



**World 2012**

# Munki Magic

Sam Dunster  
University of Wollongong  
[sdunster@uow.edu.au](mailto:sdunster@uow.edu.au) – @sdunster

# Objectives

- Explore Munki - see what it can do for your university/organisation
- Exploit Munki - learn how to setup and administer a Munki repository
- Examine an existing Munki deployment  
- how does UOW use Munki?



munki

**Centralised package  
management (MOE)**

**Automate Apple  
software updates**

**Optional installs/self-service**

# No admin access required

All you need is a  
HTTP(S) webserver

**Installer packages**  
pkg mpkg

**Copy from disk image**  
dmg

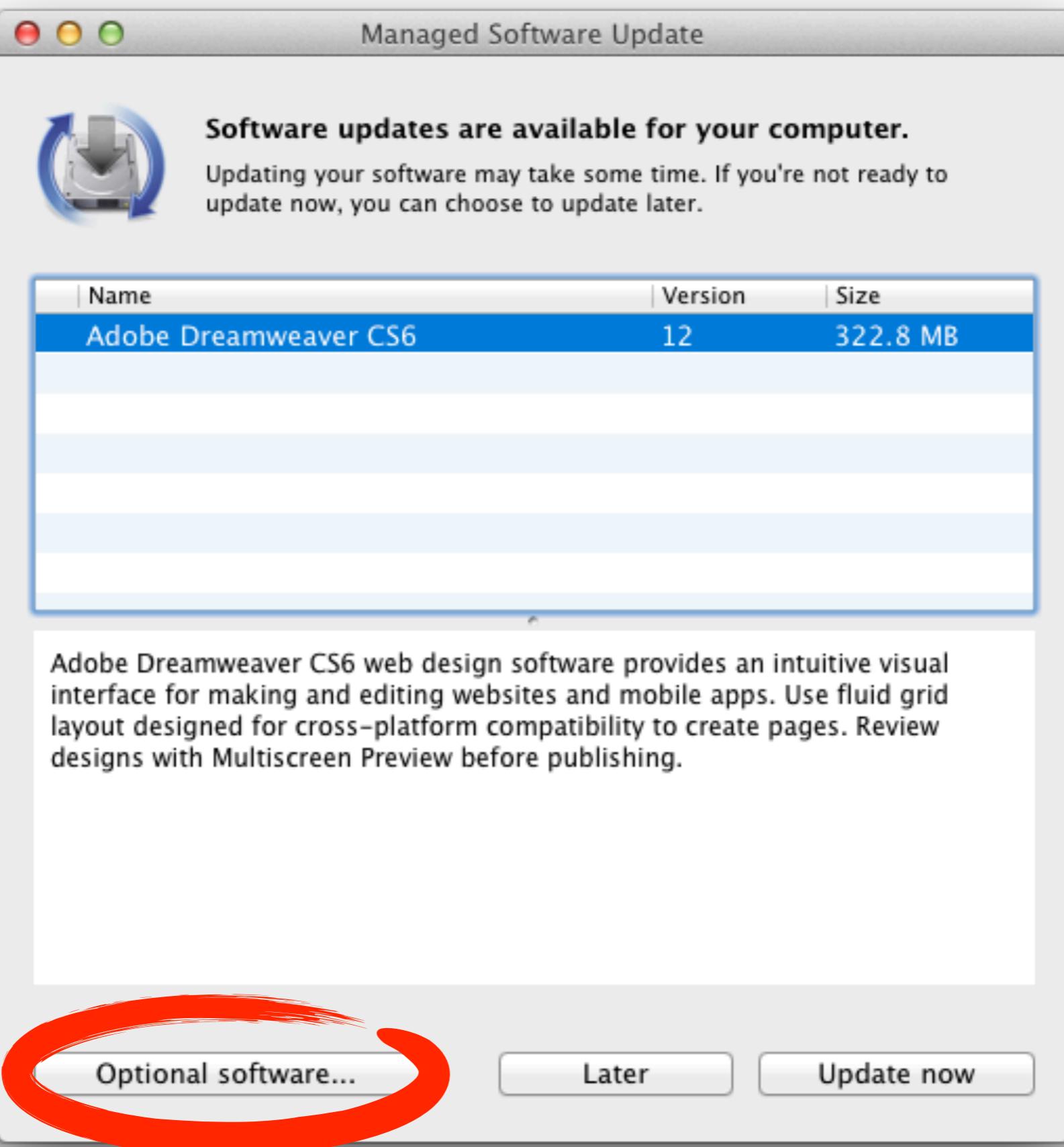
**Adobe CS3 → CS6**  
**Enterprise deployment “packages”**

**Munki agent runs  
roughly every hour**

**Looks for things to  
install or  
update or  
remove**

Can notify user there are  
updates to be done

Unattended install at the  
login window



How do I setup a  
Munki “repository”?

**HTTP(S) server to serve  
client configuration,  
package metadata and  
packages/disk images**

Ideally

<http://munki/repo>

Autodiscovery!

# Munki repository

repo/  
pkgs/  
pkginfo/  
catalogs/  
manifests/

# Packages/disk images

**pkgs/**

**Firefox-12.1.dmg**

**Firefox-13.0.dmg**

**Chrome-20.dmg**

**Keynote.dmg**

**UOW-Readme.dmg**

# Package metadata

**pkgsinfo/**

**Firefox-12.1**

**Firefox-13.0.1**

**Chrome-20.0.1132**

**Keynote-5.1.1**

**UOW-Readme-1.0**

# Catalogs

catalogs/  
production  
testing  
development  
all

Automatically generated!

# Manifests

manifests/  
server  
lab  
staff  
laptop  
site\_default

# Munki tools

```
munkiimport --help  
makepkginfo --help  
makecatalogs --help  
manifestutil --help
```

# First time configuration

```
munkiimport  
--configure
```

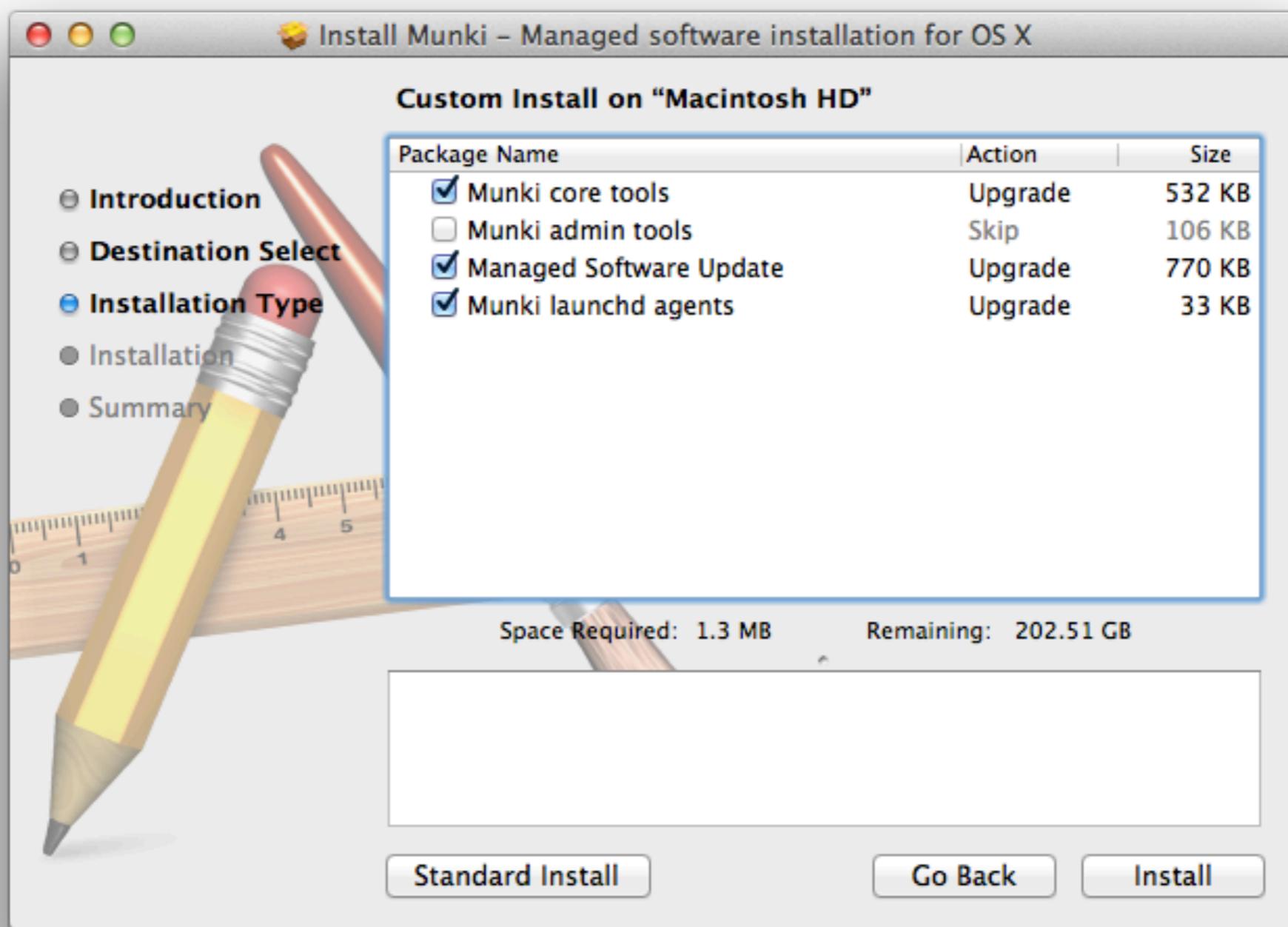
# Import a package!

```
munkiimport  
Firefox.dmg
```

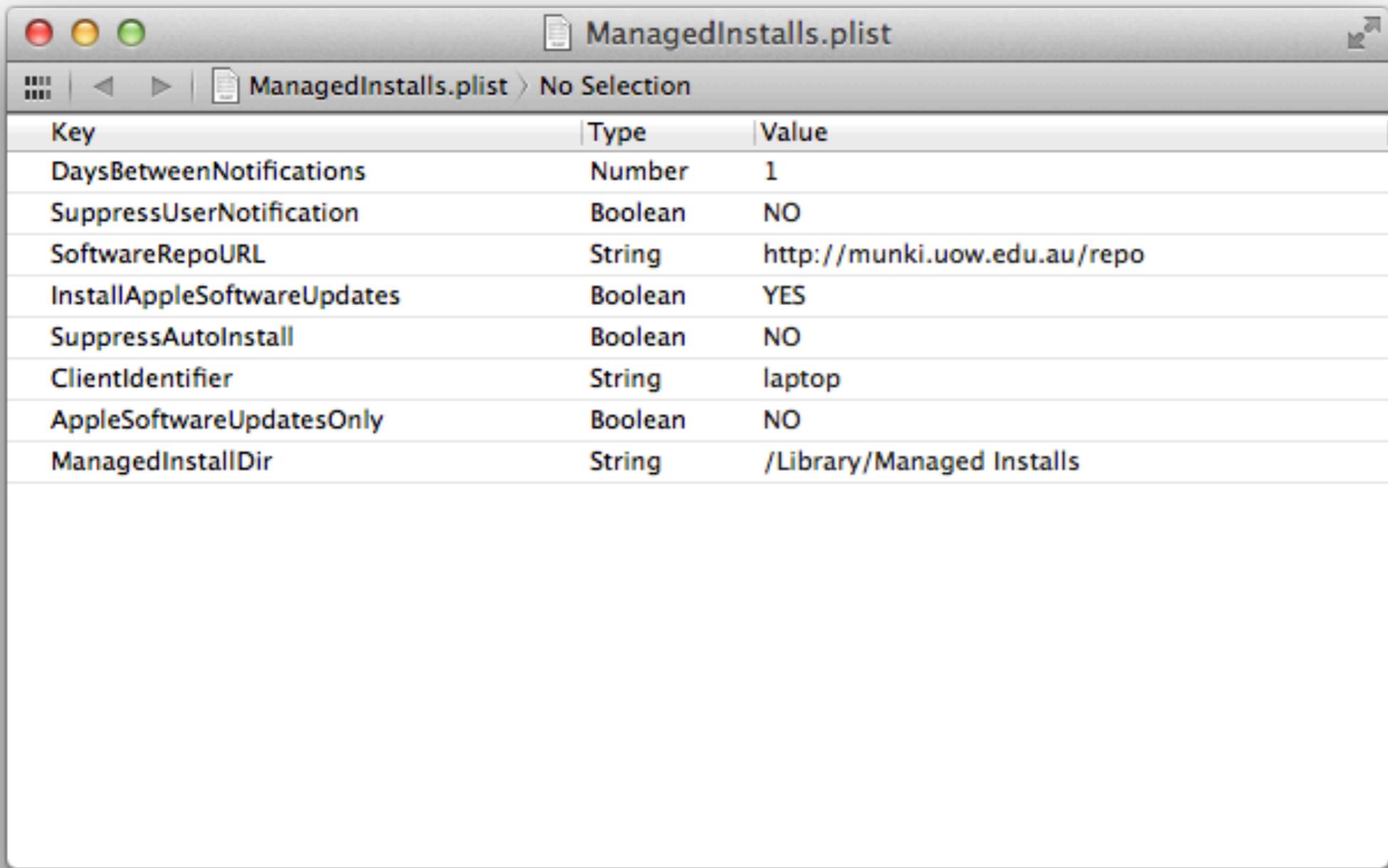
# Build catalogs

```
cd repo &&  
makecatalogs .
```

# Install Munki on client



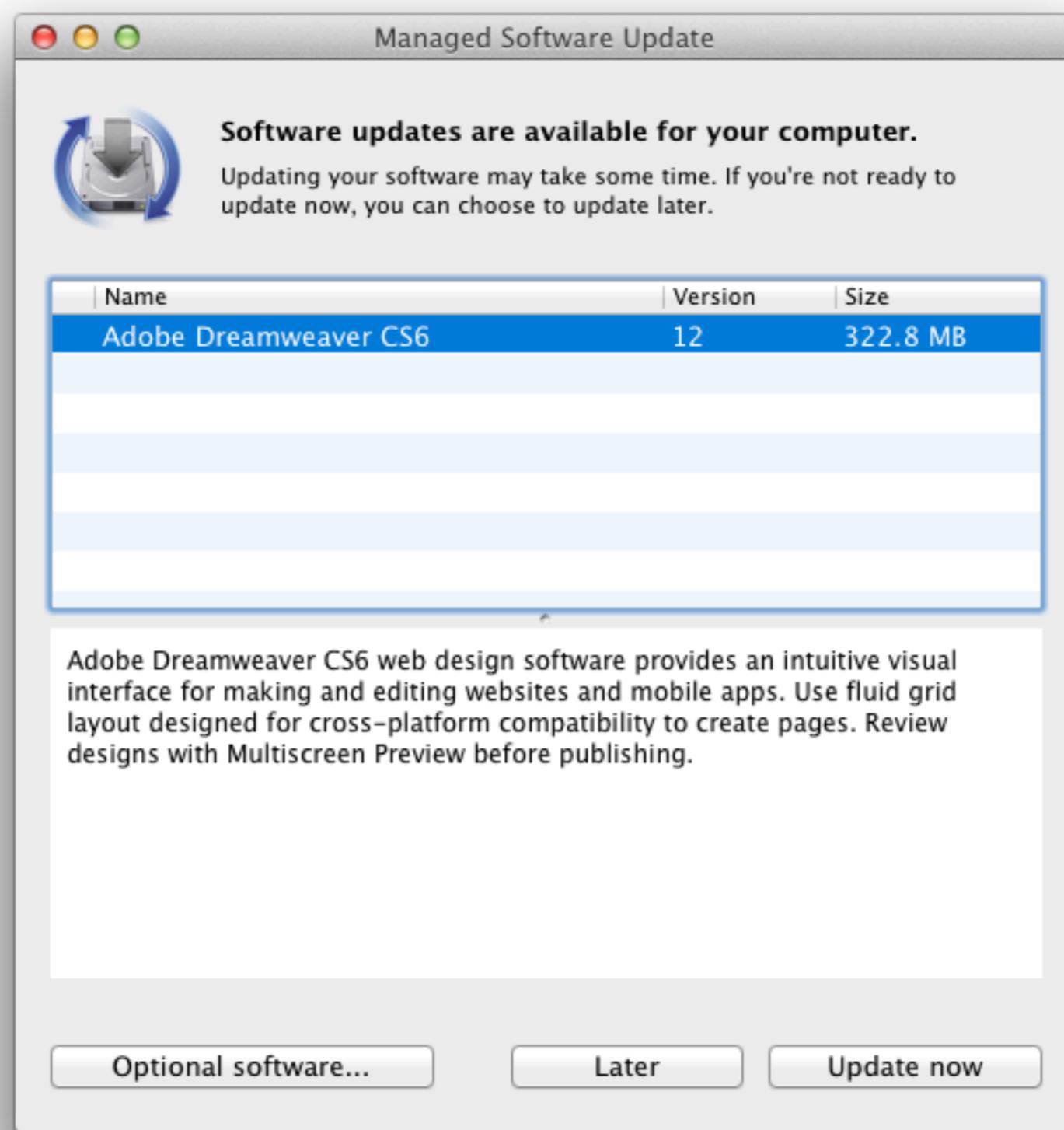
# Configure client



The screenshot shows the Xcode Property List Editor window titled "ManagedInstalls.plist". The file path "ManagedInstalls.plist > No Selection" is displayed in the title bar. The editor displays a table of configuration settings:

Key	Type	Value
DaysBetweenNotifications	Number	1
SkipUserNotification	Boolean	NO
SoftwareRepoURL	String	<a href="http://munki.uow.edu.au/repo">http://munki.uow.edu.au/repo</a>
InstallAppleSoftwareUpdates	Boolean	YES
SkipAutoInstall	Boolean	NO
ClientIdentifier	String	laptop
AppleSoftwareUpdatesOnly	Boolean	NO
ManagedInstallDir	String	/Library/Managed Installs

# Run MSU



Demo

**UNIVERSITY OF  
WOLLONGONG**



**UNIVERSITY OF  
WOLLONGONG**



**“MacMan”**

**Dynamic manifest generator hooked  
into Open Directory**

# Computer: simba

[Back](#)

Hostname:

simba

Ethernet Address:

e8:06:88:cd:3b:9b

Generated UID:

6C88D0C9-C0D3-40D9-BD28-BA539F480BB2

Catalogs:

development, testing, production

Manifest URL:

<http://munki.uow.edu.au/repo/manifests/simba>

Last manifest check in:

22:17:56 2012-07-03

Groups:

- [Desktop: Information Technology Services](#)
- [ITS Printers](#)
- [Desktop: All](#)

My Packages:

- [Oracle SQL Developer \(install\)](#) ([delete](#))
- [EndNote X4 \(optional\)](#) ([delete](#))
- [Adobe Dreamweaver CS6 \(install\)](#) ([delete](#))

Resolved Packages:

- [Oracle SQL Developer \(install\)](#)
- [EndNote X4 \(optional\)](#)
- [Adobe Dreamweaver CS6 \(install\)](#)
- [CoRD \(install\)](#)
- [Administrator Access – All \(install\)](#)

# MacMan

## Add Package

Package

[-- Choose one --](#)

Type

- Install  
 Update  
 Optional install  
 Uninstall

[Add](#)

## Add Group

Group

[-- Choose one --](#)[Add](#)

## Change Catalog

Catalog

- Default  
 Production  
 Testing  
 Development

[Save](#)

## Purge Computer

This will remove this computer and all

Search

UW-C02GL096DHJTS  
UW-C02GJ0J0DRJGS  
UW-W804904WDNPS  
UW-C02GN04KDHJRS  
UW-C02GLHJWDJWT\$  
UW-C02GN04JDHJRS  
UW-C02GN04HDHJRS  
UW-W80510LDDNNS  
UW-C02GN1U4DV17\$  
**simba**

Hostname:  
simba  
Ethernet address:  
e8:06:88:cd:3b:9b  
Generated UID:  
6C88D0C9-C0D3-40D9-BD28-BA539F480BB2  
Catalogs:  
Testing ▾  
Manifest URL:  
<http://munki.uow.edu.au/repo/manifests/simba>  
Last manifest check in:  
Tue Jun 19 2012 11:53:56 GMT+1000 (EST)

Demo

# Google Code Project/Wiki

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

# Munki Google Group

<http://groups.google.com/group/munki-dev>

**MacTech Articles – Munki**

**<http://bit.ly/rsfo5z>**

Contact me

**sdunster@uow.edu.au**

**@sdunster**

**sdunster@uow.edu.au**



**@sdunster**



**World 2012**