

REFERENCE GUIDE

The aim of this poster is to provide a list of the most interesting files and folders "Data" and in the "Shared" folders for the most commonly used third-party apps.

DFPS iOS-APPS-v1.1 03-21 This poster was created by Mattia Epifani (@mattiaep) with support of the SANS DFIR Faculty. ©2021 Mattia Epifani. All Rights Reserved. iOS third-party apps can be installed from the Apple App Store, where they are organized based on categories (e.g., Social Networking, Business/Productivity, Navigation & Travel, and so on).

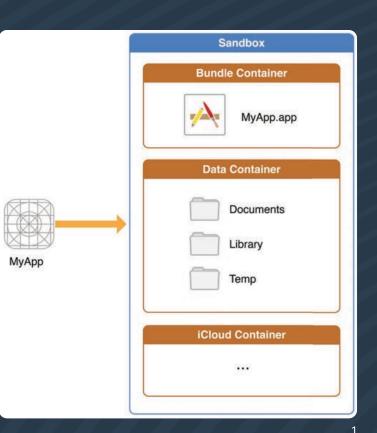
Once an app is installed on an iOS device:

- App Bundle is installed in a subfolder in the /private/var/containers/Bundle folder
- App Data is stored in a subfolder in the /private/var/mobile/Containers/Data/Application/ folder (App Sandbox)

The easiest way to track down an iOS application's Data folder is to analyze the /private/var/mobile/Library/FrontBoard/applicationstate.db database, as described in a blog post by Alexis Brignoni².

Some Apps can also store data in other subfolders like the /private/var/mobile/Containers/Share/AppGroup/ folder. Two good ways to locate the Sandbox folder for the AppGroup are mentioned in blog posts by Scott Vance³ and Yogesh Khatri⁴.

The internal structure of an App folder can be determined by the developer, but Apple provides some guidelines in its File System Programming Guide⁵.



https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/FileSystemOverview/FileSystemOverview.html https://abrignoni.blogspot.com/2018/12/identifying-installed-and-uninstalled.html

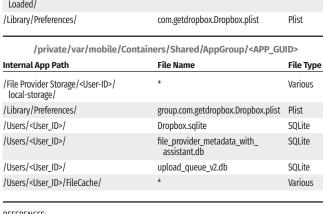
https://blog.d204n6.com/2020/09/ios-tracking-bundle-ids-for-containers.html

https://www.swiftforensics.com/2021/01/ios-application-groups-shared-data.html 5 https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/FileSystemOverview/FileSystemOverview.html

Business/Productivity



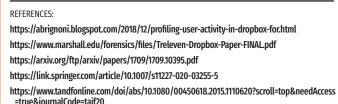
| /private/var/mobile/Containers/Data/Application/ <app_guid></app_guid> | | | |
|--|------------------------------|-----------|--|
| Internal App Path | File Name | File Type | |
| /Documents/ | spotlight.db | SQLite | |
| /Documents/Users/ <user_id>/</user_id> | Dropbox.sqlite | SQLite | |
| /Documents/Users/ <user_id>/</user_id> | metadata.db | SQLite | |
| /Documents/Users/ <user_id>/</user_id> | offline.db | SQLite | |
| /Documents/Users/ <user_id>/</user_id> | recent_actions_local.db | SQLite | |
| /Documents/Users/ <user_id>/</user_id> | recent_actions_server.db | SQLite | |
| /Documents/Users/ <user_id>/</user_id> | starred_infos_local.db | SQLite | |
| /Library/Cache/Users/ <user_id>/FileCache/ Loaded/</user_id> | * | Various | |
| /Library/Proferences/ | com gotdrophov Drophov plict | Dlict | |

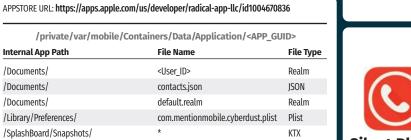


Dropbox

Eventbrite

Gmail







ProtonMail

| APPSTORE URL: https://apps.apple.com/us/app/silent-phone/id554269204 | | | |
|--|--|--------|--|
| /private/var/mobile/Containers/Data/Application/ <app_guid> Internal App Path File Name File Type</app_guid> | | | |
| /Library/Application Support/ com. silentcircle.SilentPhone/Chat/ | ChatMessages_cipher.db | SQLite | |
| /Library/Application Support/com. silentcircle.SilentPhone/tivi/ | axo_ <user-id>_secure_sql.db</user-id> | SQLite | |
| /Library/Application Support/com. silentcircle.SilentPhone/tivi/ | zids_sqlite.db | SQLite | |
| /Library/Preferences/ | com.silentcircle.SilentPhone.plist | Plist | |

| Internal App Path | File Name | File Type |
|---|-------------------------------|-----------|
| /Documents/ | default.realm | Realm |
| /Library/Caches/com.eventbrite. attendee/com.alamofire. imagedownloader/fsCachedData/ | * | JPG |
| /Library/Preferences/ | com.eventbrite.attendee.plist | Plist |

| /private/var/mobile/Containers/Data/Application/ <app_guid></app_guid> | | | |
|--|------------------------|-----------|--|
| Internal App Path | File Name | File Type | |
| /Library/Preferences/ | com.google.Gmail.plist | | |
| Library/Caches/com.google.commmon. SSO/ <user_id>/</user_id> | Profile.plist | Plist | |
| /Documents/drivekit/users/ <user_id>/ gdx-cello/</user_id> | cello.db | SQLite | |
| /Library/Application Support/data/ <email_address>/</email_address> | sqlitedb | SQLite | |

com.google.Drive.plist

| | APPSTORE URL: https://apps.apple.com/us/app/google-drive/id507874739 | | |
|---|--|---|-----------|
| | /private/var/mobile/Containers/Data/Application/ <app_guid></app_guid> | | |
| | Internal App Path | File Name | File Type |
| | /Documents/ <user_id>/</user_id> | comments_snapshot_ <user_id>.db</user_id> | SQLite |
| | /Documents/drivekit/users/ <user_id>/cello/</user_id> | cello.db | SQLite |
| | /Documents/drivekit/users/ <user_id>/files/</user_id> | * | Various |
| 100000000000000000000000000000000000000 | /Documents/drivekit/users/ <user_id>/logs/</user_id> | * | TXT |
| Google Drive | /Documents/drivekit/users/ <user_id>/ thumbnails/</user_id> | * | Various |
| | /Library/Caches/drivekit/users/ <user_id>/ image-fetcher-cache/main-cache/</user_id> | cacheV0.db | SQLite |

https://www.nw3c.org/docs/research/dust.pdf

APPSTORE URL: https://apps.apple.com/us/app/eventbrite/id487922291

| /private/var/mobile/Conta | iners/Data/Application/ <app< th=""><th>_GUID></th></app<> | _GUID> |
|--------------------------------------|---|---------|
| Internal App Path | File Name | File Ty |
| /Documents/ | Messenger.sqlite | SQLite |
| /Documents/LIImageCache | * | Various |
| /Library/Caches/WebKit/NetworkCache/ | * | Various |
| /Library/Preferences/ | com.linkedin.LinkedIn.plist | Plist |

/Library/Preferences/

| journalCode=tajf20 https://digitalcommons.newhaven.edu/cgi/viewcontent.cgi?article=1017&context= electricalcomputerengineering-facpubs https://it.scribd.com/document/57611870/Shmoocon-2011-Inside-the-App-All-Your-Data-are- Belong-to-Me |
|---|
| APPSTORE URL: https://apps.apple.com/us/app/logmein/id479229407 |
| Let and a dealth lead to a local back and come |

| | APPSTORE URL: https://apps.apple. | com/us/app/logmein/id479229407 | |
|------------|--|--|---------------------|
| (1) | /private/var/mobile/ Internal App Path | Containers/Data/Application/ <app< td=""><td>_GUID> File Type</td></app<> | _GUID> File Type |
| | /Library/LogMeInConfig/ | com.logmein.ignition.xml | XML |
| LogMeIn | /Library/LogMeInConfig/ /Library/Preferences/ | sessiondata.xml com.logmein.logmein.plist | XML Plist |



| APPSTORE URL: https://apps.apple.com/us/a | app/tutanota/id922429609 | |
|---|--|-----------|
| /private/var/mobile/Contain | ners/Data/Application/ <af< th=""><th>PP_GUID></th></af<> | PP_GUID> |
| Internal App Path | File Name | File Type |
| /Library/Preferences/ | de.tutao.tutanota.plist | Plist |
| /Library/WebKit/WebsiteData/IndexedDB/ v1/file0/ | IndexedDB.sqlite3 | SQLite |
| /Library/WebKit/WebsiteData/LocalStorage/ | file0.localstorage | SQLite |
| /SnlashBoard/Snanshots/ | * | KTX |

| nternal App Path | File Name |
|---------------------------------------|-------------------------------------|
| Library/Preferences/ | com.wearezeta.zclient.ios.plis |
| SplashBoard/Snapshots/ | * |
| /private/var/mobi nternal App Path | le/Containers/Shared/AppGroup/ </th |
| | |
| nternal App Path | File Name |
| AccountData/ <guid>/store/</guid> | File Name store.wiredatabase |

| /Library/Preferences/ | group.com.wearezeta.zclient.ios.plist |
|---|---------------------------------------|
| REFERENCES: | |
| https://www.x41-dsec.de/reports/X41-Kude | lski-Wire-Security-Review-iOS.pdf |
| https://blog.oxygen-forensic.com/wire-app | -extraction |
| https://wire-docs.wire.com/download/Wire | +Security+Whitepaper.pdf |
| | |

APPSTORE URL: https://apps.apple.com/us/app/zoom-cloud-meetings/id546505307

| Internal App Path | Containers/Data/Application/ <app_gl File Name</app_gl | File Type |
|---------------------------------------|---|-----------|
| /Documents/data/ | * | JPG |
| /Documents/data/ | zoommeeting.db | SQLite |
| /Documents/data/ | zoomus.db | SQLite |
| /Documents/data/ | zoomus.tmp.db | SQLite |
| /Documents/data/ <user_id>/</user_id> | <pre><user_id>@xmpp.zoom.us.asyn.db</user_id></pre> | SQLite |
| /Documents/data/ <user_id>/</user_id> | <us>User_ID>@xmpp.zoom.us.db</us> | SQLite |
| /Documents/data/ <user_id>/</user_id> | <us>User_ID>@xmpp.zoom.us.idx.db</us> | SQLite |
| /Documents/data/ <user_id>/</user_id> | <pre><user_id>@xmpp.zoom.us.sync.db</user_id></pre> | SQLite |
| /Library/Preferences/ | us.zoom.videomeetings.plist | Plist |

APPSTORE URL: https://apps.apple.com/us/app/microsoft-teams/id1113153706

File Type

SQLite

Plist

KTX

File Type

SQLite

| Internal App Path | File Name | File Type |
|-----------------------------|---|------------------|
| /Library/.IntuneMAM/ | Config.plist | Plist |
| /Library/Shiftr/ | Shiftr.sqlite | SQLite |
| /Library/Preferences/ | com.microsoft.skype.teams.plist | Plist |
| /SplashBoard/Snapshots/ | * | KTX |
| | | |
| /private/var/mobile/Contain | ers/Shared/AppGroup/ <app_gu File Name</app_gu | |
| | | ID> File Type |
| Internal App Path | File Name | ID> File Type |

https://digital-forensics.sans.org/summit-archives/Prague_Summit/Cloud_Storage_Forensics_Mattia_Eppifani.pdf

APPSTORE URL: https://apps.apple.com/us/app/microsoft-onedrive/id477537958

Internal App Path

/Library/Database/

/Library/Preferences/

Internal App Path

/OneDrive/DatabaseQT/

/OneDrive/StramCacheQT/

Microsoft OneDrive

Microsoft

Teams

/SplashBoard/Snapshots/

/private/var/mobile/Containers/Data/Application/<APP_GUID>

File Name

com.microsoft.skydrive.plist

| APPSTORE URL: https://apps.apple.com/us/a | pp/protonmail-encrypted-email/id | 979659905 |
|---|--|--------------------|
| /private/var/mobile/Contain | ers/Data/Application/ <app_g< th=""><th>iUID> File Type</th></app_g<> | iUID> File Type |
| /Library/Caches/SentryCras/ProtonMail/Data/ | CrashState.json | JSON |
| /Library/Preferences/ | ch.protonmail.protonmail.plist | Plist |

| /Libidity/Fielelelices/ | cii.protoiiiiaii.protoiiiiaii.ptist | Plist |
|---------------------------|--|-----------|
| /private/var/mobile/Conta | ainers/Shared/AppGroup/ <app_gu< th=""><th>ID></th></app_gu<> | ID> |
| Internal App Path | File Name | File Type |
| 1 | ProtonMail.sqlite | SQLite |
| /Library/Preferences/ | group.ch.protonmail.protonmail.plist | Plist |
| | | |

| | APPSTORE URL: https://apps.apple.com/ | us/app/silent-phone/id554269204 | |
|------------|--|--|--------------------|
| | /private/var/mobile/Con Internal App Path | tainers/Data/Application/ <app_ File Name</app_ | GUID> File Type |
| (C) | /Library/Application Support/ com. silentcircle.SilentPhone/Chat/ | ChatMessages_cipher.db | SQLite |
| laut Dhana | /Library/Application Support/com. silentcircle.SilentPhone/tivi/ | axo_ <user-id>_secure_sql.db</user-id> | SQLite |
| lent Phone | /Library/Application Support/com. silentcircle.SilentPhone/tivi/ | zids_sqlite.db | SQLite |

| | Internal App Path | File Name | File |
|---------|---|---|---------|
| | /private/var/mobile/Co | ontainers/Data/Application/ <apf< th=""><th>_GUID></th></apf<> | _GUID> |
| | APPSTORE URL: https://apps.apple.com | n/us/app/slack/id618783545 | |
| | | · | |
| | /Library/Preferences/ | com.silentcircle.SilentPhone.plis | t Plist |
| Pilolie | /Library/Application Support/com. silentcircle.SilentPhone/tivi/ | zids_sqlite.db | SQLi |
| Phone | silentcircle.SilentPhone/tivi/ | axo_ <osei=id>_secure_sqt.ub</osei=id> | JŲLI |

| Internal App Path | File Name | File Type |
|---|------------------------------|-----------|
| Library/Application Support/Slack/ <workspace_id>/Database/</workspace_id> | main_db | SQLite |
| /Library/Caches/com.tinyspeck.chatlyio/ fsCachedData/ | * | JPG |
| Library/Caches/default/com.hackemist. SDWebImageCache.default/ | * | JPG |
| /Library/Preferences/ | com.tinyspeck.chatlyio.plist | Plist |

| nttps://abrignoni.blogspot.com/2018/10/fin | iuiiig-stack-app-iiiessages-iii-iu | S.IIUIII |
|--|---|-----------------------|
| APPSTORE URL: https://apps.apple.com/us/a | app/tutanota/id922429609 | |
| | | |
| /private/var/mobile/Contain Internal App Path | ners/Data/Application/ <ap File Name</ap | PP_GUID> File Type |
| | | _ |

| / LIDIATY / WEDKIL / WEDSILEDALA / LOC | taistorage/ nie_o.tocaistorage | SQLILE |
|--|---|----------------------|
| /SplashBoard/Snapshots/ | * | KTX |
| | | |
| APPSTORE URL: https://apps.appl | le.com/us/app/wire-secure-messenger/id9 | 30944768 |
| | | |
| /private/var/mobil | e/Containers/Data/Application/ <ap< th=""><th>P_GUID></th></ap<> | P_GUID> |
| /private/var/mobil | e/Containers/Data/Application/ <ap File Name</ap | P_GUID> File Type |
| | | File Type |

| | | , |
|------------------------------------|--|-----------|
| /Library/Preferences/ | com.wearezeta.zclient.ios.plist | Plist |
| /SplashBoard/Snapshots/ | * | KTX |
| /private/var/mobile/C | ontainers/Shared/AppGroup/ <app_gu< td=""><td>JID></td></app_gu<> | JID> |
| Internal App Path | File Name | File Type |
| /AccountData/ <guid>/store/</guid> | store.wiredatabase | SQLite |
| /Accounts/ | * | JSON |
| /Library/Caches/ | * | Various |
| /Library/Preferences/ | group.com.wearezeta.zclient.ios.plist | Plist |

| Internal App Path | File Name | File Ty |
|--------------------------------------|---|---------|
| /Documents/data/ | * | JPG |
| /Documents/data/ | zoommeeting.db | SQLite |
| /Documents/data/ | zoomus.db | SQLite |
| /Documents/data/ | zoomus.tmp.db | SQLite |
| /Documents/data/ <user_id></user_id> | ·/ <user_id>@xmpp.zoom.us.asyn.db</user_id> | SQLite |
| /Documents/data/ <user_id></user_id> | ·/ <user_id>@xmpp.zoom.us.db</user_id> | SQLite |
| /Documents/data/ <user_id></user_id> | ·/ <user_id>@xmpp.zoom.us.idx.db</user_id> | SQLite |
| /Documents/data/ <user_id></user_id> | ·/ <user_id>@xmpp.zoom.us.sync.db</user_id> | SQLite |
| /Library/Proforoncos/ | us zoom vidoomootings plist | Dlict |

FOR508: Advanced Incident Response, Threat Hunting, and Digital Forensics | GCFA FOR572: Advanced Network Forensics: Threat Hunting,

FOR578: Cyber Threat Intelligence | GCTI FOR610: REM: Malware Analysis | GREM

Navigation & Travel

| | APPSTORE URL: https://apps.app | ole.com/us/app/air-france/id391968627 | | | APPSTORE URL: https://apps |
|------------|--------------------------------|--|----------------------|-------|-------------------------------------|
| | /private/var/mobi | le/Containers/Data/Application/ <ap File Name</ap | P_GUID> File Type | KLM | /private/var/m Internal App Path |
| | 1 | bagtracking.realm | Realm | KLIVI | /Documents/ |
| | 1 | checkinkit.realm | Realm | | /Library/Caches/com.klm.mo |
| | 1 | entertainmentkit.realm | Realm | KLM | klmmobile/fsCachedData/ |
| Air France | 1 | flightStatusKit.realm | Realm | | /Library/Preferences/ |
| | 1 | reservation.realm | Realm | | |
| | I | trackandtrace.realm | Realm | | APPSTORE URL: https://apps |
| | APPSTORE URL: https://apps.app | ole.com/app/airbnb/id401626263 | | | /private/var/m |

| | /private/var/mobile/Containers/Data/Application/ <app_guid></app_guid> | | | |
|---------|--|---|-----------|--|
| | Internal App Path | File Name | File Type | |
| | /Documents/ | guest_inbox_ <user_id>.db</user_id> | SQLite | |
| | /Documents/ | host_experience_inbox_ <user_id>.db</user_id> | SQLite | |
| | /Documents/ | host_inbox_ <user_id>.db</user_id> | SQLite | |
| | /Library/Application Support/ | guest_inbox_ <user_id>.db</user_id> | SQLite | |
| /o\ | /Library/Application Support/ | messaging_core.sqlite3 | SQLite | |
| \sim | /Library/Caches/ | <user_id>_itinerary.db</user_id> | SQLite | |
| | /Library/Caches/ | AIRAccount_active_account_login | Plist | |
| Airbnb | /Library/Caches/ | AIRUser_ <user_id></user_id> | Plist | |
| Allblib | /Library/Caches/ | AIRWishlist_ <user_id></user_id> | Plist | |
| | /Library/Caches/default/ com.hackemist. SDWebImageCache.default/ | * | PNG | |
| | /Library/Preferences/ | com.airbnb.app.plist | Plist | |
| | REFERENCES: https://blog.oxygen-forensic.com/untanglin | ng-airbnb/ | | |

| | APPSTORE URL: https://apps.apple.com/us/app/booking-com-hotels-travel/id367003839 | | | |
|---------|--|------------------------------|--------|--|
| | /private/var/mobile/Containers/Data/Application/ <app_gl app="" file="" internal="" name<="" path="" th=""></app_gl> | | | |
| | /Library/Application Support/ | BookingClouds | Plist | |
| Booking | /Library/Application Support/ | KeyValueStorageAccountDomain | Plist | |
| | /Library/Application Support/ | KeyValueStorageRecentsDomain | Plist | |
| | /Library/Application Support/ | KeyValueStorageSharedDomain | Plist | |
| | /Library/Caches/ | location_cache_V2.db | SQLite | |
| Booking | /Library/Caches/com.booking.BookingApp/ com. alamofire.imagedownloader/fsCachedD | | JPG | |
| | /Library/Caches/com.booking.BookingApp/fsCachedData/ | * | JSON | |
| | /Library/Preferences/ | com.booking.BookingApp.plist | Plist | |

Foursquar

Swarn

| | APPSTORE URL: https://apps.apple.com/us/app/foursquare-swarm-check-in-app/id8701610 | | | | | |
|---|---|---|-----------------|--|--|--|
| | /private/var/mobile/Containers/Data/Application/ <app_guid> Internal App Path File Name File Typ</app_guid> | | | | | |
| e | /Library/Caches/ /Library/Preferences/ | foursquare.sqlite com.foursquare.robin.plist | SQLite Plist | | | |
| | | | | | | |
| | APPSTORE URL: https://apps.appl | e.com/us/app/google-maps-transit-food/id | 585027354 | | | |
| | | | | | | |

| Internal App Path | File Name | File Type |
|--|---|-----------|
| /Documents/GMSCacheStorage-AZSpotligh StorageModel/GMSCacheStorage- AZSpotlightStorageModel/ | t AZSpotlightStorageModel.sqlite | SQLite |
| /Library/Application Support/CachedRoutes | / * | Plist |
| /Library/Application Support/ GMSCacheStorage-MyMaps/ | MyMaps.sqlite | SQLite |
| /Library/Application Support/ GMSCacheStorage-SavedUserEvent3/ | SavedUserEvent3.sqlite | SQLite |
| /Library/Application Support/ GMSCacheStorage-Tiles/ | Tiles.sqlite | SQLite |
| /Library/Caches/ImageCache | * | JPG |
| /Library/Caches/com.google. commmon.SSO/ <user_id>/</user_id> | Profile.plist | Plist |
| /Library/Preferences/ | com.google.Maps.plist | Plist |
| /private/var/mobile/Contai | ners/Shared/AppGroup/ <app< td=""><td>GIIID></td></app<> | GIIID> |
| Internal App Path | File Name | File Type |
| /Library/Preferences/ | CurrentDirections | Plist |
| /Library/Preferences/ | group.com.google.Maps.plist | Plist |

https://commons.erau.edu/cgi/viewcontent.cgi?article=1414&context=jdfsl

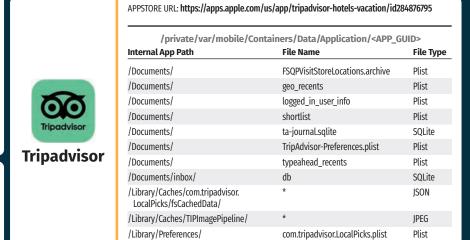
https://www.ijrte.org/wp-content/uploads/papers/v8i4/D4374118419.pdf

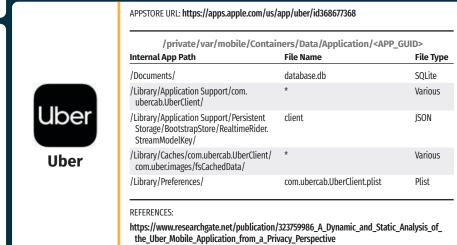
APPSTORE URL: https://apps.apple.com/us/app/brave-private-browser-vpn/id1052879175

| KLM KLM | APPSTORE URL: https://apps.apple.com/us/ | app/klm/id391732065 | | |
|------------|---|--|---------|--|
| | /private/var/mobile/Contain | r/mobile/Containers/Data/Application/ <app_guid> File Name File Typ</app_guid> | | |
| | /Documents/ | CoreAppRedesign_iPhone.sqlite | SQLite | |
| | /Library/Caches/com.klm.mobile.iphone. klmmobile/fsCachedData/ | * | Various | |
| | /Library/Preferences/ | com.klm.mobile.iphone.klmmobile.plist | Plist | |

| | APPSTORE URL: https://apps.apple.com/us | /app/lufthansa/id299219152 | |
|-----------|--|---|---------------------|
| | /private/var/mobile/Contai | iners/Data/Application/ <app< th=""><th>_GUID> File Type</th></app<> | _GUID> File Type |
| | /Documents/ | * | HTML |
| | /Library/Application Support/ | Database.sqlite | SQLite |
| Lufthansa | /Library/Caches/com.lufthansa.launcher/ fsCachedData/ | * | XML |
| | /Library/Preferences/ | com.lufthansa.launcher.plist | Plist |
| | | | |
| | APPSTORE URL: https://apps.apple.com/us | /app/skyscanner-travel-deals/id41 | 5458524 |

| Internal App Path | File Name | File Ty |
|---|-----------------------------|---------|
| /Documents/ | MiniEvents.sqlite | SQLite |
| /Documents/WatchedFlights/ | WatchedFlights.json | JSON |
| /Library/Caches/com.hackemist. SDImageCache/default/ | * | JPG |
| /Library/Caches/net.skyscanner.iphono netcache/ | e/ Cache.db | SQLite |
| /Library/Caches/net.skyscanner.iphono netcache/fsCachedData/ | e/ * | JSON |
| /Library/Preferences/ | net.skyscanner.iphone.plist | Plist |





| Waze | APPSTORE URL: https://apps.appl | le.com/us/app/waze-navigation-live-traffi | c/id323229106 | |
|------|---|---|---------------------------------------|--|
| | /private/var/mobil Internal App Path | e/Containers/Data/Application/ <af File Name</af | / <app_guid> File Type</app_guid> | |
| | /Document/ | user | TXT | |
| | /Document/ | session | TXT | |
| | /Document/ | preferences | TXT | |
| | /Document/ | user.db | SQLite | |
| | /Library/Preferences/ | com.waze.iphone.plist | Plist | |

Internal App Path

/Library/Preferences/

SSO/<User_ID>/ /Library/Preferences/

/Library/Caches/KSCrash/Firefox Focus/

/Library/Application Support/Google/

/Library/Caches/com.google.commmon.

APPSTORE URL: https://apps.apple.com/us/app/firefox-focus-privacy-browser/id1055677337

/private/var/mobile/Containers/Data/Application/<APP_GUID>

/private/var/mobile/Containers/Data/Application/<APP_GUID>

APPSTORE URL: https://apps.apple.com/us/app/google-chrome/id535886823

File Name

org.mozilla.ios.Focus.plist

com.google.chrome.ios.plist

File Type

Utilities

Firefox

Focus

Google

Chrome

| | Internal App Path | File Name | File Type |
|------|--|--|---------------------|
| | /Documents/Downloads/ | * | Various |
| ave | /Library/Application Support/ | Brave.sqlite | SQLite |
| wser | /Library/Preferences/ | com.brave.ios.browser.plist | Plist |
| | APPSTORE URL: https://apps.apple.com/us | | |
| | /private/var/mobile/Conta Internal App Path | iners/Data/Application/ <app File Name</app | _GUID> File Type |
| | /Library/Caches/com.adhoclabs.burner/ | Cache.db | SQLite |
| 6 | /Library/Caches/com.adhoclabs.burner/ fsCachedData/ | * | Various |
| 10 | /Library/Preferences/ | com.adhoclabs.burner.plist | Plist |
| | /SplashBoard/Snapshots/ | * | KTX |
| rner | /private/var/mobile/Contai | ners/Shared/AppGroup/ <apf File Name</apf | GUID> File Type |
| | 1 | Phoenix.sqlite | SQLite |
| | REFERENCES: https://digitalforensicstips.com/2013/07/f | orensic-artifact-analysis-of-the-bur | ner-app-for- |

| | https://digitalforensicstips.com/2 the-iphone | 013/07/forensic-artifact-analysis-of-the-burne | er-app-for- |
|-----------------------|--|---|-------------------|
| | APPSTORE URL: https://apps.apple.com/us/app/duckduckgo-privacy-browser/id663592361 | | |
| | /private/var/mobile | e/Containers/Data/Application/ <app_g File Name</app_g | UID> File Type |
| DuckDuckGo Browser | /Library/Preferences/ | com.duckduckgo.mobile.ios.plist | Plist |

/Library/Caches/WebKit/NetworkCache/

/Library/Preferences/

/profile.profile/

/profile.profile/

/profile.profile/

/profile.profile/

/Library/Preferences/

Firefox

APPSTORE URL: https://apps.apple.com/us/app/firefox-private-safe-browser/id989804926

/private/var/mobile/Containers/Data/Application/<APP_GUID> File Name

/private/var/mobile/Containers/Shared/AppGroup/<APP_GUID> File Name

browser.db

logins.db

places.db

tabState.archive

group.org.mozilla.ios.Firefox.plist

org.mozilla.ios.Firefox.plist

Various

Plist

SQLite

SQLite

SQLite

Plist

| | /private/var/mobile/Contain | ners/Data/Application/ <app_g< th=""><th colspan="2">ı/<app_guid></app_guid></th></app_g<> | ı/ <app_guid></app_guid> | |
|-----------|--|--|--------------------------|--|
| | Internal App Path | File Name | File Type | |
| | /Documents/ | OfflineCache.sqlite | SQLite | |
| | /Documents/CitrixLogs/Diagnostics/ | * | CSV | |
| | /Documents/TabScreenshot/ | * | JPG | |
| Microsoft | /Library/Application Support/ChromeSync/ | * | Various | |
| Edge | /Library/Caches/com.microsoft.msedge/ fsCachedData/ | * | Various | |
| | /Library/Preferences/ | com.microsoft.msedge.plist | Plist | |
| | | | | |
| | APPSTORE URL: https://apps.apple.com/us/a | app/onion-browser/id519296448 | | |
| | /private/var/mobile/Contain | ners/Data/Application/ <app_g< td=""><td>iUID></td></app_g<> | iUID> | |
| | Internal App Path | File Name | File Type | |

| | /Library/Preferences/ | com.microsorcinseuge.pust | Plist |
|---------|---|--|-------------------|
| | APPSTORE URL: https://apps.apple.com | n/us/app/onion-browser/id519296448 | |
| | /private/var/mobile/Co | ontainers/Data/Application/ <app_g File Name</app_g | JID> File Type |
| | /Documents/ | bookmarks.plist | Plist |
| | /Library/Caches/com.miketigas. OnionBrowser/ | Cache.db | SQLite |
| Onion | /Library/Caches/tor/ | state | TXT |
| Browser | /Library/Preferences/ | com.miketigas.OnionBrowser.plist | Plist |
| Diowsei | | | |
| | REFERENCES: | | |
| | https://roselabs.nl/files/audit_reports/0 | Cure53Onion_Browser.pdf | |







FOR308: Digital Forensics Essentials FOR498: Battlefield Forensics & Data **FOR500: Windows Forensics** | GCFE

FOR518: Mac and iOS Forensic Analysis and Incident Response

FOR585: Smartphone Forensic Analysis In-Depth | GASF

Analysis and Incident Response | GNFA

SEC504: Hacker Tools, Techniques, Exploits, and Incident Handling | GCIH

Social Networking

| | APPSTORE URL: https://apps.apple.com/us/app/cove | rme-private-text-call/id593652484 | |
|-----------------------|--|--|---------------------|
| | /private/var/mobile/Containers | /Data/Application/ <app_guid></app_guid> | |
| | Internal App Path /Documents/ | File Name ContactCache | File Type Plist |
| | /Documents/ /Documents/ | miliao.db notification.plist | SQLite Plist |
| CoverMe | /Documents/ /Library/logs/ | Profile.plist *.log | Plist TXT |
| | /Library/Preferences/ | com.coverme.covermeAdhoc.plist | Plist |
| | APPSTORE URL: https://apps.apple.com/us/app/disco | ord-talk-chat-hang-out/id985746746 | |
| | /private/var/mobile/Containers Internal App Path | /Data/Application/ <app_guid> File Name</app_guid> | File Type |
| | /Documents/mmkv/ | mmkv.default | JSON |
| | /Documents/RCTAsyncLocalStorage_V1/ /Documents/RCTAsyncLocalStorage_V1/ | <guid> manifest.json</guid> | JSON JSON |
| | /Library/Caches/com.hackemist.SDImageCache/ | * | PNG |
| | /Library/Caches/com.hammerandchisel.discord/ | Cache.db | SQLite |
| Discord | /Library/Caches/com.hammerandchisel.discord/ fsCachedData/ | * | JSON |
| Discoru | /Library/Preferences/ | com.hammerandchisel.discord.plist | Plist |
| | REFERENCES: https://abrignoni.blogspot.com/2018/08/finding-dis https://abrignoni.blogspot.com/2020/08/update-on https://www.nw3c.org/docs/research/discord.pdf | | |
| | APPSTORE URL: https://apps.apple.com/us/app/facel | oook/id284882215 | |
| | /private/var/mobile/Containers | /Data/Application/ <app_guid></app_guid> | File Toma |
| | Internal App Path /Documents/ | time_in_app_ <user_id>.db</user_id> | File Type SQLite |
| | /Library/Caches/com.facebook. Facebook.MosaicIGImageDiskCache/ | * | Various |
| | /Library/Caches/graphStoreDB/ | GraphStore_ <user_id>.sqlite3</user_id> | SQLite |
| | /Library/Caches/messenger_contacts. <guid>/ /Library/Caches/search_bootstrap.<guid>/search/</guid></guid> | fbsyncstore.db graph_search_entity_bootstrap.data | SQLite File |
| | /Library/Caches/video_cache. <guid>/storage/</guid> | * | Plist |
| Facebook | /Library/Preferences/ | com.facebook.Facebook.plist | Plist |
| | REFERENCES: https://www.academia.edu/10726810/Social_Media_ https://www.tandfonline.com/doi/abs/10.1080/0045 https://www.fbiic.gov/public/2011/jul/Facebook_For https://www.researchgate.net/publication/224221519 Apple_Mobile_Devices https://www.diva-portal.org/smash/get/diva2:65169 | 0618.2015.1066854?src=recsys&journal ensics-Finalized.pdf ohird_Party_Application_Forensics_ou | · |
| | APPSTORE URL: https://apps.apple.com/us/app/mess | senger/id454638411 | |
| | /private/var/mobile/Containers Internal App Path | /Data/Application/ <app_guid> File Name</app_guid> | File Type |
| | /Documents/com.facebook.Messenger.preferences/ | <user_id>.session</user_id> | Plist |
| | /Documents/messenger_secure_messages.sessionless.1/ /Documents/messenger_secure_messages.sessionless.1/ | | SQLite SQLite |
| | /Library/Caches/graphStoreDB/ | GraphStore_ <user_id>.sqlite3</user_id> | SQLite |
| | /Library/Preferences/ | com.facebook.Messenger.plist | Plist |
| | /private/var/mobile/Containers/ Internal App Path | Shared/AppGroup/ <app_guid> File Name</app_guid> | File Type |
| | 1 | lightspeed- <user_id>.db</user_id> | SQLite |
| Facebook Mossonger | /_store_ <guid>/messenger_contacts.v1/ /shared_messenger_contacts.<guid>/</guid></guid> | fbomnistore.db fbomnistore.db | SQLite SQLite |
| Messenger | /shared_messenger_messages. <guid>/</guid> | orca2.db | SQLite |
| | /lightspeed-imageCache/ * Various REFERENCES: https://www.academia.edu/10726810/Social_Media_Forensics_on_Mobile_Devices https://boncaldoforensics.wordpress.com/2018/07/28/facebook-messenger-windows-app-store-forensics https://www.champlain.edu/Documents/LCDI/iPhone%20Artifacts.pdf https://sqliteforensictoolkit.com/forensic-browser-for-sqlite-structured-storage-manager | | |
| | APPSTORE URL: https://apps.apple.com/us/app/goog | le-duo/id1096918571 | |
| | /private/var/mobile/Containers | | |
| | Internal App Path | File Name | File Type |

| /Documents/com.facebook.Messenger.preferences/ | <user id="">.session</user> | Plist |
|--|--|-----------|
| Documents/messenger_secure_messages.sessionless.1/ | <user_id>_threadStateStore.db</user_id> | SQLite |
| /Documents/messenger_secure_messages.sessionless.1/ | <user_id>_v1464784789_tincan.db</user_id> | SQLite |
| Library/Caches/graphStoreDB/ | GraphStore_ <user_id>.sqlite3</user_id> | SQLite |
| Library/Preferences/ | com.facebook.Messenger.plist | Plist |
| /private/var/mobile/Containers/ | Shared/AppGroup/ <app_guid></app_guid> | |
| nternal App Path | File Name | File Type |
| 1 | lightspeed- <user_id>.db</user_id> | SQLite |
| _store_ <guid>/messenger_contacts.v1/</guid> | fbomnistore.db | SQLite |
| shared_messenger_contacts. <guid>/</guid> | fbomnistore.db | SQLite |
| /shared_messenger_messages. <guid>/</guid> | orca2.db | SQLite |
| lightspeed-imageCache/ | * | Various |
| REFERENCES: https://www.academia.edu/10726810/Social_Media_ https://boncaldoforensics.wordpress.com/2018/07/2 forensics https://www.champlain.edu/Documents/LCDI/iPhon | 8/facebook-messenger-windows-app- e%20Artifacts.pdf | store- |
| https://sqliteforensictoolkit.com/forensic-browser-fo | | |

DataStore

| Google Duo | /Library/Caches/com.google.commmon.SSO/ <user_id>/ /Library/Preferences/</user_id> | Profile.plist com.google.Tachyon.plist | Plist Plist |
|------------|--|---|----------------|
| | APPSTORE URL: https://apps.apple.com/us/app/hous | eparty/id1065781769 | |
| | /private/var/mobile/Containers Internal App Path | | File Type |
| | /Documents/ | houseparty.rocky.phonenumbers | Realm |
| | /Documents/ | houseparty.rocky.realm | Realm |
| | /Library/Caches/com.herzick.houseparty/fsCachedData/ | * | JSON |
| | /Library/IBGLog/ | INGUserAttribute.txt | TXT |
| louseparty | /Library/Preferences/ | com.herzick.houseparty.plist | Plist |
| lousepurty | /Library/Preferences/ | Houseparty.plist | Plist |
| | /SplashBoard/Snapshots/ | * | KTX |
| | REFERENCES: https://abrignoni.blogspot.com/2020/0 | 4/ios-houseparty-app-more-realm.htr | nl |

/Documents/logs/

| Internal App Path | File Name | File Typ |
|--|--|----------------|
| /Documents/ | imo_acc | Plist |
| /Documents/ | imo_last_ts_log_appAlive | Plist |
| /Documents/ | imo_save_media_local_setting_1 | Plist |
| /Documents/ | imo_stories | Plist |
| /Library/Caches/default/com.hackemist. SDWebImageCache.default/ | * | Various |
| /Library/Caches/videos/ | * | Various |
| /Library/Preferences/ | co.babypenguin.imo.plist | Plist |
| /SplashBoard/Snapshots/ | * | KTX |
| | | |
| /private/var/mobile/Conta Internal App Path | ainers/Shared/AppGroup/ <app_guid File Name</app_guid |)> File Typ |
| 1 | IMODb2 salite | SOLite |

MeWe

MeWe

APPSTORE URL: https://apps.apple.com/us/app/imo-video-calls-and-chat-hd/id1400579543

| /SplashBoard/Snapshots/ | * | KTX |
|---|---|------------------|
| /private/var/mobile/Co | ontainers/Shared/AppGroup/ <app_gu< th=""><th>ID> File Type</th></app_gu<> | ID> File Type |
| / | IMODb2.sqlite | SQLite |
| I | IMOShareDb.sqlite | SQLite |
| /Library/Preferences/ | group.co.babypenguin.plist | Plist |
| REFERENCES: | | |
| https://www.sciencedirect.com/science/a | article/abs/pii/S1742287618300094 | |
| http://prr.hec.gov.pk/jspui/bitstream/123 | 456789/13429/1/Muhammad%20Asad%20Kha | ın%20 |

| REFERENCES: |
|--|
| https://www.sciencedirect.com/science/article/abs/pii/S1742287618300094 |
| http://prr.hec.gov.pk/jspui/bitstream/123456789/13429/1/Muhammad%20Asad%20Khan%20 Sudozai%20electrical%20engg%202019%20NUST%20isb%20prr.pdf |
| https://www.champlain.edu/Documents/LCDI/iPhone%20Artifacts.pdf |
| https://sqliteforensictoolkit.com/forensic-browser-for-sqlite-structured-storage-manager |

APPSTORE URL: https://apps.apple.com/us/app/kik/id357218860

| | Internal App Path | File Name | File Type |
|----|---|---|-----------------------------------|
| | /Library/Caches/com.kik.chat/fsCachedData/ | * | Various |
| | /Library/Preferences/ | com.kik.chat.plist | Plist |
| | /SplashBoard/Snapshots/ | * | KTX |
| | Internal App Path | ers/Shared/AppGroup/ <app_guid> File Name</app_guid> | File Type |
| | internat App i atri | ine name | inc type |
| | 1 1: 111 15 1 | 121 - 124 | CO1.1 |
| | /cores/private/ <user-id>/</user-id> | kik.sqlite | SQLite |
| | /cores/private/ <user-id>/app-lock/</user-id> | app-lock-settings | JSON |
| | | ' | |
| | /cores/private/ <user-id>/app-lock/</user-id> | app-lock-settings | JSON |
| | /cores/private/ <user-id>/app-lock/ /cores/private/<user-id>/attachments/</user-id></user-id> | app-lock-settings * | JSON Various |
| er | /cores/private/ <user-id>/app-lock/ /cores/private/<user-id>/attachments/ /cores/private/<user-id>/defaults/</user-id></user-id></user-id> | app-lock-settings * kik.defaults | JSON Various Plist |
| | /cores/private/ <user-id>/app-lock/ /cores/private/<user-id>/attachments/ /cores/private/<user-id>/defaults/ /cores/private/<user-id>/globalDefaults/</user-id></user-id></user-id></user-id> | app-lock-settings * kik.defaults kik.defaults | JSON Various Plist Plist |
| • | /cores/private/ <user-id>/app-lock/ /cores/private/<user-id>/attachments/ /cores/private/<user-id>/defaults/ /cores/private/<user-id>/globalDefaults/ /cores/private/<user-id>/suggested-chats/</user-id></user-id></user-id></user-id></user-id> | app-lock-settings * kik.defaults kik.defaults suggested | JSON Various Plist Plist JSON |

| /Library/Preferences/ | group.com.kik.chat.plist | Plist |
|---|--|--------|
| REFERENCES: https://www.sciencedirect.com/science/a https://researchonline.gcu.ac.uk/files/242 https://www.scribd.com/doc/145278610/A https://blog.oxygen-forensic.com/kickin-l | 82895/K.Ovens_revisedKMOvensManuscript3 Artefacts-of-Kik-Messenger-on-iOS | _2.pdf |

/private/var/mobile/Containers/Data/Application/<APP_GUID>

APPSTORE URL: https://apps.apple.com/us/app/line/id443904275

| Internal App Path | File Name | File Typ |
|---|--|-----------|
| /Library/Application Support/PrivateStore/ | * | Various |
| /Library/Caches/jp.naver.line/fsCachedData/ | * | Various |
| /Library/Preferences/ | jp.naver.line.plist | Plist |
| | s/Shared/AppGroup/ <app_guid></app_guid> | |
| Internal App Path | File Name | File Type |
| /Library/Application Support/KeepFileProvider/ | Keep.sqlite | SQLite |
| /Library/Application Support/PrivateStore/ <user-id>/Messages/</user-id> | ChetExt.sqlite | SQLite |
| /Library/Application Support/PrivateStore/ <user-id>/Messages/</user-id> | E2EEData.sqlite | SQLite |
| /Library/Application Support/PrivateStore/ | Line.sqlite | SQLite |
| <user-id>/Messages/</user-id> | | |

| /private/var/mobile/Containe | rs/Data/Application/ <app_guid></app_guid> | |
|--|--|-----------|
| Internal App Path | File Name | File Type |
| /Documents/ | Sgrouplesdb.sqlite | SQLite |
| /Library/Caches/com.mewe/fsCachedData/ | * | Various |
| Library/Caches/com.hackemist.SDImageCache/ | * | Various |
| /Library/Preferences/ | com.mewe.plist | Plist |

APPSTORE URL: https://apps.apple.com/us/app/amazon-prime-video/id545519333

https://pdfs.semanticscholar.org/fe66/52f6fe64ce1af44dd7d433ecf5a00b57ca0a.pdf



| Internal App Path | File Name | File Ty |
|------------------------|--|---------|
| /Library/Caches/ | * | JPG |
| /Library/Logs/ | *.log | TXT |
| /Library/Preferences/ | org.whispersystems.signal.plist | Plist |
| /private/var/mobile/Co | ntainers/Shared/AppGroup/ <app_guid< td=""><td>></td></app_guid<> | > |
| Internal App Path | File Name | File Ty |
| /Attachments/ | * | Various |
| /grdb/ | signal.sqlite | SQLite |
| /Library/Preferences/ | group.org.whispersystems.signal. group.plist | Plist |
| | * | IPG |
| /ProfileAvatars/ | | ,, , |

APPSTORE URL: https://apps.apple.com/us/app/signal-private-messenger/id874139669

| REFERENCES: |
|---|
| https://github.com/Magpol/HowTo-decrypt-Signal.sqlite-for-iOS |
| https://support.magnetforensics.com/s/article/Decrypt-app-data-using-the-iOS-Keychain-and-GrayKey |
| https://pdfs.semanticscholar.org/fe66/52f6fe64ce1af44dd7d433ecf5a00b57ca0a.pdf |
| https://isc.sans.edu/forums/diary/Looking+for+the+insider+Forensic+Artifacts+on+iOS+Messaging+ App/21363 |
| http://www.ijits-bg.com/contents/IJITS-No4-2019/2019-N4-07.pdf |

| | APPSTORE URL: https://apps.apple.com/us/app/skout-meet-new-people/id302324249 | | |
|----------|---|---|-----------|
| a | /private/var/mobile/Conta Internal App Path | iners/Data/Application/ <app_guid> File Name</app_guid> | File Type |
| | /Library/Application Support/SKOUT/ | SKCache.sqlite | SQLite |
| | /Library/Caches/default/com.hackemist. SDWebImageCache.default/ | * | Various |
| Skout | /Library/Preferences/ | com.skout.SKOUT.plist | Plist |
| | /SplashBoard/Snapshots/ | * | KTX |
| | ADDSTORE LIPL: https://anns.annle.com/us/a | on/skyno-for-inhono/id20/979510 | |

| /private/var/mobile Internal App Path | Containers/Data/Application/ <app_guil <br="">File Name</app_guil> |)> File Type |
|---|--|-----------------|
| /Documents/RCTAsyncLocalStorage_V1 | manifest.json | JSON |
| /Library/Application Support/Skype4Li <skype_username>/</skype_username> | feSlimCore/ main.db | SQLite |
| /Library/Caches/Logs/ | com.skype.*.log | TXT |
| /Library/LocalDatabase/ | s4l- <skype_username>.db</skype_username> | SQLite |
| /Library/Preferences/ | com.skype.skype.plist | Plist |
| /private/var/mobile/ Internal App Path | Containers/Shared/AppGroup/ <app_gui File Name</app_gui | D> File Typ |
| I | s4l- <skype username="">.db</skype> | SQLite |

| Library/Preferences/ | ph.telegra.Telegraph.plist | Plis |
|--|--|---------------|
| Library/Caches/ph.telegra.Telegraph/fsCachedData | / * | Var |
| /private/var/mobile/Containers nternal App Path (telegram-data/account- <account_id>/postbox/db/</account_id> | s/Shared/AppGroup/ <app_guid> File Name</app_guid> | File |
| telegram-data/account- <account_id>/postbox/ ftelegram-data/account-<account_id>/postbox/ media/</account_id></account_id> | db_sqlite * | SQLi Vario |
| Italagram data/loge/ | * | TXT |
| telegram-data/logs/ | | |

| /private/var/mobile/Containe | rs/Data/Application/ <app_guid< th=""><th>></th></app_guid<> | > |
|--|---|----------|
| Internal App Path | File Name | File Typ |
| /Documents/ | <user-id></user-id> | SQLite |
| /Documents/com.hackemist.SDWebImageCache. default/ | * | JPG |
| /Library/Application Support/ | eventHistory.db | SQLite |
| /Library/Caches/Logs/sip/ | *.log | TXT |
| /Library/Caches/media/ | * | JPG |
| /Library/Preferences/ | com.tinginteractive.usms.plist | Plist |
| , , | <u> </u> | |

| | APPSTORE URL: https://apps.apple.com/us | s/app/tinder-dating-new-people/id547702041 | |
|--------|---|---|-----------|
| | /private/var/mobile/Co Internal App Path | ontainers/Data/Application/ <app_guid> File Name</app_guid> | File Type |
| | /Library/Application Support/ | Tinder2.sqlite | SQLite |
| Tinder | /Library/Preferences/ | com.cardify.tinder.plist | Plist |
| | | | |



| | /Documents/UserEngagement/ /Library/Caches/com.viber/fsCachedData/ /Library/Preferences/ /SplashBoard/Snapshots/ | * com.viber.plist * | Various Various Plist KTX |
|-----------|---|--|------------------------------------|
| Viber | /private/var/mobile/Containers Internal App Path /com.viber/AttachmentsPreview/ | :/Shared/AppGroup/ <app_guid> File Name</app_guid> | File Type |
| Messenger | /com.viber/ContactIcons/ /com.viber/database/ | * Contacts.data | JPG SOLite |
| | /com.viber/settings/ | Settings.data | SQLite |

 ${\tt APPSTORE\ URL:}\ \textbf{https://apps.apple.com/us/app/viber-messenger-chats-calls/id382617920}$

/private/var/mobile/Containers/Data/Application/<APP_GUID>

File Name

File Type

Various

Various

| /com.viber/settings/ | Settings.data | |
|-------------------------------------|--|---|
| | | _ |
| REFERENCES: | | |
| https://pdfs.semanticscholar.org | /fe66/52f6fe64ce1af44dd7d433ecf5a00b57ca0a.pdf | |
| https://blog.oxygen-forensic.com | /viber-messenger-forensics | |
| https://blog.digital-forensics.it/2 | 019/12/checkra1n-era-ep-4-analyzing.html | |

Internal App Path

/Documents/Attachments/

/Documents/ChatExIcons/

| /private/var/mobile/Containers/Data/Application/ <app_guid></app_guid> | | > |
|--|-----------------------|----|
| Internal App Path | File Name | Fi |
| /Documents/ <user_id>/</user_id> | mmsetting.archive | Pl |
| /Documents/ <user_id>/</user_id> | wc005_008.db | SC |
| /Documents/ <user_id>/DB/</user_id> | MM.sqlite | SC |
| /Documents/ <user_id>/DB/</user_id> | WCDB_Contact.sqlite | SC |
| /Library/Preferences/ | com.tencent.xin.plist | Pl |

| t | | contencentariii.pust | 1 1131 |
|---|--|---|-----------|
| | REFERENCES: | | |
| | https://www.researchgate.net/publicati Application_on_iOS_devices | on/261016959_Forensic_Analysis_of_Social_Ne | tworking_ |
| | https://www.ictsecuritymagazine.com/a | rticoli/wechat-forensics-parte-i | |

| /private/var/mobile/Conta Internal App Path | iners/Data/Application/ <app_guid< th=""><th>)> File Type</th></app_guid<> |)> File Type |
|---|---|-----------------|
| /Documents/ | Blockedcontacts.dat | Plist |
| /Documents/ | calls.backup.log | Plist |
| /Documents/ | StatusMessages.plist | Plist |
| /Library/Caches/ChatMedia/ | * | Various |
| /Library/Caches/GalleryMedia/ | * | Various |
| /Library/Caches/net.whatsapp.WhatsApp/ fsCachedData/ | * | Various |
| /Library/Caches/spotlight-profile-v2/ | * | PNG |
| /Library/Logs/ | whatsapp-*.log | TXT |
| /Library/Preferences/ | net.whatsapp.WhatsApp.plist | Plist |
| /SplashBoard/Snapshots/ | * | KTX |

| | /SplashBoard/Snapshots/ | * | KTX |
|-----------|--------------------------------|--|-----------|
| | /private/var/mobile/Containers | s/Shared/AppGroup/ <app_guid> File Name</app_guid> | File Type |
| (📞) | 1 | calls.log | Plist |
| | I | CallHistory.sqlite | SQLite |
| | 1 | ChatStorage.sqlite | SQLite |
| WhatsApp | I | ContactsV2.sqlite | SQLite |
| Messenger | I | current_wallpaper.jpg | JPG |
| | 1 | Location.sqlite | SQLite |
| | /Biz/ | Biz.sqlite | SQLite |
| | /fts/ | ChatSearch*.sqlite | SQLite |
| | /Library/Preferences/ | group.net.whatsapp.WhatsApp. shared.plist | Plist |
| | /Media/Profile/ | * | Various |
| | /Message/Media/ | * | Various |
| | /stickers/ | * | Various |
| | REFERENCES: | | |

| /Suckers/ | Valid |
|--|--|
| | |
| REFERENCES: | |
| https://www.group-ib.com/blog/whatsapp_forension | _artifacts |
| https://pdfs.semanticscholar.org/fe66/52f6fe64ce1a | 1f44dd7d433ecf5a00b57ca0a.pdf |
| https://sudonull.com/post/30099-WhatsApp-in-the detect-forensic-artifacts-Group-IB-Blog | -palm-of-your-hand-where-and-how-can-you |
| https://www.ijesm.co.in/uploads/68/5543_pdf.pdf | |

http://www.securitybydefault.com/2011/06/what-whatsapp-doesnt-tell-you.html

APPSTORE URL: https://apps.apple.com/us/app/wickr-me-private-messenger/id528962154

| * | |
|---|---|
| | JSON |
| * | JSON |
| com.mywickr.wickr.plist | Plist |
| /Shared/AppGroup/ <app_guid> File Name</app_guid> | File Typ |
| | com.mywickr.wickr.plist /Shared/AppGroup/ <app_guid></app_guid> |

| me | /Library/Preferences/ | com.mywickr.wickr.plist | Plist |
|----------|---|---|-------------|
| 11 | /private/var/mobil Internal App Path | e/Containers/Shared/AppGroup/ <app_guid> File Name</app_guid> | File Type |
| Nickr Me | 1 | wickrLocal.sqlite | SQLite |
| | REFERENCES: https://thebinaryhick.blog/2019/08 https://blog.oxygen-forensic.com/w | | and-GrayKey |

Finance

| | APPSTORE URL: https://apps.apple.com | /us/app/paypal/id283646709 | |
|--------|---|---|--------------------|
| | /private/var/mobile/Co Internal App Path | ntainers/Data/Application/ <app_0 File Name</app_0 | GUID> File Type |
| Paypal | /Library/Preferences/ | com.yourcompany.PPClient.plist | Plist |
| | APPSTORE URL: https://apps.apple.com | /us/app/venmo/id351727428 | |
| | /private/var/mobile/Co Internal App Path | ntainers/Data/Application/ <app_0 File Name</app_0 | GUID> File Type |
| | /Documents/ | Model.sqlite | SQLite |
| | /Documents/ | mParticle28.db | SQLite |
| | /Library/Caches/com.hackemist. SDImageCache/default/ | * | Various |
| Venmo | /Library/Preferences/ | net.kortina.labs.Venmo.plist | Plist |
| | | | |

| /private/var/mobile/Co Internal App Path | ntainers/Data/Application/ <app_ File Name</app_ | GUID> File Type |
|---|---|--------------------|
| • | | |
| /Documents/ | Model.sqlite | SQLite |
| /Documents/ | mParticle28.db | SQLite |
| /Library/Caches/com.hackemist. SDImageCache/default/ | * | Various |
| /Library/Preferences/ | net.kortina.labs.Venmo.plist | Plist |
| /SplashBoard/Snapshots/ | * | KTX |

| Nev | VS |
|-----|----|

APPSTORE URL: https://apps.apple.com/us/app/reddit/id1064216828

/private/var/mobile/Containers/Data/Application/<APP_GUID>

| | Internal App Path | File Name | File Type |
|---------|---|---|--------------------|
| | /Documents/release02/accounts/ | * | Plist |
| | /Documents/release02/accountData/ | * | Plist |
| Reddit | /Library/Caches/com.reddit.Reddit/ fsCachedData/ | * | Various |
| Reduit | /Library/Caches/com.reddit.Reddit/ imagedownload/fsCachedData/ | * | Various |
| | /Library/Preferences/ | com.reddit.Reddit.plist | Plist |
| | APPSTORE URL: https://apps.apple.com/us | s/app/twitter/id333903271 | |
| | DEVELOPER WEBSITE: http://twitter.com/do | ownload/iphone | |
| | APP SUPPORT: https://support.twitter.com | /articles/20169906 | |
| | PRIVACY POLICY: https://twitter.com/priva | су | |
| | /private/var/mobile/Conta | niners/Data/Application/ <app_g< th=""><th>iUID> File Type</th></app_g<> | iUID> File Type |
| | | * | |
| | /Documents/com.atebits.tweetie. application-important-state/ | * | Various |
| | /Documents/com.atebits.tweetie. application-state/ | app.acct. <twitter_username></twitter_username> | Plist |
| | /Documents/com.atebits.tweetie. compose.attachments/ | * | JPG |
| | /Documents/com.atebits.tweetie. direct-message.attachments/ | * | Various |
| | /Library/Caches/com.atebits.Tweetie2/ fsCachedData/ | * | Various |
| | /Library/Caches/com.atebits.tweetie. direct-message.cache/ | <user_id>-<user_number></user_number></user_id> | Plist |
| Twitter | /Library/Caches/com.twitter.simple. disk.caches/ | * | MP4 |
| | /Library/Caches/TIPImagePipeline/ | * | PNG |
| | /Library/Preferences/ | com.atebits.Tweetie2.plist | Plist |
| | /private/var/mobile/Contai | iners/Shared/AppGroup/ <app_0< th=""><th>GUID></th></app_0<> | GUID> |
| | Internal App Path | File Name | File Type |
| | /com.atebits.tweetie.scribe/ | Scribe.2.sqlite-sqlite | SQLite |
| | /Library/Preferences/ | group.com.atebits.Tweetie2.plist | Plist |
| | /TFSModelCache.1/ <user_id>/database/</user_id> | modelCache.sqlite3 | SQLite |
| | I ———— | | |

http://cs.lewisu.edu/mathcs/msisprojects/papers/kevinswartz.pdf

 $https://www.academia.edu/10726810/Social_Media_Forensics_on_Mobile_Devices$ https://www.tandfonline.com/doi/abs/10.1080/00450618.2015.1066854?src=recsys&journalCode=tajf20

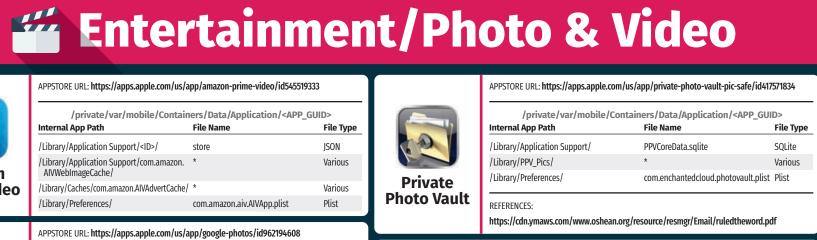
| orime video | /private/var/mobile/Contain | ers/Data/Application/ <app_ File Name</app_ | GUID> File Type |
|----------------|--|--|----------------------------|
| | /Library/Application Support/ <id>/</id> | store | JSON |
| nazon | /Library/Application Support/com.amazon. AIVWebImageCache/ | * | Various |
| ne Video | /Library/Caches/com.amazon.AIVAdvertCache/ | * | Various |
| | /Library/Preferences/ | com.amazon.aiv.AIVApp.plist | Plist |
| | APPSTORE URL: https://apps.apple.com/us/a | | GIIID> |
| | /private/var/mobile/Contain | ers/Data/Application/ <app_< th=""><th>GUID></th></app_<> | GUID> |
| | Internal App Path | File Name | |
| | internat App Fath | File Name | File Type |
| | /Library/Caches/com.google.commmon. SSO/ <user_id>/</user_id> | Profile.plist | File Type Plist |
| oogle | /Library/Caches/com.google.commmon. | | |
| | /Library/Caches/com.google.commmon. SSO/ <user_id>/</user_id> | Profile.plist | Plist |
| | /Library/Caches/com.google.commmon. SSO/ <user_id>/ /Library/Application Support/store/</user_id> | Profile.plist collections- <user_id></user_id> | Plist SQLite |
| oogle hotos | /Library/Caches/com.google.commmon. SSO/ <user_id>/ /Library/Application Support/store/ /Library/Application Support/store/</user_id> | Profile.plist collections- <user_id> photos-<user_id> com.google.photos.plist</user_id></user_id> | Plist SQLite SQLite Plist |

| tainers/Data/Application/ <a File Name</a | PP_GUID> File Type |
|--|-----------------------------------|
| default.realm | Realm |
| * | Various |
| *.log | TXT |
| imgurmobile.plist | Plist |
| | File Name default.realm * *.log |

| Internal App Path | Containers/Data/Application/ <app_g File Name</app_g | כעוטי File Type |
|--|--|--------------------|
| /Documents/ | time_in_app_ <user_id>.db</user_id> | SQLite |
| /Library/Caches/ <user_id>/</user_id> | * | Various |
| /Library/Caches/com.burbn.instagra IGImageCache/ | m. * | Images |
| /Library/Caches/com.burbn.instagra IGSparseVideoCache/ | m. * | Videos |
| /Library/Caches/Items/ | lastentries. <user_id>.1.coded</user_id> | Plist |
| /Library/Application Support/ <user_< td=""><td>_ID>/ pending-requests.plist</td><td>Plist</td></user_<> | _ID>/ pending-requests.plist | Plist |
| /Library/Application Support/ DirectSQLiteDatabase/ | <user_id>.db</user_id> | SQLite |
| /Library/Preferences/ | com.burbn.instagram.plist | Plist |
| / <user id="">/user bootstrap/</user> | shared bootstraps.plist | SQLite |
| / "OSCI_ID" / uSCI_BOOKStrup/ | - ' ' | |
| | | |
| http://xml.jips-k.org/full-text/view? | • • | Plist |
| REFERENCES: https://salt4n6.com/2018/05/15/a-fi http://xml.jips-k.org/full-text/view? https://www.forensicfocus.com/artic APPSTORE URL: https://apps.apple.com/private/var/mobile/0 | ew-interesting-ios-forensic-artefacts doi=10.3745/JIPS.03.0097 cles/forensic-analysis-of-third-party-applica om/us/app/netflix/id363590051 Containers/Data/Application/ <app_g< td=""><td>tion-instagrar</td></app_g<> | tion-instagrar |
| REFERENCES: https://salt4n6.com/2018/05/15/a-fi http://xml.jips-k.org/full-text/view? https://www.forensicfocus.com/artic | ew-interesting-ios-forensic-artefacts Pdoi=10.3745/JIPS.03.0097 cles/forensic-analysis-of-third-party-applica om/us/app/netflix/id363590051 | tion-instagra |

| | https://www.forensicfocus.com/articles/ | forensic-analysis-of-third-party-ap | plication-instagram |
|------------|--|---|-----------------------|
| | APPSTORE URL: https://apps.apple.com/u | us/app/netflix/id363590051 | |
| | /private/var/mobile/Cont Internal App Path | tainers/Data/Application/ <af< th=""><th>PP_GUID> File Type</th></af<> | PP_GUID> File Type |
| Netflix | /Documents/ | store.sqlite | SQLite |
| | /Library/assetCache/ | * | JPG |
| | /Library/Caches/br/ch/ | * | Various |
| | /Library/Caches/com.netflix.Netflix/ | Cache.db | SQLite |
| | /Library/Caches/com.netflix.Netflix/ fsCachedData/ | * | Various |
| | /Library/Preferences/ | com.netflix.Netflix.plist | Plist |
| | APPSTORE URL: https://apps.apple.com/u | | |
| 1 | The second secon | tainers/Data/Application/ <af< td=""><td>_</td></af<> | _ |
| | Internal App Path | | File Type |
| | /Documents/ | activeUser | Plist |
| | /Documents/ | activeUser <user_id></user_id> | Plist |
| Pinterest | /Library/Caches/com.pinterest.PINDiskCac PINRemoteImageManagerCache/ | he. * | Various |
| i interest | /Library/Caches/com.pinterest. PINDiskCache.PINRemoteModelCache/ | * | Various |
| | | | |

/Library/Preferences/



| /Documents/ | user.plist | Plist |
|---|-------------------------------|--------|
| /Documents/ | chatConversationStore.plist | Plist |
| /Documents/ | friendsForAsyncDecode.plist | Plist |
| /Documents/ | stories.plist | Plist |
| /Documents/gallery_data_object/1/ <user_id>/</user_id> | scdb-27.sqlite3 | SQLite |
| /Documents/global_scoped/Gallery/ | * | Variou |
| /Library/Caches/com.snap.file_ manager_1_SCContent_ <guid>/</guid> | * | Variou |
| /Library/Caches/SCCache/ | * | Variou |
| /Library/Preferences/ | com.toyopagroup.picaboo.plist | Plist |

| /Library/Preferences/ | com.toyopagroup.picaboo.piist | Plist |
|---|---|----------------|
| REFERENCES: | | |
| https://www.researchgate.net/profile/Imam analysis_of_snapchat_application_using_Xi digital-forensic-analysis-of-snapchat-appli | ML_records/links/59e73e87a6fdcc0e88 | |
| https://www.marshall.edu/forensics/files/Cinc | ly-QWu-Forensic-Analysis-of-Data-Tran | sience-PPT.pdf |
| https://resources.infosecinstitute.com/ios-a forensics/#gref | application-security-part-10-ios-filesy | stem-and- |
| https://doubleblak.com/blogPosts.php?id=! | i | |
| http://www.carpeindicium.com/blog/gone_ | 10-seconds | |
| | | |

| /private/var/mobile/Containers/Data/Application/ <app_guid></app_guid> | | |
|--|--------------------------|----|
| Internal App Path | File Name | Fi |
| /Library/Application Support/ PersistentCache/ | mercury.db | SC |
| /Library/Application Support/ PersistentCache/Storage/ | * | JP |
| /Library/Application Support/Users/ <user_id>-user/</user_id> | * | Vā |
| /Library/Caches/com.spotify.client/ nsurlcache/fsCachedData/ | * | JP |
| /Library/Preferences/ | com.spotify.client.plist | Pl |

| /private/var/mobile/Conta | iners/Data/Application/ <app_< th=""><th>GUID></th></app_<> | GUID> |
|---|--|-------|
| Internal App Path | File Name | File |
| /Documents/ | AwemelM.db | SQ |
| /Documents/drafts/ | * | Var |
| /Library/Application Support/ChatFiles/ <user-id>/</user-id> | db.sqlite | SQ |
| /Library/AWEVideoCache/FileCache/ | * | M4 |
| /Library/Caches/com.ibireme.yykit/ images/data/ | * | Var |
| /Library/Caches/TTPlayerCache/ | * | M4 |
| /Library/Heimdallr/ | heimdallr.db | SQI |
| /Library/Preferences/ | com.zhiliaoapp.musically.plist | Plis |

| REFERENCES: https://abrignoni.blogspot.com/2018/11/finding-tiktok-messages-in-ios.html https://www.systoolsgroup.com/updates/retrieve-messages-from-tiktok https://blog.oxygen-forensic.com/whos-knocking-tiktok | | | | |
|--|------------------------------|---------|--|--|
| APPSTORE URL: https://apps.apple.com/us/app/tiktok/id835599320 | | | | |
| /private/var/mobile/Containers/Data/Application/ <app_guid> Internal App Path File Name File Type</app_guid> | | | | |
| /Library/Caches/com.google. commmon.SSO/ <user_id>/</user_id> | Profile.plist | Plist | | |
| /Library/Caches/com.pinterest. PINDiskCache.com.youtube. innertube.imageservice.cache/ | * | Various | | |
| /Library/Preferences/ | com.google.ios.youtube.plist | Plist | | |

| | 4 | | leal | lth | & | Fitr | iess |
|--|---|--|------|-----|---|------|------|
|--|---|--|------|-----|---|------|------|

 ${\tt APPSTORE\ URL:\ https://apps.apple.com/us/app/fitbit-health-fitness/id462638897}$

| | ners/Data/Application/ <app_gu< th=""><th colspan="2"><app_guid></app_guid></th></app_gu<> | <app_guid></app_guid> | | | |
|------------|--|---|---------------------|--|--|
| | Internal App Path | File Name | File Type | | |
| | /Documents/ | fitbit.sqlite | SQLite | | |
| | /Library/Application Support/Fitbit/Defaults/ | UserInfo.plist | Plist | | |
| Fitbit | /Library/Caches/com.fitbit.FitbitMobile/ fsCachedData/ | * | JSON | | |
| | /Library/Preferences/ | com.fitbit.FitbitMobile.plist | Plist | | |
| | APPSTORE URL: https://apps.apple.com/us/app/adidas-running-app-runtastic/id33659988 | | | | |
| | /private/var/mobile/Contair Internal App Path | ners/Data/Application/ <app_gu File Name</app_gu | D> File Type | | |
| | /Documents/raw_traces/ <user_id>/</user_id> | * | CSV | | |
| | /Library/Application Support/runtastic/ | RTCoreDataAdditionalSessionInfo.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTCoreDataGeoImageInfo.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTCoreDataHeartRateInfo.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTCoreDataLiveTrackingInfo.sqlite | SQLite | | |
| adidas | /Library/Application Support/runtastic/ | RTCoreDataLocationInfo.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTCoreDataRoute.sqlite | SQLite | | |
| Runtastic | /Library/Application Support/runtastic/ | RTCoreDataSession.sqlite | SQLite | | |
| Ruiitastic | /Library/Application Support/runtastic/ | RTCoreDataSpeedInfo.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTCoreDataUser.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTDatabaseEventTrace.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTDatabaseGoalInfo.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTDatabaseStepInfo.sqlite | SQLite | | |
| | /Library/Application Support/runtastic/ | RTDatabaseWorkout.sqlite | SQLite | | |
| | /Library/Preferences/ | at.runtastic.gpssportapp.plist | Plist | | |
| | APPSTORE URL: https://apps.apple.com/us | /app/strava-run-ride-swim/id426820 | 5309 | | |
| | * | ners/Data/Application/ <app_gu< td=""><td></td></app_gu<> | | | |
| | Internal App Path / Library / Application Support / | File Name Strava.sqlite | File Type SQLite | | |
| | /Library/Application Support/ | Suava.squite | SQLILE | | |

| File Name Strava.sqlite | File Type SQLite | | | |
|--|-----------------------------|--|--|--|
| Strava.sqlite | SQLite | | | |
| | | | | |
| Strava.sqlite.error | SQLite | | | |
| com.strava.stravaride.plist | Plist | | | |
| REFERENCES: https://deepsec.net/docs/Slides/2019/Still_Secure_We_Empower_What_We_Harden_ Because We Can Conceal - Yury Chemerkin.pdf | | | | |
| | com.strava.stravaride.plist | | | |

| • | Shop | ping | |
|--------------------|---|--|---------------|
| | APPSTORE URL: https://apps.apple.com/us/a | app/amazon-shopping/id297606951 | |
| amazon | /private/var/mobile/Contain | ners/Data/Application/ <app_gui< th=""><th>D> File Ty</th></app_gui<> | D> File Ty |
| | /Library/Caches/com.amazon.Amazon/ | Cache.db | SQLite |
| **** | /Library/Caches/com.amazon.Amazon/ fsCachedData/ | * | Various |
| Amazon Shopping | /Library/Caches/WebKit/NetworkCache/ Version 14/ | * | Various |
| Shopping | /Library/Preferences/ | com.amazon.Amazon.plist | Plist |
| | /Library/WebKit/WebsiteData/LocalStorage/ | https_www.amazon.com_0.localstorage | SQLite |

Strava

| Amazon Shopping | /Library/Caches/WebKit/NetworkCache/ Version 14/ | * | Various | | |
|--------------------|---|-------------------------------------|---------|--|--|
| Silopping | /Library/Preferences/ | com.amazon.Amazon.plist | Plist | | |
| | /Library/WebKit/WebsiteData/LocalStorage/ | https_www.amazon.com_0.localstorage | SQLite | | |
| | | | | | |
| | | | | | |
| Reference | | | | | |

| | APPSTORE URL: https://apps.apple.com/us/app/google-translate/id414706506 | | | | |
|---------------------|--|---|--------------------|--|--|
| GX | /private/var/mobi | ile/Containers/Data/Application/ <app_ File Name</app_ | GUID> File Type | | |
| Google Translate | /Documents/ | translate.db | SQLite | | |
| | /Library/Preferences/ | com.google.Translate.plist | Plist | | |
| | | | | | |