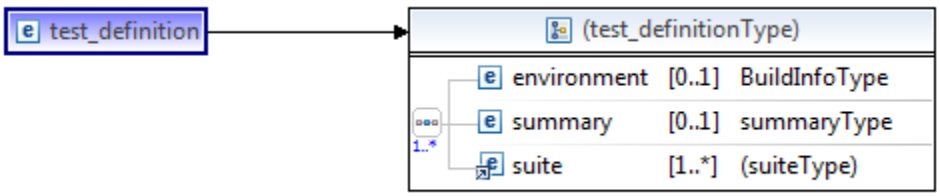
Test Definition Schema

Contents

Root Element “test_definition”:

Structure:



3 elements are defined in the root element.

```
<xs:sequence minOccurs="1" maxOccurs="unbounded">
    <xs:element name="environment" type="BuildInfoType"
        minOccurs="0">
    </xs:element>
    <xs:element name="summary" type="summaryType" minOccurs="0">
    </xs:element>
    <xs:element ref="suite" minOccurs="1" maxOccurs="unbounded">
    </xs:element>
</xs:sequence>
```

Limitation:

1\ The elements “environment” and “summary” are optional.

2\ more than 1 “suite” element are allowed.

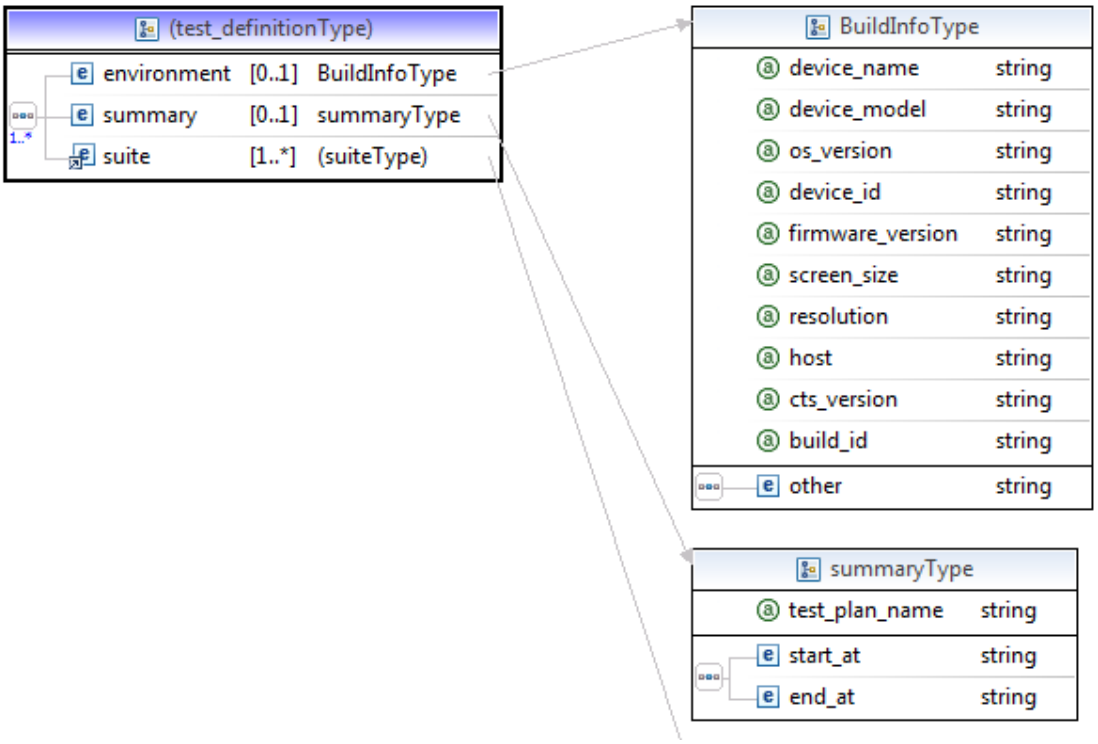
3\ 1 unique is defined, as below.

```
<xs:unique name="uniqueSuiteName">
            <xs:selector xpath=".//suite" />
            <xs:field xpath="@name" />
</xs:unique>
```

The attribute “name” of Suite should be unique.

The optional element “environment” and “summary”

Structure:



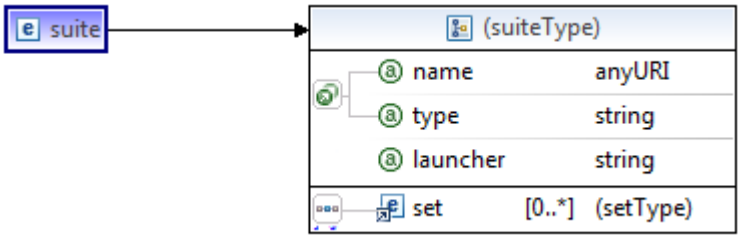
10 attributes and 1 sub-element are defined in the “environment” element. All of them are filled by testkit-lite to record the platform information, when executing test cases on it.
1 attribute and 2 sub-elements are defined in “summary” element. as the name told. they are used to record the test execution.

Limitation:

1\ If the “environment” element is included, this element should be the first sub-element of root.
2\ If the “summary” element is included, it should be the second element of root.
3\ Only in result XML, the 2 element could be included. They should not be contained in the test definition XML.

The element “suite”

Structure:



3 attributes are defined.

1\ name: the identifier of a test suite. it should be unique.

2\ type: this attribute is out of date.

3\launcher: this attribute is used to define how the suite will be handled.

launcher =“WRTLauncher”: this suite will be taken as a “WEBApi” or “W3C” test suite.

launcher =“WRTLauncher -r”, and launcher =“WRTLauncher -a”: this suite will be taken as a “UIFW” UI framework test suite.

launcher =“WRTLauncher -iu”: this suite will be taken as a “WebRuntime” test suite.

If no launcher is defined, this suite will be taken as a “Native”/”Core” test suite.

1 sub-element “set”.

```
<xs:complexType>
            <xs:sequence minOccurs="1" maxOccurs="unbounded">
                <xs:element ref="set" minOccurs="0"
maxOccurs="unbounded"></xs:element>
            </xs:sequence>
            <xs:attributeGroup
ref="set_attribute_group"></xs:attributeGroup>
            <xs:attribute name="launcher" type="xs:string"></xs:attribute>
</xs:complexType>
```

More than 1 “set” could be included.

Limitation:

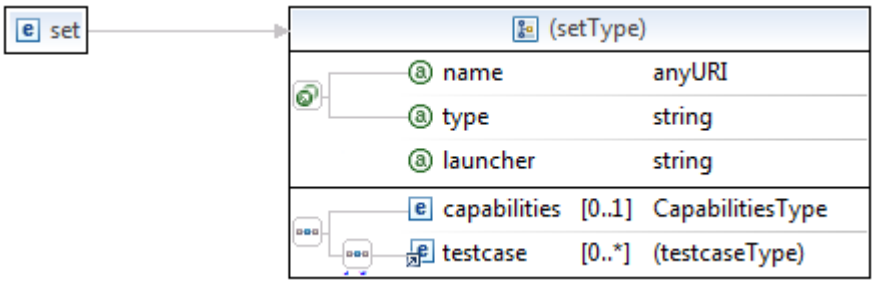
1 unique is defined, as below.

```
<xs:unique name="uniqueSetName">
            <xs:selector xpath=".//set" />
            <xs:field xpath="@name" />
</xs:unique>
```

The attribute “name” of “set” should be unique.

The element “set”

Structure:



3 attributes are defined as same as “suite”.

2 sub-elements “capabilities” and “testcase” are defined.

The element “capabilities” are designed to define which capability is related with test cases this set contained.

The element “testcase” are used to define the test cases contained in this set.

Limitation:

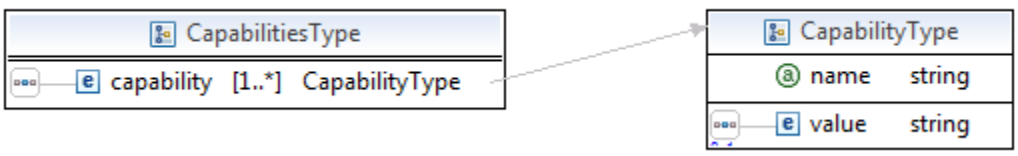
1 unique is defined, as below.

```
<xs:unique name="uniqueCaseName">
            <xs:selector xpath=".//testcase" />
            <xs:field xpath="@id" />
</xs:unique>
```

The attribute “name” of “testcase” should be unique.

The element “capabilities”

Structure:



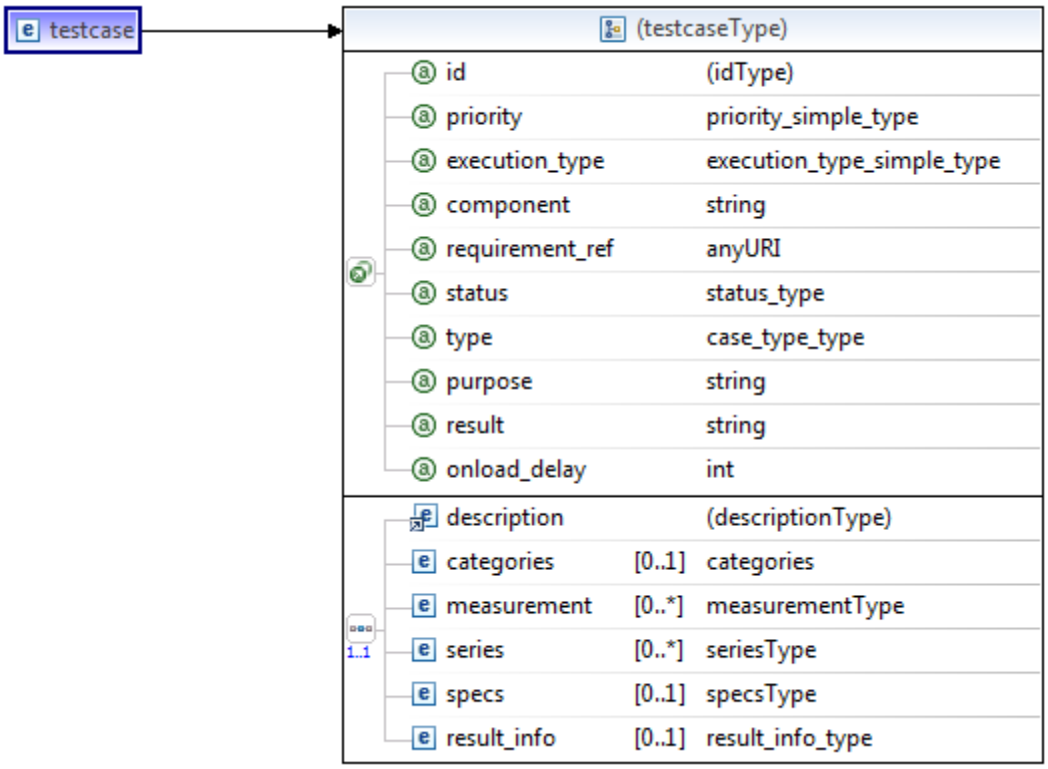
One or more sub-element “capability” is contained. The sub-element is a simple string element, only 1 identifier attribute “name” and a pure text sub-element is contained.

Limitation:

The attribute “name” is the identifier of sub-element “capability”.
Testkit-lite will filter “set” with the capability list announced in this element and the capability list extracted from devices. for instance, if “bluetooth” is announced in this element, and “bluetooth” is not in the devices capability list, this set will be filtered by testkit-lite.

The element “testcase”

Structure:



Attributes:

- id: the identifier of test case. (unique attribute)
- purpose: the purpose of test case (unique attribute)
- priority: the priority of test case (Enumeration values: P0, P1, P2, P3, P4)
- execution_type: the execution type of test case (Enumeration values: auto, manual)
- component: the component which is tested by this test case.
- requirement_ref: the URL or reference link, the test case are designed to cover (Optional).
- status: the status of test case (Enumeration values: designed, ready, approved)
- type: the type of test case (Enumeration values: functional_positive, functional_negative, security, performance, reliability, portability, maintainability, compliance, user_experience,

undefined)

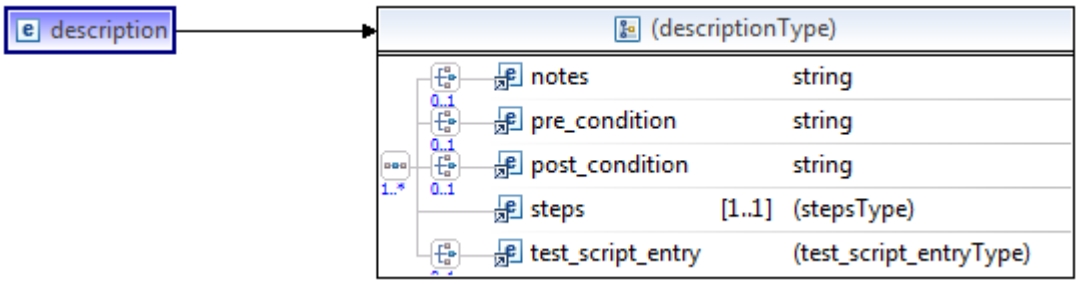
- result: testing result. this attribute is only present in result XML. (No strictly limitation, testkit-lite will fill “PASS”, “FAIL”, “N/A” and “BLOCK”)
- onload_delay: this is an integer attribute, and only work for WEBAPI and W3C test cases. 2(seconds) is default value. testkit-lite will take a delay defined by this attribute once the event “onload” is happened. This attribute is designed for asynchronized test cases

Sub-elements:

- description: the element contain the notes, step, pre/post-condition, and entry of this test case.
- “measurement” and “seriesType”: these sub-element are designed for recording scores and quantization result. and not used in WebAPI and W3C test cases.
- “categories”: a element for re-grouping test cases through suite and set.
- specs: this sub-element is used to defined which specification item is tested/covered by this test case.
- result_info: this sub element is used to defined the result of test case. including the execution time and result are filled by testkit-lite in this element.

The element “description”

Structure:



Sub-elements:

- notes: a string element for some description info. In usage test cases, this element is used to record all involved method in the test case.
- pre/post_condition: string element, used to describe the test case.
- steps: define test steps, including step description, and expected result for each step.
- test_script_entry: for native/core test case, here is the command for executing test cases. For WebAPI and W3C test case, here is the HTML file which will be load in widget.

Limitation:

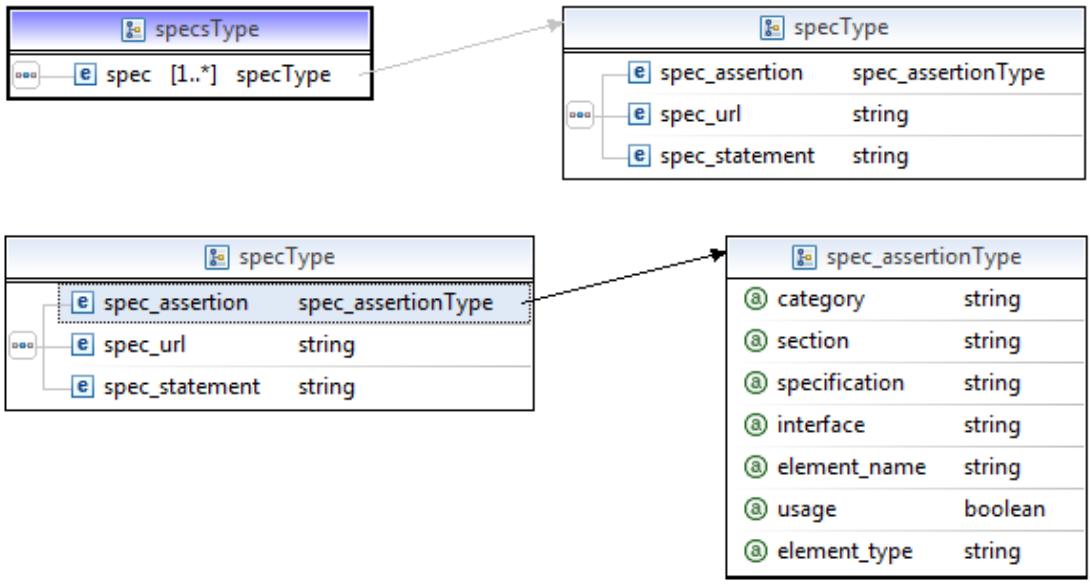
1 unique is defined for the step’s order.

```
<xs:unique name="uniqueStepName">
            <xs:selector xpath=".//step" />
            <xs:field xpath="@order" />
</xs:unique>
```

The “order” attribute should be unqiue.

The element “specs”

Structure:



This element is used to announce which specification items are tested or covered by this test case.

Limitation:

More than 1 specification can be announce in one test case.

The element “result_info”

Typically, the “result_info” element is similar with below.

```
<result_info>
    <actual_result>PASS</actual_result>
    <start>2013-06-08 20:58:45</start>
    <end>2013-06-08 20:58:45</end>
    <stdout>[Message]</stdout>
```

```
    <stderr />
</result_info>
```