

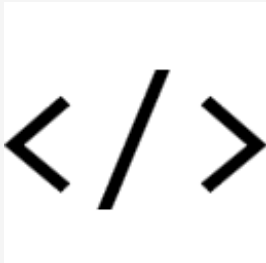
# Miscellaneous Asserts

Last Modified on 27 March 2019

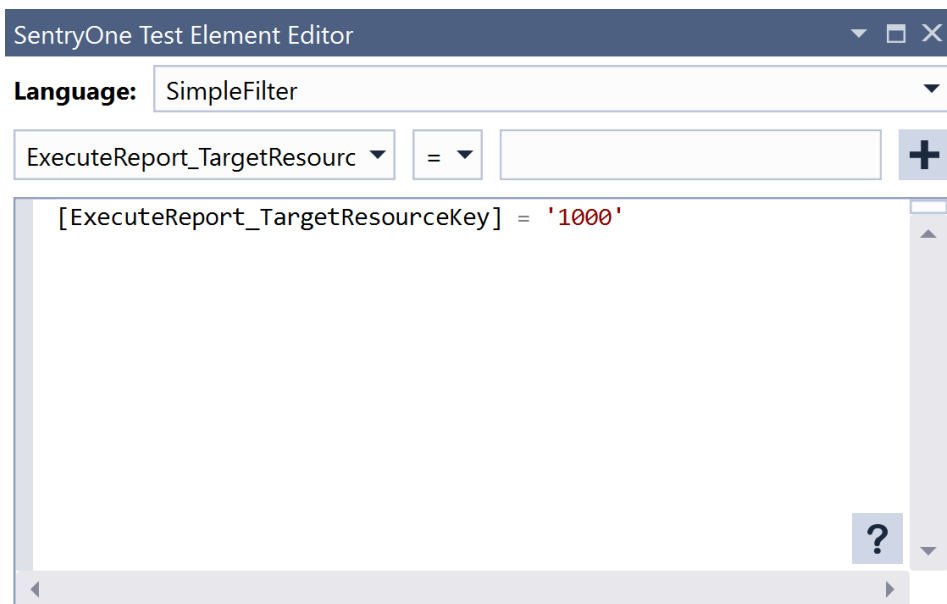
The following list is a collection of asserts that can compare a variety of object types.

Expression

## Expression

Icon	Description
	The <b>Expression</b> assert lets you enter a free-form expression to use more powerful combinational logic to validate that one or more resource values are correct.

## Expression Editor




Function	Description
Language	Select the expression language. Currently only the <b>SimpleFilter</b> language is available.

<b>Function</b>	<b>Description</b>
<b>Filter Expression</b>	<p>To add a clause to the expression, simply select the resource in the left hand combo box, choose the operator in the middle combo box and type the value you require in the right hand text box. Selecting the <b>+</b> button adds the specified clause to the expression. For more information about filter expressions, please see the <a href="#">filtering</a> topic.</p> <p><b>Note:</b> Help on the filtering language is also available in the editor directly by selecting on the <b>?</b> icon in the bottom right.</p>

Often when filtering, whether in SQL or using SentryOne Test filters, the identifiers relate to field names. In this instance, the identifiers relate to resource keys. For example, if there was an **Execute Query Scalar** action that generated a resource called **MyScalarValue** then the expression could include a clause such as **[MyScalarValue] > 10**.

Integer Comparison

## Integer Comparison

Icon	Description
	<p>The <b>Integer Comparison</b> assert tests two integers for different levels of equality. Specify to test for greater than, less than, or even user defined tolerances. The integer to compare your actual value to can either be a static value defined in the element's editor, or from another resource key.</p>

**⚠ Important:** The Integer Comparison assertion is now deprecated. While existing projects can still continue to use it, new products should migrate to using the Value Comparison assertion.

## Integer Comparison Editor

## ^ Integer comparison

Comparable resource key	
Comparable value source	StaticValue
Comparison mode	Equal
Comparison value	2
Resource key	1 (Scalar Value)
Tolerance	0

**Comparable value source**


Whether to use a static value or resource to compare against.

Function	Description												
<b>Comparable Resource Key</b>	Select a resource key you want to compare against if you opt not to use a static value to compare.												
<b>Comparable Value Source</b>	Specifies if the element should use a static value or a resource key to make the comparison.												
<b>Comparison Mode</b>	<table border="1"> <thead> <tr> <th>Mode</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>Equal</b></td> <td>Asserts that the two integers are equal.</td> </tr> <tr> <td><b>NotEqual</b></td> <td>Asserts that the two integers are not equal.</td> </tr> <tr> <td><b>LessThan</b></td> <td>Asserts that the integer is less than the static value or resource.</td> </tr> <tr> <td><b>GreaterThan</b></td> <td>Asserts that the integer is greater than the static value or resource.</td> </tr> <tr> <td><b>Within Percentage</b></td> <td>Asserts that the integer is within a specified percent</td> </tr> </tbody> </table>	Mode	Description	<b>Equal</b>	Asserts that the two integers are equal.	<b>NotEqual</b>	Asserts that the two integers are not equal.	<b>LessThan</b>	Asserts that the integer is less than the static value or resource.	<b>GreaterThan</b>	Asserts that the integer is greater than the static value or resource.	<b>Within Percentage</b>	Asserts that the integer is within a specified percent
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<b>Within Percentage</b>	Asserts that the integer is within a specified percent												

Function	Tolerance Description	Description of the static value or resource.
	<b>Within Fixed Tolerance</b>	Asserts that the integer is within the specified tolerance range of the static value or resource.
<b>Comparison Value</b>	The static value to use if you opt for a static value over a resource.	
<b>Resource Key</b>	The resource key of the integer you want to compare.	
<b>Tolerance</b>	Specifies the fixed or percent tolerance.	

Range Check

## Range Check

Icon	Description
	<p>The <b>Range Check</b> assert checks a resource key's value to see if it's between the user set maximum and minimum value.</p>


## Range Check Editor

Properties	
<b>Assertion</b> Range Check	
<div style="border: 1px solid #ccc; padding: 2px;"> <span>🔑</span> </div>	
<b>Misc</b>	
IsEnabled	<b>True</b>
Maximum Value	0
Minimum Value	0
Name	<b>Range Check</b>
Uniqueld	42c3e2f3-a73c-4143-b8a6-1f103375a110
Value Resource Key	No resource selected

Function	Description
<b>Maximum Value</b>	The maximum allowable value for the Value Resource Key.
<b>Minimum Value</b>	The minimum allowable value for the Value Resource Key.
<b>Value Resource Key</b>	Selects a resource key where you want to compare a value.

Scalar Comparison

## Scalar Comparison

Icon	Description
	The <b>Scalar Comparison</b> assert takes the result of an <b>Execute Scalar</b> action and compares with either a static value or another scalar result. The scalar values can be several different types, each with their own specifications of equality.

**⚠️ Important:** The **Scalar Comparison** assertion is now deprecated. While existing projects can still continue to use it, new products should migrate to using the Value Comparison assertion.

# Scalar Comparison Editor

LegiTest Element Editor

^ **Scalar comparison**

Comparable resource key	
<b>Comparable value source</b>	StaticValue
Comparison type	Boolean
Comparison value	True
Equality type	Equal
Resource key	1 (Scalar Value)
Tolerance	0


**Comparable value source**  
Whether to use a static value or resource to compare against.

Function	Description								
<b>Comparable Resource Key</b>	Enter the resource key for the dynamic value if you do not opt to use a static value to compare against.								
<b>Comparable Value Source</b>	Specify whether to use a static value or a dynamic value from another resource key.								
<b>Comparison Type</b>	Specify the type of the value to compare: <table border="1" data-bbox="518 1496 1396 1796"> <tr> <td>• Boolean</td> <td>• Decimal</td> <td>• Guid</td> <td>• Text</td> </tr> <tr> <td>• DateTime</td> <td>• Floating Point</td> <td>• Integer</td> <td></td> </tr> </table>	• Boolean	• Decimal	• Guid	• Text	• DateTime	• Floating Point	• Integer	
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• DateTime	• Floating Point	• Integer							
	Specify the equality type: <table border="1" data-bbox="518 1966 1029 2087"> <tr> <td>• Equal</td> <td>• Within Percent</td> </tr> </table>	• Equal	• Within Percent						
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<b>Function Equality Type</b>	<b>Description</b>	Tolerance	
	<ul style="list-style-type: none"> <li>• Not Equal</li> </ul>	<ul style="list-style-type: none"> <li>• Within Fixed Tolerance</li> </ul>	
<b>Resource Key</b>	The value to compare.		
<b>Tolerance</b>	Specify fixed or percent tolerance for certain value types.		

Value Comparison

## Value Comparison

Icon	Description
	<p>The <b>Value Comparison</b> assert is a general purpose comparison for comparing two single values. It supersedes both the <b>Integer Comparison</b> and the <b>Scalar Comparison</b> assertions, presenting a simpler configuration while also significantly extending the available options.</p>

## Value Comparison Editor



There are four main sections to the editor:

Function	Description						
<b>Actual Value</b>	This is the value that you want to validate. It always comes from a resource that's available in the test. To select the resource to test, select the arrow to the right of the resource name box.						
<b>Expected Value</b>	This is the value that you expect the actual value to match. This can either come from a static value that you configure in the user interface or from a resource. If you're using a static value, type the value that you want into the static value box. If you're using a resource then select that option and pick the resource in the same way you did for the actual value.						
	<p>This section specifies the options that we use for comparison:</p> <table border="1"> <thead> <tr> <th>Comparison</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>Data type</b></td> <td>Detected automatically when the actual and expected values are entered, but can be changed manually to use a different type for the comparison if necessary.</td> </tr> <tr> <td></td> <td>This is the type of comparison that you want to use, and different types are available for different comparison types.</td> </tr> </tbody> </table>	Comparison	Description	<b>Data type</b>	Detected automatically when the actual and expected values are entered, but can be changed manually to use a different type for the comparison if necessary.		This is the type of comparison that you want to use, and different types are available for different comparison types.
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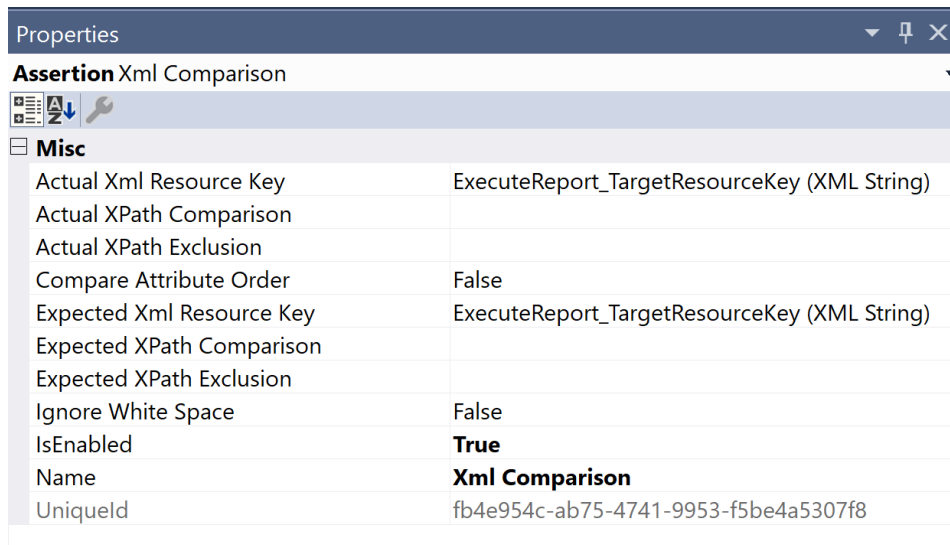


Icon



resources. These resources can be loaded many different ways, such as from a **Load Asset** that's loading a **File Content Asset**, result of a query, or even from a **Get Properties** Action. The Xml in the resource passes in as a string, and checks if it's valid Xml compared to the other resource.

## Xml Comparison Editor



Function	Description
<b>Actual Xml Resource Key</b>	The resource key for the Xml you want to compare.
<b>Compare Attribute Order</b>	When enabled, the comparison compares the order of attributes in an element, before comparing the content. If left disabled, only the attribute value is compared.
<b>Expected Xml Resource Key</b>	The resource key for the Xml you want to compare the Actual Xml against.
<b>Ignore White Space</b>	Specifies whether to ignore any extra spaces or white spaces in or around elements.
<b>Actual XPath</b>	This field takes an XPath string that executes against the <b>Actual Xml</b> once it loads. Elements found by the XPath are excluded from the comparison on the Actual side

<b>Exclusion Function</b>	<b>Description</b>
<b>Expected XPath Exclusion</b>	This field takes an XPath string that executes against the <b>Expected Xml</b> once it loads. Elements found by the XPath are excluded from the comparison on the Expected side only. This field can be a   (pipe) delimited string, allowing for multiple XPath items to execute.
<b>Actual XPath Comparison</b>	This field takes an XPath string that executes against the <b>Actual Xml</b> once it loads. Only the elements found by the XPath are used in the comparison for the Actual side only.
<b>Expected XPath Comparison</b>	This field takes an XPath string that executes against the <b>Expected Xml</b> once it loads. Only the elements found by the XPath are used in the comparison for the Expected side only.