# 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, includingarchitecture, 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, orexecute 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-Managergenerates 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
    - firefoxand 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.    Customizing Tests

## 3.1 Filtering Test Cases

You can filtertest casesaccording to their property values:

①Architecture     ②Version     ③Category     ④Priority     ⑤Status
⑥Execution Type  ⑦Test suite  ⑧Type⑨Test set     ⑩Component

To filter test cases, perform the following steps:

1.  Login to **http://localhost:8899**.
2.  Click the **CUSTOM** tab.

When the tab pageis refreshing, all the buttons are disabled, and the progress bar is displayed on the right top of the tab page, as shown by[1] in Figure 3-1.
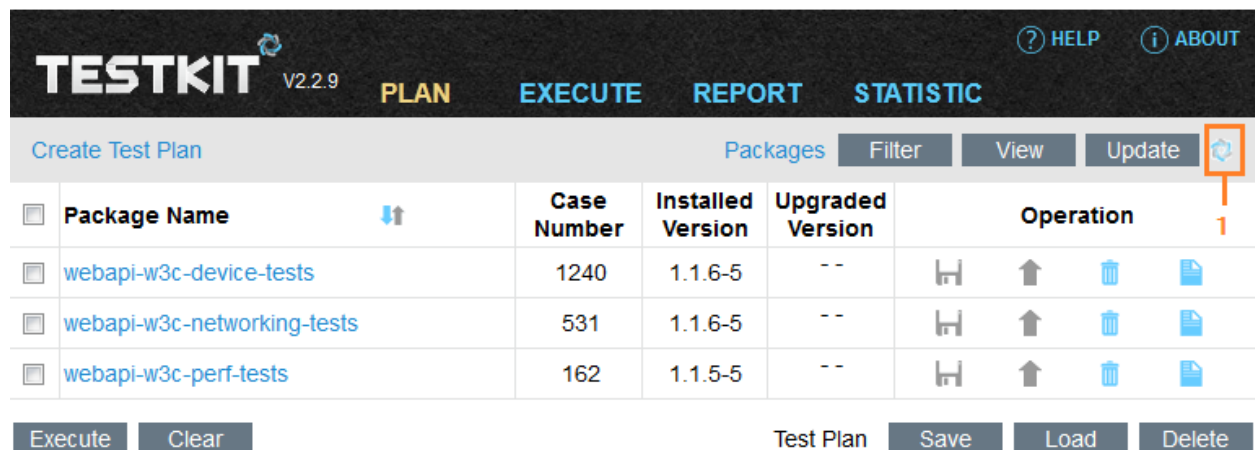


**Figure 3-1 CUSTOM** tab page in loading progress

After the tab page is refreshed, some buttons are enabled, and the progress bar is hidden. The tab page:

- Displays**Filter**, **View**, and **Update**on top, as shownby [1] in Figure 3-2.
- Lists installed packages, as shown by [2] in Figure 3-2.
- Lists uninstalled or later-version packages which are scanned from repos, as shown by [3] in Figure 3-2.

**Figure3-2 CUSTOM** tab page

3. Click **Filter**.

Options display, as shown by [2] in Figure 3-3.If you click **Filter** button again, options are hidden.

**Figure 3-3** Options on the **Custom** tab page

4. Take the **Priority** and **Execution type** options for example.

   Note: Assume that all the 10 options' value are initial values "Any ***". All the installed test case packages display.

   (1). Select **P3** from the **Priority** checkbox.

   The test case packages display, which include test cases whose priority is P3, as shown in Figure 3-4.

**Figure 3-4** Test case packages (1)

(2). Select **auto** from the **Execution type** check box.

The test case packages display, which include the test cases whose priority is P3 and whose Execution type is auto, as shown in Figure 3-5.

**Figure 3-5** Test case packages (2)

Note: You can select other optionsin the same way.All the required test case packages display.

5. Select a test case package to test, as shown in Figure 3-6.

**Figure 3-6**Selecting a test case package

## 3.2 UsingTest Plan

A test plansaves the information of filtered test cases for future test. You can save, load, or manage a test plan.

### 3.2.1    SavingTest Plan

To save a test plan, perform the following steps:

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

2. Click **Save**.

Save operations display, as shown by [2] in Figure 3-7.The **Save** button updates to**Close**, as shown by [1] in Figure 3-7.If you click **Close**, the save operations are hidden.



**Figure 3-7**Clicking the**Save** button

3. Enter the test planname in text box [1]. Then click **Save**, as shown by [2] in Figure 3-8.



**Figure 3-8**Entering thetest plan name(1)

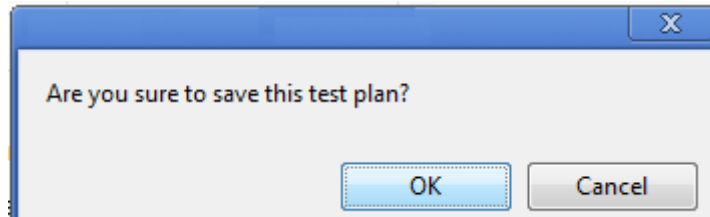4. An alert displays, as shown in Figure 3-9. Click**OK**to save the test plan.

**Figure 3-9**Confirmation dialog box (1)

After the test plan is saved successfully, the test plan name displays, as shown by [1] in figure 3-10.



**Figure 3-10**Entering the test plan name (2)

5. If there hasbeen a test plan whose name is the same as the enteredtest plan name, as shown in Figure 3-11:



**Figure 3-11**Saving an existing test plan name

Click **Save**. A dialog box pops up, reading "Test plan: <Test plan name input> exists, Are you sure to overwrite it?"
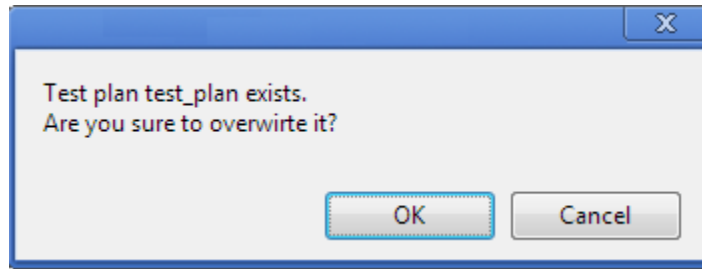


**Figure 3-12**Confirmation dialog box (2)

- Click**OK**.➔Thetest plan**test_plan**overwrites the existing one.

- Click **Cancel**.➔The test plan**test_plan** is not saved.

6. Select a test plan that you want to view, as shown by [1] in Figure 3-13. Then click **View**, as shown by [2] in Figure 3-13.

**Figure 3-13**Viewingtest plan

7. A popup page displays, as shown in Figure 3-14.

- View test plan name, as shown by [1].

- View packages name, as shown by [2].

- View thefiltered value, as shown by [3]. If the filtered value is "Any ***", it displaysas "- -".

- Click **Close** to close the popup page.



**Figure 3-14**Viewing popup page

Note:

Do not leave **test planname** blank. If you click **Save** without entering a test plan name, an alert pops up, as shown in Figure 3-15. Click **OK**.
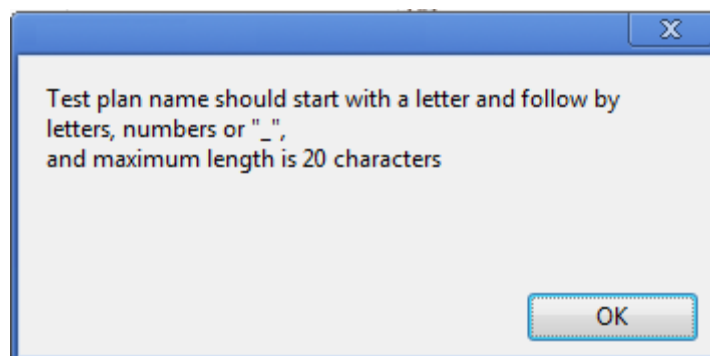


**Figure 3-15**Confirmation dialog box (3)

### 3.2.2 LoadingTest Plan

To load a test plan, perform the following steps:

1. Click **Load**, as shown in Figure 3-16.



**Figure 3-16**Clicking theLoad button(1)

2. Load operations display, as shown by [2] in Figure 3-17. The **Load** button updates to **Close**, as shown by [1] in Figure 3-17. If you click **Close**,load operations are hidden. Select a test plan name, and click **Load**.

| | Package Name | | Case Number | Installed Version | Upgraded Version | Operation | | | |
|---|---|---|---|---|---|---|---|---|---|
| ☐ | webapi-w3c-networking-tests | | 531 | 1.1.6-5 | - - | | | | |
| ☐ | webapi-w3c-perf-tests | | 162 | 1.1.5-5 | - - | | | | |
| ☐ | tts-bluez-tests | | - - | - - | 1.0.7-1 | | | | |
| ☐ | webapi-tizen-alarm-usage-tests | | - - | - - | 1.0.6-1 | | | | |
| ☐ | webapi-tizen-time-usage-tests | | - - | - - | 1.0.5-2 | | | | |
| ☐ | tts-bluez-tests | | - - | - - | 1.2.0-1 | | | | |
| ☐ | webapi-w3c-device-tests | | - - | - - | 1.1.6-5 | | | | |
| ☐ | webapi-acceptance-tests | | - - | - - | 1.1.3-1 | | | | |
| ☐ | webapi-tizen-lbs-usage-tests | | - - | - - | 1.0.7-5 | | | | |
| ☐ | webapi-w3c-css3-tests | | - - | - - | 1.1.2-1 | | | | |
| ☐ | webapi-w3c-widget-tests | | - - | - - | 1.1.0-1 | | | | |
| ☐ | webapi-nonw3c-tests | | - - | - - | 1.1.6-5 | | | | |
| ☐ | tts-connman-tests | | - - | - - | 1.0.7-1 | | | | |

**Figure 3-17**Clicking theLoad button(2)

3. If there are missing packages that need to be installed.The number of missing packages will display on the top, as shown by [1] in Figure 3-18. The number of installing packages will display, as shown by [2]. After finish installing, the results will display, as shown by [3] [4]. If there are packages that fail to be installed, the test plan would not be loaded, and you can click link, as shown by [6] to refresh the page. If all the packages have been installed successfully, the test plan will be loaded automatically.
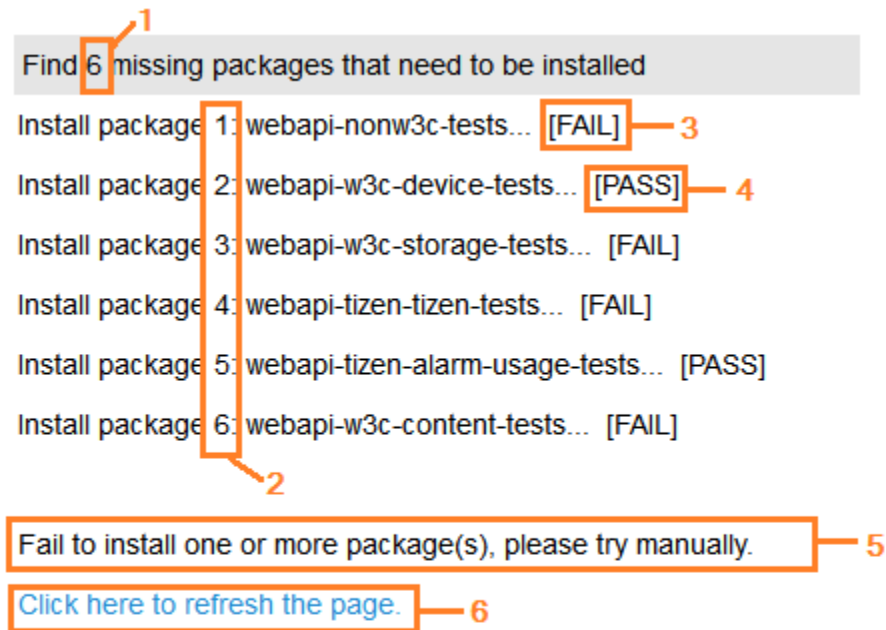
**Figure 3-18** Test plan loaded

4. Click the **View** button to view thetest plan, as shown in Figure 3-17.For details, see step 7 in section 3.2.1.

### 3.2.3 DeletingTest Plan

To**delete**a test plan that has been saved, perform the following steps:

1. Click **Delete**, as shown in Figure 3-19.

**Figure 3-19**Deletingtest plan(1)

2. Delete operations display, as shown by [2] in Figure 3-20.The **Delete** button updates to**Close**, as shown by [1] in Figure 3-20. If you click the**Close** button,the delete operations are hidden.

**Figure 3-20** Managingtest plan(2)

3. Select atest plan name, and click the **View** button. View popup page will display. For details, see step 7 in section 3.2.1.

4. Select one test plan name, and click the**Delete** button. An alert pops up, as shown in Figure 3-21. Click **OK**. The test plan is deleted.
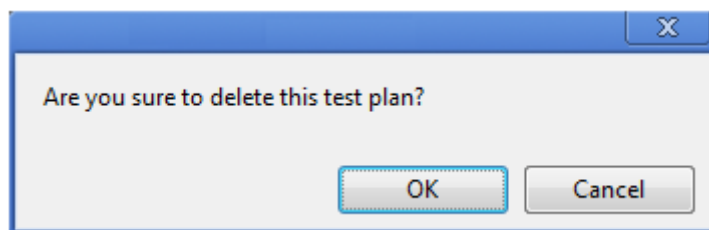


**Figure 3-21**Confirmation dialog box (4)

### 3.2.4    ExecutingTest Plan

● Execute an existingtest plan:

1.   Typethe test planname and click**Load**.

Thetest planis loaded and the page automatically refreshes.

2.   Click **Execute**. The page refreshes and the test planis executed.

● Execute a temporary test  plan:

1.   Select a test case package. For details, see section 3.1.

2.   Click **Execute**. The page refreshesand the test planis executed.

## 3.3 Useful Features

### 3.3.1 ViewingTest Case Information

To view test case information, perform the following steps:

1.  Click **view**icon,as shown by [1] in Figure 3-22. Or Click checkbox and click view button,as shown by [1] [2]in Figure 3-23. The page refreshes, as shown in Figure 3-22. Current View method is displayed, as shown by [1] in Figure 3-24. Click **List View** to view test cases in list view, as shown by [2] in Figure 3-24.

**Figure 3-22** Viewing test cases (1)

**Figure 3-23** Viewing test cases (2)

**Figure 3-24**Viewing test cases in list view

2. Click the **Tree View** button to view test cases in tree view, as shown by [3] in Figure 3-24. The page refreshes, as shown in Figure 3-25.

**Figure 3-25** Viewing test cases in tree view

3. Click the test case name. The detailed test case information displays in the right pane of the page.

### 3.3.2 SortingTest Case Packages

Click the ⬍ icon. The test case packages are sorted.

Note: You can click the ⬍ iconagain. The test case packagesare reversely sorted.

Figure 3-26 shows the details.

**Figure 3-26**Sorting test case packages

### 3.3.3 DeletingTest Case Package

Click the 🗑 icon, as shown in Figure 3-27.

**Figure 3-27**Deleting test case package

A dialog box is displayed, asking for your confirmation. Click **OK**.

### 3.3.4　ListingTest Case Package Information

Click thetest case package name. The detailed information displays, as shown in Figure 3-28.

**Figure 3-28**Detailed test case package information

### 3.3.5 Update package list from repo

Click Update button,testkit-manager will scan package list from repo, and list all the packages that not installed, we can click install icon to install these packages. At the same time, if there is newer version for the package which has been installed from repo, the update icon for this package will be enabled.We can click update icon to update this package to the latest version, as shown in Figure 3-29and Figure 3-30.

**Figure 3-29**Update package list from repo (start)

**Figure 3-30**Update package list from repo(finish)

### 3.3.6 Clear all filters and package check box

After selecting filters or package check box, the clear button will be enabled, as shown in Figure 3-31.

**Figure 3-31**Clear all filters and package check box (1)

Click Clear button, all filters and package check box will change to init value, as shown in Figure 3-32.

**Figure 3-32** Clear all filters and package check box (2)

# 4. Executing Test Cases

## 4.1 ExecutingAutoTest Cases

You can use either of the following two ways to execute test cases:

- Filtertest cases or load test plan (with auto test cases), and click**Execute**on the **CUSTOM**page.
- Select a test planand click **Execute** on the **EXECUTE**page.

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.
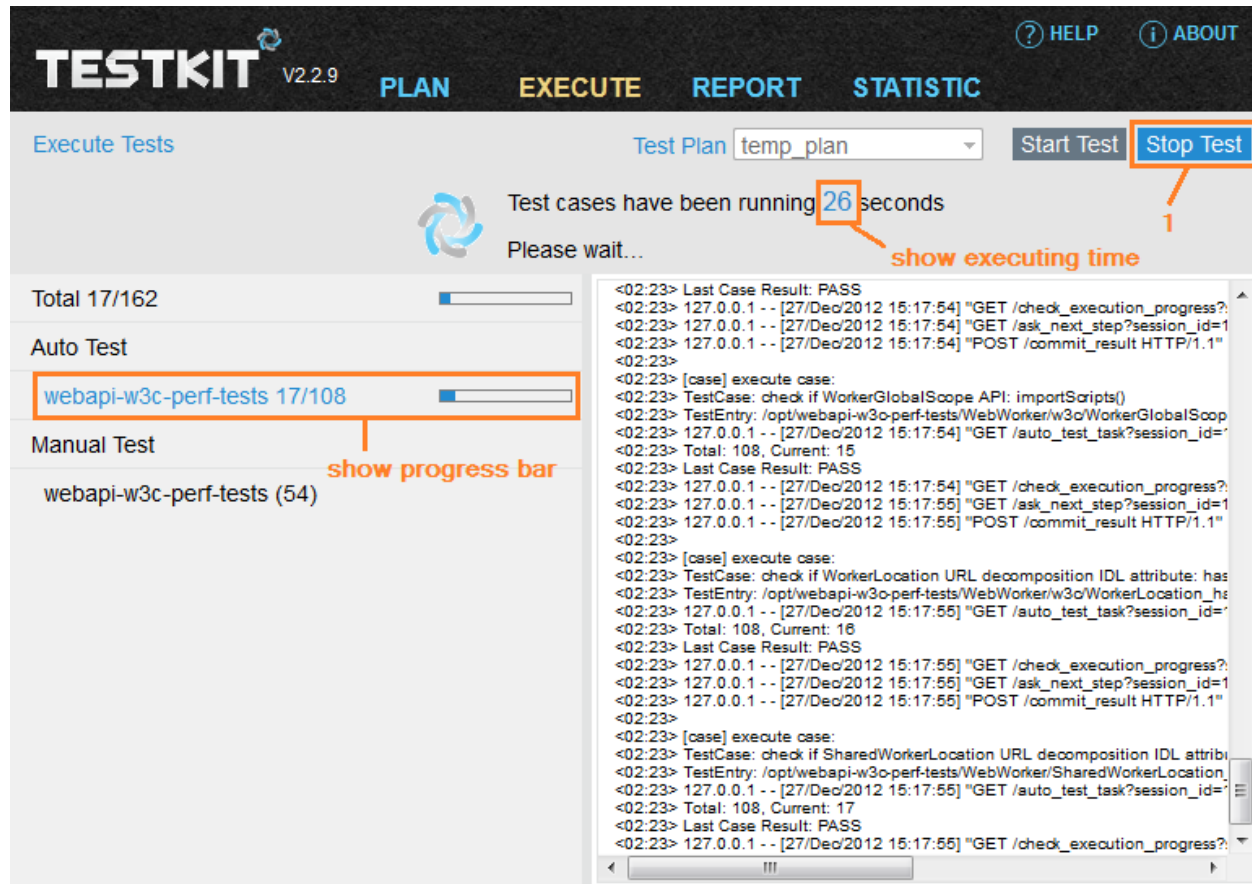


**Figure 4-1**Auto test report

## 4.1 ExecutingManual Test Cases
1. When the test plan (with manual test cases) finishes running,the page refreshes, as shown in Figure 4-2. Then, you can add the result of manual test cases:

**Figure 4-2**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.
2. Then, the **REPORT** page refreshes and displays, as shown in Figure 4-3. Current View method is displayed, as shown by [1] in Figure 4-3. Click **Tree View** to view test report in tree view, as shown by [2] in Figure 4-3.

**Figure 4-3** viewing test report in list view

3. View test report in tree view.

**Figure 4-4**View test report in tree view

# 5.   Viewing Report

## 5.1 ViewingSummary Reports

Click the ![icon] icon to view summary reports, as shown in Figure 5-1.



**Figure 5-1**Summary reports

You can view summary information, including:

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

You can also click:

✓ ![download] to download consolidated log

## 5.2 ViewingTest Report in List View

After the icon shown by [1] in Figure 5-1 is clicked, the page refreshes, as shown in Figure 5-2.

**Figure 5-2** viewing test report in list view

## 5.3 Viewing Test Report in Tree View

Click the Tree View button in Figure 5-2. The page refreshes, as shown in Figure 5-3.

**Figure 5-3** viewing test report in tree view

1. Select **Package** from the **View by:** drop-down list box.

Note: You can view the detailed reports by "Packages", "Component", or "Test type". The following steps use "Packages" as an example.

**Figure 5-4**Filtering detailed reports

2. Filter a test report by selecting **Result** and **Type**, by the same way as step 1.

3. Click the test case name to view its detailed information.

**Figure 5-5**detailedtest case information

## 5.4 Useful Features

### 5.4.1 SubmittingReport

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

1. Login to**http://localhost:8899/**.

2. Click the**REPORT** tab.

The **REPORT** tab page displays, as shown in Figure 5-6
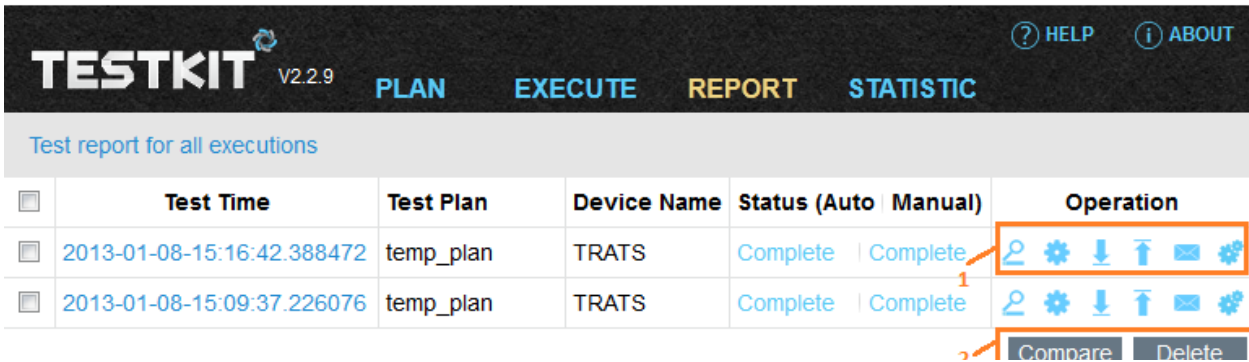
**Figure 5-6**Refreshed **REPORT** tab page

3. Select one or multiple check boxes.

The buttons **Compare and Delete** become available.

4. Click **Submit**, as shown [1] in Figure 5-7.
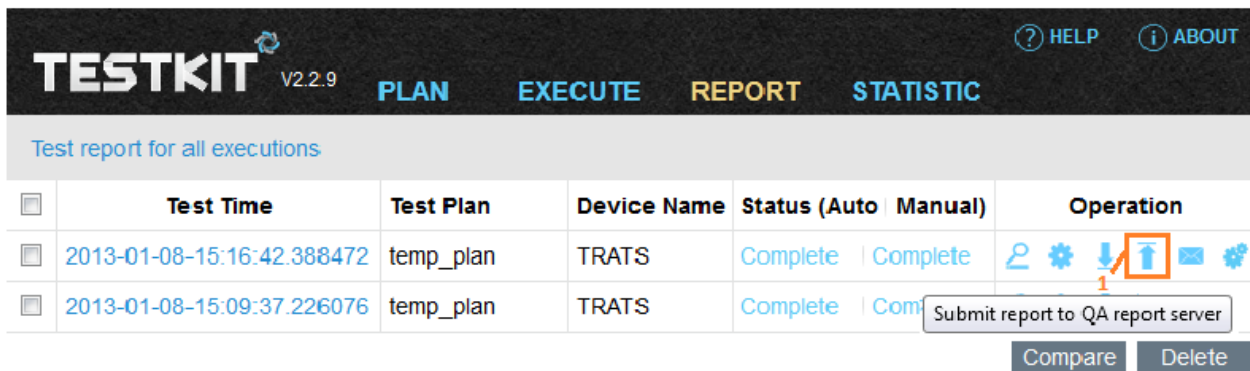


**Figure 5-7**Refreshed **REPORT** tab page

**5.** The page refreshes, as shown in Figure 5-8.
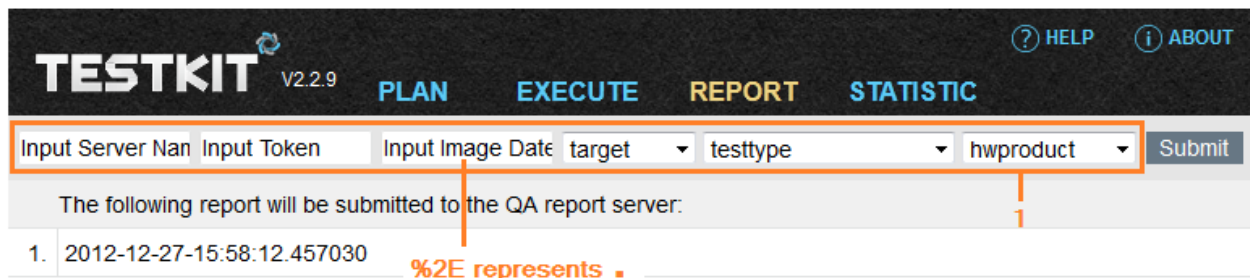


**Figure 5-8**Refreshed **REPORT** tab page

(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 obtainit 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 5-9.



**Figure 5-9**Selecting a test report to submit

(5). Click**Submit**, as shown in Figure 5-10. The report is submitted to the QA test tools.



**Figure 5-10** Submitting a test report

### 5.4.2ComparingReports

To compare reports, perform the following steps:

1. Select reports, and click the Compare button, as shown in Figure 5-11.

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**Figure 5-11** Comparing reports(1)

2. The page refreshes, as shown in Figure 5-12.



**Figure 5-12** Comparing reports(2)

### 5.4.3 DeletingReport

To delete a test report, perform the following steps:

1. Select one or multiple test reports, as shown in Figure 5-13.
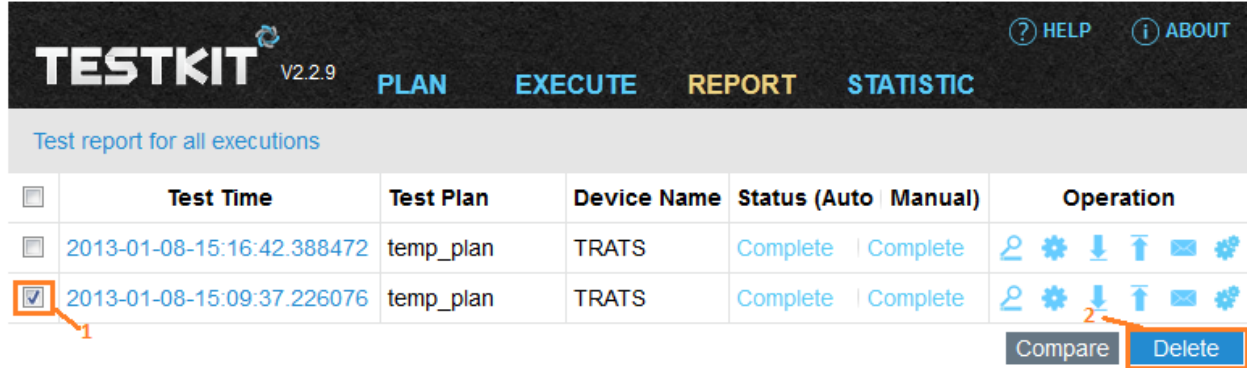


**Figure 5-13**Deleting test report(s)

2. Click **Delete**. An alert pops up, as shown in Figure 5-14.



**Figure 5-14** Confirmation dialog box (5)

● Click **OK.➔**The report and its child reportsare deleted.

● Click **Cancel.➔**The reportand its child reports arenot deleted.

**5.4.4 Send report through email**

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".

**Figure 5-15**Send report through email

2. Click the [1] in Figure 5-15,the report is put in attachment of an email. Besides, the subject and body of the emailhave been done; user needspecify a receiver and click "Send" icon.

**5.4.5Rerun caseswhich are not passed**

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

As Figure 5-16 tells:

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



**Figure 5-16**Rerun test cases in report

1. Click ⚙ . The page refreshes, as shown in Figure 5-17.Then, the test cases which are not passed in previous test  will  be executed again. However, the drop down box of  Test Plan will display "rerun+ father _report_time "

**Figure 5-17** Execute page of rerun

2. The report of rerun will be under the father report and add "." before its time. As Figure 5-18 tells:



**Figure 5-18** Report page includes rerun report
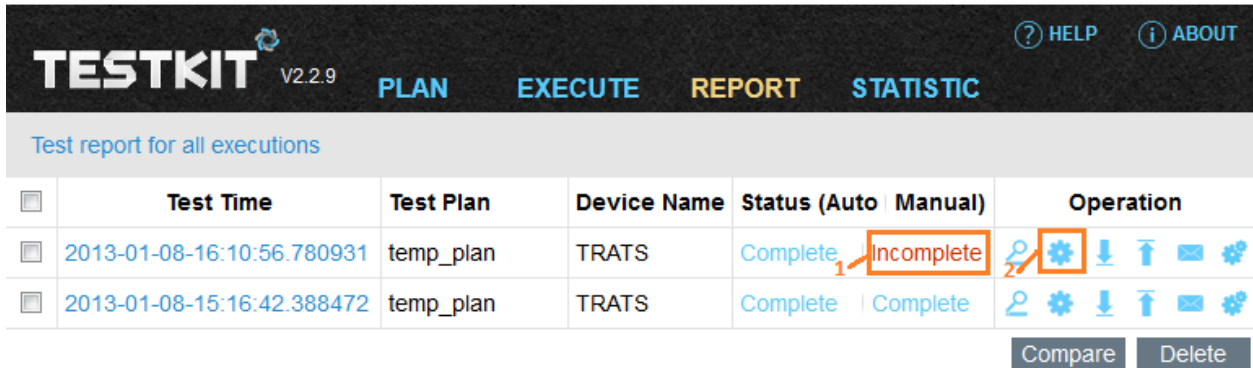
### 5.4.6 Complete Report with Manual Test Cases

The test case packages include manual test cases whose results need to be submitted to the report

manually.

As Figure 5-19tells:

● If Manual Status is "Incomplete", the ⚙ button becomes available with the title "Continue Execution".



**Figure 5-19**Manual test cases report

1. Click ⚙ . The page refreshes, as shown in Figure 5-20.Then, you can select the result of manual test cases.

**Figure 5-20**Selecting result of manual test cases

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

# 6. Statistic Test Result

1. Click the **STATISTIC** tab toview statistics by package chart. The page refreshes, as shown in Figure 6-1.The filter function becomes available.



**Figure 6-1** Viewing statistics by package chart(results)

2. Click the icon marked by [2] in Figure 6-1 to view statistic by component chart. The page refreshes, as shown in Figure 6-2.The filter function becomes available.



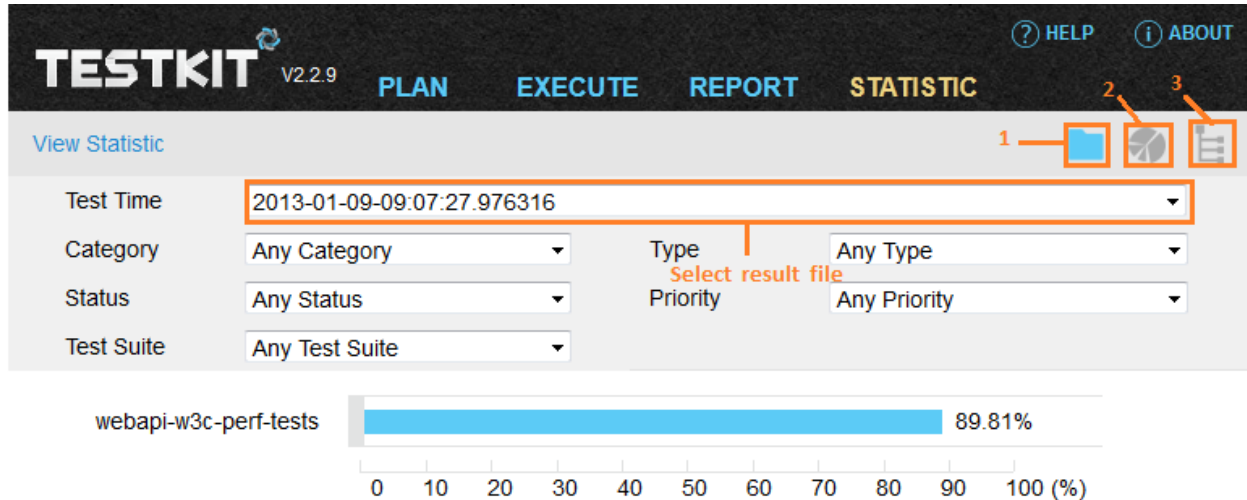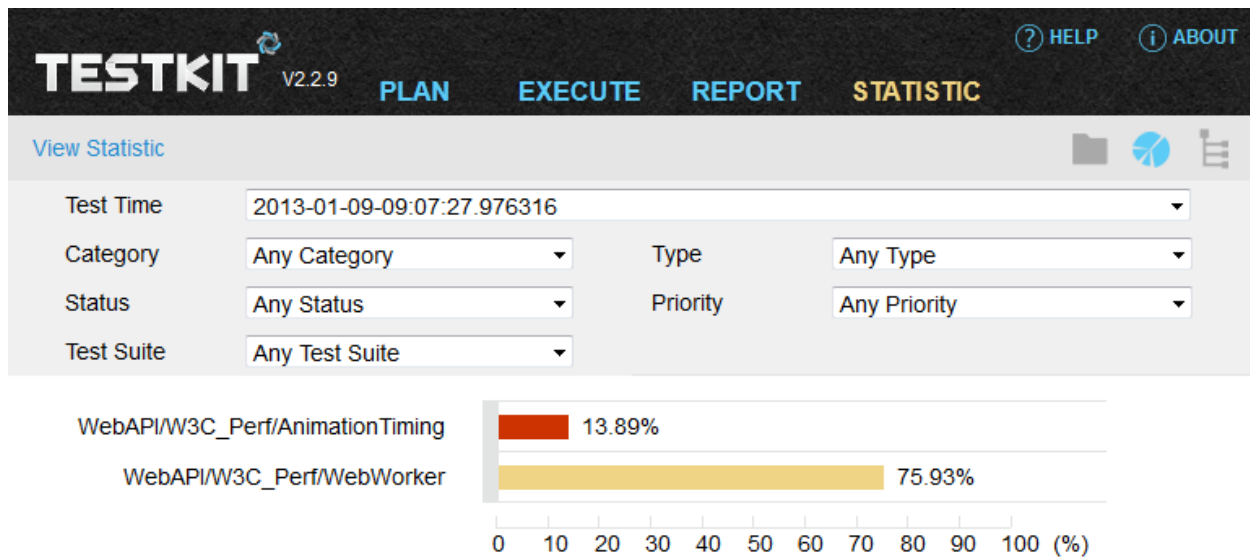**Figure 6-2**Viewing statistics by component chart (results)

3. Click the icon marked by [3] in Figure 6-1 toview statistics by spec chart. The page refreshes, as shown in Figure 6-3.The filter function becomes available.
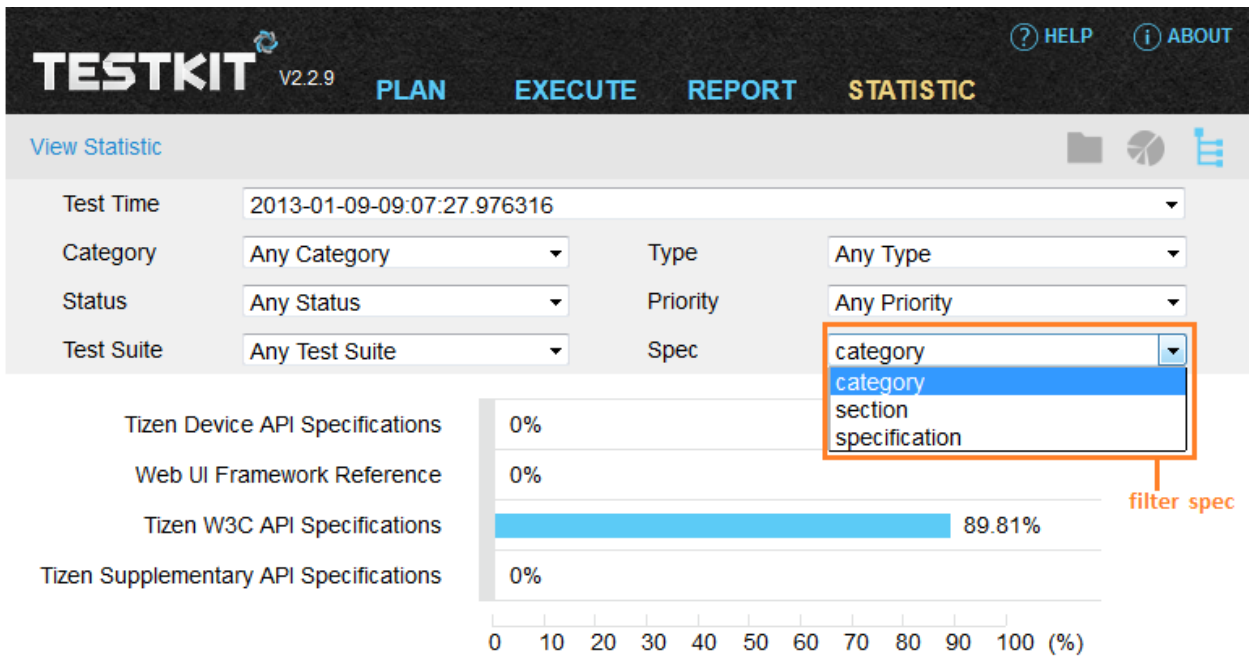
**Figure 6-3** Viewing statistics by spec chart(results)

4. Click the spec filter in Figure 6-3 to view statistics by spec chart. The page refreshes, as shown in Figure 6-4 and 6-5. The filter function becomes available.
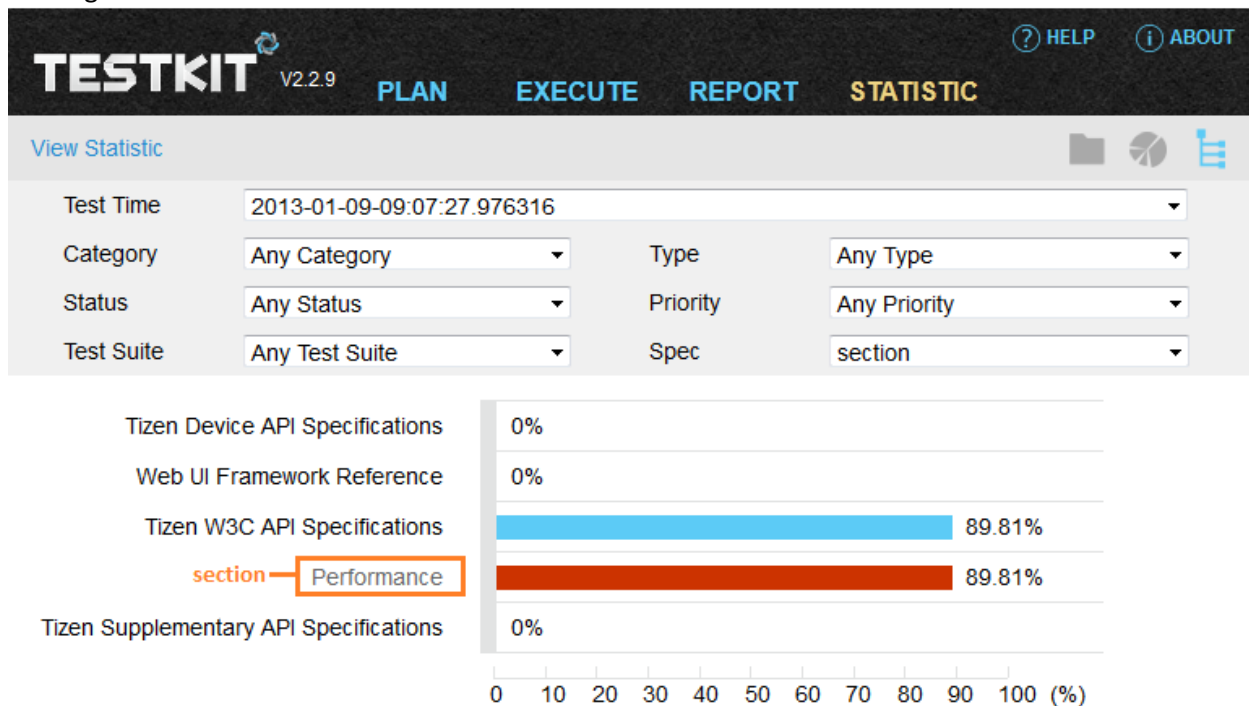


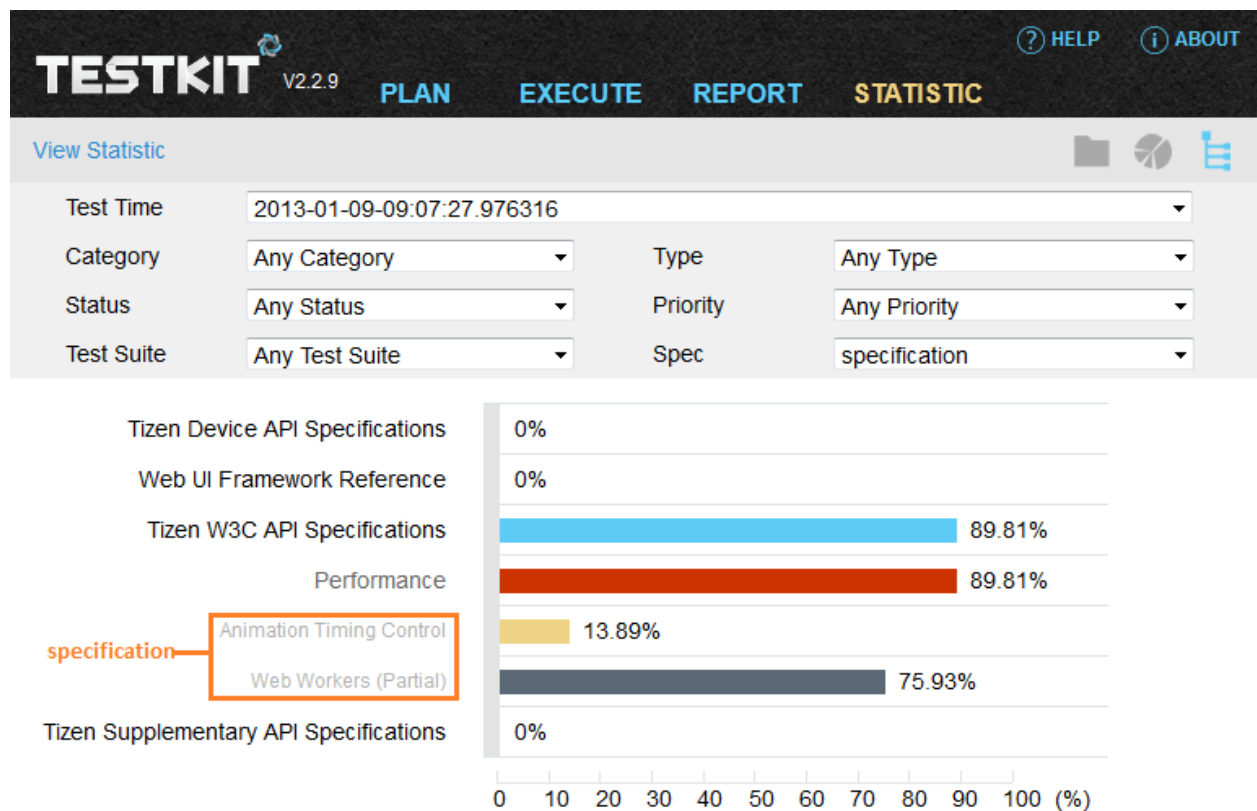**Figure 6-4**Viewing statistics by spec chart(results)

**Figure 6-5**Viewing statistics by spec chart(results)