

A Deployment Story

MacTech BootCamp III Chicago – July 23 2014



bestmacs
---> *Best For Your Mac-Powered Business*



A Deployment Story



Different people have different skill levels, we are all going to pretend to start of scratch and be tasked with the deployment of new Macs to spec. (But we all have no idea what to do next.)

“He who fails to plan is planning
to fail.”



Whatever, dude, we're busy. Let's go.

The Perfect Mac

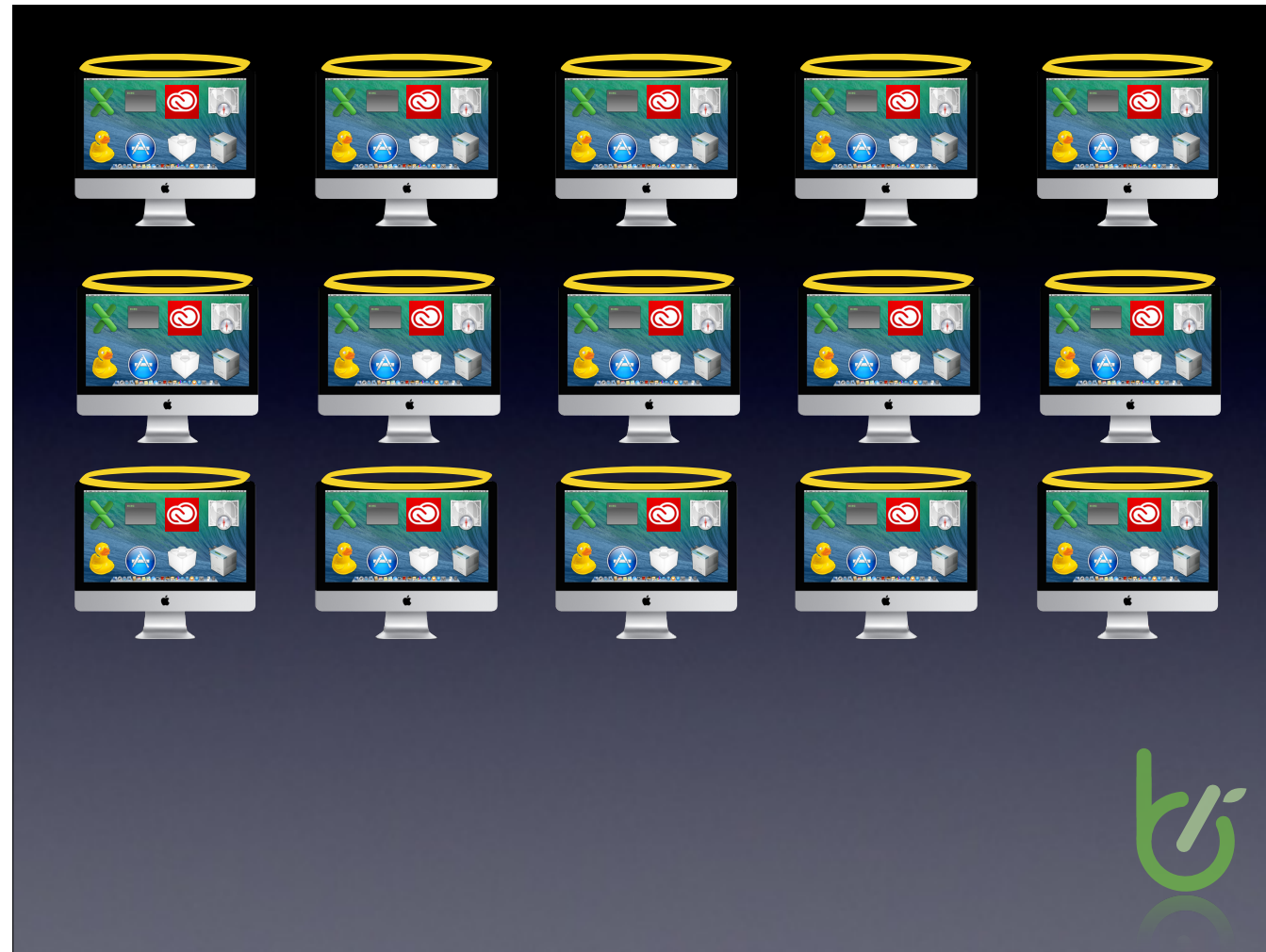


Let's start by building the perfect Mac.



We install all the apps, printer drivers, plugins, etc. we want on a fresh machine.





Now get it on everything.

Deploy That Thing!



SneakerNet



Don't knock sneakernet (walking around to each computer) in dinky environments. A lazy admin is a good admin, but a small network can get done faster this way than building a full blown solution.

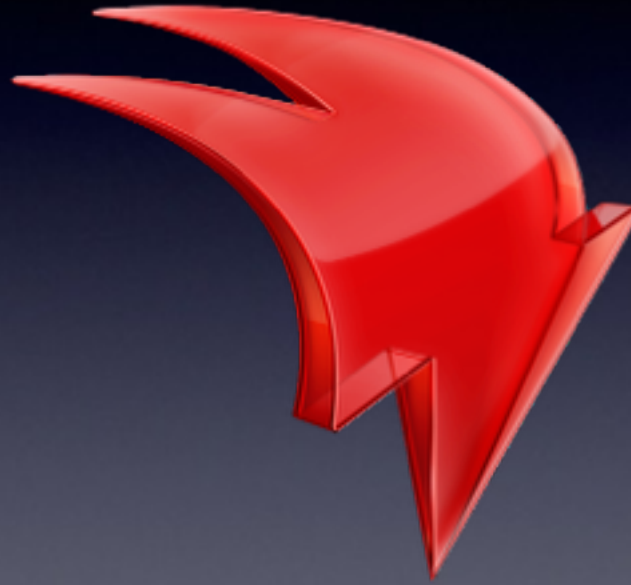
Carbon Copy



Target Disk Mode



FileWave Lightning

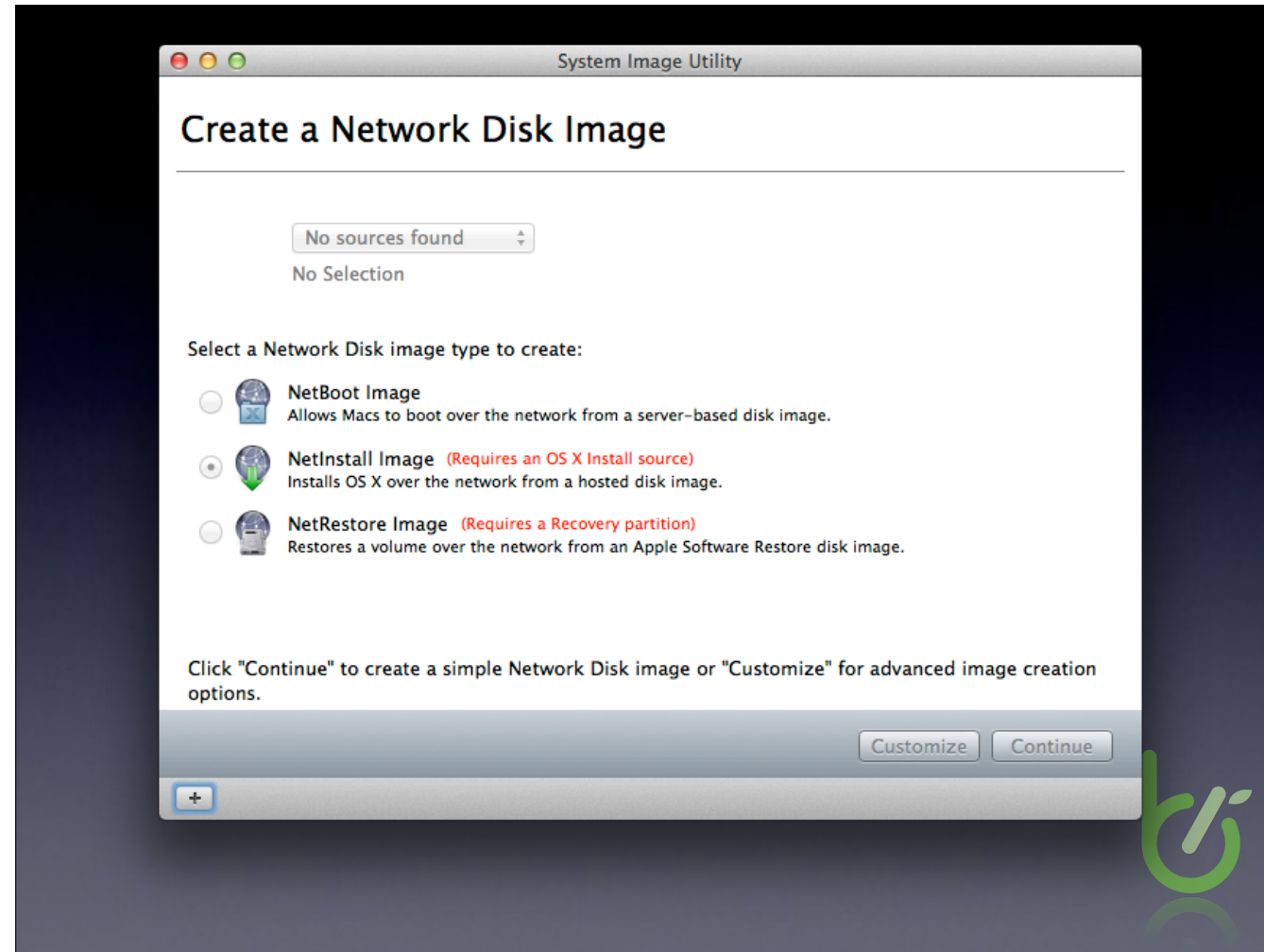


Free product separate from FileWave itself that takes images and deploys them quickly to TDM attached computers.

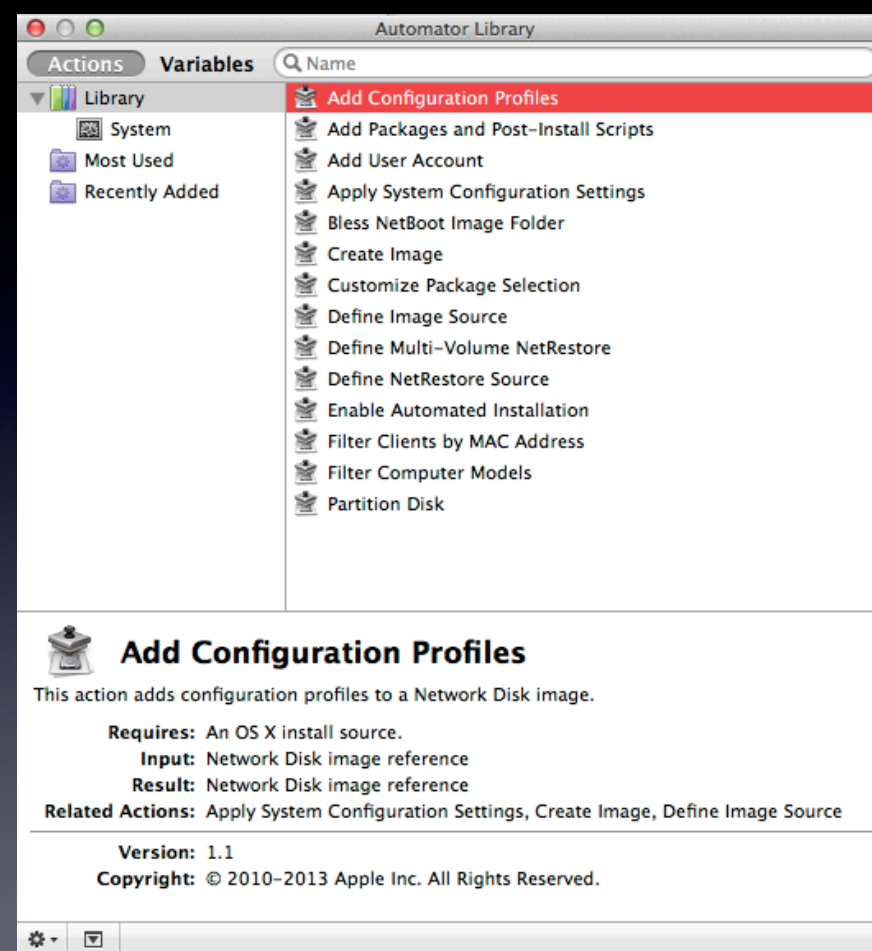
System Image



Look for it in /System/Library/CoreServices



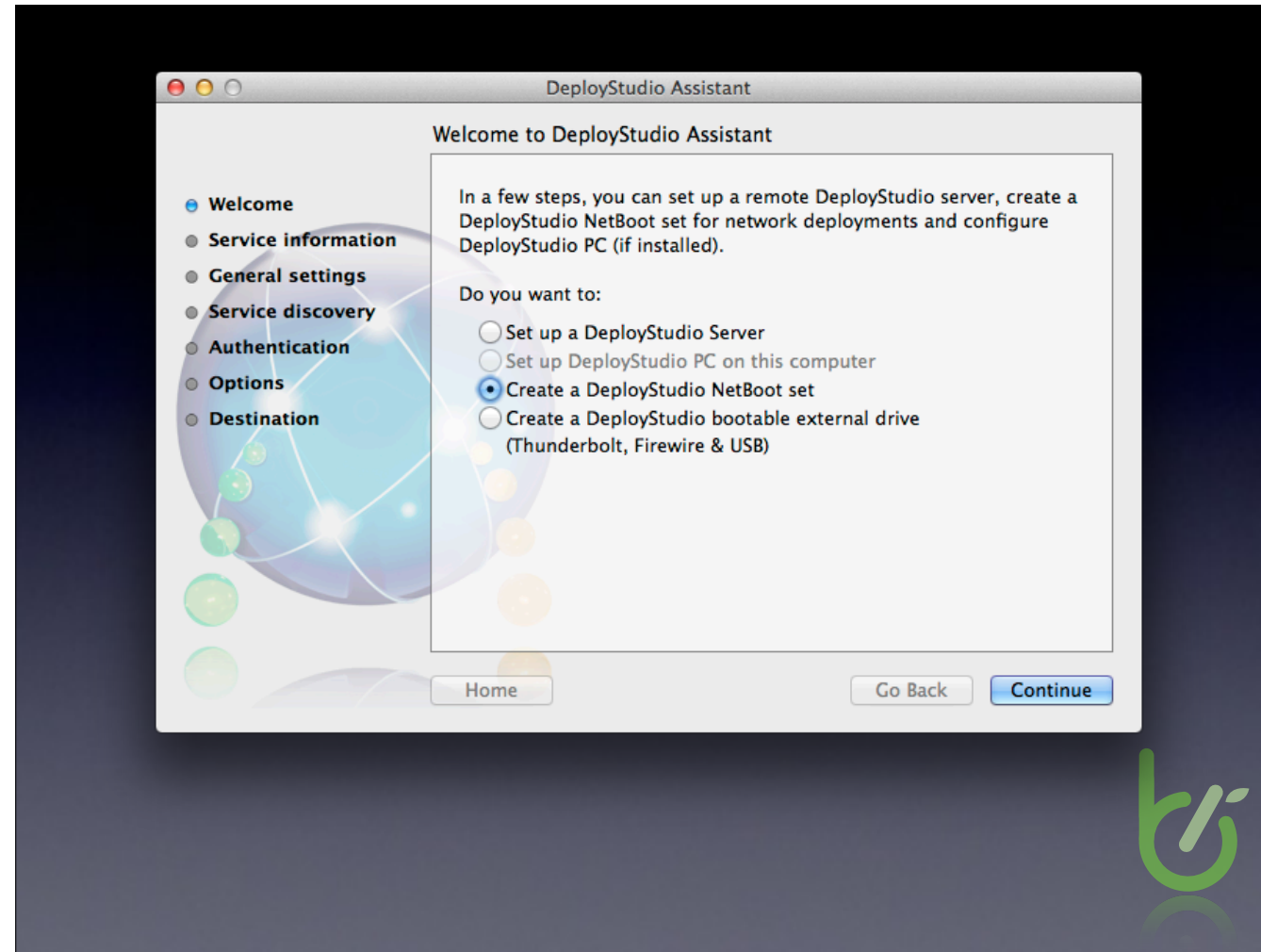
Click that + to check out the Automator actions.



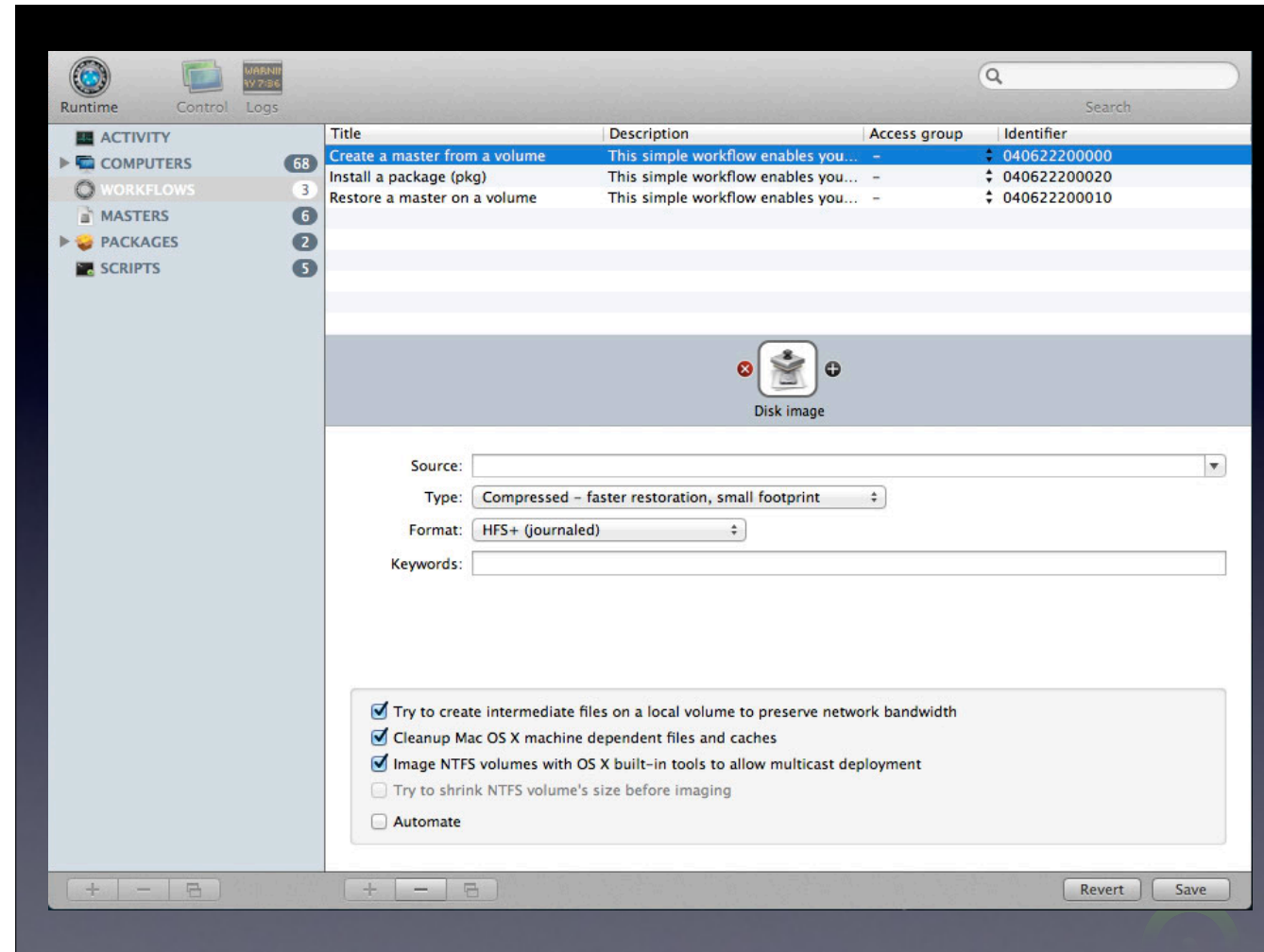
Build your own workflow

DeployStudio

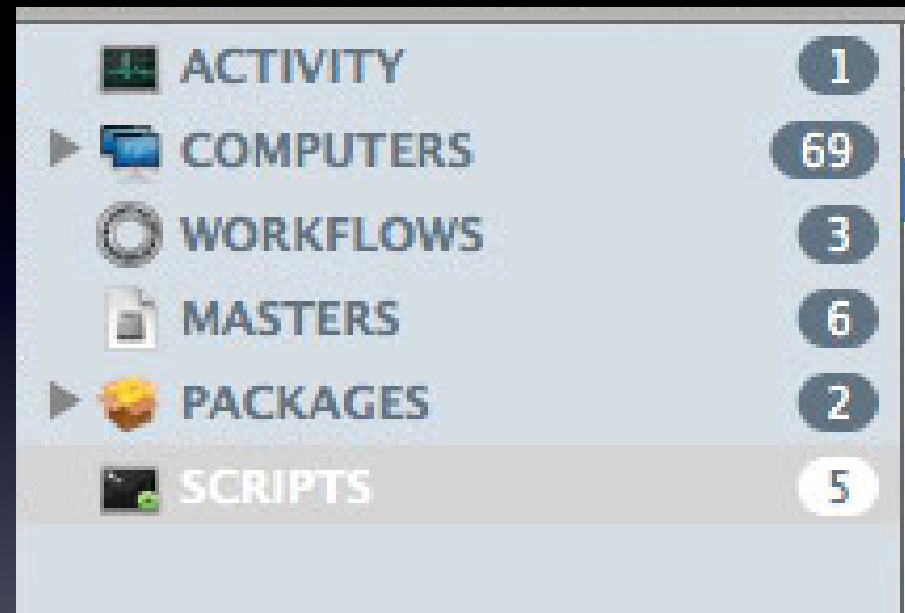










Love the idea of having a NetBoot set *and* a DeployStudio FireWire boot disk as a safety for when NetBoot doesn't work.



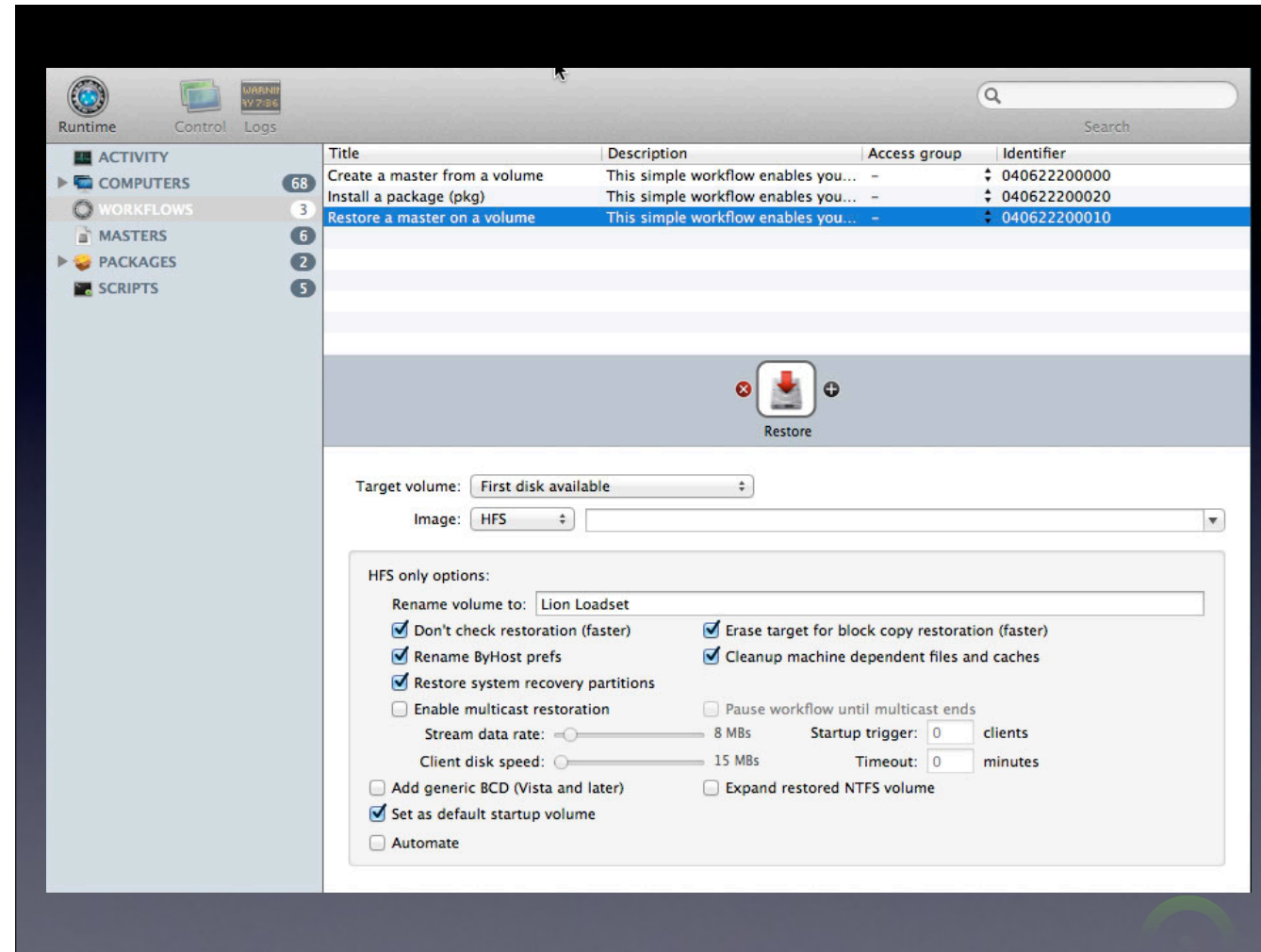
You can even build your image and upload it to the server from here.




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Dive into each of these subsections – there's a lot of power here.



Build your own workflow for restore and duplicate this with small modifications.
Beware that little automate box if DeployStudio is your default NetBoot image.

 **C02GW71YDJWT ()**

General	Licenses	Network	Accounts	Custom properties	Automation
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Status: ☐ Disabled

Local hostname:

Computer name:

Windows computer name: (Boot Camp only)

Computer information: #1

#2

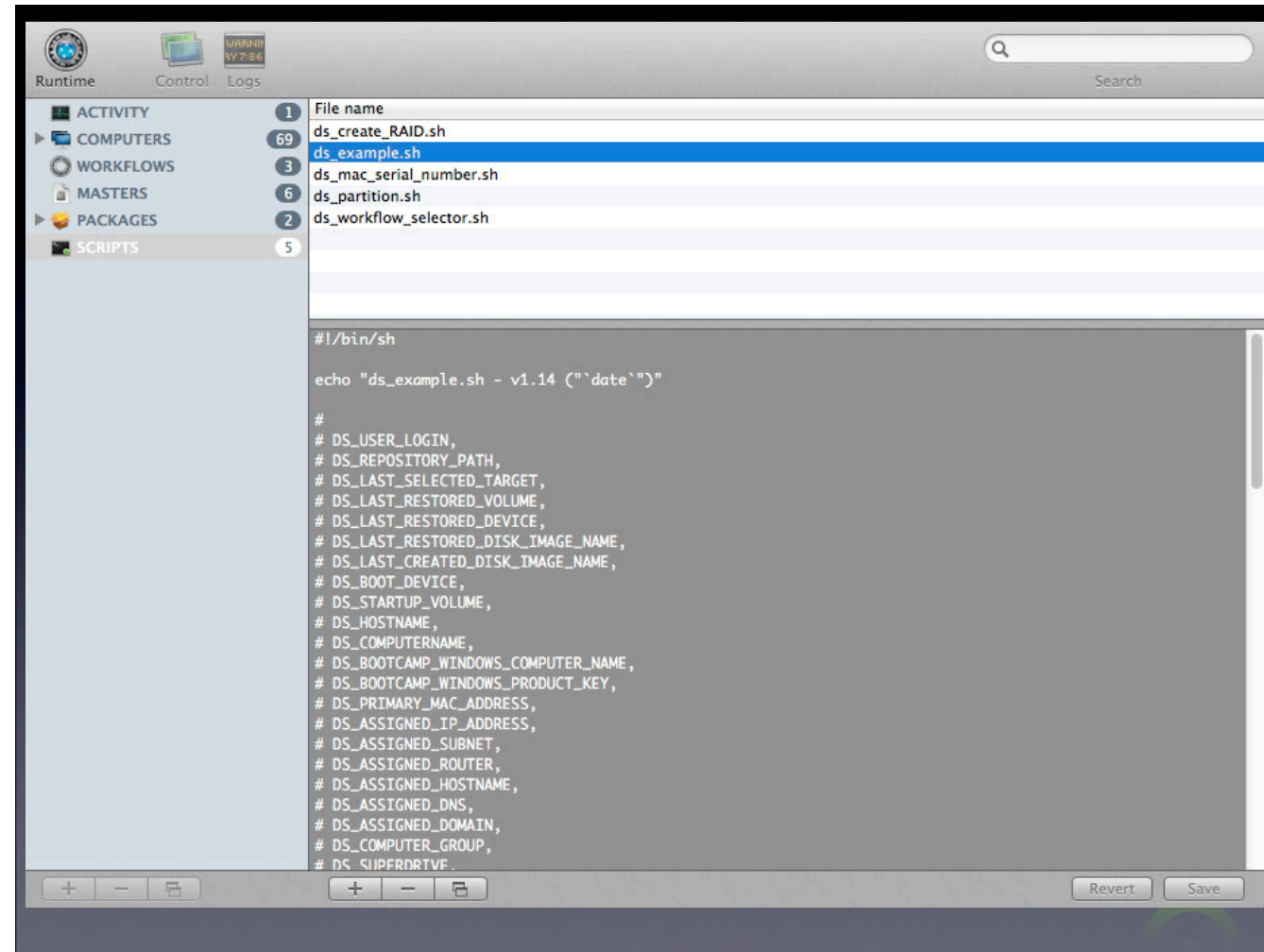
#3

#4

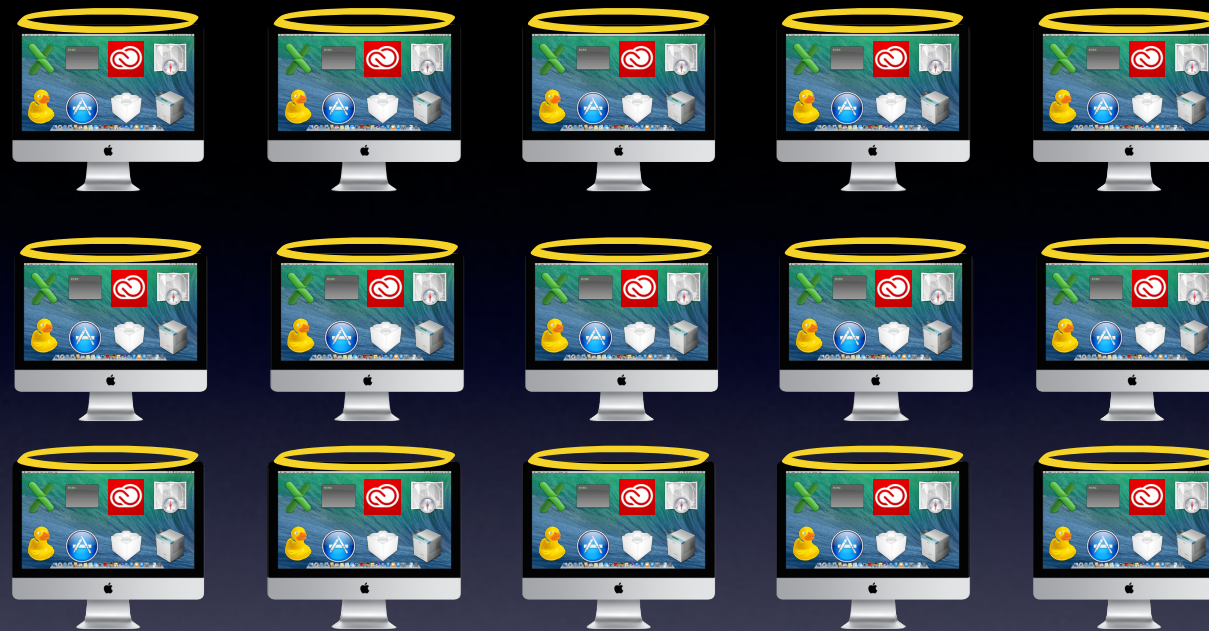
☐ Ignore empty fields when configuring the computer

Client Management:

Get granular with the computers, specifying ARD info, IP addresses, user accounts, etc.



Run scripts after DeployStudio has restored – on the first boot, DeployStudio will execute them. Let's of variables that can be detected from DS.



Perfect!!



But wait... what's
this?!





The plot thickens...



Oh, maaaaaan.

Told you so.



Software updates

(Perfect doesn't stay perfect.)



JAMF Casper



This whole presentation could have been a Casper sales pitch. It really does it all.

Absolute Manage



Absolute Manage does too. Its claim to fame is that it's fully cross-platform. And the Mac support isn't just window dressing. There's a lot of parity here.

Munki & Reposado



Munki is open-source with a great community supporting it. It doesn't do everything the other two do – but it is phenomenal at deploying patches and full installers.

<https://code.google.com/p/munki/>



The .pkg. Your friend.



Installer VISE and similar can't be deployed via standard methods. Makes me sad because there will be a lot more work involved.

Re-Package





JAMF Composer Absolute InstallEase



Composer is available stand-alone for \$100 (\$80 education, I think). InstallEase is free but doesn't run in 10.9. Both will generate packages from before and after snapshots: scan the file system before, run the installer, scan the file system after. A little bit of cleanup and you have a re-package.

```
pkgbuild \  
--identifier com.yourdomain.identifier \  
--version 1.9.11 \  
--root /files/to/be/installed \  
--install-location / \  
--sign "Developer ID Installer: Your Name" \  
/path/to/new.pkg
```



pkgbuild for creating your own packages is built into the OS. It's surprisingly easy to use to build your packages from scratch.

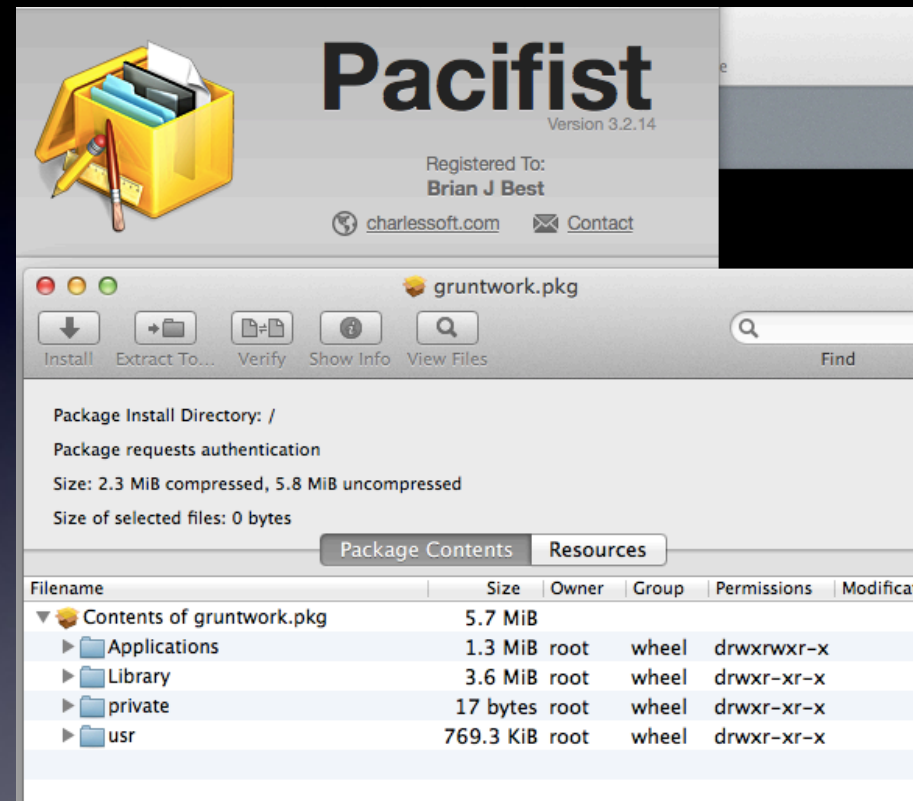


Adobe installers typically need re-pack. Fortunately Adobe provides AAMEE and CCP to provide a .pkg format where most of the work is done in post-install script. But it works.

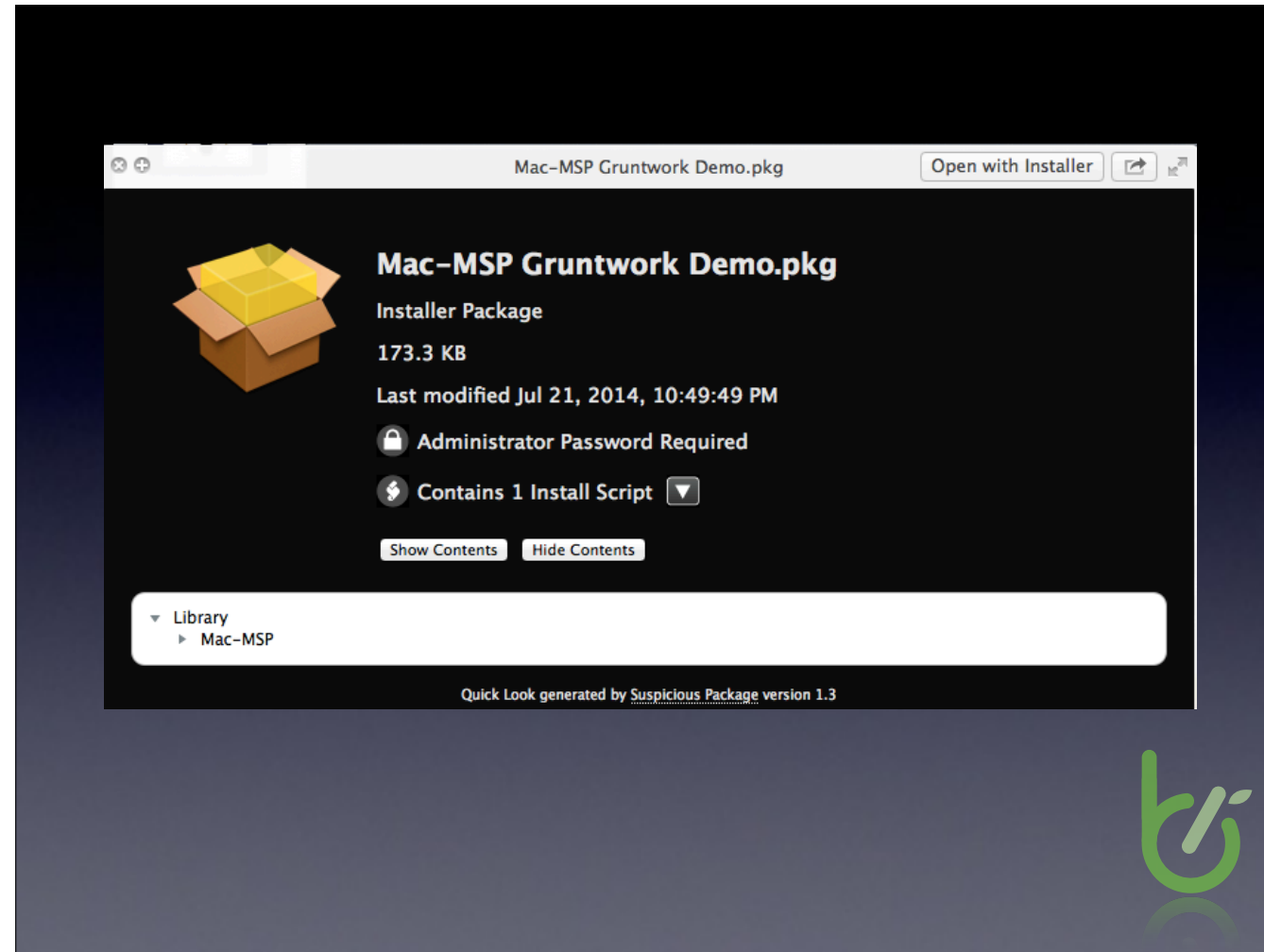
Pacifist



Great shareware utility for examine packages.



Great thing about Pacifist is that you can see and verify what's in the installer and its permissions. But you can also extract bits and pieces out of installers without installing the whole thing.



Suspicious Package is a quick look plugin that lets you view the contents of packages. I really like this for how fast it will show me a post-install script (which is often a source of difficulty in image-based workflows).

Woooooooooooo!!!



Then a miracle
happens...



You win the lottery!!



The Chiefs win the Super Bowl!!



Don't laugh. I'm still hurting over the playoff loss in January.

New Mac Minis!!!!



The currently shipping Mac Mini was released in October of 2012. A new one would be pretty cool at this point.

Uh-oh.





But a new one will also require a new OS image.

The Original OS



10.8.1 (Build 12B19)



10.8.1 (Build 12B2100)



10.8.2 (Build 12C54)



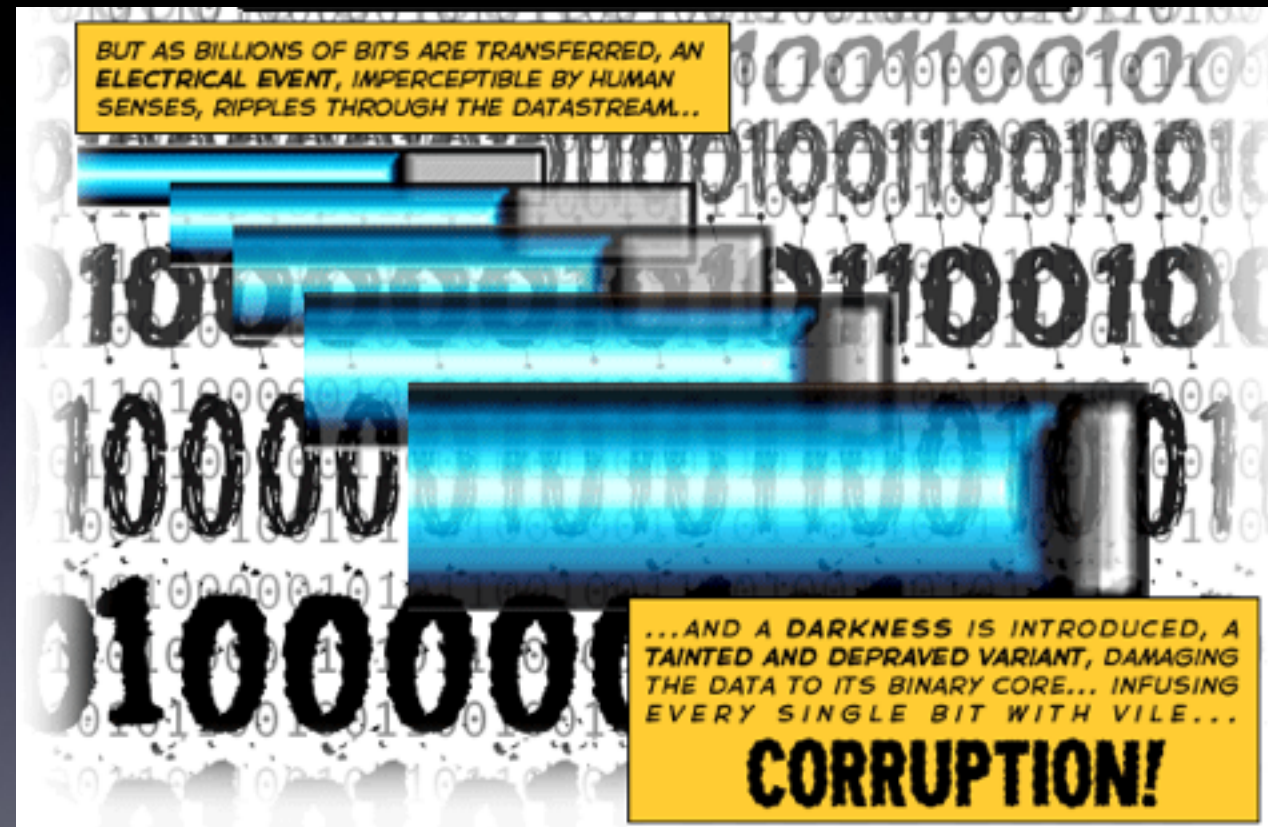
10.10 Something



Remember that the lowest OS you can run is what the model originally shipped with. The build numbers are a hint.

Upgrade your
image?





Don't just install your image, upgrade over the top of it, then reimage it. That gets messy.



Each of these tools has a way to deploy an OS.



File-level installers



Block-level restores

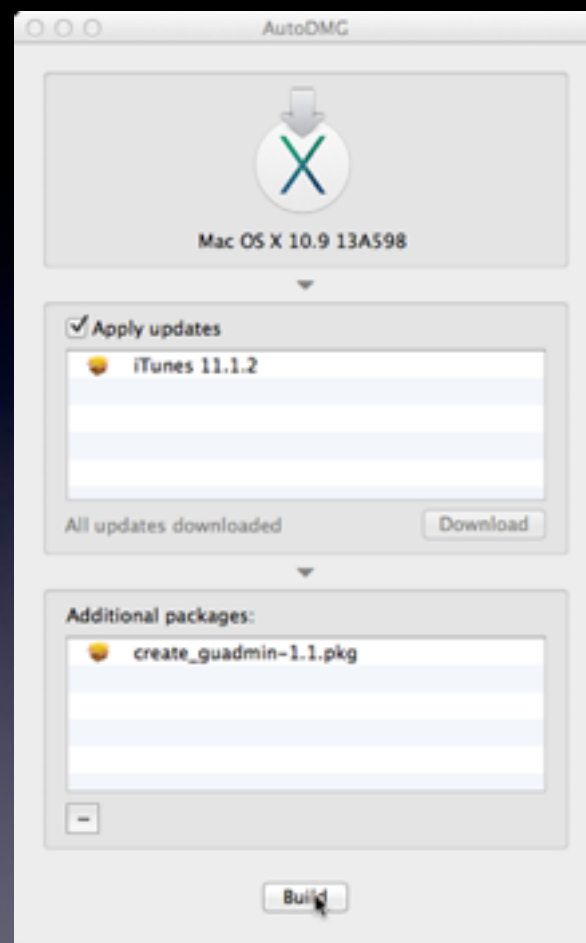


The trick with using images is that not everything can be done that way, but the stuff that can will be much, much faster.

AutoDMG



AutoDMG is a great utility to building disk images with never-booted OS installs and embedding other packages on top.



App Store OS X Installer

Apple Software Updates

Your Packages
(Some of them at least.)





So find a balance – use block based image restores for as much as you can when appropriate. Let your patch manager take care of the rest.



How you doin'?



That's beeeeeeautiful, baby!

Testing ==



Production ==



Last piece of advice. Test a lot. Be slow to deploy to production.

Q & A

Later is cool, too:
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@MacMSP



Drop me an email, I'd love to hear from you!

Thank you!!

