

Fun with Portable Home Directories

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About This Presenter



Jet Propulsion Laboratory 1998 - 2008



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Securities Exchange Commission 2009-Current

Disclosure...

- Any views or opinions presented in this seminar are solely those of the presenter and do not represent those of Lockheed Martin, the Jet Propulsion Laboratory, Securities and Exchange Commission, Apple, Inc or any other place I've hung my hat or worked within the past 25 years.

System Admin

Build Developer

End User and IT Trainer

Mac Logistics and Planning Dude

Sr. Level Resolution/Customer Support

Multi-Function Systems Analyst =

Mac Policy/CMQA POC

Security Expert

Scriptor

Deployment Coordinator

Priest, Rabbi, Witch-Doctor



My transition

- JPL - users were admins
- SEC - Mac pilot
 - Casper
 - Portable Homes

Why Portable Homes?

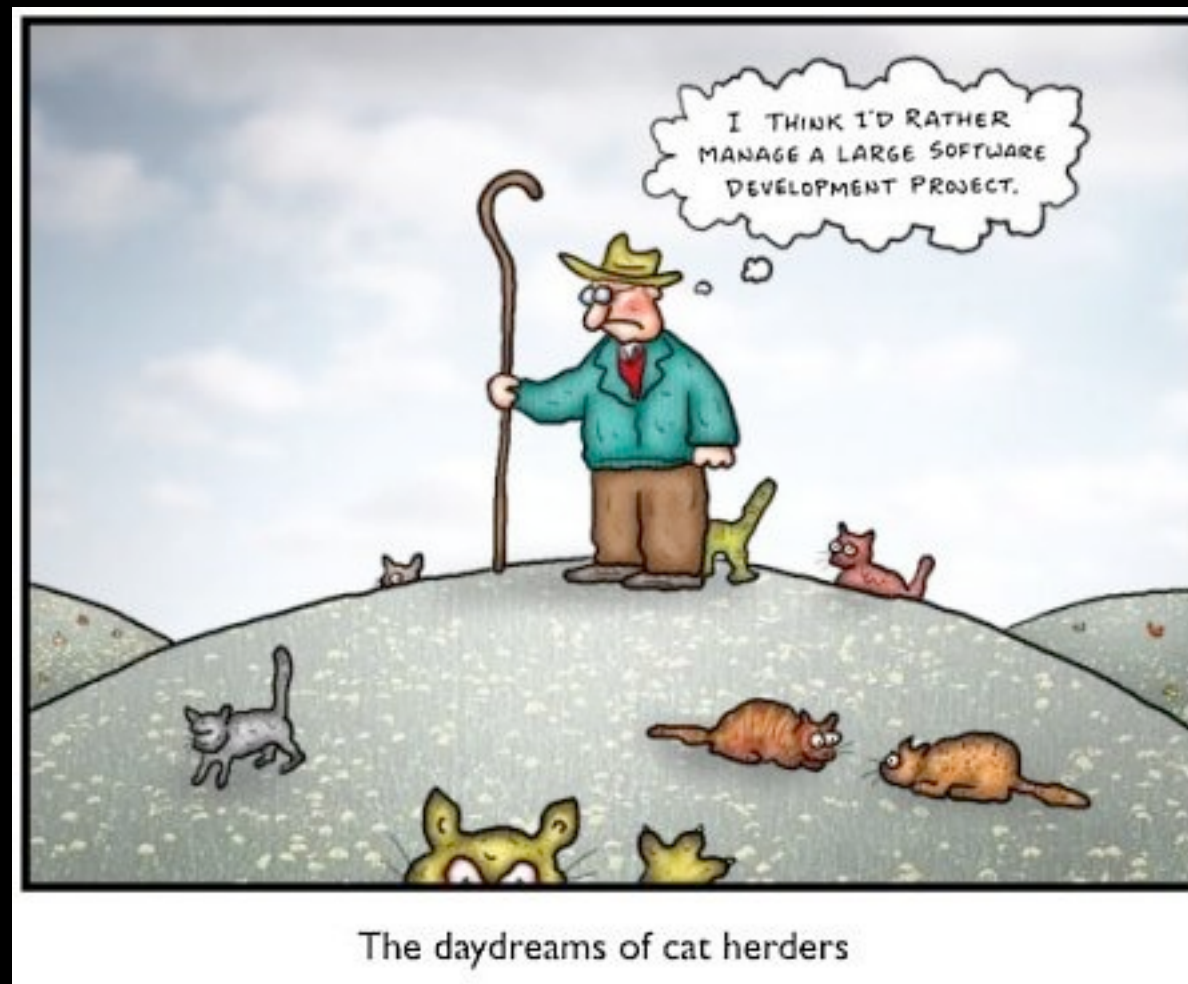
- Theoretically, they are great
 - Users are backed up
 - They can be restored easily in case of hardware failure



Yet....reality

- What issues do we face?
- How do you convince your customers to synch - how long does it take?
- How often is the computer on the network - does it go dormant in AD?
- How about synching users with more than one computer?
- What don't you synch that you might have to recover?

Herding Cats?



if not easy...

- They won't synch...
- They will screen lock...
- Then they will call when they can't log in...

Check the logs...

Enterprise Architecture

- Large enterprise environment - multiple sites around the US
- DFS (distributed file system)
- Exchange 2003
- Lots of custom Legacy applications

Apple Architecture

- AFP servers with promise storage attached at multiple sites
- Promise storage split A:B between user homes and a backup of the same user homes
- Magic Triangle: AD/OD with augmented users
- FileVaulted homes

Preparing User Home

- Add User into Workgroup Manager
- Windows admin points home to one of the xservices
- User logs in creating local home
- Copy over their 'F' drive to the user home on their Mac
- Ideal world: Mac users data on same storage as Windows users (Extreme Z-IP)

Sync what?

- Everything?
- Items that we don't sync....
 - Entourage (MS User Data folder)
 - Parallels VM
 - Music
 - Movies

Entourage Archive

- Testing a process that:
 - Checks the last time archived (runs once a week)
 - Checks to see how much hard drive space you have (don't run > 80% full)
 - Makes sure 'User' is logged in
 - Archives message folders (mbox)

Email Archives

- How do you handle the land of psts?
- How do you back up email?

Recover from crash

- Log in to new hardware if hardware issue
 - Configure email account....

Issue - can't log in

- Dormant in AD
- Gray Screen
- Wants to recreate create Filevaulted home
- Forgotten Password
- Name changed in AD (marriage/divorce)

Fixing split home

- log in as admin
- mv home to /Users/Shared/
- have user log in to create new file vaulted home
- open sparsebundle using the following command

If user knows password

- `sudo hdiutil attach /Users/Shared/
filevaultedhome/
filevaultedhome.sparsebundle`
- `sudo hdiutil attach /Users/Shared/filevaultedhome/filevaultedhome.sparsebundle`

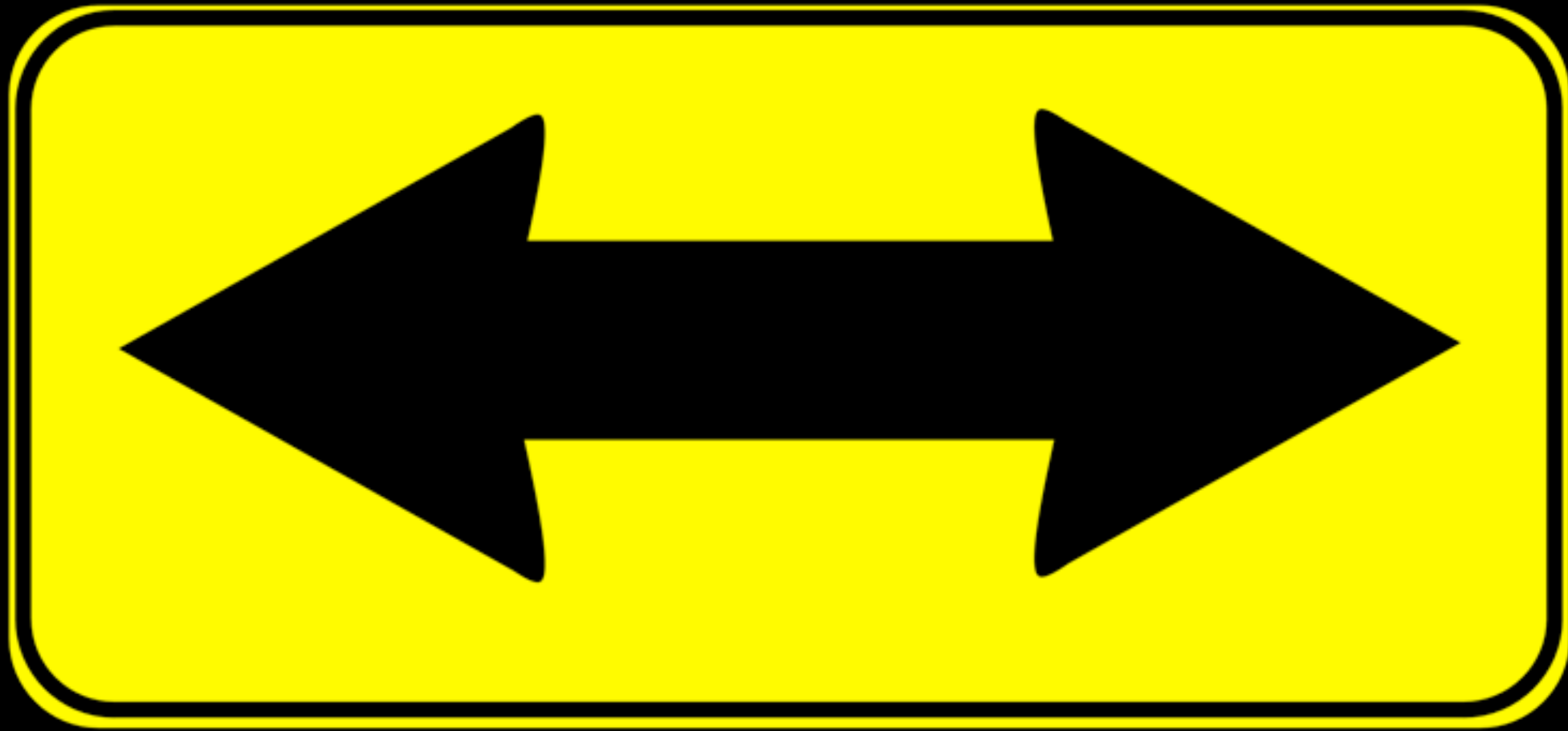
If user doesn't know password

- `sudo hdiutil attach /Users/Shared/filevaultedhome/filevaultedhome.sparsebundle -owners on -recover /Library/Keychains/FileVaultMaster.keychain`
- `sudo hdiutil attach /Users/Shared/filevaultedhome/filevaultedhome.sparsebundle -owners on -recover /Library/Keychains/FileVaultMaster.keychain`

Forgotten Password

- Get a new password
- If user doesn't know the old FileVault password - do the process previously described
- How do handle this issue?

Politics of the Apple environment



Pilot or Production

- What's the difference?



From Pilot to Production

- Does the project have long term funding?
- Does the project have “C” level support?
- Are you shifting away from legacy software?
- Are you moving from a .net world to open standards?
- Is your ticket tracking program Mac friendly?

Security - Data at Rest



- Is FileVault acceptable in your environment?
- Do you use encrypted hard drives?
 - If so, what is your experience?
 - Can you recuperate from an issue with hardware encryption?

Virtual Machines, Citrix, Boot Camp and Wine

- How will they play in the mix?
- Do you back them up?
- How do you restore from hardware failure if not?
- How do you handle security and patching on them?

Other Issues

Legacy Software



Why long synchs?

- Is it the architecture?
- DNS issues?
- Permissions issues on the server?

Home Permissions

- We use augmented homes - permissions should be username:ad\domain\ users
- sometimes they show up as: root:staff
- synchs don't happen

Syncing Issues

- Remove ~/.Filesync on the client and server side home directories and then login to force a re-sync. On the first sync after removing this file you will probably get several conflicts due to identical files. This is to be expected since a re-compare of all the local and server side files is being done.

User Support

- Part of the Mac Project was setting up a Jabber server....
- iChat
 - Text
 - Audio
 - Video
 - Screen Share

Q & A