# Web TCT Manager User Guide

Version 1.0, for Tizen 2.2.1

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## 1 Introduction

This document provides comprehensive information about Web TCT Manager, including an Overview, Installation Instructions, Operating Instructions, and Concluding Routines etc.

### 2 Overview

Web TCT Manager is a Graphic User Interface (GUI) and serves as a major component of Tizen Compliance Tests (TCT) tool set.

By providing a unified web UI, Web TCT Manager allows users to manage both automated and manual test execution, including the following:

- Save test case information as test plan, load and execute tests.
- Run both automated and manual test cases, and add test results to manual test cases.
- Automatically generates a report after executing test cases, user can view, rerun, resume, remove or export the report.

### **3** Prerequisites

Make sure you have these items in place before starting:

- One of the following Linux distribution versions is installed:
  - Ubuntu 12.04 (32-bit)
  - Ubuntu 12.04 (64-bit)
  - Ubuntu 12.10 (32-bit)
  - Ubuntu 12.10 (64-bit)
- Tizen capable devices with latest Tizen implementation (for example, M0 or Lunchbox) are available.
- The sdb software is correctly installed.
- The network environment is ready for getting dependency packages from a remote repository or internal mirror.
- There is a USB connection between the host and the target device.
- Enable "USB debugging" option in settings on target device
- Ensure the "unzip" command-line tool installed on target device.

### 4 Installing Web TCT Manager

Make sure the installation environment is ready before starting. For detailed instructions, refer to <u>"Installing the TCT Tools" section in the Web TCT User Guide</u>.

To install Web TCT Manager, perform the following procedure:

 Install dependency java runtime openjdk 7: Note: Go directly to step2 if your system already meets the requirement. For Ubuntu, follow the below command, as appropriate:

```
$ sudo apt-get install openjdk-7-jre
```

2. If user wants to install Web TCT Manager only in host, run command:

```
$ cd <TCT_Directory>/tools
$ sudo ./tct-config-host.sh
```

After the successful installation, run command "tct-mgr" in terminal to launch Web TCT Manager.

### 5 Typical Usage

### 5.1 Showing a Test Plan

Test cases can be filtered according to the execution type: automated and manual.

The default test plan and all test cases will be selected when the plan UI is displayed, as shown in Figure 5-1.

⊗⊜	Tests					43
Plan Exec	ute Reports				<b>TIZE</b> Complia	
	test 💌				Ru	in
Execution Type:	▼				Pre-Co	onfigure
•						
🔻 👿 All		Automated	Manual	Total	Version	Ê
🔻 👿 Compliance						
🗹 tct-capability-tests		17	0	17	2.4.4	Ξ
👿 tct-security-tcs-tests		11	0	11	2.4.4	
🔻 👿 Supplementary APIs						$\cup$
🗹 tct-fullscreen-nonw3d		12	0	12	2.4.4	_
👿 tct-typedarrays-nonw	3c-tests Suit	te: tct-fullscre	en-nonw3	c-tests(Auto	mated: 12, Manu	al: 0, Ver
🗹 tct-webgl-nonw3c-tes	its	889	0	889	2.4.4	
🔻 👿 Tizen Web Device AP	ls					
🗹 tct-alarm-tizen-tests		57	0	57	2.4.4	
🗹 tct-appcontrol-tizen-t	ests	5	0	5	2.4.4	
🗹 tct-application-tizen-t	ests	159	6	165	2.4.4	
🗹 tct-bluetooth-tizen-te	sts	293	34	327	2.4.4	
🗹 tct-bookmark-tizen-te	ests	36	0	36	2.4.4	
👿 tct-calendar-tizen-tes	its	315	0	315	2.4.4	
🗹 tct-callhistory-tizen-te	ests	80	27	107	2.4.4	
🗹 tct-contact-tizen-test	s	325	0	325	2.4.4	
🗹 tct-content-tizen-test	s	135	0	135	2.4.4	
🗹 tct-datacontrol-tizen-	tests	99	0	99	2.4.4	
🗹 tct-datasync-tizen-tes	sts	63	0	63	2.4.4	
🗹 tct-download-tizen-te	sts	47	0	47	2.4.4	
₩ tct-filesystem-tizen-te	ests	283	0	283	2.4.4	Ţ

Figure 5-1 Show The Full Test Plan UI.

### 5.2 Creating/Saving a Test Plan

To create and save a test plan:

1. Change the execution type (optional), or select the test packages and save in one test plan, as shown in Figure 5-2. Use the Package Name checkbox to check or uncheck all test packages.

<mark>⊗</mark> ⊜  ■ Tizen Compliance Tests <u>S</u> ettings <u>H</u> elp					
Plan Execute Reports				Complia	
Test Plan: Full_test v		S	Step3 click Run	R	un
Execution Type: Automated v	Step2 select ex	ecute type	е	Pre-C	Configure
<b>6 6</b>					
▼ □ All	Automated	Manual	Total	Version	Â
Compliance					
🕼 tct-capability-tests	17	0	17	2.4.4	=
tct-security-tcs-tests	11	0	11	2.4.4	
🔻 🚺 Supplementary APIs					
👿 tct-fullscreen-nonw3c-tests	12	0	12	2.4.4	_
Tattypedarrays.popw3tepstsChecking package	<b>ge</b> 80	0	80	2.4.4	_
tct-webgl-nonw3c-tests	889	0	889	2.4.4	_
🔻 🚺 Tizen Web Device APIs					
🐷 t-alarm-tizen-tests	57	0	57	2.4.4	
Strappcontrol-tizen-tests	5	Suite: to	t-alarm-tizen-t	ests(Automate	ed: 57 N
tct-application-tizen-tests	159	0	105	2,4,4	
tct-bluetooth-tizen-tests	293	34	327	2.4.4	
tct-bookmark-tizen-tests	36	0	36	2.4.4	
tct-calendar-tizen-tests	315	0	315	2.4.4	
tct-callhistory-tizen-tests	80	27	107	2.4.4	
tct-contact-tizen-tests	325	0	325	2.4.4	
tct-content-tizen-tests	135	0	135	2.4.4	
tct-datacontrol-tizen-tests	99	0	99	2.4.4	
tct-datasync-tizen-tests	63	0	63	2.4.4	
tct-download-tizen-tests	47	0	47	2.4.4	
☐ tct-filesystem-tizen-tests	283	0	283	2.4.4	

Figure 5-2 Change Test Plan

Click Run button and a dialog will pop up, as shown in Figure 5-3.
 Test Plan Changed
 Changes have been made to the test plan 'Full\_test'.
 What would you like to to?

what would y	ou like to to?		
(	🔿 Override 'Fu	ll_test' plan	
	🖲 Create a ne	w plan	
(	Execute as	'temp' plan	
	Cancel	ок	]

Figure 5-3 Prompt for Creating Test Plan

- 3. Select the item "Create a new plan" and click OK button to save a new test plan. Select the item "Override 'Full\_test' plan" and click OK button, the original plan will be changed, and then run test plan. Select the item "Execute as 'temp' plan", this plan will be saved as a temp plan.
- 4. Select "Create a new plan" and click **OK** button, a dialog pops up where you can enter a new plan name, as shown in Figure 5-4. Enter a new plan and click **OK** button.

😣 Input						
?	Please input the new plan name [test_plan]					
	🔇 Cancel 🛛 🗸 OK					

Figure 5-4 Create a New Test Plan

After enter the new plan name and click **OK** button, the Plan UI will switch to Execute UI and run the test plan, as shown in Figure 5-5.

<mark>⊗</mark> ⊜  ■  Tizen Compliance Tests <u>S</u> ettings <u>H</u> elp		
Plan Execute	Reports	TIZEN <sup>®</sup> Compliance
Executing plan test_plan	The new plan name	Suspend
	0%	
<ul> <li>Total: (171)</li> <li>Auto Suites:(171) tct-alarm-tizen-tests(57) tct-appcontrol-tizen-tests(5) tct-capability-tests(17) tct-fullscreen-nonw3c-tests(12) tct-typedarrays-nonw3c-tests( Manual Suites:(0)</li> </ul>	Pass Fail Block N/A 0/57 0/5 0/17 0/12 0/80	Console Export ar00] key[install_percent] val[68] _return_cb req_id[1] pkg_type[wgt] pkgid[testal ar00] key[install_percent] val[68]
		_return_cb req_id[1] pkg_type[wgt] pkgid[testal ar00] key[install_percent] val[80] _return_cb req_id[1] pkg_type[wgt] pkgid[testal ar00] key[install_percent] val[84] _return_cb req_id[1] pkg_type[wgt] pkgid[testal ar00] key[install_percent] val[84] _return_cb req_id[1] pkg_type[wgt] pkgid[testal ar00] key[install_percent] val[84]

Figure 5-5 Execute a New Plan

### 5.3 Selecting a Test Plan

⊗⊜∎ Tizen Com <u>S</u> ettings <u>H</u> elp	pliance Tests						
Plan	Execute	Reports				Complia	
Test Plan:	Full_test default_testplan	•				Ru	In
Execution Type:	temp test-plan					🗌 Pre-C	onfigure
ē •							
🔻 📝 All			Automated	Manual	Total	Version	Ê
🔻 👿 Compliance							
👿 tct-capability	/-tests		17	0	17	2.4.4	Ξ
👿 tct-security-t	cs-tests		11	0	11	2.4.4	
🔻 🗹 Supplementa	ry APIs						
Tet fullessee	nonu2e teete		10	0	10	0 A A	

Select a plan, the packages in the plan will be selected. As shown in Figure 5-6

Figure 5-6 Select an Existing Plan

### 5.4 Running Test

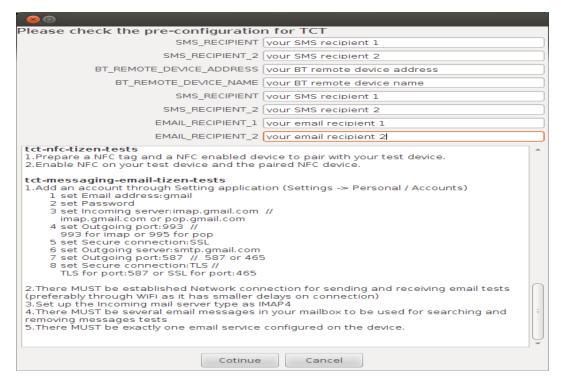
To select a test plan:

1. Select an existing plan. For details, see section 5.4.

2. Click **Run** button on the Plan UI. The dialog of health check will be displayed. For details, please refer to section 7.1.

3. The Pre-configure steps for TCT testing page appears (see Figure 5-7) if the test plan contains package that needs some pre-configure, after configuration, click **Continue** button to go to the Execute page. For details for pre-configure, please refer to section 7.2.

Note: If the checkbox of Default pre-configure is checked in plan UI, it will not show the pre-configure dialog to end user.



#### Figure 5-7 Showing Dialog of Pre-configure

5. Select <b>OK</b> button, the UI will switch to Execute UI, as Figure 5-8.	

Tizen Compliance Tests ettings <u>H</u> elp		
Plan Execute	Reports	
xecuting plan: test_plan		Susper
atus:Uploading the suite 'tct-appcont	trol-tizen-tests'	
	20%	
Total: (171) ▼ Auto Suites:(171)	Pass Fail Block N/A	Console
tct-alarm-tizen-tests(57)	57 0 0 0	Export
tct-appcontrol-tizen-tests(5)	0/5	[ cases result saved to resultfile ]
tct-capability-tests(17)	0/17	
tct-fullscreen-nonw3c-tests(12)	0/12	[ test complete at time: 2013-10-15_10_46_10 ]
tct-typedarrays-nonw3c-tests(	0/80	[ start merging test result xml files, this might ta e some time, please wait ]
		<pre>[total case number: 57] [pass rate: 100.00%] [PASS case number: 57] [FAL case number: 0] [BLOCK case number: 0] [Generate result xml: /opt/testkit/lite/2013-10-1 -10:45:34.025760/tests.result.xml] [merge complete, write to the result file, this m ht take some time, please wait ] [copy result xml to output file: /opt/tct/managei esult/2013-10-15-10:44:57-270/tct-alarm-tizen-t sts.auto.xml] [ all tasks for testkit lite are accomplished, goo bye ] return_cb req_id[1] pkg_type[wgt] pkgid[api1a arm0] key[start] val[uninstall] return_cb req_id[1] pkg_type[wgt] pkgid[api1a arm0] key[end] val[ok] spend time for pkgcmd is [971]ms Uninstall tct-alarm-tizen-tests done Kill the processes of testalar00 done return_cb req_id[1] pkg_type[wgt] pkgid[testa ar00] key[start] val[uninstall]</pre>

5.4.1 Running Automated Test

To execute automated test cases:

1. Select an existing plan. For details, see section 5.4.

2. Select Automated as the execution type.

3. Click Run on the Plan UI.

When the Execute UI appears, the execution progress for automated packages will be shown in the progress bar, as shown in Figure 5-8.

5.4.2 Running Manual Test

To execute manual test cases:

1. Select an existing plan. For details, see section 5.3.

2. Select Manual as the execution type.

3. Click Run on the Plan UI.

After click **Run** button, the packages for the Manual cases are executed, as shown in Figure 5-9.

<u>S</u> ettings <u>H</u> elp Plan	Execute	Reports		
Executing plan:	manual_test			Suspen
status:Installing the	suite 'tct-application	n-tizen-tests' for ma	nual testin	a
			0%	
	40) n-tizen-tests(6) tizen-tests(34)	Pass Fail Blo	ick N/A	Console           pli0] key[install_percent] val[68] _return_cb req_id[1] pkg_type[wgt] pkgid[apil.af pli0] key[install_percent] val[68] _return_cb req_id[1] pkg_type[wgt] pkgid[apil.af pli0] key[install_percent] val[68] _return_cb req_id[1] pkg_type[wgt] pkgid[apil.af pli0] key[install_percent] val[80] _return_cb req_id[1] pkg_type[wgt] pkgid[apil.af pli0] key[install_percent] val[84] _return_cb req_id[1] pkg_type[wgt] pkgid[apil.af pli0] key[install_percent] val[84]

Figure 5-9 Executing Manual Test Cases

### 5.5 Stopping a Test

Click the suspend button in execute UI to stop executing the test plan.

After stopping a test plan, click icon of report UI to resume test.

# 6 Performing Concluding Routines

### 6.1 Viewing Report List

To view all reports list in report UI, click one item to view summary information. As figure 6-1.

80	😣 🖨 💿 Tizen Compliance Tests								
<u>S</u> ettin	igs <u>H</u> elp								
	Plan	Execute	Reports				Comp		
Report	s for all test ex	ecutions					R	emo	ove
	Test Time		Test Plan	Device Model	Status (Auto)	Status (Ma	Operat	ion	
	2013-10-15-11:0	) <u>2:16-599</u>	man <mark>l</mark> ual_test	RD-PQ			Ŧ	4	<u>c</u>
	2013-10-15-10:4	14:57-270	test_plan	RD-PQ			Ŧ	4	Ċ.

Figure 6-1 Report List

To view summary of report, click on the test time entry, as shown by [1] in Figure 6-1. The summary reports will be displayed in the page, as shown in Figure 6-2, Figure 6-3, and Figure 6-4

### **TCT Report**

Test Summary		Device Information			
Test Plan Name	Full_test	Host Device	Linux-3.5.0-17-generic-i686-with-Ubuntu-12.10-quanta		
Build ID	Tizen_Ref.Device-PQ_20131022.1656	Manufacturer	samsung		
Test Total	994	Device Model	RD-PQ		
Test Passed	981	Device ID	4df70f0e66263000		
Test Failed	1	Screen Size	58mm x 103mm		
Test Blocked	12	Resolution	720 x 1280		
Test Not Executed	0	-			
Time	2013-10-25_10_18_31 ~ 2013-10-25_10_24_02				

#### **Device Capability**

#### **Test Summary by Suite**

Suite	Total	Passed	Failed	Blocked	Not Executed	Ratio
tct-2dtransforms-css3-tests	34	34	0	0	0	100.00%
tct-appcontrol-tizen-tests	5	5	0	0	0	100.00%

Figure 6-2 Test summary and device information

### **Device Capability**

Capability Name	Туре	Value
accelerometer	boolean	true
accelerometerWakeup	boolean	true
autoRotation	boolean	true
barometer	boolean	false
barometerWakeup	boolean	false
bluetooth	boolean	true
camera	boolean	true
cameraBack	boolean	true
cameraBackFlash	boolean	true
cameraFront	boolean	false
cameraFrontFlash	boolean	false
dataEncryption	boolean	false
duid	String	2.2ERROR
fmRadio	boolean	false
graphicsAcceleration	boolean	true
gyroscope	boolean	true
gyroscopeWakeup	boolean	false
inputKeyboard	boolean	false
inputKeyboardLayout	boolean	true
location	boolean	true
locationGps	boolean	true
locationWps	boolean	true
magnetometer	boolean	true
magnetometerWakeup	boolean	false
microphone	boolean	true
multiTouchCount	Integer	10
nativeApiVersion	String	2.2

Figure 6-3 Device capability report

#### Test Summary by Suite

Suite	Total	Passed	Failed	Blocked	Not Executed	Ratio	
tct-messaging-tizen-tests	646	367	272	7	0	57%	42%

Figure 6-4 Test summary by suite

Suite Test Results				
est Suite: tct-messaging-tizen-tests (All)	Show all Show only failed Show only blocked S	how onl	y not executed Summa	
Case_ID	Purpose	Result	Stdout	
Test Set: Messaging			dlog	
ConversationArraySuccessCallback_onsuccess_checking	check the function of findConversations with sms filter	PASS	[Message]	
FolderArraySuccessCallback_onsuccess_checking	check the function of onsuccess in MessageFolderArraySuccessCallback	PASS	[Message]	
Message_addUpdateRemove	Add a draft message and update it, and then remove it	FAIL	[Message] ###Test Start### No services found expectee messaging-tizen-tests/resou /opt/tct-messaging-tizen-test messaging-tizen-tests/mess /api1msg000/res/wgt/opt/tct /api1msg000/res/wgt/opt/tct End###	
MessageArraySuccessCallback_notexist	Check if interface MessageArraySuccessCallback exists, it should not.	PASS	[Message]	
MessageArraySuccessCallback_onsuccess	Check if method onsuccess of MessageArraySuccessCallback works	FAIL	[Message] ###Test Start### 'undefined' is not an object( tests/messaging/Message/ /res/wgt/opt/tct-messaging- /opt/tct-messaging-tizen-tes	
MessageArraySuccessCallback_onsuccess_checking	check the function of onsuccess in MessageArraySuccessCallback by checking	PASS	[Message]	
MessageAttachment_constructor	check new tizen.MessageAttachment(String filePath, String mimeType?) works (is supported)	PASS	[Message]	
MessageAttachment_constructor_minargs	check new tizen.MessageAttachment(String filePath) works (is supported)	PASS	[Message]	
MessageAttachment_exist	Check if MessageAttachment exists	PASS	[Message]	
MessageAttachment_extend	Check if instance of interface MessageAttachment can be extended with new property	PASS	[Message]	
MessageAttachment_filePath_attribute	Check if attribute filePath of MessageAttachment exists, has type DOMString and is readonly	PASS	[Message]	
MessageAttachment_filePath_exist	check if the attribute filePath in MessageAttachment	PASS	[Message]	
MessageAttachment_id_attribute	Check if attribute id of MessageAttachment exists, has type MessageAttachmentId and is readonly	PASS	[Message]	
MessageAttachment_id_exist	check if the attribute id in MessageAttachment	PASS	[Message]	

### Cuita Test Desulta

Figure 6-5 show detail test results

Choose one of the following to customize the report view:

Show all: show all the results

Show only failed: show cases that failed

Show only blocked: show cases that have blocked results.

Show only not executed: show cases that have non-applicable (N/A) results.

#### 6.2 **Exporting a Report**

Click the icon of 💶 in Figure 6-1, to download consolidated reports.

#### 6.3 **Rerunning Failed Test Cases**

If the status of test results is Fail, Block, or N/A, Click the icon of will rerun non-passed

test cases.

To rerun test cases:

1. Click the icon of sile in Figure 6-1, to open the Execute page. The failed test cases will be executed again.

2. Click the **Yes** button, the UI will switch to execute UI, and only suites with non-passed cases will be installed, executed and un-installed in rerun cycle.

### 6.4 Resuming Test

If the status of test plan is stopped, click icon of 🔼 to resume the test plan.

Click the icon of in Figure 6-1, to open the Execute page. The test case with nonexecuted cases will be installed and executed again.

### 6.5 Removing Test Report.

Select one or multiple test reports in report UI, then click Remove button, the selected items will be removed after user confirming.

## 7 Introduction of Test Check/Pre-configure

### 7.1 Health Check

During the process of test execution, for any one of the running scenarios:new running, rerunning, resuming, an generic process will be invoked by Web TCT Manager to ensure the device status ready for testing:

Currently four apps will be checked: tinyweb, testkit-stub, getCap, test-config tool. If any one of them isn't alive and can't be re-launched on the device under testing, Health check will get failed. And the testing will break down immediately. So a dialog will pop-up to show checking progress. As Figure 7-1.

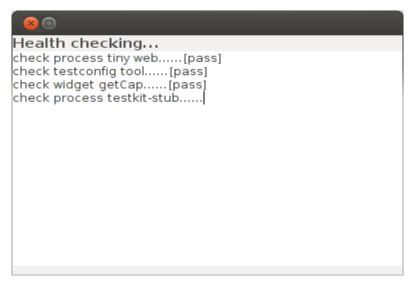


Figure 7-1 Dialog of Health Check

### 7.2 Pre-Configure

During the process of test execution, for any one of the running scenarios: new running, rerunning, resuming, an optional process pre-configure will be invoked by Web TCT Manager. It is usually invoked after health check.

If the current test plan includes these test suites need to set some configure information in advance, the pre-conguration dialog will Pop-up.

The pre-configure process include 2 types of preparing working, as Figure 7-2.

1. Set test variables for a test running: Provide input edit and set some test variable with user inputs automatically on device-side.

2. Prompt the detailed steps will need to be completed by user.

8					
Please check the pre-configuration	n for TCT				
SMS_RECIPIENT	vour SMS recipient 1				
SMS_RECIPIENT_2	vour SMS recipient 2				
BT_REMOTE_DEVICE_ADDRESS	vour BT remote device address				
BT_REMOTE_DEVICE_NAME	vour BT remote device name				
SMS_RECIPIENT	vour SMS recipient 1				
SMS_RECIPIENT_2	vour SMS recipient 2				
EMAIL_RECIPIENT_1	vour email recipient 1				
EMAIL_RECIPIENT_2	vour email recipient 2				
tct-nfc-tizen-tests         1. Prepare a NFC tag and a NFC enabled device to pair with your test device.         2. Enable NFC on your test device and the paired NFC device.         tct-messaging-email-tizen-tests         1.Add an account through Setting application (Settings -> Personal / Accounts)         1 set Email address:gmail         2 set Password         3 set Incoming server:imap.gmail.com         4 set Outgoing port:993 //         993 for imap or 995 for pop         5 set Secure connection:SL         6 set Outgoing port:587 // 587 or 465         8 set Secure connection:TLS //         TLS for port:587 or SSL for port:465         2.There MUST be established Network connection for sending and receiving email tests (preferably through WiFi as it has smaller delays on connection)         3.Set up the Incoming mail server type as IMAP4         4.There MUST be several email messages in your mailbox to be used for searching and					
removing messages tests 5.There MUST be exactly one email service Cotinue	Cancel				

Figure 7-2. Dialog of Pre-configure