

**June 2022**

**Test Results for Mobile Device Acquisition Tool:  
Magnet Forensics Axiom v6.1.0.31400**

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## Introduction

The Computer Forensics Tool Testing (CFTT) program is a joint project of the Department of Homeland Security's (DHS) Science and Technology Directorate (S&T), 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's Cyber Crime Center, U.S. Internal Revenue Service's Criminal Investigation Division Electronic Crimes Program, and the DHS' 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 Magnet Axion v6.1.0.31400 across supported mobile devices.

Test results from other tools can be found on the DHS 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:** Axiom

**Software Version:** v6.1.0.31400

**Supplier:** Magnet Forensics

**WWW:** [magnetforensics.com](http://magnetforensics.com)

## 1 Results Summary

Magnet Axiom v6.1.0.31400 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.

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

Notes/Memo data is not reported. (Devices: *Galaxy Note 10, Galaxy S10, Galaxy Note 8, Galaxy S9, Huawei P20 Pro, LG G6, LG V30, Motorola Droid Turbo 2, Google Pixel 2, HTC U11*)

### ***Multimedia Messaging Service (MMS) Messages:***

- MMS audio attachments are not playable. (Devices: *Galaxy Note 10, Galaxy S10, Galaxy Note 8, Galaxy S9, Huawei P20 Pro, LG G6, Motorola Droid Turbo 2*)
- Incoming MMS audio attachments are not playable. (Device: *Google Pixel 2*)
- MMS message attachments (audio, graphic, video) are not reported. (Device: *LG V30*)
- MMS messages are not reported. (Device: *HTC U11*)

### ***Stand-alone files:***

Stand-alone files (audio, documents, graphic, video) are not reported. (Devices: *Galaxy S9, Huawei P20 Pro, LG V30, Motorola Droid Turbo 2, Google Pixel 2*)

For more test result details see section 4.

## 2 Mobile Devices

The following table lists the mobile devices used for testing Axiom v6.1.0.31400.

Make	Model	OS	Firmware	Network
Apple iPhone	7	iOS 10.2 (14C92)	1.33.00	CDMA
Apple iPhone	8	iOS 11.3.1 (15E302)	1.89.00	CDMA
Apple iPhone	X	iOS 11.3.1 (15E302)	1.89.00	CDMA
Apple iPhone	XR	iOS 15.1 NQCK2LL/A	7.02.00	CDMA
Apple iPhone	SE	iOS 15.1 MX9N2LL/A	1.06.00	CDMA
Apple iPhone 11	11	iOS 15.1 (15E302)	3.0.00	CDMA
Samsung	Galaxy Note 10	Android 9	SM-N97OU1	CDMA
Samsung Galaxy	S10	Android 9	SM-G973U1	CDMA
Samsung	Galaxy Note 8	Android 7.1.1	NMF26XN950 U1UEU1AQ1f	CDMA
Samsung Galaxy	S9	Android 8.0.0	G960U1UEU1 ARB7	CDMA
Huawei	P20 Pro	Android 8.1.0	CLTL2981010 6 (C636)	CDMA
LG	G6	Android 7.0	US99715a	CDMA
LG	V30	Android 8.0.0	OPR11706230 26	CDMA
Motorola Droid	Turbo2	Android 5.1.1	LCK23.130-23	CDMA
Google	Pixel 2	Android 8.1.0	OPM171019.0 29	CDMA
HTC U11	U11	Android 7.1.1	12861730	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

Magnet Axiom v6.1.0.31400 was installed on Windows 10 Pro version 10.0.19042.1586.

### 3.2 Internal Memory Data Objects

Magnet Axiom v6.1.0.31400 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.

<b>Data Objects</b>	<b>Data Elements</b>
Address Book Entries	<i>Regular Length Maximum Length Special Character Blank Name Regular Length, email Regular Length, graphic Regular Length, Address Deleted Entry Non-Latin Entry Contact Groups</i>
PIM Data: Datebook/Calendar; Memos	<i>Regular Length Maximum Length Deleted Entry Special Character Blank Entry</i>
Call Logs	<i>Incoming Outgoing Missed Incoming – Deleted Outgoing – Deleted Missed – Deleted</i>
Text Messages	<i>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</i>
MMS Messages	<i>Incoming Audio Incoming Graphic Incoming Video Outgoing Audio Outgoing Graphic Outgoing Video</i>
Application Data	<i>Device Specific App Data</i>

<b>Data Objects</b>	<b>Data Elements</b>
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 4.1-4.2 identify the mobile device operating system type, media (e.g., Android, iOS) and the make and model of mobile devices used for testing Magnet Axiom v6.1.0.31400.

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 universal integrated circuit cards (UICCs) within each test case. Each individual sub-category row shows 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 Axiom v6.1.0.31400. All test cases pertaining to the acquisition of supported Android devices were successful with the exception of the following across all Android devices. The data extraction type selected for all iOS devices was: *Quick* acquire.

- Notes are not reported for the Galaxy Note 10, Galaxy S10, Galaxy Note 8, Galaxy S9, Huawei P20 Pro, LG G6, LG V30, Motorola Droid Turbo 2, Google Pixel 2 and HTC U11.
- MMS messages are partially reported (i.e., attached audio files are not playable) for the Galaxy Note 10, Galaxy S10, Galaxy Note 8, Galaxy S9, Huawei P20 Pro, LG G6 and Motorola Droid Turbo 2,
- Incoming MMS audio attachments are not playable for the Google Pixel 2.
- MMS message attachments (audio, graphic, video) are not reported for the LG V30.
- MMS messages are not reported for the HTC U11.
- Stand-alone files (audio, documents, graphic, video) are not reported for the Galaxy S9, Huawei P20 Pro, LG V30, Motorola Droid Turbo 2 and Google Pixel 2.

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

**Axiom v6.1.0.31400**

<b>Test Cases – Internal Memory Acquisition</b>		<i>Mobile Device Platform: Android</i>						
		Galaxy Note 10	Galaxy S10	Galaxy Note 8	Galaxy S9	Huawei P20 Pro	LG G6	LG V30
<b>Acquisition</b>	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>	As <i>Expected</i>	As <i>Expected</i>
<b>Reporting</b>	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>
<b>Equipment/ User Data</b>	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>
<b>PIM Data</b>	Contacts	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>
	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>	As <i>Expected</i>
	Memos/ Notes	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
<b>Call Logs</b>	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>
<b>SMS Messages</b>	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>
<b>MMS Messages</b>	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	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
	Video	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>
<b>Stand-alone Files</b>	Graphic	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
	Audio	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
	Video	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>

**Axiom v6.1.0.31400**

<b>Test Cases – Internal Memory Acquisition</b>		<i>Mobile Device Platform: Android</i>						
		Galaxy Note 10	Galaxy S10	Galaxy Note 8	Galaxy S9	Huawei P20 Pro	LG G6	LG V30
<b>Application Data</b>	Documents (txt, pdf files)	<i>As Expected</i>	<i>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>
	Facebook	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	Twitter	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	LinkedIn	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	Instagram	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	Pinterest	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	SnapChat	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	WhatsApp	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<b>Internet Data</b>	Bookmarks	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	History	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	Email	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<b>GPS Data</b>	Coordinates /Geo-tagged	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<b>Non-Latin Character</b>	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>
<b>Hashing</b>	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>
<b>Case File Data Protection</b>	Modify Case Data	<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>
<b>SQLite Data</b>	Report Active Data	<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>
	Run SQLite Commands	<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>

**Table 3a: Android Devices**

<b>Axiom v6.1.0.31400</b>				
<b>Test Cases – Internal Memory Acquisition</b>		<i>Mobile Device Platform: Android</i>		
		Motorola Droid Turbo 2	Google Pixel 2	HTC U11
<b>Acquisition</b>	Acquire All	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>
<b>Reporting</b>	Preview-Pane	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>
<b>Equipment/ User Data</b>	IMEI/ MEID/ESN	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>
<b>PIM Data</b>	Contacts	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Calendar	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
	Memos/ Notes	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
<b>Call Logs</b>	Incoming	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>
	Missed	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
<b>SMS Messages</b>	Incoming	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>
<b>MMS Messages</b>	Graphic	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
	Audio	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
	Video	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
<b>Stand-alone Files</b>	Graphic	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
	Audio	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
	Video	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>

<b>Axiom v6.1.0.31400</b>				
<b>Test Cases – Internal Memory Acquisition</b>		<i>Mobile Device Platform: Android</i>		
		Motorola Droid Turbo 2	Google Pixel 2	HTC U11
<b>Application Data</b>	Documents (txt, pdf files)	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>
<b>Social Media Data</b>	Facebook	NA	NA	NA
	Twitter	NA	NA	NA
	LinkedIn	NA	NA	NA
	Instagram	NA	NA	NA
	Pinterest	NA	NA	NA
	SnapChat	NA	NA	NA
	WhatsApp	NA	NA	NA
<b>Internet Data</b>	Bookmarks	NA	NA	NA
	History	NA	NA	NA
	Email	NA	NA	NA
<b>GPS Data</b>	Coordinates /Geo-tagged	NA	NA	NA
<b>Non-Latin Character</b>	Reported in native format	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>Hashing</b>	Case File/ Individual Files	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>Case File Data Protection</b>	Modify Case Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>SQLite Data</b>	Report Active Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Run SQLite Commands	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>

**Table 3b: Android Devices**

## 4.2 iOS Mobile Devices

The internal memory contents for iOS devices were acquired and analyzed with Axiom v6.1.0.31400. The data extraction type selected for all iOS devices was: *Quick* acquire.

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

- Social media related data (i.e., Facebook, LinkedIn, Instagram) is not reported for the iPhone 7.
- Social media related data (i.e., Facebook, LinkedIn, Instagram, Pinterest, Snapchat, Twitter) is not reported for the iPhone 8.
- Social media related data (i.e., LinkedIn, Pinterest, Snapchat) is not reported for the iPhone X.
- Social media related data (i.e., Facebook, LinkedIn, Pinterest, Snapchat, Twitter) is not reported for the iPhone XR, iPhone SE and iPhone 11.
- GPS related data (i.e., longitude, latitude coordinates) are not reported for the iPhone 7, iPhone 8, iPhone X and iPhone SE.

See Table 4 below for more details.

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<b>Test Cases – Internal Memory Acquisition</b>		<i>Mobile Device Platform: iOS</i>					
		iPhone 7	iPhone 8	iPhone X	iPhone XR	iPhone SE	iPhone 11
<b>Acquisition</b>	Acquire All	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Disrupted	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>Reporting</b>	Preview-Pane	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Generated Reports	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>Equipment/ User Data</b>	IMEI/MEID/ ESN	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	MSISDN	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>PIM Data</b>	Contacts	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Calendar	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Memos/Notes	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>Call Logs</b>	Incoming	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Outgoing	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Missed	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>SMS Messages</b>	Incoming	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Outgoing	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>MMS Messages</b>	Graphic	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>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>
	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>
<b>Stand-alone Files</b>	Graphic	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>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>
	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>
<b>Application Data</b>	Documents (txt, pdf 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>

**Axiom v6.1.0.31400**

<b>Test Cases – Internal Memory Acquisition</b>		<i>Mobile Device Platform: iOS</i>					
		iPhone 7	iPhone 8	iPhone X	iPhone XR	iPhone SE	iPhone 11
<b>Social Media Data</b>	Facebook	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>As Expected</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>
	Twitter	<i>As Expected</i>	<i>Not Applicable</i>	<i>As Expected</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>
	LinkedIn	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>
	Instagram	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Pinterest	<i>NA</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>
	SnapChat	<i>NA</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>
	WhatsApp	<i>NA</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>Internet Data</b>	Bookmarks	<i>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>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Email	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<b>GPS Data</b>	Coordinates/Geo-tagged	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>
<b>Non-Latin Character</b>	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>
<b>Hashing</b>	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>
<b>Case File Data Protection</b>	Modify Case Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
<b>SQLite Data</b>	Report Active Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
	Run SQLite Commands	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>

**Table 4: iOS Devices**