[](https://orchestrator.codeplex.com/)

Orchestrator Excel Integration Pack

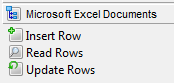
**Introduction**

The Excel Integration Pack enables you to read, update and insert into xls, xlsx and xlsm files and read and insert into csv files without needing Microsoft Office installed on the runbook server.

**Requires the Microsoft Access Database Engine 2010 Redistributable**

Install the Microsoft Access Database Engine 2010 Redistributable to allow runbooks to interact with xlsx spreadsheet files programmatically without needing to have Microsoft Office installed. This can be found at <http://www.microsoft.com/download/en/details.aspx?id=13255>. The 32-bit version must be installed because Orchestrator is a 32-bit application.

**Activities:**



**Required Properties:**

**Excel File Path –** Specified the path to a .xls, .xlsxm, .xlsx or .csv file. The file must be accessible by the Orchestrator process account being used to execute the runbook. When using the runbook tester the user account is the account use to execute the runbook designer.

**Has Header Row** – Used to define whether or not the first row in the specified file contains the names of the columns or if it contains data.

**Optional Properties:**

**CSV Delimiter –** Used to specify the delimiter used within a .csv file.

**Sheet Name –** Used to specify the name of the sheet to query within an Excel spreadsheet file.

**Force mixed data to be converted to text -** Setting this value to true configures the IMEX=1 setting with the Excel ADO connection string. If the TypeGuessRows determines that there is more than one data type (e.g. text and numbers) then it will convert all of the values to text. If there is mixed data however the mixed data exists after the number of rows specified in TypeGuessRows then the column will not be converted to text.

NOTE: Setting IMEX=1 tells the driver to use Import mode. In this state, the registry setting ImportMixedTypes=Text will be noticed. This forces mixed data to be converted to text. For this to work reliably, you may also have to modify the registry setting, TypeGuessRows=8. The ISAM driver by default looks at the first eight rows and from that sampling determines the datatype. If this eight row sampling is all numeric, then setting IMEX=1 will not convert the default datatype to Text; it will remain numeric.

You must be careful that IMEX=1 not be used indiscriminately. This is IMPORT mode, so the results may be unpredictable if you try to do appends or updates of data in this mode.

**TypeGuessRows -** Used to dynamically determine the data type for each column as well as the size of the data in xlsx (see data truncation). Setting this value to 0 will cause the entire spreadsheet to be evaluated which can result in performance degradation for large spreadsheets.

**; Replacement** – Used to define which character(s) should replace any ; characters found within the return data. Defaults to \_. This is used because the published data separates columns with the ; character so any ; characters found in the data itself would make it impossible to parse the published data.

**Available Filters**

**Select filter –** Used to only select data from specified column in the file. For example, *Select [Column A], [Column B]* would be used to only return data from columns named Column A or Column B. When there is no header row specified, use F1, F2, etc. as the column names. Data in Column C would not be returned. Note that column names with spaces must be enclosed in brackets []. Also the statement must start with the word Select. This can also be used to limit the number of rows returned. For example: ‘Select top 5 \*’ returns only the top 5 rows in the spreadsheet.

**Where filter –** Used to only return data that meets the required criteria. For example, *Where [Column A] = ‘success’*. Note that column names with spaces must be enclosed in brackets [].

**Published Data**

The input properties and filters are published back as published data. In addition the following values are also published.

**Number of rows –** The number of rows of data returned by the query.

**Full line as string with fields separated by ; -** The actual data returned by the query. Column values are separated by ; characters.

**Additional Notes**

**Data truncation:**

Your data may be truncated to 255 characters if the first 8 records for the field(s) being truncated contain 255 or fewer characters. The Microsoft Excel ODBC driver will, by default, scan the first 8 rows of your data to determine the type of data in each column. The number of rows to scan can be configured by the TypeGuessRows rows value. For xls files the data will always be truncated to 255 characters however for xlsx files the TypeGuessRows value is used to determine the appropriate size to use for the column.

All ; characters found within the spreadsheet are converted to \_ characters so that the data publishes correctly to the data bus.

**Advanced CSV importing:**

Create a Schema.ini file in the directory containing the csv file to be imported.

<http://msdn.microsoft.com/en-us/library/ms709353(v=vs.85).aspx>

**Troubleshooting:**

“Operation must use an updateable query.”

This error can be caused by the use of the **Force mixed data to be converted to text** setting being set to True. Test again using a value of False.

“Updating data in a linked table is not supported by this ISAM.”

Updating .csv files is not supported through this integration pack because of the limitation of the Micosoft Jet ADO.Net engine. Only reading and inserting rows into a .csv file is supported.

**Revision History:**

1.5 – February 3, 2014

* All: Modified the Excel File Path property to be a text box instead of a file chooser. This allows the capability to use published data to reference the file rather than a hard coded path.
* Read Rows activity: Added Select filter and Where filter values to the Filters tab to allow for returning only the desired data from the spreadsheet.
* Read Rows activity: Removed the Select Statement and Where Statement optional properties.

1.9 – July 26, 2018

* Add support for Order By.
* Add support for 40 columns.
* Add new activity Read Header Row

2.0-December 19, 2018

* Fixed issue with invalid row data being returned

2.1-November 2019

* Added new Read Sheet Names activity

2.3-September 2020

* Added support for xlsm files