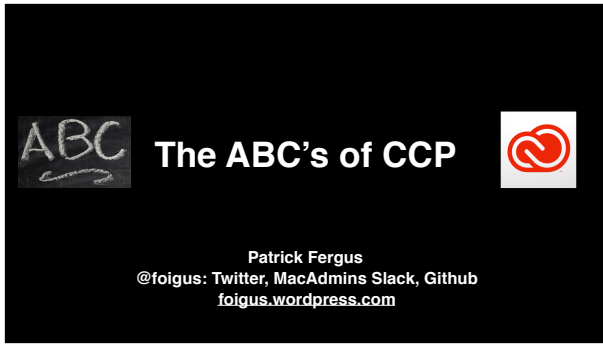
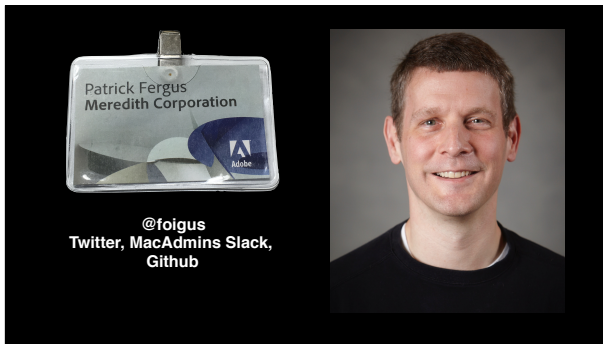


1



- Good morning, this is the ABC's of CCP, Spelling out Application Management with Creative Cloud Packager
- Provide a foundation for managing Creative Cloud
- At points I will mention there are links in the presenter notes
  - At the end of the presentation there will be a link slides and presenter notes
  - Don't feel you have to copy everything down
  - There will be a Q&A session at the end

2



- Mac administrator at Meredith Corporation for over 12 years
- Package Adobe suites CS2 and later
- Work in a team of four technicians

3



- Licensing
- Web management dashboards
- Creative Cloud Desktop App
- Building packages, updating, and uninstalling
- Lightning Round
- Let's dive in

## Creative Cloud (Volume) Licensing



4

- Why not starting with packaging?
- Distributing Creative Cloud requires understanding terminology
- Later presentation requires familiarity
- In the next few slides, pencil yourself in where you know you go or where you think you should go

## Creative Cloud for...

	Teams	Education	Government (Desktop Apps)	Enterprise
Business	Small & Medium	⊘	⊘	Large
Education	⊘	Departments --- Class/Labs	⊘	Entire Institutions
Government	<150 seats	⊘	Small Secure Deployment	>150 seats

5

- Table of Creative Cloud product lines
  - Customer type vertically
  - Creative Cloud product name horizontally
- Two items to call out that aren't smaller = Teams, bigger = Enterprise
  - \*\*Education
    - Departments closer to "Teams"
    - Classroom and lab offers offers device licenses for shared computers
  - \*\*Creative Cloud Desktop Apps for Government, deployment in secure environments
- ✧ "Adobe Creative Cloud / for business"  
<http://www.adobe.com/creativecloud/business/teams.html>
- ✧ "Adobe Creative Cloud / education"  
<http://www.adobe.com/creativecloud/buy/education.html>
- ✧ "Adobe Creative Cloud / government"  
<http://www.adobe.com/creativecloud/buy/government.html>

## Software SKUs Available

	Teams	Education	Government (Desktop Apps)	Enterprise
Single-App	✓	✓	✓	✓
Complete	✓	✓	✓	✓
Custom	⊘	⊘	⊘	✓

6

- Single-app versus complete
- Custom plans
  - Enterprise offering of applications that's less than Complete, mimic previous Creative Suite SKUs
  - Options to purchase (or not purchase) features like storage, online services
- ✧ Creative Cloud Plans  
<https://creative.adobe.com/plans>

## How Licensing is Applied




7

	Teams	Education	Government (Desktop Apps)	Enterprise
Named User	✓	✓	✗	✓
Machine-Based	✗	✓ Device License	✓ Serial Number	✓ Serial Number

- Named User
    - Authentication-based licensing
    - **Online services and mobile applications**
    - **Home use**
  - Machine-Based
    - No sign-in, two flavors
    - Device licenses for Education decrement Adobe license counter via Internet at installation, need to be uninstalled or revoked to reclaim
    - Serial numbers do not report to Adobe, installable and usable without Internet
- ✧ “Creative Cloud for education: Device licensing”  
<https://helpx.adobe.com/creative-cloud/packager/teams-deployment-overview.html#devicelicense>
- ✧ “Manage Creative Cloud for education device licenses”  
<https://helpx.adobe.com/creative-cloud/help/manage-device-licenses.html>

## Named User ID Types

8

ID Type	Authenticator	IT Access	Owner	Domain Claim
Adobe ID 	Adobe	No	Individual	No
Enterprise ID 	Adobe	Yes	Organization	Yes
Federated ID 	Organization Directory	Yes	Organization	Yes

- Adobe ID essentially BYOID
  - Enterprise customer who wants more control over the ID and the data within, you can claim a domain, provides two additional ID types
    - Enterprise ID authenticates against Adobe
    - Federated ID authenticates against your enterprise directory
  - If you do a domain claim, must choose between Enterprise or Federated IDs for that domain
  - Adobe IDs can have the same email address as a Enterprise/Federated ID
  - Can use Adobe IDs alongside Enterprise/Federated IDs in the same deployment
- ✧ “Manage identity types”  
<https://helpx.adobe.com/enterprise/help/identity.html>
- ✧ “Configure Single Sign-On”  
<https://helpx.adobe.com/content/help/en/enterprise/help/configure-sso.html>

## What Kind of Licensing?

9

“[Adobe] initially said anything greater than 250 seats should not be for Teams, but that is not necessarily true anymore. It is more about how you want to purchase and the features you need.”

–Karl Gibson, Adobe

- Big enough for Enterprise? Too big for Teams?
  - Features such as enterprise directory authentication or machine-based licensing
  - Probably also depends on the size of your budget
  - Figure out needed features, budget, and call your Adobe rep
- ✧ Quote citation  
<https://macadmins.slack.com/archives/adobeinstalls/p1459773822001330>

## Web-Based Management Dashboard



10

- Dashboards provide similar management functions for all Creative Cloud customers
  - Assign Creative Cloud software licenses
  - Download Creative Cloud Packager
- Enterprise Dashboard provides Enterprise-specific options

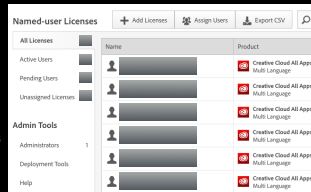
## Dashboard Features

• Teams & Education:  
[adobe.com](https://adobe.com) ->  
"Manage Team"

• Enterprise:  
[aedash.adobe.com](https://aedash.adobe.com)

• Assign and revoke licenses

• Device License  
management (Education)

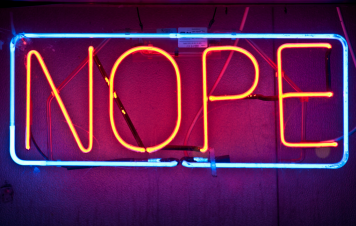


11

- To get to the dashboards, sign in at these URLs
- Presented with interface to assign and revoke licenses
  - Admin offers the license to an email address
  - Adobe emails the address provided and the recipient accepts
  - If the email isn't any sort of ID, the recipient is prompted to create an Adobe ID
- Education device licenses consumed are recorded here

☆ "Manage your Creative Cloud for teams membership"  
<https://helpx.adobe.com/creative-cloud/help/manage-teams-membership.html>

## Serial Numbers



(Image: NOPE, Potential Past, CC-BY-ND)

12

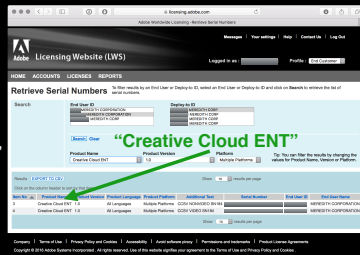
- Serial numbers are anonymous
- Don't show up in any dashboard
- Retrieved from the Adobe Licensing Website



## Serial Numbers (Enterprise)

13

- [licensing.adobe.com](https://licensing.adobe.com)
- "Creative Cloud ENT"

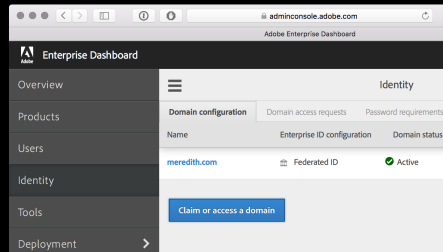


- Don't need permanent access, someone can provide the serial number
- Under "Licenses", select "Retrieve Serial Numbers"
- Choose the appropriate End User ID and Deploy-to ID
- Search for "Product Name" of "Creative Cloud ENT"

## Enterprise Portal-Specific

14

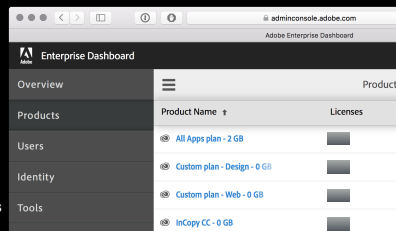
- Few more features specific to the Enterprise Dashboard
  - Identity section for starting the domain claim process and verify existing domain claims
- ☆ "Getting Started with [Directory Sync] User Management [API]"  
<https://www.adobe.io/products/usermanagement/docs/gettingstarted>



## Enterprise Portal-Specific

15

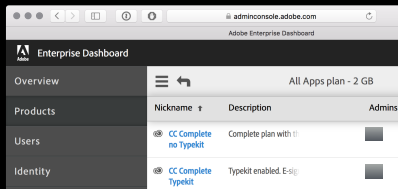
- **Product Groups**
- **Product Configurations**
- **Services**
- **Product Administrators**



- For Named User licensing, there's a hierarchy of configuring products
- Product Groups
  - Automatically created, equal purchased license entitlements
  - Each has it's own license count
- Click "All Apps plan" Product Group

## Enterprise Portal-Specific

- Product Groups
- Product Configurations
- Services
- Product Administrators

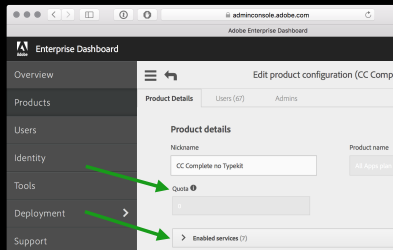


16

- Below Product Groups there are Product Configurations
- There are two Product Configurations, one with Typekit and without Typekit
- Click “CC Complete no Typekit” Product Configuration

## Enterprise Portal-Specific

- Product Groups
- Product Configurations
- Services
- Product Administrators

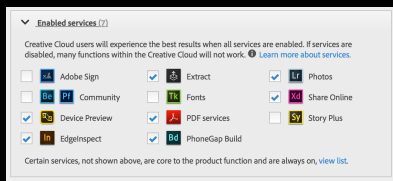


17

- Each Product Configuration can have
  - License quota—a fraction of the Product Group
  - \*\*Services that can be enabled or disabled
- Select “Enabled services”

## Enterprise Portal-Specific

- Product Groups
- Product Configurations
- Services
- Product Administrators

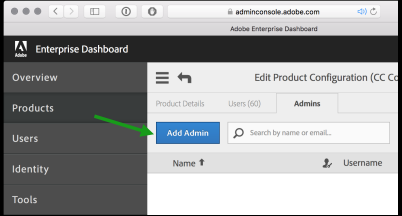


18

- List of configurable services
- Note some Creative Cloud services considered “Core”, always on with a plan that includes storage
- Note Adobe Stock (image service) doesn't appear here
  - Is it's own Entitlement, Product Group, and Product Configurations
- ✧ “Configure services”  
<https://helpx.adobe.com/enterprise/help/configure-services.html>
- ✧ “Core Creative Cloud services”  
[https://helpx.adobe.com/enterprise/help/configure-services.html#creative\\_cloud\\_services](https://helpx.adobe.com/enterprise/help/configure-services.html#creative_cloud_services)
- ✧ “Opening InDesign documents in previous versions” (Simple Saveback)  
<https://helpx.adobe.com/indesign/kb/opening-indesign-documents-in-previous-versions.html>
- ✧ “Adobe Stock for enterprise”  
<https://helpx.adobe.com/enterprise/help/adobe-stock-enterprise.html>

# Enterprise Portal-Specific

- Product Groups
- Product Configurations
- Services
- Product Administrators



19

- Product Configurations can have Product Admins
  - Product admin can assign and revoke licenses for that Product Configuration
  - Let department heads or office managers manage their portion of the licenses
- ☆ "Assign administrators to a product configuration"  
[https://helpx.adobe.com/enterprise/help/admin-roles.html#Assign\\_product\\_admins](https://helpx.adobe.com/enterprise/help/admin-roles.html#Assign_product_admins)

# Enterprise Administrative Roles

Administrator Type	Capabilities
System	All
Product	Add users to a product configuration
Deployment	Download Creative Cloud Packager, access Cloud Packager
Support	View the support dashboard

20

- Beyond Product Admins, there's a few other Administrative Roles
  - At worst you need to be a Deployment Administrator
    - Download Creative Cloud Packager, access Cloud Packager, record packaging settings
    - Try to be a Support Administrator (enter support tickets)
    - If you can't, find out who the Support Administrators are
  - If you are using Enterprise or Federated IDs, have an emergency System Administrator attached to an Adobe ID
- ☆ "Administrative Roles"  
<https://helpx.adobe.com/enterprise/help/admin-roles.html>

# Creative Cloud Desktop App

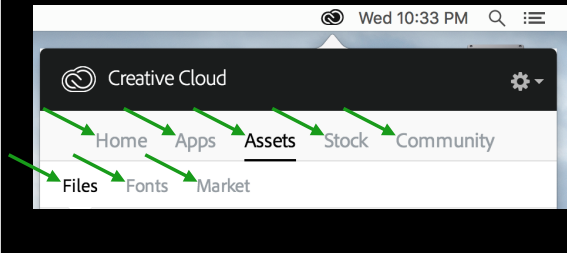


21

- Menu bar icon
- May be familiar Named Users use it to sign in
- Used for a handful of other services and purposes

## Creative Cloud Desktop App (CCDA)

22



- Note acronym of "CCDA"
  - \*\*\*Home Tab: Sign into Creative Cloud, view recent account activity
  - \*\*\*Apps Tab: Application installation and updates
    - Currently must be an admin to use
    - Can be hidden via Creative Cloud Packager
  - \*\*\*Assets tab has three sections:
    - \*\*\*Files: Track synchronization with Adobe's Dropbox-like storage
    - \*\*\*Fonts: See status of TypeKit sync
      - CCDA responsible for file sync and making TypeKit fonts available
    - \*\*\*Market: Royalty-free assets for download
  - \*\*\*Stock tab: Starting point for Adobe Stock service
  - \*\*\*Community tab: Self-promotion and discovery through Behance
- ☆ "Use the Creative Cloud desktop app to manage your apps and services"  
<https://helpx.adobe.com/creative-cloud/help/manage-apps-services-desktop.html>

## Creative Cloud Desktop App (CCDA)

23

- Disabled services
- Workflow and security
- Creative Cloud Packager can disable CCDA...
  - ...but only for machine-based licenses
- Unload LaunchAgent at login

- Again Enterprise customers can disable some of these services
  - Consider workflow and security impact
    - Typekit: Will everyone have the fonts?, File sync: Can we store this in the cloud?
  - CCDA can be disabled
    - But only machine-based licensing
    - If you keep the CCDA with machine-based licensing, Adobe recommends the user log out of Creative Cloud before logging out
  - If you are using Named User packages and want to disable CCDA
    - Delete the LaunchD job entirely (not recommended), or unload CCDA LaunchAgent at login (Outset is suggested)  
`launchctl unload /Library/LaunchAgents/com.adobe.AdobeCreativeCloud.plist`
- ☆ "Outset: Automatically process packages, profiles, and scripts during boot, login, or on demand"  
<https://github.com/chilcote/outset>
- ☆ Logging out of CCDA with machine-based licensing "AdobeEdu Office Hours: Creative Cloud Packager 1.9": 40:05-41:15, 42:50-43:46  
<https://www.youtube.com/watch?v=1E1zPqgPnLk>
- ☆ "Use the Creative Cloud desktop app to manage your apps and services"  
<https://helpx.adobe.com/creative-cloud/help/manage-apps-services-desktop.html>

## Creative Cloud Packager

24

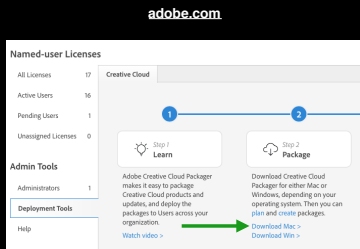


- Onto building packages
- Note acronym of CCP
- Where to download CCP
- CCP no longer a public download like its predecessor, AAMEE
- Learning/testing versions of CCP? Ask Adobe

## CCP Download (Teams and Education)

25

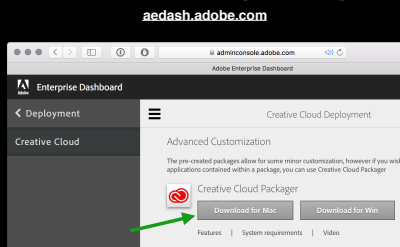
- Teams or education
- Sign in and click “Manage Team”
- Left hand column, under “Admin Tools”, select “Deployment Tools”
- “Download Mac”



## CCP Download (Enterprise)

26

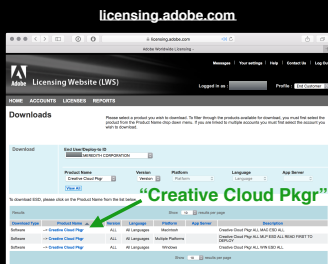
- Sign into the Enterprise Dashboard
- Left-hand column, “Deployment” and then “Creative Cloud”
- Scroll down and click “Download for Mac”

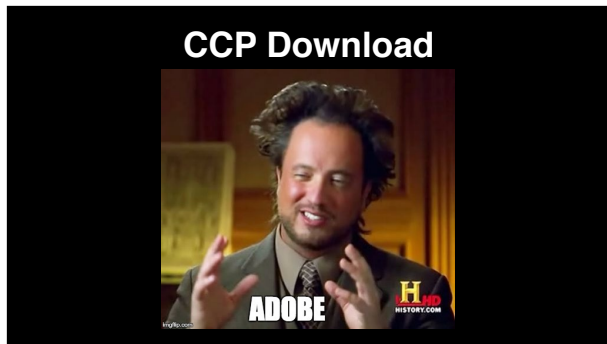


## CCP Download (Licensing Website)

27

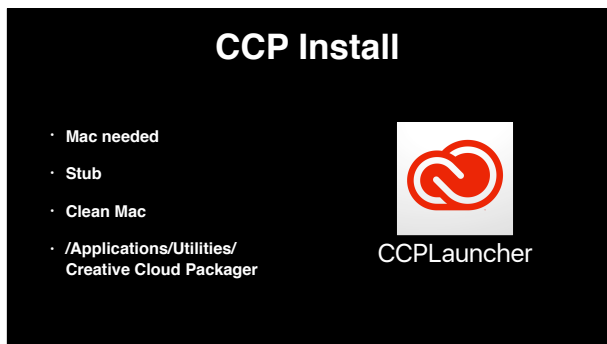
- Sign in at the Adobe Licensing Website
- Under “Licenses”, select “Downloads”
- Select the needed End User ID and Deploy-to ID
- Search for “Product Name” of “Creative Cloud Pkgr”





28

- If three unique ways of just *downloading* CCP makes you feel like this, well, buckle up
- Full disclosure—I can *nearly* guarantee that ancient aliens had nothing to do with Adobe

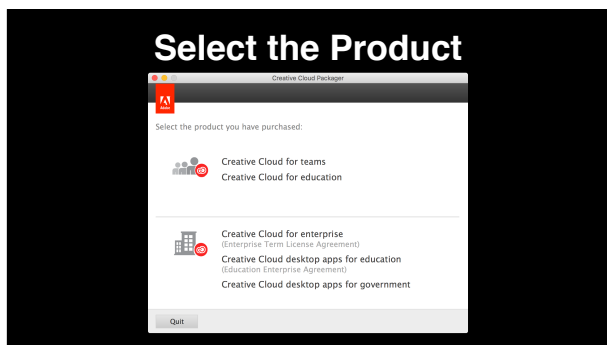


29

- Now that we have CCP, need to install it
- Must build on a Mac
- Installer is a stub, it downloads CCP from Adobe
- Install on Mac without other Adobe software, minimize bizarre things
  - VM is ideal, consider expanding VM size
- Once installed CCP is located in the Utilities folder

☆ “About Creative Cloud Packager”

<https://helpx.adobe.com/creative-cloud/packager/creative-cloud-packager.html>



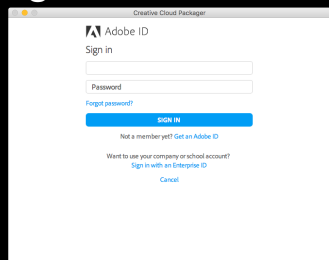
30

- Select the product you've purchased
- Top section requires an ID that is an admin for either Teams or Education
- Education customers,
  - Device Licenses choose the top section
  - Serial numbers choose the bottom section

31

## Sign In

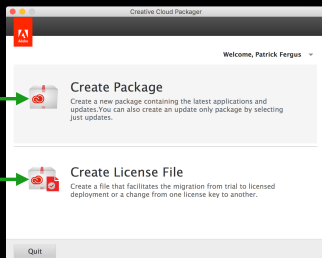
- Any ID
- Enterprise ID benefits



- Education and Teams customers sign in with your admin ID as I just mentioned
- Enterprise customers should use an ID that's system admin or deployment admin, packaging details are recorded in the Enterprise Dashboard

32

## Create Package or License File

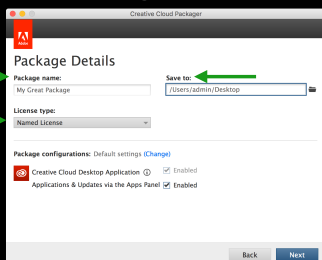


- Create Package
  - Our focus
- \*\*Create License File
  - Create files that can be used to add or remove machine-based licensing
- Click "Create Package"

☆ "Create license file"  
<https://helpx.adobe.com/creative-cloud/packager/create-license-file.html>

33

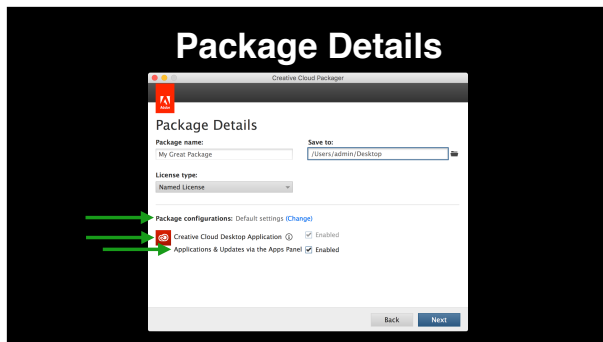
## Package Details



- Package name
  - Included application(s), license type (serial/device/named), update-only vs full (more in a second)
- \*\*Save to: Someplace local
  - CCP package creates bundle-style package and relies on symlinks
  - Mac-safe handling (HFS+, AFP, D&D w/Fusion VMs, copy in and out of ARD sessions)
  - NOT a SMB server or VMware Fusion Shared Folder
  - Otherwise zip the CCP package before moving it
- \*\*License type
  - Choose between Named User or machine-based license

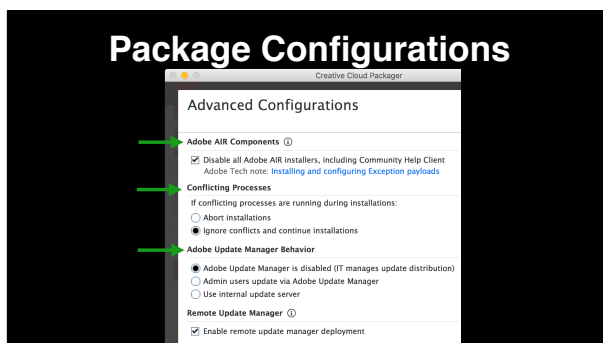
☆ "Don't test installers from a VMWare Fusion shared folder"  
<https://swytechnotes.wordpress.com/2014/10/09/dont-test-installers-from-a-vmware-fusion-shared-folder/>

34



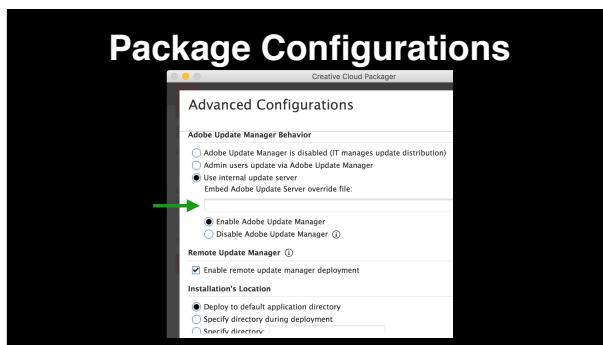
- Creative Cloud Desktop Application
  - Can disable for machine-based licenses
  - Forced on for Named User
- \*\*Apps and Updates panel
  - Hides the CCDA panel that offers updates and new applications
  - Again, this panel only useful for admins
- \*\*Package Configurations
  - This reveals a pane of options
  - Click “Change” and...

35



- Disable all Adobe AIR installers
  - Leave this checked
  - If you need AIR, there's always AutoPkg
- \*\*Conflicting Processes
  - Leave this set to Ignore conflicts
  - Note the install will still abort if the application to be updated is running
- \*\*Adobe Update Manager Behavior
  - *Adobe Update Manager is disabled*: Updates come from CCP packages or Remote Update Manager (RUM)
    - Note that's another acronym
  - *Admin users update via Adobe Update Manager*: “Regular” install—users will see prompts to install
  - *Use internal update server*: Have the updater check in with an internal Adobe Update Server

36



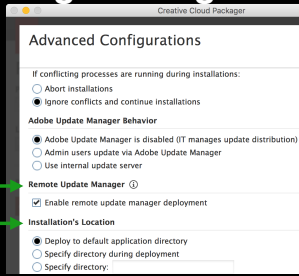
- To configure an Adobe Update Server, provide an Adobe Update Server override file
  - Setting up an Adobe Update Server outside scope of this presentation, Karl Gibson's presentation tomorrow will discuss setup
- *Enable Adobe Update Manager*: Allows admins to apply updates
- *Disable Adobe Update Manager*: You'll need to use Remote Update Manager to take advantage of an Adobe Update Server

☆ “Using Adobe Update Server Setup Tool”  
<https://helpx.adobe.com/creative-cloud/packager/update-server-setup-tool.html>



## Package Configurations

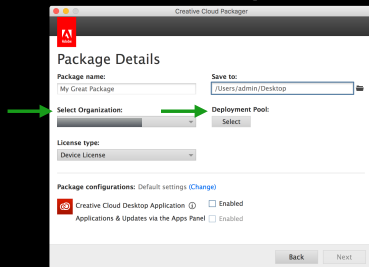
37



- Remote Update Manager: (RUM!) Leave it enabled, even if you're not using RUM--it doesn't hurt anything
- \*\*Installation location
  - Haven't seen anyone move these in a long time
  - May confuse plugin installers

## Device License (Education)

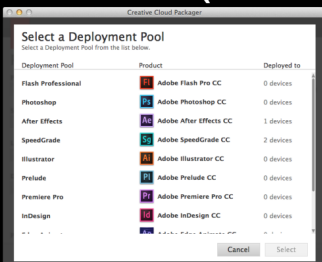
38



- If you're in Education using device licenses
- Select organization
  - Choose the organization you're packaging for—only displays if your ID is associated with multiple organizations
- \*\*Deployment pool
  - Click this button and...

## Device License (Education)

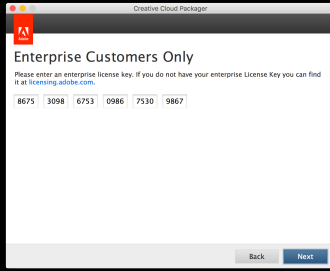
39



- ...choose the appropriate license for the device pool

## Serial Number

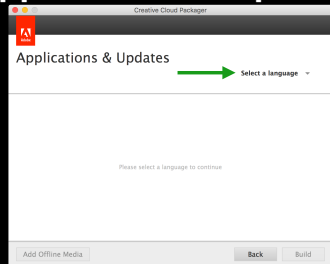
40



- If you selected a Serial Number license, enter your serial number
  - If you enter a Captivate or Presenter serial number, can package those as well
- ☆ Adobe Captivate 7 and Presenter 9 Can Now Be Packaged for IT Deployment  
<https://blogs.adobe.com/edtechatadobe/tag/creative-cloud-packager>

## Applications & Updates

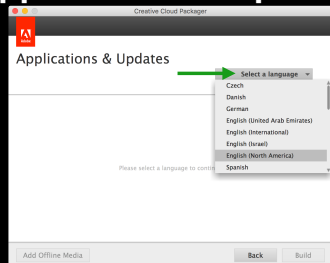
41



- Click here and pick your language

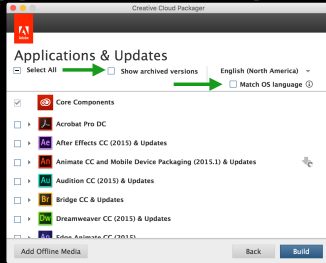
## Applications & Updates

42



- This will be the native language of the packages you create, however

## Applications & Updates



43

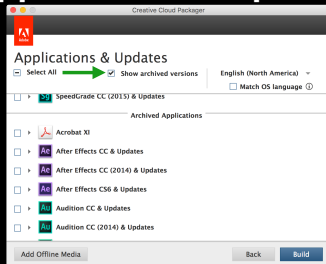
- As of CCP 1.9.3, packages are now multi-lingual
- “Match OS language” checkbox will match target computer’s language
- Can configure package to install in specified language, editing Info.plist inside package and specifying language
- Since Info.plist is inside the Install package, consider how to deploy that—may need preinstall script or multiple package copies
- \*\*Show archived versions: If you need older version, click here...

✧ Multi-Lingual Notes in version 1.9.3

<https://helpx.adobe.com/creative-cloud/packager/ccp-readme.html>

✧ "Deploy using Info.plist file on Mac machines" <http://tinyurl.com/ccp-info-plist> **OR** <https://helpx.adobe.com/creative-cloud/packager/deploying-packages.html#DeployusingInfogclassgrgr9gralertgrspellundefinedContextualSpellinginsdelmultiReplacedatagrid9plistgfileonMacmachines>

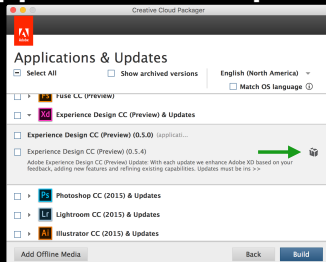
## Applications & Updates



44

- ...and earlier versions of the software will become available for packaging
- As long as they're still supported
  - For example Acrobat X isn't available in this screenshot

## Applications & Updates



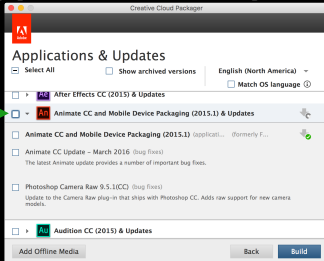
45

- If you do tip open a list of options and see this icon, this is a new format installer
- We'll cover the differences in a minute

## Applications & Updates

46

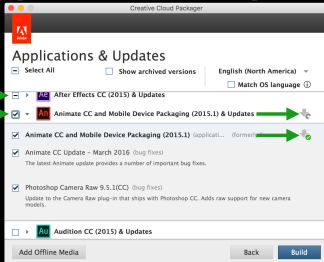
- Let's tip open the disclosure triangle next to Animate CC 2015



## Applications & Updates

47

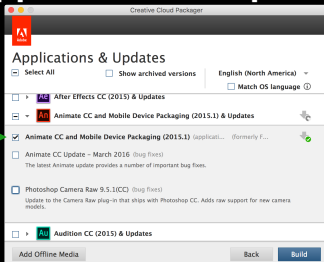
- If you check here, you'll get a package with all available updates
- \*\*Half-checkmark for After Effects means some currently selected item also applies to After Effects
- \*\*Arrows on the right hand side
  - Half-filled circle is partially downloaded
  - Green checkmark is completely downloaded



## Applications & Updates

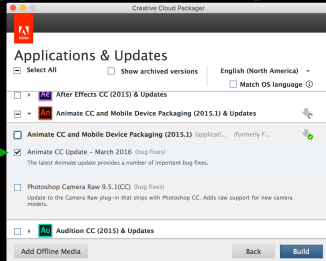
48

- Check just the application, un-updated original dot-zero version



## Applications & Updates

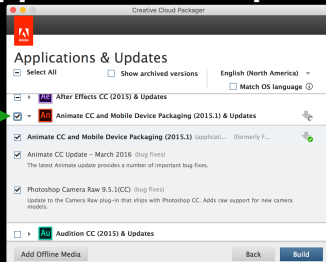
49



- Check just the update, get an “Update Only” package that contains only the update
  - Dependent on the base application installer
  - Only updates that version of application (won't update 2014 -> 2015)
  - “Combo” updater
  - No uninstaller

## Applications & Updates

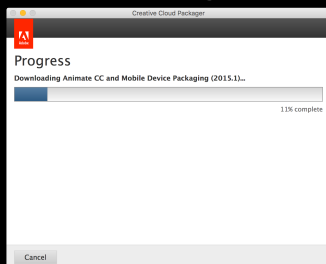
50



- For this example we'll take everything for Animate CC
- Click “Build”

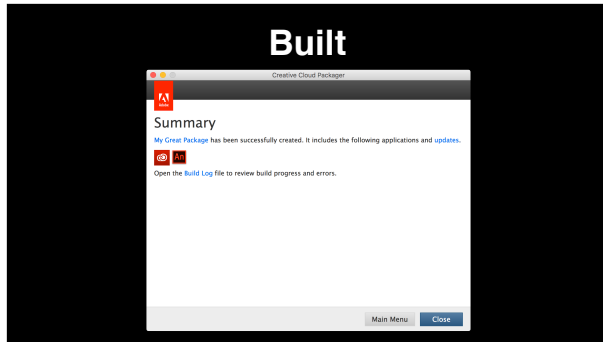
## Building...

51



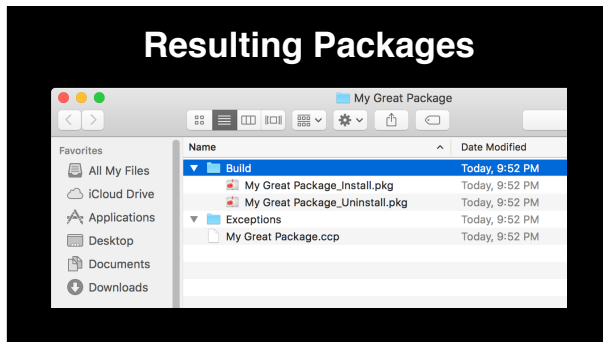
- Wait a little while

52



- And it's built
- Icons are the included applications
- Included updates are listed under the “updates” text

53



- The output is two packages, install and uninstall
- They install or uninstall all included software titles in the package
  - Also install and remove the licenses if they were included

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## New Format Package Differences

- Faster install and improved success
- “Update only” packages gone
- Few other points as appropriate

- New Installer technology
    - Shorten install time and improve success rate
  - Each package is a full install
    - Size concerns? Update-only packages are running about 75% of the full install
  - Consult a URL in presenter notes to see where each application version starts offering new format installers
  - Few more points in the relevant parts of presentation
- ✧ “Applications that can be deployed without their base versions” (list of new format packages)  
<https://helpx.adobe.com/creative-cloud/packager/apps-deployed-without-their-base-versions.html>

## Configuration Considerations

55

- Watch the checkboxes
- One "wrong" package
- Read the release notes  
[tinyurl.com/ccp-release-notes](https://helpx.adobe.com/creative-cloud/packager/ccp-readme.html)

- Beware! The checkboxes and options do occasionally revert
- A "wrong" package with a missed configuration (Adobe Update Manager behavior, enabling CCDA or Apps and Updates) can change the result
- Really, really read the Read Me/Release Notes  
<https://helpx.adobe.com/creative-cloud/packager/ccp-readme.html>

## Cloud Packager

56



- Another option to obtain CC packages
- Introduced July 2015 for Enterprise customers

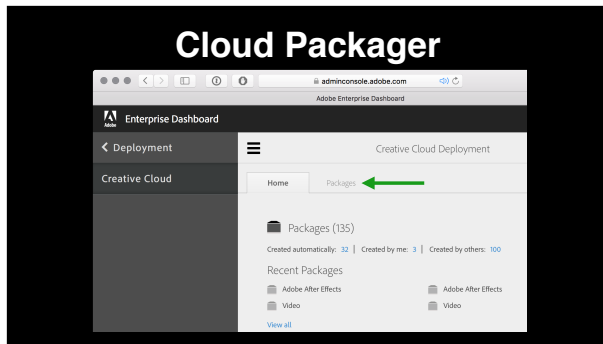
## Cloud Packager

57

- Pre-created packages
- Suites and individual applications

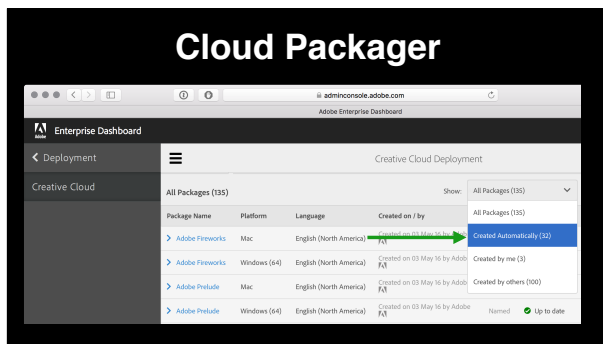
- This is an Adobe-hosted website where you can obtain pre-created packages
- Purchased license "entitlement" packages and single applications

58



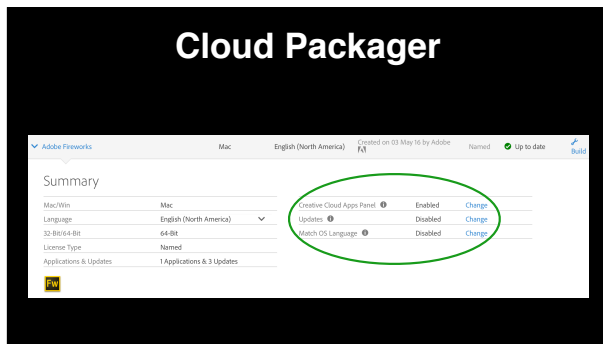
- Access the Cloud Packager via the Enterprise Dashboard
- “Deployment”, “Creative Cloud”, and then the “Packages” tab

59



- From the “Show” menu select “Created Automatically” to only see the Cloud Packager-created packages
- Show a list of packages, if you click one...

60



- ....you'll see package details
- \*\*Can change a few package options, but not every option that was in CCP
- Click “Build” in the upper right-hand corner to download the package



## Cloud Packager

### Pros

- Less clicking
- No need for dedicated computer/VM
- Less network access requirements
- Packages always current

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- Less clicking than CCP
- No need for an clean, Adobe-free computer/VM
- Only need a web browser, less dependence on Internet access to the variety of servers CCP requires
- Always includes latest updates

✧ "Site/Port information used by Creative Cloud Packager"

[https://helpx.adobe.com/creative-cloud/packager/creative-cloud-packager.html#port\\_info](https://helpx.adobe.com/creative-cloud/packager/creative-cloud-packager.html#port_info)

## Cloud Packager

### Cons

- Packages always current
- No custom
- No update-only
- Named User packages only
- No licensing files
- Add-ons

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- Always includes latest updates
- No custom packages, it's either one title or the entire entitlement
- No update-only packages
- Only named licenses, no serialized or device license packages
- Can't create licensing files either
- Packages always include some add-ons (Bridge, Extension Manager, ExtendScript Toolkit, Media Encoder) in every package
- If these pros and cons aren't an issue, Cloud Packager might be a good fit

## Packaging Strategies and Pitfalls



63

- Hooray, we now know how to determine what sort of packages to create
- What tips can I offer?
- These are only from my experience—you might find a reason to ignore some of these recommendations

## Package Applications Individually

64

- Future proofing
- Smaller installation sizes
- Tethering updates to the "right" packages
- Miscellaneous

- Future proofing
  - You can't break apart a "suite" installer
  - Instead package individual applications and tether them in your management system
- Smaller Installation Sizes
  - A computer with a small SSD may only want Photoshop
  - Reinstalling a single application only downloads and reinstalls one application
  - A la carte install allows a la carte uninstall

## Package Applications Individually

65

- Future proofing
- Smaller installation sizes
- Tethering updates to the "right" packages
- Miscellaneous

- Less complex to tether updates to application packages
  - Updates only need to be an update for their title rather than multiple suite packages
- Miscellaneous
  - Licensing Concerns: If different licenses are purchased in the future and only a suite is packaged, need new packages
  - Less management system space
    - No software title duplication
  - Installation failures have a smaller impact and easier to troubleshoot
  - If packaged as a suite, new CC applications will be packaged individually

## Package Applications without Updates

66

- Only old-format packages
- Avoid unnecessary installations
- Use update-only packages

- Only old-format packages since new are always full install
- If update is included, you'll install unnecessary intermediate updates
  - No need to install dot-zero and dot-one, followed by a combo dot-two
- Use update-only packages
  - "Combo" updates
  - Only apply the most current

## Pre-Cache Downloads



67

- Since CCP network based, any network speed issues will cause you to wait
- To help you build (but not for deployment!) download everything into a monster package, and then throw it away
- Faster to build the followup packages

## Build Named User Packages

- Licensing flexibility
- How to apply the license?

68

- Named User packages become machine-based with the installation of a license
- Different licenses can be installed as needed with same base package
  - If you have multiple serial number or device based license pools
- Convert between named user and machine-based licensing
  - Freelance versus full time employees' computers
- How do you install the license?

## make-adobe-cc-license-pkg

<https://github.com/timsutton/make-adobe-cc-license-pkg>

- Three issues
  - Uninstall package
  - "Create License File"
  - Device License Portal

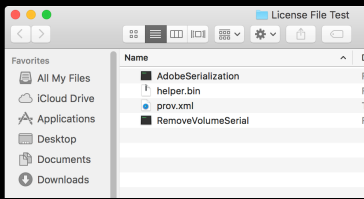
69

- Tim Sutton's make-adobe-cc-license-pkg was created to handle three issues
  - 1) Using a CCP "uninstall" package removes license, regardless if any software still needs it
  - 2) Remember Create License File? Turns out doesn't make package

☆ Adobe Creative Cloud Deployment - Packaging a License File  
<https://macops.ca/adobe-creative-cloud-deployment-packaging-a-license-file>

## make-adobe-cc-license-pkg

<https://github.com/imsutton/make-adobe-cc-license-pkg>



70

- Makes a pile of files—you're expected to assemble them
  - RemoveVolumeSerial fails to return Device Licenses back to Adobe
- ☆ "Create license file"
- <https://helpx.adobe.com/creative-cloud/packager/create-license-file.html>

## make-adobe-cc-license-pkg

<https://github.com/imsutton/make-adobe-cc-license-pkg>

Device Name	Status
device licenses	Available <a href="#">How to activate a device</a>
cds-...-phil.local	Active Deactivate
cds-...-ca	Active Deactivate
cds-...-ca	Active Deactivate
cds-...-ca	Active Deactivate
cds-...-ca	Active Deactivate

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- 3) Removing licenses with the Education device license dashboard isn't straightforward
  - Only computer hostname is recorded at activation
    - Unique names aren't guaranteed
  - Can't batch deactivate
  - Can't sort by last reactivation date to find stale client activations
  - Can't be sure the license being deactivated is the right one

## make-adobe-cc-license-pkg

<https://github.com/imsutton/make-adobe-cc-license-pkg>

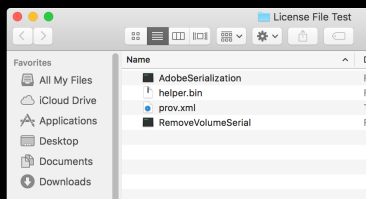
```
$ /path/to/make-adobe-cc-license-pkg "/path/to/License
File Test/"
** Built package at /Users/admin/License File
Test-2016.05.06.pkg
** Wrote uninstall script to /Users/admin/License File
Test-2016.05.06.uninstall
** Done.
```

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- make-adobe-cc-license-pkg addresses these three issues
  - It creates a package that will apply the license
  - 1) A package you can use instead of creating CCP packages that include licenses, so you can control license uninstallation
  - 2) Creates an uninstall script that will remove the license and return device based licenses to Adobe
  - 3) Fixing these decreases need to deactivate in the education dashboard

## make-adobe-cc-license-pkg

<https://github.com/imsutton/make-adobe-cc-license-pkg>

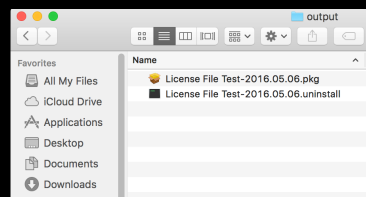


73

- So this

## make-adobe-cc-license-pkg

<https://github.com/imsutton/make-adobe-cc-license-pkg>



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- Becomes this
- Highly suggest checking it out

## “Identical” CCP Packages Change

```
07/22/15 08:50:47:384 | [INFO] | | OOB | DE | |  
| | 15330 | installer: choices changes file  
'ignore_AAM.xml' applied
```

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- **Lastly**, CCP packages of the same applications can be different if packaged at different times
- One package may have issues while the other does not
- Acrobat DC package reports installation failure even though the installation succeeded
- Fixed with Choice Changes file
- Another really good reason to package individual applications!

☆ Acrobat DC install log reflecting Choice Changes File:  
<http://pastebin.com/ac7hNhia>

## Updating Applications

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- Now you have the applications installed on your computers
- What strategies are available for updating applications

## Updating Applications

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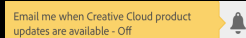
- Self service
- Additional CCP update packages
- aamporter (Munki only!)  
[github.com/timsutton/aamporter](https://github.com/timsutton/aamporter)
- Remote Update Manager (RUM)

- Self service: If allowed, admins apply their own updates
- Package updates via CCP and distribute
- aamporter: Retrieves updates from Adobe and imports into Munki repo
- Remote Update Manager (RUM)
  - Command line installation of Adobe software updates
  - Computer should be logged out while running RUM, since "Adobe Applications for which updates are to be installed should not be running when Remote Update Manager is invoked."
- ✧ "Use Adobe Remote Update Manager"  
<https://helpx.adobe.com/creative-cloud/packager/using-remote-update-manager.html>
- ✧ "Using Adobe Update Server Setup Tool":  
<https://helpx.adobe.com/creative-cloud/packager/update-server-setup-tool.html>

## Updating Applications

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- Some updates not available through RUM
- AutoPkg
- Update the CCDA
- (Enterprise Dashboard)  
Application update email

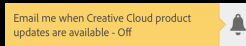


- Some updates aren't available through RUM
  - Adobe Reader, Acrobat Professional, AIR, and Flash Player
- Depending on the application, either use update-only packages or AutoPkg
- ✧ "Use Adobe Remote Update Manager", "Remote Update Manager is meant only for a subsection of Adobe Desktop products. It cannot be used for some native installer applications such as Adobe Edge Code, Edge Reflow, Muse, and Gaming SDK. Browser plug-ins such as Flash Player and for Adobe Reader, Acrobat Professional, and Adobe AIR application updates are also not supported"  
<https://helpx.adobe.com/creative-cloud/packager/using-remote-update-manager.html>
- ✧ AutoPkg Recipes
  - Acrobat 9/X/XI <https://github.com/autopkg/recipes/tree/master/AdobeAcrobatPro>
  - Acrobat DC <https://github.com/autopkg/novaksam-recipes/blob/master/Recipes%20-%20Download/AdobeAcrobatDCUpdates.download.recipe>
  - AIR: <https://github.com/autopkg/recipes/tree/master/AdobeAIR>
  - Flash Player: <https://github.com/autopkg/recipes/tree/master/AdobeFlashPlayer>
  - Reader: <https://github.com/autopkg/recipes/tree/master/AdobeReader>

## Updating Applications

79

- Some updates not available through RUM
- AutoPkg
- Update the CCDA
- (Enterprise Dashboard)  
Application update email



- To update the CCDA, create a CCP package with no applications selected
- Update notifications in Enterprise Dashboard
- ✧ "To create a package that contains only the Creative Cloud for desktop app, do not select any Applications or Updates in the subsequent screens."  
<https://helpx.adobe.com/creative-cloud/packager/named-licenses.html>
- ✧ "Want to know when Creative Cloud product updates get released?"  
<http://blogs.adobe.com/oobe/2015/12/want-to-know-when-creative-cloud-product-updates-get-released.html>

## Uninstalling Applications

80



Uninstall Adobe  
Creative Cloud

- Now the applications are installed, updated, and you want to remove them
- Not going to cover double-clickable GUI uninstaller, probably not using it

## Uninstalling Applications

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- Uninstall package
- Creative Cloud Cleaner Tool  
[tinyurl.com/cleaner-tool-cc](http://tinyurl.com/cleaner-tool-cc)
- Command-line uninstall (new packages!)
- Install older software over new (new packages!)

- Uninstall pkg
  - Not every piece of software (e.g. CCDA) has a successful uninstaller—test!
  - Some successful uninstallers leave pieces behind
  - Again, be careful about accidentally removing machine-based licenses
- Creative Cloud Cleaner Tool, the nuclear option
  - Has a command-line option, but really this is a last resort
  - For silent usage, the CC cleaner requires using an explicit list of software to remove
    - Only way to pre-accept the EULA (eulaAccepted=1)
    - Otherwise a EULA will appear
- ✧ Creative Cloud Cleaner Tool  
<https://helpx.adobe.com/creative-cloud/kb/cc-cleaner-tool-installation-problems.html>

## Uninstalling Applications

82

- Uninstall package
- Creative Cloud Cleaner Tool  
[tinyurl.com/cleaner-tool-cc](http://tinyurl.com/cleaner-tool-cc)
- Command-line uninstall (new packages!)
- Install older software over new (new packages!)

- New Format packages offer command-line uninstall
- New format packages can install older versions over newer versions
- ✧ Example new format package CLI uninstall (Experience Design)  

```
sudo /Applications/Utilities/Adobe\ Creative\ Cloud/HDCore/Setup --uninstall=1 --platform=osx10-64 --sapCode=SPRK --baseVersion=0.5.0 --deleteUserPreferences=false
```
- ✧ Note the “baseVersion” option that tells what version of the application to uninstall, such as 19.0 for Illustrator 19 (CC 2015)
- ✧ “Applications that can be deployed without their base versions” (list of new format packages)  
<https://helpx.adobe.com/creative-cloud/packager/apps-deployed-without-their-base-versions.html>

## Management Suite-Specific

83



- Specific tips for some top OS X management suites



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- Installs arrays
- Include uninstaller package
- `munkiimport_cc_installers.py`  
[tinyurl.com/munkiimport-cc-installers](http://tinyurl.com/munkiimport-cc-installers)
- RestartAction of RequireLogout

- Installs arrays
  - Installs arrays allow Munki to smartly tolerate updated software
  - Install DBs (especially if not exclusively for the updates) can go away
  - For some CCP packages, you may need to install by hand and generate installs array
- Include `uninstallerpkg`
  - Support added about 18 months ago
- Importing lots of CCP packages? `munkiimport_cc_installers.py`
- RestartAction of RequireLogout
  - `blocking_applications` funky, requiring a logout gives a single conflict-free environment to install Adobe software
- With the New Format installers, watch for future Munki updates to better handle these packages
- ✧ `munkiimport_cc_installers.py`:  
[https://github.com/timsutton/aamporter/tree/master/scripts/munkiimport\\_cc\\_installers.py](https://github.com/timsutton/aamporter/tree/master/scripts/munkiimport_cc_installers.py)





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- Caching
- Casper Admin
- Imaging Workflow

- Cache the packages first, then install from cached
  - Have a local distribution point
- Use Casper Admin to upload your CCP packages to your JSS
  - This allows your packages to be automatically zipped to survive your distribution point
- If you plan on using the packages in an imaging workflow then you should set the packages to install on restart via Casper Admin

## The Lightning Round

POTPOURRI

<http://www.says-ll.com/jeopardy/>

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- The lightning round—a bunch of small tidbits
- Again, a link to the slides and presenter notes will be at the end of the presentation

## The Lightning Round

- Acrobat versions and installation
- Muse
- Animate versus Edge Animate
- Versioning



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- Later Acrobat versions prevent earlier versions from installing
  - The package will report success, but the software will not be installed
- Later versions of Muse uninstall earlier versions, except the newest version of Muse from last week
- "Edge Animate" was replaced by "Animate", the replacement for Flash
  - But they're different applications
- Versioning issues
  - SpeedGrade CS6 (clean install version 2012.7766.34, updated to 6.0.4)
  - Camera RAW 9.0 (414) -> 9.1 (441) -> 9.2 (486) -> 9.3 (506) -> 9.3.1 (520) -> 9.4

## The Lightning Round

- Reenabling updates
- “Managing” preferences
- On-demand reserialization
- Adobe Experience Manager (a.k.a. DPS Desktop Tools)

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- **Reenabling updates:** If Adobe Update Manager or Apps and updates panel is disabled via CCP, they can be reenabled
- **“Managing” Preferences**
  - Profiles, sometimes—the newer the application, the better chance Configuration Profiles will work
  - Leverage the scripting APIs
    - Some preferences may be part of the JavaScript or AppleScript APIs for a program
    - Use a startup script to set the preferences on each launch
- ☆ Reenable the CCDA "Apps and Updates" Panel  
<https://helpx.adobe.com/creative-cloud/packager/customize-creative-cloud-app.html>
- ☆ Reenable application updates after previously setting to "Adobe Update Manager is disabled"  
<https://helpx.adobe.com/creative-suite/kb/disable-auto-updates-application-manager.html>
- ☆ “Re: Deploying custom color Profile and Adobe Bridge automation”  
[https://groups.google.com/d/msg/macenterprise/SfbM7RD7ad4/wmu-iHau\\_LsJ](https://groups.google.com/d/msg/macenterprise/SfbM7RD7ad4/wmu-iHau_LsJ)
- ☆ “Adobe Scripting Center”  
<http://www.adobe.com/devnet/scripting.html>

## The Lightning Round

- Reenabling updates
- “Managing” preferences
- On-demand reserialization
- Adobe Experience Manager (a.k.a. DPS Desktop Tools)

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- **On Demand/Self Service reserialization:** It's just a good idea if licensing blows up on a computer
- **Adobe Experience Manager**
  - InDesign CC 2015 or later, use CCP to package the update
  - Anything earlier, you'll need a package
    - You `_must_` have a user logged in
    - Munki users can use what's detailed on that page
    - Casper users can use login or logout policies
- ☆ “Distributing DPS Desktop Tools for InDesign CC 2014 with Munki”  
<https://foigus.wordpress.com/2014/12/15/distributing-dps-desktop-tools-for-indesign-cc-2014-with-munki/>

## The Lightning Round

- Plugin installation
  - Ask vendor for a package
- ExManCmd (.mxp or .zxp)
- Repackage

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- **Plugin Installation**
- Ask your vendor to provide a package
- If plugins are provided in .mxp or .zxp format, ExManCmd (still supported child of Extensions Manager)
  - ExManCmd CS6 (in Extensions Manager CS6) scripting practically requires a user to be logged in
  - ExManCmd (in Extensions Manager CC) good up through CC 2014 applications
  - ExManCmd for CC 2015 applications, download link in notes
- ☆ Working from the Command Line | Extension Manager CS6  
<https://helpx.adobe.com/extension-manager/using/command-line-extension-manager-cs6.html>  
`"/Applications/Adobe Extension Manager CS6/Adobe Extension Manager CS6.app/Contents/MacOS/Adobe Extension Manager CS6" -suppress -install [zxp|mxp]="/path/to/plugin.[mxp|zxp]"`
- ☆ Working from the command line | Extension Manager CC (same general command for ExManCmd for CC 2015+)  
<https://helpx.adobe.com/extension-manager/using/command-line.html>  
`"/Applications/Adobe Extension Manager CC/Adobe Extension Manager CC.app/Contents/MacOS/ExManCmd" --install "/path/to/plugin.zxp"`
- ☆ Announcement: Extension Manager End of Life Notification (ExManCmd for CC 2015+ download)  
<https://www.adobeexchange.com/resources/27>
- ☆ Adobe Extensions Remote Install (example package): <https://groups.google.com/forum/#!msg/macenterprise/qN2-iAYILK4/ovkjfbU-Xd4J>

## The Lightning Round

- Plugin installation
- Ask vendor for a package
- ExManCmd (.mxd or .zxp)
- Repackage

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- AutoPkg
  - If the plugin can be installed via structured repackage, make it available to others
  - Grab fseventer and see what's possible
- ✧ fseventer Download
  - <https://twitter.com/rtrouton/status/646645271540199424>

## The Lightning Round

- Acrobat DC "Tracks"
- Acrobat Customization Wizard
- CCP Offline Media Workflow

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- **Acrobat DC Continuous and Classic**
  - Continuous Track = Firefox (lots of changes, hard to keep up and manage...and cloud services)
  - Classic Track = Firefox Extended Service Release (fewer radical changes; easier to manage...and no cloud services)
  - What are you eligible for?
    - See "License Programs" URL in presenter notes
    - If you have a choice between the two tracks, consult with your organization
- ✧ "Document Cloud Product Tracks"
  - <http://www.adobe.com/devnet-docs/acrobatetk/tools/AdminGuide/whatsnewdc.html>
- ✧ Firefox comparison taken from Don Montalvo's post
  - <https://jamfnation.jamfsoftware.com/discussion.html?id=18915#responseChild115120>
- ✧ "License Programs"
  - <http://www.adobe.com/devnet-docs/acrobatetk/tools/AdminGuide/whatsnewdc.html#license-programs>

## The Lightning Round

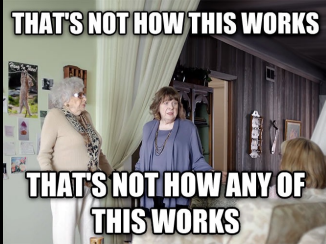
- Acrobat DC "Tracks"
- Acrobat Customization Wizard
- CCP Offline Media Workflow

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- **Acrobat Customization Wizard**
  - Configure preferences, browser integration, updater
- **CCP Offline Media Workflow**
  - If you need to package a non-current update with CCP, first obtain the "media"
  - Suggested source: ProDesignTools Direct Download Links <http://prodesigntools.com/tag/ddl>
  - Look for pages with titles such as "All Adobe CC 2015 Updates: The Direct Download Links for Mac OS"
  - Download the update of interest and then follow the instructions at my blog post
- ✧ "Customization Wizard Home" for Mac
  - <http://www.adobe.com/devnet-docs/acrobatetk/tools/Wizard/index.html>
- ✧ "Packaging Adobe Rapid Release Updates With CCP or AAMEE" (Offline Media Workflow)
  - <https://foigus.wordpress.com/2015/05/07/packaging-adobe-rapid-release-updates-with-ccp-or-aamee/>

## Troubleshooting and Support

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- But what when it all goes wrong

## Logging

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- `~/Library/Logs/PDApp.log`  
`~/Library/Logs/Adobe/Installers`
- Verbose logging:  
`cd ~/Library/Logs`  
`touch asu.trace asu.debug asu.buffer`
- Log Collector Tool



- Logging for CCP and it's friends (RUM, Adobe Update Server)
  - Installation and launch errors, table of installation error codes
- Most important logs are in the two locations shown
- Verbose logging if you touch these files in the `~/Library/Logs` directory
- If logs are in "home", remember root's home is `/var/root`, important if you're installing at the login window
- ✧ "Adobe Creative Cloud Packager logs"  
<https://helpx.adobe.com/creative-cloud/packager/deploying-packages.html#AdobeCreativeCloudPackagerlogs>
- ✧ "Troubleshoot install issues with log files | CC" (error table)  
<https://helpx.adobe.com/creative-cloud/kb/troubleshoot-install-logs-cc.html>
- ✧ "Troubleshoot Creative Cloud apps installation and uninstallation errors"  
<https://helpx.adobe.com/creative-cloud/packager/troubleshoot-install-uninstall-errors-ccp.html>
- ✧ "Troubleshoot launch errors using logs | Creative Cloud"  
<https://helpx.adobe.com/creative-cloud/kb/troubleshoot-launch-errors-using-logs.html>
- ✧ "Find launch log files"  
<https://helpx.adobe.com/creative-cloud/kb/launch-log-files-location-ccm.html>

## Logging

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- `~/Library/Logs/PDApp.log`  
`~/Library/Logs/Adobe/Installers`
- Verbose logging:  
`cd ~/Library/Logs`  
`touch asu.trace asu.debug asu.buffer`
- Log Collector Tool



- Log Collector Tool
  - Let Adobe's tool grab logs and put them on your Desktop
  - Note the Log Collector Tool doesn't collect logs from root's home directory
- Many links to support articles in presenter's notes
- ✧ "Log Collector Tool"  
<https://helpx.adobe.com/creative-cloud/kb/cc-log-collector.html>

## Network Services

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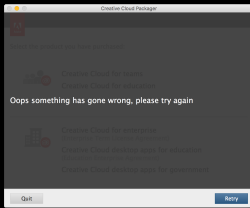
- “Adobe Creative Cloud Network Endpoints”  
[tinyurl.com/cc-network-endpoints](http://tinyurl.com/cc-network-endpoints)
- “Network Service Check”  
[tinyurl.com/cc-service-check](http://tinyurl.com/cc-service-check)

- Practically everything Creative Cloud or Creative Cloud Packager needs Internet access
- Network service check is fairly new, provide feedback to Karl Gibson
- ☆ “Adobe Creative Cloud Network Endpoints”  
[https://helpx.adobe.com/content/dam/help/attachments/Creative\\_Cloud\\_for\\_enterprise\\_Service\\_Endpoints.pdf](https://helpx.adobe.com/content/dam/help/attachments/Creative_Cloud_for_enterprise_Service_Endpoints.pdf)
- ☆ “Network Service Check”  
[http://help.adobe.com/en\\_US/enterprise/service-check/index.html](http://help.adobe.com/en_US/enterprise/service-check/index.html)

## Recovery from CCP Errors

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- Delete items under `~/Library/Application Support/Adobe/`
- Or the entire Adobe folder
- Reinstall CCP



- List of items in the notes, delete each in turn and bounce CCP
  - `~/Library/Application Support/Adobe/OOBE/opm.db`
  - `~/Library/Application Support/Adobe/OOBE`
  - `~/Library/Application Support/Adobe/AAMUpdater`
- Or go nuclear and remove `~/Library/Application Support/Adobe`
- Reinstall CCP if necessary
- ☆ “Creative Cloud Packager release notes”  
<https://helpx.adobe.com/creative-cloud/packager/ccp-readme.html>

## Official Support

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- Enterprise portal support tickets
- Adobe Representative
- @Adobe\_ITToolkit (Twitter)
- Karl Gibson's presentation



- System Administrators or Support Delegates enter tickets in Enterprise Portal
  - If you're neither of these things, find out who is
- Adobe Rep: Find your rep and be their best friend
- Twitter
- Karl Gibson, Senior Product Manager Creative Cloud Enterprise, presentation, tomorrow at 3:15
  - Future focused, covering upcoming CCP features such as automating CCP
  - Adobe Update Server Setup Tool
  - Not being recorded

## MacAdmins Slack

- #adobeinstalls (or possibly #munki, #jamfnation, or similar)
- Constructive feedback to Karl Gibson



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- Join #adobeinstalls (or possibly #munki, #jamfnation, or whatever channel is appropriate for you)
- In #adobeinstalls you'll likely find me, you'll also find Karl Gibson's email address
  - Provide constructive feedback

## Thanks!

- Karl Gibson
- Tim Sutton
- Steve Yuroff
- Jason Broccardo, Mike Flender, Sean Kaiser, Alexander Kaltsas, Michael Permann, Josh Whitver, and Steve Yuroff

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- Karl for providing advice through the prep of this presentation
- Tim for writing awesome tools and providing Education screenshots
- Steve for providing Teams screenshots
- Jason Broccardo, Mike Flender, Sean Kaiser, Alexander Kaltsas, Michael Permann, Josh Whitver, and Steve Yuroff for letting me practice in front of a live studio audience
- You! for coming to the presentation

## In Conclusion



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- Hopefully this presentation assisted you with planning your Creative Cloud rollout
  - It's inspiring, like this Premiere CC 2015 splash screen of super kid looking at a sunrise
- If things aren't making sense, *and* if you're a fan of the TV show *Jericho* from a few years back

## In Conclusion



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- There's always the Q&A section

## Q&A



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- One more thing before Q&A, the link to the presentation will only be live until Penn State starts hosting it

## The Final Slide

- Thanks for coming!
- Presentation: <http://tinyurl.com/abc-of-ccp>
- Feedback: <https://bit.ly/psumac2016-62>

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- Thanks for coming!
- The presentation and presenter notes are here, at least until Penn State starts hosting them
- Provide feedback at the URL shown