The software and tools we use to deploy our iPads

- We use Apple Configurator (AC)

- Under 90 days Apple suggests AC instead MDM (Mobile Device Management)

- We use Apple's VPP (Volume Purchasing Program) to be able to buy multiple copies of apps and use redeemable codes to sync with AC

Apple's VPP program (how you deploy an app to many iPads as each needs to be paid for)

- To put apps onto the iPads we use VPP (volume purchasing program)
- VPP requires an Agent (Old name program Manager)- to enroll the college in the program. The Agent manages Administrators and an Administrator (old name Facilitator) can then Purchases apps
- The Administrator ID needs to be clean (in other words a new Apple ID not associated with other accounts)
- Agent can link a CC to the account and Administrator can use this to purchase apps (old way was a coupon through snail mail!)
- From here you can shop for Apps like in the App Store but the difference is you are purchasing quantity. You do this through the VPP portal not iTunes App Store
- Some developers give the education discount which is 50% off normal price for the purchase of 20 or more
- You then download an XLS file and receive your list of codes
- You open it and redeem one of the codes in the App Store. Go to "redeem" on right hand side of App Store. This effectively puts the App into iTunes on the computer that is running AC
- Throw away the old XLS file and then download *another* XLS which refreshes the one code you've just burned to put the app into iTunes
- Add the app to AC by either dragging it into AC under the Apps tab within either Prepare or Supervision tabs or adding through the "+" button at bottom of AC. Find the file and add it. You can batch select and add all files at once if there are many
- Somewhere in this process if you have purchased apps you'll be asked for the iTunes ID that purchased the app. This should hopefully occur only once for this process. This is NOT the Administrator ID but the ID associated with iTunes on the computer AC lives on
- Click on licenses to the far right of the app which you now want to add licenses
- This will open a window. Click "redeem license codes" and select the file again
- AC will show you how many Apps you have left to deploy on to iPads under
- Then as you deploy the apps to iPads you will see the number go down. If you remove the app from an iPad the number will go up

Apple Configurator in a nutshell

Allows you to make a Golden Master that you can quickly deploy to large numbers of iPads

Apple Configurator
and the 3 Modalities in AC (tabs)

- **Prepare**- Create configuration Profiles for central management of system settings like wifi, and any restrictions you may want to impose such as ability to add apps, view youtube, limit iCloud use. Turning on supervision- supervision makes it so no data can be synced from the iPad to another computer besides the AC home computer. Usually used by institutions. We use this.
- **Supervision**- Here you would create groups if you want to have different groups using different apps. We only have one group so in effect we use this to simply use the to supervise and "refresh" back to our Golden Master upon each return. This is were you usually add apps to a prepared iPad.
- **Assign**- The ability to check out to multiple classes, put users name or image onto lock screen, have some data they use saved onto computer AC resides on (google settings don't save).
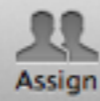
Apple Configurator
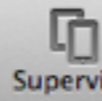
Prepare   Supervise   Assign

Settings   Apps   Setup

Name: PARC check out 2

☑ Number sequentially starting at 2

Supervision: [ON] [Organization Info...]

☑ Allow devices to connect to other Macs

Update iOS: [When update is available ⇡]

☑ Erase before installing

Restore: [PARC Master ⇡]

Profiles: ☑ 📄 Restrictions
           ☑ 📄 WiFi

⧉ + − ⤴
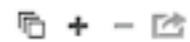
Best practices for setting up your iPad fleet

First: Work in AC and create configuration profiles and make global customizations *before* plugging in the first iPad

IN PREPARE

1. Turn supervision on in Prepare (in essence puts a profile on iPads that doesn't allow them to sync with other computers)
2. Create configuration profiles. First name in "General" then choose payloads

IN PREFERENCES

1. We check "Automatically Refresh" when supervised device is connected
2. We check "Remove apps and profiles Configurator did not install"
3. We put in our Reed logo image for the lock screen
4. We put Reed College -no renewals- as text on the lock screen

Apple Configurator
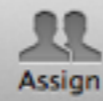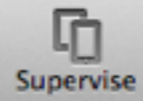
Prepare Supervise Assign

Settings Apps Setup

Name: PARC check out 2

☑ Number sequentially starting at 2

Supervision: ON Organization Info...

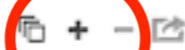☑ Allow devices to connect to other Macs

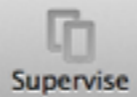Update iOS: When update is available ⇕

☑ Erase before installing

Restore: PARC Master ⇕

Profiles: ☑ 📄 Restrictions
☑ 📄 WiFi

Prepare   Supervise   Assign

General
Mandatory

Passcode
Not configured

Restrictions
Not configured

Global HTTP Proxy
Not configured

Content Filter
Not configured

Domains
Not configured

Wi-Fi
Not configured

VPN
Not configured
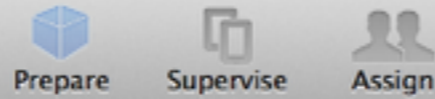
AirPlay
Not configured

AirPrint

General

Name
Display name of the profile (shown on the device)

Untitled 1

Organization
Name of the organization for the profile

[optional]

Description
Brief explanation of the contents or purpose of the profile

[optional]

Consent Message
A message that will be displayed during profile installation

[optional]

Cancel   Save

Prepare   Supervise   Assign

General
Mandatory

Passcode
Not configured

Restrictions
Not configured

Global HTTP Proxy
Not configured

Content Filter
Not configured

Domains
Not configured

Wi-Fi
1 Payload Configured   ①

VPN
Not configured

AirPlay
Not configured

AirPrint

Wi-Fi

⊖ ⊕

Service Set Identifier (SSID)
Identification of the wireless network to connect to

[required]   ←

☐ **Hidden Network**
Enable if target network is not open or broadcasting

☑ **Auto Join**
Automatically join this wireless network

Proxy Setup
Configures proxies to be used with this network

None   ⬍

Security Type
Wireless network encryption to use when connecting

None   ⬍

Network Type
Configures network to appear as legacy or Passpoint
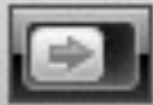
Standard   ⬍

1 validation error   Cancel   Save

Preferences

General   Lock Screen

When a supervised device is connected:

☑ Automatically refresh

When a supervised device is refreshed:

☑ Remove apps and profiles Configurator did not install

Play sound on completion: Hero ▲▼

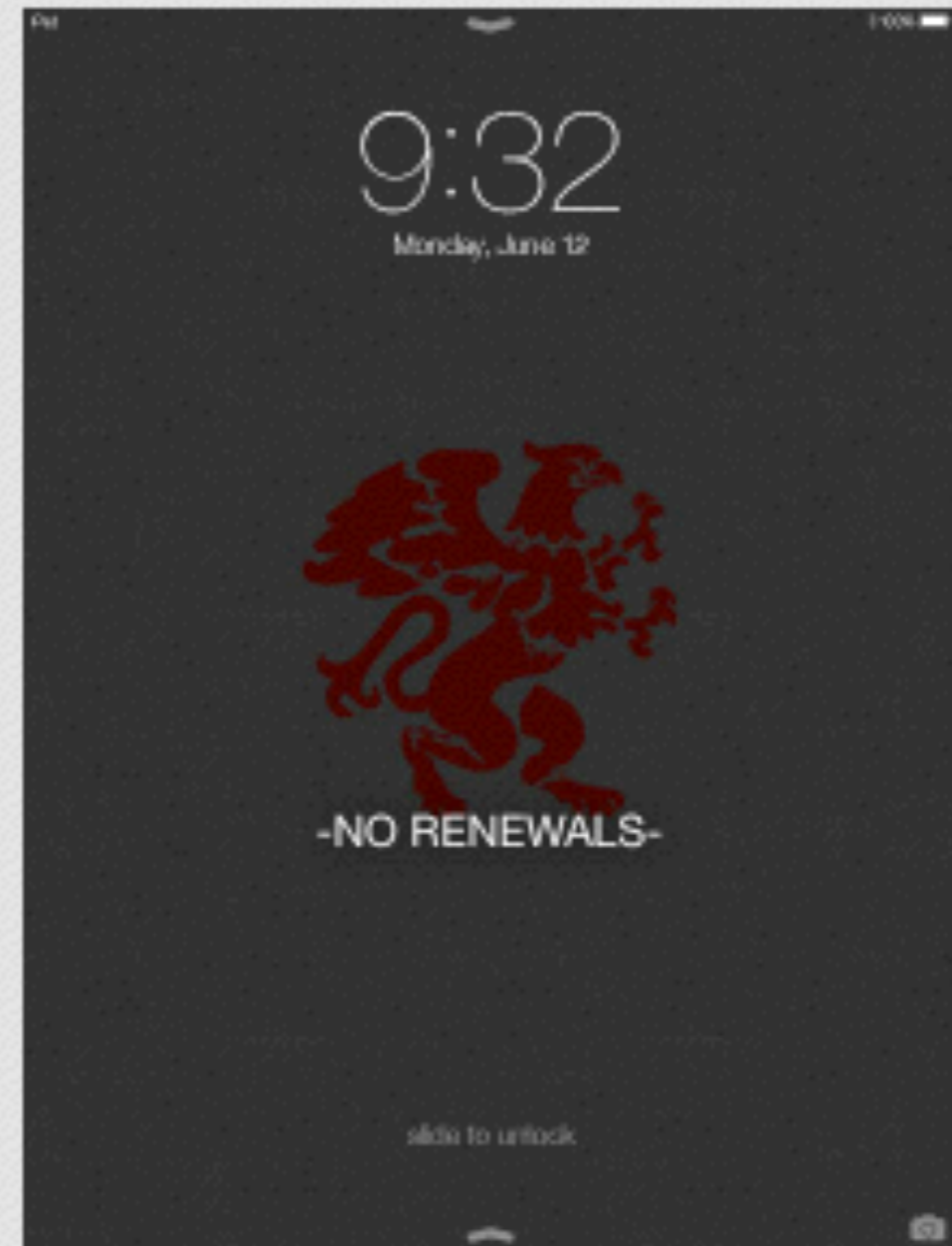Reset all dialog warnings: Reset Warnings   ?

iPhone | iPad

Text:
- None
- Device or user name
- ● Custom

-NO RENEWALS-

☐ Include user image

Drag an image onto the preview to change the lock screen background.

9:32
Monday, June 12

-NO RENEWALS-

slide to unlock

Lock screen will be applied to supervised devices.

Second: Set up the master iPad

1. Go through the iPad's out of box set up *before* putting into AC

2. Plug in the iPad to AC and prepare

3. Touch the iPad again and arrange all the icons how you want them to appear to the user, if desired
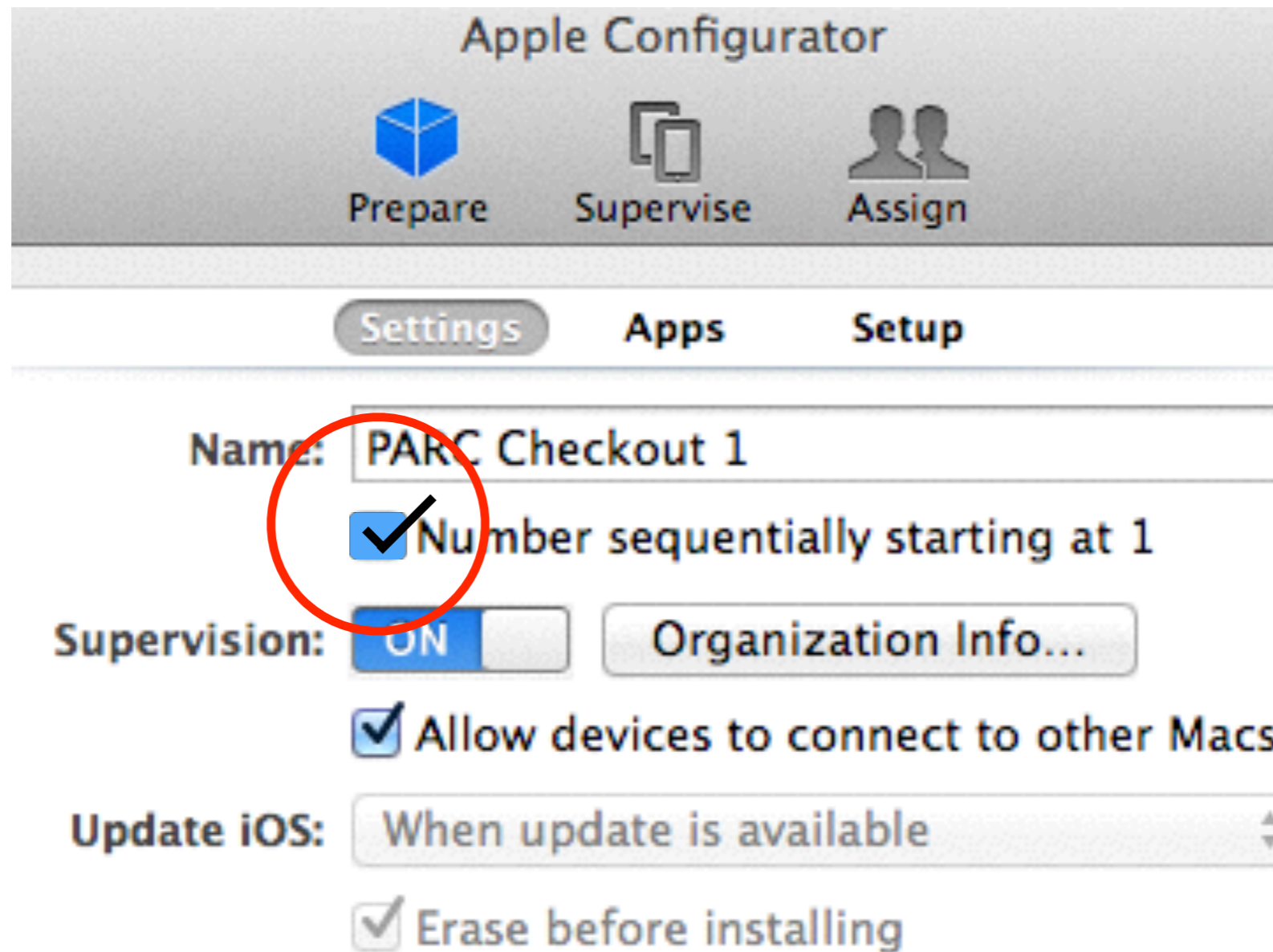
Third: Make your Golden Master by using Back Up in AC to take the "image" of the iPad you just set up
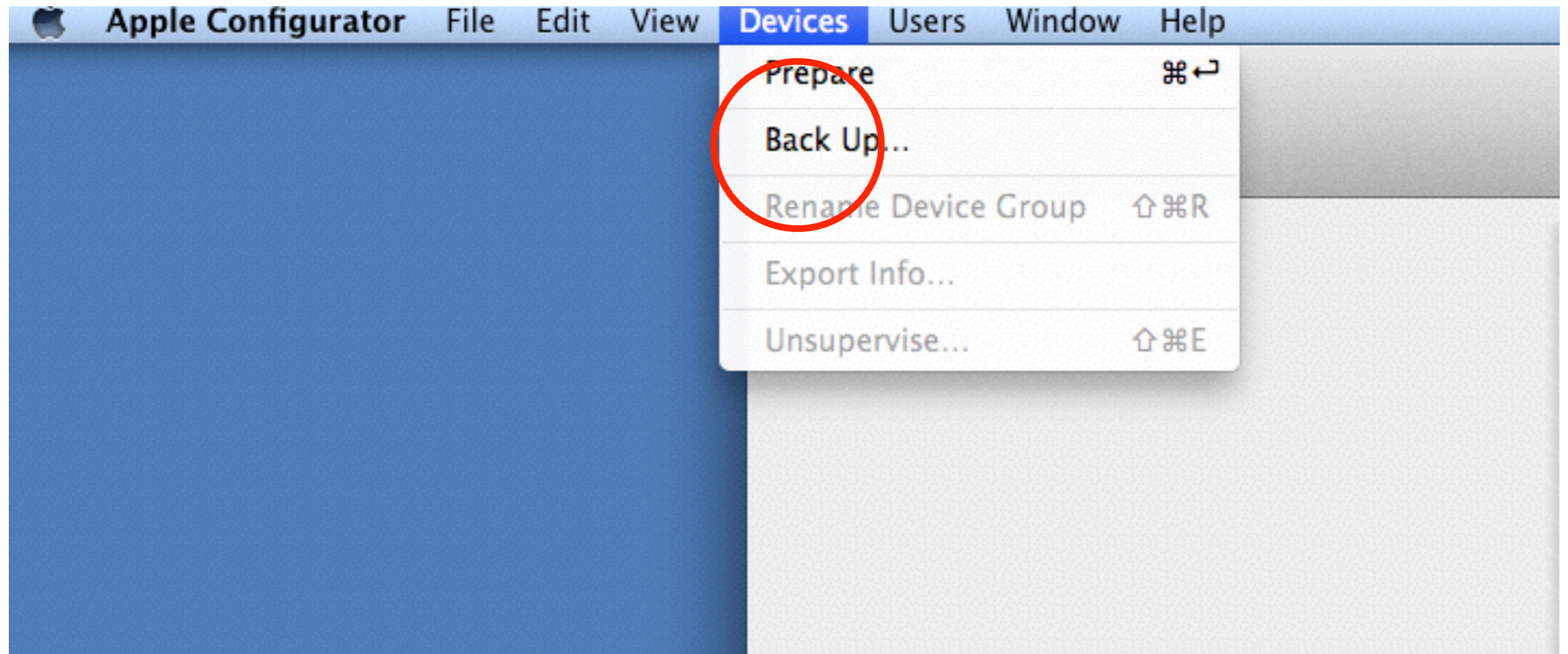
1. Select Back Up under "Devices" in the upper menu bar
2. Name your image appropriately

Fourth: Now you're ready to start imaging your other devices with the Golden Master

1. Choose sequential numbering if desired
2. Go what at a time if choosing sequenced numbering (we do this)
3. Allow to connect to other Macs if desired. (This allows you to sync *only* photos and videos with other Macs)

Finally: Add purchased apps

1. Run all the prepared iPads through the Supervision tab
2. In Supervision modality you will check the apps you want to put on your iPads *before* #1
3. If you have multiple groups you would then decide which apps go where at this point
4. Press Apply and the iPads in chosen groups will be applied to the iPads
5. Now you can use a powered USB hub and do as many at one time as your system can handle. From here on out you can do this step en masse

Prepare   Supervise   Assign

All iPads (1)

PARC check out 1
16 GB iPad

Settings   Apps

✓	Name	Category	Licenses
☑	**YouTube** 19.5 MB, version 2.13.0 (2.13.11388)	Photo & Video	Free
☑	**Voice Memos for iPad** 4.2 MB, version 2.3.2 (2.3.2)	Utilities	15
☑	**Vimeo** 29.4 MB, version 5.0.1 (1001)	Photo & Video	Free
☑	**Subdivide Metronome** 8.9 MB, version 3.0.2 (3.0.2)	Music	4
☑	**Spark Motion Basic** 7.0 MB, version 1.3 (1.3)	Health & Fitness	3
☑	**SoundCloud – Music & Audio** 40.6 MB, version 3.3.0 (2626)	Music	Free
☑	**PDF Scanner – easily scan book...** 32.4 MB, version 1.3.1 (1.3.2)	Productivity	15
☑	**Pages** 265.2 MB, version 2.5 (1712)	Productivity	10
☑	**Notability** 67.6 MB, version 5.26 (3066)	Productivity	14
☑	**MultiTrack DAW** 15.6 MB, version 3.4.8 (3.4.7.7)	Music	4
☑	**Moving Space: The Laban Scales** 8.6 MB, version 2.0 (2.0)	Health & Fitness	10
☑	**KineScribe** 1.5 MB, version 1.1 (1.1)	Education	Free
☐	**Keynote** 439.8 MB, version 2.5 (1711)	Productivity ⚠	0
☑	**iPhoto** 274.0 MB, version 2.0 (531)	Photo & Video	Free
☑	**iMovie** 613.3 MB, version 210 (1824.9.43)	Photo & Video	10
☑	**iDensity** 10.4 MB, version 1.8 (1.8.2)	Music	15
☐	**GuitarToolkit** 66.9 MB, version 2.4	Music	1
☑	**Google Drive – free online stora...** 21.6 MB, version 3.2.2 (3.2.2)	Productivity	Free
☐	**GoodReader for iPad** 28.1 MB, version 3.21.6 (3.21.6)	Productivity	5

GarageBand

MultiTrack

iDensity

Voice Memos

MovingSpace

KineScribe

iMovje

SoundCloud

GuitarToolkit

forScore

Music

Subdivide

Bluefire Reader

GoodReader

Notability

PDFScanner

YouTube

Vimeo

iPhoto

AnimationDesk

Pages

Mail

Camera

Safari

Dropbox

Google Drive

How iPads are "refreshed" through AC

- Students workers plug iPad back into AC which automatically wipes any user data and refreshes iPad to the golden master

- Notification upon completion

- iPads are then returned to a locked cabinet, which is equipped with power for charging the iPads

Apple Configurator

SUPERVISED DEVICES

All Devices

USB Connected

All iPads (1)

PARC check out 1
16 GB iPad

Settings   **Apps**
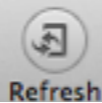
Name: PARC check out 1

☐ Number sequentially starting at 1

Update iOS: When update is available ⇕

Restore: PARC Master ⇕

Lock to App: None ⇕ Options...

Profiles:
☑ 👤 Restrictions
☑ 👤 WiFi

Refresh

Alternative customizations and workflow

- Make two images in back up. One the Golden Master as above and the second an image that incorporates all the apps into it. So you can place the app icons where you would like.

- We also open Safari and clear out all stock bookmarks, put in bookmarks that are relevant to our college (Reed Library, CUS help) and leave Safari open to the Library home page so when a user first opens Safari they see just that.

Issues and problem areas/best practice

- If iCloud is used **and** "FindMyiPad" is selected the iPad will not refreshed and cannot be unsupervised effectively. Need to wipe iPad in iTunes

- Both iTunes and AC **always** need to be updated to latest version to be compatible

- Make a back up of your database for AC. By making a back up of the computer