

Mobile Device Support

Jeff Dove

February 18 2017

Apple and IOS

Apple is a vertical company.

- Control of type and design of hardware components
- Control over phone operating system and updates
- Control over what apps can accomplish

This allows them create a user environment that is consistent, easy to support and use.

People are willing to pay a premium for the ease of use and better device security and better support

Google and Android

Google is a horizontal company that has large scale

- The relative fixed costs allow them to scale out
- Open systems help them increase scale
- Google cares about the data more than the device

Android is an open source mobile platform

- Multiple hardware manufactures
- Many software add-ons from OEM and carriers
- Apps can have fewer restrictions interacting with the operating system

Support Topics

- Backup and restoration
- Security
- Privacy
- Storage and battery
- Mobile pay platforms
- Site for simple how to's on many phones:
<https://www.verizonwireless.com/support/simulators/>

Backups

- iPhone based backups
- iCloud
- Computer based backups
 - iTunes, iMazing, AnyTrans, iPhone Backup Extractor, Copy Trans
- App based backups
 - Easy Backup, My Contacts Backup, iDrive Lite
 - iPhone apps focus on contacts address backups
- Direct file transfers
 - There is no direct disk access (disk mode) on iPhones

iCloud backup includes:

- Purchase history for music, movies, TV shows, apps, and books
- Photos and videos on your iOS devices
- Device settings
- App data
- Home screen and app organization
- iMessage, text (SMS), and MMS messages (requires the SIM card that was in use during backup)
- Ringtones
- Visual Voicemail password (requires the SIM card that was in use during backup)
- Health data
- HomeKit configuration

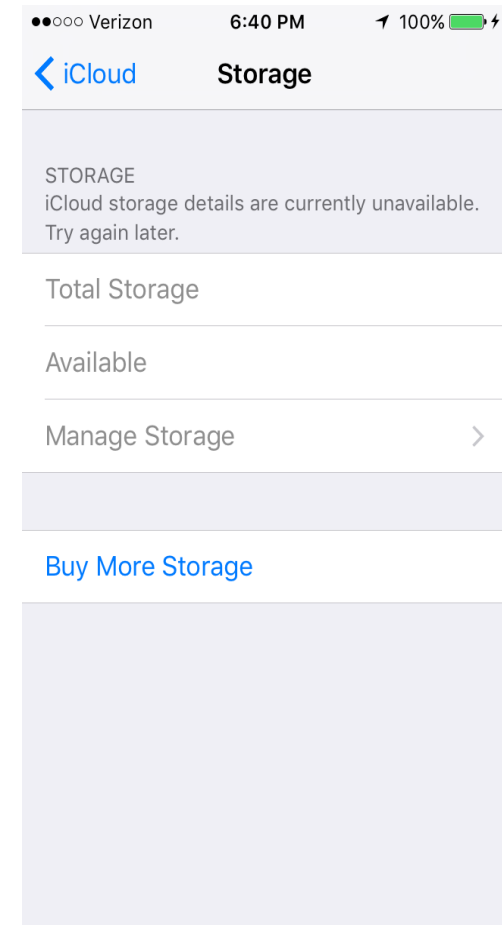
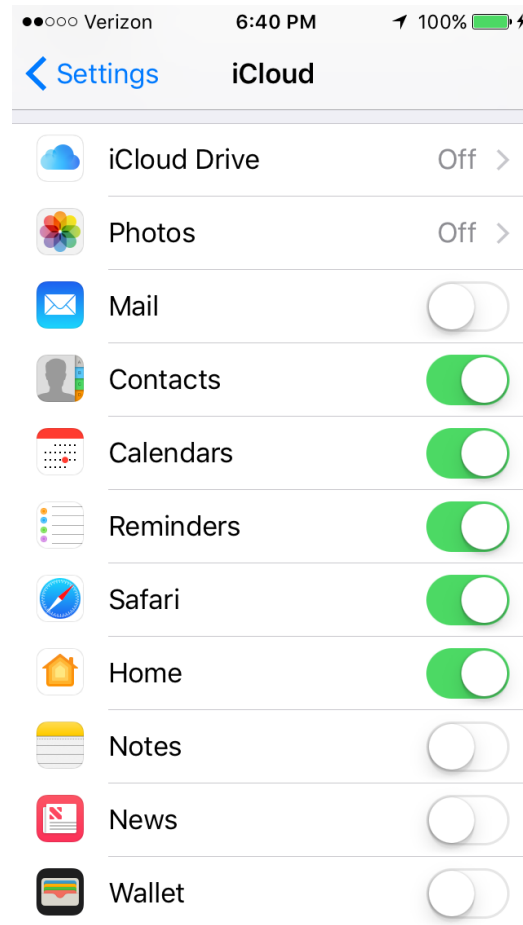
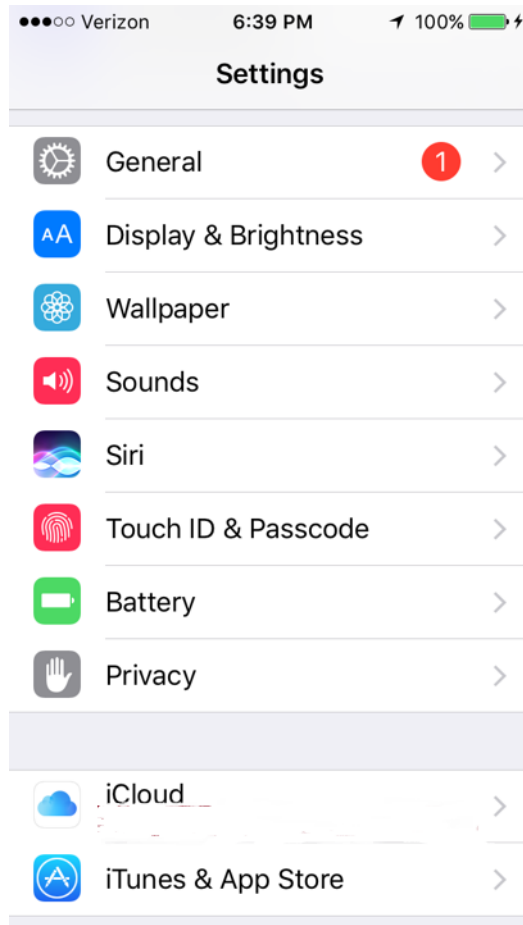
https://support.apple.com/kb/ph12519?locale=en_US

iCloud backup does not include

- Data that's already stored in iCloud, like Contacts, Calendars, Notes, My Photo Stream, and iCloud Photo Library
- Data stored in other cloud services, like Gmail and Exchange mail
- Apple Pay information and settings
- Touch ID settings
- iCloud Music Library and App Store content (If it's still available in the iTunes, App Store, or iBooks Store)
- You can tap to re-download your already purchased content

<https://support.apple.com/en-us/ht204136>

iCloud backup



<https://support.apple.com/en-us/ht204247>

iTunes Backup and restore

The screenshot shows the iTunes application window titled "Backing up 'Jeffrey's iPhone'...". The interface is divided into a left sidebar and a main content area. The sidebar shows "Jeffrey's iPhone" with 16GB storage and 100% battery. Below this is a "Settings" menu with "Summary" selected. The main content area displays "iPhone 5s" information, including capacity (11.24 GB), phone number, and serial number. It also shows the current iOS version (10.1.1) and a notification that a newer version (10.2.1) is available. The "Backups" section offers options for "Automatically Back Up" (iCloud or This computer) and "Manually Back Up and Restore". A "Latest Backup" section shows a backup from 2/18/2017. At the bottom, a progress bar indicates "9.82 GB Free" and "Other" storage, with "Sync" and "Done" buttons.

Backing up "Jeffrey's iPhone"...

File Edit View Controls Account Help

Jeffrey's iPhone

Jeffrey's iPhone 16GB 100%

Settings

- Summary
- Apps
- Music
- Movies
- TV Shows
- Photos
- Info

On My Device

- Music
- Movies
- TV Shows
- Books
- Audiobooks
- Tones

iPhone 5s

Capacity: 11.24 GB

Phone Number: [Redacted]

Serial Number: [Redacted]

iOS 10.1.1

A newer version of the iPhone software is available (version 10.2.1). To update your iPhone with the latest software, click Update.

Update Restore iPhone...

Backups

Automatically Back Up

- iCloud
Back up the most important data on your iPhone to iCloud.
- This computer
A full backup of your iPhone will be stored on this computer.
 Encrypt iPhone backup
This will allow account passwords, Health, and HomeKit data to be backed up.
Change Password...

Manually Back Up and Restore

Manually back up your iPhone to this computer or restore a backup stored on this computer.

Back Up Now Restore Backup...

Latest Backup:
2/18/2017 2:05 PM to iCloud

Other 9.82 GB Free Sync Done

Android Backups

- Cloud based backups
- Google drive, one drive, amazon photos
- Computer based backups
 - Manufacture specific - Samsung Smart Switch, LG Bridge, Sony PC companion, Huawei phone backup, or HiSuite,
- App based backups
 - Titanium, My Backup Pro, Helium, SMS Backup & Restore
 - Some can do complete backups on rooted phones (Titanium)
 - Can go to internal storage or cloud based storage
- Direct file transfers
- PC, Dropbox, One Drive, Google Drive

Android backup

Settings

SEARCH

- Location
- Lock screen and security
- Privacy and emergency
- Easy mode
- Accounts
- Google
- Language and input
- Backup and reset

System

- Date and time
- Accessibility
- Help

Backup and reset

Transfer between phones

Open Smart Switch

Transfer content such as images, contacts, calendar items, and messages from your old phone.

Google account

Back up my data

On

Backup account

Automatic restore

When reinstalling an application, backed up settings and data will be restored.

Reset

Reset settings

Reset all settings to their defaults.

Reset network settings

Reset Wi-Fi, Bluetooth, and other network settings to their defaults.

Google

MORE

Google

Sync Contacts

Last synced on 2/21/17 7:21 PM

Sync Drive

Sync turned off

Sync Gmail

Last synced on 2/21/17 7:21 PM

Sync Google Fit data

Sync turned off

Sync Google Play Movies & TV

Sync turned off

Sync Google Play Music

Sync turned off

Sync People details

Last synced on 2/21/17 10:42 AM

PC based backup

Smart Switch

MORE



Backup has been completed.

Backup date and time:
2-5-2017 7:54:13 PM

Backed up from:
SAMSUNG-SM-

Total size:
5.4GB

Succeeded / Excluded:
14 / 2

The following categories have been backed up successfully.

- | | | |
|----------------------------------|--|---------------------------|
| ✓ Contacts
680 item(s) | ✓ Images
6646 item(s), 4.66GB ? | ✓ Email |
| ✓ Messages
473 item(s) | ✓ Music
5 item(s), 4.71MB ? | ✓ Home screen |
| ✓ Memo
1 item(s) | ✓ Videos
185 item(s), 544.74MB ? | ✓ Location Service |
| ✓ Call logs | ✓ Documents
168 item(s), 33.47MB ? | ✓ Settings |
| ✓ S Health | ✓ Applications
8 item(s), 171.18MB | |

The following categories have been excluded because there is no data on the device.

OK



Select a backup to restore

Samsung device data

SAMSUNG-SM-...

2/5/2017 7:54:13 PM

 Select all (14 selected)

<input checked="" type="checkbox"/> Personal content	<input checked="" type="checkbox"/> Multimedia, apps	<input checked="" type="checkbox"/> Settings, etc.
<input checked="" type="checkbox"/> Contacts 7 item(s)	<input checked="" type="checkbox"/> Images 6646 item(s), 4.66GB	<input checked="" type="checkbox"/> Email
<input checked="" type="checkbox"/> Messages 2016.06~2017.02	<input checked="" type="checkbox"/> Music 5 item(s), 4.71MB	<input checked="" type="checkbox"/> Home screen
<input checked="" type="checkbox"/> Memo 1 item(s)	<input checked="" type="checkbox"/> Videos 185 item(s), 544.74MB	<input checked="" type="checkbox"/> Location Service
<input checked="" type="checkbox"/> Call logs	<input checked="" type="checkbox"/> Documents 168 item(s), 33.47MB	<input checked="" type="checkbox"/> Settings

Estimated free space required to restore: 5.4GB

Device storage

10.41GB available

SD card

1.72GB available

OK

Cancel

iPhone restoration

[← Back](#)



Apps & Data

Restore from iCloud Backup >

Restore from iTunes Backup >

Set Up as New iPhone >

Move Data from Android >

What does restoring do?

Your personal data and purchased content will appear on your device, automatically.

Items that impact a restore

- needs to be on Wi-Fi
- multiple Apple IDs and forgot a password
- try syncing to iTunes
- delete and reload the app

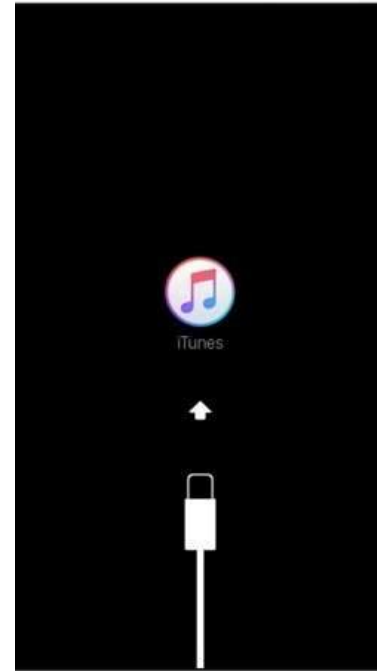
Recovery Mode

While connected to a PC or Mac, force restart it with these steps:

On an iPhone 6s and earlier, iPad, or iPod touch: Press and hold the Sleep/Wake and **Home** buttons at the same time. Don't release the buttons when you see the Apple logo. Keep holding both buttons until you see the recovery mode screen.

On an iPhone 7 or iPhone 7 Plus: Press and hold the Sleep/Wake and **Volume Down** buttons at the same time. Don't release the buttons when you see the Apple logo. Keep holding both buttons until you see the recovery mode screen.

<https://support.apple.com/en-us/HT201263>



There is a problem with the iPhone "iPhone" that requires it to be updated or restored.

The problem may be fixed by updating your iPhone, which preserves your settings and content. However, if updating doesn't work, it may be necessary to click Restore, which erases all settings and content. If you backed up this iPhone to this computer or iCloud, you'll be prompted to restore the backup onto the iPhone.

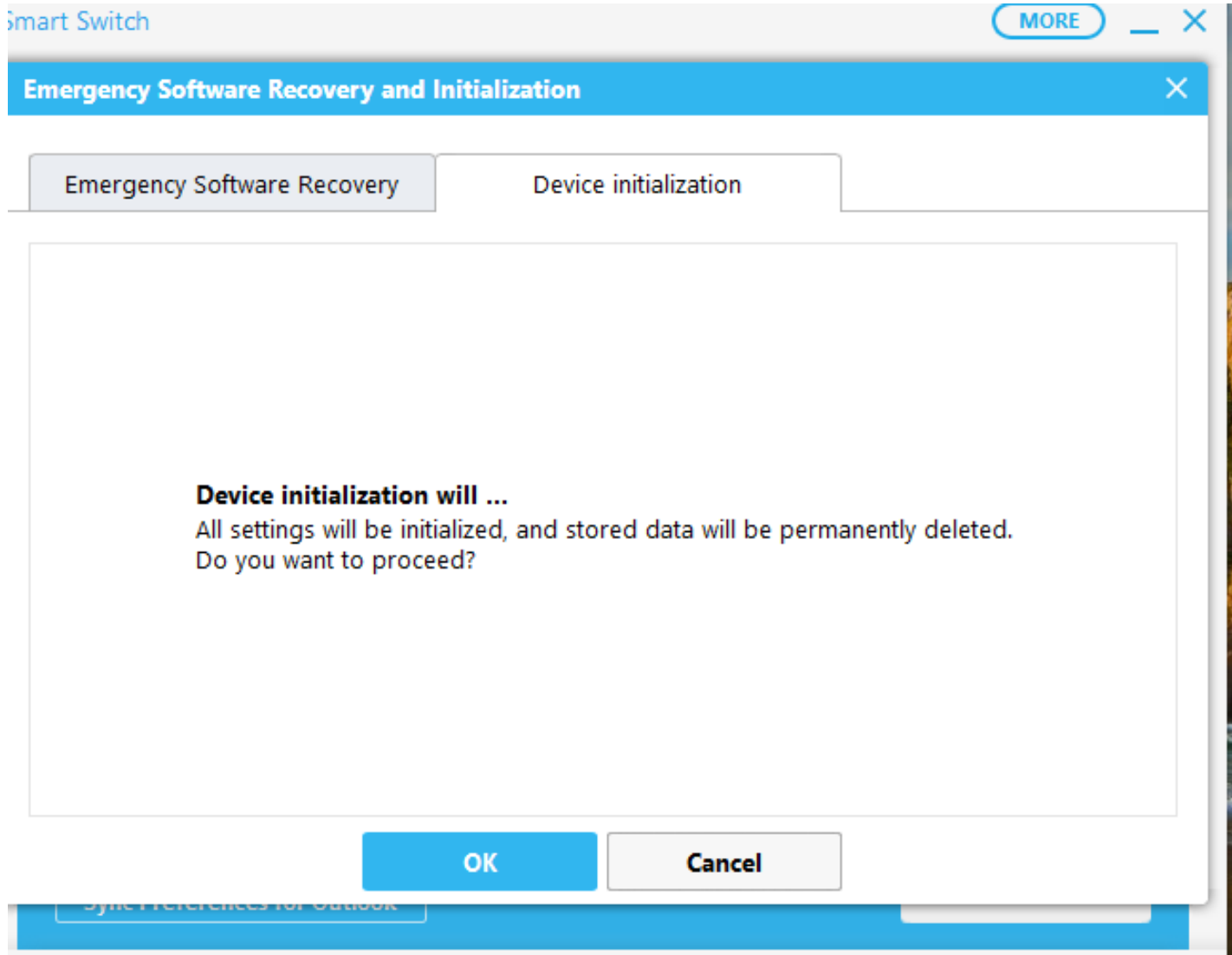
Cancel

Restore

Update

Android recovery

Samsung Smart switch recovery



Security

Locking and encrypting the phone

Find my phone and erase data remotely

Jailbreaking and rooting phones

Keeping the phone up to date

Physical Security

Lock the phone – password or pin; Thumb print is secure but also have a pin as well

1234, 0000, 2580, 1111, 5555, 5683, 0852, 2222, 1212, and 1998 are commonly used

Patterns on Androids are not as secure

Enable Erase Data will erase after 10 incorrect attempts

Be aware of what shows on the lock screen?

message previews

Find My Phone

- iPhone <https://www.icloud.com/#find>
 - Locate your device on a map
 - Play a sound on your device to help you find it
 - Use Lost Mode to lock and track your device
 - Remotely erase all of your personal information from the device
- Android <https://www.google.com/android/devicemanager>
 - Ring, Lock or Erase

Rooting and jailbreaking

Jailbreaking is bypassing limitations imposed by Apple

- Loading apps onto iPhone from outside the App store can only be done on a jailbroken phone.

Rooting (Android) goes much further than the IOS jailbreak. A standard (unrooted android) can already load apps from third party app stores.

- Rooting is gaining administrative access to the device. This circumvents the android security architecture

Software and updates

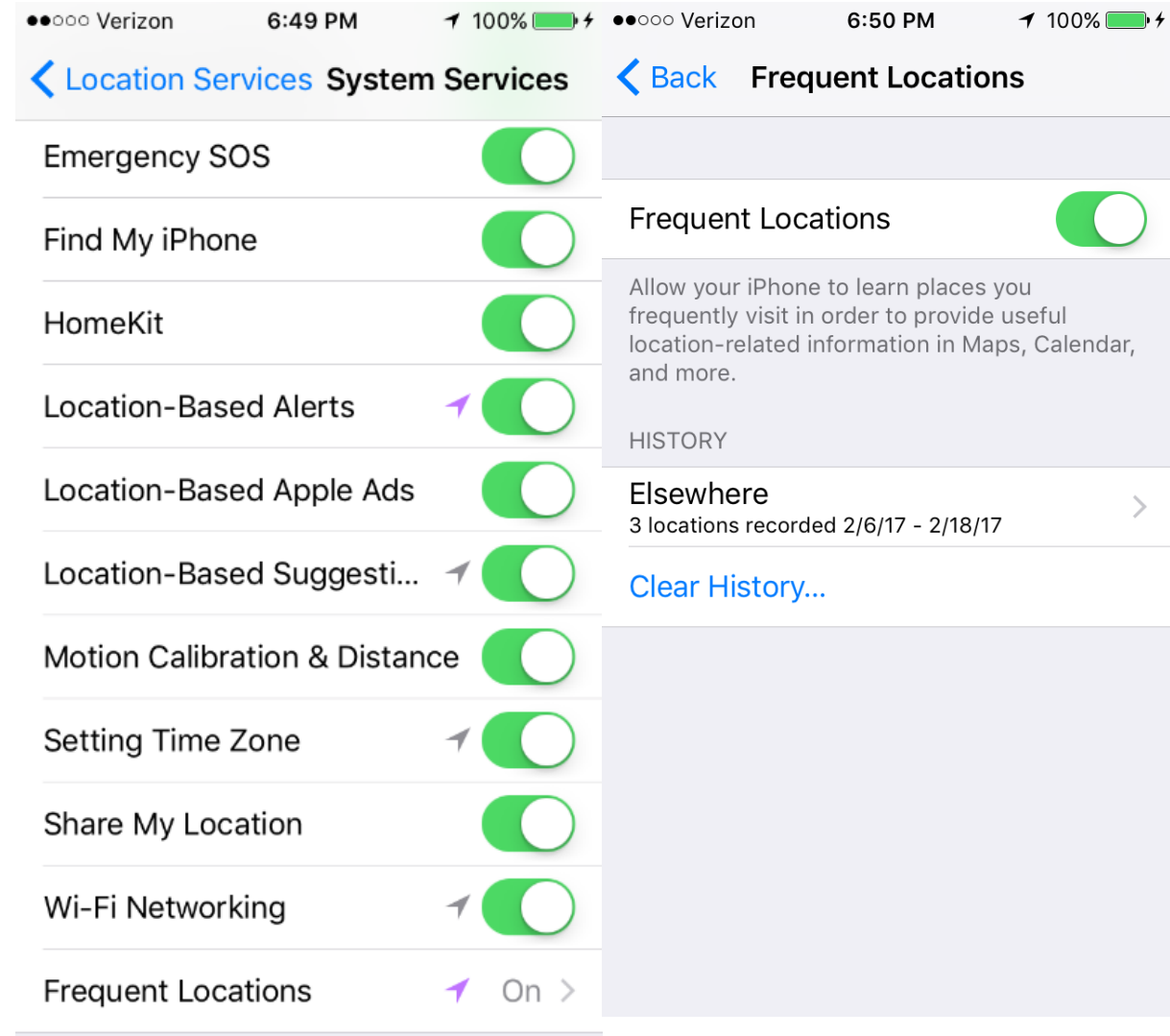
- Keep the phone up to date
 - IOS is updated by Apple
 - Android by the particular phone manufacture
 - Apps are updated by the developer and pushed to the app stores
 - Virus and malicious software can be an issue on Android

Privacy

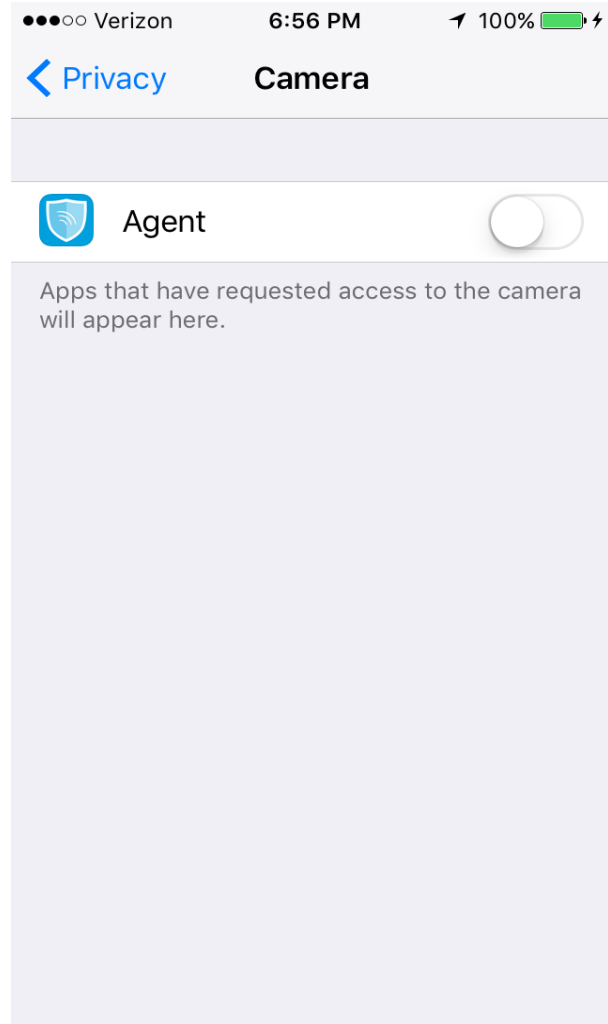
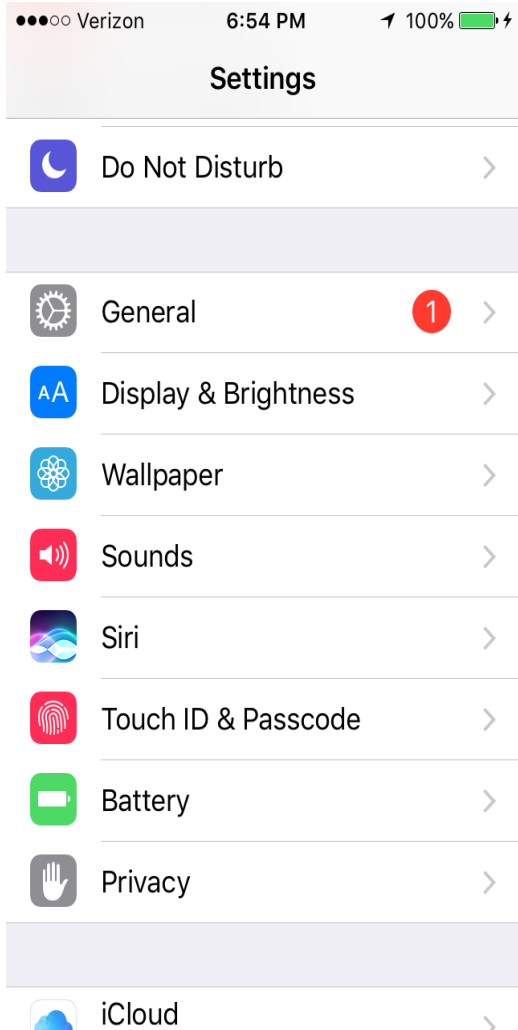
1. Location Services
2. Managing App Permissions
3. Ad tracking

Location services

- Apps that need access to your location
- Find my device needs location on
- Almost all apps will function without the location turned on. A few that map you will not like exercise apps and some games
- Map services will still work but will be more limited or any app that wants to show services near you



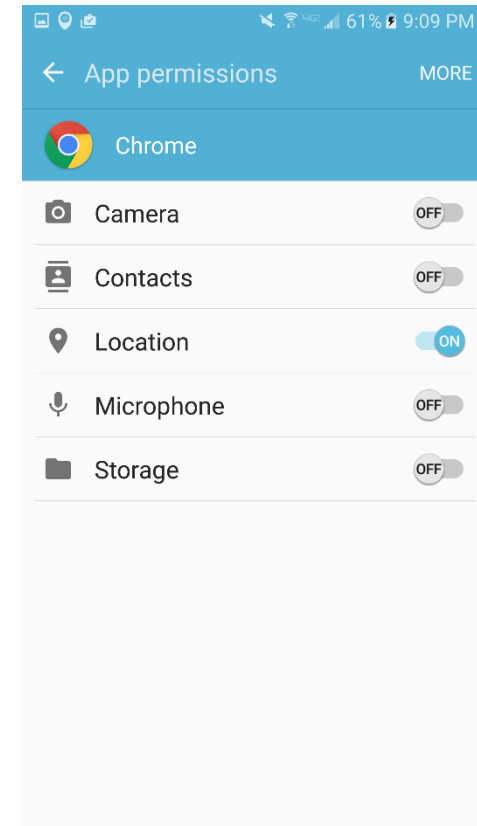
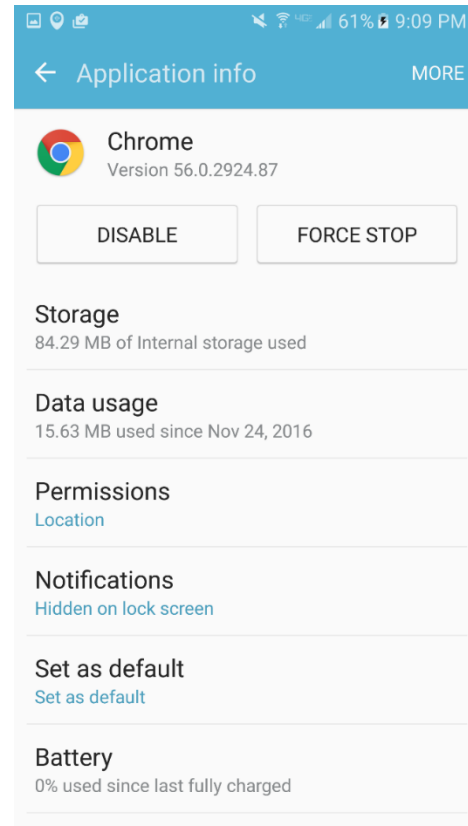
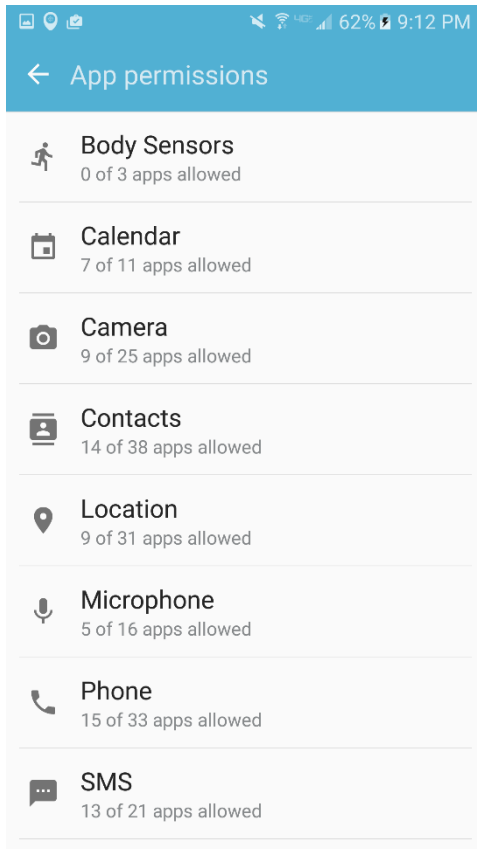
App Permissions



- Be aware of the permissions the apps have
- iPhone go to settings then privacy

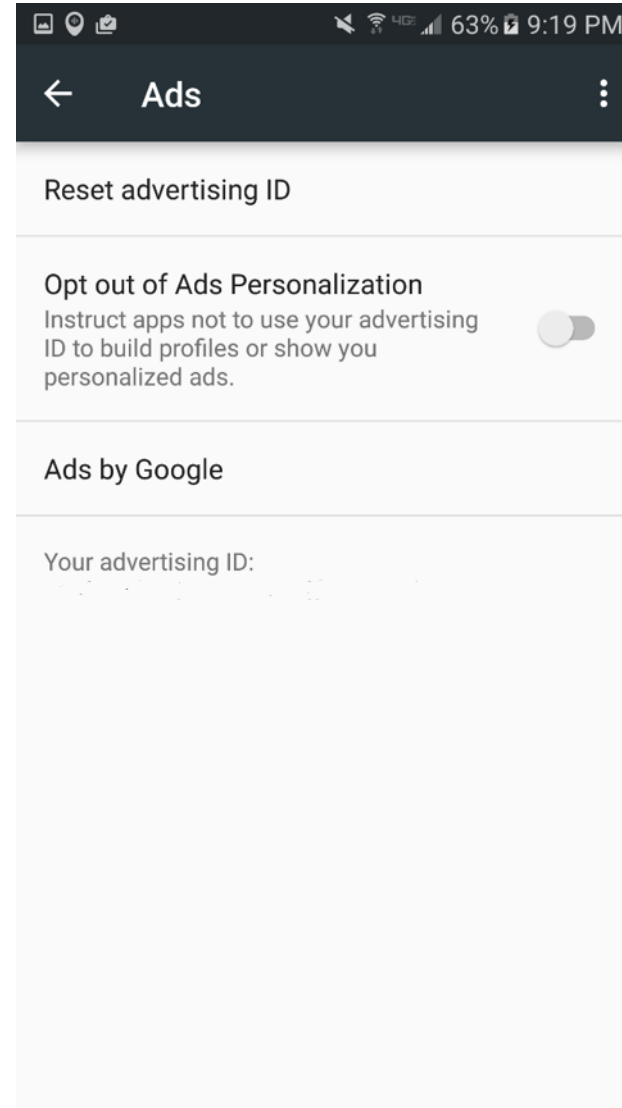
App Permissions Android

- Be aware of the permissions the apps have
- Apps may need permissions to contact, storage, camera and mic



Ad Tracking Opt Out

- You will still see ads but not based on your searches and personal information
- Also you can turn off location based ads
- <https://myaccount.google.com/privacy>



Storage

- iPhone: no built in storage device
- There is no disk mode
- Lightning or wireless devices

Android; most have built expansion, micorSD or USB OTG



Battery

- Update to the latest software.
- Avoid extreme ambient temperatures
 - Too hot can permanently damage, too cold is temporary
- Remove certain cases during charging
- There are two simple ways you can preserve battery life — no matter how you use your device: adjust your screen brightness and use Wi-Fi.
- Turn off push notifications
- Turn off Location Services for the app
- Turn on Airplane mode. Note that you cannot make or receive calls while in Airplane mode.
- <https://support.apple.com/iphone/repair/battery-power>

Apple Pay, Google Pay, and Samsung Pay

Safer than credit cards???

Payment information is transmitted wirelessly through Near Field Communication (NFC)

Card data is not transmitted during the transaction (tokenization)

Card data is stored securely (iPhone on secure element chip and android in the cloud).

Apple and Android pay are being integrated into Safari and Chrome