**January 2024**

Test Results for Mobile Device Acquisition Tool:

[Toolname] [version]

**Contents**

[Introduction 3](#_Toc158029170)

[How to Read This Report 3](#_Toc158029171)

[1 Results Summary 4](#_Toc158029172)

[2 Mobile Devices 5](#_Toc158029173)

[3 Testing Environment 5](#_Toc158029174)

[3.1 Execution Environment 5](#_Toc158029175)

[3.2 Internal Memory Data Objects 6](#_Toc158029176)

[4 Test Results 8](#_Toc158029177)

[4.1 Android Mobile Devices 9](#_Toc158029178)

[4.2 iOS Mobile Devices 15](#_Toc158029179)

# Introduction

The Computer Forensics Tool Testing (CFTT) program is a joint project of the Department of Homeland Security’s (DHS) Science and Technology Directorate, the National Institute of Justice, and the National Institute of Standards and Technology’s (NIST) Special Programs Office and Information Technology Laboratory. CFTT is supported by other organizations, including the Federal Bureau of Investigation, the U.S. Department of Defense Cyber Crime Center, U.S. Internal Revenue Service’s Criminal Investigation Division Electronic Crimes Program, and U.S. Immigration and Customs Enforcement, U.S. Customs and Border Protection and U.S. Secret Service. The objective of the CFTT program is to provide measurable assurance to practitioners, researchers, and other applicable users that the tools used in computer forensics investigations provide accurate results. Accomplishing this requires the development of specifications and test methods for computer forensics tools and subsequent testing of specific tools against those specifications.

Test results provide the information necessary for developers to improve tools, users to make informed choices, and the legal community and others to understand the tools’ capabilities. The CFTT approach to testing computer forensics tools is based on well-recognized methodologies for conformance and quality testing. Interested parties in the computer forensics community can review and comment on the specifications and test methods posted on the CFTT website (<https://www.cftt.nist.gov/>).

This document reports the results from testing [toolname] [version] across supported mobile devices.

Test results from other tools can be found on the DHS S&T-sponsored digital forensics webpage, <http://www.dhs.gov/science-and-technology/nist-cftt-reports>.

# How to Read This Report

This report is divided into four sections. Section 1 identifies and provides a summary of any significant anomalies observed in the test runs. This section is sufficient for most readers to assess the suitability of the tool for the intended use. Section 2 identifies the mobile devices used for testing. Section 3 lists testing environment, the internal memory data objects used to populate the mobile devices. Section 4 provides an overview of the test case results reported by the tool.

**Test Results for Mobile Device Acquisition Tool**

**Tool Tested:** [Toolname]

**Software Version:** [version]

**Supplier:**

**Address:**

**Phone:**

**WWW:**

# Results Summary

[toolname][version]was tested for its ability to acquire active data from the internal memory of supported mobile devices.

The data reported for the devices below varies based upon the data extraction technique supported. For instance, a physical and/or file system extraction will provide the user with more data than a logical extraction. Each supported data extraction technique was performed. Except for the following anomalies, the tool acquired all supported data objects completely and accurately for all mobile devices tested.

*(****Remove this insert before publishing your report.***

*Note: Bullet items are only needed when more than one item/statement is going to be listed. Otherwise, indentation without the bullet should be used (Section 508 compliance guidance.))*

***Example: Personal Information Management (PIM) data*:**

Input anomalies here… *(Single finding format)*

***Example: MMS Messages*:**

* Input anomalies here...
* Addition finding…

**NOTES:**

* …

For more test result details see section 4.

# Mobile Devices

The following table lists the mobile devices used for testing [toolname] [v.1.2.3].

| **Make** | **Model** | **OS** | **Firmware** | **Network** |
| --- | --- | --- | --- | --- |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose an Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |
| Samsung | Select or Enter | KaiOS | Select or Enter | Choose Network |

Table 1: Mobile Devices

# Testing Environment

The tests were run in the NIST CFTT lab. This section describes the selected test execution environment, and the data objects populated onto the internal memory of mobile devices.

## Execution Environment

[toolname] [version]was installed on Windows 10 Pro version 10.0.19042.1586.

## Internal Memory Data Objects

[toolname] [version] was measured by analyzing acquired data from the internal memory of pre-populated mobile devices. Table 2 defines the data objects and elements used for populating mobile devices provided the mobile device supports the data element.

| **Data Objects** | **Data Elements** |
| --- | --- |
| Address Book Entries | *Regular Length*  *Maximum Length*  *Special Character*  *Blank Name*  *Regular Length, email*  *Regular Length, graphic*  *Regular Length, Address*  *Deleted Entry*  *Non-Latin Entry*  *Contact Groups* |
| PIM Data: Datebook/Calendar; Memos | *Regular Length*  *Maximum Length*  *Deleted Entry*  *Special Character*  *Blank Entry* |
| Call Logs | *Incoming*  *Outgoing*  *Missed*  *Incoming – Deleted*  *Outgoing – Deleted*  *Missed - Deleted* |
| Text Messages | *Incoming SMS – Read*  *Incoming SMS – Unread*  *Outgoing SMS*  *Incoming EMS – Read*  *Incoming EMS – Unread*  *Outgoing EMS*  *Incoming SMS – Deleted*  *Outgoing SMS – Deleted*  *Incoming EMS – Deleted*  *Outgoing EMS – Deleted*  *Non-Latin SMS/EMS* |
| MMS Messages | *Incoming Audio*  *Incoming Graphic*  *Incoming Video*  *Outgoing Audio*  *Outgoing Graphic*  *Outgoing Video* |
| Application Data | *Device Specific App Data* |
| Stand-alone data files | *Audio*  *Graphic*  *Video*  *Audio – Deleted*  *Graphic - Deleted*  *Video - Deleted* |
| Internet Data | *Visited Sites*  *Bookmarks*  *E-mail* |
| Location Data | *GPS Coordinates*  *Geo-tagged Data* |
| Social Media Data | *Facebook*  *Twitter*  *LinkedIn*  *Instagram*  *Pinterest*  *SnapChat*  *WhatsApp* |
| WiFi Data | *SSID*  *MAC Address*  *Passwords*  *Access datetime* |
| Financial Applications – Venmo,  Cash App, Apple Pay, Google Pay | *Card Type*  *Last 4 digits of account*  *Expiration date*  *Datetime of transactions*  *Participants*  *Transfer amount*  *Description* |
| Fitness Applications | *Datetime*  *Distance traveled*  *Energy burned*  *Hear trate*  *Steps*  *Flights climbed*  *Travel Speed*  *Routes* |

Table 2: Internal Memory Data Objects

# Test Results

This section provides the test cases results reported by the tool. Sections 4.1 – 4.2 identify the mobile device operating system type, media (e.g., Android, iOS) and the make and model of mobile devices used for testing [toolname] [version].

The *Test Cases* column (internal memory acquisition) in sections 4.1 - 4.2 are comprised of two sub-columns that define a particular test category and individual sub-categories that are verified when acquiring the internal memory for supported mobile devices and UICCs within each test case. Each individual sub-category row results for each mobile device/UICC tested. The results are as follows:

*As Expected*: the mobile forensic application returned expected test results – the tool acquired and reported data from the mobile device/UICC successfully.

*Partial*: the mobile forensic application returned some of data from the mobile device/UICC.

*Not As Expected*: the mobile forensic application failed to return expected test results – the tool did not acquire or report supported data from the mobile device/UICC successfully.

*NA*: Not Applicable – the tool does not provide support for the acquisition for a particular data element.

## Android Mobile Devices

The internal memory contents for Android devices were acquired and analyzed with [toolname] [version]. All test cases pertaining to the acquisition of supported Android devices were successful with the exception of the following across all Android devices.

* Record Anomalous behavior here

**NOTES:**

* …

See Table 3a, 3b below for more details.

**Internal Memory Acquisition**

**[toolname] [version].**

*Mobile Device Platform: Android*

| **Test Cases:** | Galaxy Note 8 | HTC U11 | Motorola Turbo 2 | Galaxy Note 8 | Galaxy Note 8 | Galaxy Note 8 | Galaxy Note 8 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Acquisition:  Acquire All | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Acquisition:  Disrupted | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Reporting:  Preview-Pane | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Reporting:  Generated Reports | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Equipment/User Data:  IMEI/MEID/ESN | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Equipment/User Data:  MSISDN | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Contacts | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Calendar | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Memos/Notes | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Incoming | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Outgoing | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Missed | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SMS Messages:  Incoming | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SMS Messages:  Outgoing | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Graphic | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Audio | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Video | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Graphic | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Audio | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Video | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Application Data:  Documents (txt, pdf files) | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Facebook | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Twitter | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  LinkedIn | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Instagram | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Pinterest | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  SnapChat | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  WhatsApp | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  Bookmarks | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  History | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  Email | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| GPS Data:  Coordinates/Geo-tagged | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| WiFi Data | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Cash App | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Venmo | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Apple Pay | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Google Pay | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Fitness Application Data | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Timeline Analysis | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Non-Latin Character:  Reported in native format | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Hashing:  Case File/ Individual Files | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Case File Data Protection:  Modify Case Data | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SQLite Data:  Report Active Data | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SQLite Data:  Run SQLite Commands | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |

Table 3a: Android Devices

**Internal Memory Acquisition**

**[toolname] [version]**

*Mobile Device Platform: Android*

| **Test Cases:** | Galaxy Note 8 | Galaxy Note 8 | Galaxy Note 8 |
| --- | --- | --- | --- |
| Acquisition:  Acquire All | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Acquisition:  Disrupted | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Reporting:  Preview-Pane | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Reporting:  Generated Reports | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Equipment/User Data:  IMEI/MEID/ESN | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Equipment/User Data:  MSISDN | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Contacts | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Calendar | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Memos/Notes | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Incoming | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Outgoing | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Missed | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SMS Messages:  Incoming | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SMS Messages:  Outgoing | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Graphic | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Audio | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Video | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Graphic | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Audio | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Video | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Application Data:  Documents (txt, pdf files) | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Facebook | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Twitter | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  LinkedIn | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Instagram | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Pinterest | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  SnapChat | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  WhatsApp | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  Bookmarks | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  History | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  Email | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| GPS Data:  Coordinates/Geo-tagged | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| WiFi Data | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Cash App | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Venmo | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Apple Pay | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Google Pay | *As Expected* | *Not As Expected* | *Not As Expected* |
| Fitness Application Data | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Timeline Analysis | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Non-Latin Character:  Reported in native format | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Hashing:  Case File/ Individual Files | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Case File Data Protection:  Modify Case Data | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SQLite Data:  Report Active Data | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SQLite Data:  Run SQLite Commands | *Not As Expected* | *Not As Expected* | *Not As Expected* |

Table 3b: Android Devices

## iOS Mobile Devices

The internal memory contents for iOS devices were acquired and analyzed with Toolname v1.2.3.

All test cases pertaining to the acquisition of supported iOS devices were successful with the exception of the following across all iOS devices.

* Record Anomalous behavior here…

**NOTES:**

* …

See Table 4 below for more details.

**Internal Memory Acquisition**

**[toolname] [version]**

*Mobile Device Platform: iOS*

| **Test Cases:** | Apple iPhone 8 | Apple iPhone 8 | Apple iPhone 8 | Apple iPhone 8 | Apple iPhone 8 | Apple iPhone 8 |
| --- | --- | --- | --- | --- | --- | --- |
| Acquisition:  Acquire All | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Acquisition:  Disrupted | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Reporting:  Preview-Pane | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Reporting:  Generated Reports | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Equipment/User Data:  IMEI/MEID/ESN | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Equipment/User Data:  MSISDN | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Contacts | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Calendar | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| PIM Data:  Memos/Notes | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Incoming | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Outgoing | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Call Logs:  Missed | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SMS Messages:  Incoming | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SMS Messages:  Outgoing | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Graphic | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Audio | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| MMS Messages:  Video | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Graphic | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Audio | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Stand-alone Files:  Video | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Application Data:  Documents (txt, pdf files) | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Facebook | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Twitter | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  LinkedIn | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Instagram | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  Pinterest | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  SnapChat | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Social Media Data:  WhatsApp | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  Bookmarks | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  History | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Internet Data:  Email | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| GPS Data:  Coordinates/Geo-tagged | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| WiFi Data | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Cash App | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Venmo | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Apple Pay | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Google Pay | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Fitness Application Data | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Timeline Analysis | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Non-Latin Character:  Reported in native format | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Hashing:  Case File/ Individual Files | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| Case File Data Protection:  Modify Case Data | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SQLite Data:  Report Active Data | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |
| SQLite Data:  Run SQLite Commands | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* | *Not As Expected* |

Table 4: iOS Devices