

Web TCT Manager User Guide

Version 1.0, for Tizen 3.0

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Contents

1	Introduction.....	3
2	Overview	3
3	Prerequisites	3
4	Installing Web TCT Manager.....	4
5	Typical Usage	4
5.1	Showing a Test Plan	4
5.2	Creating/Saving a Test Plan	5
5.3	Selecting a Test Plan	8
5.4	Running Test	9
5.5	Stopping a Test.....	12
6	Performing Concluding Routines.....	12
6.1	Viewing Report List	12
6.2	Exporting a Report	15
6.3	Rerunning Failed Test Cases	15
6.4	Resuming Test.....	16
6.5	Removing Test Report.....	16
7	Introduction of Multi-Profile.....	16
7.1	Multi-Profile.....	16
7.2	Usage of profile option.....	17
8	Introduction of Test Check/Pre-configure	18
8.1	Health Check	18
8.2	Pre-Configure	19

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)
 - Windows 7 (32-bit)
 - Windows 7 (64-bit)
- Tizen capable devices with latest Tizen implementation (for example, M0 or Lunchbox) are available.
- The gdb 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 chapter “Installing the TCT Tools” in the *Web TCT User Guide*.

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.

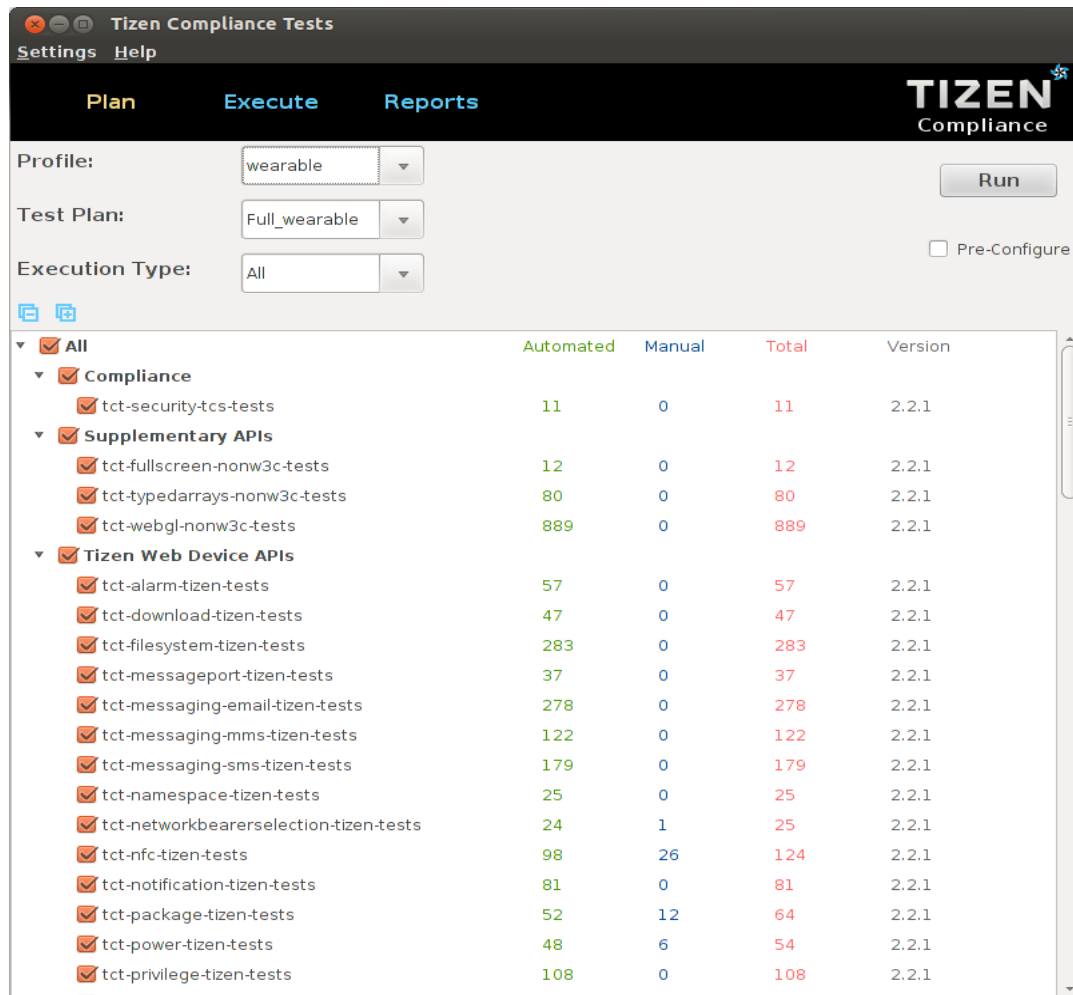


Figure 5-1 Show The Full Test Plan UI.

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.

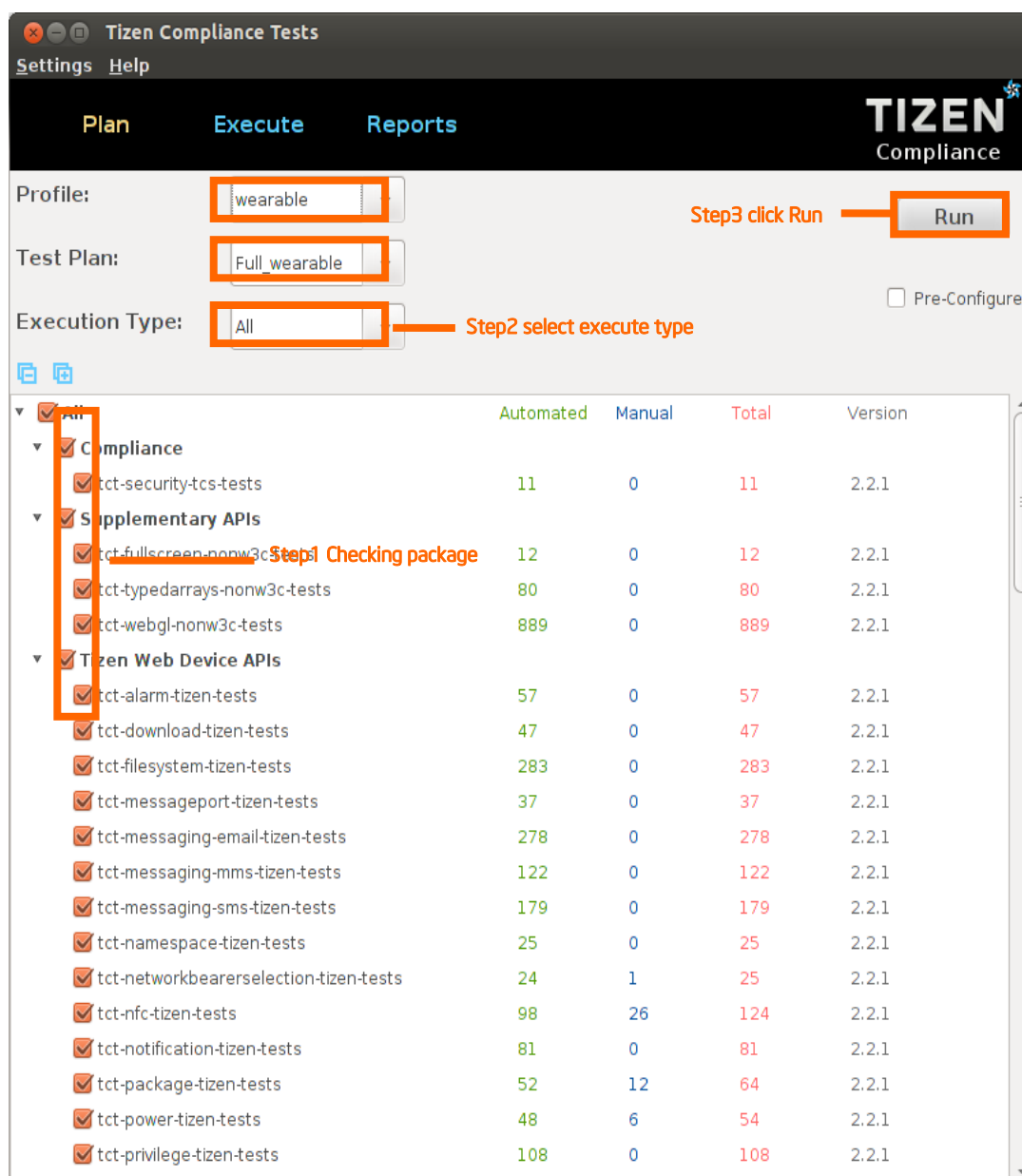


Figure 5-2 Change Test Plan

- Click **Run** button and a dialog will pop up, as shown in Figure 5-3.

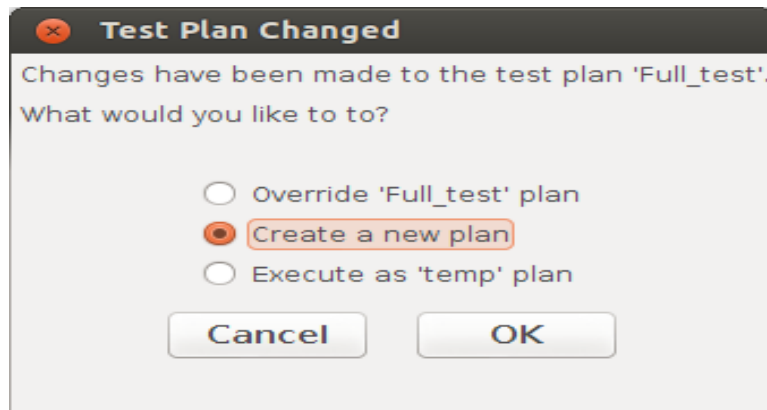


Figure 5-3 Prompt for Creating Test Plan

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.

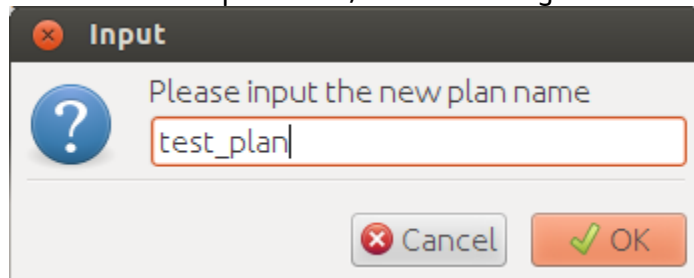


Figure 5-4 Create a New Test Plan

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.

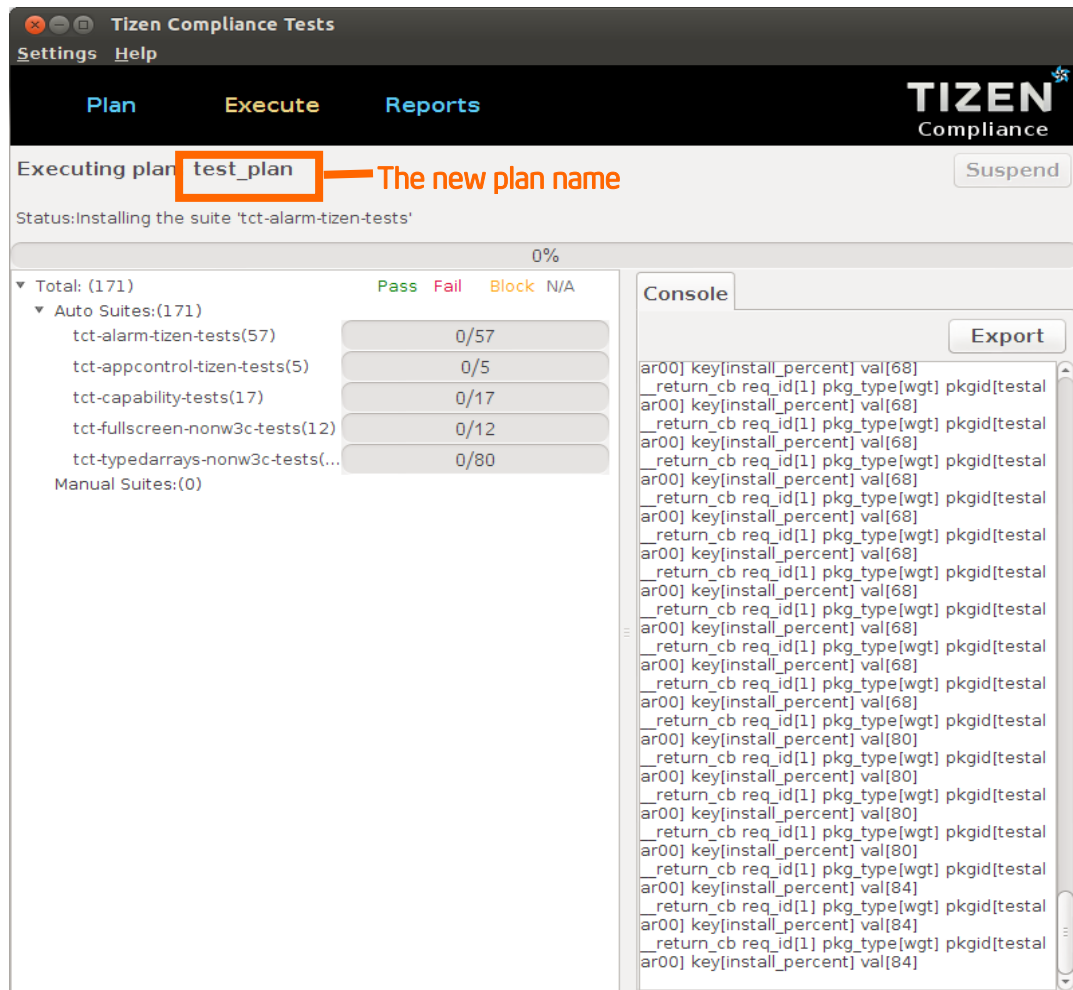


Figure 5-5 Execute a New Plan

5.3 Selecting a Test Plan

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

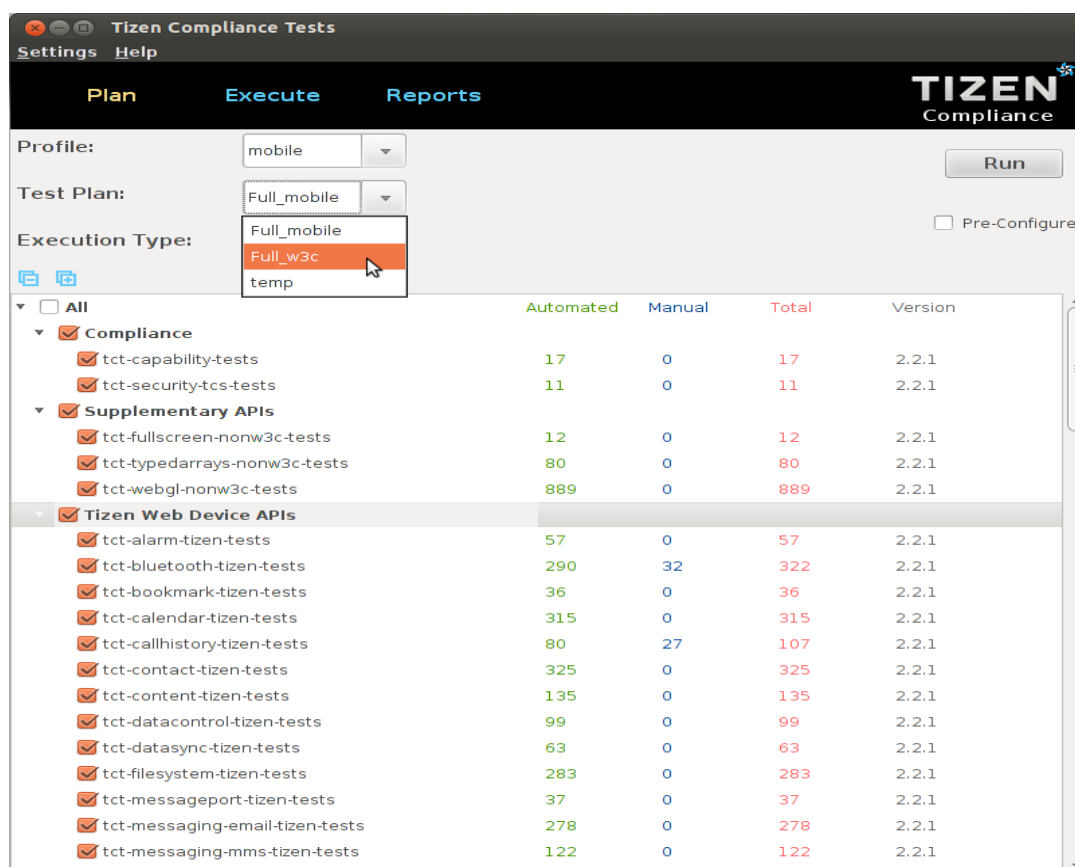


Figure 5-6 Select an Existing Plan

5.4 Running Test

To select a test plan:

1. Select an existing plan. For details, see section 5.3.
2. Click **Run** button on the Plan UI. The dialog of health check will be displayed. For details, please refer to section 8.1.
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 8.2.

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

Please check the pre-configuration of TCT

SMS_RECIPIENT_1 your SMS recipient 1

SMS_RECIPIENT_2 your SMS recipient 2

BT_REMOTE_DEVICE_ADDRESS your BT remote device address

BT_REMOTE_DEVICE_NAME your BT remote device name

MMS_RECIPIENT_1 your MMS recipient 1

MMS_RECIPIENT_2 your MMS recipient 2

EMAIL_RECIPIENT_1 peng.wang@borqs.com

EMAIL_RECIPIENT_2 peng.wang@borqs.com

6. Time format MUST be set as AM/PM format,

tct-nfc-tizen-tests

1. Manual tests requires a NFC tag (which supports NDEF) and a NFC enabled device to connect your test device with.
2. Enable NFC on your test device and the NFC device you will connect to.

tct-messaging-email-tizen-tests

1. There MUST be established Network connection for sending and receiving email tests (preferably through WiFi as it has smaller delays on connection)
2. Add an account through Settings application.
(Settings -> Personal / Accounts)
 - 2.1 Click "Add"
 - 2.1 Select type of account: Email
 - 2.2 Enter e-mail address and password (preferably Gmail account)
 - 2.3 Click "Next" - configuration will be verified and stored
3. There MUST be several email messages in your mailbox to be used for searching and removing messages tests
4. There MUST be exactly one email service configured on the device
5. EMAIL_RECIPIENT_1 is the e-mail address of the account You have set up on the device
6. EMAIL_RECIPIENT_2 is any valid e-mail address different from EMAIL_RECIPIENT_1

Continue Cancel

Figure 5-7 Showing Dialog of Pre-configure

5. Select **Continue** button, the UI will switch to Execute UI, as Figure 5-8.

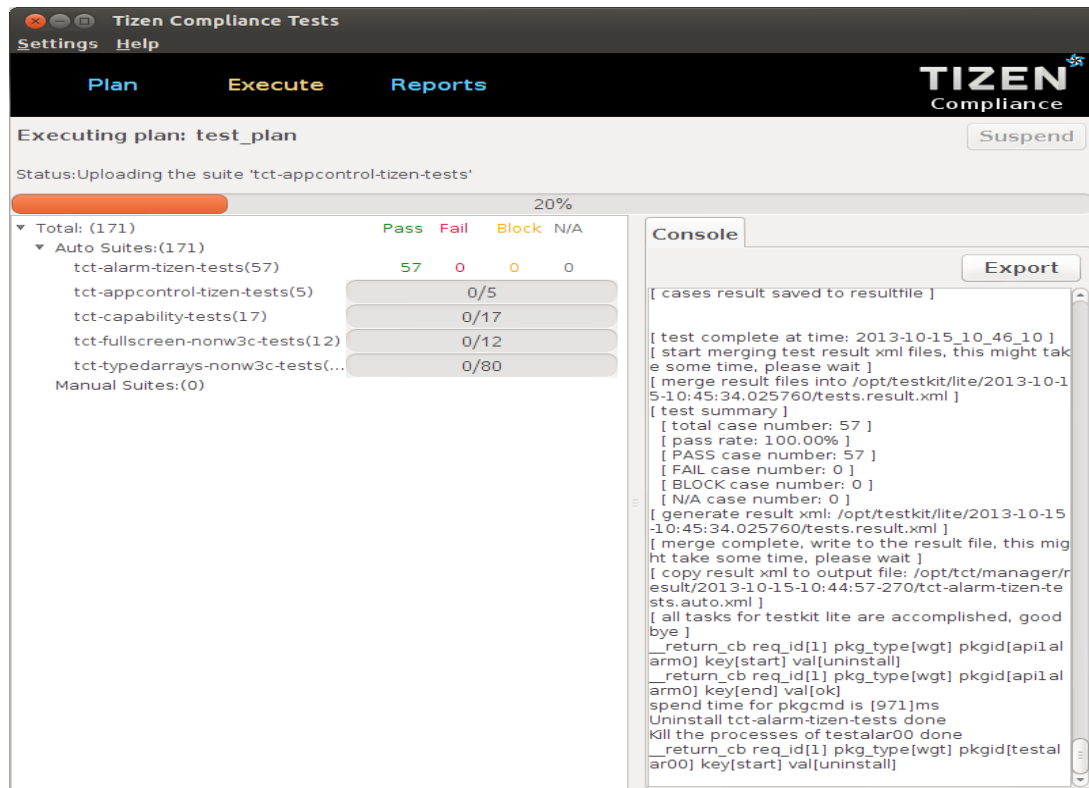


Figure 5-8 Execute UI

5.4.1 Running Automated Test

To execute automated test cases:

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

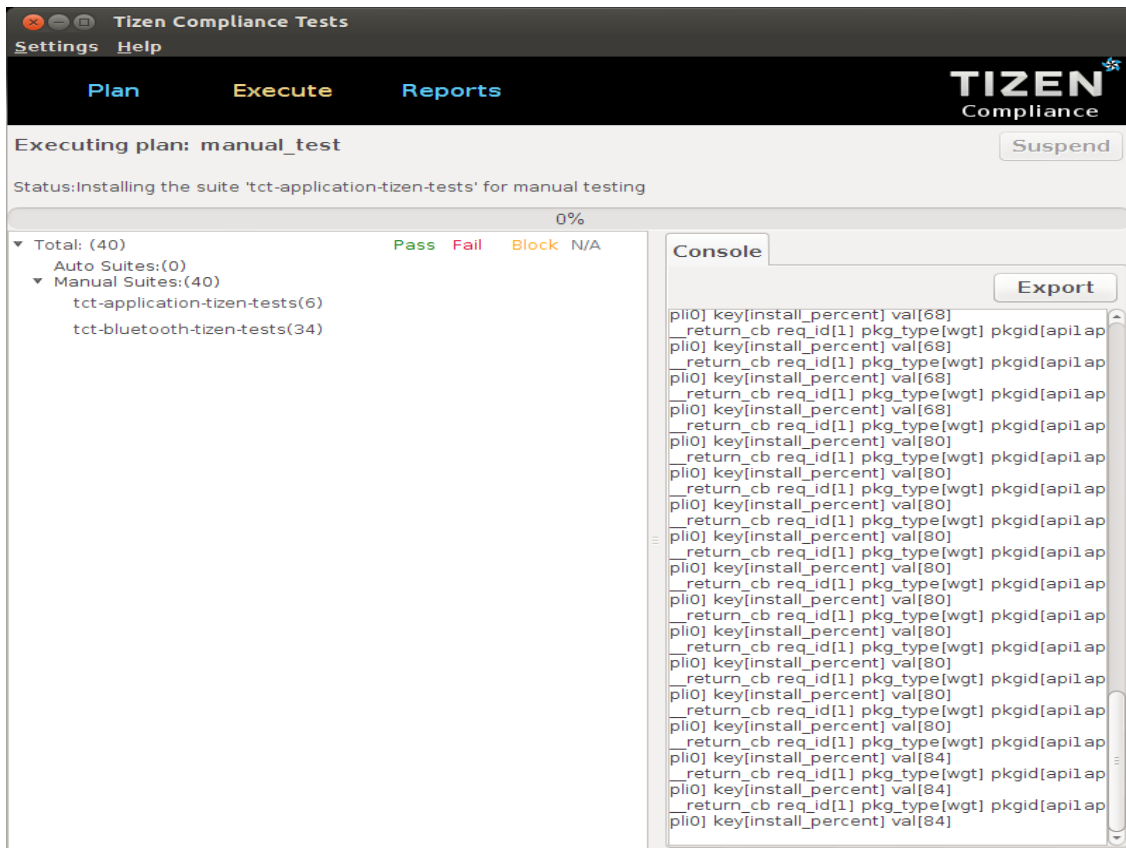


Figure 5-9 Executing Manual Test Cases

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.

For details, see section 6.4.

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.

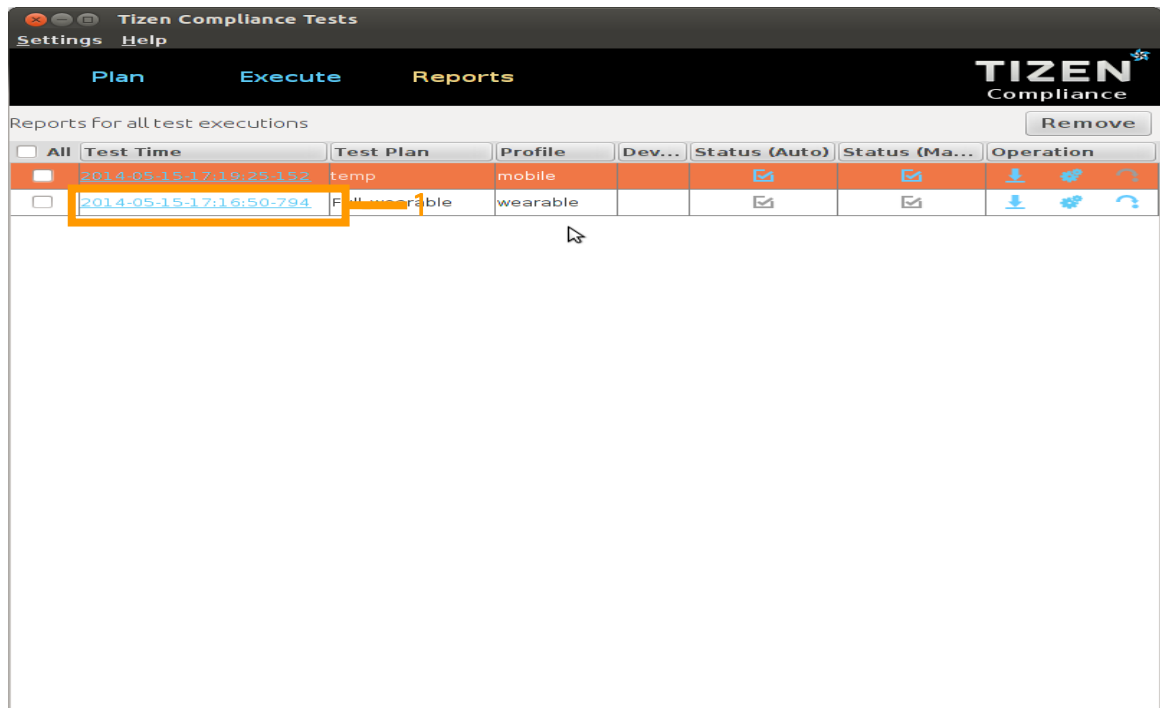


Figure 6-1 Report List

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-quantal
Build ID	Tizen_Ret.Device-PQ_20131022.1656	Manufacturer	samsung
Test Total	994	Device Model	RD-PQ
Test Passed	981	Device ID	4a70f0e66263000
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	Type	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	<div> <div>57%</div> <div>42%</div> </div>

Figure 6-4 Test summary by suite

Suite Test Results			
Test Suite: tct-messaging-tizen-tests (All) Show all Show only failed Show only blocked Show only not executed Summary			
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 expected t messaging-tizen-tests/resour /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(st tests/messaging/MessageAr /res/wgt/opt/tct-messaging-ti /opt/tct-messaging-tizen-test
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]

Figure 6-5 show detail test results

Choose one of the following to customize the report view, referring to Figure 6-5


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  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 non-executed 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 Multi-Profile

7.1 Multi-Profile

Web TCT 3.0 support multi-profile in a uniform tool. On Test Plan view, tct-mgr provides a combo-box for selecting a test profile of your test.

Currently we support three profile values: "mobile", "wearable" and "IVI".

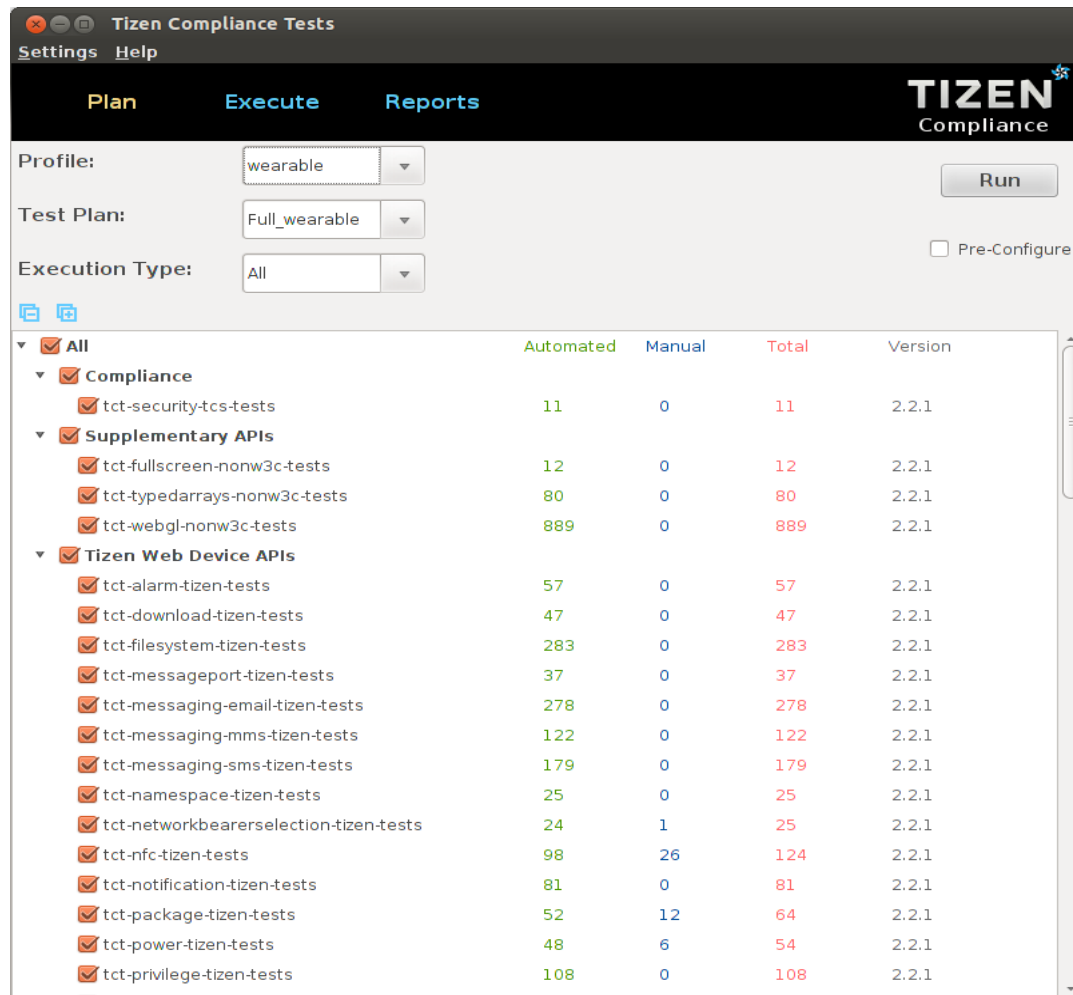


Figure 7-1 Default plan view with multi-profiles

7.2 Usage of profile option

When invoking tct-mgr in console, you can specify a test profile with "--profile/-p" to launch tct-mgr. For instance.

1. On Ubuntu Host

```
$ /opt/tct/tizen_3.0/tct-mgr --profile ivi
```

2. On Windows Host

```
$ c:\opt\tct\tizen_3.0\tct-mgr --profile ivi
```

After launched, tct-mgr will be working under the context with the profile.

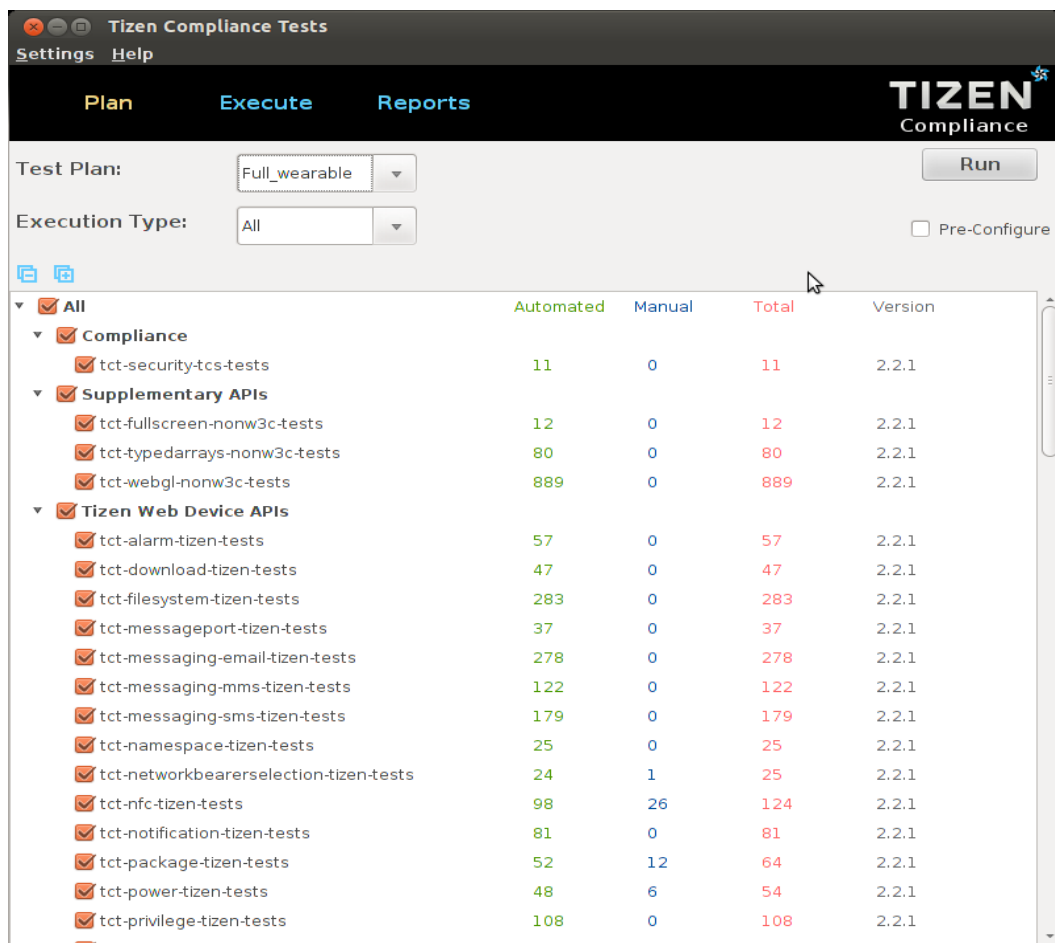


Figure 7-2 Plan view with a specific profile provided

8 Introduction of Test Check/Pre-configure

8.1 Health Check

During the process of test execution, for any one of the running scenarios: new running, rerunning, resuming, a 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 8-1.

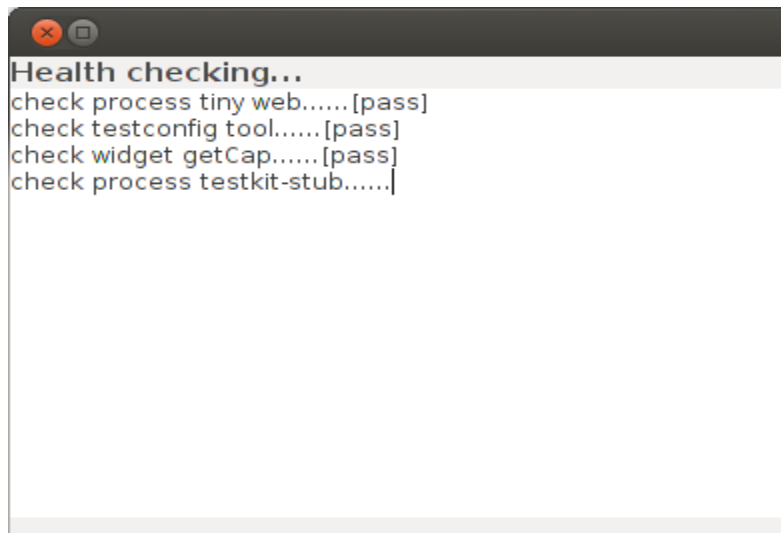


Figure 8-1 Dialog of Health Check

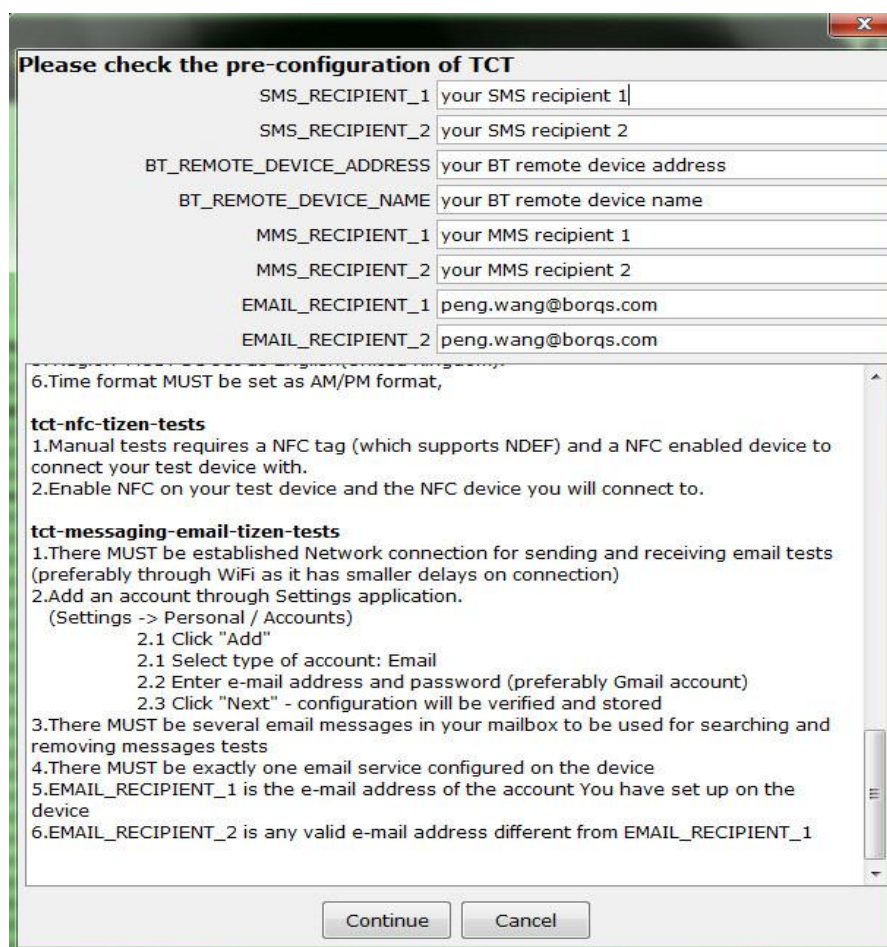
8.2 Pre-Configure

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-configuration dialog will Pop-up.

The pre-configure process include 2 types of preparing working, as Figure 8-2.

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.



Please check the pre-configuration of TCT

SMS_RECIPIENT_1	your SMS recipient 1
SMS_RECIPIENT_2	your SMS recipient 2
BT_REMOTE_DEVICE_ADDRESS	your BT remote device address
BT_REMOTE_DEVICE_NAME	your BT remote device name
MMS_RECIPIENT_1	your MMS recipient 1
MMS_RECIPIENT_2	your MMS recipient 2
EMAIL_RECIPIENT_1	peng.wang@borqs.com
EMAIL_RECIPIENT_2	peng.wang@borqs.com

6. Time format MUST be set as AM/PM format,

tct-nfc-tizen-tests

1. Manual tests requires a NFC tag (which supports NDEF) and a NFC enabled device to connect your test device with.
2. Enable NFC on your test device and the NFC device you will connect to.

tct-messaging-email-tizen-tests

1. There MUST be established Network connection for sending and receiving email tests (preferably through WiFi as it has smaller delays on connection)
2. Add an account through Settings application.
(Settings -> Personal / Accounts)
 - 2.1 Click "Add"
 - 2.1 Select type of account: Email
 - 2.2 Enter e-mail address and password (preferably Gmail account)
 - 2.3 Click "Next" - configuration will be verified and stored
3. There MUST be several email messages in your mailbox to be used for searching and removing messages tests
4. There MUST be exactly one email service configured on the device
5. EMAIL_RECIPIENT_1 is the e-mail address of the account You have set up on the device
6. EMAIL_RECIPIENT_2 is any valid e-mail address different from EMAIL_RECIPIENT_1

Figure 8-2. Dialog of Pre-configure