

We're Building Up To Something...

MacTech 2017
Charles Edge

Let's talk about
2010...

Everything I loved
about this community

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	10.13
1997	1999	2002	2003	2005	2007	2009	2011	2012	2013	2014	2015	2016	2017
10	9	13	15	19	24	24	22	18	21	21	21	21	14
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	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	Open Directory
NetBoot	NetBoot	NetBoot	NetBoot	NetBoot	NetBoot	NetBoot	NetBoot	NetInstall	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	Mail
		DNS	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	VPN
				Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates	Software Updates
				iChat	iChat	iChat	iChat	Messages	Messages	Messages	Messages	Messages	Messages
					iCal	iCal	iCal	Calendar	Calendar	Calendar	Calendar	Calendar	Calendar
					Wiki	Wiki	Wiki	Wiki	Wiki	Wiki	Wiki	Wiki	Wiki
						Address Book	Address Book	Contacts	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	Profile Manager
								Xsan	Xsan	Xsan	Xsan	Xsan	Xsan
									Caching	Caching	Caching	Caching	
									Xcode	Xcode	Xcode	Xcode	
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								

November 5

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Apple's future in the Pro Sector



Alan Bailey

0 Comments

To attempt to get a statement from Apple regarding the future (or not) of their pro product lineup including: OSX Server, Final Cut Server, Xsan, Final Cut Studio, Logic Studio. The sudden announcement of discontinuation of the Xserve server has caused a lot of Apple Technicians and Pro customers worry over their futures and the value of their skillsets. We worked with and stood by Apple in the 'Bad Old Days' now all we ask in return is clarification of their intentions in the Pro/Enterprise sector so as we do not sell our clients products with no future!!

LINKS

Everything changed...

4 other things
happened in 2010

Oracle Buys Sun

The iPad

The Mac App Store

MDM

If I leave you with one
thing...

Think Transactional

IT as an assembly line

There's procurement

Architecture

Packaging

QA

Release management

Deployment

Service Desk

Desktop Support

Accessing shared services

It starts with hiring a
junior tech...

Why do we need to be
transactional?

Otherwise we can't
keep up



Against the Current: Lessons in Growth & Ambiguity

by Meg Ciliberti

What happens when the team you support virtually doubles within a year? Most of us would prefer to be keeping our heads above water, when the reality is your team is barely staying afloat. In this session, Meg will share how IT grows at Shopify, as it scales at a rapid pace. ****Water wings not provided****

Schools used to need
their SE to come by and
give them guidance

And hire professional
services

Very human-centric

Good for our egos

Then came MDM

The move to MDM
simplifies deployments

The move to DEP
reduces imaging
requirements

Imaging is Dead: Now What?

by Greg Neagle



Recent developments in the Mac world mean that installation workflows, not imaging workflows, are the future of consistent Mac deployment. Greg will discuss the Apple and third-party tools available to replace traditional imaging workflows with flexible, consistent, and repeatable workflows based on installing macOS. We'll also speculate where this might all lead in the future.



Managing Macs with DEP

by Todd Ness

Apple's DEP and MDM are now a clear part of the current and future of Mac management. Once seen as only needed to manage iOS devices, macOS is increasingly able to be managed with MDM, and in some cases, it's required. I'll talk about the issues surrounding DEP and MDM, including the pros/cons, and where it's going. If you're confused about DEP and MDM, or still in the deployment phase and trying to push the boundaries, this talk is for you.

VPP makes software
distribution easier

As do .ipa-based app
deployments

Allows for more
vendors

A higher level of
security

Less configuration
required

What isn't scalable?

The Full Stack Mac Admin

What is a full stack
developer?

Does it all

Desktop support

Server support

Middleware

Troubleshoot printer
drivers

Release manager

Infosec

Works on Line of
Business Apps

Common in startups

Unique in SMB and
Apple infrastructure

Historically most
admins were Full Stack

Because there weren't
enough of us

And it took so long to
become an expert

And deployments
weren't big enough

Now, they all pretty
much work at Facebook



pyobjc: the frogor way

by Michael Lynn

Apple ships both python and pyobjc with macOS. Learn why using them together can do amazing things on your Macs and why it's Mike Lynn's favorite combination for automating the impossible.

The good old days!

The days of the
Cylinder of Destiny



NoMAD and the Future of Directory Services

by Joel Rennich

Find out where NoMAD is going and how it can free you from the burden of having a directory service at all! Joel Rennich, the creator of NoMAD, will discuss methods for creating and manipulating local accounts via MDM without AD or other directory service required. Allow your IT staff to become admin users without having any account for that user. Also learn about leveraging authentication mechanisms beyond the Kerberos and LDAP and how you can add two-factor authentication into your workflow.

And many an admin
still manages...

Xsan

Kerio

Less and less with
agents

The old way of
complicated deployments
is disappearing

Apple is discouraging
directory services

While MCX still works
it's not really tested

User accepted kernel
extensions

And arrays of allowed
kexts via MDM

User accepted MDM
enrollments

Sandbox, SIP, and Entitlements

Increasingly
separating resources

More iOS-like

Imagine a day when you
need to grant access to
Contacts from Maps

Centralizing business
resources into online
services

Dropbox, Box,
Salesforce, now device
management

Think of all the
companies Apple could
buy

But...

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					RADIUS	RADIUS	RADIUS						
					Podcast	Podcast	Podcast						
						Mobile Access							
					MySQL								

What else isn't
scalable?

Not providing direct
referrals as much in retail

Enter your city or ZIP code to find a consultant near you.

90401

Search

63 locations near Santa Monica, CA 90401, United States

Sort by: Company name Highest rated

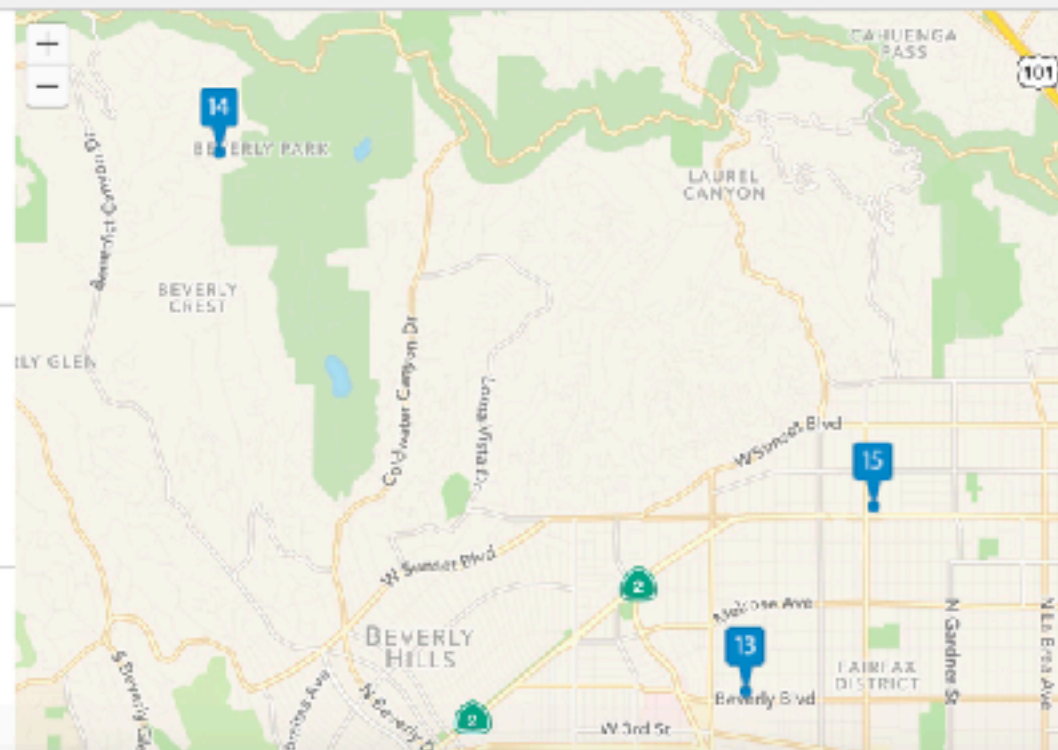
Reset Filters

Services: Mac Server and networking Mobility FileMaker Creative Training

11 **318, Inc.**
3710 S. Robertson Blvd,
Suite #210
Culver City, 90232
877-318-1318
★★★★★ (1)
[See reviews](#) [See company profile >](#)

12 **Solutions Consulting**
2728 Canfield Ave.,
Los Angeles, 90034
(310) 838-6224
★★★★★ (1)
[See reviews](#) [See company profile >](#)

13 **EnlightenMac Consulting**
8391 Beverly Blvd. #329,
Los Angeles, 90048
(323) 319-8227
[Write a review](#) [See company profile >](#)



Integrations, apps and more for your platform.

Consultants

The third parties



SimpleMDM



MOSYLE


airwatch[®]
by **vmware**[®]

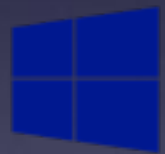
 jamf

filewave[™] 

Absolute[®]
MANAGE



SOPHOS
ENDPOINT



Windows Intune



FLEETSMITH



ZULUdesk



munki



ADDiGY[™]

 **Parallels**[™]

Device Management

- Addigy
- AirWatch
- Altiris
- Apple Profile Manager
- BigFix
- Chef
- ConnectWise
- FileWave
- Fleetsmith
- IBM MaaS360
- Ivanti
- Jamf Now
- Jamf Pro (formerly Casper Suite)
- KACE
- Kaseya
- Labtech
- LanRev
- Lightspeed
- Meraki Systems Manager
- microMDM
- Microsoft Intune & SCCM
- Manage Engine
- Mobile Guardian
- MobileIron
- Mosyle
- Munki
- Puppet
- SimpleMDM
- Solarwinds MSP
- Sophos
- Tabpilot
- Zuludesk

Backup tools

- Archiware
- Acronis
- Backblaze
- Carbon Copy Cloner
- Crashplan
- Datto
- Druva

Collaboration and File Sharing

- Atlassian
- Box
- Dropbox
- Egnyte
- G Suite
- Kerio Connect
- macOS Server
- Netatalk
- Office 365
- Promise
- Synology

Directory Services and Authentication Solutions

- Apple Enterprise Connect
- AdmitMac
- Centrify
- Duo Mobile
- JumpCloud
- LDAP
- Microsoft Active Directory
- NoLo
- NoMAD
- NoMAD Pro
- Okta
- OneLogin

Imaging and Configuration Solutions

- Apple Configurator
- Deep Freeze
- DeployStudio
- FileWave Lightning
- Ground Control
- Imagr

Service Desk Tools

- Freshdesk
- Salesforce Cases
- ServiceNow
- Webhelpdesk
- Zendesk

Service Desk Tools

Putting in Place Great Ticketing Systems

by Mary Conahan



If you had an opportunity to build from the ground up a Service Desk Implementation, what would it look like? What do you want to solve? What would make it productive across the organization. This session is useful for both those starting from scratch, or modifying an existing system, or even purchasing one off the shelf. And, it will give you an idea of the structure and resources that you will need to consider when putting a ticketing system in place, and give you confidence that you are covering your bases.

- Webhelpdesk
- Zendesk

Automation Tools

- AutoCasperNBI
- AutoDMG
- AutoNBI
- Autopkg
- Dockutil
- Homebrew
- Jamjar
- JSSImporter
- Precache
- Outset
- Sal

Security and Antivirus

- Avast
- Avira
- BitDefender
- CarbonBlack and Bit9
- Crypt
- Digital Guardian
- Kaspersky
- Malware Bytes
- McAfee
- Sophos
- Symantec
- Trend Micro
- Wandera

Security and Antivirus

- Avast

Santa: The open source binary white/blacklisting security project

by Matt Doyle

Santa, the open source binary white/blacklisting security project from Google has seen interest and adoption in the Mac community. One missing piece has been a centralized policy server. How do we work around this? There are some surprises to how this server allows users to manage themselves, so, attend this session and find out!



- McAfee
- Sophos
- Symantec
- Trend Micro
- Wandera

Virtualization and Emulation

- Citrix
- Parallels
- Remote Desktop
- VMware

Remote Management

- Apple Remote Desktop
- Bomgar
- LogMeIn
- GoToMyPC
- TeamViewer
- VNC

Log Collection and Analysis

- Elastic Search
- RobotCloud
- Splunk
- Tableau
- Watchman Monitoring
- Zentral

CRM and PoS

- Daylite
- Lightspeed

Printing

- Papercut
- Printopia

Digital Signage and Kiosks

- Carousel Digital Signage
- Kiosk Pro
- Risevision

Misc

- ADEPT
- DEPNotify
- InfinealQ
- ITGlue
- Reposado
- Sassafras Keyserver
- SplashBuddy

Why did I go through
those?

One person can't
know them all

So we have to get more
transactional to ease the
learning curve

Easier learning curve
means more secure out
of the box

A higher level of security
means less configuration
required

Can we screw up iOS
more than macOS?

So what are we
gearing up for?

The iOSification of the Mac

Do you complain when
prompted to allow access
to resources on an iPhone?

What's required for
“Supervision”?

Agents without access
to *everything*



Advanced Mac Troubleshooting: Launch Daemons and Agents

by John Kirn

Further strengthen your Mac support skills by delving deeper into how third-party launch daemons/agents work and how to reverse engineer what they do. Advanced topics that John Kirn will cover include: 1) Overview- Understand how launchd loads launch daemons and agents, what each are used for, and where they come from. 2) Create- Instructions for building a simple launch daemon and agent, illustrating how the different property list keys work (Label, ProgramArguments, KeepAlive, Sockets...). 3) Dissection- Learn how to read the property list keys for any launch daemons/agents to determine exactly what each does. 4) Modify- How to manipulate launch daemons/agents using the Finder, command line, and Lingon X. 5) Troubleshoot- Methods for determining if a third-party launch agent/daemon is causing a Mac problem, and what these problems look like. 6) The good, the bad, and the ugly- John will share a list of third-party launch agents/daemons that he's collected over the years, broken down into the categories of: Necessary, potentially troublesome, and highly suspect.

SIP...

User Approved Kernel Extension Loading

Rootless

Containers in APFS

Dive into APFS

by Tim Standing



APFS: the biggest architectural change to Mac OS since Apple moved to Intel processors over 10 years ago. With this talk, you'll get an overview of some of the features of APFS and how they differ from HFS Extended — the file system we've been using since 1998. We'll go over some use cases for APFS and look at how it can solve specific problems for laptop and desktop users. Lastly, we'll look at what is going on "under the hood" with an APFS volume. This talk will give you the information you need to create more robust APFS volumes on the storage hardware you are using.

Secure enclave

Exchanging data
between apps via REST



Technology Preview: Cross Platform Automation Magic for iOS and macOS

by Sal Soghoian

The dream of a universal automation solution for both iOS and macOS has remained elusive. In this session, Sal will show you Omni Automation — a technology developed by The Omni Group to tackle this problem. Omni Automation delivers dual-platform automation through scripts, plugins, libraries, menus, and user-assigned action triggers. Based on JavaScript Core in WebKit, Omni Automation will ultimately automate all of Omni's suite of productivity applications for both iOS and macOS with real object-model scripting support rivaling the traditional automation tools of macOS. And, because of its JavaScript lineage, Omni Automation integrates with the classic HTML JavaScript DOM, so that a tap on a webpage table or image can trigger data transfer and manipulation in an Omni app document.

I knew this Android
developer...

Rewriting how IT is
done

An explosion of Mac
devices

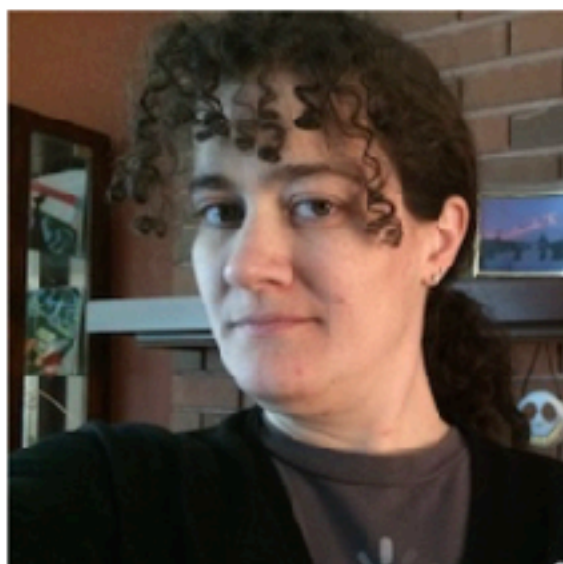
And Apple just makes
the devices

Otherwise they can't
grow fast enough

It's an incredible
opportunity for us

But we have to be
cool with change

New admins can learn
how to use an MDM
faster than script stuff



Don't Forget the New Admin

by Kelly Guimont

This session is for admins both new and old in the industry. People new to the Mac admin community often struggle to find resources, assistance, and best practices. People that are deeply ingrained in the community can often forget what it's like to be new. Let's come together and share all the knowledge!

The less options we have
the more transactional
managing devices is

Less Infosec
paperwork

Cyber Security is dead. Long live Cyber Resilience!

by Chad Calase

The promise (illusion) of 100% Cyber Security is gone. While we continue to support the concepts of defense and prevention, Cyber Resilience goes beyond those measures to elevate your team's awareness and emphasize strategic response for when incidents occur. Because they will occur. Making sure you're prepared when they do is what Cyber Resilience is all about.



Less time with legal

But companies need
device “Supervision”

Supervision separates the
organization owned devices
from personal devices

Allows for more control
by MDM

Scale.

Without violating privacy.

It's not as fun for some

The hacker mentality
isn't dead



The Apple of your EFI - An updated analysis of the state of Apple's EFI Security Support

by Pepijn Bruienne and Rich Smith, Duo Labs

Duo Labs conducted an extensive data analysis on the state of Apple's EFI security from two main perspectives: analyzing all EFI update released by Apple since OS X 10.10.0 through macOS 10.12.6, and an analysis across over 73,000 real-world Mac systems to compare the actual state of their EFI security against the expected state. Our findings cover a range of anomalies and security issues with the security support provided by Apple for their EFI firmware, more worryingly our analysis shows significant deviations in the real-world state of EFI firmware in Macs compared to the expected state which causes us to suspect a more systemic issue causing the failure of new EFI firmware that is supposed to be automatically installed alongside an OS update. Alongside our findings in the form of a technical paper we are also releasing a tools and API's to enable admins and end users to have far greater visibility to the state of the the EFI firmware on their Apple systems and to understand the security implications that it may contain.

You'll still be able to
“jailbreak”

Until you deploy 150,000
devices to a customer...

That's actually
possible now.

And in the future, it will
be even easier.

So many options
mean fragmentation

Are you a Mac Admin?

AirWatch Admin?

Jamf Admin?

Munki Admin?

Mobile Admin?

Thanks to Slack

We've stayed together
as a community

We share

We are kind

Let's stay that way

If you write tools

MDM and Apps

If you don't, there are
other ways to contribute

Documentation

QA

Graphics

The Future

Think about the
roadmap

Transactional

Build tools capable of
scaling

That follow Apple's
trends

Maybe even still hack
together temporary
solutions

Because Apple will
still have gaps



File Sharing Performance and Function Optimization

by Sean Collins

Apple seems to think all file sharing has moved to cloud sharing like DropBox, iCloud, Box and Google Drive, but we know it hasn't. File sharing with our Macs is still a dilemma. We struggle with performance and functionality between our creatives and the on site file sharing storage we provide. In this presentation, learn how to tune your network and file sharing servers to provide the best speed, function and reliability to your users running High Sierra. Understand how different suites of applications, and file types behave when shared over varying protocols and how volume formats at the file server level impact the files they host. Learn how to best educate your users to avoid data corruption, slow file transfers, and more.

Remember that
assembly line

And lets keep things
cohesive in the
community

I love hanging out with
all of you!

Thank you!