



AgiliProve

ALM Excel Add-in

Document Id: TD.AP.ALM.GUI
Date Issued: January 2025

Contents

| | |
|--|-----------|
| Purpose/Scope | 3 |
| Functional Description | 3 |
| Excel Add-in Installation..... | 3 |
| Prerequisites | 3 |
| Variable Parameters for Installation Steps | 4 |
| Installation Steps..... | 5 |
| Formatting Data | 6 |
| Formatting Requirements..... | 8 |
| Formatting Tests | 13 |
| Importing Data into ALM | 15 |
| Prerequisites | 15 |
| Variable Parameters for Exporting Steps | 15 |
| Requirement Exporting Steps..... | 16 |
| Tests Exporting Steps | 18 |
| Additional Notes..... | 19 |

Purpose/Scope

The purpose of this document is to explain how to operate and use the Excel Add-in.

Functional Description

The Excel Add-in exports Requirements and Tests from Microsoft Excel into HP ALM.

The Excel Add-in has been developed by TDTS and will honor the rules that have been defined by the AgiliProve Rule Set (ex. prevent overwriting requirements and tests that are not in the proper state).

Note: the Excel Add-in currently will only import requirements and tests into a project that has an AgiliProve template applied.

Excel Add-in Installation

The Excel Add-in is distributed as a Microsoft Installer Package (.msi) file. Once installed, the Excel Add-in is accessible on Excel's "Add-Ins" tab (2013, 2016) from the "AgiliProve" group and is the "Import Data" menu item.

The Excel Add-in can be removed via the Programs and Features component of the Windows Control Panel.

Prerequisites

The following prerequisites must be met before installation.

Prerequisites:

- Microsoft Office 2013, 2016 or 2019 (32 or 64 bit) is installed on target machine. Office 365 Applications are also included in the prerequisites, given the Microsoft Office applications are installed on the target machine.
- Project Parameter configured to allow user or group to use tool (see AgiliProve Admin Guide)
- Microsoft .Net 4.7.1

Variable Parameters for Installation Steps

Use these variables/parameters in the installation steps that follow:

| Parameter Name | Description | Parameter Value |
|---------------------|--|-----------------|
| [Installation Path] | The Excel Importer's installation path. (e.g. C:\Program Files (x86)\TechData\AgiliProve.ExcelAddin\ | |

Installation Steps

Refer to the Variable Parameters table above for items in brackets [].

| Excel Add-in Installation Steps | | |
|---------------------------------|--|--------------------------------|
| Step | Procedure | Confirmation (Initial/Date) |
| 1. | <p>Double click the .msi to begin installation.</p> <p>On the Welcome screen, click Next.</p> | |
| 2. | On the End User License Agreement screen, check the Agree to License checkbox and click Next. | |
| 3. | <p>On the Options screen, use the default Program Directory location for the Excel Add-in or click the “Select” button to define the [Installation Path].</p> <p>Click Next.</p> | |
| 4. | On the Install screen, click Install. | |
| 5. | On the ExitDlg screen, click Finish. | |

Formatting Data

When using the Excel Add-in, the following rules must be followed:

1. Each HP ALM field being imported must be mapped to a column.
 - a. A designated header row must be defined and each column in the row must contain a label of the HP ALM field(s) which is mapped.

| | A | B | C | D | E | F | G |
|---|---------------|---------------|------------------|---------------------------|----------|----------------|--------------|
| 1 | Path | Name | Requirement Type | Description | Priority | Target Release | Target Cycle |
| 2 | | SampleFolder | Folder | Folder description entry. | 1-Low | | |
| 3 | SampleFolder | Req1 | Functional | Req1 description entry. | 2-Medium | 1001 | 1001 |
| 4 | | SampleFolder2 | Folder | | 1-Low | | |
| 5 | SampleFolder2 | Req2 | Functional | Req2 description entry. | 3-High | 1001 | 1002 |
| 6 | | | | | | | |

- b. Each mandatory (required) field must map to a column. Mandatory fields appear as red text in ALM/QC.

| | | | |
|---------|--|---------------------|------------|
| * Name: | | * Requirement Type: | Functional |
|---------|--|---------------------|------------|

- c. If exporting data into an AgiliProve enabled project, the Approval Status field must not be included.
2. Each requirement or test must be entered on its own row.
 - a. The first Design Step can be on the same row as the Test information.

| | A | B | C | D | E | F | G |
|---|------------------------|-----------|--------|--------------------------|-----------|---|-----------------------------------|
| 1 | Subject | Test Name | Type | Description | Step Name | Step Description | Expected Result |
| 2 | SampleFolder | Test1 | Manual | Test1 description entry. | Step1 | Open system under test. | System Under test is displayed. |
| 3 | | | | | Step2 | Enter username and password. Click Login. | User is logged in. |
| 4 | SampleFolder | Test2 | Manual | Test2 description entry. | | | |
| 5 | SampleFolder\SubFolder | Test3 | Manual | Test3 description entry. | Step1 | Click Edit Profile. | Profile Edit screen is displayed. |
| 6 | | | | | Step2 | Updated email address. Click Save. | Email address is updated. |
| 7 | | | | | Step3 | Return to home page. | Home page is displayed. |

3. The data stored in Excel must meet the HP ALM field configuration requirements (i.e. field length, field type, and lookup lists and list values) that are specified in the project's configuration.
 - a. Note: If a field is a memo field in Excel, you can place an asterisk (*) at the end of the label and the formatting will be converted to an ALM equivalent and shown in ALM.
4. Each requirement or test on the same hierarchical level must have a unique name or it will be overwritten.

5. If updating a record and Version Control is turned on, the record must be checked in.
6. Blank rows or header row cells should not be selected.

Note: Error or warning messages will be displayed during the data verification process if the above rules are not followed.

Formatting Requirements

Requirement formatting must follow these rules:

1. The “Path” field label is used to define the requirements tree hierarchy. Levels are separated by the backslash “\” character.
 - a. The path must already exist or be created by previous rows.
 - b. Do not enter the top level hierarchy name “Requirements” in the path field label.
2. “Requirement Type” field must be defined and any fields required by the type must be defined for that requirement.
3. Labels with an asterisk (*) at the end, can only be memo fields and this will signify the formatting should be carried over to ALM.
4. Target Release and Target Cycle can be added in 2 ways
 - a. If Field Labels (“Target Release” or “Target Cycle”) are included, they are added via ID
 - (i) Note: This will replace values in the current ALM Requirement
 - b. If using field labels “TRC:Values” & “TRC:Option” see table below

| Label Value | Description |
|-------------|--|
| TRC:Type | <p>Valid values are: Name, ID or Path</p> <p>If Name, TRC:Values is a semi-colon delimited list of Target Release/Cycle names. If there is more than one Release in the system with the same name, you will get the warning and Target Release/Cycle will not be modified</p> <p>If ID, TRC:Values is a semi-colon delimited list of Target Release/Cycle IDs</p> <p>If Path, TRC:Values is a semi-colon delimited list of full paths to Target Releases and name of Target Cycle. If the release doesn't exist, a warning will be shown and the entries Target Release/Cycle won't be modified</p> <p>Note: if this is blank, Target Release/Cycle won't be modified</p> |
| TRC:Options | <p>Valid values are: Replace, R or Merge, M</p> <p>If Replace, existing coverages on the Requirement are removed then the items in the C:Value are added</p> <p>If Merge, existing coverages are not removed and new one will be added if it doesn't already exist.</p> <p>Note: If TRC:Options is not present or the value is blank, Merge will be used.</p> |

| Label Value | Description |
|-------------|--|
| TRC:Values | <p>A delimited value to represent the Target Release and Target Cycle</p> <p><Target Release Name>:<Comma List of Target Cycle Names>;<Target Release Name>:<Comma List of Target Cycle Names>;...</p> <p>Ex: One:A,B~Two::~Three:A</p> <p>This would add 3 Target Releases (One,Two,Three)</p> <p>Would add 3 Target Cycles (A,B,A)</p> <p>Note: multiple A's, however, they are for different Target Releases</p> <p>Note: if TRC:Type has a value, C:Options is "Replace" and this is blank, all coverage will be removed</p> <p>Note: Release Folders, Release Names and Cycle Names with comma, colon, semicolon (,,:) are not supported</p> |

5. Test coverage can be added. You need columns with the following headings:

| Label Value | Description |
|-------------|--|
| C:Type | <p>Valid values are: Name, ID or Path</p> <p>If Name, C:Value is a semi-colon delimited list of names. If there is more than one test in the system with the same name, you will get the warning and no coverage will be added</p> <p>If ID, C:Value is a semi-colon delimited list of valid Test Ids</p> <p>If Path, C:Value is a semi-colon delimited list of full paths to tests. If the test doesn't exit, a warning will be shown and the entries coverage won't be added</p> <p>Note: if this is blank, Coverage will not be modified</p> |
| C:Value | <p>A semi-colon delimited list of items. The values are dependent on the C:Type value.</p> <p>Note: if the item contains spaces, the value should be enclosed in double quotes</p> <p>Note: if C:Type has a value, C:Options is "Replace" and this is blank, all coverage will be removed</p> |
| C:Options | <p>Valid values are: Replace, R or Merge, M</p> <p>If Replace, existing coverages on the Requirement are removed then the items in the C:Value are added</p> <p>If Merge, existing coverages are not removed and new one will be added if it doesn't already exist.</p> |

6. You can also have a column with “Attachment” as the field name. The value must be the location of the file that will be put on the requirement as an attachment. There can be multiple files by separating them with a newline.

Sample format is included below:

| | A | B | C | D | E | F | G | H | I | J |
|---|--------------------------|--------------|------------------|---------------------------|----------|----------------|--------------|--------|----------------|-----------|
| 1 | Path | Name | Requirement Type | Description | Priority | Target Release | Target Cycle | C:Type | C:Value | C:Options |
| 2 | | | | | | | | | | |
| 3 | | ExcelFolder | Folder | Folder Description Entry. | 1-Low | | | | | |
| 4 | ExcelFolder | Req1 | Functional | Req1 Description | 2-Medium | 1001 | 1001 | ID | 60 | Merge |
| 5 | ExcelFolder | ExcelFolder2 | Folder | Folder 2 Description | 1-Low | | | | | |
| 6 | ExcelFolder\ExcelFolder2 | Req2 | Functional | Req2 Description Change | 3-High | | | Name | MyTesta_Copy_1 | |

Formatting Tests

Test formatting must follow these rules:

1. The “Subject” field label is used to define Test Folder names in the Test Plan tree hierarchy. Levels are separated by the backslash “\” character.
 - a. Do not enter the top level hierarchy name “Subject” in the path field label.
2. The “Type” field label is used to define the type of test.
3. Each Design Step must be entered on its own row.
 - a. Steps for Tests are entered by having the first row sharing the Test information row.
 - b. 2nd – Nth steps are on new rows with the Test Fields being blank.
4. Design Step field labels in the header row must be preceded by “S:” to designate them from test fields.
5. Labels with an asterisk (*) at the end, can only be memo fields and this will signify the formatting should be carried over to ALM.
6. Requirement coverage can be added.

| Label Value | Description |
|-------------|--|
| C:Type | <p>Valid values are: Name, ID or Path</p> <p>If Name, C:Value is a semi-colon delimited list of names. If there is more than one requirement in the system with the same name, you will get the warning and no coverage will be added</p> <p>If ID, C:Value is a semi-colon delimited list of valid Requirement Ids</p> <p>If Path, C:Value is a semi-colon delimited list of full paths to tests. If the requirement doesn’t exist, a warning will be shown and the entries coverage won’t be added</p> <p>Note: if this is blank, Coverage will not be modified</p> |

| Label Value | Description |
|-------------|--|
| C:Value | <p>A semi-colon delimited list of items. The values are dependent on the C:Type value.</p> <p>Note: if the item contains spaces, the value should be enclosed in double quotes</p> <p>Note: if C:Type has a value, C:Options is “Replace” and this is blank, all coverage will be removed</p> |
| C:Options | <p>Valid values are: Replace, R or Merge, M</p> <p>If Replace, existing coverages on the Test are removed then the items in the C:Value are added</p> <p>If Merge, existing coverages are not removed and new one will be added if it doesn’t already exist.</p> |

- You can also have a column with “Attachment” as the field name. The value must be the location of the file that will be put on the test as an attachment. There can be multiple files by separating them with a newline.

Sample format is included below:

| | A | B | C | D | E | F | G | H | I | J |
|---|---------|-----------|--------|------------------------|-------------|---------------|-------------------|--------|---------|-----------|
| 1 | Subject | Test Name | Type | Description | S:Step Name | S:Description | S:Expected Result | C:Type | C:Value | C:Options |
| 2 | Test1 | MyTesta | Manual | ExcelTest1 Description | Step 1 | Step 1 Desc | Step 1 Exp Result | Path | 15;16 | R |
| 3 | | | | | Step 2 | Step 2 Desc | Step 2 Exp Result | | | |
| 4 | | | | | Step 3 | Step 3 Desc | Step 3 Exp Result | | | |

Selecting Data

There are 2 ways to select data:

- Range Selection
- Sheet Selection

Range Selection Mode

In selection mode, you should select a range in a single sheet to use. It will use the columns in combination with the Field Label Row to select the data and fields that will be imported.

Note: you should only have a single sheet with a single selection range

Requirements Example:

| | A | B | C | D | E | F | G |
|---|---------------|---------------|------------------|---------------------------|----------|----------------|--------------|
| 1 | Path | Name | Requirement Type | Description | Priority | Target Release | Target Cycle |
| 2 | | SampleFolder | Folder | Folder description entry. | 1-Low | | |
| 3 | SampleFolder | Req1 | Functional | Req1 description entry. | 2-Medium | 1001 | 1001 |
| 4 | | SampleFolder2 | Folder | | 1-Low | | |
| 5 | SampleFolder2 | Req2 | Functional | Req2 description entry. | 3-High | 1001 | 1002 |
| 6 | | | | | | | |

Test Example:

| | A | B | C | D | E | F | G |
|---|------------------------|-----------|--------|--------------------------|-------------|--|-----------------------------------|
| 1 | Subject | Test Name | Type | Description | S:Step Name | S:Description | S:Expected Result |
| 2 | SampleFolder | Test1 | Manual | Test1 description entry. | Step1 | Open system under test. | System Under test is displayed. |
| 3 | | | | | Step2 | Enter User ID and Password. Click Login. | User is logged in. |
| 4 | SampleFolder | Test2 | Manual | Test2 description entry. | | | |
| 5 | SampleFolder\SubFolder | Test3 | Manual | Test3 description entry. | Step1 | Click Edit Profile. | Profile Edit screen is displayed. |
| 6 | | | | | Step2 | Updated email address. Click Save. | Email address is updated. |
| 7 | | | | | Step3 | Return to home page. | Home page is displayed. |

Sheet Selection Mode

In sheet selection mode, the selection will be calculated with the Field Label Row + 1 and the bottom right of the data in the sheet.

You can have multiple sheets selected, however, they must have the Field Label Row on the same row and the labels must match.

Importing Data into ALM

Prerequisites

The following prerequisites must be met before execution.

Prerequisites:

- Excel Add-in is installed.
- Data created in Microsoft Excel meet the formatting rules defined in the “Formatting Data” section.
- The user performing the data export must have full create and modify permissions for the record(s) being created and/or modified.

Variable Parameters for Exporting Steps

Use these variables/parameters in the installation steps that follow:

| Parameter Name | Description | Parameter Value |
|----------------|--|-----------------|
| [URL] | AgiliProve URL (ex. http://AP_SERVER:80) Note: Port can be excluded if it is 80 | |
| [Author] | HP ALM project user ID and password with author/designer assigned permissions | |
| [Domain] | HP ALM Domain | |
| [Project] | HP ALM Project | |

Requirement Exporting Steps

Refer to the Variable Parameters table above for items in brackets [].

Excel Add-in Exporting Steps for Requirements

1. Select the data rows to be exported. (See section Selecting Data)
2. Select “Import Data” menu item from the Add-Ins tab / AgiliProve group.
3. Enter the AgiliProve Server URL [URL]. Click **Next**.
4. Enter then [Author]’s user id and password. Click **Next**.
5. Select the [Domain]/[Project]. Click **Next**.
6. Select the “Requirements” radio button as the type of data being exported, then enter the Field Label Row, make sure the Selection Mode is what you want. Click **Next**.

Note: The Field Label Row corresponds to the header row from the Excel workbook containing the field labels.

Note: The “Fix List Item Upper/Lower Case” will change all matching list items to match the case in the ALM List. If the field is verify and this check box is not checked and the case does not match, this will show an invalid value error.

7. Verify no problems are identified. Click **Next**.

Notes:

- A “Hide Successful” checkbox is included to hide successful validation results and display only failures.
- A “Copy to Clipboard” button is included to copy the information to your clipboard.
- To correct errors, click Cancel, then restart the add-in when the errors are fixed.

8. Upon completion, a dialog displays confirming that the export has completed. Click **Close** to close the Excel Add-in.
9. Navigate to the Requirements module in ALM/QC to view the exported Requirements.

Tests Exporting Steps

Refer to the Variable Parameters table above for items in brackets [].

Excel Add-in Exporting Steps for Tests

1. Select the data rows to be exported. (See section Selecting Data)
2. Select “Import Data” menu item from the Add-Ins tab / AgiliProve group.
3. Enter HP ALM [URL]. Click **Next**.
4. Enter the [Author]’s user name and password. Click **Next**.
5. Select the [Domain]/[Project]. Click **Next**.
6. Select the “Tests” radio button as the type of data being exported, then enter the Field Label Row, make sure the Selection Mode is what you want. Click **Next**.

Note: The Field Label Row corresponds to the header row from the Excel workbook containing the field labels.

Note: The “Fix List Item Upper/Lower Case” will change all matching list items to match the case in the ALM List. If the field is verify and this check box is not checked and the case does not match, this will show an invalid value error.

7. Verify no problems are identified. Click **Next**.

Notes:

- A “Hide Successful” checkbox is included to hide successful validation results and display only failures.
 - A “Copy to Clipboard” button is included to copy the information to your clipboard.
 - To correct errors, click Cancel, then restart the add-in when the errors are fixed.
8. Upon completion, a dialog displays confirming that the export has completed. Click **Close** to close the Excel Add-in.
 9. Navigate to the Test Plan module in ALM/QC to view the exported Tests.

Additional Notes

The following notes apply to importing data to both Requirements and Tests:

1. An empty cell in Excel will not overwrite existing data in an ALM field. Data in the ALM field will be left as-is.
2. To intentionally clear an ALM field, use #NULL# in the Excel cell. An error will be reported on attempts to intentionally clear a required ALM field.