Julie Wetherwax

Julie is the Client Systems Manager at Convent & Stuart Hall Schools of the Sacred Heart San Francisco, a 4 school, K-12 organization.

She heads the provisioning, deployment, and ongoing management of the fleet of Macs and iPads at the schools.

She utilizes a variety of deployment models, from the shared iPad carts in K-3 to the 1:1 iPad program for 4-12th grades.



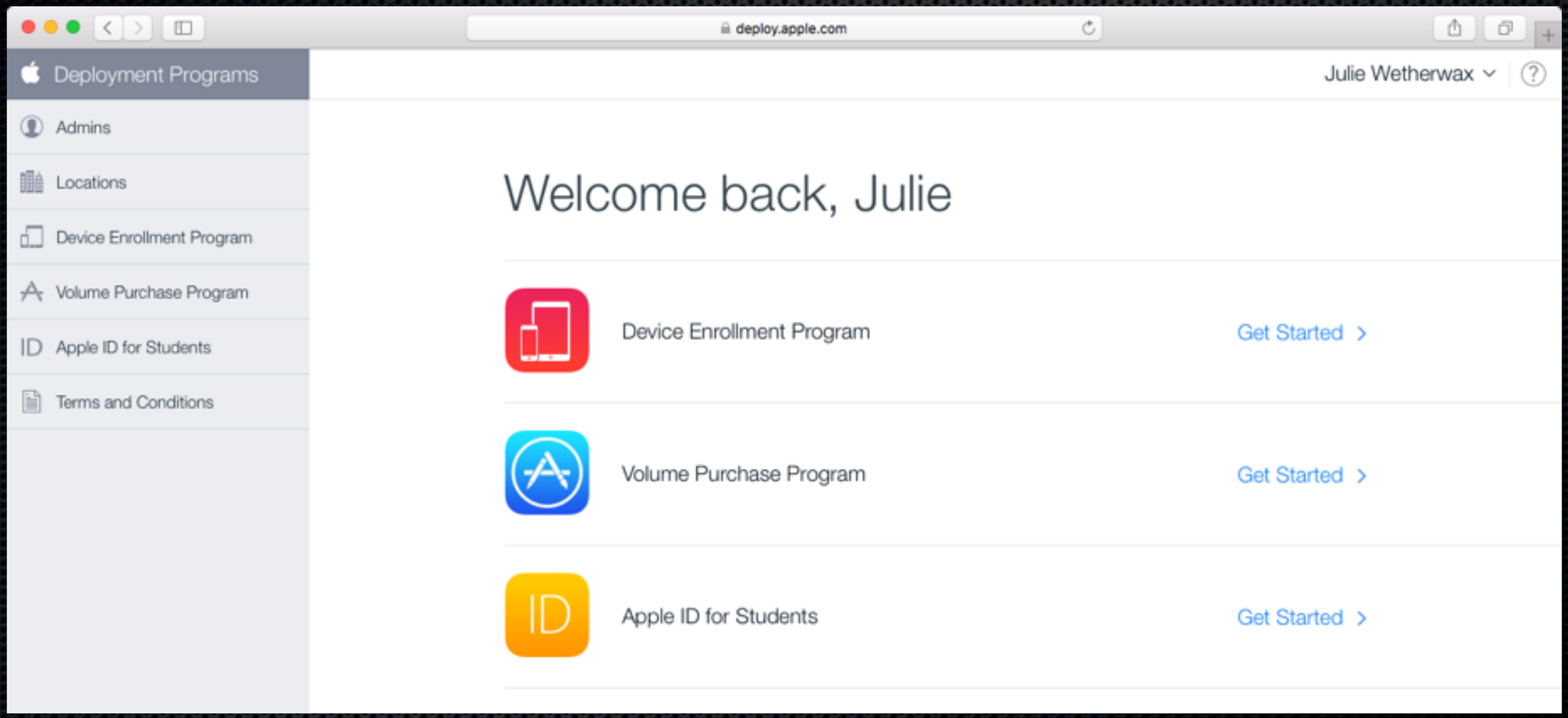
Convent & Stuart Hall
Schools of the Sacred Heart San Francisco

Deploying Devices: State of the Union and How to Select a MDM

What are we going to cover?

- **Apple Deployment Programs**
  - Device Enrollment Program (DEP)
  - Volume Purchase Program (VPP)
  - Apple IDs for Students
- **Profile Manager**
- **Configurator 2**
- **3rd Party Options**

Apple Deployment Programs (ADP)

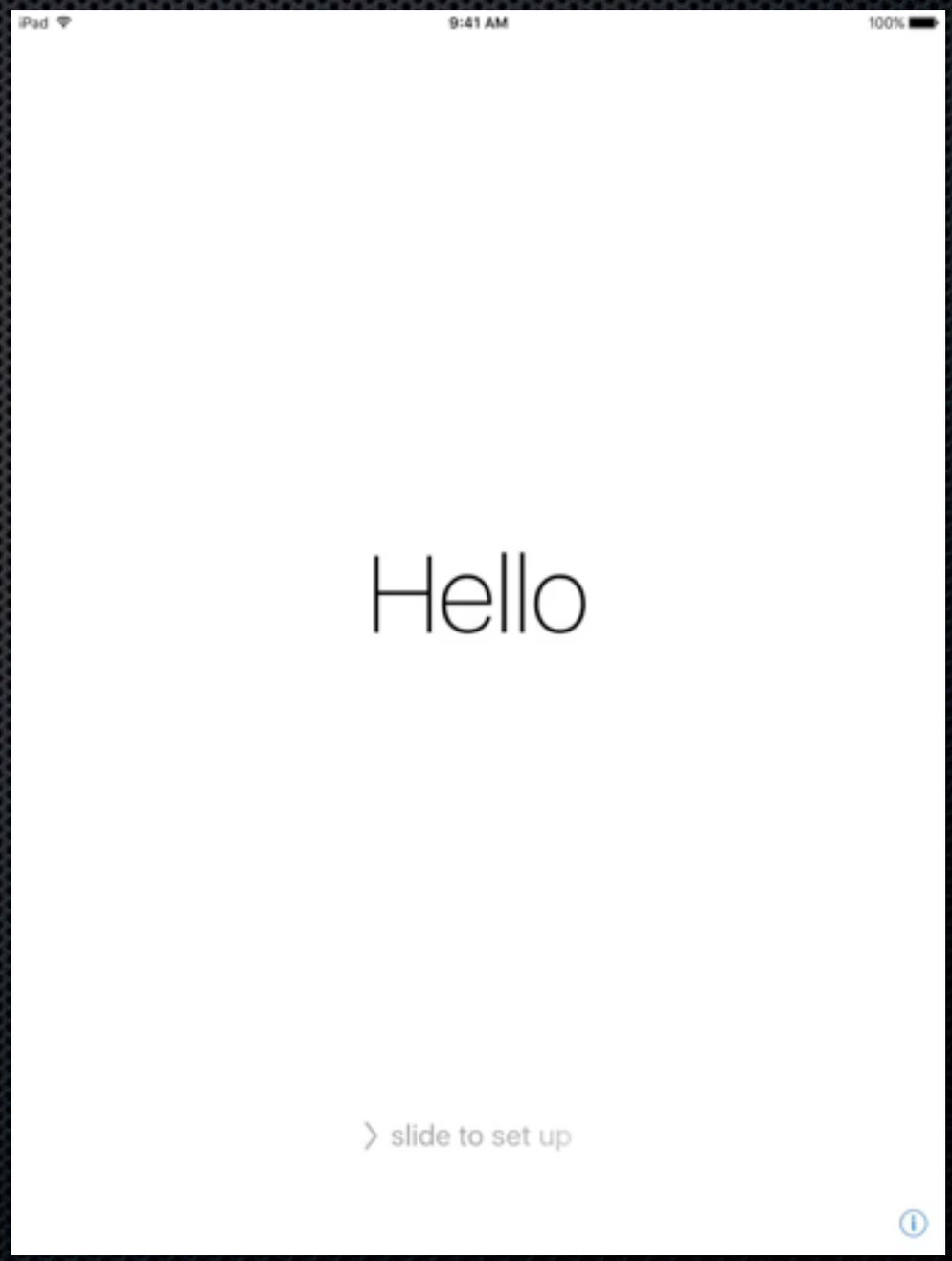


deploy.apple.com

Device Enrollment Program (DEP)

Automates and enforces

MDM enrollment and supervision during setup.



Device Enrollment Program (DEP)

Account Creation

- ADP Apple IDs must be new and linked to your organization's domain.
- ADP Apple IDs can't be used to log into other services like iTunes.
- Consider using generic accounts
  - DEP Accounts: domain-dep@domain.com
  - VPP Account(s): domain-vpp@domain.com
    or: domain-vpp-mdm@domain.com
    domain-vpp-configurator@domain.com

Device Enrollment Program (DEP)

Enrollment Process

1. Setup an Agent Account
2. Enable two step verification
3. Provide additional institutional information
   - Verification Contact
   - Physical Address Information
   - DUNS #
   - Apple Customer # or DEP Reseller ID

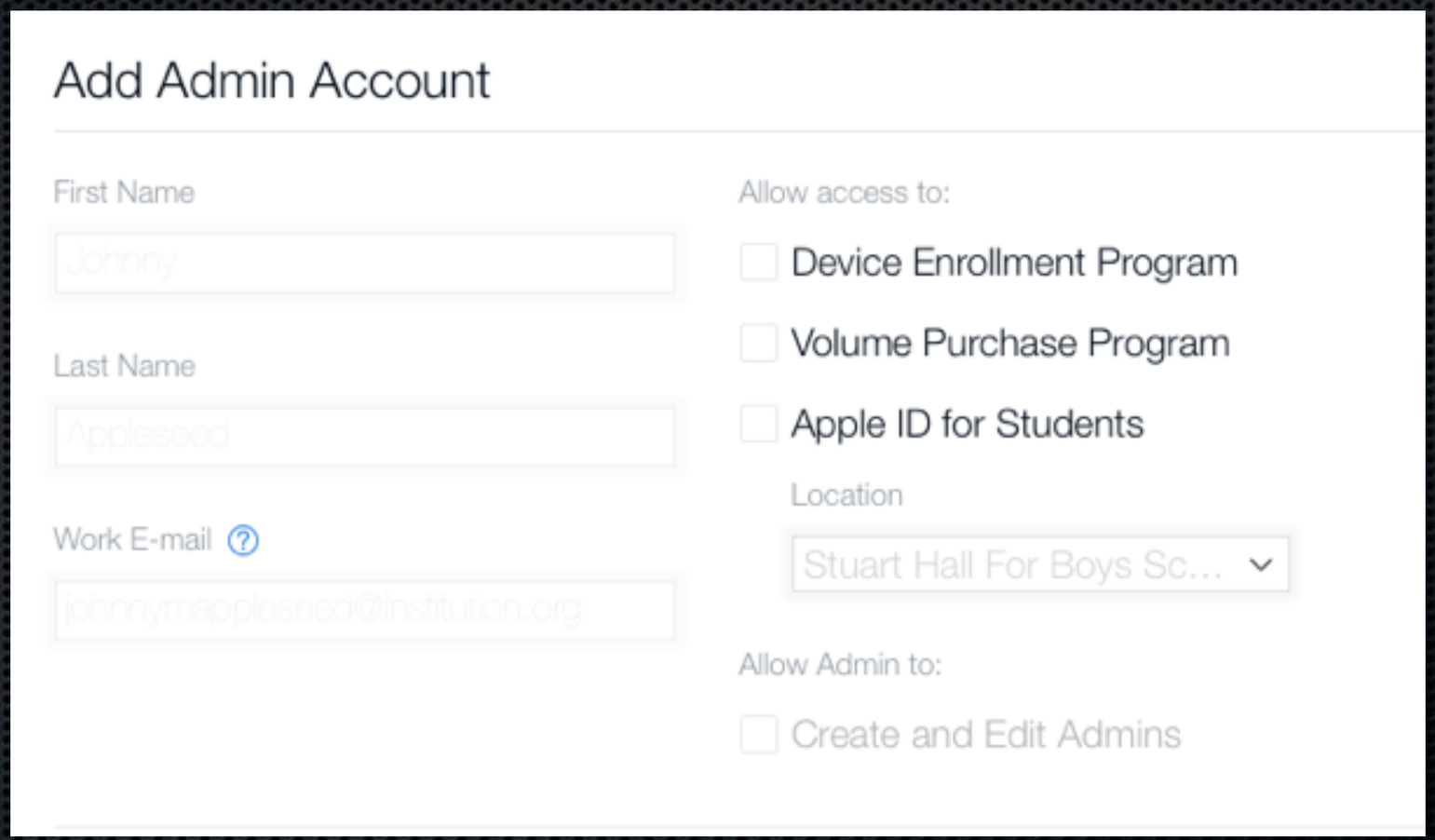
When enrollment is complete you will receive a DEP Customer ID #.

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Device Enrollment Program (DEP)

Next Steps

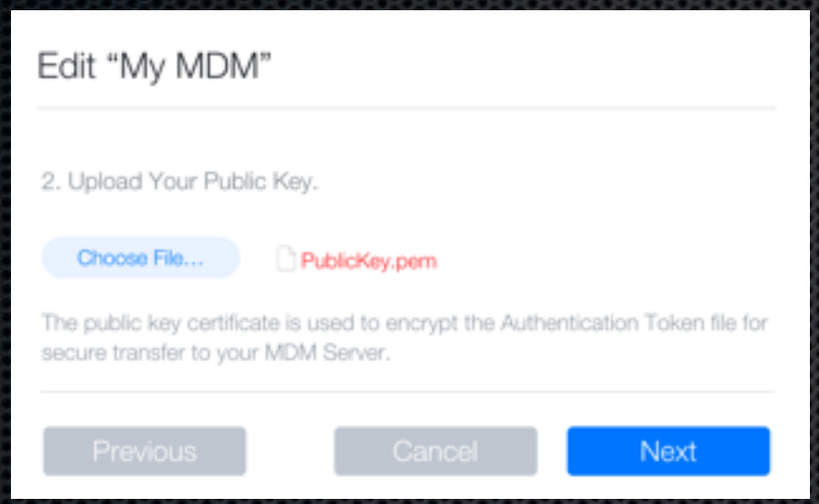
1. Create Admin Accounts

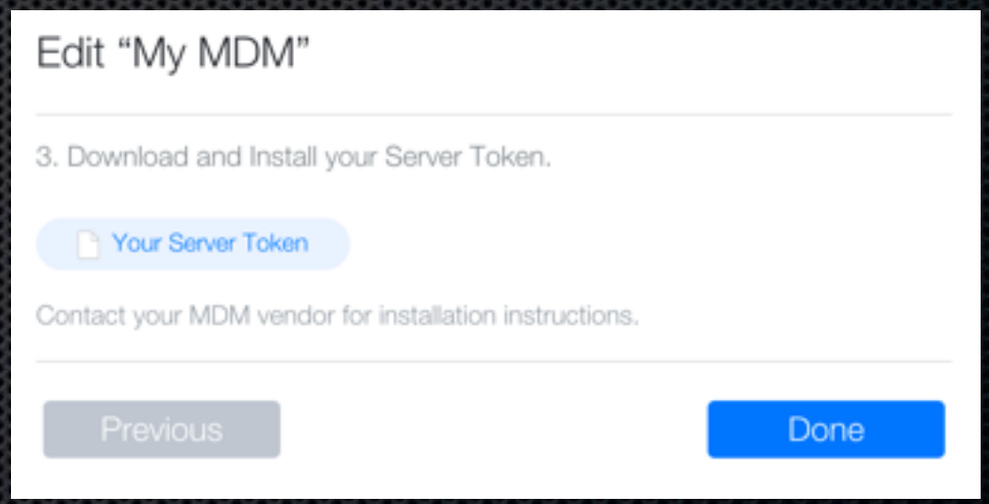


Device Enrollment Program (DEP)

Next Steps

2. Link MDM to DEP with token.





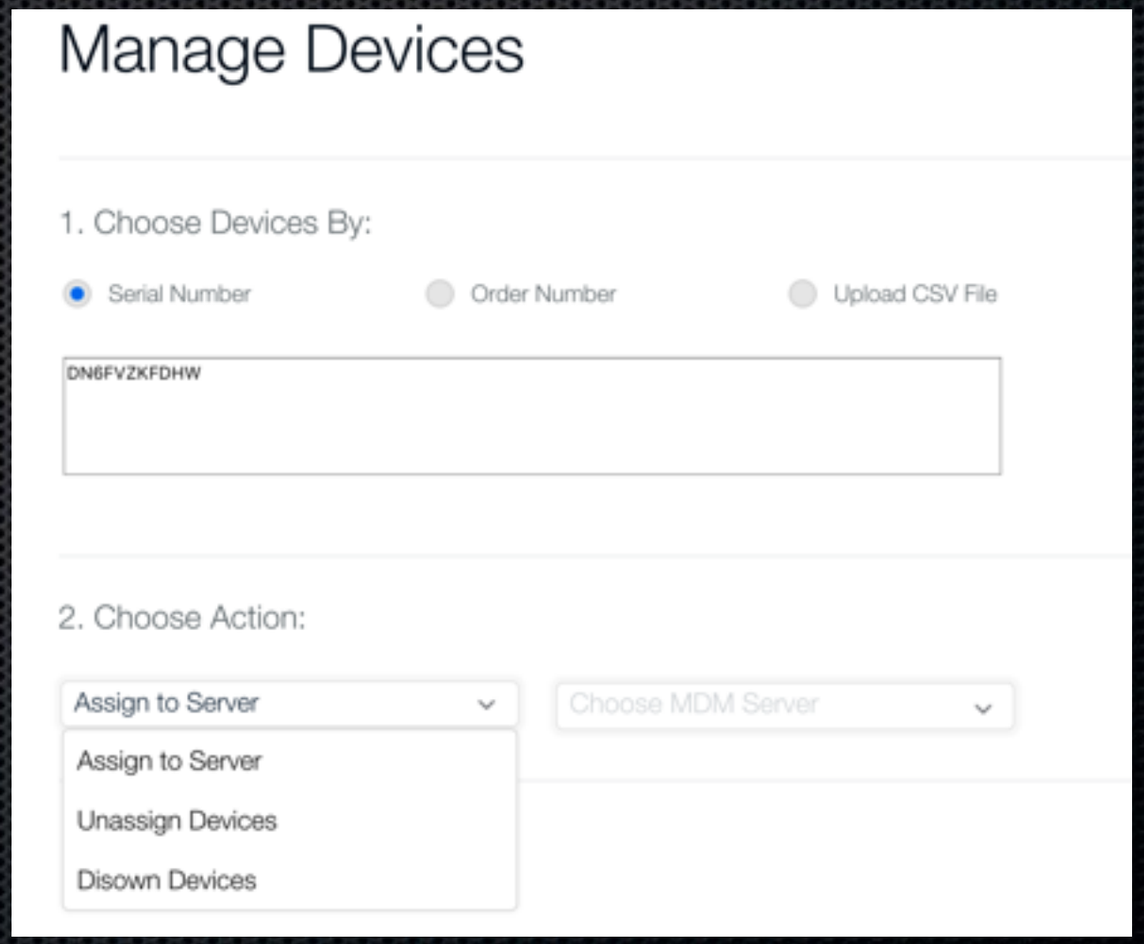
1. Download Public Key from your MDM.
2. Upload Public key to DEP
3. Download newly created token
4. Upload new token to MDM

Device Enrollment Program (DEP)

Next Steps

3. Assign Devices - Devices can be manually added by serial, or purchase order #.

Devices can also be disowned from DEP, but this is PERMANENT.



Volume Purchase Program (VPP)

- Apple program that allows you to find, buy and distribute Apps in bulk for your institution.
- Available for Business as well as Educational Institutions.



Discounts available on bulk purchases of Apps (20 or more).

Volume Purchase Program (VPP)

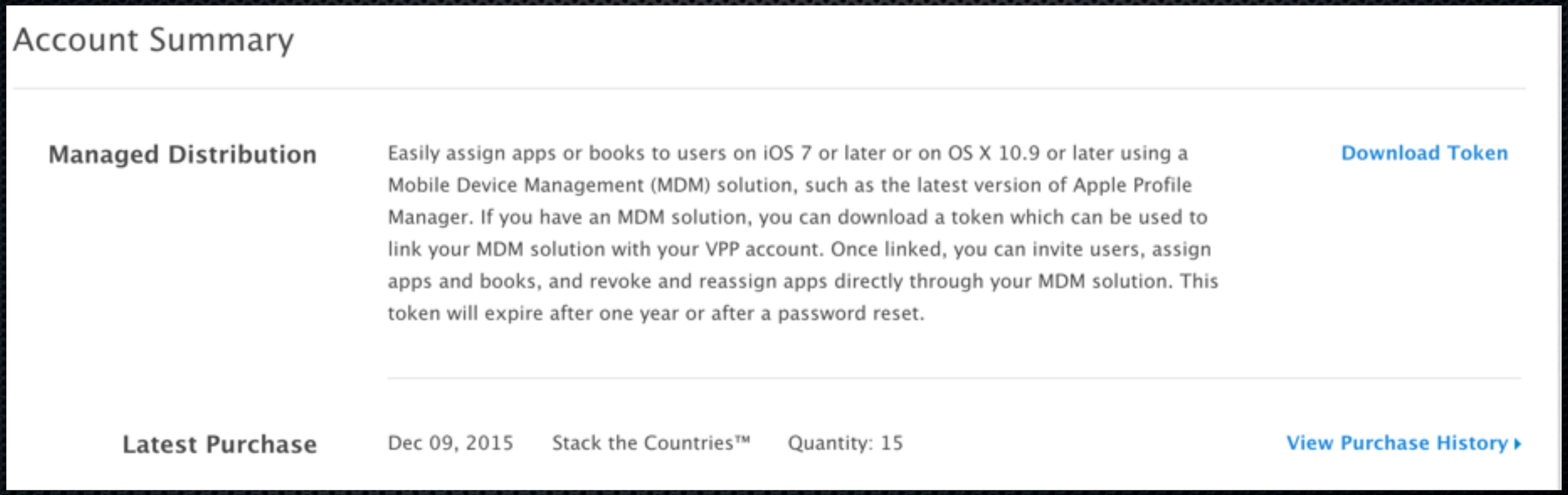
Enrollment Process

1. Create Account or use existing ADP Apple ID
2. Provide additional institutional information
   - Verification Contact
   - Physical Address Information
3. Submit to Apple for Approval

Volume Purchase Program (VPP)

Linking to your MDM

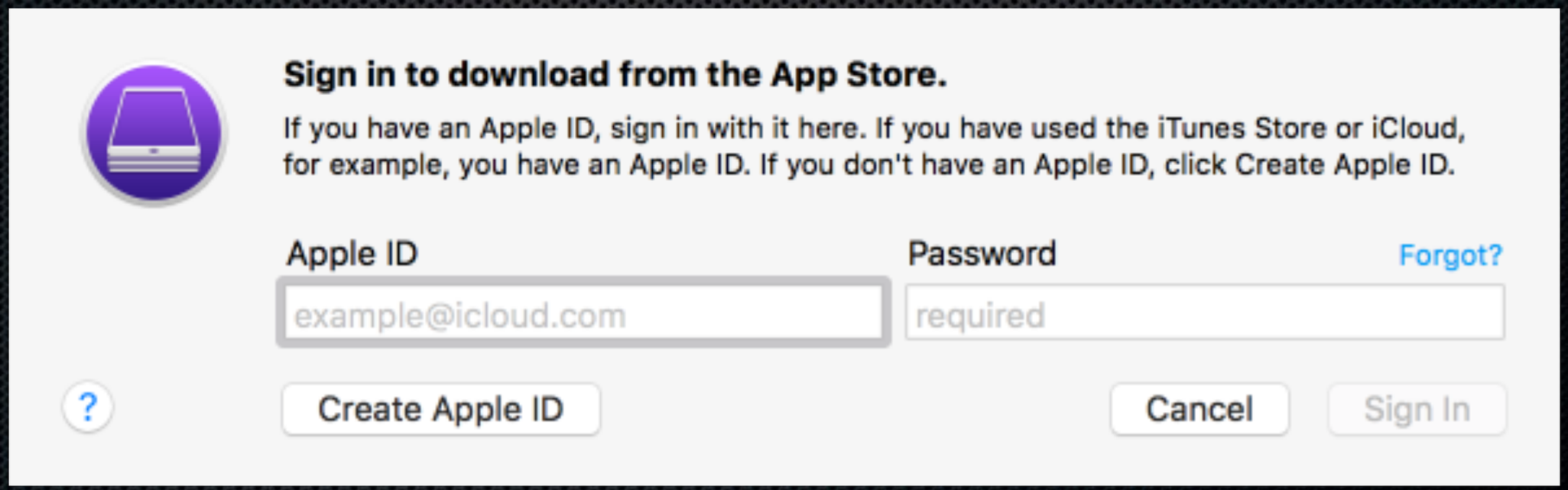
Download token from VPP Account Summary, and upload it to your MDM.



Volume Purchase Program (VPP)

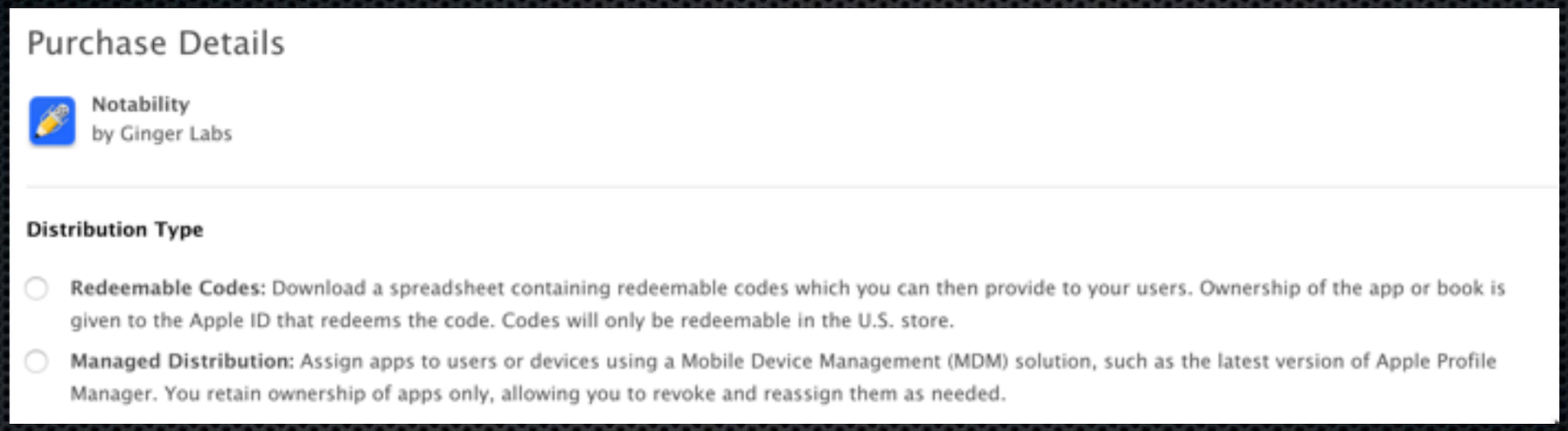
Sync with Configurator

- Log into your VPP account in Configurator to access Managed Distribution apps.



Volume Purchase Program (VPP)

Purchasing Apps



- Redeemable Codes: Apps delivered as a spreadsheet of one-time use codes. The codes are permanently attached to the Apple ID that redeems them.
- Managed Distribution: Apps can be assigned to an Apple ID or Device, and then revoked later. (MDM/Configurator 2)

Volume Purchase Program (VPP)

Managed Distribution

- User Based: Assigned via apple ID, available on any device that apple id is associated with. (MDM)
- Device Based: Assigned based on device- only can be used on that device. (Configurator 2)

Apple IDs for Students

Apple IDs for students under 13 include the following features:

- Account settings, such as email address and date of birth, cannot be changed.
- No credit card is attached to the account at setup.
- Limit Ad Tracking is turned on for the account to ensure the student does not receive targeted advertising from Apple.
- Students can't opt-in to receive marketing materials.
- A parent or guardian can be notified of any significant changes

Apple IDs for Students

Enrollment process for students under 13:

1. Prepare Apple IDs
2. Upload list of students
    1. Account Creation CSV Requires
        A. Batch ID: Name for batch of students
        B. Language
        C. Parent Email: Where the parent/gaurdian request from Apple is sent.
        D. Apple ID: desired Apple ID for students.

Apple IDs for Students

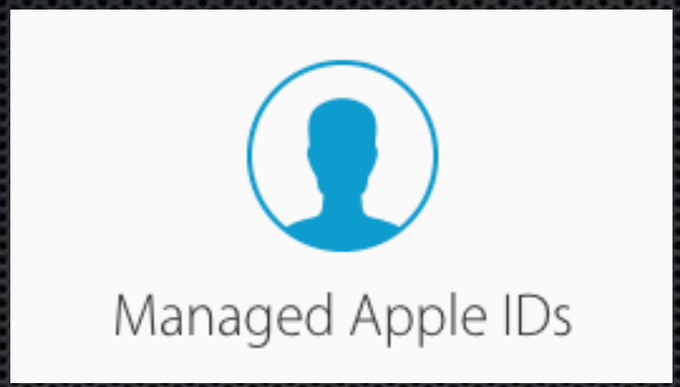
Enrollment process for students under 13:

Batch	No. of Accounts	Last Modified	Download	Consent Email
Test	6	09/05/2014 12:43 PM PDT	Download CSV	Resend Email

3. Parent or Guardian reviews request and submits online consent form.
4. Check status of parental consent.
5. Resend email to parents if needed.

Apple IDs for Students

Looking ahead...



- Managed Apple IDs with iOS 9.3
  - Apple will allow ADP admins to create and manage AppleIDs for students under 13 in bulk

Profile Manager

Apple's MDM- built into OS X Server

Features

- Links with DEP and VPP
- Policy Setting
- Set Security Restrictions
- Assign Apps
- Inexpensive (if you have a machine to host.)



Configurator 2

Overview

Apple Configurator 2 makes it easy to deploy iPad, iPhone, iPod touch, and Apple TV devices in your school or business.

Use Apple Configurator 2 to quickly configure large numbers of iOS devices with the settings, apps, and data you specify for your students, employees, or customers.

Requirements

- El Capitan or later
- iTunes 12.3 or later

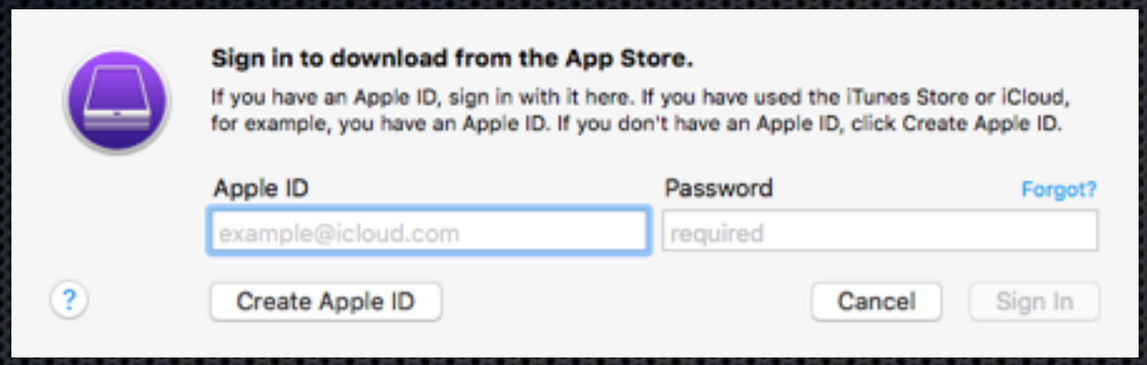
Configurator 2

Updates in Apple Configurator 2

- Interface
- Links with Apple Deployment Programs (DEP and VPP)
- Blueprints
- Managed Distribution

Configurator 2

Managed Distribution



- Links to VPP directly, no more iTunes.
- Migrate redemption codes to VPP
  - Business: https://www.apple.com/support/itunes/vpp/
  - EDU: https://www.apple.com/support/itunes/vpp-edu/
  - Migrates all apps, and is one way process
- Link VPP Account in Configurator 2
- Assign and Revoke Apps

Deployment Scenarios

- Shared Devices Model:

Configurator - Managed Distribution - Device Based Assignment

- 1:1 Device Model:

MDM - Managed Distribution - User Based Assignment

3rd Party Options

- **Mobile Device Management:** MDM suites manage the whole device, that includes remote lock and wipe capability, policy enforcement, and data tracking.
- **Mobile Content Management:** MCM focuses on secure document management through authentication, authorization, and access. Users gain access to content based on usernames, passwords, IP address, and mobile device authentication.
- **Mobile Application Management:** MAM focuses on securing access and actions of applications rather than entire devices. MAM provisions, controls, monitors, updates, and removes applications from a user's device.

3rd Party Options

Airwatch

- Initial Rollout: Easy when using the paid setup assistance.
- Pricing: High per device cost.
- Supports: Mac, Windows, Chrome OS, iOS, Android and Blackberry
- Tiered "Management Suites"
- Good for BYOD programs- easy enrollment.



3rd Party Options

MobileIron



- Pricing: Tiered levels, fairly inexpensive per/device
- Supports: Mac, Windows, iOS and Android
- Scalable for large fleets or large BYOD programs
- Excellent security profiles
- Content Management

3rd Party Options

MaaS360



- Initial Rollout: Fast initial deployment
- Pricing: Inexpensive per/device for MDM, can purchase additional tools if desired.
- Supports: Mac, Windows, iOS, Android, Blackberry
- Easy to use interface

3rd Party Options

JAMF- Casper



- Initial Rollout: Lot's of support through Jumpstart program, but expensive.
- Pricing: Dependent on #s, discounts for Education
- Supports: Mac, iOS
- Great customer support team
- High focus on Education customers and features

3rd Party Options

JAMF- Bushel



- Initial Rollout: Easy setup
- Pricing: Inexpensive
- Supports: Mac and iOS
- Good for smaller rollouts
- Now support blueprints!
- Easy to use interface, good for non IT folks

3rd Party Options

Meraki System Manager

- Pricing: Free for 100 devices or less. Per device cost is high.
- Supports: Mac, Windows, Chrome OS, iOS, Android, Windows phone and Blackberry
- Ties into Cisco Meraki systems
- Used to be a free service, but now only Enterprise version receives updates.



3rd Party Options

Filewave



- Pricing: Inexpensive for Edu
- Supports: Mac, Windows, iOS and Android
- Works with institution owned or BYOD programs
- Offer site licenses as well as per device pricing.
- Can manage multiple OS through a single UI

3rd Party Options

Absolute Manage

- Pricing: Dependent on package
- Supports: iOS, Windows Phone, and Android
- Excellent inventory and reporting system
- MDM is an Add-on option to main software package

3rd Party Options

Points to consider

Features:

- Single or Multi Platform
- Security?
- Reporting levels?
- Scalability?
- Size of your organization?
- Cost?
- Who are your users?

- AirWatch
- MobileIron
- MaaS360
- JAMF

  Casper & Bushel
- Meraki System Manager
- Filewave
- AbsoluteManage

Resources

- ADP: https://deploy.apple.com/
- ADP Help: http://help.apple.com/deployment/programs/
- iOS 9 Deployment: http://help.apple.com/deployment/ios/#/apd5b9e6434f
- Migrate VPP codes: https://support.apple.com/en-us/HT202863
- Configurator 2: https://help.apple.com/configurator/mac/2.1/
- MDM Comparison: http://enterpriseios.com/wiki/Comparison_MDM_Providers

Questions?



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