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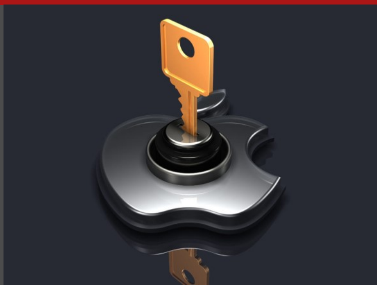
This Week's Topic: *iOS 11 Best Practices*

Update Corner: *October Software Updates*

TOUCHPOINT
INTERNATIONAL DEVELOPMENT GROUP, INC
YOUR ONE STOP SHOP FOR TECHNICAL AND TACTICAL EQUIPMENT

A Bi-Monthly Snapshot into Emerging Threats and Trends

Digital Update



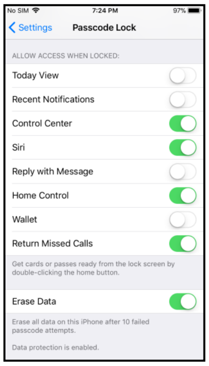
iOS 11 Best Practices

New iOS, New Rules

With the update to iOS 11 many things have changed; some for the worse and some for the better. We are going to explore all of the new options with iOS that specifically affect your privacy or security and you can decide whether or not you want to take the convenience or security route. If you have any questions or comments, contact admin@tpidg.us

Control Center
(Settings -> Control Center)

The Control Center has been changed significantly in the new version of iOS. They have made it slightly more customizable, but there are still major limitations. One thing they have added that is a welcome addition is a switch for cellular data. However, they have watered down the Wi-Fi and Bluetooth buttons by changing them to only act as disconnection buttons. Instead of turning off the interfaces, now they will only disconnect you from a Wi-Fi network or Bluetooth device. It's very important to no longer rely on these buttons. Head straight to settings to turn off the interfaces manually whenever not in use. Another handy tool on the new Control Center is the ability to add apps such as wallet or alarms. These apps get added to the bottom of the Control Center and push it up as more are added. If you are going to add a whole lot of apps to it, we recommend you remove Control Center from your lock screen as well most of the other options by going to **Settings -> Touch ID & Passcode** and scrolling to the bottom. Things like Wallet, Siri and Reply with Message can be exploited to either access or gather information from your device without having to enter your passcode. The more you can limit your attack surface, the better.



No SIM 7:24 PM 97%
< Settings Passcode Lock

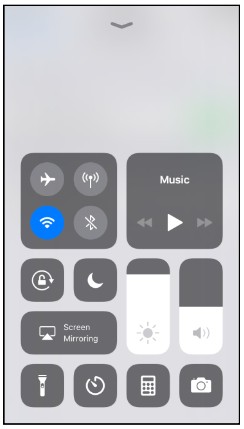
ALLOW ACCESS WHEN LOCKED:
- Today View ○
- Recent Notifications ○
- Control Center ●
- Siri ●
- Reply with Message ○
- Home Control ●
- Wallet ○
- Return Missed Calls ●

Get cards or passes ready from the lock screen by double-clicking the home button.

- Erase Data ●

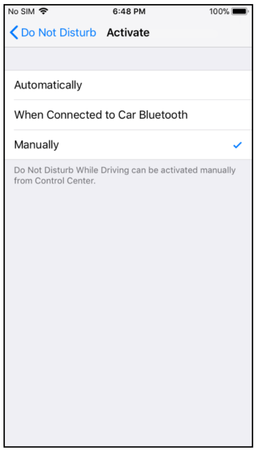
Erase all data on this iPhone after 10 failed passcode attempts.

Data protection is enabled.



Do Not Disturb While Driving
(Settings -> Do Not Disturb -> Activate)

Do Not Disturb has been improved to add an automatic option. When "Automatically" is selected, iOS uses your Bluetooth connection to your car to determine when you are driving. If Bluetooth is off, iOS uses your accelerometer and nearby Wi-Fi networks to determine if you are driving. While this is a great feature to keep people from texting and driving, we recommend changing this to "Manually" and keeping your phone in a faraday bag while you drive. Having your phone in a faraday bag has the same effect as do not disturb while not collecting any information in the process.



No SIM 6:48 PM 100%
< Do Not Disturb Activate

- Automatically
- When Connected to Car Bluetooth
- Manually ✓

Do Not Disturb While Driving can be activated manually from Control Center.

CURRENT COURSES >>>

- ESSR
- Wireless Analysis
- Basic Non-Standard Communications
- Advanced Non-Standard Communications
- Basic OSINT
- Advanced OSINT
- Identity Management
- NSC RasPi
- Data Protection

iOS 11 Best Practices

CURRENT NEWS >>>

FBI Director: Unbreakable encryption is a "huge, huge problem"

-Arstechnica

FBI couldn't access nearly 7K devices because of encryption

-AP

Body Cam Study Shows No Effect On Police Use Of Force Or Citizen Complaints

-The Hill

Kaspersky pledges independent code review to cast off spying suspicions

-The Verge

DOJ changes "gag order" policy, Microsoft to drop lawsuit

-Arstechnica

How Silicon Valley's Dirty Tricks Helped Stall Broadband Privacy in California

-EFF

Expanding E-Verify is a Privacy Disaster in the Making

-EFF

Congress opens probe into FBI's handling of Clinton e-mail investigation

-Arstechnica

Researchers Reconstruct Blurred QR Code to Gain Access to $1,000 Bitcoin Wallet

-Bleeping Computer

EVENTS >>>

ToorCamp 2018

June 20-24 2018, San Juan, WA

Black Hat USA 2018

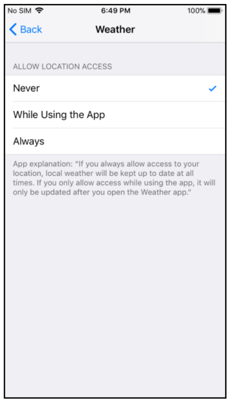
Aug 4-9 2018, Las Vegas, NV

DEF CON 26

Aug 9-12 2018, Las Vegas, NV

Location Services New Feature

(Settings -> Privacy -> Location Services)



No SIM 6:49 PM 100%

< Back Weather

ALLOW LOCATION ACCESS

Never ✓

While Using the App

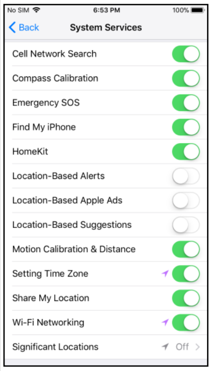
Always

App explanation: "If you always allow access to your location, local weather will be kept up to date at all times. If you only allow access while using the app, it will only be updated after you open the Weather app."

What was once an optional setting for app developers to include in their apps, "While Using The App" is now a mandatory setting for Location Services. With "While Using The App" enabled for any app, the app will not be able to collect location data after you close it, only while it is still open and being used. This means that apps such as Uber can no longer track your location five minutes after you close the app. Many apps have just done away with the "Always" option and only have "While Using The App" and "Never" available. Some apps such as the Weather app will benefit greatly from having Locations Services always on, so it can pull weather information for your current location in the background, but it's not necessary . Even with this new safeguard, you should be keeping your Location Services off when not in use. Do not rely on this to give you the peace of mind that having your Location Services completely off gives you. Just because apps cannot access your location does not mean system services are not still accessing it. (see below)

System Services Accessing Location

(Settings -> Privacy -> Location Services -> System Services)



No SIM 6:53 PM 100%

< Back System Services

Cell Network Search ●

Compass Calibration ●

Emergency SOS ●

Find My iPhone ●

HomeKit ●

Location-Based Alerts ○

Location-Based Apple Ads ○

Location-Based Suggestions ○

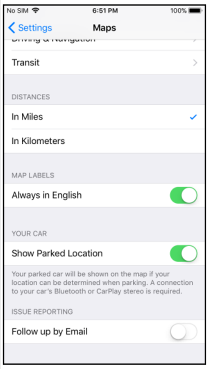
Motion Calibration & Distance ●

Setting Time Zone ●

Share My Location ●

Wi-Fi Networking ●

Significant Locations Off >



No SIM 6:51 PM 100%

< Settings Maps

Transit >

DISTANCES

In Miles ✓

In Kilometers

MAP LABELS

Always in English ●

YOUR CAR

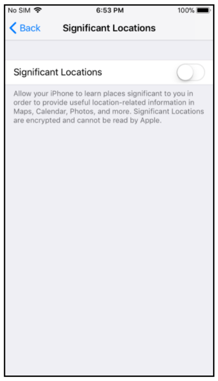
Show Parked Location ●

Your parked car will be shown on the map if your location can be determined when parking. A connection to your car's Bluetooth or CarPlay stereo is required.

ISSUE REPORTING

Follow up by Email ○

While not a completely new addition to iOS 11, it is a good idea to check your system services to make sure most, if not all of the location-based services are turned off. Location-Based Alerts, Ads and Suggestions must be switched to the off position permanently. Other services like Wi-Fi Networking, Share My Location, Motion Calibration & Distance, HomeKit and Cell Network Search can be turned off as well without many worries. For Emergency SOS, Find My iPhone and Setting Time Zone, you will need to weigh your options. If you are injured and you call 911, are you going to be able to explain where you are? Do you want to be able track your lost phone? And how accurate do you want your clock to be? If you scroll down on the same page (not shown), you have options for product improvement. Apple is not going to be upset if you disable those options. If you enable the last option on the page, "Status Bar Icon", you will get the location icon every time a System Service accesses your location. On the same page under Significant Locations, you may find that your iPhone has compiled a list of places that are significant to you based off of your location data. It does this "...to provide useful location related information…". While this information is encrypted and cannot be read by Apple, we still recommend disabling this option. Just because Apple can't read it doesn't mean it's a good idea to keep all of the places you frequent on a device that you carry everywhere with you. Significant Locations is also used to locate your parked car using a new feature in Apple Maps. The "Show Parked Location" features requires that Significant Locations is turned on and your phone was previously paired via CarPlay or Bluetooth to your car. You can turn off this setting under **Settings -> Maps.**



No SIM 6:53 PM 100%

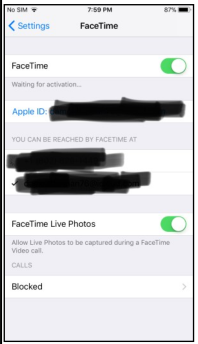
< Back Significant Locations

Significant Locations ○

Allow your iPhone to learn places significant to you in order to provide useful location-related information in Maps, Calendar, Photos, and more. Significant Locations are encrypted and cannot be read by Apple.

Facetime Live Photos

(Settings -> FaceTime)



No SIM 7:59 PM 87%

< Settings FaceTime

FaceTime ●

Waiting for activation...

Apple ID: [redacted]

YOU CAN BE REACHED BY FACETIME AT

[redacted]

FaceTime Live Photos ●

Allow Live Photos to be captured during a FaceTime Video call.

CALLS

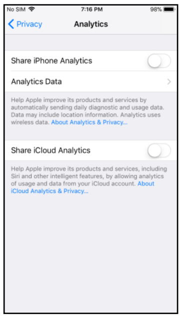
Blocked >

You now have the ability to take a photo during a live FaceTime call. While you shouldn't be using FaceTime in the first place (Wire and Signal support Video Calls), you can turn this option off and it will disable it on both sides. This option is on by default and should be turned off.

Apple Analytics

(Settings -> Privacy -> Analytics)

Apple added an additional option under Analytics for "Share with App Developers". As the name implies, this option should be turned off as it gives Apple permission to share data about your device and your usage with any app developer that asks. If you disable "Share iPhone Analytics", it also disables "Share With App Developers.



No SIM 7:16 PM 98%

< Privacy Analytics

Share iPhone Analytics ○

Analytics Data >

Help Apple improve its products and services by automatically sending daily diagnostic and usage data. Data may include location information. Analytics uses wireless data. About Analytics & Privacy...

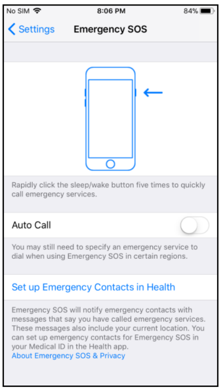
Share iCloud Analytics ○

Help Apple improve its products and services, including Siri and other intelligent features, by allowing analytics of usage and data from your iCloud account. About iCloud Analytics & Privacy...

iOS 11 Best Practices

Emergency SOS
(Settings -> Emergency SOS)

An innocent new feature for iOS 11 called Emergency SOS allows you to rapidly press a button on your iPhone five times to put your device in emergency mode. You have to option to allow your iPhone to auto call emergency services for your area or if you prefer, you can swipe to call. It might be best to leave auto call off if you have children. When you call emergency services, they will be sent your location whether or not Location Services were on before you called. If you have emergency contacts set up, they will be alerted and sent your location as well if you choose to notify them. While this is great if there's an emergency, there is a hidden feature to it. When you put your device in emergency mode, it completely disables Touch ID as an unlock option. When you unlock your phone next, it will force you to enter your PIN or password to your device, similar to how it works when rebooting your device. This is great if you get yourself in a situation where you are compelled to use your fingerprint to unlock your device. Throw it in emergency mode and your fingerprints won't work.



Rapidly click the sleep/wake button five times to quickly call emergency services.

Auto Call ○

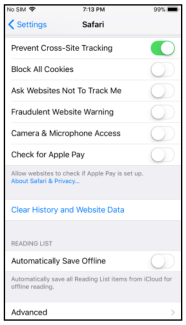
You may still need to specify an emergency service to dial when using Emergency SOS in certain regions.

Set up Emergency Contacts in Health

Emergency SOS will notify emergency contacts with messages that say you have called emergency services. These messages also include your current location. You can set up emergency contacts for Emergency SOS in your Medical ID in the Health app.
About Emergency SOS & Privacy

New Safari Options
(Settings -> Safari)

Apple did two major things with Safari in iOS 11. Firstly, they added an option to "Prevent Cross-Site Tracking" under Safari settings. What this does in a nutshell is it prevents advertising websites from tracking you from site to site by intelligently dealing with third party cookies. While it's not a replacement for a privacy browser (such as Firefox Focus), it's a step in the right direction. The second major change was the split off of the saved passwords from the browser. iOS 11 now has a device wide password manager for Safari and any apps that require logins. This is a good thing and a bad thing. A device wide password manager is a welcome addition and we are glad it got implemented in iOS 11, but it should not be a replacement for an actual password manager like MiniKeePass. iOS's password manager still lacks a few things such as a separate master password and the ability to generate long and unique passwords.



Prevent Cross-Site Tracking ●
Block All Cookies ○
Ask Websites Not To Track Me ○
Fraudulent Website Warning ○
Camera & Microphone Access ○
Check for Apple Pay ○

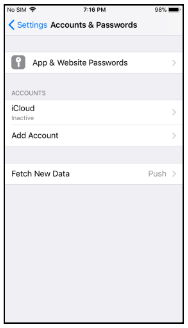
Allow websites to check if Apple Pay is set up.
About Safari & Privacy...

Clear History and Website Data

READING LIST
Automatically Save Offline ○

Automatically save all Reading List items from iCloud for offline reading.

Advanced

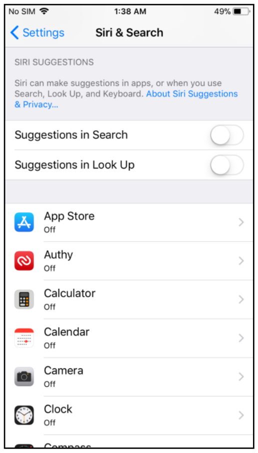


App & Website Passwords

ACCOUNTS
iCloud
Inactive
Add Account

Fetch New Data Push

Better, Faster, Stronger Siri
(Settings -> Siri & Search)



SIRI SUGGESTIONS
Siri can make suggestions in apps, or when you use Search, Look Up, and Keyboard. About Siri Suggestions & Privacy...

Suggestions in Search ○
Suggestions in Look Up ○

App Store
Off
Authy
Off
Calculator
Off
Calendar
Off
Camera
Off
Clock
Off
Compass

Siri has gotten a bit of a revamp and now has more access than ever. Under Siri Settings, the options "Suggestions in Search" and "Suggestions in Lookup" use Siri to suggest things to you when you search or lookup something by sending information to Apple, processing it, and returning relevant information. These options should be turned off as every time you search something, Apple gets notified. Beneath those options, you have every application on your phone with corresponding Siri Search options. Unless the option "Search & Siri Suggestions" is disabled, your device is collecting information from each one of your applications to help provide relevant search suggestions based on usage and data. It will be a lengthy process, but it's worth disabling this option within all of your apps. Some apps such as Maps, Contacts and News have additional options specific to their purpose. For instance, Maps has an option called "Find Locations in Other Apps". This allows Siri to suggest certain locations based on your web browsing history and your app usage. It is recommended that you uncheck all of these options as well to prevent Siri from tracking app usage.

UPDATE CORNER >>>

Software Updates

We preach updates in every class, so here's a list of security software updates for the month of October accompanied by sha256 checksums.

TOR Browser Bundle

Version: 7.0.8

Released: October 24th, 2017

torbrowser-install-7.0.8_en-US.exe

19175a24c707ae3b343db06861d54bae1069d35dfa8158a3bb0fa574c1c11380

TorBrowser-7.0.8-osx64_en-US.dmg

11ad9163a5bfb82c5c3985b6c7c5f258b9677b4ae1ccfa3a5aee6dfc12e09d80

tor-browser-linux64-7.0.8_en-US.tar.xz

c249d76c2072c0e93d9322b2eccfda5846787b349b5fb9a5d22e02a22aa1242e

Firefox

Version: 56.0.2

Released: October 26th, 2017

Firefox Setup 56.0.2.exe

cc25c263124c1a149971bd84d805548f30b9fd1f6f70766b3232cbf0e73bddbb

Firefox 56.0.2.dmg

1a11cf1bb57c8bc7c538f1fbe88a29e64ab5a4d1f9879fa617e6b57559d6e5d5

firefox-56.0.2.tar.bz2

547b60180da45bdb06724b1bb53d9a9582266d619ce84c7f4670dd18e05c6858

CCleaner

Version: 5.36

Released: October 24th, 2017

ccsetup536.exe

03d8b1eafddb81140afe512122c20d048863ba861f976f97d28697f9e44a9e5b

CCMacSetup114.dmg

be3411c927b919d1332cd29e01b526c3529139c99f86a0c9db1e12918259ce70

READER QUESTIONS >>>

Have a specific **question** you would like us to answer?

Have a suggestion for a **topic**?

Want to **contribute** to the digital update?

Let us know at
digitalupdate@tpidg.us