The MacAdmin Toolchain

Charles Edge

"The English contribution to world cuisine - the chip."
John Cleese

What We'll Cover

- All the things

- Updating systems

- MDM

- OMG packaging

- Scripting

- The future

All The Things

Challenge Questions

Access to source code?

Government compliance?

24x7 support?

Data must be on premises?

Data must be in the cloud?

Data must be in your country?

Scale Appropriately

"The life so short, the crafts so long to learn."
Chaucer

You have a finite amount of resources

Chaucer knew…

An infinite number of options

Scale appropriately

For some, one tool is enough

More machines, more problems

More problems, more logic

The field of Mac management

Setting Up Systems

"What really matters is what you do with what you have."
H.G. Wells

Apple has charted a course for the future of imaging

Until Everyone Has DEP

Save time, get machines in a known state

Monolithic, package-based, thin, no

DeployStudio

http://www.deploystudio.com

Casper Imaging

http://www.jamfsoftware.com/products/casper-suite/
deployment-and-provisioning/

Filewave Lightning

https://www.filewave.com/products/imaging/lightning-thunderbolt

imagr

https://github.com/grahamgilbert/imagr

System Image Utility

https://itunes.apple.com/us/app/os-x-server/id883878097?mt=12

asr

/usr/sbin/asr

Save time, automate image creation

AutoDMG

https://github.com/MagerValp/AutoDMG

createOSXInstallPkg

https://github.com/munki/createOSXinstallPkg

first-boot-pkg

https://github.com/grahamgilbert/first-boot-pkg

Netbooting and Imaging

Save time, image over the network

OS X Server

"Hell isn't merely paved with good intentions; it's walled and roofed with them."
Aldous Huxley

bsdpy

https://bitbucket.org/bruienne/bsdpy

Go a step further and
automate creating
Netboot sets

AutoNBI.py

https://bitbucket.org/bruienne/autonbi

Software Updates

Save bandwidth, cache/control software updates

OS X Server

Caching Server

Software Update Server

"He who stops being better stops being good."
Oliver Cromwell

Reposado

https://github.com/wdas/reposado

Margarita

NetSUS

https://jamfnation.jamfsoftware.com/viewProduct.html?id=180

Device Management: The Hub

Save time, centrally manage all the things

"Things are not quite so simple always as black and white."
Doris Lessing

Apple Remote Desktop

https://itunes.apple.com/us/app/apple-remote-desktop/
id409907375?mt=12

The Casper Suite

http://www.jamfsoftware.com

Munki

https://github.com/munki

Sal

https://github.com/grahamgilbert/docker-sal

Simian

https://github.com/google/simian

Munki-In-A-Box

https://github.com/tbridge/munki-in-a-box

MunkiWebAdmin

https://github.com/munki/munkiwebadmin

munkireport-php

CauliflowerVest

https://github.com/google/cauliflowervest

Cheeky Monkey Preso

http://docs.macsysadmin.se/2015/pdf/Day2Session6.pdf

Filewave

https://www.filewave.com

Absolute

https://www.absolute.com/

Puppet (orchestration)

https://puppetlabs.com

SCCM and BigFix (scriptrunners)

Gruntwork

http://mac-msp.com

Watchman Monitoring

https://www.watchmanmonitoring.com

Packages and Scripts: The spokes

Save time, automate moar

"We build too many walls and not enough bridges."
Isaac Newton

Licensing

Inventory

Active Directory

Identity Management: OneLogin and Okta

Settings for Software

plists

profiles

mcxToProfile

https://github.com/timsutton/mcxToProfile

User Templates

Antivirus

Groupware

Remote Login

Scaling appropriately

MDM

http://enterpriseios.com

Scale appropriately?

Save time, use APIs

"I don't know where I'm going from here, but I promise it won't be boring."
David Bowie

App Store: Buy Apps on the iOS and Mac App Stores and have them automatically download to your devices.
Apple Developer programs: Access beta copies of software and developer tools.
Apple Music: Apple's music service that uses a monthly fee rather than purchasing each song individually.
Apple Music Radio: Stream radio to your devices over the Apple Music Radio service.
Apple Online Store: Purchase hardware and software through the Apple.com.
Apple Retail services: Access to Concierge, Joint Venture, and programs, including the Apple Store app.
Apple Support Communities: Access the Apple support site, ask questions, and answer any support requests you know the answer to.
Apple TV: Access Content purchased on Apple from an Apple TV and control the TV with the Remote app on an iOS device.
Back to My Mac: Provides remote access to a computer, even when that computer is using NAT behind a different firewall.
Device Entrollment Program (DEP): Automatically associate devices owned by an organization with a Mobile Device Management (MDM) solution.
FaceTime: Video conferencing with friends and family.
FileVault Key Escrow: Option to keep the FileVault recovery key stored on a server.
Find My Friends: Shows the physical location of friends you have added using the Find My Friends app, using GPS
Find My Mac: Shows the physical location of your Apple devices using the iCloud web interface
Game Center: Access scores in apps that support Game Center integration for friends using the Game Center app.
iBooks Store: Access books and other multi-media content on the Apple iBooks Store.
iChat: Legacy chat system from 10.8 and below.
iCloud Calendars: Sets up the client for the Calendar app to work with an iCloud account.
iCloud Contacts – sets up the client for the Contacts app to work with an iCloud account.
iCoud Drive: allows certain apps to write data into storage on iCloud servers.
iCloud Keychain: Synchronizes passwords and certificates between computers.
iCloud Mail: Configures the Mail app to work with an iCloud account.
iCloud Photos: Displays the photo stream and integrates iCloud Photo Library with your Mac and allows for iCloud Photo Sharing.
iCloud Notes: Synchronizes notes created in the Notes app with an iCloud account.
iMessage: Instant message with other iMessage users rather than using text messages.
iTunes Genius: Tracks purchases on iTunes and allows you to find similar content to music in your library and purchase history.
iTunes Home Sharing: Share data within apps such as iTunes and Photos from within a given Local Area Network (LAN).
iTunes Match: Access music that was ripped from CDs and other media.
iTunes Store: Purchase music that can be downloaded and listened to offline.
iTunes U: Access podcasts posted by education institutions.
Handoff – Shows the same content on an iPhone or iOS devices as on an OS X device if apps are built with Handoff support.
My Apple ID (appleid.apple.com): Access information about an Apple ID and reset passwords and addresses for the Apple ID.
Volume Purchase Program: Purchase applications in bulk and deploy those applications using codes, Apple IDs, or devices.

Apple Services

VPP

http://www.apple.com/business/vpp/

DEP

http://www.apple.com/business/dep/

Policy Management

Wait, wait, instant policies…

OMG Packaging

Save time, automate what MDM doesn't

Scaling appropriately

"In England, we have such good manners that if someone says something impolite, the police will get involved."
Russell Brand

Composer

http://www.jamfsoftware.com/products/composer/

Packages

http://s.sudre.free.fr/Software/Packages/about.html

pkgutil

`/usr/sbin/pkgutil`

Suspicious Package

www.mothersruin.com/software/SuspiciousPackage

Autopkg

http://autopkg.github.io/autopkg

autopkgr

http://www.lindegroup.com/autopkgr

JSSImporter

https://github.com/sheagcraig/JSSImporter

Patchoo!

http://patchoo.github.io/patchoo/

CreateUserPkg

https://github.com/MagerValp/CreateUserPkg

Firefox CCK2

http://cck2.freshdesk.com/support/discussions

Scripting and Settings Management

Save time, or do you?
(get smahta')

"Knowledge comes, but wisdom lingers."
-Lord Tennyson

dockutil

https://github.com/kcrawford/dockutil

duti

http://duti.org

launched

http://launched.zerowidth.com

outset

https://github.com/chilcote/outset

MacPorts

HomeBrew

http://brew.sh

Servers, Infrastructure, and Testing

Save time, automate
management of your
management systems

"I can't do anything in moderation."
Ozzy Osbourne

VirtualBox, VMware, Parallels

Puppet again…

Docker

www.docker.com

Scaling Further with Regression Testing

"You never know what is enough unless you know what is more than enough"
William Blake

Spreadsheets

Sikuli

Cucumber

TestPlant

expect

The Community

"Like all the best families, we have our share of eccentricities"
Queen Elizabeth II

Finishing School

#Slack

https://macadmins.herokuapp.com

www.macenterprise.org/mailing-list

Mac Admins & User Groups

http://krypted.com/community/macadmin-links/

The future?

"Never look backwards or you'll fall down the stairs."
Rudyard Kipling

MDM

More iOS-ish

More SIP-ish

Packages?

"I seldom end up where I wanted to go, but almost always end up where I need to be."
Douglas Adams

Q&A

Join me for a drink

"Saints need sinners."
Alan Watts

Twitter: @cedge318
Slack: krypted
me.com: krypted
@jamfsoftware: krypted