

Altova ESEF Add-in for Excel, Version 2023



ALTOVA®
European Single Electronic Format
(ESEF) XBRL add-in for Excel

User & Reference Manual

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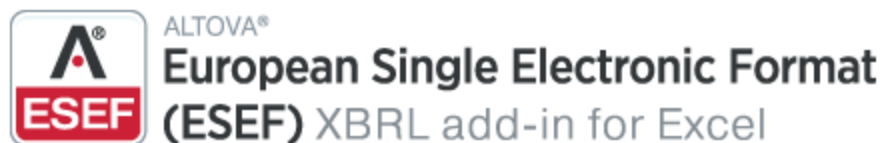
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1 Introduction

The **Altova European Single Electronic Format (ESEF) XBRL Add-in for Excel** (or ESEF Add-in for short) enables your organization to prepare annual financial reports that conform to the ESEF reporting format.



The ESEF Add-in allows you to do the following:

- Enter report data, using a flexible report layout
- Validate the report data directly in Excel to ensure the data conforms to the XBRL taxonomy
- Export report data from Excel to [iXBRL format](#)

The ESEF Add-in supports the ESEF XBRL Taxonomy that is based on the IFRS taxonomy. The ESEF Add-in supports the ESEF taxonomy from Version 2017 onwards. The list of supported XBRL taxonomies is periodically updated to include the latest versions, independently of Altova add-in releases. To view, install, upgrade, and uninstall ESEF taxonomy versions, use the [XBRL Taxonomy Manager](#)¹⁸ included in the add-in. For more information about the ESEF format, see [European Single Electronic Format](#). For information about ESEF reporting guidelines, see the [ESEF Reporting Manual](#).

Last updated: 13 October 2022

1.1 System Requirements

To install and run the add-in, note the following system requirements:

- Windows 7 SP1 with Platform Update, Windows 8, Windows 10, Windows 11, Windows Server 2008 R2 SP1 with Platform Update or newer
- Microsoft Excel 2013 and later
- .NET Framework 4.5 and later

Important

- The add-in is available for Microsoft Excel 32-bit and 64-bit.
- The add-in requires full access to the Excel document in order to create, validate, and export XBRL reports. If your organization enforces Information Rights Management (IRM) using the Azure Information Protection or a similar technology, access to the Excel document may be restricted. For information about how to allow code to run behind documents with restricted permissions, see [the Microsoft documentation](#).

1.2 Installation and Licensing

To install the ESEF Add-in, download the executable from the [Altova Download Center](#). Run the executable and follow the wizard steps to complete the installation. You will need to accept the license agreement and privacy policy in order to proceed with the installation. Make sure to download the executable corresponding to your operating system and Excel platform (32-bit or 64-bit). The 32-bit executable can be installed on both 32-bit and 64-bit Windows. However, the 32-bit executable supports only Excel 32-bit. Note that if you have Excel 32-bit and install the 64-bit version of the add-in, you will still be running the 32-bit version.

After the installation, a new tab called **ESEF** becomes available in the Excel ribbon. To view the current version of the add-in, click the ESEF tab in the Excel ribbon. Then click **About ESEF Add-In**.

Licensing

To use the ESEF Add-in, you need a valid license key code. To purchase a new key code or request a free evaluation from the Altova website, take the following steps:

1. In the Excel ribbon, click the **ESEF** tab.
2. Click **Add-In Activation**. You will see instructions on how to get a new license from Altova or manage an existing license.

After you purchase a license from Altova, follow the same steps as above to open the activation dialog box and upload the license file. Alternatively, you can upload the purchased licenses to [Altova LicenseServer](#) running on your organization's network. Altova LicenseServer is a free product that helps organizations manage all Altova licenses in a centralized place. See also [License Information](#) ⁴⁰.

2 New Report

This section will help you get started with an ESEF report. ESEF reports are based on the so-called extension taxonomies that extend the ESEF taxonomy. Extension taxonomies are provided externally. For example, you can create an extension taxonomy using [Altova XMLSpy](#). An extension taxonomy can be either a taxonomy package (.zip) or an unpacked xbrl taxonomy (.xsd).

When you install the add-in for the first time on your computer, only the most recent version of the ESEF XBRL Taxonomy will be installed by default. If you need support for older ESEF XBRL Taxonomy versions, you need to install them separately, using the [XBRL Taxonomy Manager](#)¹⁸ tool included in the add-in.

New report: Broad procedures

The broad procedures of creating an ESEF report include the following steps:

1. Select an extension taxonomy that is relevant to your report.
2. [Tag relevant facts](#)⁹ using the **Tag cells** button (add-in ribbon) and/or insert whole tables based on the presentation and calculation linkbases from the extension taxonomy. The tables defined in the selected extension taxonomy are available in the *Tables* section of the [ESEF Filing Pane](#)¹⁴.
3. [Define settings](#)¹² in the ESEF Filing Pane: accuracy parameters, the reporting period, currency, and information about the reporting entity.

You can then start entering data into tables, validate it, and export it to iXBRL format.

In this section

This section describes the following procedures:

- [Entering data](#)⁹
- [Setting parameters in the ESEF Filing Pane](#)¹²
- [Validating data](#)¹⁵
- [Exporting data to iXBRL](#)¹⁷

2.1 Enter Data

This topic explains how to enter data into an ESEF report. In an ESEF report, there are two types of cells: tagged and untagged. A tagged cell is a reported concept that is marked up with a corresponding XBRL tag. This means a fact must be associated with a particular concept from the taxonomy. Note that all reported concepts must be tagged. An untagged cell can be empty or contain the name of a concept (see *Report Example below*). For information about tagging/untagging cells, see the subsection below.

As soon as you have imported an extension taxonomy, you can start working on the layout of your report in the following ways:

- By tagging relevant facts manually
- By importing relevant tables from the [presentation and calculation linkbases](#)¹⁴, which already include tagged cells
- By using the combination of the first two points

Defining the layout of your report and entering data are a flexible process. You can enter data as you tag a cell or add a table, or you can define the layout first and then start filling in your data. Additionally, you might need to define [report properties](#)¹² and/or cell properties (see *Cell Properties below*).

You can fill in your report by entering data into cells manually or by pasting values. When you paste data, it makes sense to double-check if the properties in the Cell tab of the Filing Pane still match the name of the concept.

Tag/untag cells

To tag a cell, click a cell of interest, select the **Tag cells** option in the add-in ribbon, and specify a concept that corresponds to this cell in the Cell tab of the Filing Pane. Use the button circled red in the screenshot above to browse for the relevant concept in the taxonomy. Additionally, you can highlight tagged cells (the **Highlight Tagged Cells** command in the add-in ribbon), which will make your report data easier to work with.

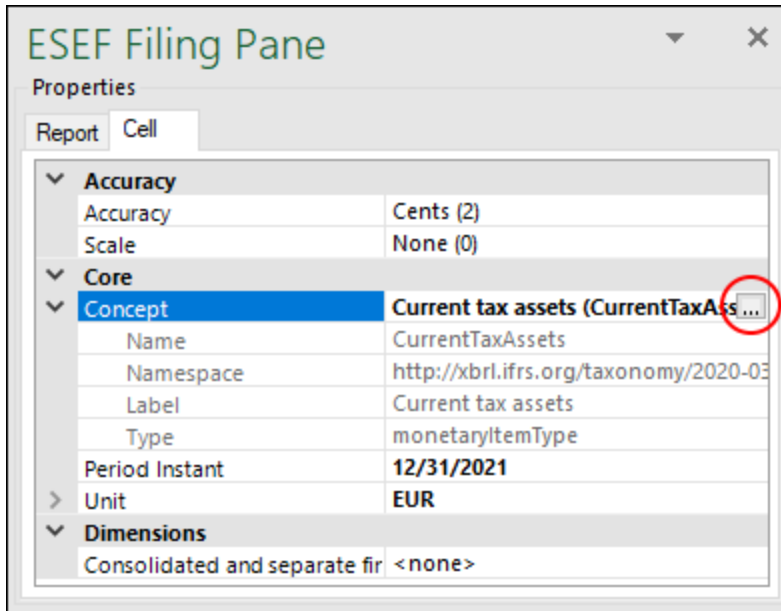
To untag a cell, click a cell of interest and select the **Untag cells** option in the add-in ribbon.

Empty tagged cells

If you leave tagged cells empty, they will be treated as zero for numeric items or nil (`xsi:nil="true"`) for all others. These values will be exported to `.xhtml` with the following transformations: `ixt:fixed-zero` and `ixt:fixed-empty`, respectively.

Cell properties

To define properties of a particular cell, select a cell of interest and then open the Cell tab of the ESEF Filing Pane (see *screenshot below*). The Cell tab includes the following sections: *Accuracy*, *Core*, and *Dimensions*. For information about the *Accuracy* properties, see [Properties](#)¹². The *Core* section contains information about the concept corresponding to the selected cell, the reporting period associated with the selected cell, and the cell's unit (e.g., currency). The *Dimensions* section shows all the dimensions available for the selected concept. Dimensions of a particular concept are defined in the taxonomy. To find out more about report-level properties, see [Properties](#)¹².



Delete cells, rows, columns

To delete cells/rows/columns, you can use the standard [Excel delete options](#):

1. Select cells you would like to delete.
2. Right-click the selection and click **Delete** in the context menu.
3. Choose one of the four options from the **Delete** dialog: (i) *Shift cells left*, (ii) *Shift cells up*, (iii) *Entire row*, (iv) *Entire column*.

To delete tagged cells, delete the respective rows/columns or use the **Untag cells** button in the add-in ribbon.

Important

It is recommended to preserve the original layout of the table you work with. Otherwise, deleting certain cells might cause errors (e.g., #REF!), because Excel formulas are missing some cells they refer to. In theory, you are allowed to edit tables, especially if you want to make changes to the design (inserting/deleting empty rows and columns and changing headers). It might also make sense to delete some of the rows containing data. However, in this case, it is recommended to fix the extension taxonomy accordingly, to avoid cell reference errors.

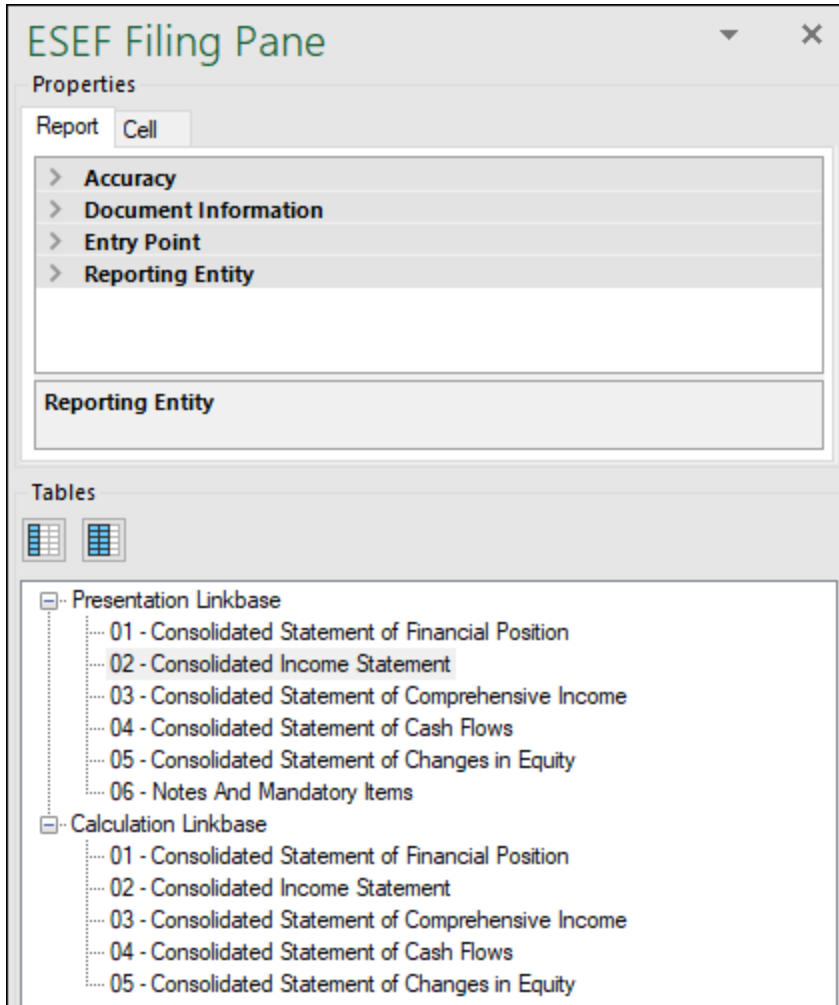
Report example

Below is an extract from a sample report. For this report, we have selected a table from the *Calculation Linkbase*. Therefore, the entered facts have been automatically calculated. The cells highlighted yellow have been marked up with the relevant XBRL tags. The white cells are not tagged. These cells represent the names of the concepts (e.g., *Current tax assets*).

+ Receivables, including insurance receivables	12,000.00	100,000.00
+ Current tax assets	60,000.00	40,000.00
+ Deferred tax assets	80,000.00	60,000.00
+ Cash and cash equivalents	300,000.00	160,000.00
Assets	452,000.00	360,000.00

2.2 ESEF Filing Pane

The ESEF Filing Pane allows you to add tables to your report, view information about each cell, and define various report properties. When you insert an extension taxonomy, the ESEF Filing Pane becomes visible automatically. You can show or hide it by clicking **Toggle ESEF Filing Pane** in the ribbon. The ESEF Filing Pane consists of two main sections: *Properties* and *Tables* (see screenshot below). The available settings are described in the subsections below.



Properties

The properties displayed in the ESEF Filing Pane directly affect the content of your iXBRL instance file. The *Properties* section of the Filing Pane has the following settings: *Accuracy*, *Document Information*, *Entry Point*, and *Reporting Entity* (see information below).

Properties are grouped into the following tabs:

- The *Report* tab displays properties applicable to the entire report. One report corresponds to one Excel workbook.
- The *Cell* tab displays properties only of the currently selected cell. When you click a new cell, the cell properties are re-drawn accordingly. For more information about cell properties, see [Enter Data](#)⁹.

To set a property, select it in the relevant tab, click the down-arrow icon, and select one of the values from the drop-down list.

Accuracy

The accuracy parameter communicates the level of precision of reported facts and indicates the number of decimal places to which the reported fact is accurate. The level of accuracy is communicated through the `decimals` attribute. The `decimals` attribute can be an integer or the INF value. The INF value represents the exact value of a reported fact.

For monetary and numeric cells, the `decimals` value can be positive or negative. A positive value *N* specifies the accuracy of up to *N* digits to the right of the decimal separator. For example, the value 2 specifies the accuracy of monetary cells to be in cents. A negative value *N* specifies the accuracy of up to *N* digits to the left of the decimal separator. For example, the value -3 specifies the accuracy to be up to thousands, while the value -6 specifies the accuracy to be up to millions. To find out more about accuracy, see the [XBRL 2.1 Recommendation](#).

You can set the accuracy-related properties at report and cell level. If you set accuracy at multiple levels, keep in mind that the more specific property always overrides the more generic one. For example, the accuracy and scale set at cell level takes priority over the one set at report level. You can define the accuracy and scale of monetary, numeric, and percentage cells (see *screenshot below*).

Accuracy	
Accuracy of Monetary Cells	Cents (2)
Scale of Monetary Cells	None (0)
Accuracy of Percentage Cells	Basis points (4)
Scale of Percentage Cells	None (0)
Accuracy of Numeric Cells	Exact (INF)
Scale of Numeric Cells	None (0)

Accuracy of monetary cells

The property *Accuracy of Monetary Cells* applies to numeric cells that represent a monetary value. The option you choose specifies the accuracy of the number, relative to the decimal point. By default, this property is set to *Cents (2)*, which means that the number is accurate up to 2 places to the right of the decimal point.

Accuracy of percentage cells

The property *Accuracy of Percentage Cells* applies to values that represent a percentage. The option you choose specifies the accuracy of the percentage number, relative to the decimal point. By default, this property is set to *Basis Points (4)*, which means the percentage number is accurate up to 4 places to the right of the decimal point.

Accuracy of numeric cells

The property *Accuracy of Numeric Cells* applies to numeric values that are neither monetary nor percentage values. The option you choose specifies the accuracy of the number, relative to the decimal point. By default, this property is set to *Exact (INF)*.

☒ Scale of monetary, percentage, and number cells

Shows the scale of the number, relative to the decimal point. The default parameter is *None*. The scale parameter is represented as a power of ten and shows the amount by which the reported number must be multiplied. This helps make the numbers smaller in the report and easier to read. For example, a value of 2000.00 could be reported as 2 with a scale of 3 (thousands). For the value 2345.67 with accuracy in cents and the scale of 3, the value reported would be 2.34567. For more details and examples, see [iXBRL Tagging Features](#).

Documentation Information

The *Document Information* section allows you to set the reporting period, currency, and the language of footnotes in the XBRL filing.

Entry Point

The entry point indicates the location of the taxonomy file.

Reporting Entity

The *Scheme* and *Identifier* properties are usually provided by the relevant competent authorities. The *Country* property specifies the country of the reporting entity.

Tables

The *Tables* section of the Filing Pane gives an overview of available tables that come from your extension taxonomy. You can select a table (or tables) from the [Presentation Linkbase](#) or [Calculation Linkbase](#). If you select a table from the presentation tree, the data will be shown only for visualization purposes, whereas tables in the calculation tree will calculate the values you submit.

Ways of inserting new tables

An ESEF report allows you to flexibly represent your data in different ways. You can choose the following options:

- You can insert a new table into the same sheet with the already existing table(s) in the Excel book, starting with the selected cell.
- You can also add a new sheet in Excel and then add a new table to this sheet.

Tables and manually tagged cells may use any worksheet in the workbook. The worksheets will be exported in the order they are displayed in Excel into one `.xhtml` document, separated by a horizontal line. A report containing several worksheets is valid for submission.

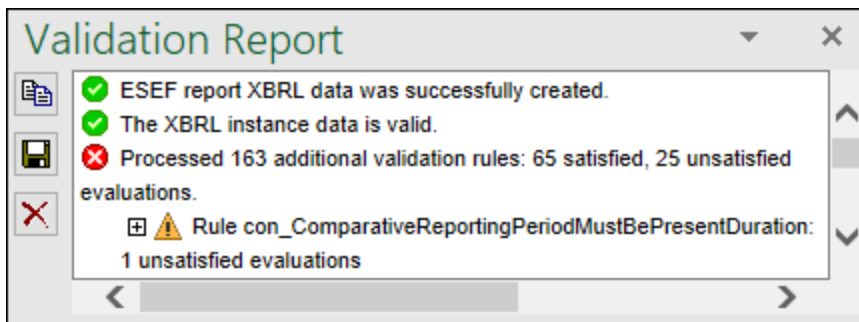
Reporting periods

You can insert a table with the current period or both the current period and the previous period. To specify the period, right-click a table of interest and select the relevant option. Alternatively, you can use the corresponding icons located above the *Presentation Linkbase*.

2.3 Validate Data

Validation ensures that the XBRL data you are filing conforms to the XBRL specification. It is essential that you validate your report data before exporting it. To validate data, click the **Validate** button in the add-in tab of the Excel ribbon. When the validation of the instance finishes, a validation report similar to the one below is displayed.

When the validation fails, the **Validation Report** window may display links to the cell where the error occurred. To quickly find a cell with the error, click the underlined text, and the cursor will be positioned automatically on the required cell. Note that there are cases where multiple cells are involved in a single validation check. In such cases, clicking on the error link will select one of the affected cells.



Validation results

The validation result can contain any of the following validation messages:

Message type	Meaning
	The instance data is valid.
	The instance data is valid but has inconsistencies or warnings.
	The instance data is not valid.

Information messages, warnings, and errors

The **Validation Report** dialog box may additionally display any of the following message types: information messages, warnings, and errors.


Message type	Meaning
	This is an information message. Information messages do not make the XBRL instance invalid.
	This is a warning message or an inconsistency. Warnings and inconsistencies do not make the XBRL instance invalid.
	Indicates an error. If there are validation errors, the XBRL instance is not valid. In this case, you will need to edit the report data to correct each error before exporting to XBRL.


Message type	Meaning
	During validation, the add-in checks XBRL formula assertions and reports them as errors. If you are using Altova RaptorXML+XBRL Server for validation, XBRL formula assertions may be optionally configured not to be reported as errors.

Note: By default, the add-in treats invalid cell values as errors. If necessary, you can configure the add-in to treat invalid cell values as warnings instead. For more information, see [Settings](#) ³⁸.

Copy, save, clear

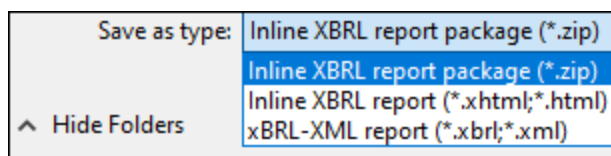
To copy the contents of the validation report to the clipboard, click  and paste it into a target file (e.g., an email). Alternatively, right-click inside the **Validation Report** window and select **Copy All Messages** from the context menu.

To save the validation report as text or HTML, click . Alternatively, right-click inside the **Validation Report** window and select **Save Validation Report** from the context menu.

To clear the validation report, click . Alternatively, right-click inside the **Validation Report** window and select **Clear** from the context menu.

2.4 Export Data to iXBRL

Once your report is ready and valid, you can generate an iXBRL instance file. To do this, click **Export to iXBRL** in the add-in ribbon. By default, instance files are saved with a `.zip` extension. You can export your file in the formats shown in the screenshot below:



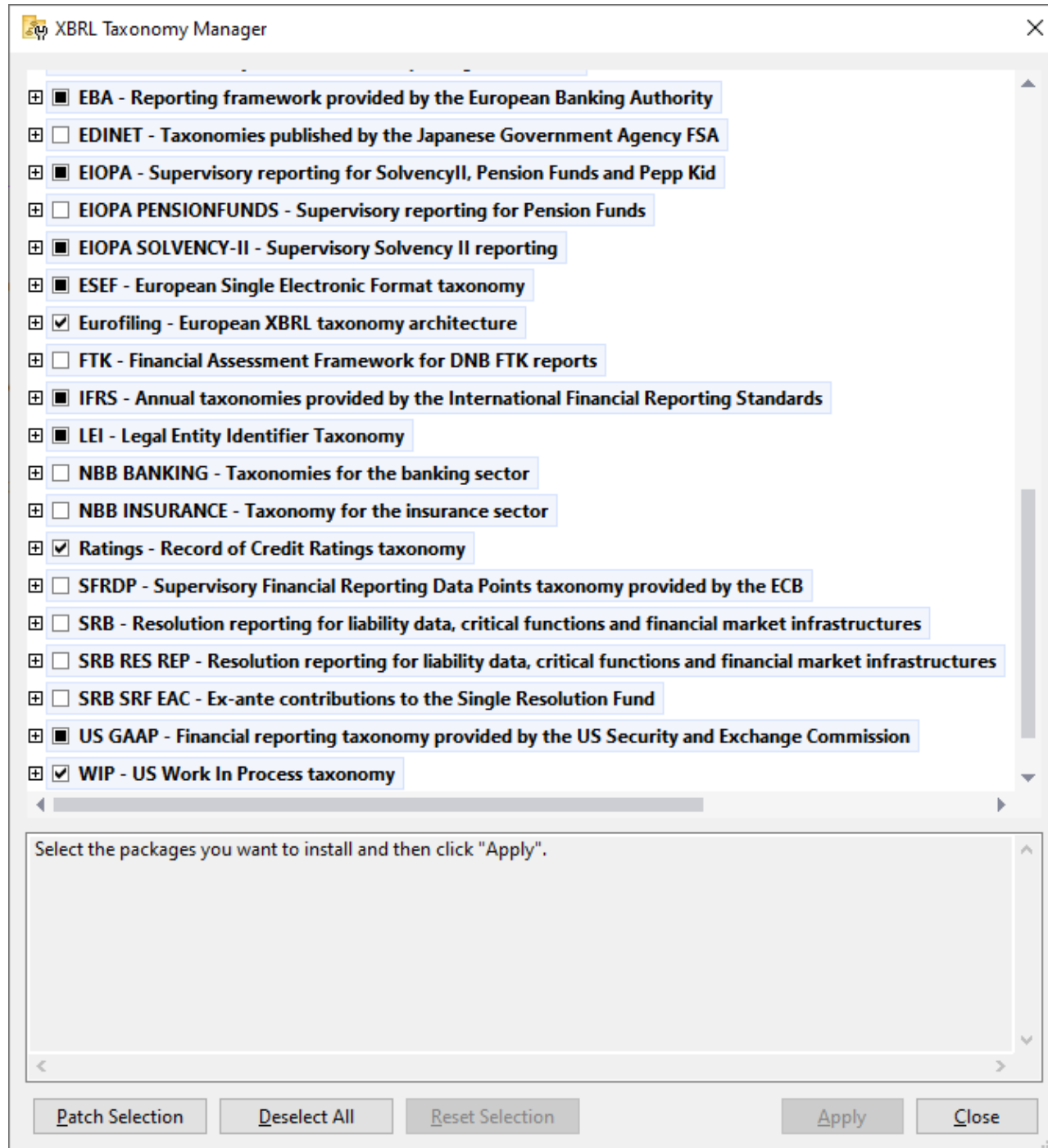
During the export, data is automatically validated. Any errors, inconsistencies, and warnings will be shown on the screen after the export finishes. For more information, see [Validate Data](#)¹⁵. If validation errors occur, they might be related to incorrect formatting. Some errors might occur because entered data does not meet the XBRL validation rules applicable to the report you are filing.

Note that even if your report is not valid, you can still export it. However, such a report will not be suitable for submission.

3 Taxonomy Manager

XBRL Taxonomy Manager is an Altova tool that provides a centralized way to install and manage XBRL taxonomies for use across all Altova's XBRL-enabled applications, including ESEF Add-in.

- On Windows, Taxonomy Manager has a graphical user interface (*screenshot below*) and is also available at the command line. (Altova's desktop applications are available on Windows only; *see list below*.)
- On Linux and macOS, Taxonomy Manager is available at the command line only. (Altova's server applications are available on Windows, Linux, and macOS; *see list below*.)



Altova's XBRL-enabled applications

Desktop applications (Windows only)	Server applications (Windows, Linux, macOS)
Altova XBRL Add-ins for Excel (EBA, ESEF, Solvency II)	MapForce Server (Standard and Advanced Editions)

MapForce Enterprise Edition	RaptorXML+XBRL Server
StyleVision Enterprise Edition	StyleVision Server
XMLSpy Enterprise Edition	

Installation and de-installation of Taxonomy Manager

Taxonomy Manager is installed automatically when you first install a new version of Altova Mission Kit Enterprise Edition or of any of Altova's XBRL-enabled applications (*see table above*).

Likewise, it is removed automatically when you uninstall the last Altova XBRL-enabled application from your computer.

Taxonomy Manager features

Taxonomy Manager provides the following features:

- Shows XBRL taxonomies installed on your computer and checks whether new versions are available for download.
- Downloads newer versions of XBRL taxonomies independently of the Altova product release cycle. (Altova stores taxonomies online, and you can download them via Taxonomy Manager.)
- Install or uninstall any of the multiple versions of a given taxonomy (or all versions if necessary).
- An XBRL taxonomy may have dependencies on other taxonomies. When you install or uninstall a particular taxonomy, Taxonomy Manager informs you about dependent taxonomies and will automatically install or remove them as well.
- Taxonomy Manager uses the [XML catalog](#) mechanism to map schema references to local files. In the case of large XBRL taxonomies, processing will therefore be faster than if the taxonomies were at a remote location.
- All major taxonomies are available via Taxonomy Manager and are regularly updated for the latest versions. This provides you with a convenient single resource for managing all your taxonomies and making them readily available to all of Altova's XBRL-enabled applications.
- Changes made in Taxonomy Manager take effect for all Altova products installed on that machine.

How it works

Altova stores all XBRL taxonomies used in Altova products online. This repository is updated when new versions of the taxonomies are released. Taxonomy Manager displays information about the latest available taxonomies when invoked in both its GUI form as well as on the CLI. You can then install, upgrade or uninstall taxonomies via Taxonomy Manager.

Taxonomy Manager also installs taxonomies in one other way. At the Altova website (<https://www.altova.com/taxonomy-manager>) you can select a taxonomy and its dependent taxonomies that you want to install. The website will prepare a file of type `.altova_taxonomies` for download that contains information about your taxonomy selection. When you double-click this file or pass it to Taxonomy Manager via the CLI as an argument of the `install` ³² command, Taxonomy Manager will install the taxonomies you selected.

Local cache: tracking your taxonomies

All information about installed taxonomies is tracked in a centralized cache directory on your computer, located here:

<i>Windows</i>	C:\ProgramData\Altova\pkgs\.cache
<i>Linux</i>	/var/opt/Altova/pkgs\.cache
<i>macOS</i>	/var/Altova/pkgs

This cache directory is updated regularly with the latest status of taxonomies at Altova's online storage. These updates are carried out at the following times:

- Every time you start Taxonomy Manager.
- When you start ESEF Add-in for the first time on a given calendar day.
- If ESEF Add-in is open for more than 24 hours, the cache is updated every 24 hours.
- You can also update the cache by running the [update](#)³⁵ command at the command line interface.

The cache therefore enables Taxonomy Manager to continuously track your installed taxonomies against the taxonomies available online at the Altova website.

Do not modify the cache manually!

The local cache directory is maintained automatically based on the taxonomies you install and uninstall. It should not be altered or deleted manually. If you ever need to reset Taxonomy Manager to its original "pristine" state, then, on the command line interface (CLI): (i) run the [reset](#)³³ command, and (ii) run the [initialize](#)³¹ command. (Alternatively, run the `reset` command with the `--i` option.)

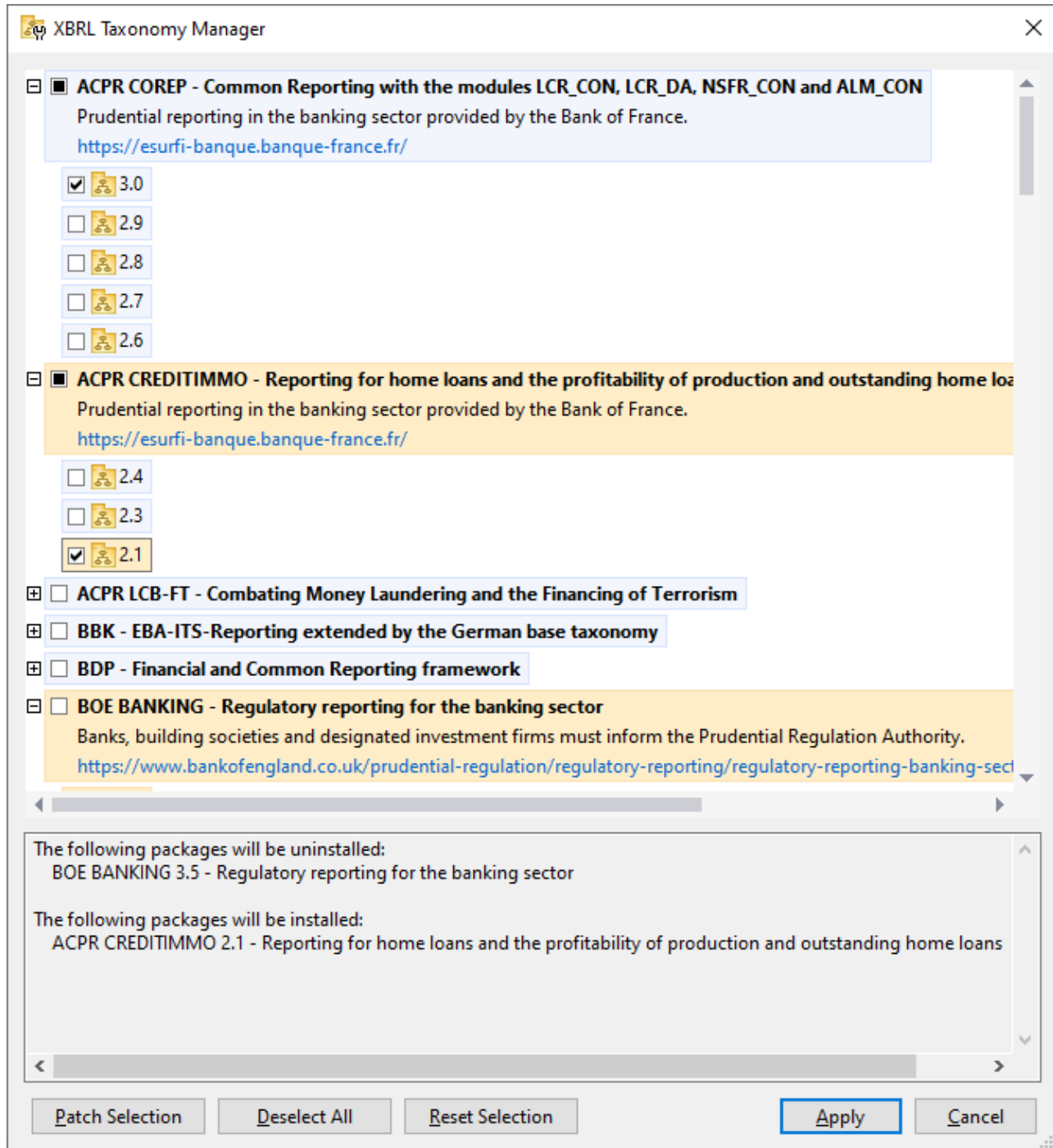
3.1 Run Taxonomy Manager

Graphical User Interface

You can access the GUI of Taxonomy Manager in any of the following ways:

- *During the installation of ESEF Add-in:* Towards the end of the installation procedure, select the check box *Invoke Altova Taxonomy Manager* to access the XBRL Taxonomy Manager GUI straight away. This will enable you to install taxonomies during the installation process of your Altova application.
- *After the installation of ESEF Add-in:* After your application has been installed, you can access the Taxonomy Manager GUI at any time, by clicking **Manage Taxonomies** in the add-in ribbon.
- Via the `.altova_taxonomies` file downloaded from the [Altova's XBRL Taxonomy Download Center](#): Double-click the downloaded file to run the Taxonomy Manager GUI, which will be set up to install the taxonomies you selected (at the website) for installation. (To open Altova's online XBRL Taxonomy Download Center in your browser and select the taxonomies you want to install, click **Altova on the Web | Taxonomy Download** in the add-in ribbon.)

After the Taxonomy Manager GUI (*screenshot below*) has been opened, already installed taxonomies will be shown selected. If you want to install an additional taxonomy, select it. If you want to uninstall an already installed taxonomy, deselect it. After you have made your selections and/or deselections, you are ready to apply your changes. The taxonomies that will be installed or uninstalled will be highlighted and a message about the upcoming changes will be posted to the Messages pane at the bottom of the Taxonomy Manager window (*see screenshot*).



Command line interface

You can run Taxonomy Manager from a command line interface by sending commands to its executable file, `taxonomymanager.exe`.

The `taxonomymanager.exe` file is located in the following folder:

- *On Windows:* `C:\ProgramData\Altova\SharedBetweenVersions`
- *On Linux or macOS (server applications only):* `%INSTALLDIR%/bin`, where `%INSTALLDIR%` is the program's installation directory.

You can then use any of the commands listed in the CLI command reference section.

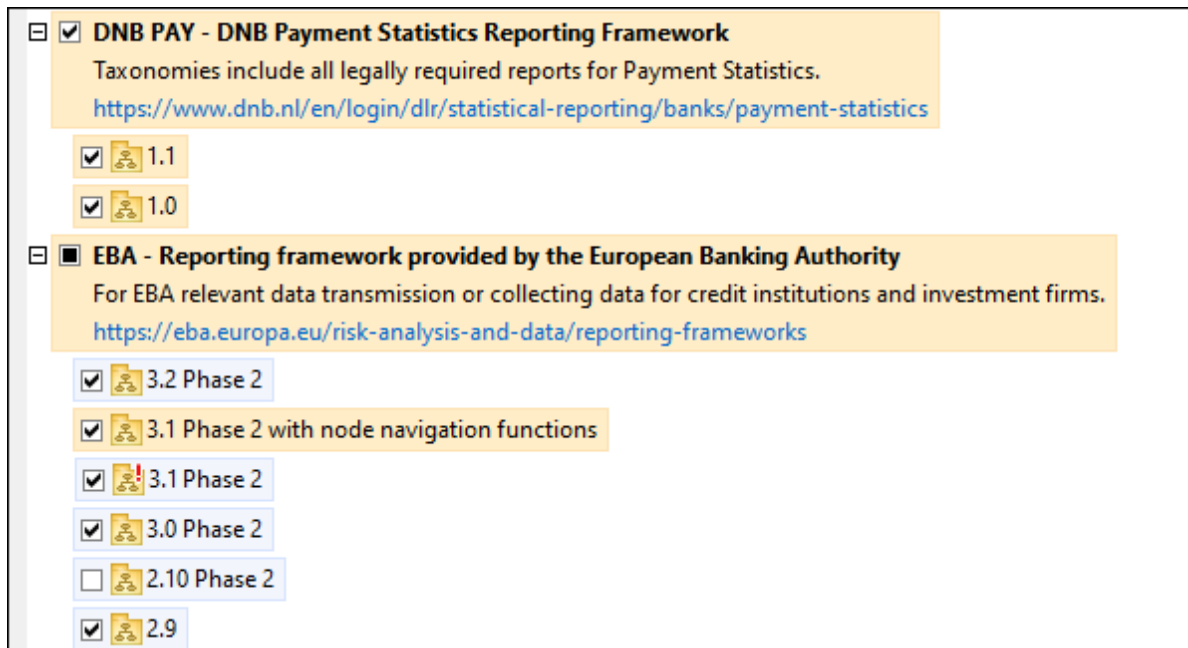
To display help for the commands, run the following:


- *On Windows:* `taxonomymanager.exe --help`
- *On Linux or macOS (server applications only):* `sudo ./taxonomymanager --help`

3.2 Status Categories

Taxonomy Manager categorizes the taxonomies under its management as follows:

- *Installed taxonomies.* These are shown in the GUI with their check boxes selected (*in the screenshot below the checked versions of the DNB and EBA taxonomies are installed taxonomies*). If all the versions of a taxonomy are selected, then the selection mark is a tick. If at least one version is unselected, then the selection mark is a solid colored square. You can deselect an installed taxonomy to **uninstall** it.
- *Uninstalled available taxonomies.* These are shown in the GUI with their check boxes unselected. You can select the taxonomies you want to **install**.



- *Upgradeable taxonomies* are those which have been revised by their issuers since they were installed. They are indicated in the GUI by a  icon (see screenshot above). You can **patch** an installed taxonomy with an available revision.

Points to note

- In the screenshot above, both DNB taxonomies and some of the EBA taxonomies are checked. Those with the blue background are already installed. Those with the yellow background are uninstalled and have been selected for installation. Note that (i) the EBA 2.10 Phase 2 taxonomy is not installed and has not been selected for installation, (ii) the EBA 3.1 Phase 2 taxonomy has been installed, but it has been patched by its issuer since it was installed and the patch has not yet been installed.
- When running Taxonomy Manager from the command line, the `list` ³² command is used with different options to list different categories of taxonomies:

<code>taxonomymanager.exe list</code>	Lists all installed and available taxonomies; upgradeables are also indicated
---------------------------------------	---

<code>taxonomymanager.exe list -i</code>	Lists installed taxonomies only; upgradeables are also indicated
<code>taxonomymanager.exe list -u</code>	Lists upgradeable taxonomies

Note: On Linux and macOS, use `sudo ./taxonomymanager list`

3.3 Patch or Install a Taxonomy

Patch an installed taxonomy

Occasionally, XBRL taxonomies may receive patches (upgrades or revisions) from their issuers. When Taxonomy Manager detects that patches are available, these are indicated in the taxonomy listings of Taxonomy Manager and you can install the patches quickly.

In the GUI

Patches are indicated by the 📄🔴 icon. (Also see the previous topic about [status categories](#)²⁵.) If patches are available, the **Patch Selection** button will be enabled. Click it to select and prepare all patches for installation. In the GUI, the icon of each taxonomy that will be patched changes from 📄🔴 to 📄🟢, and the Messages pane at the bottom of the dialog lists the patches that will be applied. When you are ready to install the selected patches, click **Apply**. All patches will be applied together. Note that if you deselect a taxonomy marked for patching, you will actually be uninstalling that taxonomy.

On the CLI

To apply a patch at the command line interface:

1. Run the `list -u`³² command. This lists any taxonomies where patch upgrades are available.
2. Run the `upgrade`³⁵ command to install all the patches.

Install an available taxonomy

You can install taxonomies using either the Taxonomy Manager GUI or by sending Taxonomy Manager the install instructions via the command line.

Note: If the current taxonomy references other taxonomies, the referenced taxonomies are also installed.

In the GUI

To install taxonomies using the Taxonomy Manager GUI, select the taxonomies you want to install and click **Apply**.

You can also select the taxonomies you want to install at the [Altova website](#) and generate a downloadable `.altova_taxonomies` file. When you double-click this file, it will open Taxonomy Manager with the taxonomies you wanted pre-selected. All you will now have to do is click **Apply**.

On the CLI

To install taxonomies via the command line, run the `install`³² command:

```
taxonomymanager.exe install [options] Taxonomy+
```

where `Taxonomy` is the taxonomy (or taxonomies) you want to install or a `.altova_taxonomies` file. A taxonomy is referenced by an identifier of format `<name>-<version>`. (The identifiers of taxonomies are displayed when you run the `list`³² command.) You can enter as many taxonomies as you like. For details, see the description of the `install`³² command.

Note: On Linux or macOS, use the `sudo ./taxonomymanager` command.

Installing a required taxonomy

When you run an XBRL-related command in ESEF Add-in and ESEF Add-in discovers that a taxonomy it needs for executing the command is not present or is incomplete, Taxonomy Manager will display information about the missing taxonomy. You can then directly install any missing taxonomy via Taxonomy Manager.

In the Taxonomy Manager GUI, you can view all previously installed taxonomies at any time by running Taxonomy Manager from **Tools | Taxonomy Manager**.

3.4 Uninstall a Taxonomy, Reset

Uninstall a taxonomy

You can uninstall taxonomies using either the Taxonomy Manager GUI or by sending Taxonomy Manager the uninstall instructions via the command line.

Note: If the taxonomy you want to uninstall references other taxonomies, then the referenced taxonomies are also uninstalled.

In the GUI

To uninstall taxonomies in the Taxonomy Manager GUI, clear their check boxes and click **Apply**. The selected taxonomies and their referenced taxonomies will be uninstalled.

To uninstall all taxonomies, click **Deselect All** and click **Apply**.

On the CLI

To uninstall taxonomies via the command line, run the `uninstall` command:

```
taxonomymanager.exe uninstall [options] Taxonomy+
```

where each `Taxonomy` argument is a taxonomy you want to uninstall or a `.altova_taxonomies` file. A taxonomy is specified by an identifier that has a format of `<name>-<version>`. (The identifiers of taxonomies are displayed when you run the `list`³² command.) You can enter as many taxonomies as you like. For details, see the description of the `uninstall`³⁴ command.

Note: On Linux or macOS, use the `sudo ./taxonomymanager` command.

Reset Taxonomy Manager

You can reset Taxonomy Manager. This removes all installed taxonomies and the cache directory.

- In the GUI, click **Reset Selection**.
- On the CLI, run the `reset`³³ command.

After running this command, make sure to run the `initialize`³¹ command in order to recreate the cache directory. Alternatively, run the `reset`³³ command with the `-i` option.

Note that `reset -i`³³ restores the original installation of the product, so it is recommended that you run the `update`³⁵ command after performing a reset. Alternatively, run the `reset`³³ command with the `-i` and `-u` options.

3.5 Command Line Interface (CLI)

To call Taxonomy Manager at the command line, you need to know the path of the executable. By default, the Taxonomy Manager executable is installed here:

```
C:\ProgramData\Altova\SharedBetweenVersions\TaxonomyManager.exe
```

Note: On Linux and macOS systems, once you have changed the directory to that containing the executable, you can call the executable with `sudo ./taxonomymanager`. The prefix `./` indicates that the executable is in the current directory. The prefix `sudo` indicates that the command must be run with root privileges.

Command line syntax

The general syntax for using the command line is as follows:

```
<exec> -h | --help | --version | <command> [options] [arguments]
```

In the listing above, the vertical bar `|` separates a set of mutually exclusive items. The square brackets `[]` indicate optional items. Essentially, you can type the executable path followed by either `--h`, `--help`, or `--version` options, or by a command. Each command may have options and arguments. The list of commands is described in the following sections.

3.5.1 help

This command provides contextual help about commands pertaining to Taxonomy Manager executable.

Syntax

```
<exec> help [command]
```

Where `[command]` is an optional argument which specifies any valid command name.

Note the following:

- You can invoke help for a command by typing the command followed by `-h` or `--help`, for example:

```
<exec> list -h
```
- If you type `-h` or `--help` directly after the executable and before a command, you will get general help (not help for the command), for example:

```
<exec> -h list
```

Example

The following command displays help about the `list` command:

```
taxonomymanager help list
```

3.5.2 info

This command displays detailed information for each of the taxonomies supplied as a `Taxonomy` argument. This information for each submitted taxonomy includes the title, version, description, publisher, and any dependent taxonomies, as well as whether the taxonomy has been installed or not.

Syntax

```
<exec> info [options] Taxonomy+
```

- The `Taxonomy` argument is the name of a taxonomy or a part of a taxonomy's name. (To display a taxonomy's package ID and detailed information about its installation status, you should use the [list](#) ³² command.)
- Use `<exec> info -h` to display help for the command.

Example

The following command displays information about the `eba-2.1.0` and `us-gaap-2020.0` taxonomies:

```
taxonomymanager info eba-2.1.0 us-gaap-2020.0
```

3.5.3 initialize

This command initializes the Taxonomy Manager environment. It creates a cache directory where information about all taxonomies is stored. Initialization is performed automatically the first time an XBRL-enabled Altova application is installed. You would not need to run this command under normal circumstances, but you would typically need to run it after executing the `reset` command.

Syntax

```
<exec> initialize | init [options]
```

Options

The `initialize` command takes the following options:

<code>--silent, --s</code>	Display only error messages. The default is <code>false</code> .
<code>--verbose, --v</code>	Display detailed information during execution. The default is <code>false</code> .
<code>--help, --h</code>	Display help for the command.

Example

The following command initializes Taxonomy Manager:

```
taxonomymanager initialize
```

3.5.4 install

This command installs one or more taxonomies.

Syntax

```
<exec> install [options] Taxonomy+
```

To install multiple taxonomies, add the **taxonomy** argument multiple times.

The **taxonomy** argument is one of the following:

- A taxonomy identifier (having a format of **<name>-<version>**, for example: **eba-2.10**). To find out the taxonomy identifiers of the taxonomies you want, run the [list](#)³² command. You can also use an abbreviated identifier if it is unique, for example **eba**. If you use an abbreviated identifier, then the latest version of that taxonomy will be installed.
- The path to a **.altova_taxonomies** file downloaded from the Altova website. For information about these files, see [Introduction to TaxonomyManager: How It Works](#)¹⁸.

Options

The **install** command takes the following options:

<code>--silent, --s</code>	Display only error messages. The default is false .
<code>--verbose, --v</code>	Display detailed information during execution. The default is false .
<code>--help, --h</code>	Display help for the command.

Example

The following command installs the latest **eba** (European Banking Authority) and **us-gaap** (US Generally Accepted Accounting Principles) taxonomies:

```
taxonomymanager install eba us-gaap
```

3.5.5 list

This command lists taxonomies under the management of Taxonomy Manager. The list displays one of the following

- All available taxonomies
- Taxonomies containing in their name the string submitted as a **taxonomy** argument
- Only installed taxonomies
- Only taxonomies that can be upgraded

Syntax

```
<exec> list | ls [options] Taxonomy?
```


If no **Taxonomy** argument is submitted, then all available taxonomies are listed. Otherwise, taxonomies are listed as specified by the submitted options (see *example below*). Note that you can submit the **Taxonomy** argument multiple times.

Options

The **list** command takes the following options:

<code>--installed, --i</code>	List only installed taxonomies. The default is false .
<code>--upgradeable, --u</code>	List only taxonomies where upgrades (patches) are available. The default is false .
<code>--help, --h</code>	Display help for the command.

Examples

- To list all available taxonomies, run: `taxonomymanager list`
- To list installed taxonomies only, run: `taxonomymanager list -i`
- To list taxonomies that contain either "eba" or "us-gaap" in their name, run: `taxonomymanager list eba us-gaap`

3.5.6 reset

This command removes all installed taxonomies and the cache directory. You will be completely resetting your taxonomy environment. After running this command, be sure to run the [initialize](#)³¹ command to recreate the cache directory. Alternatively, run the `reset` command with the `-i` option. Since `reset -i` restores the original installation of the product, we recommend that you run the [update](#)³⁵ command after performing a reset and initialization. Alternatively, run the `reset` command with both the `-i` and `-u` options.

Syntax

```
<exec> reset [options]
```

Options

The **reset** command takes the following options:

<code>--init, --i</code>	Initialize Taxonomy Manager after reset. The default is false .
<code>--update, --u</code>	Updates the list of available taxonomies in the cache. The default is false .
<code>--silent, --s</code>	Display only error messages. The default is false .
<code>--verbose, --v</code>	Display detailed information during execution. The default is false .
<code>--help, --h</code>	Display help for the command.

Examples

- To reset Taxonomy Manager, run: `taxonomymanager reset`
- To reset Taxonomy Manager and initialize it, run: `taxonomymanager reset -i`
- To reset Taxonomy Manager, initialize it, and update its taxonomy list, run: `taxonomymanager reset -i -u`

3.5.7 uninstall

This command uninstalls one or more taxonomies. By default, any taxonomies referenced by the current one are uninstalled as well. To uninstall just the current taxonomy and keep the referenced taxonomies, set the option `--k`.

Syntax

```
<exec> uninstall [options] Taxonomy+
```

To uninstall multiple taxonomies, add the `Taxonomy` argument multiple times.

The `Taxonomy` argument is one of the following:

- A taxonomy identifier (having a format of `<name>-<version>`, for example: `eba-2.10`). To find out the taxonomy identifiers of the taxonomies that are installed, run the `list -i` ³² command. You can also use an abbreviated taxonomy name if it is unique, for example `eba`. If you use an abbreviated name, then all taxonomies that contain the abbreviation in its name will be uninstalled.
- The path to a `.altova_taxonomies` file downloaded from the Altova website. For information about these files, see [Introduction to TaxonomyManager: How It Works](#) ¹⁸.

Options

The `uninstall` command takes the following options:

<code>--keep-references, --k</code>	Set this option to keep referenced taxonomies. The default is <code>false</code> .
<code>--silent, --s</code>	Display only error messages. The default is <code>false</code> .
<code>--verbose, --v</code>	Display detailed information during execution. The default is <code>false</code> .
<code>--help, --h</code>	Display help for the command.

Example

The following command uninstalls the `eba-2.10` and `us-gaap-2020.0` taxonomies and their dependencies:

```
taxonomymanager uninstall eba-2.10 us-gaap-2020.0
```

The following command uninstalls the `eba-2.10` taxonomy but not the taxonomies it references:

```
taxonomymanager uninstall --k eba-2.10
```

3.5.8 update

This command queries the list of taxonomies available from the online storage and updates the local cache directory. You should not need to run this command unless you have performed a [reset](#)³³ and [initialize](#)³¹.

Syntax

```
<exec> update [options]
```

Options

The **update** command takes the following options:

<code>--silent, --s</code>	Display only error messages. The default is false .
<code>--verbose, --v</code>	Display detailed information during execution. The default is false .
<code>--help, --h</code>	Display help for the command.

Example

The following command updates the local cache with the list of latest taxonomies:

```
taxonomymanager update
```

3.5.9 upgrade

This command upgrades all installed taxonomies that can be upgraded to the latest available *patched* version. You can identify upgradeable taxonomies by running the [list -u](#)³² command.

Note: The **upgrade** command removes a deprecated taxonomy if no newer version is available.

Syntax

```
<exec> upgrade [options]
```

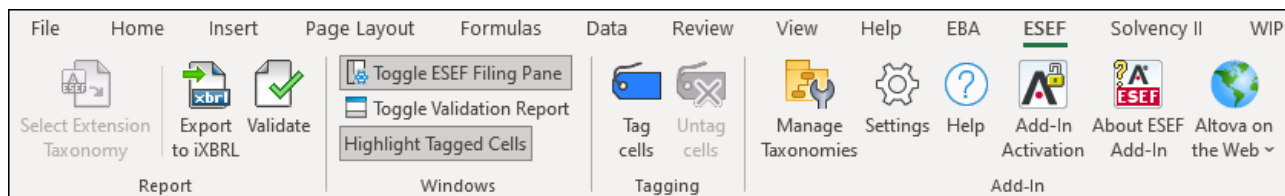
Options

The **upgrade** command takes the following options:

<code>--silent, --s</code>	Display only error messages. The default is false .
<code>--verbose, --v</code>	Display detailed information during execution. The default is false .
<code>--help, --h</code>	Display help for the command.

4 Menu Commands

This section describes the add-in commands available in the **ESEF** tab of the Excel ribbon (see *screenshot below*). The commands are organized into four groups: *Report*, *Windows*, *Tagging* and *Add-In*. For more information, see the subsections below.



Report

[-] Select Extension Taxonomy

Imports an extension taxonomy that you will need to create a new ESEF report. For more information, see [New Report](#)⁸. This command is disabled if the report sheet has already been inserted into the workbook.

[-] Export to iXBRL

Exports data from all currently active sheets to an iXBRL instance file. For more details, see [Export Data to iXBRL](#)¹⁷.

[-] Validate

Validates report data against the underlying taxonomy and displays the validation results in the **Validation Report** dialog box. For details, see [Validate Data](#)¹⁵.

Windows

[-] Toggle ESEF Filing Pane

Shows or hides the [ESEF Filing Pane](#)¹². By default, the Filing Pane becomes visible after you have imported an extension taxonomy.

[-] Toggle Validation Report

Shows or hides the **Validation Report** window. See [Validate Data](#)¹⁵.

[-] Highlight Tagged Cells

This option highlights all the tagged cells yellow, which make the report easier to work with and more user-friendly. For more information about tagging cells, see [Enter Data](#)⁹.

Tagging

Reported concepts must be marked up with XBRL tags, which means every fact must correspond to a relevant concept from the taxonomy. For details about tagging cells, see [Enter Data](#)⁹.

Add-In

☒ Manage Taxonomies

This command opens the XBRL Taxonomy Manager tool, which allows viewing, installing, and uninstalling XBRL taxonomies. See [XBRL Taxonomy Manager](#)¹⁸.

☒ Settings

Displays a dialog box where you can view and change the add-in [settings](#)³⁶.

☒ Help

Opens this help file in CHM (Microsoft Compiled HTML Help) format.

☒ Add-In Activation

Displays the activation status of the add-in or provides options to enter or purchase a license key code.

☒ About ESEF Add-In

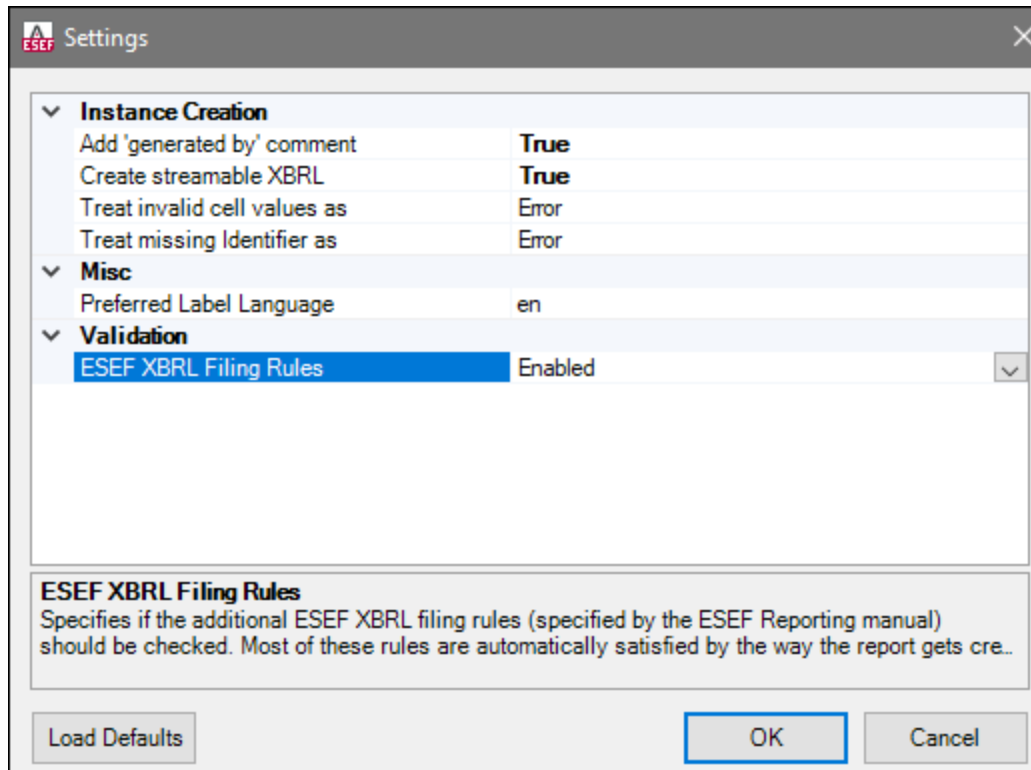
Displays version information about the add-in.

☒ Altova on the Web

Provides links to the Altova website, including Online Support Center, XBRL Taxonomy Download Center, training and tutorials.

5 Settings

The Setting dialog allows you to configure instance creation and language parameters and define validation settings. To view or change the add-in settings, click **Settings** in the add-in tab of the Excel ribbon (see *screenshot below*).



The settings you can configure are listed below.

Instance Creation

The settings below describe the *Instance Creation* section of the **Settings** dialog box.

Add 'generated by' comment

Specifies if the exported XBRL instances should contain a *Generated by* comment. Set this option to `False` if your reporting authority does not allow comments in the created reports. The default value is `True`.

Create streamable XBRL

Specifies if the exported XBRL instances should be streamable and contain the `xbml-streamable-instance` processing instruction. Set this option to `False` if your reporting authority does not allow processing instructions in reports. The default value is `True`.

Treat invalid cell values as

Specifies whether invalid cell values should be treated as validation errors or warnings. The default value is

Error.

Treat missing Identifier as

The *Identifier* property is available in the Filing Pane. By default, this parameter is empty. The *Treat missing Identifier as* option specifies whether an empty *Identifier* property should trigger a validation error or a warning. The default value is `Error`.

Misc

The setting below describes the *Misc* section of the **Settings** dialog box.

Preferred Label Language

Specifies the preferred language to be used in the headers of created worksheets. Note that the respective label resources must be defined in the taxonomy for this setting to take effect. The default value is `en`.

Validation

The setting below describes the *Validation* section of the **Settings** dialog box.

ESEF XBRL Filing Rules

Specifies if the additional ESEF filing rules (defined by the [ESEF Reporting Manual](#)) should be checked. The default value is `Enabled`.

6 License Information

This section contains information about:

- the distribution of this software product
- software activation and license metering
- the license agreement governing the use of this product

Please read this information carefully. It is binding upon you since you agreed to these terms when you installed this software product.

To view the terms of any Altova license, go to the [Altova Legal Information page](#) at the [Altova website](#).

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