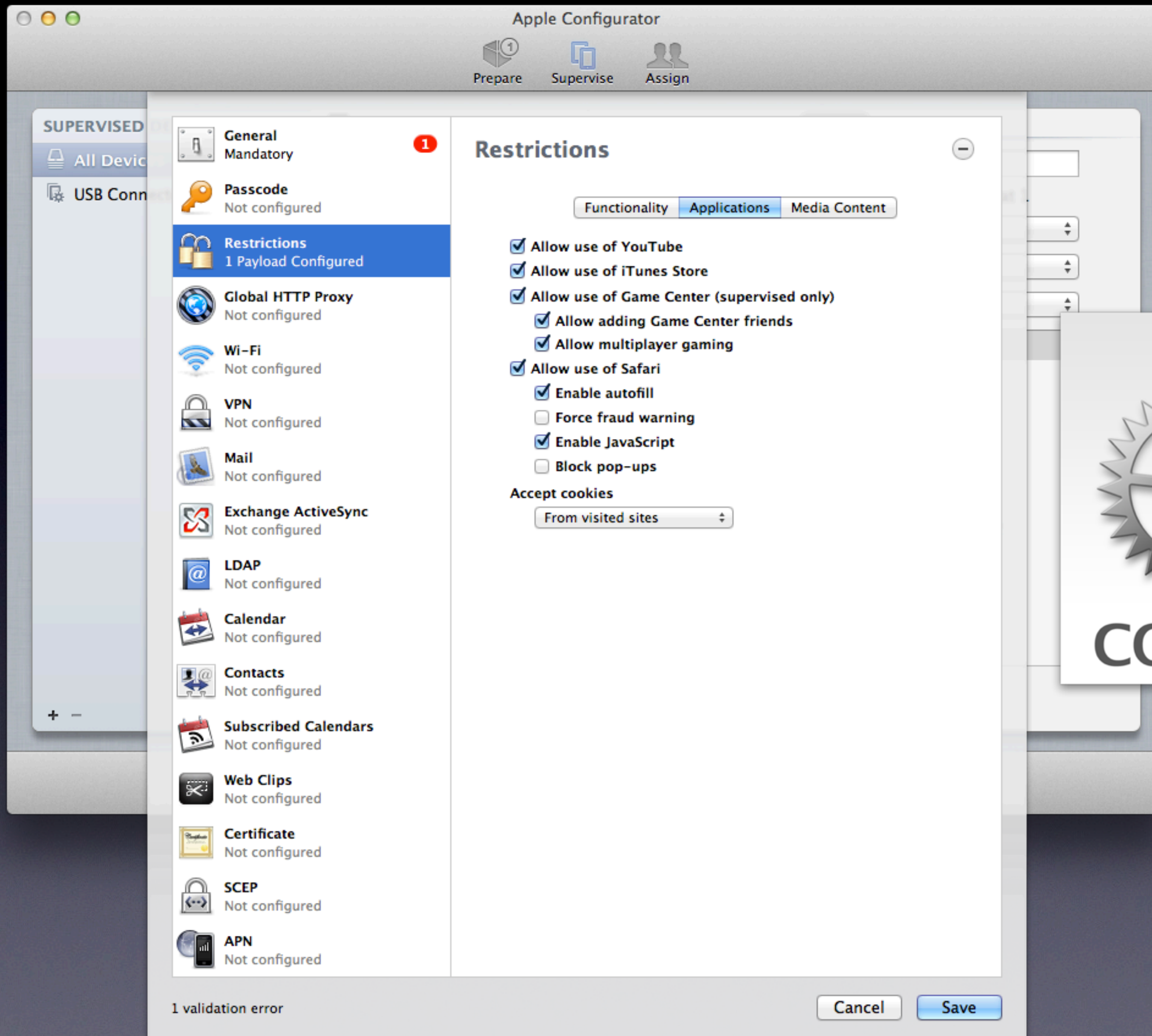


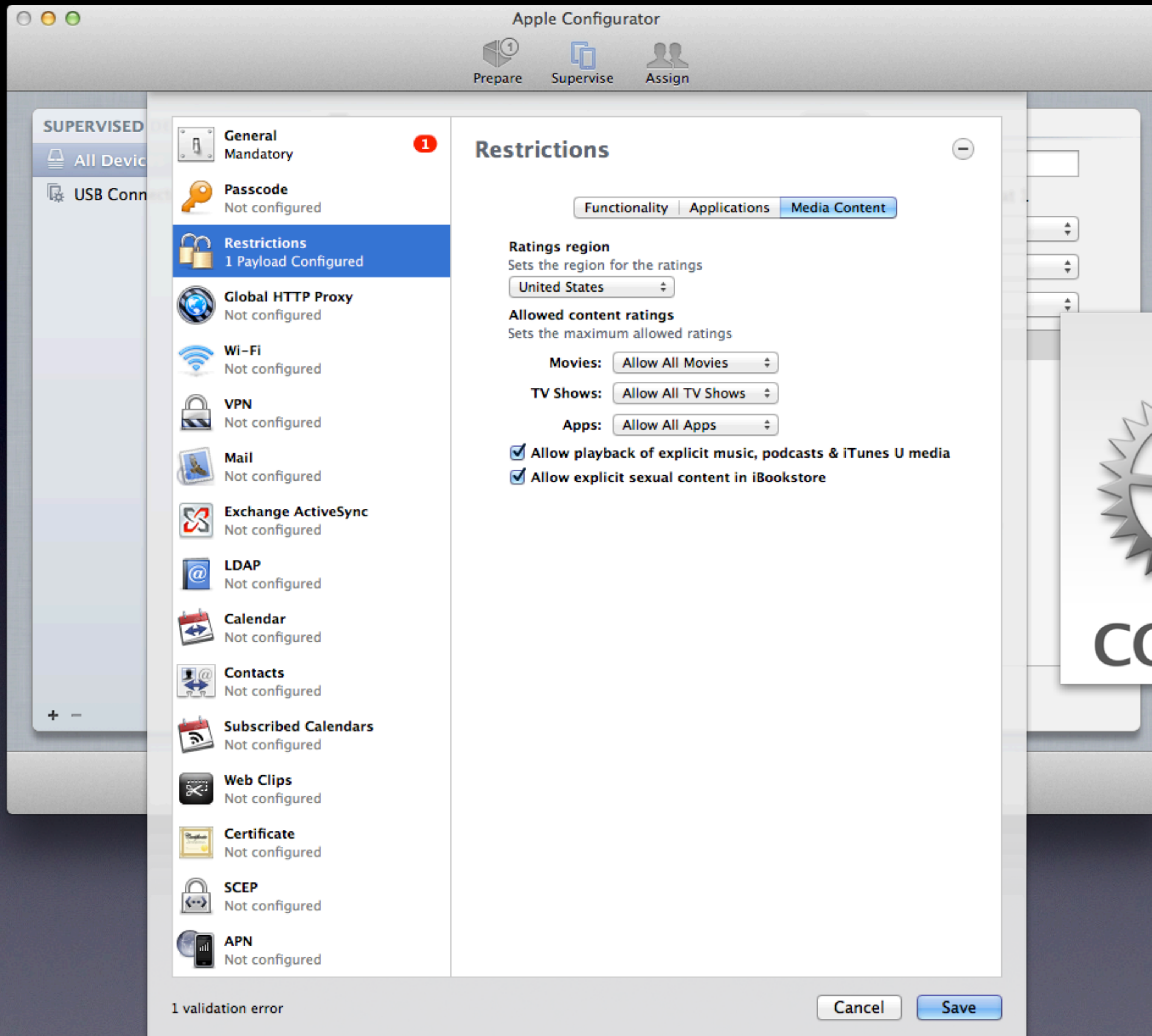
Get More with Supervision

- Silent installation
- Remove iMessage, iBookstore, Game Center
- Prevent installing profiles
- Prevent removing apps
- Profanity filter Siri
- Global HTTP Proxy





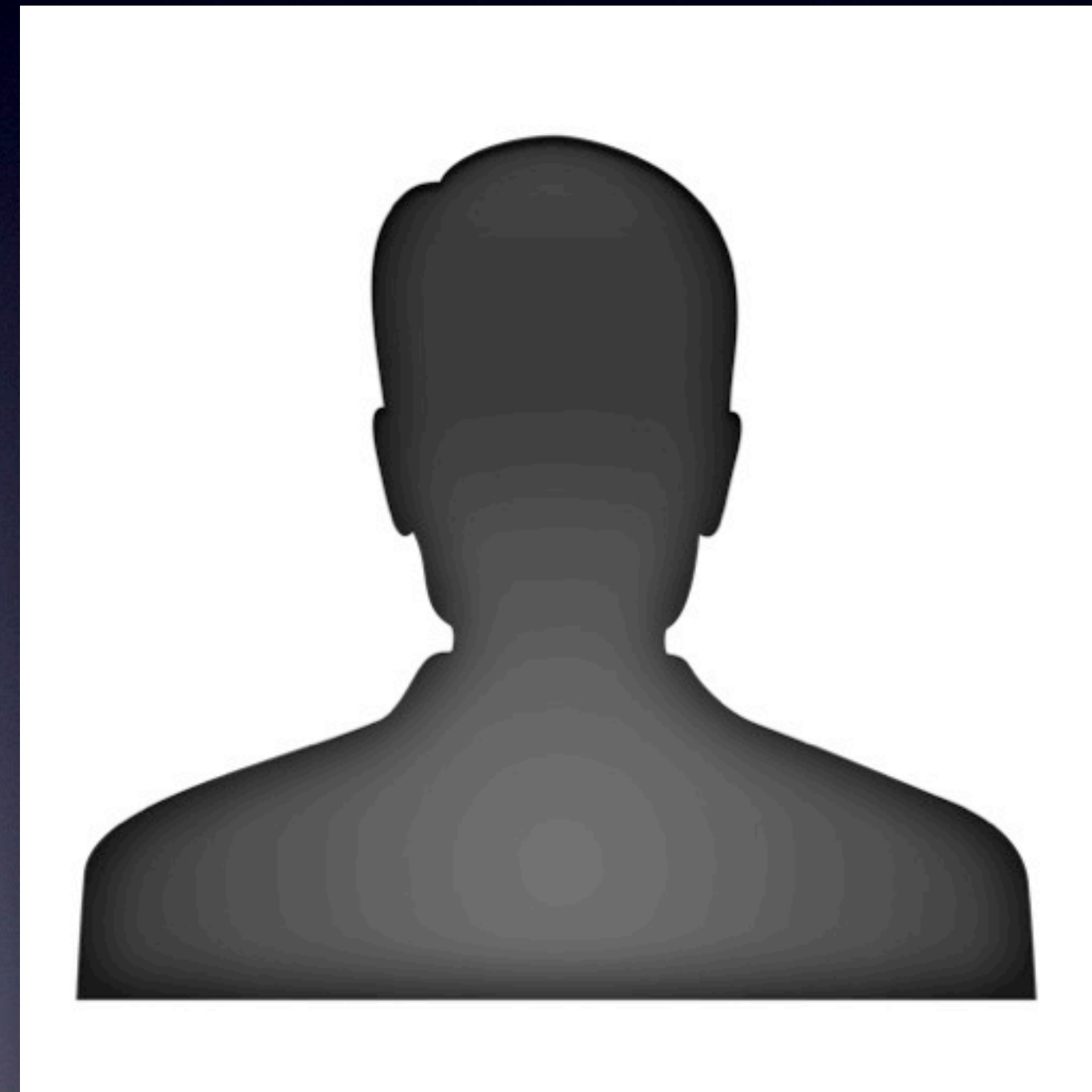


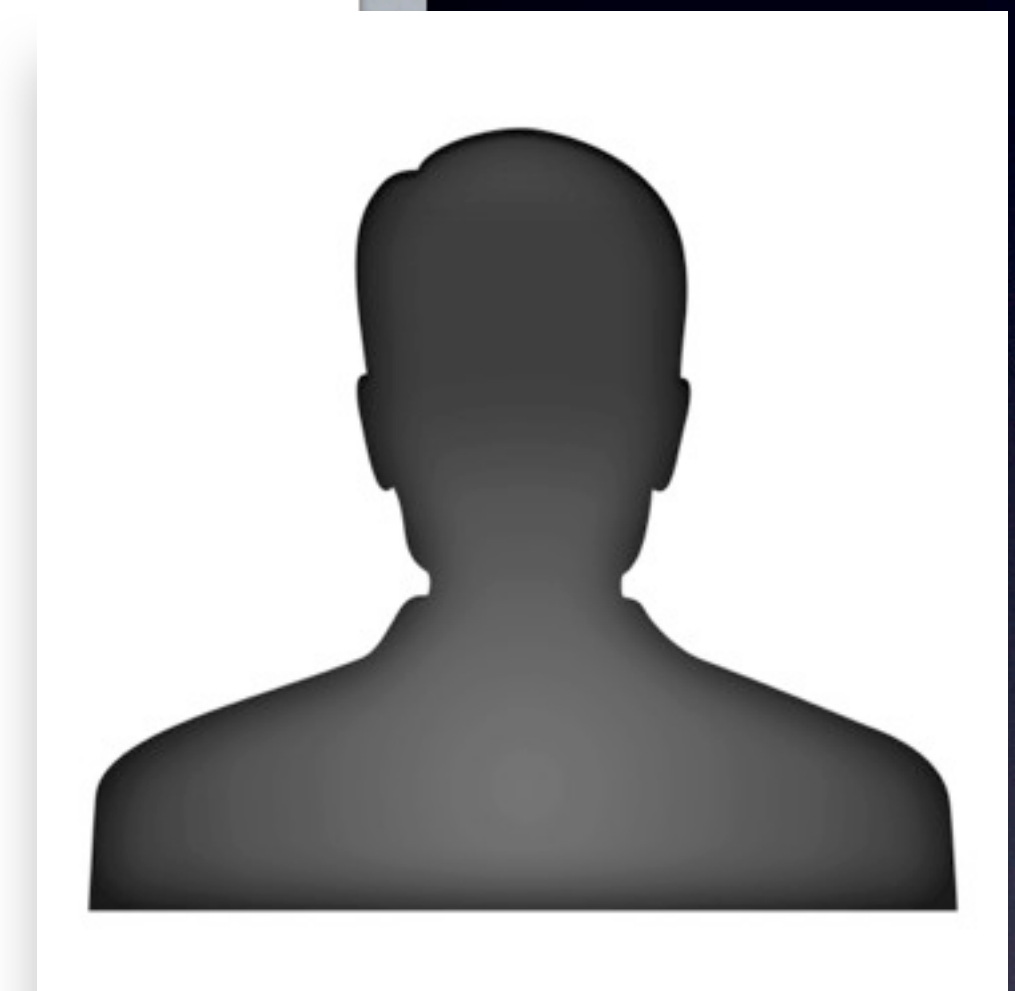
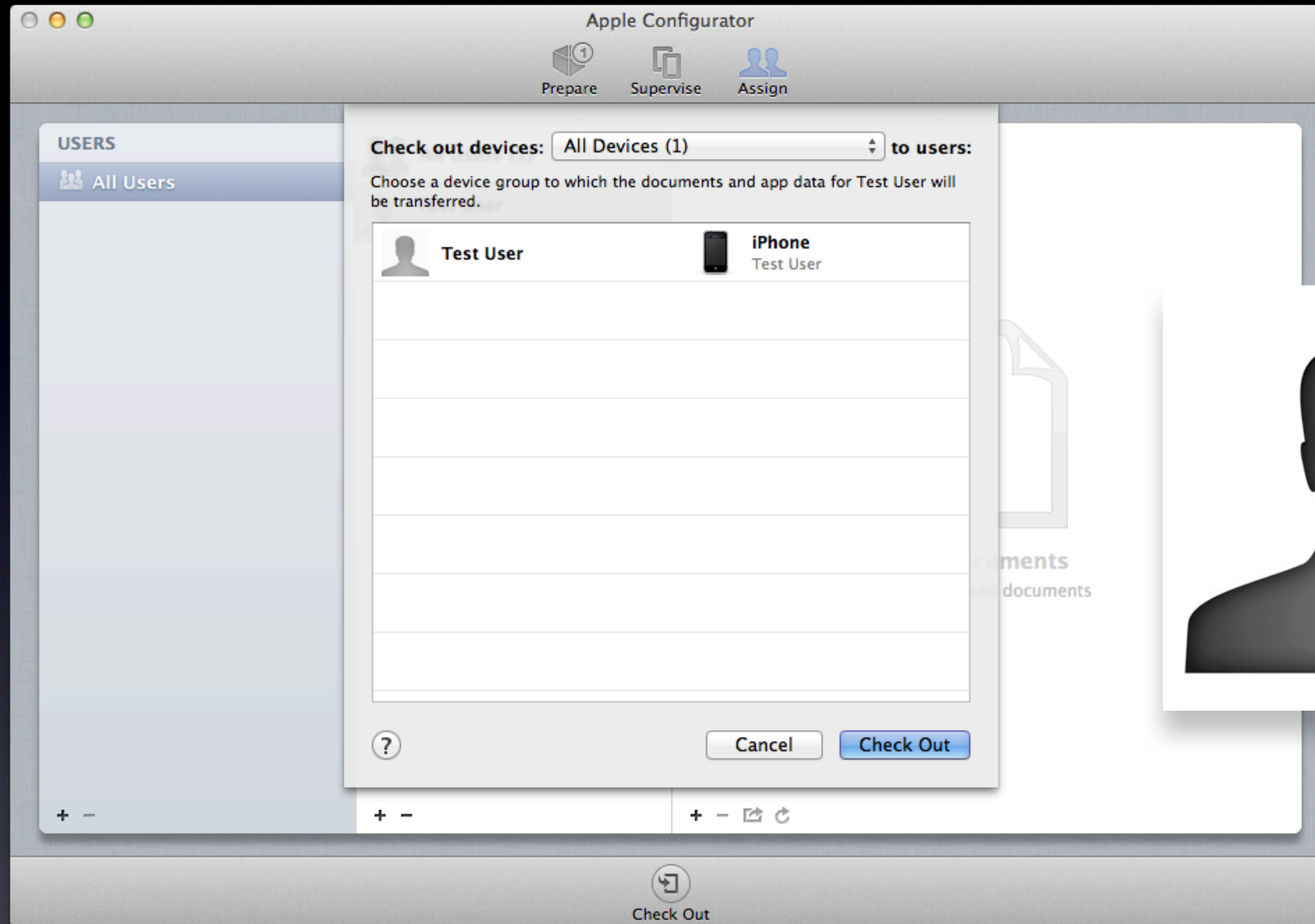


CONFIG

Assign

- Users and Groups
 - Manual or import from OD / AD
- Per-user backup
- iTunes sharing
- User images
- Specific devices become irrelevant





Restore from Backup

- Supervise
- Setup Assistant
- Dismiss dialogs
- Set sync settings
- Backup and restore from “model”



Troubleshooting

- Network and firewall
- Refresh, or restart Configurator
- Logs

```
defaults write com.apple.configurator DebugLevel All
```

```
/var/log/system.log
```


Deployment Models

- Institutional
- Layered
- Supervised I to I
- Unsupervised I to I and BYOD



Institutional

- Organization owns
 - Devices
 - Apple ID
 - Apps, books, and other content



Layered

- Organization owns
 - Devices
 - An Apple ID
 - Some apps, books, and other content
- User has additional Apple ID and content



Supervised 1 to 1

- Organization owns
 - Devices
- User owns
 - Apple ID and all content



Unsupervised and BYOD

- OTA management needed
- Network design needed
- Less control of iOS
- More control of Android



OTA MDM

Cheap, Easy, and Great
(Limit 2 per customer)

Profile Manager 2

- Comes with Server.app
- Device placeholders
- App Push issues
- Payload variables

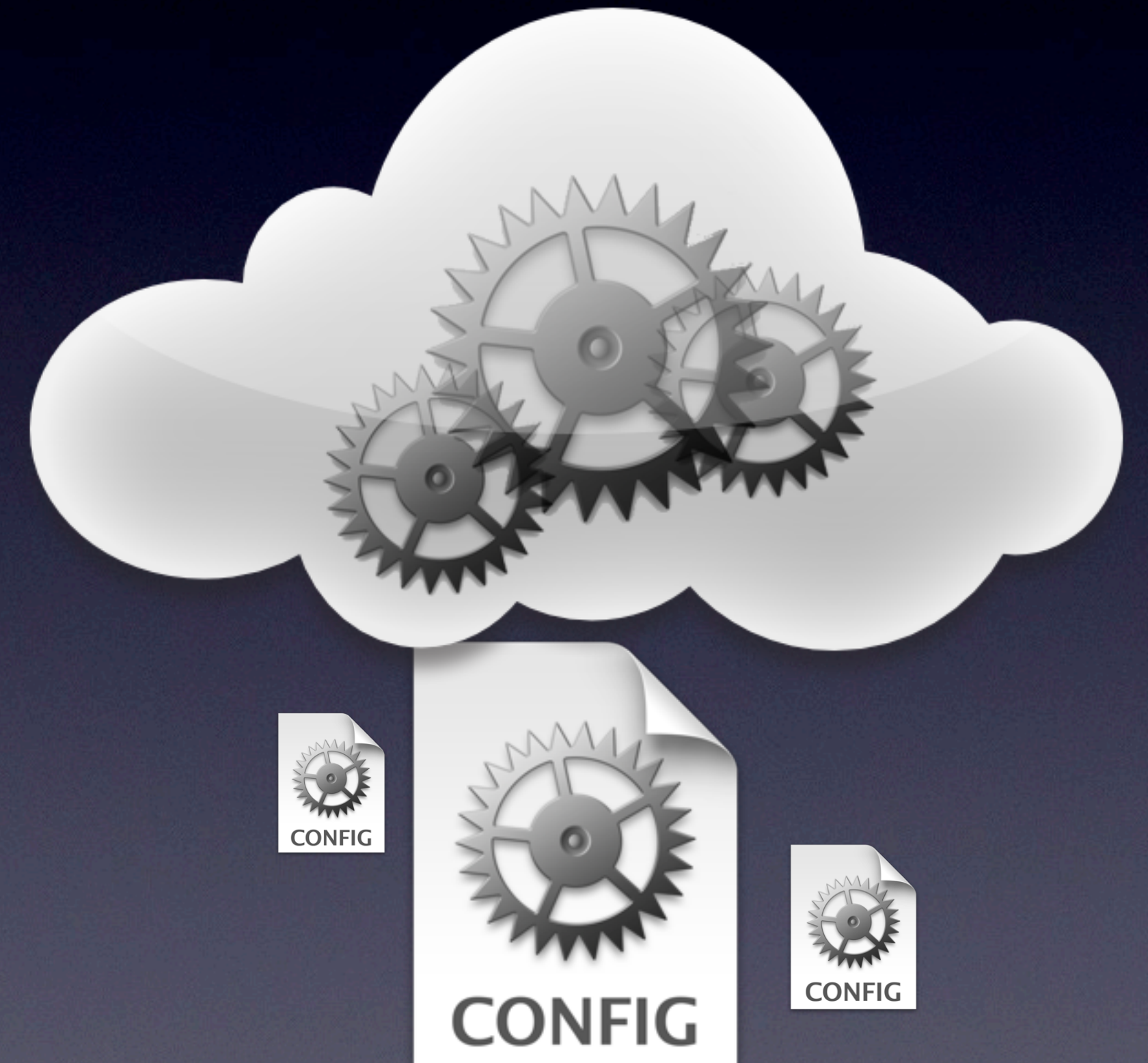
%full_name%

<https://help.apple.com/profilemanager/>



Enrollment Profiles

- Create in MDM
- Deploy in Configurator
- Configurator order of operations
 - Network, Trust, Enrollment
- Ports 80, 443, 1640, 2195, 2196, 5223
 - (Some also use 8008, 8443)



More about MDM Profiles

- Trust profiles
- Differences and similarities
 - Can be removed by end user
 - A few less restrictions
 - OSX profiles





Profile Manager: Groups: Settings for Everyone

https://testserver.local/profilemanager/#/user_group/ABCDEFAB-CDEF-ABCD-EFAB-CDEF0000000C/

Profile Manager

LIBRARY

- Devices
- Users
- Groups

ACTIVITY

- Active
- Completed

ENROLLMENT

- Brown
- JayB
- JuliaP

Settings for Everyone

2 Payloads Configured – Created 07/07/13 at 6:03 PM

iOS

- Restrictions**
1 Payload Configured
- Global HTTP Proxy**
Not Configured
- Subscribed Calendars**
Not Configured
- APN**
Not Configured

OS X

- Identification**
Not Configured
- Restrictions**
Not Configured
- Messages**
Not Configured
- AD Certificate**
Not Configured
- Login Items**
Not Configured
- Mobility**
Not Configured
- Dock**
Not Configured
- Printing**
Not Configured
- Parental Controls**

Functionality **Applications** **Media Content**

- ☒ Allow use of camera
 - ☒ Allow FaceTime
- ☒ Allow Photo Stream (disallowing can cause data loss)
- ☒ Allow Shared Photo Streams
- ☒ Allow screen capture
- ☒ Allow use of iMessage (Supervised devices only)
- ☒ Allow installing apps
- ☒ Allow In-App Purchase
- ☐ Require iTunes password for all purchases
- ☒ Allow iCloud backup
- ☒ Allow iCloud document syncing
- ☒ Allow automatic sync while roaming
- ☒ Allow voice dialing
- ☐ Force encrypted backups
- ☒ Allow Siri
 - ☒ Allow Siri while device locked
- ☒ Allow Passbook while device locked
- ☒ Allow accepting untrusted TLS certificates
- ☒ Allow Installation of Configuration Profiles (Supervised devices only)

Cancel OK

3rd Party MDM

- MDM vendor's apps extend functionality
 - Secure storage apps, browsers
 - Per app VPN
- VPP code management
- Geolocation services
- Selective remote wipe



casper
SUITE



airwatch™

Absolute
MANAGE

MaaS360®
by Fiberlink

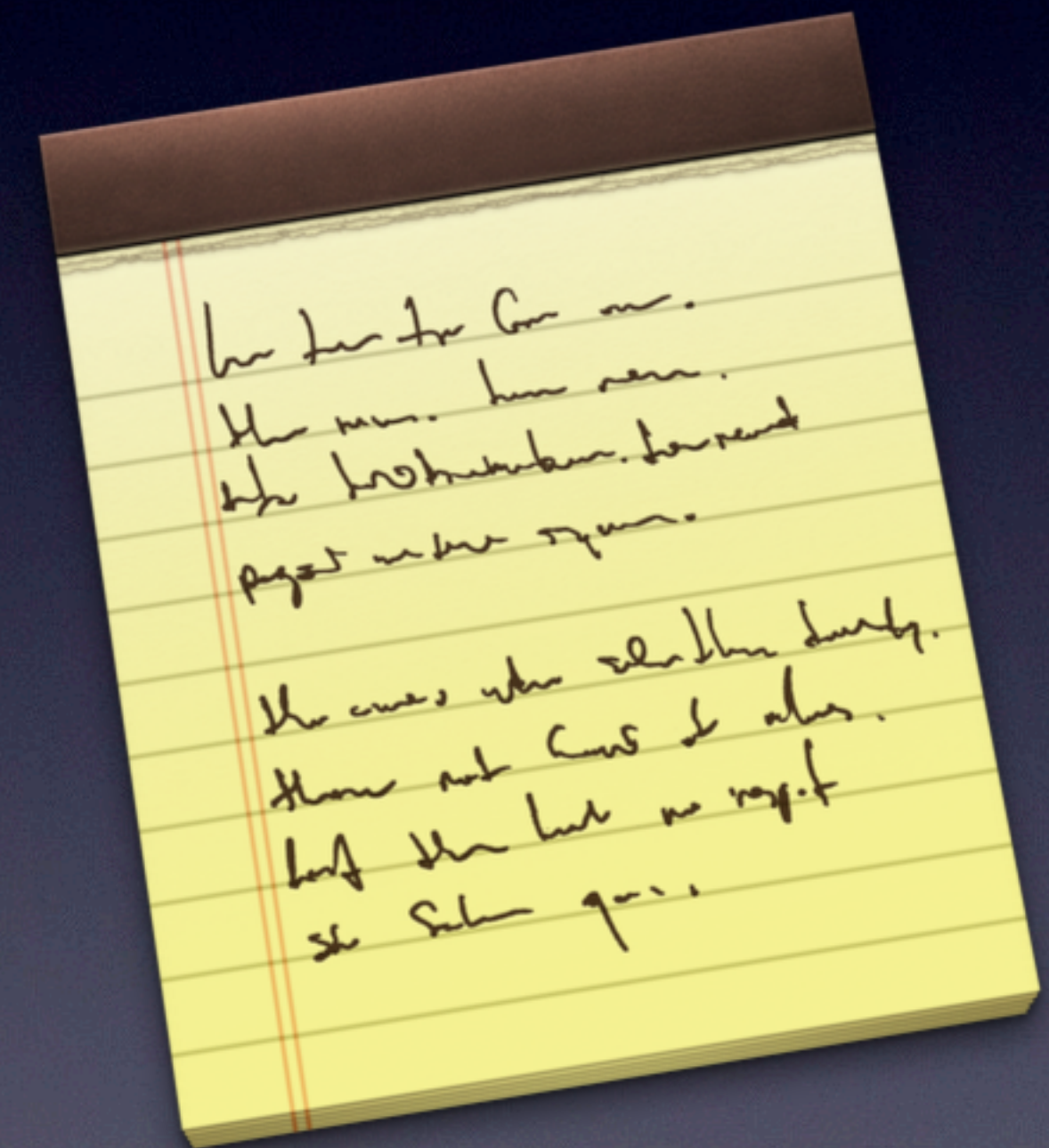


MobileIron

COREQUICK

Choosing an MDM

- What devices will you support?
- What can you afford?
- What can't you afford to do without?
- What mix of solutions work together?



Preparing for Deployment

- Network readiness
- Legal concerns
 - Waivers, liability forms, AUA / AUP
- Stakeholder buy-in
- Manpower and funding



Maintaining Compliance

- Configurator
- Walled garden network
 - Enrollment for access
 - Filtering and managed browsers
- App detection and blacklisting
- Jailbreak and root detection



Privacy and Security

- Data privacy
- Separating Apple IDs
- Passcode
- Encrypted backups
- Preventing profile installation
- Un-enrolling removes access

