Testkit-Manager User Guide

Contents

1. Overview

Testkit-Manager, a Graphical User Interface (GUI) front-end in browser, manages auto test cases execution remotely and provides unified web UI to help manual tests execution.

Testkit-Manager has the following features:

- You can filter test cases as per their property value, including architecture, version, category, priority, status, execution type, test suite, type, test set, and component. After that, you can view the detailed information of the test cases.
- You can save the detailed test case information as a test plan, and load, delete, or execute the test plan.
- You can install, update, and delete test case packages.
- You can execute both auto test cases and manual test cases as well as add test result to manual test cases.
- After executing test cases, Testkit-Manager generates a report automatically. After that, you can view, compare, delete, submit, and export the report.

2.   Installation

1. git source code
   - git clone https://github.com/testkit/testkit-manager.git
2. build rpm package
   - cd testkit-manager; ./pack
3. install dependence packages on host
   - Host (ubuntu11.10)
     - sudo apt-get install libxml-simple-perl
     - sudo apt-get install libdigest-sha-perl
     - sudo apt-get install libjson-perl
     - sudo apt-get install libio-pty-easy-perl
     - sudo apt-get install cpanminus
     - sudo cpanm JSON
     - sudo apt-get install rpm
   - Host (fedora17)
     - sudo yum install wget
     - sudo yum install perl-libxml-perl
     - sudo yum install perl-App-cpanminus
     - sudo yum install perl-Digest-SHA
     - sudo yum install perl-XML-Simple
4. install testkit-manger on host
   - Host (ubuntu11.10)
     - sudo rpm -ivh testkit-manager-x.x.x-x.noarch.rpm --nodeps
   - Host (fedora17)
     - sudo rpm -ivh testkit-manager-x.x.x-x.noarch.rpm
5. install 'sdb' on host
   - sudo cp <somewhere>/sdb /usr/bin
   - sudo chmod 755 /usr/bin/sdb
6. connect device
   - power on device
   - turn on USB debugging mode from Settings -> Developer options -> USB debugging
7. connect USB cable
   - type command 'sudo sdb devices' from the host to check if the device is really connected
8. configure repository of test packages
   Please put test packages to /home/package
   If you have your own place to save the test packages, you also can configure the repository of test packages in configuration file '/opt/testkit/manager/CONF'
   repo_url=<repo address>

   <repo address> can be a remote server address or a local path on the host machine

9. startup
   - type command 'sudo /opt/testkit/manager/webapps/bin/testkit_start.pl' from the host
   - open web page on browser: http://<test-machine-name>:8899
10. Suggestion
    - Firefox and Chrome are the preferred web browsers to open testkit-manger
11. Limitation

- only support devices that have 'sdb' communication module
- only support testing package with standard version number which is x-x-x.x
- local repository doesn't support subfolder

12. Known Issues:
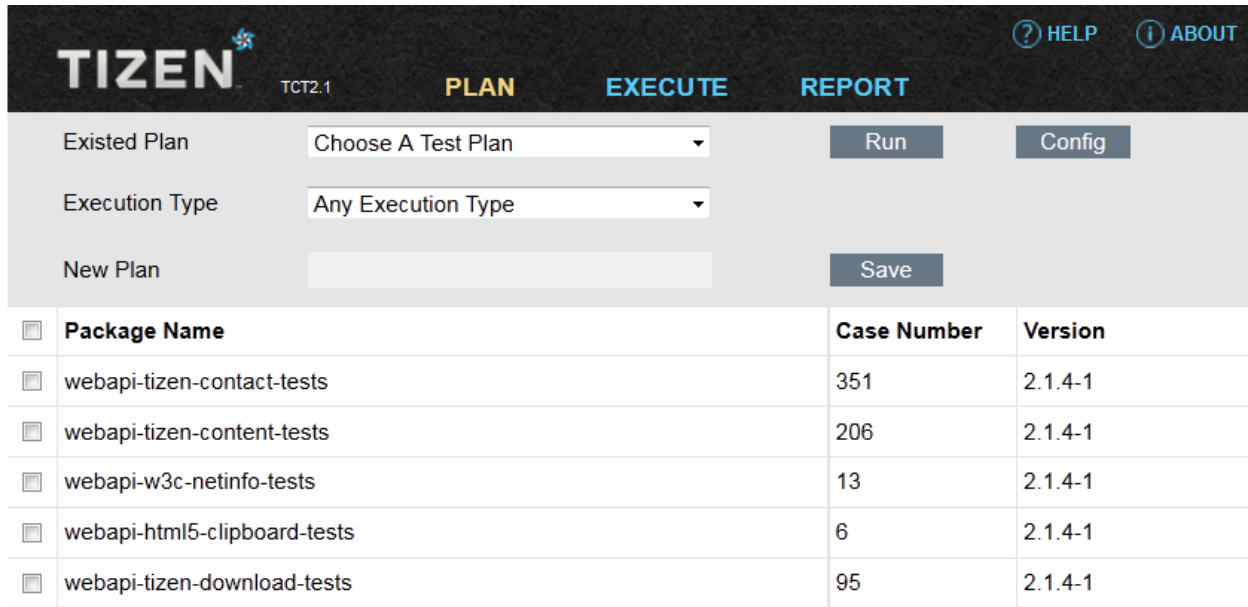- IE web browser is not supported

3. Preparing Tests

3.1 Filtering Test Cases

You can filter 'auto' or 'manual' test cases according to 'Execution Type' select box.

To filter test cases, perform the following steps:

1. Log in to **http://localhost:8899**.

When the tab page is refreshing, all the buttons are disabled, as shown by in Figure 3-1.

Figure 3-1 PLAN tab page after refreshing

2. Select "Execution Type" select box, as shown by in Figure 3-2.

Figure 3-2 Filter in **PlAN** page

After select "auto " in option ,the package included "auto case" will be display in the package chart, as shown in Figure 3-3.

Figure 3-3 Display filter package

3.2 Save Test Plan

To save a test plan, perform the following steps:

1. Filter test case packages. For details, see section 3.1.

2. Select packages according to click checkbox, as shown in Figure 3-4.

Figure 3-4 Select package

3. Input new test plan name in input box,   as   shown by [1] in Figure 3-5. And click "Save " button as   shown by [2] in Figure 3-5.

Figure 3-5 Save test plan

4. You can find the plan which you have saved in 'Existed Plan', as shown in Figure 3-6.

Figure 3-6 Find test plan

3.3 Select Test Plan

To select a test plan, perform the following steps:

Select a plan according to click 'Existed Plan', eg: pre_Tizen_TCT, as shown in Figure 3-7.

Figure 3-7 Select a exist plan

The checkbox of packages included in the plan will be selected, as shown in Figure 3-8. Besides,the "Run" and "Config" buttions will change to be light, as shown by [1] and [2] in Figure 3-8.

Figure 3-8 Display after select a exist plan

3.4 Config For Test

To config some information for test, perform the following steps:

1. Select a exist plan . For details, see section 3.3.

2. Click 'Config' button in **PLAN** page .

3. Input information in box , as shown in Figure 3. 9. And click "Save", as shown by [1] in Figure 3-9, the input content will be saved . Click "Skip", as shown by [2] in Figure 3-9, the input content will be canceled .After the operation, the page will return to **PLAN** page.

Figure 3-9 Config pop up

4. Executing Tests

4.1 Start Test

To select a test plan, perform the following steps:

1. Select a exist plan . For details, see section 3.3.

2. Click 'Run' button in **PLAN** page .the page will refresh.

If there is a package included in the plan in '/opt/testkit-manager/CONF/ hardware_capability_package', a pop up will display. You can edit the information , as shown in Figure 4-1. And click And click "Save", as shown by [1] in Figure 4-1, the input content will be saved . Click "Skip", as shown by [2] in Figure 4-1, the input content will be canceled .

Figure 4-1 hardware capability pop up

After the operation, the page will refresh to **EXECUTE** page and begin to install packages included in test plan, The number of missing packages will display on the top, as shown by [1] in Figure 4-2. The number of installing packages will display, as shown by [2]. After finish installing, the results will display, as shown by [3] . If there are packages that fail to be installed, the test plan would not be loaded, and you can click link to refresh the page.
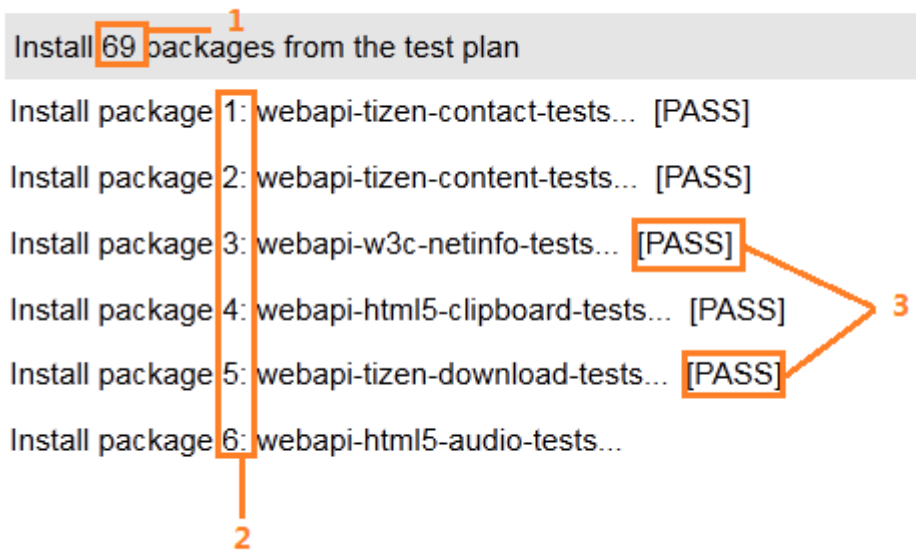
Figure 4-2 Install package

If all the packages have been installed successfully, the page will skip to execute page automatically and the test begin to execute, as shown in Figure 4-3. The test plan runs with log. When the profile finishes running, a test report generates automatically. Click the **Stop** button to stop executing the test plan.
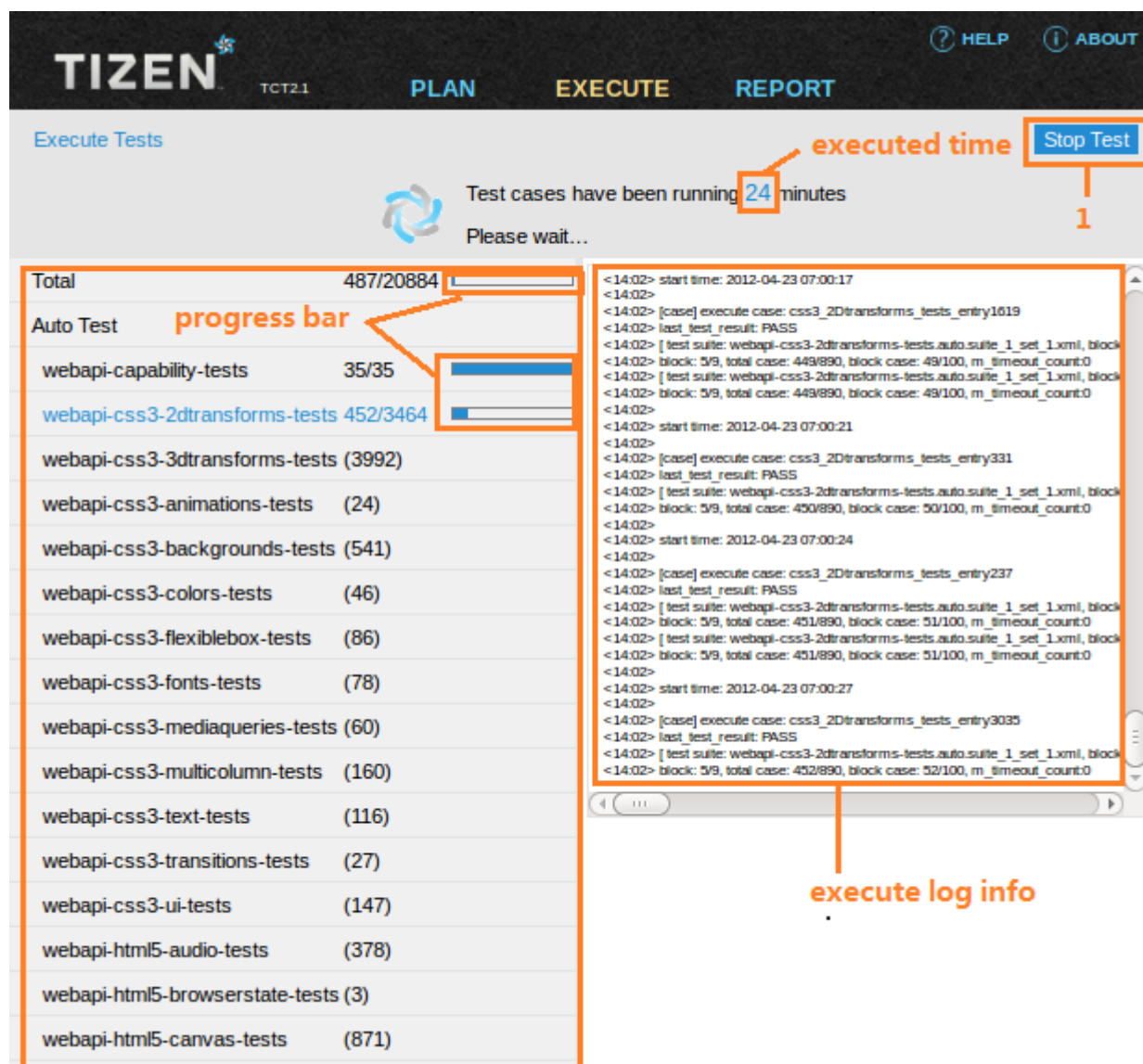
Figure 4-3 Execute test

After finishing   tests, the page will refresh to 'Summary report' page, as shown in Figure 4-4. Click [1] of Figure 4-4,report will export. Click [2] of   Figure 4-4,rerun the case which not pass in test plan.
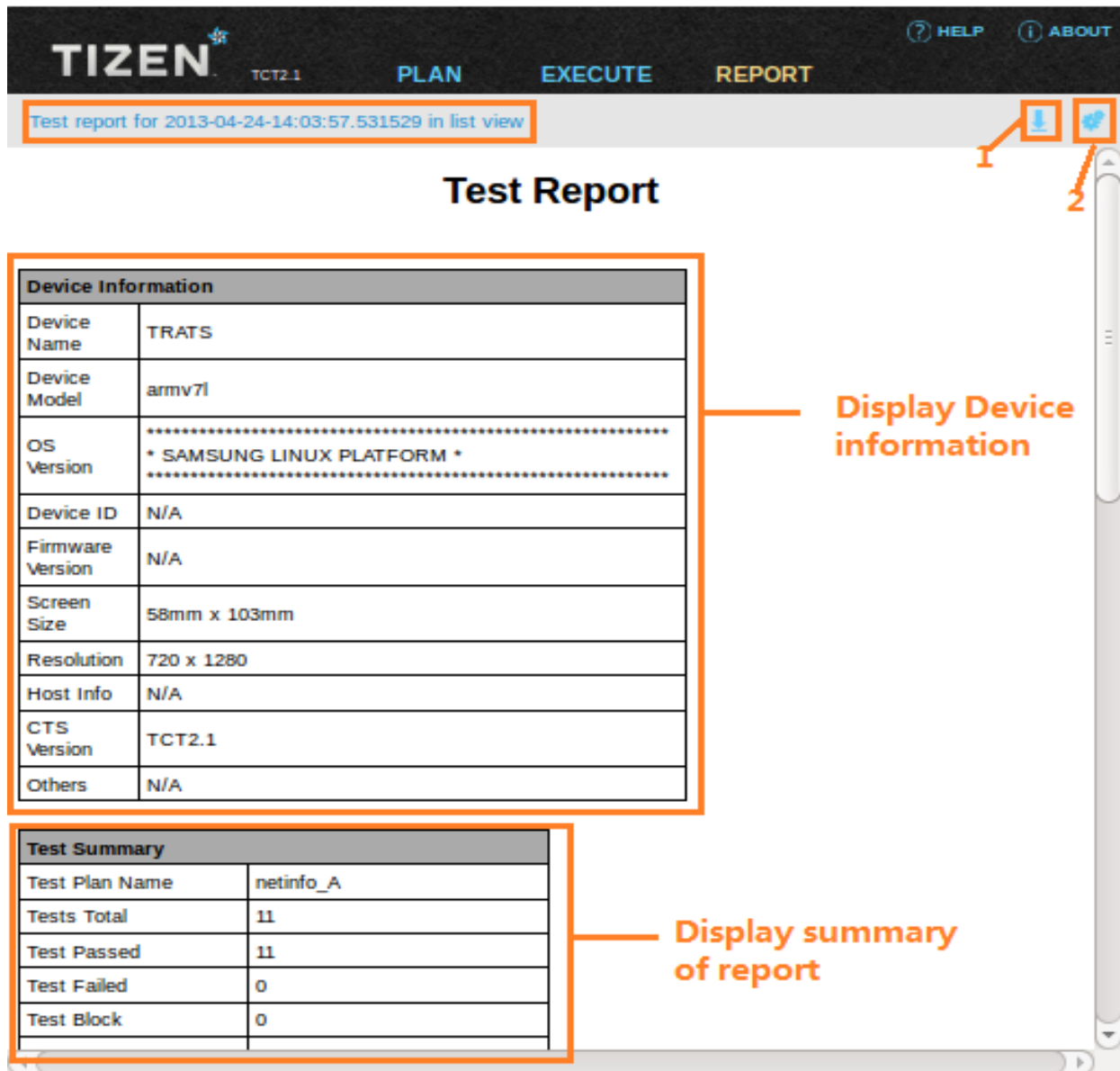
Figure 4-4 Summary report

4.2 Auto Test

You can use the following way to execute auto test cases:

1. Select a exist plan . For details, see section 3.3.

2. Select "auto" in Execution Type.

3. Click 'Run' button in **PLAN** page .

When refresh to **EXECUTE** page, the progress bar just display packages that included auto cases, as shown in Figure 4-5.
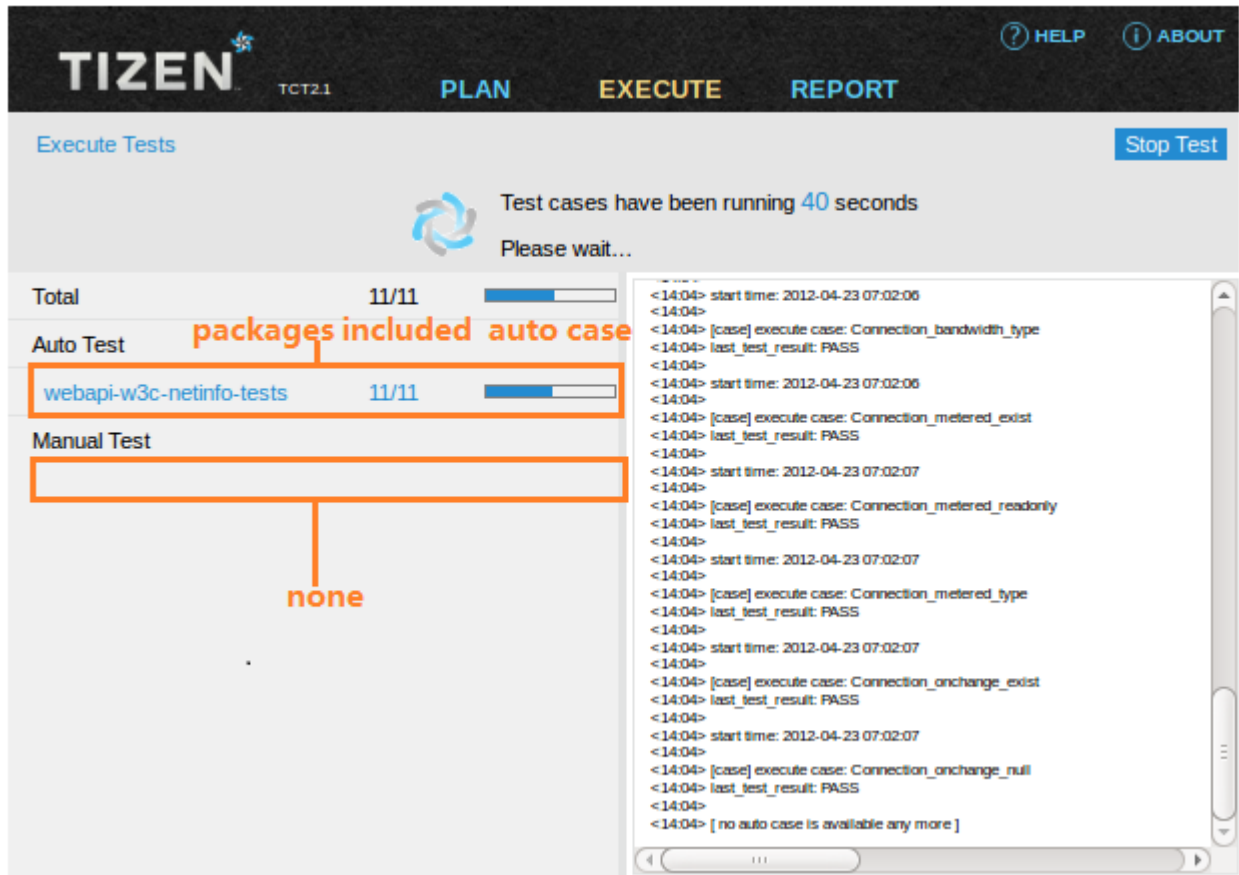
Figure 4-5 Execute auto test

4.3 Manual Test

You can use the following way to execute manual test cases:

1. Select a exist plan . For details, see section 3.3.

2. Select "manual" in Execution Type.

3. Click 'Run' button in **PLAN** page .

When refresh to **EXECUTE** page, the progress bar just display packages that included manual cases, as shown in Figure 4-6.
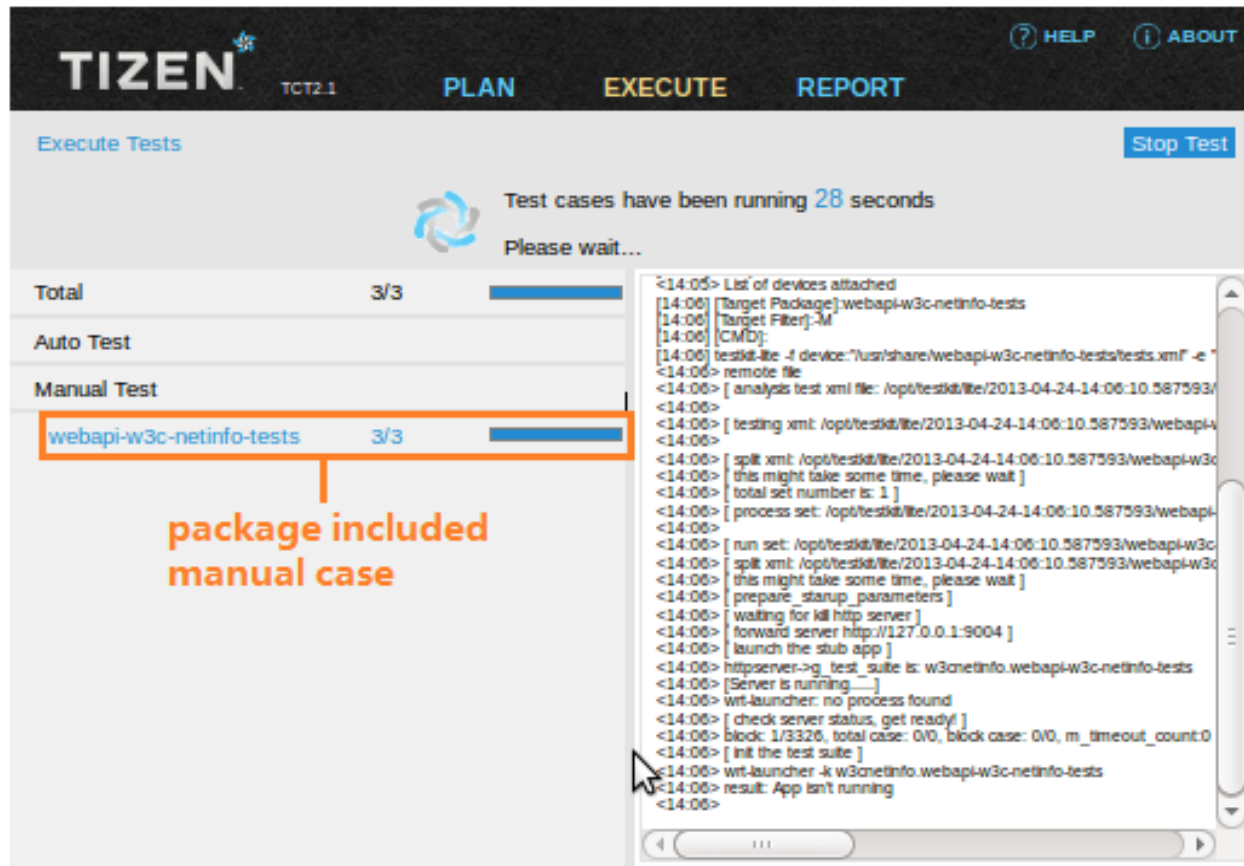
Figure 4-6 Execute manual test

When the test plan (with manual test cases) finishes running, the page refreshes, as shown in Figure 4-7. Then, you can add the result of manual test cases:

- Click **Manual Test**. All the manual test cases display on the right pane of the page.

- Run the test cases manually, obtain the results, and then select **Pass**, **Fail**, **Block** or **N/A** for the test results.

- Click **Save.**
- Click **Finish** to complete the execution.

Then, the **REPORT** page refreshes to 'Summary report', you can see the detail in Figure 4-4.

Figure 4-7 Manual test cases

⚠ Caution: Use caution in the following step, for the result cannot be changed after it.

5. Viewing Report

Figure 5-1 Reports

5.1 Viewing Summary Reports

Click the 'Test time' to view summary reports, as shown by [1] in Figure 5-1. The page will refresh to 'Summary Report', you can see the detail in Figure 5-2.

You can view summary information, including:

- Test environment
- Total number of test cases
- Number of passed, failed, and blocked test cases
- Test log

Figure 5-2 Summary reports

5.2 Continue To Execute

Click [2] in Figure 5-1. The page refreshes to 'Manual test cases' page. Then, you can select the result of manual test cases, as shown in Figure 5-3.

Figure 5-3 Manual test cases

5.3 Export Reports

You can click [3] in Figure 5-1. , to download consolidated reports.

5.4 Submitting Report

To submit a test report to QA test tools, perform the following steps:

1. Log in to **http://localhost:8899/.**

2. Click the **REPORT** tab.

3 . Click [4] in Figure 5-1.The page will refresh to 'Submit ' page, as shown in Figure 5-4.

Figure 5-4 Submit page

(1). Type server name in context **Input Server Name**.

(2). Type token in context **Input Token**.

Note: The token is a string which records account and password. You can obtain it after logging in to QA test tools.

(3). Type the report date in context **Input Image Date**.

Note: **%2E** is used to indicate ".". For example, type **20120319%2E5** for "20120319.5".

(4). Select values from the **target**, **testtype**, and **hwproduct** combo boxes, as shown in Figure 5-5.

Figure 5-5 Selecting a test report to submit

(5). Click **Submit**, as shown in Figure 5-6. The report is submitted to the QA test tools.

Figure 5-6 Submitting a test report

5.5 Send Report

To send a report through email, perform the following steps:

1 .If the Evolution in your system, the ✉ button is available with the title "Send report through email".

2. Click the [5] in Figure 5-1, the report is put in attachment of an email. Besides, the subject and body of the email have been done; user need specify a receiver and click "Send" icon.

5.6 Rerun Not Pass Cass

The results include Fail, Block and N/A, the cases can be rerun and be submitted to execute page

If the result includes Fail, Block and N/A, the ⚙ button becomes available with the title "Rerun cases which are not passed".

1. Click [6]in Figure 5-1. The page refreshes to **EXECUTE** page. Then, the test cases which are not passed in previous test   will   be executed again, as show in Figure 5-7.
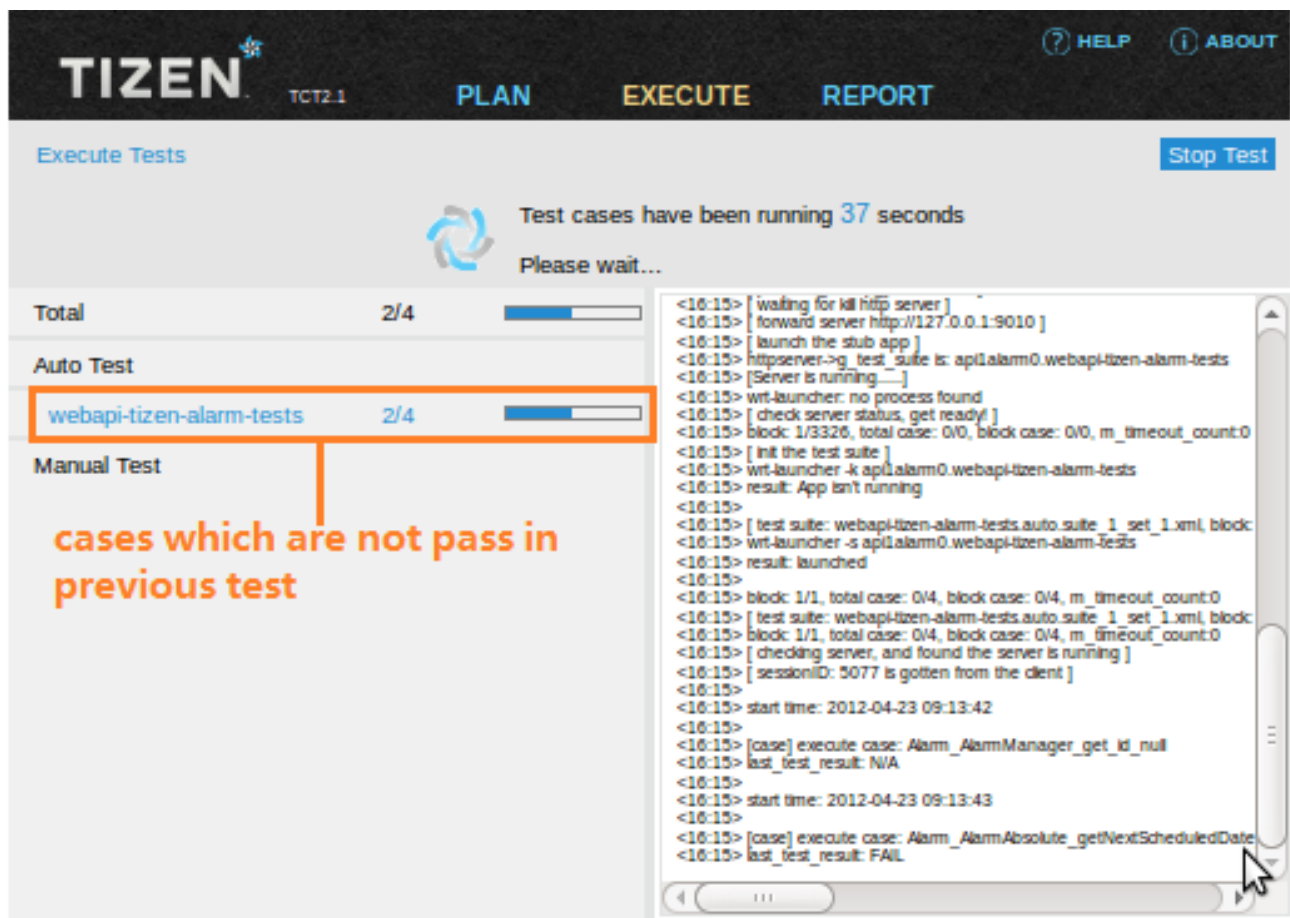

Figure 5-7 Execute page of rerun

2. The report of rerun will be under the father report and add "." before its time. As Figure 5-8 tells:
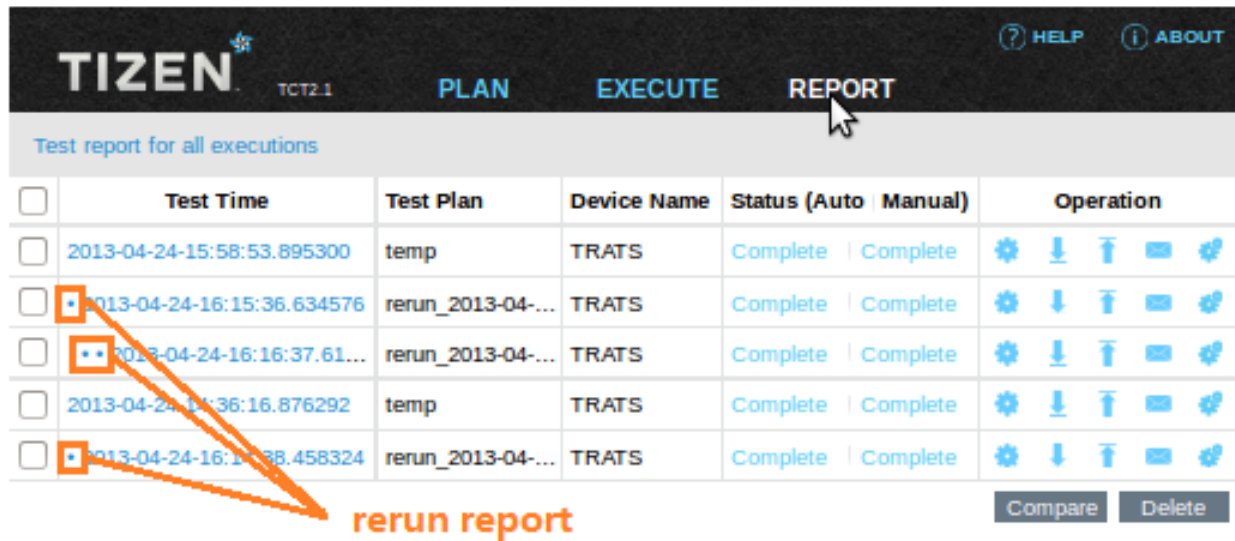
Figure 5-8 Report page includes rerun report

5.7 Comparing Reports

To compare reports, perform the following steps:

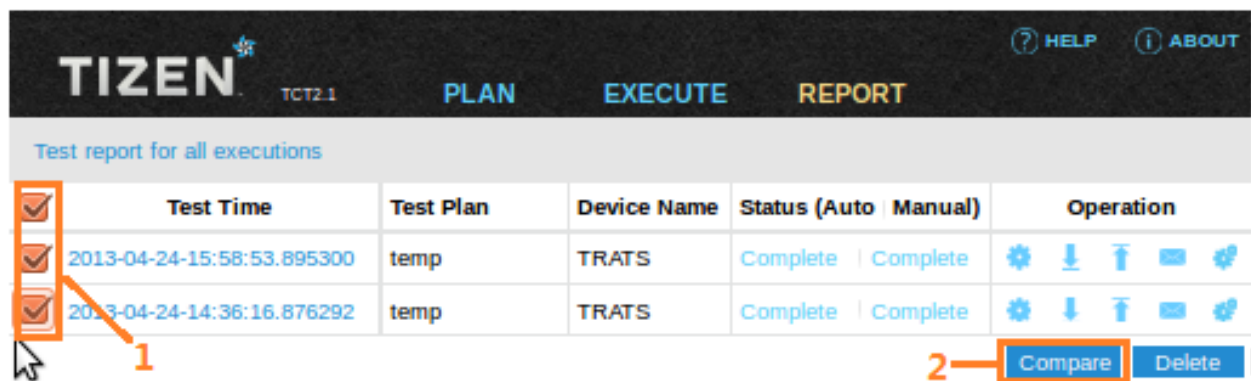1. Select reports, and click the Compare button, as shown in Figure 5-9.

Figure 5-9 Comparing reports (1)

2. The page refreshes, as shown in Figure 5-10.

Figure 5-10 Comparing reports (2)

5.8 Deleting Report

To delete a test report, perform the following steps:

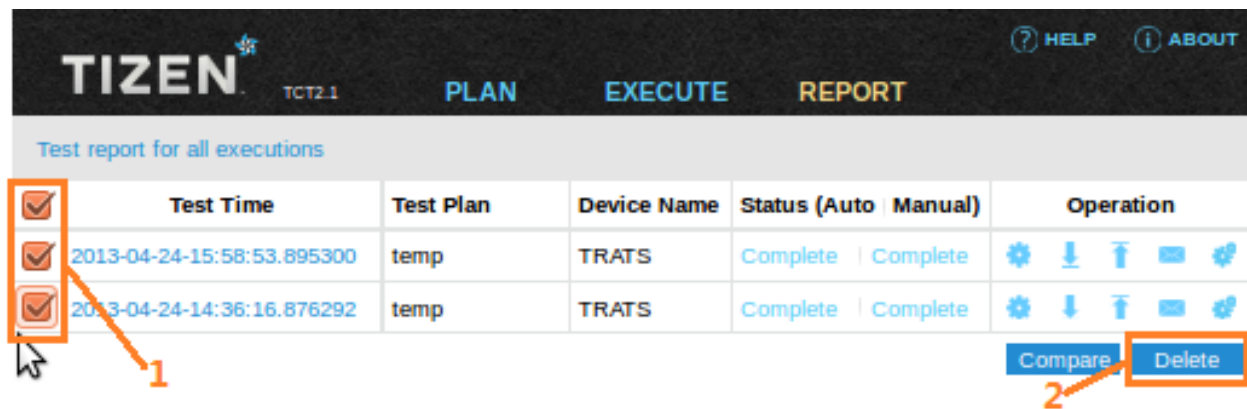1. Select one or multiple test reports, as shown in Figure 5-11.

Figure 5-11 Deleting test report(s)

2. Click **Delete**. An alert pops up, as shown in Figure 5-12.

Figure 5-12 Confirmation dialog box

- Click **OK.➔** The report and its child reports are deleted.
- Click **Cancel.➔** The report and its child reports are not deleted.