



Tizen Web Protection Service Daemon Test Specification

Document version 1.0.2

Copyright © 2014, McAfee, Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of McAfee, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1. Contents

1. Contents.....	3
1.0 Document History.....	4
1.2 References.....	4
1.3 Glossary and definitions	4
2. Purpose and Scope	5
3. Component Description	6
4. Test Environment Description	7
5. Test Cases Specifications.....	8
5.1 Test Case TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_001	8
5.2 Test Case TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_002	8
5.3 Test Case TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_003	9
5.4 Test Case TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_004	10
5.5 Test Case TC_SEC_WP_TWPSerDaemonGetVerSendMessageSync_001.....	11
5.6 Test Case TC_SEC_WP_TWPSerDaemonGetVerSendMessageAsync_001	12
5.7 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_001.....	13
5.8 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_002	14
5.9 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_003.....	14
5.10 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_004	15
5.11 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_005	16
5.12 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_006	17
5.13 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_007	18
5.13 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageAsync_001.....	19
5.14 Test Case TC_SEC_WP_TWPSerDaemonGetRepSendMessageAsync_002	20
5.15 Test Case TC_SEC_WP_TWPSerDaemonGetRepGetVerSendMessageAsync_001	21
6. Test Guide	23
7. Test Contents	24

1.0 Document History

Version	Date	Reason
1.0.0	6/24/2014	First draft from McAfee
1.0.1	08/26/2014	Update 2 testcases to check status code
1.0.2	05/01/2015	Update the sync mode Get Version testcase name

1.2 References

Ref	Document	Issue	Title
[1]	Tizen Web Protection API Specification	1.1.1	Tizen Web Protection API Specification

1.3 Glossary and definitions

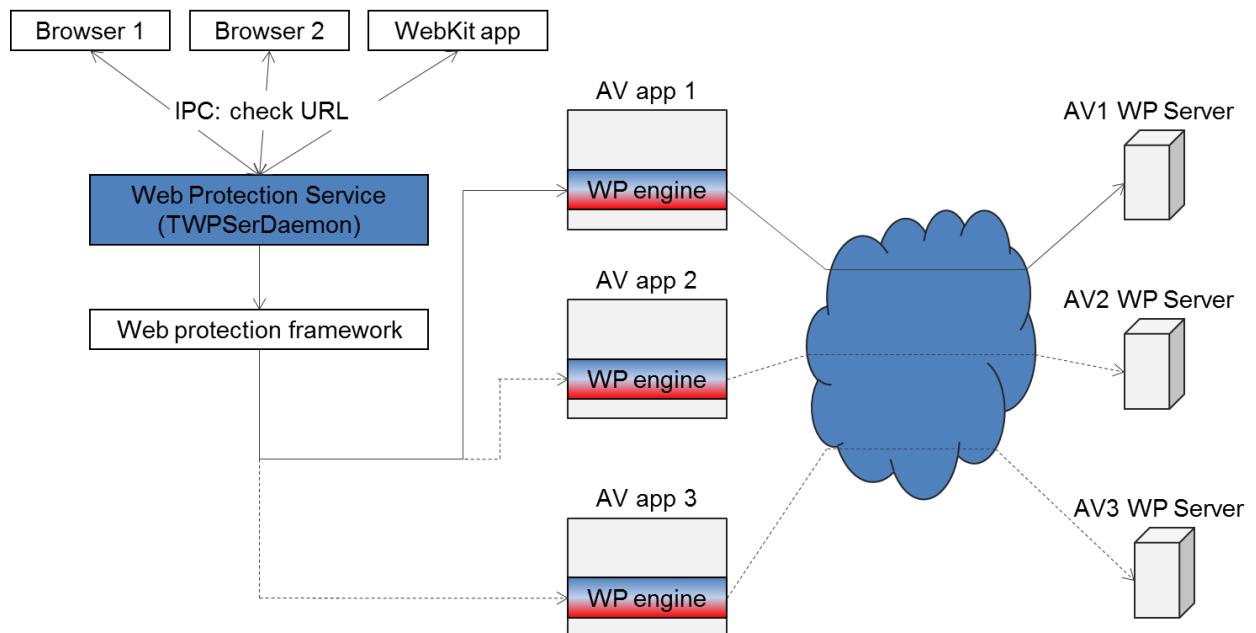
API Application Programming Interface

TWP Tizen Web Protection

2. Purpose and Scope

The overall purpose of this document is to describe the test cases for the Tizen Web Protection Service Daemon. This document includes Test case procedures.

3. Component Description



4. Test Environment Description

The test environment used is on Tizen platform.

The following requirements apply to all test cases defined in this document:

1. Any resources required by Tizen Web Protection subsystem in runtime should be installed in the test environment.
2. Test samples required by test suite should be installed in the test environment.

5. Test Cases Specifications

5.1 Test Case

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_001

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_001	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TSCSendMessageN(IpcClientInfo *pInfo, const char *service_name, const char *szMethod, int argc, char **argv, int *argc_reply, char ***argv_reply, int timeout_milliseconds);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets error if TWPSerDaemon is not running.	
<u>Test pre-conditions:</u>	
No Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none">1. Call TSCSendMessageN () with TWPGETVERSIONMETHOD2. Verify the API return value is not equal to 0.	
<u>Test PASS Condition:</u>	
Step 2 should return a value not equal to 0.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply.	

5.2 Test Case

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_002

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_002	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetVersion(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_002	TWPSerDaemon interface test.
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result if TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	
Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Call TSCSendMessageN () with TWPGETVERSIONMETHOD 3. Verify the API return value is equal to 0 and number of reply arguments is 4. 4. Verify status code set to 0. 5. Verify framework version equal to TWP_FRAMEWORK_VERSION. 6. Verify plugin version is greater than zero. 7. Verify Daemon version is equal to TWP_DAEMON_VERSION. 	
<u>Test PASS Condition:</u>	
Step 3, 4, 5, 6 and 7 should pass.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply. Stop the Daemon.	

5.3 Test Case

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_003

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_003	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetVersion(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result everytime when TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_003	TWPSerDaemon interface test.
Daemon running.	
Test Procedure:	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Do below steps for 500 times. 3. Call TSCSendMessageN () with TWPGETVERSIONMETHOD 4. Verify the API return value is equal to 0 and number of reply arguments is 4. 5. Verify status code is set to 0. 6. Verify framework version equal to TWP_FRAMEWORK_VERSION. 7. Verify plugin version is greater than zero. 8. Verify Daemon version is equal to TWP_DAEMON_VERSION. 	
Test PASS Condition:	
Step 2, 3, 4, 5, 6, 7 and 8 should pass.	
Test Clean-up procedure:	
Cleanup Reply. Stop Daemon.	

5.4 Test Case

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_004

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_004	TWPSerDaemon interface test.
API Function(s) covered:	
<pre>int TWPSerGetVersion(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
Test Objectives:	
This test case verifies that the calling application succeeds but does not get plugin version if TWPSerDaemon is running and there is no plugin.	
Test pre-conditions:	
Daemon running and Plugin removed.	

TC_SEC_WP_TWPSerDaemonGetVerSendMessageN_004	TWPSerDaemon interface test.
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Remove Plugin. 3. Call TSCSendMessageN () with TWPGETVERSIONMETHOD 4. Verify the API return value is equal to 0 and number of reply arguments is 1. 5. Verify the status code is set to 3 (TWP_INVALID_HANDLE) 	
<u>Test PASS Condition:</u>	
Step 3, 4 should pass.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply. Stop the Daemon.	

5.5 Test Case

TC_SEC_WP_TWPSerDaemonGetVerSendMessageSync_001

TC_SEC_WP_TWPSerDaemonGetVerSendMessageSync_001	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetVersion(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result by using TSCSendMessageln in different threads when TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	
Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Do below steps in 10 threads. 3. Call TSCSendMessageln () with TWPGETVERSIONMETHOD. 	

TC_SEC_WP_TWPSerDaemonGetVerSendMessageSync_001	TWPSerDaemon interface test.
<p>4. Verify the API return value is equal to 0 and number of reply arguments is 4.</p> <p>5. Verify status code is set to 0.</p> <p>6. Verify framework version equal to TWP_FRAMEWORK_VERSION.</p> <p>7. Verify plugin version is greater than zero.</p> <p>8. Verify Daemon version is equal to TWP_DAEMON_VERSION.</p>	
Test PASS Condition:	
Step 2, 3, 4, 5, 6, 7 and 8 should pass.	
Test Clean-up procedure:	
Cleanup Reply. Stop Daemon.	

5.6 Test Case

TC_SEC_WP_TWPSerDaemonGetVerSendMessageAsync_001

TC_SEC_WP_TWPSerDaemonGetVerSendMessageAsync_001	TWPSerDaemon interface test.
API Function(s) covered:	
<pre>int TWPSerGetVersion(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
Test Objectives:	
This test case verifies that the calling application gets correct result by using TSCSendMessagAsync in different threads when TWPSerDaemon is running.	
Test pre-conditions:	
Daemon running.	
Test Procedure:	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Do below steps in 10 threads. 3. Call TSCSendMessagAsync () with TWPGETVERSIONMETHOD. 4. Verify the API return value is equal to 0 and number of reply arguments is 4. 5. Verify status code is set to 0. 	

TC_SEC_WP_TWPSerDaemonGetVerSendMessageAsync_001	TWPSerDaemon interface test.
<p>6. Verify framework version equal to TWP_FRAMEWORK_VERSION. 7. Verify plugin version is greater than zero. 8. Verify Daemon version is equal to TWP_DAEMON_VERSION.</p>	
Test PASS Condition:	
Step 2, 3, 4, 5, 6, 7 and 8 should pass.	
Test Clean-up procedure:	
Cleanup Reply. Stop Daemon.	

5.7 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_001

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_001	TWPSerDaemon interface test.
API Function(s) covered:	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
Test Objectives:	
This test case verifies that the calling application gets error if TWPSerDaemon is not running.	
Test pre-conditions:	
No Daemon running.	
Test Procedure:	
<ol style="list-style-type: none"> 1. Call TSCSendMessageN() with TWPGETURLREPUTATIONMETHOD. 2. Verify the API return value is not equal to 0. 	
Test PASS Condition:	
Step 2 should return a value not equal to 0.	
Test Clean-up procedure:	
Cleanup Reply.	

5.8 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_002

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_002	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
	<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>
<u>Test Objectives:</u>	This test case verifies that the calling application gets correct result for high risk URL if TWPSerDaemon is running.
<u>Test pre-conditions:</u>	Daemon running.
<u>Test Procedure:</u>	<ol style="list-style-type: none">1. Start the Daemon.2. Call TSCSendMessageN () with TWPGETURLREPUTATIONMETHOD.3. Verify the API return value is equal to 0 and number of reply arguments is 3.4. Verify status code is set to 0.5. Verify risk level is set to TWP_High.6. Verify redirect URL length is greater than zero.
<u>Test PASS Condition:</u>	Step 3, 4, 5, and 6 should pass.
<u>Test Clean-up procedure:</u>	Cleanup Reply. Stop the Daemon.

5.9 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_003

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_003	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result for Medium Risk URL if TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	
Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Call TSCSendMessageN() with TWPGETURLREPUTATIONMETHOD. 3. Verify the API return value is equal to 0 and number of reply arguments is 3. 4. Verify status code is set to 0. 5. Verify risk level is set to TWP_Medium. 6. Verify redirect URL length is greater than zero. 	
<u>Test PASS Condition:</u>	
Step 3, 4, 5, and 6 should pass.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply.	
Stop the Daemon.	

5.10 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_004

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_004	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_004	TWPSerDaemon interface test.
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result for Unverified Risk URL if TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	
Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Call TSCSendMessageN () with TWPGETURLREPUTATIONMETHOD. 3. Verify the API return value is equal to 0 and number of reply arguments is 2. 4. Verify status code is set to 0. 5. Verify risk level is set to TWP_Unverified. 	
<u>Test PASS Condition:</u>	
Step 3, 4, and 5 should pass.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply. Stop the Daemon.	

5.11 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_005

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_005	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result for Minimal Risk URL if TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_005	TWPSerDaemon interface test.
Daemon running.	
Test Procedure:	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Call TSCSendMessageN() with TWPGETURLREPUTATIONMETHOD. 3. Verify the API return value is equal to 0 and number of reply arguments is 2. 4. Verify status code is set to 0. 5. Verify risk level is set to TWP_Minimal. 	
Test PASS Condition:	
Step 3, 4, and 5 should pass.	
Test Clean-up procedure:	
Cleanup Reply.	
Stop the Daemon.	

5.12 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_006

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_006	TWPSerDaemon interface test.
API Function(s) covered:	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
Test Objectives:	
This test case verifies that the calling application gets correct error result if TWPSerDaemon is running and there is no plugin.	
Test pre-conditions:	
Daemon running.	
No Plugin.	

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_006	TWPSerDaemon interface test.
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Remove Plugin. 3. Call TSCSendMessageN () with TWPGETURLREPUTATIONMETHOD. 4. Verify the API return value is equal to 0 and number of reply arguments is 1. 5. Verify status code is set to 3 (TWP_INVALID_HANDLE). 	
<u>Test PASS Condition:</u>	
Step 3, 4, and 5 should pass.	
<u>Test Clean-up procedure:</u>	
<p>Cleanup Reply.</p> <p>Stop the Daemon.</p> <p>Restore Plugin.</p>	

5.13 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_007

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_007	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result everytime if TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	
Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Do below steps for 200 times. 3. Call TSCSendMessageN () with TWPGETURLREPUTATIONMETHOD and High Risk URL. 	

TC_SEC_WP_TWPSerDaemonGetRepSendMessageN_007	TWPSerDaemon interface test.
<p>4. Verify the API return value is equal to 0 and number of reply arguments is 3.</p> <p>5. Verify status code is set to 0.</p> <p>6. Verify risk level is set to TWP_High.</p> <p>7. Verify redirect URL length is greater than zero.</p>	
<u>Test PASS Condition:</u>	
Step 2, 3, 4, 5, 6 and 7 should pass.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply. Stop the Daemon.	

5.13 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageAsync_001

TC_SEC_WP_TWPSerDaemonGetRepSendMessageAsync_001	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result by using TSCSendMessageln in parallel threads if TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	
Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Do below steps for 200 different threads. 3. Call TSCSendMessageln () with TWPGETURLREPUTATIONMETHOD and High Risk URL. 4. Verify the API return value is equal to 0 and number of reply arguments is 3. 5. Verify status code is set to 0. 	

TC_SEC_WP_TWPSerDaemonGetRepSendMessageAsync_001	TWPSerDaemon interface test.
<p>6. Verify risk level is set to TWP_High. 7. Verify redirect URL length is greater than zero.</p>	
<u>Test PASS Condition:</u>	
Step 2, 3, 4, 5, 6 and 7 should pass.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply. Stop the Daemon.	

5.14 Test Case

TC_SEC_WP_TWPSerDaemonGetRepSendMessageAsync_002

TC_SEC_WP_TWPSerDaemonGetRepSendMessageAsync_002	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result by using TSCSendMessagAsync in parallel threads if TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	
Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Do below steps for 200 different threads. 3. Call TSCSendMessagAsync () with TWPGETURLREPUTATIONMETHOD and High Risk URL. 4. Verify the API return value is equal to 0 and number of reply arguments is 3. 5. Verify status code is set to 0. 6. Verify risk level is set to TWP_High. 7. Verify redirect URL length is greater than zero. 	

TC_SEC_WP_TWPSerDaemonGetRepSendMessageAsync_002	TWPSerDaemon interface test.
<u>Test PASS Condition:</u>	
Step 2, 3, 4, 5, 6 and 7 should pass.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply. Stop the Daemon.	

5.15 Test Case

TC_SEC_WP_TWPSerDaemonGetRepGetVerSendMessageAsync_001

TC_SEC_WP_TWPSerDaemonGetRepGetVerSendMessageAsync_001	TWPSerDaemon interface test.
<u>API Function(s) covered:</u>	
<pre>int TWPSerGetURLReputation(void *pData, int req_argc, char **req_argv, char ***rep_argv, int *rep_argc, CALLBACKFUNC callback, TSC_METHOD_HANDLE *handle);</pre>	
<u>Test Objectives:</u>	
This test case verifies that the calling application gets correct result by calling both methods “TWPGETURLREPUTATIONMETHOD” and “TWPGETVERSIONMETHOD” in parallel threads while TWPSerDaemon is running.	
<u>Test pre-conditions:</u>	
Daemon running.	
<u>Test Procedure:</u>	
<ol style="list-style-type: none"> 1. Start the Daemon. 2. Do below steps for 50 different threads. 3. Call TSCSendMessageAsync () for method TWPGETURLREPUTATIONMETHOD with argument as High Risk URL. 4. Call TSCSendMessageAsync () for method TWPGETVERSIONMETHOD with no arguments. 5. If TWPGETURLREPUTATIONMETHOD’s call back is invoked, verify that API return value is equal to 0 and number of reply arguments is set to 3 and steps 6, 7 and 8. 6. Verify status code is set to 0. 7. Verify risk level is set to TWP_High. 	

TC_SEC_WP_TWPSerDaemonGetRepGetVerSendMessageAsync_001	TWPSerDaemon interface test.
<p>8. Verify redirect URL length is greater than zero.</p> <p>9. If TWPGETVERSIONMETHOD's call back is invoked, verify that API return value is equal to 0 and number of reply arguments is set to 4 and steps 10, 11, 12 and 14.</p> <p>10. Verify status code set to 0.</p> <p>11. Verify framework version equal to TWP_FRAMEWORK_VERSION.</p> <p>12. Verify plugin version is greater than zero.</p> <p>13. Verify Daemon version is equal to TWP_DAEMON_VERSION.</p>	
<u>Test PASS Condition:</u>	
Steps 2 to 13 should pass.	
<u>Test Clean-up procedure:</u>	
Cleanup Reply.	
Stop the Daemon.	

6. Test Guide

To run test cases, we need to have:

- TWP plug-in for test purpose
- Test contents
- Test cases
- TWP security framework
- TWP Service Daemon

Test cases need to be compiled with TWP security framework. A TWP plug-in need to be created which can look-up the test contents as expected. All test contents, test cases and test TWP plug-in will be provided as a test suite along with script file which will automate the test process.

7. Test Contents

URL	Risk Level
http://twp.test.chat.browserexploits	TWP_High
http://twp.test.searchengines.spamurls	TWP_Medium
http://twp.test.sports.games	TWP_Unverified
http://twp.test.gambling	TWP_Minimal