Orchard

Carrot or Stick?

How we got User buy in for
Mac Management at the University of Oxford

European Macintosh System Administrators Meeting, Göteborg

18.09.2013

Orchard

Carrot or Stick?

How we got User buy in for
Mac Management at the University of Oxford

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Acknowledgements

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OXFORD

Oxford at a glance

- Oxford was the first University in the English-speaking world.
- Our aim is to remain at the forefront of centres of learning, teaching and research.

Oxford at a glance

- In 2010-11, total University income was £919.6 million.
- Total University expenditure in 2010-11 was £908.2 million.
- Oxford consistently has the highest research income from external sponsors

Oxford at a glance

- The University, including the colleges and Oxford University Press, is the largest employer in Oxford, supporting more than 18,000 jobs and injecting £750 million annually into the regional economy.

Oxford at a glance

- There are over 21,000 students at Oxford, including 11,723 undergraduates and 9,327 postgraduates.
- 42% of Oxford students are citizens of 143 foreign countries.

Oxford at a glance

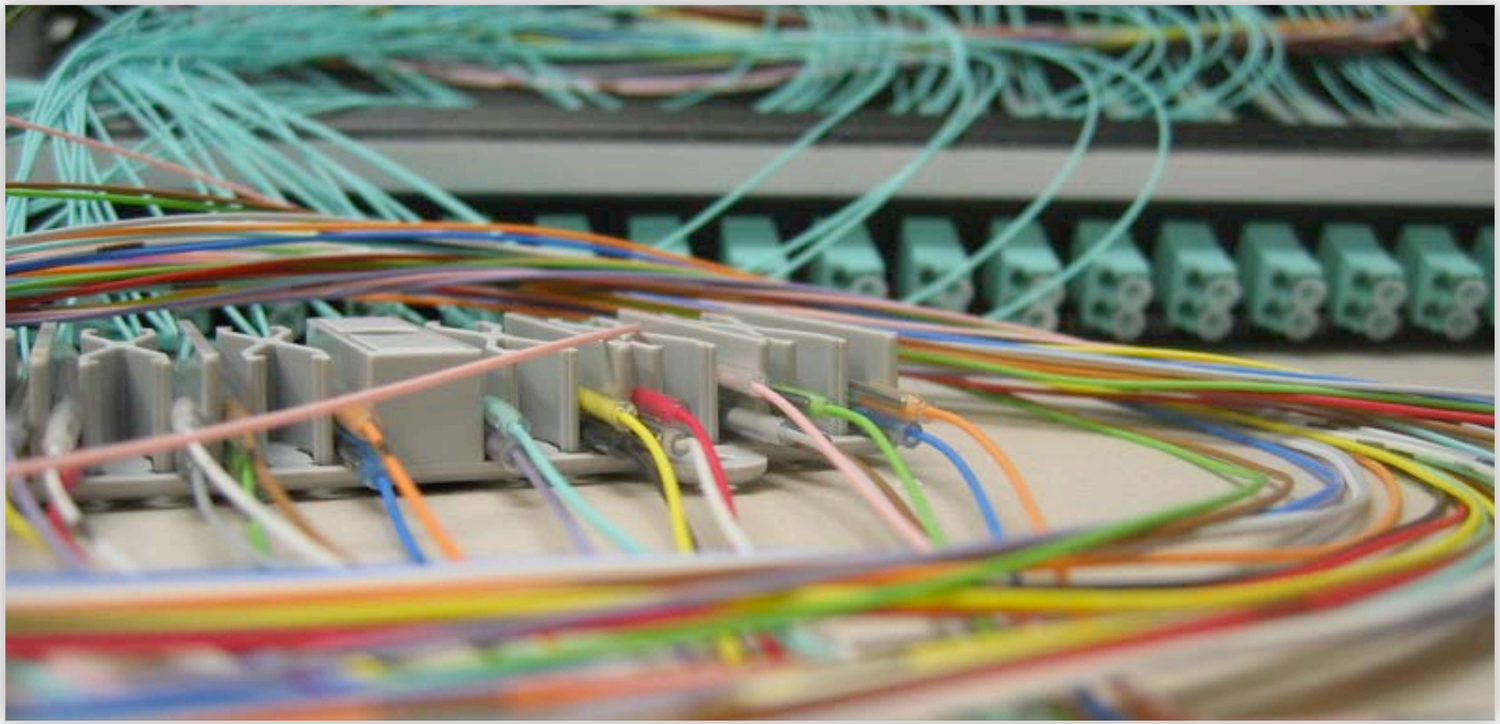
- Oxford's research activity involves more than 70 departments, the colleges, over 1,600 academic staff, more than 3,500 research and research support staff, and over 4,600 graduate research students.

Oxford at a glance

- More than 70 departments.
- 38 colleges and 6 permanent private halls.
- 290 buildings totaling some 530,000 m².

Oxford at a glance

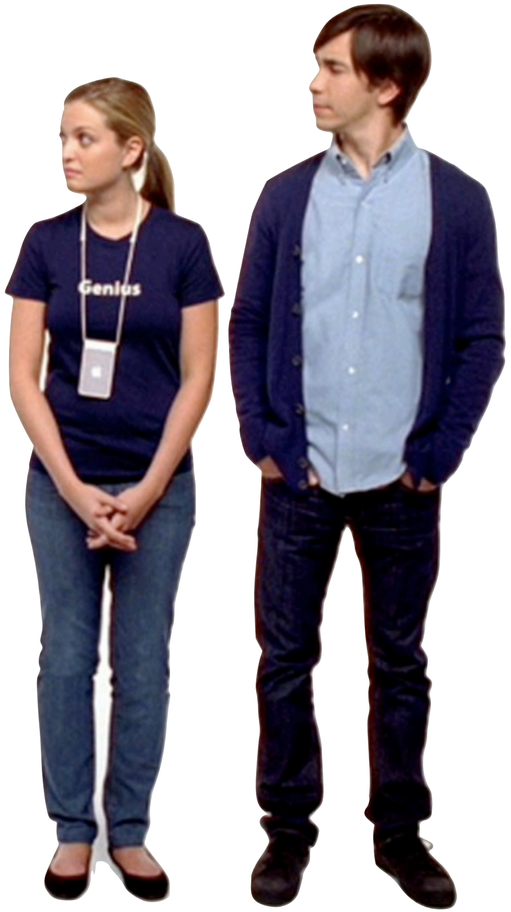
- City spanning campus network. Daily backbone traffic more than 55 TB.
- More 43,500 accounts and over 51,959 user Kerberos principals.
- Weekly backup volume 65.9 million files or 88.3 TB, totalling 1.6 PB



Oxford at a glance

- IT Services provides services from the centre
- Local IT support staff in every department or college
- In total over 660 registered IT support staff

Know Your Enemy



End Users: Students, Researchers, and Administrative Staff

CEO, CIO, and other Senior Management

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Local IT Support Staff and IT Managers

“Focus on the user and all else will follow”

http://www.google.com/about/company/philosophy/

There are only 10 types of Admins ;)

Which kind are you?

Do you grant your users administrative permissions?

User Experience Management

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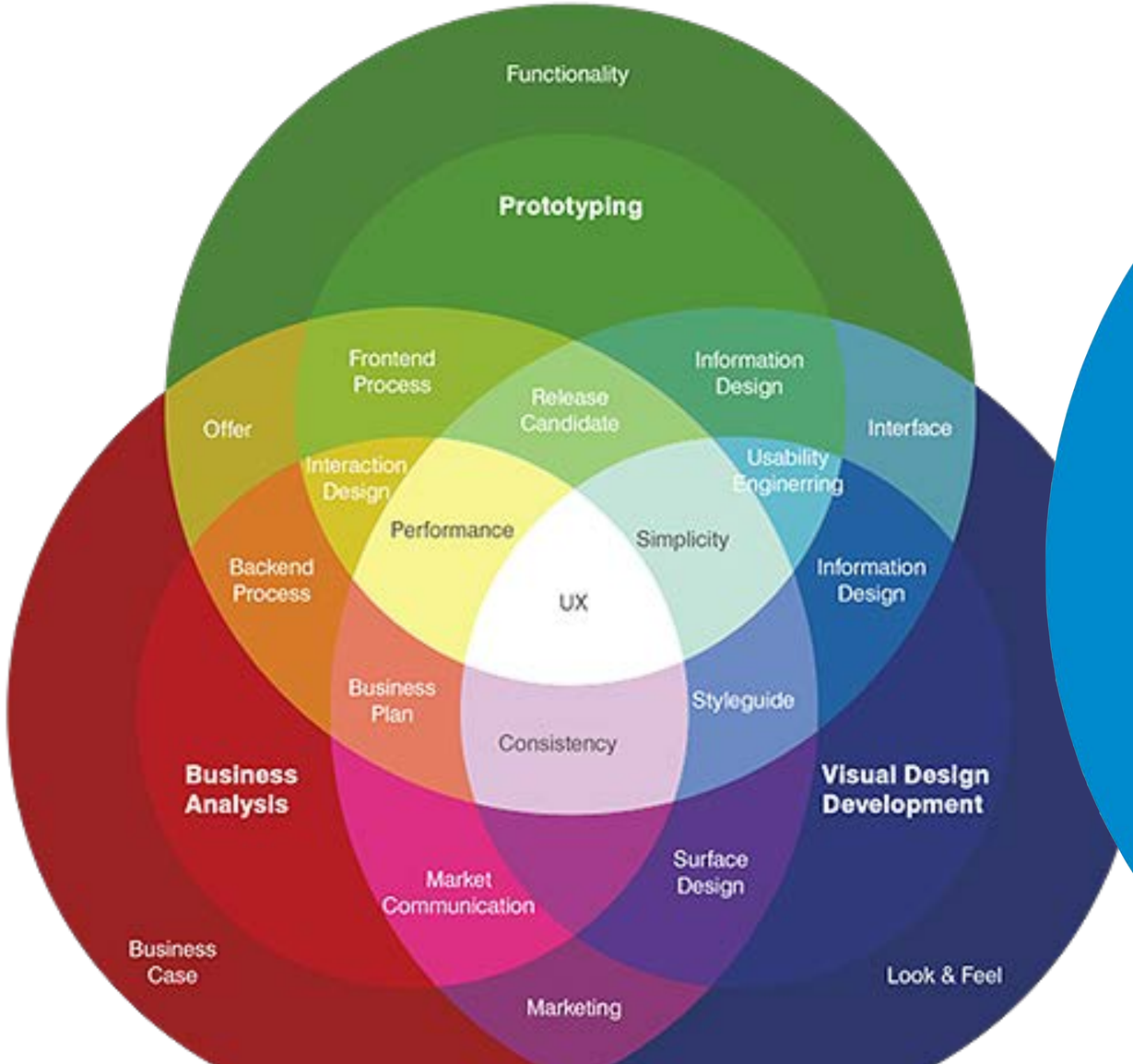
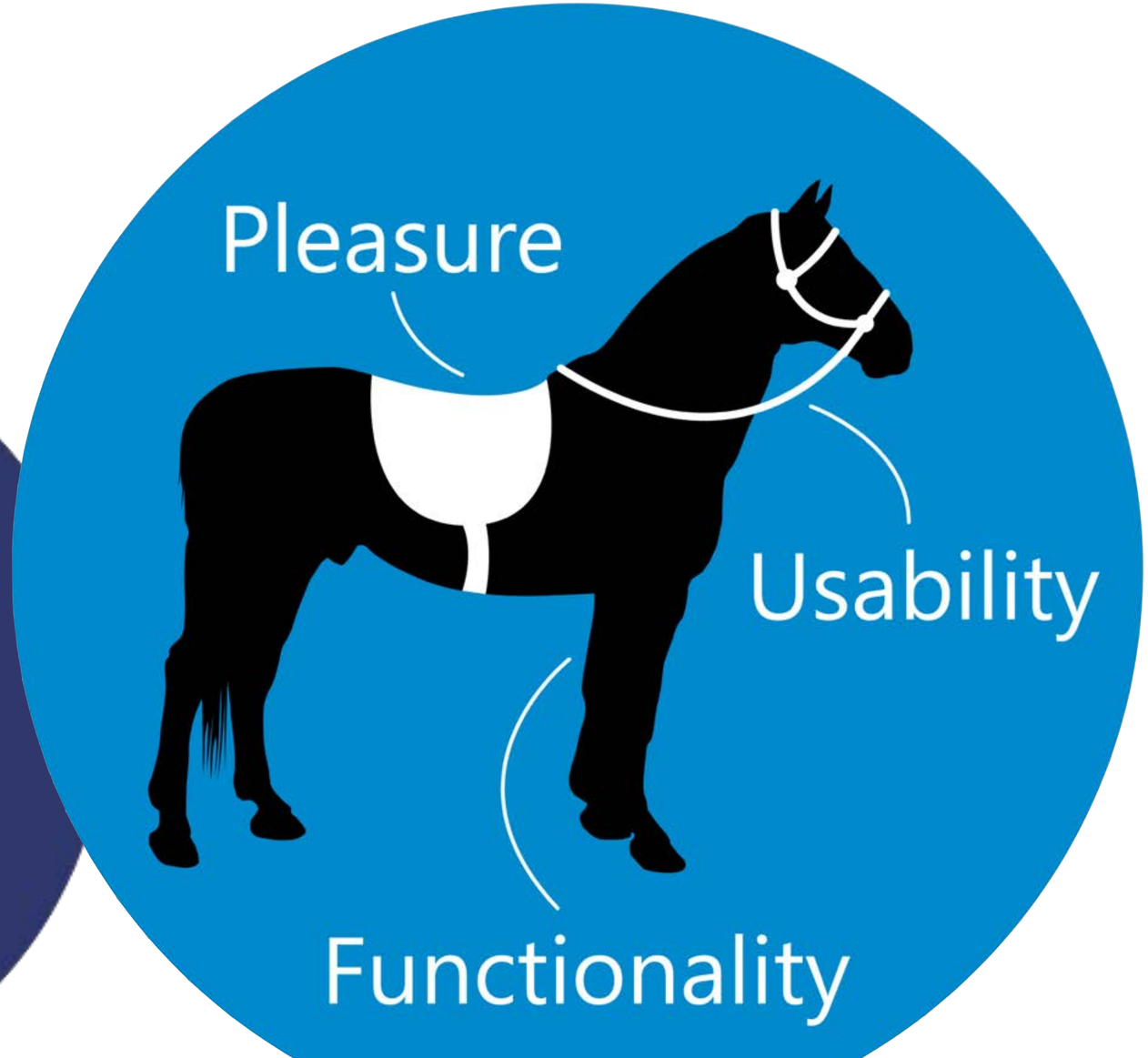




Out of the Box Experience

Light Touch

Light Touch

Mac App Store

Mac App Store Product Usage Rules

Except as otherwise set forth herein,

(i) If you are an *individual acting in your personal capacity*, you may download and use an application from the Mac App Store ("Mac App Store Product") *for personal, non-commercial use* on any Apple-branded products running Mac OS X ("Mac Computer") *that you own or control.*

(ii) If you are a *commercial enterprise or educational institution*, you may download a Mac App Store Product for use by either

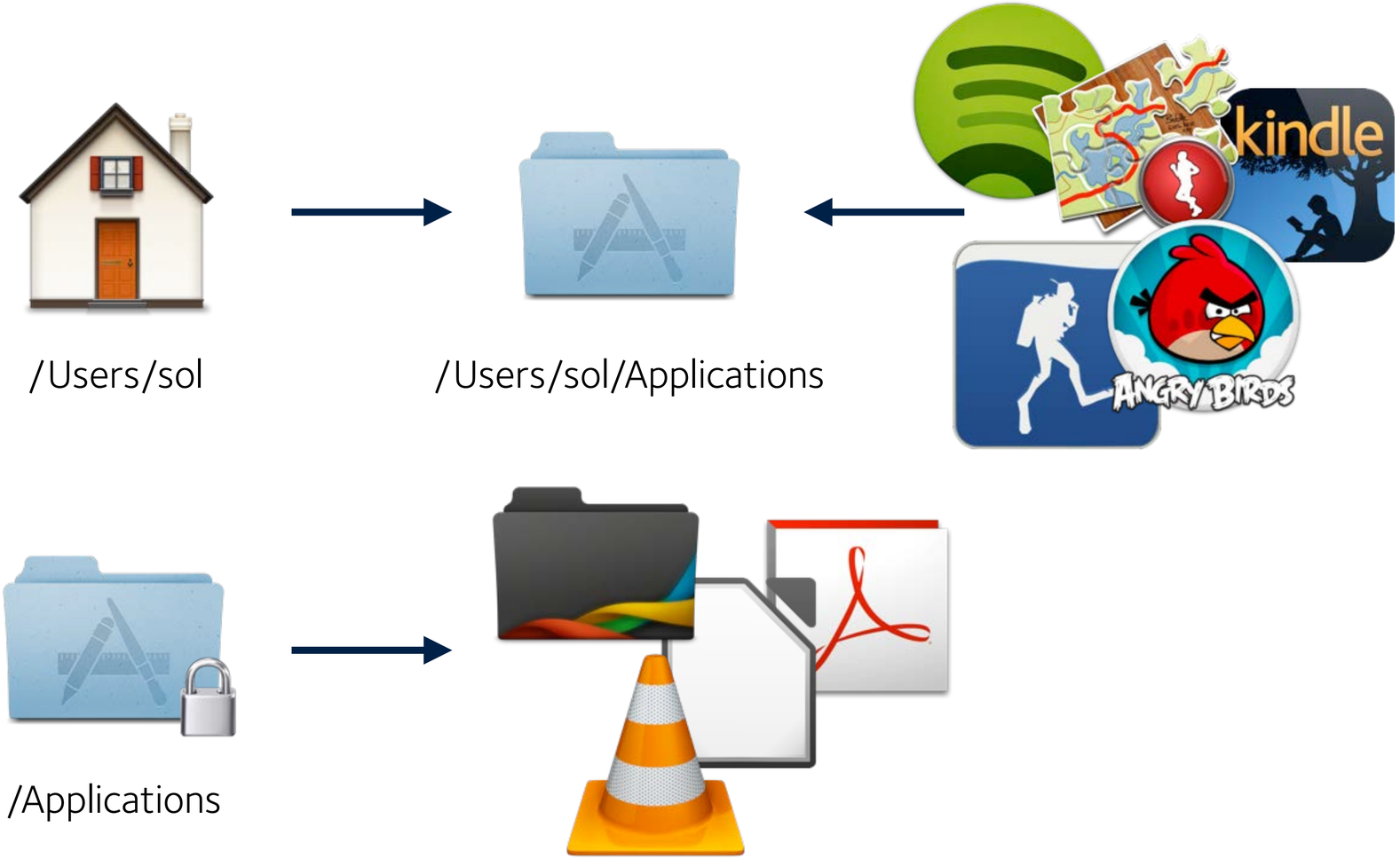
- (a) a *single individual on each of the Mac Computer(s)* used by that individual that you own or control or
- (b) *multiple individuals on a single shared Mac Computer* that you own or control. [...]

Source: http://www.apple.com/legal/internet-services/itunes/us/terms.html

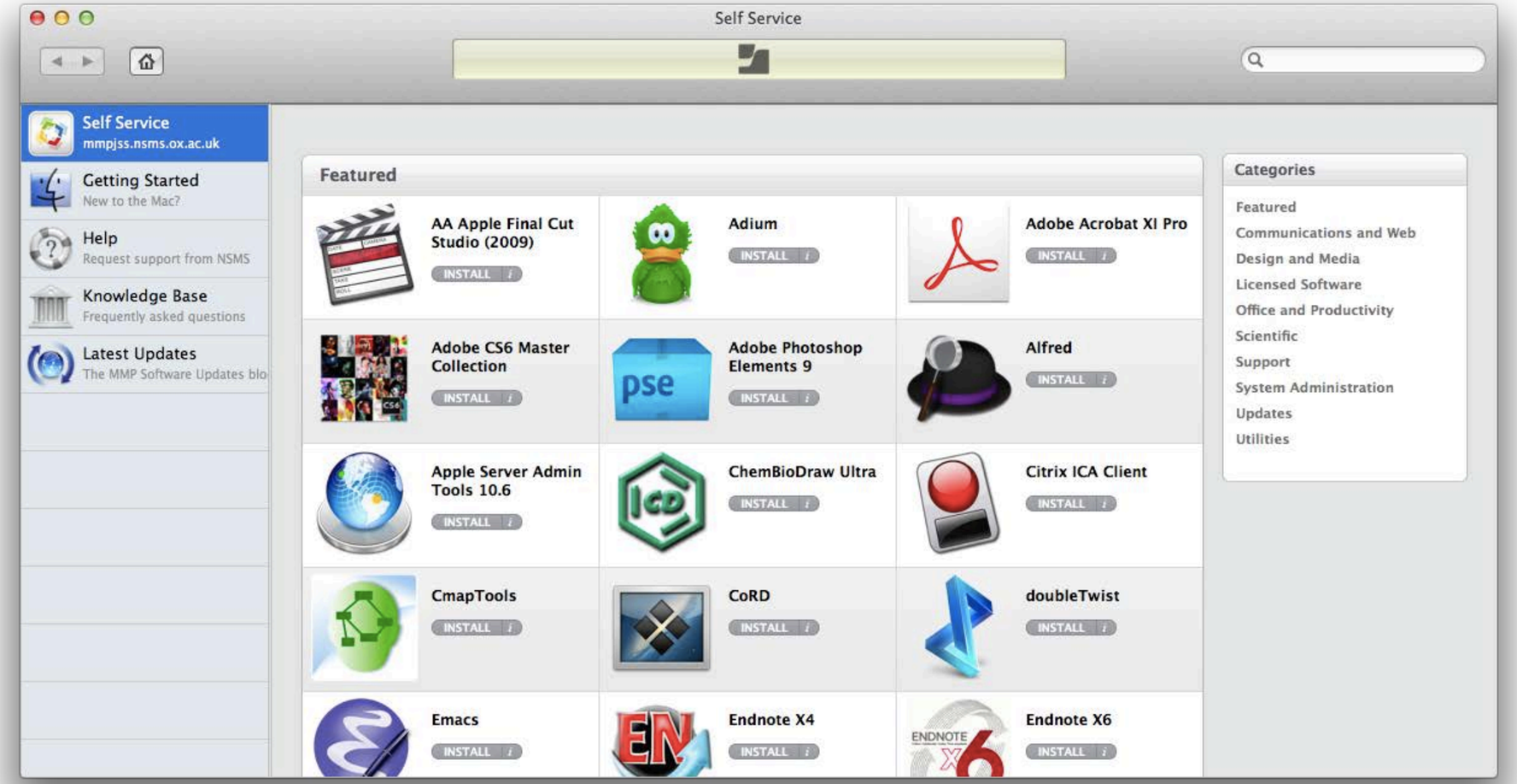
Mac App Store

- *"Why can't I download my personal Apps?"*
  - Educate your users
  - Explain your end-users these rules and license terms
- *"Why can't I open this file?"*
  - Preinstall viewers for the most common data formats
  - Collect requests and define a threshold for deployment of new core software
- *"Why can't I use tool foo it is way better than bar?"*
  - One tool for each purpose agreed with user representatives
  - There is always *~/Applications* for the majority of Apps

Applications



In-House App Store



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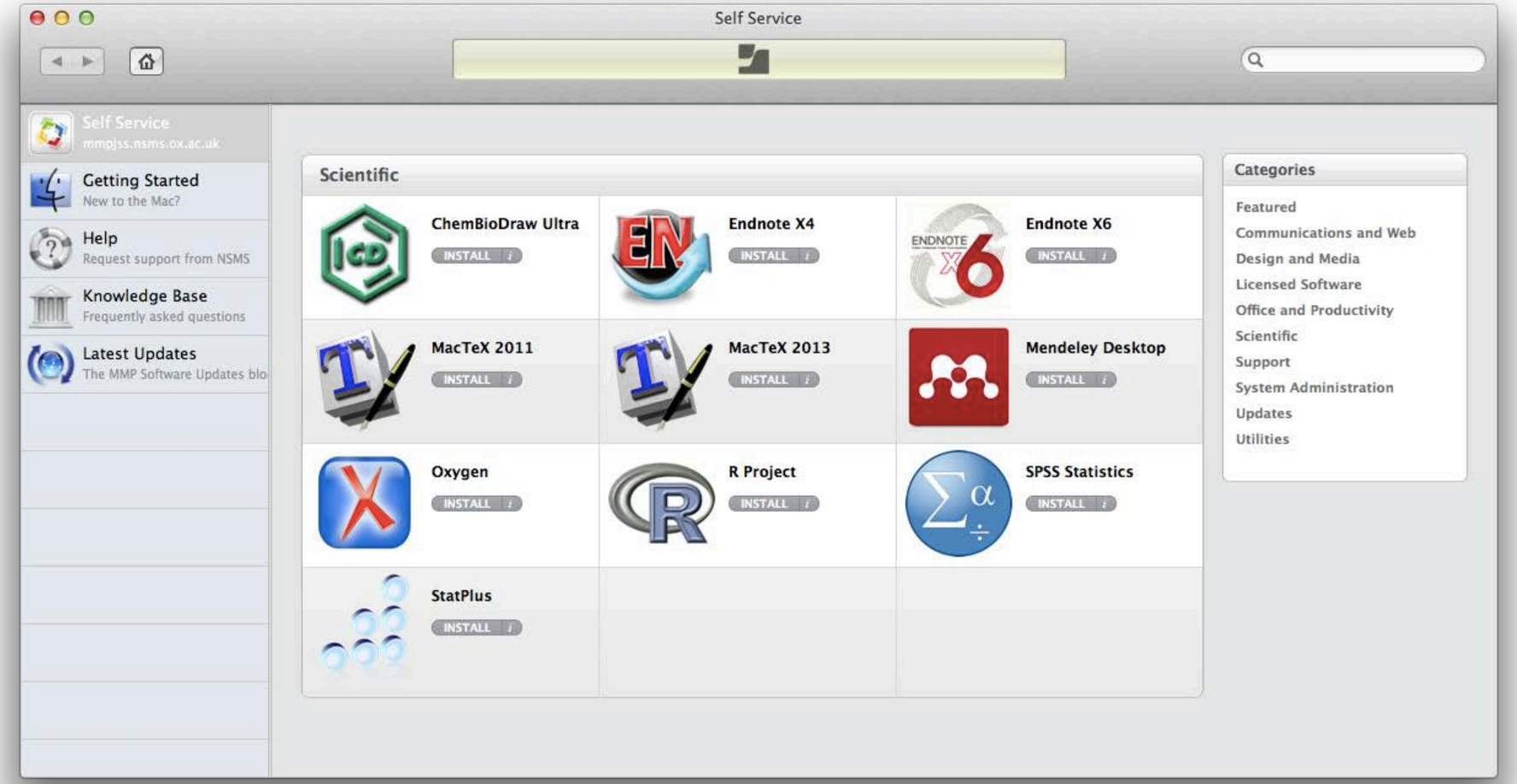

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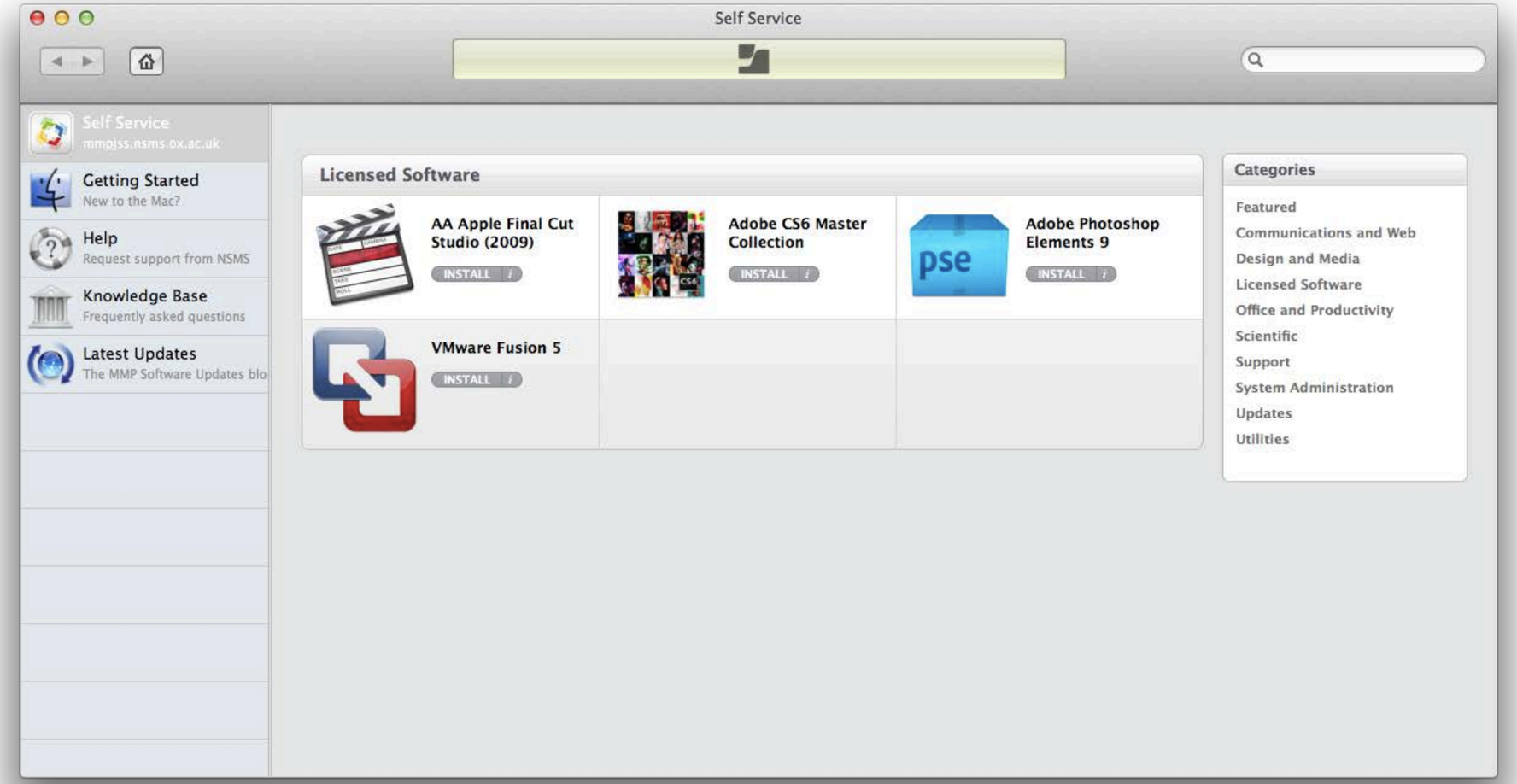
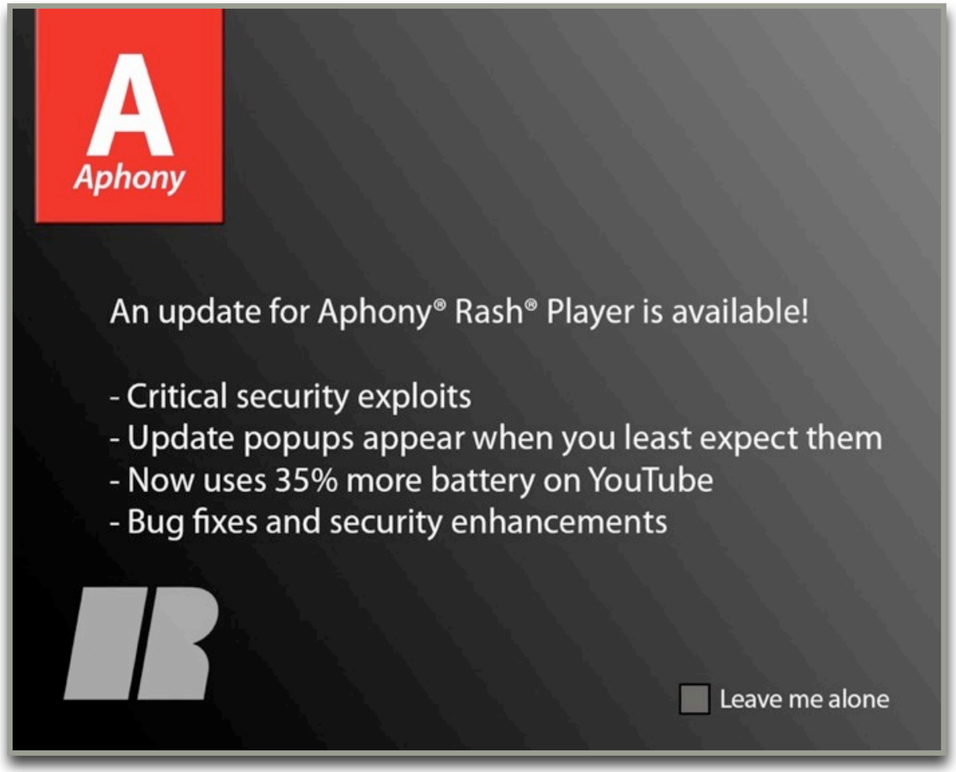


In-House App Store



Dealing with Updates

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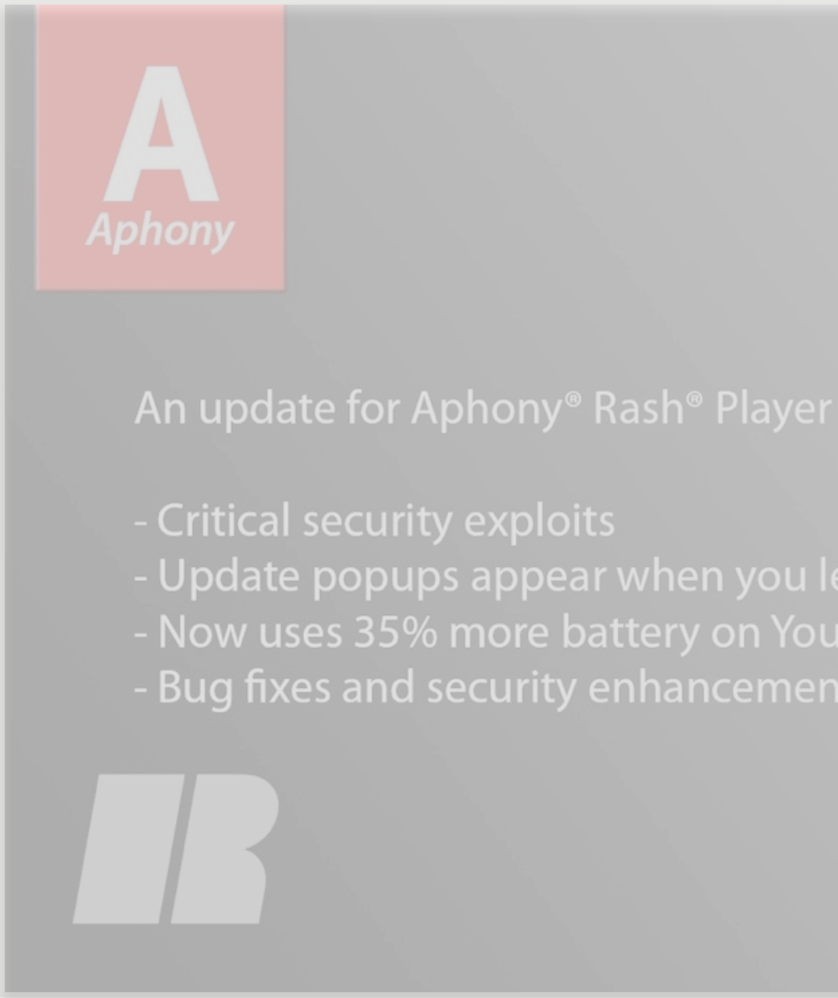
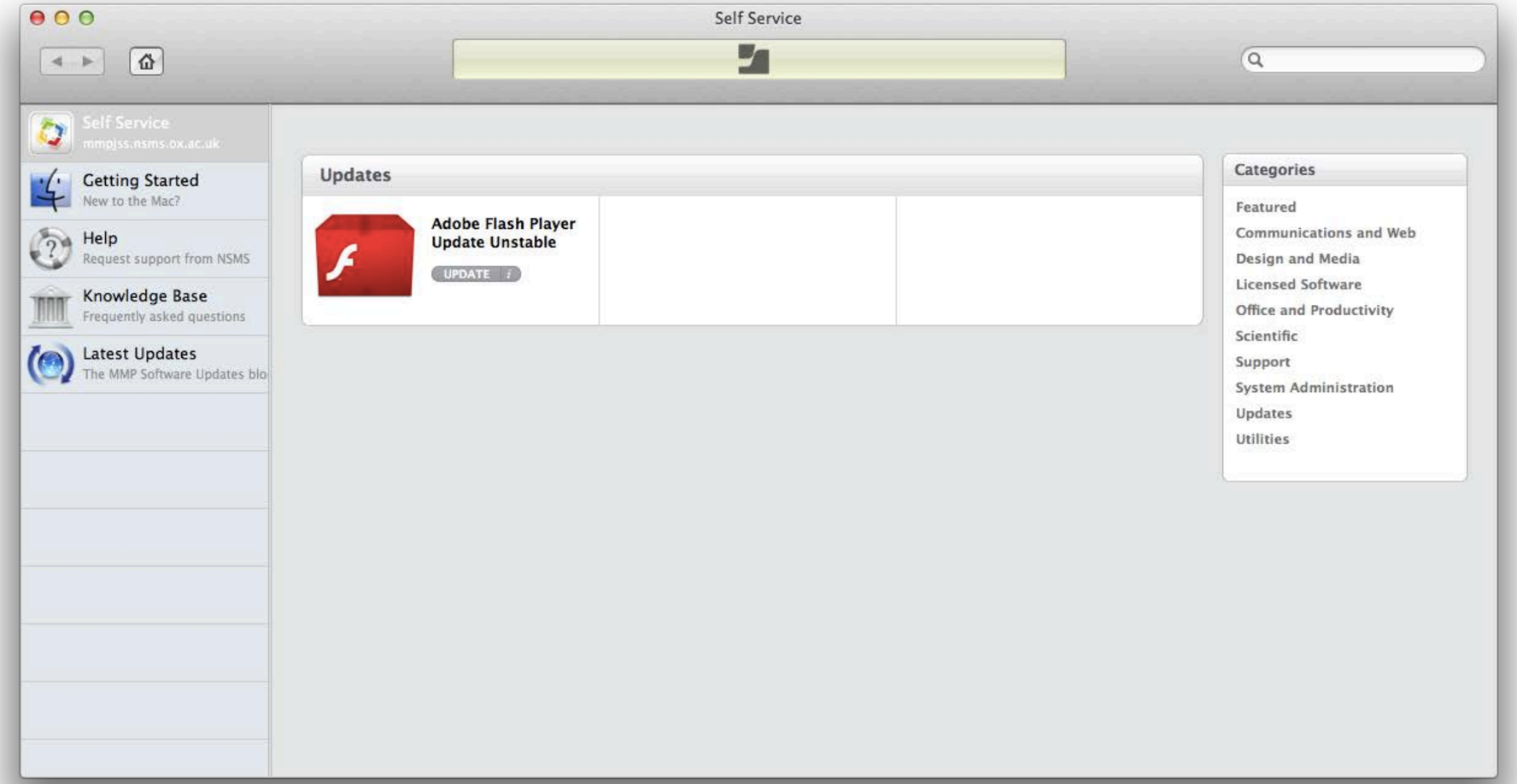
- Define your update cycle
- Facilitate auto-update features
- Suppress update notifications
  - MCX
  - Configuration Profiles
  - Vendor specific (proprietary) settings file
- Remind your suppliers about its importance
- Ensure this gets part of every procurement decision



Even more Self Service



Even more Self Service

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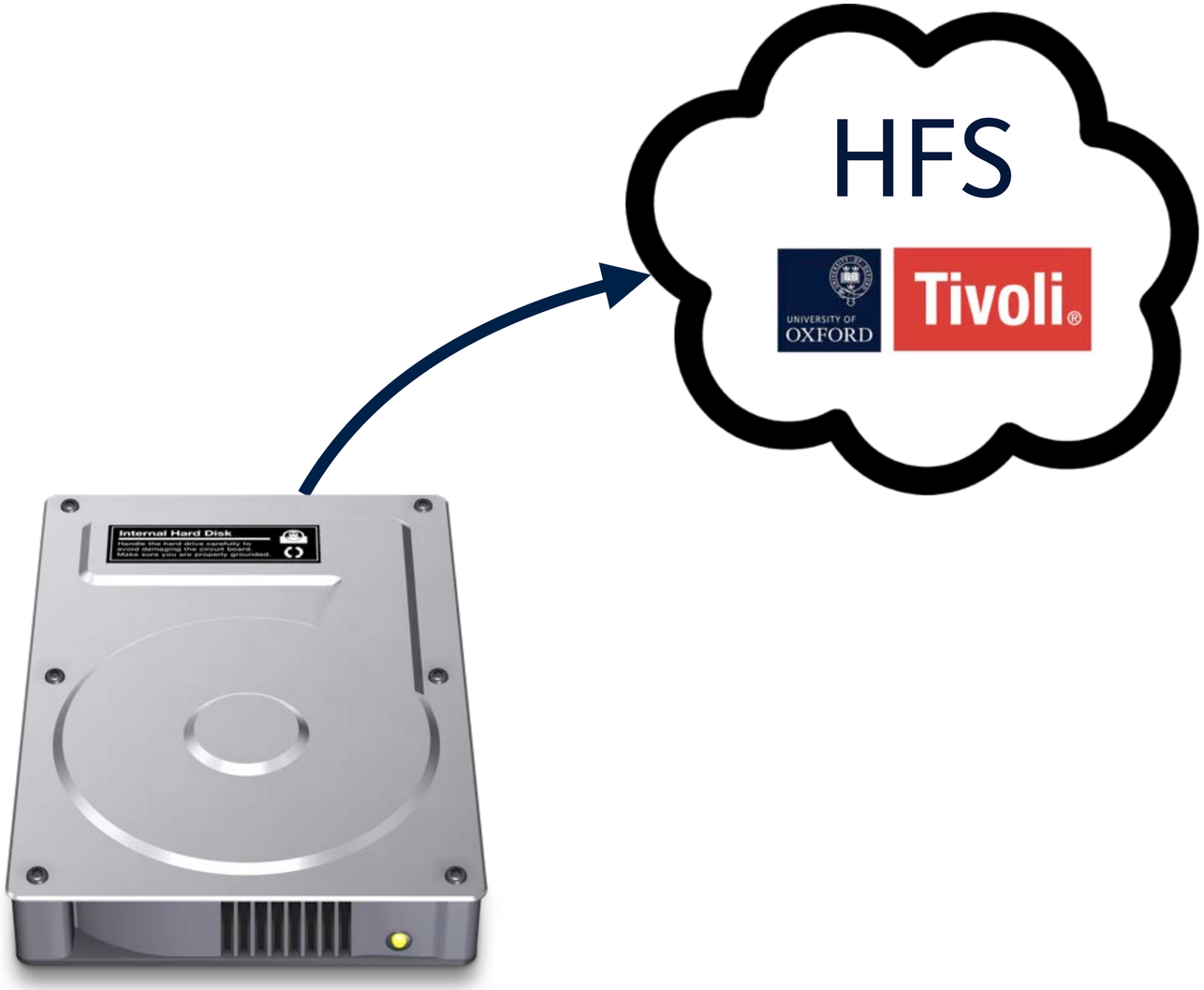
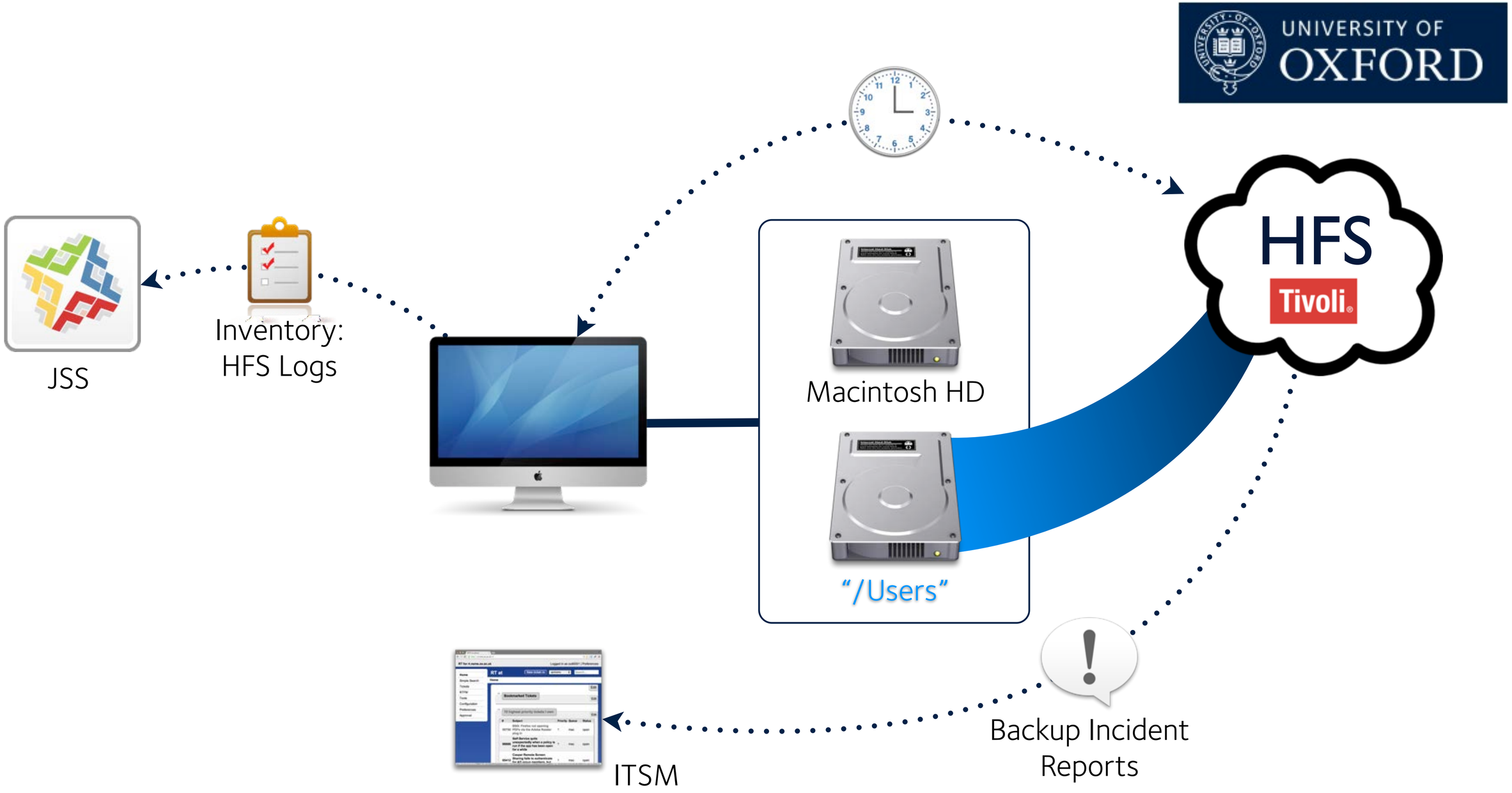
OS X Mavericks

“Only wimps use tape backup”

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JSS
Inventory:
HFS Logs
Macintosh HD
"/Users"
HFS
Tivoli
ITSM
Backup Incident
Reports

Backup Status info

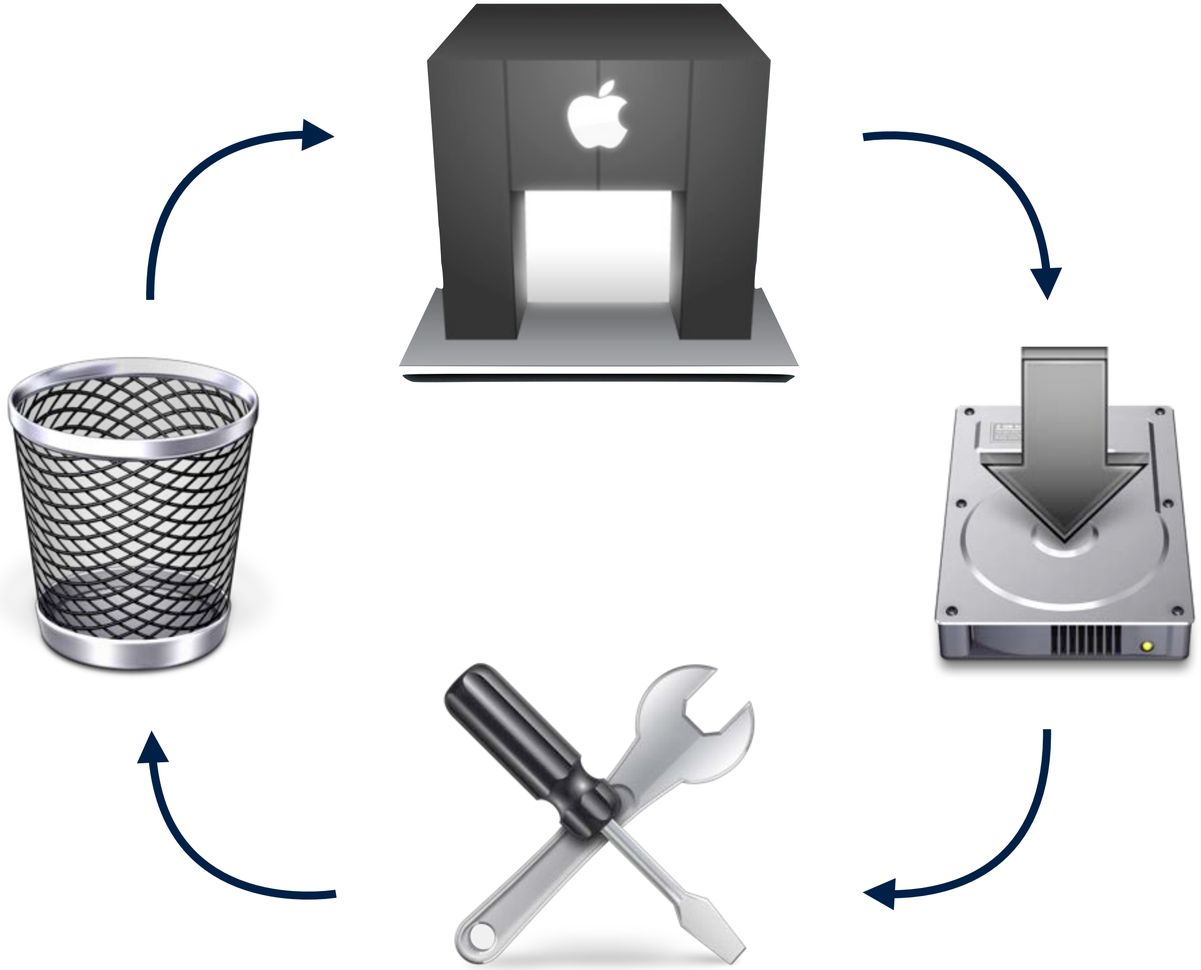
HFS Info: Backup Last Succeeded	HFS Info: Backup Latest Status	HFS Info: Client Version	HFS Info: Scheduler Last Check In	HFS Info: Scheduler Status	HFS: Host Name
Successfully (09-09-2013 23:18:21)	Successfully (09-09-2013 23:18:21)	6.4.0.5	16-09-2013 09:34:01	OK - PID 69	mmp-achilles-bsg
Successfully (16-09-2013 23:48:36)	Successfully (16-09-2013 23:48:36)	6.4.0.5	17-09-2013 11:48:38	OK - PID 17582	mmp-bsgagamemnon-bsg
Successfully (16-09-2013 19:49:22)	Successfully (16-09-2013 19:49:22)	6.4.0.5	17-09-2013 07:49:24	OK - PID 2759	mmp-agrippa-bsg
Successfully (09-09-2013 18:45:58)	Successfully (09-09-2013 18:45:58)	6.4.0.5	16-09-2013 07:21:18	OK - PID 108	mmp-bsgantonio-bsg
Successfully (16-09-2013 19:07:04)	Successfully (16-09-2013 19:07:04)	6.4.0.5	16-09-2013 19:07:04	OK - PID 90	mmp-bsgbalthazar-bsg
Successfully (16-09-2013 18:14:49)	Successfully (16-09-2013 18:14:49)	6.4.0.5	16-09-2013 18:14:51	OK - PID 69	mmp-bsgbanquo-bsg
Successfully (02-09-2013 21:53:02)	Successfully (02-09-2013 21:53:02)	6.4.0.5	16-09-2013 14:51:33	OK - PID 2864	mmp-bsgborachio-bsg
Successfully (16-09-2013 19:18:51)	Successfully (16-09-2013 19:18:51)	6.4.0.5	16-09-2013 19:18:51	OK - PID 107	mmp-bsgcaesar-bsg
Successfully (09-09-2013 22:14:40)	Successfully (09-09-2013 22:14:40)	6.4.0.5	16-09-2013 17:49:42	OK - PID 504	mmp-bsgcaliban-bsg
Successfully (09-09-2013 22:25:21)	Successfully (09-09-2013 22:25:21)	6.4.0.5	16-09-2013 10:25:27	OK - PID 71	mmp-bsgcalpurnia-bsg
Successfully (09-09-2013 22:35:21)	Successfully (09-09-2013 22:35:21)	6.4.0.5	16-09-2013 12:37:21	OK - PID 65	mmp-bsgcassandra-bsg
Successfully (09-09-2013 23:03:22)	Successfully (09-09-2013 23:03:22)	6.4.0.5	16-09-2013 12:03:29	OK - PID 7262	mmp-bsgcinna-bsg
Successfully (16-09-2013 21:05:41)	Successfully (16-09-2013 21:05:41)	6.3.0.0	16-09-2013 21:05:42	OK - PID 66	mmp-claudio-bsg

```
#!/bin/bash
# (c) 2013 University of Oxford IT Services
#     source https://github.com/ox-it/mac-scripts

function check_tsm_pid {
  DSMPID=$( launchctl list | \
    awk '/.*\tcom.ibm.tsm.dsmsched/ { \
    if ( $1 == "-" ) print "not running"; \
    else print $1;  }' )
  DSMSTATUS=$( expr "$DSMPID" : '[0-9]*' )
}

check_tsm_pid

if [ $DSMSTATUS -gt 0 ]; then
    RESULT="OK - PID ${DSMPID}"
else
    launchctl unload ...
    launchctl load ...
    check_tsm_pid
    if [ $DSMSTATUS -gt 0 ]; then
        RESULT="OK - PID ${DSMPID} (restarted)"
    else
        RESULT="FAIL - failed restarting"
    fi
fi

echo "<result>${RESULT}</result>"
```

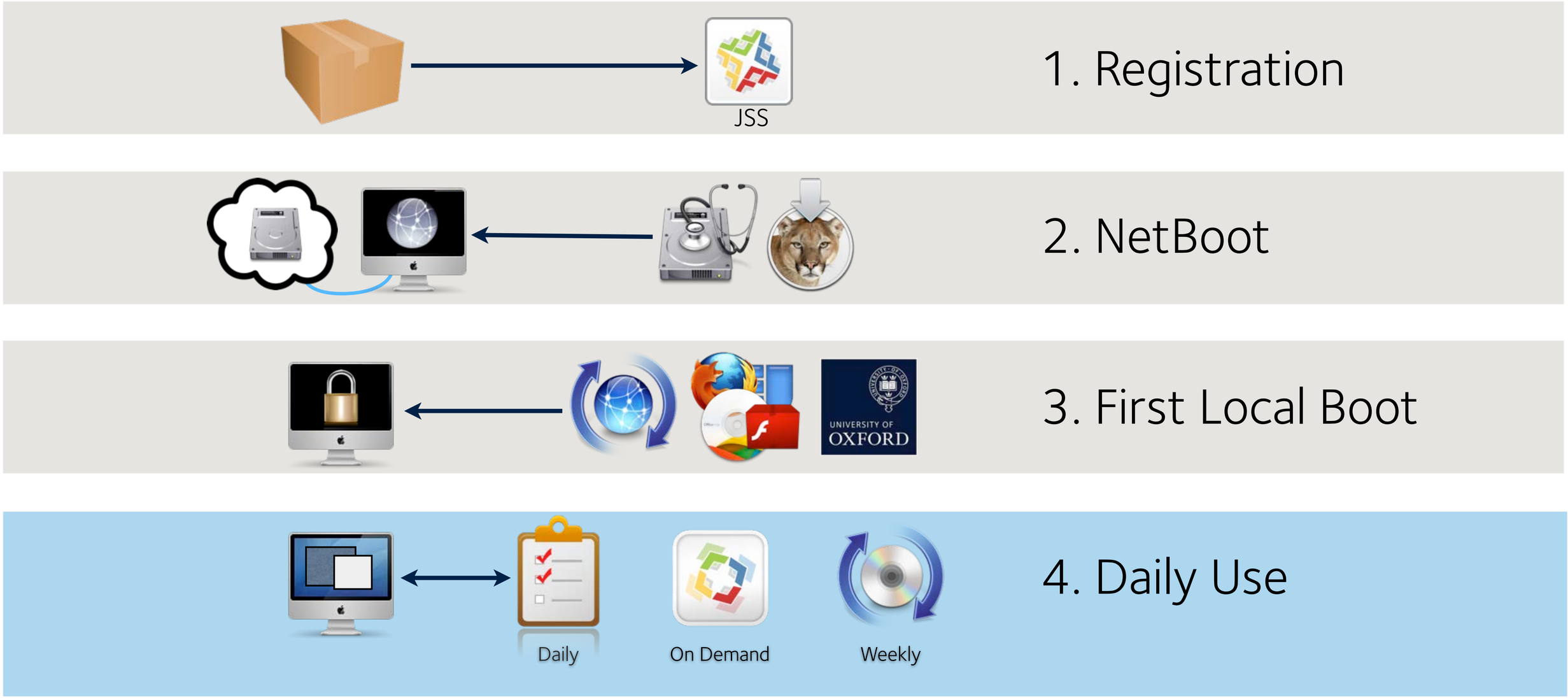
User Experience Summary

How to satisfy the IT Crowd?

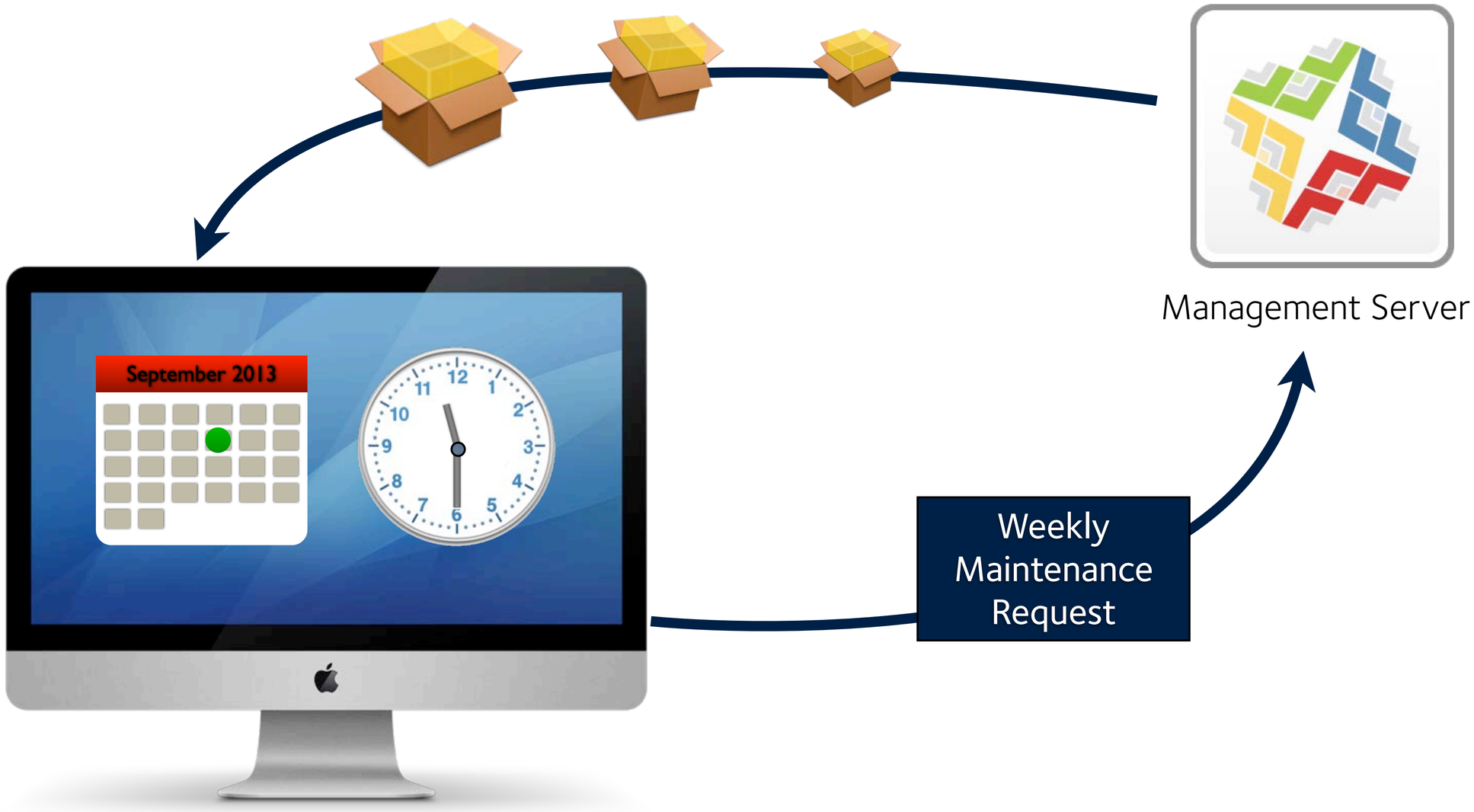
Whole Lifecycle Management

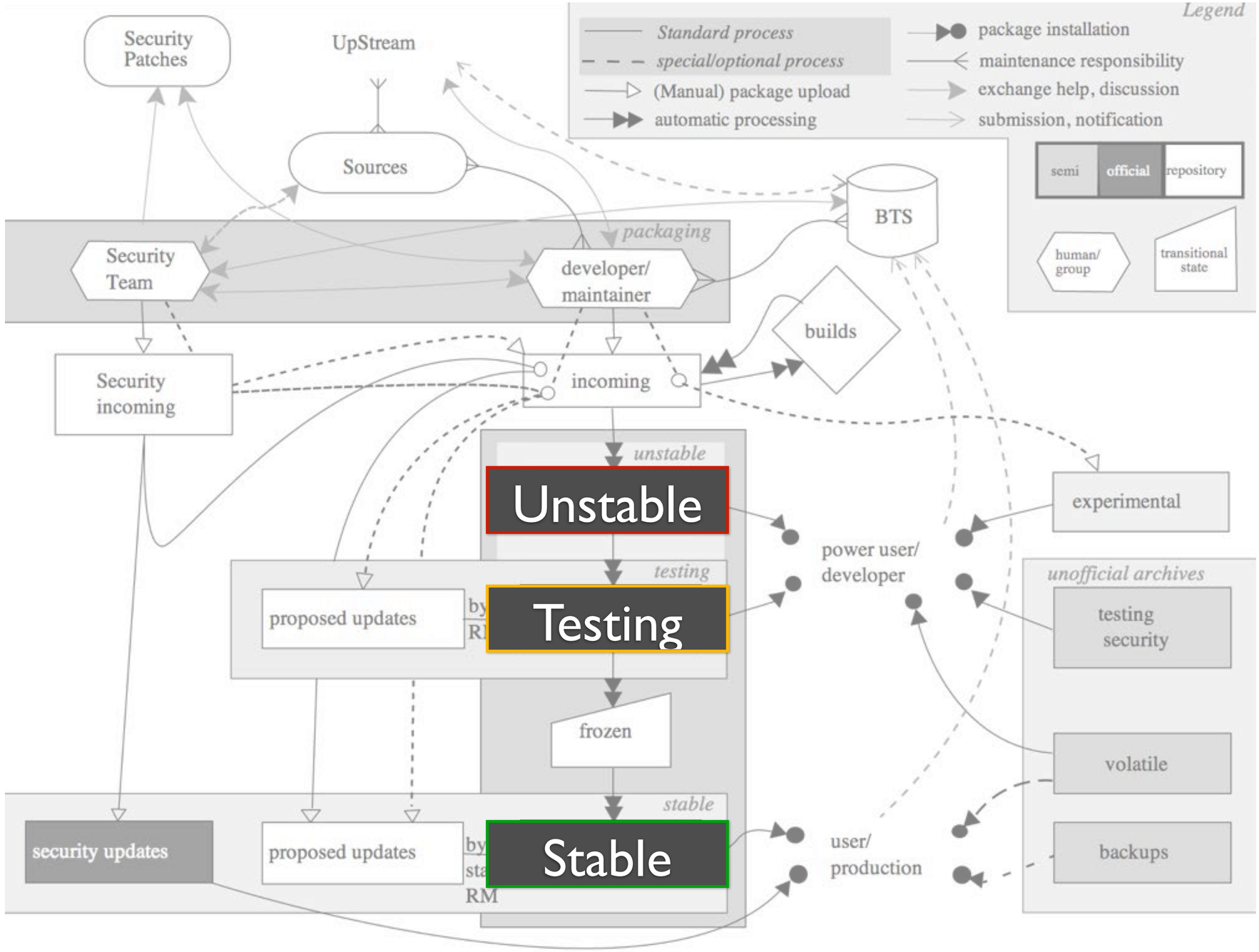


Commissioning



Weekly Maintenance





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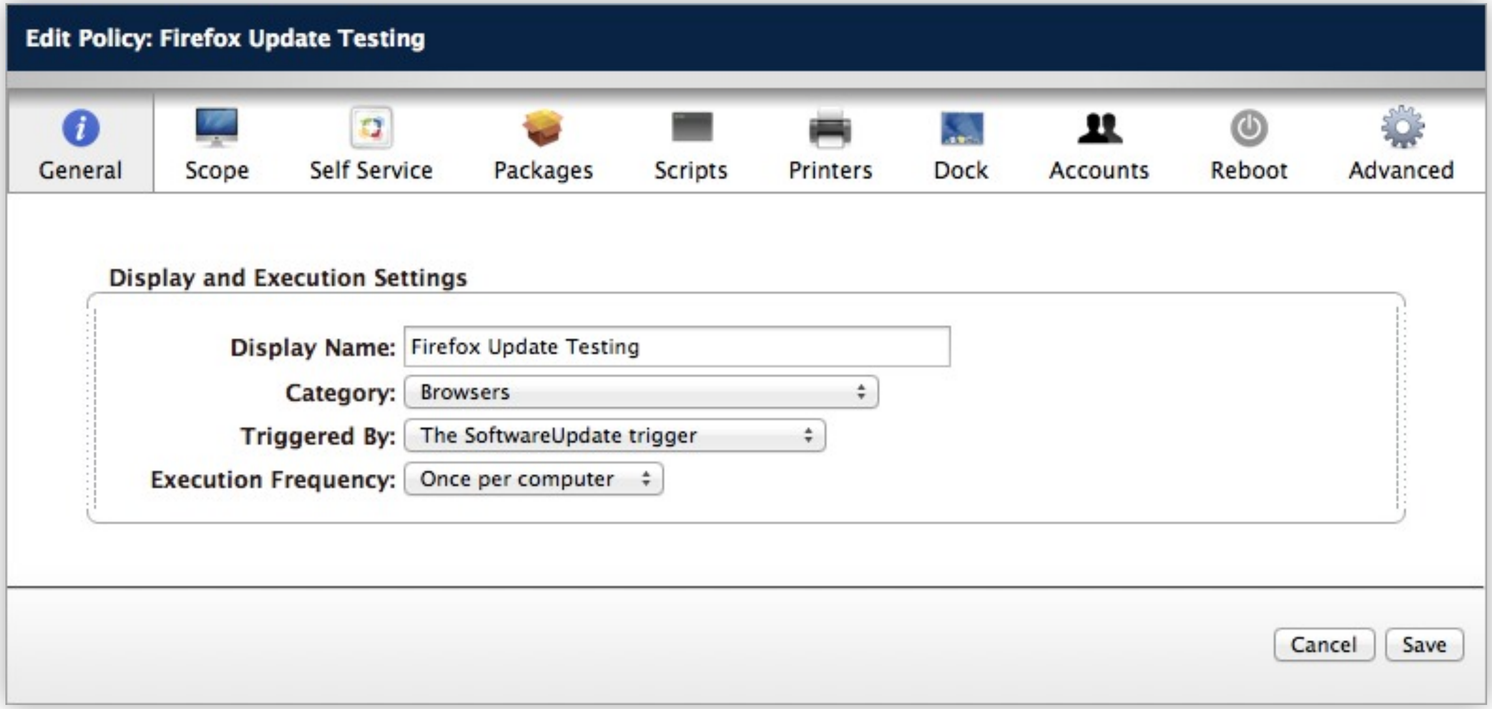
Release channels

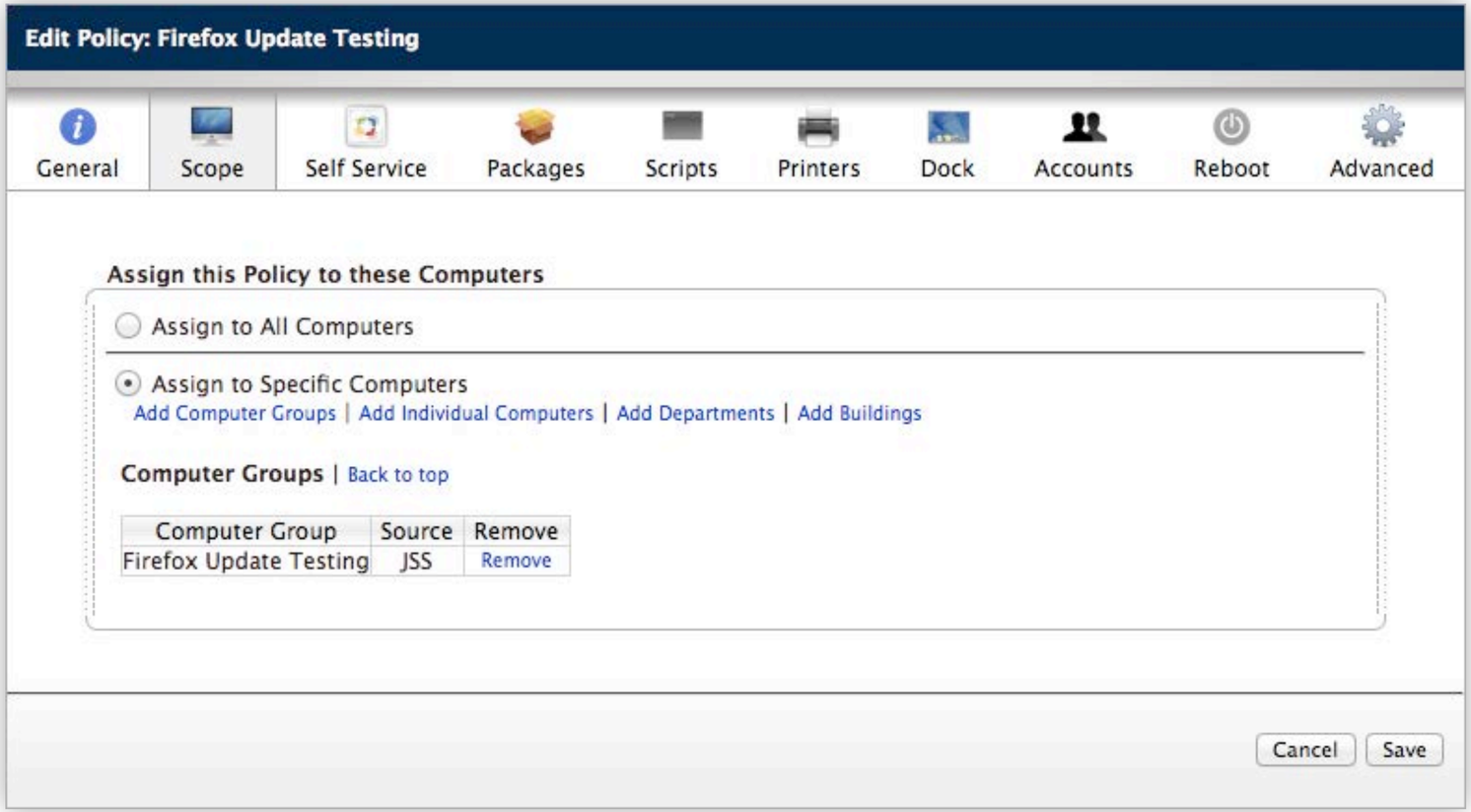
	Unstable	Testing	Stable
Week 1	24.1		24.0
Week 2		24.1	24.0
Week 3	24.2β		24.1
Week 4		24.2β	24.1

Update deployment



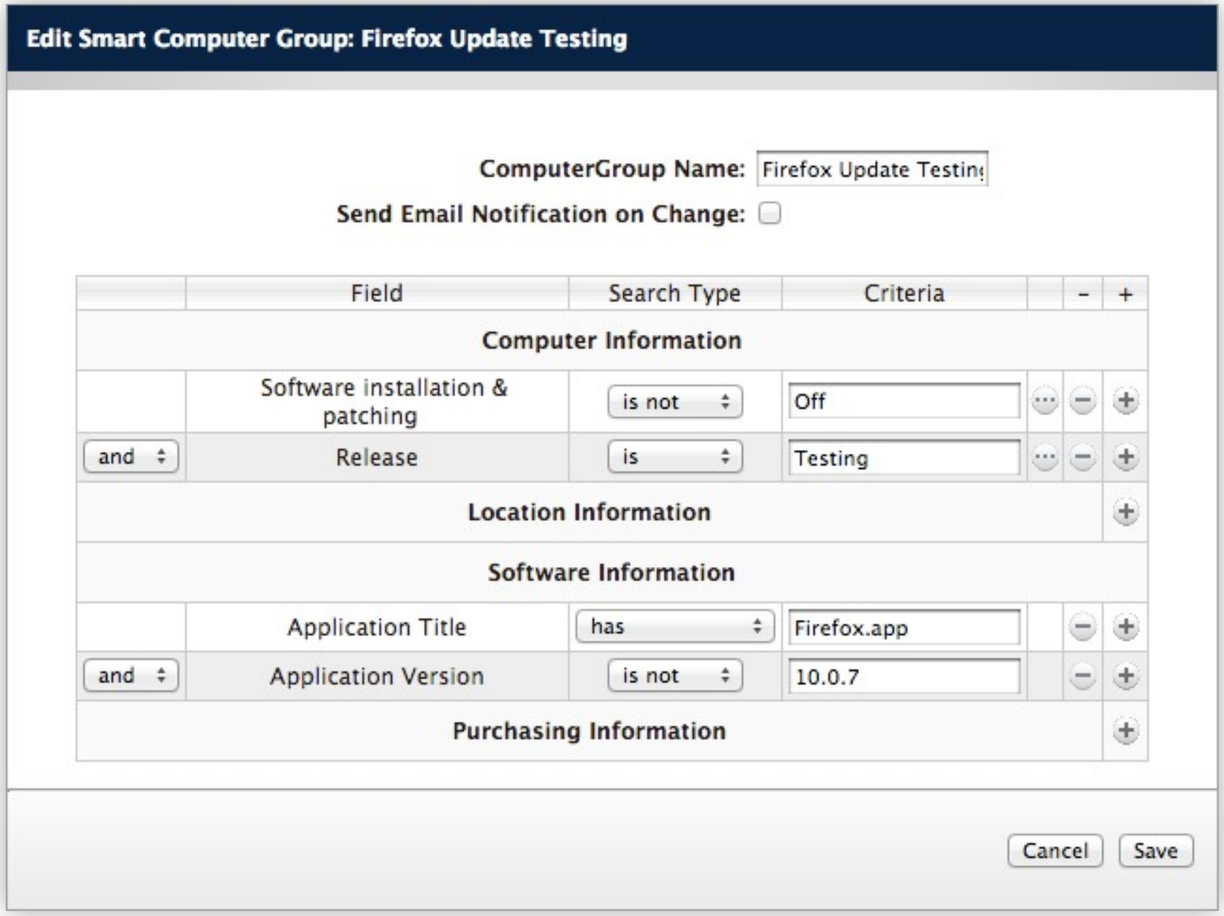
Update policies respond to the SoftwareUpdate action
and are also set to run once per computer.

Update deployment



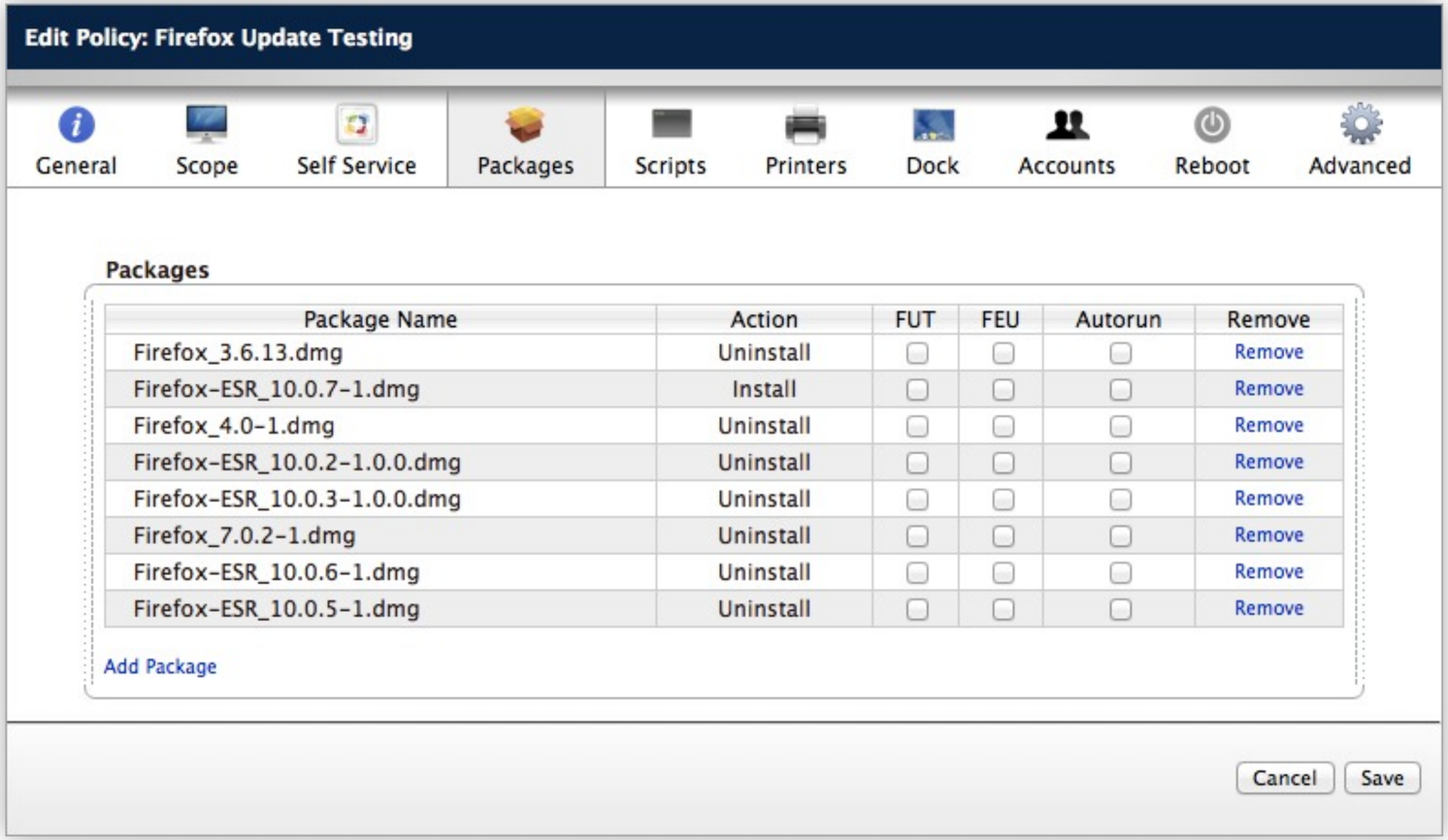
For each software title there is a SmartGroup…

Update deployment



...searching for all hosts with a previous version of the application deployed.

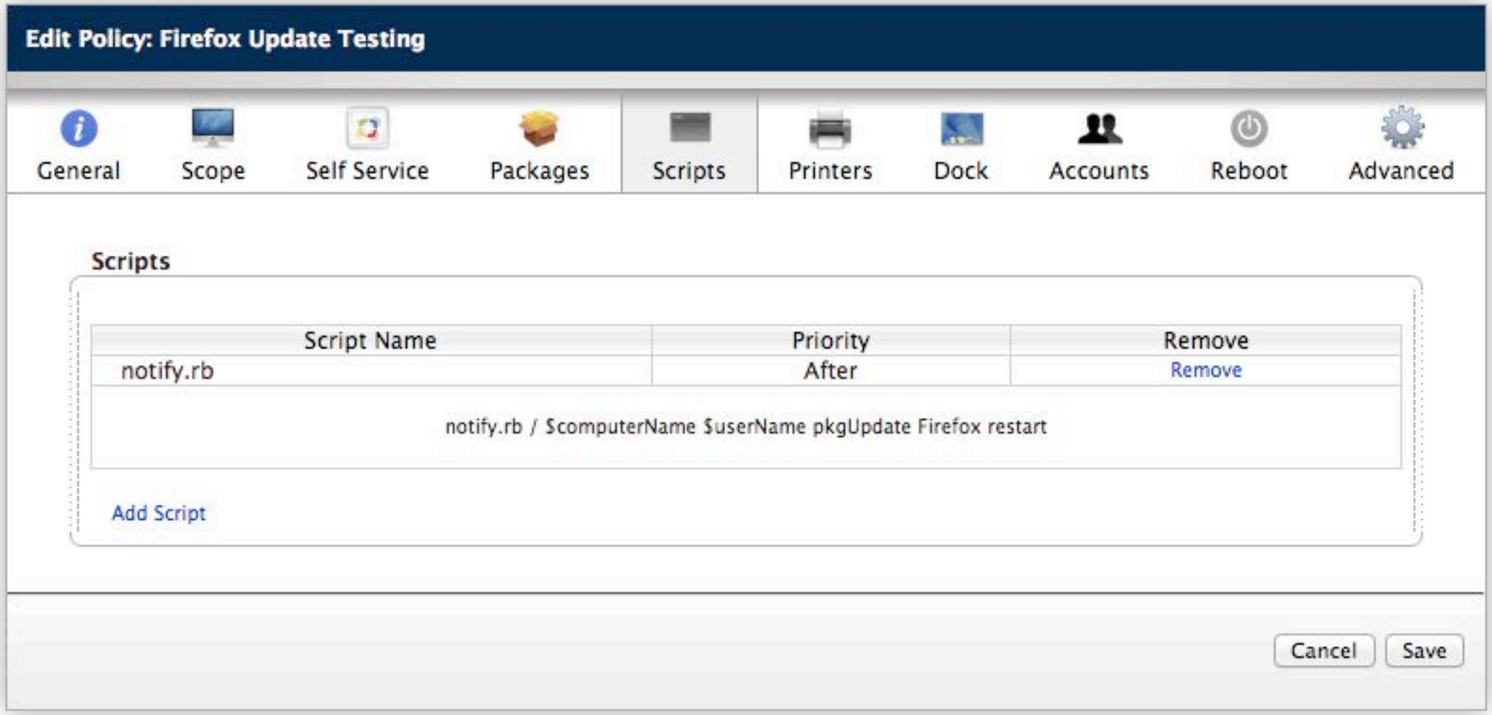
Update deployment



Package Name	Action	FUT	FEU	Autorun	Remove
Firefox_3.6.13.dmg	Uninstall	☐	☐	☐	Remove
Firefox-ESR_10.0.7-1.dmg	Install	☐	☐	☐	Remove
Firefox_4.0-1.dmg	Uninstall	☐	☐	☐	Remove
Firefox-ESR_10.0.2-1.0.0.dmg	Uninstall	☐	☐	☐	Remove
Firefox-ESR_10.0.3-1.0.0.dmg	Uninstall	☐	☐	☐	Remove
Firefox_7.0.2-1.dmg	Uninstall	☐	☐	☐	Remove
Firefox-ESR_10.0.6-1.dmg	Uninstall	☐	☐	☐	Remove
Firefox-ESR_10.0.5-1.dmg	Uninstall	☐	☐	☐	Remove

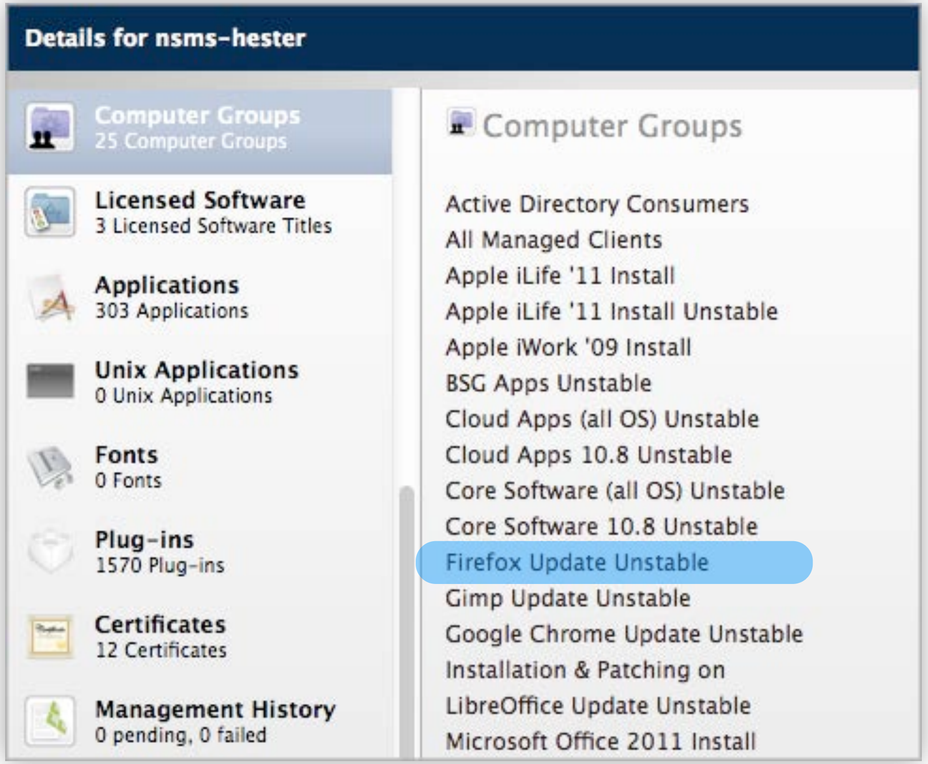
The policy initially tries to remove any previous version before the new package is deployed.

Update deployment



Finally our notification system informs the user
to restart the application.

Update deployment



The computer groups in each host details give a very precise overview of what will be updated during the next update cycle.

Essentials, Plug-ins and Players

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JRE 6 and JRE 7

The Java Browser Plug-in Saga

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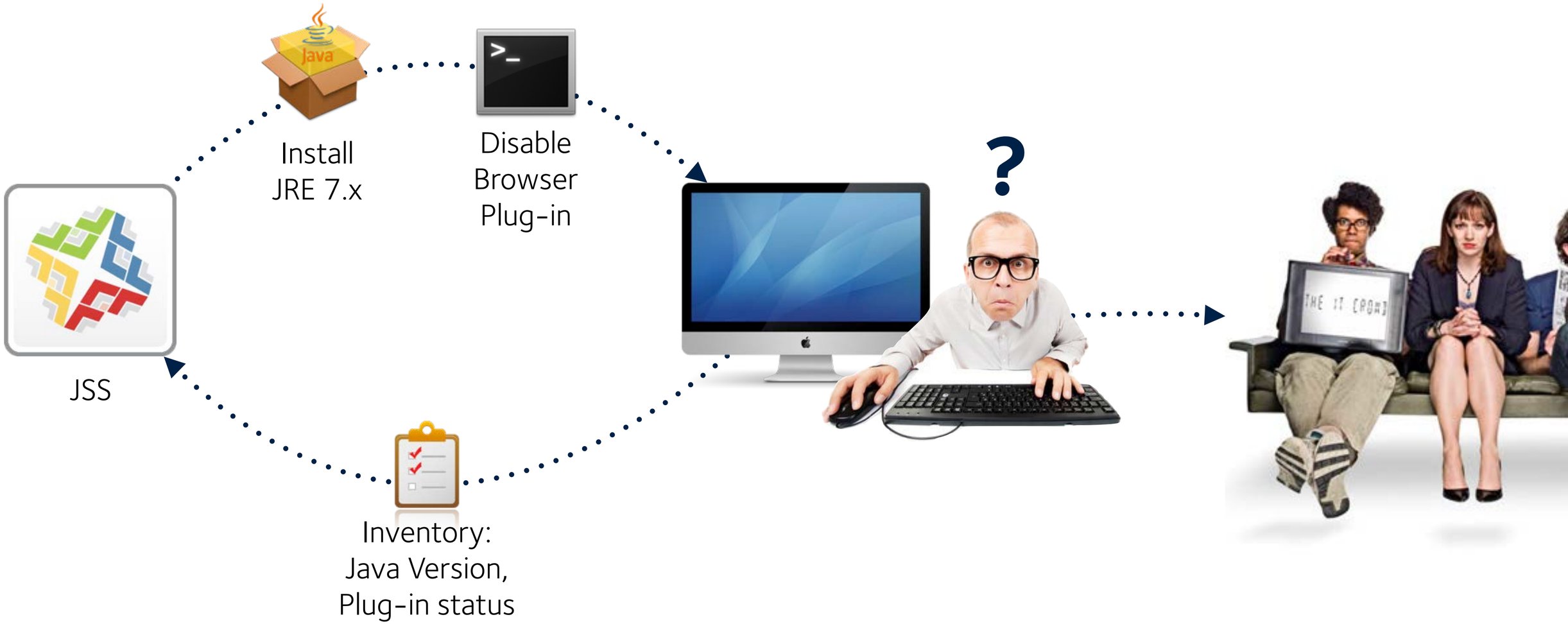
32bit
~~Java 6~~

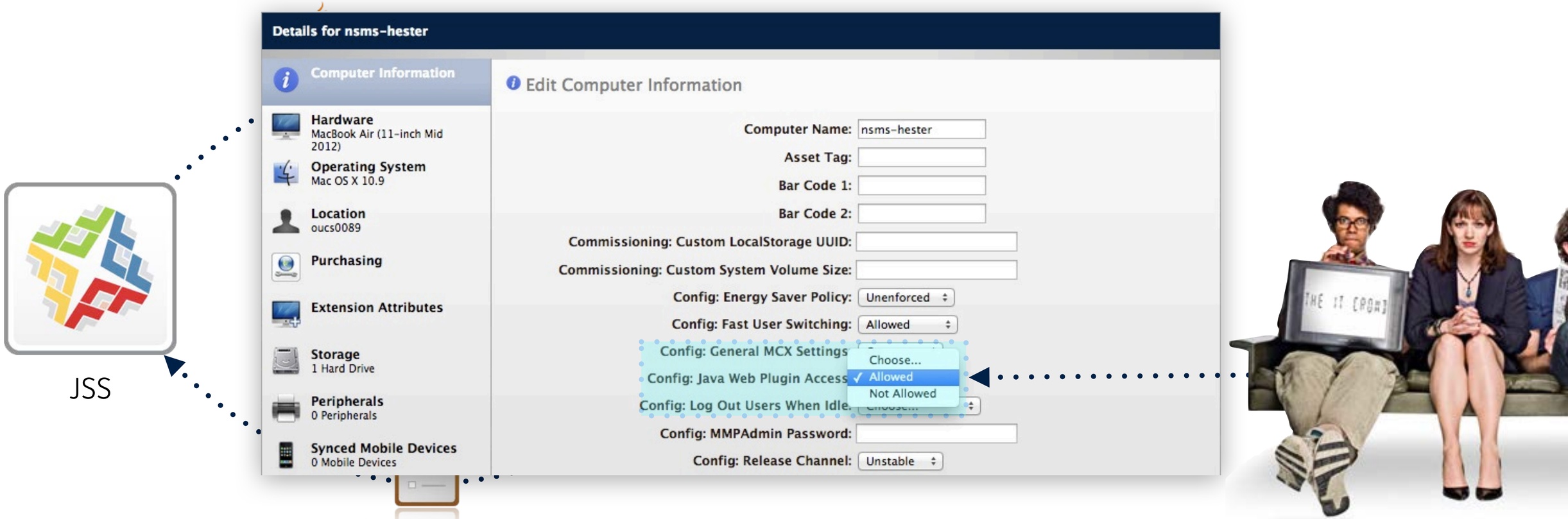
64bit
Java 7

64bit
Java 7

Java 7 Workflow



Java 7 Workflow



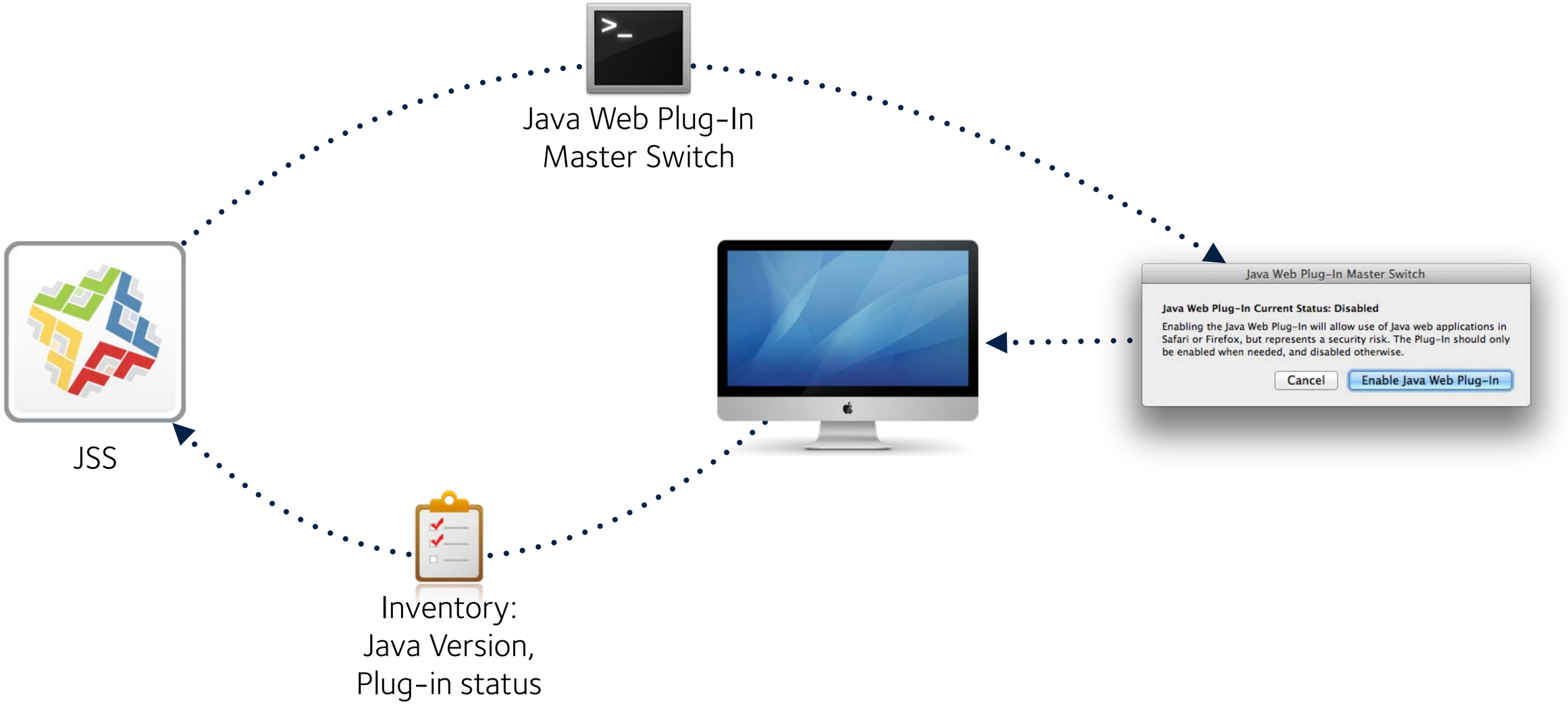
Java 7 Workflow

JSS

Java 7 Workflow

JSS

Java 7 Workflow



IT Staff Experience Summary

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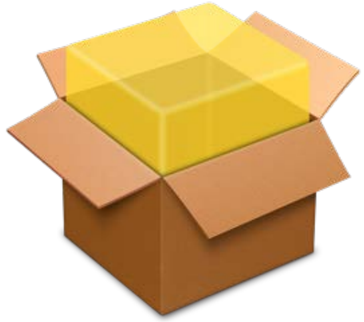
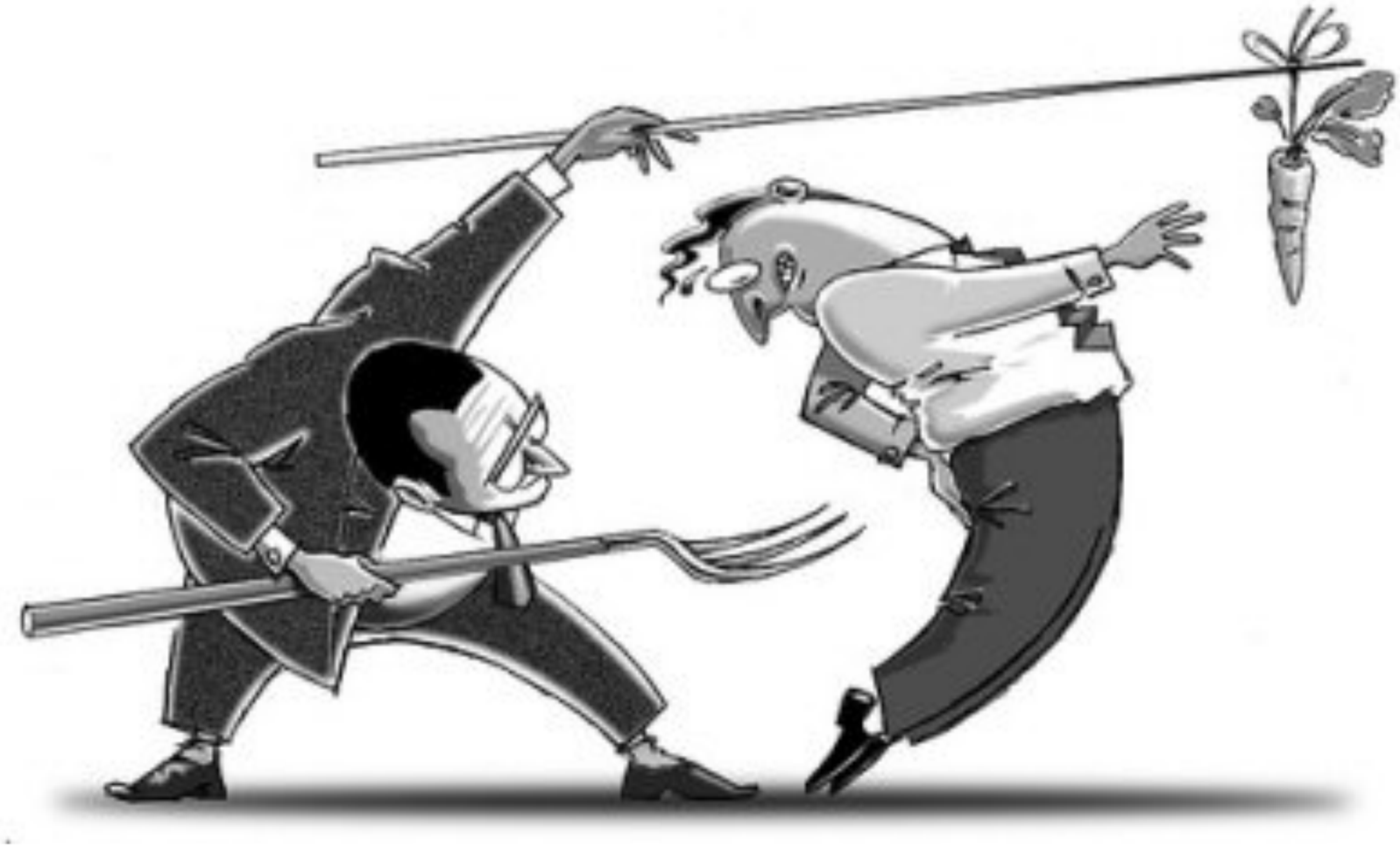


IT Staff Experience Summary

Management Compatibility Checklist

Public Cloud Infrastructure ✓
Bring your own disaster ✓
Enterprise Social Networking ✓
Cyber Security ✓
Gamification ✓

Carrot and a Stick!?!



https://github.com/ox-it/mac-scripts

Thank you!

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Questions?

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