

November 2021

Test Results for Mobile Device Acquisition Tool:
Final Mobile Forensics v2021.09.28

Contents

Introduction.....	1
How to Read This Report	1
1 Results Summary	2
2 Mobile Devices	6
3 Testing Environment.....	7
3.1 Execution Environment	7
3.2 Internal Memory Data Objects.....	7
4 Test Results.....	9
4.1 Android Mobile Devices.....	10
4.2 iOS Mobile Devices.....	16
4.3 Universal Integrated Circuit Cards (UICC)	22

Introduction

The Computer Forensics Tool Testing (CFTT) program is a joint project of the Department of Homeland Security (DHS) Science and Technology Directorate, the National Institute of Justice (NIJ), and the National Institute of Standards and Technology (NIST) Special Programs Office and Information Technology Laboratory (ITL). 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 Criminal Investigation Division Electronic Crimes Program, and DHS's Bureau of 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 Web site (<https://www.cftt.nist.gov/>).

This document reports the results from testing Final Mobile Forensics v2021.09.28 across supported mobile devices and associated media (e.g., smart phones, tablets and Universal Integrated Circuit Cards (UICCs)).

Test results from other tools can be found on the S&T-sponsored digital forensics web page, <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:	Final Mobile Forensics
Software Version:	v2021.09.28
Supplier:	Final Data Inc.
Address:	5950 Canoga Ave, Ste 220 Woodland Hills, CA 91367
Office:	877-612-2353/818-645-1200
WWW:	https://finaldata.com/

1 Results Summary

Final Mobile Forensics v2021.09.28 was tested for its ability to acquire active data from the internal memory of supported mobile devices (e.g., smart phones, tablets) and UICC. Except for the following anomalies, the tool acquired all supported data objects completely and accurately for all mobile devices tested.

The anomalies listed below are specific to the phone type and operating system (OS).

Acquisition:

- Disruption of device's connectivity doesn't result in error. (Devices: ***Samsung J3, Moto G5 Plus, Samsung S9, Samsung Galaxy Note 8, LG G6, iPhone 11, iPhone SE, iPhone 7, iPad Mini 2, iPad Mini 4, iPad Air v7.1***)

Equipment-Related Data:

- IMEI was not reported. (Devices: ***Huawei P20 Pro, HTC 10, Motorola Z Force, Moto G5 Plus, Samsung S9, HTC U11, LG G6, Google Pixel 2, LG V30***)

Personal Information Management (PIM) data:

- Contacts are partially reported. (Devices: ***Samsung S10, Note 10, Huawei P20 Pro, Motorola Z Force, Moto G5 Plus, Samsung S9, HTC U11, Google Pixel 2***)
- Contacts are not reported. (Device: ***iPhone SE***)
- Calendar entries are not reported. (Devices: ***Motorola Z Force, Moto G5 Plus, LG G6, Google Pixel 2, LG V30, iPhone SE***)
- Notes/Memos are partially reported. (Devices: ***Samsung S10, LG V30***)
- Notes/Memos are not reported. (Devices: ***Huawei P20 Pro, Samsung Galaxy S7 Edge, Samsung J3, Motorola G5 Plus, Samsung S9, HTC U11, LG G6, Google Pixel 2, iPhone SE***)
- Call Log data is not reported. (Device: ***iPhone SE***)

Short Message Service (SMS) Messages:

- SMS messages are partially reported. (Devices: ***HTC 10, Samsung J3, Motorola Z Force, Moto G5 Plus***)
- SMS messages are not reported. (Device: ***iPhone SE***)

Multimedia Messaging Service (MMS) Messages:

- MMS messages are partially reported. (Device: ***Huawei P20 Pro***)
- MMS messages with audio file graphic file attachment is not reported. (Device: ***Galaxy S7 Edge***)
- MMS messages with audio file attachment are partially reported. (Devices: ***Galaxy S7 Edge, Moto G5 Plus, Google Pixel 2***)

Stand-Alone Files:

- Graphic files are not reported. (Device: ***Samsung J3***)
- Document files are partially reported (files only reported in Hexadecimal representation (HEX)). (Devices: ***Samsung S10, Note 10, Huawei P20 Pro, HTC 10, Galaxy S7 Edge, Samsung J3, Motorola Z Force, Moto G5 Plus, Samsung S9, HTC U11, Samsung Galaxy Note 8, LG G6, Google Pixel 2, LG V30, iPhone 11, iPhone 8 Plus, iPhone 8, iPad Mini 2***)
- Document files (pdf) are not reported. (Devices: ***iPhone SE, iPhone 7, iPad Mini 4, iPad Air v7.1***)
- Stand-alone deleted file (graphic) status was incorrectly reported. (Device: ***LG V30***)
- Stand-alone files (audio, video) are not reported. (Device: ***iPhone SE***)
- Stand-alone files (graphic, audio, video) are not reported. (Device: ***iPad Mini 4***)

Social Media-Related Data:

- Social media-related data (Facebook, Instagram) is not reported. (Devices: ***HTC 10, Galaxy S7 Edge***)
- Social media-related data (LinkedIn) is not reported. (Devices: ***HTC 10, iPad Air v7.1***)
- Social media-related data (LinkedIn, SnapChat) is not reported. (Device: ***Huawei P20 Pro***)
- Social media-related data (Facebook, LinkedIn, Instagram, Pinterest) is not reported. (Devices: ***Samsung S10, Note 10, HTC U11***)
- Social media-related data (SnapChat) is not reported. (Devices: ***Samsung S10, Note 10***)
- Social media-related data (Twitter) is partially reported. (Devices: ***Samsung S10, Note 10, HTC 10, Moto G5 Plus, Samsung S9, HTC U11***)
- Social media-related data (LinkedIn, Instagram, WhatsApp) is not reported. (Device: ***Samsung Galaxy Note 8***)
- Social media-related data (Facebook, LinkedIn, Instagram) is not reported. (Device: ***LG G6***)
- Social media-related data (LinkedIn) is partially reported. (Devices: ***Galaxy S7 Edge, Samsung J3***)
- Social media-related data (Facebook, Twitter, LinkedIn, Instagram) is not reported. (Devices: ***Motorola Z Force, iPhone SE***)
- Social media-related data (Facebook, LinkedIn, Instagram, Pinterest, SnapChat, WhatsApp) is not reported. (Device: ***Moto G5 Plus***)

- Social media-related data (Instagram) is partially reported. (Device: **Samsung S9**)
- Social media-related data (Facebook, LinkedIn, Pinterest, SnapChat, WhatsApp) is not reported. (Device: **Samsung S9**)
- Social media-related data (Twitter) is partially reported. (Device: **Moto G5 Plus**)
- Social media-related data (Facebook, Twitter, Instagram, WhatsApp) is partially reported. (Device: **Google Pixel 2**)
- Social media-related data (LinkedIn, Pinterest, SnapChat) is not reported. (Device: **Google Pixel 2**)
- Social media-related data (Facebook, Twitter, LinkedIn, Instagram, Pinterest, SnapChat, WhatsApp) is partially reported. (Device: **LG V30**)
- Social media-related data (Facebook, Twitter, LinkedIn, Pinterest, SnapChat) is not reported. (Device: **iPhone 11**)
- Social media-related data (Facebook, Twitter, Instagram) is not reported. (Device: **iPhone 7**)
- Social media-related data (Facebook) is partially reported. (Devices: **iPhone 8 Plus, iPhone 8, iPad Air v7.1**)
- Social media-related data (Twitter, LinkedIn, Instagram, Pinterest, SnapChat) is not reported. (Device: **iPhone 8 Plus**)
- Social media-related data (WhatsApp) is partially reported. (Device: **iPhone 8**)
- Social media-related data (Facebook, Twitter, LinkedIn, Pinterest) is not reported. (Device: **iPad Mini 2**)
- Social media-related data (Twitter) is not reported. (Device: **iPad Air v7.1**)

Internet-Related Data:

- Bookmarks, Browser History and email-related data are not reported. (Devices: **Samsung S10, Note 10, Huawei P20 Pro, HTC 10, LG G6, Motorola Z Force, Moto G5 Plus, Samsung S9, HTC U11, Google Pixel 2, LG V30**)
- Bookmarks and Browser History-related data are not reported. (Device: **iPhone SE**)
- Browser History data is not reported. (Devices: **iPad Mini 4, iPad Air v7.1**)
- Bookmarks and Emails are not reported. (Devices: **Galaxy S7 Edge, Samsung J3, Samsung Galaxy Note 8**)
- Email data is not reported. (Devices: **all Android**)

Global Positioning System (GPS)-Related Data:

- GPS-related data (longitude, latitude coordinates) is not reported. (Devices: **Samsung S10, Note 10, Huawei P20 Pro, Motorola Z Force, Moto G5 Plus, Samsung S9, LG G6, LG V30, iPhone 7, iPhone 8 Plus, iPad Air v7.1, iPad Mini 4**)
- GPS-related data (longitude, latitude coordinates) are partially reported. (Device: **iPhone 8**)

Case File Data Protection:

- No data protection is provided. (Devices: **Android, iOS**)

➤ **Notes:**

- *For each device, all acquisition options offered were selected. However, this report is based on the acquisition that reported the most data recovered from devices.*

For more test result details see section 4.

2 Mobile Devices

The following table lists the mobile devices used for testing Final Mobile Forensics v2021.09.28.

Make	Model	OS	Firmware	Network
Apple iPhone	11	iOS 15.1 (15E302)	3.00.00	Code Division Multiple Access (CDMA)
Apple iPhone	SE	iOS 15.1	1.06.00	CDMA
Apple iPhone	7	iOS 10.2 (14C92)	1.33.00	CDMA
Apple iPhone	8 Plus	iOS 11.4.1 (15G77)	1.89.00	CDMA
Apple iPhone	8	iOS 11.3.1 (15E302)	1.89.00	CDMA
Apple iPad	Mini 2	iOS 11.2.1 (11D167)	2.18.02	CDMA
Apple iPad	Mini 4	iOS 11.3.1 (15E302)	4.52.00	CDMA
Apple iPad	Air	iOS 7.1		CDMA
Samsung Galaxy	S10	Android 9		CDMA
Samsung Galaxy	Note 10	Android 9		CDMA
Huawei	P20 Pro	Android 8.1.0	CLTL29810106 (C636)	CDMA
HTC 10	HTC6545LVW	Android 6.0.1	1.85.605.8.8.0_g CL774095	CDMA
Samsung GS7 Edge	GS7 Edge SM-G935V	Android 6.0.1	MMB29M.G935VV RS4APH1	CDMA
Samsung J3	J3 – SM-J320V	Android 6.0.1	MMB29M.J320VV RU2AP12	CDMA
Motorola	Z Force XT1650	Android 7.0	NCLS25.86-11-4	CDMA
Moto	G5Plus	Android 7.0	NPNS25137924	CDMA
Samsung Galaxy	S9	Android 8.0.0	G960U1UEU1ARB 7	CDMA
HTC U11	U11	Android 7.1.1	12861730	CDMA
Samsung Galaxy	Note 8	Android 7.1.1	G960U1UEU1ARB 7	CDMA
LG	G6	Android 7.0	US99715a	CDMA
Google	Pixel 2	Android 8.1.0	OPM 171019.029	CDMA
LG	V30	Android 8.0.0	OPR1170623026	CDMA

Table 1: Mobile Devices

3 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.

3.1 Execution Environment

Final Mobile Forensics v2021.09.28 was installed on Windows 10 Pro version 20H2.

3.2 Internal Memory Data Objects

Final Mobile Forensics v2021.09.28 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	<i>Regular Length</i>
	<i>Maximum Length</i>
	<i>Special Character</i>
	<i>Blank Name</i>
	<i>Regular Length, email</i>
	<i>Regular Length, graphic</i>
	<i>Regular Length, Address</i>
	<i>Deleted Entry</i>
	<i>Non-Latin Entry</i>
PIM Data: Datebook/Calendar; Memos	<i>Regular Length</i>
	<i>Maximum Length</i>
	<i>Deleted Entry</i>
	<i>Special Character</i>
	<i>Blank Entry</i>
Call Logs	<i>Incoming</i>
	<i>Outgoing</i>
	<i>Missed</i>
	<i>Incoming – Deleted</i>
	<i>Outgoing – Deleted</i>
	<i>Missed – Deleted</i>
Text Messages	<i>Incoming SMS – Read</i>
	<i>Incoming SMS – Unread</i>
	<i>Outgoing SMS</i>
	<i>Incoming EMS – Read</i>
	<i>Incoming EMS – Unread</i>
	<i>Outgoing EMS</i>
	<i>Incoming SMS – Deleted</i>
	<i>Outgoing SMS – Deleted</i>
<i>Incoming EMS – Deleted</i>	

Data Objects	Data Elements
MMS Messages	<i>Outgoing EMS – Deleted</i>
	<i>Non-Latin SMS/EMS</i>
	<i>Incoming Audio</i>
	<i>Incoming Graphic</i>
	<i>Incoming Video</i>
	<i>Outgoing Audio</i>
	<i>Outgoing Video</i>
Application Data	<i>Device Specific App Data</i>
Stand-Alone Data Files	<i>Audio</i>
	<i>Graphic</i>
	<i>Video</i>
	<i>Audio – Deleted</i>
	<i>Graphic – Deleted</i>
	<i>Video – Deleted</i>
Internet Data	<i>Visited Sites</i>
	<i>Bookmarks</i>
	<i>E-mail</i>
Location Data	<i>GPS Coordinates</i>
	<i>Geo-tagged Data</i>
Social Media Data	<i>Facebook</i>
	<i>Twitter</i>
	<i>LinkedIn</i>
	<i>Instagram</i>
	<i>Pinterest</i>
	<i>SnapChat</i>
<i>WhatsApp</i>	

Table 2: Internal Memory Data Objects

4 Test Results

This section provides the test cases results reported by the tool. Sections 4.1-4.3 identify the mobile device operating system type, media (Android, iPhone Operating System, UICC) and the make and model of mobile devices used for testing Final Mobile Forensics v2021.09.28.

The *Test Cases* column (internal memory acquisition) in sections 4.1-4.3 are composed 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.

4.1 Android Mobile Devices

The internal memory contents for Android devices were acquired and analyzed with Final Mobile Forensics v2021.09.28. All test cases pertaining to the acquisition of supported Android devices were successful with the exception of the following.

- Disruption of device's connectivity doesn't result in errors. The tool keeps attempting acquisition for the Samsung J3, Moto G5 Plus, Samsung S9, Samsung Galaxy Note 8 and LG G6.
- IMEI was not reported for the Huawei P20 Pro, HTC 10, Motorola Z Force, Moto G5 Plus, Samsung S9, HTC U11, LG G6, Google Pixel 2 and LG V30.
- Graphic files associated with contact entries are not reported for the Samsung S10, Note 10, Huawei P20 Pro, Motorola Z Force, Moto G5 Plus, Samsung S9, HTC U11 and Google Pixel 2.
- Calendar entries are not reported for the Motorola Z Force, Moto G5 Plus, LG G6, Google Pixel 2 and LG V30.
- Long Notes/Memos are truncated for the Samsung S10.
- Deleted memo status marked as "live" for the LG V30.
- Notes/Memos are not reported for the Huawei P20 Pro, Samsung Galaxy S7 Edge, Samsung J3, Motorola Z Force, Motorola G5 Plus, Samsung S9, HTC U11, LG G6, Google Pixel 2.
- MMS attachments are reported under the "Multimedia" category and the text message associated with attachments is not reported for the Huawei P20 Pro.
- Outgoing MMS with audio file attached is partially reported. The audio file is not reported in the message for the Galaxy S7 Edge.
- Incoming MMS with graphic file is not reported for the Galaxy S7 Edge.
- Outgoing SMS are partially reported. Recipients included in an outgoing group SMS are not reported for the HTC 10 and Samsung J3.
- The recipients' phone numbers included in a group message were not reported completely for the Motorola Z Force and Moto G5 Plus.
- Incoming MMS with audio attachment partially reported. The audio file is not associated with the message, it can be found in the case file folder saved to computer for the Moto G5 Plus.
- Incoming MMS with audio attachment partially reported. The audio file is not reported in the message for the Google Pixel 2.
- Stand-alone graphic files are not reported for the Samsung J3.
- Document files (pdf) are partially reported. In the GUI, document is only reported in HEX. Files can be found in a case file folder save to computer for the Samsung S10, Note 10, Huawei P20 Pro, HTC 10, Galaxy S7 Edge, Samsung J3, Motorola Z Force, Moto G5 Plus, Samsung S9, HTC U11, Samsung Galaxy Note 8, LG G6, Google Pixel 2 and LG V30.
- Stand-alone files (graphic) deleted status was incorrectly reported as "live" for the LG V30.
- Social media-related data (Facebook, Instagram) is not reported for the HTC 10 and Galaxy S7 Edge.
- Social media-related data (LinkedIn) is not reported for the HTC 10.
- Social media-related data (LinkedIn, SnapChat) is not reported for the Huawei P20 Pro.

- Social media-related data (Facebook, LinkedIn, Instagram, Pinterest) is not reported for the Samsung S10 and HTC U11.
- Social media-related data (SnapChat) is not reported for the Samsung S10.
- Social media-related data (LinkedIn) is partially reported. Only graphic files were reported for the Galaxy S7 Edge and Samsung J3.
- Social media-related data (Facebook, Twitter, LinkedIn, Instagram) is not reported for the Motorola Z Force.
- Social media-related data (Facebook, LinkedIn, Instagram, Pinterest, SnapChat, WhatsApp) is not reported for the Moto G5 Plus.
- Social media-related data (Instagram) is partially reported for the Samsung S9.
- Social media-related data (Facebook, LinkedIn, Pinterest, SnapChat, WhatsApp) is not reported for the Samsung S9.
- Social media-related data (Twitter) is partially reported for the Samsung S10, HTC 10, Moto G5 Plus, Samsung S9 and HTC U11.
- Social media related data (LinkedIn, Instagram, WhatsApp) is not reported for the Samsung Galaxy Note 8.
- Social media-related data (Facebook, LinkedIn, Instagram) is not reported for the LG G6.
- Social media-related data (Facebook, Twitter, Instagram, WhatsApp) is partially reported for the Google Pixel 2.
- Social media-related data (LinkedIn, Pinterest, SnapChat) is not reported for the Google Pixel 2.
- Social media-related data (Facebook, Twitter, LinkedIn, Instagram, Pinterest, SnapChat, WhatsApp) is partially reported, only pictures were reported, for the LG V30.
- Internet-related data (Bookmarks, Browser and Email) is not reported for the Samsung S10, Note 10, Huawei P20 Pro, HTC 10, LG G6, Motorola Z Force, Motorola G5 Plus, Samsung S9, HTC U11, Google Pixel 2 and LG V30.
- Internet-related data (Bookmarks, Emails) is not reported for the Galaxy S7 Edge, Samsung J3 and Samsung Galaxy Note 8.
- Internet-related data (Emails) is not reported for all Android devices.
- GPS-related data is not reported for the Samsung S10, Note 10, Huawei P20 Pro, Motorola Z Force, Motorola G5 Plus, Samsung S9, LG G6, LG V30.
- No case data protection is present, user can update the case file and no error is reported when re-opening the modified case for all Android devices.

Table(s) below contain(s) some acronyms, these are:

- International Mobile Equipment Identity (IMEI), Mobile Equipment Identifier (MEID), Equipment Serial Number (ESN), Mobile Station International Subscriber Directory Number (MSISDN), Text file (.TXT), Portable Document Format (.PDF).

➤ **Notes:**

- Deleted data (contacts, call logs, SMS, MMS) was reported for the Samsung J3 and Galaxy S7 Edge.
- Deleted data (contacts, memo) was reported for the HTC 10 and Samsung Galaxy Note 8.
- Deleted data (memos) was reported for the Motorola Z Force.
- Deleted data (stand-alone graphic file) was reported for the LG G6.

- Deleted data (contacts) was reported for the LG V30.
- There was not an exact profile for the Google Pixel 2. The “other” option as manufacturer was used. Applications were also downgraded for this device.
- There was not an exact profile for the HTC 10, Motorola Z Force, Moto G5 Plus and Samsung S9. The “other” option as manufacturer was used. Applications were NOT downgraded for this device.
- The “Android Rooting option” didn’t work for the HTC 10.
- There was not an exact profile for the Google Pixel 4. The “other” option as manufacturer was tried and failed.

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

Final Mobile Forensics v2021.09.28								
Test Cases – Internal Memory Acquisition		Mobile Device Platform: Android						
		Samsung S10	Note 10	Huawei P20 Pro	HTC 10	Samsung GS7 Edge	Samsung J3	Motorola Z Force
Acquisition	Acquire All	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Disrupted	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
Reporting	Preview-Pane	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Generated Reports	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Equipment/ User Data	IMEI/ MEID/ESN	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
	MSISDN	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
PIM Data	Contacts	Partial	Partial	Partial	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Partial
	Calendar	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
	Memos/ Notes	Partial	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
Call Logs	Incoming	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Outgoing	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Missed	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
SMS Messages	Incoming	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Outgoing	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Partial	As <i>Expected</i>	Partial	Partial

Final Mobile Forensics v2021.09.28

Test Cases – Internal Memory Acquisition		Mobile Device Platform: Android						
		Samsung S10	Note 10	Huawei P20 Pro	HTC 10	Samsung GS7 Edge	Samsung J3	Motorola Z Force
MMS Messages	Graphic	<i>As Expected</i>	<i>As Expected</i>	<i>Partial</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Audio	<i>As Expected</i>	<i>As Expected</i>	<i>Partial</i>	<i>As Expected</i>	<i>Partial</i>	<i>As Expected</i>	<i>As Expected</i>
	Video	<i>As Expected</i>	<i>As Expected</i>	<i>Partial</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Stand-Alone Files	Graphic	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>
	Audio	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Video	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Application Data	Documents (txt, pdf files)	<i>Partial</i>	<i>Partial</i>	<i>Partial</i>	<i>Partial</i>	<i>Partial</i>	<i>Partial</i>	<i>Partial</i>
Social Media Data	Facebook	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>
	Twitter	<i>Partial</i>	<i>Partial</i>	<i>As Expected</i>	<i>Partial</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>
	LinkedIn	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Partial</i>	<i>Partial</i>	<i>Not As Expected</i>
	Instagram	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	NA	<i>Not As Expected</i>
	Pinterest	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	NA	NA	NA	NA
	SnapChat	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	NA	NA	NA	NA
	WhatsApp	NA	NA	<i>As Expected</i>	NA	NA	NA	NA
Internet Data	Bookmarks	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
	History	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>
	Email	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
GPS Data	Coordinates /Geo-tagged	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>
Non-Latin Character	Reported in native format	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Hashing	Case File/ Individual Files	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>

Final Mobile Forensics v2021.09.28								
Test Cases – Internal Memory Acquisition		Mobile Device Platform: Android						
		Samsung S10	Note 10	Huawei P20 Pro	HTC 10	Samsung GS7 Edge	Samsung J3	Motorola Z Force
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	NA	NA	NA	NA	NA	NA	NA
	Run SQLite Commands	NA	NA	NA	NA	NA	NA	NA

Table 3a: Android Devices

Final Mobile Forensics v2021.09.28								
Test Cases – Internal Memory Acquisition		Mobile Device Platform: Android						
		Motorola G5 Plus	Samsung S9	HTC U11	Samsung Galaxy Note 8	LG G6	Google Pixel 2	LG V30
Acquisition	Acquire All	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
	Disrupted	Not As Expected	Not As Expected	As Expected	Not As Expected	Not As Expected	As Expected	As Expected
Reporting	Preview-Pane	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
	Generated Reports	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
Equipment/ User Data	IMEI/ MEID/ESN	Not As Expected	Not As Expected	Not As Expected	As Expected	Not As Expected	Not As Expected	Not As Expected
	MSISDN	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
PIM Data	Contacts	Partial	Partial	Partial	As Expected	As Expected	Partial	As Expected
	Calendar	Not As Expected	As Expected	As Expected	As Expected	Not As Expected	Not As Expected	Not As Expected
	Memos/ Notes	Not As Expected	Not As Expected	Not As Expected	As Expected	Not As Expected	Not As Expected	Partial
Call Logs	Incoming	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
	Outgoing	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
	Missed	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected

Final Mobile Forensics v2021.09.28

Test Cases – Internal Memory Acquisition		Mobile Device Platform: Android						
		Motorola G5 Plus	Samsung S9	HTC U11	Samsung Galaxy Note 8	LG G6	Google Pixel 2	LG V30
SMS Messages	Incoming	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
	Outgoing	Partial	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
MMS Messages	Graphic	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
	Audio	Partial	As Expected	As Expected	As Expected	As Expected	Partial	As Expected
	Video	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
Stand-Alone Files	Graphic	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	Partial
	Audio	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
	Video	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected
Application Data	Documents (txt, pdf files)	Partial	Partial	Partial	Partial	Partial	Partial	Partial
Social Media Data	Facebook	Not As Expected	Not As Expected	Not As Expected	As Expected	Not As Expected	Partial	Partial
	Twitter	Partial	Partial	Partial	As Expected	As Expected	Partial	Partial
	LinkedIn	Not As Expected	Not As Expected	Not As Expected	Not As Expected	Not As Expected	Not As Expected	Partial
	Instagram	Not As Expected	Partial	Not As Expected	Not As Expected	Not As Expected	Partial	Partial
	Pinterest	Not As Expected	Not As Expected	Not As Expected	As Expected	As Expected	Not As Expected	Partial
	SnapChat	Not As Expected	Not As Expected	NA	As Expected	As Expected	Not As Expected	Partial
	WhatsApp	Not As Expected	Not As Expected	NA	Not As Expected	NA	Partial	Partial
Internet Data	Bookmarks	Not As Expected	Not As Expected	Not As Expected	Not As Expected	Not As Expected	Not As Expected	Not As Expected
	History	Not As Expected	Not As Expected	Not As Expected	As Expected	Not As Expected	Not As Expected	Not As Expected
	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	As Expected	As Expected	Not As Expected	As Expected	Not As Expected
Non-Latin Character	Reported in native format	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected

Final Mobile Forensics v2021.09.28

Test Cases – Internal Memory Acquisition		Mobile Device Platform: Android						
		Motorola G5 Plus	Samsung S9	HTC U11	Samsung Galaxy Note 8	LG G6	Google Pixel 2	LG V30
Hashing	Case File/ Individual Files	As Expected	As Expected	As Expected	As Expected	As Expected	As Expected	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	NA	NA	NA	NA	NA	NA	
	Run SQLite Commands	NA	NA	NA	NA	NA	NA	

Table 3b: Android Devices

4.2 iOS Mobile Devices

The internal memory contents for iOS devices were acquired and analyzed with Final Mobile Forensics v2021.09.28.

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

- Disruption of device’s connectivity doesn’t result in errors. The tool keeps attempting acquisition for the iPhone 11, iPhone SE, iPhone 7, iPad Mini 2, iPad Mini 4 and iPad Air v7.1.
- Contacts are not reported for the iPhone SE.
- Calendar entries are not reported for the iPhone SE.
- Notes/Memos are not reported for the iPhone SE.
- Call log is not reported for the iPhone SE.
- SMS and MMS messages are not reported for the iPhone SE.
- Bookmarks/Browser History are not reported for the iPhone SE.
- Browser history is not reported for the iPad Mini 4.
- Document files (pdf files) are not reported for the iPhone SE, iPhone 7, iPad Mini 4 and iPad Air v7.1.
- Document files (pdf) are partially reported. In the GUI, document is only reported in HEX. Files can be found in a case file folder saved to computer for the iPhone 11, iPhone 8 Plus, iPhone 8 and iPad Mini 2.
- Stand-alone files (audio, video) are not reported for the iPhone SE.
- Stand-alone files (graphic, audio, video) are not reported for the iPad Mini 4.
- Social media-related data (Facebook, Twitter, LinkedIn, Pinterest, SnapChat) is not reported for the iPhone 11.

- Social media-related data (Facebook, Twitter, LinkedIn, Instagram) is not reported for the iPhone SE.
- Social media-related data (Facebook, Twitter, Instagram) is not reported for the iPhone 7.
- Social media-related data (Facebook) is partially reported (only graphic files reported) for the iPhone 8 Plus, iPhone 8 and iPad Air v7.1.
- Social media-related data (Twitter, LinkedIn, Instagram, Pinterest, SnapChat) is not reported for the iPhone 8 Plus.
- Social media-related data (WhatsApp) is partially reported for the iPhone 8.
- Social media-related data (Facebook, Twitter, LinkedIn, Pinterest) is not reported for the iPad Mini 2.
- Social media-related data (LinkedIn, Twitter) is not reported for the iPad Air v7.1.
- Internet-related data (Browser/History data) is not reported for the iPhone SE.
- GPS-related data (longitude, latitude coordinates) is not reported for the iPhone 7, iPhone 8 Plus, iPad Air v7.1 and Mini 4.
- GPS-related data (longitude, latitude coordinates) is partially reported, geo-tag are reported under “pictures” category for the iPhone 8.
- No case data protection is present, user can update the case file and no error is reported when re-opening the modified case for all iOS devices.

➤ **Notes:**

- Deleted data (contacts, memos) was reported for the iPhone 8 Plus, iPad Mini 2, iPhone 7, iPhone 8 and iPad Mini 4.
- Deleted data (SMS) was reported for the iPad Mini 4 and iPad Air v7.1.
- Deleted data (memos, SMS) was reported for the iPad Air v7.1.

See Tables 4a, 4b below for more details.

Final Mobile Forensics v2021.09.28

Test Cases – Internal Memory Acquisition		Mobile Device Platform: iOS						
		iPhone 11	iPhone SE	iPhone 7	iPhone 8 Plus	iPhone 8	iPad Mini 2	iPad Mini 4
Acquisition	Acquire All	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Disrupted	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
Reporting	Preview-Pane	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Generated Reports	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Equipment/ User Data	IMEI/MEID/ ESN	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	MSISDN	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
PIM Data	Contacts	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Calendar	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Memos/Notes	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Call Logs	Incoming	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	NA	NA
	Outgoing	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	NA	NA
	Missed	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	NA	NA
SMS Messages	Incoming	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Outgoing	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
MMS Messages	Graphic	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Audio	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Video	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Stand- Alone Files	Graphic	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
	Audio	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
	Video	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
Application Data	Documents (txt, pdf files)	Partial	Not As <i>Expected</i>	Not As <i>Expected</i>	Partial	Partial	Partial	Not As <i>Expected</i>
	Facebook	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Partial	Partial	Not As <i>Expected</i>	Not As <i>Expected</i>

Final Mobile Forensics v2021.09.28

Test Cases – Internal Memory Acquisition		Mobile Device Platform: iOS						
		iPhone 11	iPhone SE	iPhone 7	iPhone 8 Plus	iPhone 8	iPad Mini 2	iPad Mini 4
Social Media Data	Twitter	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
	LinkedIn	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>
	Instagram	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	NA	<i>Not As Expected</i>
	Pinterest	<i>Not As Expected</i>	NA	NA	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	NA
	SnapChat	<i>Not As Expected</i>	NA	NA	<i>Not As Expected</i>	<i>Not As Expected</i>	NA	NA
	WhatsApp	<i>As Expected</i>	NA	NA	<i>As Expected</i>	<i>Partial</i>	NA	NA
Internet Data	Bookmarks	<i>As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	History	<i>As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>
	Email	NA	NA	NA	NA	NA	NA	NA
GPS Data	Coordinates/Geo-tagged	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Partial</i>	<i>As Expected</i>	<i>Not As Expected</i>
Non-Latin Character	Reported in native format	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Hashing	Case File/Individual Files	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Case File Data Protection	Modify Case Data	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
SQLite Data	Report Active Data	NA	NA	NA	NA	NA	NA	NA
	Run SQLite Commands	NA	NA	NA	NA	NA	NA	NA

Table 4a: iOS Devices

Final Mobile Forensics v2021.09.28		
Test Cases – Internal Memory Acquisition		<i>Mobile Device Platform: iOS</i>
		iPad Air v7.1
Acquisition	Acquire All	<i>As Expected</i>
	Disrupted	<i>Not As Expected</i>
Reporting	Preview-Pane	<i>As Expected</i>
	Generated Reports	<i>As Expected</i>
Equipment/ User Data	IMEI/MEID/ ESN	<i>As Expected</i>
	MSISDN	<i>As Expected</i>
PIM Data	Contacts	<i>As Expected</i>
	Calendar	<i>As Expected</i>
	Memos/Notes	<i>As Expected</i>
Call Logs	Incoming	<i>NA</i>
	Outgoing	<i>NA</i>
	Missed	<i>NA</i>
SMS Messages	Incoming	<i>As Expected</i>
	Outgoing	<i>As Expected</i>
MMS Messages	Graphic	<i>As Expected</i>
	Audio	<i>As Expected</i>
	Video	<i>As Expected</i>
Stand-Alone Files	Graphic	<i>As Expected</i>
	Audio	<i>As Expected</i>
	Video	<i>As Expected</i>
Application Data	Documents (txt, pdf files)	<i>Not As Expected</i>
Social Media Data	Facebook	<i>Partial</i>
	Twitter	<i>Not As Expected</i>

Final Mobile Forensics v2021.09.28		
Test Cases – Internal Memory Acquisition		<i>Mobile Device Platform: iOS</i>
		iPad Air v7.1
	LinkedIn	<i>Not As Expected</i>
	Instagram	<i>NA</i>
	Pinterest	<i>NA</i>
	SnapChat	<i>NA</i>
	WhatsApp	<i>NA</i>
Internet Data	Bookmarks	<i>As Expected</i>
	History	<i>Not As Expected</i>
	Email	<i>NA</i>
GPS Data	Coordinates/Geo-tagged	<i>Not As Expected</i>
Non-Latin Character	Reported in native format	<i>As Expected</i>
Hashing	Case File/Individual Files	<i>As Expected</i>
Case File Data Protection	Modify Case Data	<i>Not As Expected</i>
SQLite Data	Report Active Data	<i>NA</i>
	Run SQLite Commands	<i>NA</i>

Table 4b: iOS Devices

4.3 Universal Integrated Circuit Cards (UICC)

The internal memory contents for Universal Integrated Circuit Cards (UICCs) were acquired and analyzed with Final Mobile Forensics v2021.09.28.

All test cases pertaining to the acquisition of UICCs were successful.

See Table 5 below for more details.

Final Mobile Forensics v2021.09.28		
Test Cases – UICC Acquisition		<i>UICC</i>
Connectivity	Non Disrupted	<i>As Expected</i>
	Disrupted	<i>As Expected</i>
Equipment/ User Data	Service Provider Name (SPN)	<i>As Expected</i>
	ICCID	<i>As Expected</i>
	IMSI	<i>As Expected</i>
	MSISDN	<i>N/A</i>
PIM Data	Abbreviated Dialing Numbers (ADNs)	<i>N/A</i>
	Last Numbers Dialed (LNDs)	<i>N/A</i>
	SMS Messages	<i>N/A</i>
	EMS Messages	<i>N/A</i>
Location Related Data	LOCI	<i>N/A</i>
	GPRSLOCI	<i>N/A</i>
Acquisition	Acquire All	<i>N/A</i>
	Selected All	<i>N/A</i>
	Select Individual	<i>N/A</i>
Case File Data Protection	Modify Case Data	<i>N/A</i>
Password Protected SIM Acquire	Acquisition of Protected SIM	<i>N/A</i>
PIN/PUK Attempts	PIN attempts reported	<i>N/A</i>
	PUK attempts reported	<i>N/A</i>
Non-ASCII Character	Non-ASCII characters	<i>N/A</i>
Hashing	Hashes reported for acquired data objects	<i>As Expected</i>

Table 5: UICCs