The Most Relevant Evidence per Gigabyte

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FOR500 Windows Forensic Analysis — GCFE

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SQLite

SQLite Database Basics

SQLite databases are a self-contained database stored as a file system file (but may have a few supporting files that will also be needed for analysis!) Files have the magic number "`SQLite format 3`." SQLite files correspond to a database that contains tables. `Tables` contain `rows` of data with corresponding `columns` that describe the data in the row.
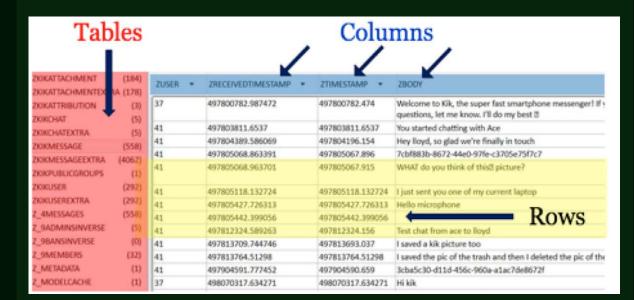

Some temporary files may also be created, including `Journal files` and `Write Ahead Logs`. `Journal files` store original data before a transaction change so the database can be restored to a known state if an error occurs. They are created by default.

Write Ahead Logs (WAL) contain new data changes, leaving original database untouched. After a set number of page changes, the WAL is used to update the actual database. Write ahead logs are optional. Journal files – stores original data before a transaction change so the database can be restored to a known state if an error occurs (created by default).

Timestamp Conversion

Timestamps are stored in the databases as one of several numerical representations. *(Timestamps are assumed to be stored in UTC, you may need to verify this.)*

UNIX Epoch (10 digit number - number of seconds since 01/01/1970 00:00:00):
- `SELECT datetime(TS_COLUMN,'unixepoch')`
  Or in **local time** as suggested by the device settings (this can be done for all the following timestamps):
- `SELECT datetime(TS_COLUMN,'unixepoch', 'localtime')`

UNIX Epoch MILLISECONDS (13 digit number – number of milliseconds since 01/01/1970 00:00:00):
- `SELECT datetime(TS_COLUMN/1000,'unixepoch');`

Mac Absolute time, number of seconds since 01/01/2001 00:00:00. In order to correctly convert this timestamp, first, add the number of seconds since UNIXEPOCH time to Mac Absolute Time (978307200), then convert.
- `SELECT datetime(TS_COLUMN + 978307200, 'unixepoch');`

Chrome time accounts for time accurate to the MICROSECOND, which requires dividing the number by 1,000,000:
- `SELECT datetime(TS_COLUMN/1000000 + (strftime('%s','1601-01-01')),'UNIXEPOCH');`

Basic Analysis Query Structure

Get everything from a single table:
`SELECT * FROM A_TABLE;`

Get two columns from a single table:
`SELECT COLUMN_A, COLUMN_B FROM A_TABLE;`

Table Joins

Taking data from two (or more!) tables that have a column in common and joining them into one table. Identify tables of interest that contain unique values.

LEFT JOIN – Resulting rows are returned from the **LEFT** table even if there are no matches in the right. Using the **LEFT JOIN** returns all the text messages, including those with and without attachments.

`SELECT ZVIBERMESSAGE.ZTEXT AS "Message Text", ZATTACHMENT.ZNAME AS "Attachment Filename", datetime(ZVIBERMESSAGE.ZDATE+978307200, 'unixepoch', 'localtime') AS "Message Date", ZVIBERMESSAGE. ZSTATE AS "Message Direction/State" FROM ZVIBERMESSAGE LEFT JOIN ZATTACHMENT on ZATTACHMENT.Z_PK=ZVIBERMESSAGE.ZATTACHMENT`

INNER JOIN – Resulting rows are returned when both items are a match. Using the **INNER JOIN** (also achieved by typing "**JOIN**" in the query) returned just the messages that included attachments.

Useful Stuff

Column Renaming:
A_TABLE.ZAWKWARDCOLUMNNAME AS "Chat Messages"

Counting:
`SELECT COUNT(*) FROM A_TABLE;`

Aggregating with GROUP BY and COUNT (Count chat messages per contact):
`SELECT MESSAGES,COUNT(*) FROM CHAT GROUP BY CONTACT;`

Sorting with ORDER BY:
`SELECT * FROM CHAT ORDER BY A_TIMESTAMP ASC`
ASC = Ascending   DESC = Descending

Searching with WHERE and LIKE:
`SELECT CONTACT, MESSAGE FROM CHAT WHERE CONTACT LIKE '%Hank%'`

Our Favorite Mobile Forensic Resources

Practitioners/Researchers
Sarah Edwards	https://www.mac4n6.com
Heather Mahalik	https://smarterforensics.com
Mattia Epifani	http://mattiaep.blogspot.com
Adrian Leong	http://cheeky4n6monkey.blogspot.com
Alexis Brignoni	https://abrignoni.blogspot.com
Jon B	https://www.ciofecaforensics.com
Mari DeGrazia	http://az4n6.blogspot.com
Andrew Hoog	https://www.hack42labs.com
Ian Whiffin	http://doubleblak.com/blogs.php
Josh Hickman	https://thebinaryhick.blog

Vendors
Oxygen Forensics	https://blog.oxygen-forensic.com
Magnet Forensics	https://www.magnetforensics.com
Cellebrite	https://www.cellebrite.com/en/blog
Sanderson Forensics	https://sqliteforensictoolkit.com/support-articles
Elcomsoft	https://blog.elcomsoft.com
MSAB	https://www.msab.com/resources/blog
Belkasoft	https://belkasoft.com/articles
Grayshift	https://www.grayshift.com

Additional Resources
DFRWS	https://dfrws.org
iOS Jailbreaks	https://www.theiphonewiki.com/wiki/Jailbreak
DFIR Review	https://dfir.pubpub.org
This Week in 4N6	https://thisweekin4n6.com
IMEI.info	https://www.imei.info
GSM Arena	https://www.gsmarena.com
Phone DB	https://phonedb.net
FOR585 Google Group	*access granted to all 585 Alumni
DFIR mailing list	DFIR@lists.sans.org

Free Scripts and Helpful Utilities

	Utility	Description	Repository
iOS	APOLLO	Apple Pattern of Life Lazy Output'er	https://github.com/mac4n6/APOLLO
	iLEAPP	iOS Logs, Events, And Properties Parser	https://github.com/abrignoni/iLEAPP
	iOS-Mobile-Installation-Logs-Parser	iOS installation and uninstallation log parser	https://github.com/abrignoni/iOS-Mobile-Installation- Logs-Parser
	iOS Triage	Incident response tool for iOS devices	https://github.com/RealityNet/ios_triage
	fplist	Converts plist files to json, dot notation or csv	https://www.hack42labs.com/tools/fplist/details
	iOS_sysdiagnose_forensic_scripts	Scripts for parsing various iOS sysdiagnose logs	https://github.com/cheeky4n6monkey/iOS_sysdiagnose_forensic_scripts
	libimobiledevice		https://www.libimobiledevice.org
Android	ALEAPP	Android Logs Events & Protobuf Parser	https://github.com/abrignoni/ALEAPP
	Android Usagestats XML + Protobuf Parser	Parser for Android Usagestats files in xml or protobuf format	https://github.com/abrignoni/Android-Usagestats-XML-Protobuf
	ftree	Identifies, hashes and destructures all files recursively from any file system	https://www.hack42labs.com/tools/ftree/details/
	FAPK	Extracts apk files from an Android device	https://www.hack42labs.com/tools/fapk/
	Andriller		https://github.com/den4uk/andriller
	Android Triage		https://github.com/RealityNet/android_triage
Third-Party Applications/SQLite	DFIR-SQL-Query-Repo	Collection of SQL query templates for digital forensics use by platform and application	https://github.com/abrignoni/DFIR-SQL-Query-Repo
	SQLite-Deleted-Records-Parser	Recovers deleted entries from SQLite databases	https://github.com/mdegrazia/SQLite-Deleted-Records-Parser
	SQLECmd	Automates the identification and processing of sqlite database files	https://github.com/EricZimmerman/SQLECmd
	sqlite_miner	Mines SQLite databases for BLOBs and potential unparsed content of interest	https://github.com/threeplanetssoftware/sqlite_miner
	4n6-scripts	Collection of forensic and third-party scripts	https://github.com/cheeky4n6monkey/4n6-scripts

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Mobile Malware and Spyware

Key Artifacts: Static Analysis

Requested Permissions: Granted to an application by the user (1) during installation or (2) upon execution/runtime. Found in the AndroidManifest.xml file.

Activities: One or more activities comprise each application. Users can navigate to/from and interact with activities directly through the User Interface (UI).

Services: Tasks often running in the background and integrated into the application. User doesn't (normally) interact with Services. Examples: music playing during a gaming application, or calculations performed in the background.

Broadcast Receivers: Facilitates the exchange of information for applications, which can be delivered between app components or between entirely different applications. Applications can be programmed to "listen" for events that are then delivered to the broadcast receivers using Intents.

Content Providers: Refers to how information is stored within an application and shared between multiple applications. Example: a contact database often used by many native and third-party applications. The code would call the ContentResolver (the global instance that provides access to the content) that passes on the request to the proper Content Provider.

Common Signs and Symptoms

- Android devices are most at risk for mobile malware infection
- Poor battery life
- Dropped calls and call disruptions
- Unusually large phone bills
- Data plan spikes
- Device performance problems
- Unexpected application errors

- **Unexpected device behaviors**
  - Unplanned reboots
  - Apps that close or open on their own
  - Unexplained settings changes
- **High-risk user behavior**
  - Risky downloads, browsing or link-clicking
- **Spyware: Device was out of owner's control**
  - Spyware installation requires possession of the device

Mobile Malware Detection

Online Mobile Malware Sandboxes

Upload suspicious .apk files to the Internet for online sandbox analysis:
- https://www.joesandbox.com
- https://www.virustotal.com
- https://github.com/pjlantz/droidbox

Local Static Malware Analysis

Tools installed on the local machine for mobile malware analysis:
- Android SDK
- Dex2Jar
- Dexter
- JD-GUI

*Virtual machine environments for mobile malware analysis: Santoku

Beyond Scanning for Malware with Forensic and AV Tools

Android Extraction

LOCKED

Encryption Type?

Full Disk Encryption — Is secure startup configured?
- **No** → Device is in a live decrypted state, encryption keys are in memory, no brute force is needed
- **Yes** (Hot or Cold?)
  - **Cold** → Brute force is needed
  - **Hot** → Device is in a live decrypted state, encryption keys are in memory, no brute force is needed

File-Based Encryption — In which state did the device arrive at the lab?
- **Cold** → Brute force is needed
- **Hot** → Device is in a live decrypted state, encryption keys are in memory, no brute force is needed

Graphic courtesy of Cellebrite

Poster Authors
Heather Mahalik — hmahalik@gmail.com — @heathermahalik
Domenica "Lee" Crognale — domenica.crognale@gmail.com — @domenicacrognal
Mattia Epifani — mattia.epifani@realitynet.it — @mattiaep

iOS Cheatsheet

Path	Description	BFU	Backup	Sysdiagnose
DEVICE INFORMATION				
/private/var/installd/Library/MobileInstallation/LastBuildInfo.plist	Operating system version	Y	N	N
/private/var/mobile/Library/CoreDuet/coreduetd.db	CoreDuet Info (0=unlocked, 1=locked) (Up to iOS 9)	Y	N	N
/private/var/mobile/Library/Logs/mobileactivationd	MobileActivation Logs	Y	N	N
/private/var/mobile/Library/Preferences/com.apple.AdLib.plist	May show older iOS versions used	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.aggregated.plist	Last BootTime	Y	N	N
/private/var/mobile/Library/Preferences/com.apple.mmcs.plist	IMSIs	Y	N	N
/private/var/mobile/Library/Preferences/com.apple.mobilegestalt.plist	Device name	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.preferences.datetime.plist	Time settings	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.preferences.network.plist	Airplane mode (on/off)	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.Preferences.plist	Disk usage	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.purplebuddy.plist	Language, Country info, Device IDs	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.timed.plist	Auto Time and Auto Time Zone settings	Y	Y	N
/private/var/preferences/SystemConfiguration/com.apple.networkidentification.plist	Network IP, WiFi, Wifi Time Zone settings	Y	Y	N
/private/var/preferences/SystemConfiguration/com.apple.radios.plist	Airplane mode (on/off)	Y	Y	N
/private/var/preferences/SystemConfiguration/NetworkInterfaces.plist	Wi-Fi Mac Addresses	Y	N	N
/private/var/preferences/SystemConfiguration/preferences.plist	Network and VPN information	Y	Y	N
/private/var/root/Lockdown/escrow_records/	Computer Trust/Pair certificates	Y	N	N
/private/var/root/Lockdown/pair_records/	Computer Trust/Pair certificates	Y	N	N
/private/var/mobile/Library/Preferences/com.apple.preferences.network.plist	Airplane mode (on/off)	Y	Y	N
/private/var/wireless/Library/Preferences/com.apple.commcenter.plist	Device Info (IMEI, Phone Number, Network Carrier, ICCIDs, IMSIs, etc.)	Y	N	N
PASSWORDS AND ACCOUNT INFORMATION				
/private/var/mobile/Library/Accounts/Accounts3.sqlite	Account information	Y	Y	N
/private/var/mobile/Library/DataAccess/	Account information used to set up apps (Email, #, etc)	Y	Y	N
/private/var/mobile/Library/DataAccess/AccountInformation.plist	Email sync data	Y	Y	N
/private/var/mobile/Library/DataAccess/[iCloud-[iCloud email account name]/.mboxCache.plist	iCloud Email account information	Y	Y	N
/private/var/mobile/Library/Health/healthdb.sqlite	Health data, personal data, iOS version info, etc.	N	Y	N
/private/var/mobile/Library/Health/healthdb_secure.sqlite	Health data, personal data, iOS version info, etc.	N	Y	N
/private/var/mobile/Library/MedicalID/MedicalIDData.Archive	Medical information (bloodtype, organ donor, name, DOB, etc.)	N	Y	N
/private/var/mobile/Library/Preferences/com.apple.accountsettings.plist	Email accounts pushed to device	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.cmfsyncagent.plist	Blocked Dialers	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.commcenter.shared.plist	Phone number	Y	N	N
/private/var/mobile/Library/Preferences/com.apple.contacts.donation-agent.plist	Facetime phone number in use, SMS phone number, user accounts	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.contextstored.plist	Last Metrics Attempts (usage information)	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.coreduetd.plist	Activity throttling	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.corerecents.recentsd.plist	Activity throttling	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.FeedbackAssistant.plist	iCloud login information	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.homesharing.plist	Last successful email address used to login to cloud	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.icloud.findmydeviced.FMIPAccounts.plist	iCloud account information	Y	Y	N
/private/var/mobile/Library/UserConfigurationProfiles/	Find My iPhone settings	Y	Y	N
/private/var/preferences/SystemConfiguration/com.apple.accounts.exists.plist	Profiles and restrictions	N	Y	N
/private/var/root/Library/Lockdown/data_ark.plist	Account information	Y	N	N
/private/var/root/Library/preferences/com.apple.callservices.plist	Last backup computer, iCloud Backup Settings, Device info	Y	N	N
	Last iCloud account	Y	N	N
SETTINGS – SYSTEM CONTROLLED – KEYBOARDS, DICTIONARY, LOGS, BT ADDRESS, ETC.				
/private/installd/Library/MobileInstallation/mobile_installation.log.*	Mobile Applications Installation Logs	Y	N	N
/private/var/mobile/Library/Containers/	Application Folders	Y	Y	N
/private/var/mobile/Library/BulletinBoard/ClearedSections.plist	Logs of cleared notifications	Y	Y	N
/private/var/mobile/Library/Keyboard/<language>-dynamic.lm/dynamic-lexicon.dat	Auto correction / Predictive text	Y	N	N
/private/var/mobile/Library/Preferences/	Examine plists for more information	Y	Y	N
/private/var/preferences/SystemConfiguration/NetworkInterfaces.plist	Wi-Fi Mac Addresses	Y	N	N
SETTINGS – USER CONTROLLED – SYNC SETTINGS, SPRINGBOARD, ETC.				
/private/var/containers/Shared/SystemGroup/systemgroup.com.apple.configurationprofiles/Library/ConfigurationProfiles/CloudConfigurationDetails.plist	Cloud configurations	N	N	N
/private/var/mobile/Library/DoNotDisturb/DB/Settings.sqlite	Do not disturb settings	Y	N	N
/private/var/mobile/Library/Keyboard/UserDictionary.sqlite	User created auto-correct	Y	Y	N
/private/var/mobile/Library/Mail/	Mail and settings	N	Y	N
/private/var/mobile/Library/Preferences/com.apple.assistant*	Siri	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.assistant.backedup.plist	Cloud sync settings	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.camera.plist	Camera settings	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.celestial.plist	Camera, CarPlay, Volumes and other settings	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.cloudphotod.plist	Cloud photo sync information	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.CoreDuet.plist	Cloud sync settings	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.imservice*	SMS, iMessage and FaceTime	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.MobileSMS.plist	Time to keep messages	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.preferences.network.plist	Airplane Mode Settings	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.springboard.plist	User created restrictions/Remote wipe settings	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.weather.plist	Weather (including current city)	Y	Y	N
/private/var/mobile/Library/SpringBoard/HomeBackground.cpbitmap	Wallpaper	Y	Y	N
/private/var/mobile/Library/SpringBoard/HomeBackgroundThumbnail.jpg	Wallpaper	Y	Y	N
/private/var/mobile/Library/SpringBoard/IconState.plist	Homescreen icon layout	Y	Y	N
/private/var/mobile/Library/SpringBoard/LockBackground.cpbitmap	Wallpaper	Y	Y	N
/private/var/mobile/Library/SpringBoard/LockBackgroundThumbnail.jpg	Wallpaper	Y	Y	N
/private/var/mobile/Library/SpringBoard/LockBackgroundThumbnaildark.jpg	Wallpaper	Y	Y	N
/private/var/mobile/Library/SpringBoard/PushStore/	Notifications	N	Y	N
/private/var/mobile/Library/UserConfigurationProfiles/UserSettings.plist	User created restrictions	Y	Y	N
/private/var/mobile/Library/UserNotifications/	User Notifications	N	Y	N
/private/var/root/Library/Lockdown/data_ark.plist	Last backup computer, iCloud Backup Settings, Device info	Y	N	N
/private/var/root/Library/Preferences/com.apple.preferences.network.plist	Airplane Mode Settings	Y	N	N
COMMUNICATIONS – SMS, CALLS, EMAIL				
/private/var/mobile/Library/CallHistory/call_history.db	Call log (Up to iOS 7)	N	Y	N
/private/var/mobile/Library/CallHistoryDB/CallHistory.storedata	Call log (From iOS 8)	N	Y	N
/private/var/mobile/Library/CallHistoryDB/CallHistoryTemp.storedata	Call History Temporary storage (Before First Unlock)	N	N	N
/private/var/mobile/Library/CallHistoryTransactions/<GUID>.log	Call log traces	N	N	N
/private/var/mobile/Library/Mail/	Mail and settings	N	Y	N
/private/var/mobile/Library/Preferences/com.apple.madrid.plist	SMS, iMessage and FaceTime	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.mobilephone.*	List of contacts added to the phone application's favorites list	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.MobileSMS.plist	SMS, iMessage and FaceTime	Y	Y	N
/private/var/mobile/Library/Recents/	Recents communications	N	N	N
/private/var/mobile/Library/SMS/Attachments/*	MMS File	N	Y	N
/private/var/mobile/Library/SMS/Drafts/*	SMS/MMS Drafts	N	Y	N
/private/var/mobile/Library/SMS/sms.db	SMS/MMS messages	N	Y	N
/private/var/mobile/Library/SMS/sms-temp.db	SMS Temporary storage (Before First Unlock)	Y	N	N
/private/var/mobile/Library/Suggestions/query_predictions.db	Contains Message/SMS traces	N	N	N
/private/var/mobile/Library/Voicemail/voicemail.db	Voicemail	N	Y	N
/private/var/mobile/Media/Recordings/*	Voice Memos	N	N	N
BROWSER ACTIVITY				
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/Caches/com.apple.mobilesafari/	Safari Cache files	N	N	N
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/Caches/com.apple.mobilesafari/Cache.db	Safari Cache database	N	N	N
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/Caches/com.apple.WebAppCache/ApplicationCache.db	Safari Website cache	N	N	N
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/Cookies/Cookies.binarycookies	Safari Cookies	N	Y	N
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/Safari/Favicons/Favicons/	Safari Website favicons	N	Y	N
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/Preferences/com.apple.mobilesafari.plist	Safari Configuration	Y	Y	N
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/Safari/Downloads/Downloads.plist	Safari Download History	N	Y	N
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/Safari/Thumbnails/	Safari Tabs Screenshots (PNG or KTX format)	N	Y	N
/private/var/mobile/Containers/Data/Application/<Apple Safari GUID>/Library/WebKit/WebsiteData/LocalStorage/*	Safari WebKit Localstorage	Y	Y	N
/private/var/mobile/Library/CoreDuet/Knowledge/knowledgeC.db	Safari History information	Y	N	N
/private/var/mobile/Library/Safari/Bookmarks.db	Safari Bookmarks	N	Y	N
/private/var/mobile/Library/Safari/BrowserState.db	Safari Suspended State Tab	N	Y	N
/private/var/mobile/Library/Safari/CloudTabs.db	Safari Cloud Tabs	N	Y	N
/private/var/mobile/Library/Safari/History.db	Safari History	N	Y	N
/private/var/mobile/Library/Safari/SafariTabs.db	Safari Tabs	N	N	N
MULTIMEDIA				
*.ktx	Application Snapshots	N	N	N
/private/var/mobile/Library/AddressBook/AddressBookImages.sqlitedb	Contacts pictures	N	Y	N
/private/var/mobile/Library/Preferences/com.apple.mobileslideshow.plist	Photos	N	Y	N
/private/var/mobile/Library/SMS/Attachments/	MMS File	N	Y	N
/private/var/mobile/Media/DCIM/*APPLE	User Created/Saved Photos	Y	Y	N
/private/var/mobile/Media/iTunes_Control/iTunes/MediaLibrary.sqlitedb	iTunes Media Library	Y	N	N
/private/var/mobile/Media/MediaAnalysis/mediaanalysis.db	Media analysis and classification	Y	N	N
/private/var/mobile/Media/PhotoData/Thumbnails/*.ithmb	Thumbnails databases	N	Y	N
/private/var/mobile/Media/PhotoData/Photos.sqlite	Photo Albums Metadata	N	Y	N
/private/var/mobile/Media/PhotoData/CPL/	Cloud Photo Library	Y	N	N
/private/var/mobile/Media/PhotoData/Photos.sqlite	Photos/Videos Database	N	Y	N
/private/var/mobile/Media/PhotoData/Thumbnails/V2	Photos saved from Live Video and SMS photo capture	N	Y	N
NETWORK CONNECTIONS				
/private/var/db/dhcpclient/leases/	DHCP Lease	Y	N	N
/private/var/mobile/Library/homed/datastore.sqlite	Apple Home information	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.preferences.network.plist	Airplane mode ON/OFF	Y	Y	N
/private/var/networkd/netusage.sqlite	Network data usage per App	Y	N	N
/private/var/preferences/com.apple.networkextension.plist	Network Extension	Y	N	N
/private/var/preferences/com.apple.wifi.known-networks.plist	Wi-Fi	Y	N	N
/private/var/preferences/SystemConfiguration/com.apple.networkidentification.plist	Network IP, Wi-Fi, Cellular	Y	Y	N
/private/var/preferences/SystemConfiguration/com.apple.wifi.plist	Wi-Fi	Y	Y	N
/private/var/preferences/SystemConfiguration/NetworkInterfaces.plist	Wi-Fi Mac Addresses	Y	N	N
/private/var/preferences/SystemConfiguration/preferences.plist	Wi-Fi, VPN, Certs and more	Y	Y	N
/private/var/root/Library/Application Support/WiFiNetworkStoreModel.sqlite	Wi-Fi information	Y	N	N
/private/var/root/Library/Application Support/com.apple.nfshanalytics/DeviceAnalyticsModel.sqlite	Wi-Fi information	Y	N	N
/private/var/root/Library/Caches/com.apple.wifid/ThreeBars.sqlite	Wi-Fi information	N	N	N
/private/var/root/Library/Preferences/com.apple.preferences.network.plist	Wi-Fi ON/OFF	Y	N	N
/private/var/wireless/Library/Databases/CellularUsage.db	SIMs used in device, including most recent	N	Y	N
/private/var/wireless/Library/Databases/DataUsage.sqlite	Network data usage per App	N	Y	N
/private/var/wireless/Library/Preferences/com.apple.commcenter.counts.plist	Data and Cellular network statistics	Y	N	N
/private/var/wireless/Library/Preferences/com.apple.commcenter.plist	SIM Card ICCID	Y	N	N
/private/var/wireless/Library/Preferences/com.apple.commcenter.device_specific_nobackup.plist	Device IMEI	Y	N	N
/private/var/wireless/Library/Preferences/com.apple.commcenter.plist	SIM Card ICCID	Y	N	N
SYNCING ARTIFACTS				
/private/var/containers/Shared/SystemGroup/<GUID>/Library/Database/com.apple.MobileBluetooth.other.db	Seen Bluetooth devices	N	N	N
/private/var/containers/Shared/SystemGroup/<GUID>/Library/Database/com.apple.MobileBluetooth.ledevices.paired.db	Paired Bluetooth devices	N	Y	N
/private/var/mobile/Library/Application Support/CloudDocs/Preferences/com.apple.MobileBluetooth.devices.plist	Paired Bluetooth devices	N	N	N
/private/var/mobile/Library/Application Support/CloudDocs/backup/backup_manifest.db	Cloud Documents details	N	N	N
/private/var/mobile/Library/DataAccess/iCloud-[iCloud email account name]/OfflineCache/[number]	iCloud offline cache	N	Y	N
/private/var/mobile/Library/DeviceRegistry.state/activeStateMachine.plist	Apple Watch pairing information	Y	Y	N
/private/var/mobile/Library/DeviceRegistry.state/historySecureProperties.plist	Apple Watch information (also previously paired Apple Watch)	Y	Y	N
/private/var/mobile/Library/DeviceRegistry.state/stateMachine-<GUID>.plist	Apple Watch pairing information (also previously paired Apple Watch)	Y	Y	N
/private/var/mobile/Library/DeviceRegistry/<GUID>/	Apple Watch data	Y	Y	N
/private/var/mobile/Library/DeviceRegistry/<GUID>/NanoAppRegistry/Applications/	Apple Watch Applications	Y	Y	N
/private/var/mobile/Library/DeviceRegistry/<GUID>/NanoMail/registry.sqlite	Apple Watch Mail application	Y	Y	N
/private/var/mobile/Library/DeviceRegistry/<GUID>/NanoPasses/nanopasses.sqlite3	Apple Watch Wallet Passes	Y	Y	N
/private/var/mobile/Library/DeviceRegistry/<GUID>/NanoPreferencesSync/Backup/Faces/	Apple Watch Faces	Y	Y	N
/private/var/mobile/Library/Health.NanoSync/com.apple.private.alloy.health.sync.db	Apple Watch Health data sync	Y	Y	N
/private/var/mobile/Library/homed/datastore.sqlite	Apple HomeKit Devices	N	Y	N
/private/var/mobile/Library/MobileBluetooth/com.apple.MobileBluetooth.ledevices.plist	Seen Bluetooth devices	N	Y	N
/private/var/mobile/Library/NanoBackup/	Apple Watch information	Y	Y	N
/private/var/mobile/Library/NanoMusicSync/	Apple Watch information	Y	Y	N
/private/var/mobile/Library/NanoPreferencesSync/	Apple Watch information	Y	Y	N
/private/var/mobile/Library/NanoTimeKit/	Apple Watch information	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.carplay.plist	Apple CarPlay configuration	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.icloud.quota.plist	Cloud Sync denials and dates	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.CoreDuet.QueuedDenials.plist	Cloud Sync denials and dates	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.coreduetd.plist	sync devices	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.itunesstored.sync.idstatuscache.plist	iCloud sync, Email, FaceTime, Email, more	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.mobile.ldbackup.plist	Last iTunes and last iCloud backup date and timezone.	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.nano*.plist	Apple Watch preferences	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.sharingd.plist	Device AirDrop ID	Y	Y	N
/private/var/mobile/Library/SpringBoard/<GUID>-CarDisplayDesiredIconState.plist	Apple CarPlay per car App Icon configuration	Y	Y	N
/private/var/mobile/Media/iTunes_Control/iTunes/iTunesPrefs	List of computer where the device was connected to	Y	N	N
/private/var/root/Library/Lockdown/data_ark.plist	Last backup computer, iCloud Backup Settings, Device info	Y	N	N
/private/var/wireless/Library/Databases/DataUsage-watch.sqlite	Watch Cellular Usage	N	N	N
LOCATION ARTIFACTS				
/private/var/containers/Shared/SystemGroup/<GUID>/Library/Database/com.apple.MobileBluetooth.ledevices.other.db	Seen Bluetooth devices	N	N	N
/private/var/mobile/Containers/Data/Application/<Apple_Maps_GUID>/Library/Maps/History.mapsdata	Apple Maps history	N	Y	N
/private/var/mobile/Containers/Data/Application/<Apple_Maps_GUID>/Library/Maps/GeoHistory.mapsdata	Apple Maps history	N	Y	N
/private/var/mobile/Containers/Data/Application/<Apple_Maps_GUID>/Library/Maps/Maps.plist	Last latitude and longitude, map search history	Y	Y	N
/private/var/mobile/Containers/Data/Application/<Apple_Maps_GUID>/Library/SyncedPreferences/com.apple.Maps.recents.plist	Apple Maps recents	Y	Y	N
/private/var/mobile/Containers/Data/Application/<Apple_Maps_GUID>/Library/SyncedPreferences/com.apple.Maps.plist.MapsSupport.bookmarks.plist	Apple Maps bookmarks	Y	Y	N
/private/var/mobile/Containers/Data/Application/<Apple_Maps_GUID>/Library/SyncedPreferences/com.apple.Maps.plist.MapsSupport.history.plist	Apple Maps history	Y	Y	N
/private/var/mobile/Containers/Shared/AppGroup/<Apple_Maps_GUID>/Library/Preferences/group.com.apple.Maps.plist	Last latitude and longitude, map search history	Y	Y	N
/private/var/mobile/Library/Caches/com.apple.Maps/Maps/MapsSync_0.0.1	Apple Maps history	Y	Y	N
/private/var/mobile/Library/Caches/com.apple.routined/Cache.sqlite	Location information	Y	N	N
/private/var/mobile/Library/Caches/com.apple.routined/Cloud-V2.sqlite	Location information	Y	N	N
/private/var/mobile/Library/Caches/com.apple.routined/Local.sqlite	Location information	Y	N	N
/private/var/mobile/Library/PersonalizationPortrait/PPSQLDatabase.db	Personalization Portrait	Y	N	N
/private/var/mobile/Library/Preferences/com.apple.locationd.plist	"Location Services" setting (Enabled = 1; Disabled = 0)	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.preferences.datetime.plist	Time settings	Y	Y	N
/private/var/mobile/Library/Preferences/com.apple.purplebuddy.plist	Language, Country info, Device IDs	Y	Y	N
/private/var/preferences/SystemConfiguration/com.apple.networkidentification.plist	Network IP, WiFi, Cellular	Y	Y	N
/private/var/preferences/SystemConfiguration/preferences.plist	Network and VPN information	Y	Y	N
/private/var/root/Library/Caches/locationd/Cache.sqlite	Location information	Y	N	N
/private/var/root/Library/Caches/locationd/cache_encrypted.db	Location information	Y	N	N
/private/var/root/Library/Caches/locationd/cache_encryptedB.db	Location information	Y	N	N
/private/var/root/Library/Caches/locationd/cache_encryptedC.db	Location information	Y	N	N
/private/var/root/Library/Caches/locationd/consolidated.db	Application Traces and GeoFence information	Y	N	N
/private/var/root/Library/Caches/locationd/significant.db	Significant Location	Y	N	N
/private/var/root/Library/Caches/locationd/significantVisitAuth.plist	Significant Location	Y	N	N
/private/var/root/Library/Caches/locationd/significantVisitInterest.db	Significant Location	Y	N	N
TRACES OF DESTRUCTION – WIPING, ETC.				
/private/var/db/diagnostics/		N	N	N
/private/var/mobile/Library/Preferences/com.apple.purplebuddy.plist	Language, Country info, Device IDs	N	N	N
/private/var/root/.obliterated	Creation time stamp -> Device reset time	N	N	N
/private/var/root/Library/MobileContainerManager	Container Manager Logs	N	N	N
/private/var/mobile/Library/Preferences/com.apple.MobileBackup.plist	Restore information (timestamp, local vs. iCloud)	Y	N	N
BATTERY/POWER				
/private/var/containers/Shared/SystemGroup/<GUID>/Library/BatteryLife/CurrentPowerLog.PLSQL	Battery life tracker	N	N	N
/private/var/mobile/Library/CoreDuet/coreduetd.db	Powering Events (0=unplugged, 1=plugged in)	N	N	N
/private/var/mobile/Library/Preferences/com.apple.BatteryCenter.BatteryWidget.plist	Battery icon status	N	N	N
/private/var/mobile/Library/Preferences/com.apple.smartbattery.batterysaver.plist	Battery Saver state	Y	N	N

Path	Description	BFU	Backup	Sysdiagnose
APPLICATION USAGE				
/private/var/containers/Shared/SystemGroup/<GUID>/Library/BatteryLife/CurrentPowerLog.PLSQL	Battery life tracker	N	N	Y
/private/var/containers/Shared/SystemGroup/<GUID>/Library/mobile_installation_helper.log	Application traces	N	N	Y
/private/var/installd/Library/Logs/MobileInstallation/mobile_installation_helper.log*	Mobile Applications Installation Logs	N	N	Y
/private/var/mobile/Library/AggregateDictionary/ADDataStore.sqlitedb	Application traces	Y	N	N
/private/var/mobile/Library/AppConduit/AvailableApps.plist	Installed Apps and Apps Path	Y	N	N
/private/var/mobile/Library/AppConduit/AvailableCompanionApps.plist	Installed Apps and Apps Path	Y	N	N
/private/var/mobile/Library/Application Support/com.apple.remotemanagmentd/RMAdminStore-Cloud.sqlite	Screen time	N	N	N
/private/var/mobile/Library/Application Support/com.apple.remotemanagmentd/RMAdminStore-Local.sqlite	Screen time	N	N	N
/private/var/mobile/Library/ApplicationSync/AssetSortOrder.plist	Application order on the SpringBoard	N	N	N
/private/var/mobile/Library/Assistant/knowledge.cdb	Application traces	N	N	N
/private/var/mobile/Library/Caches/com.apple.Pasteboard/*	Pasteboard	N	N	N
/private/var/mobile/Library/com.apple.itunesstored/itunesstored2.sqlitedb	Application Traces	N	N	N
/private/var/mobile/Library/com.apple.itunesstored/kvs.sqlitedb	Installed Applications	N	N	N
/private/var/mobile/Library/CoreDuet/Knowledge/knowledgeC.db	Application traces	N	N	N
/private/var/mobile/Library/CoreDuet/People/interactionC.db	Application traces	N	N	N
/private/var/mobile/Library/FrontBoard/applicationState.db	Application traces	N	N	N
/private/var/mobile/Library/Health/ActivitySharing/contacts2.dat	Fitness Friends	N	N	N
/private/var/mobile/Library/Keyboard/langlikelihood.dat	Fitness Friends	N	N	N
/private/var/mobile/Library/location/user.plist	Step/Stride Cadence, Pedometer Info	N	N	N
/private/var/mobile/Library/Logs/AppConduit/	Installed Apps and Apps Path	N	N	Y
/private/var/mobile/Library/Logs/mobile_installation_helper.log*	Application traces	N	N	Y
/private/var/mobile/Library/Preferences/addaily.plist	Application Traces	N	N	N
/private/var/mobile/Library/Preferences/com.apple.ActivitySharing.plist	Information about Fitness Friends	N	N	N
/private/var/mobile/Library/preferences/com.apple.AppStore.plist	Last search on Apple Store	N	N	N
/private/var/mobile/Library/Preferences/com.apple.corespotlightui.plist	Application Execution Traces	N	N	N
/private/var/mobile/Library/Preferences/com.apple.suggestions.plist	Application traces	N	N	N
/private/var/mobile/Library/Preferences/com.apple.lsd.last.Launch.plist	Application traces	N	N	N
/private/var/networkd/netusage.sqlite	Network data usage per App	N	N	N
/private/var/root/Library/Caches/locationd/clients.plist	Application using location services	N	N	N
/private/var/root/Library/Logs/MobileContainerManager	MobileContainerManager logs	N	N	Y
/private/var/root/Library/MobileContainerManager/containers.sqlite3	Installed Applications	N	N	N
/private/var/wireless/Library/Databases/DataUsage.sqlite	Application traces	N	N	N

Android Cheatsheet

Partition	Path	Tables of Interest	Description
DEVICE INFORMATION			
System	/build.prop	N/A	Device information (version, patches, etc.)
Userdata	/data/com.android.providers.calendar/databases/calendar.db	*	Calendar Items and Timezone information
Userdata	/data/com.android.providers.settings/databases/settings.db	*	Lock settings information
Userdata	/data/com.android.providers.settings/databases/settings.db-WAL	*	Lock settings information
Userdata	/data/system/locksettings.db	*	Lock settings information
Userdata	/data/system/locksettings.db-WAL	*	Lock settings information
Userdata	/data/com.google.android.gms/databases/MdpSimBasedDatabase	*	Sim card information
Userdata	/data/com.google.android.gms/shared_prefs/Checkin.xml	N/A	Activity on device related to installed SIM (ICCID and Google Account included)
Userdata	/data/com.google.android.gms/databases/gservices.db	*	Fitness settings, network settings, other settings
Userdata	/misc/	N/A	Bluetooth, VPN, Wi-Fi and more
Userdata	/Property/persist.sys.timezone	N/A	Timezone (Up to Android 8)
Userdata	/Property/persistent_properties	N/A	Timezone (From Android 9)
Userdata	/system/*key	N/A	Files needed for password cracking
Userdata	/system/device_policies.xml	N/A	Passcode requirements and policies. Syncing info may exist
Userdata	/system/locksettings.db	*	Lock settings information
Userdata	/system/locksettings.db-WAL	*	Lock settings information
Userdata	/system/netpolicy.xml	N/A	Timezone
Userdata	/system/SimCard.dat	N/A	Sim card and phone number information
Userdata	/system/users/0/settings_global.xml	N/A	Global settings
Userdata	/system/users/0/settings_secure.xml	N/A	Secure settings
Userdata	/data/de/0/com.android.providers.telephony/databases/telephony.db	N/A	System card information
PASSWORDS AND ACCOUNT INFORMATION			
Userdata	/data/com.android.email/databases/EmailProvider.db	Account, Email AddressCache, Mailbox* accounts	Email accounts, 3rd party app data, and messages associated with Email notifications.
Userdata	/data/com.android.providers.contacts/databases/contacts2.db	N/A	Login info
Userdata	/data/com.android.providers.settings/*	N/A	Username and passwords
Userdata	/data/com.google.android.gms/shared_prefs/Lastaccount.xml	N/A	Last account used on Google PlayStore (Android 9 and above)
Userdata	/data/com.google.android.gms/shared_prefs/BackupAccount.xml	N/A	Backup account email address
Userdata	/data/com.google.android.googlequicksearchbox/databases/app_icons.db	*	Google Account Information
Userdata	/data/com.google.android.googlequicksearchbox/databases/launcher.db	*	Google Account Information
Userdata	/data/com.google.android.googlequicksearchbox/databases/opa_history	*	Google Account Information
Userdata	/data/com.google.android.gsf/databases/gservices.db	*	Fitness settings, network settings, other settings
Userdata	/misc/apexdata/com.android.wifi/softap.conf	N/A	Hotspot Passwords [From Android 11]
Userdata	/misc/wifi/softap.conf	N/A	Hotspot Passwords [Up to Android 10]
Userdata	/misc/wifi/wpa_supplicant.conf	*	Wi-Fi Network Password
Userdata	/system/accounts*	N/A	User account information
Userdata	/system/sync/accounts.xml	N/A	User account information
Userdata	/system/users/0/0.xml	N/A	User information
Userdata	/system_ce/0/accounts_ce.db	*	Additional accounts (could also be system_de or accounts_de)
Userdata	/system_de/0/accounts_de.db	*	Additional accounts (could also be system_de or accounts_de)
SYSTEM SETTINGS			
Userdata	/data/com.android.providers.calendar/databases/calendar.db	*	Calendar Items and Timezone information
Userdata	/data/com.android.providers.userdictionary/databases/user_dict.db	*	Dictionary Files [Keylogging]
Userdata	/data/com.google.android.gms/databases/NetworkUsage.db	*	Application, User and Location traces
Userdata	/data/com.google.android.gms/databases/reminders.db	*	Application, User and Location traces
Userdata	/data/com.google.android.gms/databases/googlesettings.db	*	Google preferences – location, maps, wallet, etc --1=true
Userdata	/data/com.google.android.gsf/databases/gservices.db	*	Fitness settings, network settings, other settings
Userdata	/data/com.sec.android.inputmethod/Swiftkey/user/dynamic.lm	N/A	Dictionary Files [Keylogging] SwiftKey folder name may vary
USER SETTINGS			
Userdata	/data/com.android.providers.calendar/databases/calendar.db	*	Calendar Items and Timezone information
Userdata	/data/com.android.providers.userdictionary/databases/user_dict.db	*	Dictionary Files [Keylogging]
Userdata	/data/com.google.android.gms/databases/NetworkUsage.db	*	Application, User and Location traces
Userdata	/data/com.google.android.gms/databases/reminders.db	*	Application, User and Location traces
Userdata	/data/com.google.android.gms/databases/googlesettings.db	*	Google preferences – location, maps, wallet, etc --1=true
Userdata	/data/com.google.android.gsf/databases/gservices.db	*	Fitness settings, network settings, other settings
Userdata	/data/com.sec.android.inputmethod/Swiftkey/user/dynamic.lm	N/A	Dictionary Files [Keylogging] SwiftKey folder name may vary
COMMUNICATIONS – SMS, CALLS, EMAILS			
Cache	/data/com.android.providers.contacts/databases/calllog.db	*	Gmail attachments, Downloads and Browser data
Userdata	/data/com.android.providers.contacts/databases/calllog.db	calls	Call logs [From Android 7]
Userdata	/data/com.android.providers.contacts/databases/contacts2.db	calls	Call logs (Up to Android 6)
Userdata	/data/com.android.providers.telephony/databases/mmssms.db	sms and part	SMS/MMS
Userdata	/data/com.google.android.apps.dynamite/databases/dynamite.db		Google Chat (formerly Hangouts)
Userdata	/data/com.google.android.apps.messaging/databases/bugle_db	*	RCS/Android Messages (refer to notebook for query)
Userdata	/data/com.google.android.gm/databases/dialer.db		Call logs
Userdata	/data/com.google.android.gm/databases/bigTopDataDB.user-id*	conversations & messages	Email information
Userdata	/data/com.google.android.gms/databases/EmailProvider.db		Email information
Userdata	/data/com.google.android.gms/databases/icing_mmssms.db	*	SMS/MMS [Up to Android 11]
Userdata	/data/com.google.android.gms/databases/ipa_mmssms.db	*	SMS/MMS
Userdata	/data/com.android.provider.logsprovider/databases/logs.db	logs	Call logs [Up to Android 9]
Userdata	/data/user_de/0/com.android.providers.telephony/app_parts		MMS Attachments
MULTIMEDIA			
Userdata	/data/com.android.providers.media.module/databases/external.db	*	Traces to SD card used in the device. This is stored on the phone. [From Android 11]
Userdata	/data/com.android.providers.media/databases/external.db	*	Traces to SD card used in the device. This is stored on the phone. [Up to Android 11]
Userdata	/data/com.google.android.apps.photos/uid_photos_location_data.db	photos_top_feature	Photos and Videos metadata
Userdata	/data/com.google.android.apps.photos/databases/gphotos0.db	local_media	Camera Photos information
Userdata	/data/com.samsung.android.providers.media/databases/media.db	files and location	Media file metadata (only Samsung devices running Android 11 or above)
Userdata	/data/com.samsung.cmh/databases/cmh.db	files	Camera Photo – Samsung Devices
Userdata	/data/com.samsung.storyservice/databases/dme.db	info	Camera Photo – Samsung Devices
Userdata	/data/com.samsung.visionprovider/databases/visionprovider.db	files	Camera Photo – Samsung Devices
Userdata	/media/	N/A	Acts like SD card
BROWSER ACTIVITY			
Userdata	/data/com.android.browser/app_databases/*	*	Internet History
Userdata	/data/com.android.browser/app_geolocation/GeolocationPermissions.db	*	Internet History
Userdata	/data/com.android.browser/databases/browser2.db	*	Internet History
Userdata	/data/com.android.browser/databases/webview.db	*	Internet History
Userdata	/data/com.android.browser/databases/webviewCache.db	*	Internet History
Userdata	/data/com.android.email/webviewCache.db	*	Internet History
NETWORK CONNECTIONS			
Userdata	/data/com.android.connectivity.metrics/databases/events.db	completed_events_requests	USB, Bluetooth, NFC and other connects – Acquisition connection tracked
Userdata	/data/com.google.android.gms/databases/herrevad	*	Wireless network and MAC addresses
Userdata	/data/com.google.android.locations/files/cache.cell	*	Cellular and WiFi
Userdata	/data/com.google.android.locations/files/cache.wifi	*	Cellular and WiFi
Userdata	/log/wifi /wc/wc_dump.txt	N/A	Wireless network connections
Userdata	/misc/apexdata/com.android.wifi/WiFiConfigStore.xml	N/A	Wireless network [From Android 11]
Userdata	/misc/wifi/WifiConfigStore.xml	N/A	Wireless network [Up to Android 10]
SYNCING ARTIFACTS			
Userdata	/data/com.google.android.apps.docs.editors.docs/databases/*	*	Google Docs
Userdata	/data/com.google.android.apps.docs.editors.sheets/databases/*	*	Google Sheets
Userdata	/data/com.google.android.apps.docs.editors.slides/databases/*	*	Google Slides
Userdata	/data/com.google.android.apps.docs/databases/*	*	Google Docs
Userdata	/data/com.google.android.gms/databases/newsweather.db	*	Sync activity
Userdata	/data/com.google.android.gms.turbo/databases/bluetooth.db	*	Bluetooth connections
Userdata	/data/com.google.android.gms/databases/peoplelog.db	*	Sync activity – contacts
Userdata	/data/com.google.android.gms/shared_prefs/com.google.android.gms.auth.authzen.cryptauth.SyncManager.proximity_features.xml	N/A	Sync Activity
Userdata	/data/com.google.android.gms/shared_prefs/nearbysharing/service.state.xml	N/A	Nearby Share
Userdata	/misc/bluedroid/bt_config.conf	N/A	Bluetooth adapter info and connections
Userdata	/system/sync/accounts.xml	N/A	Synced Accounts
LOCATION ARTIFACTS			
Userdata	/data/com.google.android.apps.maps/app_tts-temp/tts-%UNIXEPOCH%	N/A	Google Maps turn-by-turn directions [On Android 10 and above]
Userdata	/data/com.google.android.apps.maps/databases/da_destination_history	destination history	Maps
Userdata	/data/com.google.android.apps.maps/databases/gmm_storage.db	*	Search history Maps
Userdata	/data/com.google.android.apps.maps/databases/gmm_sync.db	*	Syncing
Userdata	/data/com.google.android.apps.maps/databases/search_history.db	history & suggestions	Maps
Userdata	/data/com.google.android.apps.turbo/databases/turbo.db	battery_event	Timezone [From Android 8]
Userdata	/data/com.sec.android.daemonapp/db/weatherClock	*	Location artifacts
Userdata	/Media/0/DCIM/Camera	*	EXIF data with location
APPLICATION USAGE			
System	/app/*	N/A	APK files for installed applications
Userdata	/dalvik-cache	N/A	.dex/.oat/.art files for installed applications
Userdata	/data/"Application Folder"	N/A	Application Data Files*
Userdata	/data/com.android.vending/databases/data_usage.db	app_data_usage	Application Data
Userdata	/data/com.android.vending/databases/frosting.db	frosting	Application traces
Userdata	/data/com.android.vending/databases/install_queue.db	install_requests	Application traces
Userdata	/data/com.android.vending/databases/localappstate.db	appstate	Application Manager
Userdata	/data/com.android.vending/databases/notification_cache	ownership	Application traces
Userdata	/data/com.android.vending/databases/package_verification.db	verification_cache	Application permissions and metadata
Userdata	/data/com.android.vending/databases/suggestions.db	suggestions	Application traces
Userdata	/data/com.android.vending/databases/verify_apps.db	*	Application traces
Userdata	/data/com.google.android.apps.turbo/databases/turbo.db	battery_event	Battery Level [From Android 8]
Userdata	/data/com.google.android.apps.wellbeing/databases/app_usage	*	Digital Wellbeing
Userdata	/data/com.google.android.gms/databases/cast.db	DeviceInfo	Cast devices
Userdata	/data/com.google.android.gms/databases/config.db	main	Application traces
Userdata	/data/com.google.android.gms/databases/gass.db	app_info	Application traces
Userdata	/data/com.google.android.gms/databases/gcm_registrar.db	packages	Application traces
Userdata	/data/com.google.android.gms/databases/google_app_measurement.db	*	Application traces
Userdata	/data/com.google.android.gms/shared_prefs/batterystats.xml	BatteryState	Battery Usage Stats – Contains Application Usage information
Userdata	/data/com.google.android.gms/shared_prefs/batterystats*		Battery Usage Stats – Contains Application Usage information
Userdata	/data/com.google.android.settings.intelligence/databases/battery-usage-db-v4	BatteryState	Battery Usage [From Android 10]
Userdata	/data/com.samsung.android.connect.contextmesh.ContextLog_0.db	*	Application traces (Samsung devices) [Up to Android 10]
Userdata	/data/sec.android.app.launcher/databases/launcher.db	*	Application artifacts (even after deleted)
Userdata	/data/sec.android.app.launcher/databases/batterystatsdumpsystask.gz	N/A	Battery Usage Stats – Contains Application Usage information
Userdata	/data/semclipboard	N/A	Clipboard content
Userdata	/misc/_de/0/apexdata/com.android.permission/runtime-permissions.xml	N/A	Application permissions [Android 11 and 12]
Userdata	/system/appops.xml	N/A	Application permissions
Userdata	/system/appops/discrete	N/A	Privacy dashboard [From Android 12] – ABX Format
Userdata	/system/batterystats.bin	N/A	Battery Usage Stats – Contains Application Usage information
Userdata	/system/batterystats-checkin.bin	N/A	Battery Usage Stats – Contains Application Usage information
Userdata	/system/batterystats-daily.xml	N/A	Battery Usage Stats – Contains Application Usage information
Userdata	/system/dmappmgr.db	N/A	Application Usage
Userdata	/system/job/jobs.xml	N/A	Application Usage
Userdata	/system/notification_log.db	*	Application notifications [Up to Android 10]
Userdata	/system/packages.list	N/A	Application permissions and metadata
Userdata	/system/packages.xml	N/A	Application permissions
Userdata	/system/shutdown-checkpoints	N/A	Shutdown Checkpoints
Userdata	/system/usagestats/0/*	N/A	Application Usage Stats
Userdata	/system/users/0/app_idle_stats.xml	N/A	Application Usage
Userdata	/system/users/0/runtime-permissions.xml	N/A	Runtime permissions [Android 10]
Userdata	/system/users/0/recent_images/*.png	N/A	Application snapshots
Userdata	/system/users/0/recent_tasks/*.xml	N/A	Recent Tasks
NATIVE APPLICATIONS			
Userdata	/data/com.android.providers.calendar/databases/calendar.db	*	Calendar Items
Userdata	/data/com.android.providers.contacts/databases/calllog.db	calls	Call Logs [Up to Android 6]
Userdata	/data/com.android.providers.contacts/databases/calllog.db	calls	Call Logs [From Android 7]
Userdata	/data/com.android.providers.contacts/databases/contacts2.db	contacts and raw contacts	Contacts
Userdata	/data/com.google.android.apps.walletnfcrel/databases/downloads.db	wallet	Android Pay
Userdata	/data/com.google.android.gms/databases/icing_contacts.db	*	Contacts
Userdata	/data/com.google.android.gms/databases/icing_mmssms.db	*	SMS/MMS [Up to Android 11]
Userdata	/data/com.google.android.gms/databases/pluscontacts.db	*	Google+ Contacts
DEVICE WIPING			
Userdata	/property/reboot,factory_reset	N/A	Reboot, Factory Reset
Userdata	/misc/bootstat/factory_reset	N/A	Check modified timestamp
Userdata	/misc/bootstat/last_boot_time.xml	N/A	Check modified timestamp
Userdata	/system/users/service/ERR.p	N/A	Only Samsung devices
Userdata	/data/com.android.providers.media/databases/internal.db	*	Internal system files timestamps
Userdata	/data/com.samsung.android.forest/databases/dwbCommon.db	*	Only Samsung devices
Userdata	/data/com.google.android.apps.wellbeing/databases/app_usage	*	Digital Wellbeing