What's New in Managing Apple Devices

Session 302

Todd Fernandez, Senior Manager, Device Management
Demo
Classroom for Mac

Curt Clifton, Classroom Engineer
Raheel Merali, Classroom Engineer
Enrollment
Apple School Manager

200 GB of iCloud storage for Managed Apple IDs
Easier account password management
New Apps and Books purchasing experience
Flexible license management
Default MDM server for device type
Enrollment
Apple Business Manager

Manage Accounts, Apps and Books, Devices
Create Managed Apple IDs for admins
New Apps and Books purchasing experience
Flexible license management
Default MDM server for device type
No Managed Apple IDs for employees
Accounts

Apps and Books

Johnny Appleseed

Buy Licenses

Assign to

Choose a Location

Price

Quantity

Payment Method

Total Cost

Buy

Manage Licenses

Location

In Use

Available

Transfer
Enrollment

Availability: Today
Enrollment
Availability: Today

34 COUNTRIES
Enrollment
Availability: This summer
Enrollment
Availability: This summer

65 COUNTRIES
Enrollment
New countries
<table>
<thead>
<tr>
<th>Enrollment</th>
<th>New countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Lithuania</td>
</tr>
<tr>
<td>Bahrain</td>
<td>Malta</td>
</tr>
<tr>
<td>Cyprus</td>
<td>Qatar</td>
</tr>
<tr>
<td>Estonia</td>
<td>Romania</td>
</tr>
<tr>
<td>Iceland</td>
<td>Slovakia</td>
</tr>
<tr>
<td>Israel</td>
<td>Slovenia</td>
</tr>
<tr>
<td>Latvia</td>
<td>Ukraine</td>
</tr>
<tr>
<td></td>
<td>South Korea</td>
</tr>
<tr>
<td></td>
<td>Malaysia</td>
</tr>
<tr>
<td></td>
<td>Philippines</td>
</tr>
<tr>
<td></td>
<td>Argentina</td>
</tr>
<tr>
<td></td>
<td>Bolivia</td>
</tr>
<tr>
<td></td>
<td>Chile</td>
</tr>
<tr>
<td></td>
<td>Colombia</td>
</tr>
<tr>
<td></td>
<td>Ecuador</td>
</tr>
<tr>
<td></td>
<td>El Salvador</td>
</tr>
<tr>
<td></td>
<td>Costa Rica</td>
</tr>
<tr>
<td></td>
<td>Guatemala</td>
</tr>
<tr>
<td></td>
<td>Honduras</td>
</tr>
<tr>
<td></td>
<td>Dominican Republic</td>
</tr>
<tr>
<td></td>
<td>Nicaragua</td>
</tr>
<tr>
<td></td>
<td>Panama</td>
</tr>
<tr>
<td></td>
<td>Paraguay</td>
</tr>
<tr>
<td></td>
<td>Peru</td>
</tr>
<tr>
<td>New countries</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
</tr>
<tr>
<td>Bahrain</td>
<td></td>
</tr>
<tr>
<td>Cyprus</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td></td>
</tr>
<tr>
<td>Qatar</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td></td>
</tr>
</tbody>
</table>
Enrollment
Volume Purchase Credit

Add credit to your account via purchase order

Purchase from Apple or reseller

Launched last week in 10 new countries
Enrollment
Volume Purchase Credit

Add credit to your account via purchase order

Purchase from Apple or reseller

Launched last week in 10 new countries

Austria    Finland    Netherlands    Switzerland
Belgium    Ireland    Norway
Denmark    Luxembourg    Sweden
Enrollment
Setup Assistant configuration

Privacy  10.13.4/11.3
Enrollment
Setup Assistant configuration

Privacy   10.13.4/11.3

iCloud storage  10.13.4
Enrollment
Setup Assistant configuration

Privacy  10.13.4/11.3
iCloud storage  10.13.4
Set language and region  11.3
Where is this Apple TV?  11.4
Enrollment
Setup Assistant configuration

Privacy 10.13.4/11.3
iCloud storage 10.13.4
Set language and region 11.3
Where is this Apple TV? 11.4
iMessage and FaceTime
Screen Time
Software Update
Enrollment
Apple Push Notification service

Legacy Binary Provider API obsolete
Adopt HTTP/2 API
• More capable and efficient

Documented in ‘Communicating with APNs’
Enrollment

Security: App Transport Security

App Transport Security (ATS) required in 2018

SCEP server capabilities

DES no longer supported in iOS 11 or tvOS 11

Support AES and SHA-512

Advertise your capabilities
Enrollment
Security: App Transport Security

Verify your server supports ATS using

nslookup --ats-diagnostics <URL>

- Check-in
- Server
- SCEP
- OTA profile delivery
- Enterprise app distribution
Management
Password restrictions

Password AutoFill
• Implies Safari AutoFill

Password sharing
• Also blocks WiFi password sharing

Password proximity requests

Automatic Strong Passwords and Security Code AutoFill
WWDC 2018
Management
Commands and settings

Enable/disable Bluetooth 10.13.4/11.3

Exchange: Use OAuth

Managed Software Updates 10.13.4/11.3
Management
Managed Software Updates

Restrictions
• Delay when user will see new update
• Configure delay period

ScheduleOSUpdate supports version number

Apple Software Lookup Service
• Catalog API for iOS updates
• Documentation available
Announcements

Security

Allow USB accessories while device is locked
Switch in Settings to allow when locked
Supervised restriction to force switch on
Configurator managed devices
Announcements
Supervised-only restrictions
Announcements

Supervised-only restrictions

Restrictions that should have been supervised only will only be honored on supervised devices
Announcements

Supervised-only restrictions

Restrictions that should have been supervised only will only be honored on supervised devices

Now will be enforced in 2019

Upgrade and migration policy
Announcements
Supervised-only restrictions

App installation: Siri *
App removal: iCloud documents and data
FaceTime: Multiplayer gaming
iTunes: Add Game Center friends
Safari: Explicit content

2019
Announcements
Managed Open In

Improvements in iOS 11.3 and iOS 12
Sharing files
Contacts API respects boundary in iOS 11.3
Management
Settings new in iOS 11.3

Require authentication before AutoFill

Allow USB accessories while device is locked

Require teacher consent to leave a teacher created Classroom class

Restrict Remote pairing to whitelisted devices

VPN: AlwaysOn support CellularServices service exception

Home Screen Layout: Web Clip support
Management
Settings new in iOS 12

Notifications: Critical alerts, Show in CarPlay

Restrictions: Set date and time automatically
Management
Settings new in iOS 12: S/MIME for Mail and Exchange

Allow user to
• Enable or disable signing
• Modify signing cert selection
• Enable or disable encryption by default
• Modify encryption cert selection
Management

Settings new in iOS 12: VPN IKEv2

DNS server addresses
Primary domain of the tunnel
DNS search domains
DNS supplemental match domains
Management
Commands and Settings

Erase Device: Prevent proximity setup

macOS Server Account

REMOVED

11.3
Troubleshooting

Install MDM and APNs logging profiles

Get logs using Console or Apple Configurator 2

Filter logs by process

- APNs: apsd
- MDM: mdmd, dmd
- Profiles, restrictions, certs: profiled
- Apps: mdmd, dmd, appstored
- Shared iPad: mdmuserd

Developers, Developers, Developers
Developers
Schoolwork

Easily share content
Leverage power of apps
View student progress
Tailor instruction
Collaborate and provide feedback
Developers

ClassKit

Integrate with Schoolwork

Help teachers discover activities in your app

Take students directly to activity

Securely share progress data with teachers
Developers
Roster API: Class Name

Use Class Name as display name ✔

Consistency in Classroom and Schoolwork
Developers
Roster API: Class Name

Use Class Name as display name ✓

Consistency in Classroom and Schoolwork

<table>
<thead>
<tr>
<th>Date</th>
<th>Class Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before January 2018</td>
<td>&lt;blank&gt;</td>
</tr>
</tbody>
</table>
**Developers**  
**Roster API: Class Name**

Use Class Name as display name ✔

Consistency in Classroom and Schoolwork

<table>
<thead>
<tr>
<th>Date</th>
<th>Class Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before January 2018</td>
<td>&lt;blank&gt;</td>
</tr>
<tr>
<td>January 2018</td>
<td>Derived by Apple School Manager</td>
</tr>
</tbody>
</table>
Developers
Roster API: Class Name

Use Class Name as display name ✔️

Consistency in Classroom and Schoolwork

<table>
<thead>
<tr>
<th>Date</th>
<th>Class Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before January 2018</td>
<td>&lt;blank&gt;</td>
</tr>
<tr>
<td>January 2018</td>
<td>Derived by Apple School Manager</td>
</tr>
<tr>
<td>June 2018</td>
<td>Set by administrator</td>
</tr>
</tbody>
</table>
Developers

Shared iPad

Data not available locally on new device

App persists any data to the cloud

Works well after deleting local data
Developers
Managed App Configuration

 Thousands of developers
 Shared schemas
 App warming
 Customization

https://www.appconfig.org
Developers
Enterprise SDKs

IBM Watson Services for Core ML
IBM Cloud Developer Console
SAP Cloud Platform SDK
GE Predix SDK for iOS
Developers
Cisco Fastlane

Enterprise app developers and MDM vendors should support profile keys

Configurable via profile

• New QoS keys
Management
Commands and Settings for tvOS

Configure movie ratings, TV ratings, app ratings, explicit content

Remote pairing to whitelisted devices

Install App Store app

Install software update
Management
Commands and Settings for tvOS

Configure movie ratings, TV ratings, app ratings, explicit content

Remote pairing to whitelisted devices

Install App Store app

Install software update

Install enterprise app

Configure home screen layout

Single App Mode
Step 1 of 2: Preparing Update...

Do not unplug your Apple TV while it's updating. This may take a few minutes.
Step 1 of 2: Preparing Update...
Do not unplug your Apple TV while it's updating. This may take a few minutes.
Step 2 of 2: Applying Update…

Do not unplug your Apple TV while it's updating. This may take a few minutes, during which the Image on your TV may briefly disappear.
Step 2 of 2: Applying Update...

Do not unplug your Apple TV while it’s updating. This may take a few minutes, during which the image on your TV may briefly disappear.
HOTEL CUPERTINO

Concierge

IN ROOM SERVICES
- Room Service
- Dry Cleaning
- Housekeeping

AROUND TOWN
- Shopping and Entertainment
- Restaurants
HBO ORIGINAL SERIES
Stream every episode of HBO’s addictive shows.
Part of macOS installer

Install macOS on startup disk

Install packages after macOS

--installpackage

Erase current startup disk first

--eraseinstall
Enrollment
macOS user experience

Simpler

Matches iOS
Enrollment
Security: Enterprise app manifest delivery

InstallApplication still supported

Switch to one of the new, secure methods

InstallEnterpriseApplication
- Inline manifest
- Provide certs to pin
Management
System Profiles

Calendar ×
Contacts ×
Exchange ×
Dock ×
Mail ×
Web Clip ×
Management

Commands and Settings for macOS 10.13.4

Generated private keys not exportable

AD Certificate: Auto-renew certs

Content Caching

Smart Card
- Require to sign in 10.13.2
- Enable screen saver on removal
- New options for Check Cert Trust key
Management
User-approved MDM

Manage features which should only be available on organization-owned Mac
• Kernel extension permissions

Introduced in 10.13.2
Required in 10.13.4
Developers
Assessments

Support for testing apps 10.13.4

Requires entitlement
Troubleshooting

Install Managed Client and APNs logging profiles

Get logs using Console

Filter logs by subsystem com.apple.ManagedClient

Use profiles

Summary
Admins

Apple School Manager
Apple Business Manager
Use new device management capabilities
Prepare for security changes
Summary
MDM developers

Support new features

Adopt security features
Summary
App developers

ClassKit

Shared iPad

Managed App Configuration

Enterprise SDKs

Cisco Fastlane
<table>
<thead>
<tr>
<th>Event</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Management Lab</td>
<td>Technology Lab 2</td>
<td>Thursday, 1:30PM</td>
</tr>
<tr>
<td>Device Management Lab</td>
<td>Technology Lab 12</td>
<td>Friday, 9:00AM</td>
</tr>
<tr>
<td>Safari, WebKit, and Password AutoFill Lab</td>
<td>Technology Lab 12</td>
<td>Friday, 2:45PM</td>
</tr>
</tbody>
</table>

More Information

https://developer.apple.com/wwdc18/302