

# Behavior Test Tool User Guide

Version 1.0

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# 1 Introduction

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This document provides comprehensive information about Behavior Test Tool, including the following: Overview, Installation and Deployment, Test Execution and Report.

## 2 Overview

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Behavior Test Tool is a device behavior checker that uses jQuery. It is a major component of the Tizen Compliance Tests tool set.

Behavior Test Tool has these features:

- A list of behaviors you can test, with information about test cases
- Test cases for checking and evaluating the behavior of a device
- Automatically generated test reports you can view and save for further analysis

## 3 Install Crosswalk

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### 1. Install crosswalk on Tizen

- Download crosswalk from here

<https://download.01.org/crosswalk/releases/crosswalk/tizen-ivi/canary/<version>/crosswalk-<version>.i686.rpm>

<https://download.01.org/crosswalk/releases/tizen-extensions-crosswalk/tizen-ivi/canary/<version>/tizen-extensions-crosswalk-<version>.i686.rpm>

- Deploy crosswalk to Tizen device

```
$ sdb push crosswalk-<version>.i686.rpm /opt/home/developer
$ sdb push tizen-extensions-crosswalk-<version>.i686.rpm
/opt/home/developer
$ sdb shell "rpm -ivh /opt/home/developer/crosswalk-<version>.i686.rpm"
$ sdb shell "rpm -ivh /opt/home/developer/tizen-extensions-crosswalk-
<version>.i686.rpm"
```

### 2. Install crosswalk on Android

- Download crosswalk from here

<https://download.01.org/crosswalk/releases/crosswalk/android/canary/<version>/x86/crosswalk-apks-<version>-x86.zip>

- Deploy crosswalk to Android device

```
$ unzip crosswalk-apks-<version>-x86.zip -d /path/to/
$ adb install /path/to/crosswalk-apks-<version>-x86/XWalkRuntimeLib.apk
```

## 4 Deploy tinyweb

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### 1. Deploy tinyweb on Tizen

- Make binaries for tinyweb from source code in Github

```
$ git clone git@github.com:testkit/tinyweb.git
$ cd tinyweb && make
```

Note: The generated tinyweb type depends on your OS system type (32/64 bit).

- Deploy binaries to TIZEN device

```
$ sdb shell "mkdir -p /opt/usr/media/tct/"
$ sdb push tinyweb /opt/home/developer/
$ sdb shell "chmod a+x /opt/home/developer/tinyweb"
$ sdb push cgi-getcookie /opt/home/developer/
$ sdb shell "chmod a+x /opt/home/developer/cgi-getcookie"
$ sdb push cgi-getfield /opt/home/developer/
$ sdb shell "chmod a+x /opt/home/developer/cgi-getfield"
$ sdb push server.pem /opt/home/developer/
$ sdb shell "chmod 666 /opt/home/developer/server.pem"
$ sdb shell "ln -s /usr/lib/libssl.so.1.0.0 /opt/home/developer/libssl.so"
$ sdb shell "ln -s /usr/lib/libcrypto.so.1.0.0 /opt/home/developer/libcrypto.so"
```

- Launch tinyweb

```
$ DPATH=`sdb shell "printenv PATH"`
$ timeout 5 sdb shell "env LD_LIBRARY_PATH=/opt/home/developer
PATH=$DPATH:/opt/home/developer tinyweb -ssl_certificate
/opt/home/developer/server.pem -document_root /opt/usr/media/tct/ -
listening_ports 80,8080,8081,8082,8083,8443s; sleep 3s"
```

## 2. Deploy tinyweb on Android

- Make binaries for tinyweb from source code in Github

```
$ git clone git@github.com:testkit/tinyweb.git
$ cd tinyweb/android/native/jni/ && /path/to/android-ndk-<version>/ndk-build
```

- Copy tinyweb/android/native/libs/ to folder tinyweb/android/assets/system/libs/

For example:

```
$ cp -r /path/to/tinyweb/android/native/libs/
/path/to/tinyweb/android/assets/system/libs/
```

- Import project tinyweb to Android developer Tool by location tinyweb /android
- Export the android project to APK and install APK to android device

```
$ adb install /path/to/tinyweb/bin/TinywebTestService.apk
```

- Launch tinyweb by clicking the tinyweb app icon in launcher

# 5 Installation Behavior Test Tool

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## 1. Pack Behavior Test Tool

Please see *Web\_Test\_Suite\_Packaging\_Guide*, Chapter 3 “Pack Web Test Suite Packages”, to choose a suitable mode package.

Note: For Android device, only embedded mode APK package is supported.

## 2. Install Behavior Test Tool

On Tizen:

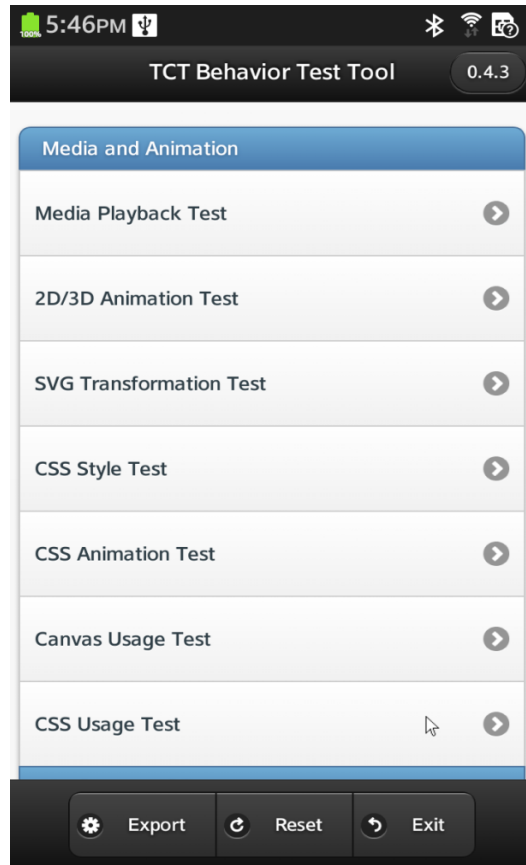
```
$ sdb push tct-behavior-tests-x.x.x-x.xpk.zip /opt/usr/media/tct/
$ sdb shell
$ cd /opt/usr/media/tct/
$ unzip tct-behavior-tests-x.x.x-x.xpk.zip
$ /opt/usr/media/tct/opt/tct-behavior-tests/inst.sh
```

On Android:

```
$ unzip tct-behavior-tests-x.x.x-x.apk.zip  
$ ./opt/tct-behavior-tests/inst.sh
```

## 6 Preparing To Test

The home page in which all Behavior Test Tool test cases are listed is shown below:



**Figure 5-1. Behavior Test Tool Home Page**

The header bar shows the Behavior Test Tool title and version.

The test list in the center shows components and the tests for them. When you perform a test, the result status also appears in this area.

The footer bar has buttons for working with the test results:

- **Export:** Save the test result XML file to the file system. This is default full path that includes both location and file name: /opt/usr/media/Documents/tct-behavior-tests.result.xml.

Note: Currently export result is blocked by crosswalk implement.

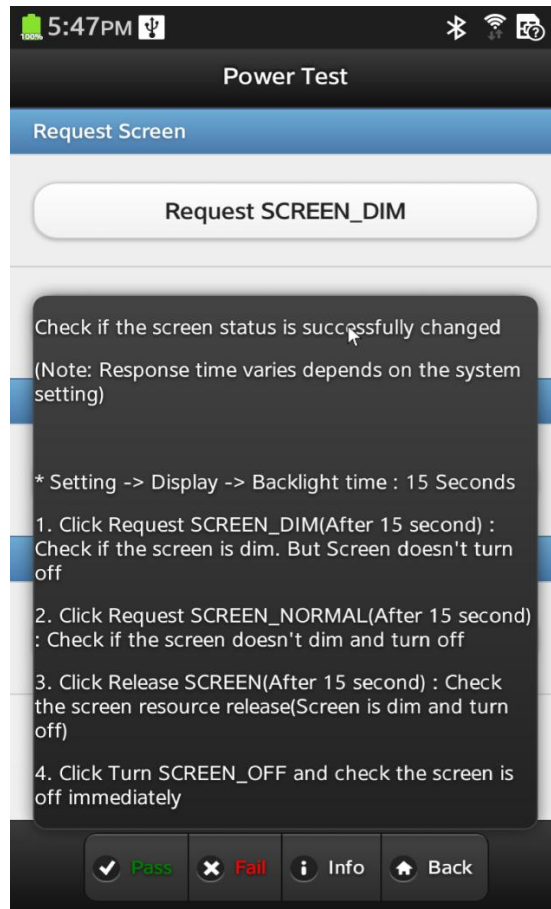
- **Reset:** Reset the test results.

- **Exit:** Quit.

## 7 Executing Tests

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1. Click the Info button to view the test case description, and perform the test according to it.



**Figure 6-1. Behavior Test Tool Test Case Info Page**

2. Compare the test result with the expected result, then click **Pass** or **Fail** to update the test result on the Home page.

## 8 Viewing the Report

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To generate the result XML at the specific location, click Export. You can view the summary information, including the case title and result.