

CC-ALLSEEN Project


Compliance & Certification Program for
AllSeen Alliance



Certification Test Tool

USER AND MAINTENANCE INSTRUCTIONS

Code: CC-ALLSEEN_D16

Author	
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VERSION CONTROL

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1.0	2015-04-17	Initial version
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1 INTRODUCTION

1.1 Objective

This document is part of the Test Tool documentation and describes how to use both parts of the Certification Test Tool: the Web Server and the Local Agent. It also describes how to maintain both applications.

Six main actions have been identified for the end users:

- 1) Creating a Testing Project.
- 2) Updating the Local Agent.
- 3) Updating the Test Cases Package.
- 4) Running Test Cases.
- 5) Visualizing Test Cases Results.
- 6) Submitting Test Reports.

Seven main actions have been identified for the administrator users in order to maintain both applications:

- 1) Creating a Test Case Control List (TCCL).
- 2) Updating Services Frameworks.
- 3) Updating Test Cases List.
- 4) Updating ICS/IXIT/General Parameters.
- 5) Updating a Test Cases Package.
- 6) Updating a Test Tool Local Agent Installation Package.
- 7) Creating a Test Tool Local Agent Installation Package.

1.2 Definition of Terms

AllSeen Alliance	Open source nonprofit consortium providing open source software for widespread adoption of products, systems and services for the Internet of Things.
Applicant OEM	OEM, manufacturer, vendor, etc. requesting AllSeen Certification for a product.
Certification	Process through which AllSeen Alliance grants recognition to a product that meets certain AllJoyn® specified requirements. This activity results in issuance of a “Certificate of Conformity”.
Compliance & Certification	It refers to the fact that a product is in accordance with the AllJoyn® Interface Definitions and the formal process intended to determine if such product meets these specifications.
Conformance Testing	Testing performed using the Test Tool to verify the compliance an applicant AllJoyn® implementation with AllJoyn® features and service framework interface definitions.
Implementation	Table that indicates if the mandatory and optional features and

Conformance Statement (ICS)	functionalities that could be implemented in the product to test are supported or not.
Implementation eXtra Information for Testing (IXIT)	Statement made by a supplier or implementer of an DUT which contains or references all of the information related to the DUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the DUT.
Interoperability testing	Testing performed according to AllSeen Alliance Interoperability test cases to verify that an applicant AllJoyn® implementation can interoperate with other applicant AllJoyn® devices.
Product	Manufactured article that can be offered to a market that might satisfy a want or need.
Test Tool	Tool used to perform conformance testing on product according to Interface Test Specifications. Test Tool software is provided by AllSeen Alliance. Test Tool hardware is commercially available.
CAS	Central Authentication Service. This is the Single Sign-On technology used by the Linux Foundation to centralize the secured access to the different AllSeen Sites.

2 User Instructions

2.1 Creating a Testing Project

Several steps are described below to show users how a testing project is created. There are 7 or 8 steps, depending on if Golden Unit selection is necessary or not (for Interoperability, Conformance + Interoperability and Pre-Certification is necessary):

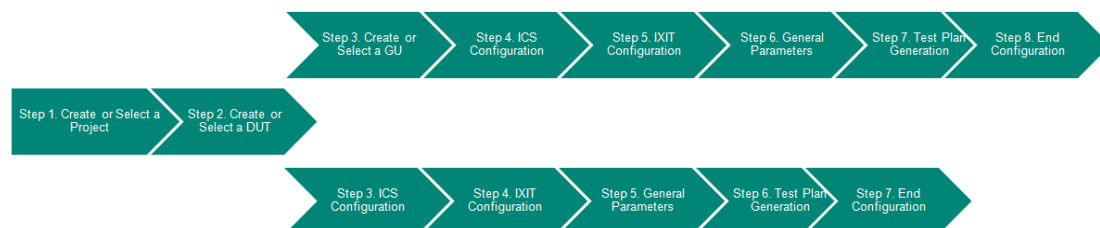


Figure 1. Workflow for Testing Project creation

2.1.1 Login

Go to the Test Tool Web Server by entering the following URI into a supported web browser:


<https://certify.allseenalliance.org/>

The following web browsers have been fully tested and validated for the Test Tool Web Server under Windows 7 SP1:

- Google Chrome version 42.0.2311.90
- Firefox version 37.0.2
- Internet Explorer version 11.0.9600.17728

MEMBERS LOGIN

Connect to the Linux Foundation to continue



Connect

Figure 2. Connecting to the CAS Server

The CTT Web Server integrates the CAS (Central Authentication Service) Single Sign-On technology to avoid multiple logins for the same user across the different AllSeen websites.

By clicking on “Connect” the user is forwarded to the Linux Foundation CAS server to introduce username and password or to create a new user.



[LOG IN](#) » [RETURN TO 192.168.110.50](#)

☒ I already have a Linux Foundation ID
☐ I need to create a Linux Foundation ID

Username

Password

Log in

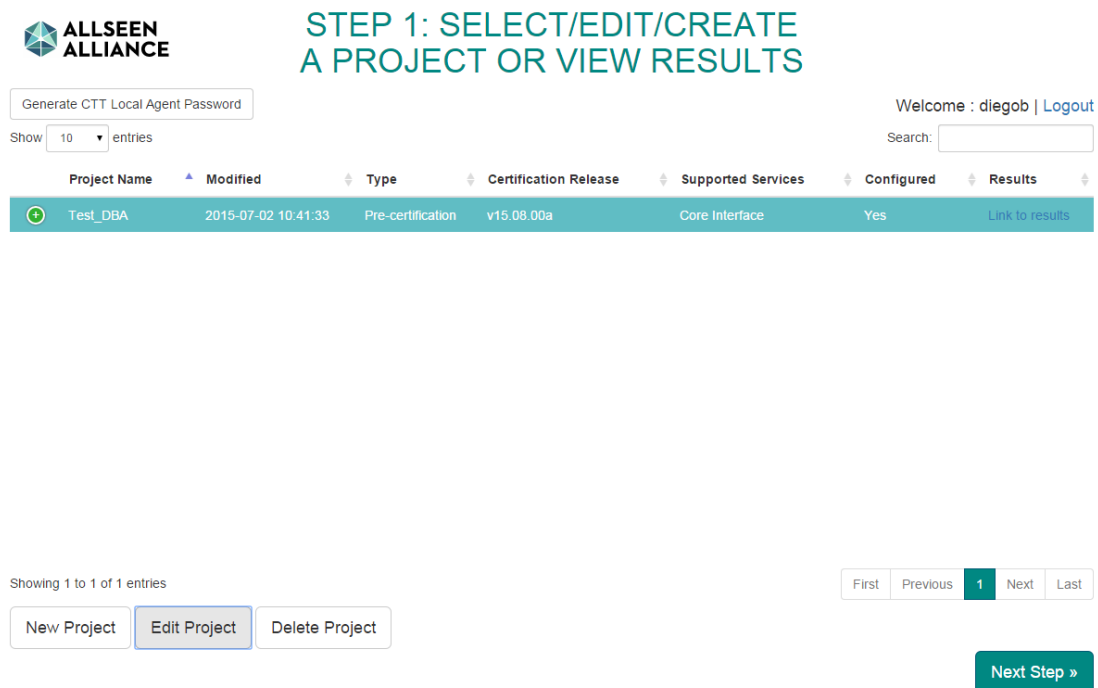
[Request new password](#)

Figure 3. Username and Password

Enter your username and password or create a new one by selecting “I need to create a Linux Foundation ID”. This option allows specifying two possible roles: “Administrator” and “User”. See section 3.1.1 for additional details about “Administrator” role.

2.1.2 Step 1: Select, Edit, Create a Project or View Results

Once the user has entered into the CTT Web Server, he/she needs to create a password or key to access to the CTT Local Agent by clicking on “Generate CTT Local Agent Key” button:



Generate CTT Local Agent Password

Welcome : diegob | [Logout](#)

Show 10 entries

Search:

Project Name	Modified	Type	Certification Release	Supported Services	Configured	Results
Test_DBA	2015-07-02 10:41:33	Pre-certification	v15.08.00a	Core Interface	Yes	Link to results

Showing 1 to 1 of 1 entries

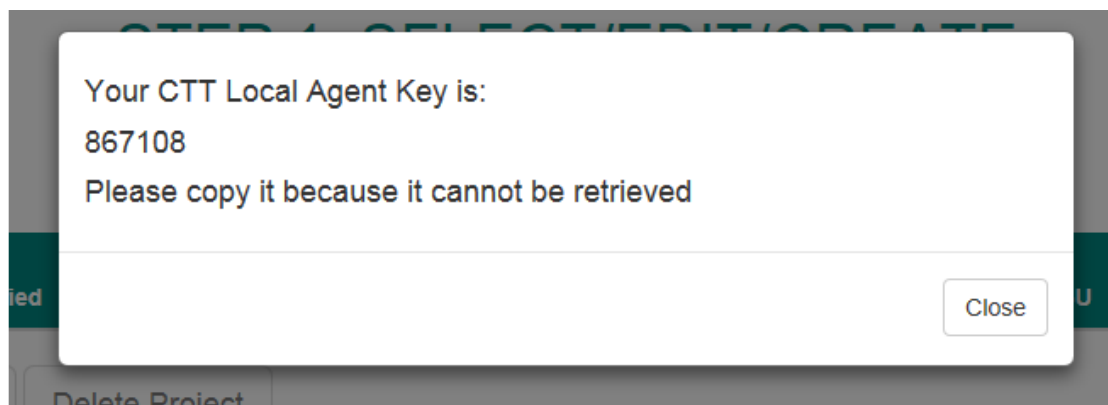
First Previous 1 Next Last

New Project Edit Project Delete Project

Next Step »

Figure 4. Generating a CTT Local Agent Key

The user needs to copy the key and paste into the CTT Local Agent. If the user forgets this key, he/she could generate a new one by clicking again on the “Generate CTT Local Agent Key” button:



Your CTT Local Agent Key is:


867108

Please copy it because it cannot be retrieved

Close

Figure 5. Copy/Paste the CTT Local Agent Key


A list shows all existing projects. When a project is selected, the button “Next” is enabled:



STEP 1: SELECT/EDIT/CREATE A PROJECT OR VIEW RESULTS

Welcome : diegob | [Logout](#)

Show entries

Project Name	Modified	Type	Certification Release	Supported Services	Configured	Results
 Test_DBA	2015-07-02 10:41:33	Pre-certification	v15.08.00a	Core Interface	Yes	Link to results

Showing 1 to 1 of 1 entries

Figure 6. Selecting an existing Project

If “New Project” button is pressed, the following information is requested:

Name (*)

Type

Certification Release Core Version

Test Case Control List

Certification Application Request ID (*)

Supported Services

(*) This is a mandatory field

Cancel

Create project

Figure 7. Creating a new Project

- **Name:** Is the project name.
- **Type:** The user can select four types of project: Conformance, Interoperability, Conformance and Interoperability and Pre-Certification. The last option is aimed for a non-certification purpose (a testing or debugging session) and will enable the selection of Certification Release Core Versions for debugging purpose.
- **Certification Release Core Version:** Is the AllJoyn® version used by the Test Cases Package and supported by the DUT. By the moment, v14.06.00a, v14.12.00a, v14.12.00b, v15.04.00 and v15.04.00a are available for selecting. The name given to the Test Cases Packages refers to the Standard Client Core version; i.e, v15.04.00a means that Standard Client Core v15.04a has been used to compile the Test Cases Package. The base services version used during the compilation is added in the form of a comment.
- **Certification Application Request ID:** The user has to select a valid CRI from the list. If there are not available any CRI on the list, the user won't be able to submit a Test Report after completing a testing session. If the user selects a valid CRI on the list, it will be possible to create the Test Report


(when all test cases in the Test Plan have been run and they have a verdict) and submit the Test Report with all logs from the test execution.

- **Supported Services:** Core Interface is always selected. Apart from this, the user could select other Services Framework supported by the DUT.

If “Edit Project” button is pressed, the user can modify all the information in Figure 7.

If “Delete Project” button is pressed, the user can delete a project from the list.

For each project a “Link to results” appears when there are logs from test execution (instead of “No results”). A row for each test case execution is shown containing the test case description, the Date & Time when the test cases was run, the Certification Release and the final verdict:



TEST CASES RESULTS FOR "Test_DBA"

Welcome : diegob | [Logout](#)

Show entries

Search:

Name	Description	Date and Time Execution	Certification Release	Final Verdict
About-v1-01	About announcement received	2015-06-26 19:10:02	15.04.00	INCONC
About-v1-01	About announcement received	2015-07-01 12:23:12	15.04.00	INCONC
IOP_About-v1-01	Device detected	2015-06-26 19:21:33	15.04.00	INCONC
IOP_About-v1-01	Device detected	2015-07-02 09:12:59	15.04.00	INCONC
IOP_About-v1-01	Device detected	2015-07-02 11:34:37	15.04.00	INCONC
IOP_About-v1-02	Reception of About Announcement	2015-06-26 19:21:39	15.04.00	PASS
IOP_About-v1-03	Reception of GetAboutData information	2015-06-26 19:21:46	15.04.00	PASS
IOP_About-v1-04	Support of DeviceIcon Object	2015-06-26 19:21:55	15.04.00	PASS

Showing 1 to 8 of 8 entries

First Previous **1** Next Last

You need to execute all applicable Test Cases to be able to create the Test Report

Create Test Report Send Test Report View Test Report

« Back

Figure 8. Test Cases Results

If the user presses on one row, the corresponding full log will be shown on a separated window of the browser. This is the log generated and sent by the Local Agent after the test case execution and it contains the ICS, IXIT and General Parameters configuration, as well as partial verdicts.

← → ↻ about:blank

```
=====
Test Name: About-v1-01
Description: About announcement received
=====
04-15 10:44:21.247:I/TestRunner(2372):started:About-v1-01
=====
ICSCO_DateOfManufacture: true
ICSCO_HardwareVersion: true
ICSCO_SupportUrl: true
ICSCO_IconInterface: true
ICSCO_DeviceName: true
IXITCO_AboutVersion: 1
IXITCO_AppId: 002
IXITCO_DefaultLanguage:
IXITCO_DeviceName: Test DBA
IXITCO_DeviceId: 001
IXITCO_AppName:
IXITCO_Manufacturer: AT4 wireless
IXITCO_ModelNumber: Test Model
IXITCO_SoftwareVersion: 01_00_0797
IXITCO_AJSoftwareVersion:
IXITCO_HardwareVersion: 0011111
IXITCO_IntrospectableVersion: 1
IXITCO_SupportedLanguages:
IXITCO_Description:
IXITCO_DateOfManufacture:
IXITCO_SupportUrl:
GPCO_AnnouncementTimeout: 30
=====
04-15 10:44:21.287:I/AboutTestSuite(2372):test setUp started
04-15 10:44:21.287:I/AboutTestSuite(2372):Running About test case against Device ID: 001
04-15 10:44:21.287:E/AboutTestSuite(2372):Exception setting up resources: java.lang.IllegalArgumentException: Invalid UUID string: 002
04-15 10:44:21.297:E/AboutTestSuite(2372):Invalid UUID string: 002
04-15 10:44:21.297:E/AboutTestSuite(2372):Exception: java.lang.IllegalArgumentException: Invalid UUID string: 002
04-15 10:44:21.307:I/AboutTestSuite(2372):Partial Verdict: FAIL
04-15 10:44:21.307:I/TestRunner(2372):finished:About-v1-01
04-15 10:44:21.307:I/TestRunner(2372):Final Verdict: INCONC
```

Figure 9. Visualization of a Full Log

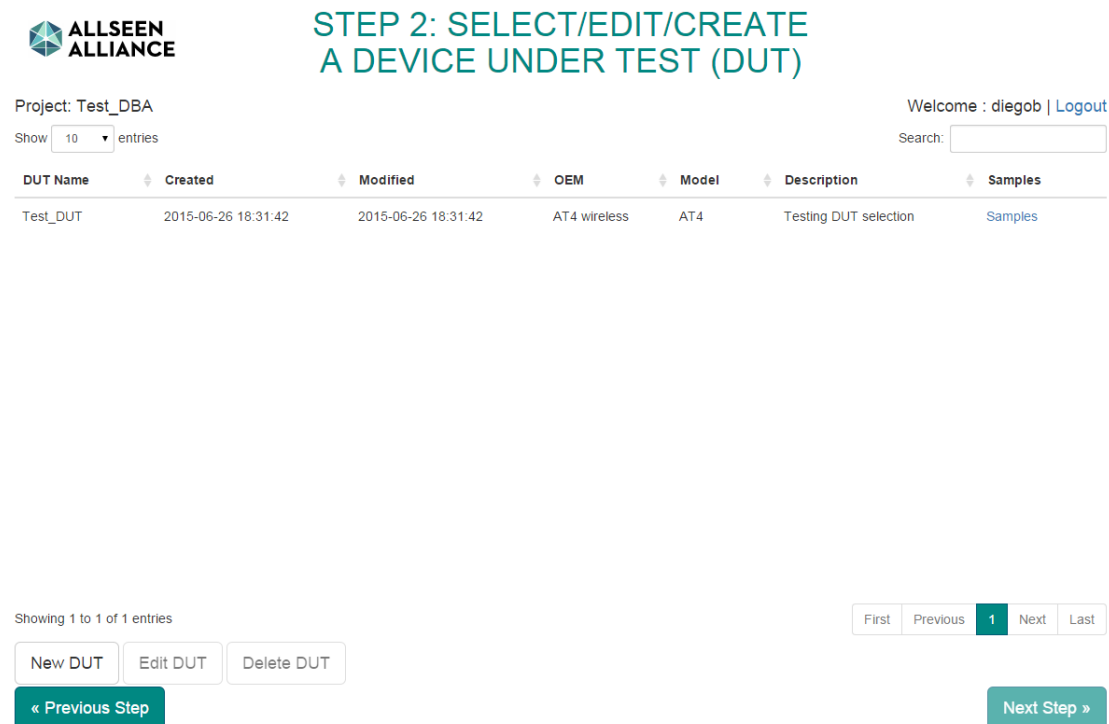
Once the user has run all applicable test cases and there are final verdicts for every Test Case, the “Create Test Report” button is enabling every time the user enters in the test cases Results area. By pressing “Create Test Report”, a PDF is generated containing the following information:

- Project Name.
- User Name.
- Test Report Creation Date & Time.
- Certification Application Request ID.
- Certification Application Request Description.
- Type of Project.
- Supported Services.
- Certification Release Version.
- TCCL Version.
- ICS, IXIT, General Parameters,
- List of test cases Results. If more than one result exists for the same Test Case, only the last result will be included in the Test Report.
- Number of executed Test Cases from the set of all applicable Test Cases.

Once the Test Report has been generated, the “Submit Test Report” and the “View Test Report” buttons will be enabled. The first one creates a ZIP package containing the Test Report itself (PDF document) and all the logs from the test cases execution. The second one only opens the PDF document.

2.1.3 Step 2: Select, Edit or Create a Device Under Test (DUT)

A list shows all existing DUTs. When a DUT is selected, the button “Next” is enabled:



STEP 2: SELECT/EDIT/CREATE A DEVICE UNDER TEST (DUT)

Project: Test_DBA

Welcome : diegob | [Logout](#)

Show entries

Search:

DUT Name	Created	Modified	OEM	Model	Description	Samples
Test_DUT	2015-06-26 18:31:42	2015-06-26 18:31:42	AT4 wireless	AT4	Testing DUT selection	Samples

Showing 1 to 1 of 1 entries

First Previous **1** Next Last

[New DUT](#) [Edit DUT](#) [Delete DUT](#)

[« Previous Step](#) [Next Step »](#)

Figure 10. DUT selection

If “New DUT” button is pressed, the following information is requested:

Name

OEM

Model

Description

Insert a first sample

Device ID

App ID

Software Version

Hardware Version

Cancel

Create DUT

Figure 11. Creating a new DUT

- **Name:** Is the Device Name contained in the “About” description. This value will be copied to the corresponding IXIT (IXITCO_DeviceName) and will be checked against the information contained in the “About” service of the DUT.
- **OEM:** Is the Manufacturer Name contained in the “About” description. This value will be copied to the corresponding IXIT (IXITCO_Manufacturer) and will be checked against the information contained in the “About” service of the DUT.

- **Model:** Is the Model Name contained in the “About” description. This value will be copied to the corresponding IXIT (IXITCO_ModelNumber) and will be checked against the information contained in the “About” service of the DUT.
- **Description:** Is a general description of the DUT.

At least, one Sample needs to be created. A DUT has always one or more associated Samples. For each Sample, the following information is requested:

- **Device ID:** Is the Device ID contained in the “About” description. This value will be copied to the corresponding IXIT (IXITCO_DeviceId) and will be checked against the information contained in the “About” service of the DUT.
- **App ID:** Is the App ID contained in the “About” description. This value will be copied to the corresponding IXIT (IXITCO_AppId) and will be checked against the information contained in the “About” service of the DUT. An example of a valid App ID format is as follow: 1006803f-08d0-900f-5000-000000000000.
- **Software Version:** Is the Software Version contained in the “About” description. This value will be copied to the corresponding IXIT (IXITCO_SoftwareVersion) and will be checked against the information contained in the “About” service of the DUT.
- **Hardware Version:** Is the Hardware Version contained in the “About” description. This value will be copied to the corresponding IXIT (IXITCO_HardwareVersion) and will be checked against the information contained in the “About” service of the DUT.

If “Edit DUT” button is pressed, the user can modify all the information in Figure 11.

If “Delete DUT” button is pressed, the user can delete a DUT from the list.

If user chooses a different DUT than the selected during the project creation, the project configuration (ICS, IXIT, General Parameters and Test Plan) will be lost and the user will receive the following message:

This project was configured with a different DUT than selected. If you continue, the project configuration will be deleted.



Figure 12. Selecting a different DUT

Once a DUT has been created, it is possible to add additional Samples by pressing “Samples” link. The following window appears:

Device ID	App ID	Sw Ver	Hw Ver
12345678-9abc-1def-8012-000000000000	12345678-9abc-1def-8012-000000000000	0.1	1.0

Figure 13. Adding a new Sample

If more than one sample is defined for a DUT, the Test Tool Local Agent will ask to the user which sample wants to use during the test execution. The IXITs attached to the Sample information will be modified by the Local Agent accordingly:

- IXITCO_DeviceId
- IXITCO_AppId
- IXITCO_SoftwareVersion
- IXITCO_HardwareVersion
- IXITCO_DeviceName
- IXITCO_Manufacturer
- IXITCO_ModelNumber

2.1.4 Step 3: Select, Edit or Create a Golden Unit (GU)

This Step only appears for the following type of projects: “Interoperability”, “Conformance and Interoperability” and “Pre-Certification”.

A list shows all existing GUs. When at least three GUs are selected, the button “Next” is enabled:

STEP 3: SELECT/EDIT/CREATE A GOLDEN UNIT (GU)

Project: Test_DBA / DUT: Test Luminaire

Welcome : diegob | [Logout](#)

Show entries

Search:

GU Name	Created	Modified	Category	OEM	Model	SW Ver	HW Ver	Description
GU_1	2015-06-26 18:32:29	2015-06-26 18:32:29	Category 1 AllJoyn Devic...	AT4 wireless	AT4	0.1	1.0	Golden Unit for debuggin...
GU_2	2015-06-26 18:32:59	2015-06-26 18:32:59	Category 4.2 AllJoyn Dev...	AT4 wireless	AT4	0.1	1.0	Golden Unit for debuggin...
GU_3	2015-06-26 18:33:29	2015-06-26 18:33:29	Category 6.1 AllJoyn Dev...	AT4 wireless	AT4	0.1	1.0	Golden Unit for debuggin...

Showing 1 to 3 of 3 entries

First Previous **1** Next Last

[New GU](#) [Edit GU](#) [Delete GU](#)

You need to select at least 3 Golden Units

[« Previous Step](#)

[Next Step »](#)

Figure 14. GU selection

STEP 3: SELECT/EDIT/CREATE A GOLDEN UNIT (GU)

Project: Test_DBA / DUT: Test Luminaire

Welcome : diegob | [Logout](#)

Show entries

Search:

GU Name	Created	Modified	Category	OEM	Model	SW Ver	HW Ver	Description
GU_1	2015-06-26 18:32:29	2015-06-26 18:32:29	Category 1 AllJoyn Devic...	AT4 wireless	AT4	0.1	1.0	Golden Unit for debuggin...
GU_2	2015-06-26 18:32:59	2015-06-26 18:32:59	Category 4.2 AllJoyn Dev...	AT4 wireless	AT4	0.1	1.0	Golden Unit for debuggin...
GU_3	2015-06-26 18:33:29	2015-06-26 18:33:29	Category 6.1 AllJoyn Dev...	AT4 wireless	AT4	0.1	1.0	Golden Unit for debuggin...

Showing 1 to 3 of 3 entries

First Previous **1** Next Last

[New GU](#) [Edit GU](#) [Delete GU](#)

[« Previous Step](#)

[Next Step »](#)

Figure 15. Three GU selected

The user needs to select three GUs in order to run the Interoperability Test Cases.

If “New GU” button is pressed, the following information is requested:

Name

Category

☐

OEM

Model

Software Version

Hardware Version

Description

Figure 16. Creating a new GU

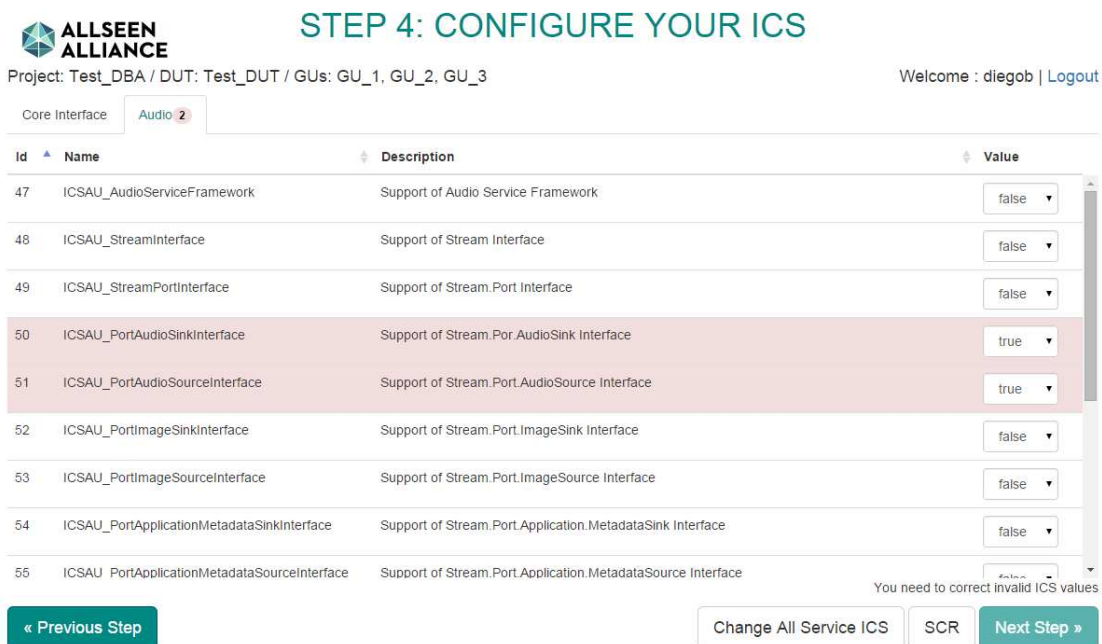
- **Name:** Is the GU name.
- **Category:** Is the GU category:
 - o Category 1: AllJoyn Device (About)
 - o Category 2: AllJoyn Device (Configuration)
 - o Category 3: AllJoyn Device (Onboarding)
 - o Category 4.1: AllJoyn Device (Control Panel Controller)
 - o Category 4.2: AllJoyn Device (Control Panel)
 - o Category 5.1: AllJoyn Device (Notification Consumer)
 - o Category 5.2: AllJoyn Device (Notification Producer)
 - o Category 6.1: AllJoyn Device (Audio Source)
 - o Category 6.2: AllJoyn Device (Audio Sink)

- Category 7.1: AllJoyn Device (Lighting Controller)
- Category 7.2: AllJoyn Device (Lamp Service)
- **OEM:** Is the Manufacturer name.
- **Model:** Is the GU model.
- **Software Version:** Is the GU software version.
- **Hardware Version:** Is the GU software version.
- **Description:** Is a general description of the GU.

If “Edit GU” button is pressed, the user can modify all the information in Figure 16.
If “Delete GU” button is pressed, the user can delete a GU from the list.

2.1.5 Step 4: Configure your ICS

ICSs (Implementation Conformance Statements) are True/False descriptors for the DUT. The different ICSs to describe the DUT configuration are shown in different tabs, depending on the Service Framework/s selected during the project creation. When the Static Conformance Review (SCR) button is pressed and there are not errors in ICS selection, the button “Next” is enabled:



STEP 4: CONFIGURE YOUR ICS

Project: Test_DBA / DUT: Test_DUT / GUs: GU_1, GU_2, GU_3

Welcome : diegob | [Logout](#)

Core Interface: **Audio 2**

Id	Name	Description	Value
47	ICSAU_AudioServiceFramework	Support of Audio Service Framework	false
48	ICSAU_StreamInterface	Support of Stream Interface	false
49	ICSAU_StreamPortInterface	Support of Stream.Port Interface	false
50	ICSAU_PortAudioSinkInterface	Support of Stream.Port.AudioSink Interface	true
51	ICSAU_PortAudioSourceInterface	Support of Stream.Port.AudioSource Interface	true
52	ICSAU_PortImageSinkInterface	Support of Stream.Port.ImageSink Interface	false
53	ICSAU_PortImageSourceInterface	Support of Stream.Port.ImageSource Interface	false
54	ICSAU_PortApplicationMetadataSinkInterface	Support of Stream.Port.Application.MetadataSink Interface	false
55	ICSAU_PortApplicationMetadataSourceInterface	Support of Stream.Port.Application.MetadataSource Interface	false

You need to correct invalid ICS values

« Previous Step Change All Service ICS SCR Next Step »

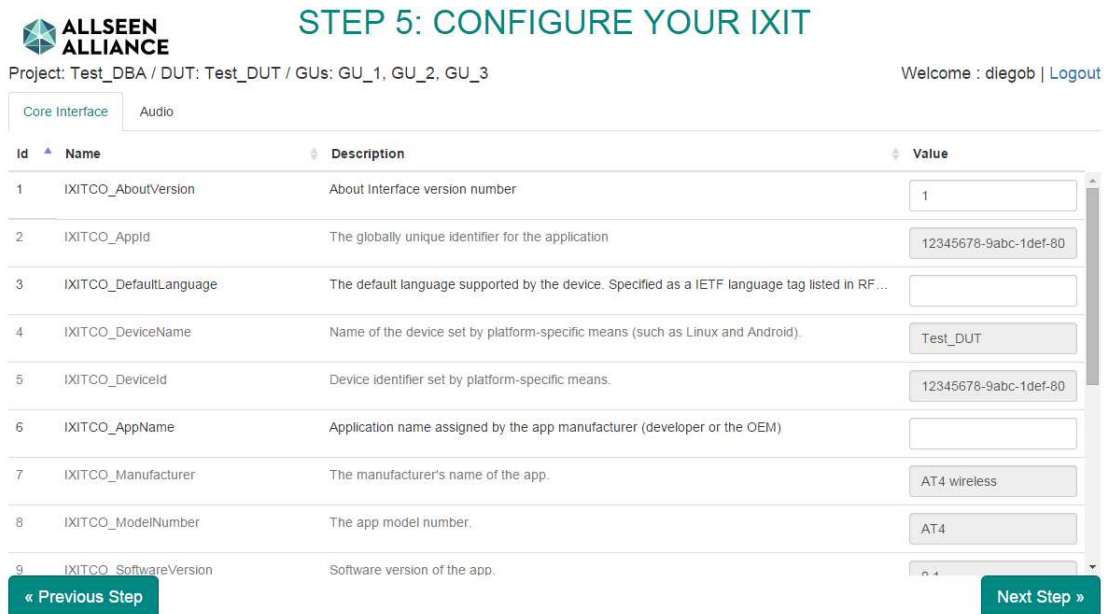
Figure 17. ICS selection and SCR

The SCR checks the consistency of ICS selection. For example, if “ICSAU_PortAudioSinkInterface” is TRUE, the opposite ICS: “ICSAU_PortAudioSourceInterface” needs to be set to FALSE. If not, a SCR error will be highlighted and a notification will appear above the “SCR” button.

By clicking on “Change All Services ICS” button it is possible to invert the configured values for all ICS in the selected Service Framework.

2.1.6 Step 5: Configure your IXIT

The different IXITs (Implementation eXtra Information for Testing) to describe the DUT configuration are shown in different tabs, depending on the Service Framework/s selected during the project creation:



STEP 5: CONFIGURE YOUR IXIT

Project: Test_DBA / DUT: Test_DUT / GUs: GU_1, GU_2, GU_3 Welcome : diegob | Logout

Core Interface Audio

Id	Name	Description	Value
1	IXITCO_AboutVersion	About Interface version number	1
2	IXITCO_AppId	The globally unique identifier for the application	12345678-9abc-1def-80
3	IXITCO_DefaultLanguage	The default language supported by the device. Specified as a IETF language tag listed in RF...	
4	IXITCO_DeviceName	Name of the device set by platform-specific means (such as Linux and Android).	Test_DUT
5	IXITCO_DeviceId	Device identifier set by platform-specific means.	12345678-9abc-1def-80
6	IXITCO_AppName	Application name assigned by the app manufacturer (developer or the OEM)	
7	IXITCO_Manufacturer	The manufacturer's name of the app.	AT4 wireless
8	IXITCO_ModelNumber	The app model number.	AT4
9	IXITCO_SoftwareVersion	Software version of the app.	

« Previous Step Next Step »

Figure 18. IXIT selection

The IXIT attached to the DUT/Sample parameters:

- IXITCO_DeviceId
- IXITCO_AppId
- IXITCO_SoftwareVersion
- IXITCO_HardwareVersion
- IXITCO_DeviceName
- IXITCO_Manufacturer
- IXITCO_ModelNumber


are blocked in this step. If the user needs to modify any value, the modification must be performed in the step 2 by editing the corresponding DUT/Sample fields.

DeviceID and AppID are used to identify the DUT across the common bus. For example, if there are two AllJoyn® devices in the common bus, the Test Case is going to connect to the device which matches the provided DeviceID and AppID.

If the user does not know one specific IXIT value, it is possible to leave in blank, run the Test Case and check in the logs the value provided by the DUT. After that, the user can fill in the IXIT with the correct value and run the Test Case again.

2.1.7 Step 6: Configure your General Parameters

The different General Parameters to configure the test environment are shown in a common list. They are commonly timers:



STEP 6: CONFIGURE YOUR GENERAL PARAMETERS

Welcome : diegob | [Logout](#)

Project: Test_DBA / DUT: Test_DUT / GUs: GU_1, GU_2, GU_3

Id	Name	Description	Value
1	GPOC_AnnouncementTimeout	About announcement timeout in seconds	<input type="text" value="30"/>
2	GPON_WaitSoftAP	Onboarding Service Framework time to wait for Soft AP in ms	<input type="text" value="12000"/>
3	GPON_ConnectSoftAP	Onboarding Service Framework time to wait to connect to Soft AP in ms	<input type="text" value="60000"/>
4	GPON_WaitSoftAPAfterOffboard	Onboarding Service Framework time to wait for Soft AP after offboard in ms	<input type="text" value="15000"/>
5	GPON_ConnectPersonalAP	Onboarding Service Framework time to wait to connect to Personal AP in ms	<input type="text" value="60000"/>
6	GPON_Disconnect	Onboarding Service Framework time to wait for disconnect in ms	<input type="text" value="30000"/>
7	GPON_NextAnnouncement	Onboarding Service Framework time to wait for next device announcement in ms	<input type="text" value="180000"/>
8	GPCF_SessionLost	Configuration Service Framework session lost timeout in seconds	<input type="text" value="30"/>
9	GPCF_SessionClose	Configuration Service Framework session close timeout in seconds	<input type="text" value=""/>

« Previous Step
Next Step »

Figure 19. General Parameters selection

2.1.8 Step 7: Test Plan Generation

The last step in order to configure the project is the Test Plan generation. By default, all applicable test cases (after considering ICS and TCCL selection) are enabled but the user can remove test cases from the Test Plan:

STEP 7: TEST PLAN GENERATION

Project: Test_DBA / DUT: Test_DUT / GUs: GU_1, GU_2, GU_3

Welcome : diegob | [Logout](#)

Test Case	Description	Select
About-v1-01	About announcement received	<input checked="" type="checkbox"/>
About-v1-02	Version property consistent with the About announcement	<input checked="" type="checkbox"/>
About-v1-03	GetObjectDescription() consistent with the About announcement	<input checked="" type="checkbox"/>
About-v1-04	Bus objects consistent with the About announcement	<input checked="" type="checkbox"/>
About-v1-05	Standardized interfaces match definitions	<input checked="" type="checkbox"/>
About-v1-06	GetAboutData() with default language	<input checked="" type="checkbox"/>
About-v1-07	GetAboutData() with each supported language	<input checked="" type="checkbox"/>
About-v1-08	GetAboutData() without a specified language	<input checked="" type="checkbox"/>
About-v1-09	GetAboutData() for an unsupported language	<input checked="" type="checkbox"/>
About-v1-10	GetContent() on the About DeviceIcon	<input checked="" type="checkbox"/>
About-v1-11	GetUrl() on the About DeviceIcon	<input checked="" type="checkbox"/>

(*) Mandatory for Certification purpose

Figure 20. Test Plan Generation

2.1.9 Step 8: End Configuration

Finally, the project is considered as configured and the user is able to run the test cases contained in the Test Plan from the Test Tool Local Agent. Also, it is possible to download the last available installation package for the Test Tool Local Agent.

STEP 8: END CONFIGURATION

Project: Test_DBA / DUT: Test_DUT / GUs: Test_GU1, Test_GU2, Test_GU3

Welcome : diegob | [Logout](#)

Your project has been successfully configured!

- 1) Open the Test Tool Local Agent
- 2) Select your configured Project
- 3) Run the Test Cases
- 4) Summit the results

Figure 21. Ending and Downloading the Test Tool Local Agent

After pressing “End” button, the user is redirected to Step 1.

2.2 Updating the Local Agent

To get a valid Password to enter in the CTT Local Agent, check section 2.1.2. When the user opens the Test Tool Local Agent and enters a valid user/password, the first action performed by the application is to check if the user has the latest available version for the application. The installed Local Agent version appears in the login window (highlighted below in red). If there is a newer version, the Test Tool Web server will allow downloading an installation package (i.e. "CTT_Local_Agent_v1.0.0_Installer.exe").

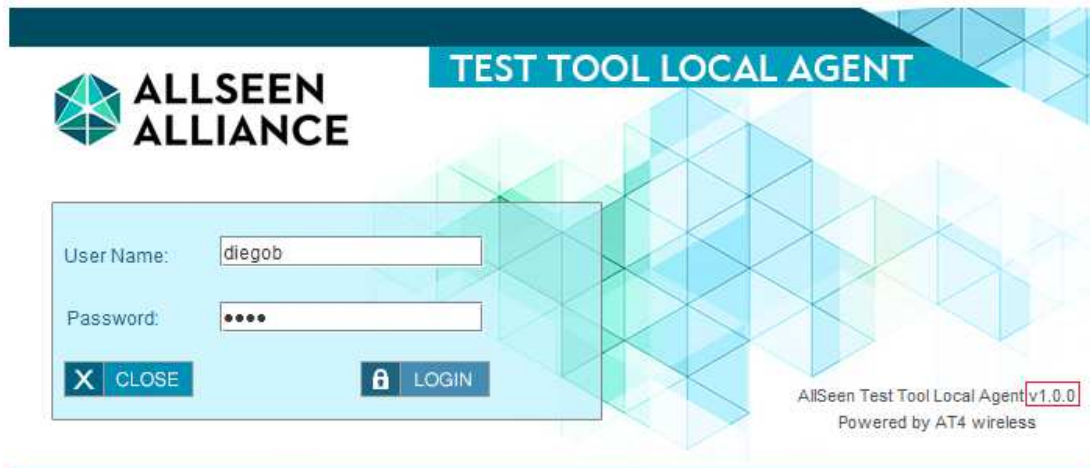


Figure 22. Test Tool Local Agent login window and version

The user needs to run the installation package with administrator rights:



Figure 23. Run as administrator

By clicking with right button on the installation package the user needs to select "Run as administrator".

2.3 Updating the Test Cases Package

When the user selects a project with a Certification Release which is not supported by any of the installed Test Cases Packages in the Local Agent, the following message is shown:

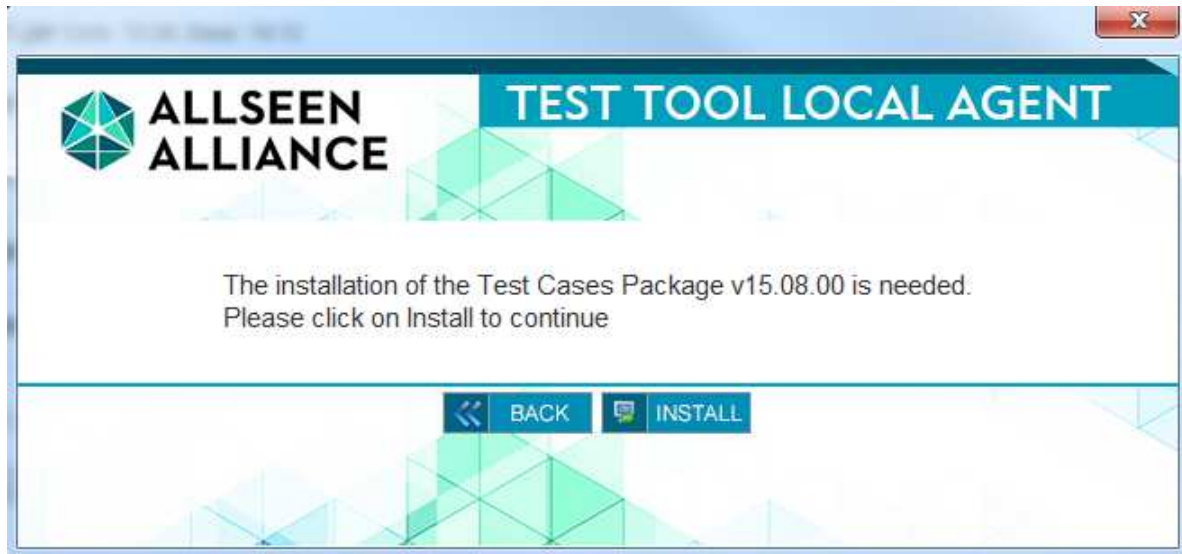


Figure 24. Updating the Test Cases Package

2.4 Running Test Cases

Once the user has the latest Test Tool Local Agent version and has a valid Test Cases Package according to the selected Certification Release, the user is ready to run test cases.

It is possible to sort alphabetically each column by clicking on the column's name:



Figure 25. Running Test Cases

“Result” and “Date&Time” refers to the last test case execution. If there are not previous executions for one specific test case, “Result” column indicates “Not executed” and the “Date&Time” column remains empty.

There are two ways to run test cases:

- One by One (“RUN” button): Only the selected Test Case is run and, after the execution, the user is prompted to send the logs to the Test Tool Web Server by pressing the “SAVE” button:

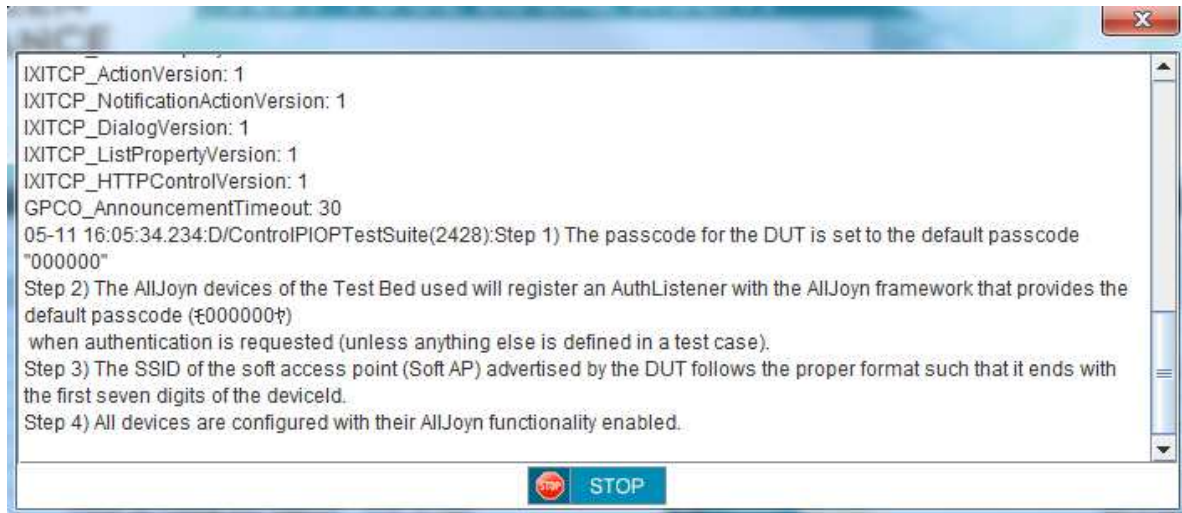


Figure 26. Test Case execution details

It is also possible to cancel the Test Case execution by pressing “STOP” button.

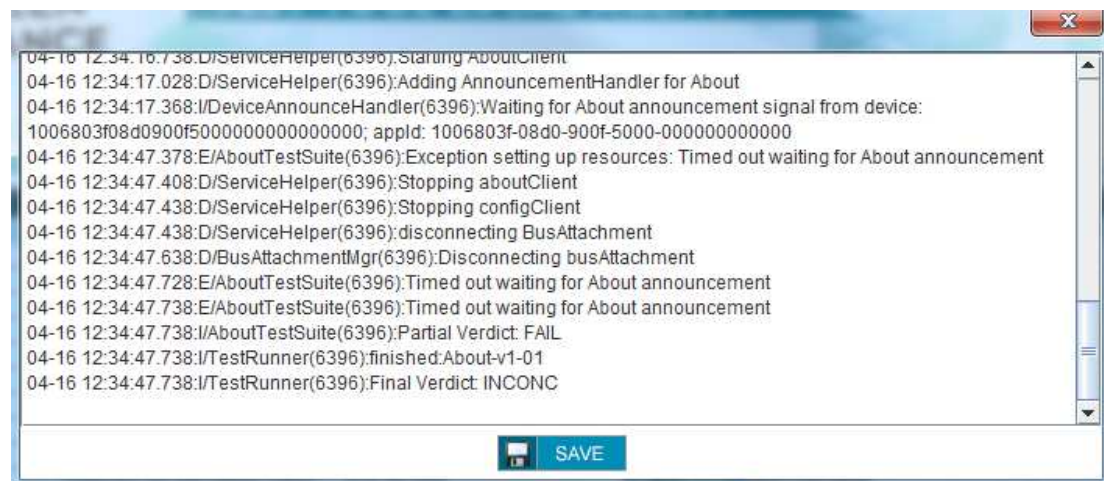


Figure 27. Saving the test result

Once the test execution has ended, it is possible to save the logs.

- In a batch (“RUN ALL” button): All applicable test cases are run sequentially. The logs are sent automatically after the end of each Test Case.

If there is more than one Sample for the selected Project DUT, the Local Agent will ask which Sample the user wants to use during the test case execution:

Device Id	App Id	Software Version	Hardware Version
1006803f08d0900f...	1006803f-08d0-90...	1.0	1.0
test luminaire	test luminaire	test luminaire	test luminaire

NEXT

Figure 28. Sample selection

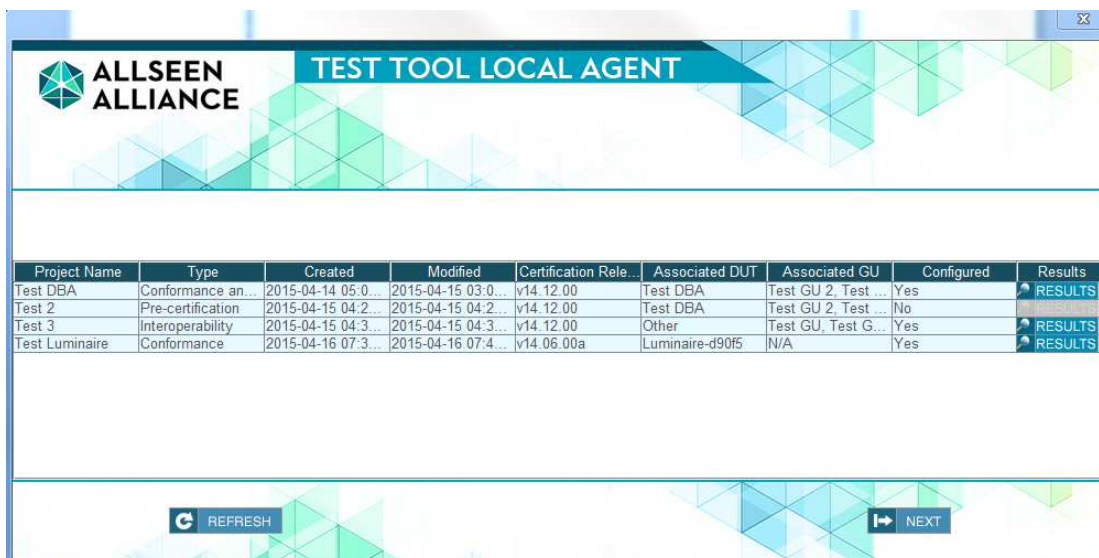
If the user has pressed the “RUN ALL” button, the Sample selection will occur only for the first test case and will be applied for the rest ones.

2.5 Visualizing Test Cases Results

The test cases results can be visualized in both: Test Tool Local Agent and Test Tool Web Server. The information in both sides is the same and is synchronized automatically.

Section 2.1.2 contains details for the visualization from the Test Tool Web Server. The visualization from the Test Tool Local Agent is as follow:

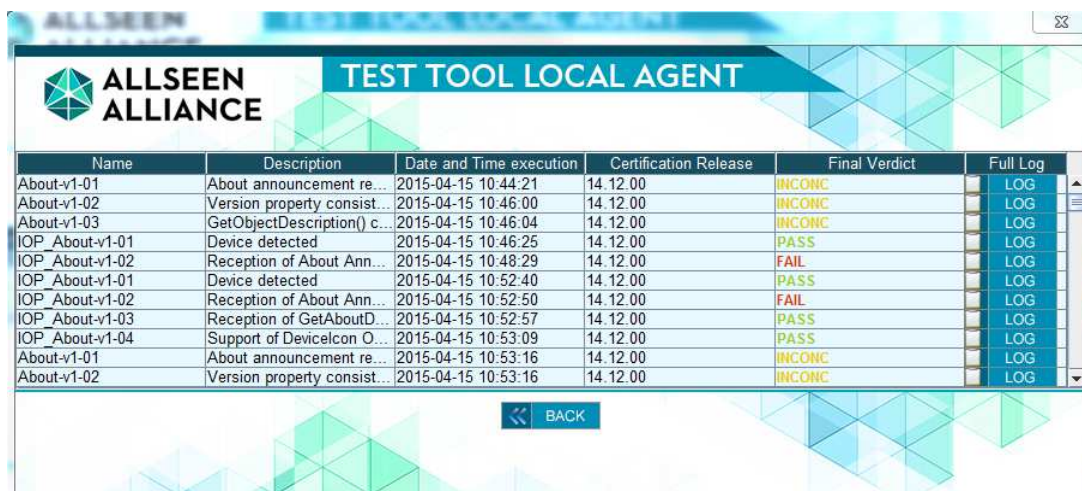
- 1) The user goes to the Test Tool Local Agent list of projects and selects the results of the desired project by pressing the corresponding “RESULTS” button. If there are not results, this button is disabled.
- 2) The user sees all final verdicts for all executed test cases.
- 3) The user can open a specific full log by pressing “LOG” button.



Project Name	Type	Created	Modified	Certification Release	Associated DUT	Associated GU	Configured	Results
Test DBA	Conformance an...	2015-04-14 05:0...	2015-04-15 03:0...	v14.12.00	Test DBA	Test GU 2, Test ...	Yes	RESULTS
Test 2	Pre-certification	2015-04-15 04:2...	2015-04-15 04:2...	v14.12.00	Test DBA	Test GU 2, Test ...	No	RESULTS
Test 3	Interoperability	2015-04-15 04:3...	2015-04-15 04:3...	v14.12.00	Other	Test GU, Test G...	Yes	RESULTS
Test Luminaire	Conformance	2015-04-16 07:3...	2015-04-16 07:4...	v14.06.00a	Luminaire-d90f5	N/A	Yes	RESULTS

REFRESH NEXT

Figure 29. Access to the Project Results



Name	Description	Date and Time execution	Certification Release	Final Verdict	Full Log
About-v1-01	About announcement re...	2015-04-15 10:44:21	14.12.00	INCONC	LOG
About-v1-02	Version property consist...	2015-04-15 10:46:00	14.12.00	INCONC	LOG
About-v1-03	GetObjectDescription() c...	2015-04-15 10:46:04	14.12.00	INCONC	LOG
IOP_About-v1-01	Device detected	2015-04-15 10:46:25	14.12.00	PASS	LOG
IOP_About-v1-02	Reception of About Ann...	2015-04-15 10:48:29	14.12.00	FAIL	LOG
IOP_About-v1-01	Device detected	2015-04-15 10:52:40	14.12.00	PASS	LOG
IOP_About-v1-02	Reception of About Ann...	2015-04-15 10:52:50	14.12.00	FAIL	LOG
IOP_About-v1-03	Reception of GetAboutD...	2015-04-15 10:52:57	14.12.00	PASS	LOG
IOP_About-v1-04	Support of DeviceIcon O...	2015-04-15 10:53:09	14.12.00	PASS	LOG
About-v1-01	About announcement re...	2015-04-15 10:53:16	14.12.00	INCONC	LOG
About-v1-02	Version property consist...	2015-04-15 10:53:16	14.12.00	INCONC	LOG

BACK

Figure 30. Test Cases final verdicts

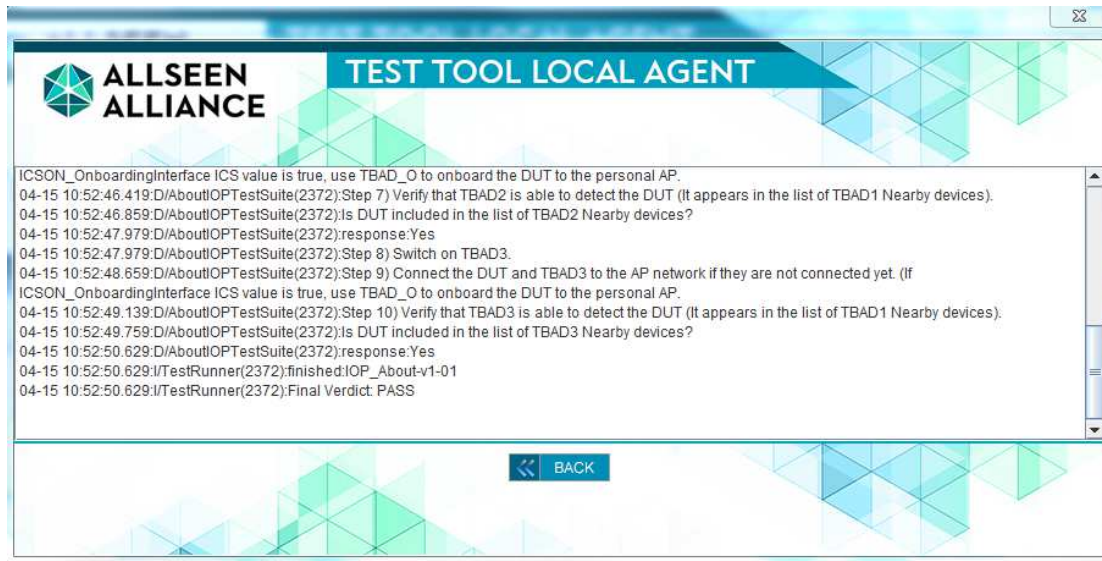


Figure 31. Access to the Full Log

3 Maintenance Instructions

3.1 Certification Test Tool Web Server

In this section, main activities in the maintenance process of the Test Tool Web Server are described.

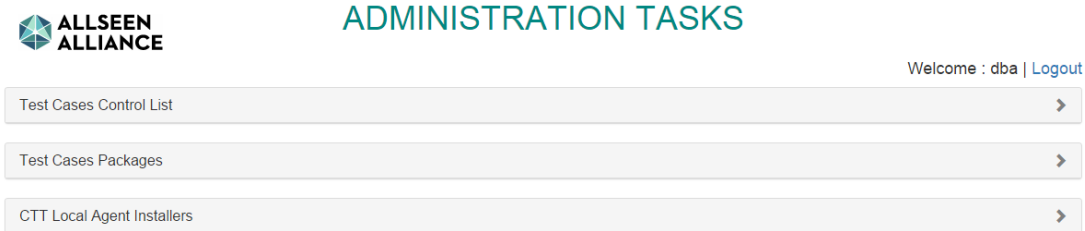


Figure 32. Administration tasks for admin role

3.1.1 Creating a Test Case Control List (TCCL)

The TCCL creation is a task reserved to Administrator users. When an Administrator enters user/password a list with the existing TCCLs can be shown:

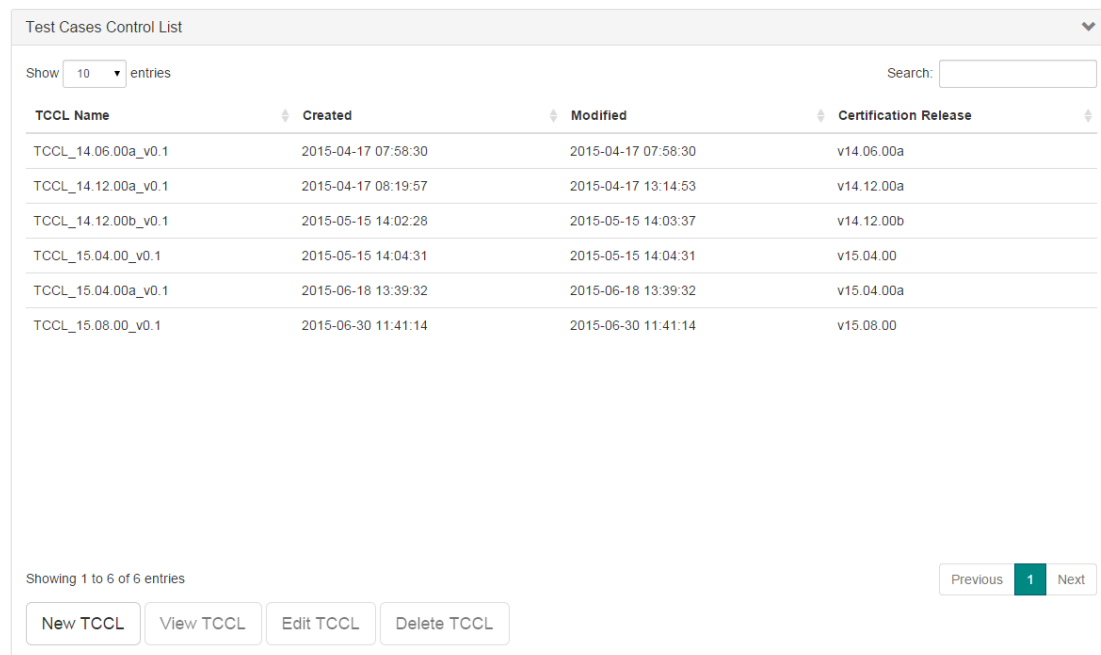


Figure 33. TCCL selection

If “New TCCL” button is pressed, the following information is requested:

Certification Release

v14.12.00
▼

Cancel

Continue

Figure 34. TCCL Creation (I)

- **Certification Release:** Is the Certification Release to be used during the TCCL creation.

Test Case	Test Case Description	Type	Enable
About-v1-01	About announcement received	A ▼	<input checked="" type="checkbox"/>
About-v1-02	Version property consistent with the About announcement	A ▼	<input checked="" type="checkbox"/>
About-v1-03	GetObjectDescription() consistent with the About announcement	A ▼	<input checked="" type="checkbox"/>
About-v1-04	Bus objects consistent with the About announcement	A ▼	<input checked="" type="checkbox"/>
About-v1-05	Standardized interfaces match definitions	A ▼	<input checked="" type="checkbox"/>
About-v1-06	GetAboutData() with default language	A ▼	<input checked="" type="checkbox"/>
About-v1-07	GetAboutData() with each supported language	A ▼	<input checked="" type="checkbox"/>
About-v1-08	GetAboutData() without a specified language	A ▼	<input checked="" type="checkbox"/>
About-v1-09	GetAboutData() for an unsupported language	A ▼	<input checked="" type="checkbox"/>

Search:

Back

Create TCCL

Figure 35. TCCL Creation (II)

- **Type:** Is the Test Case type: A, B, D, N or P, depending on the current state for each test case:
 - Category A: Test case has been validated to verify the conformance of the product. Every device has to be tested against this test case if applicable and get a PASS verdict as part of its certification process. The test case is fully validated with no testing restrictions.
 - Category B: These are typically test cases which have been verified, and can be executed, but for which a test case implementation validation may be incomplete.

This category is used for:

- Means of Test where test purposes are not fully tested, because parts of the Means of Test are incorrect and therefore not valid for accredited testing.
- Means of Test where a "PASS" verdict is a correct verdict, but a "FAIL" verdict may not be correct.
- Means of Test not validated for a special UE configuration.

Every device has to be tested against this test case, if applicable, as part of its certification process:

- Devices not affected by the test case limitation(s) need to get a PASS verdict.
- Devices affected by the test case limitation(s) might get an Inconclusive or Fail verdict if the reason for not getting a PASS verdict is the test case limitation.

This category may also be used whenever a test is performed using an acceptable alternative method, i.e. best available means.

- Category D: The test case has been downgraded from category A or B and must be revalidated and reinstated to its prior status without delay.

The test case does not need to be performed for product certification until the test case is revalidated.

- Category N: This category is assigned for test cases that were part of the certification scope in the past but they are not currently required.

The test case does not need any testing or declaration.

- Category P: The test case is not validated but AllSeen Alliance has defined the test case as intended to be used for product certification and accordingly it is pending validation.

The test case does not need to be performed for product certification.

- **Enable:** Only test cases A or B are valid for running.

It is possible to have more than one TCCL for each Certification Release. The user will need to select a TCCL when a project is being created.

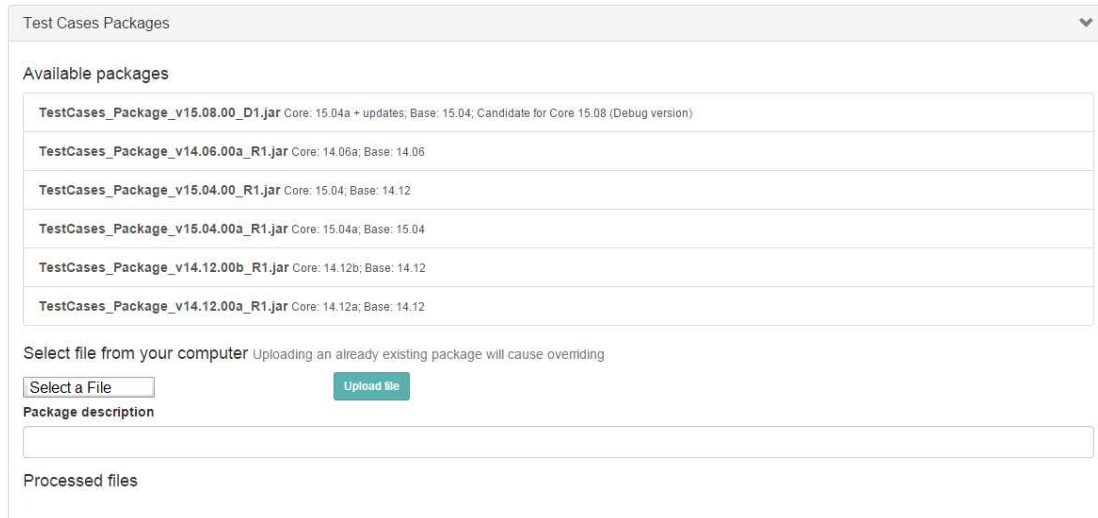
If "View TCCL" button is pressed, the user can view the TCCL details.

If "Edit TCCL" button is pressed, the user can modify all the information in Figure 35.

If "Delete TCCL" button is pressed, the user can delete a TCCL from the list.

3.1.2 Updating a Test Cases Package

This is a task reserved to Administrator users. When an Administrator enters user/password a list with the existing Test Cases Packages can be shown:



The screenshot shows a web interface titled "Test Cases Packages". It features a table of "Available packages" with columns for package name and version details. Below the table, there is a section for uploading a new package, including a "Select file from your computer" button, a "Package description" text area, and a "Processed files" section.

Available packages
TestCases_Package_v15.08.00_D1.jar Core: 15.04a + updates; Base: 15.04; Candidate for Core 15.08 (Debug version)
TestCases_Package_v14.06.00a_R1.jar Core: 14.06a; Base: 14.06
TestCases_Package_v15.04.00_R1.jar Core: 15.04; Base: 14.12
TestCases_Package_v15.04.00a_R1.jar Core: 15.04a; Base: 15.04
TestCases_Package_v14.12.00b_R1.jar Core: 14.12b; Base: 14.12
TestCases_Package_v14.12.00a_R1.jar Core: 14.12a; Base: 14.12

Select file from your computer Uploading an already existing package will cause overriding

Select a File Upload file

Package description

Processed files

Figure 36. Uploading a Test Cases Package

All the Test Cases Package names need to have the same format:

TestCases_Package_vXX.YY.ZZ.t_Tn.jar, where:

“XX.YY.ZZ.t” is the Windows Standard Client (SC) Core version used during the compilation of the test cases package; i.e: 14.12.00a, 15.04.00, etc.

“Tn” could be: Rn for a Release version (“n” will start in 1) or Dn for a Debug version (“n” will start in 1).

A Package Description needs to be also inserted. Unless the format is free, it is strongly recommended to use the following format; i.e:

Core: 15.04a; Base: 15.04; Release 2

Core: 15.08; Base: 15.04; Debug 1

If there are Debug test cases packages for a specific certification release; i.e: v15.08.00 and a Release test cases package for this certification release is uploaded, all Debug test cases package will be deleted automatically.

If there is a Release test cases package for a specific version; i.e: v15.04.00a, it is not possible to upload a Debug test cases package for this v15.04.00a certification release.

3.1.3 Updating a Local Agent installer

This is a task reserved to Administrator users. When an Administrator enters user/password a list with the existing Local Agent installers can be shown:

CTT Local Agent Installers

Available installers

CTT_Local_Agent_v1.3.0_Installer.exe
CTT_Local_Agent_v1.1.0_Installer.exe
CTT_Local_Agent_v1.2.0_Installer.exe

Select file from your computer Uploading an already existing installer will cause overriding

Processed files

Figure 37. Uploading a Local Agent installer

3.1.4 Database Access Configuration

All database changes are going to be performed with Squirrel SQL Client.

1. Open it and create a new Alias as shown below:

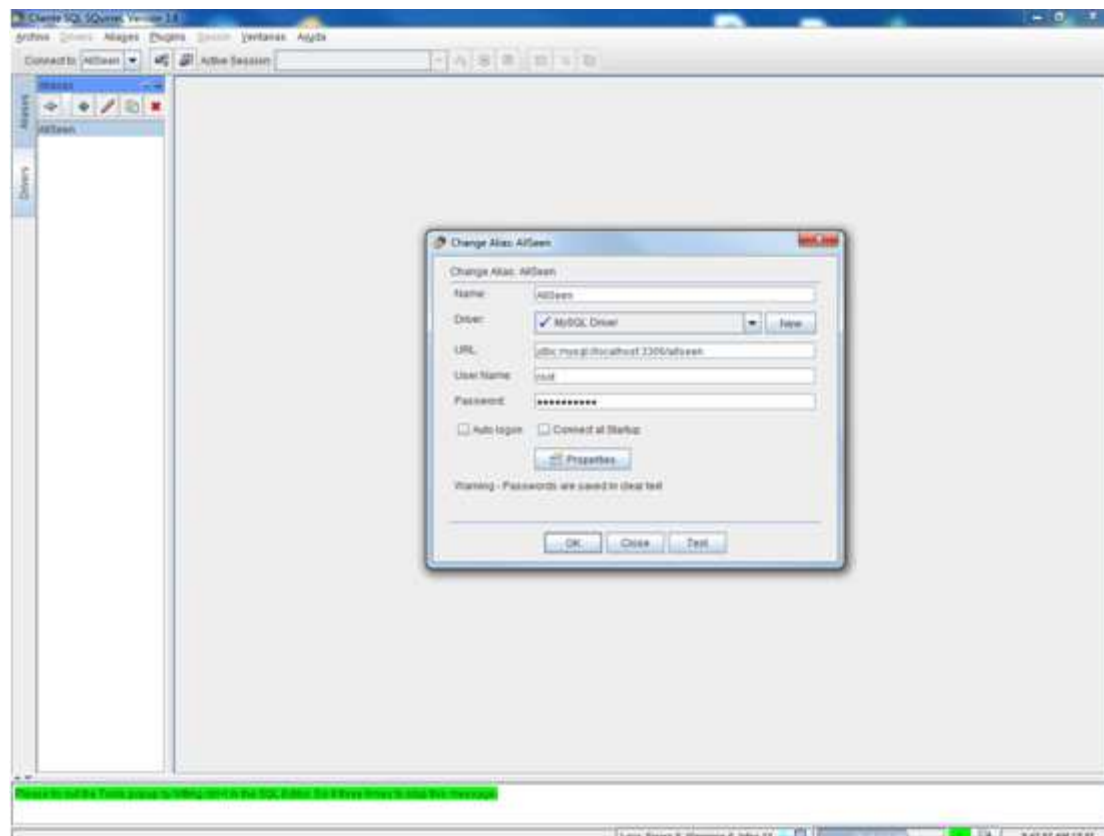


Figure 38. Squirrel SQL Client

where “localhost” should be changed to the url where MySQL server is allocated.

2. Default user is “root” and default password is “At4wirelesS15”.
3. Press OK, and click on SQL tab.

3.1.5 Updating Service Frameworks

Connect to database server. After that, write and execute the following MySQL commands:

```
USE allseen;  
INSERT INTO services (name) VALUES ('new_service');
```

to insert "new_service" service into database.

3.1.6 Updating Test Cases List

Connect to database server. After that, write and execute the following MySQL commands:

```
USE allseen;  
INSERT INTO testcases (name, type, applicability, service_group,  
last_id_project, last_execution, last_result, description) VALUES  
('tc_name', 'tc_type', 'tc_applicability', service, null, null, null,  
'tc_description');
```

where tc_name is the testcase name, tc_type is Conformance or Interoperability, tc_applicability is the testcase logic needed to make it applicable, service is the id_service of the service framework the testcase is designed for (check on services table) and tc_description is the description of the testcase.

After that, it is needed to associate the new testcases with all Certification Releases it supports, with the command below:

```
INSERT INTO testcases_certrel (id_test, id_certrel) VALUES (test,  
certrel);
```

Where test is the id_test of the testcase created (check on testcases table) and certrel is the id_certrel you want to assign the testcase (check on certrel table).

3.1.7 Updating ICS/IXIT/General Parameters

Connect to database server. After that, write and execute the following MySQL commands:

1. Updating ICS

```
USE allseen;  
INSERT INTO ics (name, value, service_group, scr_expression, description)  
VALUES ('ics_name', false, service, 'ics_scr_expression',  
'ics_description');
```

where ics_name is the name of the new ics, service is the id_service of the service framework the ics is created to (check on services table), ics_scr_expression is the ics logic needed to pass the SCR verification and ics_description is the description of the new ics.

2. Updating IXIT

```
USE allseen;  
INSERT INTO ixit (name, value, service_group, description) VALUES  
('ixit_name', 'ixit_value', service, 'ixit_description');
```

where ixit_name is the name of the new ixit, ixit_value is the default value of the new ixit, service is the id_service of the service framework the ixit is created to (check on services table) and ixit_description is the description of the new ixit.

3. Updating General Parameters

```
USE allseen;
```

```
INSERT INTO parameters (name, value, description) VALUES ('gp_name',  
'gp_value', 'gp_description');
```

where gp_name is the name of the new general parameter, gp_value is the default value of the new general parameter and gp_description is the description of the new general parameter.

3.1.8 Updating Test Cases Packages

This action can be done with the wizard described in section 3.1.2.

Connect to database server. After that, write and execute the following MySQL commands:

```
USE allseen;  
INSERT INTO certrel (name) VALUES ('vXX.YY.ZZZ');
```

where vXX.YY.ZZZ is the new certification release version.

It is necessary to insert new testcases and associate them with the new certification release. See section 3.1.6.

After executing commands, if it is needed to upload a new Test Cases Package to the server. To do that, check sections 7.3 and 7.4 in [24].

3.1.9 Updating Test Tool Local Agent Installation Package

Check sections 6.4 of [24].

3.2 Certification Test Tool Local Agent

In this section, main activities in the maintenance process of the Test Tool Local Agent are described.

3.2.1 Creating a new Installation Package

Check sections 6.3 and 6.4 of [24].

REFERENCES

- [0] ETSI SR 001 262 v1.8.1 (2003-12): ETSI drafting rules.
- [1] CC-ALLSEEN_D01 Business Model 1.0.
- [2] CC-ALLSEEN_D02 Compliance & Certification Program Management Document 1.2.
- [3] AllJoyn™ Core 1.0 Interface Definition.
- [4] AllJoyn™ Control Panel Service Framework 1.0 Interface Definition.
- [5] AllJoyn™ Notification Service Framework 1.0 Interface Definition.
- [6] AllJoyn™ Onboarding Service Framework 1.0 Interface Definition.
- [7] AllJoyn™ Configuration Service Framework 1.0 Interface Definition.
- [8] AllJoyn™ Audio Service Framework 1.0 Interface Definition.
- [9] AllJoyn™ Lighting Service Framework 1.0 Interface Definition.
- [10] AllJoyn™ Gateway Agent High-Level Design.
- [11] AllJoyn™ Smart Home Service Framework 1.0 Interface Definition.
- [12] AllJoyn™ Time Service Framework Interface Definition.
- [13] AllJoyn™ Core Software 14.06 Test Case Specifications.
- [14] AllJoyn™ Control Panel Service Framework 14.06 Update 1 Test Case Specifications.
- [15] AllJoyn™ Notification Service Framework 14.06 Update 1 Test Case Specifications.
- [16] AllJoyn™ Onboarding Service Framework 14.06 Update 1 Test Case Specifications.
- [17] AllJoyn™ Configuration Service Framework 14.06 Update 1 Test Case Specifications.
- [18] AllJoyn™ Audio Service Framework 1.0 14.06 Update 1 Test Case Specifications.
- [19] AllJoyn™ Lighting Service Framework 14.06 Test Case Specifications.
- [20] AllJoyn™ Gateway Service Framework 14.06 Test Case Specifications.
- [21] AllJoyn™ Smart Home Service Framework 1.0 14.06 Test Case Specifications.
- [22] AllJoyn™ Time Service Framework 14.12 Test Case Specifications.
- [23] Validation Test User Guide
- [24] CC-ALLSEEN_D15_D4.6.1 System Installation Documentation_v1.2

