

Deployment

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What Is Deployment?

What Is Deployment?



- To organize and send out (people or things) to be used for a particular purpose.

Prepare

- Infrastructure
- Manage Devices
- Plan for Support

Imaging Methods

- Monolithic “Golden Master”
- Modular
- Modular Thin Provisioning

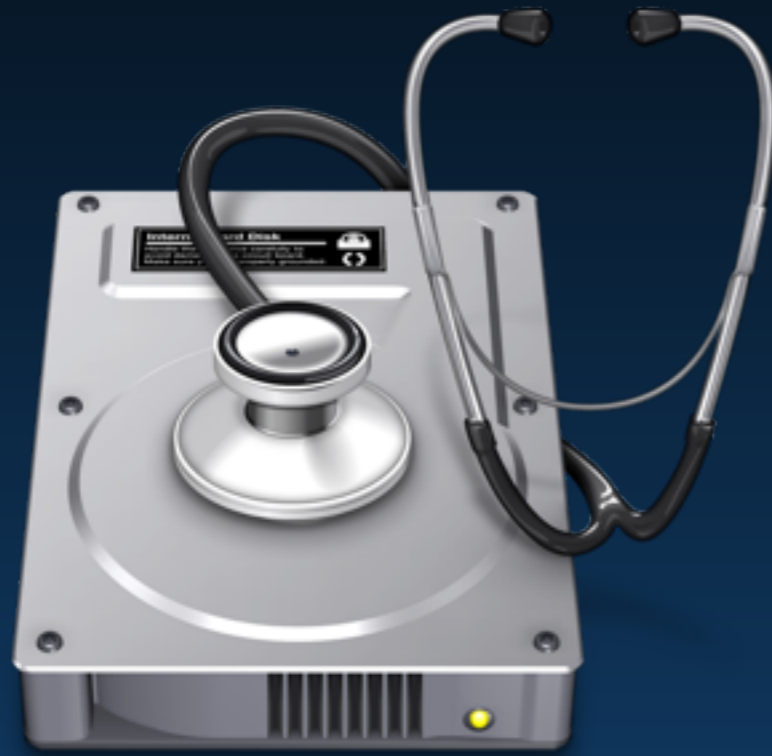
The Golden Master Mac

- Workable but outdated method
- Creating a master system for imaging
- Specific to each computer model

Versions Builds

- Continual updates for new versions
- Takes too long for a perfect image...
- Software is constantly being updated
- <http://support.apple.com/kb/ht1159>

Clone = does not scale
Post install configurations needed



Disk Utility



Carbon Copy Cloner

Modular Imaging



- Core OS & packages installed directly to disk image

Modular Imaging

- Cleaner system images
- Easier upgrade path
- Open to automation
- Finding the right tools can be confusing

No-Image deployment also known as Modular Thin Provisioning



No-image deployment



- User initiated
- Works via policy from management server
- Learned from iOS

Modular Thin Provisioning

Benefits

- Fastest method of deployment
- Doesn't require system-specific images
- Ability to use Internet-restore
- Scripts and Profiles allow automation

Configuration Profiles



Configuration Profiles



- Replacing MCX
- Configuration method moving forward OS X & iOS
- Customization possible
- Flexible delivery options

Packaging Tools



Apple Built in Packing Tools

Terminal commands

- `productbuild`
- `pkgbuild`
- `pkgutil`

Casper Composer



Quickly update packages

Snapshot & FS events

.dmg support

Imaging Tools

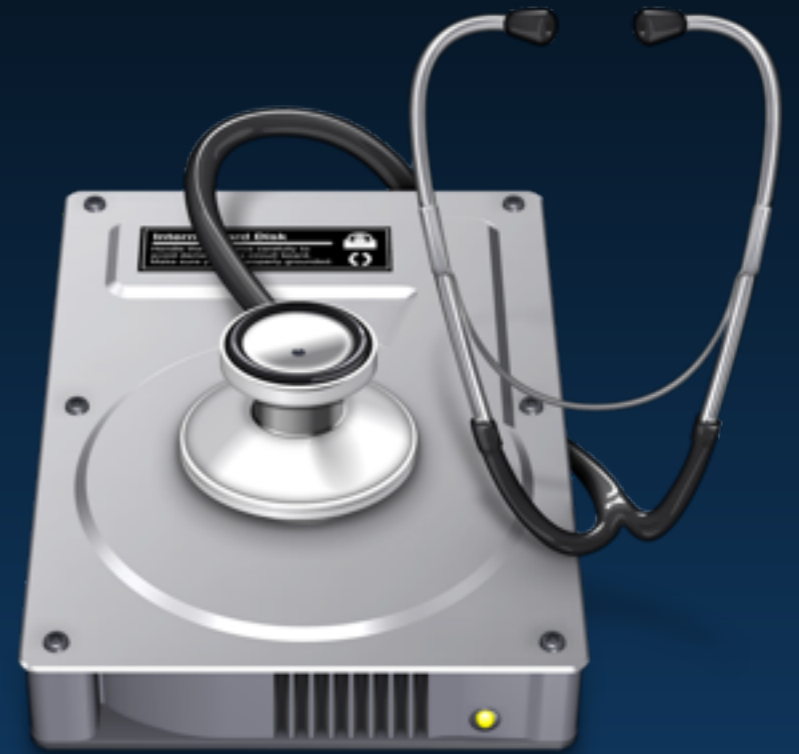
Disk Utility

Built in OS X to create images

Create disk image of volume

No modular tools

Ideal for monolithic images



System Image Utility

Custom Image Creation

Built into OS X Mavericks

- Netboot
- NetInstall
- NetRestore



AutoDMG

Open source

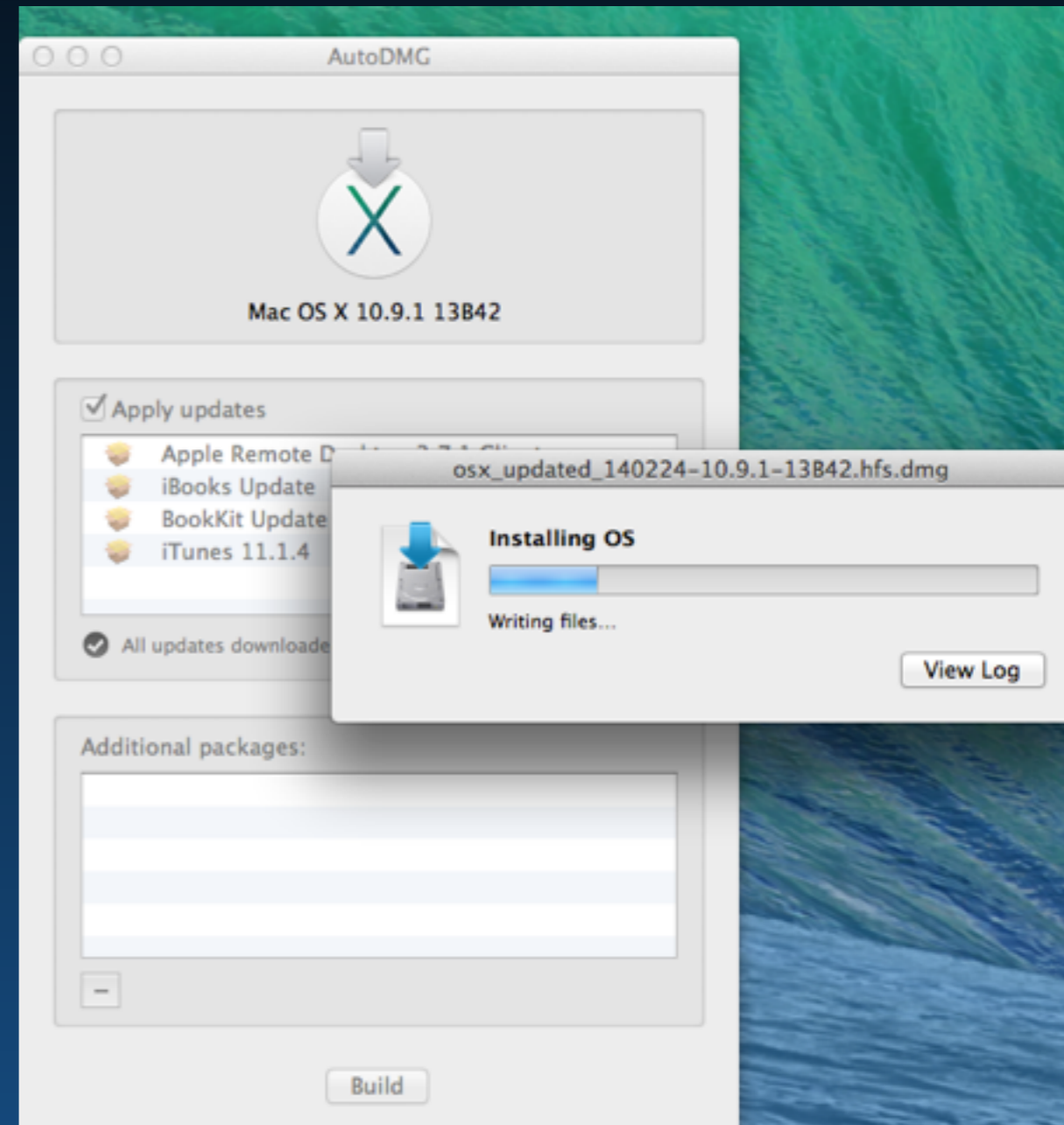
Uses Apple native installers

Pkg formats

Replacement to InstaDMG

Very simple G.U.I.

MACTECH



Deployment Tools

Disk Utility

One to one, not ideal

Monolithic images

- ASR to target volume
- Block copy



OS X Server

- Easy to configure
- Perfect for small business
- \$20



DeployStudio

Open source

Active community

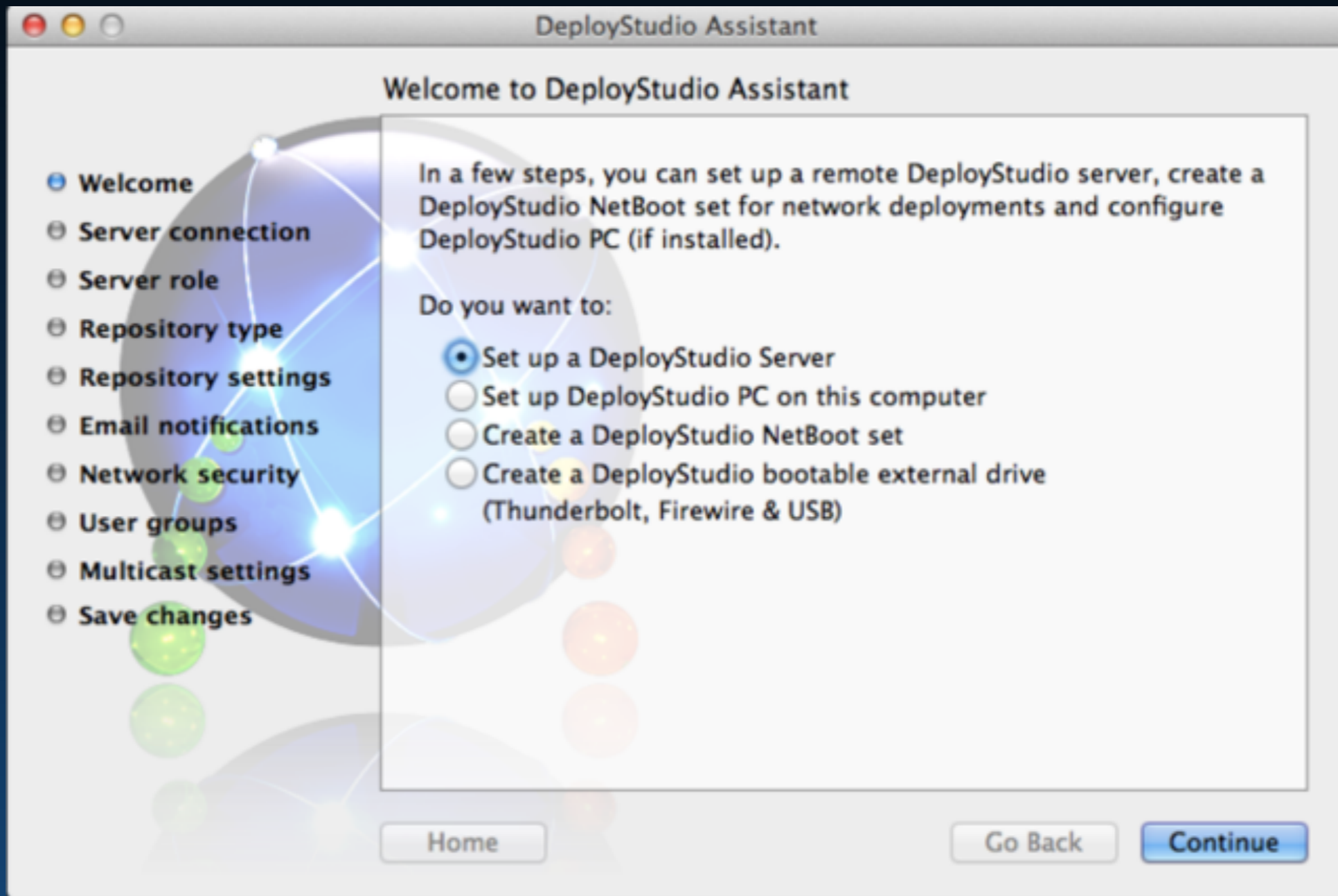
Well documented

Requires OS X Server

deploystudio.com



DeployStudio



Casper Imaging

- Enterprise support
- Integrates with other Casper products
- Well documented
- Good with updates
- Costly



MDM Solutions

Mobile Device Management

Modern Device Management



AirWatch



Casper

MDM

Profile
Manager



Filewave

MACTECH

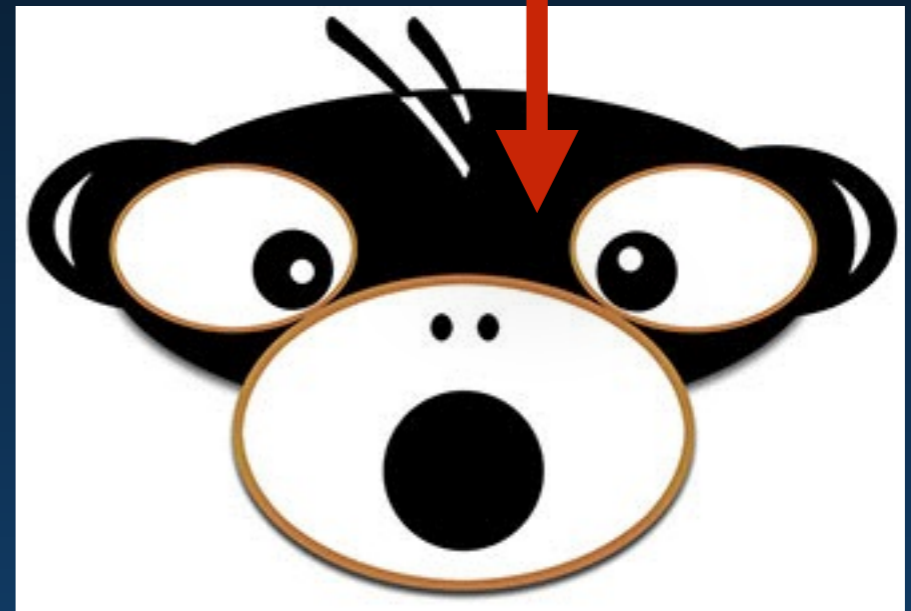


Management Solutions

Manage Settings

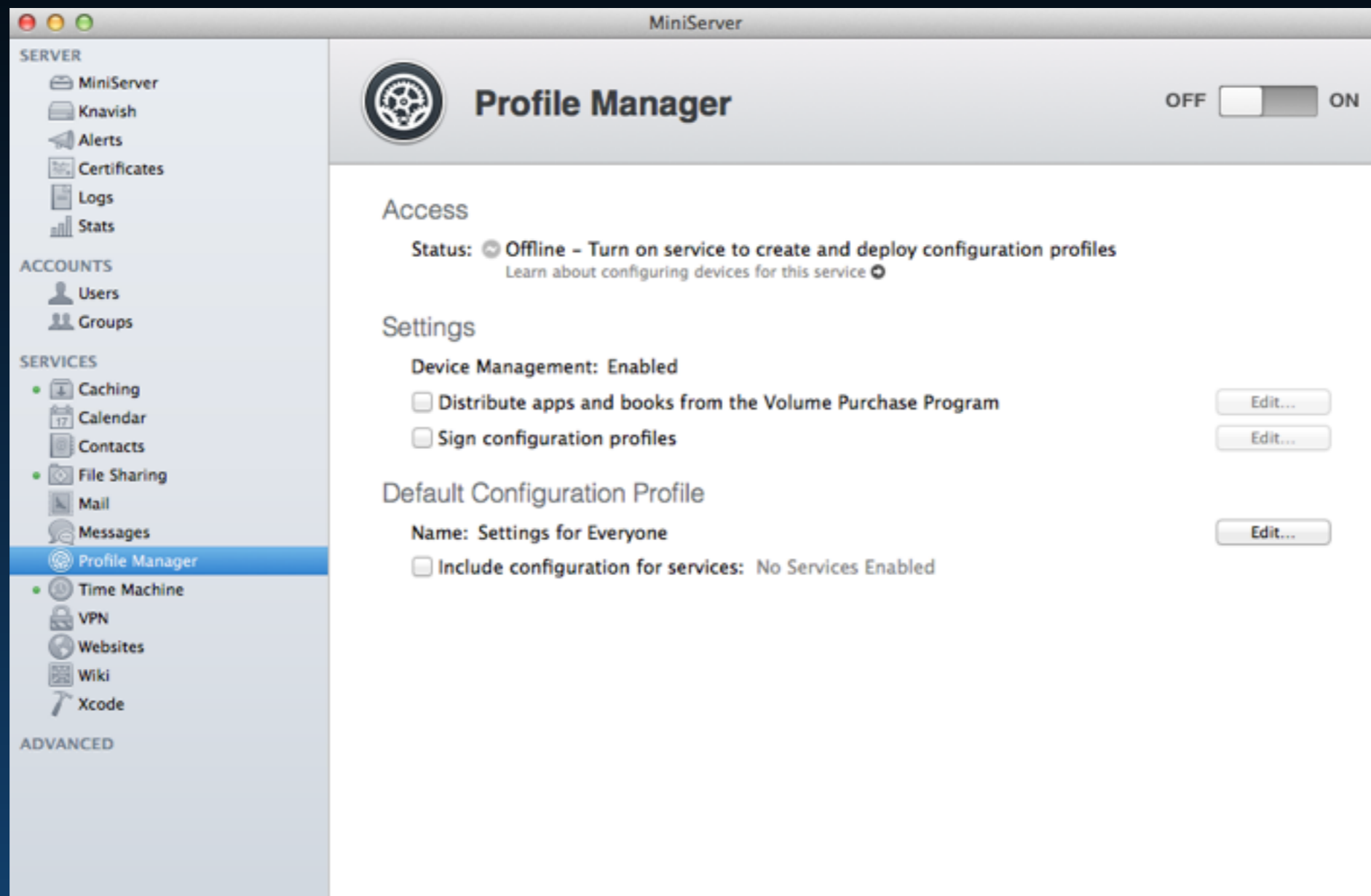


Installing



Munki

Profile Manager



Profile Manager

Settings for Everyone
1 Payload Configured - Created 02/24/14 at 3:55 PM

OS X and iOS

- General**
1 Payload Configured
- Passcode**
Not Configured
- Mail**
Not Configured
- Exchange**
Not Configured
- LDAP**
Not Configured
- Contacts**
Not Configured
- Calendar**
Not Configured
- Network**
Not Configured
- VPN**
Not Configured
- Certificate**
Not Configured
- SCEP**

Organization
Name of the organization for the profile

Description
Brief explanation of the content or purpose of the profile

Consent
Consent Text Description

Security
Controls when the profile can be removed

Automatically Remove Profile
Settings for automatic profile removal

Cancel OK

MDM solution
Must be enrolled
Based on Profiles
XML format

Updated Deployment Tools






- Enroll unsupervised and supervised devices in MDM using enrollment URLs
- New Bretford PowerSync + Carts and Stations integration
- Report progress and status and display physical port numbers
- Require a passcode for initial AirPlay connection

Device Enrollment Program

Deployment Programs

Enroll your organization in the:

-  Device Enrollment Program
-  Volume Purchase Program
-  Apple ID for Students

Don't have an account? [Enroll Now](#)

Sign In

[Forgot your Apple ID or Password?](#)

[Sign In](#)

<http://deploy.apple.com>

Device Enrollment Program

- Zero-touch Configuration
- iPad, iPhone, or Mac purchased directly from Apple
- Does not affect existing BYOD

Procedure

- Administrator logs into Device Enrollment Program site
- From Program site - Establish Virtual Server to link to MDM servers
- Virtual Servers in DEP are linked to physical MDM servers
- Only eligible devices available in DEP

Resources

- deploy.apple.com
- apple.com/iphone/business/it, apple.com/ipad/business/it
- apple.com/education/IT

Third-party tools

- Munki
- Puppet
- Casper Suite
- Absolute Software
- FileWave



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Q&A