



Putting a User Behind an iOS Device

By:
Heather Mahalik (Cellebrite)

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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

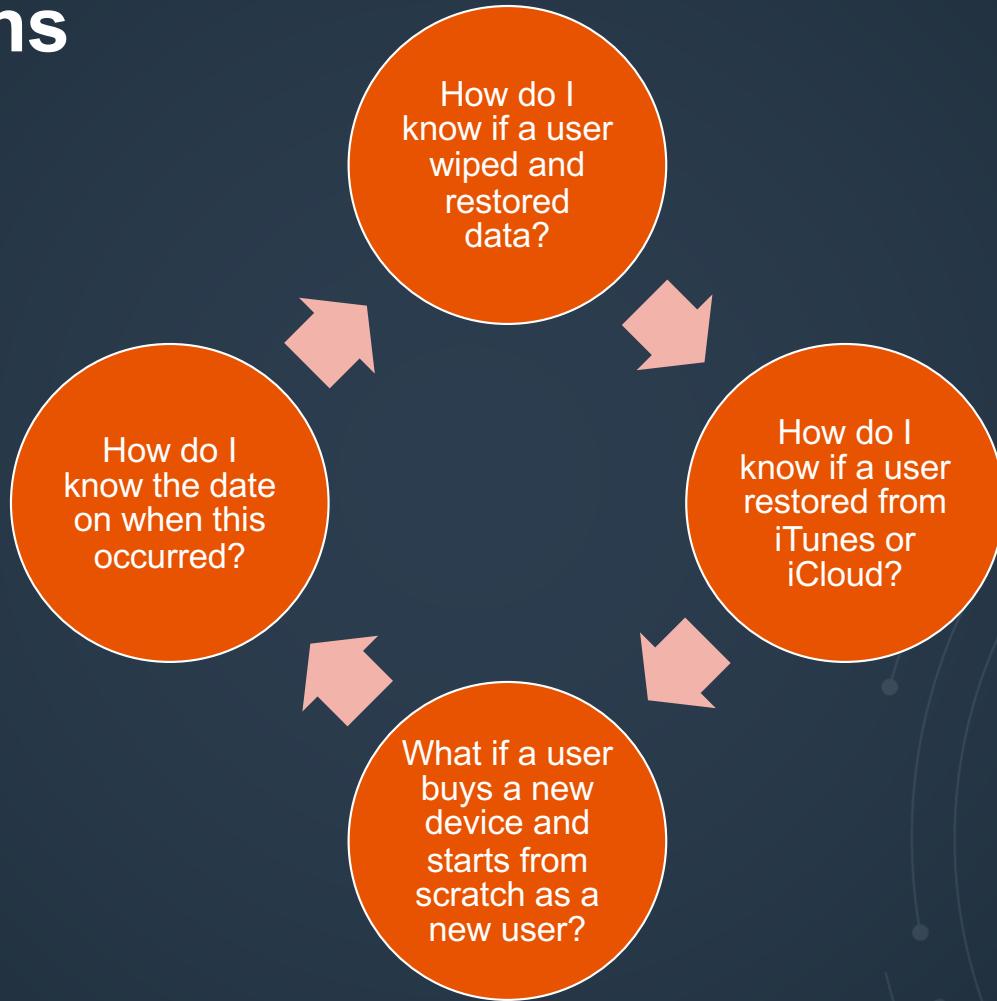
- DFIR Professional for almost 19 years
- Senior Director of Digital Intelligence, Cellebrite
- SANS Senior Instructor and Course Author
- Mobile obsessed
- Serial vacationer, lover of wine and bourbon
- Won the Lottery – I found a career that doesn't feel like work!



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
AppleIDPB9Presented	boolean	true
LockdownSetLanguage	boolean	true
Locale	string	en_US
WebKitMinimumZoomFontSize	real	0.000000
AppleIDPB10Presented	boolean	true
SetupDone	boolean	true
Language	string	en
WebKitShrinksStandaloneHTML	boolean	true
MesaPresented	boolean	true
setupMigratorVersion	integer	9
SetupState	string	SetupUsingAssistant
AppleIDPB7Presented	boolean	true
WebKitLocalStorageDatabasePath	string	/var/mobile/Library/Caches

XML View List View

Key	Type	Value
Root	dict	
PrivacyPresented	boolean	true
AppleIDPB9Presented	boolean	true
SetupLastExit	date	2018-09-21 13:47:31
AppleIDPB4Presented	boolean	true
AppleIDPresented	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
Passcode2Presented	boolean	true
AssistantPHSOffered	boolean	true
AppleIDPB5Presented	boolean	true
SetupState	string	RestoredFromiCloudBackup
RootHomeOnBoardingPresented	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

Email - heather@cellebrite.com

Blog - <https://smarterforensics.com/>

Twitter - [@heathermahalik](https://twitter.com/heathermahalik)

The Paper-

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

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