

Full Circle: The Journey To Consumerism

Charles Edge

Have we spent the last decade over-complicating our deployments?

Have we spent the last
decade over-protecting
our users?

What do you call solid
gold bananas?

Before we get started,
who runs anti-virus on an
iPhone?

Who harshly judges
those who do?

Consumerism =
Buzz Word

Remember what Ed said
about taking an iPad
through border security

Consumerisation =
Mobilization

mikeymikey blogs here

About

Oct 4, 2016

m(DM)acOS

tags: [osx](#) [macos](#)

Howdy.

It's been almost a year or so since my last blog post.

I've been kinda busy with my fun new job.

I'll try to do more fun posts soon-ish (did you see this neat thing I did at the [PSU Macadmins](#) hackathon called [nibbler?](#))

But I wanted to take some time to write this out, since it's been rattling in my head since WWDC: **MDM is (probably) coming.**

Why Mobilization?
It's the future

The future for your
environment

The future for your
career

On my flight over...

I'm a PC

Just “not Enterprise
enough”

Good

I know I am supposed
to be welcoming

But on our terms,
right?

Some mandate anti-
virus on iOS...

Dumb Quotes

“Why would I do anything for
that orifice called the CIO?”

-Steve Jobs

“I’m going to build devices that are irresistible for consumers, and CIOs will just have to deal with it.”

-Steve Jobs

“This is not a hobby, it's a
real business.”

-Tim Cook

“It will be by working with companies like IBM, Cisco, and Box and others to give customers a full solution.”

-Tim Cook

Kevin showed the Cisco
enhancements for Wi-Fi

IBM

Deloitte

Agenda

- The last decade
- Binding vs SSO
- Imaging
- Scenario'ing
- Next up

Apple in the Enterprise

- Active Directory plug-in
- SMB and DFS support
- Policy-based Management (MCX)
- Full disk encryption
- Exchange support
- SAML support in Safari

Replicating that dogma....

- Active Directory plug-in -> Open Directory
- SMB and DFS support -> Clustered AFP Services w/ Xsan
- MCX -> White papers on extending the AD Schema
- Full disk encryption -> Build FileVault and court
Checkpoint
- Exchange support -> OS X Server Mail/Calendar/Contact
Services
- And attempting services alliances with 3rd parties

But we were always
playing catch-up

Nick mentioned
“agentless”

MDM: A Game Changer

Why MDM?

- Instant
- Apple support
- Auditable
- Cost
- Wipe/Lock/Activation Lock
- DEP

An Ecosystem

- Add VPP
- And B2B VPP
- No more packaging
- Subscriptions
- Apple School Manager

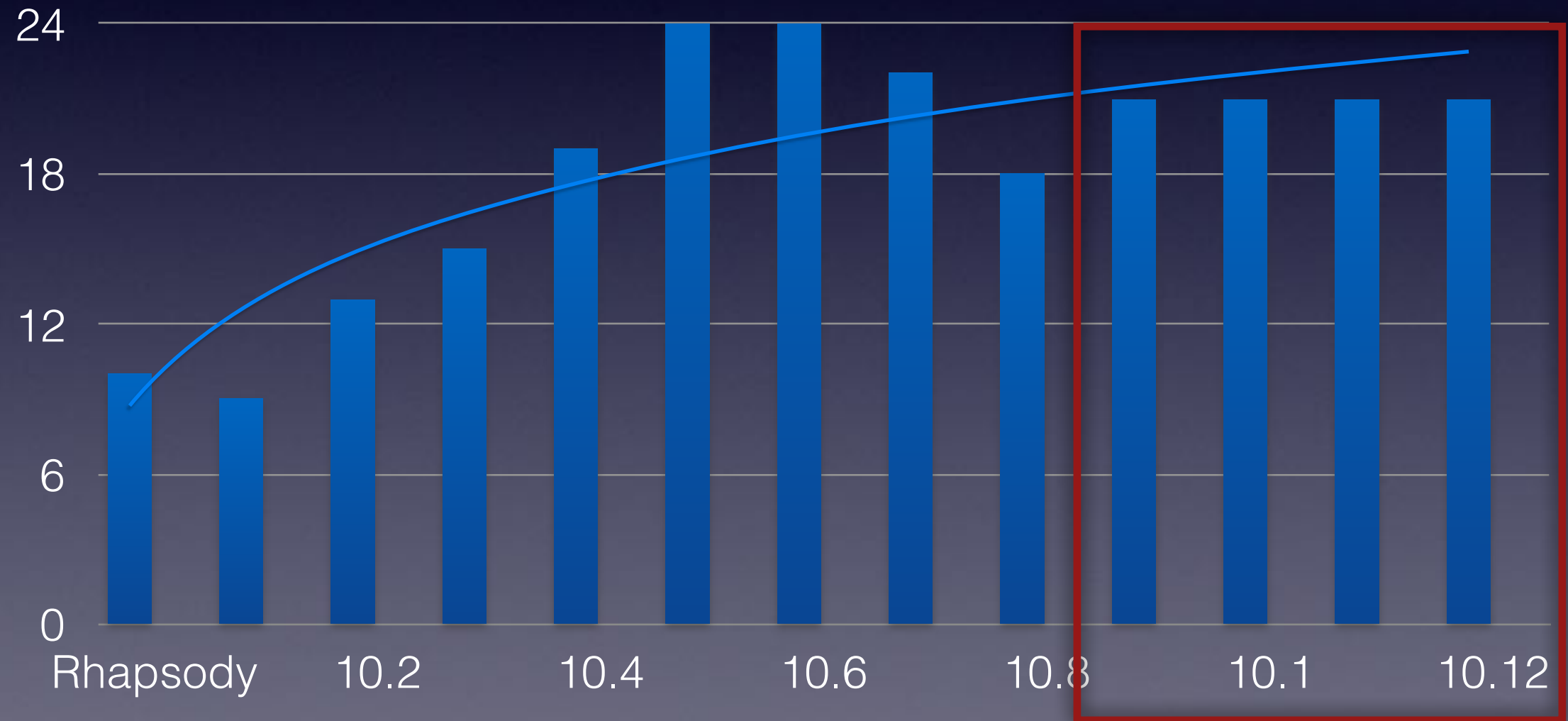
And then...

- Will MDM eventually be the only management tool for the Mac?
- The future of LaunchDaemons and LaunchAgents
- Speaking of MDM...

A Server Product

- Showcase MDM
- Cache all the things
- Is that all macOS Server is?
- Started with a thesis...

Server Services



Digging into the data

Rhapsody	Mac Server 1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	10.1	10.11	10.12
10	9	13	15	19	24	24	22	18	21	21	21	21
AppleShare	AFP	AFP	AFP	AFP	AFP	AFP	AFP	AFP	AFP	AFP	AFP	AFP
NFS	NFS	NFS	NFS	NFS	NFS	NFS	NFS	NFS	NFS	NFS	NFS	NFS
Web	Web	Web	Web	Web	Web	Web	Web	Websites	Websites	Websites	Websites	Websites
NetInfo	NetInfo	Directory Server	Open Directory	Open Directory	Open Directory	Open Directory	Open Directory	Open Directory	Open Directory	Open Directory	Open Directory	Open Directory
NetBoot	NetBoot	NetBoot	NetBoot	NetBoot	NetBoot	NetBoot	NetBoot	NetInstall	NetInstall	NetInstall	NetInstall	NetInstall
FTP	FTP	FTP	FTP	FTP	FTP	FTP	FTP	FTP	FTP	FTP	FTP	FTP
		Windows	Windows	Windows	SMB	SMB	SMB	SMB	SMB	SMB	SMB	SMB
		Mail	Mail	Mail	Mail	Mail	Mail	Mail	Mail	Mail	Mail	Mail
		DNS	DNS	DNS	DNS	DNS	DNS	DNS	DNS	DNS	DNS	DNS
		DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP
			VPN	VPN	VPN	VPN	VPN	VPN	VPN	VPN	VPN	VPN
				Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates
				iChat	iChat	iChat	iChat	iChat	Messages	Messages	Messages	Messages
					iCal	iCal	iCal	iCal	Calendar	Calendar	Calendar	Calendar
					Wiki	Wiki	Wiki	Wiki	Wiki	Wiki	Wiki	Wiki
						Address Book	Address Book	Contacts	Contacts	Contacts	Contacts	Contacts
							Time Machine	Time Machine	Time Machine	Time Machine	Time Machine	Time Machine
							Profile Manager	Profile Manager	Profile Manager	Profile Manager	Profile Manager	Profile Manager
								Xsan	Xsan	Xsan	Xsan	Xsan
Macintosh Manager	Macintosh Manager											
Web Objects	Web Objects			Web Objects	Web Objects							
			Application Server	Application Server	Tomcat	Tomcat						
Print		Print	Print	Print	Print	Print						
QTSS	QTSS	QTSS	QTSS	QTSS	QTSS	QTSS						
		NAT	NAT	NAT	NAT	NAT	NAT					
				Xgrid	Xgrid	Xgrid	Xgrid					
					RADIUS	RADIUS	RADIUS					
					Podcast	Podcast	Podcast					
						Mobile Access						
					MySQL							

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							Time Machine	Time Machine	Time Machine	Time Machine	Time Machine	Time Machine
							Profile Manager	Profile Manager	Profile Manager	Profile Manager	Profile Manager	Profile Manager
								Xsan	Xsan	Xsan	Xsan	Xsan
									Caching	Caching	Caching	Caching
									Xcode	Xcode	Xcode	Xcode
Macintosh Manage	Macintosh Manager											
Web Objects	Web Objects			Web Objects	Web Objects							
			Application Server	Application Server	Tomcat	Tomcat						
Print		Print	Print	Print	Print	Print						
QTSS	QTSS	QTSS	QTSS	QTSS	QTSS	QTSS						
		NAT	NAT	NAT	NAT	NAT	NAT					
				Xgrid	Xgrid	Xgrid	Xgrid					
					RADIUS	RADIUS	RADIUS					
					Podcast	Podcast	Podcast					
						Mobile Access						
					MySQL							

Server is about
enabling clients

Not trying to own back-
end network services

To bind or not to bind

Once upon a time, we did
days of scripting per
customer to bind

And planned complex
domain/OU structures

And extended
schemas

Then the Internet got
smarter

SAML

1 factor vs 2

Do or do not, it's not that
hard (aka **interesting**)
any more either way...

If you don't bind

Software that
intermediates binding

OneLogin

- 3 free apps
- Unlimited users
- Took about 15 minutes to master
- Took about 15 more minute to be a reseller

Okta

- For Developers
 - 3 apps
 - 100 users
 - Free forever
- For IT
 - Unlimited apps
 - 100 Users
 - 30 day trial

Apple Enterprise Connect

- Kerberize w/out AD
 - Automatic key renewal
 - Sync AD passwords w/ local accounts
 - Obtain certificates
 - Site/OU aware

NoMAD

- Kerberize w/out AD
 - Automatic key renewal
 - Sync AD passwords w/ local accounts
 - Get x509 certs
 - AD Site aware
 - Warn about expiring passwords
- Aaaaannnnd
 - One-click Jamf Self Service

MDM

- Push binds
- Push 802.1x
- Custom defaults domain keys
- Login/startup/scripts
- Lack of in-depth Kerberos/scripty logic, so best in web-based workflows or with a patch management solution

Is imaging dead?

Remember that thing
Kevin said about SIP2?

Rich <3 APFS

Mostly dead

But, it's easy now, so
who cares

Thin imaging

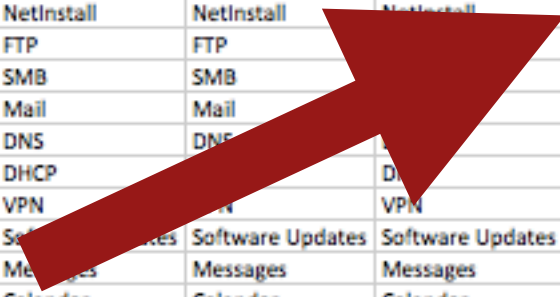
Some ***must*** put a fully formed device on a desk

But you can't image an iOS device enrolled in MDM, so that can be annoying

Some orgs still image

And...

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		DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP	DHCP
		VPN	VPN	VPN	VPN	VPN	VPN	VPN	VPN	VPN	VPN	VPN
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				RADIUS	RADIUS	RADIUS	RADIUS					
				Podcast	Podcast	Podcast	Podcast					
					Mobile Access							
				MySQL								



Device-based VPP + DEP

Network and Portable Homes

Versus Backup

It was never backup

Scripting All The Things

Swift

As Joel said, it's
getting more mature

APIs are more
important than ever

Like the MDM API...

But you learned to
think programmatically!

Packages?

All apps *CAN* be self-
contained .apps

Scenarios!

A school lab where
machines need to get
reset every morning

A school where students
need their profiles
moving with them

A school where students
need their desktops
moving with them

A rapidly growing startup
with highly technical staff
that uses mostly web apps

Environments that need to audit
CIS or other very specific
regulatory security requirements

A small business with 5 devices
that just needs to check some
boxes on a security form

Layered management

But most importantly:
What's next for you?

Engineering

MDM

Logistics

Development

Management

Managing larger deployments

Much logistics

If your candidate doesn't
win, you could move

Other platforms

Questions