



JAMF NATION
user conference
OCTOBER 13-15, 2015 MINNEAPOLIS, MN

[Welcome to crowd...]

Computer Deployment

Ask “Why?” not “How?”

<https://github.com/acodega/WnH>



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[Title slide, stage handed to Adam]



Adam Codega

IT Operations Specialist
Swipely, Inc.

<https://github.com/acodega/WnH>



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Thank you everyone for coming today. My name is Adam, I'm an IT Operations Specialist for Swipely, which means I'm responsible for the internal IT (computers, networks, Wi-Fi, phones and A/V) for a 100 person startup company.



I'm so excited to be here at the Guthrie Theater, on this contemporary 19th and 20th century stage. If you haven't learned, this McGuire Proscenium Stage is an American style design that shows the audience member from any seat a picture frame view of the act on stage.



Meanwhile, OS X security talks are being held on the classic Wurtele Thrust stage, the appropriate Shakespearean stage for such tales, both comedy and tragedy.

A Tale in Three Acts

Act 1) Suddenly, A new Macadmin appears!

Act 2) Ask Why, not How.

(or How I Learned to Stop Worrying and Love That Weekly JAMF Nation Post)

Act 3) Are you not entertained?

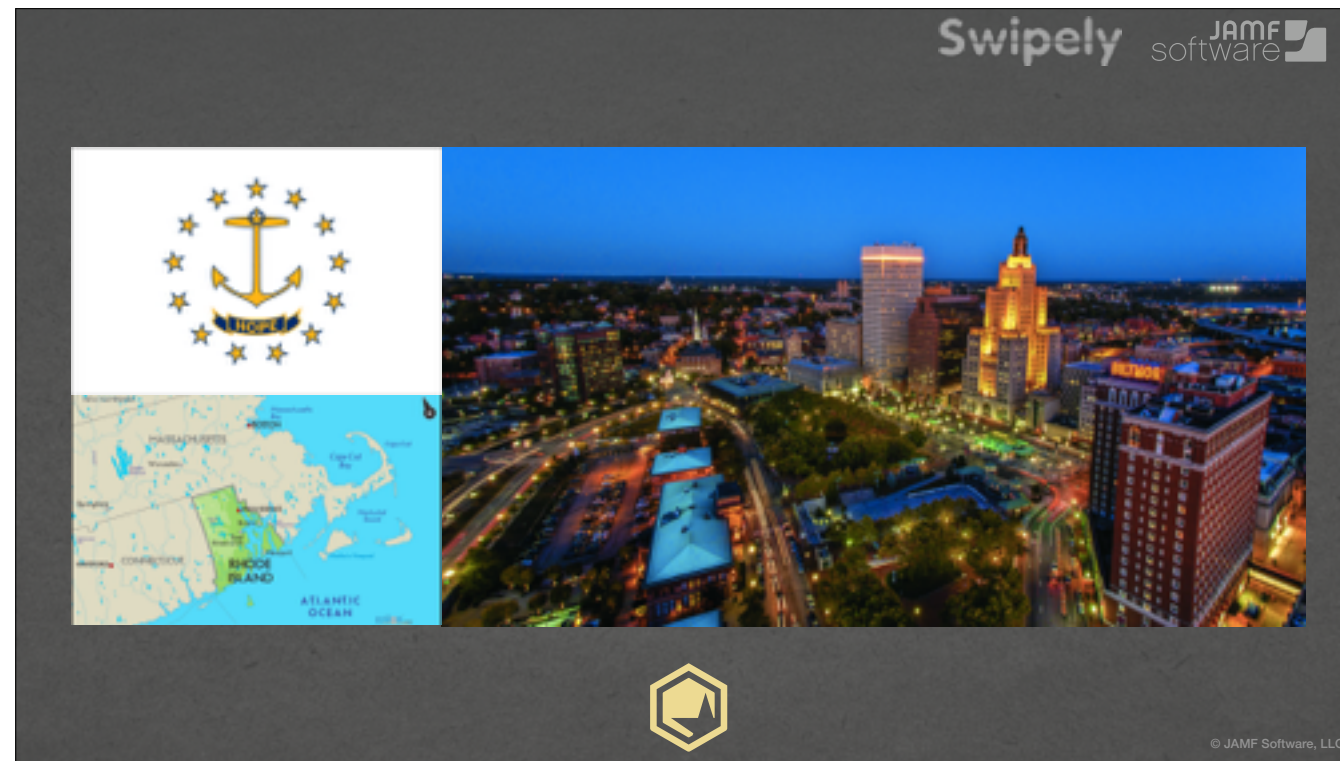


So it's on this contemporary stage that we discuss a contemporary topic, computer deployment. Today's story is going to be told in three acts:

**Suddenly, A new Macadmin
appears!**



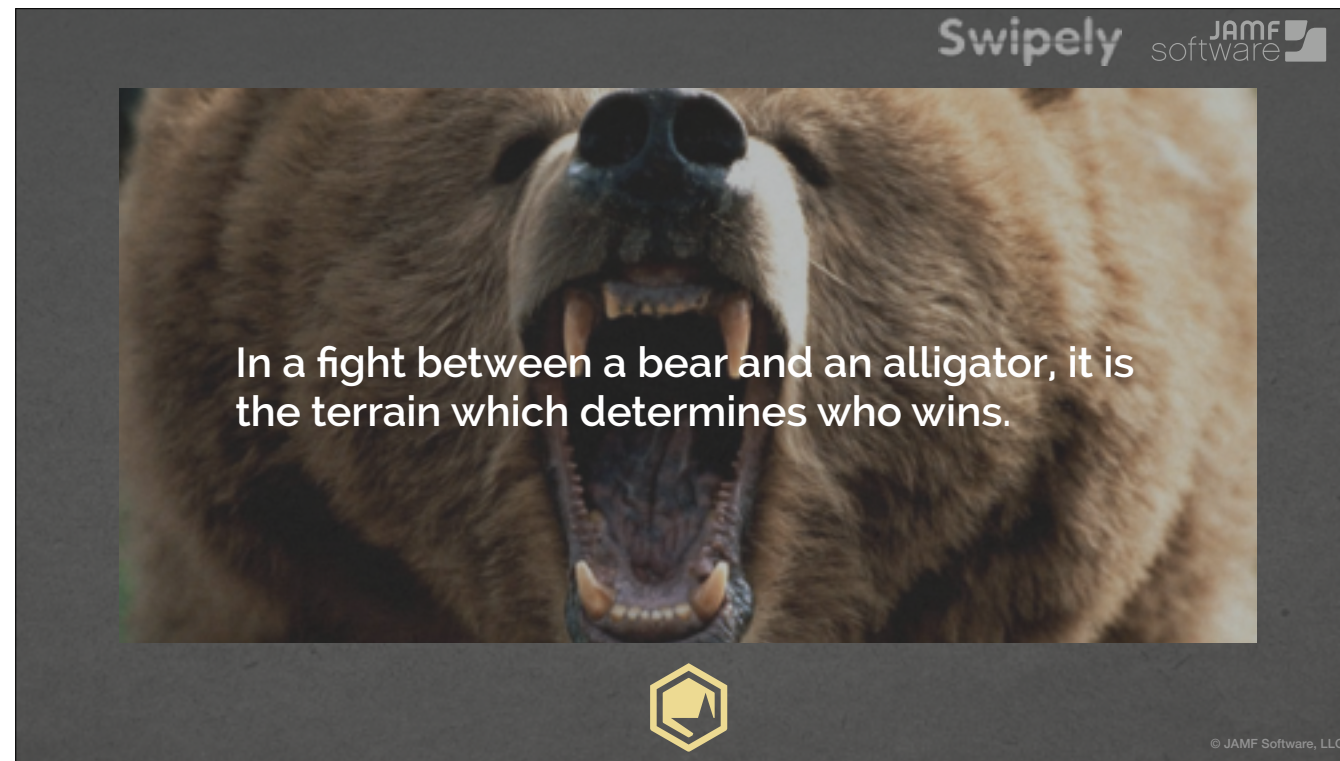
Act 1..



I work for Swipely, a four year old tech startup in Providence, RI. I tell people I work for a startup, no not on the West coast, no not New York, no not Boston. Right in the middle.



We're carving out our own Silicon Valley in Rhode Island, and my morning commute is only 20 minutes.



I had to make my own choice about what deployment method made sense, and I discovered it through some experimentation and trial and error. I was influenced by the company culture, this being one of our beliefs.



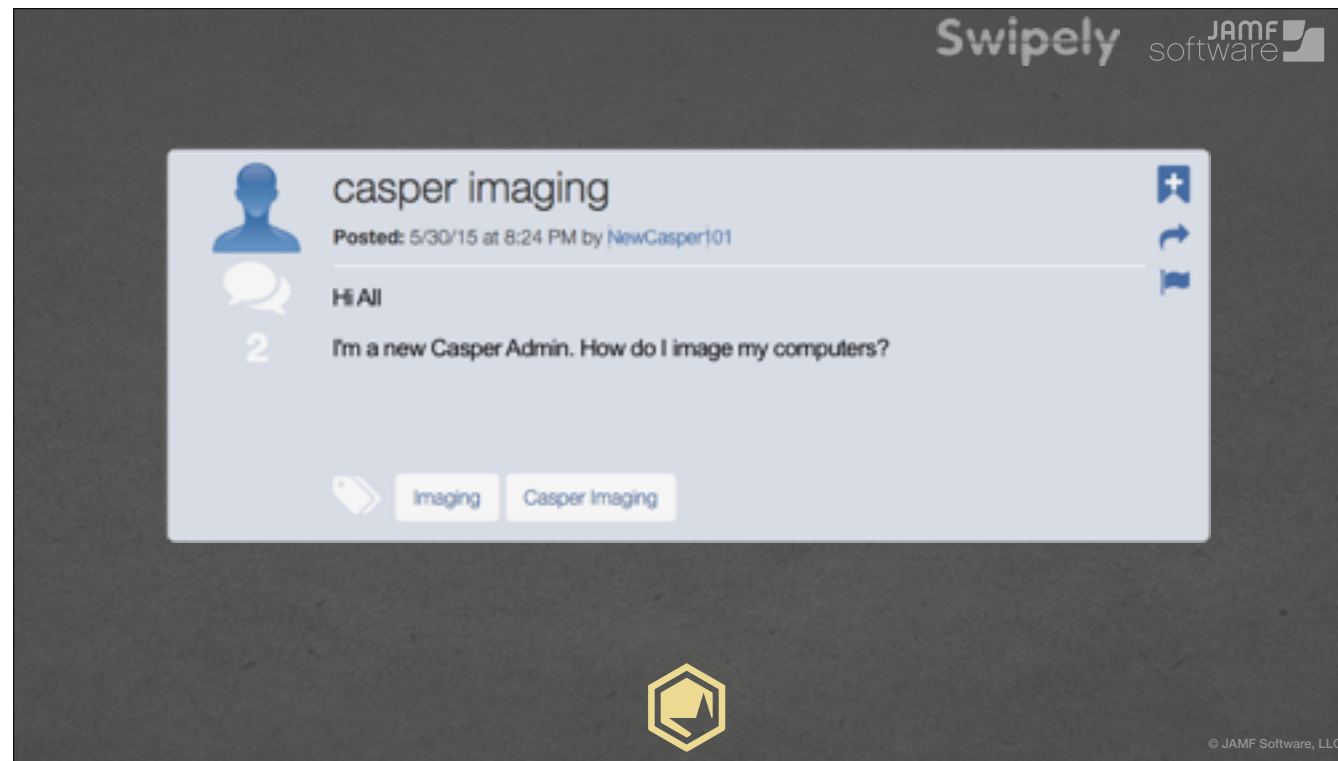
These ideas are what shapes the culture at Swipely, and helped me grow into my role in IT. I think they are especially relevant today.

Ask Why, not How.

(or How I Learned to Stop Worrying and Love
That Weekly JAMF Nation Post)



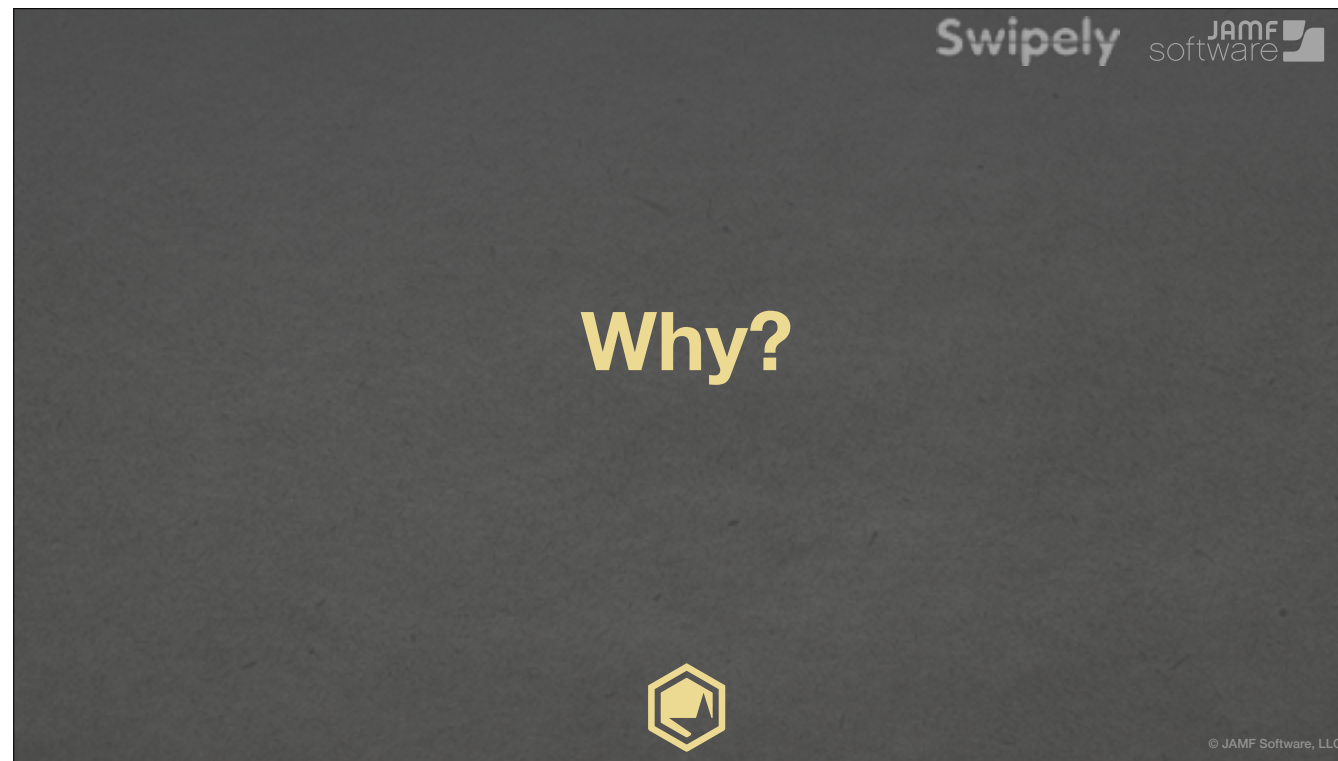
Act 2..



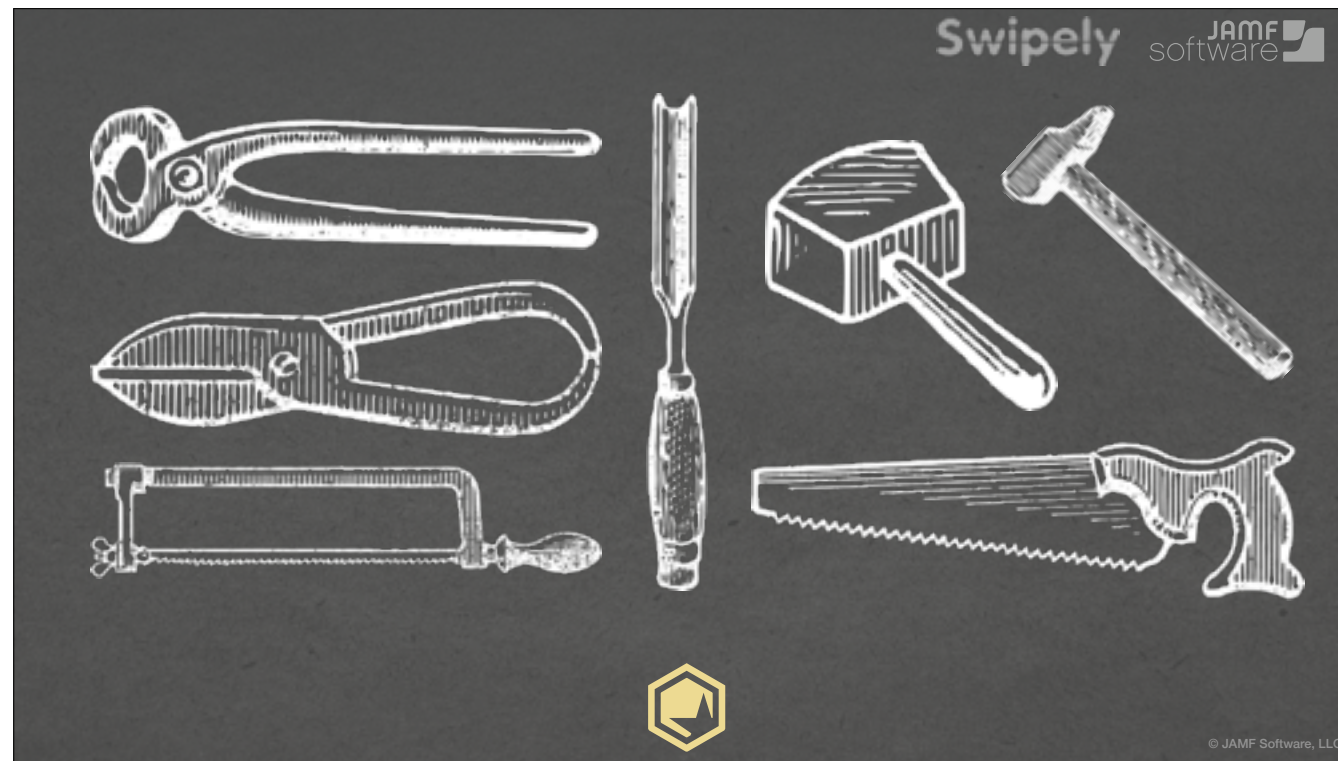
What I'd like to do is answer that JAMF Nation post we all see, "How do I image with Casper?". The answer depends.



Let's take a step back from asking "How do I image?" and instead ask "Why do I use this deployment method?" Commonly in the past we'd just call computer deployment "imaging", but imaging is just one method to deploy a computer, there's other options we'll cover. It's vital in your career to be willing to re-evaluate your tools, needs, and goals to choose the solution that works best for you and your company.



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They say when you're a hammer, everything looks like a nail. But you know what, if we're still talking about picking tools, let's take a step back again. We tell people "Use the best tool for the job", but we forget to spend time figuring out what the job is.



The job is to equip your co-worker with the computer they need, configured the way they need it, with the software they need to do their job.

Facebook
Pixar
Forget what Google does.
Walt Disney
Macmule



Learn from us.. but don't fret about being us.. focus on your own capabilities, what's your job?

Computer Deployment Methods

- Monolithic/Golden Image
- Modular Imaging
- Thin Imaging
- Retail Deployment
- Device Enrollment Program
- DEP for IT



So let's get into it then. We're going to review the deployment methods available and I'll let you know what I discovered with each and where I ended up.

But First...

- AutoDMG
- Drag and drop OS X, drivers, apps
- Never booted OS X image
- Automatically installs updates
- Deployable anywhere*



In order to create an image, you usually capture one from an existing Mac. This can be time consuming and require extra hardware. AutoDMG fixes that.

*almost anywhere

- Forked operating system
- Hardware released between point release



A Forked OS is what's on new Mac hardware that's released in-between point releases. You'll need a MacBook specific 10.10.2 image, but when 10.10.3 comes out you can use just one image, it will have the required drivers. Another example is when the new MacBook Pro Retina came out with force touch, it had a forked OS.

Monolithic/Golden Image

- No school like old school
- Install ALL the things!
- Capture Image
- Deploy to computers
- Netboot or Target Disk Mode
- Profit?



Monolithic images have the OS and all the apps in one image. They are laborious to build and even more so to update. (How old will the Google Chrome in an image be?) Monolithic may be beneficial in a lab, with very bandwidth intensive apps that you don't update very often. I guess.. No need to use this at Swipely..

Modular Imaging

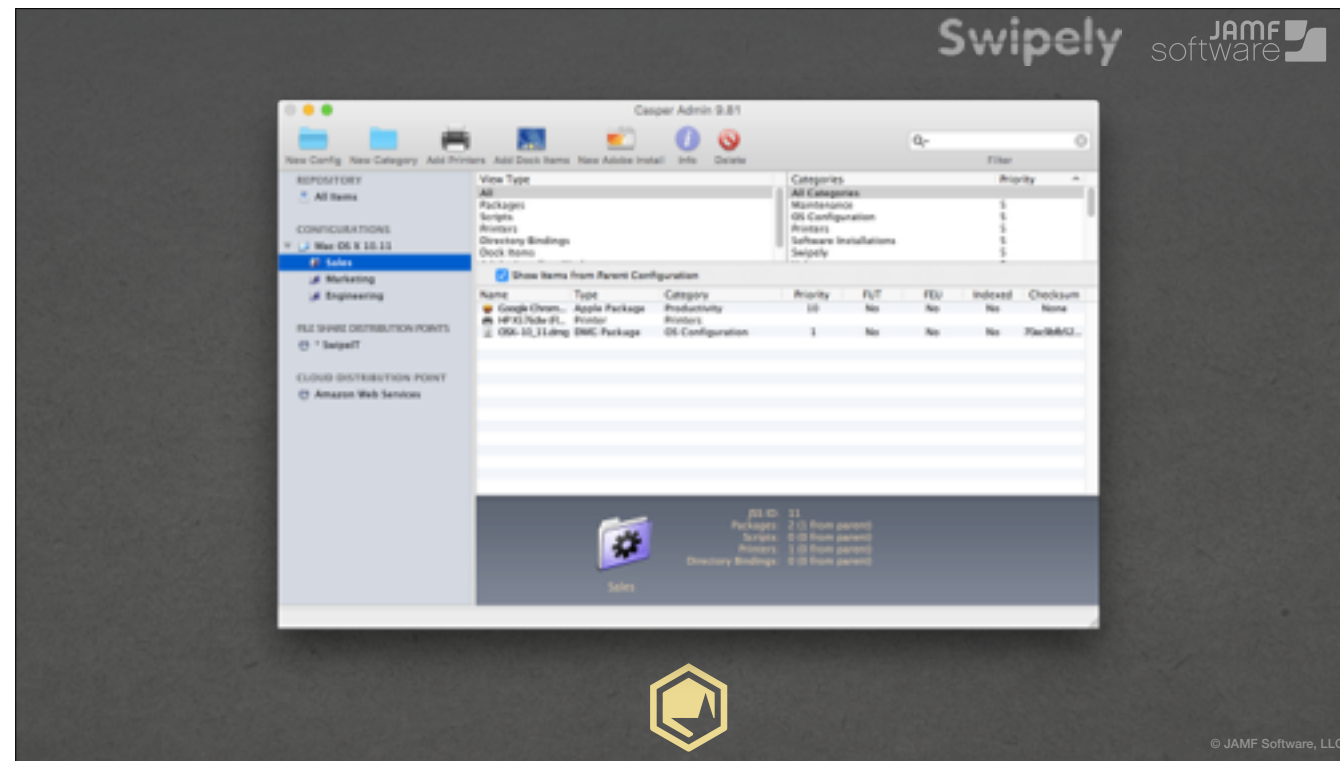
- Now we're talking
- Casper Imaging installs what you need
- Simple to get started
- Create Standard Config
- Add Smart Config
- Netboot or Target Disk Mode



This is where we first started. You combine a minimal OS image and build on top of it with a config to add easily updated apps from the JSS distribution point.



In Casper Admin, on the left you can see our Master Mac OS X 10.11 configuration. Underneath it is smart configs which build on the master, adding apps, configs, and printers needed for that config. In this case it's by department.



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Thin Imaging

- Let JSS policies do their job
- Image laptop with just OS X
- Let JSS policies (On Enrollment trigger) kick off
- Installs and Configurations
- Same policies deployed or put in Self Service



Thin imaging is like modular imaging but install things via policies after imaging. Definitely a good way to go, don't recreate work of creating configs and creating deployment and Self Service policies

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Retail Deployment

- Startup Mac
- Run Setup Assistant
- Run QuickAdd.pkg
- Benefits of thin imaging without time spent imaging



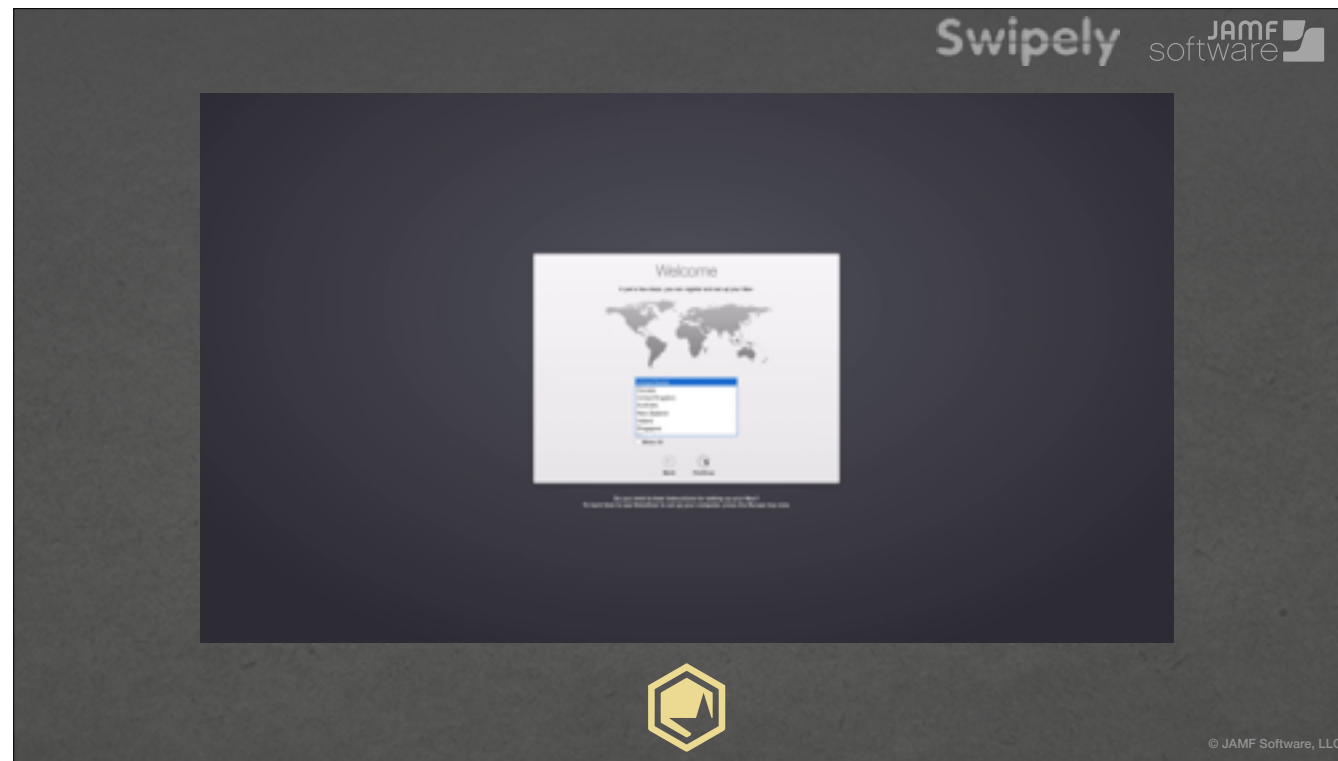
Let's be honest, I've done this before.

Device Enrollment Program

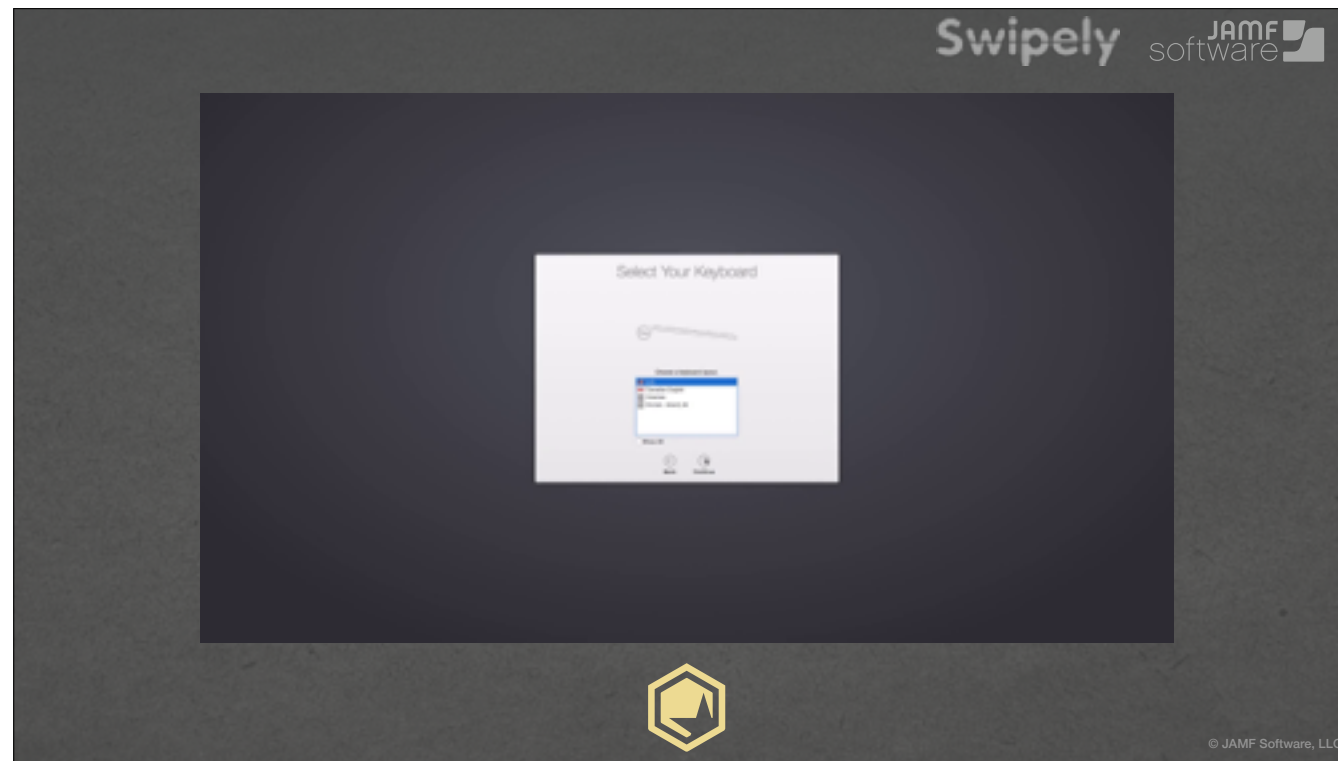
- Hands off MDM enrollment
- Enrolls in JSS during Setup Assistant
- Streamline Setup Assistant
- All it does is **enroll** (Pre 10.11)



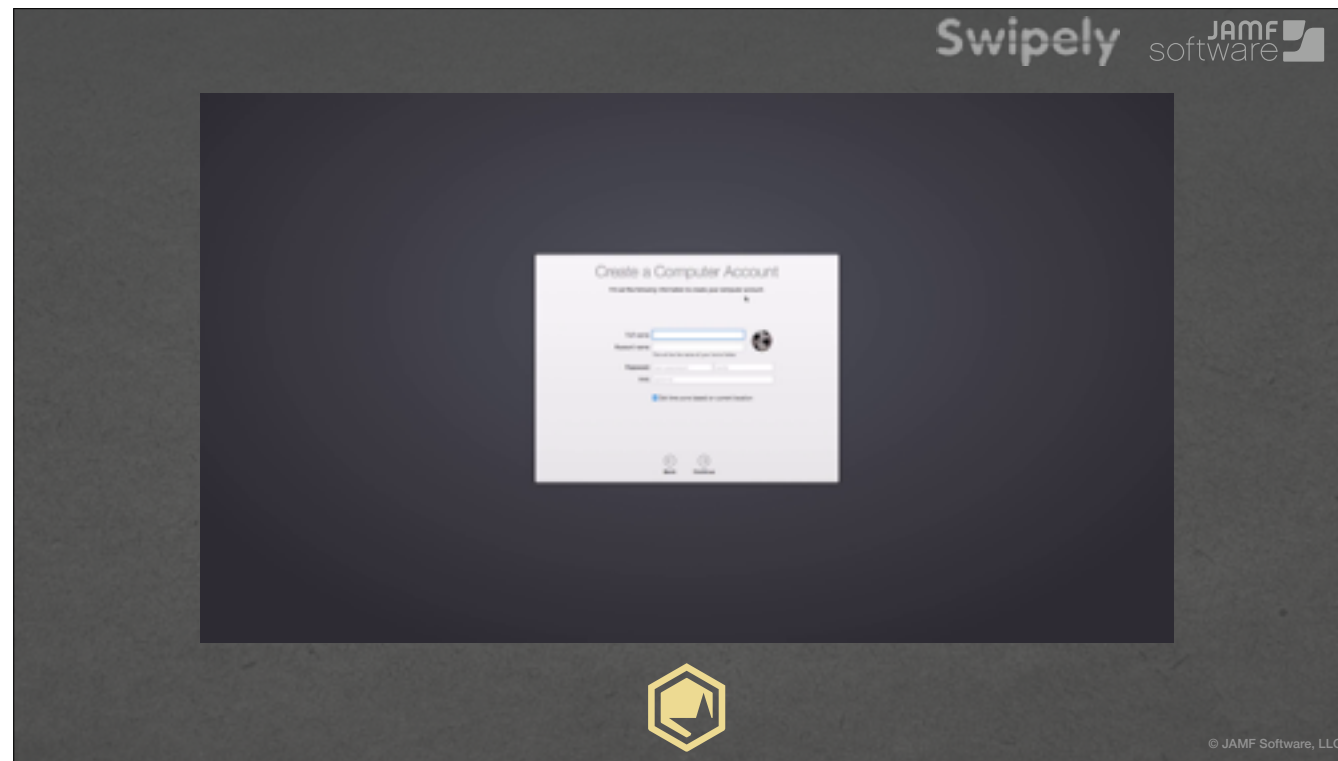
Here's where Swipely is today. Setup Assistant enrolls the Mac for you! Requires applying for and enrolling in the Apple Deployment Program



Let's take a look at how it works. One caveat is that our Mac needs to be given an network connection during Setup Assistant. During Setup Assistant we create the intended user account and you're told a configuration is available, we skip steps we don't want like Apple ID, Terms & Conditions, and Diagnostics opt-in, and we're at the desktop where we can install some apps via Self Service.



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The New Device Enrollment Program

- Mac OS X El Capitan
- Create a standard user, or none at all
- Enforce password policy during Setup Assistant
- Create and hide an additional Administrator
- Casper Suite support coming soon



Apple made some big changes in the Device Enrollment Program for OS X 10.11, Casper Suite support is coming soon.

DEP for IT: Get Creative!

- Script runs "On Enrollment" trigger
- Cleans up computer name
- Asks for and then sets JSS building and department
- Turns on software updates, installs pending
- Optional: Install software via Self Service
- Submits Recon and restarts to enable FileVault 2

<https://github.com/acodega/WnH>



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A lot of folks, myself included, use DEP not as a method presented to users but as a tool for IT to deploy Macs quicker. An IT tech runs the Mac through Setup Assistant and upon first boot, since it's enrolled automatically, a script kicks off to customize the Mac for where it's being delivered. The script is posted on my GitHub.

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So there we have it, our deployment options.

Are you not entertained?

- **Bringing VPP & DEP to Life**
James Ridsdale *Tuesday, 3:00 PM, Wurtele Thrust Stage*
- **Imaging from A to Z: Which is the Right Choice for Me?**
Nick Koval *Wednesday, 3:00 PM, Wurtele Thrust Stage*
- **Smooth Sailing when Planning for the Casper Suite**
Dave Acland *Thursday, 10:30 AM, McGuire Proscenium Stage*
- **VPP & DEP Panel**
Thursday, 2:30 PM, McGuire Proscenium Stage



Before we get into Q+A, there's some great sessions lined up for the rest of the week. Starting later this afternoon all the way through Wednesday and Thursday, don't forget to check out the VPP & DEP Panel hosted by JAMF to get questions answered and hear about how others are using Apple Deployment Programs.

Thank you!

Q+A will continue outside,
Find me on JAMF Nation

<https://github.com/acodega/WnH>



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Open floor to Q+A, don't forget these slides and my DEP script are available at that URL, after Q+A here I welcome everyone to continue the conversation outside the theater by the windows.