



Putting a User Behind an iOS Device

By:

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PUTTING A USER BEHIND AN IOS DEVICE

Validating how an iOS device was setup and
why this may impact your investigation

Heather Mahalik

Who I Am

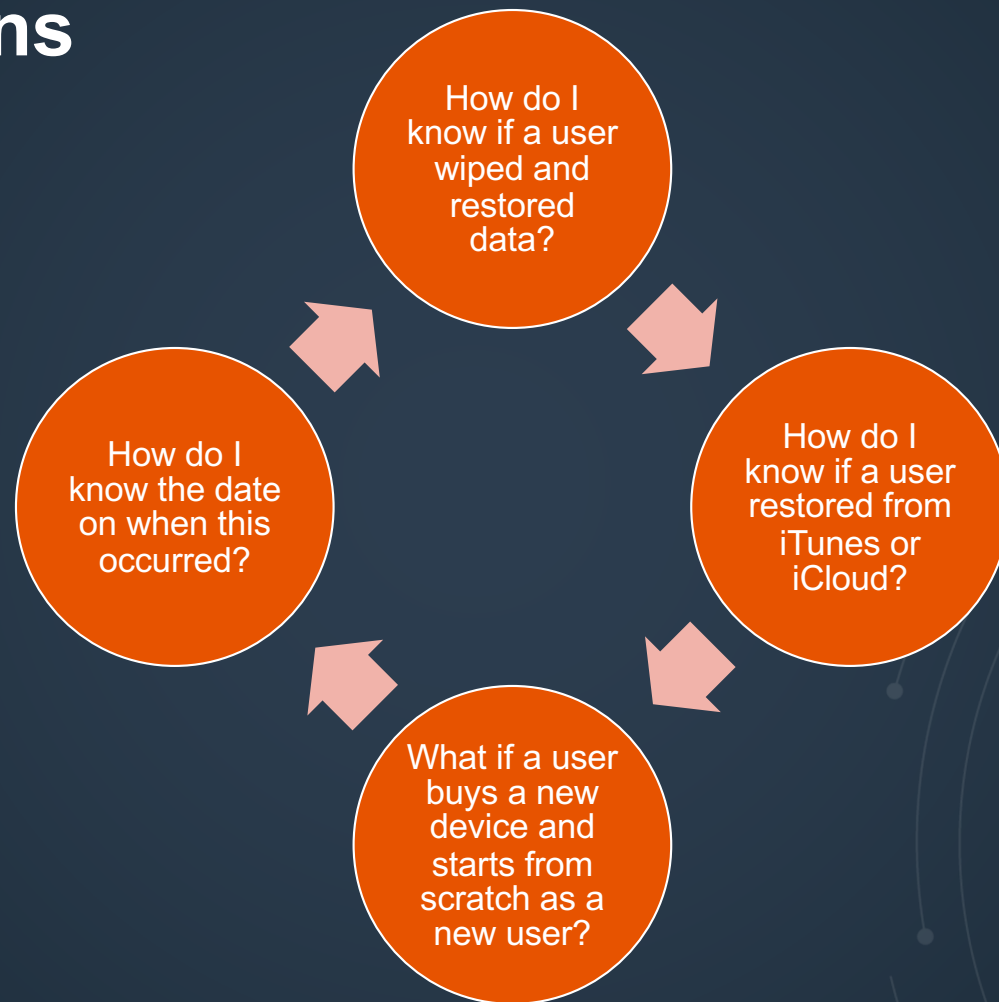
- DFIR Professional for almost 19 years
- Senior Director of Digital Intelligence, Cellebrite
- SANS Senior Instructor and Course Author
- Mobile obsessed
- Serial vacationer, lover of wine and bourbon
- Won the Lottery – I found a career that doesn't feel like work!



The Back Story



The Questions



My Methodology

Gather test devices

- Multiple models
- Different iOS versions

Create your test plan

- What is the point of the test
- Which tools are you going to use?

Document *EVERY* step

Review your results

- Document files of interest here (com.apple.purplebuddy.plist)

SHARE IT!!!! This is our duty in DFIR

- My vow was to blog about what I do live or in webinar formats

Share your Findings

XML View List View		
Key	Type	Value
Root	dict	
PBDiagnosticsPresented	boolean	true
AppleDPB9Presented	boolean	true
LockdownSetLanguage	boolean	true
Locale	string	en_US
WebKitMinimumZoomFontSize	real	0.000000
AppleDPB10Presented	boolean	true
SetupDone	boolean	true
Language	string	en
WebKitShrinksStandaloneImage	boolean	true
MesaPresented	boolean	true
setupMigratorVersion	integer	9
SetupState	string	SetupUsingAssistant
AppleDPB7Presented	boolean	true
WebKitLocalStorageDatabasePath	string	/var/mobile/Library/Caches

XML View List View		
Key	Type	Value
Root	dict	
PrivacyPresented	boolean	true
AppleDPB9Presented	boolean	true
SetupLastExit	date	2018-09-21 13:47:31
AppleDPB4Presented	boolean	true
AppleDPPresented	boolean	true
ControlCenterOnBoardingPresented	boolean	true
acceptedSLAVersion	integer	530001
KeychainSync3Presented	boolean	true
PrivacyContentVersion	integer	2
PBDiagnosticsPresented	boolean	true
PBDiagnostics4Presented	boolean	true
HSA2UpgradeMiniBuddyRan	boolean	true
GuessedCountry	dict	
countries	array	
at	string	US
at	date	2018-09-18 09:57:49
Passcode2Presented	boolean	true
AssistantPHSOffered	boolean	true
AppleDPB5Presented	boolean	true
setupMigratorVersion	integer	9
SetupState	string	RestoredFromCloudBackup
ControlCenterOnBoardingPresented	boolean	true

Why This Matters

Peer review and validation remove a ton of pressure

What you write may impact a lot of investigations

- Don't stress about it becoming dated

Take what I did and update the research

- Is this the same for iOS 14 – coming soon!
- What if the person restores from another device and not iTunes or iCloud?
- What if the device is not restored at all on these newer iOS versions?
- Does data_ark.plist match the purplebuddy plist?

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Thank you

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The Paper-

<https://dfir.pubpub.org/pub/2q177smo/release/5>

shortened - <https://for585.com/dfrws>