

User Manual ReqEdit

Release 2.14



Table of Content

1. About this manual	6
2. About ReqEdit	6
2.1 Starting ReqEdit6)
2.1.1 Unzip ReqEdit archive6	,
2.1.2 Activate Demo license6	,
2.1.3 Activate ReqEdit Reader, Basic or Premium license6	,
2.1.4 Prerequisites11	1
2.1.5 File11	1
2.1.6 New11	1
2.1.7 Open15	,
2.1.8 Save17	7
2.1.9 Save As	}
2.1.10 Close	}
2.1.11 CloseAll	}
2.2 Overview	}
2.2.1 Hide navigator20)
2.2.2 Column managing20)
2.1.3 Handling of multiple open documents21	1
2.2.4 Closing of documents22	<u>)</u>
2.2.5 Tab Personalization22	?
2.2.6 Displaying of tab title settings23	}
2.2.7 Setting of tab width23	}
3. Editing	.23
3.1 Insert new object24	ļ
3.1.1 After25	,
3.1.2 Before25	,
3.2 Insert new child object25	
3.3 Delete object	;
3.4 Copy and move objects27	,
3.5 Promote and demote objects29	
3.6 Default values)



3.7 Mass update function 31	
3.8 Data types	
3.8.1 The Boolean type32	
3.8.2 The Date type32	
3.8.3 The Integer type33	
3.8.4 The Real type33	
3.8.5 The String type33	
3.8.6 The Enumeration type33	
3.8.7 The XHTML type34	
3.9 MainColumn	
3.9.1 Status indicator36	
4. View - Filtering, Searching and sorting3	37
4.1 Filtering	
4.2 Search and replace39	
4.3 Sorting	
4.3.1 Delete sorting41	
5. Attributes and attribute types4	12
5.1 Attribute types (DataTypes)	
5.2 Attributes	
5.3 System attributes	
5.4 Specification Attributes	
5.5 Rearrange main column	
6. Links4	18
6.1 Go to links	
6.2 Links administration	
6.3 Add links	
6.4 External Links	
6.5 Delete Links	
7. Server settings5	54
Connect	
Proxy Settings	
Check Out56	
Check In	



8. Pictures and OLE objects	57
8.1 Insert Image	58
8.2 Insert File	58
9. HTML Tables	59
10. DOORS Tables	61
11. Importing	62
11.1 RIF 1.1a & ReqIF 1.0.1	63
11.2 Word import	68
11.2.1 Mapping file	72
11.2.2 Parsing details	
11.2.3 Features and Limitations	74
12. Exporting	75
13. Print	78
Main column	79
All visible columns	80
Print Setup	81
14. User settings	84
14.1 Multilanguage support	84
14.2 Delete temporary files	84
14.3 ReqEdit Backup	84
14.4 DOORS table attribute selector	
14.5 Image caching	85
15. Document properties	85
16. Document views	87
17. Templates	87
18. ReqEdit Log	88
19. ReqEdit Buttons	89
20. Keyboard Shortcuts	89
21. Contacting Support and Help	91



18.1 Help	91
18.1.1 Help content	91
18.1.2 License info	91
18.1.3 Check for update	91
18.1.4 About ReqEdit	92
18.2 Support	93
18.3 Error reports	93
22. Notices and limitations	94
22.1 Insert images and OLE objects	94
22.2 Generate preview images of OLE files	94
22.3 Import/Export OLE objects	94
22.4 Import large OLE Files	95
22.5 Export large OLE Files	95
22.6 Copy and Paste	96
22.7 Program environment	96
23. Appendix	97
ReqIF Namespace Reserved Attributes	97
RegEdit Namespace Reserved Attributes	97

The ReqEdit XML Editor documentation starts on page 100.



About this manual

Welcome to ReqEdit, a tool that is designed as a simple and portable ReqIF editor for Windows OS. This user manual describes how to use the basic features of ReqEdit.

2. About ReqEdit

2.1 Starting ReqEdit

2.1.1 Unzip ReqEdit archive

The first step for the ReqEdit installation is to copy the .zip archive file provided by REQTEAM to your desired ReqEdit location and unzip it. This will create the ReqEdit program folder.

2.1.2 Activate Demo license

To activate the demo license please execute the file "ReqEdit_demo_license_activation.exe" provided by REQTEAM and press on the "apply update" button.

If the update is successful, you can start the software. In the menu Help -> License info you can check if the demo license of 15 days has been successfully activated.

2.1.3 Activate ReqEdit Reader, Basic or Premium license

Before running ReqEdit, the license needs to be activated. To do that, you need an internet connection and the license key provided by REQTEAM.

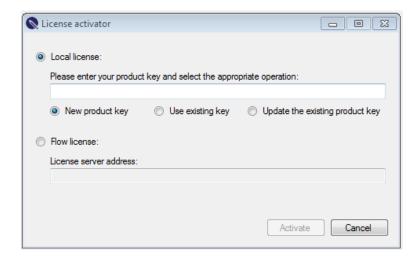
Automatic activation

The process is automated so the only thing you need to do is to execute "Start.exe" from your ReqEdit folder and copy your license key in the pop-up window if you want to install a local license.

If you want to use network license you have to switch the radio button to the Flow License area and paste in the license server address. After you click



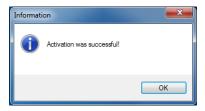
activate, a message will appeat telling you that the application needs to close for the settings to be applied. After that start the application again and it will grab a key from the license server.



If your network requires a proxy for internet connections, you can find proxy settings in the "Proxy Settings" section. More information on proxy settings can be found here.

If you install a new product key, select the corresponding radio button. If you are upgrading or extending your current license, select the "Update" radio button.

After you click on activate, a progress bar will appear and show you the status of the activation. After the activation finishes you will get a success message and after clicking on OK, the program will start automatically.

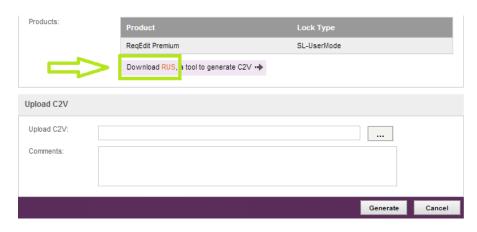


Manual activation

Step 1: Open your web browser and access https://license.reqteam.com/ems/customerLogin.html. Log in using your Product Key.

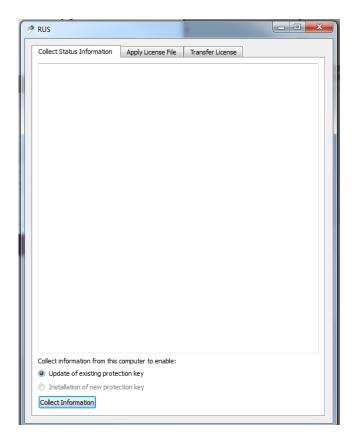


- Step 2: Click on the "Offline Activation Button".
- Step 3: Download RUS tool.

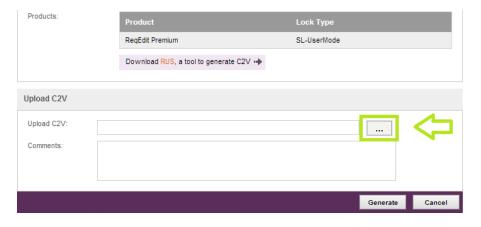


- **Step 4**: After the download is completed, open the **RUS tool**.
- **Step 5**: Select "Installation of new protection key" if you are installing a ReqEdit License for the first time. Click on the "Collect Information" button and save a .c2v file on your computer. Select the file name and <u>please remember where you save the file!</u>





Step 6: Switch to your web browser and upload the created .c2v file to the license generator.



Step 7: Click on the "Generate" button and save the .v2c file to your computer. <u>Please remember where you save the file!</u>



Step 8: Switch to the **RUS tool**, click on the "Apply License File" panel and upload the created .v2c file.



Step 9: Click on the "Apply Update" button. You will get a confirmation text after the license is successfully applied.

Step 10: Open ReqEdit. You can check your license info by accessing **Help** -> **License info** in the ReqEdit main menu.

After the license installation, the program can be started with "ReqEdit.exe" or "Start.exe".



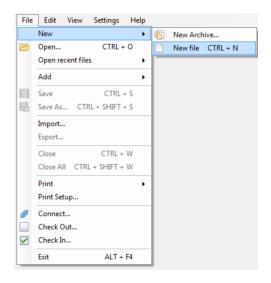
2.1.4 Prerequisites

ReqEdit is a Windows application so in will only work on computers with a Windows operating system.

To run the software, it is necessary to install .Net 3.51 Framework or else you will get the message "Some file is missing on your machine to execute the program" and the program will not work. As the .Net Framework is used by many Windows applications, it might already be installed on your computer so checking before installation is recommended.

2.1.5 File

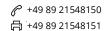
The ReqEdit Client is started. If you click now on file you can select either -> New, Open or Import. The description of these options will be explained in the following chapters.



2.1.6 New

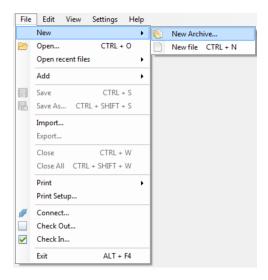
Here we have the posibility to create two different document types: reqif file (*.reqif) and reqif archive file (*.reqifz).

For each type of file you can select a template as your starting document. You can select the default template or one you have already defined. For more information on templates, please read the <u>Templates</u> section.

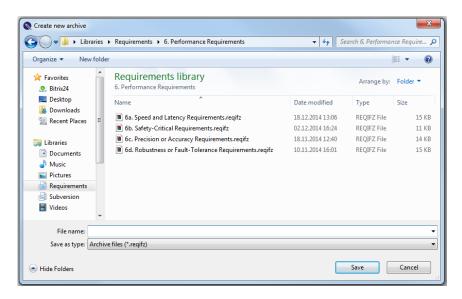




New Archive

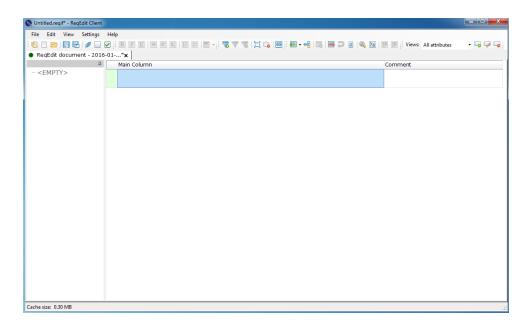


When a new archive action is initiated, a "Create new archive" window appears. A new file name has to be inserted. The only available type is: "Project Files (*.reqifz)".



If you save a new Untitled.reqif file, a new document will be created. The new document contains a single empty line with two columns, the Main Column and and the Comment Column. The Main Column contains the following attributes by default: Main Column = ReqIF.ChapterName + ReqIF.Name + ReqIF.Text.





The advantage of archives is that external files and images can also be added. The normal ReqIF file does not provide this function.

New File



You also have the posibility to create a new standard document (*.reqif). The new document contains a single empty row with two columns, the Main Column and the Comment Column.

For adding multiple attributes and attributes types, Settings -> Document has to be used.

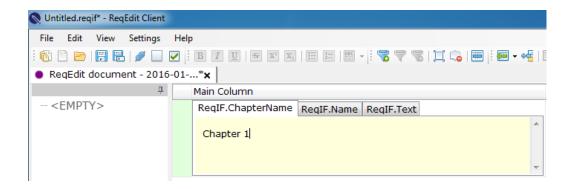
The attributes types added for a new document can be found in the table below.

Attribute type	Base type
String	XHTML
Text	XHTML

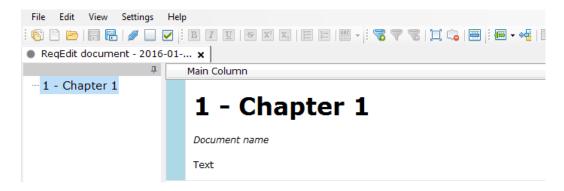


The attributes added for a new document can also be found in the table below.

Attribute name	Attribute type
ReqIF.ChaperName	XHTML
ReqIF.Name	XHTML
ReqIF.Text	XHTML
Comment	XHTML
ReqEditID	Integer
ReqEditModifiedOn	Date
ReqEditModifiedBy	String



After the document has been saved, it looks like this:



After the document has been saved, the hirarchical tree structure can be seen on the left side. The user has here the possibility to navigate easily to the requirements in the document.



On the right side in the grid view, the user can see all the attributes of a requirement in a single row. A document will always be displayed in this way. For more details have a look at chapter 2.2.

Add new document

ReqEdit also supports multi-document files. After you create a new .reqif or .reqifz file, you have the possibility to add a new document to your file.

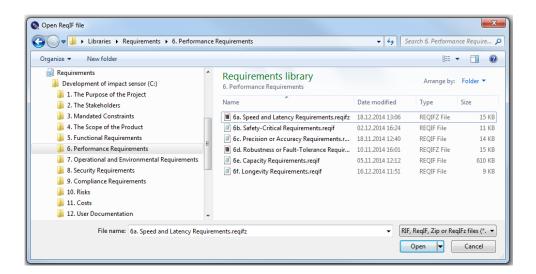
To add a new document to your file, go to **File** -> **Add** -> **New document to the current file**.



NOTE: All documents will be stored in the same .regif or .regifz file.

2.1.7 Open

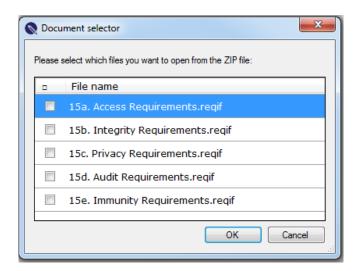
You can open a document if you click on File-> Open. For the selection of the file the selector window can be used. By default, only xml, rif, reqif, zip and reqifz files are displayed.





If the file you want to open is a multi-document file, all included documents will be opened in separate tabs.

If the selected document is a reqifz type, a list with reqif files of the zipped file is displayed.



By clicking on the checkbox in front of the file names, you can select which files will be opened. All the documents in the selected reqif files will be opened in new tabs.

NOTE: If the reqifz file contains only one reqif type document, the selector window mentioned above is not displayed and the document inside opens automatically.

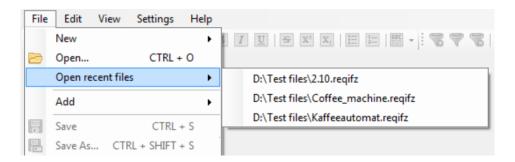
While opening the reqifz file, it is checked if documents contained in that file have already been opened in the program or not. If a document has not been opened yet, it will be opened and otherwise its corresponding tab is focused.

If no hierarchical information is stored in the opened document, the tree view on the left side will not be displayed automatically.



Open recent files

If you want to work on a recently opened file, you can use the "Open recent files" menu item. Up to six recently opened files are stored.



Checking of file structures

Before opening a file, the program checks the document content in two steps. First, the ROOT node of the xml type file is checked to determine the RIF version. Second, the file will be checked for the accurate schema for a valid format in order to avoid editing corrupt files. In case of corrupt files, the user will receive an error message.

NOTE: If you try to open a file that it is not a ReqEdit file type, the program will ask you if you want to import the file. If you select "Yes", the import wizard will start and guide you through the import process.

2.1.8 Save

Saving is used for new and edited documents. For new documents the file name and path can be inserted in a Save dialog-box. In case of editing an already existing file, the program saves the modified data without asking and without any dialog-boxes. The edited but not yet saved state of the document is marked by a star (*) in the program. The same state can be seen on the tabs, too. It is possible to have multiple documents in the same file (Multidoc files), so a change in one of the documents has an impact on the others too. Changes in one document will automatically display all the other documents as changed, marked with a star (*). In case of archived files (zip, reqifz, rifz), the content will be automatically updated while saving. If your file is a multi-document file, saving one of the documents will also save the changes made in the other documents of the file.





NOTE: Changes on linked documents (e.g. Images or Word, Excel) will not be detected by the editor. To update the content, the content inside the XML file needs to be changed.

NOTE: In case of large archived files (reqifz), saving can take a longer time. This happens because the archiving process is a more time consuming task.

2.1.9 Save As

Already existing documents can be saved with a new name with the "Save As..." command. A dialog-box is displayed where the name and place of the new file can be chosen. If the name already exists, the program asks as a confirmation whether you want to overwrite the existing file or not. After saving, the new file name can be seen it the header of the window and also in the tabs.

2.1.10 Close

The selected document (tab) is closed. If you try to close an unsaved document, the program asks if you want to save it.

2.1.11 CloseAll

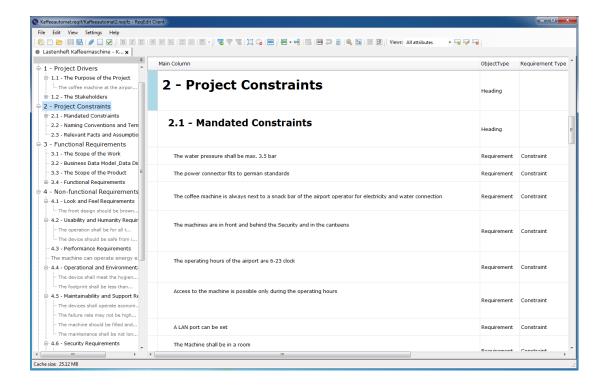
It closes all open documents. Before closing, the program checks the state of the documents one by one and it asks if you want to save the changed documents. The operation can be interrupted by the Cancel button.

2.2 Overview

The main user interface (main Graphical User Interface, GUI) can be divided into four parts. The menu items are located on the top and under them, shortcut icons can be found. The commands can be sent from the menu and the most common ones are collected in the quick launch icons bar below. The quick launch icons can be moved by the mouse into four areas of the interface (upper, lower, right and left part of the window), which promotes better and more convenient workflow.



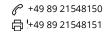




The middle part of the interface is used for reading and editing of an open document. You can read more about it in the Editing chapter. On the left side, main titles (title list) are shown in a tree view hierarchy which promotes easier transparency. If the new or edited document does not contain an address list, it is reported to the user with the following message: "No heading information available!". On the right side, the main titles and description texts belonging to them can be seen in a table structure display.

The title list situated on the left side also works as a bookmark.

For example if a title is chosen on the left then the user will be guided in the document to the same title section of the document. The table structure on the right side displays also other data besides the description, such as status of the record. All of them appear in separate columns of the table. The order of the columns can be changed by an easy drag-and-drop operation. The width of the columns can be adjusted by clicking on the borders and moving the mouse left or right while pressing the mouse button. Columns can also be hidden or displayed by right clicking on a column header and selecting the columns you





want to show or hide from the "Columns" submenu. Titles get a sequence numbering automatically in the document navigator.

2.2.1 Hide navigator

The left-side document navigator can be displayed or hidden. The title of the menu is changing according to the status of the navigator.

Numbering changes dynamically by adding or deleting of a new element. Nodes on the top level in the structure get a normal numbering. Sub nodes starting from a node above them (parent node) always inherit its numbering, expanded by a numbering received on their own level. Sequence numbering is illustrated by the following example:

- 1. Title 1 on level 1
 - 1.1. Title 1 on this node level 2 (inherit 1)
 - 1.1.1. Title 1 on this node level 3 (inherit 1.1)
 - 1.2. Title 2 on this node level 2 (inherit 1)
 - 1.2.1. Title 1 on this node level 3 (inherit 1.2)
- 2. Title 2 on level 1
- 3. Title 3 on level 1
 - 3.1. Title 1 on this node level 2 (inherit 3)
 - 3.1.1. Title 1 on this node level 3 (inherit 3.1)

The footer is located on the bottom part where important data is displayed, such as number of rows in the document or the name of the order in progress.

2.2.2 Column managing

The position of the columns can be inverted, as well as they can be hidden and displayed. Inverting in Windows is performed by the usual technics, namely by drag-and-drop. This means, that the user selects the required column to be moved by the left mouse button and moves it to the required position by dragging, afterwards the user releases it. The visibility of columns can also be set from the local menu of the header, mentioned above. A submenu opens from the columns menu of the local menu, which contains all column names of



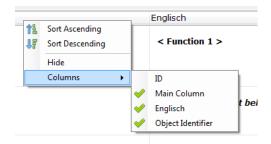
the document. The icons before the names mark the current state of the column, namely, if it is in hidden or visible mode. By clicking on the column name this state can be changed. Column names in the menu appear in the same order as they appear in the table. If a column dragging is performed, the order of the menu items is also changed.

If the user makes a right mouse button click on "hide" the current column will be hidden.

To show the column again, select in the menu columns the column you want to display.

If you select the column name again it will disappear.

The visible columns are indicated by a green checkmark and the hidden columns do not have a green checkmark.



2.1.3 Handling of multiple open documents

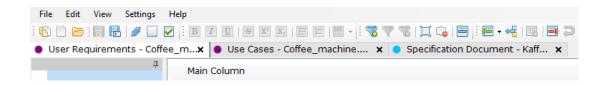
The opened documents are grouped into tabs which provide more transparency and easier handling of the documents. The name of the file and of the document is displayed on the tab. It can occur that in one file more documents have been saved.

In this case every document can be seen in a separate tab.

For each document contained in a specific .reqif file, the tab is marked with a colored circle icon. Each .reqif file will have a specific color assigned for all its documents. This way it's easier for the user to handle documents from different .reqif files.

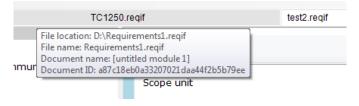






Names of the files containing the documents are displayed on the tabs. If the name for the file does not fit the given tab, it is marked with three points (...). More detailed data about the opened document can be gained by positioning the cursor above the tab. In this case, the following data appears in a ToolTip:

- File location: it shows the entire path of the opened file. In case of a zip file it shows the name of the zip file.
- File name: the name of the file. In case of a zip file, it shows the name of the file unpacked and opened from it.
- Document name: shows the name of the document of the file.
- Document ID: the identifier of the document.

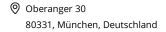


2.2.4 Closing of documents

Every opened document can be closed by File -> Close menu item or by the closing button found on the tab (X). In case of closing of a not saved document, the program offers the save option for the user. Group closing can be started by File -> Close All. In this case it can happen that certain documents' content has changed, and others' has not. That is why the program checks all the documents before closing, and at every single not saved part it asks if the user would like to save it or not. In case of clicking on the Cancel button, the whole operation is interrupted.

2.2.5 Tab Personalization

In case of multiple opened documents, the order of the tabs can be changed easily with a drag & drop operation. The chosen tab can be moved between the other tabs with a simple mouse movement.







The following settings can be found in the "ReqEditSettings.xml" file by the program. More information on the configuration file can be found in the Program Environment chapter. This is an XML structured file whose editing can be performed manually. Every setting is going to be explained at the section belonging to it.

2.2.6 Displaying of tab title settings

Every tab displays the name of the document opened in it. The default file names are displayed from the beginning and longer names are cut at the end of the tab and marked by three points. The user can set if he would like to see the end of the file name on the tab instead of the beginning of it. In this case the three points are at the beginning on the tab and the end of the file name is displayed on it as a title. The name of the setting in the XML configuration file is: TabDocumentTextAlign. Its possible values are:

- Left
- Right

In case the setting values differ the program applies the Left setting automatically.

2.2.7 Setting of tab width

The opened documents are always opened on a tab size determined in advance. The wider the tab is, the more can be seen of the name of the opened document file. The user can set these values in the TabDocumentWidth variable. Its default value is 250 px. In case of setting a wrong value the program uses the default setting automatically.

3. Editing

The biggest part of the window is occupied by the list for data editing. This displays data in a table in which every single column represents a data type and the rows contain data belonging to them. Every row has different height according to the cell content. During displaying, the program checks the content of the cells in the row and the value of the highest cell is given as a row height. If



this height is bigger than the height of the editor, the biggest height displayed in the editor is given to the row.

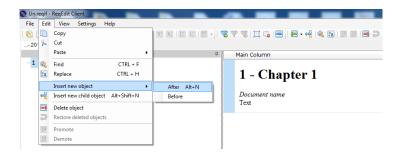
Cursor and mouse can perform navigation between the cells too. Clicking F2 key or by double click on the cell can start data editing. Every single cell type has its own editor control, of which we can distinguish seven.

The cells with grey backgrounds mean that the value (cell) is read only. XHTML attributes and the main column have white backgrounds even if they are read only. They can be opened normally but cannot be edited.

If the user starts to edit one cell, then the cell background color will be light yellow.

The content of the XML file is also changed and upgraded automatically by adding and editing data (and by saving it).

We have the possibility to insert a new object, insert a new child object and remove an object from the document. Adding a new object is done by inserting a new row. The new row will contain all the attributes that are set for the document.

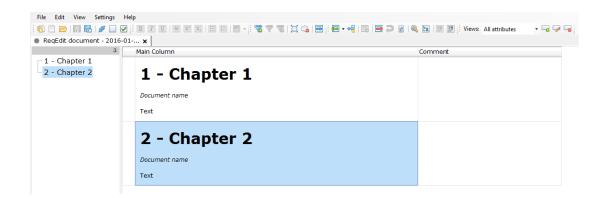


3.1 Insert new object



Adding a new object on the same level will create a new row in the table on the same level of the tree hierarchy. A new empty line will appear. In case it is edited, it will look like this:





3.1.1 After

This option allows you to add a new object after the selected one, on the same level of the hierarchy.

3.1.2 Before

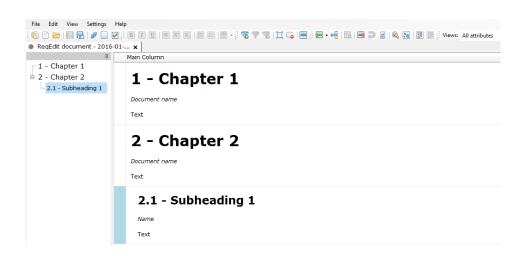
This option allows you to add a new object before the selected one, on the same level of the hierarchy.

3.2 Insert new child object



Add new object as child will create a new row in the table, below the selected line. It is a child in the tree hierarchy. A new empty line will appear. In case it is editted it will look like this:





3.3 Delete object

Delete the selected object row. This function will place the removed object into a deleted state. The objects from this state can be seen with this option:



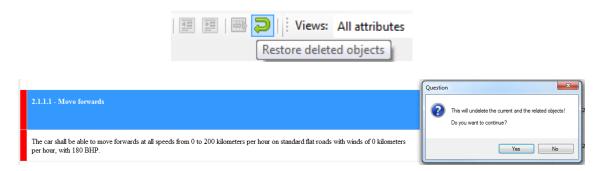
Note! For being able to delete a row, the document needs to contain the "ReqIF.ForeignDeleted" attribute. If it doesn't contain it, ReqEdit will ask if you want to add it. If you choose not to add the attribute, you will not be able to delete rows from the document.

All the removed objects will be marked with red. Like this:

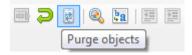




A deleted object can be restored by selecting it and clicking on the "Restore deleted objects" button from the toolbar menu or from the right mouse click menu.



Note! The deleted objects and associated links are not removed permanently from the document, they are just marked as deleted using the "ReqIF.ForeignDeleted" attribute and removed from display. If the objects and links need to be removed permanently, the "Purge" function needs to be used.



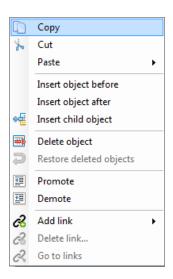
The "Purge objects" button can be found on the toolbar menu and in the "Edit" tree from the main menu.

Note! The "Purge" function will permanently remove all rows which are marked as deleted.

3.4 Copy and move objects

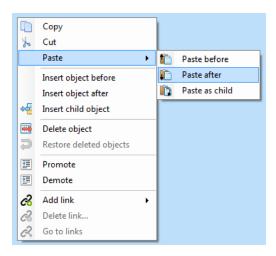
Objects can be copied or moved by right clicking on a row in the main interface or on an object heading in the explorer and selecting copy or cut from the menu.





NOTE: If an object selected for copying contains links, the program will ask if you want to copy it with or without the links. Also, if the object has child elements, these will also be copied or moved.

After you select copy or move, you can click on row in the main interface or on an object heading in the explorer and select the paste operation. You can paste the object before, after or as a child of the selected object.



NOTE: In the object explorer you can also perform a copy or move operation by using a drag and drop mouse movement. For moving an object, just drag and drop the object to the desired location. If you want to copy the object, the CTRL button needs to be pressed while executing the drag and drop mouse movement.

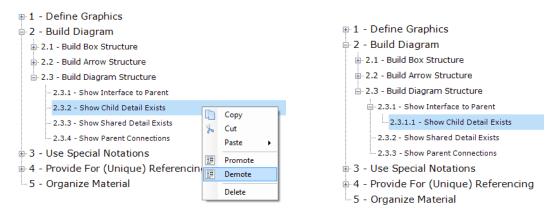


3.5 Promote and demote objects

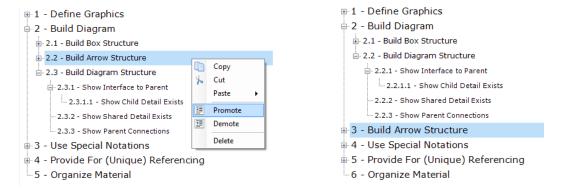
The hierarchy of objects can be changed by using the "promote" and "demote" functions.

As an example, when demoting an object, it will be changed to a child object of the object above it.

In the images below you can see the effects of a demote operation. The indentation of the object has changed and also the chapter number has changed from 2.3.2 to 2.3.1.1, making it a child object of object 2.3.1. By using the promote function, a child object will be changed to a sibling of its former parent object.



Demote function



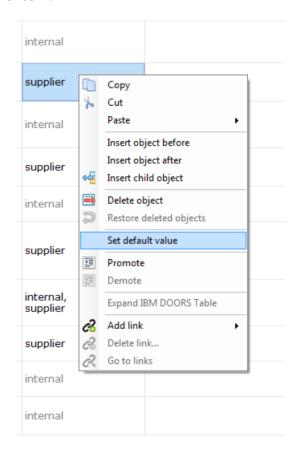
Promote function



NOTE: If you promote or demote an object which has child objects, all the hierarchy of the object will be affected by the operation, promoting or demoting all the child objects along with the parent object.

3.6 Default values

Each attribute can have a default value defined in the "Document settings" section by selecting an attribute and accessing the "Attribute editor". If a cell has a different value, the default value can be set back for each attribute of a row by right-clicking the corresponding cell in the grid and selecting the "Set default value" menu item.



The cells where the default value is displayed has gray text color.

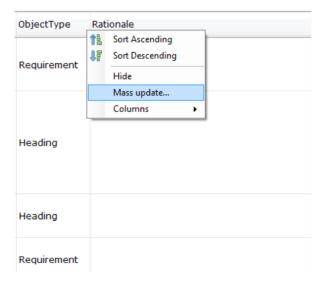
NOTE: Although the main column attributes can have a defined default value, this value is not displayed in the grid view. The default value can be seen only in



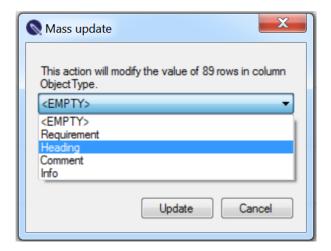
the "Attributes" tab of the "Document settings" section. Also, the default value for boolean attributes is not displayed with gray text color.

3.7 Mass update function

A function for changing the value of an attribute for a set of rows is available by right-clicking on a column header.



A window will be displayed, containing the number of rows for which the mass update applies and an input box specific for the type of attribute.





The mass update function is designed to be used together with the filtering function. This way, a set of objects can be selected according to specific criteria and updated at the same time.

NOTE: The mass update function is not available for the main column.

3.8 Data types

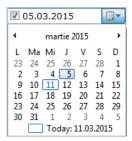
3.8.1 The Boolean type

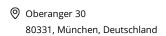
Its value can be true of false. These two states are displayed by a check box on the screen. This is an exception type, double click on the cell is not necessary for editing. Its value can be altered by a single click.



3.8.2 The Date type

A real date can be written or set as its value. In the view mode, the cell shows the value of the date, but in the edit mode it displays the DateTimePicker controller used for selecting the date. This offers help for the user to select fast the exact date. The date value can also be removed by unchecking the box in the top left corner of the date picker.









3.8.3 The Integer type

An integer can be given as a value between previously determined limits. In case of not giving a numeric type, the program will display an alert and the user can only continue if a correct value is entered.

3.8.4 The Real type

The value can be a decimal number between previously determined limits. In case of not entering a numeric type, the program will display an alert and the user can only continue if a correct value is entered.

3.8.5 The String type

An unformatted text with a previously determined length can be entered as a value.

NOTE: The maximum allowed length of a string is 600 characters. This limitation was imposed in order for the files to be compatible with IBM Rational DOORS.

3.8.6 The Enumeration type

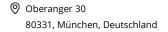
Two types of the enumeration type can be distinguished: single-value and multivalue.

The single-value enumeration type

You can choose only one value from a previously determined value set. It shows the chosen value in cell viewer mode. In the editor mode you can choose the required value from a values list (ComboBox or DropDownList).

Besides the values of an enumeration attribute type, the user can also select the <EMPTY> value to remove the value of a cell.



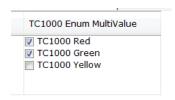






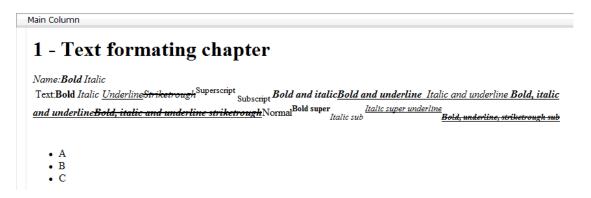
The multivalue enumeration type:

You can choose multiple values from a previously determined value set. It shows the chosen value in cell viewer mode. In the editor mode you can choose the required values from a list by selecting each check box.

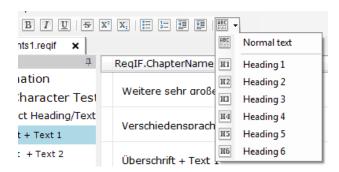


3.8.7 The XHTML type

A complex HTML content in an editor can be given as its value, which can contain a plain or a formatted text, images, objects and lists. Both, in the viewer or in the edit mode of the cell, the complex value can be seen. During editing, the HTML formatter on the icon toolbar becomes active. A possible content of the XHTML type can be the following:



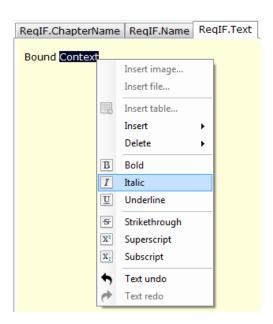
The icons used for editing are the following, which are only active in case of the XHTML type field:



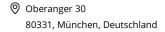


- **Bold** it changes the selected text or paragraph into bold.
- Italic it changes the selected text or paragraph into italic.
- **Underline** it underlines the selected text or paragraph
- **Strikethrough** it strikes through the selected text or paragraph
- **Superscript** it changes the selected text or paragraph into superscript
- **Subscript** it changes the selected text or paragraph into subscript
- **Unordered list** it arranges the selected text or paragraph into an unordered list.
- **Ordered list** it arranges the selected text or paragraph into an ordered list.
- **Text Style** it sets the style of the current paragraph (it cannot set a selected paragraph) which can be the following:
 - Normal text
 - Heading 1 Heading 6

Formating options are also available by right clicking inside a XHTML cell or on a selected text from a XHTML cell.



During the editing process, changes can be reverted by using the "Text undo" function from the right click menu or by using the CTRL + Z shortcut. The undo action can also be reverted by using the "Text redo" function from the right click menu or by using the CTRL + Y shortcut.







NOTE: After you leave the editing mode of the cell, the undo and redo functions will be deactivated and the change history of the text inside the cell will be erased from memory.

3.9 MainColumn

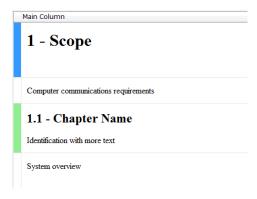
In this cell, the main fields of the document can be edited all in one. These fields are XHTML type attributes. Editing is performed by a TabControl, where every Tab contains an editor. In the view mode the totalized content of these fields can be seen. The attributes displayed in the main column can be configured (see Rearrange main column).

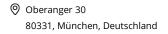
3.9.1 Status indicator

In this column the user can see the row status. These are the possible statuses:

- unchanged marked with white color
- edited marked with light green
- edited and saved marked with light blue

This column is always the first and the user cannot move, hide or set the columns width. This is a frozen column, which means that the user will always see the column, even if the document will be scrolled horizontally. If a user opens a document, every column is in unchanged mode. If cell content in the row will be changed, then the status will be edited (light green). After saving, this status will be "edited and saved" (light blue).









This column also includes link information if it is available. If an object contains a link, a symbol will be displayed according to the link type. Incoming links will be displayed using a red arrow and outgoing links using a green arrow.



For more information about links, please read the **Links** chapter.

4. View - Filtering, Searching and sorting

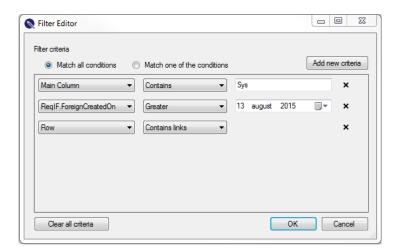
4.1 Filtering

Filter settings can be configured here, such as giving filter conditions or deleting a filter.

An already existing filter condition can be edited or a new one can be created by clicking on the "Add new or edit filter" menu item. This can be performed on the following user interface:







There is no filter condition in case of the first opening, so the window is empty. The "Add new criteria" button can add new filter conditions. It consists of the following fields:

- 1. You can select from a list by which column you want to filter. Rows can also be selected if we want to filter by links.
- 2. You can select from a list what the searched value has to correspond to.
- 3. The third field depends on the field type selected and contains the searched value.

An endless number of filter conditions can be given. The logical connection between them can be given by the "Match all conditions" and the "Match one of the conditions". The first means a logical AND and the second a logical OR. The X button can delete a filter condition and all of them can be deleted by the "Clear all criteria" button.

Filtering is performed by clicking on the OK button. At this time, only the element (title) remains active on the navigation panel, where the list element belonging to it can also be seen, and the others change into grey. In case of a repeated opening of the window, the built up filter conditions can be edited. Switching off the filter is possible. As an effect, the whole document can be seen again and the given filter conditions are not lost. The Activate Filter or Deactivate Filter menu item of the Filter menu can be activated again. The Delete Filter menu item performs deleting of a filter. Filter commands can be given from shortcut icons too.





4.2 Search and replace

By clicking on the menu, the search panel opens on the top of the editor window, which is shown on the following diagram:



The text, which is searched for can be given in the search field. Searching is started by the ENTER button or by the Previous or Next buttons next to it. The column(s) where the program will search for the text can be selected from the "Search in" list. The options are:

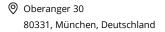
- Main Column, which searches in the three main fields (ChapterName, Name, Text).
- Entire document, which searches in all fields of the document.
- ForeignID, which searches only in the Foreign ID field. This option can be selected only if the ForeignID field is defined in the current document.

Coloring the cell into green shows the results. The Previous and the Next buttons can perform navigation between the results. The number of the results is also displayed after the "Search in" selector list. If you reach the end of the search, it is signaled by a message. By entering a new text and by starting the search, the old search is deleted automatically and the new one is started. Searching can be deleted by the Cancel button or by closing of the search panel by clicking the X button located on its right side.

By clicking on the "Replace" button on the toolbar, the following form will be displayed:



For the search and replace function, you need to add in the search field the text you want to replace and in the "Replace with" field, the text you want to replace it with.







By clicking on the "Replace" button on the form, the program will search for the first occurrence of the searched text and highlight it. By clicking the button again, the searched text will be replaced with the text from the "Replace with" field and the next occurrence will be highlighted.

If you don't want to replace a specific occurrence, you can skip it by clicking on the "Next" button.

The number of replaced items will be displayed after the "Replace all" button. By clicking the "Replace all" button, the program will automatically replace all occurrences of the searched text.

NOTE: The replace function works only for the Main Column.

4.3 Sorting

Data displayed in the list can be sorted according to one or more conditions. The usual clicking on the list header performs the single sorting in Windows. It means the header of the column has to be clicked on, according how the user would like to sort the list.

Multi-sorting according to more conditions can be done the same way, with a difference. During clicking on the header, the user has to hold the CTRL button. In this way a signal is given to the program that the user would like to sort the data according to more columns. This time the program sorts on the already sorted data according to the new added condition (column).

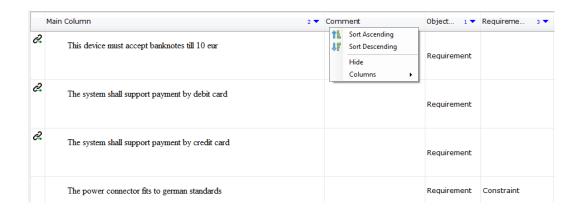
In this way data can be sorted according to any number of columns. If you like to sort data according to new columns, (you would like to delete the already existed sorting) the CTRL button has to be released during clicking on the new column. As a result, sorting according to the already existed columns is deleted and the program sorts the list according to the column which has been clicked on. After this, the required sorting columns can be compiled by also holding the CTRL button.





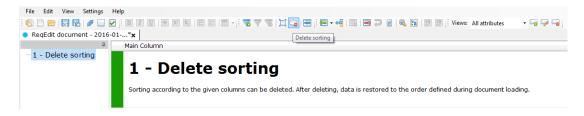
Sorting can be performed according to ascending and descending order. Changing the order can be performed by re-clicking on the column header (in case of multi-sorting the CTRL or Shift+CTRL button also has to be held). The numbered icon found on the right of the header marks the sorted columns and their direction. The number marks the priority of the sorting and the seated or standing triangle after it marks the sorting direction. The \blacktriangle sign marks the ascending and the \blacktriangledown sign marks the descending order.

Setting of ascending and descending order can also be set from the local menu of the column. This menu can be displayed by right clicking on the given column header, where Sort ascending and Sort descending menu items can be selected.



4.3.1 Delete sorting

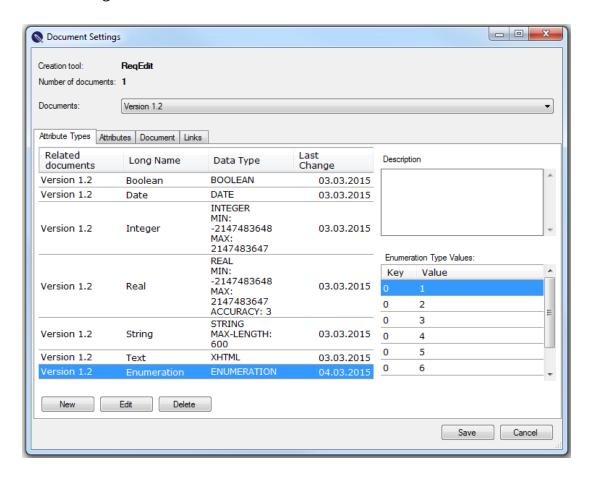
Sorting according to the given columns can be deleted. After deleting, data is restored to the order defined during document loading.





5. Attributes and attribute types

Editing of datatypes and specObjectTypes belonging to the document can be performed by accessing the "Document Settings" menu item. Its user window is the following:

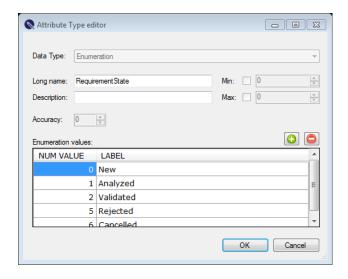


NOTE: Before accessing the document settings, the file needs to be saved. If the file was not saved by the user, the program will automatically ask to save it. More details on file saving can be found here.



5.1 Attribute types (DataTypes)

Datatypes in the document can be seen in the list. The name of the datatype, type, (extended by the individual properties belonging to the type) and its last modification date can be seen in the columns. The description of the selected datatype and in case of Eumeration type its values can be seen on the right side in the list. A new type can be created using the buttons under the list, an already existed type can be edited or rather deleted. By clicking on the New and Edit (editing of a datatype can be started by double click on the list) buttons we get the same surface where properties of the datatype can be given or modified.



Properties can vary according to the selected datatype. Properties to be reached at a special datatype can be seen in the following table:

	Long Name	Description	Min	Max	Accuracy	Enum Values
Boolean	Χ	Χ				
Date	Χ	Χ				
Enumeration	Χ	Χ				X
Integer	Χ	Χ	Χ	Χ		
Real	Χ	Χ	Χ	Χ	Χ	
String	Χ	Χ		Χ		
XHTML	Χ	Χ				



In case of an enumeration datatype values can be extended or deleted with the buttons found in the right top corner of the list. Value editing can be performed by overwriting the value in the list. The value of the NEW VALUE has to be a number, it is not necessary to be unique. LABEL values have to be unique, the program obliges the user to keep this. After adding the new datatype or after modifying an already existing one, modifications become visible right away in the list of the previous window. The final modification is performed after clicking on the Save button of the Document Settings window. By clicking on the cancel button, all the recorded and modified data will be lost.

By clicking the delete button, attribute types can be deleted but only if there are no attributes of that specific type present. If such attributes are present, you will get a pop-up message containing the names of those attributes. To be able to delete the attribute type, first you need to delete all the attribute fields of that type.

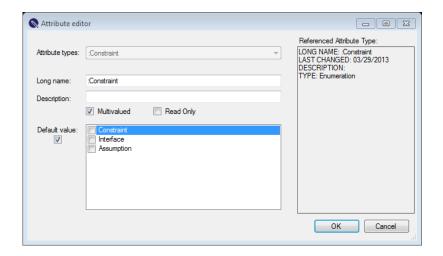
NOTE: The following data types have attribute types created by default: integer, real, date, string, xhtml and boolean.

5.2 Attributes

Attributes of the document can be reached by clicking on the Attributes tab. Its structure is very similar to the ones mentioned above with an exception, that on the right it displays the default value defined at the attributes referring to all types. Adding a new attribute, editing of an already existing one, and deleting (NOTE: in this version the user can delete only the new created attributes) can also be started from the buttons found at the bottom of the list. By clicking on the New and Edit buttons, the following surface is displayed:







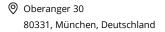
The required attribute type can be selected in the upper list, the name, description and other properties of the defined attribute can be selected in the other fields:

- Multivalued it can be activated only in case of an enumeration type,
 which can have one or more values at the same time
- Read Only it determines the editing right of the object
- Default Value: every object can have a default value, which it gets if it is added to the document as a new element. This value can be set according to the "attribute type". On the right side of the surface in the upper list, the user can see data of the selected attribute type, on behalf of the better transparency.

By clicking the delete button, attributes can be deleted. Please consider that all data stored in the fields related to the deleted attribute will be lost.

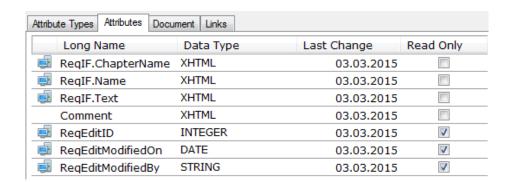
5.3 System attributes

There are 6 attributes which are created by default with each new file. They can be distinguished from the other attributes by the computer symbol in front of their name.









Three of them are part of the main column and consist of the following attributes:

- ReqIF.ChapterName editable XHTML attribute
- RegIF.Name editable XHTML attribute
- RegIF.Text editable XHTML attribute

More info on these 3 attributes can be found in the Main column section.

The other 3 system attributes are:

- ReqEditID integer type, read-only attribute
- ReqEditModifiedOn date type, read-only attribute
- ReqEditModifiedBy string type, read-only attribute

ReqEditID is an auto-incrementing ID number used for identification of the objects inside a ReqEdit document.

RegEditModifiedOn stores the last modification date of each object.

ReqEditModifiedBy stores the Windows username of the user who was the last to edit the object.

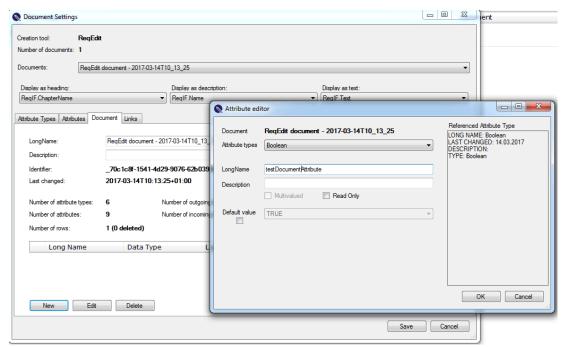
These 3 system attributes cannot be edited and are by default hidden.

NOTE: System attributes cannot be deleted.

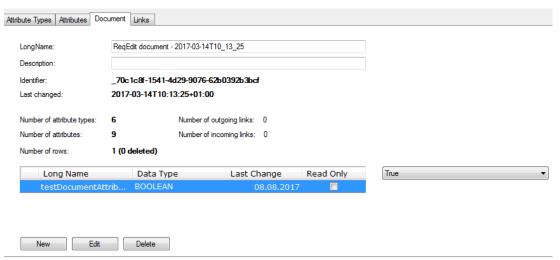


5.4 Specification Attributes

You can add to attributes to the specification/document. The attributes will only be stored as metadata for the specification/document. You can add/edit and view these attributes and their values in the document tab.



Adding new document attribute

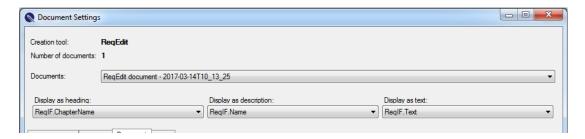


Overview of the document attributes



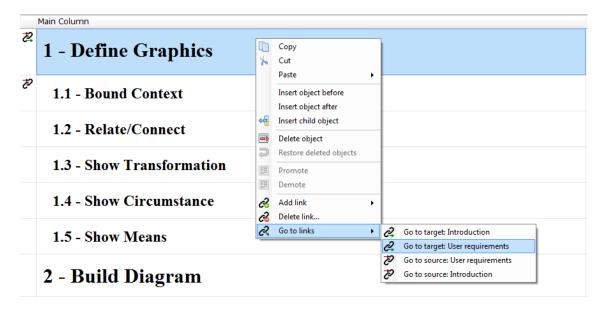
5.5 Rearrange main column

The main coulumn contains by default ReqIF.Chaptername as Heading (with automatic numbering), ReqIF.Name as Description and ReqIF.Text as content. You have the possibility to rearrange the columns or even to select other XHTML attributes that are displayed in the main column.



6. Links

Starting with ReqEdit 2.0, link support was introduced. Link information is displayed in the status indicator column, at the begining of each object row.



If an object contains links, a link symbol and arrows indicating the link type are displayed inside the status indicator column. The red arrow indicates an



incoming link and the green arrow indicates an outgoing link. If an object contains both types of links, both types of arrows are dispalyed.

6.1 Go to links

To follow a link to its destination or source, you have to perform a right click on the object row and go to the "Go to links" menu item. A submenu will open and dispaly the available links. A submenu item contains a symbol for incoming or outgoing link and according text "Go to source" or "Go to target" and also the object text (in case there is any available) or the ReqIF ID of the source or target object.

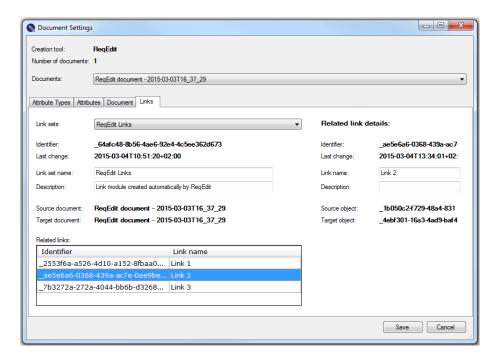
A link can be incoming from or outgoing to an object from the same document but also to another document. When clicking on a link in the submenu, the linked item will be selected and displayed on the first row in the grid. If the linked object is contained in another document, the program will automatically switch to the document's tab and select the linked object. If the document containing the linked object is not opened in ReqEdit, the program will ask if you want to open it.

NOTE: Currently we only support links between objects inside the same ReqIF file. If an object contains a link to another ReqIF file, the text "The target is placed in an outer file…" will be displayed in the links menu.

6.2 Links administration

The link administration tab can be accessed from the "Document Settings" window.





In this section, all link sets related to the selected document can be viewed and administrated. You can change the link set name and description and also edit each individual link's name and description related to that link set.

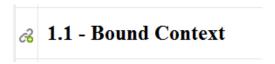
6.3 Add links

In order to create a new link, first you have to create a "start link" by right clicking on an object and then going to the "Add link" menu and clicking on "Start link" in the submenu.





After creating the start link, an icon will appear in the status column of the source object.



The next step is choosing a target object for the link. You can do this by right clicking on an object and selecting "End link" from the "Add link" submenu.



Next, you can add links to some other objects starting from your source object, by repeating the last step. After you added all your links from the source object, you can click on the "Remove start link" menu item from the "Add link" submenu.

After removing the start link, you can add a new one to another object.



6.4 External Links

ReqEdit offers you the possibility to store external links in your ReqIF document. This can be either an OSLC or a Web URL. Please select in the row you want to link and use the right mouse click to open the related menu and select the entry "Add external link". After selection, you will see this input dialog.



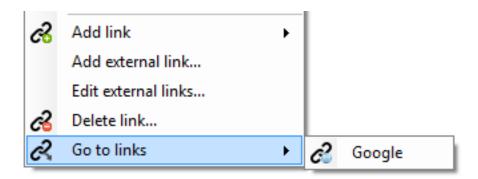
You can define with the long name a display name for the link. In the field URL please enter a valid URI (including protocol prefix like http://). The field link type is optional, and should be used to classify links (like derives, implements).

For the link direction, you can choose between INWARDS and OUTWARDS. The selection has no impact on the function, it is just a semantic. The field technology determines how the link is intended to be open. Currently all links will be opened with your default browser.

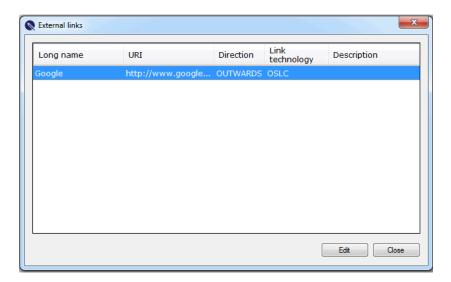
You can add an additional description to the link as well. If you now press "Save" button, you will see the link in the Go to links menu with the selected name. If you don't define a name the URI will be displayed.







If you want to edit the external link, than please select in the right click menu the entry "Edit external links" and select the link you want to edit:



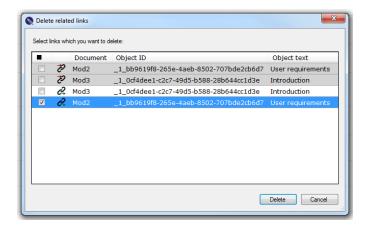
If you click on the edit button, then you will get the same dialog described before. Here you can edit all the properties of the external link.

Please take in consideration, that this feature is not implemented currently by all tools, that support ReqIF. This information may get lost if you import the ReqIF file generated by ReqEdit to other tools, that not support this feature.

6.5 Delete Links

To delete a link, you must right click on an object that contains one or more links and go to the "Delete link..." menu item. After clicking it, a window containing all links of the object will be displayed.





Only outgoing links can be deleted from an object. If you want to delete an incoming link, you must delete it from the source object.

For deleting outgoing links you have to select them by clicking on the checkbox at the beginning of the rows and click on the "Delete" button afterwards.

NOTE: Incoming links have a grey background and cannot be selected.

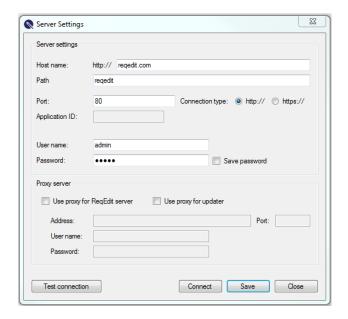
7. Server settings

For connecting to the server you need to setup first the connection to the server. For connection the mandatory fields are:

- Host name
- User name
- Password

Note! If the connection settings are saved then the connection can be initiated from toolbar.





Connect

If the connection settings are saved then the connection can be initiated from toolbar.



Proxy Settings

If your network requires a proxy for internet connections, you can find proxy settings in the "Server Settings" section. The username and password fields are not mandatory to be set, only the address and port fields are. These proxy settings can be selected to be used for the ReqEdit Server and the automatic updater and license activator, by checking the corresponding boxes.

Note! Currently ReqEdit does not support NTLM Authorization Proxy Servers.

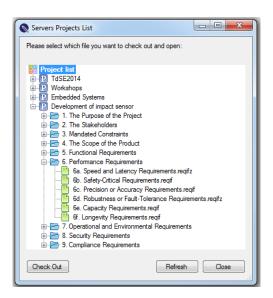


Check Out

When the connection is established a Check Out can be made. This Check Out function is adding the possibility of downloading a project from server. From the hierarchy you can choose a project and press Check Out. When the download is completed the project is automatically opened in RegEdit client.

If there is already a file with the same name in the folder where you are trying to do the Check Out, for data security, ReqEdit will not overwrite the file. To be able to save and use it in that folder you will have to rename the file in the download window and it will be connected to the server file. A file that has been manually renamed by the user after the Check Out process, will not be checked in back on the server as a new revision of the checked out file, but as a new file.

Note! When a project is on Check Out mode on server is locked for any other users until the Check In is made.

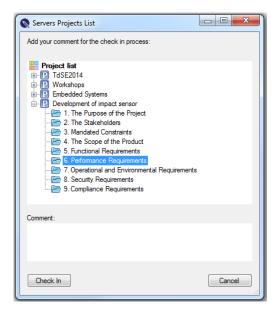


Check In

When the connection is established a Check In can be made only in case there is already a Check Out made for that project. This Check In function is adding the possibility of uploading the changes of a project to server. From the actual



opened document you can press Check In and choose the hierarchy folder where the document will be uploaded. Optionally you can also add a comment to your check in.

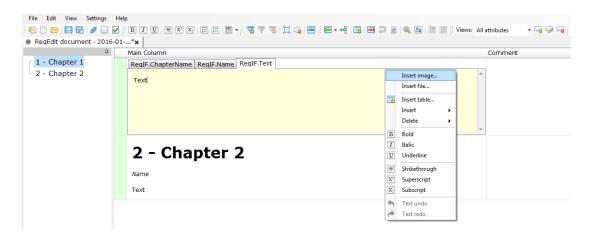


8. Pictures and OLE objects

It is possible to insert images and files in the reqifz archive files because reqifz archive files are having a zip archive which allows to store there several information such as pictures and OLE objects. The usual reqIF file is just meant for text editing. So in the case the user wants to add other information like pictures and OLE objects a reqifz archive file needs to be created.



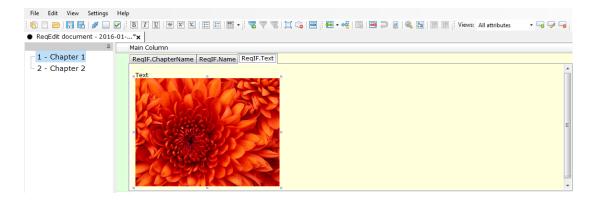
8.1 Insert Image



Inside the XHTML fields, like Main Column -> ReqIF.Text there is the possibility to add a new image.

The supported files are: png, bmp, jpg, gif, ico, wmf.

There is also the possibility of enlarge/strech the image inside the editor.



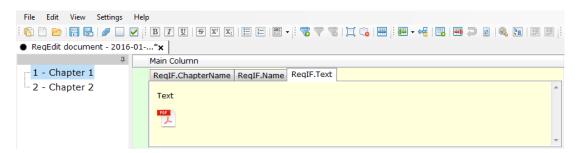
8.2 Insert File

Inside the XHTML fields, like Main Column -> ReqIF.Text there is the possibility to add a new file.

All the files are supported in case the user has an installed application on the PC to open it. ReqEdit can only open natively ReqIF file formats.



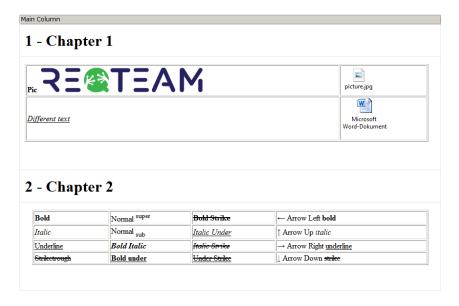
For the Pdf, office documents and images the related icons will be displayed.



If we double-click on the icon the related application will open the file and allows to handle the file in the proper way.

9. HTML Tables

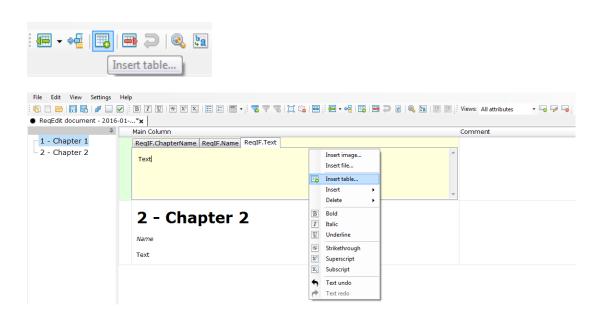
For working with table structures, ReqEdit uses the HTML table format. This tables support the same type of data like a XHTML attribute (formatted text, images, file attachments).



A HTML table can be created by clicking on the corresponding main menu item or by clicking on the "Insert table" menu item from the right-click menu while editing a XHTML cell.

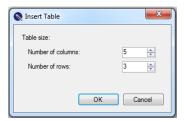






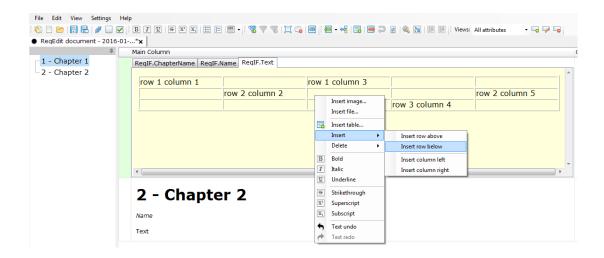
When creating a table, you can select the number of rows and columns to be added initialy to the table.

NOTE: The maximum number of columns that can be added is 30 and the maximum number of rows is 100.



After the table is created, rows and columns can be inserted or deleted by using the right-click menu items.





10. DOORS Tables

ReqEdit offers support for DOORS tables when importing a file from IBM DOORS. The table structure and content is preserved and displayed in ReqEdit after import. The cell content can be edited in ReqEdit but the table structure cannot be changed (add or delete rows or columns). A cell containing a DOORS table cannot contain any other items (text or attachments) and cannot link or be linked from other objects.

The attribute values which are displayed in the table cells can be selected from the user settings menu (see Chapter 14.4 for details).

The default DOORS table attributes (ex: TableBottomBorder, TableCellAlign...) are hidden from display but can be shown by right clicking on the column header and choosing to display them in the column list.

NOTE: By changing the table attributes manually, there is a risk that IBM DOORS will not import back the file correctly if the modified parameters are out of bounds.





2 - Chapter 2

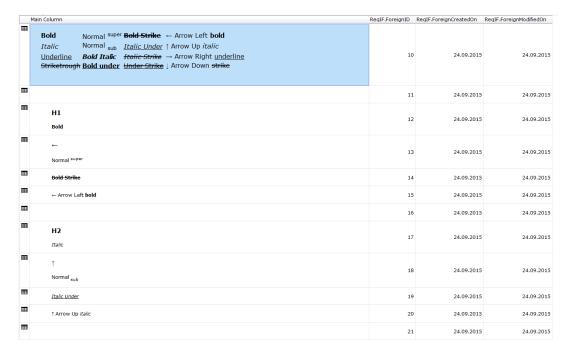
■

Bold	Normal ^{super}	Bold Strike	← Arrow Left bold
Italic	Normal _{sub}	<u>Italic Under</u>	↑ Arrow Up <i>italic</i>
<u>Underline</u>	Bold Italic	Italic Strike	→ Arrow Right underline
Striketrough	Bold under	Under Strike	↓ Arrow Down strike

DOORS Tables are displayed by default in the HTML table format (see <u>Chapter 9</u> for details). By accessing the right click menu on a row containing a DOORS Table, you can select to display the table in expanded format.

In the expanded format, you can edit all the individual attributes for each table cell, not only the three main attributes which you can select to be displayed in the table format (ReqIF.ChapterName, ReqIF.Name and ReqIF.Text). Links can also be added for each table object.

The table header structure and row structure are also displayed in the expanded format but the cells are not editable and cannot contain links.



11. Importing



The ReqEdit editor supports the ReqIF Format as open platform for many of the tools that are on the market. So the file attachments and images are stored in the archives as they are (no conversion of any type necessary) and for formatting we are using the XHTML tags that are designated for this purpose.

Not all tool vendors share this spirit, and they have their own kind of implementations that need to be adapted. One of these tools, IBM Rational DOORS, uses for external file reference an OLE wrapping around each of the files. This is ReqIF conform, but not intended. So ReqEdit needs to un-wrap this OLE envelope to get to the original file. This is happening during the import. ReqEdit creates a new file, with all the original files inside. The filename is like the original one, but has an additional suffix called "_imported" in the name. This imported file can be edited. The linked external files can be opened with an application for the specific file type.

11.1 RIF 1.1a & ReqIF 1.0.1

In order to edit files coming from DOORS (directly or via Atego Requirement Synchronizer) you need to execute an import, by clicking on File->Import.

NOTE: IBM Rational DOORS version. 9.5.2 and Atego Requirements Synchronizer 2.4 have been tested.

By clicking the "Import" menu item, a wizard will be opened and guide you through the import process.





On the first page of the wizard you will find some information about the wizard and a link to the documentation. By selecting the "Do not show me this start page next time" check-box, this page will not be shown anymore on the wizard start-up.

In the next page of the wizard, the format of the file you want to import has to be selected. The available options are "IBM Rational DOORS© compatible ReqIF format", "Rational DOORS Next Generation", "RIF 1.1a format" and "Word format".



Source type
Select the source file type

Import IBM Rational DOORS® compatible ReqIF format file into ReqIF 1.0.1 format
With this selection, you will get an ReqIF 1.0.1 or ReqIF 1.0.1 archive file. You can select IBM Rational DOORS® compatible ReqIF or ReqIF archive file.

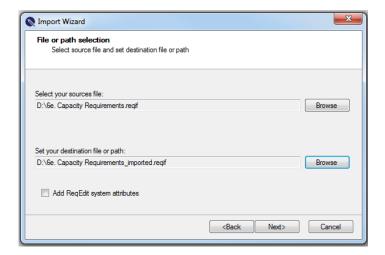
Rational DOORS Next Generation
With this selection, you will get an ReqIF 1.0.1 or ReqIF 1.0.1 archive file. You can select Rational DOORS Next Generation compatible ReqIF or ReqIF archive file.

Import RIF 1.1a format file into ReqIF 1.0.1 format
With this selection, you will get an ReqIF 1.0.1 or ReqIF 1.0.1 archive file. You can select RIF 1.1a or RIF 1.1a archive file.

Import Word format files into ReqIF 1.0.1 format
With this selection, you will get an ReqIF 1.0.1 format
With this selection, you will get an ReqIF 1.0.1 archive file. You can select the following Word file types: .doc. docx and .rtf.

Cancel

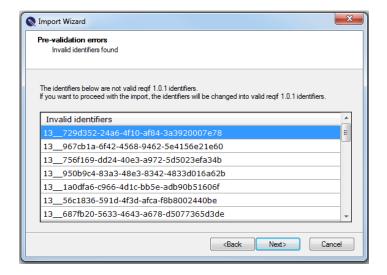
The following page lets you select the file you want to import and also the destination path and name for your output file.



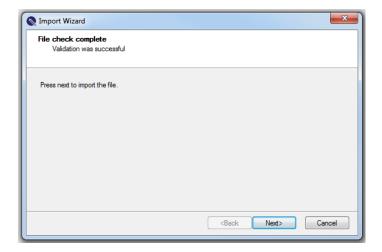
After selecting the file paths and clicking next, the program will do a prevalidation check and verify the objects IDs. Some valid RIF IDs may not be valid in ReqIF format, thus creating invalid files. It is possible that some requirements management tools can also generate invalid ReqIF IDs. If some IDs are not valid, the wizard will ask if you want them to be fixed or not. If you agree, the wizard



will fix the IDs and after the validation, you can continue with the importing process, or else the wizard will stop.

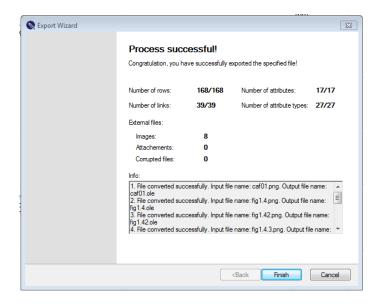


On the next page, the program will check the file structure and compare it against the ReqIF or RIF schema. If the process is successful, the file can be imported. If you click on the "Next" button, the file will be imported.

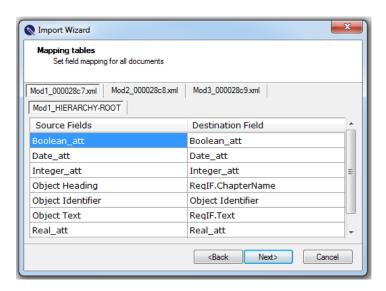


After the file is imported, a confirmation page will be displayed. Here you can see several statistics about the imported document and an info panel were warnings and errors are displayed in case something occured during the import.





NOTE: If you import a file from RIF format, another page containing mapping tables will be displayed after the pre-validation. This page contains tabs for each file (in case of a RIF archive) and for each document contained in the xml files. For each document you can set the destination attribute name for every source attribute.



NOTE: Please consider that some attribute names are already in use by the ReqIF standard and have a pre-defined type. ReqEdit has also a set of attribute names that must not be assigned by the user. You can find a list of these attributes here.





Also, for best interoperability between tools, use only the following characters in the attribute names:

- Alphanumeric characters (letters of the alphabet and numbers)
- Space characters
- Periods (.)
- Underscores (_)
- Hyphens (-)

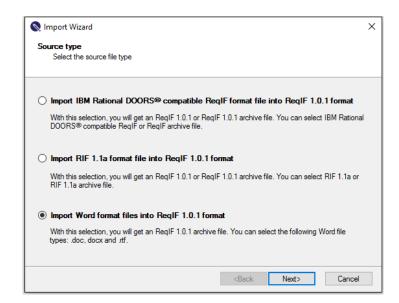
Rational DOORS Next Generation Limitations

- Works with Rational DOORS Next Generation version 6.0.2 and above.
- Until DNG reaches version 6.0.4, Workflows in ReqIF roundtrips are not supported.
- Links between artifacts are not supported.

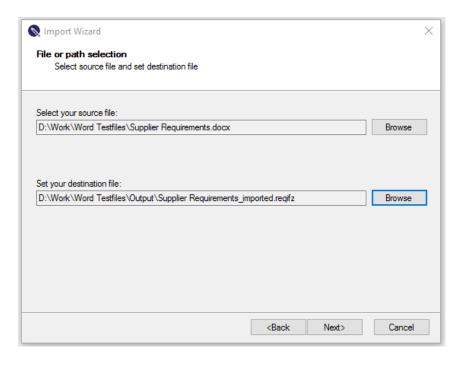
11.2 Word import

The Word import is an extra feature that can be requested when purchasing your ReqEdit license. This feature works like the other import functions and supports the import of .doc, .docx and .rtf files.



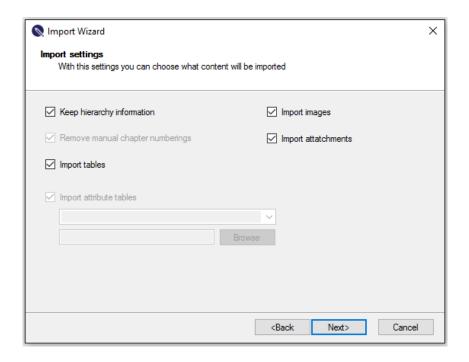


The Word import can be started by opening the same import wizard as for the other file types and selecting the third option, "Import Word format files".



The next wizard page lets you select the input and output files.



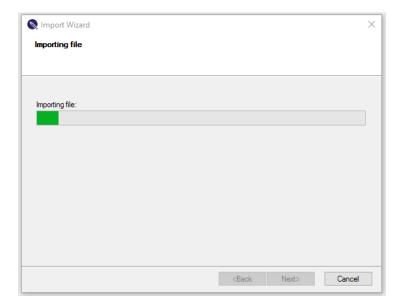


After selecting the input and output files, the next page displays a list of options for the import. The available settings are:

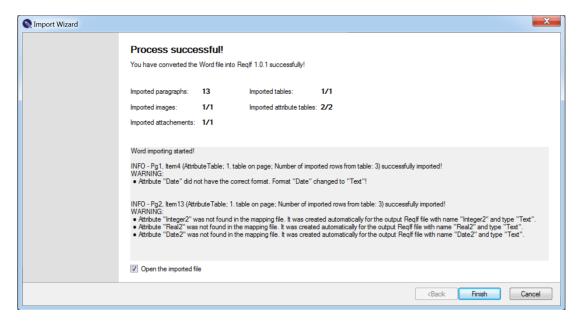
- Keep hierarchy information will recreate the parent/child structure found in the Word document, based on Heading levels. If not enabled, all Headings will be displayed on the first level.
- Remove manual chapter numberings with the format (<number>(.<number>)*).
- Import images if the option is selected, embedded images (JPG, PNG, BMP) in the Word document will be imported to ReqIFz file and referenced inside the ReqIF object. If the option is not selected, all images in the Word file will be ignored.
- Import attachments if the option is selected, embedded objects (Word
 (rtf, doc, docx), Excel (xls, xlsx), Powerpoint (ppt, pptx)) in the Word
 document will be imported to ReqIFz file and referenced inside the ReqIF
 object. If the option is not selected, all objects in the Word file will be
 ignored.
- Import tables if the option is selected, all tables will be parsed an converted to a ReqIF compatible (HTML) table. If the option is not selected, all tables in the Word file will be ignored.



• Import attribute tables – if the option is checked, a selection "First row"/"First column" is displayed for parsing option; a field for mapping file selection is also displayed.



In the next step, the wizard will start the import process with the user defined settings.



On the last page of the wizard you can see details regarding the import. In the upper part of the page, you can see the numbers of the imported elements.



Warnings and other information (if necessary) are displayed on the lower part. More details on the import operation can be found in the main log file, where each element status is logged individually.

When the process reaches the end, the output file can be opened directly.

11.2.1 Mapping file

The mapping file is used to translate attributes from attribute tables into ReqIF specific attributes.

If the "Import attribute tables" option is selected and the mapping file is found, the importer will parse the first row or first column (as specified by the user) for the attributes found inside the mapping file. If no attribute is found, the table will be imported as a simple HTML table. If at least one attribute is found, the table will be imported with each row as a requirement.

An example of the content of a mapping file:

```
Attribute_1 | Attribute_A | string
Attribute_2 | Attribute_2 | text
Attribute_3 | Attribute_B | integer
Attribute_4 | Attribute_4 | real
```

If no type is given, the default type will be text:

```
Attribute 5 | Attribute C
```

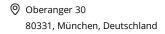
For a real number attribute, you can set the decimal separator as . (dot) or , (comma). If the separator type is not set, the deafult will the . (dot).

```
Attribute 6 | Attribute 6 | real: .
```

For a date attribute, you can set the display format. If the format is not set, the deafult format will the one seen in the example below:

```
Attribute_7 | Attribute_D | date: dd.MM.yyyy
```

On left side are the attribute names for which the importer will search in the tables and on the right side will be the attributes inside the output .reqifz file.







Between the square brackets, the user can define the type of the attribute (if it's empty, the importer will set the default type "text"). The mapping file should be saved with UTF-8 encoding.

NOTE: Please consider that some attribute names are already in use by the ReqIF standard and have a pre-defined type. If you decide to assign these names to some attributes, use the correct attribute types. ReqEdit has also a set of attribute names that must not be assigned by the user. You can find a list of these attributes here.

Also, for best interoperability between tools, use only the following characters in the attribute names:

- Alphanumeric characters (letters of the alphabet and numbers)
- Space characters
- Periods (.)
- Underscores (_)
- Hyphens (-)

Common errors and warnings

A common error for a file being unable to import is the case in which you have an attribute table inside your file but one of the heading row values is missing. To correct this problem, just make sure that the header row of your attribute table is complete. If the name of an attribute is not found in the mapping file, it will be automatically created as a text attribute. If you want to have the attribute as a specific type, make sure you add it to the attribute mapping file.

Not all attribute names from the heading of an attribute table need to be defined inside the mapping file (only one is mandatory for the table to be considered as an attribute table), but all cells need to have a value.

If you get any warnings regarding the conversion of a specific value to a certain type, make sure the values in your attribute table inside the Word file are all correct. This can appear due to a mistype inside the Word file or a wrong attribute type specified in the mapping file. To fix this, check your values inside the Word file (an example for a wrong value for an ID of integer type is a value



of 123a) and also check if the attribute type is correct in the mapping file. If the types do not correspond (this is the case for boolean, integer, real, date and string types), the program will automatically convert the type to text and you will get a warning message.

11.2.2 Parsing details

The parser will translate each heading into a chapter name and each paragraph into a requirement. If the file contains a bullet list, ordered list, attachment or image, it will be added to the same requirement as the paragraph above it.

Simple tables will be translated into HTML tables in the output .regifz file.

The output file will always be a .reqifz file so it is easier for the user to add attachments or images afterwards.

11.2.3 Features and Limitations

Features:

- Import headings as chapter names
- Import paragraphs as text
- Import all main text formatting(bold, italic, underline, striketrough, superscript, subscipt)
- Import all unicode characters
- Import ordered lists
- Import unordered list
- Import attachments (optional)
- Import images from .doc and .rtf (optional)
- Import tables as HTML tables (optional)
- Possibility to keep hierarchy based on heading level
- Possibility to remove manually added chapter numberings before headings

Limitations:

- Import images from .docx not supported yet
- Cell merging on tables larger than one page is supported yet



- Import attribute tables as requirements with attributes not supported yet
- Starting ordered list with a value different from "1" is not possible due to a limitation in the RegIF standard
- Different fonts
- Font size, color, background color, styling
- Text alignment
- Document comments
- Text box, Footnotes
- Shapes, charts, smart art, word art, quick parts, images in tables
- Webdings, Wingdings
- · Heading, Footer
- Macros
- Changes on a document with Track Changes enabled
- Restrict editing
- Word file properties
- Word fields

12. Exporting

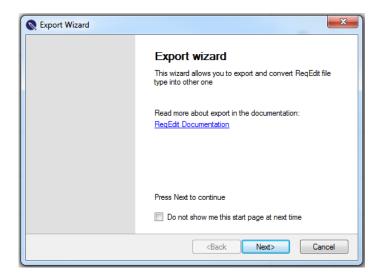
If the files that the user edits or creates should be imported to IBM Rational DOORS (directly or via Atego Requirement Synchronizer), an export is necessary.

After editing and before importing to DOORS, you have to do an export by clicking on File->Export. During the export all the linked files will be wrapped in an OLE envelope. To protect the ReqEdit variant of the ReqIF file, the export function will ask the user for a new file name, where to save the DOORS variant. This new file can be imported to IBM Rational DOORS.

NOTE: IBM Rational DOORS version. 9.5.2 and Atego Requirements Synchronizer 2.4 have been tested.

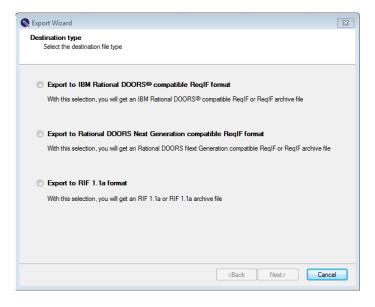
By clicking the "Export" menu item, a wizard will be opened and guide you through the export process.





On the first page of the wizard you will find some information and a link to the documentation. By selecting the "Do not show me this start page next time" check-box, this page will not be shown anymore on the wizard start-up.

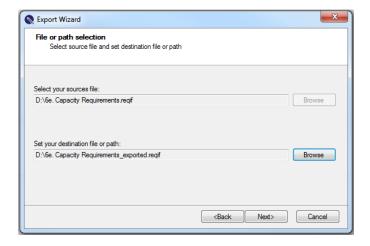
In the next page of the wizard, the format of the file you want to export has to be selected. The available options are "IBM Rational DOORS© compatible ReqIF format", "Rational DOORS Next Generation", and "RIF 1.1a format".



The following page lets you select the destination path and name for your output file. In case you want to export to RIF format and your file is a multi-document file, multiple .zip files will be created at export. In this case, only the

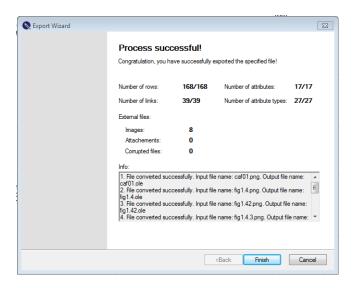


destination folder can be selected and the file names will be assigned automatically.



After selecting the file paths, the wizard will convert your file and a confirmation page will be displayed. Here you can see several statistics about the exported document and an info panel were warnings and errors are displayed in case something occured during the export.

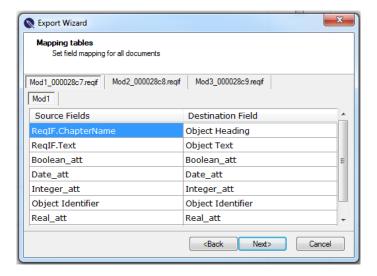
You can find your exported files in the destination directory you have specified on the previous page.



NOTE: If you export a file to RIF format, another page containing mapping tables will be displayed after you select the file paths. This page contains tabs for each

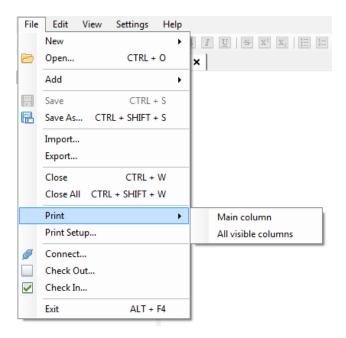


file (in case of a multi ReqIF file archive) and for each document contained in the .reqif files. For each document you can set the destination attribute name for every source attribute.

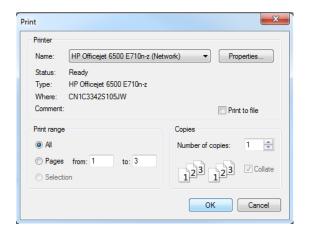


13. Print





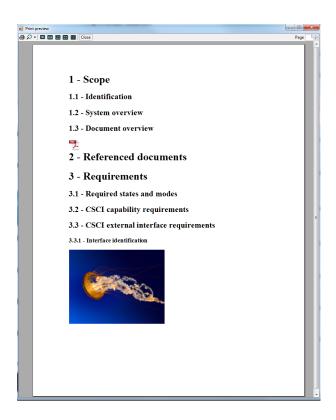
Printer setup



Main column

This printing function will prepare for printing only the main column of the selected document. The content can be seen before printing on the print preview window. The visual output of the print preview is similar like the content from the ReqEdit client grid. Bellow you can see a screenshot of the print preview.





All visible columns

This printing function will prepare for printing all columns of the selected document. The content, before printing, can be seen on the print preview window. The visual output of the print preview is similar like the content from the ReqEdit client grid, only for main column, the attributes appear into a grey box bellow each main column row.

Note! For selecting which columns you want to appear on the print you can use the Hide function. Only the visible columns will be printed.



Bellow you can see a screenshot of the print preview.



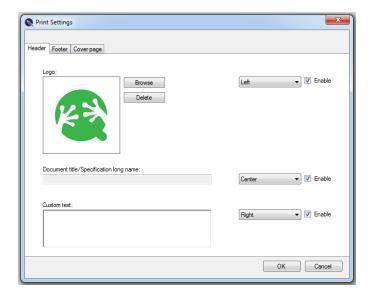




Print Setup

The print setup section can be accessed from File -> Print Setup.



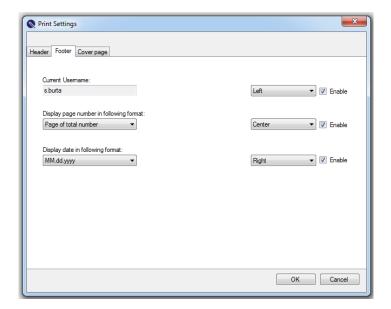


The print setup window has 3 tabs where you can set up the Header, Footer and Cover page.

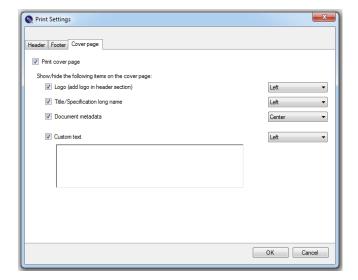
In the Header section you can select if you want to display any information on the top of the page. You can choose to display a logo image, a document title and a custom text. Each of these can be positioned on the left, center or on the right side of the header.

In the Footer section you can select if you want to display any information on the bottom of the page. You can choose to display you username, page numbering with options to display the single page number or the page number out of the total pages and the current date with options for the date format. Each of these can be positioned on the left, center or on the right side of the footer.



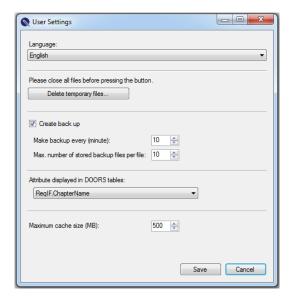


In the Cover page section you can select if you want to print a cover page and the information to be displayed on it. You can select following sections to be displayed on the cover page: logo (image must be selected in the header section), title (specification long name), document metadata (file name, created on date, printed by and project title) and a custom text area. Each of these can be positioned on the left, center or on the right side of the cover page.





14. User settings



14.1 Multilanguage support

The current version is available in English and German. The language can be changed by accessing **Settings** -> **User** in the main menu and selecting a language from the drop-down list.

Note! ReqEdit client needs to be restarted for the changes to take effect.

14.2 Delete temporary files

The "Delete temporary files…" button deletes all File backups, Temporary Files and File Changelogs stored in the local workspace. The ReqEdit changelog and settings are not deleted.

14.3 ReqEdit Backup

When a file is saved for the first time, ReqEdit automatically makes a backup copy of the initial state of the file and also starts the timed backup process. By



default, the program creates a backup every 10 minutes until it reaches 10 backup files. After that, the oldest backup file will be overwritten. The number of minutes and number of backup files can be changed by the user in the "User settings" window.

The timed backup process can also be disabled by unchecking the "Create backup" box.

By default, ReqEdit stores the backups in the Windows user folder. This is a Windows 7 location sample:

C:\Users\user_name\AppData\Local\ReqEdit\ReqEdit\BackUpFiles

NOTE: The locations of the Log and Backup folders can be changed. More information can be found in the <u>Program environment</u> chapter.

14.4 DOORS table attribute selector

In this section you can select one of the 3 primary attributes to be displayed in DOORS tables.

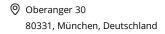
ReqIF.ChapterName = Object Heading ReqIF.Name = Short Text ReqIF.Text = Object Text

14.5 Image caching

To improve grid display performance, ReqEdit implements an image caching system for XHTML cells. By default, the cache size is set to 500 MB and can be changed by the user in the "User Settings" section.

15. Document properties

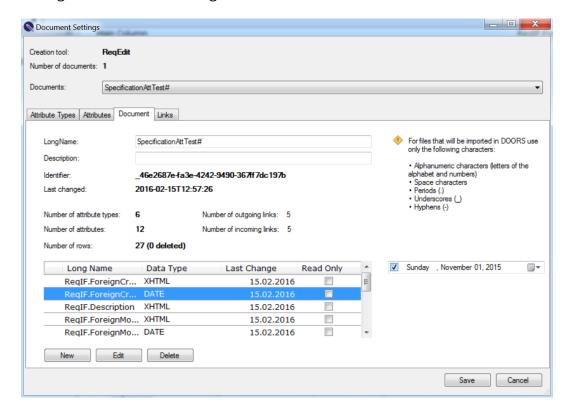
In the "Document" tab of the **Settings** -> **Document** section, you can edit the name, description and attributes of the current document. If your file is an archive or a multi document file, you can select any of the contained requirements documents and edit its name, description and attributes.







If you try to rename the document and use any special characters, you will get a message with a list containing all alowed characters.



The attributes of the document can be added, edited or deleted exactly like the object attributes from the "Attributes" tab. On the right side you can see the value(s) of the selected attribute.

In this tab you can also see some document statistics including:

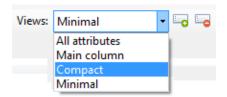
- Number of documents in file
- Number of rows in selected document
- Number of attributes in selected document
- Number of attribute types in selected document
- Number of incoming and outgoing links



16. Document views

In ReqEdit, custom views can be created for requirements documents. Using views, you can hide certain columns and save the view for future use. Filters and sorting options are also saved.

You can select an existing view from the drop-down list located on the toolbar. Two standard views are available: "All attributes" and "Main column".



A new view can be saved by clicking on the "Create new view" button on the toolbar and entering a name. You can also delete a view by selecting it from the drop-down list and clicking on the "Delete view" button.

Note! The two standard views cannot be deleted.

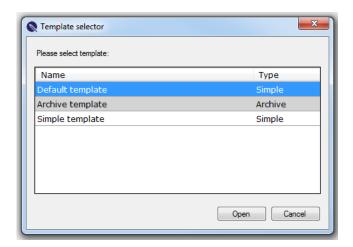
17. Templates

You can create templates as normal reqif and reqifz files which you can later copy into the "Templates" folder inside the ReqEdit main folder. By doing so, you will have the option to use these templates when creating a new reqif or reqifz file.

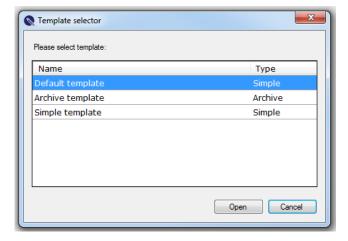
When creating a new reqif file or when adding a new document to a reqif file, you can only select simple reqif files as templates.







When creating reqifz archive files or adding a new document to a reqifz file, both reqif and reqifz files can be used as templates.



NOTE: Multi-document files are not valid templates.

18. ReqEdit Log

For each action that modifies the structure of a document, an entry is created in the ReqEditEventLog file. The log entries will not store any actual data from the documents, just the actions performed in ReqEdit.



The log files can be found on the local settings of the OS user. This is a Windows 7 location sample: C:\Users\user_name\AppData\Local\ReqEdit\ReqEdit\SystemLog

19. ReqEdit Buttons

It offers the most frequently used commands in the interest of faster working. The icons used here can also be found in front of the menu items corresponding to them therefore it can be set more easily which icon belongs to which menu item.

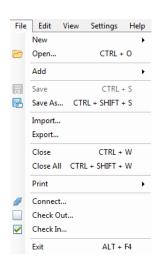


Moving the cursor above the icons, in the ToolTip it can be read which command can be performed by the given icon. The toolbar place of every icon can be changed, and it can be adjusted to the four sides of the working surface. This can be performed by dragging the four points located at the beginning of the toolbar to one of the four sides of the surface.

20. Keyboard Shortcuts

Users can reach the often used commands with shortkeys. On the menupoint we can see which shortkeys belong to each command:





The next list contains all the shortkeys, which are used in the program:

- CTRL + O Open file
- CTRL + N New file
- CTRL + S Save file
- CTRL + SHIFT + S Save as
- CTRL + W Close file
- CTRL + SHIFT + W Close all file
- ALT + F4 Exit program
- CTRL + D Delete sorting
 - CTRL + F Find
- CTRL + H Replace
- CTRL + E Add new or edit filter
- CTRL + A Activate/deactivate filter
- CTRL + Q Delete filter
- ALT + N Add new object below
- ALT + SHIFT + N Add new child object
- CTRL + TAB Switch between open tabs



21. Contacting Support and Help

18.1 Help

18.1.1 Help content

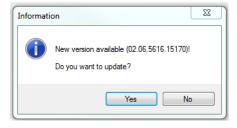
Displays the content of the Help file. This is contained in a PDF file which can be found besides the program in the HelpFiles directory. By clicking on the menu item, it opens the default PDF handler program used in Windows.

18.1.2 License info

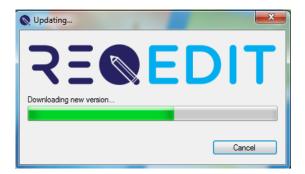
Displays the license information of the program.

18.1.3 Check for update

By clicking on the menu item, a window will open and check if there are any updates available for your version. If there is an update available, the window will display the version and ask if you want to update.



If you click on the "yes" button, the program will close and the updater window will apear and display the progress bar for the download and unpacking of the new version.





After the update finishes, the updater will ask if you want to open the new version or close the program.



If an error occurs during the download or the unzipping of the new package, the current version can still be used without a problem. You can check the update logger in your workspace at ReqEdit\Logger\UpdaterHistory.log.

If an error occurs during the overwriting of the old version, you will get an error informing you to do a rollback to the old version. This can be found in the folder "latest_backup_<datetime>" in your workspace at

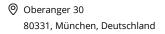
ReqEdit\UpdaterWorkingDirectory. You can copy the content of that folder back into your ReqEdit folder.

NOTE: More information on the locations of the Log and Backup folders can be found in the <u>Program environment</u> chapter.

18.1.4 About ReqEdit

Displays information about of the program.









Version number

The version number consists of four parts:

- Major version
- Minor version
- Build number
- Revision

Major and Minor numbers change only in case of publishing of a newer version, Build and revision numbers change automatically during updating. Major and Minor numbers found here can be seen in the header of the document belonging to the program, by which the program can be compared with the document versions.

18.2 Support

You can find a self-help forum here https://reqteam.zendesk.com/hc/de.

If the self-help resources have not provided a resolution to your problem, you can contact ReqEdit Support for assistance in resolving product issues. Please send an email to: support@zendesk.regteam.com

18.3 Error reports

In the case of an improbable error event, ReqEdit offers the possibility to send an error report directly to our support team. After the error report is sent, a support ticket will be created automatically and the user will get an answer as soon as possible. After the error is fixed, the sender of the error report will be contacted and a patched version of ReqEdit will be provided.

The data gathered in the error report does not include any content from your documents, just information about the actions that took place before the error occurred. This data helps our developers and support team reproducing, discovering the source of the problem and fixing of the error.



22. Notices and limitations

22.1 Insert images and OLE objects

Inserting external references like images or other file types are not possible in simple ReqIF files. The software only allows adding images and external file references to ReqIF Archives (file ending ".reqifz"). If you intend to add files to the document you created, you have to use the menu "create new archive" for a new file. If you already have a file, create a ZIP archive of this file and rename the file ending to ".reqifz". So it is possible to add new file references to the document.

Note: At the moment we do not fully support the import of OLE objects containing .wmf files.

22.2 Generate preview images of OLE files

The current ReqEdit editor is not able to generate preview images during imports or if they are directly added in the application. A file-type icon will be inserted instead of the preview (e.g. a Word or Excel symbol).

22.3 Import/Export OLE objects

It is tested with the Atego Requirements Synchronizer version 2.4 and IBM Rational DOORS 9.5.2. Earlier versions should also work but have not been tested.

If you use older Versions of IBM Rational DOORS or not export the "ReqIF Compressed" Variant, then DOORS will export the ReqIF and all this OLE objects in the same directory.

Please use for export always a new directory then compress the content of this directory (without the directory name) in a zip archive. Check if the ReqIF file and all of the OLE objects are in the root folder of the archive. Rename the file



to <<filename>>.reqifz instead of ".zip". After this operation you can import this file to ReqEdit and after editing it also export to IBM Rational DOORS.

If you use IBM Rational DOORS 9.4 you need to uncompress the generated file by RegEdit-Export in an empty directory before import.

If exports are done directly by IBM Rational DOORS, in most of the cases the tool will not offer the preview images. Instead a small cross icon is displayed (broken images) as a preview image, but the linked OLE object still exists in the background. Please don't delete this symbol, because then also the linked OLE object will be deleted.

22.4 Import large OLE Files

For the conversion of OLE objects we need contiguous memory free for the content, because of the limitations of the selected platform .NET 3.5.1 and 32bit address limitation . The conversion of 1 MB OLE file takes about 15-20MB free memory with the current implementation. A memory free functionality has been build to ensure that no problems occur, but in very seldom cases the program is not able to set enough contiguous memory free for the conversion. If this happens then the OLE file will be wraped inside an RTF file and any file types will be opened inside Microsoft Word.

On 64bit OS all available memory can be addressed and so conversion of bigger files is possible. For any file conversion the program needs about 20 times more free memory than the size of the file that will be converted.

22.5 Export large OLE Files

Exported files that have OLE objects larger than 40-45MB cannot be imported into IBM DOORS that is connected to IBM DOORS server 9.5 because of a size limitation on the server side.



22.6 Copy and Paste

It is possible to copy text content from an external source with Ctrl-C and to paste it in the ReqEdit Client with Ctrl-V. But all the formatting will be stripped from the copied text. The consequence is that all text formats (bold, italic, font size font type) and colors will be lost. Please format the pasted text after inserting it with the given format possibilities, offered by the tool.

Copy of external referenced files is not possible, so inserting images or other documents are not possible with copy and paste. Please use the menu entries "insert Image" or "Insert file" for this action.

22.7 Program environment

The standard location of the ReqEdit program files is:

C:\Users\user_name\AppData\Local\ReqEdit\ReqEdit\

This location can be changed by editing the "ReqEditSettings.xml" file found in this path. The setting that needs to be changed is the "ReqEditEnvironmentPath". Copy the path to the folder you want to use between the "value" tags and save the file.

Example: <value>D:\Programs\ReqEdit</value>

If the value is set to "default", the standard location will be used.

After you change the path, ReqEdit will create the new program files and folders at the next program start.

NOTE: The old program files will not be moved automatically. If you want to keep them, please copy them manually to the new location. Also, the "ReqEditSettings.xml" file cannot be moved to another location.



23. Appendix

ReqIF Namespace Reserved Attributes

ReqIF Attribute Name	Attribute type	Short description
ReqIF.ForeignID	String	The ID of a requirement that can be used by all tools.
ReqIF.ForeignCreatedBy	String	The username of the person who created the requirement.
ReqIF.ForeignCreatedOn	Date	The date on which the requirement was created.
ReqIF.ForeignCreatedThru	Enumeration	Method through which the requirement was created (manual input, import, copy etc.)
ReqIF.ForeignModifiedBy	String	The username of the person who did the most recent change on the requirement.
ReqIF.ChapterName	XHTML	The heading of a requirement.
ReqIF.ChapterNumber	String	The hierarchy number of a requirement.
ReqIF.Name	XHTML	The short description of a requirement.
ReqIF.Text	XHTML	The body of a requirement.
ReqIF.Description	XHTML	The main description of a requirement.

ReqEdit Namespace Reserved Attributes

ReqEdit Attribute Name	Attribute type	Short description	
ReqEditID	Integer	The ID of a requirement.	
ReqEditModifiedOn	Date	The date on which the requirement was changed most recently.	
ReqEditModifiedBy	String	The username of the person who	



	did the most recent change on
	the requirement.





User Manual ReqEdit XML Editor

Release 2.14



Table of Content

1.	About this manual	102
2.	How to start the XML Editor	102
3.	The XML editor	102
3.1	Toolbar	103
3.2	Content area	105
3.3	Validation box	106
3.4	Status bar	106



1. About this manual

Welcome to ReqEdit XML Editor, a tool that is designed as a supporting tool for ReqEdit. The user has the possibility to correct the XML text file, if the file contains invalid ReqIF content (like invalid IDS or wrong tags). This user manual describes how to use the features of the ReqEdit XML Editor.

The editor is only usable for ReqEdit Premium user.

2. How to start the XML Editor

The XML editor can be easily started from ReqEdit, by click on the menu "Add-Ons" →"ReqEdit XML editor". The editor will only run if ReqEdit is open, and will be automatically closed if you close ReqEdit.

3. The XML editor

If you open the editor, you will see four sections (from top to bottom):

- 1. Toolbar
- 2. Content area
- 3. Validation box
- 4. Status bar



```
- D X
ReqEdit XML Editor
      📂 🔚 🧮 🗙 🔎 😅 📮 👪 🗎 🖺 🖟 Document type: ReqIF
                                                                                                                                                                                                                                                           - I
                         <THE-HEADER>
                                                      <SOURCE-TOOL-ID>ReqEdit/SOURCE-TOOL-ID>
<TITLE>ReqEdit document - 14.03.2015 17:09:12</TITLE>
                                            13
                                                      <REQ-IF-CONTENT>
                                                               <DATATYPES>
                                                                       ANALITES CAPACITICS CONTINUES CONTIN
    Line Col... Message
Copyright © 2014-2017 REQTEAM GmbH. All rights reserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Version: 1.0.6414.27735
```

3.1 Toolbar

Open: open a ReqIF file or ReqIFz archive in the editor. The ReqIFz archive will be automatically unpacked and all the containing documents will be opened.

Save: save changes in the current file. If the file is part of one ReqIFz archive, all the changes inside the archive will be saved and the files will be packed as well.

Save As: save the current content in a new location

Close: close the current document. If the file is a valid RIF or ReqIF file, then you will have the possibility to open the file in a new ReqEdit instance.

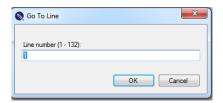
Please take in consideration, that each ReqEdit instance consumes one network license. With a user license, you can open unlimited instances on your computer.

Undo: undo last user action

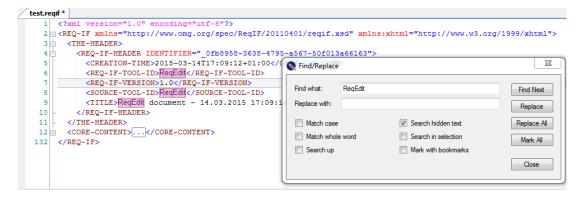
Redo: redo the user action, that was reverted by undo

Goto Line: jump to the line entered in the XML file. The range displayed in the dialog is determined by the total lines of the current file.





Search/Replace: search for a text inside the document. Enter the search text and press the button "Find Next" to start or to continue the search. If you press the button "Mark All" all findings of the entered search string will be highlighted.



To replace a part of a text you need to enter the search string and the replacement in the corresponding input fields. Press then the "Replace" button, to replace the next occurrence of the search string. Alternatively, you can press the "Replace All" button, then all the occurrences of the search string in the current file/tab will be replaced.

Additional to default search you can change some options of the search. If you like to search the exact entered text, then select "Match case" option. If you searching for complete words (starting and terminated by a non-character) than select the "Match whole word" option. You can search also in reverse order by selection the "Search up" option.

You can search as well in collapsed XML tags if you switch on the "Search hidden text" option. If you want to limit the search, then you can select the section with the mouse and then select the option "Search in selection".

Collapse all nodes: collapse all xml nodes in the current file/tab. So only the root node is visible. Now on the right side you can click on the "+" sign right



beside a tag to make the content of tag visible. If you click on the "-" sign, then the content of the tag will be hidden.

Expand all nodes: expands XML all nodes in the current file/tab

Validate Document: validate the document as ReqIF or as RIF. The selection of the validation can be done by the drop down selection right beside the icon.



Help: opens the ReqEdit documentation containing this documentation.

3.2 Content area

The content area displays the single ReqIF files as syntax highlighted XML document and line numbers. As known from other XML editors you have the possibility to collapse and expand single tags in the XML file (see description in "Collapse all nodes").

If you open a ReqIF archive that contains multiple files, then all single ReqIF files will be displayed in separate tabs.



3.3 Validation box

In the validation box the user can automatically see if the XML document is not well formed, including the line number and the referring tag.

A XML document is contained well-formed if:

- XML documents must have a root element
- XML elements must have a closing tag
- XML tags are case sensitive
- XML elements must be properly nested
- XML attribute values must be quoted

3.4 Status bar

Contains the copyright reference and the current version of the ReqEdit XML editor.