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# MICROSOFT EXCEL<sup>®</sup> DATA ACQUISITION MODULE

Version 1.2.0

User Guide

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## CONTACT

Stegmann Systems GmbH  
Raiffeisenstr. 2 // C1, C2  
63110 Rodgau  
Germany

Phone: +49 6106 770100

Fax: +49 6106 7701029

[www.bioassay.de](http://www.bioassay.de)

[support@bioassay.de](mailto:support@bioassay.de)

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## WELCOME

Welcome to the Microsoft Excel® Data Acquisition Module User Guide. This guide is intended for users, functional administrators of PLA, and system administrators.

It describes all aspects of the installation, configuration, and usage of the Microsoft Excel® Data Acquisition Module.

## HOW TO USE THIS GUIDE

The structure of this guide is as follows:

### **System Requirements (System Administrators and PLA Administrators)**

- Requirements of the Data Acquisition Module

### **Step by Step Guide: Acquire Data with Microsoft Excel Data Acquisition Module (PLA Users)**

- Acquire data
- Manage configurations

### **Installation (System Administrators)**

- Installation of the Data Acquisition Module

## OVERVIEW

The Microsoft Excel Data Acquisition Module gives you the opportunity to acquire data from Microsoft Excel files using PLA 3.0.4.

A single import format is available for Microsoft Excel® Data Acquisition Module:

**Microsoft Excel (\*.xls, \*.xlsx)** – Allows importing data from a Microsoft Excel file.

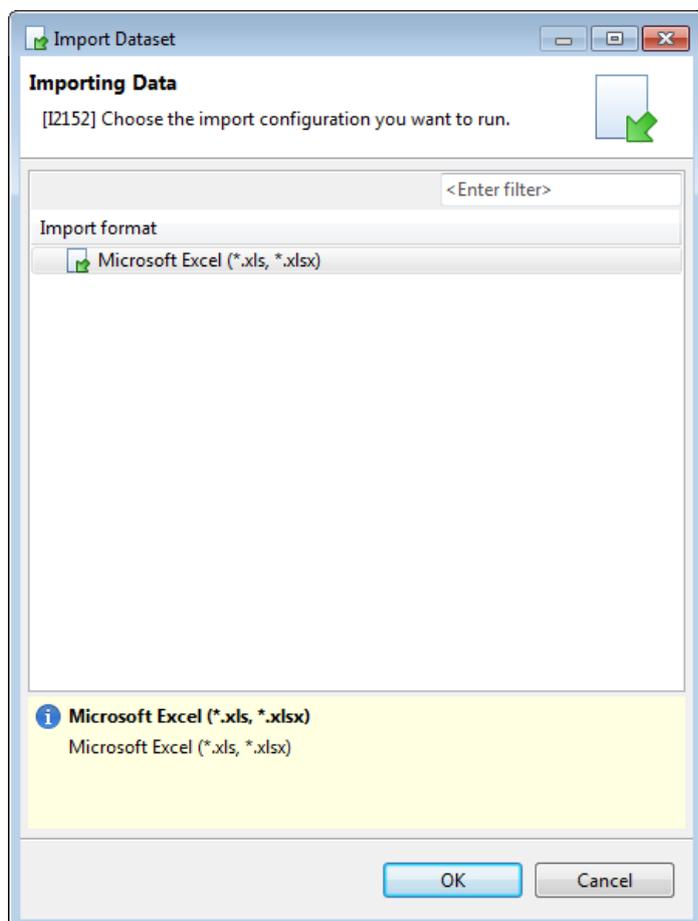
## SYSTEM REQUIREMENTS

The Microsoft Excel® Data Acquisition Module v1.2.0 requires PLA 3.0.4. An installation of Microsoft Excel is not required.

## ACQUIRE DATA USING THE MICROSOFT EXCEL DATA ACQUISITION MODULE

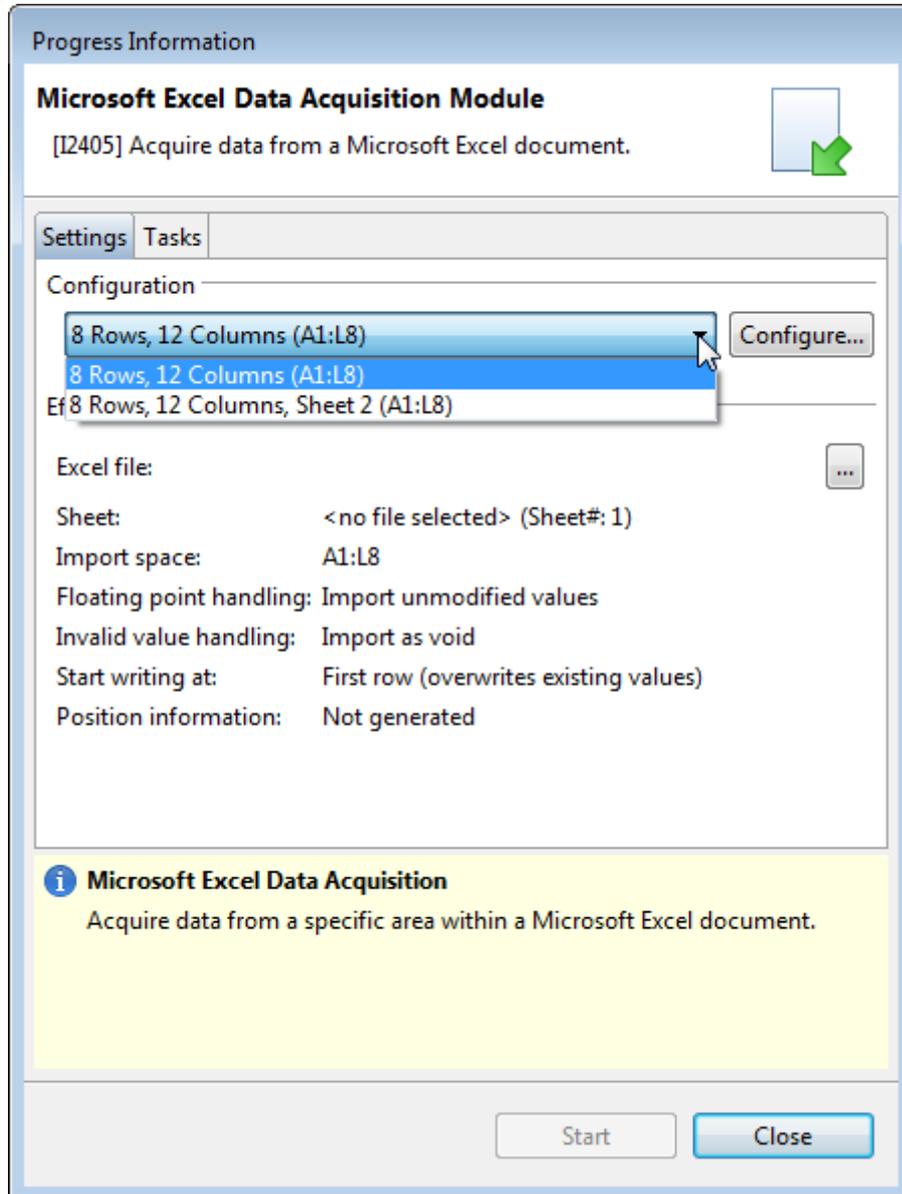
The Microsoft Excel® Data Acquisition Module allows you to import data from existing Microsoft Excel files into PLA Quantitative Response Assay documents. To start the Data Acquisition Module, run the **Acquire Data** action of a PLA Quantitative Response Assay document.

Select the Microsoft Excel import format and click the **OK** button.



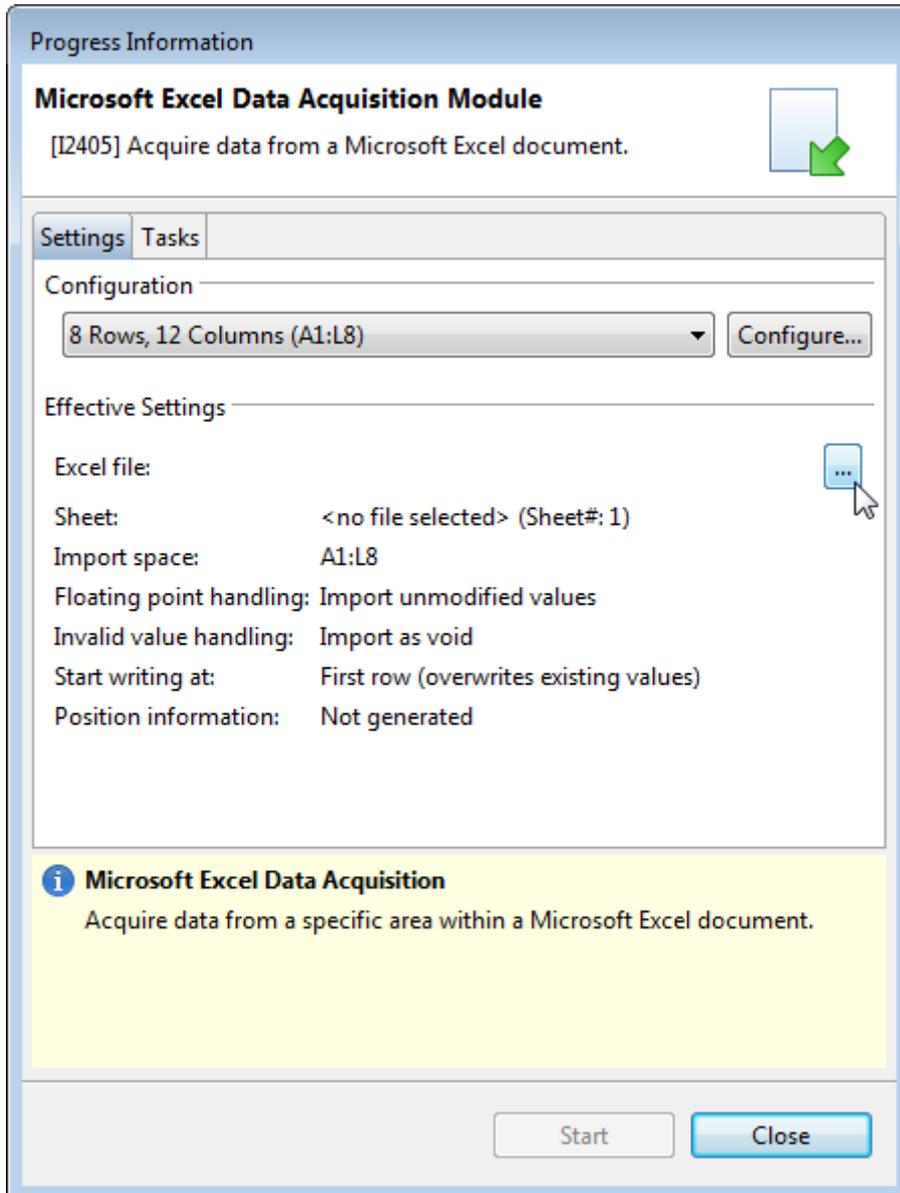
You can select a configuration profile using the drop-down menu of the Data Acquisition dialog.

If there is no configuration profile listed, it is necessary to create one (see chapter Manage Configurations).

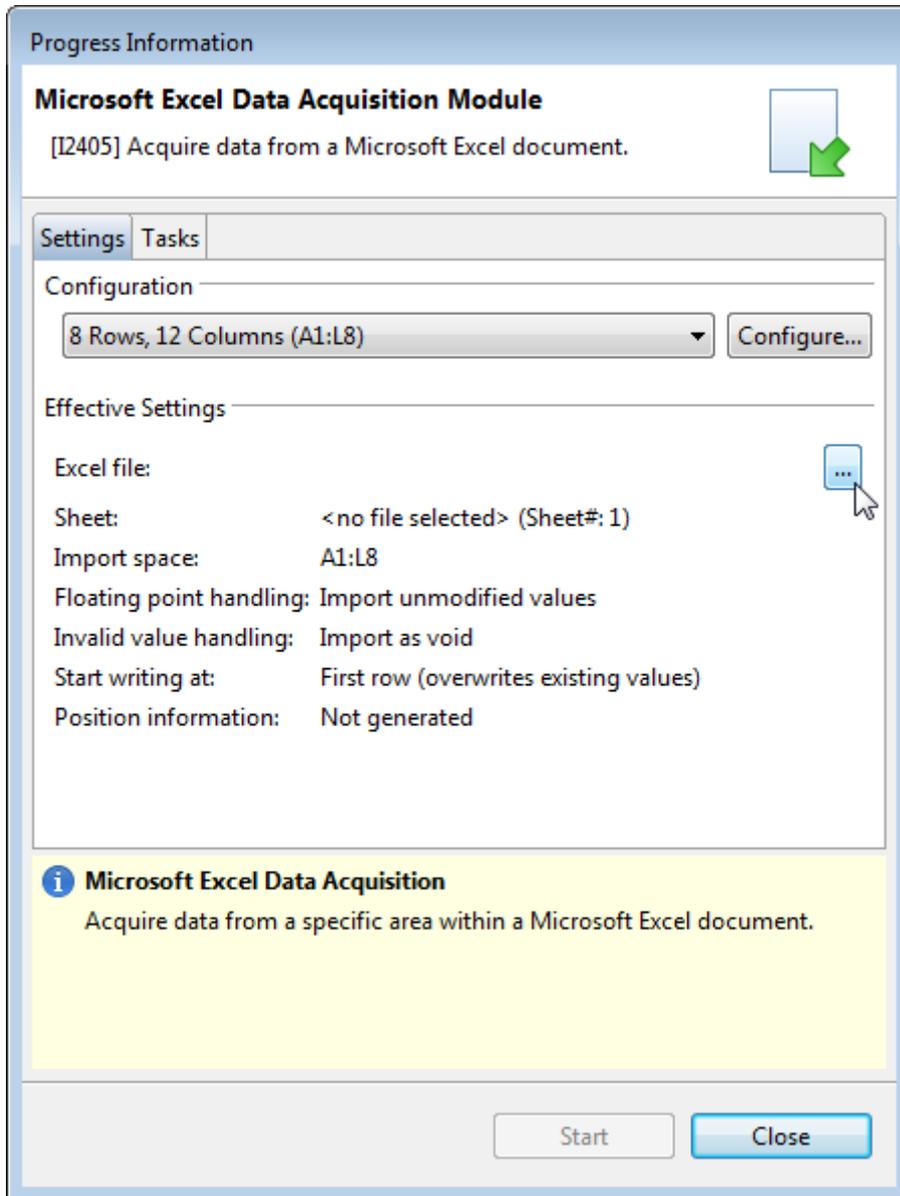


## Acquire Data Using the Microsoft Excel Data Acquisition Module

After choosing a configuration profile, select a Microsoft Excel file using the ... button.

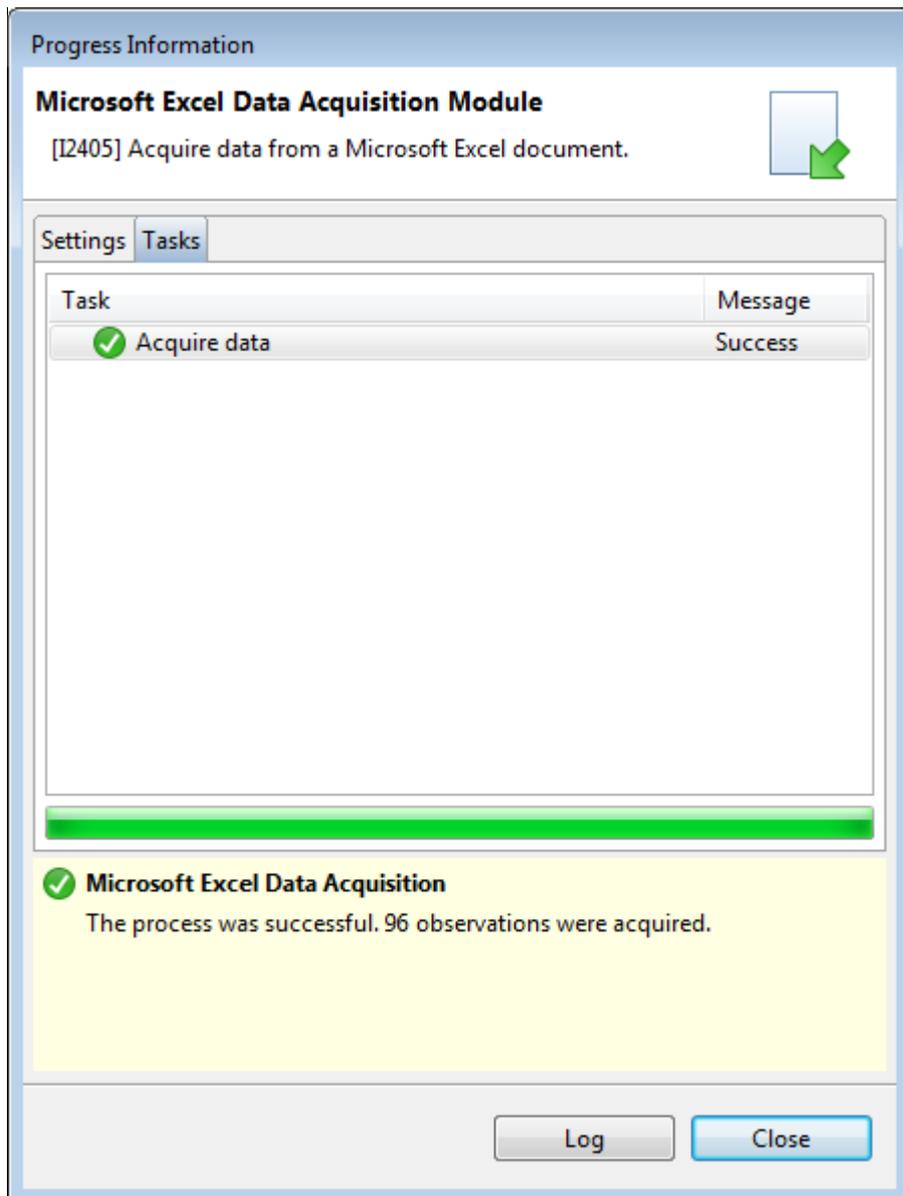


When you have chosen a configuration and a Microsoft Excel file, you can start the import process using the **Start** button. The effective settings are set by the configuration profile and define the import strategy.



## Acquire Data Using the Microsoft Excel Data Acquisition Module

You can view the progress and result of the data acquisition using the status dialog.



## Microsoft Excel® Data Acquisition Module - User Guide

The result of the data acquisition is available in the response column in the observations view of the PLA document editor.

PLA 3.0 - Software for Biostatistical Analysis

File Edit System Validation Help

Home New Quantitative Response Assay (Document-1)

### New Quantitative Response Assay

Document-1, Revision 2, Quantitative Response Assay

No tasks were executed for the current state of this document.

Dashboard Add Remove Assignments Move Up Move Down Sign (0) View Options

Observation Group ID	Sequence Step	Response	Technical Outlier
1		1.01	false
2		1.02	false
3		1.03	false
4		1.04	false
5		1.05	false
6		1.06	false
7		1.07	false
8		1.08	false

You are currently editing the settings of a single observation.

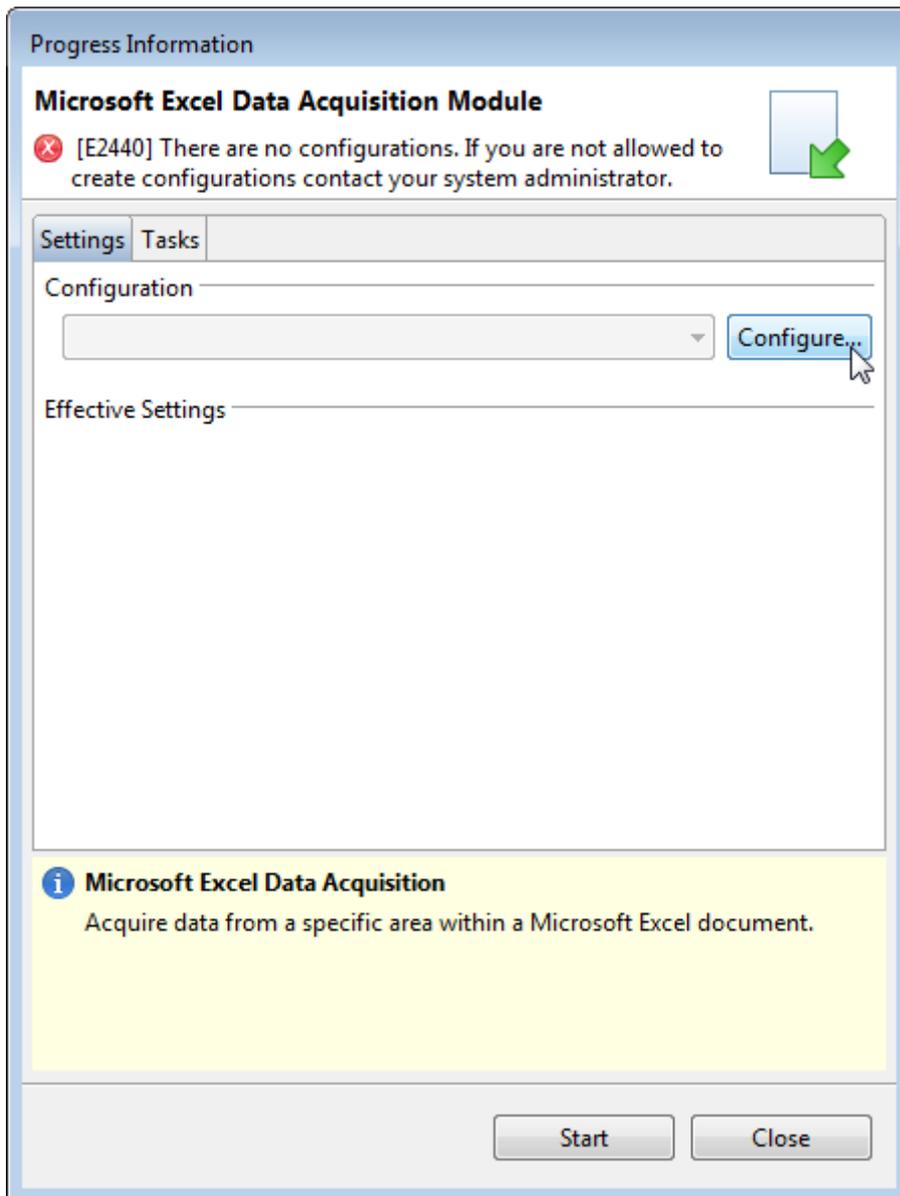
Factor	Value
Observa...oup ID	
Sequence Step	
Response	1.01
Technical Outlier	false

Demo3

## MANAGE CONFIGURATIONS

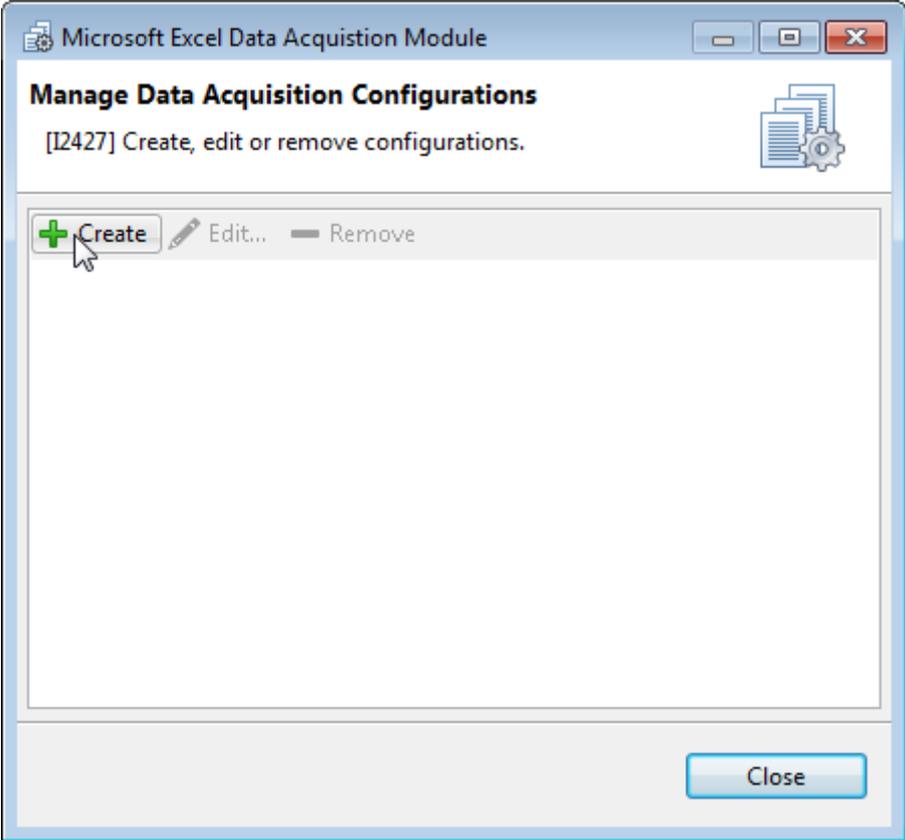
Within PLA, the Microsoft Excel® Data Acquisition Module offers the possibility of creating, editing, or deleting data acquisition configurations.

You can open the profile configuration dialog using the **Configure...** button in the Acquire Data dialog.

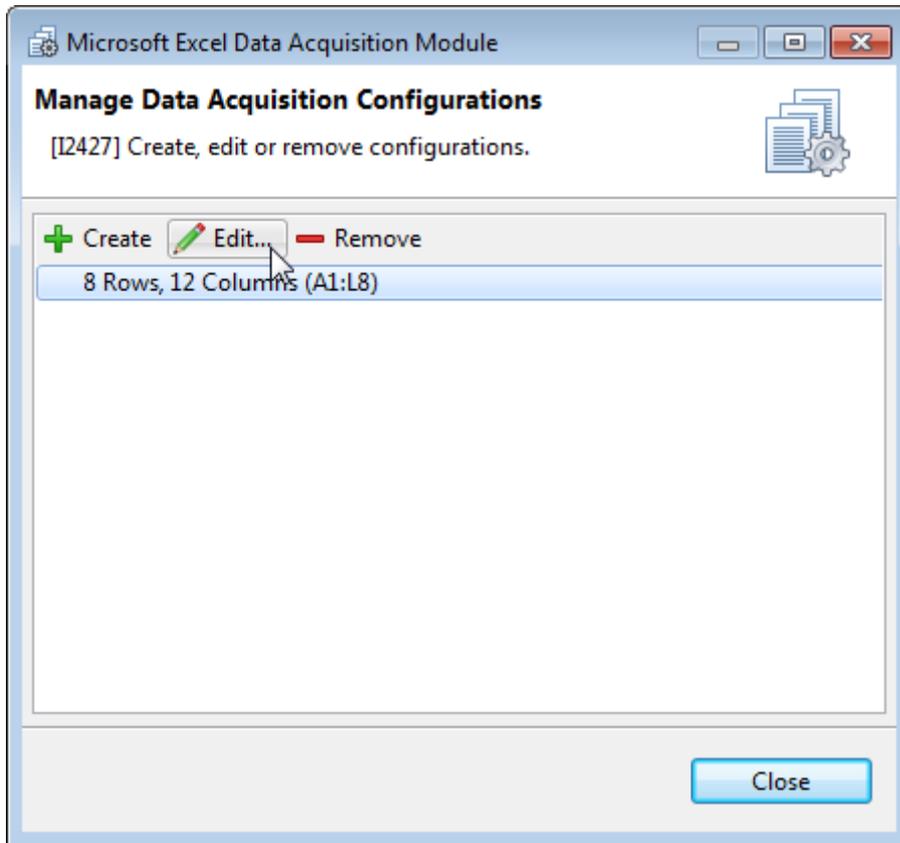


Microsoft Excel® Data Acquisition Module - User Guide

To configure the Microsoft Excel® Data Acquisition Module, you need to create a configuration profile in the Manage Data Acquisition Configurations dialog.



The Manage Data Acquisition Configurations dialog also allows editing or removing existing configuration profiles.

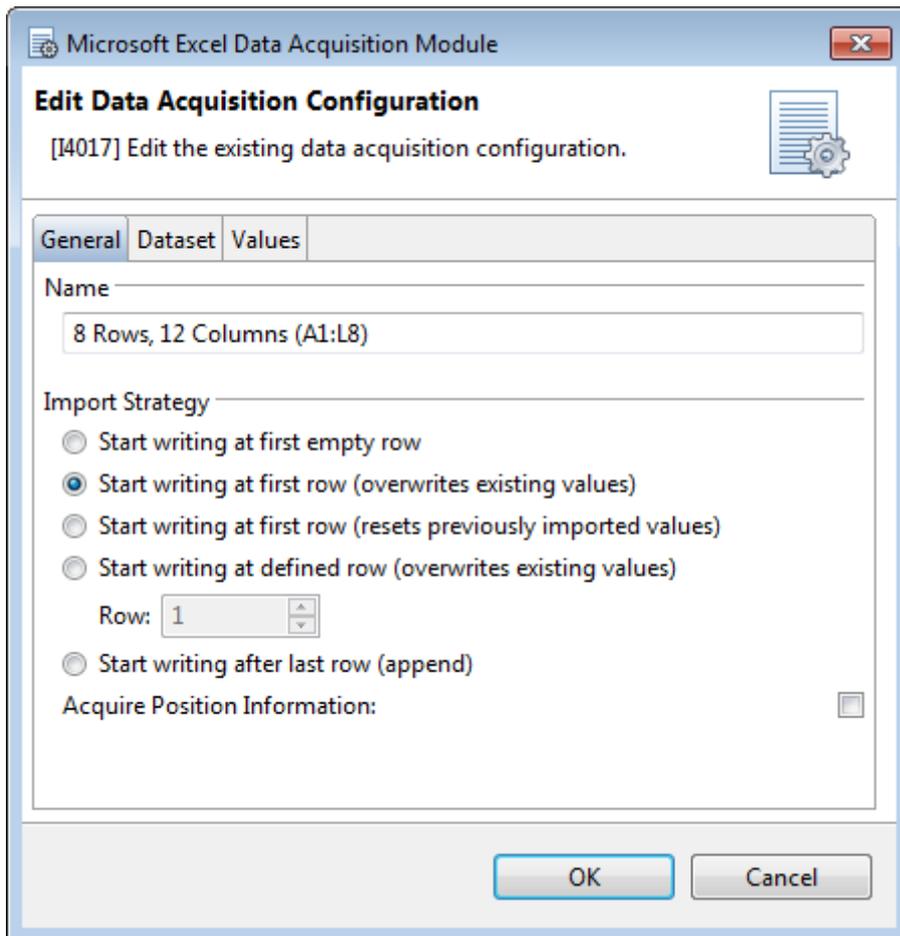


## STANDARD CONFIGURATION OPTIONS

Within PLA, the Manage Data Acquisition Configurations dialog offers the possibility of creating, editing or deleting data acquisition configurations. When creating or editing a configuration profile, the following options are available:

### GENERAL

You can name the profile and define an import strategy using the General tab of the configuration dialog.



### NAME

Allows you to enter the name of the configuration profile.

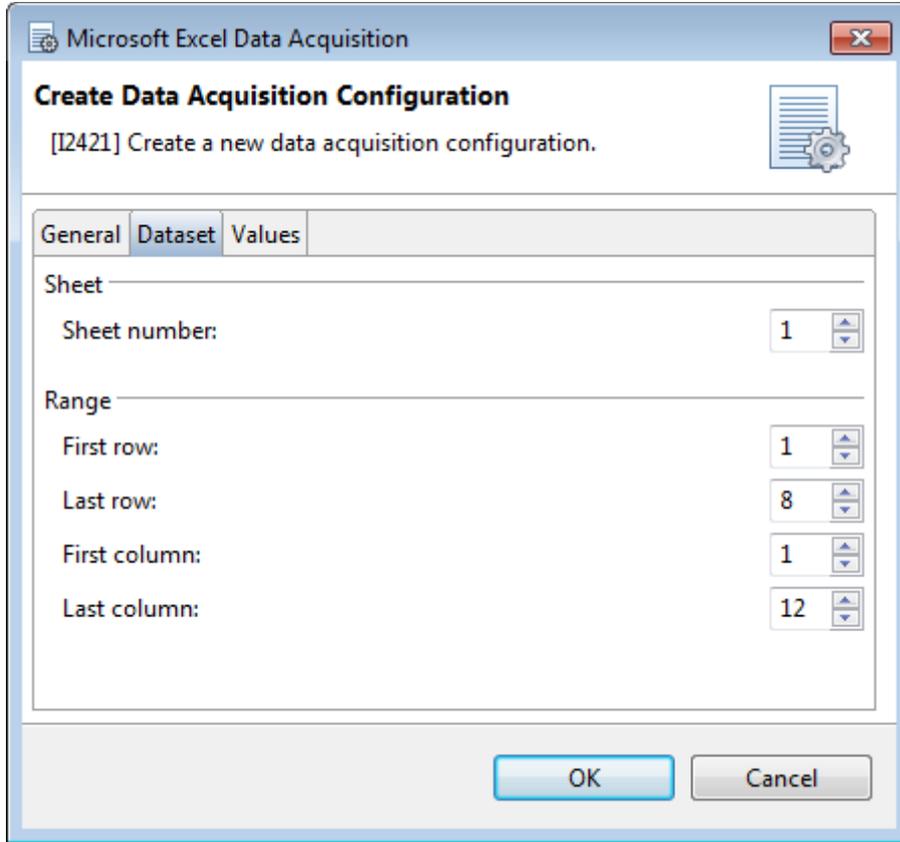
## IMPORT STRATEGY

Describes how the data is written into the observations view of the Quantitative Response Assay.

<b>Label</b>	<b>Description</b>
Start writing at first empty row	Starts writing at the first empty observation row, keeping existing values
Start writing at first row (overwrites existing values)	Starts writing at the first observation row, overwriting existing values
Start writing at first row (resets previously imported values)	Starts writing at the first observation row, resets all values to default values before inserting data.
Start writing at defined row (overwrites existing values)	Starts writing in specified observation row, overwriting existing values
Start writing after last row (append)	Starts writing after the last observation row, keeping existing values
Acquire Position Information	Acquires row, column and plate position factor values if available

DATASET

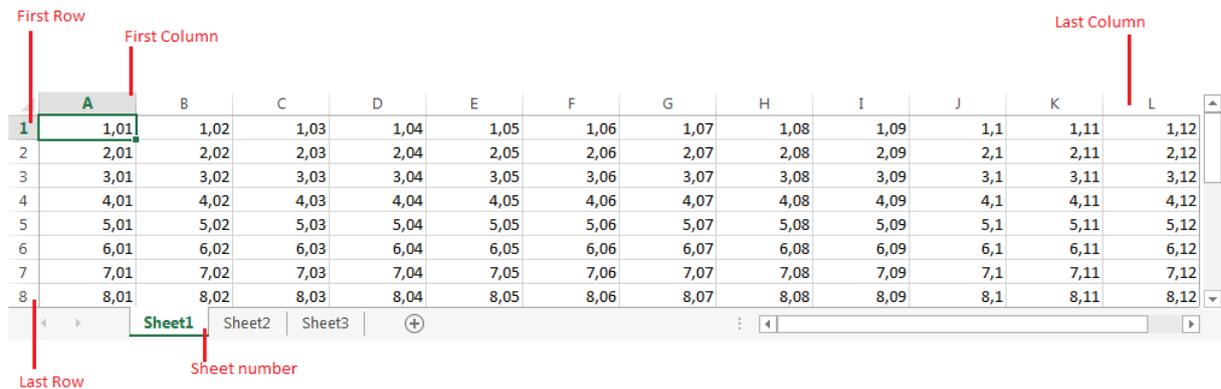
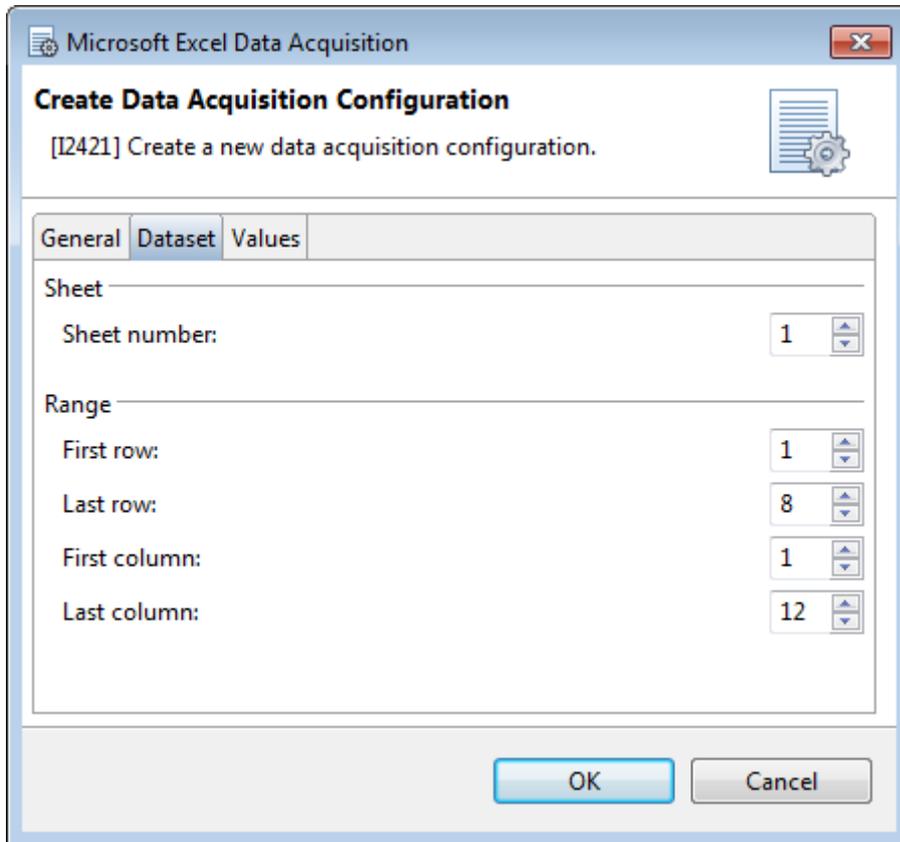
You can define the location of the data within the excel file using the **Dataset** tab of the configuration dialog.



Label	Description
Sheet number	The number of the sheet in which the values are located.
First row	The first row within the sheet that contains data that should be acquired.
Last row	The last row within the sheet that contains data that should be acquired.
First column	The first column within the sheet that contains data that should be acquired.
Last column	The last column within the sheet that contains data that should be acquired.

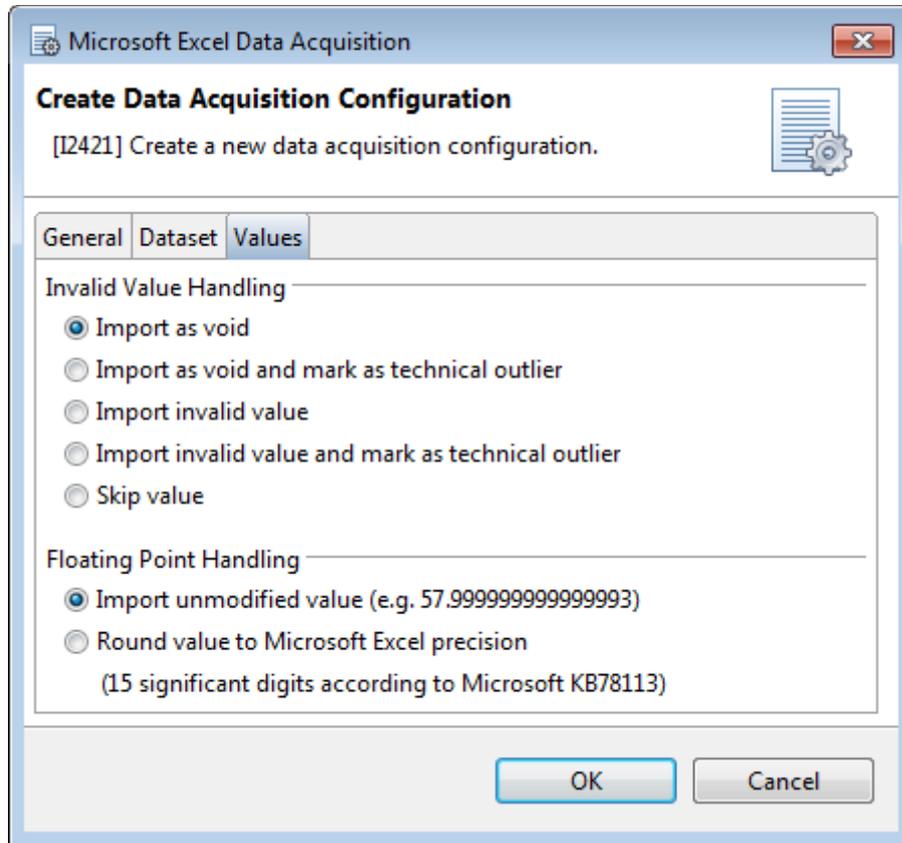
VISUALIZATION OF THE DATASET OPTIONS

This example explains the options available in the Dataset tab.



## VALUES

You can define how valid and invalid values are imported using the Values tab of the configuration dialog. Any value that is not a double value is considered as invalid value.



### INVALID VALUE HANDLING

You can define how invalid values are imported using the invalid value handling settings.

Label	Description
Import as void	Invalid values will be imported as empty values.
Import as void and mark as technical outlier	Invalid values will be imported as empty values and marked as technical outlier.
Import unchanged value and mark as technical outlier	Invalid values will be imported without any changes, but marked as technical outlier. Floating point handling settings apply.
Import unchanged value	Invalid values will be imported without any changes. Floating point handling settings apply.
Skip value	Invalid values will be skipped.

## FLOATING POINT HANDLING

You can define the overall handling of values using the floating point handling settings.

Label	Description
Import unmodified value	Imports the original value.
Round value to Microsoft Excel precision	Imports the rounded value (max. 15 significant digits).

## ADVANCED CONFIGURATION OPTIONS

The advanced configuration of the Microsoft Excel® Data Acquisition Module is handled via the `Excel Data Acquisition Package.properties` configuration that is stored in the `C:\ProgramData\Stegmann Systems\PLA [version]` directory. Any settings that are made using the Microsoft Excel Data Acquisition Module configuration profiles are also saved to the `Excel Data Acquisition Package.properties` file.

**Important:** The encoding of the `.properties` file is ISO-8859-1 (Latin-1). All non-Latin-1 characters must be entered by using `\` as escape character. Example: The special character `:` must be entered as `\:` and the special character `\` must be entered as `\\`

To configure the Microsoft Excel® Data Acquisition Module, you need write permissions on the `Excel Data Acquisition Package.properties` file. Regular Microsoft Windows user accounts do not have write permissions within the Program Data directory, so you might need an administrative account to change the configuration.

## DEFINE AVAILABLE CONFIGURATION PROFILES

You can define the available configuration profiles per folder on a database. To define the available configuration profiles, add the following property to your `Excel Data Acquisition Package.properties` file:

```
com.stegmannsystems.edp.dataacquisition.excel.restrictions.<DB-UUID>.profile.<Folder-Key>
```

You can view the DB-UUID of the database using the PLA Database Policies (General tab). The folder key can be viewed using the PLA folder properties dialog (Document Key value).

The following example will limit the available configuration profiles for the folder with the folder-key "Folder-1" (Root Folder) and all of its subfolders, unless a subfolder defines its own set of available configuration profiles. Multiple configuration files need to be separated by a pipe symbol (`|`). Only the configuration profiles named "Excel Profile1" and "Excel Profile2" can be used in the Microsoft Excel® Data Acquisition Module:

## Microsoft Excel® Data Acquisition Module - User Guide

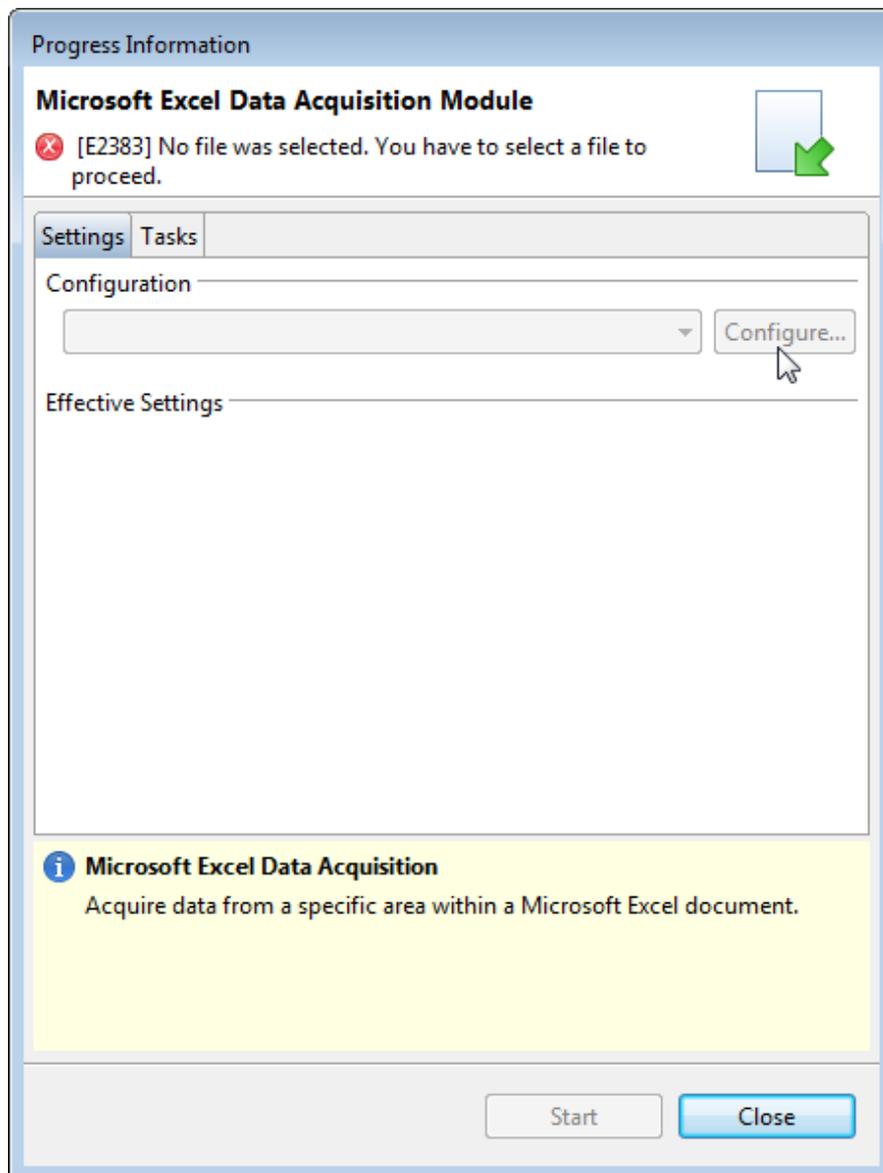
```
com.stegmannsystems.edp.dataacquisition.excel.restrictions.6c868b23-d386-45f8-833b-15e8014b424f.profile.Folder-1=Excel Profile1|Excel Profile2
```

This setting does not prevent users from changing the available profiles. See chapter Prevent Configuration of Configuration Profiles for further information.

### PREVENT CONFIGURATION OF CONFIGURATION PROFILES

By default, all users that can access the Microsoft Excel® Data Acquisition Module can create, edit, and delete configuration profiles. To prevent users from creating, editing, and deleting configuration profiles, you have to add the following property to your `Excel Data Acquisition Package.properties` file:

```
com.stegmannsystems.edp.dataacquisition.excel.restrictions.canEditProfiles=false
```

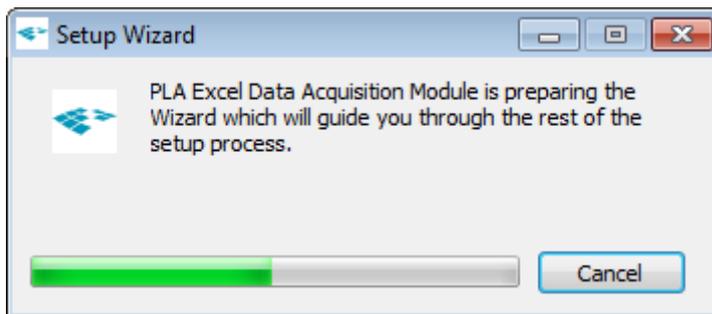


## INSTALLATION

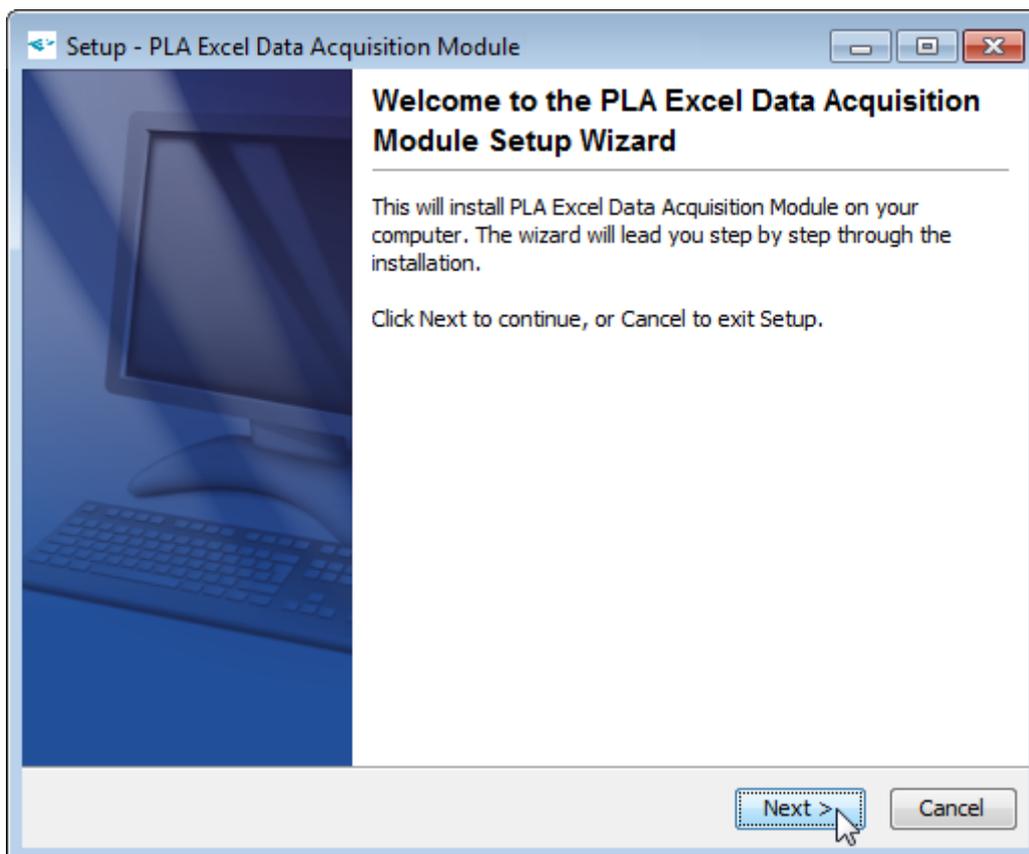
Installing the Microsoft Excel® Data Acquisition Module consist of two parts. The Setup part will install the Data Acquisition Module on your local hard disk. Afterwards, it can be activated in multiple databases using the PLA Package Management.

### SETUP

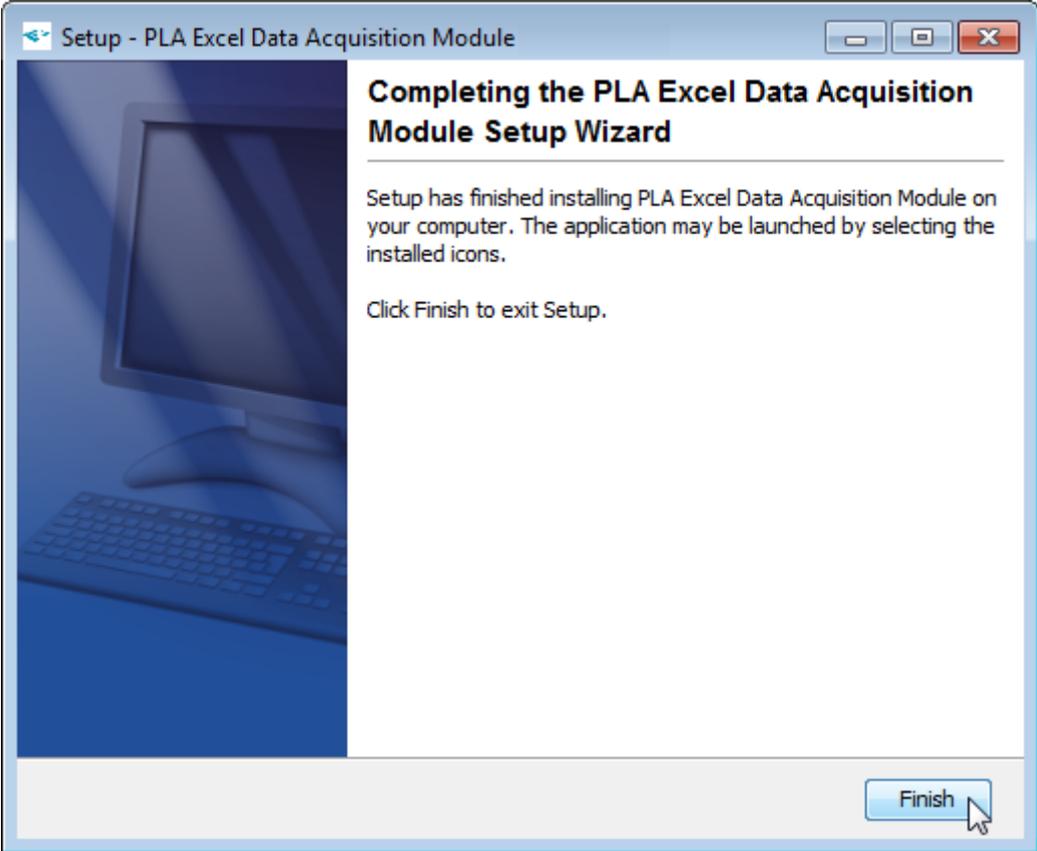
To install the Microsoft Excel Data Acquisition Module, start the installation program using a Microsoft Windows Administrator account.



Follow the on-screen instructions.



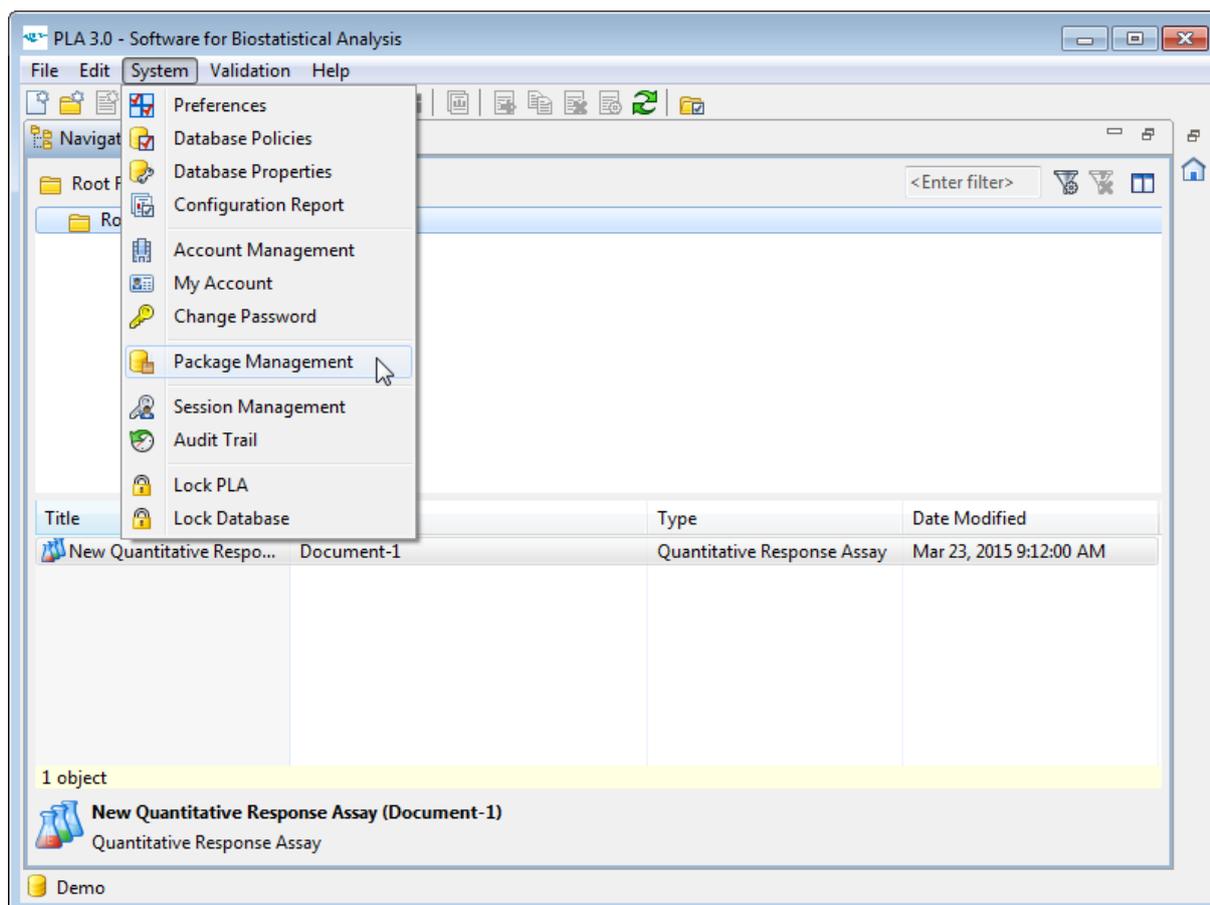
When the installation finished successfully, close the installation program using the **Finish** button.



## PACKAGE MANAGEMENT

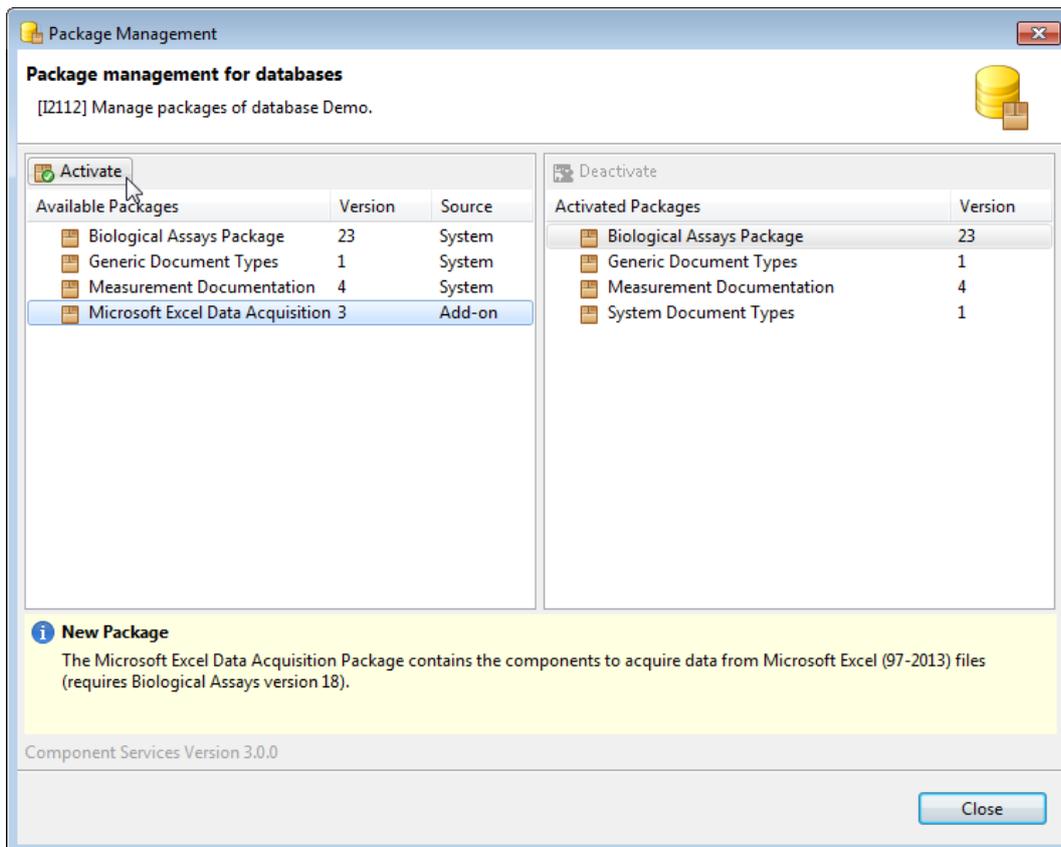
To use the Microsoft Excel® Data Acquisition Module, it has to be activated in the specific database.

To make the module available in a PLA database, a PLA user account with the permission to view and manage packages is required. Log in to PLA using a user account with the required permissions and open the **Package Management** from the **System** menu.



## Microsoft Excel® Data Acquisition Module - User Guide

Select the Microsoft Excel Data Acquisition Module out of the list of available packages and click the **Activate** button.



PLA will activate the selected Data Acquisition Module in the database. When the activation is complete, the package will be listed as activated package. The Data Acquisition Module can now be used to acquire data into PLA Quantitative Response Assays, using the **Acquire Data** action of the PLA document editor.

