Innovator 11

Innovator Office Integration

How to Install and Use the Word Add-In

HowTo

Contents

Introduction to Innovator Office Integration

Model-Based Requirements Engineering and Management

Requirements form the basis of all development projects. This is regardless of whether this is a new development or working on an existing development. The biggest challenges for model-based requirements engineering are faced when verifying that requirements have been fulfilled or establishing what the effect of changes on requirements are. The required traceability can integrate and link requirements directly in and with business process and software analysis models.

Challenges

Traceability is a prerequisite when assessing whether requirements are complete and consistent. This can be achieved by integrating requirements into a model.

The biggest challenges are:

- Providing a simple, easy to maintain link function for linking requirements with model elements
- Taking the requirements engineer's special requirements into consideration
- Offering requirements analysts options for editing a text in a way that they are used to

Analysis, management of requirements and modeling all require functions such as versioning, prioritizing and reporting. If requirements engineers and modelers can use these together in the modeling tool, both will profit from the synergy effect.

MID Solution

MID has taken Innovator's functions and expanded them into a model-based requirements tool. Its integration into Microsoft Word means that requirements can be created and maintained in Word.

Functions:

- Integration of requirements in business process and software analysis models
- Traceability through linking requirements with model elements
- Matrix and tree displays for impact and traceability analysis
- Requirements can be easily edited using Microsoft Word

Word Add-In

Innovator Office Integration is an extension for the Innovator platform that allows the user to insert and manage requirement elements into an Innovator model on an Innovator repository through Microsoft Word. The implementation is done using a Visual Studio Tools for Office (VSTO 4.0) add-in.

Requirement elements can be inserted and edited separately through MS Word without Innovator being installed on the client machine. The add-in includes an efficient updating mechanism between the Word document which can be partly generated offline and the Innovator model on the repository.

Terms and Definitions

The following terms will be used in this document.

- Word document

  The document which the user works on their requirements in.

- Tool window

  The dockable pane of the add-in in Word which the tabs and requirements tables (tree and list view) are embedded in.

- Requirements table

  The data grid showing a filterable selection of the requirements which are available from the connected repository. It provides information about ID, title and synchronization status of the requirements element (synchronized, Word version is newer, repository version is newer).

- Requirements template

  Each requirement element in the Word document is represented by a requirements template.

- Content controls

  A requirements template consists of content controls. Each content control holds information about one data field. Content controls can be read/write or read-only.

Installing Innovator Office Integration

Prerequisites

If you have a previous version of the add-in, please uninstall it first.

Note **Please ensure that all running instances of Microsoft Word are closed before (un)installing a previous version of the add-in.**

Uninstall a previous version of the add-in using the standard Windows uninstall routine in the Windows control panel.

The Word add-in, Innovator Office Integration, requires both Microsoft Word (Version 2007 and higher) and Microsoft Windows XP SP3 or higher.

Depending on the installation package, you need an internet connection to install the Word add-in, Innovator Office Integration; this is so that Microsoft dependencies required for running the add-in can be downloaded.

To modify requirement elements in an Innovator model you need a connection to an Innovator repository and access to this model.

Installing Innovator Registry Entries and Icons

You need to install Innovator registry entries and icons on the computer you wish to use Innovator Office Integration on if Innovator is not installed.

How to proceed

To install Innovator registry entries and icons:

» Download the latest version of Innovator Runtime from http://www.mid.de/products/office-integration/.

» Double-click on `Innovator_Runtime.msi`.

» Enter the license server.

Installing Innovator Office Integration

The set-up installs the Word add-in onto the local machine.

Note **Please ensure that Microsoft Word is not running during the installation.**

How to proceed

To install the Word add-in:

» Download the current version of Innovator Office Integration from http://www.mid.de/products. You can choose between a small installation package which requires runtime libraries from Microsoft's update server and a complete package that contains all the runtime libraries.

» Unzip the downloaded installation package.

» Run `setup.exe` on your machine.

After installing the Word add-in and opening Word, you should see the ribbon tab `Requirements`.

If you do not see the new ribbon tab in Word, check out the Troubleshooting section.

Getting Started with Innovator Office Integration

The Word add-in Innovator Office Integration was created to enable requirements to be collected in a familiar Microsoft Word environment. Requirements can be created in Word without being connected to an Innovator model; they can also be checked-out, edited in Word and synchronized back to the Innovator model.

Configuring Innovator Office Integration

There are some configuration tasks which need to be done before you can collect requirements with Innovator Office Integration. If you are an administrator, read the Administrative Tasks section to find out what these are.

After successful installation, start Word and switch to the `Requirements` ribbon tab.

Creating Offline Requirements

You can directly start creating offline requirements by clicking on `Connect` to open the tool window and then `After` to add an offline requirement in the `Requirements` tab (see the Offline Requirements section).

You can use **existing documents** which already contain requirements. Please save any documents you are using from older Word version (*.doc) in the current Word format (*.docx). If you do not do this, Word works in compatibility mode and the add-in will not work.

If you select existing text in the Word document, it will automatically be used as the name or the description text for the new offline requirement. This is the first step towards getting your existing textual requirements in the Innovator model.

You can save your changes and exit Word at any time; all your structured offline requirements are saved in the document.

Connecting to a Model

You need to be connected to an Innovator model to be able to work with requirements in this model. You can be connected to as many models as needed at the same time. In the Innovator Office Integration add-in pane, the current model is shown in the `Source` drop-down list in the `Requirements` tab and all requirements in this model are shown below. You can only interact with this current selected model.

Adding New Requirements to the Model

When working with a model, use the `Below`, `Above` and `After` commands in the `Add` group to add new requirements to a requirement structure in Word (and via synchronization to the model). Check out the Adding Requirements section to learn about all the details related to this task.

Working with Existing Model Requirements

You can drag requirements out of the requirements table of the tool window to Word to edit them in the Word document. You can directly edit requirements which are in the Word document and you can also change their requirements template. Check out the Editing Requirements section to learn about all the requirement editing tasks.

Note **Please note that you need to have already defined some requirements templates to be able to add new requirements or use existing ones (see the Creating a Requirements Template section).**

Synchronizing Your Work with the Model

Synchronization is the process by which the changes you have made to requirements in the Word document are saved to the Innovator model and, vice versa, the Word document is updated with the changes in the model. If you edit a model requirement in the Word document, you will notice that the requirements table in the tool window contains `Modified in Document` for this requirement. This shows you that changes to a requirement need to be uploaded to the model. With the `Synchronize` command in the `Model` group, you can start a synchronization process which uploads these changes. You can find all details related to synchronization in the Synchronizing Requirements section.

Administrative Tasks

Templates and Requirements

This section assumes that you have basic knowledge of Word templates. You can find information about Word templates and building blocks here:

- Microsoft Word 2007: http://office.microsoft.com/en-us/templates/submission-guidelines-for-microsoft-office-word-2007-templates-HA010237363.aspx
- Microsoft Word 2010: http://office.microsoft.com/en-us/templates/submission-guidelines-for-microsoft-office-word-2010-templates-HA101998498.aspx

Creating a Requirements Template

Requirements templates allow you to create a form for your requirements. You can use different forms for different requirements (e.g. non-functional, functional or constraint requirements). Forms consist of value or label fields, both depending on the stereotype.

Note **If you need to move fields, delete them and re-add them to the document. Do not use the Copy-Paste or Undo-Redo functions.**

Note **Please ensure a precise range of your selection for adding it to the requirements template.**

For example, if you merely select the contents of a table, the table itself may not be included; this means that your requirements template might not look as you would expect. To be certain of including the table structure itself, start your selection one line above the table.

Note **If you want to use a table as a requirements template, you have to apply one of Word's pre-defined table formats to the table before adding any label or value fields. This is not possible afterwards.**

How to proceed

To create a new requirements template:

» Ensure that you are logged-in to the Innovator model you want to create requirements templates in and that you have configuration rights.

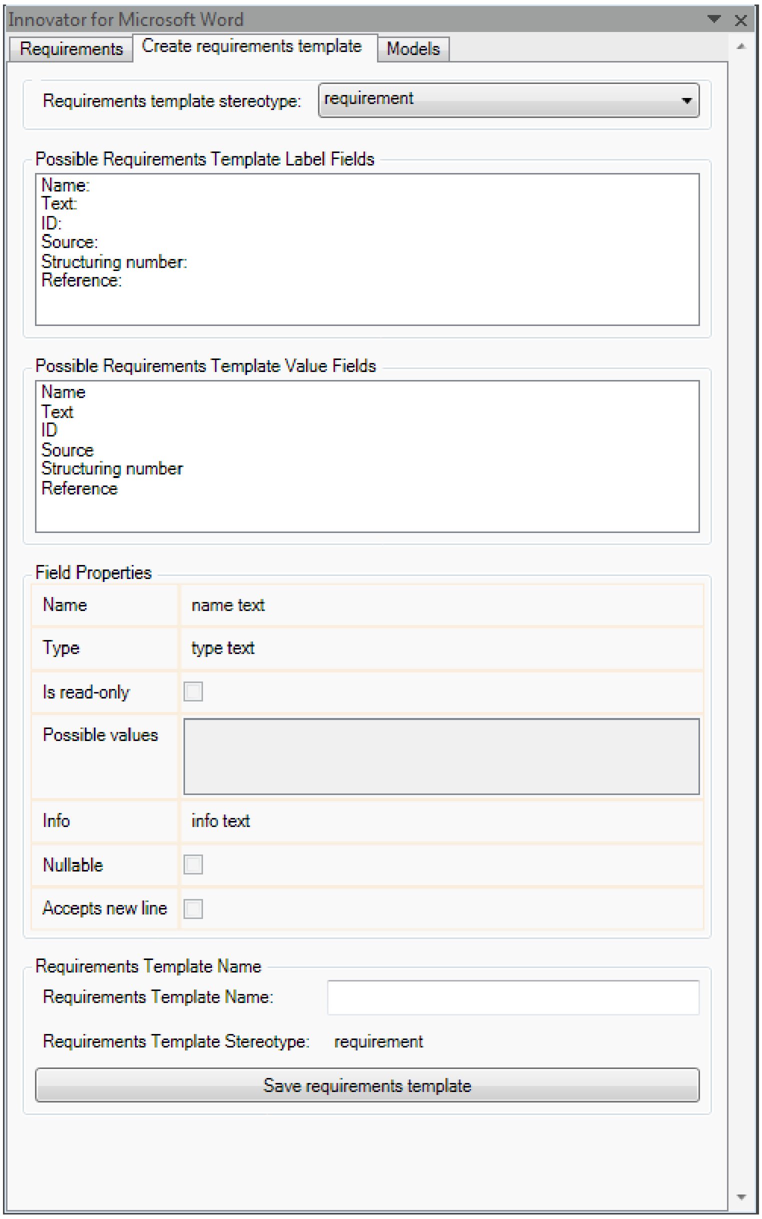
» Select the `Create new requirements template` command in the `Configurations` group.

The `Create requirements template` tab appears in the tool window.

» Select the requirements stereotype which you want to create a new requirements template for in the drop-down `Requirements stereotype`.

» If your requirements template should be in the form of a table, add the table into the document now.

» Use drag & drop to add one or more entries from the `Requirements Template Value Fields` list to the Word document.



- Use drag & drop to add one or more entries from the `Requirements Template Label Fields` list to the Word document.
- Use the standard Word function to add formatting to the future requirements template. You can also add tables to the template. You can drag fields directly into the cells of a table. You can also type any text into the requirements template; you will not be able to edit this text when editing requirements in your document.
- If you need to delete fields, just highlight the corresponding range in the Word document and delete as with any other text. Deleted fields reappear in the tool window, in the list of available fields.
- If you need to move fields, delete them and re-add them to the document.
- When you are finished creating the desired layout, select the whole range you want to use as a requirements template.

- Provide a name for the new requirements template in the `Requirements Template Name` field.
- Press `Save requirements template`.

  After the successful creation of a requirements template, the corresponding range is deleted in the Word document and the new template appears in the templates drop-down list in the `Add` and `Edit` ribbon groups.

Modifying a Requirements Template

How to proceed

To modify a requirements template:

- Ensure that you are connected to the Innovator model you want to create requirements templates in and that you have configuration rights.
- Select the requirement in the Word document which has the requirements template you wish to edit.
- Click on `Edit existing template` in the `Configurations` group.

  The `Create requirements template` tab appears in the tool window.
- Start editing the template.

  The lists of labels and values only show elements which do not already exist in the requirements template being edited.
- Drag any of these elements to the document to add them to the requirements template.
- To remove a field, just delete it as normal text. The fields deleted in the document appear in the lists in the tool window.
- If you leave the area of the requirements template being edited, you will be prompted to save your changes. You cannot work outside of the area of a requirements template while editing it. Saving your changes in this situation ends the requirements template edit mode.
- If you do not modify the name of the requirements template, the old requirements template will be overwritten. To create a new requirements template using the changes made, change the `Requirements Template Name` field to a new value. If you specify a name of a requirements template which already exists, this requirements template will be overwritten.
- To explicitly save your changes and exit edit mode, press the `Save requirements template` button at the bottom of the add-in pane.

Configuration Settings

Innovator Office Integration uses the basic settings stored in the registry in the exact format of Innovator. Here is an example:

```
[HKEY_USERS\…\Software\MID GmbH\Innovator\<version number>\Environ]
"INODIR"="C:\\Innovator\\<version number>\\inodir\\"
"INOHOST"="<license server name>.<port number>"
"INOLANG"="en_us"
```

Reference

References Section

The references section shows all elements which the requirement has a relationship to in the Innovator model. This section cannot be edited in the Word document.

When a requirement is placed in the Word document, the references section is automatically filled.

The contents of the section are updated automatically for the opened Word document:

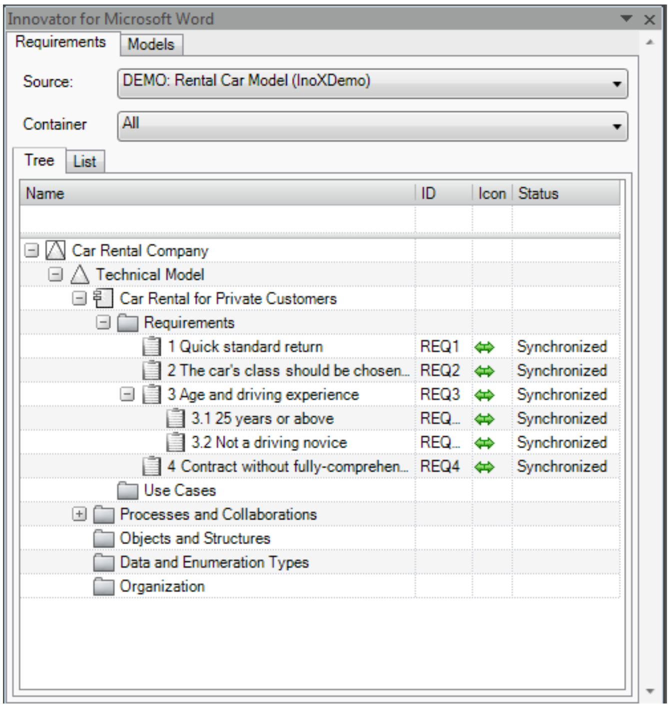
- When the corresponding Innovator model is reconnected
- When the user uses the `Refresh` command
- When the user uses the `Synchronize` command

Innovator Office Integration Add-In Pane

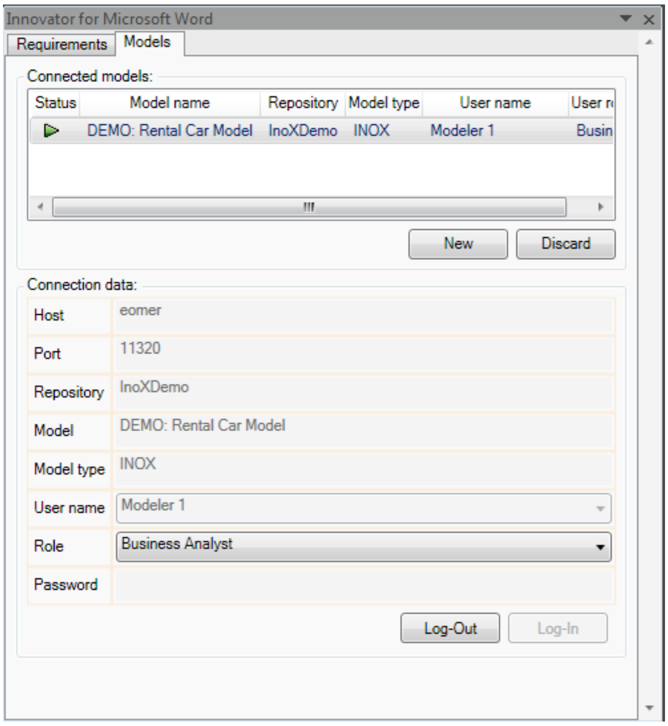
The add-in pane is the main point of interaction with the Innovator model.

The pane usually contains two tabs:

- `Requirements`: shows a plain or structured (tree) listing of all the requirements available in the Innovator model



- `Models`: shows all known and active model connections.



The `Requirements` tab will be your main work area. The `Source` drop-down list at the top of this tab shows the model which is currently active. You can switch to another connected model by choosing another entry from this list. While Innovator Office Integration is able to handle multiple model connections at once, please note that only one connection is active at a time.

The `Source` list also contains the Word document itself as a separate source for offline requirements.

Once you select a source in the `Source` list, the lower area of the add-in pane has two views of the requirements available from the selected source. The `List` page only contains requirements and does not show their structure. The `Tree` page shows the requirements and potential containers in a hierarchical structure, similar to that in Innovator.

Both the tree and the list can be used to:

- Drag & drop requirements into the Word document so they can be edited.
- Check if a requirement exists in the Word document and check its synchronization status.
- Check for incoming changes to the requirement by selecting `Show incoming changes` in the context menu.
- You can edit the selected requirement (which does not have to be part of the Word document) by selecting `Edit` in the context menu, or by double-clicking on the requirement.

When navigating the Word document, the requirement currently selected is also highlighted in the add-in pane. Vice versa, a requirement is highlighted in the Word document if it is selected in the add-in pane. This is only done for the active model.

Adding Requirements

<u>How to proceed</u>

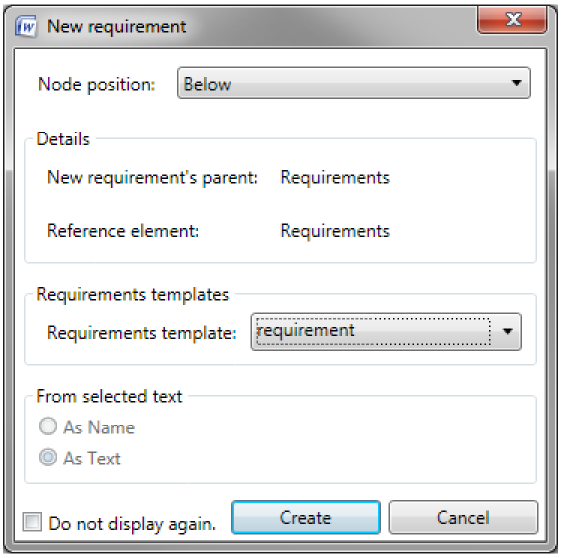
To add a new model requirement:

» Ensure that you have at least one anchor or one requirement in the document, above where you want to insert the new requirement. This element will be used as a reference element in the next step.

» Move the cursor in the Word document to where you want to insert the new requirement .

» Press `After`, `Before` or `Below` in the `Add` ribbon group.

Depending on the current settings, the dialog box `New Requirement` appears showing the details of the element which is about to be inserted.



- `Node position` corresponds to the button you have just selected in the `Add` ribbon group. In some cases it is not possible to insert the requirement where you chose. If this is the case, the `Node position` drop-down list is automatically adjusted to show where it is possible to insert the new element. For example, if the reference element is an anchor, the position can only be `Below`.
- The `Details` group shows the `Name` of the reference element. This is the element relative to which the new requirement will be positioned as stated above. The `Parent` element of this element is shown and will become the 2nd level parent of the new element if you choose to insert `Below`, or the direct parent if you choose `After` or `Before`.
- The `Requirements Template` drop-down box automatically shows the requirements template you chose; this is the same as the template of the reference element. You can change the template here.
- If you have selected a section of text in the document, the `From Selected text` section is activated. Choose one of the options in this section to specify how the selected text will be used in the new requirement.

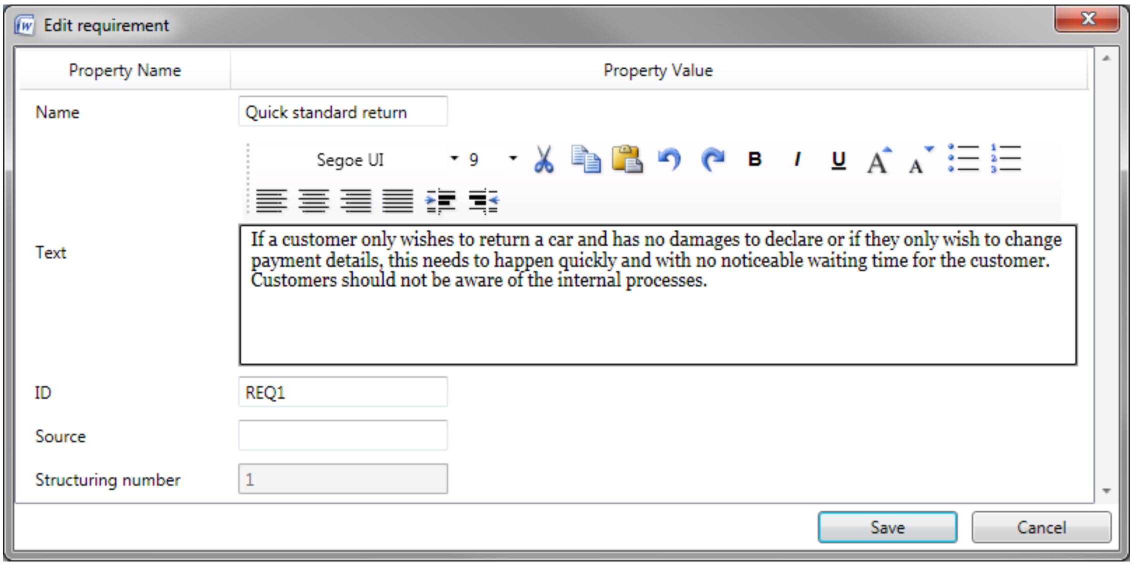
» Press `Create` to insert the new requirement.

You can check `Do not display again` if you do not want the `New requirement` dialog to be shown and to always use default values instead when creating new requirements. You can always reactivate the dialog in the `Settings` dialog.

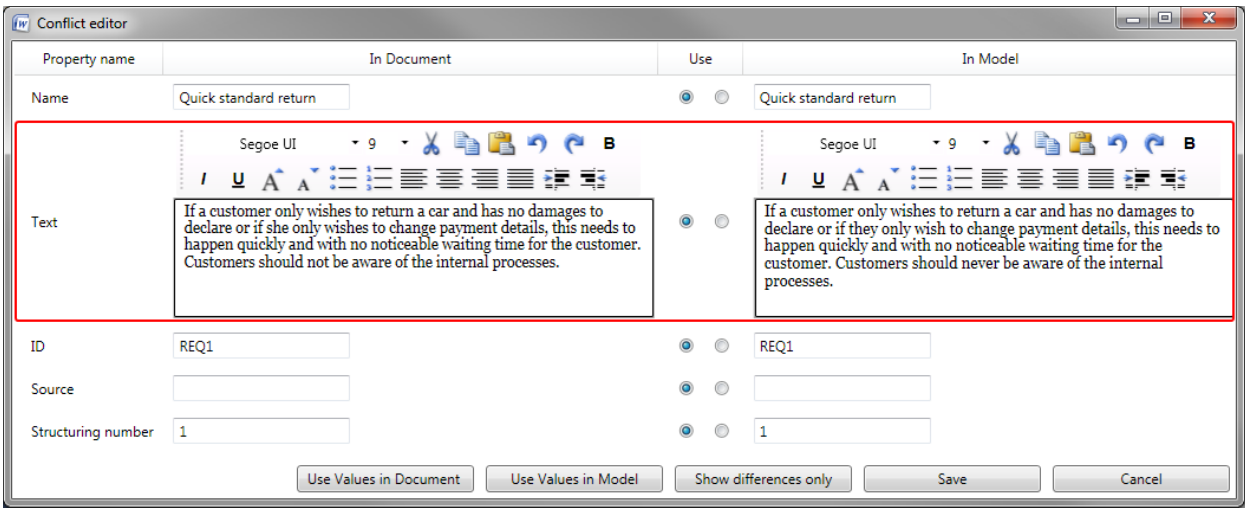
Requirement Editor Dialog

To edit a requirement outside of the Word document, double-click the requirement in the list or tree view. The requirement editor dialog box opens. You can edit each property of the requirement and press `Save` to store the changes you made. This is useful when:

- A requirement does not exist in the Word document but you still want to edit it
- A requirement exists in the Word document but the requirements template does not contain the property you want to edit



Conflict Editor Dialog



When a conflict between a requirement in the Word document and a requirement in the Innovator model has to be solved, the `Conflict editor` dialog is shown. The fields available for a conflict are highlighted using a red border. To hide all fields without conflicts, press `Show differences only`. The left side of the window shows the values of the properties in the Word document; the right side shows all corresponding values in the Innovator model.

You can resolve each conflict individually by activating the radio buttons between the values in the "`Use`" column. The value next to the radio button you have checked will be used.

Alternatively, you can choose to use **all** local values by pressing `Use Values in Document` or use **all** model values by pressing `Use Values in Model`.

Once you have chosen a value for each conflicting field, you have finished editing. Press `Save` to commit the changes you have made to the Innovator model and the document (if applicable).

Anchor

An anchor is a container for requirements in the Innovator model. In the Innovator model, this is any element which can contain requirements. The exact element types depend on your model configuration.

The anchor is usually a section title in the Word document.

In the process of defining an anchor, the Innovator Office Integration user links this section title in the Word document to a container element in the Innovator model. This tells Innovator Office Integration that all subsequent requirements in the document should be inserted below this anchor. This is very important when synchronizing offline requirements (see Synchronizing Requirements section).

How to proceed

To create an anchor:

» Ensure that you have at least one Innovator model connected and selected in the `Source` drop-down list in the `Requirements` tab in the add-in pane.

» Place the cursor in the Word document precisely where you want the anchor to be inserted. If you already have a text (section title) which you want to use as your anchor text, select this text.

» Select the `Define anchor` command in the `Model` group of the Innovator Office Integration ribbon bar.

» Select the model element which represents this anchor and then press `OK`.

The anchor is inserted in the document. If you have selected text this becomes the anchor text, otherwise the Innovator model element name will be used as a text.

An anchor can be deleted by simply using the standard Word delete function (e.g. select it, press backspace).

Requirements Template

A requirements template defines the appearance of a requirement in a Word document. It specifies which properties (stereotype properties, stereotype fields) of an Innovator requirement the Word user will see and how they will be formatted.

Innovator Office Integration comes with two predefined requirements templates for offline requirements.

All other requirements templates in Innovator Office Integration are specific to a stereotype in an Innovator model. These requirements templates are stored as attachments to the stereotype in the model's configuration. They must be defined by the model administrator as described in Creating a Requirements Template section.

Fields in requirements templates have one of the following field types; these types are chosen automatically based on the configuration of the Innovator model:

- Simple text
  Depending on the configuration of the Innovator model, these fields can be multiple lines. Although it is possible to format the contents of these fields in Word, changes to the format are not saved in the Innovator model.
- Formatted text
  Most changes to the format of these fields are saved to the Innovator model. Not all Word formatting options are supported by Innovator Office Integration; please see Supported Formatting Options section.
- Multiple choice fields
  These fields are shown in Word as drop-down lists.
- Boolean
  These fields are shown in Word as drop-down lists and contain two options only.
- Integers
- Reference section
  This type of field cannot be edited in the Word document. It shows all of a requirement’s model references to other elements in the model.

If you want to format a field's content, for example font size or typeface, you have to select the whole field by selecting the field's tab and then apply the format.

Editing Requirements

There are two ways to edit requirements in Innovator Office Integration:

- Double-click a requirement in the add-in pane. An editor window appears (see Requirement Editor section). You can edit each field of a requirement here and press `Save` to store the changes. These changes are not directly synchronized with the Innovator model (see Synchronizing Requirements section).
- Drag the requirement out of the add-in pane into the Word document. You can then edit the fields displayed in the requirements template used in the requirement in the Word document. The changes are not directly synchronized with the Innovator model. You can exit the Word document and return to it at a later point in time to continue editing this requirement. You can edit requirements even when Innovator Office Integration is not connected to an Innovator model. This makes it possible to be completely offline and still work on requirements (see Connecting to an Innovator Model section).

Connecting to an Innovator Model

You need to establish a connection to an Innovator model to be able to use requirements from it or add new requirements to it.

How to proceed

To establish a connection to an Innovator model:

» Go to the `Models` tab in the add-in pane.

» Press `New`. The model selection dialog appears which shows all models on the configured server (see Configuration Settings section).

» Select a repository, model, user name, role and password then press `Log in`.

» The model connection is made and displayed in the `Connected models` list. The requirements in this model are loaded in the `Requirements` tab.

Innovator Office Integration can handle many model connections at the same time. Model connections are stored in the document. You can log-out of a model but still store the connection data to that model. The `Status` column of currently connected models shows a red stop icon if a connection is stored but not logged-in.

To reconnect to a stored model, select it and press the `Log in` button. You can change the user name before reconnecting.

If you select an entry in the `Connected models` list, the details of the connection are shown in the `Con` section. You can change the current role while you are connected by selecting another role from the `Role` drop-down list.

To discard all connection details for a given connection and remove it from the list of stored connections, select it and press `Discard`.

Model Requirements

Model requirements exist in the Innovator repository. You need to be connected to an Innovator model to access these requirements (see Connecting to an Innovator Model section).

Model requirements are always shown in the add-in pane and can (but must not always) be shown in the Word document (see Innovator Office Integration Add-In Pane section).

All model requirements have:

- A model they belong to
- A stereotype
- A current requirements template (if they are shown in the Word document). This is one of the requirements templates defined for this stereotype and model (see Templates and Requirements section)
- A synchronization status (see Synchronizing Requirements section)

Model requirements can be added and edited using Innovator Office Integration (see Adding Requirements and Editing Requirements sections).

Offline Requirements

Offline requirements only exist in the Word document. They are not assigned to a model, which means they are also not assigned to a stereotype. A requirements analyst can use Innovator Office Integration for gathering requirements before they even connect to an Innovator model.

Offline requirements can be:

- **Single requirements**

  Single requirements always have 3 fields:

  - ID: identifier of this requirement
  - Name: name of the requirement
  - Text: description of the requirement

- **Group requirements** (used to group a set of single requirements)

  Group requirements always have 2 fields:

  - ID: identifier of this requirement group
  - Name: name of the requirement group

How to proceed

To add an offline requirement:

» Press `After` in the `Add` ribbon group. You can select the offline requirement's type in the corresponding drop-down list of the `Add` ribbon group. If you select a section of text in Word before adding the offline requirement, this text will be used as the description text for the offline requirement. You can also use the text as a title by clicking on the `Convert to name` button.

Offline requirements have no representation in the Innovator model; they have no UUID, no stereotype and no parent in the model.

Offline requirements can be synchronized with Innovator (see the Synchronizing an Offline Requirement section). Once synchronized to the model, an offline requirement becomes a model requirement.

If you select the Word document name (e.g. Document1.docx) from the `Source` drop-down list, the Innovator Office Integration add-in pane shows all offline requirements in the List of Requirements. This denotes the fact that the requirements only exist in the current document (see the Synchronizing an Offline Requirement section).

Synchronizing Requirements

Synchronization is the process by which changes that you have made to requirements are uploaded to the Innovator model and changes that someone else has made to requirements in the Innovator model are downloaded to your Word document (see the Synchronizing an Offline Requirement section).

Requirement States

Requirements shown in the Innovator Office Integration add-in pane have six possible states. These states refer to the **current** Word document. If you have other Word documents which contain the same requirements, you need to open those documents to check the status of the requirements in them.

- **Only in model**

  This requirement only exists in the Innovator model and has not been added to the current Word document. You can still edit such a requirement.

- **Only in document**

  This is usually a new requirement which has been inserted in the Word document but has not been synchronized with the Innovator model yet. In addition to this, if an Innovator user deletes a requirement from the Innovator model but this requirement exists in a Word document, Innovator Office Integration will also show the requirement as “Only in document”.

- **Synchronized**

  The requirement exists both in the Innovator model and in the Word document. All of this requirement’s data is exactly the same as it was in the Innovator model when the last synchronization or refresh happened.

- **Modified in document**

  The requirement exists both in the Innovator model and in the Word document. There are some changes in the Word version which need to be uploaded (synchronized) to the Innovator model. A requirement can also be in this state if:

  - You edited it in Word then deleted it from the document. Innovator Office Integration stores changes you made before the deletion.
  - You never added the requirement in Word but edited it using the editor window.

- **Incoming changes**

  The requirement exists both in the Innovator model and in the Word document. There are some changes in the repository which need to be downloaded (synchronized) and the Word document needs to be updated.

- **Conflict**

  The requirement exists both in the Innovator model and in the Word document. There are some changes both in the model and the Word document for this requirement. The resulting conflict needs to be manually solved.

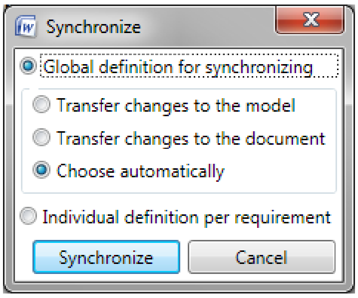
Synchronizing

<u>How to proceed</u>

To start synchronizing:

» Select `Synchronize` in the `Model` group.

The synchronization dialog appears.



You have two basic options in this dialog:

- `Global definition for synchronizing` synchronizes everything using automatic settings. This has an effect on the following states:
  - **Only in document**: for these requirements, a corresponding new model requirement is created and synchronized on the server (see Model Requirements section).
  - **Outgoing changes**: the changes to these requirements are transferred to the corresponding model requirements.
  - **Incoming changes**: the model changes are downloaded and the requirement in the Word document is updated.
  - **Conflict**: a special dialog for solving conflicts is shown for each requirement
- **`Individual definition per requirement`** synchronizes using user-defined options. To use this, open the `Action` column (see the Innovator Office Integration Settings section) in the Innovator Office Integration add-in pane and then select the synchronization action for each requirement (row).
  - **No action**: does not change this requirement in Word or in the Innovator model.
  - **Send to model**: uploads local changes to the model requirement. Values in the model are **overwritten**.
  - **Get from model**: gets model changes and **overwrites** local changes.

Synchronizing an Offline Requirement

Synchronizing an offline requirement adds this requirement to an Innovator model.

<u>How to proceed</u>

To synchronize an offline requirement which has no sub elements:

» Ensure you have at least one Innovator model connected and selected in the add-in pane.

» If you don't already have an appropriate anchor, create an anchor in the Word document above the requirement you want to synchronize.

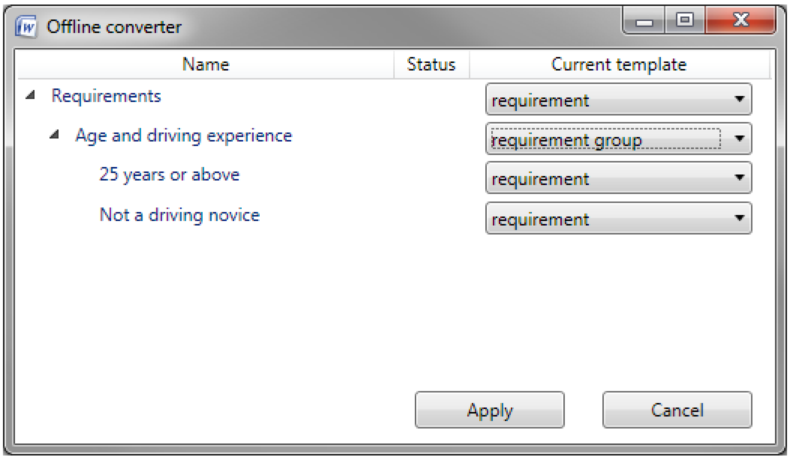
» Place the cursor within the offline requirement you want to synchronize.

» Select the desired requirements template from the `Requirements templates` drop-down list in the `Edit` ribbon group in the Innovator Office Integration ribbon bar. If you do not see any entries here, please check Troubleshooting.

The offline requirement will be added as the last child directly below the closest anchor above. During this process, the requirement is given the anchor model element as a parent; it is also given a UUID and the stereotype which the requirements template was created for.

Synchronizing an Offline Requirement Hierarchy

If you assign a requirements template from a model to an offline requirement which is part of a hierarchy, a dialog window opens which shows the hierarchy of the offline requirements containing the offline requirement selected.



The hierarchy root is the offline requirement which is the anchor's sub element. You can choose a requirements template for every offline requirement. The requirements template chosen which opens the dialog is used as default. The next permissible template is selected if this template cannot be used for certain requirements. By clicking on "`Apply`", the online requirements templates are applied to the requirements sequentially according to the hierarchy's depth. You can check the progress in the "`State`" column in the dialog. The dialog closes once the process is completed.

Note **It is also possible to open the dialog when the anchor is selected. The command is then called "`Bulk convert offline requirements`" and the anchor itself then becomes the root node. The combo box for the requirements templates which should be used (if possible, see above) can then be selected for the anchor. This then gives you the option of easily converting all offline requirements in one fell swoop using the anchor.**

Innovator Office Integration Settings

By pressing `Settings` in the Innovator Office Integration ribbon bar, you are able to change the following configuration properties of Innovator Office Integration. These properties are stored on the local machine, making them machine-dependent but not user-dependent. All users will share the same settings. Pressing the `Default` button resets all settings to the factory default.

Column Definitions

This tab allows you to change the columns which are visible in the list and tree view of the add-in pane.

The order and width of the columns can be changed directly in the add-in pane by dragging the column headers and their margins.

All these settings are automatically saved by Innovator Office Integration and will be restored the next time you start the add-in on this machine.

Automatic Saving

This tab changes the behavior related to automatic saving of changes to requirements. It contains the following options:

- `Load before editing`

  If checked, each requirement edited using the built in requirement editor (double-click a requirement in the tree or list view) is retrieved from the server before being displayed. This does **not** apply when a requirement is edited directly in the Word document. Use this to lower the chance of creating conflicts when locally editing requirements using the editor.

- `Save automatically`

  If checked, each requirement edited using the built in requirement editor is immediately synchronized with the model when editing is finished.

- `Save Word requirement automatically`

  If checked, each requirement edited in Word is immediately synchronized with the model when the user exits the range of the requirement in the Word document.

- `Do not show "New Requirement" Window`

  If checked, the confirmation dialog for creating new requirements is not shown anymore. The standard settings will apply when creating a new requirement (see Adding Requirements section).

Supported Formatting Options

These formatting options can be used:

- Bold
- Italic
- Underline
- Font
- Font Size
- Font Color
- Text Highlighting Color
- Tables

Troubleshooting

Copy, Paste, Undo, Redo

Not all Copy, Paste, Undo, Redo operations are supported by the add-in. For example, it is unadvisable to use `Undo` after inserting a requirement in the Word document. If you need to delete this requirement, select its whole range and press the delete key.

I don't see the ribbon tab "Requirements" in Word

- Ensure that you have installed the latest version of the add-in.
- Ensure that you only have one active instance of Word. The add-in only currently loads in the first instance of Word started on a system. Subsequent instances of Word will not show the add-in. If you close the instance that loaded the add-in, it will **not** be automatically transferred to another instance. Instead, you have to open a new Word and the add-in will start. Word sometimes hangs as a process without an interface. This also prevents the Requirements tab from appearing. To check that Word is not running at all, use the `Windows Task Manager`. Search for `winword.exe` in the `Processes` tab., if found, select it and press `End Process`.
- In Word, click on `Start>Word Options>Add-Ins>Manage "COM-Add-Ins">Go…>Check "Innovator Office Integration"`. If you don't see “`Innovator Office Integration`” in the list, the add-in was not installed correctly (see Installing Innovator Office Integration section).

I don't get any entries in the Requirements Template drop-down

- Check that your configurator has created requirements templates for the requirement stereotype you are working with.
- Check that you have selected a valid requirement in Word.
- If you have selected an offline requirement, be sure that you have an anchor, and that the model configuration allows requirements of the stereotype of the configured requirements template to be created right below this anchor.
- If you have selected an offline requirement, check your configuration to ensure that the role you have used to log-in to the model allows creation of new elements below this anchor.

I cannot drag requirements out of the add-in pane.

- Ensure that you are dragging a requirement and not some other model element. Only requirements can be dragged into the Word document.
- Ensure that there is at least one requirements template created for the stereotype of the requirement you are dragging.
- Ensure that the requirement is not already present in the Word document.

Log File

Innovator Office Integration add-in problems are logged in the `log-file.txt` file, which can be found in the `%AppData%\MID GmbH\I4MW` directory.

Some requirements templates cannot be loaded

If you get any of the following messages while using Innovator Office Integration, the binary form of one of your requirements templates is corrupted in the Innovator model. If you are an administrator, you can directly delete the requirements template in question. This should not occur during production:

- `Error while loading requirements template for Stereotype {0} from Model. Template data might be corrupted. Would you like to delete this template from the Model?`
- `Error while loading requirements template for Stereotype {0} from Model. Please contact your Model Administrator.`

If you get any of the following messages while using Innovator Office Integration, one of your requirements templates is stored in an old format in the Innovator model. If you are an administrator, you can directly delete the requirements template in question. This should not occur during production as the requirements template format will then be stable:

- `Requirements template {1} for Stereotype {0} is outdated. Please contact your Model Administrator.`
- `Requirements template {1} for Stereotype {0} is outdated. Would you like to delete this template from the Model?`

For questions, please contact our hotline. Tel.: +49 (0)911 96836-222, E-mail: support@mid.de

Your **MID** team

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