Modern Bootstrapping

Mike Solin, May 2021

About Me

- Senior Client Platform Engineer at Saint Joseph's University in Philadelphia, PA
- Cofounder of Greater Philadelphia Mac Admins (phillymacadmins.com)
- Lifelong Mac user
- Started off as an Apple certified repair technician in 2008
- Inherited a NetRestore imaging setup, rebuilt it with DeployStudio
- Found the Mac Admin community soon afterwards and switched careers in 2012
- @flammable on MacAdmins Slack



What this presentation isn't:

It's not a tutorial. That would be boring!

Visit my blog: mikesolin.com

mike solin's blog

About



Bootstrapping! What is it?

- you can support.
- Manual provisioning and imaging were older forms of bootstrapping.

Bootstrapping is whatever you do to get a Mac from "stock" to something

Bootstrapping! Back in MY day...

- Standard tools for bootstrapping Macs up until a couple years ago:
 - Disk Utility
 - NetRestore
 - DeployStudio
 - Imagr















The rise of MDM / DEP ...and how it killed imaging

- Mobile Device Management servers became necessary with the introduction of macOS 10.13 "High Sierra"
- With MDM, a new method of onboarding Apple devices was introduced: the Device Enrollment Program



Workspace ONE[™] UEM

Zjamf PRO



Bootstrapping! Modernized

- With DEP, the MDM server pushes the bootstrap package to the Mac
 - This allows for installing the bare minimum to get the Mac up and running
- Every MDM implements bootstrapping differently - some let you skip theirs in favor of your own
- At Saint Joseph's University, we're using Workspace ONE UEM for our MDM, and Erik Gomez's InstallApplications as our custom bootstrapping tool





Boot the Mac





Select your country



Do you need to hear instructions for setting up your Mac? To learn how to use VoiceOver to set up your computer, press the Escape key now.



Select your keyboard layout

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			Select Your Keyboard
			Choose a keyboard layout.
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			Show All
			 General Antiperative Sector Back Continue



Agree to MDM enrollment



msolin-awvm13

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Authenticate to MDM

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				Please login with your SJU username and password to set up your device. User Name: Password:	
				Cancel Sign In	
			"Sair	nt Joseph's University" can automatically configure your computer.	
				Contacting enrollment server and configuring your Mac.	
				 General and the second second	



Skip Time Machine





Select your time zone



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Wait!





Wait some more!





KEEP WAITING











Login to desktop

msolin-awvm13



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Benefits Why did we do this?

- This process has proven to be stable enough that we can:
 - Allow users to set up their own computers
 - Mail laptops to users in a pandemic
- Paired with our data backup solution, Code42, we have a 100% "zero touch" setup process for our users
- Most Mac setups do not require IT staff

