AllJoyn™ Events and Actions Feature 14.06 Test Case Specifications

August XX, 2014

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# Introduction

## Purpose

These test cases evaluate and verify the functionality related to the AllJoyn™ Events and Actions 1.0 feature exposed by a device through the AllSeenIntrospectable interface.

The AllSeenIntrospectable interface makes the Events and Actions feature discoverable through the introspected BusObject. The introspection XML provides description elements under Objects, Interfaces, Methods (including parameters), Signals (including parameters), and Properties. These descriptions are used to define the Events and Actions rules.

NOTE

[To the reviewers: A statement will be added to indicate the presence of required data for an application to pass compliance and certifcation. This information is currently TBD. If required data is present, a chapter will be added to this document to list the data.]

## Scope

These test cases are designed to determine if a device conforms to the Events and Actions 1.0 feature specifications. Successful completion of all test cases in this document does not guarantee that the tested device will interoperate with other devices.

## Release history

|  |  |
| --- | --- |
| Release version | What changed in this document |
| 14.06 | Initial release |

## References

The following are reference documents:

* AllJoyn™ About Feature 1.0 Interface Specification
* Guide to Using the AllJoyn™ Events and Actions Feature

# Environment setup

## Requirements

The following are required in order to execute these test cases:

* The AllJoyn-enabled device (the device under test or DUT) that implements the Events and Actions feature.
* A supported test device on which the test cases will run.
* A Wi-Fi access point (referred to as the personal AP).

## Preconditions

Before running these test cases, it is assumed that:

* The DUT is connected to the personal AP
* The test device is connected to the personal AP
* The DUT is announcing its support of the AllSeenIntrospectable interface through its About announcement.

## Parameters

Table 1. Parameters for the Events and Actions feature

| Parameter | Description |
| --- | --- |
| DeviceId | Device ID of the DUT |
| AppId | Application ID of the application on the DUT |

# AllSeenIntrospectable test cases

## EventsActions-v1-01: Description tag existence in introspection XML and identical XML across different description languages

Objective

Verify that introspection XML of a Bus Object that announces itself as implementing the AllSeenIntrospectable interface (org.allseen.Introspectable) contains a description tag.

If the introspection XML of the Bus Object doesn’t contain a description tag, one of its child objects should contain it.

If a Bus Object has a description in more than one language, the introspection XML retrieved for each language should be identical. (This is to ensure that descriptions were provided for each object with description in all languages.)

Procedure

1. The test device listens for an About announcement from the application on the DUT.
2. After receiving an About Announcement from the application, the test device joins a session with the application at the port specified in the received About announcement.
3. For each matching bus object found, the test device performs the following steps:
4. Call the [GetDescriptionLanguages](file:///C:/Users/irivin/Documents/JAVA_Projects/AllJoynSDK/alljoyn-0.0.1406-android-sdk-dbg/alljoyn-android/core/alljoyn-0.0.1406-dbg/java/docs/html/org/alljoyn/bus/ifaces/AllSeenIntrospectable.html#GetDescriptionLanguages())() method of the AllSeenIntrospectable interface.
5. Call [IntrospectWithDescription](file:///C:/Users/irivin/Documents/JAVA_Projects/AllJoynSDK/alljoyn-0.0.1406-android-sdk-dbg/alljoyn-android/core/alljoyn-0.0.1406-dbg/java/docs/html/org/alljoyn/bus/ifaces/AllSeenIntrospectable.html#IntrospectWithDescription(java.lang.String))() for each of the description languages.
6. Remove the content of the description tag from the received introspection XML. Hold the XML for the later usefor the first language in the list of description languages.
7. Verify for all of the subsequent languages that the introspection XML is identical to the XML of the first language.
8. Introspect the child objects of the currently tested Bus Object and repeat this step.
9. The test device leaves the session.

Expected results

* The test device receives an About announcement from the application on the DUT.
* The test device joins a session with the application at the port specified in the received announcement.
* For each bus object implementing the AllSeenIntrospectable interface:
* Retrieve an array of the description languages supported by the introspected bus object. If the array is empty, it means that the tested object has no description tag, so the child objects are introspected.
* Retrieve the introspection XML with description tags in the requested language.
* The content of the description tags should be removed, so the tags receive the form of: <description></description>.
* The introspection XMLs are identical for each of the description languages by comparing it to the XML of the first language.
* Retrieve the introspection XML of the child objects of the tested bus object and repeat step 3 on each of them.

The test fails if no bus object with the description tag was found or if a difference was found between the introspection XML of the different description languages.