

Data Management Actions


Last Modified on 15 February 2022

EOL: SentryOne Test will reach its [end of life](#) date on June 15, 2022. See the [Solarwinds End of Life Policy](#) for more information.

Data Management actions are responsible for gathering and / or manipulating data. Each action can be used to fulfil a unique role within a test:

- They can prepare tests by ensuring the expected results are up to date.
- Clean-up an environment before or after a test execution.
- Summarize data in preparation for asserts.
- Generate test data for usage within a test.

Data Generation

Icon	Description
	The Data Generation action creates data using a BI xPress Data Generation solution.

Properties	
Action Data Generation	
Misc	
Connection asset	No asset selected
Data generation solution asset	No asset selected
IsEnabled	True
Name	Data Generation
Uniqueld	bd4f575f-6a02-4891-9f8b-086025f6e306

Required Assets


- Connection
- Data Generation Solution

Once the editor has loaded, you need to input the following properties:

Asset	Description
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Connection Asset Asset	The connection string that's used during data generation. Description
Data Generation Solution Asset	The property stores the location to the BI xPress Data Generation solution.

Execute Query Command

Icon	Description
	The Execute Query Command action takes the specified query command and runs it against the desired location. This element uses various assets to accomplish filling in the required information.

Execute Query Command Editor

Properties
▼ ↑ ×

Action Execute Query (Command)
▼

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☰ **Misc**

Connection asset	No asset selected
IsEnabled	True
Name	Execute Query (Command)
Query asset	No asset selected
Timeout	30
Uniqueld	9460d201-5ced-411e-b8c6-826a18f92db2

Function	Description
Connection Asset	Determines the database that the command is run against.
Query Asset	The query command you want to execute.
Timeout	Controls how long the command runs before failing with a timeout.

Execute Query Grid

Icon	Description
	The Execute Query Grid action runs a query against a connection, then stores the information gathered into the resource key defined in the element's editor. This element is used for retrieving a grid of information

Icon






Description
to be compared in the assertion step. If the query pulls multiple grids, you can specify which grid to use using the Result set index. The default is zero, which is the first result set pulled.

Execute Query Grid Editor

Properties ▾ 🔍 ✕

Action Execute Query (Grid) ▾


  

Misc

Connection asset	No asset selected
IsEnabled	True
Low memory mode	False
Name	Execute Query (Grid)
Query asset	No asset selected
Resource key	ExecuteQueryGrid_TargetResourceKey
Result set index	0
Timeout	30
Uniqueld	fe135223-bffb-4d67-9bf6-e704efe5c069

Function	Description
Connection Asset	The connection to the data source.
Low memory mode	Toggles whether the grid is stored on disk or in memory.
Query Asset	The query that runs against the connection.
Result Set Index	Selects the result set to use if multiple sets are returned from the query.
Timeout	Controls how long the query runs before failing with a timeout.


Execute Query Scalar

Icon	Description
	<p>The Execute Query Scalar action retrieves a single piece of data to compare and then store in the resource key defined in the element's editor.</p>

Execute Query Scalar Editor

Properties ▼ ⌵ ✕

Action Execute Query (Scalar) ▼




☐ **Misc**

Connection asset	No asset selected
Expected type	Int32
IsEnabled	True
Name	Execute Query (Scalar)
Query asset	No asset selected
Resource key	ExecuteQueryScalar_TargetResourceKey
Timeout	30
Uniqueld	887d6bc4-5793-460f-9781-b17ef4345c31

Function	Description
Connection Asset	The connection to use for the query.
Query Asset	The query that runs against the connection.
Resource Key	The resource key where the data is stored from this element.

Timeout Function	Controls how long the query runs before failing with a timeout.
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Extract Grid Checksum

Icon	Description
	The Extract Grid Checksum action checks for changes in a grid set. This action would be used in conjunction with an integer compare assert. The grid checksum takes in a grid, and then returns out an integer that represents its current state. This integer state can then be compared to another integer to see if there has been any changes to the structure or content of the grid.

Extract Grid Checksum

Properties


Action Extract Grid Checksum

Misc

Grid Resource	sourceDataSet (Grid)
IsEnabled	True
Name	Extract Grid Checksum
Target Resource Key	ExtractGridChecksum_TargetResourceKey
Uniqueld	41a9c07c-4f33-4bb3-a6b6-b3b402bc0f87

Function	Description
Grid Resource	The grid where the checksum is extracted.
Target Resource Key	The name given to the result in the Test Resources. This key is used when populating an assert.

Filter Grid

Icon	Description
	The Filter Grid action filters an already loaded grid. If possible, avoid using this action. For example if the grid being loaded comes from an Execute Query Grid action, then modifying the query to perform the filtering at the source performs better. It's not always possible to run sufficient filtering at the source, and this is why the filter grid action is present.

Filter Grid Editor

SentryOne Test Element Editor


Grid to filter: ▶

Low memory mode

Filter expression:

Function	Description
Grid to filter	The grid that you want to filter.
Filter expression	The filter expression to use. For more information about filter expressions, please see the filtering topic.


Get Grid Row Count

Icon	Description
	The Get Grid Row Count action takes in a grid and returns the amount of rows in the grid.

Get Grid Row Count Editor

Properties ▼ 🔍 ✕

Action Get Grid Row Count ▼



☐ **Misc**

Grid	sourceDataSet (Grid)
IsEnabled	True
Name	Get Grid Row Count
Resource key	GetGridRowCount_TargetResourceKey
Uniqueld	135acbe0-76a5-4556-bf53-c7f854a7fb99

Function	Description

Grid Function	The grid where the row count is extracted. Description
Resource key	The name given to the result stored in the Test Resources.

Load Excel Scalar

Icon	Description
	Loads a selected excel cell file from a connection asset.

Properties
▼ ↑ ✕

Action Load Excel Cell (Scalar) ▼

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☐ **Misc**

Excel cell reference	
Expected type	Int32
File reference asset	No asset selected
IsEnabled	True
Name	Load Excel Cell (Scalar)
Refresh data sources before loading	False
Resource key	LoadExcelCellScalar_TargetResourceKey
Uniquelid	9eb88472-8c7b-4fd0-bb31-ede02dfc9f6f

Function	Description
Excel Cell Reference	String reference to the excel cell in the following format : <ul style="list-style-type: none"> "SheetName!A1"
Expected type	The type of value expected in the cell.
File reference asset	The file reference or content specifying the data to load.
Refresh data sources before loading	Refreshes all data sources and power pivot tables in the excel file before loading.
Resource Key	Name of the resource key that stores the results.

Load Excel Data Grid

Description
Loads a selected excel data grid from a connection asset.

Flat data:



Resource key:

LoadExcelDataGrid_TargetResourceKey

 Low memory mode


 Refresh Data Sources

 Edit Filter

Selected columns:

Function	Description
Flat data	The Delimited File Reference Asset, Delimited Content Asset or Fixed Width File Reference Asset that contains the information about the file to load.
Resource Key	Name of the resource key that stores the results.
Low memory mode	If true, then the grid is loaded in low memory mode - meaning that the data is stored in a temporary file.
Refresh Data Sources	Refreshes all data sources in the excel file before loading.
Edit Filter	Opens the filtering window that allows you to apply a SQL-like filter expression to select data.
Selected Columns	This area allows you to select the columns that are loaded from the Excel data.

Load Flat File Data

Icon	Description
	<p>The Load Flat File Data action loads flat file data into a resource key for comparison and validation.</p> <p>The Load Flat File Data action loads data from the following types of assets:</p> <ul style="list-style-type: none"> • Delimited File Reference • Delimited Content • Fixed Width File Reference

Load Flat File Data Editor

SentryOne Test Element Editor

Flat data: ▶

Resource key:


Low memory mode

▼ **Edit Filter**

Selected columns:

Function	Description
Flat data	The Delimited File Reference Asset, Delimited Content Asset or Fixed Width File Reference Asset that contains the information about the file to load.
Resource Key	Name of the resource key that stores the results.
Low memory mode	If true, then the grid is loaded in low memory mode - meaning that the data is stored in a temporary file.
Edit Filter	Opens the filtering window that allows you to apply a SQL-like filter expression to select data.
Selected columns	This area allows you to select the columns that are loaded from the flat file data.

Load Grid From Asset

Icon	Description
	The Load Grid from Asset action loads the grid defined by a grid collection asset into a resource key for comparison.

Load Grid Editor

Properties ▾ 🔍 ✕

Action Load Grid from Asset ▾

Misc

Asset	No asset selected
Grid index	0
IsEnabled	True
Name	Load Grid from Asset
Resource key	LoadGridfromAsset_TargetResourceKey
Uniqueld	d5de2244-90c2-4902-8429-24a6d5c791c9

Function	Description
Asset	The Grid Collection asset to use.
Grid Index	The index of the grid that loads into the resource key. The default value is zero.
Resource Key	Name of the resource key that stores the results.

Load Tabular File Table

Description

Loads a selected tabular file table from a connection asset.

SentryOne Test Element Editor ▾ 🗑 ✕

Data Package File ?

▶ Browse

Resource Path ?

Target Resource Key ?

LoadTabularFileTable_TargetResourceKey

Function	Description
Data Package File	The asset where you want to retrieve a test run result.
Browse	Search for a desired data package file.
Resource Path	The path to the resource from the data package file.

Target Resource Key
Function

Name of the resource key that stores the results.
Description

Table Row Count

Description

Calculates the number of rows in a table from a selected connection asset.

SentryOne Test Element Editor

Connection



Table

Resource Key

TableRowCount_TargetResourceKey

Function	Description
Connection	The connection string for your desired table.
Table	The selected table from the connection string.
Resource Key	Name of the resource key that stores the results.