

	NIJ
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Test Results for Mobile Device Acquisition Tool: Zdziarski's Method	

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**Test Results for Mobile Device Acquisition Tool: Zdziarski's Method** 



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#### Introduction

The Computer Forensics Tool Testing (CFTT) program is a joint project of the National Institute of Justice (NIJ), the department of Homeland Security (DHS), and the National Institute of Standards and Technology Office of Law Enforcement Standards (OLES) 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 the U.S. Department of Homeland Security'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. This approach to testing computer forensic tools is based on well–recognized methodologies for conformance and quality testing. The specifications and test methods posted on the CFTT Web site (<a href="http://www.cftt.nist.gov/">http://www.cftt.nist.gov/</a>) are available for review and comment by the computer forensics community.

This document reports the results from testing Zdziarski's method, against the *Smart Phone Tool Test Assertions and Test Plan*, available at the CFTT Web site (www.cftt.nist.gov/mobile\_devices.htm).

Test results from other software packages and the CFTT tool methodology can be found on NIJ's computer forensics tool testing Web

page, <a href="http://www.ojp.usdoj.gov/nij/topics/technology/electronic-crime/cftt.htm">http://www.ojp.usdoj.gov/nij/topics/technology/electronic-crime/cftt.htm</a>.

### **How to Read This Report**

This report is divided into five sections. The first section is a summary of the results from the test runs. This section is sufficient for most readers to assess the suitability of the tool for the intended use. The remaining sections of the report describe how the tests were conducted and provide documentation of test case run details that support the report summary. Sections 2 and 3 provide justification for the selection of test cases and assertions from the set of possible cases defined in the test plan for smart phone forensic tools. The test cases are selected, in general, based on features offered by the tool. Section 4 lists the hardware and software used to run the test cases. Section 5 contains a

description of each test case, test assertions used in the test case, the expected result and the actual result.						

#### **Test Results for Mobile Device Data Acquisition Tool**

Tool Tested: JZ\_Method

Run Environment: Mac OS X 10.5.4

WWW: http://www.iphoneinsecurity.com

### 1 Results Summary

The tested tool acquired all supported data objects completely and accurately from the selected test mobile device (i.e., iPhone 3Gs). No anomalies were found.

#### 2 Test Case Selection

Test cases used to test mobile device acquisition tools are defined in *Smart Phone Tool Test Assertions and Test Plan Version 1.0*. To test a tool, test cases are selected from the *Test Plan* document based on the features offered by the tool. Not all test cases or test assertions are appropriate for all tools. There is a core set of base cases that are executed for every tool tested. Tool features guide the selection of additional test cases. If a given tool implements a given feature then the test cases linked to that feature are run. Table 1a lists the test cases available for Zdziarski's method. Table 2a lists the test cases not available in Zdziarski's method.

Table 1a: Selected Test Cases (iPhone 3Gs)

Supported Test Cases	Cases Selected for Execution
Base Cases	SPT-01, SPT-02, SPT-03, SPT-05, SPT-
	06, SPT-07, SPT-08, SPT-09, SPT-10,
	SPT-11, SPT-12, SPT-13
Perform a physical acquisition and review	SPT-32
reports for recoverable deleted data.	
Acquire mobile device internal memory and	SPT-33
review data containing non-ASCII	
characters.	
Acquire mobile device internal memory and	SPT-40
review data containing GPS longitude and	
latitude coordinates.	

Table 2a: Omitted Test Cases (iPhone 3Gs)

Unsupported Test Cases	Cases omitted – not executed
Acquire mobile device internal memory and review reported data via the	SPT-04
preview–pane or generated reports for readability.	
Acquire SIM memory over supported interfaces (e.g., PC/SC reader).	SPT-14

Unsupported Test Cases	Cases
	omitted – not
Attempt acquisition of a non–supported SIM.	executed SPT-15
Begin SIM acquisition and interrupt connectivity by interface	SPT-15 SPT-16
disengagement.	SP1-10
	SPT-17
Acquire SIM memory and review reported subscriber and equipment	SP1-17
related information (i.e., SPN, ICCID, IMSI, MSISDN).  Acquire SIM memory and review reported Abbreviated Dialing Numbers	SPT-18
(ADN).	SP1-18
Acquire SIM memory and review reported Last Numbers Dialed (LND).	SPT-19
Acquire SIM memory and review reported text messages (SMS, EMS).	SPT-20
Acquire SIM memory and review recoverable deleted text messages	SPT-21
(SMS, EMS).	
Acquire SIM memory and review reported location related data (i.e., LOCI, GPRSLOCI).	SPT-22
Acquire SIM memory by selecting a combination of supported data	SPT-23
elements.	
Acquire mobile device internal memory and review reported data via	SPT-24
supported generated report formats.	
Acquire mobile device internal memory and review reported data via the	SPT-25
preview pane.	
Acquire SIM memory and review reported data via supported generated	SPT-26
report formats.	
Acquire SIM memory and review reported data via the preview–pane.	SPT-27
Attempt acquisition of a password–protected SIM.	SPT-28
After a successful mobile device internal memory, alter the case file via	SPT-29
third-party means and attempt to re-open the case.	
After a successful SIM acquisition, alter the case file via third–party	SPT-30
means and attempt to re-open the case.	
Perform a physical acquisition and review data output for readability.	SPT-31
Acquire SIM memory and review data containing non–ASCII characters.	SPT-34
Begin acquisition on a PIN protected SIM to determine if the tool provides	SPT-35
an accurate count of the remaining number of PIN attempts and if the PIN	
attempts are decremented when entering an incorrect value.	
Begin acquisition on a SIM whose PIN attempts have been exhausted to	SPT-36
determine if the tool provides an accurate count of the remaining number	
of PUK attempts and if the PUK attempts are decremented when entering	
an incorrect value.	
Perform a stand–alone mobile device internal memory acquisition and	SPT-37
review the status flags for text messages present on the SIM.	
Acquire mobile device internal memory and review hash values for vendor	SPT-38
supported data objects.	
Acquire SIM memory and review hash values for vendor supported data	SPT-39
objects.	

### 3 Results by Test Assertion

Table 3a summarizes the test results by assertion. The column labeled **Assertion** gives the text of each assertion. The column labeled **Tests** gives the number of test cases that use the given assertion. The column labeled **Anomaly** gives the section number in this report where the anomaly is discussed. No anomalies were found.

Table 3a: Assertions Tested: (iPhone 3Gs)

Assertions Tested	Tests	Anomaly
SPT-CA-01 If a cellular forensic tool provides support for connectivity	1	
of the target device then the tool shall successfully recognize the target		
device via all vendor supported interfaces (e.g., cable, Bluetooth, IrDA).		
SPT-CA-02 If a cellular forensic tool attempts to connect to a non-	1	
supported device then the tool shall notify the user that the device is not		
supported.		
SPT-CA-03 If connectivity between the mobile device and cellular	1	
forensic tool is disrupted then the tool shall notify the user that		
connectivity has been disrupted.		
SPT-CA-04 If a cellular forensic tool completes acquisition of the	1	
target device without error then the tool shall have the ability to present		
acquired data objects in a useable format via either a preview-pane or		
generated report.		
SPT-CA-05 If a cellular forensic tool completes acquisition of the	1	
target device without error then subscriber-related information shall be		
presented in a useable format.		
SPT-CA-06 If a cellular forensic tool completes acquisition of the	1	
target device without error then equipment related information shall be		
presented in a useable format.		
SPT-CA-07 If a cellular forensic tool completes acquisition of the	1	
target device without error then address book entries shall be presented		
in a useable format.		
SPT-CA-08 If a cellular forensic tool completes acquisition of the	1	
target device without error then maximum length address book entries		
shall be presented in a useable format.		
SPT-CA-09 If a cellular forensic tool completes acquisition of the	1	
target device without error then address book entries containing special		
characters shall be presented in a useable format.		
SPT-CA-10 If a cellular forensic tool completes acquisition of the	1	
target device without error then address book entries containing blank		
names shall be presented in a useable format.		
SPT-CA-11 If a cellular forensic tool completes acquisition of the	1	
target device without error then email addresses associated with address		
book entries shall be presented in a useable format.		
SPT-CA-12 If a cellular forensic tool completes acquisition of the	1	
target device without error then graphics associated with address book		
entries shall be presented in a useable format.		

SPT-CA-13 If a cellular forensic tool completes acquisition of the target device without error then datebook, calendar, note entries shall be presented in a useable format.	1
SPT-CA-14 If a cellular forensic tool completes acquisition of the target device without error then maximum length datebook, calendar, note entries shall be presented in a useable format.	1
SPT-CA-15 If a cellular forensic tool completes acquisition of the target device without error then call logs (incoming/outgoing/missed) shall be presented in a useable format.	1
SPT–CA–16 If a cellular forensic tool completes acquisition of the target device without error then the corresponding date/time stamps and the duration of the call for call logs shall be presented in a useable format.	1
SPT-CA-17 If a cellular forensic tool completes acquisition of the target device without error then ASCII text messages (i.e., SMS, EMS) shall be presented in a useable format.	1
SPT-CA-18 If a cellular forensic tool completes acquisition of the target device without error then the corresponding date/time stamps for text messages shall be presented in a useable format.	1
SPT-CA-19 If a cellular forensic tool completes acquisition of the target device without error then the corresponding status (i.e., read, unread) for text messages shall be presented in a useable format.	1
SPT-CA-20 If a cellular forensic tool completes acquisition of the target device without error then the corresponding sender / recipient phone numbers for text messages shall be presented in a useable format.	1
SPT–CA–21 If a cellular forensic tool completes acquisition of the target device without error then MMS messages and associated audio shall be presented in a useable format.	1
SPT-CA-22 If a cellular forensic tool completes acquisition of the target device without error then MMS messages and associated graphic files shall be presented in a useable format.	1
SPT-CA-23 If a cellular forensic tool completes acquisition of the target device without error then MMS messages and associated video shall be presented in a useable format.	1
SPT–CA–24 If a cellular forensic tool completes acquisition of the target device without error then stand–alone audio files shall be presented in a useable format via either an internal application or suggested third–party application.	1
SPT-CA-25 If a cellular forensic tool completes acquisition of the target device without error then stand-alone graphic files shall be presented in a useable format via either an internal application or suggested third-party application.	1
SPT-CA-26 If a cellular forensic tool completes acquisition of the target device without error then stand-alone video files shall be presented in a useable format via either an internal application or suggested third-party application.	1

SPT-CA-27 If a cellular forensic tool completes acquisition of the target device without error then device specific application related data shall be acquired and presented in a useable format via either an internal application or suggested third-party application.	1	
SPT-CA-28 If a cellular forensic tool completes acquisition of the target device without error then Internet related data (i.e., bookmarks, visited sites) cached to the device shall be acquired and presented in a useable format.	1	
SPT-CA-29 If a cellular forensic tool provides the user with an "Acquire All" device data objects acquisition option then the tool shall complete the acquisition of all data objects without error.	2	
SPT-CA-30 If a cellular forensic tool provides the user with a "Select All" individual device data objects then the tool shall complete the acquisition of all individually selected data objects without error.	2	
SPT-CA-31 If a cellular forensic tool provides the user with the ability to "Select Individual" device data objects for acquisition then the tool shall acquire each exclusive data object without error.	2	
SPT-CA-32 If a cellular forensic tool completes two consecutive logical acquisitions of the target device without error then the payload (data objects) on the mobile device shall remain consistent.	2	
SPT-AO-32 If the cellular forensic tool supports the interpretation of address book entries present on the target device then the tool shall report recoverable active and deleted data or address book data remnants in a useable format.	1	
SPT-AO-33 If the cellular forensic tool supports the interpretation of calendar, tasks, or notes present on the target device then the tool shall report recoverable active and deleted calendar, tasks, or note data remnants in a useable format.	1	
SPT-AO-34 If the cellular forensic tool supports the interpretation of call logs present on the target device then the tool shall report recoverable active and deleted call or call log data remnants in a useable format.	1	
SPT-AO-35 If the cellular forensic tool supports the interpretation of SMS messages present on the target device then the tool shall report recoverable active and deleted SMS messages or SMS message data remnants in a useable format.	1	
SPT-AO-36 If the cellular forensic tool supports the interpretation of EMS messages present on the target device then the tool shall report recoverable active and deleted EMS messages or EMS message data remnants in a useable format.	1	
SPT-AO-37 If the cellular forensic tool supports the interpretation of audio files present on the target device then the tool shall report recoverable active and deleted audio data or audio file data remnants in a useable format.	1	
SPT-AO-38 If the cellular forensic tool supports the interpretation of graphic files present on the target device then the tool shall report	1	

recoverable active and deleted graphic file data or graphic file data		
remnants in a useable format.		
SPT-AO-39 If the cellular forensic tool supports the interpretation of	1	
video files present on the target device then the tool shall report		
recoverable active and deleted video file data or video file data remnants		
in a useable format.		
SPT-AO-40 If the cellular forensic tool supports display of non-ASCII	1	
characters then the application should present address book entries in		
their native format.		
SPT-AO-41 If the cellular forensic tool supports proper display of non-	1	
ASCII characters then the application should present text messages in		
their native format.		
SPT-AO-44 If the cellular forensic tool supports acquisition of GPS	1	
data then the tool shall present the user with the longitude and latitude		
coordinates for all GPS-related data in a useable format.		

Table 4a lists the assertions that were not tested, usually due to the tool not supporting an optional feature.

#### **Table 4a: Assertions Not Tested (iPhone 3Gs)**

	Assertions Not Tested				
SPT-AO-01 If a cellular forensic tool provides support for connectivity of the then the tool shall successfully recognize the target SIM via all tool-supported					
SPT-AO-02 If a cellular forensic tool attempts to connect to a non-supported S					
	the tool shall notify the user that the SIM is not supported.				
	SPT-AO-03 If a cellular forensic tool loses connectivity with the SIM reader then the				
	tool shall notify the user that connectivity has been disrupted.				
	SPT-AO-04 If a cellular forensic tool completes acquisition of the target SIM without				
	error then the SPN shall be presented in a useable format.				
	SPT-AO-05 If a cellular forensic tool completes acquisition of the target SIM without				
error then the ICCID shall be presented in a useable format.					
SPT-AO-06 If a cellular forensic tool completes acquisition of the target SIM without error then the IMSI shall be presented in a useable format.					
				SPT-AO-07 If a cellular forensic tool completes acquisition of the target SIM without	
error then the MSISDN shall be presented in a useable format.					
	SPT-AO-08 If a cellular forensic tool completes acquisition of the target SIM without				
	error then ASCII Abbreviated Dialing Numbers (ADN) shall be presented in a useable				
	format.				
	SPT-AO-09 If a cellular forensic tool completes acquisition of the target SIM without				
	error then maximum length ADNs shall be presented in a useable format.				
	SPT-AO-10 If a cellular forensic tool completes acquisition of the SIM without error				
	then ADNs containing special characters shall be presented in a useable format.				
	SPT-AO-11 If a cellular forensic tool completes acquisition of the SIM without error				

- then ADNs containing blank names shall be presented in a useable format.
- SPT-AO-12 If a cellular forensic tool completes acquisition of the target SIM without error then Last Numbers Dialed (LND) shall be presented in a useable format.
- SPT-AO-13 If a cellular forensic tool completes acquisition of the target SIM without error then the corresponding date/time stamps for LNDs shall be presented in a useable format.
- SPT-AO-14 If a cellular forensic tool completes acquisition of the target SIM without error then ASCII SMS text messages shall be presented in a useable format.
- SPT-AO-15 If a cellular forensic tool completes acquisition of the target SIM without error then ASCII EMS text messages shall be presented in a useable format.
- SPT-AO-16 If a cellular forensic tool completes acquisition of the target SIM without error then the corresponding date/time stamps for all text messages shall be presented in a useable format.
- SPT-AO-17 If a cellular forensic tool completes acquisition of the target SIM without error then the corresponding status (i.e., read, unread) for text messages shall be presented in a useable format.
- SPT-AO-18 If a cellular forensic tool completes acquisition of the target SIM without error then the corresponding sender / recipient phone numbers for text messages shall be presented in a useable format.
- SPT-AO-19 If the cellular forensic tool completes acquisition of the target SIM without error then deleted text messages that have not been overwritten shall be presented in a useable format.
- SPT-AO-20 If a cellular forensic tool completes acquisition of the target SIM without error then location related data (i.e., LOCI) shall be presented in a useable format.
- SPT-AO-21 If a cellular forensic tool completes acquisition of the target SIM without error then location related data (i.e., GRPSLOCI) shall be presented in a useable format.
- SPT-AO-22 If a cellular forensic tool provides the user with an "Acquire All" SIM data objects acquisition option then the tool shall complete the acquisition of all data objects without error.
- SPT-AO-23 If a cellular forensic tool provides the user with a "Select All" individual SIM data objects then the tool shall complete the acquisition of all individually selected data objects without error.
- SPT-AO-24 If a cellular forensic tool provides the user with the ability to "Select Individual" SIM data objects for acquisition then the tool shall acquire each exclusive data object without error.
- SPT-AO-25 If a cellular forensic tool completes acquisition of the target device without error then the tool shall present the acquired data in a useable format via supported generated report formats.
- SPT-AO-25 If a cellular forensic tool completes acquisition of the SIM without error then the tool shall present the acquired data in a useable format via supported generated report formats.
- SPT-AO-26 If a cellular forensic tool completes acquisition of the target device without error then the tool shall present the acquired data in a useable format in a preview-pane view.
- SPT-AO-26 If a cellular forensic tool completes acquisition of the SIM without error then the tool shall present the acquired data in a useable format in a preview-pane view.

SPT-AO-27 If the case file or individual data objects are modified via third-party means then the tool shall provide protection mechanisms disallowing or reporting data modification.

SPT-AO-28 If the SIM is password-protected then the cellular forensic tool shall provide the examiner with the opportunity to input the PIN before acquisition.

SPT-AO-29 If a cellular forensic tool provides the examiner with the remaining number of authentication attempts then the application should provide an accurate count of the remaining PIN attempts.

SPT-AO-30 If a cellular forensic tool provides the examiner with the remaining number of PUK attempts then the application should provide an accurate count of the remaining PUK attempts.

SPT-AO-31 If the cellular forensic tool supports a physical acquisition of the target device then the tool shall complete the acquisition without error.

SPT-AO-42 If the cellular forensic tool supports stand-alone acquisition of internal memory with the SIM present, then the contents of the SIM shall not be modified during internal memory acquisition.

SPT-AO-43 If the cellular forensic tool supports hashing for individual data objects then the tool shall present the user with a hash value for each supported data object.

### 4 Testing Environment

The tests were run in the NIST CFTT lab. This section describes the testing environment including available computers, mobile devices and the data objects used to populate mobile devices and Subscriber Identity Modules.

### 4.1 Test Computers

One test computer was used.

Magnum has the following configuration:

Mac mini

Intel Core 2 Duo

Processor Speed: 1.83 GHz

Memory: 1 GB

Boot ROM Version: MM21.009A.B00

#### 4.2 Mobile Devices

The following table contains the mobile device used.

Make	Model	OS	Network
Apple iPhone	3Gs	iPhone	AT&T

### 4.3 Internal Memory Data Objects

The following data objects were used to populate the internal memory of the smart phones.

Data Objects	Data Elements	
Address Book Entries		
	Regular Length	
	Maximum Length	
	Special Character	
	Blank Name	
	Regular Length, email	
	Regular Length, graphic	
	Deleted Entry	
	Non–ASCII Entry	
PIM Data	, , , , , , , , , , , , , , , , , , , ,	
	Regular Length	
	Maximum Length	
	Deleted Entry	
	Special Character	
Call Logs	<b></b>	
- · · · · · · · · · · · · · · · · · · ·	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–ASCII EMS	
MMS Messages		
	Incoming Audio	
	Incoming Graphic	
	Incoming Video	
	Outgoing Audio	
	Outgoing Graphic	
	Outgoing Video	

Data Objects	Data Elements
Stand–alone data files	
	Audio
	Graphic
	Video
	Audio – Deleted
	Graphic – Deleted
	Video – Deleted
Application Data	
	Device Specific App Data
Location Data	
	GPS Coordinates

#### 5 Test Results

The main item of interest for interpreting the test results is determining the conformance of the tool with the test assertions. Conformance with each assertion tested by a given test case is evaluated by examining the **Results** box of the test case details.

#### 5.1 Test Results Report Key

A summary of the actual test results is presented in this report. The following table presents a description of each section of the test report summary.

**Table 5 Test Results Report Key** 

Heading	Description
First Line:	Test case ID, name, and version of tool tested.
Case Summary:	Test case summary from Smart Phone Tool Test Assertion
	and Test Plan.
Assertions:	The test assertions applicable to the test case, selected from
	Smart Phone Tool Test Assertion and Test Plan.
Tester Name:	Name or initials of person executing test procedure.
Test Host:	Host computer executing the test.
Test Date:	Time and date that test was started.
Device:	Source mobile device.
Source Setup:	Acquisition interface.
Log Highlights:	Information extracted from various log files to illustrate
	conformance or non–conformance to the test assertions.
Results:	Expected and actual results for each assertion tested.
Analysis:	Whether or not the expected results were achieved.

### 5.2 Test Details

# 5.2.1 SPT-01 (iPhone 3Gs)

Test Case SPT	-01 jz_method	
Case	SPT-01 Acquire mobile device internal memory over tool-support	ted interfaces
Summary:	(e.g., cable, Bluetooth, IrDA).	
Assertions:		
Tester Name:	rpa	
Test Host:	Magnum	
Test Date:	Wed Sep 8 10:27:49 EDT 2010	
Device:	iPhone3Gs	
Source	OS: WIN XP	
Setup:	Interface: cable	
Log	Created by jz_method	
Highlights:	Acquisition started: Wed Sep 8 10:27:49 EDT 2010	
	Acquisition finished: Wed Sep 8 10:33:00 EDT 2010	
	Device connectivity was established via supported interface	
Results:		
	Assertion & Expected Result	Actual Result
	SPT-CA-01 Device connectivity via supported interfaces.	as expected
	SPT-CA-04 Readability and completeness of acquired data via	as expected
	supported reports.	
	SPT-CA-29 Acquire-All data objects acquisition.	as expected
	SPT-CA-32 Perform back-to-back acquisitions, check device payload for modifications.	as expected

# 5.2.2 SPT-02 (iPhone 3Gs)

,		
Test Case SPT	-02 jz_method	
Case	SPT-02 Attempt internal memory acquisition of a non-supported mobile	
Summary:	device.	
Assertions:	SPT-CA-02 If a cellular forensic tool attempts to connect to a non-	
	supported device then the tool shall notify the user that the device is not	
	supported.	
Tester Name:	rpa	
Test Host:	Magnum	
Test Date:	Wed Sep 8 10:33:51 EDT 2010	
Device:	unsupported_device	
Source	OS: WIN XP	
Setup:	Interface: cable	
Log	Created by jz_method	
Highlights:	Acquisition started: Wed Sep 8 10:33:51 EDT 2010	
	Acquisition finished: Wed Sep 8 11:52:21 EDT 2010	
	Identification of non-supported devices was successful	
Results:		
	Assertion & Expected Result Actual Result	
	SPT-CA-02 Identification of non-supported devices. as expected	
Analysis:	Expected results achieved	

# 5.2.3 SPT-03 (iPhone 3Gs)

,			
Test Case SPT	Test Case SPT-03 jz_method		
Case	SPT-03 Begin mobile device internal memory acquisition and interrupt		
Summary:	connectivity by interface disengagement.		
Assertions:	SPT-CA-03 If connectivity between the mobile device and cellular forensic		
	tool is disrupted then the tool shall notify the user that connectivity has		
	been disrupted.		
Tester Name:	rpa		
Test Host:	Magnum		
Test Date:	Wed Sep 8 11:53:43 EDT 2010		
Device:	iPhone3Gs		
Source	OS: WIN XP		
Setup:	Interface: cable		
Log	Created by jz_method		
Highlights:	Acquisition started: Wed Sep 8 11:53:43 EDT 2010		
	Acquisition finished: Wed Sep 8 11:56:05 EDT 2010		
	Device acquisition disruption notification was successful		
Results:			
	Assertion & Expected Result Actual Result		
	SPT-CA-03 Notification of device acquisition disruption. as expected		
Analysis:	Expected results achieved		

# 5.2.4 SPT-05 (iPhone 3Gs)

Test Case SPT-	-05 jz_method		
Case	SPT-05 Acquire mobile device internal memory and review reported subscriber		
Summary:	and equipment related information (e.g., IMEI/MEID/ESN, MSISDN).		
Assertions:	SPT-CA-05 If a cellular forensic tool completes acquisition of the target device without error then subscriber-related information shall be presented in a useable format.  SPT-CA-06 If a cellular forensic tool completes acquisition of the target device without error then equipment related information shall be presented in a useable format.		
Tester Name:	rpa		
Test Host:	Magnum		
Test Date:	Wed Sep 8 12:21:10 EDT 2010		
Device:	iPhone3Gs		
Source	OS: WIN XP		
Setup:	Interface: cable		
Log Highlights:	Created by jz_method Acquisition started: Wed Sep 8 12:21:10 EDT 2010		
	Acquisition finished: Wed Sep 8 12:34:20 EDT 2010		
	Subscriber and Equipment related data (i.e	e., MSISDN, IMEI	) were acquired
Results:			
	Assertion & Expected Result	Actual Result	
ļ	SPT-CA-05 Acquisition of MSISDN, IMSI.	as expected	
ļ	SPT-CA-06 Acquisition of IMEI/MEID/ESN.	as expected	
Analysis:	Expected results achieved		

### 5.2.5 SPT-06 (iPhone 3Gs)

Test Case SPT	-06 jz method		
Case	SPT-06 Acquire mobile device internal memory and review repor	ted PIM	
Summary:	related data.		
Assertions:	SPT-CA-07 If a cellular forensic tool completes acquisition of the target		
110001010110	device without error then address book entries shall be presented in a		
	useable format.		
	SPT-CA-08 If a cellular forensic tool completes acquisition of the target		
	device without error then maximum length address book entries shall be		
	presented in a useable format.		
	SPT-CA-09 If a cellular forensic tool completes acquisition o	f the target	
	device without error then address book entries containing spe		
	characters shall be presented in a useable format.		
	SPT-CA-10 If a cellular forensic tool completes acquisition o	f the target	
	device without error then address book entries containing bla	nk names shall	
	be presented in a useable format.		
	SPT-CA-11 If a cellular forensic tool completes acquisition o	f the target	
	device without error then email addresses associated with add	ress book	
	entries shall be presented in a useable format.		
	SPT-CA-12 If a cellular forensic tool completes acquisition o	f the target	
	device without error then graphics associated with address bo	ok entries	
	shall be presented in a useable format.		
	SPT-CA-13 If a cellular forensic tool completes acquisition o		
	device without error then datebook, calendar, note entries sh	all be	
	presented in a useable format.		
	SPT-CA-14 If a cellular forensic tool completes acquisition o		
	device without error then maximum length datebook, calendar,	note entries	
	shall be presented in a useable format.		
Tester Name:	rpa		
Test Host:	Magnum		
Test Date:	Wed Sep 8 12:38:39 EDT 2010		
Device:	iPhone3Gs		
Source	OS: WIN XP		
Setup:	Interface: cable		
Log	Created by jz_method		
Highlights:	Acquisition started: Wed Sep 8 12:38:39 EDT 2010		
	Acquisition finished: Wed Sep 8 12:45:52 EDT 2010		
	All address book entries were successfully acquired		
	ALL PIM related data was acquired		
7. 7.			
Results:			
	Assertion & Expected Result	Actual	
	GDT G2 0F 2 1111 5 11	Result	
	SPT-CA-07 Acquisition of address book entries.	as expected	
	SPT-CA-08 Acquisition of maximum length address book	as expected	
	entries.	_	
	SPT-CA-09 Acquisition of address book entries containing	as expected	
	special characters.		
	SPT-CA-10 Acquisition of address book entries containing a	as expected	
ĺ		1	
ĺ	blank name entry.		
	SPT-CA-11 Acquisition of embedded email addresses within	as expected	
	SPT-CA-11 Acquisition of embedded email addresses within address book entries.	_	
	SPT-CA-11 Acquisition of embedded email addresses within address book entries.  SPT-CA-12 Acquisition of embedded graphics within address	as expected as expected	
	SPT-CA-11 Acquisition of embedded email addresses within address book entries.  SPT-CA-12 Acquisition of embedded graphics within address book entries.	as expected	
	SPT-CA-11 Acquisition of embedded email addresses within address book entries.  SPT-CA-12 Acquisition of embedded graphics within address book entries.  SPT-CA-13 Acquisition of PIM data (i.e.,	_	
	SPT-CA-11 Acquisition of embedded email addresses within address book entries.  SPT-CA-12 Acquisition of embedded graphics within address book entries.  SPT-CA-13 Acquisition of PIM data (i.e., datebook/calendar, notes).	as expected	
	SPT-CA-11 Acquisition of embedded email addresses within address book entries.  SPT-CA-12 Acquisition of embedded graphics within address book entries.  SPT-CA-13 Acquisition of PIM data (i.e.,	as expected	
	SPT-CA-11 Acquisition of embedded email addresses within address book entries.  SPT-CA-12 Acquisition of embedded graphics within address book entries.  SPT-CA-13 Acquisition of PIM data (i.e., datebook/calendar, notes).	as expected	
	SPT-CA-11 Acquisition of embedded email addresses within address book entries.  SPT-CA-12 Acquisition of embedded graphics within address book entries.  SPT-CA-13 Acquisition of PIM data (i.e., datebook/calendar, notes).  SPT-CA-14 Acquisition of maximum length PIM data.	as expected	
Analysis:	SPT-CA-11 Acquisition of embedded email addresses within address book entries.  SPT-CA-12 Acquisition of embedded graphics within address book entries.  SPT-CA-13 Acquisition of PIM data (i.e., datebook/calendar, notes).	as expected	

# 5.2.6 SPT-07 (iPhone 3Gs)

Test Case SPT	-07 jz_method		
Case Summary:	SPT-07 Acquire mobile device internal memory and review reported call logs.		
Assertions:	SPT-CA-15 If a cellular forensic tool completes acquisition of the target device without error then call logs (incoming/outgoing/missed) shall be presented in a useable format.  SPT-CA-16 If a cellular forensic tool completes acquisition of the target device without error then the corresponding date/time stamps and the duration of the call for call logs shall be presented in a useable format.		
Tester Name:	rpa		
Test Host:	Magnum		
Test Date:	Wed Sep 8 14:07:51 EDT 2010		
Device:	iPhone3Gs		
Source	OS: WIN XP		
Setup:	Interface: cable		
Log Highlights:	Created by jz_method Acquisition started: Wed Sep 8 14:07:51 EDT 2010 Acquisition finished: Wed Sep 8 14:11:16 EDT 2010 All Call Logs (incoming, outgoing, missed) were acqui All Call Log date/time stamps data were correctly rep		
Results:			
	Assertion & Expected Result	Actual Result	
	SPT-CA-15 Acquisition of call logs.	as expected	
	SPT-CA-16 Acquisition of call log date/time stamps.	as expected	
Analysis:	Expected results achieved		

# 5.2.7 SPT-08 (iPhone 3Gs)

Test Case SPT	-08 jz_method	
Case	SPT-08 Acquire mobile device internal memory and review repor	ted text
Summary:	messages.	
Assertions:	SPT-CA-17 If a cellular forensic tool completes acquisition of device without error then ASCII text messages (i.e., SMS, EMS presented in a useable format.  SPT-CA-18 If a cellular forensic tool completes acquisition of device without error then the corresponding date/time stamps messages shall be presented in a useable format.  SPT-CA-19 If a cellular forensic tool completes acquisition of device without error then the corresponding status (i.e., real text messages shall be presented in a useable format.  SPT-CA-20 If a cellular forensic tool completes acquisition of device without error then the corresponding sender / recipier numbers for text messages shall be presented in a useable for	f) shall be  of the target for text  f the target d, unread) for  of the target tt phone
Tester Name:	rpa	
Test Host:	Magnum	
Test Date:	Wed Sep 8 14:16:06 EDT 2010	
Device:	iPhone3Gs	
Source	OS: WIN XP	
Setup:	Interface: cable	
Log Highlights:	Created by jz_method Acquisition started: Wed Sep 8 14:16:06 EDT 2010 Acquisition finished: Wed Sep 8 14:22:50 EDT 2010  ALL text messages (SMS, EMS) were acquired Correct date/time stamps were reported for all text messages Correct status flags were reported for all text messages Sender and Recipient phone numbers associated with text messages correctly reported	ges were
Results:	Assertion & Expected Result	Actual Result
	SPT-CA-17 Acquisition of text messages.	as expected
	SPT-CA-18 Acquisition of text message date/time stamps.	as expected
	SPT-CA-19 Acquisition of text message status flags.	as expected
	SPT-CA-20 Acquisition of sender/recipient phone number associated with text messages.	as expected
Analysis:	Expected results achieved	
wigilars.	TAPECTER TERRITOR SCHILENER	

# 5.2.8 SPT-09 (iPhone 3Gs)

Test Case SPT	-09 jz_method	
Case	SPT-09 Acquire mobile device internal memory and review reported MMS mult	i-
Summary:	media related data (i.e., text, audio, graphics, video).	
Assertions:	SPT-CA-21 If a cellular forensic tool completes acquisition of the target device without error then MMS messages and associated audio shall be presented in a useable format.  SPT-CA-22 If a cellular forensic tool completes acquisition of the target device without error then MMS messages and associated graphic files shall be presented in a useable format.  SPT-CA-23 If a cellular forensic tool completes acquisition of the target device without error then MMS messages and associated video shall be presented in a useable format.	
Tester Name:	rpa	
Test Host:	Magnum	
Test Date:	Wed Sep 8 14:23:28 EDT 2010	
Device:	iPhone3Gs	
Source	OS: WIN XP	
Setup:	Interface: cable	
Log Highlights:	Created by jz_method Acquisition started: Wed Sep 8 14:23:28 EDT 2010 Acquisition finished: Wed Sep 8 14:25:42 EDT 2010 ALL MMS messages (Audio, Image, Video) were acquired	
Results:		
	Assertion & Expected Result Actual Result	
	SPT-CA-21 Acquisition of audio MMS messages. as expected	
	SPT-CA-22 Acquisition of graphic data image MMS as expected messages.	
	SPT-CA-23 Acquisition of video MMS messages. as expected	
Analysis:	Expected results achieved	

# 5.2.9 SPT-10 (iPhone 3Gs)

Test Case SPT	-10 jz_method		
Case	SPT-10 Acquire mobile device internal memory and review reported stand-		
Summary:	alone multi-media data (i.e., audio, graphics, video).		
Assertions:	SPT-CA-24 If a cellular forensic tool completes acquisition of the target device without error then stand-alone audio files shall be presented in a useable format via either an internal application or suggested third-party application.  SPT-CA-25 If a cellular forensic tool completes acquisition of the target device without error then stand-alone graphic files shall be presented in a useable format via either an internal application or suggested third-party application.  SPT-CA-26 If a cellular forensic tool completes acquisition of the target device without error then stand-alone video files shall be presented in a useable format via either an internal application or suggested third-party application.		
Tester	rpa		
Name:	194		
Test Host:	Magnum		
Test Date:	Thu Sep 9 07:47:56 EDT 2010		
Device:	iPhone3Gs		
Source	OS: WIN XP		
Setup:	Interface: cable		
Log	Created by jz_method		
Highlights:	Acquisition started: Thu Sep 9 07:47:56 EDT 2010 Acquisition finished: Thu Sep 9 08:09:30 EDT 2010		
	ALL stand-alone data files (Audio, Image, Video) were	acquired	
Results:			
	Assertion & Expected Result	Actual Result	
	SPT-CA-24 Acquisition of stand-alone audio files.	as expected	
	SPT-CA-25 Acquisition of stand-alone graphic files.	as expected	
	SPT-CA-26 Acquisition of stand-alone video files.	as expected	
Analysis:	Expected results achieved		

# 5.2.10 SPT-11 (iPhone 3Gs)

Test Case SPT-11 jz_method			
Case Summary:	SPT-11 Acquire mobile device internal memory and review application related data (i.e., word documents, spreadsheet, presentation documents).		
Assertions:	SPT-CA-27 If a cellular forensic tool completes acquisition of the target device without error then device specific application related data shall be acquired and presented in a useable format via either an internal application or suggested third-party application.		
Tester Name:	rpa		
Test Host:	Magnum		
Test Date:	Thu Sep 9 08:11:19 EDT 2010		
Device:	iPhone3Gs		
Source	OS: WIN XP		
Setup:	Interface: cable		
Log Highlights:	Created by jz_method Acquisition started: Thu Sep 9 08:11:19 EDT 2010 Acquisition finished: Fri Sep 10 14:54:45 EDT 2010  Partial Application data was acquired  Notes: Partial data (i.e., filename) was recovered. Application data was pushed onto the device an email attachment. For data types that the iphone does not natively support the attachments are opened with via Safari and not saved to flash memory.		
Results:	Results:		
	Assertion & Expected Result	Actual Result	
	SPT-CA-27 Acquisition of application related data.	as expected	
Analysis:	Expected results achieved		

# 5.2.11 SPT-12 (iPhone 3Gs)

Test Case SPT	-12 jz_method	
Case Summary:	SPT-12 Acquire mobile device internal memory and review Internet related data (i.e., bookmarks, visited sites.	
Assertions:	SPT-CA-28 If a cellular forensic tool completes acquisition of the target device without error then Internet related data (i.e., bookmarks, visited sites) cached to the device shall be acquired and presented in a useable format.	
Tester Name:	rpa	
Test Host:	Magnum	
Test Date:	Mon Sep 13 10:01:23 EDT 2010	
Device:	iPhone3Gs	
Source	OS: WIN XP	
Setup:	Interface: cable	
Log Highlights:	Created by jz_method Acquisition started: Mon Sep 13 10:01:23 EDT 2010 Acquisition finished: Mon Sep 13 10:29:04 EDT 2010 All Internet related data was acquired	
Results:		
	Assertion & Expected Result	Actual Result
	SPT-CA-28 Acquisition of Internet related data.	as expected
Analysis:	Expected results achieved	

# 5.2.12 SPT-13 (iPhone 3Gs)

Case Summary:  Assertions:  SPT-CA-29 If a cellular forer All" device data objects acquire mobile device supported data elements.  SPT-CA-29 If a cellular forer All" device data objects acquire acquisition of all data of SPT-CA-30 If a cellular forer All" individual device data of acquisition of all individual SPT-CA-31 If a cellular forer "Select Individual" device data of acquire each exclusive data of Tester Name:  Tester Name:  Tester Name:  Tester Name:	sic tool provides the user isition option then the to bjects without error. sic tool provides the user bjects then the tool shall ly selected data objects wasic tool provides the user ta objects for acquisition	with an "Acquire ol shall complete with an "Select complete the ithout error. with the ability to		
Assertions: SPT-CA-29 If a cellular foremally device data objects acquired the acquisition of all data of SPT-CA-30 If a cellular foremally individual device data of acquisition of all individual SPT-CA-31 If a cellular foremally select Individual device data of acquire each exclusive data of acquire each exclusive data of the select se	disition option then the to bjects without error. sic tool provides the user bjects then the tool shall ly selected data objects we sic tool provides the user ta objects for acquisition	ol shall complete  with an "Select complete the ithout error. with the ability to		
All" device data objects acquithe acquisition of all data of SPT-CA-30 If a cellular forem All" individual device data of acquisition of all individual SPT-CA-31 If a cellular forem "Select Individual" device data of acquire each exclusive data of Tester Name:	disition option then the to bjects without error. sic tool provides the user bjects then the tool shall ly selected data objects we sic tool provides the user ta objects for acquisition	ol shall complete  with an "Select complete the ithout error. with the ability to		
1				
Togt Hogt: Magnum		rpa		
Test Host: Magnum	Magnum			
Test Date: Fri Sep 10 15:05:32 EDT 2010	Fri Sep 10 15:05:32 EDT 2010			
Device: iPhone3Gs	iPhone3Gs			
Source OS: WIN XP	OS: WIN XP			
Setup: Interface: cable				
Log Created by jz_method				
Highlights: Acquisition started: Fri Sep	Acquisition started: Fri Sep 10 15:05:32 EDT 2010			
Acquisition finished: Fri Sep	Acquisition finished: Fri Sep 10 15:06:13 EDT 2010			
Acquire All acquisition was s	uccessful			
Results:				
Assertion & Expected Result		Actual Result		
SPT-CA-29 Acquire-All data		as expected		
SPT-CA-30 Select-All data of	jects acquisition.	as expected		
SPT-CA-31 Select-Individual	data objects acquisition.	as expected		
Analysis: Expected results achieved				

### 5.2.13 SPT-32 (iPhone 3Gs)

a	-32 jz method	
Case	SPT-32 Perform a physical acquisition and review reports for	recoverable
Summary:	deleted data.	
Assertions:	SPT-AO-32 If the cellular forensic tool supports the interpr	etation of
INDUCT CIOID	address book entries present on the target device then the t	
	report recoverable active and deleted data or address book d	
	a useable format.	ata remmants in
	SPT-AO-33 If the cellular forensic tool supports the interpr	
	calendar, tasks, or notes present on the target device then	
	report recoverable active and deleted calendar, tasks, or no	te data
	remnants in a useable format.	
	SPT-AO-34 If the cellular forensic tool supports the interpr logs present on the target device then the tool shall report active and deleted call or call log data remnants in a useab	recoverable le format.
	SPT-AO-35 If the cellular forensic tool supports the interpr messages present on the target device then the tool shall re recoverable active and deleted SMS messages or SMS message d	port
	a useable format.	
	SPT-AO-36 If the cellular forensic tool supports the interpretation of EMS messages present on the target device then the tool shall report	
	recoverable active and deleted EMS messages or EMS message data remnants in a useable format.	
	SPT-AO-37 If the cellular forensic tool supports the interpr audio files present on the target device then the tool shall	report
	recoverable active and deleted audio data or audio file data remna useable format.	
	SPT-AO-38 If the cellular forensic tool supports the interpr	
	graphic files present on the target device then the tool shall recoverable active and deleted graphic file data or graphic file	
	remnants in a useable format.	
	SPT-AO-39 If the cellular forensic tool supports the interpretation of video files present on the target device then the tool shall report recoverable active and deleted video file data or video file data remnant	
	in a useable format.	
Tester	rpa	
Name: Test Host:	Magnum	
	Magnum	
Test Date:	Mon Sep 13 15:01:12 EDT 2010	
Device:	iPhone3Gs	
Source	OS: WIN XP	
Source	OS: WIN XP Interface: cable	
Source Setup:	OS: WIN XP Interface: cable Created by jz_method	
Source Setup:	OS: WIN XP Interface: cable	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was not recovered Deleted Call log data was not recovered	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted Call log data was not recovered Deleted text message data was recovered	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered	
Source Setup:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered	
Source Setup: Log Highlights:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered	Actual Result
Source Setup: Log Highlights:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered Deleted video data was recovered  Massertion & Expected Result  SPT-AO-32 Physical acquisition, recovery of deleted	
Source Setup: Log Highlights:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered Deleted video data was recovered  Assertion & Expected Result  SPT-AO-32 Physical acquisition, recovery of deleted address book entries.	Result as expected
Source Setup: Log Highlights:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered Deleted video data was recovered  Massertion & Expected Result  SPT-AO-32 Physical acquisition, recovery of deleted address book entries.  SPT-AO-33 Physical acquisition, recovery of deleted PIM	Result
Source Setup: Log Highlights:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered Deleted video data was recovered  Assertion & Expected Result  SPT-AO-32 Physical acquisition, recovery of deleted address book entries.  SPT-AO-33 Physical acquisition, recovery of deleted PIM data.	as expected as expected
Source Setup: Log Highlights:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered Deleted video data was recovered  Massertion & Expected Result  SPT-AO-32 Physical acquisition, recovery of deleted address book entries.  SPT-AO-33 Physical acquisition, recovery of deleted PIM data.  SPT-AO-34 Physical acquisition, recovery of deleted call	Result as expected
Source Setup: Log Highlights:	OS: WIN XP Interface: cable  Created by jz_method Acquisition started: Mon Sep 13 15:01:12 EDT 2010 Acquisition finished: Mon Sep 13 15:07:39 EDT 2010  Deleted address book entries were not recovered Deleted PIM data was recovered Deleted PIM data was not recovered Deleted Call log data was recovered Deleted Call log data was not recovered Deleted text message data was recovered Deleted audio data was recovered Deleted graphic data was recovered Deleted video data was recovered  Assertion & Expected Result  SPT-AO-32 Physical acquisition, recovery of deleted address book entries.  SPT-AO-33 Physical acquisition, recovery of deleted PIM data.	as expected as expected

Test Case SPT	-32 jz_method	
	messages.	
	SPT-AO-36 Physical acquisition, recovery of deleted EMS	as expected
	messages.	
	SPT-AO-37 Physical acquisition, recovery of deleted stand-	as expected
	alone audio files.	
	SPT-AO-38 Physical acquisition, recovery of deleted	as expected
	graphic files.	
	SPT-AO-39 Physical acquisition, recovery of deleted video	as expected
	files.	
Analysis:	Expected results achieved	

# 5.2.14 SPT-33 (iPhone 3Gs)

Test Case SPT	-33 jz_method	
Case	SPT-33 Acquire mobile device internal memory and review data containing	
Summary:	non-ASCII characters.	
Assertions:	SPT-AO-40 If the cellular forensic tool supports display of non-ASCII characters then the application should present address book entries in their native format.  SPT-AO-41 If the cellular forensic tool supports proper display of non-ASCII characters then the application should present text messages in their native format.	
Tester Name:	rpa	
Test Host:	Magnum	
Test Date:	Mon Sep 13 10:45:37 EDT 2010	
Device:	iPhone3Gs	
Source	OS: WIN XP	
Setup:	Interface: cable	
Log Highlights:	Created by jz_method Acquisition started: Mon Sep 13 10:45:37 EDT 2010 Acquisition finished: Mon Sep 13 10:52:21 EDT 2010  Non-ASCII Address book entries were acquired and properly displayed Non-ASCII text messages were acquired and properly displayed	
Results:		
	Assertion & Expected Result	Actual Result
	SPT-AO-40 Acquisition of non-ASCII address book entries/ADNs.	as expected
	SPT-A0-41 Acquisition of non-ASCII text messages.	as expected
Analysis:	Expected results achieved	·

# 5.2.15 SPT-40 (iPhone 3Gs)

	,	
Test Case SPT-40 jz_method		
Case	SPT-40 Acquire mobile device internal memory and review data containing GPS	
Summary:	longitude and latitude coordinates.	
Assertions:	SPT-AO-44 If the cellular forensic tool supports acquisition of GPS data	
	then the tool shall present the user with the longitude and latitude	
	coordinates for all GPS-related data in a useable format.	
Tester Name:	rpa	
Test Host:	Magnum	·
Test Date:	Mon Sep 13 10:29:55 EDT 2010	
Device:	iPhone3Gs	
Source	OS: WIN XP	
Setup:	Interface: cable	
Log	Created by jz_method	
Highlights:	Acquisition started: Mon Sep 13 10:29:55 EDT 2010	
	Acquisition finished: Mon Sep 13 10:37:29 EDT 2010	
	GPS Coordinate data was successfully acquired	
Results:		
	Assertion & Expected Result	Actual Result
	SPT-AO-44 Acquire data, check GPS data for consistency.	as expected
Analysis:	Expected results achieved	
_		

# **Test Results for Mobile Device Acquisition Tool:**

Zdziarski's Method



#### **About the National Institute of Justice**

A component of the Office of Justice Programs, NIJ is the research, development and evaluation agency of the U.S. Department of Justice. NIJ's mission is to advance scientific research, development and evaluation to enhance the administration of justice and public safety. NIJ's principal authorities are derived from the Omnibus Crime Control and Safe Streets Act of 1968, as amended (see 42 U.S.C. §§ 3721–3723).

The NIJ Director is appointed by the President and confirmed by the Senate. The Director establishes the Institute's objectives, guided by the priorities of the Office of Justice Programs, the U.S. Department of Justice, and the needs of the field. The Institute actively solicits the views of criminal justice and other professionals and researchers to inform its search for the knowledge and tools to guide policy and practice.

#### **Strategic Goals**

NIJ has seven strategic goals grouped into three categories:

#### Creating relevant knowledge and tools

- 1. Partner with state and local practitioners and policymakers to identify social science research and technology needs.
- 2. Create scientific, relevant, and reliable knowledge—with a particular emphasis on terrorism, violent crime, drugs and crime, cost-effectiveness, and community-based efforts—to enhance the administration of justice and public safety.
- Develop affordable and effective tools and technologies to enhance the administration of justice and public safety.

#### Dissemination

- 4. Disseminate relevant knowledge and information to practitioners and policymakers in an understandable, timely and concise manner.
- 5. Act as an honest broker to identify the information, tools and technologies that respond to the needs of stakeholders.

#### **Agency management**

- 6. Practice fairness and openness in the research and development process.
- 7. Ensure professionalism, excellence, accountability, cost-effectiveness and integrity in the management and conduct of NIJ activities and programs.

#### **Program Areas**

In addressing these strategic challenges, the Institute is involved in the following program areas: crime control and prevention, including policing; drugs and crime; justice systems and offender behavior, including corrections; violence and victimization; communications and information technologies; critical incident response; investigative and forensic sciences, including DNA; less-than-lethal technologies; officer protection; education and training technologies; testing and standards; technology assistance to law enforcement and corrections agencies; field testing of promising programs; and international crime control.

In addition to sponsoring research and development and technology assistance, NIJ evaluates programs, policies, and technologies. NIJ communicates its research and evaluation findings through conferences and print and electronic media.

To find out more about the National Institute of Justice, please visit:

http://www.ojp.usdoj.gov/nij

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