

Documentation

What are you afraid of?

Mat X

@macvfx

IT Consultant

Why document?

- Bring sanity to ourselves
- Share knowledge with others

Lesson # 1

Document for yourself.

No, really?!

Do you want to ever go
on vacation?

Don't get hit by a bus

What are we afraid of?



Lesson # 2

Document for others

SysAdmin or IT
consultant?

What do we document?

- Computers
- Network
- Software
- Workflow

What happens if we don't ?

- If there's no documentation
- What if there is a doc but it's not good
- What if it can't be documented

Impossible!

- The system is too complex to document
- No one can do it
- We've hired consultants for the last 6 months
- Visio is the map

Discovery

- What are the systems in place?
- What is the workflow?

/Library/Scripts/

/usr/local/bin

~/bin

Carbon Copy Cloner

plists

Rsync

shell scripts

launchd

python

How do we document all that?!

Bash

```
% history > ~/saved-cli-'date'.txt
```

```
hdiutil create -srcfolder /Library/Scripts  
~/m0r3-scripts-`date`.dmg
```

Notes

The screenshot shows a Mac OS X Notes application window. The title bar includes standard window controls (red, yellow, green buttons), a toolbar with icons for window management, editing, and search, and a search field. The main content is split into two panes. The left pane displays a list of notes, each with a title, a timestamp, a brief description, and a small thumbnail image. The right pane shows the content of the selected note, including a title, a timestamp, a description, a list of tasks, and a product link with an image.

Notes List (Left Pane):

- Kitchen remodel ideas**
9:41 AM Modern kitchen design in a small space...
- Carson's birthday party**
9:41 AM Call party supply store...
- Reference letter for Lee**
9:02 AM Worked on the same team for 5 years
- Contractor meeting**
8:37 AM Gary says the inspector will not be able...
- Tropical vacation ideas**
Yesterday Na Pali Properties Kauai...
- Miami conference notes**
Yesterday Sales in emerging markets up
- Landscaping**
Monday Look into flagstone for backyard patio
- NYC dining greatest hits**
Saturday Get reservations for...
- Team-building activities**
Saturday Paintball tournament
- Story idea**
Friday Circus clowns rob bank. Hilarity en...
- Local ramen joints**

Note Content (Right Pane):

Today at 9:41 AM

Kitchen remodel ideas
Modern kitchen design in a small space. Should have an island. Plenty of storage. Need to research colors, materials, and appliances (stainless steel).

Things to do

- Create a budget
- Price appliances
- Measure dimensions of kitchen
- Layout and space planning
- Get estimate on cabinets and countertops
- Consult with a contractor
- Apply for permits
- Prep kitchen for demo

1953LF Delta Single Handle Bar/Prep Faucet
www.deltafaucet.com



Blogs

Der Flounder

Seldom updated, occasionally insightful.

About Contact

Automating the setup of OS X Server on El Capitan and Yosemite

October 29, 2015  rtrouton

 Leave a comment

As part of the development of Mac OS X, Apple has also developed [Mac OS X Server](#) as a way to provide access to both additional services on OS X and the management tools needed to administrate those services. While Mac OS X and Mac OS X Server used to be separate operating systems, Apple combined them into one release re-branded as [OS X Server](#). Specific services and management tools into an [OS X Server](#) [App Store](#).

As part of the move to an application-based installation procedure from OS X Server: [The ability to automate its setup entirely](#)

In order to run the initial setup of OS X Server, the following

1. Log into the Mac using an account with administrator rights
2. Launch **/Applications/Server.app**



OS X Dominion: Mastering OS X Management

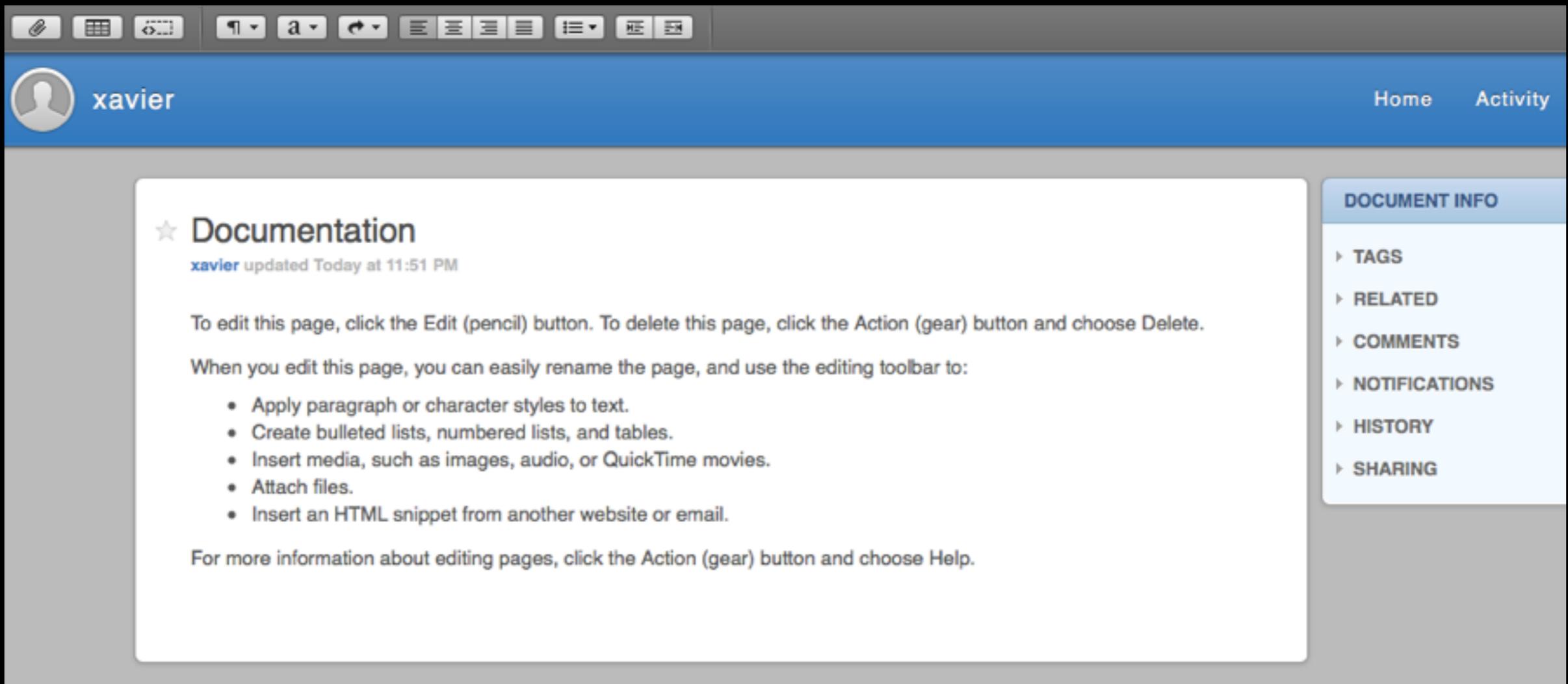
Introducing Facebook's AutoPkg Script

AutoPkg Wrapper Scripts

There are myriad [AutoPkg](#) wrapper scripts/tools available out there:

Wiki

OS X + Server.app



The screenshot shows a web browser window displaying a Wiki page. The browser's address bar and toolbar are visible at the top. The page has a blue header with a user profile icon and the name 'xavier' on the left, and 'Home' and 'Activity' links on the right. The main content area features a star icon next to the title 'Documentation', followed by the text 'xavier updated Today at 11:51 PM'. Below this, there are instructions on how to edit and delete the page, and a list of editing capabilities. A right-hand sidebar contains a 'DOCUMENT INFO' section with links for 'TAGS', 'RELATED', 'COMMENTS', 'NOTIFICATIONS', 'HISTORY', and 'SHARING'.

 **xavier** Home Activity

★ Documentation

xavier updated Today at 11:51 PM

To edit this page, click the Edit (pencil) button. To delete this page, click the Action (gear) button and choose Delete.

When you edit this page, you can easily rename the page, and use the editing toolbar to:

- Apply paragraph or character styles to text.
- Create bulleted lists, numbered lists, and tables.
- Insert media, such as images, audio, or QuickTime movies.
- Attach files.
- Insert an HTML snippet from another website or email.

For more information about editing pages, click the Action (gear) button and choose Help.

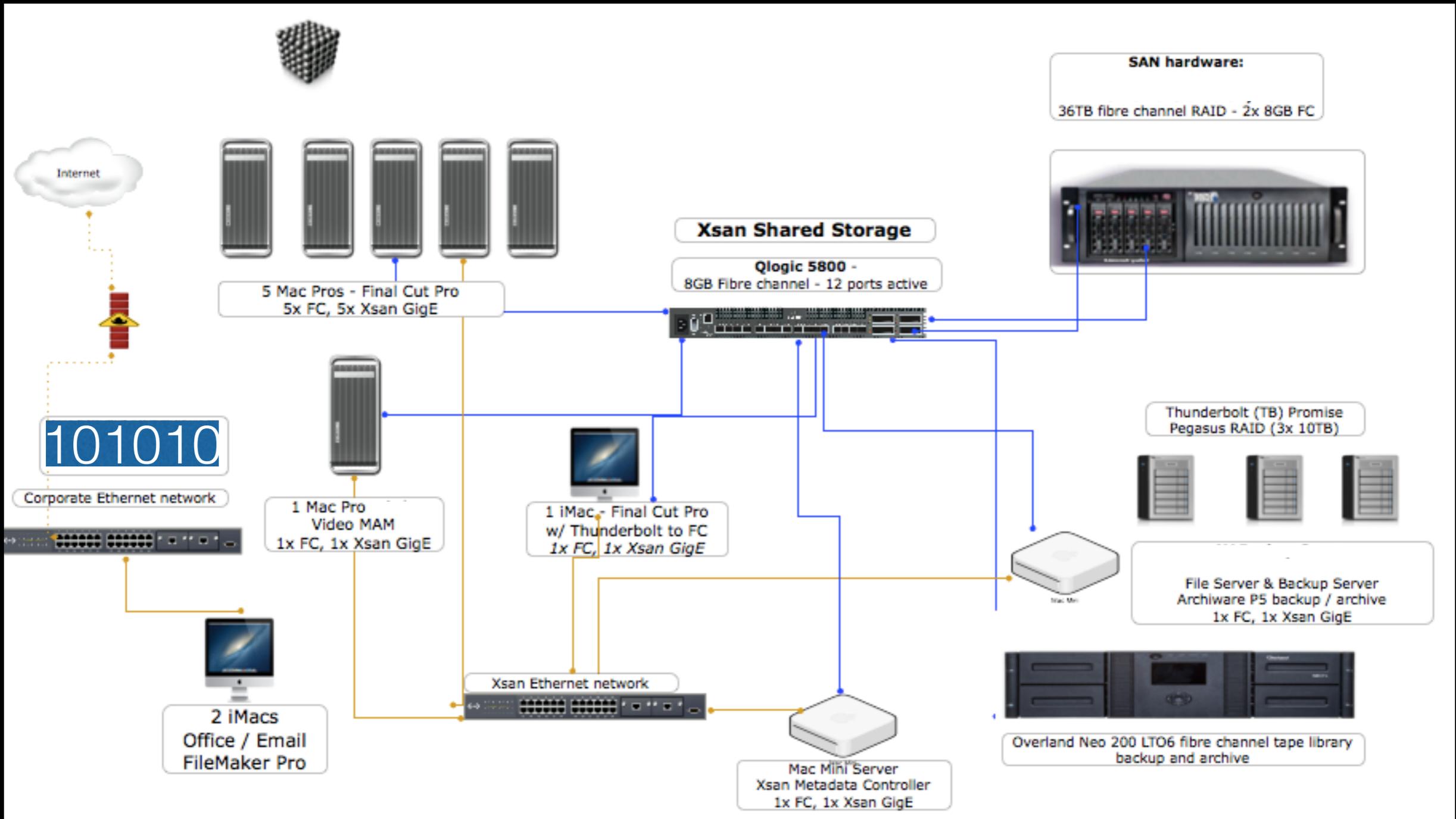
DOCUMENT INFO

- ▶ TAGS
- ▶ RELATED
- ▶ COMMENTS
- ▶ NOTIFICATIONS
- ▶ HISTORY
- ▶ SHARING

Make pretty pictures

- Omnigraffle
- Illustrator

All your SAN



Ticket systems

- Redmine
- Zen desk
- Web help desk

Redmine

Overview, Activity, Issues, Wiki, etc

The screenshot shows the Redmine interface for a project named 'WatchmanMonitoring'. The top navigation bar includes a search field and a dropdown menu. Below the navigation bar, the 'Overview' tab is selected, showing a summary of the project's status. The 'Issue tracking' section lists the number of open tasks, bugs, features, and support requests. The 'Members' section identifies the project manager and developers. The 'Spent time' section shows the total time spent on the project and provides links to log time, view details, and generate a report.

WatchmanMonitoring Search: WatchmanMonitoring

[Overview](#) [Activity](#) [Issues](#) [New issue](#) [Gantt](#) [Calendar](#) [News](#) [Documents](#) [Wiki](#) [Files](#) [Repository](#) [Todos](#)

Overview

[+ New subproject](#)

Issue tracking

- Task: 8 open / 8
- Bug: 0 open / 0
- Feature: 0 open / 0
- Support: 0 open / 0

[View all issues](#) | [Calendar](#) | [Gantt](#)

Members

Manager: [Scott AutomationGarden Neal](#)
Developer: [Mat X](#), [Scott AutomationGarden Neal](#)

Spent time

[🕒 1.50 hour](#)

[Log time](#) | [Details](#) | [Report](#)

When do we document?

- Continuously!
- During the planning of a new setup
- Discovering facts for an existing setup
- Automatically!

Lesson # 3

DevOps

MacDevOps

- Mac IT (Ops) + Dev
- Automation
- Version control
- Repeatable
- Peer review
- Empathy



GitHub

Wiki, issues, commit messages

The screenshot displays the GitHub interface for the repository 'macvfx/AutoPkg'. The main content area shows a commit diff for the 'Final Cut Library Manager' repository, comparing the current state with a previous commit (563c1da) from 5 months ago. The diff highlights changes in the '.gitignore' and 'FinalCuLibraryManager.download.recipe' files.

Commit History:

- Removing download recipes (4) - 5 months ago by macvfx
- Typo fix (3)** - 5 months ago by macvfx
- Auto Pkg Munki - Downlo... (8) - 5 months ago by macvfx

Diff Details:

.gitignore

```
... .. @@ -0,0 +1,2 @@
1 +
2 +*.txt
```

FinalCuLibraryManager.download.recipe

```
... .. @@ -3,13 +3,13 @@
3 3 <plist version="1.0">
4 4 <dict>
5 5     <key>Description</key>
6 -     <string>Downloads the current release version of
       FinalCuLibraryManager.</string>
6 +     <string>Downloads the current release version of
       FinalCutLibraryManager.</string>
7 7     <key>Identifier</key>
8 -     <string>com.github.autopkg.download.FinalCuLibraryManager</string>
8 +     <string>com.github.autopkg.download.FinalCutLibraryManager</string>
9 9     <key>Input</key>
```



Branch: master

RsyncVolumes / rsync-backup-XSAN-example-script.sh

macvfx second commit

1 contributor

Executable File | 17 lines (10 sloc) | 578 Bytes

Raw Blame History

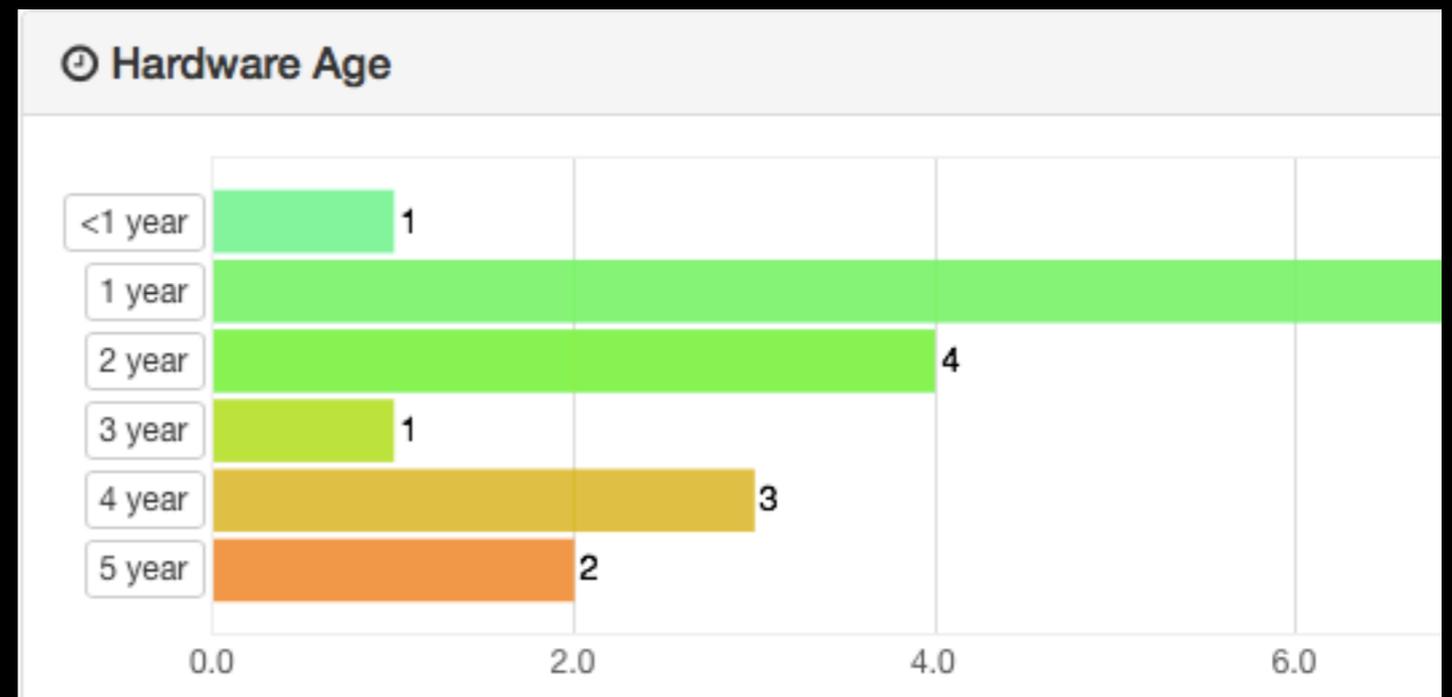
```
1 #!/bin/sh -
2
3 PATH=/bin:/usr/bin:/sbin:/usr/sbin:/opt/local/bin:/usr/local/bin
4 log=/var/log/rsync.Xsan.log.`date -u +%y-%m-%d`
5
6 date > $log
7
8 echo "START rsync Xsan" >> $log
9 /usr/bin/rsync --avP --exclude=".DS_Store" --stats --ignore-errors -h --dry-run "/Volumes/XSAN/MEDIA/"
10 /usr/bin/rsync --avP --exclude=".DS_Store" --stats --ignore-errors -h --dry-run "/Volumes/XSAN/PHOTOS/"
11
12 echo "END rsync Xsan" >> $log
13
14 date >> $log
15
16 echo "Xsan backup DONE" |mail -s "Xsan backup DONE" example@domain.com
```

Lesson # 4

Sustainability

Living documentation

- Inventory systems
- Asset management
- Automatic reporting
- Use the systems you have

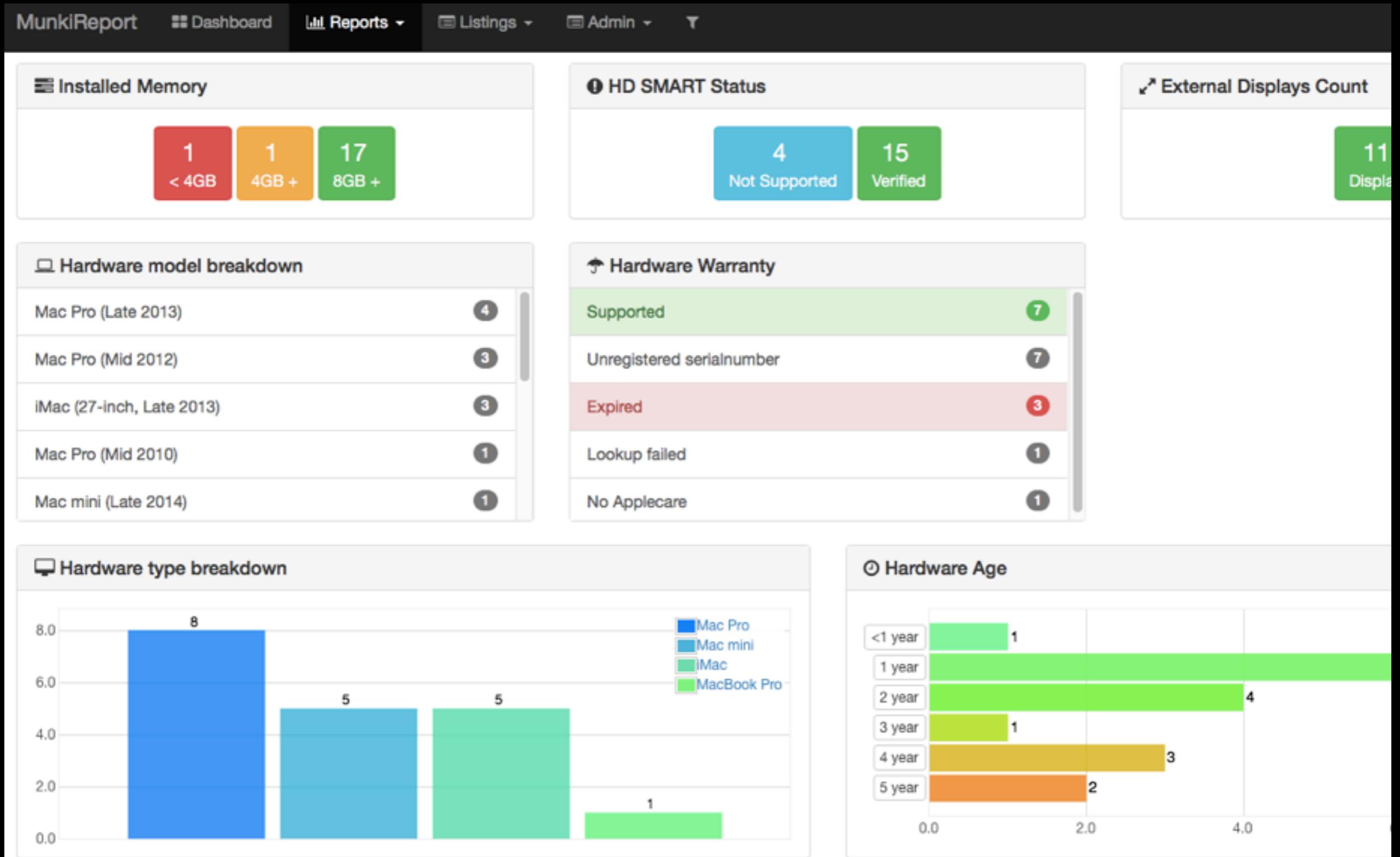


IT management systems

- Munki
 - Munki Report
- Absolute Manage
- Filewave
- Jamf Casper



Munki + MunkiReport



Take it to the cloud!

- Watchman
- Monkeybox



Computer Overview

Actions ▾



ladmin's Mac

Xtest



Missing for 11 months



0 Muted Plugins



0 Expirations

Last User: apple

Computer Name: ladmin's Mac

Group: Xtest

Serial Number: VMga78rWVLPD

INTEGRATIONS

Monkey Box:

[View in MonkeyBox](#)

Plugin Results

Notes: 0

History

Edit



Disk IO Errors

2014-12-22 12:51 AM

[2014-12-22] No recent disk I/O errors were logged.



Actions ▾



False Mount

2014-12-22 12:51 AM

No False Mounts to report.



Actions ▾



Kernel Panics

2014-12-22 12:51 AM

There are no panic logs to report.



Actions ▾



Local IP Address

2014-12-22 12:51 AM

Primary IP: 172.16.4.160 via DHCP on Ethernet (en0)



Actions ▾



Malware Tests

2014-12-22 12:51 AM

[2014-12-22] No Known Malware Found.



Actions ▾

Lesson # 5

Improve

Beyond documentation

- Discovery and Documentation leads to suggestions for improvement
- Where it makes sense replace custom scripts with commercially supported software and/or properly documented config management (e.g. Puppet or Chef)
- Exit plan and ethical Sysadmins / consultants

Conclusions

- Bring sanity and clarity to all IT systems
- Living systems lead to better documentation
- Happy clients and happy people work well together

More info:

- <https://macvfx.wordpress.com>
- <https://github.com/macvfx/>
- <http://www.macdevops.ca>