Software Documentation

Version 2.22

User Guide

This document is generated automatically from our ReqTeam help center located at https://documentation.reqteam.com. The following content represents a comprehensive usage guide for ReqEdit application and features.

Our goal is to keep the presented information accurate. If there are any mismatches to your version of ReqEdit, please notify us. Thank you for your understanding.

Create document in REQEDIT

ReqEdit creates different **types of requirement documents.**

- New specification (.reqif)

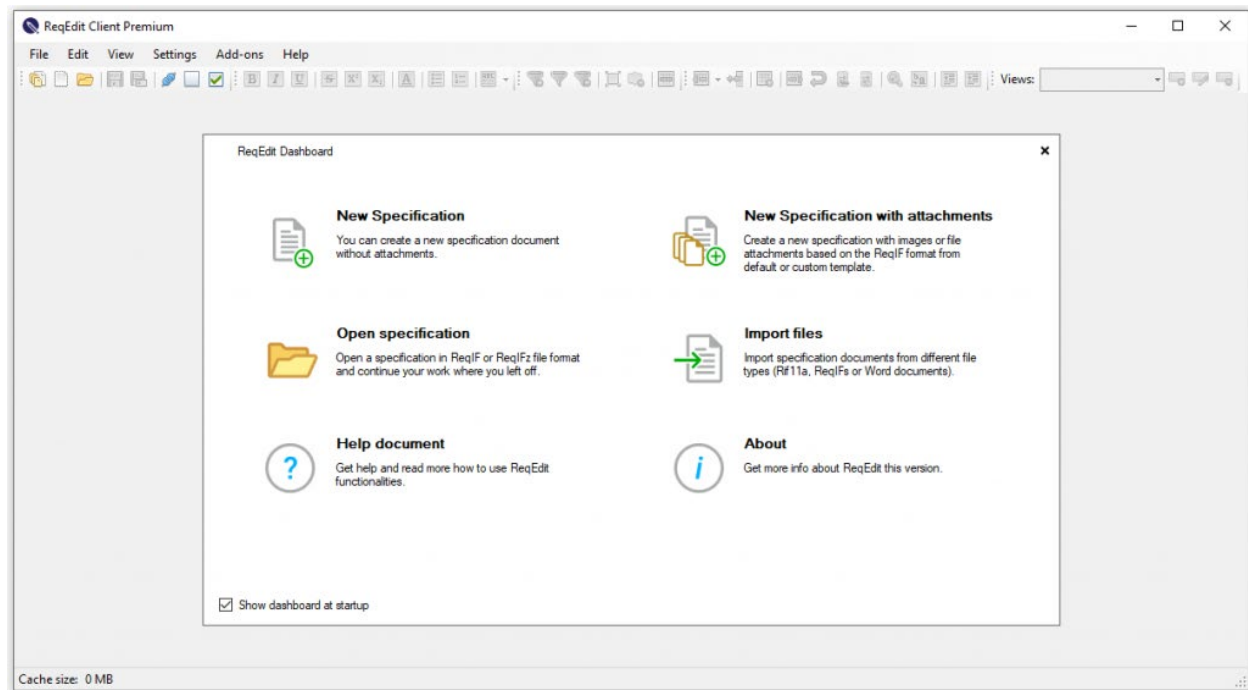You can create a new specification document withouth attachements.

- New specification with attachements (.reqifz)

You can create a new specification document with attachments, images, file attachments based on ReqIF format from default or template. This option is recommended to use, vs the simple reqif documents.

More about ReqIF formats read **here**.

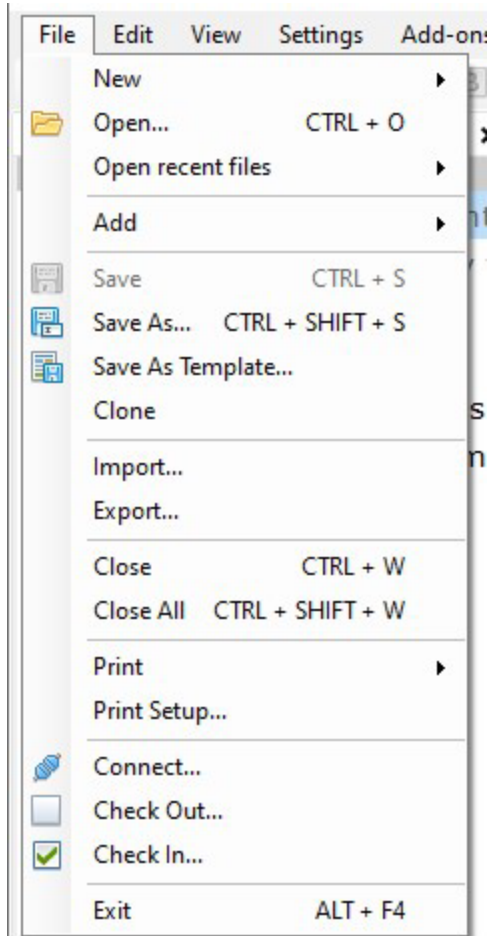| ReqIF (.reqif)	ReqIF Archive (.reqifz)
No attachments	Can have attachments
CTRL+N	CTRL+SHIFT+N

Create a new specification document

Dashboard

Create a new specification document:

- Click on the wanted option on the Dashboard or
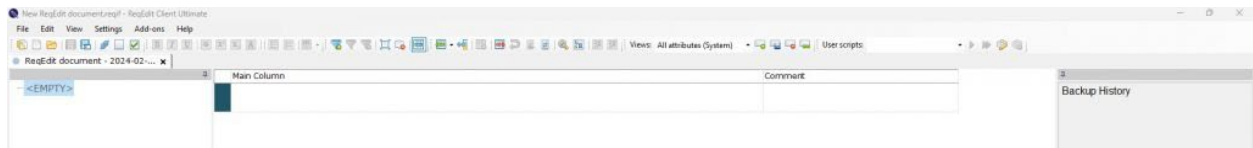- Open File menu/New... and choose the option you want to use

File menu

New Archive

ReqIF Archive supports attaching external images or files to any requirement. Creating a new archive will show a window asking for a filename.

Choose default template from the Template selector pop-up window.

A new file template appears.

New Template

An overview of the user interface description, read **here**.
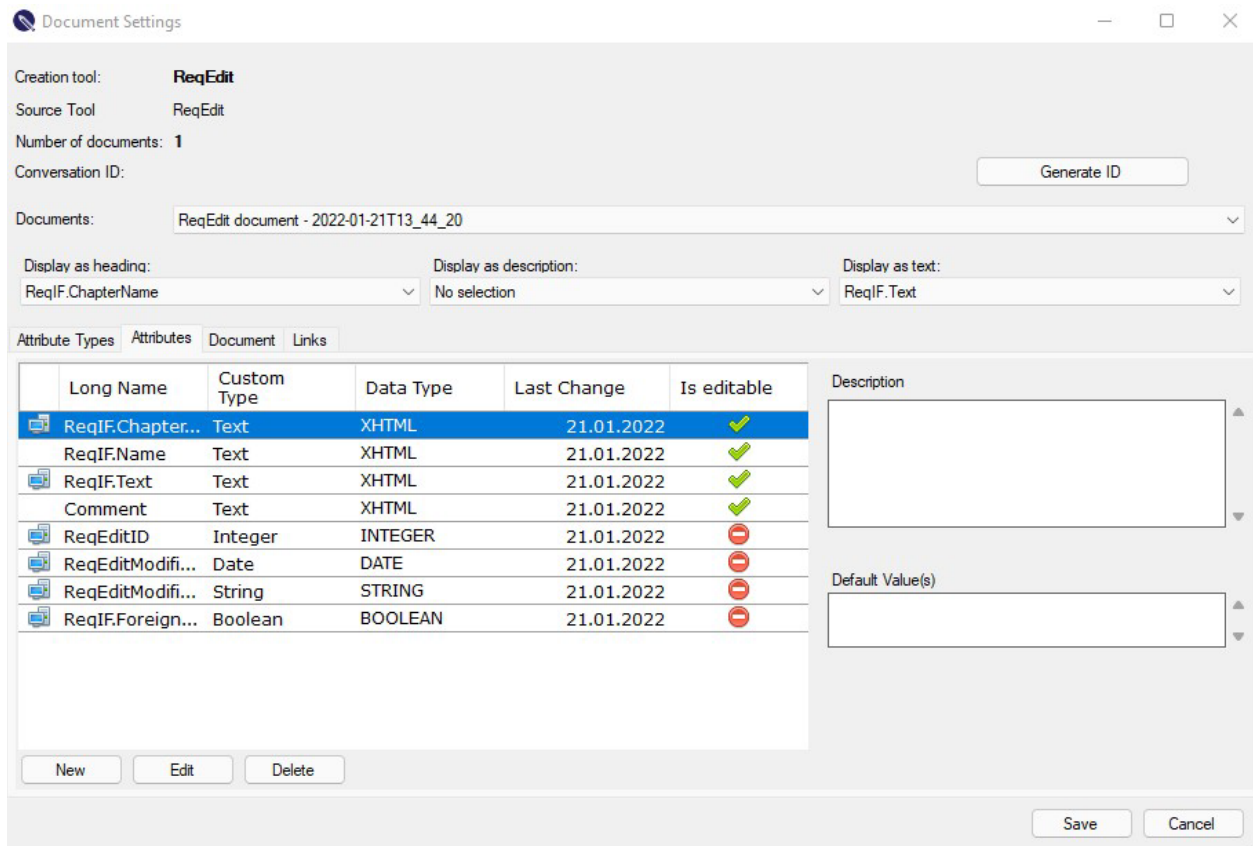
Adding new items

Now you can add rows, add columns (attributes) to your document.

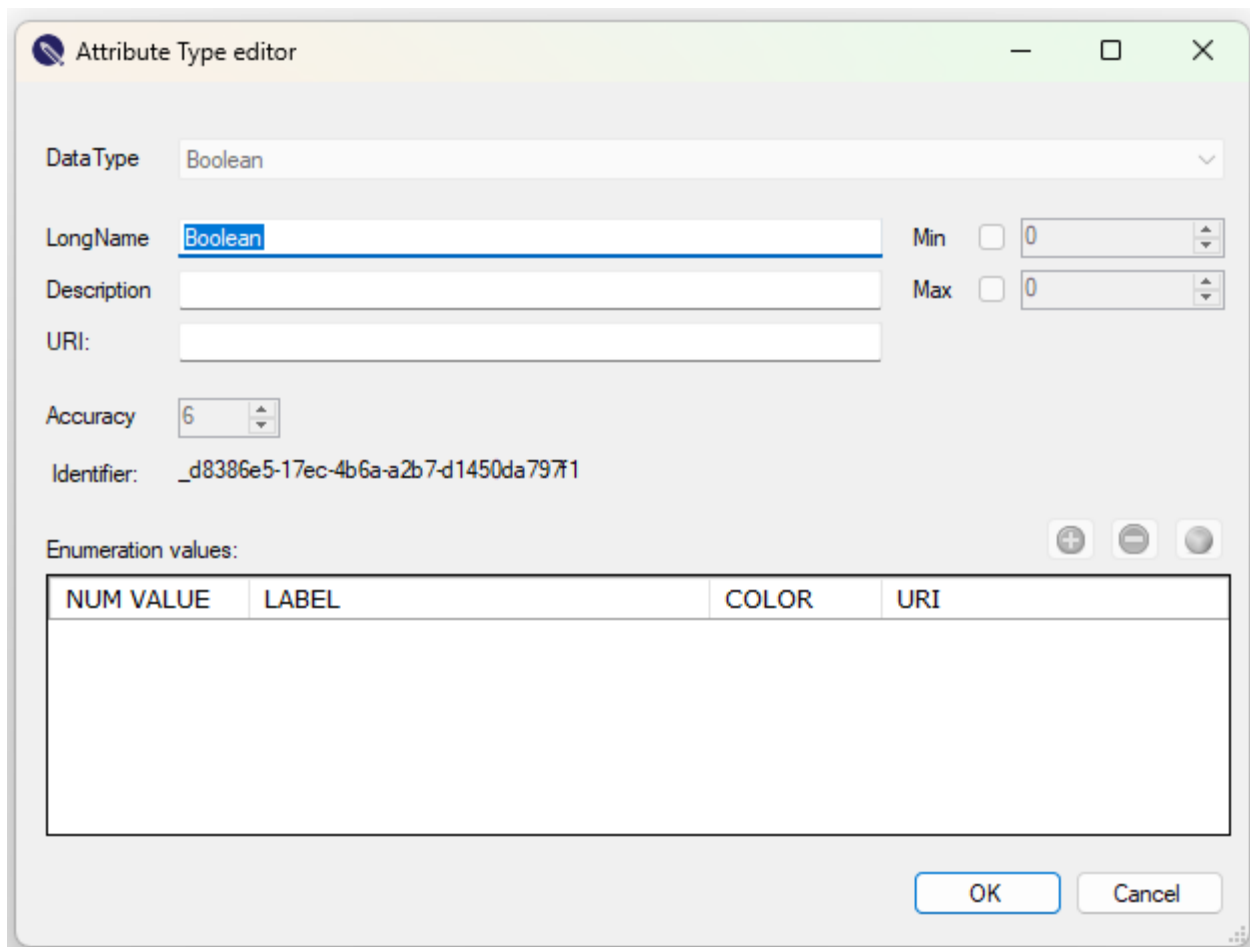To add rows click **File/Edit/Insert new row** ... or **Insert new child row**

To delete rows click **File/Edit/Delete row**

To add Column go to Settings/Document or use shortcut key F8

In the Document settings table use **Attributes** tab to add new or edit or delete columns.

Document settings

Attribute editor

Note: You cannot edit a created attribute type after saving it.

More about attributes and attribute types read **here.**

Attachments

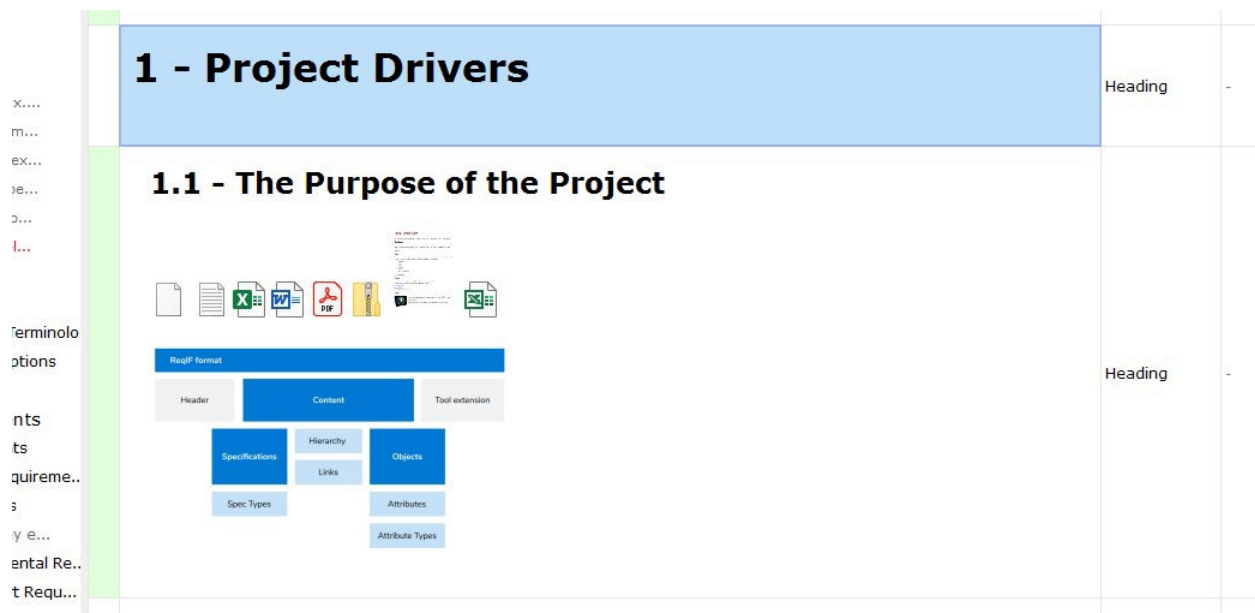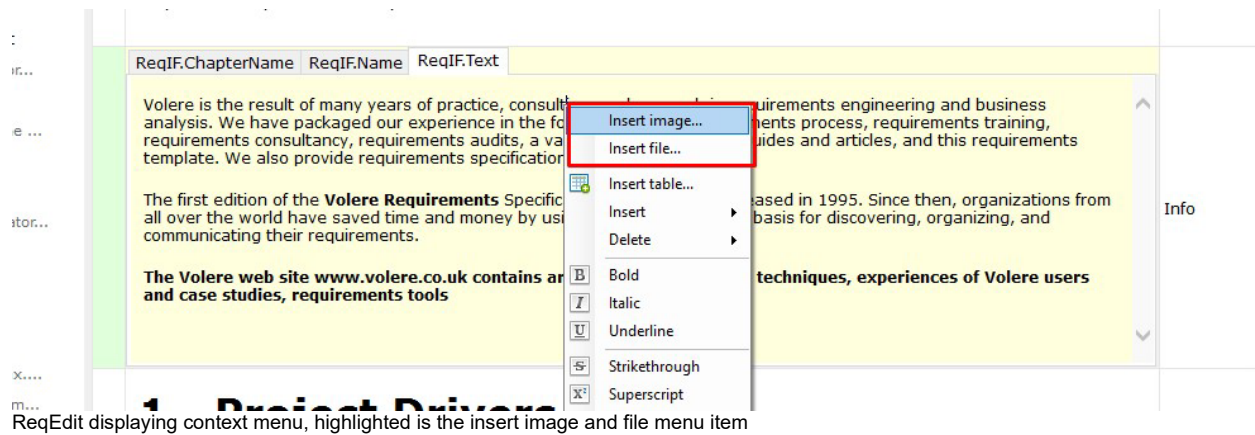ReqIF Archive .reqifz files support having file attachments for objects.

Only XHTML attributes can have attachments inside .reqifz files

Image attachments: png, bmp, jpg, gif, ico, wmf,

File attachments: any file type is supported: pdf, doc, docx, xls, xlsx …

Inserting file attachments

To add an attachment simply right click the XHTML inline editor area and select **Insert image** or **Insert file**

ReqEdit displaying context menu, highlighted is the insert image and file menu item

ReqEdit displaying attachment previews of an object, contains file icons and preview images

About editing an opened specification file read **here.**

Opening existing files, read **here**.

Quick start guide

1. Download ReqEdit

Read how to [download ReqEdit trial](#) and how to install and start it.

For the purchased product you get downloading and installing details by email from the sales department.

2. Install ReqEdit

First check the [system requirements](#) for the ReqEdit application.

Run the Portable-Installer from the directory, you downloaded it. The Portable-Installer guides you through the installing process.

For trial the activation happens automatically.

Read more on [Install ReqEdit](#).

3. Activate ReqEdit for purchased version

The License activator window appears. In the text box enter the Product key and press the Activate button.

Note: You need to have non-restricted Internet acces, or need to configure the proxy settings for it.

For overall view for activating methods, read [here](#).

4. Run ReqEdit

For run use the desktop icon or start "reqedit.exe" directly from the installation directory.

5. Use cases

- [Create](#) document
- [Open](#) document
- [Import IBM Rational DOORS©](#) RIF Files
- [Import MS Word](#) to ReqIF
- [Import MS Excel](#) to ReqIF
- [Print](#) opened document

ReqIF requirements format

RIF/ReqIF (Requirements Interchange Format) is an XML file format suitable for lossless exchange of requirements in any industry. The old way of transmitting requirements were lossy like Office Documents, PDF or Spreadsheets, ReqIF offers solutions to keep the data integrity through the supply-chain.

It is used to exchange requirements, along with its associated metadata, between software tools from different vendors. ReqIF keeps the data integrity of requirements, attributes, additional files (e.g. images) through the supply-chain. ReqIF format also defines a workflow for transmitting the status of requirements between partners. Each object is uniquely identified by **GUID** (globally unique identifier inside a RIF / ReqIF file), ensures unique content across the data exchange processes.

The interchange standard

Main players of the automotive industry in Germany agreed to conform to the RIF/ReqIF joint standard, initially developed by HIS Group, ProSTEP iViP, now maintained by OMG. (Object Management Group)

History

In 2004, HIS (Herstellerinitiative Software) a consortium of German automotive manufacturers, defined a generic requirements interchange format called RIF.

The format was handed over in 2008 to ProSTEP iViP e.V. for further maintenance. A project group responsible for international standardization further developed the format and handed over a revised version to Object Management Group (OMG) as "Request for Comment" in 2010.

As the acronym RIF had an ambiguous meaning within the OMG, the new name ReqIF was introduced to separate it from the W3C's Rule Interchange Format.

In April 2011, the version 1.0.1 of ReqIF was adopted by OMG as a formal specification (OMG Document Number: formal/2011-04-02).

In October 2013, version 1.1 was published (OMG Document Number: formal/2013-10-01). Changes are restricted to the text of the standard, the XML schema and underlying model have not changed. Therefore, 1.1 and 1.0.1 .reqif files are equivalent.

In July 2016, version 1.2 was published (OMG Document Number: formal/2016-07-01). Like with the previous versions, changes are restricted to the text of the standard, the XML schema and underlying model have not changed. Therefore, 1.2, 1.1 and 1.0.1 .reqif files are equivalent.

Source: wikipedia.org

Naming conventions and structure of ReqIF files

The Prostep iViP published a guide how to exchange with ReqIF and an implementation guide for ReqIF, where you can find detailed information how to use this file format and also about the file structure, naming convention and interchange. To read about it, click on the link:

[Prostep iViP - ReqIF Recommendation](#)

We recommend to read the [chapter 2](#), to get an overview about the common use cases of ReqIF file exchange. [Chapter 3](#) describes the custom attributes used in ReqIF, and [chapter 4](#) specifies the workflow of the SRC process.

[Prostep iViP - ReqIF Implementation Guide](#)

For more technical details please look at the Prostep [Implementation Guide](#). We recommend to study the [chapter 2.1-2.3](#) for an overview.

Install ReqEdit

System Requirements

Microsoft Windows x64
.Net 4.7.2 runtime package
MS EDGE browser or Chrome (for Compare Add-on HTML report)

Operating systems

OS Version	Tested configuration	Limitations
Windows 11 Pro x64	.Net 4.8 EDGE included	
Windows 10 Pro x64	.Net 4.8 / 21H EDGE installed by update	
Windows 8.1 x64 EOL 2023-01-10	.Net 4.8 EDGE manually installed	
Windows 7 Enterprise x64 EOL 2020-01-14	.Net 4.8 EDGE installed manually	
Windows Server 2022 Data Center x64	.Net 4.8 EDGE included	
Windows Server 2019 Data Center x64	.Net 4.8 IE11 included	on IE11 - HTML compare report, some features are missing
Windows Server 2016 Data Center x64	.Net 4.8 IE11 included	on IE11 - HTML compare report, some features are missing
Windows Server 2012 R2 x64 EOL 2023-10-10	.Net 4.8 IE10 included IE11 installed by update	on IE11 - HTML compare report, some features are missing

Windows compatibiltiy of ReqEdit 2.17 (2021 Nov)

Installation

ReqEdit comes packaged into an installer that guides users through the install procedure. It will unpack the files into a custom user directory.

Run the Installer
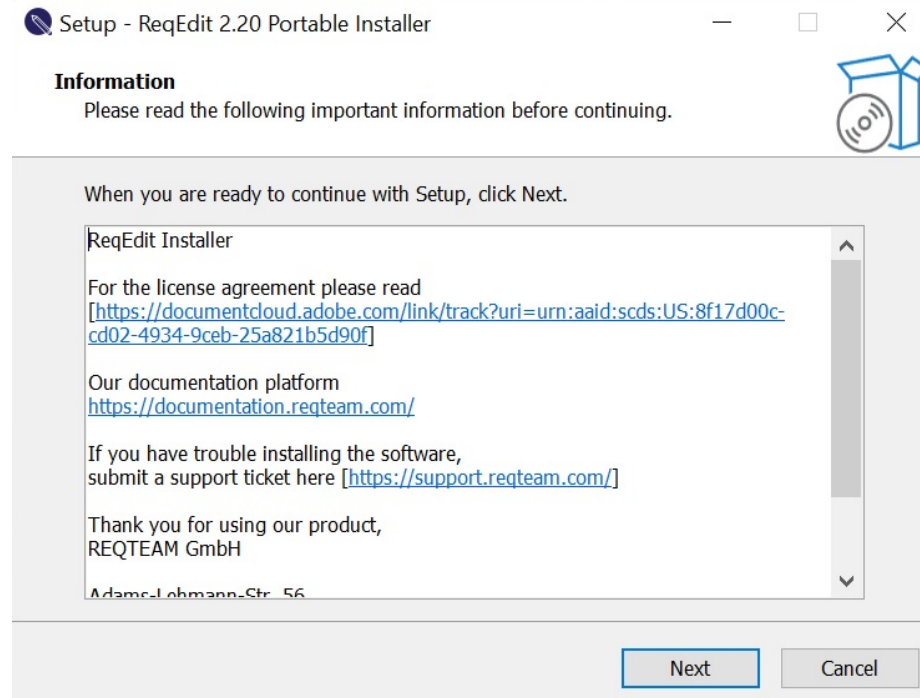
Window Install ReqEdit

Run the provided installer executable and go through the steps, default install path is the user profile folder in windows.

On the last step of the installer you can choose to activate the license. For that check the checkbox.
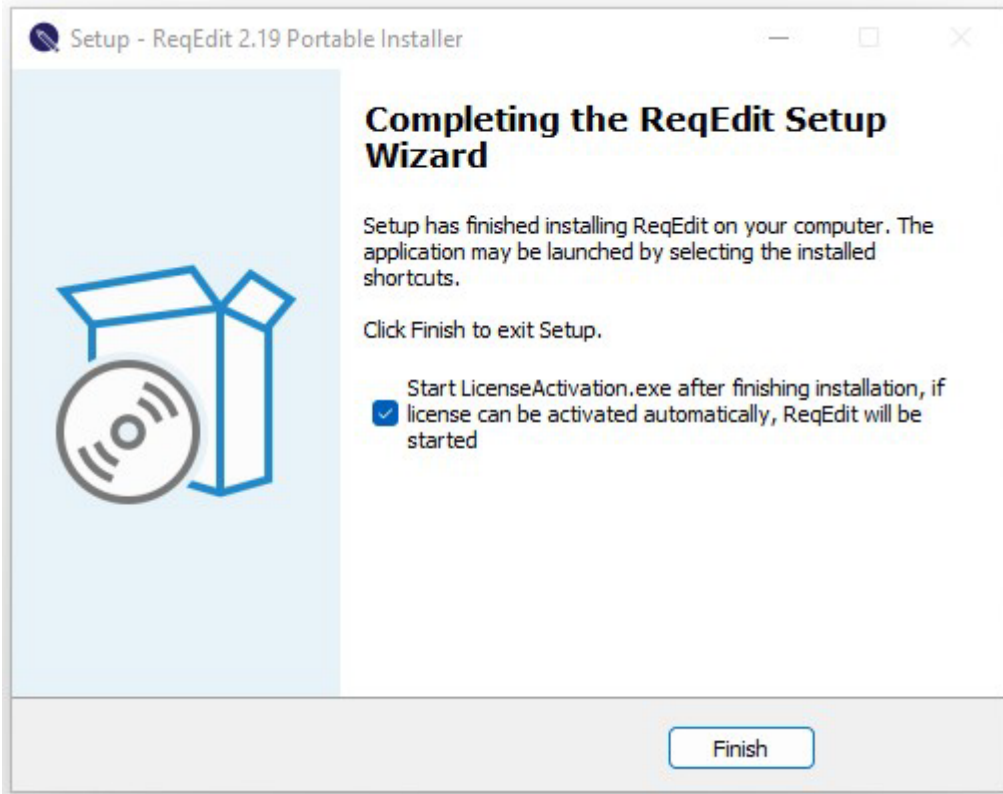
Window Start Activation Setup

Licensing Models

After installation follow your model of licensing. More about licensing read [here](#).

Downgrade functionality for ReqEdit Premium

More information about downgrading functionality read [here](#).

User Interface

Overview

The look and feel of the application is similar to any classic Windows application. It has a main menu at the top, function icon groups that can be rearranged, main content area and a status bar at the bottom.

At first run a quick action dashboard is shown.
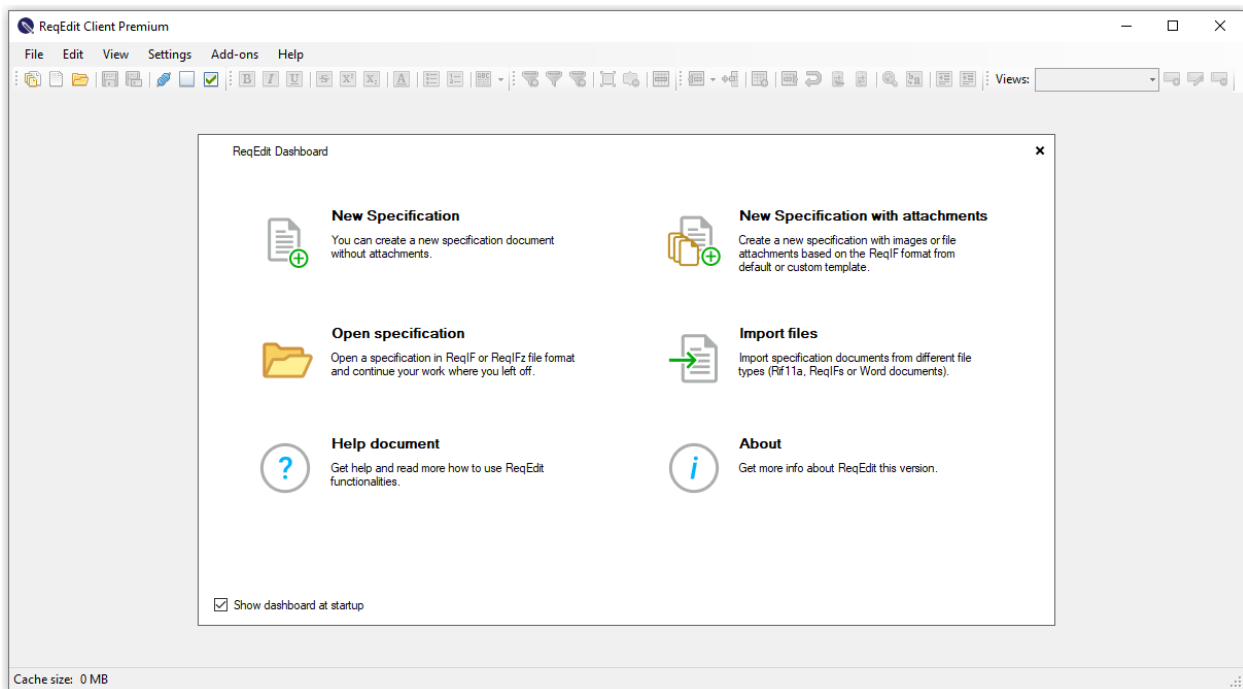
ReqEdit start screen showing the dashboard

After opening a ReqIF file, the contents will be shown in the main user interface. If the ReqIF contains multiple specifications it will be displayed as color coded tabs.
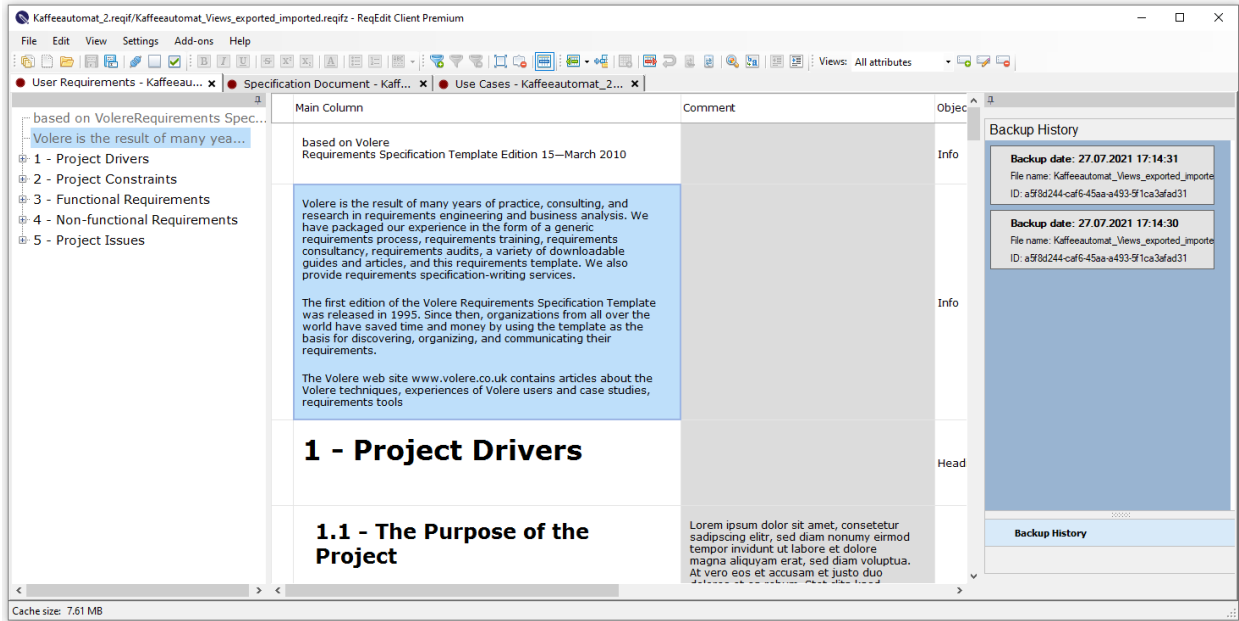
ReqEdit showing a ReqIF file, from left to right: navigator panel, requirements and auto-backup panel

Specification tabs

Opening a ReqIF file will display all the specifications as tabs. Same color tabs are from a single ReqIF or ReqIF Archive file. The specification title is displayed as the tab title.
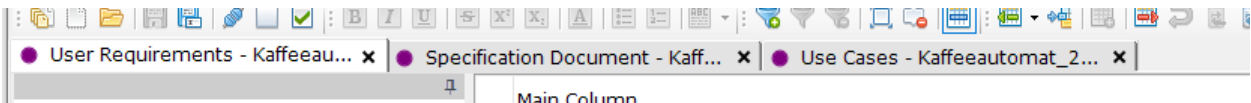
ReqEdit displaying specifications inside a ReqIF file in color coded tabs

Keeping the mouse over a tab will display more info of the specification like: file location, document id, and so on.

Rename/delete specifications

Right -click on the specification tab to rename or delete it.
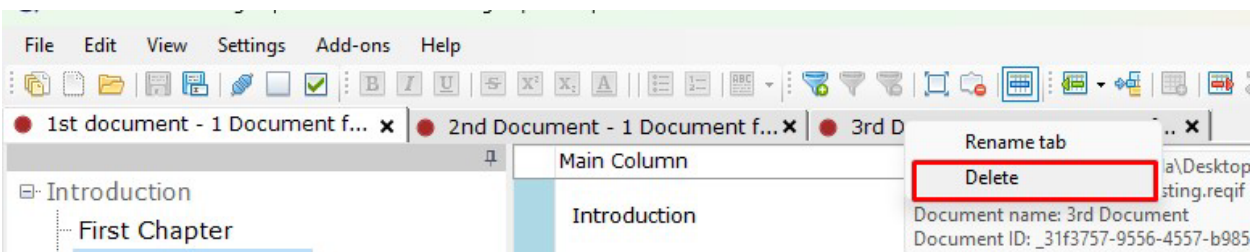
Closing opened files

Close any tab by pressing the **X** of the tab or by pressing CTRL+W , if there are any unsaved changes a popup will ask to save the specification.

Closing all opened specifications of a ReqIF file by accessing **File > Close All** or by pressing CTRL+SHIFT+W, if there are any unsaved changes a popup will ask for confirmation.

Navigator

Specification headlines are shown as a tree menu on the left panel. Numbering is added automatically to aid navigation. Clicking on the items will jump to the same requirement in the content area.

Show / Hide Navigator

Navigator can be toggled by clicking the pin icon.
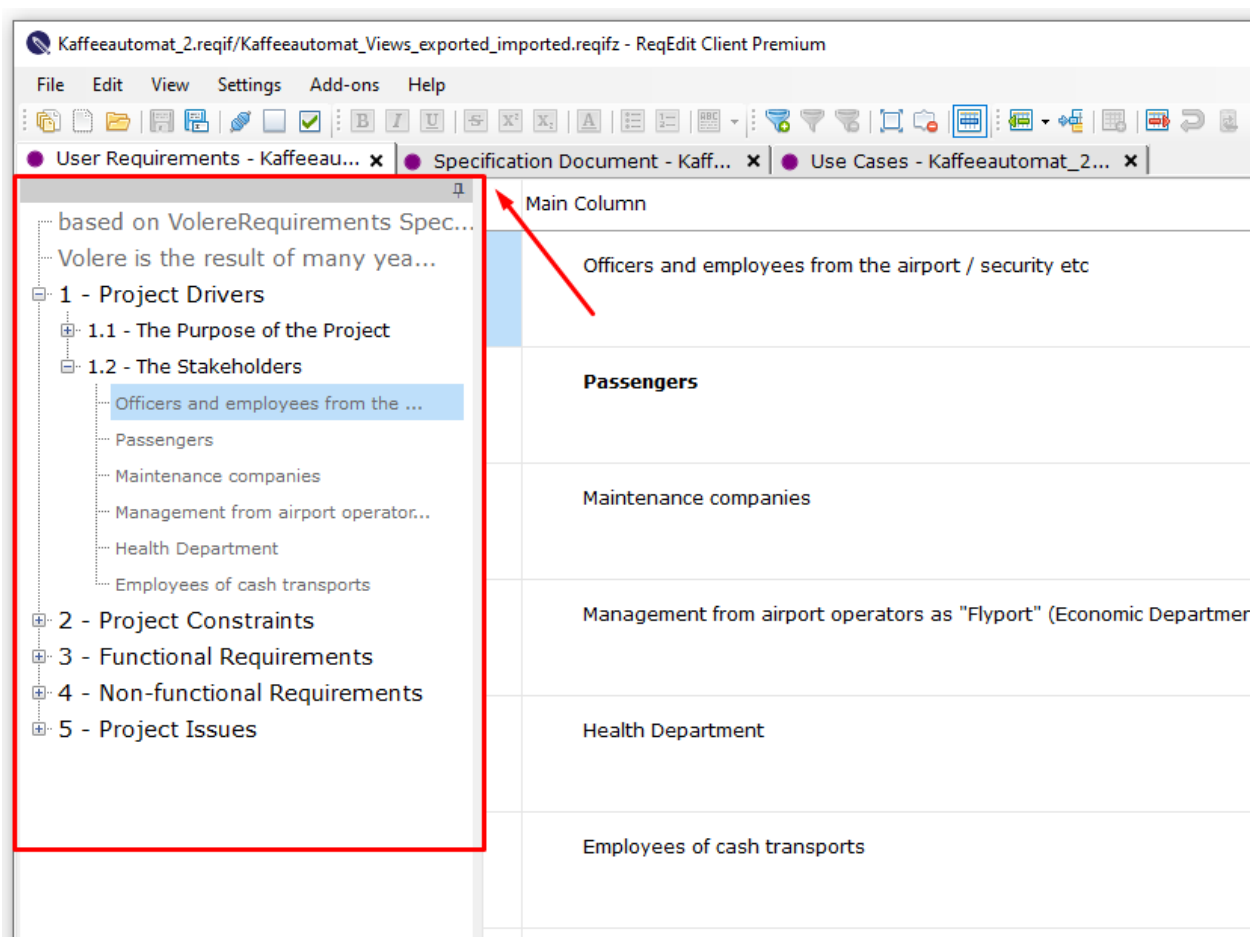
ReqEdit navigator pane on the left showing requirements hierarchy as a tree menu

Requirement Numbering

Requirements with (ReqIF.ChapterName) headlines are shown in a tree menu structure, numbered by the position in the hierarchy. The numbering is automatically updated on each change of the requirements, new additions or deletions will affect this.

The levels of the menu represents sub items in the spec hierarchy. This is visible in the content as sub numbering of a main headline, all the content remains on a single level in the table.
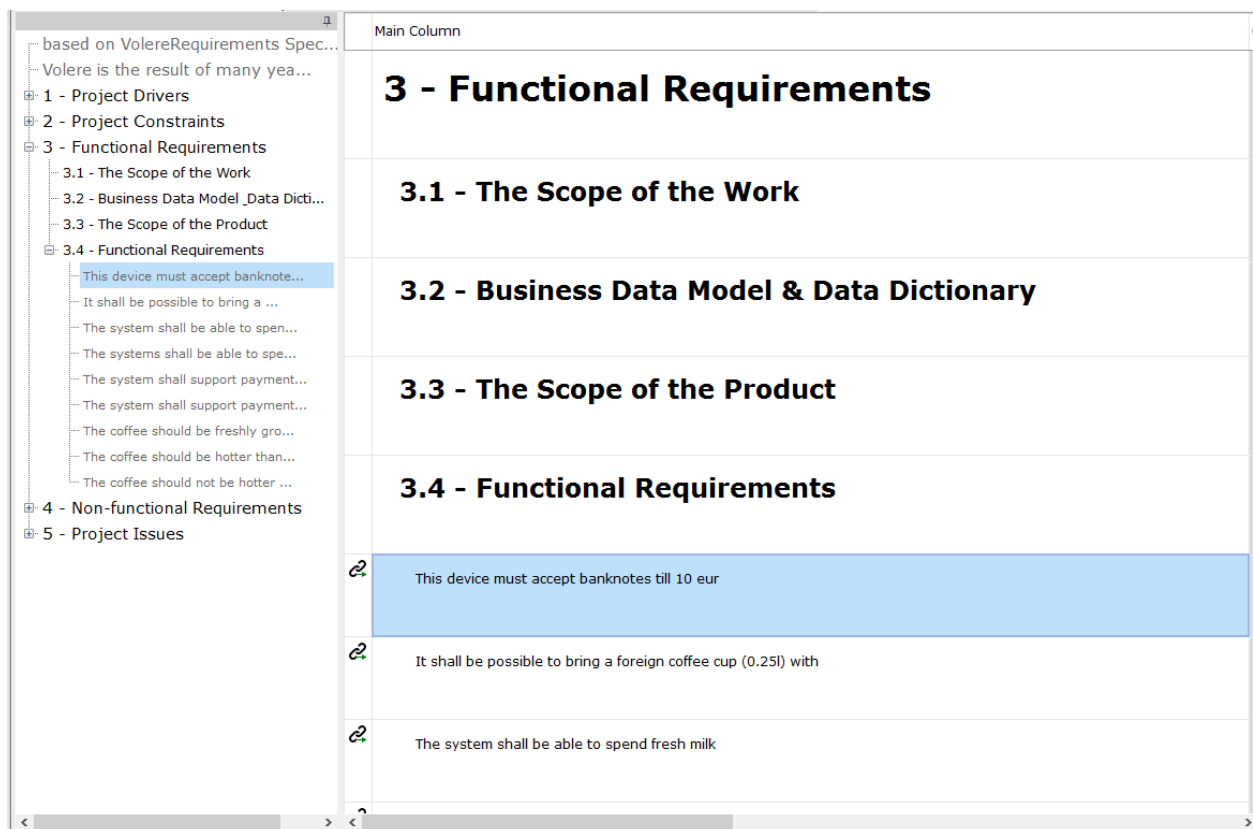
ReqEdit displaying a specification where the same requirement is selected in the navigator and the content area

To show/hide Chapter Numbers check the box Show Chapter Numbers in the Settings/User settings.

User settings / Show Chapter Numbers box

Show/hide Chapter Numbers result view

Content

Requirements are shown in the middle as a table, where the **Main Column** is a multi content field and the other columns are the associated metadata.

The Object menu (Right-click)

Right clicking any object (row) in the content area, displays the context menu. Contains editing functions like: creating, cut-copy-pasting, deleting, restoring, purging objects. Hierarchical editing si possible by promote / demote menu items.

Manage relations between objects by the lower menu items: Add, Edit, Delete link or Go to link targets.

Get the object ReqIF ID using the Copy ReqIF ID menu item.
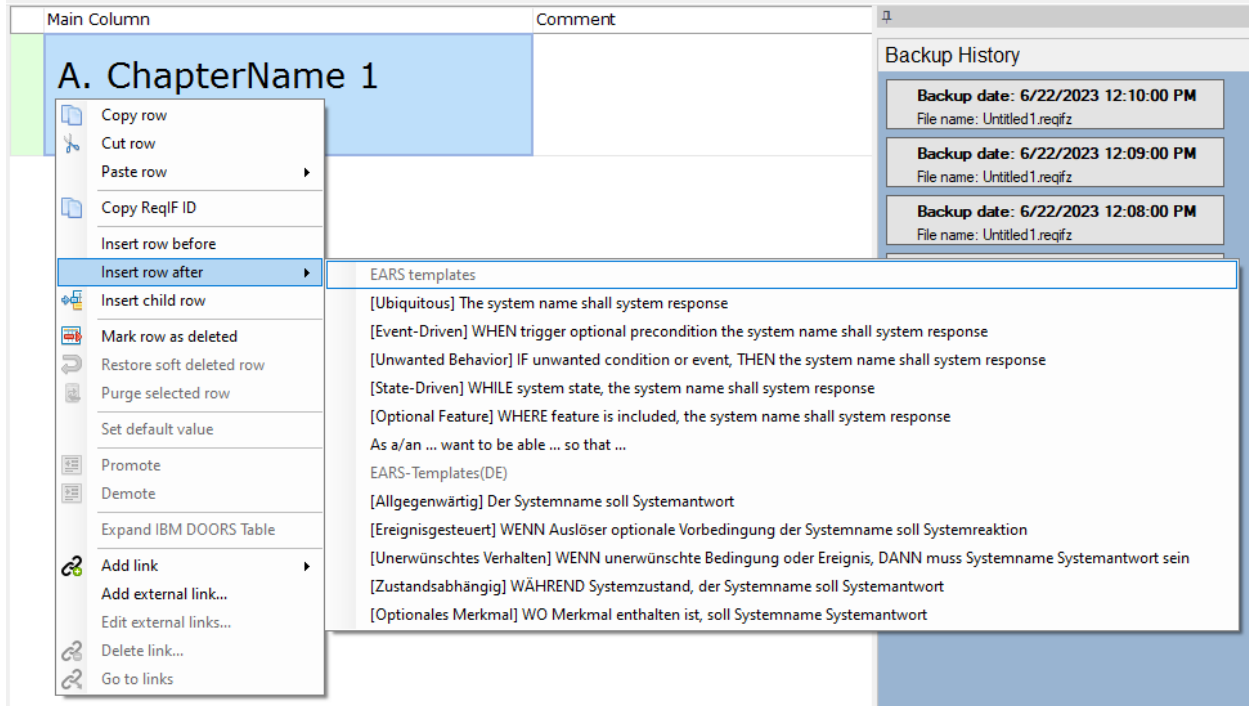
Object context menu displaying Insert submenu with requirement patterns. These patterns can be customized as needed.

Main Column

Main Column is the most important content of the specification. It has the default value of the combination of **headline** (ReqIF.ChapterName), **description** (ReqIF.Name), **xhtml content** (ReqIF.text). If all there attributes are present it will be displayed together in the same cell and the headline will have a number assigned to it.

The Main column content can be customized in the Document Settings panel. The attribute types supported are STRING or XHTML.

Main Column	ObjectType	Re
based on Volere Requirements Specification Template Edition 15—March 2010	Info	-
Volere is the result of many years of practice, consulting, and research in requirements engineering and business analysis. We have packaged our experience in the form of a generic requirements process, requirements training, requirements consultancy, requirements audits, a variety of downloadable guides and articles, and this requirements template. We also provide requirements specification-writing services. The first edition of the Volere Requirements Specification Template was released in 1995. Since then, organizations from all over the world have saved time and money by using the template as the basis for discovering, organizing, and communicating their requirements. The Volere web site www.volere.co.uk contains articles about the Volere techniques, experiences of Volere users and case studies, requirements tools	Info	
1 - Project Drivers	Heading	
1.1 - The Purpose of the Project	Heading	

ReqEdit displaying a ReqIF file, main column is visible, highlighted is the column separator and a row separator

Resizing columns or rows

Drag the column header separator bars or the row separator bars to resize the grid.

Content editing

Double clicking on any object will enable the inline editor and activate the text formatting icon group. Right clicking the content will show a menu for adding attachments or tables and formatting the content.

To leave the inline editing click anywhere outside the yellow background.

Main Column		ReqEdit.ExcelRowRefence	Hierarchy ID	Comment	ReqIF-WF.CustomerStatus
ReqIF.Name ReqIF.Text					Accepted
Object 5		11	1		
Object 6					
Object 7					
Object 8		14	2		ToEvaluate
Object 9		15	2		Accepted
Object 10		16	2		Accepted
Object 11		17	3		ToEvaluate
Object 12		18	4		ToEvaluate
Object 13		19	3		ToEvaluate
Object 14		20	5		ToEvaluate
Object 15		21	2		ToEvaluate
Object 16		22	2		ToEvaluate

Context menu:
- Copy — Ctrl+C
- Cut — Ctrl+X
- Paste — Ctrl+V
- Paste ►
  - Cleaned — Ctrl+Shift+V
  - Cleaned more (no tables, images, links, lists) — Ctrl+Shift+F
  - As text — Ctrl+Shift+T
- Insert image...
- Insert file...
- Insert table...
- Insert ►
- Delete ►
- Bold — Ctrl+B
- Italic — Ctrl+I
- Underline — Ctrl+U
- Strikethrough — Ctrl+T
- Superscript — Ctrl+1
- Subscript — Ctrl+2
- Text undo
- Text redo
- Properties
- HTML Source — F12

Managing columns

Right clicking the column headers will display a menu, where the selected column or the other columns can be toggled visible or hidden.

If all the columns are hidden the View manager can reset the visibility back to a predefined state.

ReqEdit colum management by right clicking the column header row

Views

Views are visible column sets with optional custom sorting and filtering saved as presets. The view manager is located in the icon groups on the right side. The views are only for displaying the ReqIF contents in a more human friendly manner for large files with lots of metadata.

The view presets are not stored in a ReqIF file, they can be exported and later imported from the local hard drive.
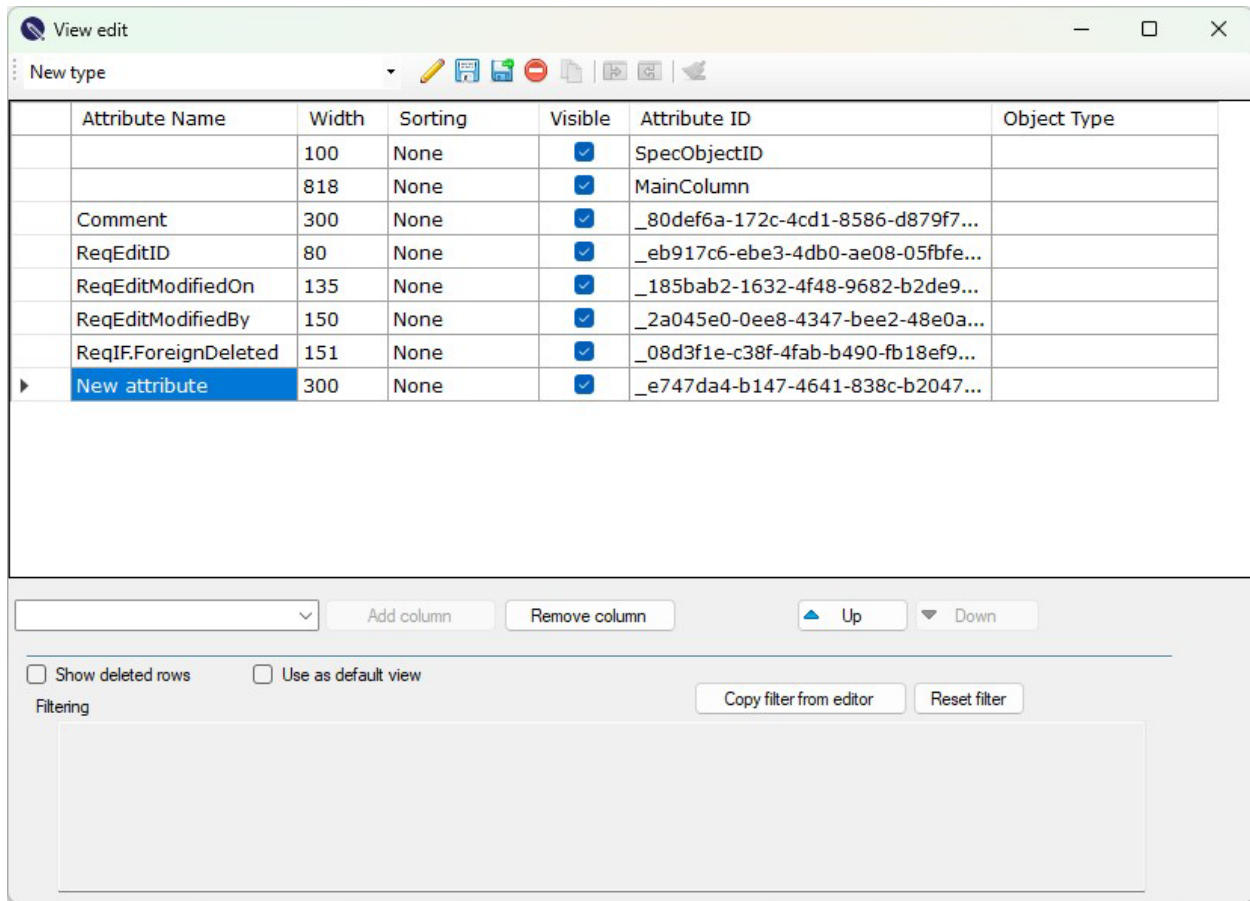
ReqEdit displaying the view manager popup window

Backups

ReqEdit offers an auto-backup feature which will create a snapshot of the current state of the opened files. Default setting is to create a backup every 10 minutes and rotating 10 backup files (the last will be deleted to have a max of 10 backups).

The backup settings can be changed in the **User Settings** panel

Show / Hide Backups

Backups can be toggled by clicking the pin icon in the title of the panel
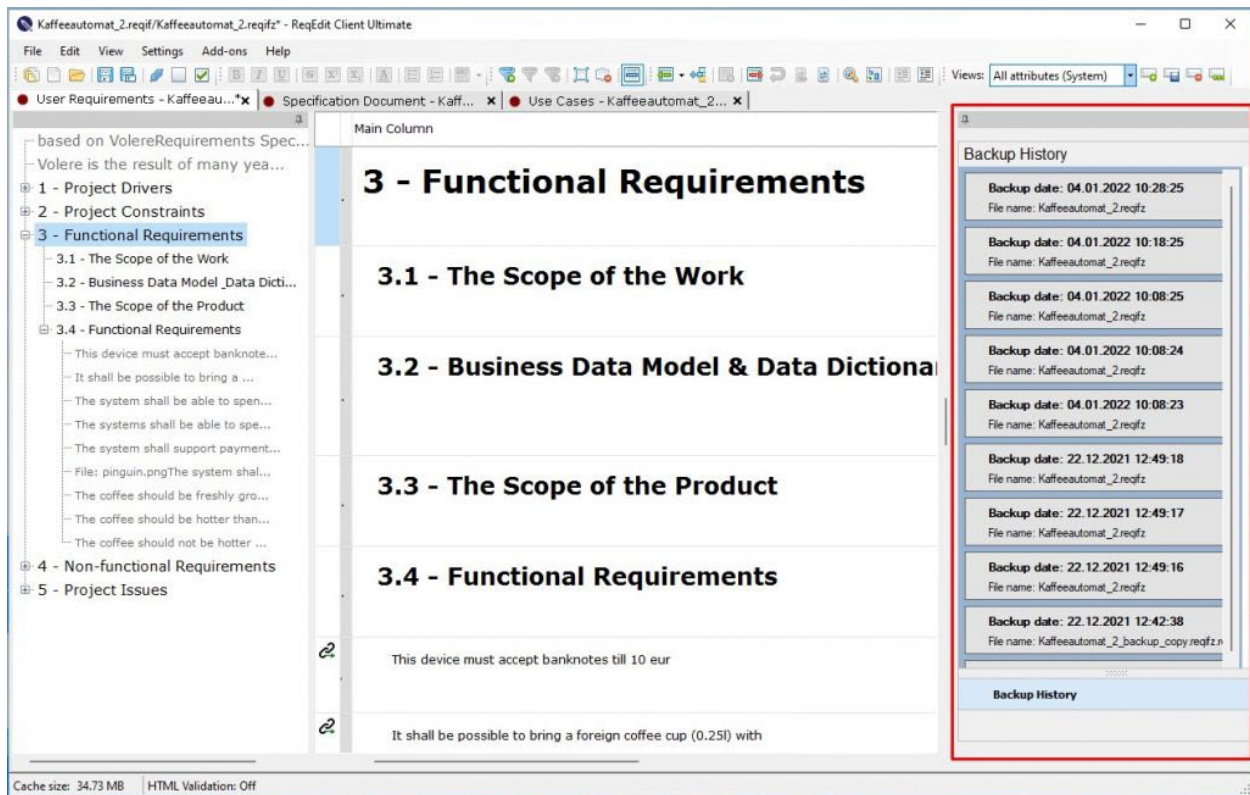
ReqEdit displaying a ReqIF file, highlighted is the auto-backup panel

Backup Snapshots

Backups can be locked so that it will not be deleted automatically on backup rotation.
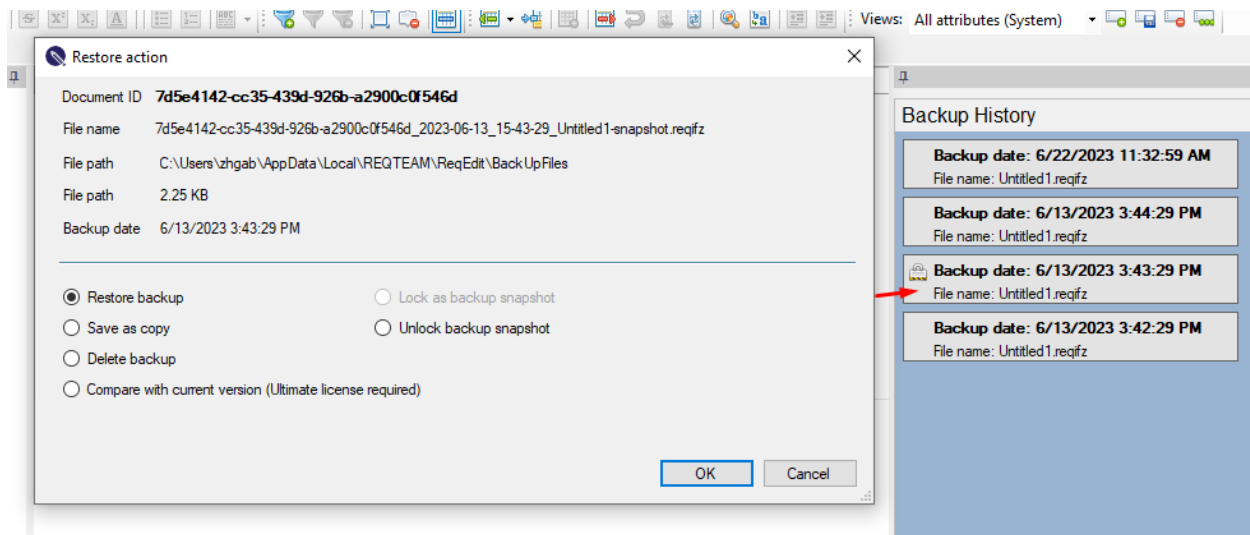
Backup settings for a backup snapshot

Menus

File
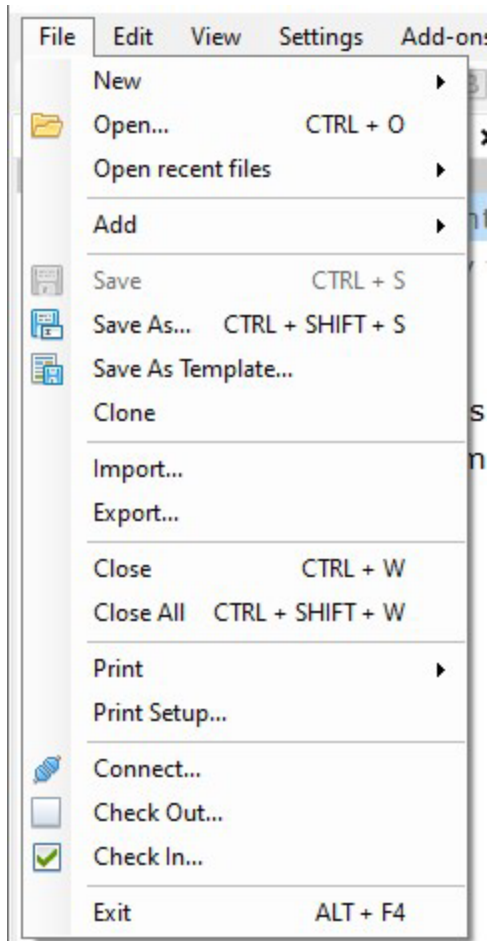
ReqEdit File menu

New

Create a new ReqIF file **.reqif** (New File) or an archive with attachments as **.reqifz**. (New Archive)

ReqIF Archive supports attaching external images or files to any requirement. Creating a new archive will show a window asking for a filename.

ReqIF (.reqif)

No attachments

CTRL+N

ReqIF Archive (.reqifz)

Can have attachments

CTRL+SHIFT+N

A template list will popup will ask for a specific template to use for the new file. For more information on templates, please read the **Templates** section.
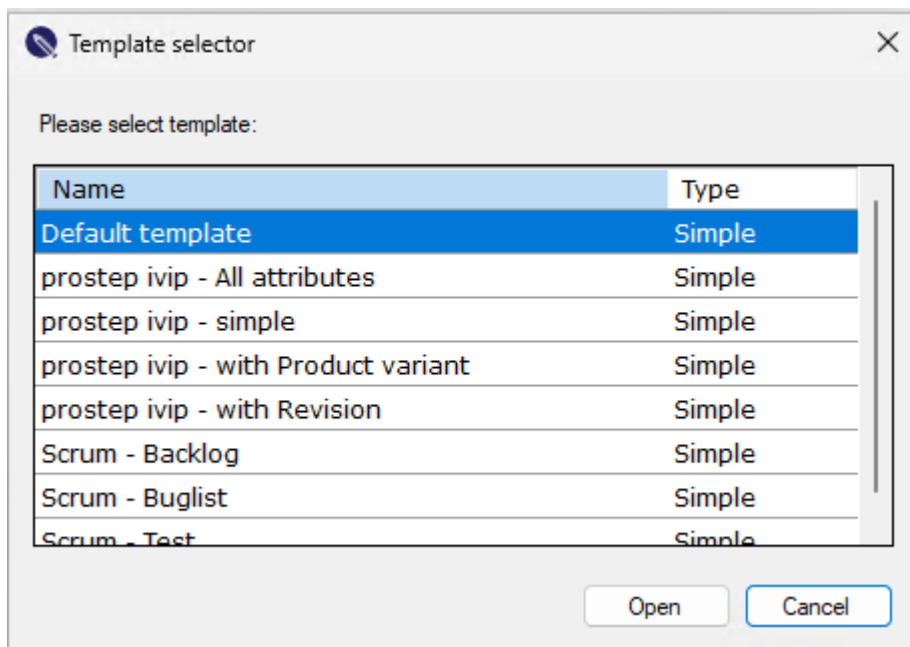
Template selector window

Open

By default, only **xml**, **rif**, **reqif**, **zip**, **reqifz** and **ReqEdit encrypted** files can be selected
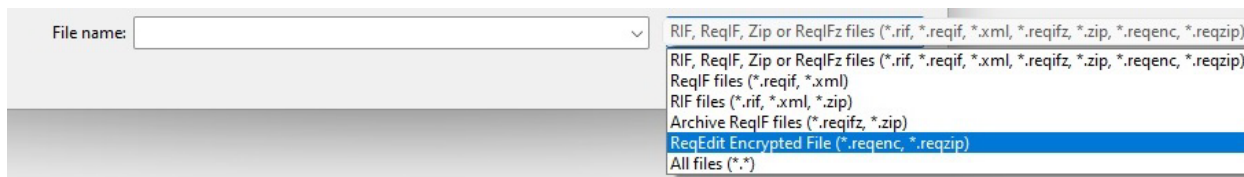
Supported file types by ReqEdit

Add new document to current file

Adds a new specification document to the currently active ReqIF file. Use this to add more than one specification to a single file.

Save

Any change in the specifications will be displayed with asterisk ***** in the tab.

Changes to linked documents (e.g. Images or Word, Excel) will not be detected by the editor, a change needs to be made in the requirements in order to be able to Save

Save

Save the currently active file to disk

CTRL+S

Save As

Save the active file under a new name

Keep all UUIDs

CTRL+SHIFT+S

Save As for saving encrypted file

To encrypt a file choose **ReqEdit Encrypted File (*reqenc, *.reqzip)** as file type then click SAVE.

File name:	Test document Specifications_imported.reqenc
Save as type:	ReqEdit Encrypted File (*.reqenc, *.reqzip)
	Archive ReqIF files (*.reqifz, *.zip)
∧ Hide Folders	ReqEdit Encrypted File (*.reqenc, *.reqzip)
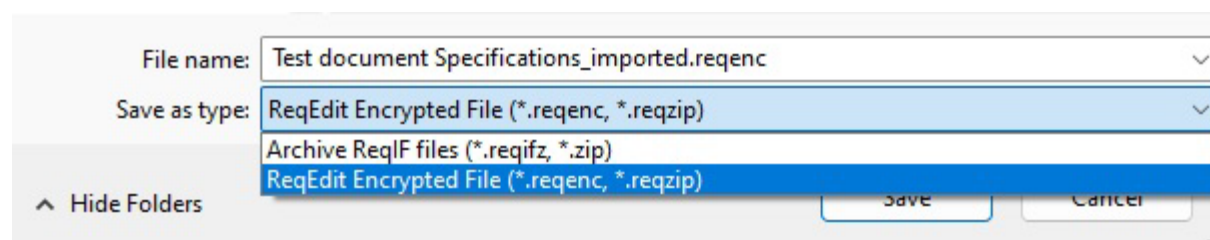
More about encryption of a file read here: <u>ReqEdit File Encryption/Decryption</u>

Save as template

Single document ReqIF files can be saved as a template and reused later

Close

Opened specifications can be hidden by clicking the X in the tab bar, if there are unsaved changes a popup will ask for confirmation. **This is not removing the specification from the file.**

Close All

Close all opened specifications, any unsaved change will notify the user. It will close all opened files.

Import

Start an import wizard for **Reqlf 1.0.1** files

Export

Start an [export](#) wizard from **ReqIF 1.0.1** to **ReqIF compatibility mode** or **RIF 1.1 / RIF 1.1a** arhive format.

Print

Print the current specification Main Column or all visible columns.

Connect

Requires ReqEdit file server

Will authenticate the current user and create a connection

Check out

Requires ReqEdit file server

Lock the file and download for editing (other users that have permission to the same file cannot download it)

Check in

Requires ReqEdit file server

Upload a file to the server. If the file was previously locked by the user it will become unlocked and can be edited by others as well.

Edit
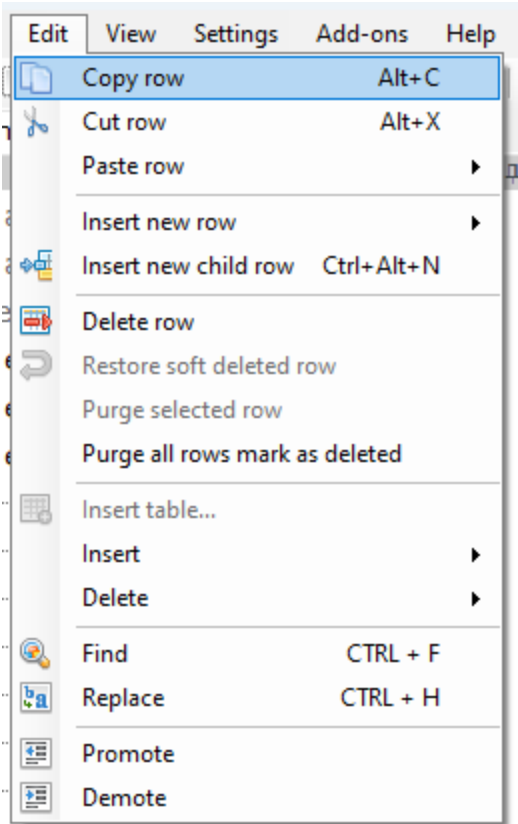
Editing objects and contents

Object / Requirement level editing

Create before, after

Create child

Promote, demote

Delete (soft delete)

Restore deleted (soft deleted)

Purge (hard delete)

Cut/Copy/Paste

Content level editing

Table editing

Find

Replace

View
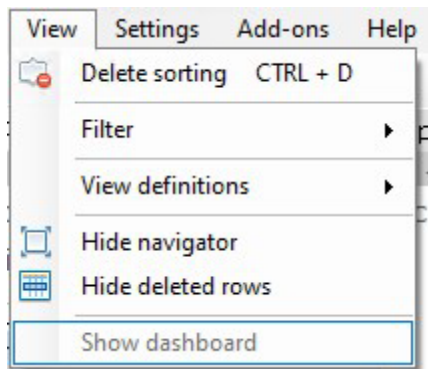
ReqEdit View menu

Attributes (columns) related

Filtering

ReqEdit can show a sub-set of the requirements based on special conditions of the attributes. Filters can be set and reset. **Filters will not be saved inside ReqIF files.**

Sorting

ReqEdit can sort the requirements based on multiple columns. It can be configured and then reset. **The sorting is not saved inside the ReqIF file.**

Show/Hide deleted requirement objects

Soft deleted objects will be marked for deletion but are not removed from a specification until PURGE is not pressed. The deleted objects can be shown or hidden

View definitions (views)

Views are a sub-set of the attributes that are displayed. **The views are not saved inside the ReqIF. file Views can be exported and later imported.**

The views can be imported and used on any specification as long as there are attributes with similar names.

Settings
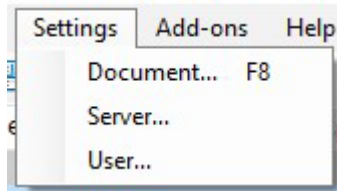
ReqEdit settings menu

Expert users can fine tune ReqEdit for their specific use case, and configure lots of ReqIF settings

Document settings

Manage ReqIF file internal settings

Attribute Types

Attributes

Document attributes

Links

Configure Main Column display settings

Server settings

ReqEdit file server connection settings

Server user credentials

User settings

ReqEdit internal configuration

Interface language

Auto backup settings

Doors table display settings

Cache size

Dashboard startup
Date display format
XHTML Schema validation

Chapter Numbers showing

Add-ons
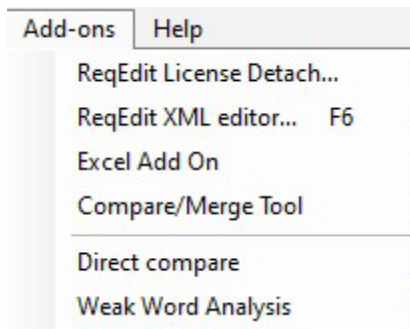
ReqEdit Add-ons menu

Displays all available add-ons which are active in the current license. Descriptions below.

Help
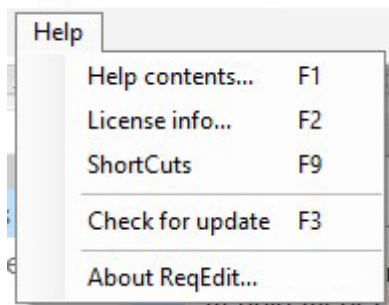
ReqEdit Help menu

Contains a user guide. Can display Information about the active license. Display keyboard shortcuts. Check for online updates. Display version information about the current ReqEdit release.

Add-ons

ReqEdit Ultimate comes with powerful addons that extends the base functionality.

Xml Editor

Look inside ReqIF files and check the xml code. The editor comes with a built in ReqIF validation function that will debug any invalid code. Read more here.

Excel importer

Turn your excel files into ReqIF files. Data exchange is more realiable and lossless if ReqIF is used. Read more [here.](#)

Compare / Merge tool

Will generate a comparison report that can be handed out as a signle html file. Read more [here.](#)

Weak-word Analysis

Weak words are words that are confusing for readers and should be avoided if possible. This tool provides a case insensitive whole word search for this purpose, optionally writing the results back in the ReqIF file. Read more [here.](#)

License Detach tool

Take ReqEdit out of the licensing environment. This power feature will enable users not to depend on the local licensing servers and to be able to work from anywhere. Read more [here.](#)

Expert knowledge

Tab title configuration

ReqEdit exposes some settings that can be configured for the tabs. The configuration file is located in **AppData\Local\REQTEAM\ReqEdit\ReqEditSettings.xml**

Setting	Values	Notes
TabDocumentTextAlign	Left, Right	Alignment of document title in the tab
TabDocumentWidth	250px	width of the tabs in pixels

Keyboard shortcuts

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	Close application
Ctrl+D	Delete Sorting
Ctrl+F	Find text
Ctrl+H	Replace text
Ctrl+E	Add new or edit filter
Ctrl+A	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
Ctrl+C	Copy text information inside the cell
Ctrl+X	Cut text information inside the cell

Ctrl+V	Paste text (remove all formatings)
Ctrl+Alt+S	Start link
Ctrl+Alt+E	End link
Ctrl+Alt+R	Reset start link
Ctrl+Alt+R	Reset start link
F1	Open help
F2	Open selected cell in edit mode
F3	Check for update
F5	License information
F6	XML Editor
F8	Document settings
F9	Shortcut window

Shortcuts used in ReqEdit

Open ReqIF requirement files

ReqEdit is used to display contents of ReqIF requirement exchange files including attachments and images in ReqIF Archive files.

These are the key features:

- ReqIF requirement objects
- hierarchy structure
- Internal UUIDS
- attribute types
- specification attributes
- object attributes and relations

For experienced users the **XML Editor add-on** can display the source code of the ReqIF file.

Supported RIF/ReqIF file extensions: RIF contents (**.xml .rif .zip**) or ReqIF content **(.reqif .reqifz)**

You can open decrypted *.reqedit files too, if you know the password. More about encryption / decryption read **here.**

More about RIF and ReqIF files read **here**.

Open file
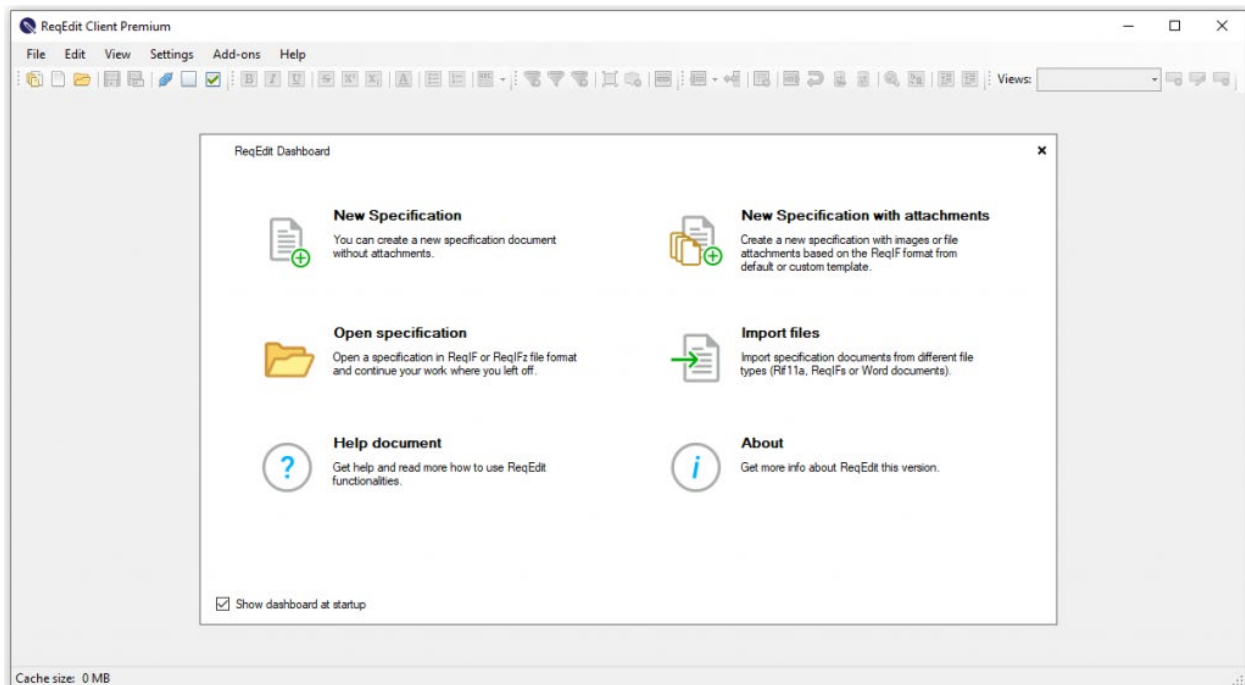
Dashboard for ReqEdit

To open a file

- click on the Open Specification on the Dashboard or
- select File > Open on the main menu or
- press CTRL+O and then select the ReqIF file.
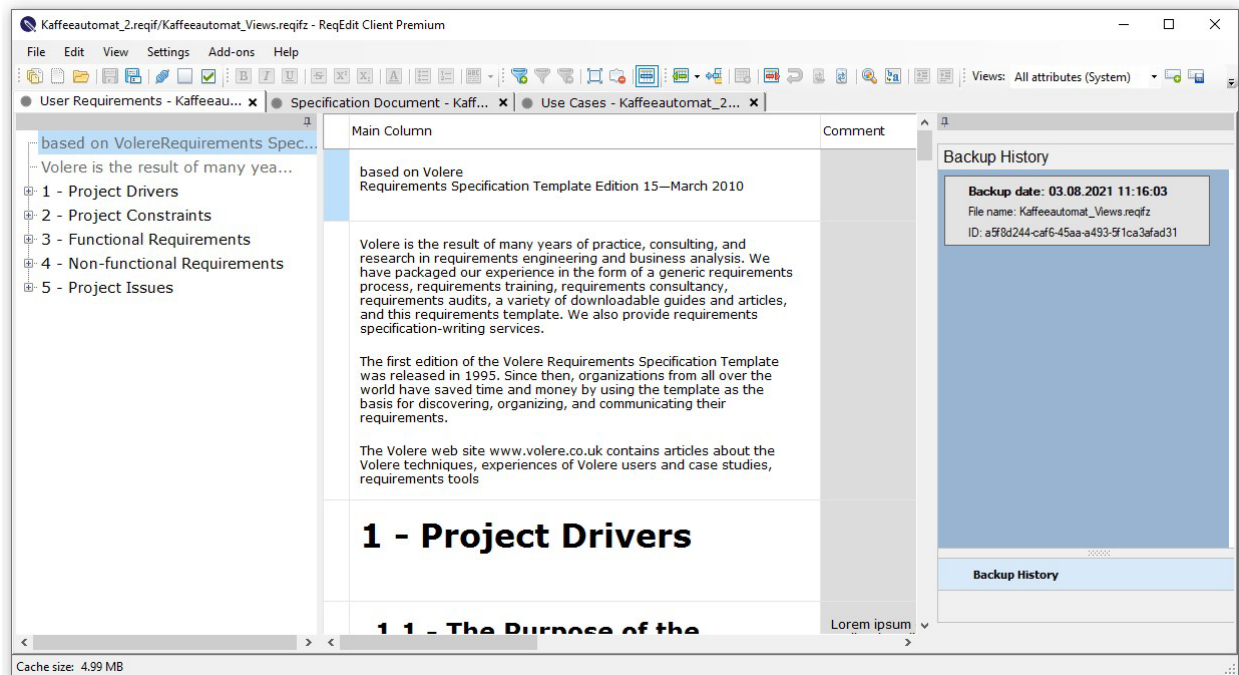
ReqEdit displaying an opened ReqIF file

All containing specification documents are displayed as tabs in the tab bar.
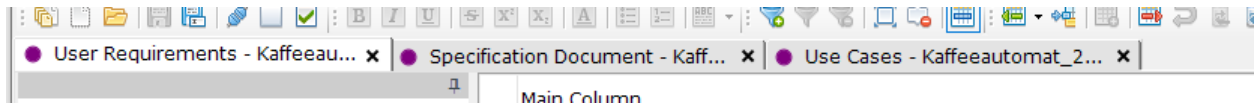
ReqEdit tab bar showing a ReqIF with three specifications

Compatible ReqIF files

If the file is not a standard ReqIF file but ReqEdit can import it, a popup notifies the user. Import wizard starts and completes the steps to open file.
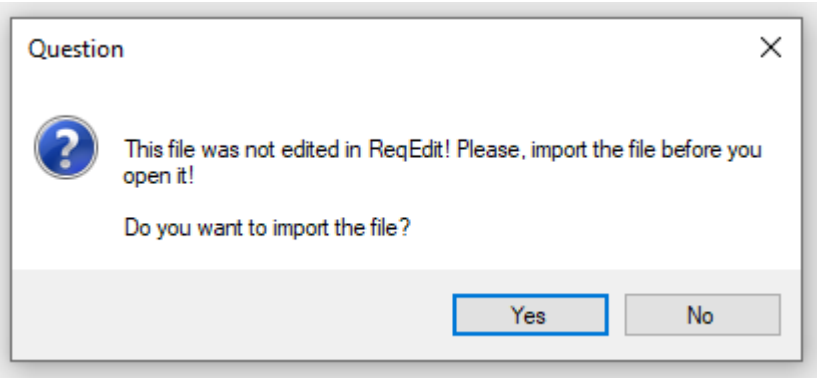
ReqEdit found an invalid ReqIF but asks the user for importing the file

Multi ReqIF Archives

If the opened document contains multiple ReqIF files (is an archive format .reqifz or .zip) a popup notification allows the user to select the files to open.
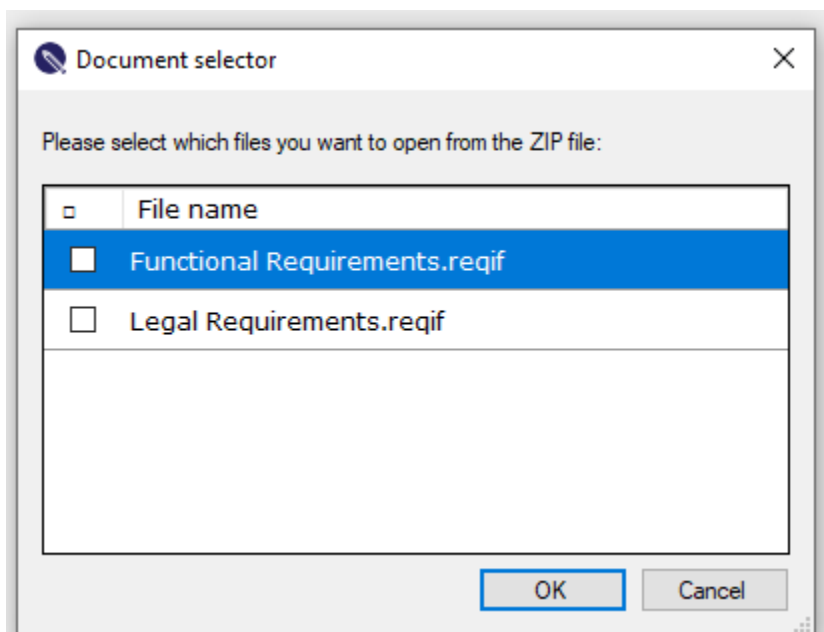
ReqEdit showing document selector for .zip or .reqifz files (containing two or more ReqIF files)

In case of any ReqIF errors, ReqEdit identifies the errors. Use **XML Editor Add-o**n to correct.
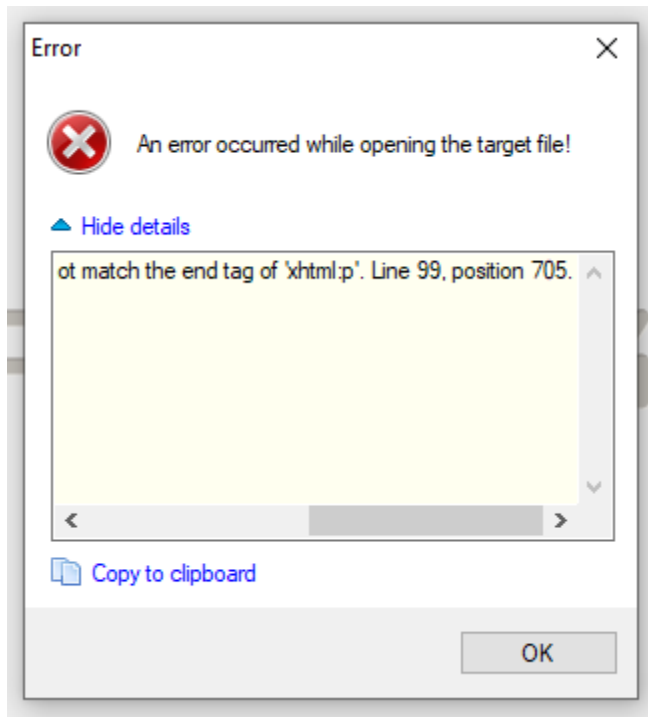
Error message shows ReqEdit detected an invalid ReqIF source code

ReqIF file format

ReqEdit follows ReqIF standard on all levels. It will display contents of ReqIF files from structural to attribute definitions.

ReqIF format

Attribute Types
atomic data types: boolean, date, enumeration, int, float, string, xhtml

Attributes
uses the basic attribute type definitions with optional restrictions: min, max, length, can be defined for objects and specifications also

Object types
collection of attribute types that are grouped together

Objects
uses a specific object type and has values for each attribute

Values
value objects for attributes of objects or specifications

Specification Types
a collection of object types and specification attributes

Specifications
uses a single specification type

Hierarchy
requirement object structure inside a specification

Relations
links between the objects

Documents

ReqIF requirements are grouped into specification documents, these are displayed in
the **tab bar**. Each opened ReqIF file will have its own random color to indicate that the files
are together.
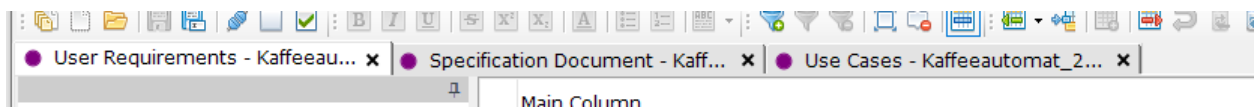
ReqEdit tab bar showing colored dots in front of specifications that are contained in a single opened file

Hierarchy

Each specification document has its own object structure which is shown in the navigator
tab.
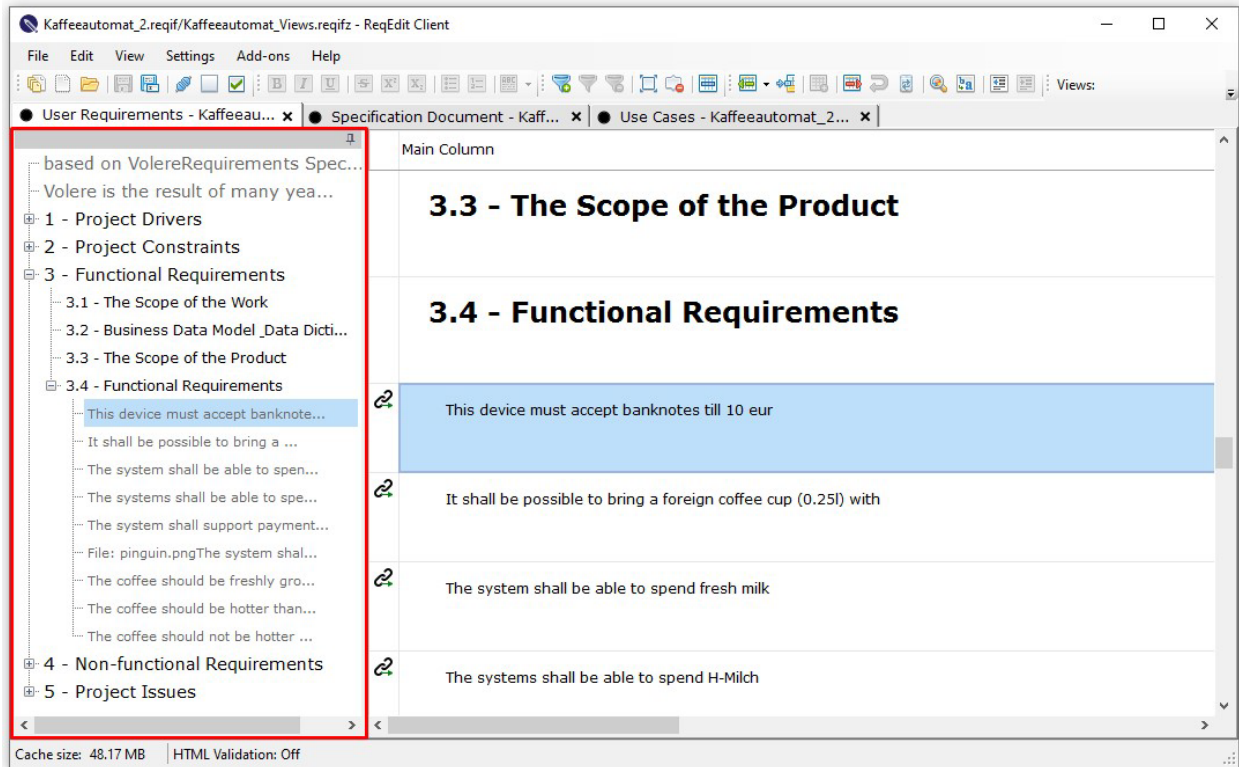
ReqEdit displaying an opened ReqIF file, navigator on the left side is highlighted

The navigator can be used to quickly jump to a specific section in the specification document.

Numbering
Automatically generated for each ReqIF.ChapterName which are used as headlines. Depth is determined by child objects.

Objects

Each row in the main content area is an object that has a Main Content and additional attributes. Objects are displayed as follows
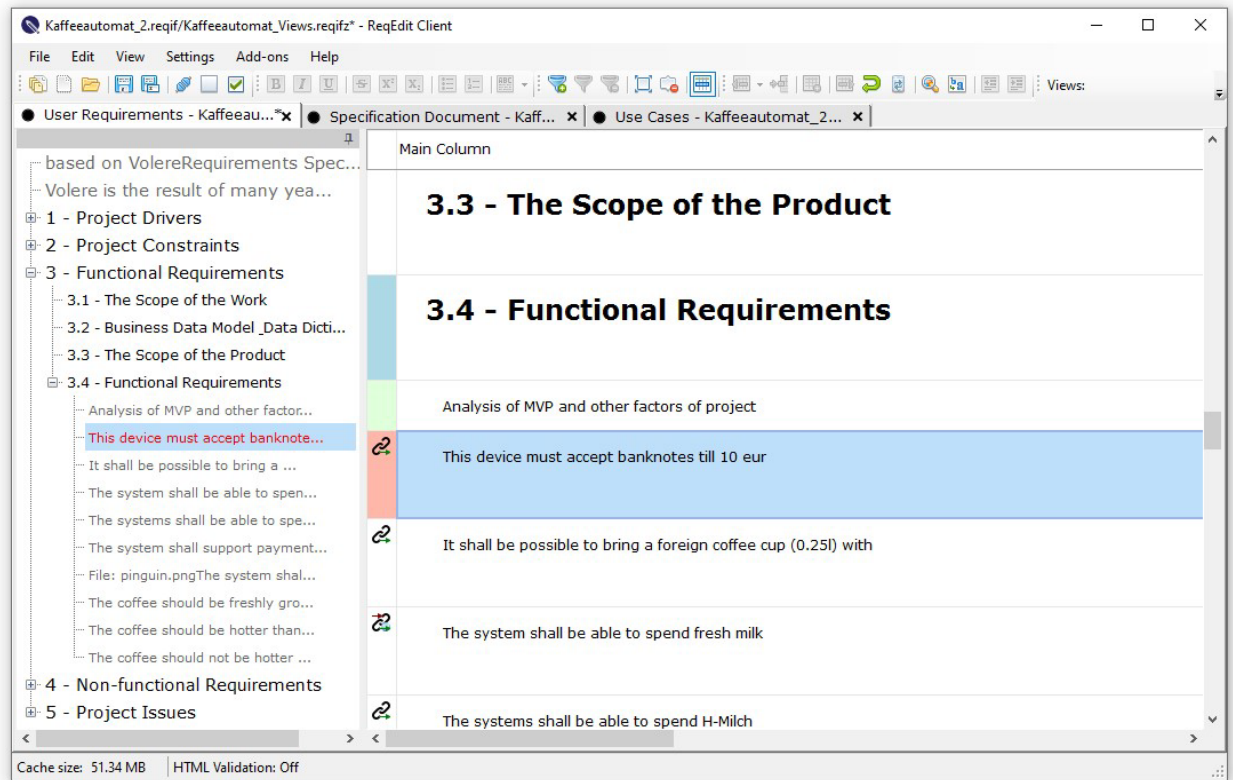
ReqEdit displaying different types of requirement object states from top to bottom:
not changed (white), edited and saved (blue), new not saved (green), deleted (red), with links (link icon, in, out, external)

Status indicator

First column of the grid is a **frozen column**, which means that the user will always see the column, even if the document will be scrolled horizontally.

Displays the following states:

- unchanged – marked with white color
- edited – marked with light green
- edited and saved – marked with light blue
- links - marked with link icon
  - internal links
  - external links
    - URI / OSLC
    - Inward / Outward
- red - soft deleted (can be recovered)

More about Editing objects you can read here.

Attachments

ReqEdit displaying attachment previews of an object, file icons and preview images

Double-click on the icon. The attached file will be opened by the installed applications on the machine.

Attributes

Object attributes are displayed as columns inside the data grid. The default column layout starts with Main Column then the rest of the object attributes defined in the specification.

By default all attributes are displayed in the specification as texts

Main Column

Displays the the main ReqIF attributes: ReqIF.ChapterName, ReqIF.Name, ReqIF.Text as a single cell where

ReqIF.ChapterName - is displayed as Headline and will be auto numbered, displayed in the navigator

ReqIF.Name - displayed in the content area as text

ReqIF.Text - displayed in the content area as text

The main column rendering can be customized in the Settings > Document menu

Attribute columns

All columns can be set hidden / visible by right clicking on the column name row.
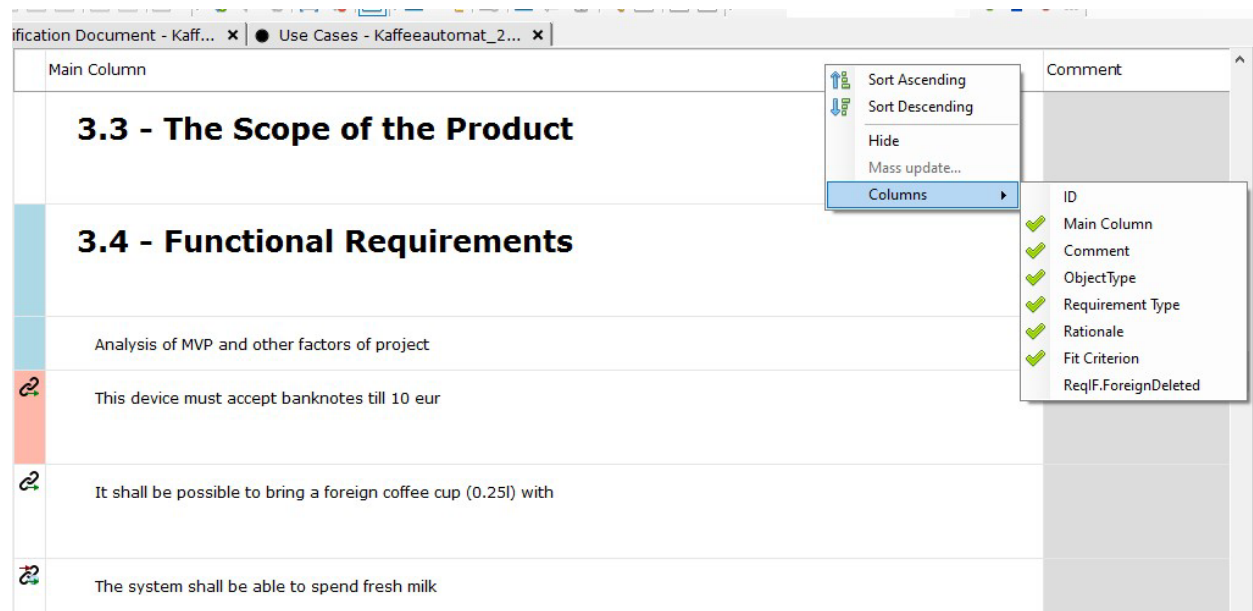
ReqEdit column management menu displayed by right clicking anywhere on column names

Attributes used in the current specification document can be displayed by opening Setting > Document and selecting the Attributes tab.

Related topics:

- [Filtering and sorting](#)
- [Views](#)

Edit ReqIF requirement files

https://youtu.be/La-70CBGDno
ReqEdit presentation video

Why ReqIF files?

Requirement Interchange Format is the de facto standard for lossless requirement data exchange for any industry.

ReqIF simplifies the workflow of requirements exchange between suppliers and vendors in all industries. Mainly driven by the automotive industry.

ReqEdit was built from the ground up to aid the participants of the supply-chain to quickly use ReqIF files without the need for complex ALM/PLM software solutions. This is becoming more important with the digital transformation in more and more industries.

ReqIF based interchange offers seamless integration of supply chains in all industries making collaboration more standardized and efficient.

ReqEdit is an easy tool for ReqIF editing. Creating, comparing and merging requirements and specification documents with powerfull add-ons.

Large companies rely on lossless data exchange

ReqIF format simplifies and streamlines the data exchange of requirements between companies or departments and also on the management level. ReqEdit has multiple licensing models to support corporate environments and use cases.

Medium or small size companies needs cost effective solutions to participate in the supply-chain

ReqEdit is available as a standalone application. No other dependency is required. Cost effective solution for processing ReqIF requirement files.

ReqIF file structure

ReqEdit follows ReqIF standard on all levels. It will display contents of ReqIF files from structural to attribute definitions. More details you can find [here](#).

ReqIF format

Attribute Types
atomic data types: boolean, date, enumeration, int, float, string, xhtml

Attributes
uses the basic attribute type definitions with optional restrictions: min, max, length, can be
defined for objects and specifications also

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uses a specific object type and has values for each attribute

Values
value objects for attributes of objects or specifications

Specification Types
a collection of object types and specification attributes

Specifications
uses a single specification type

Hierarchy
requirement object structure inside a specification

Relations
links between the objects

Edit Objects

Double click on a cell to edit the content. An inline editor appears for XHTML attributes. For
other data types appear corresponding checkboxes or date pickers or single inputs.

To close inline editing click on any other cell.

The user can set the height of the main column: check the box in Settings / User ... /
Calculate only main column row height.

Use the quick action icons or the right-click menu for text formatting and XHTML content
editing.

Editing shortcuts

Ctrl+C	Copy content inside the cell
Ctrl+X	Cut content inside the cell
Ctrl+V	Paste text (remove all formatings)
Ctrl+Shift+V	Paste content remove formatting
Ctrl+Shift+F	Paste content clean more and remove tables
Ctrl+Shift+T	Paste only text content

Text formatting shortcuts

Ctrl+B	Bold
Ctrl+I	Italic
Ctrl+U	Underline
Ctrl+T	Strike
Ctrl+1	Superscript

Editing and text formatting shortcuts
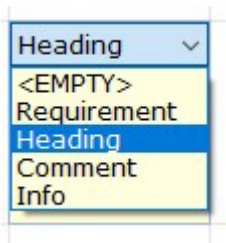
Single valued enumeration will show a dropdown selector
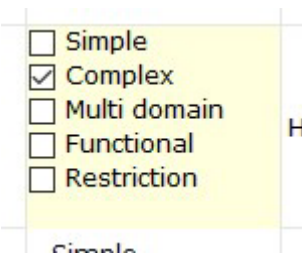
Multivalued enumeration attributes are displayed as a list of checkboxes
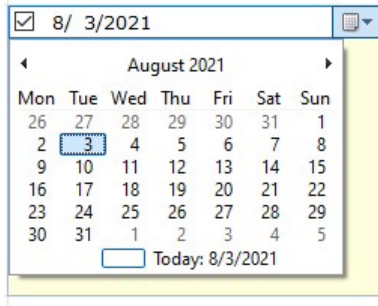
Dates will show a datepicker

String types editing as simple text

Boolean values editing as checkboxes

Integer and float types will only store numerical values

Insert rows

New rows can be created on the same level or as children to the current row.

For inserting a new row at the same level of the current row, right-click on a cell and choose where to insert it. A new generic object is displayed as an empty line or with default values.

Each spec object in ReqEdit has the same attributes (columns) in a document. Different object types are not supported in a single document.

Insert child row creates 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 edited it will look like this:
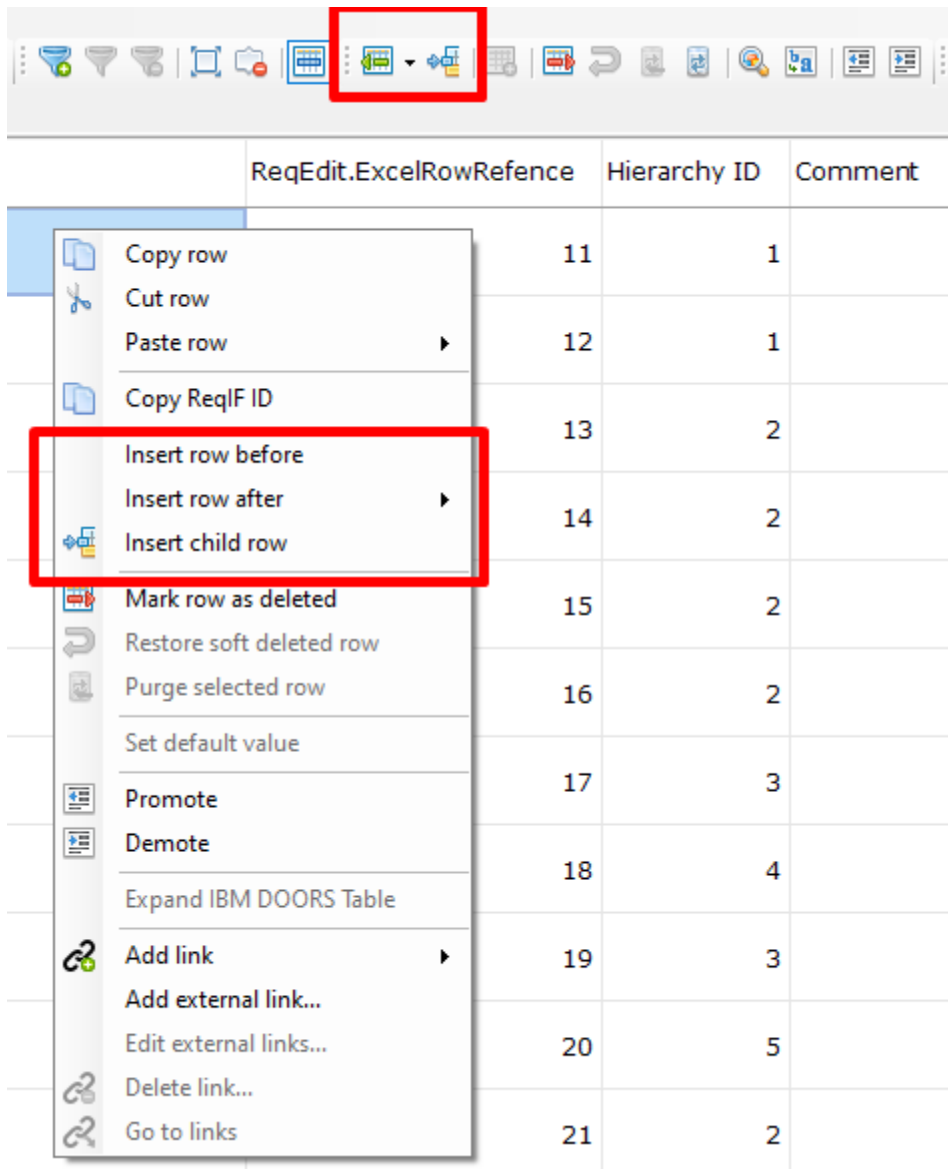
ReqEdit displaying context menu

There is a possibility to insert rows based on customizable requirement patterns. To offer a quicker way to build requirement documents.

Use **Insert row after..** and chose one of the patterns.
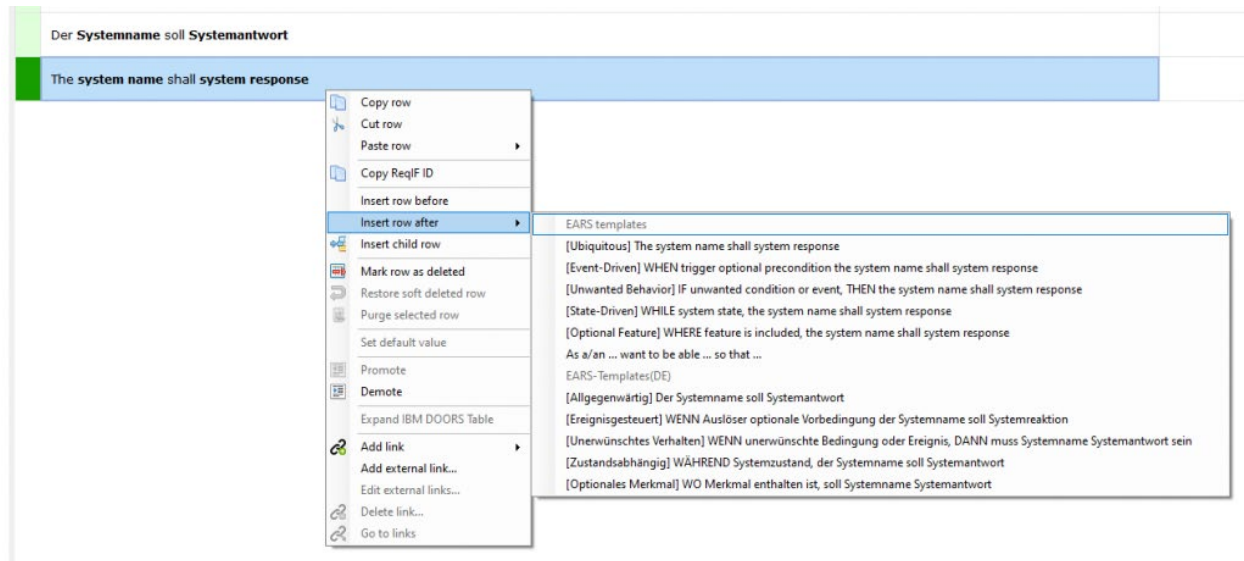
Delete rows

ReqEdit uses soft-deletions, delete will not remove objects from the ReqIF file.

Delete the selected row(s) by

- selecting the row(s) and pressing DEL or
- right-click menu or
- the quick action icons.
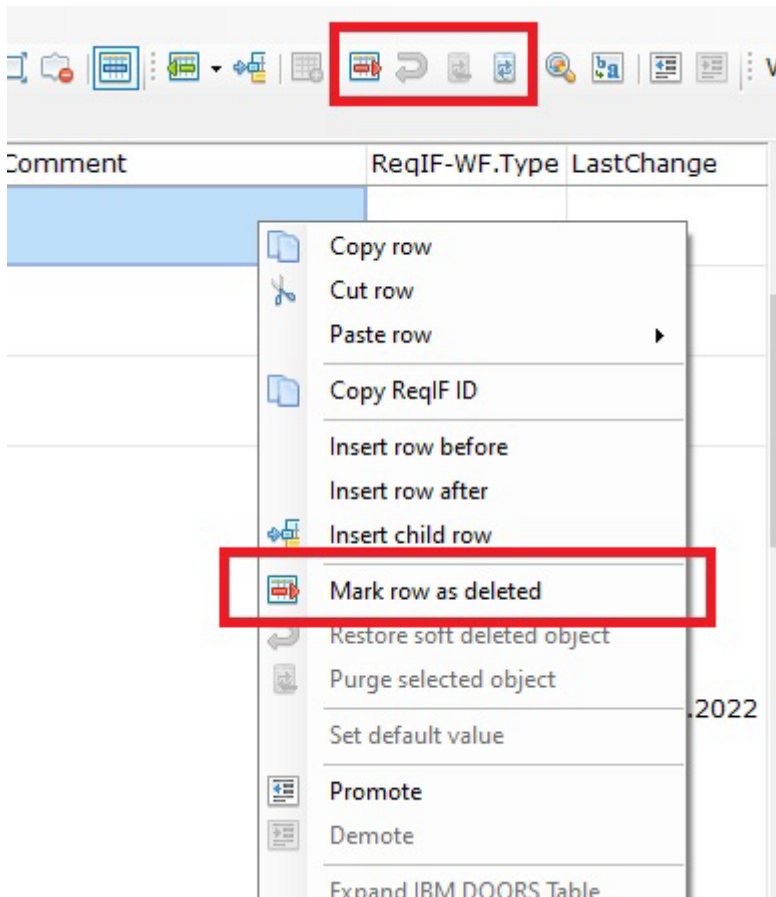
ReqEdit displaying context menu, highlighted are the delete menu items

To confirm Delete action click Yes in the pop up window which appears next.

This function places the removed row(s) into a deleted state. (marked with red)
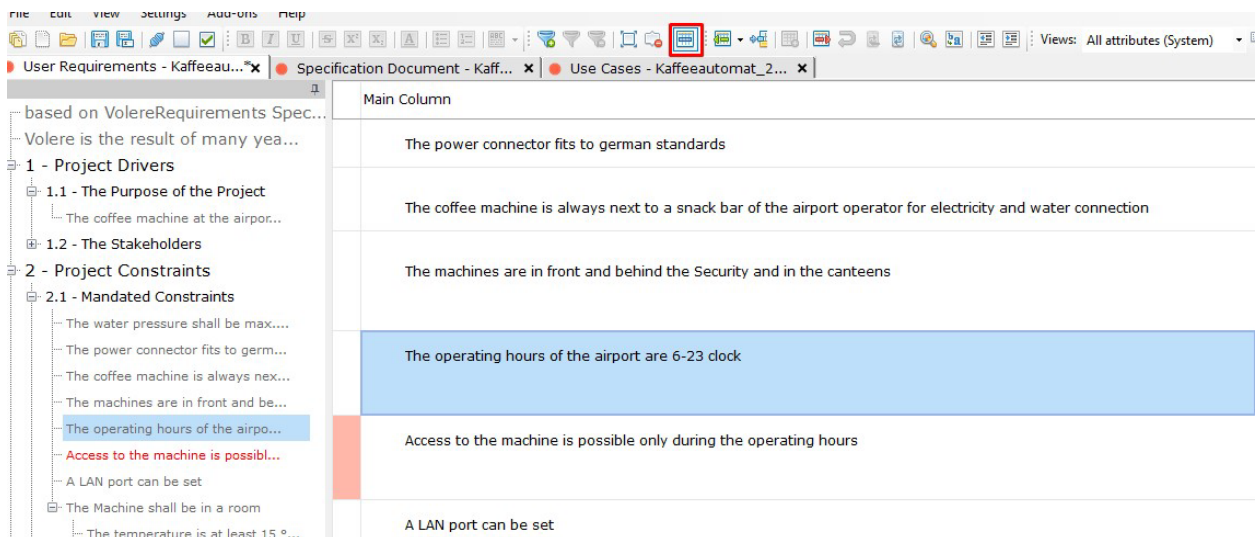
ReqEdit displaying deleted rows with red status indicator, highlighted is the Show deleted objects icon in the top bar

Restoring deleted rows

To restore a deleted row(s) select it/them and click on the „Restore deleted rows" button from the toolbar or right-click on the object and select the Restore menu item. It is possible to restore multiple deleted rows.

Restore deleted rows icon

PURGE (definitive deletion) of deleted objects

Use PURGE to remove objects, marked as deleted, with all attachments from a ReqIF file. Purge function is on the delete toolbars and right-click menus.

Once purged, objects cannot be recovered. Auto-backup feature will have 10 snapshots for recovery.

To clean up deleted rows:

- **purge a single deleted row** or
- **purge all** the deleted rows in the entire specification document.

Purge one row or all deleted rows icons

Copy and move rows

Use cut-copy-paste of existing row to create new one. Right-click the desired location and paste the copied object before / after or as a child row of another row.

If a copied row contains links, on paste, a notification asks what to do with the existing links.

If the row has child elements, these will also be copied or moved.
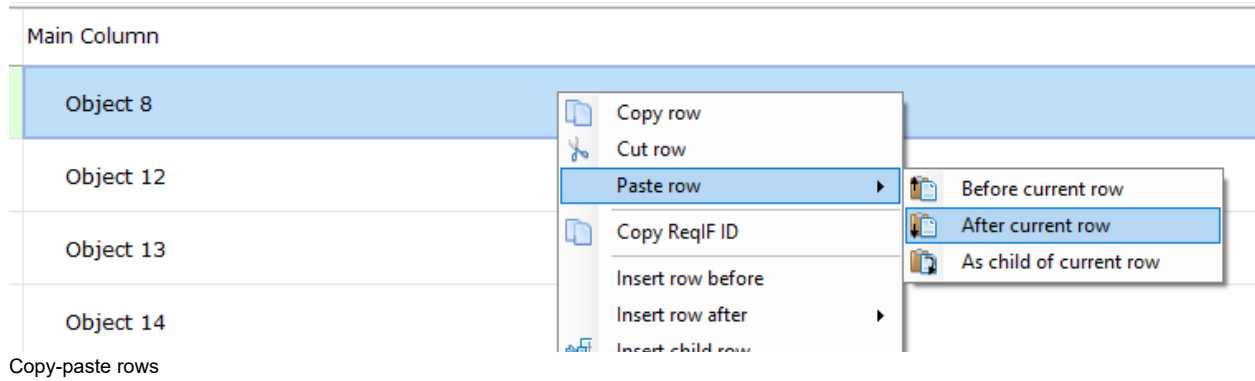
Copy-paste rows

To copy-paste multiple rows at a time select multiple rows and right-click on the last selected row, click Copy row than click on the first selected row and click Paste.

Copy-paste in the Navigator

Use right-click menu in the object navigator to copy-paste objects/rows.

If an object contains links to or from other objects, the links are copied too. A pop up window asks for copying the links or not.

Note: In Navigator is possible to copy-paste only one row at a time.

Navigator drag-and-drop

Use drag-and-drop to move objects

Object can be created by CTRL+Drag and release at the desired location

Editing Hierarchy

To change the hierarchy of objects use the **promote** and **demote** functions. They are in the quick action icons, and in right-click context menus.
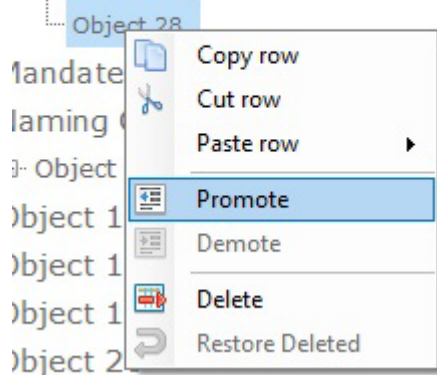
Promote / demote objects with right-click menu

Promoting

Will move the object one level up in the hierarchy. If using the drag-and-drop way for promoting, an object/ row can be moved more levels up or down.

It is possible to Promote/Demote multiple rows of the **same levels** by selecting rows with shift and arrows than click Promote/Demote.

Demoting

Move the object one level down as children in the hierarchy.

Promote or demote a parent object include promote or demote the object together with its child objects.

Main column

Main column is a combined cell displaying the most important ReqIF attributes: ReqIF.ChapterName, ReqIF.Name, ReqIF.Text

In this cell, the main fields of the document can be edited at once. These fields are XHTML type attributes.

Double click the main column of an object displays an inline XHTML editor with 3 tabs. One tab for each attribute.
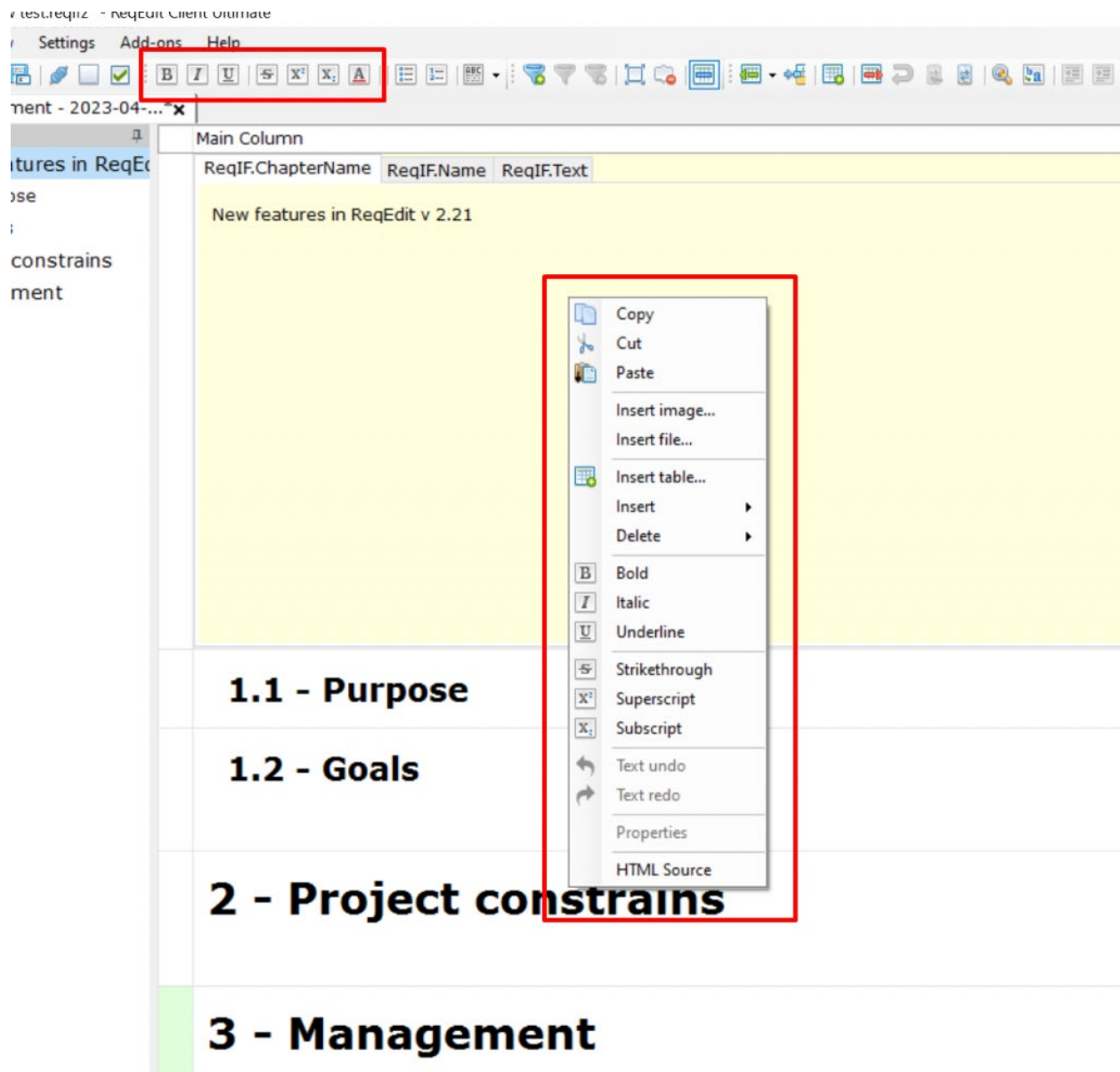
Cell content editor using buttons or mouse right-click

The cell content editing menu Copy/Cut/Paste function refers to copy/cut/paste texts and pictures from the same document and external documents, too. (word file, excel spreadsheet cells, screenshots, images). The function converts external data format into ReqIF supported one. (text formatting doesn't see, image cannot be downloaded). File format must be ReqIFz to be able to save the images, as attachments.

Note: Depending on corporate internet access, downloading copied images could be prevented by firewalls. ReqEdit will remove some formatting due to limitations of XHTML inside of the ReqIF format.

Copy-Cut-Paste the text of cells of the same ReqIFz file has no limitations regarding the possibilities shown in the right click menu. (Bold, underline, italic, strikethrough, subscript, superscript)

Copy-Cut-Paste of tables is with visible borders of cells. ReqEdit will add automatically borders to tables, even there was no set one before.

Note for experts with HTML knowledge: The HTML Source (experimental) menu item allows to edit and change the HTML source code of content of a cell.

Limitations on content editing Copy-Cut-Paste function:

- Cell formatting settings in Excel spreadsheet
- Attached objects from Wordpad (RTF documents)
- Images can be copy-paste only in ReqIFz files
- If the image/attachment cannot be copied, only file name of the preview images are displayed.

Recommendation: Before copy-cut content from an external source, save file to have a backup copy in case of the copied content is ReqIF invalid.

Properties

Properties menu gives information about the attachments / inserted files in main column cells. Right click on the inserted file, **Properties**
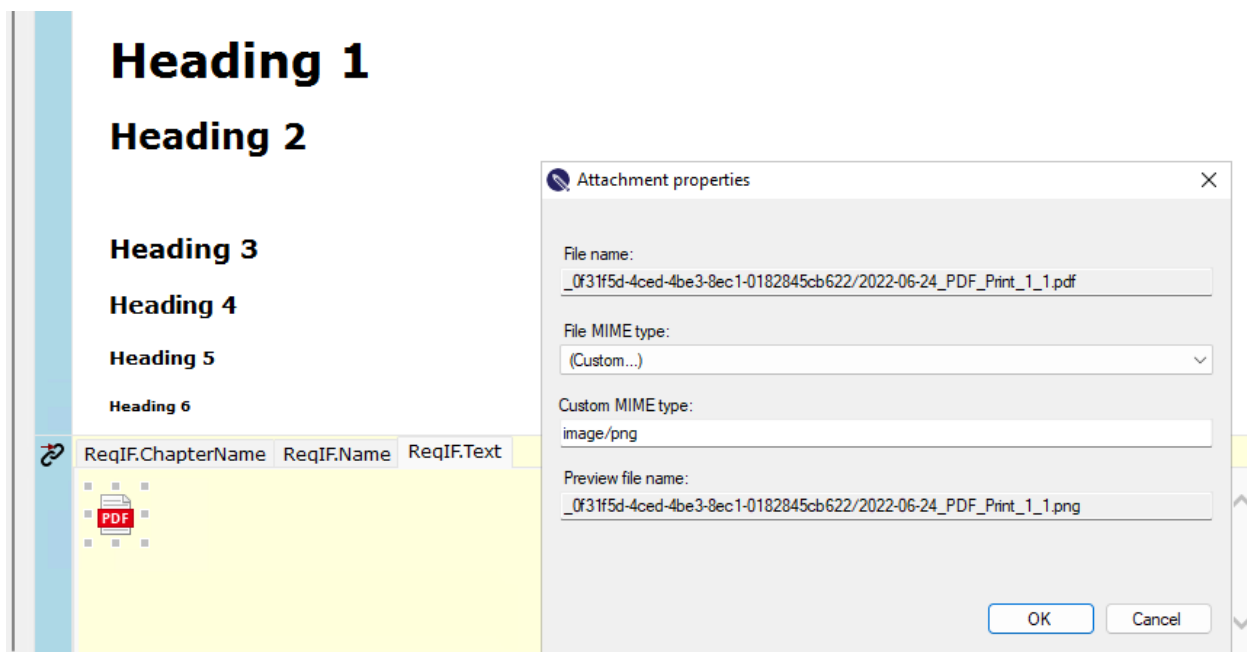
Right click menu in editor mode shows Properties window

HTML Source (experimental)

This function of the right click menu of content editor is recommended to expert users. This function allows to view and change the html source code of the attribute/cell.

Note: Currently the changes will not be validated at inserting time. So be very careful at any change!

Columns

Mass update of attributes

Update multiple rows with a specific attribute value.

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

The mass update function is not available for the main column

To use Mass update function first define a filter to select all the rows you want to change. Then right-click on the column header. Select Mass update....A popup window appears.
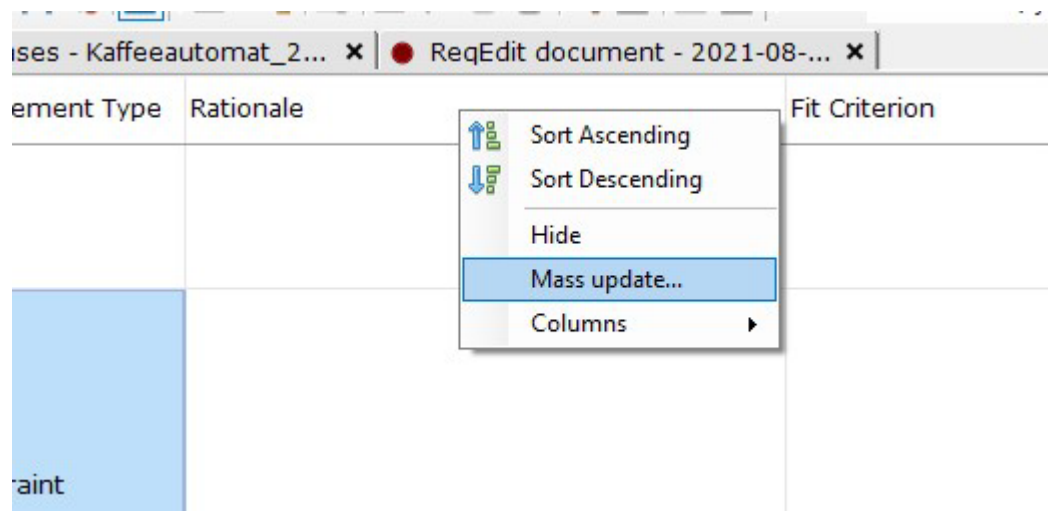
ReqEdit displaying the mass update menu item by right clicking the column header

string
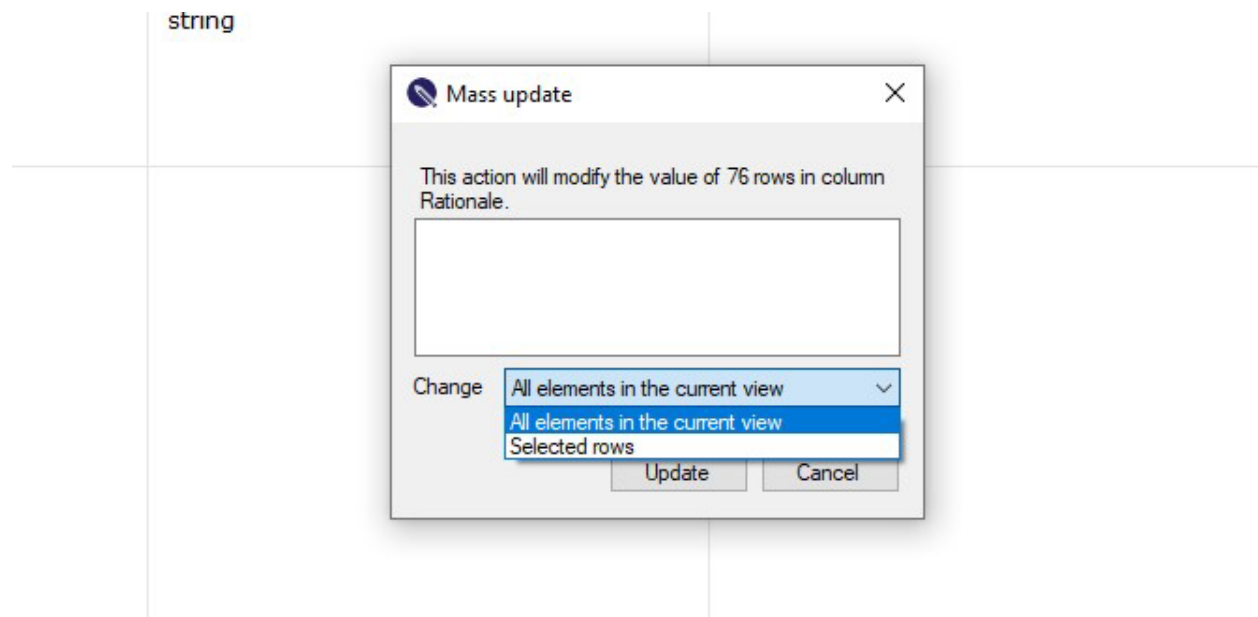
Mass update popup window showing options

Mass update changes all values in the current view for the column.

To change individual cells, select multiple cells from the same column (either Ctrl + click or Shift + click). Right-click at the column heading to trigger the mass change.

Default values

Each attribute can have a default value defined in the Document settings. Selecting an attribute and access the "Attribute editor".

To set back a cells default value for each attribute of a row, right-click the corresponding cell and select the "Set default value".

		ObjectType	Requirement Type	Rationale	Fit Criterion
		Info	-		
	analysis. ents We also				
	ns from	Info	Constraint		
	sers and				
		Heading	-		

Context menu:
- Copy
- Cut
- Paste ▶
- Copy ReqIF ID
- Insert object before
- Insert object after
- Insert child object
- Mark object as deleted
- Restore soft deleted object
- Purge selected object
- Set default value ←
- Promote
- Demote
- Expand IBM DOORS Table
- Add link ▶
- Add external link...
- Edit external links...
- Delete link...
- Go to links
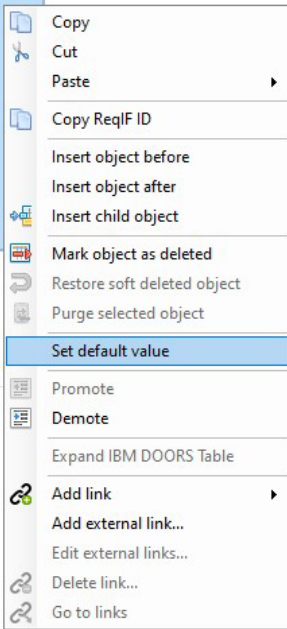
Attachments

ReqIF Archive .reqifz files supports file attachments for objects.

Only XHTML attributes can have attachments inside .reqifz files

Image attachments:

png, bmp, jpg, gif, ico, wmf,

File attachments:

any file type is supported

pdf, doc, docx, xls, xlsx ...

Opening file attachments

Double-click on the file's icon. The attached file is opened by the installed applications on the machine.

Insert file attachments

To add an attachment right-click the XHTML inline editor area and select **Insert image** or **Insert file**

ReqIF.ChapterName ReqIF.Name ReqIF.Text

First Heading

	Copy
	Cut
	Paste

| Insert image... |
| Insert file... |

Describe the purpose of this chapter

| Insert table... |
| Insert | ▶ |
| Delete | ▶ |

First requirement

B	Bold
I	Italic
U	Underline

S	Strikethrough
X²	Superscript
X₂	Subscript

| ↶ | Text undo |
| ↷ | Text redo |

| Properties |

| HTML Source |

ReqEdit displaying context menu, highlighted is the 'Insert image' item

ReqEdit displaying attachment previews of an object, contains file icons and preview images

Tables

XHTML attributes by definition can have tables. All tables are rendered inside cells.

ReqEdit displaying tables inside XHTML attributes

To edit XHTML table structure use the inline editor right-click menu.

Save ReqIF files

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 ReqIF file.

NOTE: Changes on linked documents (e.g. Images or Word, Excel) are not detected. Make a content change to trigger update and enable saving.

Save as

Save the currently edited file as a new filename. Contents will be identical to the original one. Can convert ReqIF into ReqIFz.

Note: Actual file is closed and the file in new saved format will be opened.

Save as encrypted file

To encrypt a file choose **ReqEdit Encrypted File (*reqenc, *.reqzip)** as file type then click SAVE.

More about encryption of a file read here: [ReqEdit File Encryption/Decryption](#)

Close files

ReqEdit can only close saved files. If there are any unsaved changes, a notification displays and asks to save files before closing.

Use **CLOSE ALL** to clean up the editor.

License activation

General overview about the license activation options. For more details, click [here](#).

Automatic activation

Activation is automatic for trial version and for some custom-tailored versions.

Online activation

(Public environment, internet/online access with no restriction)

The License activator window appears. In the text box enter the Product key and press the Activate button
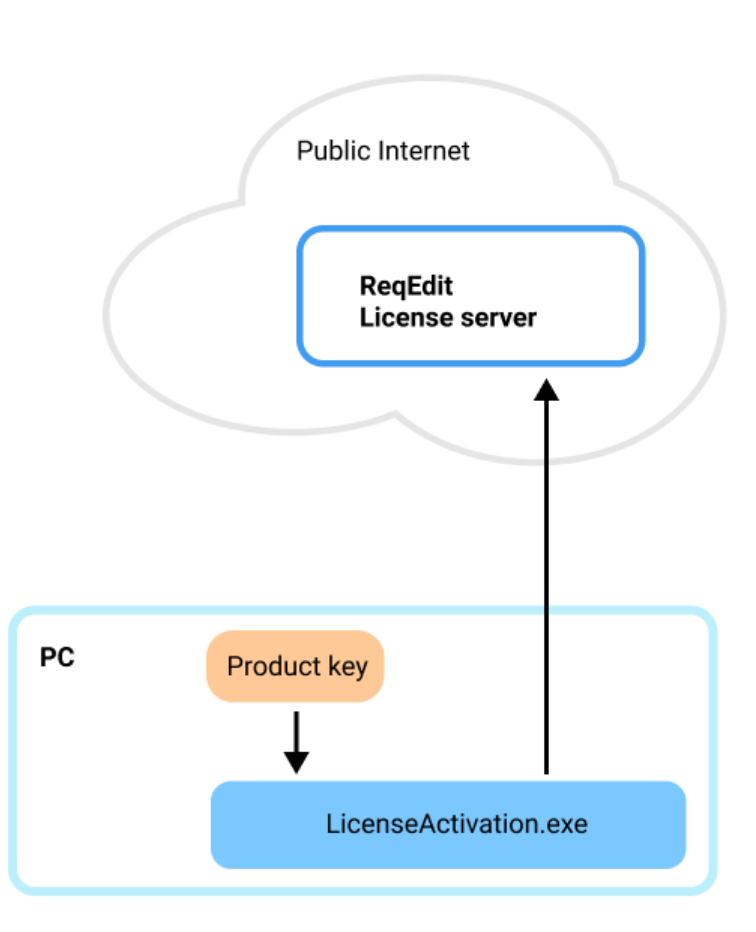
Diagram of public environment with direct connection to ReqEdit License Server

Follow the [Activation steps](#)

Offline activation

(Limited environment, with restriction on internet/online access)

LicenseActivation.exe

Access to ReqEdit License Server is restricted or not available. Manually activate license for the machine where ReqEdit is running.
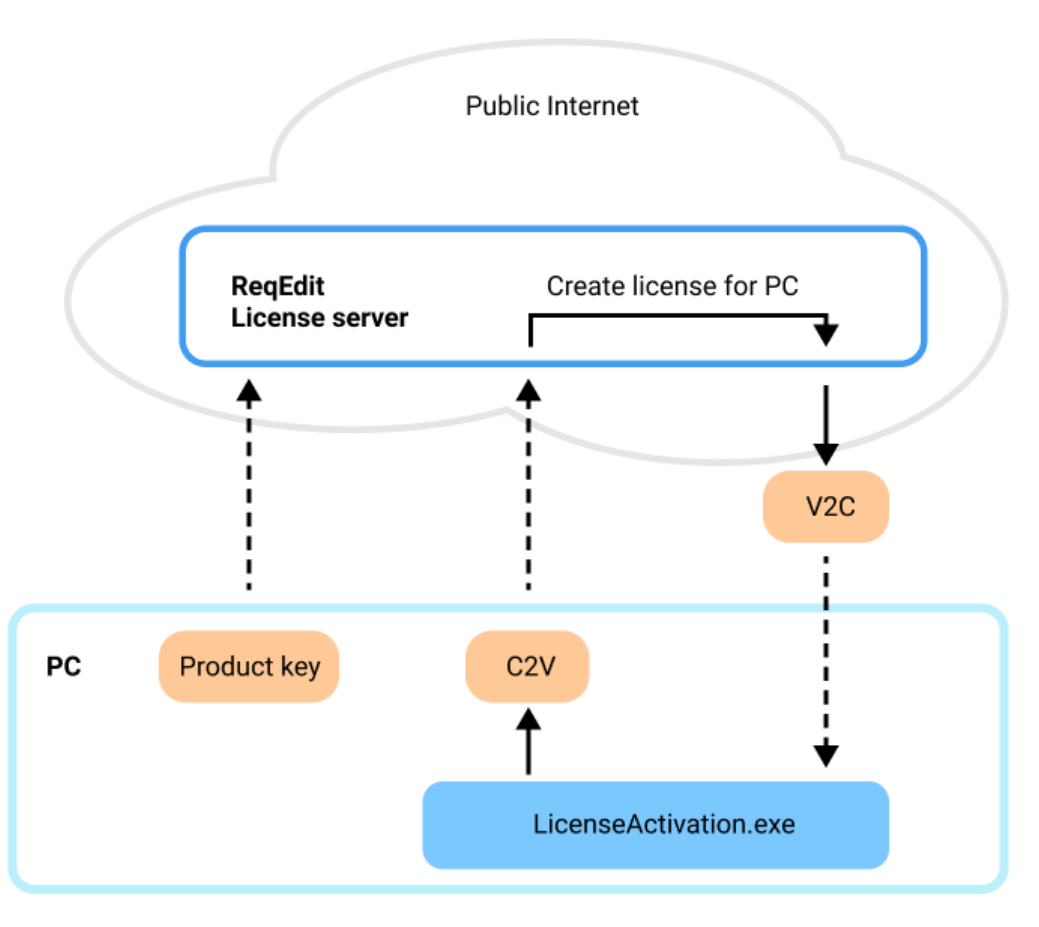
Offline activation with LicenseActivation.exe

Offline Activation with LicenseActivation.exe

RUS Tool
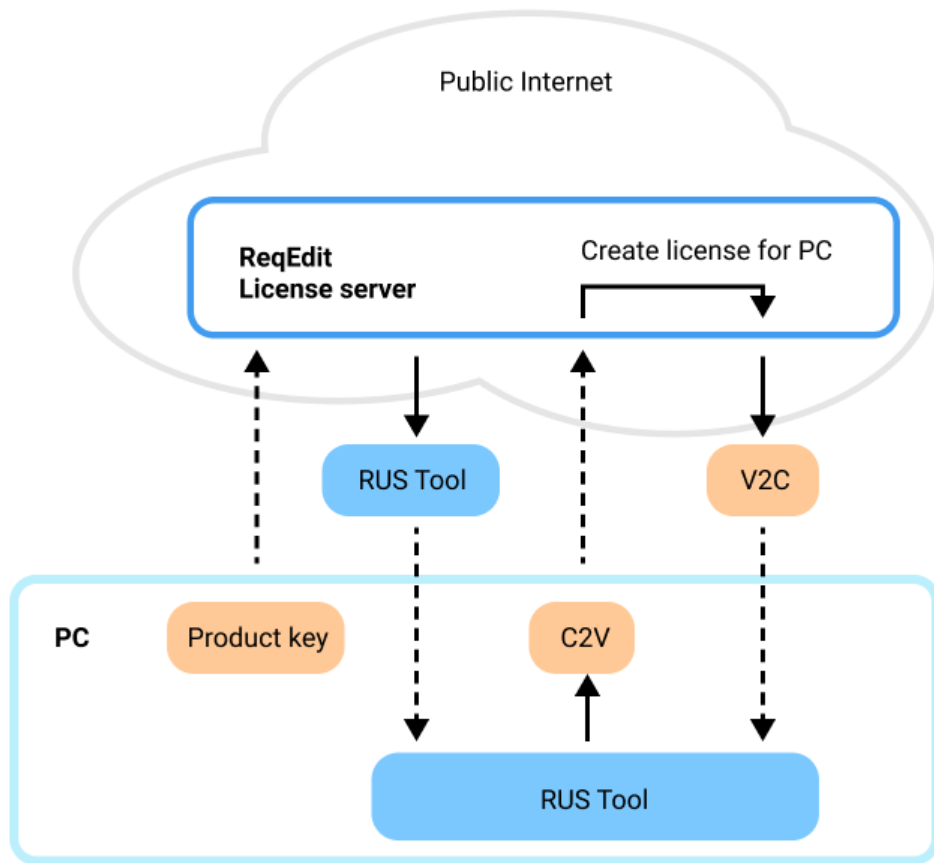
Offline activation with RUS tool downloaded from the ReqEdit License Server

Offline Activation with [RUS tool](#)

Network license server ACC

(Public internet access is restricted due to internal security policies, and only a local license server is accessible)

A self-hosted licensing server is installed on the restricted network. The server holds all the ReqEdit licenses, that can be accessed from any workstation inside the company network (no local license installation necessary).
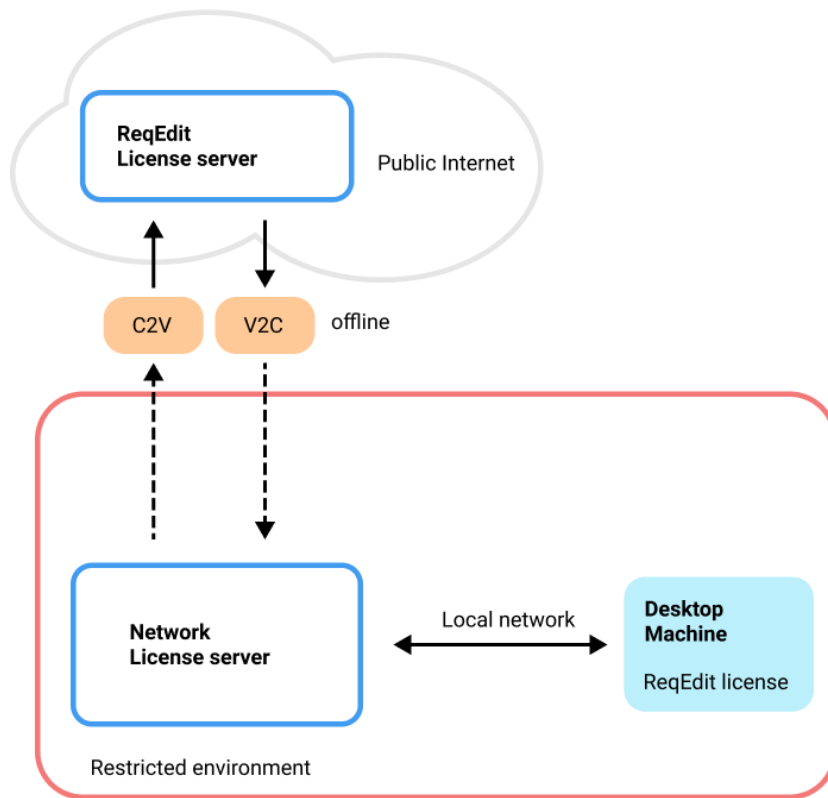
Diagram of restricted environment with self hosted ReqEdit License Server

Setting up the **[Network license server](#)**

License detaching

Note: please inform REQTEAM if you plan to use detaching, so the license can be generated for this purpose.

When users want to have a working copy of ReqEdit outside the restricted environment. License detaching is possible by using the Detach Tool Add-on.

Detaching licenses will lock the license for a period of time for a specific machine. Locking a license has to be done inside the restricted environment, after which it can be disconnected from the network.

Diagram showing detach mechanism to work outside network license server

License detaching

Filtering, Searching and Sorting

Filtering

Filtering can be used to display only a subset of objects based on specific criteria.

Filtering is temporary, rules are not saved.

From the toolbar **create filter**, **enable / disable current filter**, **delete filter** can be used.
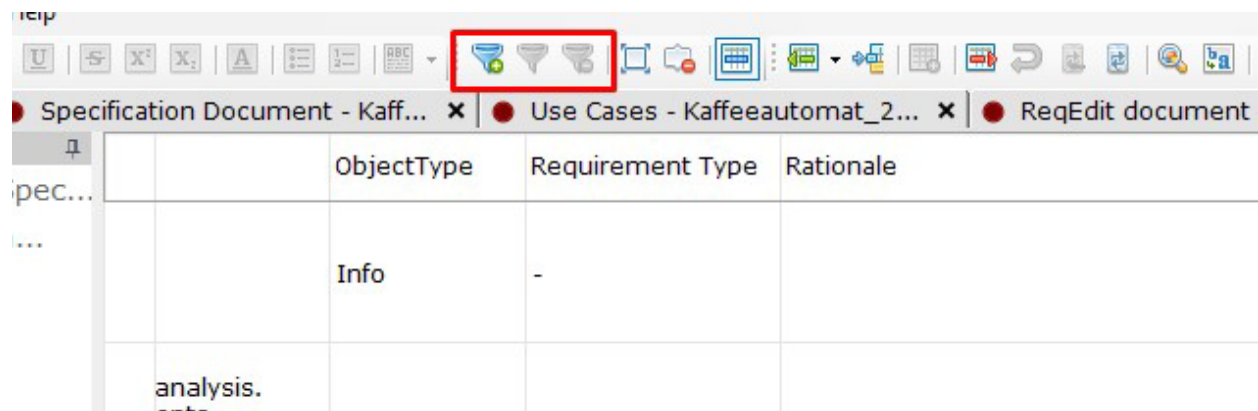
ReqEdit toolbar highlighted are the filtering icons

Filters can be constructed by the toolbar icons, then later edited or deleted.
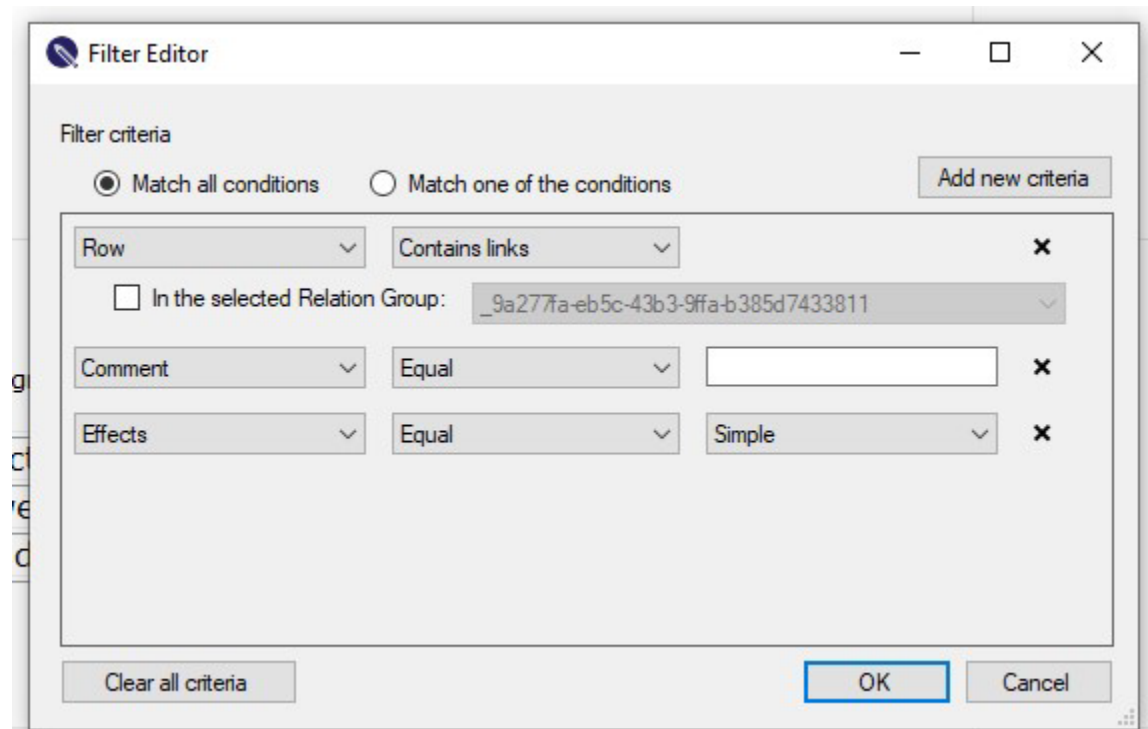
ReqEdit filter editor popup window

Searching

Activate the search bar from the toolbar or by pressing CTRL+F
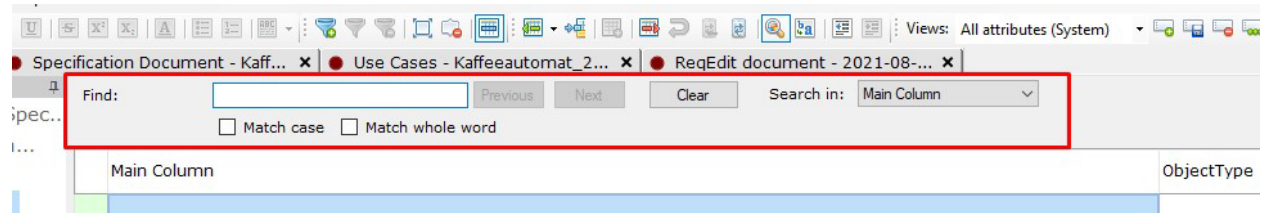
ReqEdit search bar displayed above the main content area

Search can be done in three contexts:

- **Main Column**: search only in ReqIF.ChapterName, ReqIF.Name, ReqIF.Text
- **Entire document**: all attributes
- **ForeignID**: search only in ReqIF.ForeignID (only if the attribute is present in the current document)
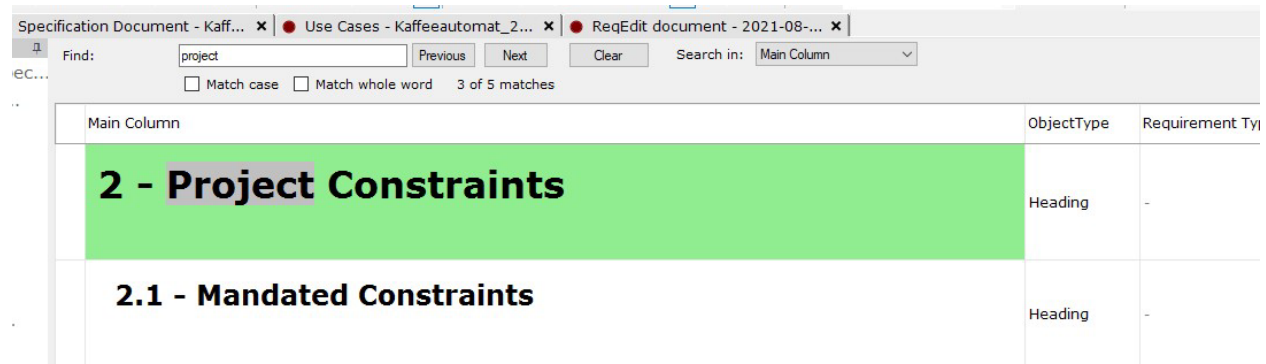
ReqEdit searching, found result displayed in green cell background

Search and Replace

Replacing values or part of values depending on the search can be done by pressing CTRL+H enabling the replace bar

The replace function works only for the Main Column

ReqEdit displaying Search and Replace bar above main content area
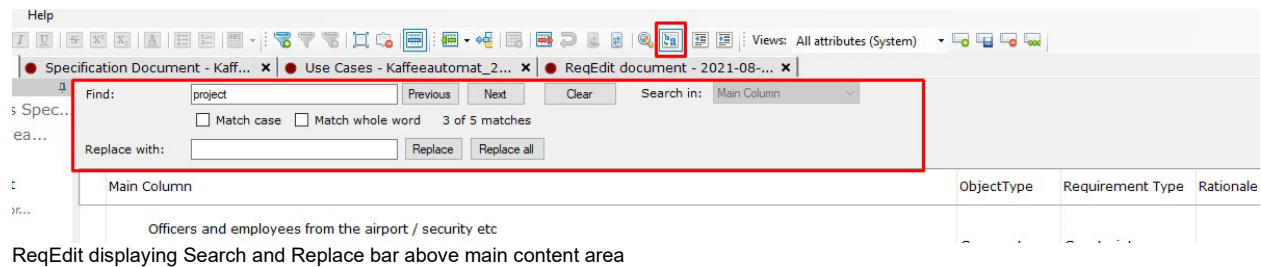
Skipping a specific replacement press the **Next** button

Replace all will do the replacements in the contents of the Main Column then display the total count of replacements.

Sorting columns

Columns can be sorted ascending or descending by **clicking** or by **right clicking** on the column header. Each sort will reset the previous sorting.

ReqEdit column sorting menu by right clicking on the column headers

Multi-column sorting

To have multiple sorting CTRL+click the column headers you want to sort. A numbered arrow will display the sorting order. To change the ordering press CTRL+click again on the column

ReqEdit multi column sorting displayed by numbered arrows in the column headers

Reset sorting

Press the delete sorting icon in the toolbar or press CTRL+D
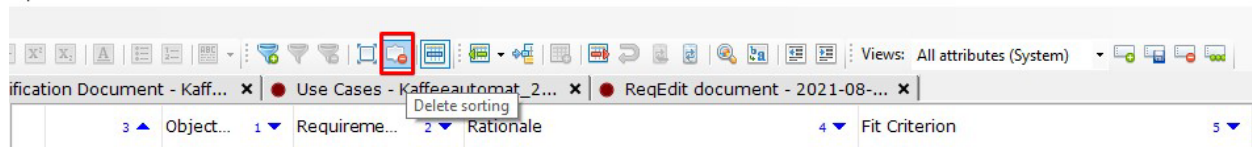
View Manager

What are views?

Views are visible column sets with optional custom sorting and filtering saved as presets. The view manager is located in the toolbar icon groups on the right side.

The views are only for displaying the ReqIF contents in a more human friendly manner for large files with lots of metadata.

The view presets are saved in the ReqIF file

Views can be exported and later imported from the local hard drive
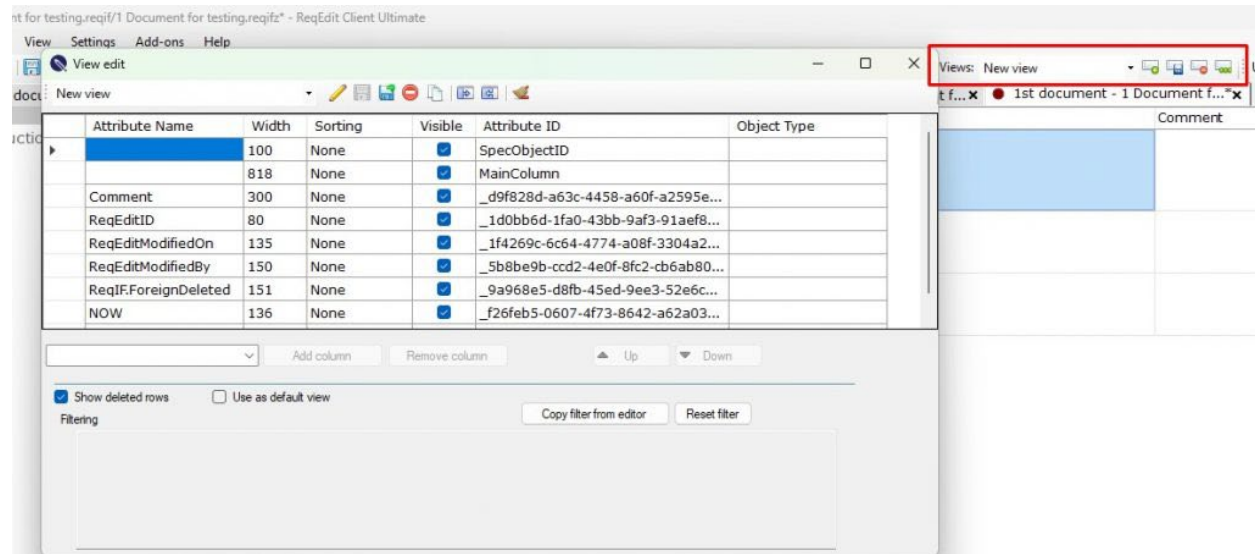
ReqEdit displaying the view manager popup window, highlighted is the view manager toolbar

There are two system views defined per each document which cannot be deleted:

All Attributes - show all the columns in the document

Main column - show only the main column
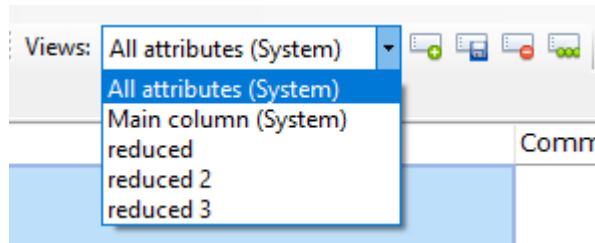
View selector in the toolbar

Manage views

To be able to manage views **user defined views has to be created** by clicking the **Create new view** icon
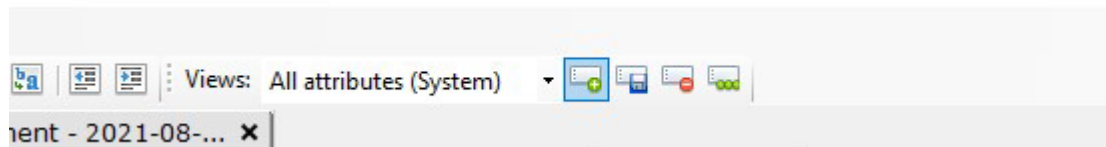
View toolbar icons, selected is the Create new view icon

Create or edit views

Pressing the Edit view icon the view editor popup window is displayed. The toolbar icons are:

- **Rename**
- **Save**
- **Save and Apply**, will show the applied view in the main content area
- **Delete** after confirmation the view is deleted
- **Make a copy** of the view by setting a new name
- **Export** the current view in a .view file
- **Import** .view files. Only existing column names are imported
- **Cleanup**, will leave only the visible columns in the document, a confirmation popup lists all the views / attributes that will be removed. This operation saves the document so a backup is highly advised.
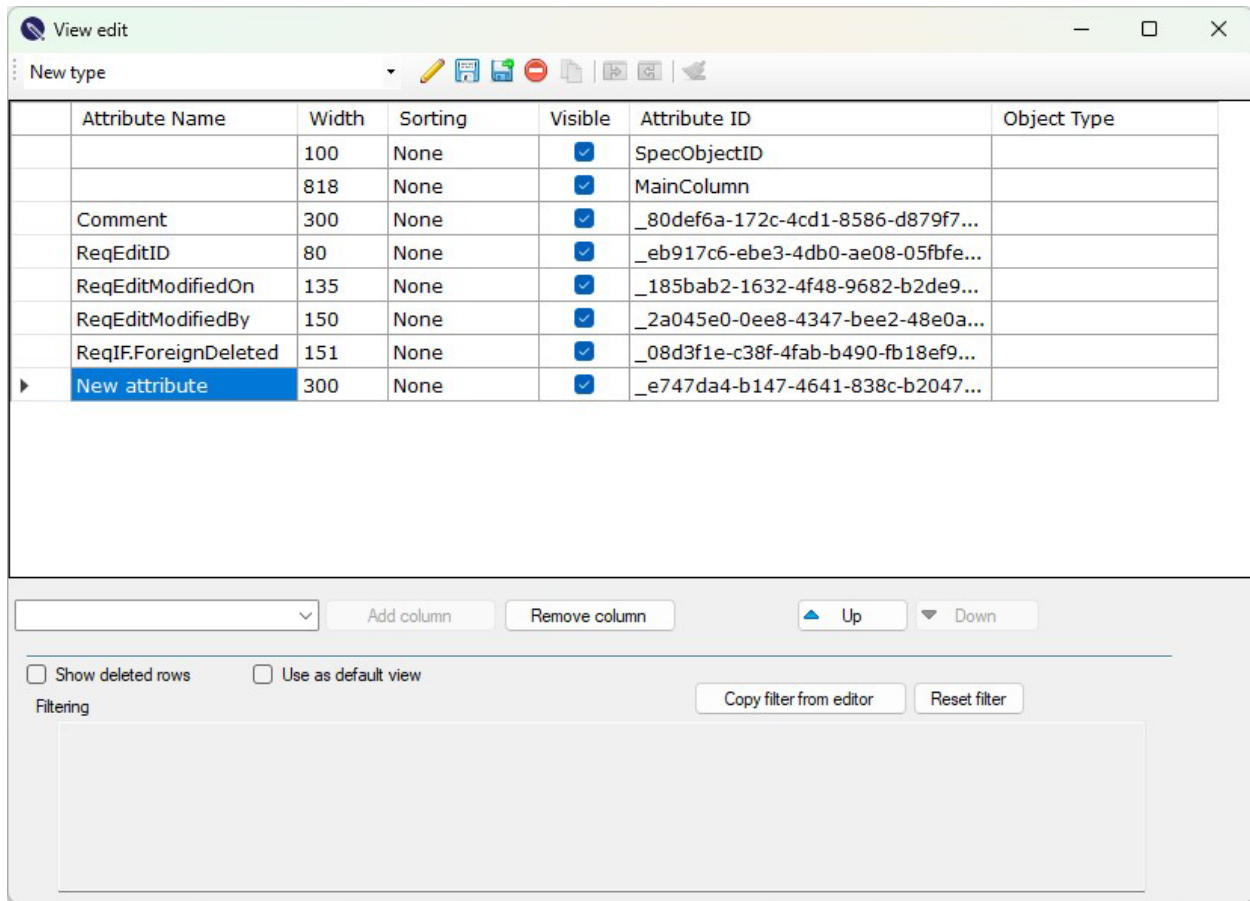
View editor window

A certain view can be set as default. If specified, the ReqEdit opens the default view on start.

Filtering

Views can inherit filtering from the current document. Press **Copy filter from editor** to save the filter into the view.

Show deleted objects filter can also be used

Toolbar

Creating new views

Clicking the Add View button will ask user for the new view name and preparea it will all the attributes added to it

Editing views

User can edit the view in the main gui with rightclicking the column names or by opening the View manager panel by clicking the icon to the right
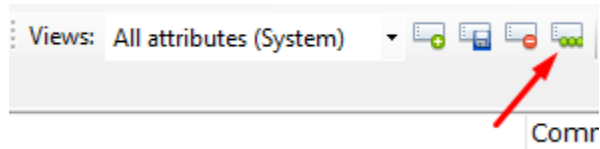
View manger toolbar, highlighted is the Edit view icon

Deleting views

User can delete the selected view if it's not any of the system views by clicking the Delete View button located in the toolbar

Printing

How to print requirements?

ReqEdit supports printing the Main Column or all the visible contents of the current document. File \ Print will show the two options.

The print document is based on a template file located in: ReqEdit\Data\Templates\Print folder. It can be customized as needed.

Print Main Column

1 - Scope

1.1 - Identification

1.2 - System overview

1.3 - Document overview

2 - Referenced documents

3 - Requirements

3.1 - Required states and modes

3.2 - CSCI capability requirements

3.3 - CSCI external interface requirements

3.3.1 - Interface identification
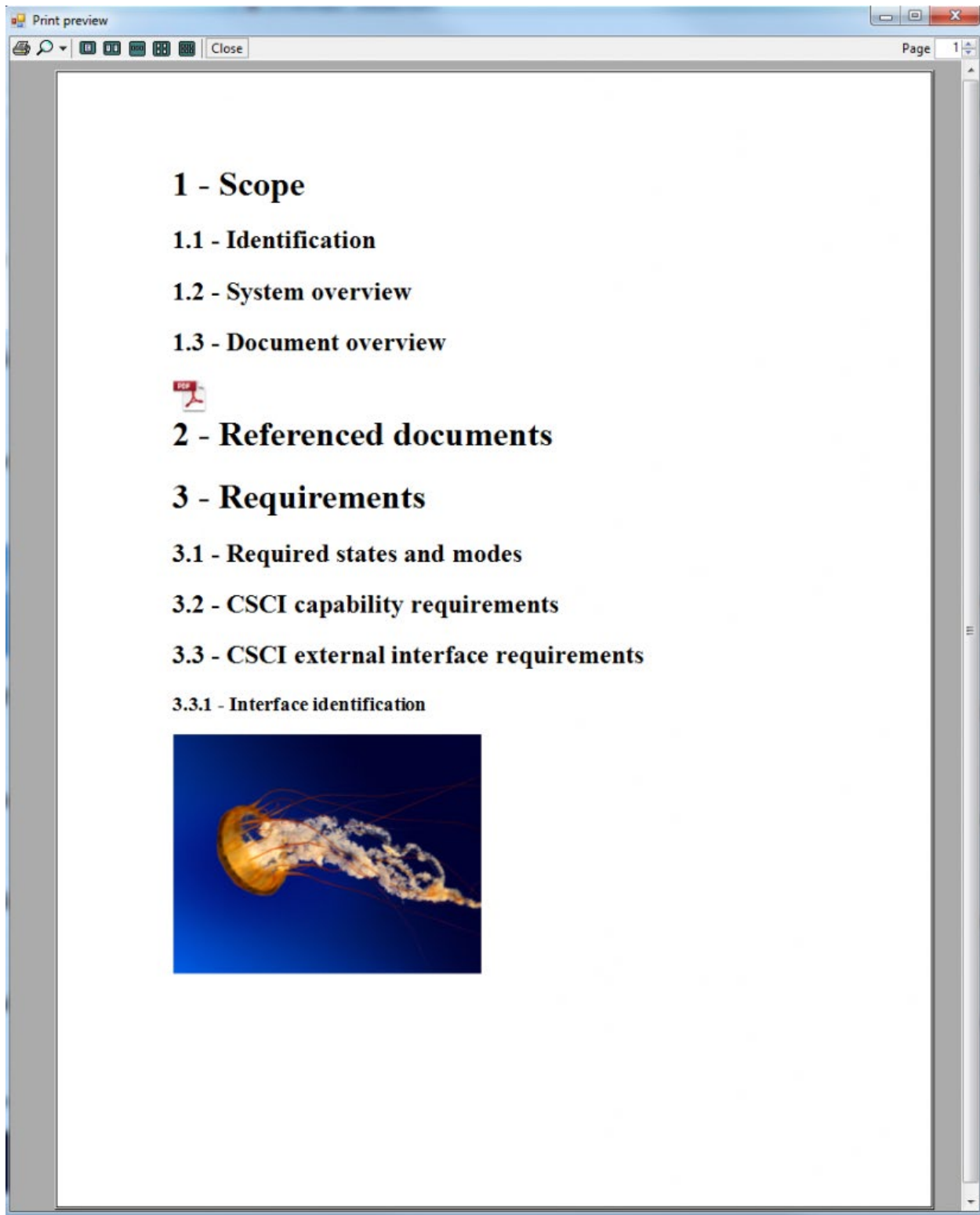
Print All visible columns
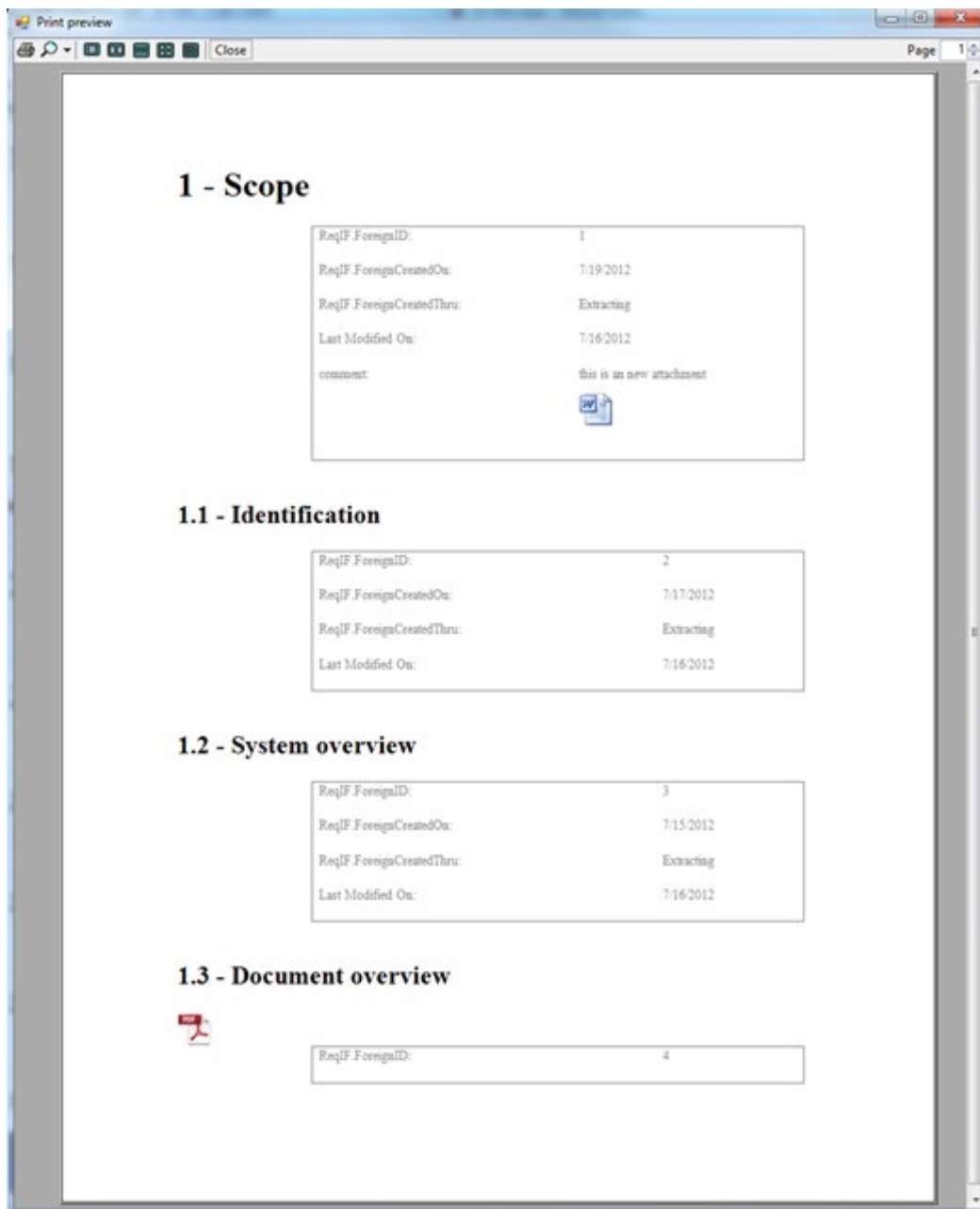
Customize the current view with filters and sorting to prepare a custom view for the print.

Customize the output

ReqEdit offers print customization of the header, footer and cover pages. Access the File >
Print > Print Settings menu item for displaying the customization window.

Print customization

Settings

Expert users can fine tune ReqEdit for their specific use case, and configure lots of ReqIF related settings
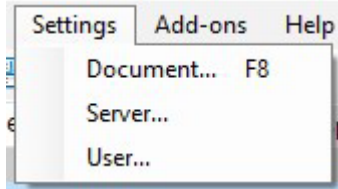
ReqEdit settings menu

Document settings

Manage ReqIF file internal settings

Attribute Types

Attributes

Document attributes

Links

Configure Main Column display settings

Server settings

ReqEdit file server connection settings

Server user credentials

User settings

ReqEdit internal configuration

Interface language

Auto backup settings

Doors table display settings

Cache size

Dashboard startup

Document Settings

Read the chapter [Document Settings](#) for an in depth overview.

User settings

ReqEdit can be displayed in two languages: **English** and **German**.

To change the language, press Save and then restart ReqEdit.

Temporary files

Using ReqIF files produces temporary files like: previews, caches, ReqIF Archive objects, and activity logs.

Automatically each time ReqEdit is exited, the log and temporary files that are older than **6 months** will be gradually deleted.

By pressing the **Delete temporary files** button all logs and backups including backup snapshots will be deleted, offering workspace cleanup for the current user of ReqEdit.

Backups

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 panel.
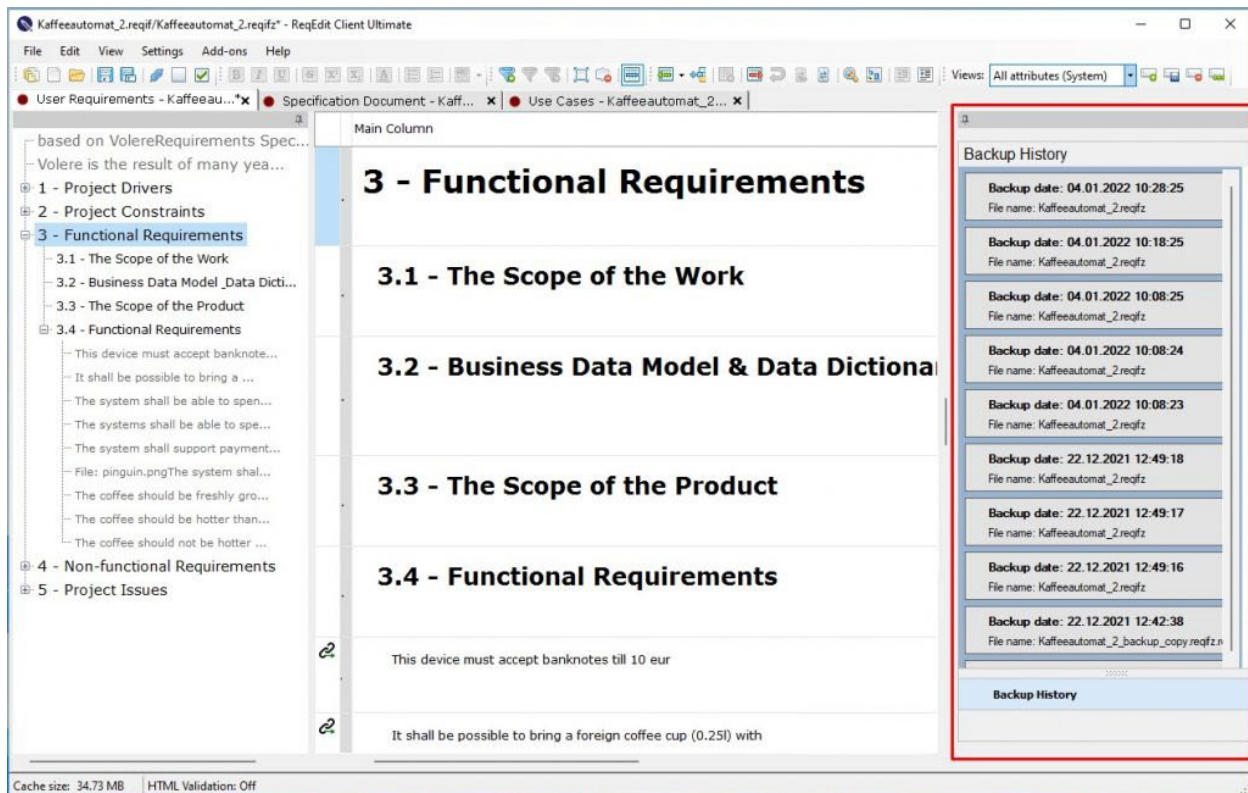
ReqEdit displaying a ReqIF file, highlighted on the right side is the auto backup panel displaying available backups

The timed backup process can also be disabled by unchecking the [Create backup] checkbox in the Settings > User panel.

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**

The locations of the Log and Backup folders can be changed. More information can be found in the Program environment chapter.

Image caching

Limit the RAM memory used by ReqEdit. Default value is 500mb, but can be increased to gain more speed.

ReqEdit uses image caching to speed up displaying XHTML contents of the ReqIF files. If the ReqIF files are big, increasing the cache size could be a good idea.
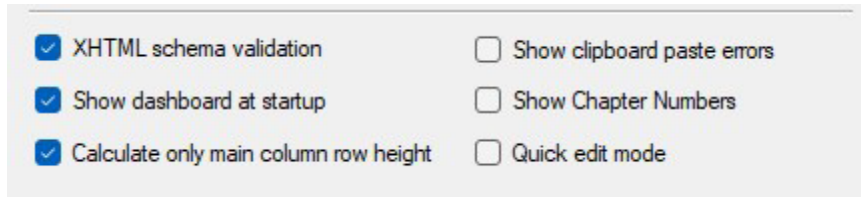
XHTML Validation

In some cases it is recommended to turn off the XHTML validation to save the invalid ReqIF document. Then correct the XHTML errors in XML Editor Add-on. This option should be

always enabled to have maximum compatibility. The change of this setting is instantaneous, there is no need to close and re-open the software.

Read more on [XHTML Validation Error](#)

GUI settings
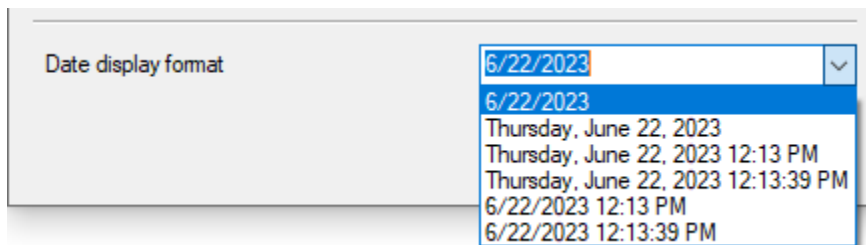
Enable "Calculate only main column row height" for better readability of the main column.

Disable "Show Chapter Numbers" to have a pure view over the ReqIF structure.

To see the changed settings, close and re-open the program.

Date format

This format will be used to display dates. To see the changed setting, close and re-open the program.

Server settings

This requires a ReqEdit Server instance and to be accessible on the internet.

Read more on the **Collaborative work with ReqEdit Server**

The focus of ReqEdit Server is to keep the file management effort as low as possible. The server offers a central point where you can organize and work with ReqIF files in ReqEdit.

ReqEdit Server settings

Enter credentials for ReqEdit Server and press Test Connection then Save.

Once a valid configuration is saved press **Connect** from this window or from the toolbars or the File menu.

ReqEdit Server connection toolbar

Display a ReqIF Info panel for files

ReqEdit exclusive feature to show additional information related to a reqif file. The content can be easily customized by editing a HTML file. This feature is available for all editions of ReqEdit 2.22.

To try out this panel create a new Archive from the **ReqEdit JS Demo** template or download below

Download ReqEdit JS Demo.reqifz

Use this to inform collaborators about specifics related to processes or actions to follow. Or just as an overview description related to a reqif file.
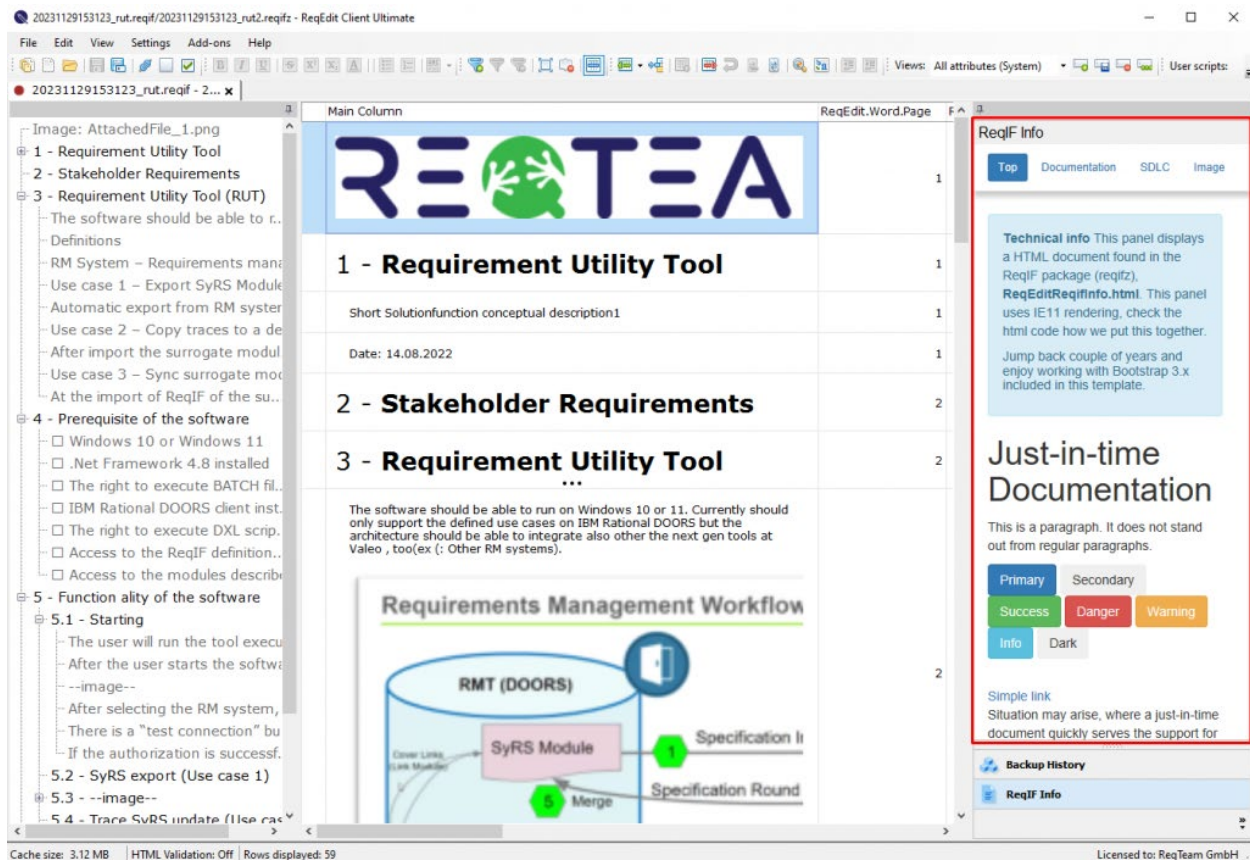
ReqEdit displaying the ReqIF Info panel with html content.

To display the panel simply customize and copy the ReqEditReqifInfo.html in the reqifz or zip document. Then on opening it will be automatically displayed on the right side.

Download ReqEditReqifInfo.html package

Download and extract the package, then modify and copy the html into the ReqIF package.

NOTE: The browser inside the panel uses old browser engine so newer features are unavailable. Also opening other URLs is blocked. The attachment is technically a lost attachment unreferenced in the reqif file.

Document Settings

Before describing the document properties, lets go through the internals of the ReqIF files.

TLDR jump to [Document properties](#)

Attribute types

Each specification document has its own set of attribute types that are used as attributes. The list can be displayed using the menu **Settings > Document**.

> **Automatic data types for documents**
> Each new document will have: integer, real, date, string, xhtml and boolean attribute types automatically created, which can be edited.

ReqEdit displaying list of attribute types of a specification document, highlighted is the data type column which displays the base type and restrictions of the attributes. Selected is an enumeration type attribute and the enumeration values are displayed on the right bottom in the Enumeration Type Values list box

Data types

Attributes in ReqIF files are constructed from underlaying data types with or without restrictions. The usage of restrictions in the data types can make the requirement specifications more robust by not letting invalid values to be used.

Properties of data types

Depending on data types, different properties are available. The following table describes all available properties per data type

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

Boolean

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.

Date

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.

Integer

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.

Real

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.
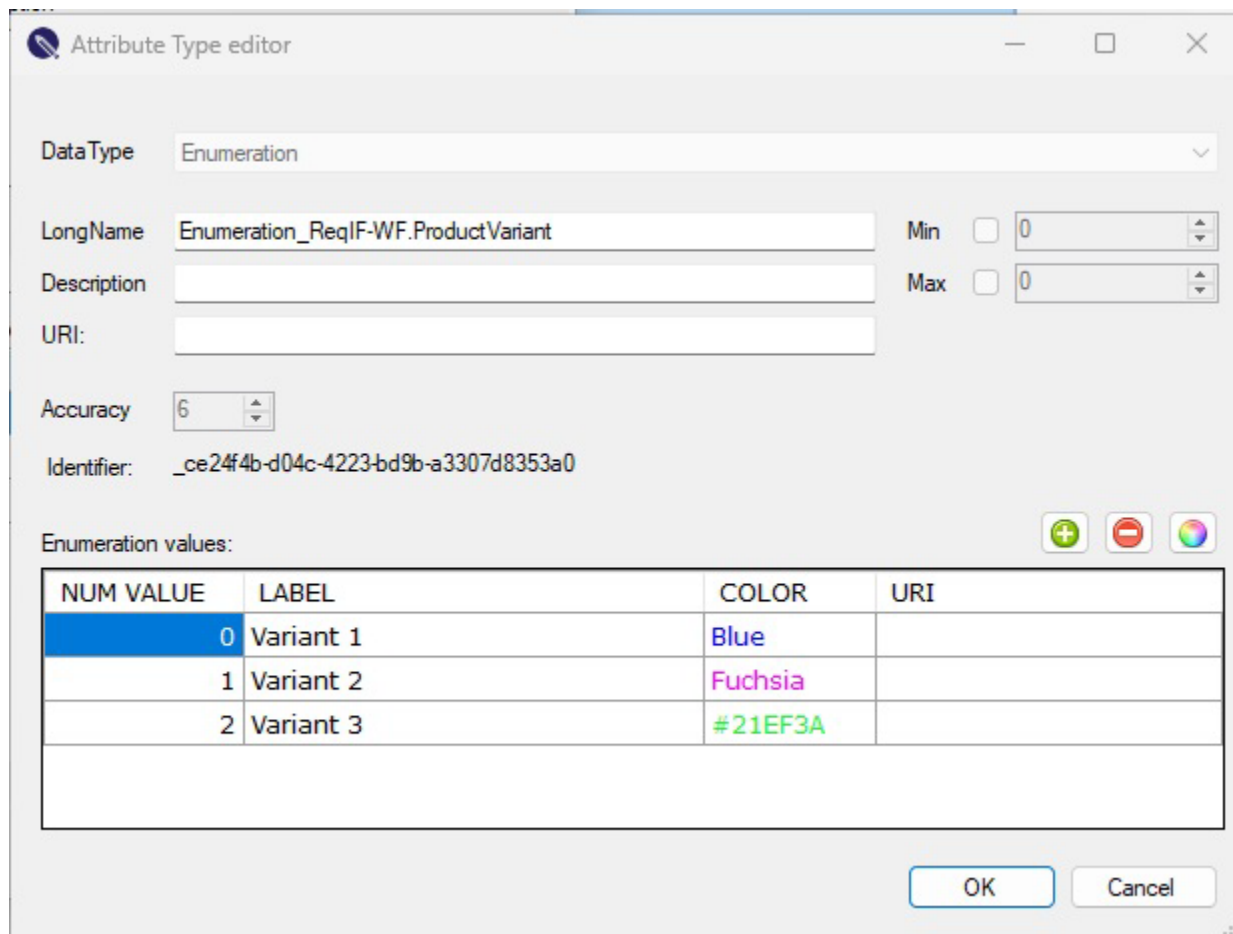
String

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.

Enumeration

Represents a list of fixed values that can be used.

Each value has a **Numeric Value**, a **Label** displayed to the user, and an optional **color** in HEX or named color.

Enumeration type editor window

XHTML

XHTML format permits formatting of text in multiple ways, similar to any text processing application: Bold, Italic, Underline, Strikethrough, Superscript, Subscript, Unordered list, Ordered list, Paragraph, Normal text, Heading 1 – Heading 6

In addition to text formatting **tables** and **images** can be used in the content, as well as **file attachments**.

URI

The URI Represents the Resource types defined by DNG data models. All the attribute definitions, attributes, enum values may have URI values defined.

Attributes

Using the defined attribute types, attributes can be created to be used in the document or the objects. Each data type has its own properties shown in the following table

	Long Name	Description	Read Only	Multivalued	Default Value
Boolean	X	X	X		X
Date	X	X	X		X
Enumeration	X	X	X	X	X
Integer	X	X	X		X
Real	X	X	X		X
String	X	X	X		X
XHTML	X	X	X		X

Each data type has its own properties

Enumeration attributes

Using enumeration data types in attributes has two main use cases

Single-value enumeration

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 value to remove the value of a cell.

Multivalue enumeration

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.

enum	enums
2-lime, 3-pink	4-black
4-black, 5-green	2-lime, 4-black
4-black, 5-green	3-pink, 4-black
3-pink	3-pink
	3-pink
2-lime, 5-green	2-lime
2-lime, 5-green	

Multivalued enum attribute displayed as list of values with colors

Requirement	Non-functional
Requirement	Constraint
Requirement	Constraint
Requirement	Constraint
Requirement	Constraint
Requirement	Constraint

Single value enum attributes are displayed as text

Document Properties

Information related to a specification document is visible in the Document tab. Document Name, description, attributes and statistics.

Statistic Information of:

- Documents in file
- Rows in selected document
- Attributes in selected document
- Attribute types in selected document
- Incoming and outgoing links

Attributes that are defined internal to the specification are also listed with the value displayed on the right side.

ReqEdit displaying document properties

Main Column (heading and text) supports STRING and XHTML as attribute type.

Specification types

Currently not displayed, internally will be created and used exactly as in the ReqIF standard.

Object Attributes

List of attributes used in all objects of the selected document.
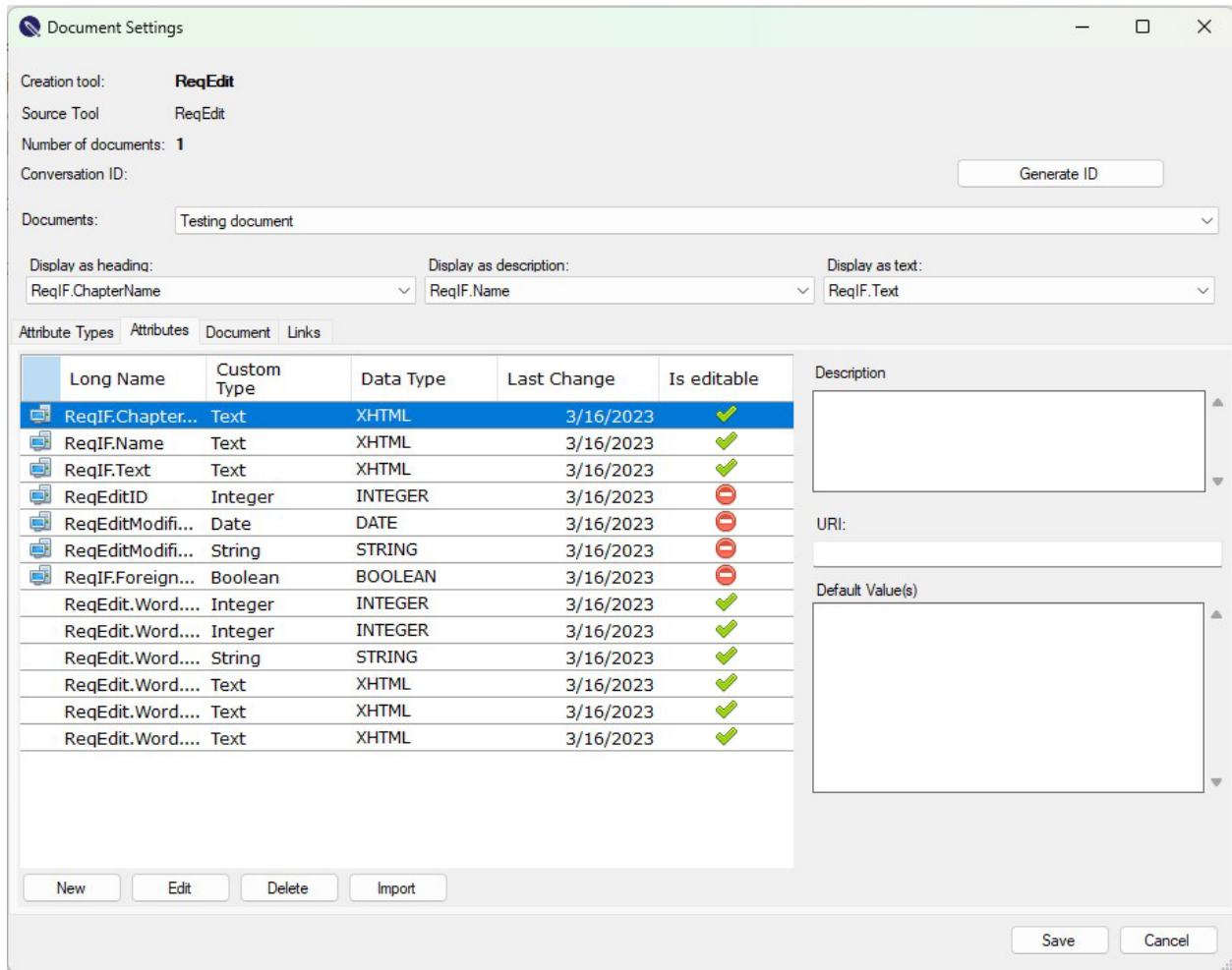
Object Attribute management window

System attributes are displayed by a PC icon in the list, **these attributes cannot be deleted**

ReqEdit internal attributes

- **ReqEditID** – integer type, read-only attribute, internal unique ID
- **ReqEditModifiedOn** – date type, read-only attribute, last modification date of the object
- **ReqEditModifiedBy** – string type, read-only attribute, stores the Windows username who edited the object

Import attributes from other file

To import attributes from an other file:

1. Open both files
2. Click on Document settings\ Attribute tab\ Import

3. Select source ReqIF
4. Select the attributes to be imported
5. Click Save

In case of Attrybute type - enumeration,

- If enumeration attribute exist - after importing, the new values will be added to the enumeration.
- if attribute already exist and type is not the same - the old attribute will be renamed to "... OLD" and does nothing to it

SpecObject types

Currently not displayed, internally will be created and used exactly as in the ReqIF standard.

Links

Are covered in the Links chapter

License Management

Automatic activation.

Activation runs automatically for trial version or for some custom-tailored versions.

On the last step of the installer the checkbox remains at default settings.
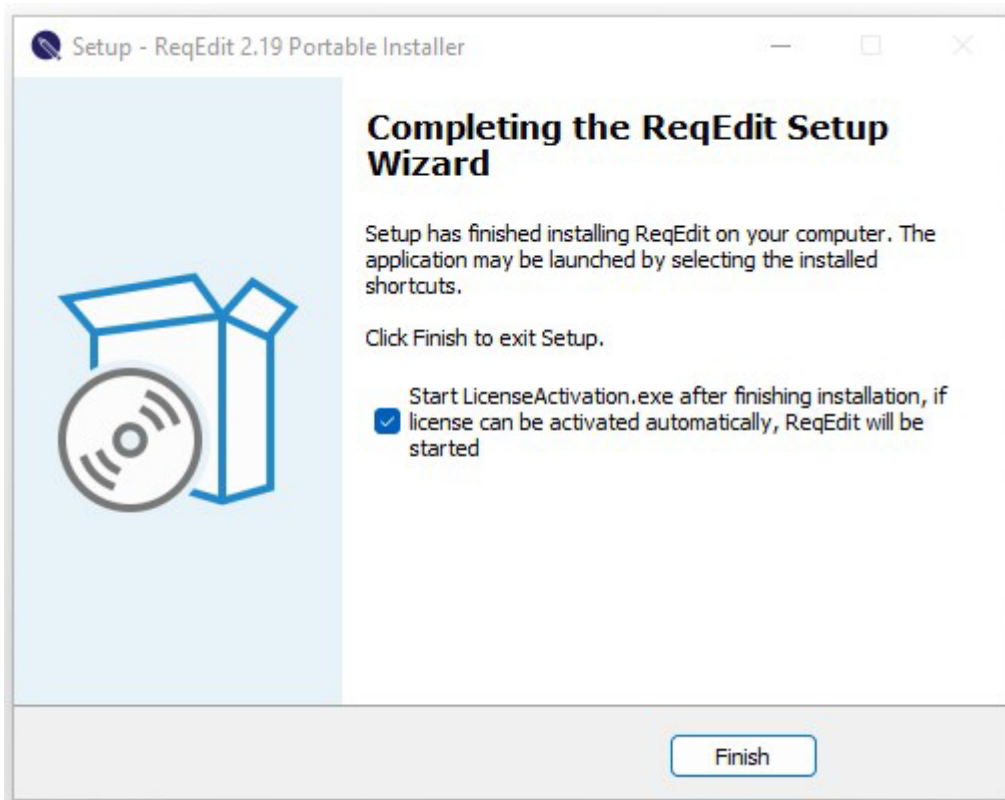
Window Start Activation Setup

LicenseActivator.exe starts without displaying User interface. It detects .v2c file and activates the product.

ReqEdit opens automatically.

Online activation

After installation

Note: You need to have non-restricted Internet acces, or need to configure the proxy settings for it.

The License activator window appears. If not, run the LicenseActivator.exe in the ReqEdit folder. In the text box enter the Product key and press the Activate button.
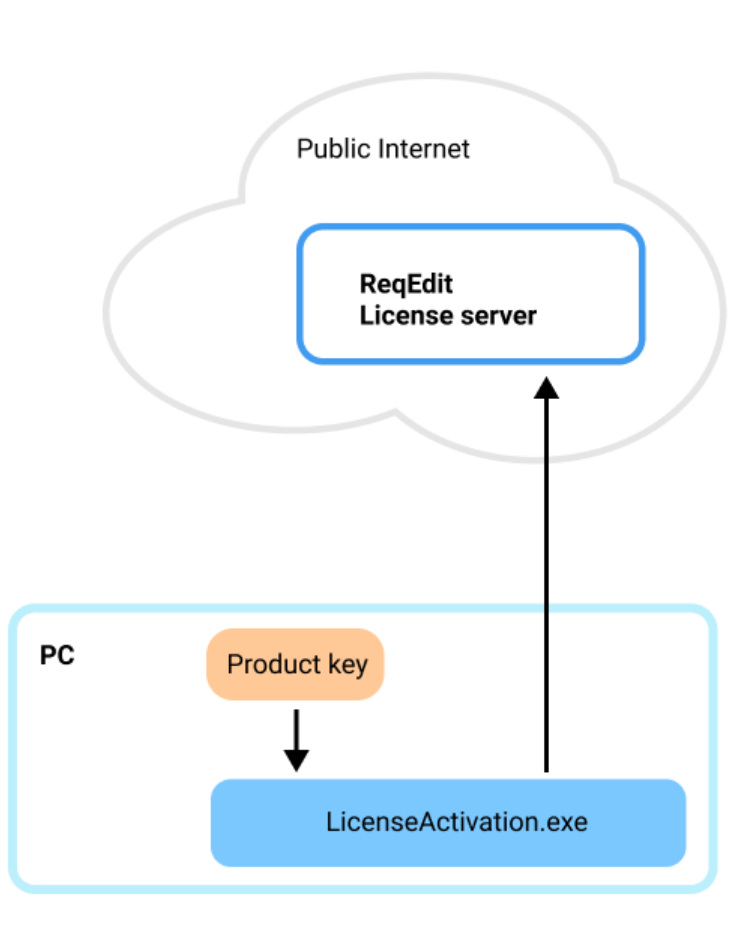
Diagram of public environment with direct connection to ReqEdit License Server
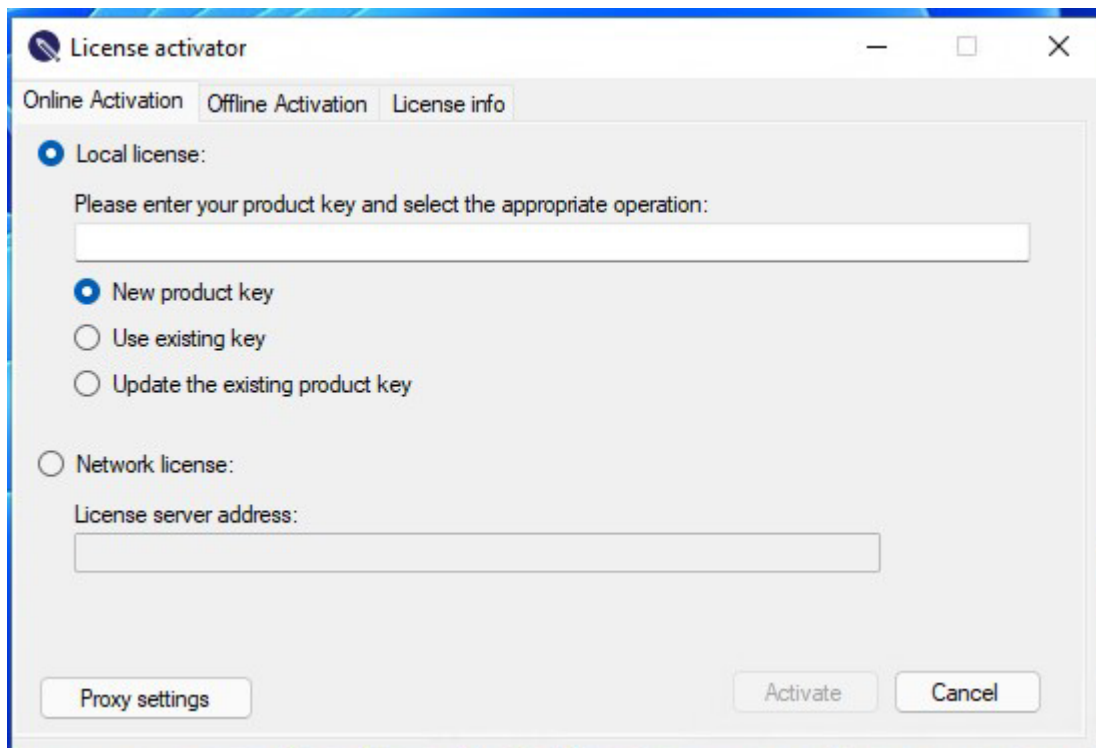
License activator window
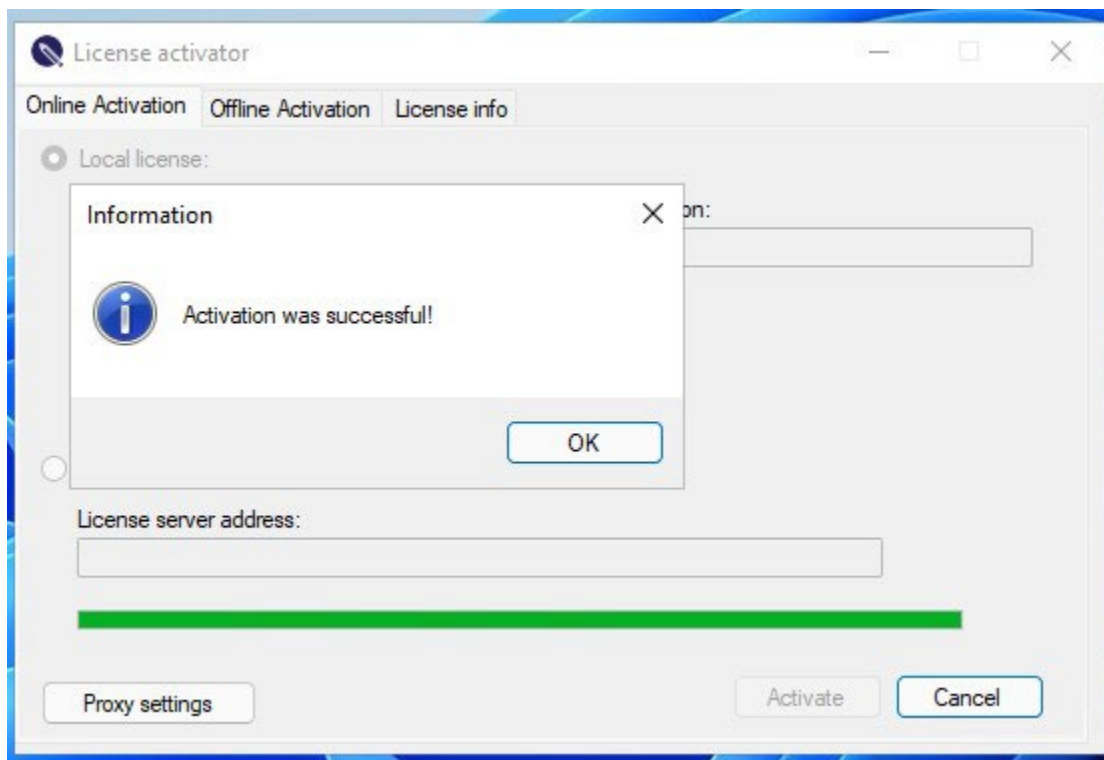
Activation done

Activation done. Run ReqEdit.

Offline activation

This activation allows running ReqEdit when access to ReqEdit License Server is restricted or not available. Create manually a license for the machine where ReqEdit is running.

In this case there are 2 options for activation: Activation with the file LicenseActivation.exe or Activation using the RUS Tool. Through them you can generate a .c2v file which you need for creating the license for your PC.
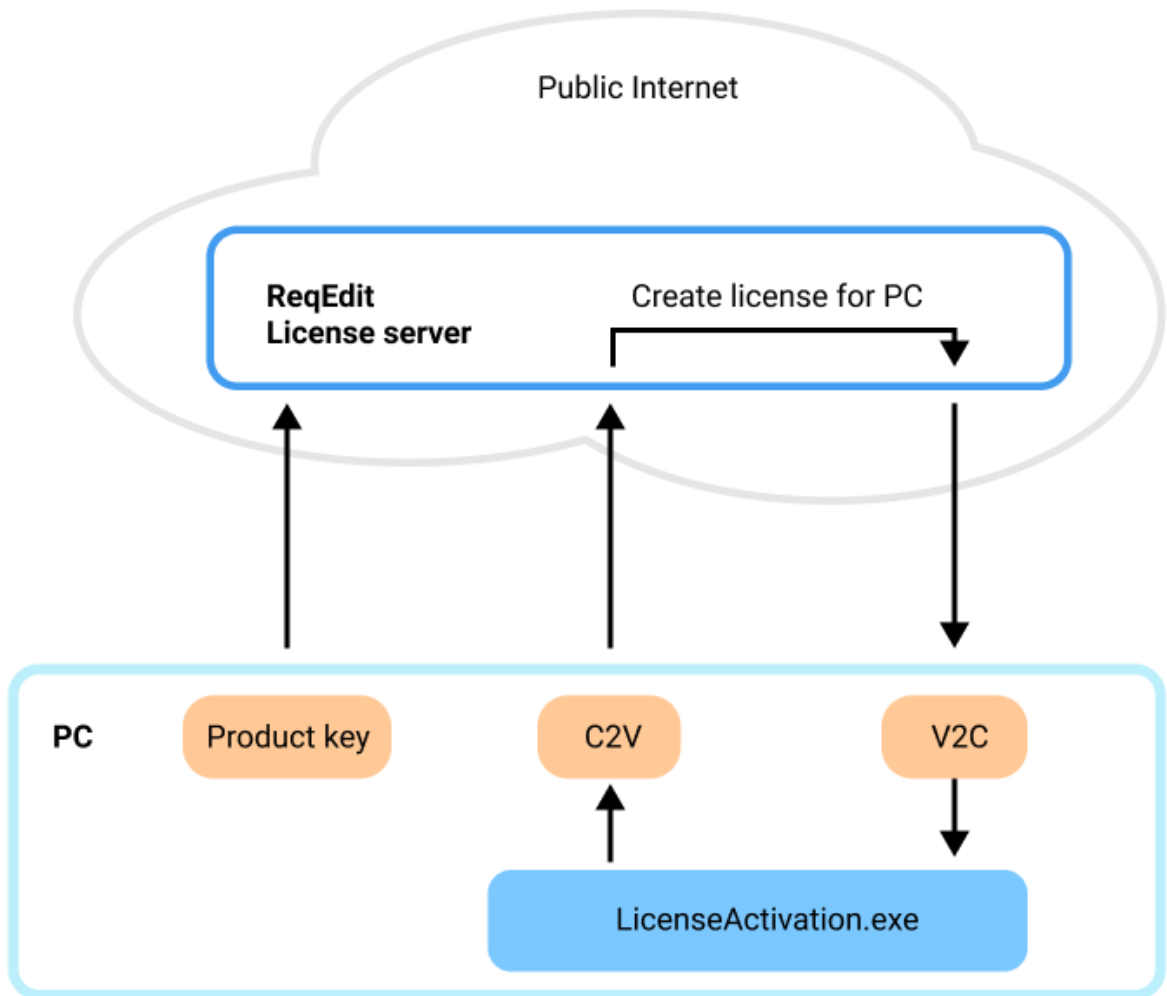
Activation with LicenseActivation.exe
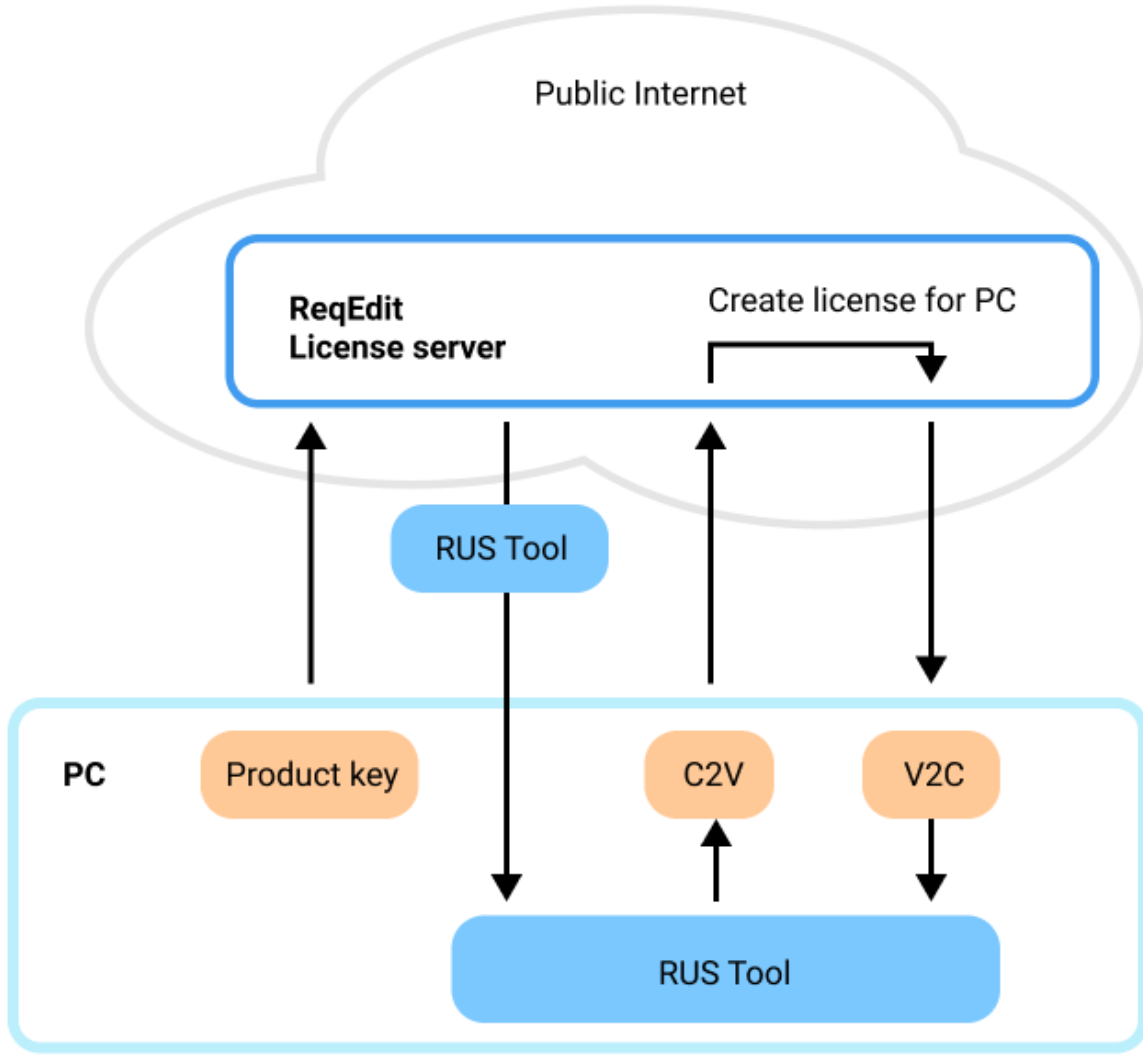
Activation with RUS Tool

Activation with LicenseActivation.exe

Activation with RUS Tool

Activate with LicenseActivation.exe

The offline activation needs the following:

- product key (got with purchasing ReqEdit)

- machine generated .c2v file (follow the next steps)

Open ReqEdit folder and click **LicenseActivation.exe** in the ReqEdit folder.

Pops up License activator window. Here **generate C2V file**

Save the file into the suggested folder or elsewhere
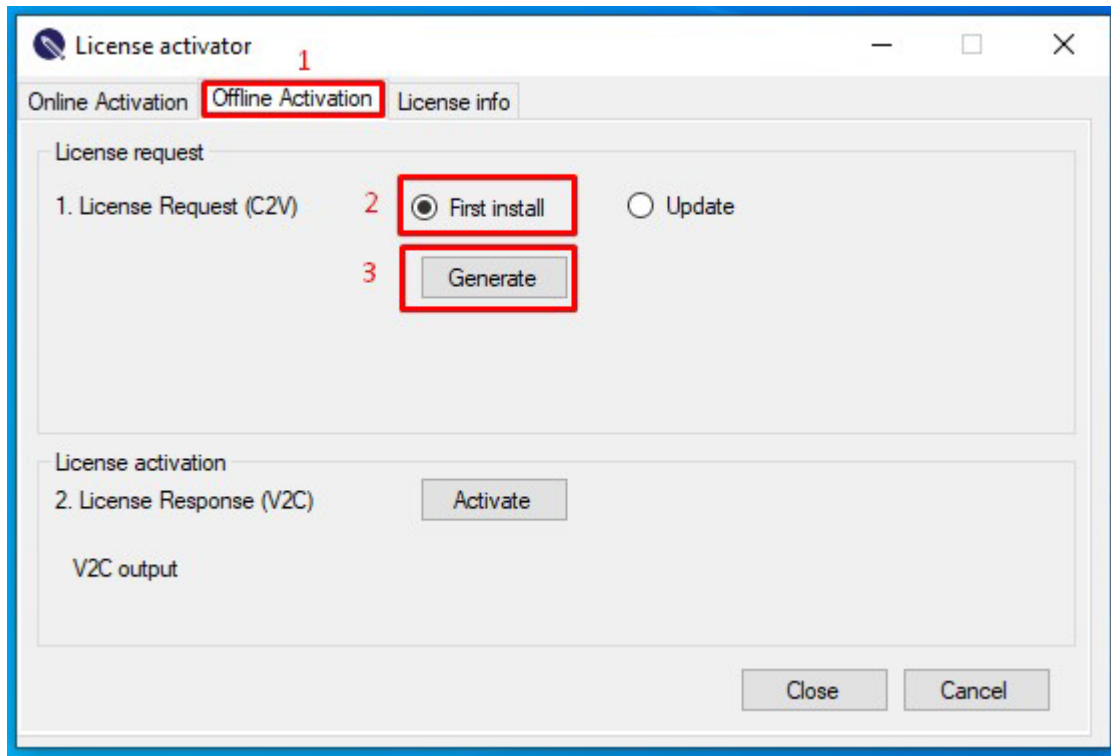
Generate c2v file in Offline activation

At an online workstation **login with Product key** at the Sentinel EMS Customer portal

https://license.reqteam.com/ems/login.html

Sentinel EMS Login

Choose **Offline Activation** tab. A new window appears.

In the Generate License window **upload** the saved **C2V** file.

Then click **Generate.**

Uploading the .c2v file

The Key ID. appears

Download the **VC2** file

Key ID	Lock Type	Activation Date	Comments	Download
	SL-UserMode	2021-12-09		V2C File

Downloading the V2C file

Go to the **License Activator** window and press **Activate** button
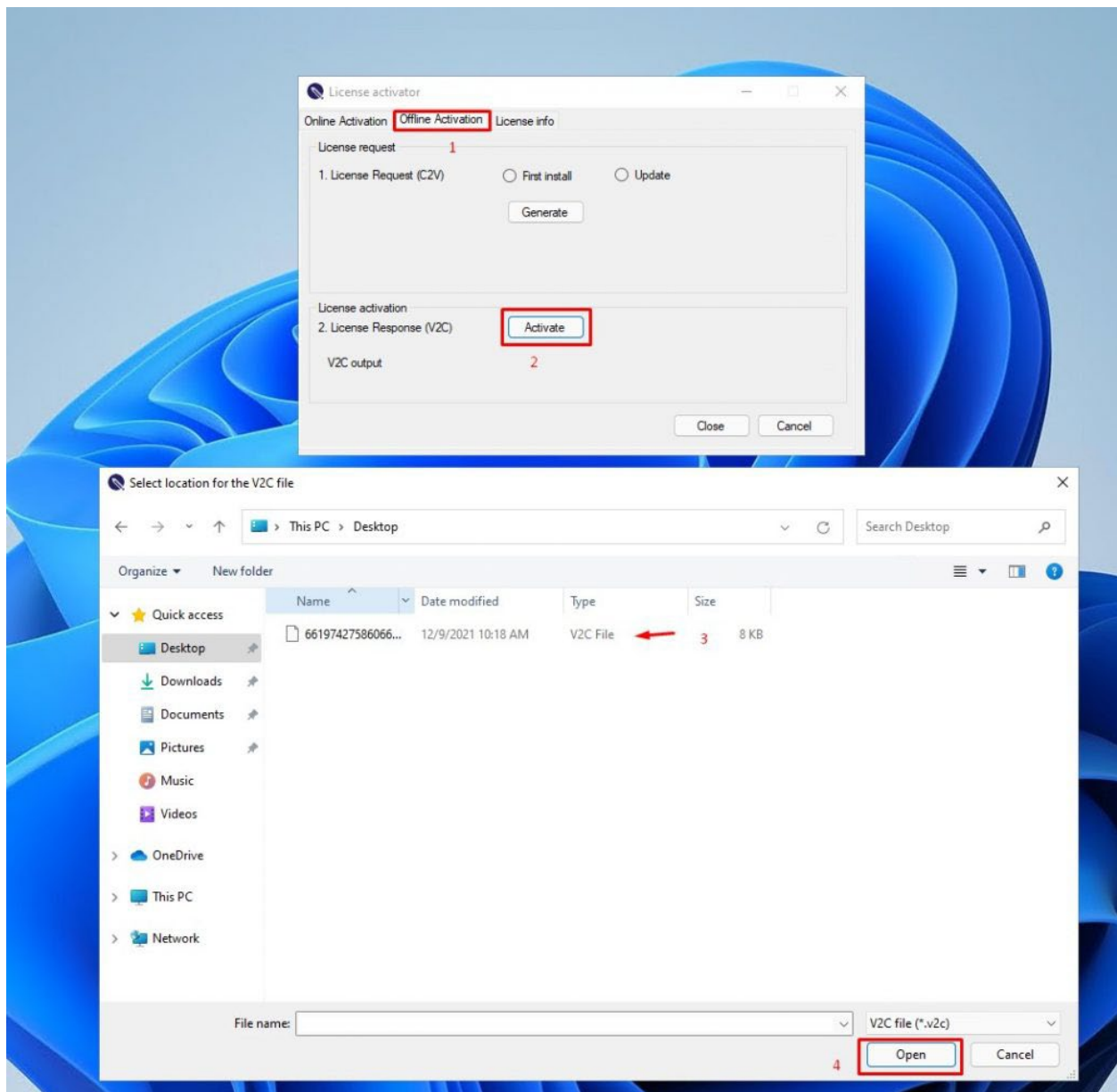
Activate offline with key

In the Browser window select **V2C** file

Press **Open**
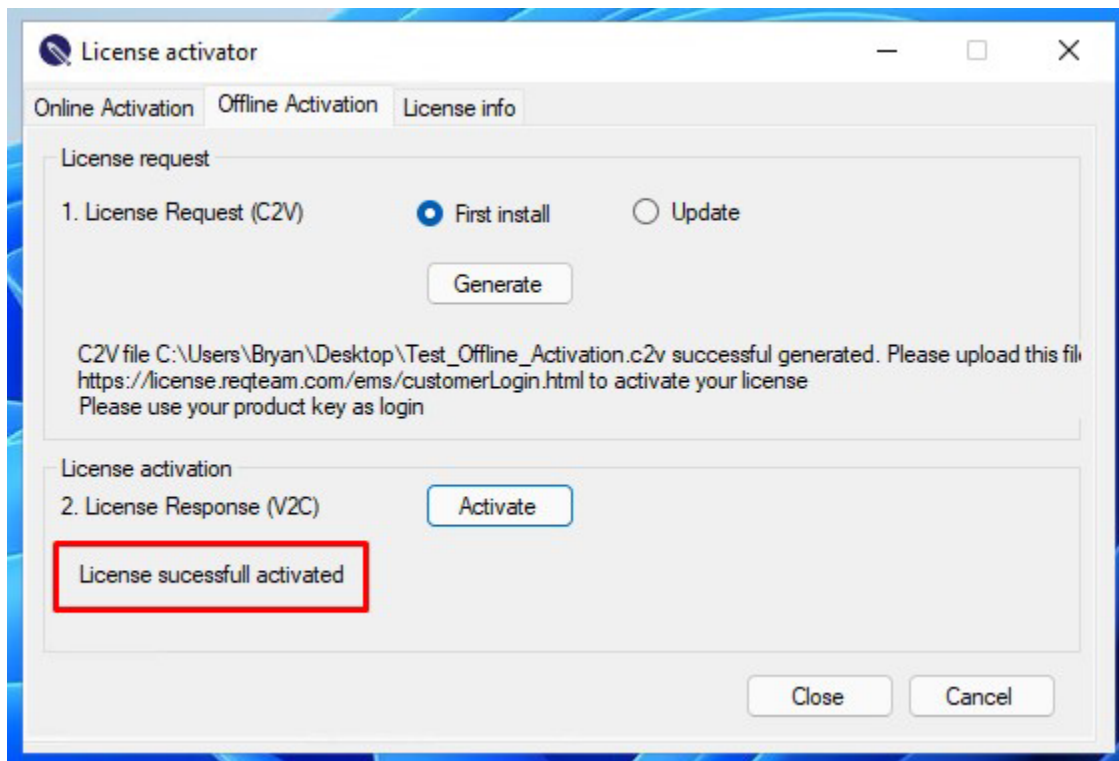
Open ReqEdit and start working with it.

Activate with RUS Tool

- Login to the customer page of REQTEAM license management (https://license.reqteam.com/ems/customerLogin.html)
- Enter your license key from your license

Sentinel EMS login

Click on the **Offline Activation Button**

Appears Generate License window

Download RUS tool

Download **RUS tool** (RUS_OWOZQ)

Some antivirus program can delete or quarantine this file. So, keep it when the antivirus asks for deleting or putting into quarantine.
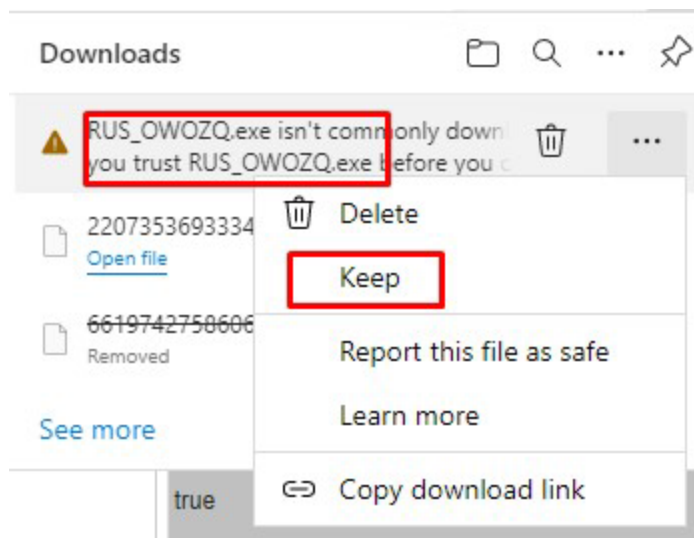
Keep RUS tool

1. execute RUS tool
2. select **Collect Status Information** and select C2V file type.
3. select **Installation of new protection key**
4. press **Collect Information**
5. save the C2V file
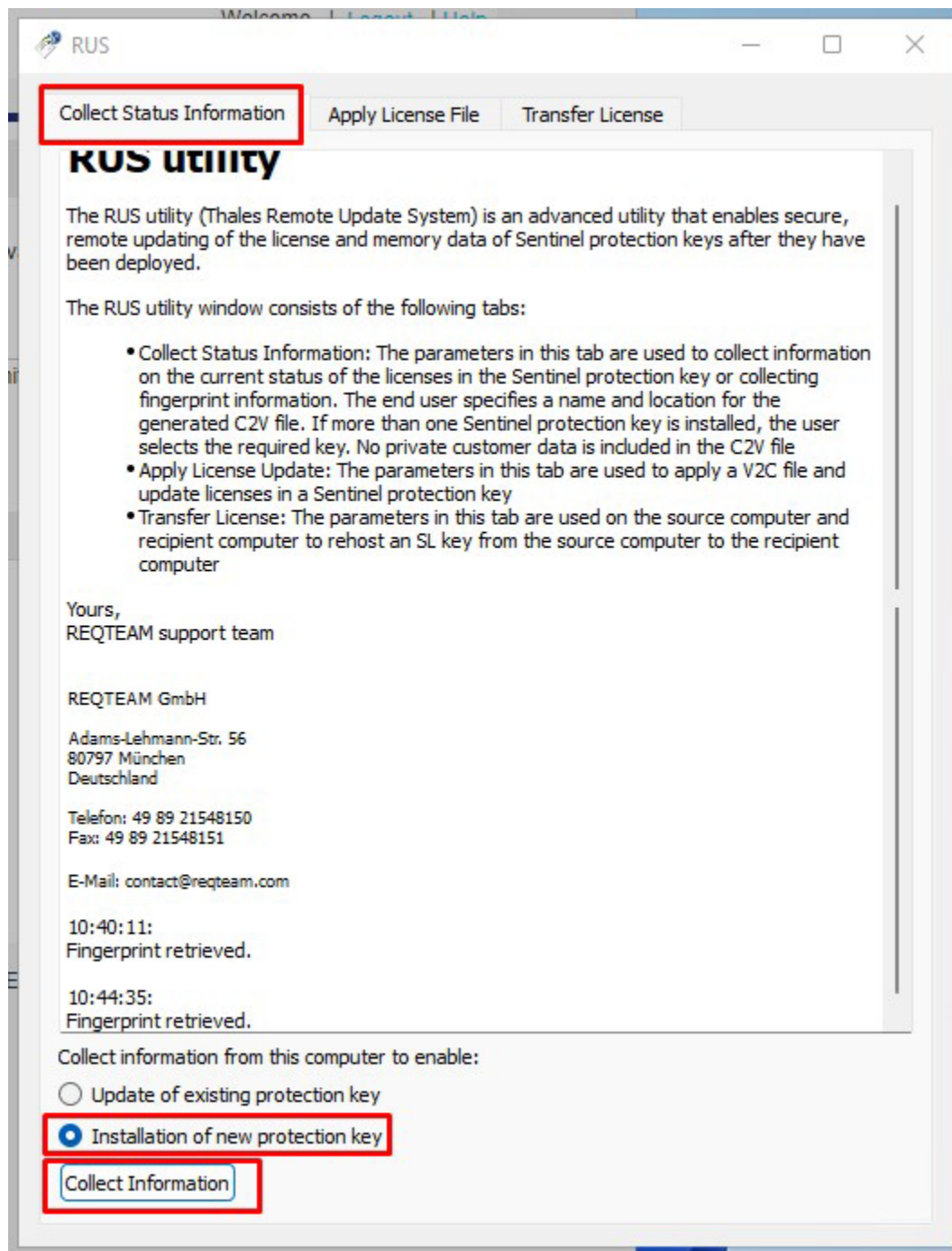
Generate c2v file
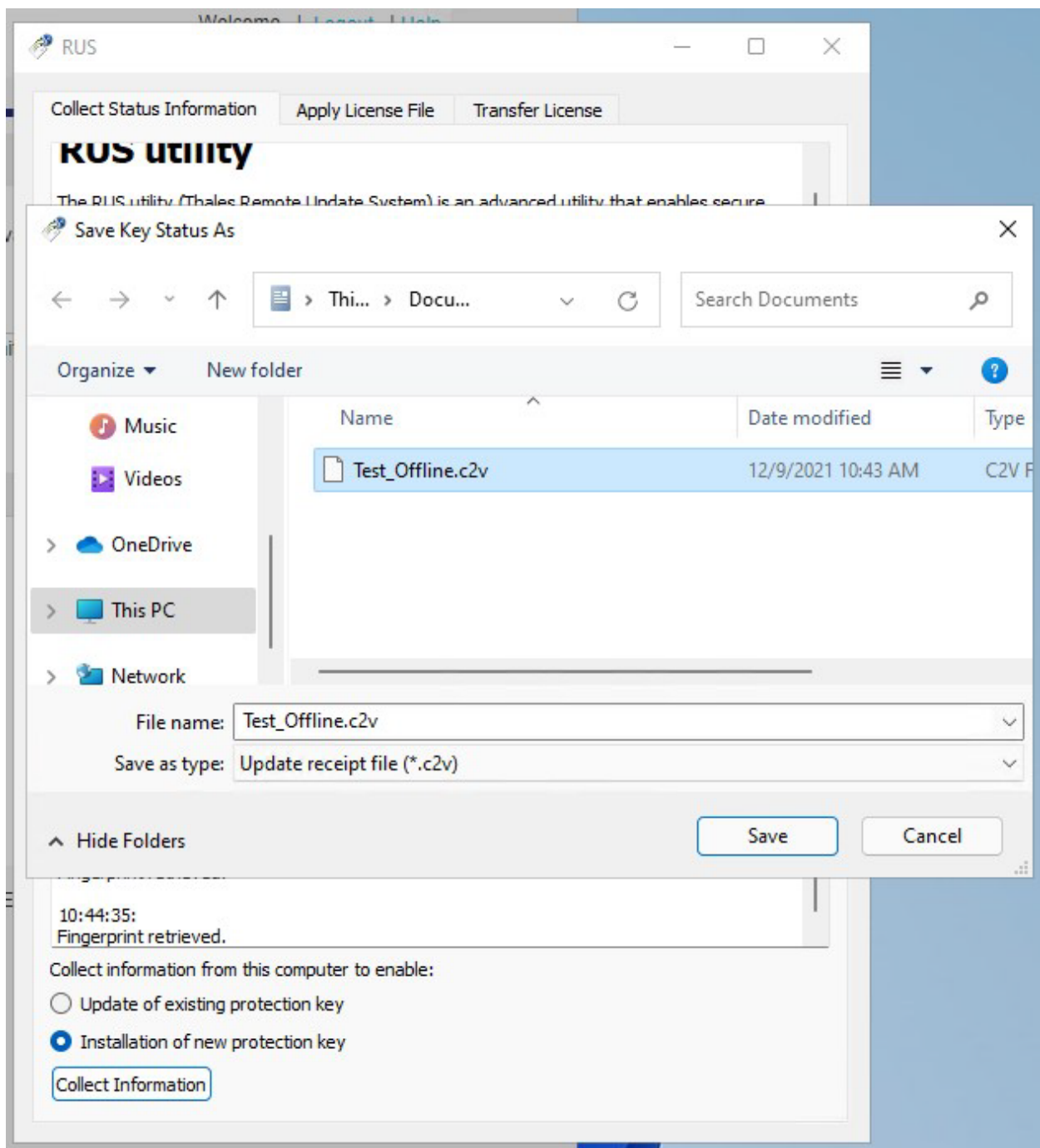
Save c2v file

C2V file can be used for license related operations.

At an online workstation **login with Product key** at the Sentinel EMS Customer portal

Upload the C2V file to [Sentimel EMS](#).

Upload c2v to EMS

Press **Generate** to generate V2C file.

Download V2C file to your PC.

Download v2c

1. execute RUS Tool
2. select tab **Apply License File** and select the V2C file
3. press **Apply Update** to activate the license on the machine
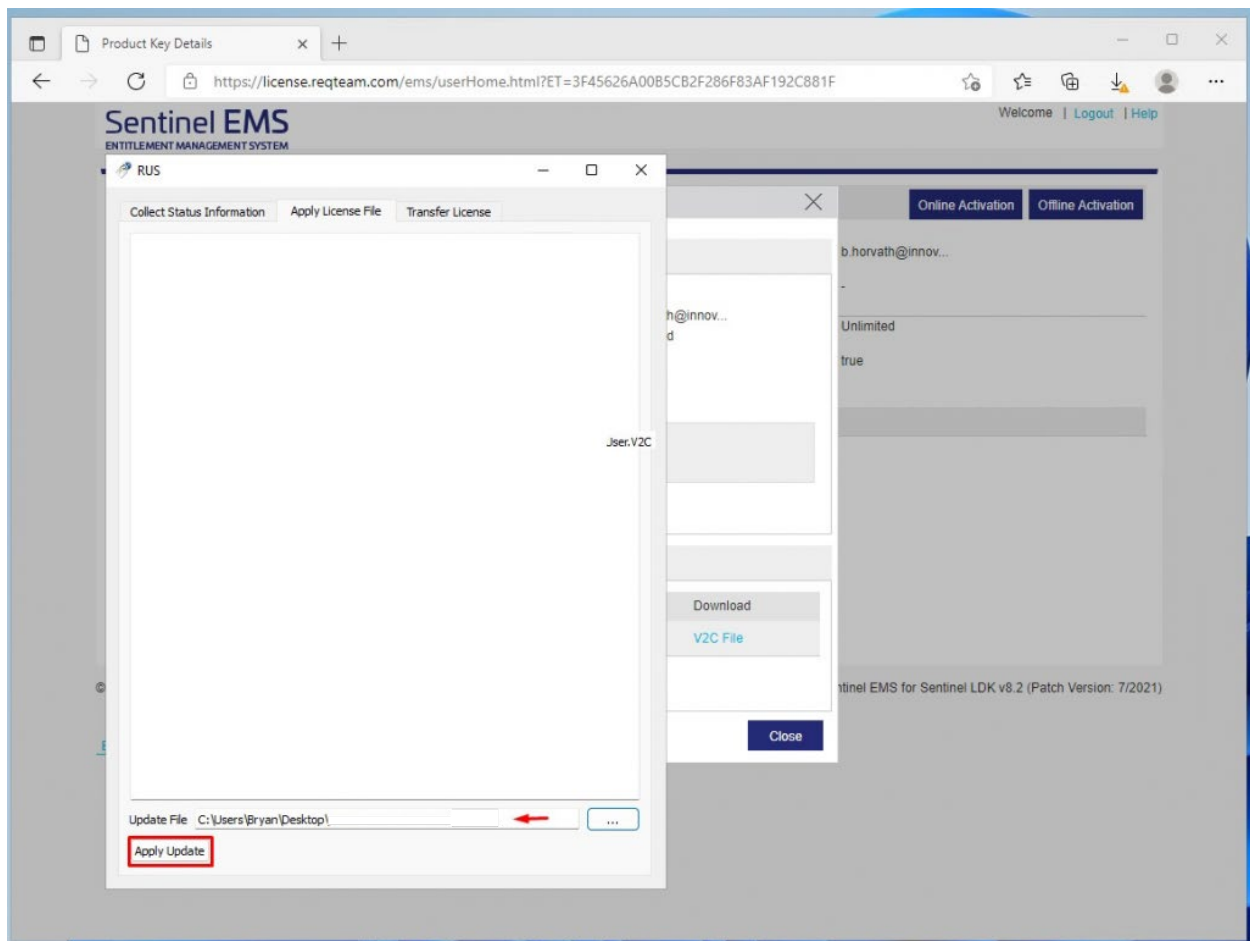
Apply update V2C
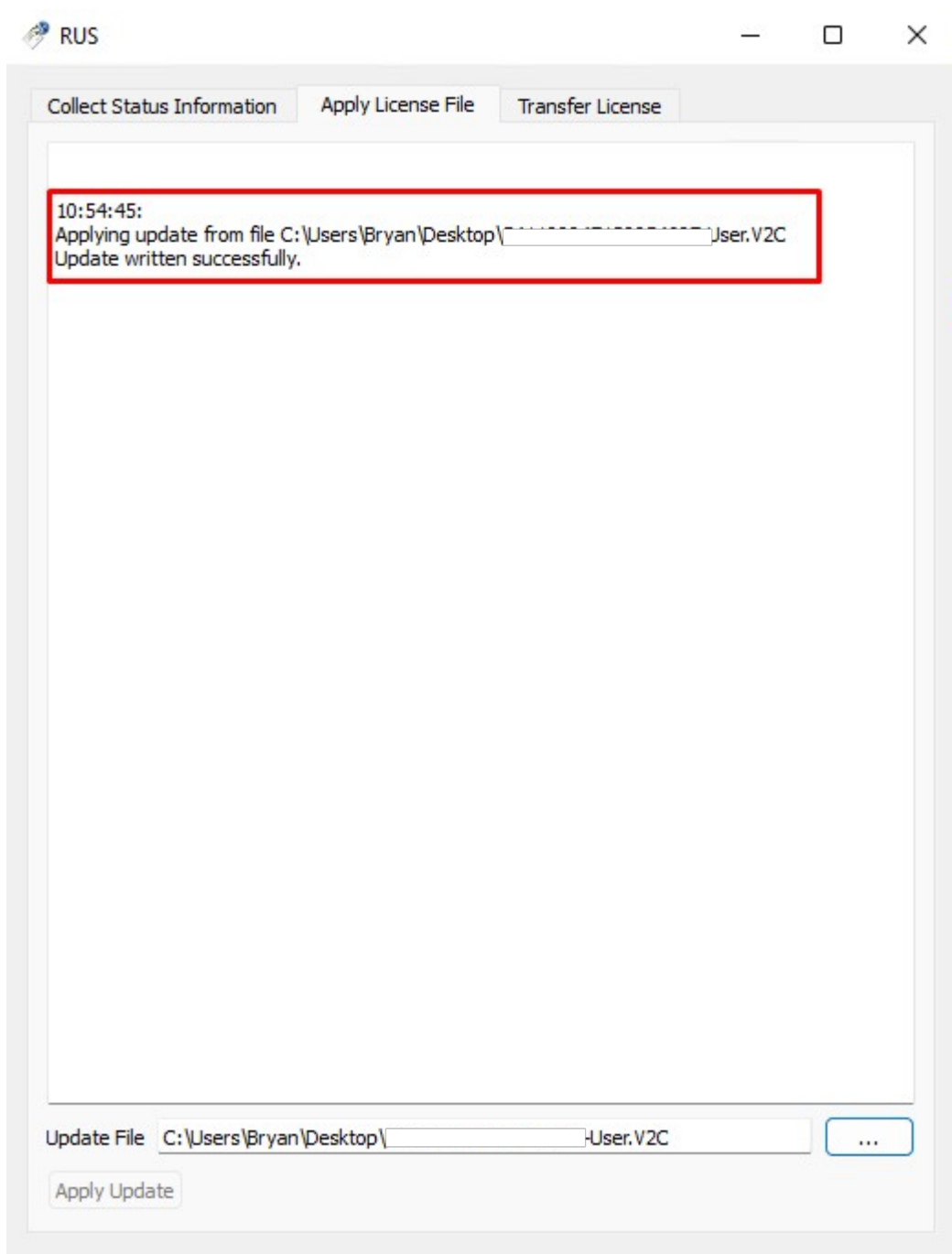
Activation done

Activation done!

You can start to work with ReqEdit.

Network license server ACC

A self-hosted licensing server is installed on the restricted network. The server holds all the license pools that can be used and has to contain a current snapshot of the license database from ReqEdit License Server.

Downloads

Download **haspdinst.exe** for windows

Version	Downloads
Sentinel ACC haspdinst.exe 8.53	haspdinst.zip haspdinst.exe

ACC windows versions

Download **aksusbd.tar** for linux

Version	Downloads
Sentinel ACC aksusdb.tar 8.53	aksusbd-8.53.1.tar

ACC linux versions

Add note: please inform REQTEAM if you plan to use detaching, so the license can be generated for this purpose.

Installing
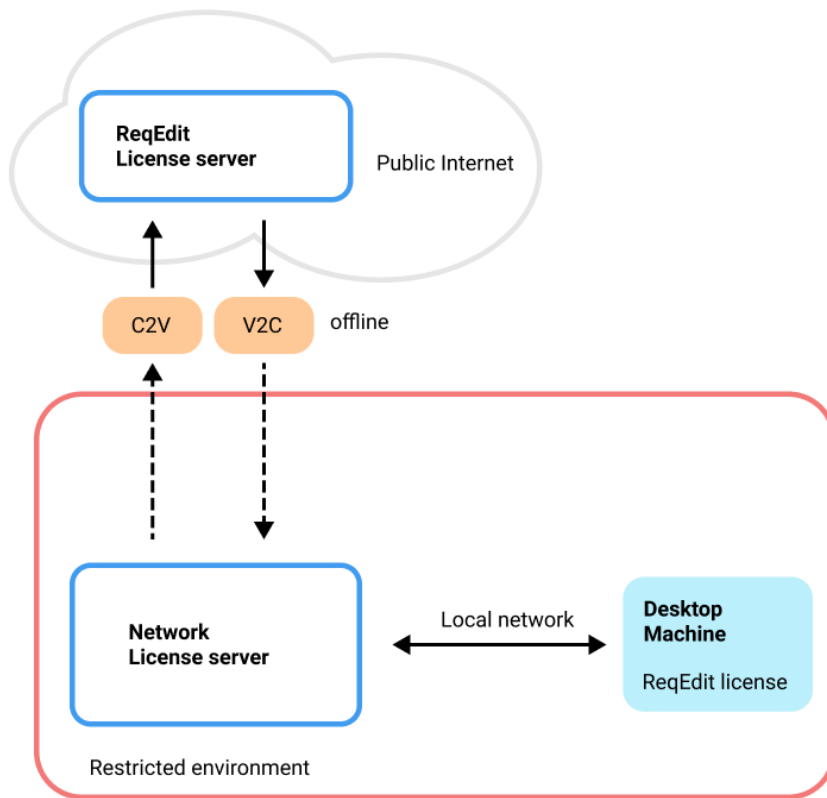
Diagram of restricted environment with self hosted ReqEdit License Server

NOTE: The installation needs to me made on the "future" license server.

NOTE: Windows can detect the haspdinst.exe as untrusted, Run Anyway

- **Port 1947** has to be opened
- Type **haspdinst -i** in the command line. The installation or upgrade process is performed automatically. A message is displayed informing you that the Sentinel LDK Run-time Environment was successfully installed.

On windows execute the following command to start the installation:

```
haspdinst -i
```

You can find an extended manual if you run the program in Windows File Explorer.

To check the status of the installation execute the command:

```
haspdinst -info
```

The version of the "Installed Package Drivers" needs to be **8.**31

To check the status of the installation execute the command

haspdinst -info

In the ReqEdit application folder you need to start the executable "Start.exe" or "LicenseActivator.exe" depending on the version you have and insert the FQDN or IP of your license server.

Read more on the topic here [Installation guide Thales/Sentinel LDK EMS](#)

Updating

The update of the ACC needs to be done exactly like the install.

Fist stop the windows service (press windows START then type "Services") with the name "Sentinel LDK License Manager" and then execute

```
haspdinst -i
```

Uninstalling

To **remove** Sentinel license server on Windows execute

```
haspdinst.exe -r
```

if for some reason the uninstallation does not work, you can **force remove** with

```
haspdinst.exe -fr
```

Setup

NOTE: The operation MUST be done on the machine where ACC is running.

Login on the ACC license server from the same machine and select the menu "Configuration"

1. Go to the license server webpage http://localhost:1947

2. Allow Remote Access to ACC as HTTP or HTTPS

3. Set Password - to access the configuration pages, also it will be used for Detach Tool later on

ACC server configuration for HTTP or HTTPS access

4. Open [Access From Remote Client] tab and set FQDN of the server

ACC server Access from Remote Clients tab

Press Submit to apply

5. Network settings

Set EMS URL to https://license.reqteam.com
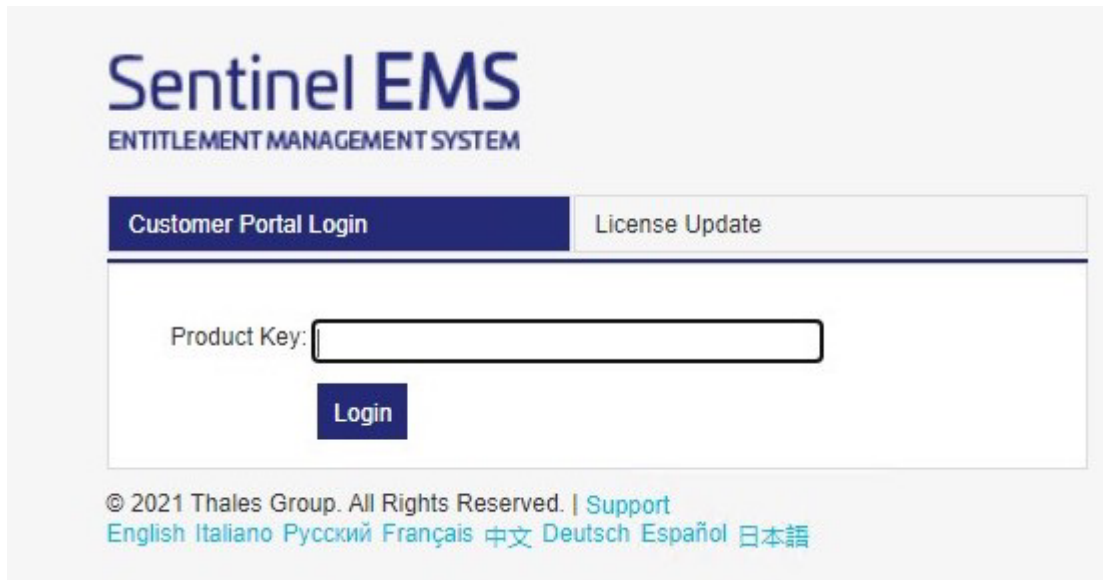
ACC Network settings

Online License Activation

NOTE: The operation MUST be done on the machine where ACC is running.

Access the ACC server from the same machine http://localhost:1947 - just to make sure the local ACC is running.

1. Go to the customer login page https://license.reqteam.com/ems/customerLogin.html. You need to insert the product key to login.

Login Sentinel EMS

2. Press Online Activation

REQTEAM EMS License server Online Activation button

3. Check that the local ACC received the licenses

Local ACC server product list displaying received local licenses

Update Licenses

**NOTE: ACC network settings MUST be configured so that EMS URL
is https://license.reqteam.com (read previous chapter)**

NOTE: The operation MUST be done on the machine where ACC is running.

Go to the customer login page https://license.reqteam.com/ems/customerLogin.html.
Access License Update tab and press Update Licenses

The new licenses will be updated to the ACC server automatically.
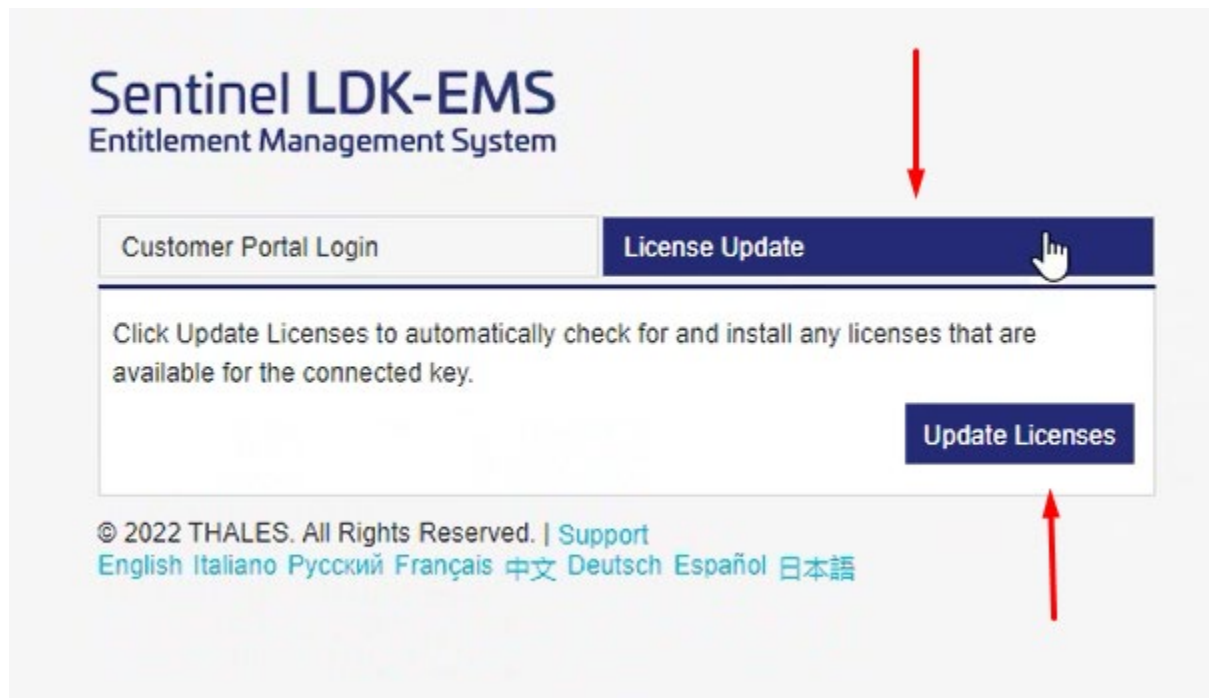
Update licenses to local ACC server

Offline License Activation

C2V on Windows

Go to the license server webpage http://localhost:1947 and select the "Sentinel Key" item.
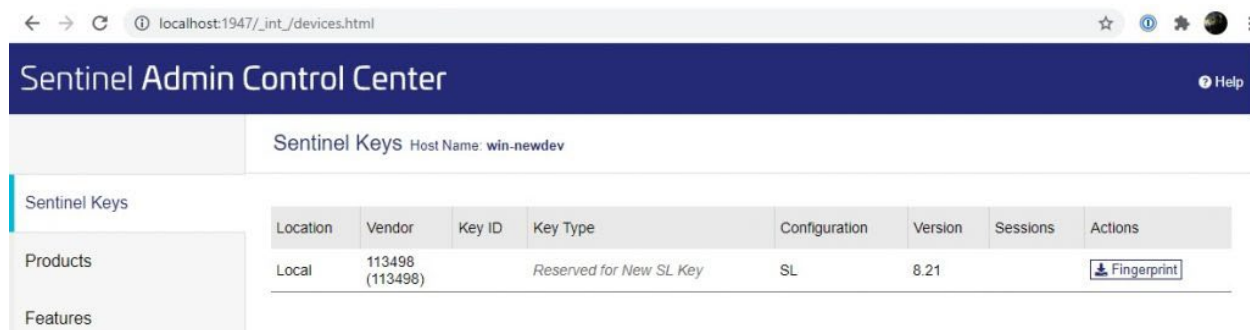
ACC server showing the vendor keys, download the Fingerprint

press the "Fingerprint" button and save the C2V file in the downloads folder.

Step 1: Got to the customer login page https://license.reqteam.com/ems/customerLogin.html. You need to insert the product key to login.
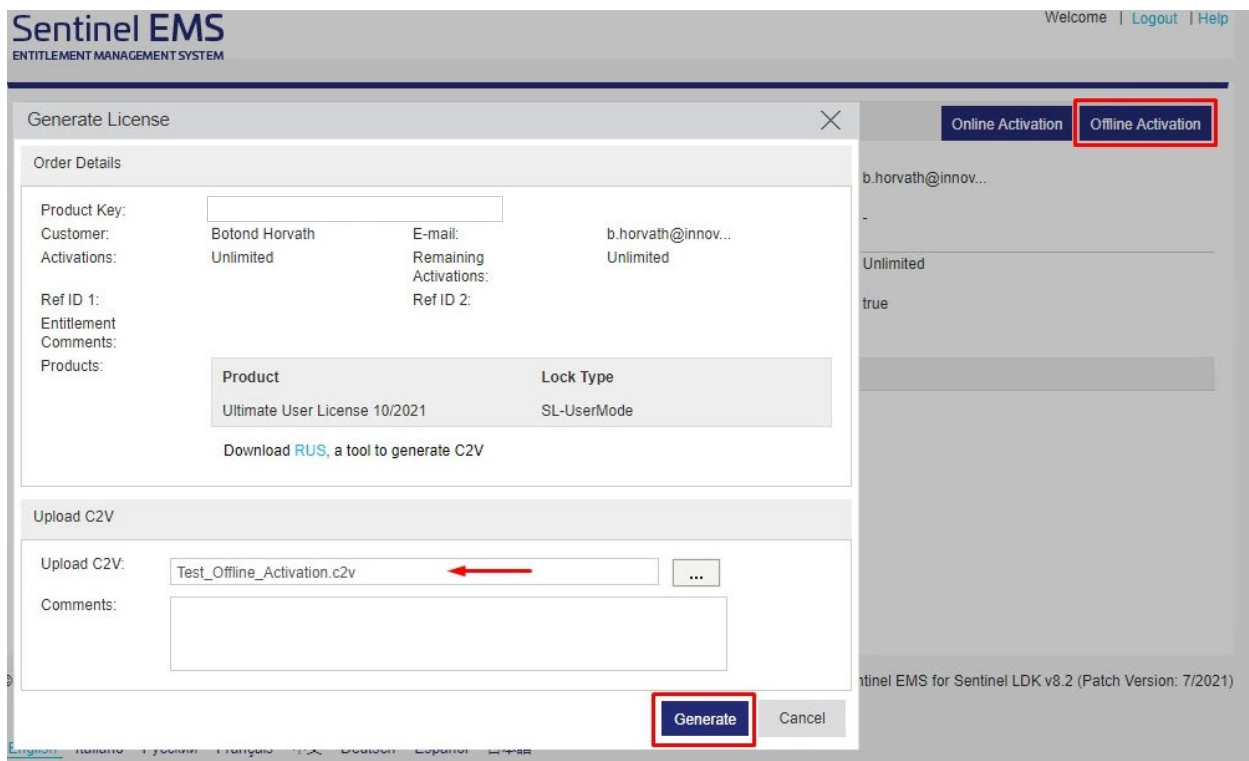
Login Sentinel EMS

Step 2: Select "Offline Activation".

Step 3: Upload the created .c2v file.

Step 4: Click the "Generate" button and save the .v2c file to a folder you like.

Upload c2v file

Update/Attach licenses

Step 5: Download the generated V2C file (or the V2C file received from us)

Key ID	Lock Type	Activation Date	Comments	Download
	SL-UserMode	2021-12-09		V2C File

Download V2C file

Step 6: Upload to your local license server http://localhost:1947 in the menu "Update/Attach".

ACC server update/attach V2C license file page

Step 7: Check in in the menu "Products", if the license was correct inserted/updated.

C2V on Linux

If you are using Linux, the procedure is a little bit more complex. You need to log in to your license server (ACC) and click the tab "Diagnostics". Here you find a button named

"Generate ID File". After clicking this button you got an ID file to save. Please save this file to a local drive and change the file extension to .c2v.

Now open this C2V file in a text editor and change the structure of the ID file, which should look like this (characters truncated with ...):

```
<?xml version="1.0" encoding="UTF-8" ?>
<location>
<license_manager id="F07reQmW9igotxo.....1b4VD5kRUi4qsA" time="0">
<version>24.4.1.110802</version>
<hostname>safenet</hostname>
<name>SAFENET</name>
<host_fingerprint type="SL-AdminMode" crc="123456789">
MXhJSYlJIQewwFkjBPbITRjkSqpKZebAq3PcANCwG............==
</host_fingerprint>
</license_manager>
</location>
```

and change the file to this:

```
<?xml version="1.0" encoding="UTF-8" ?>
<hasp_info>
<host_fingerprint type="SL-AdminMode" crc="123456789">
MXhJSYlJIQewwFkjBPbITRjkSqpKZebAq3PcANCwG............==
</host_fingerprint>
</hasp_info>
```

License detaching

Note: please inform REQTEAM if you plan to use detaching, so the license can be generated for this purpose.

When users want to have a working copy of ReqEdit outside the restricted environment. License detaching is possible by using the Detach Tool Add-on.

Detaching licenses will lock the license for a period of time for a specific machine. Locking a license has to be done inside the restricted environment, after which it can be disconnected from the network.
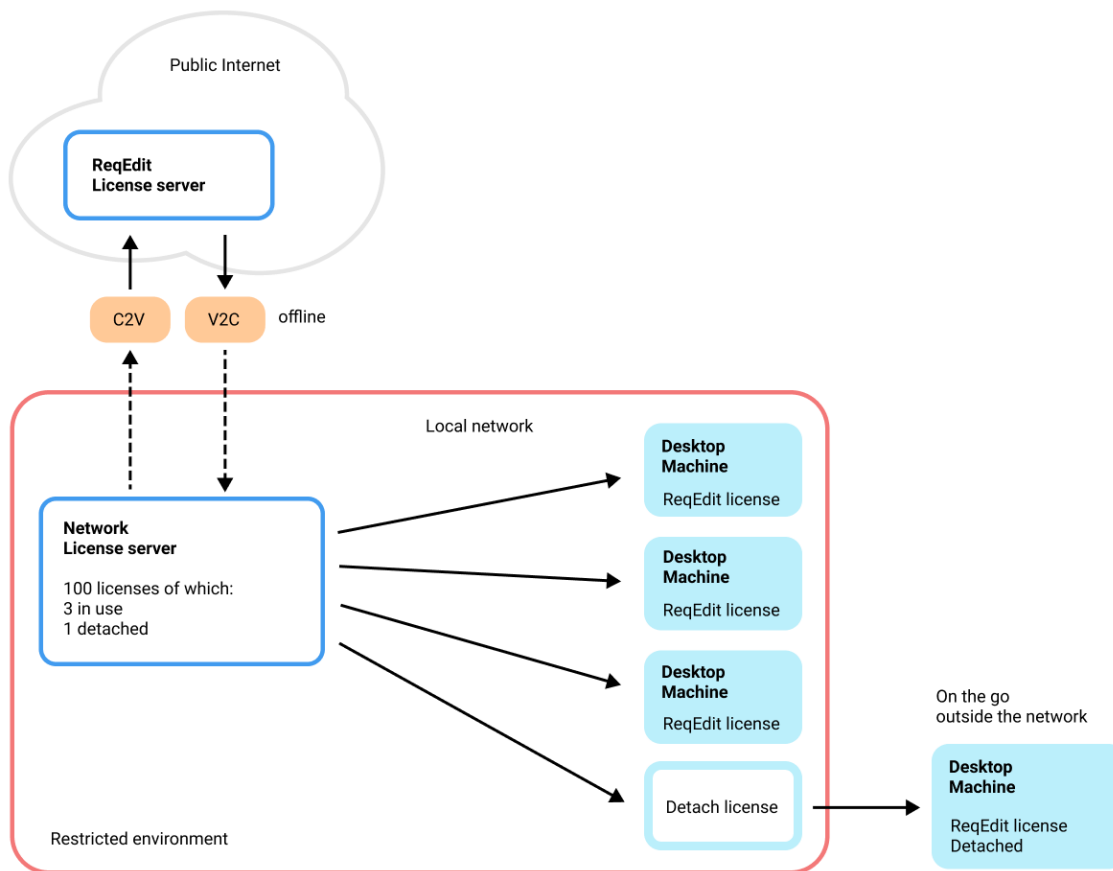
Diagram showing detach mechanism to work outside network license server

NOTE: : To be able to use ReqEdit on a workstation which leaves the company network, you need to detach a license for it. To achieve this goal ACC must be installed on the workstation!

Installing ACC on the workstation (jump to [ACC install section](#))

Configuration of ACC is not needed. Detach tool will handle the license transfer automatically.

Requirements

The ReqEdit Detach tool needs to run on a Windows operating system with .Net library (at least version 4.8 or higher) installed.

Additional the Sentinel Admin Control Center needs to be installed and configured locally. Please ensure that a valid VLIB DLL (i.e. haspvlib_113498.dll is corresponding for ReqEdit licenses) is installed. The file needs to be in the folder.

"C:\Program Files (x86)\Common Files\Aladdin Shared\HASP".

About detailed requirements, read more here.

Enable Detaching on ACC server

3. Go to the Detachable Licensing Tab

Please activate the checkbox "Enable Detaching of Licenses". You can determine the maximum detach duration in days.

Additional you can set the number of licenses you want to keep on the server (to be not detachable) in the field "Reserved Licenses". Here you can enter either an absolute number or a percent value. .

If you want to do different settings for your different products, you can do this by click on the button "Per-Product Settings".
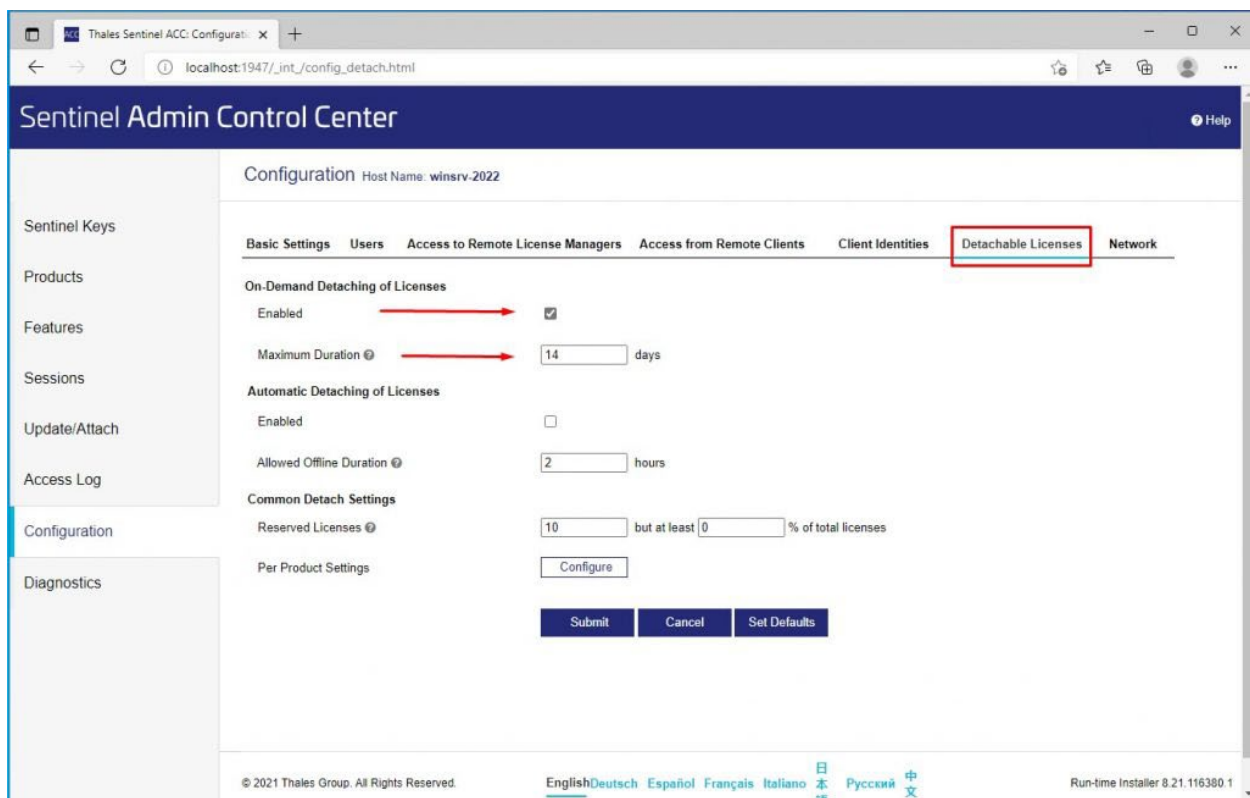
ACC Detach license tab

Configure Detach tool

The tool has to be configured on the workstation

Open **Reqedit\AddOn\Lm\ReqEditLm.exe.config**
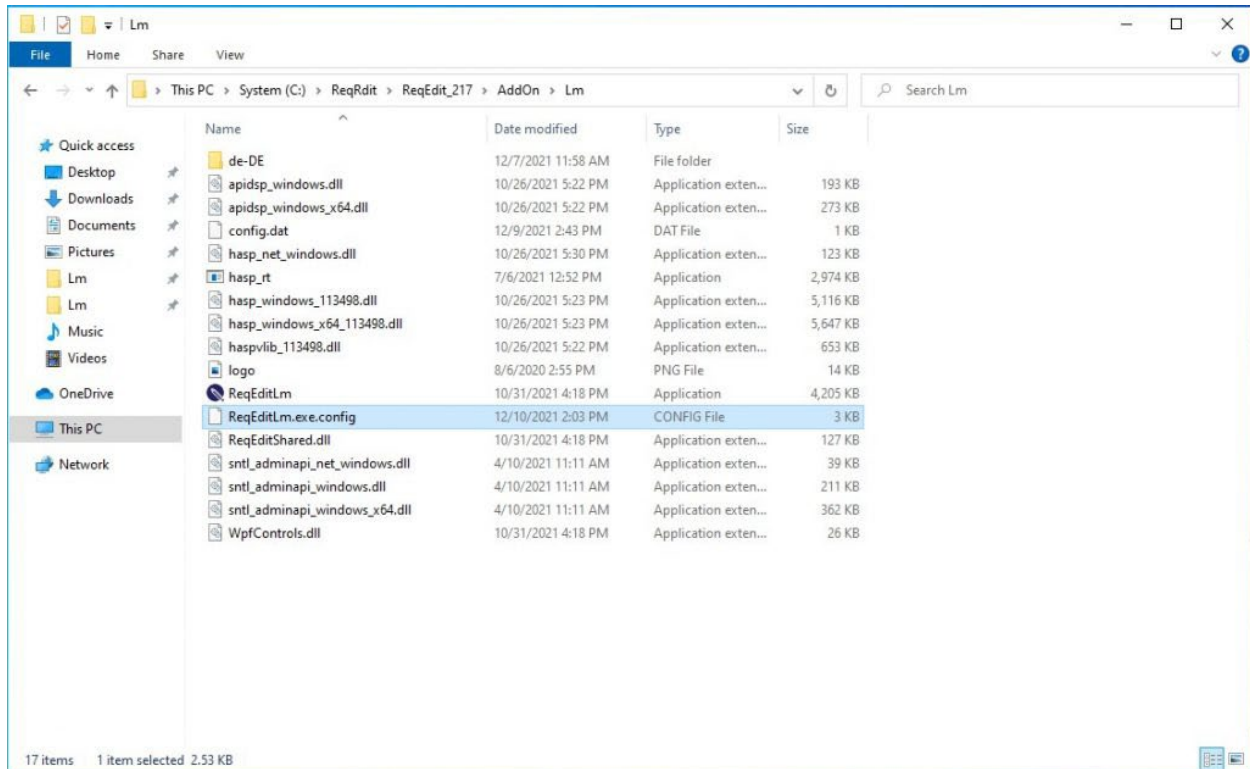
ReqEditLm.exe.config location in Windows Explorer

Set server address to the ACC server

serverAddress - **10.0.0.10** or the FQDN like: **server.localdomain.local**

```
...
<setting name="LicenseServerAddress" serializeAs="String">
<value>server.localdomain.local</value>
</setting>
...
```

Generate config.dat

```
reqeditlm.exe -pass password -out config.dat
```

password - the access password for ACC server (that was set in the previous steps)
outfile - config.dat the file that will be used in the config xml

NOTE: If you want to use different out file please update the xml to use that

To use the Detach Tool please open Users Guide

License Updates

If your license is arriving the expire date or even some days before we will provide you an update key (file ending .V2C) and you request a new one.

A. You do not have a license manager installed (no ACC)

You need to activate this license with your "LicenseActivation" tool from ReqEdit client. Select offline activation and press the "Activate" button and select the V2C File to update your license.
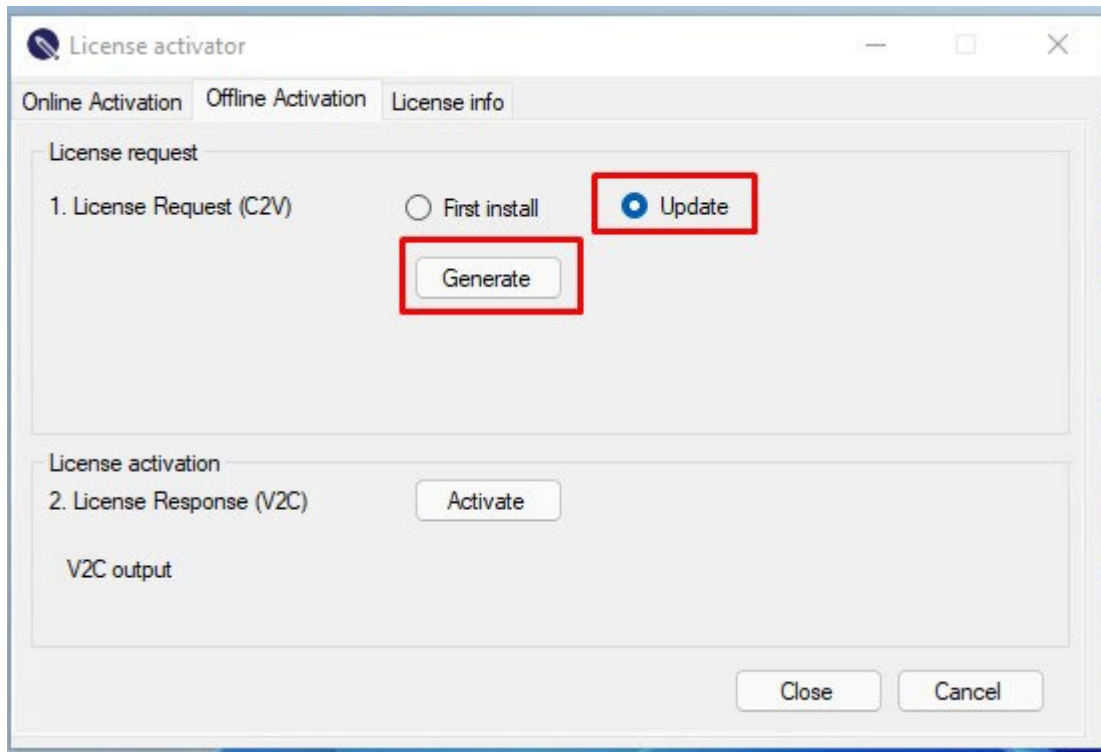
Update License window

At an online workstation **login with Product key** at the Sentinel EMS Customer portal

https://license.reqteam.com/ems/login.html

Sentinel EMS Login

Choose **Offline Activation** tab. A new window appears.

In the Generate License window **upload** the saved **C2V** file.

Then click **Generate.**

Uploading the .c2v file

The Key ID. appears

Download the **V2C** file

Key ID	Lock Type	Activation Date	Comments	Download
	SL-UserMode	2021-12-09		V2C File

Downloading the V2C file

Go to the **License Activator** window and press **Activate** button
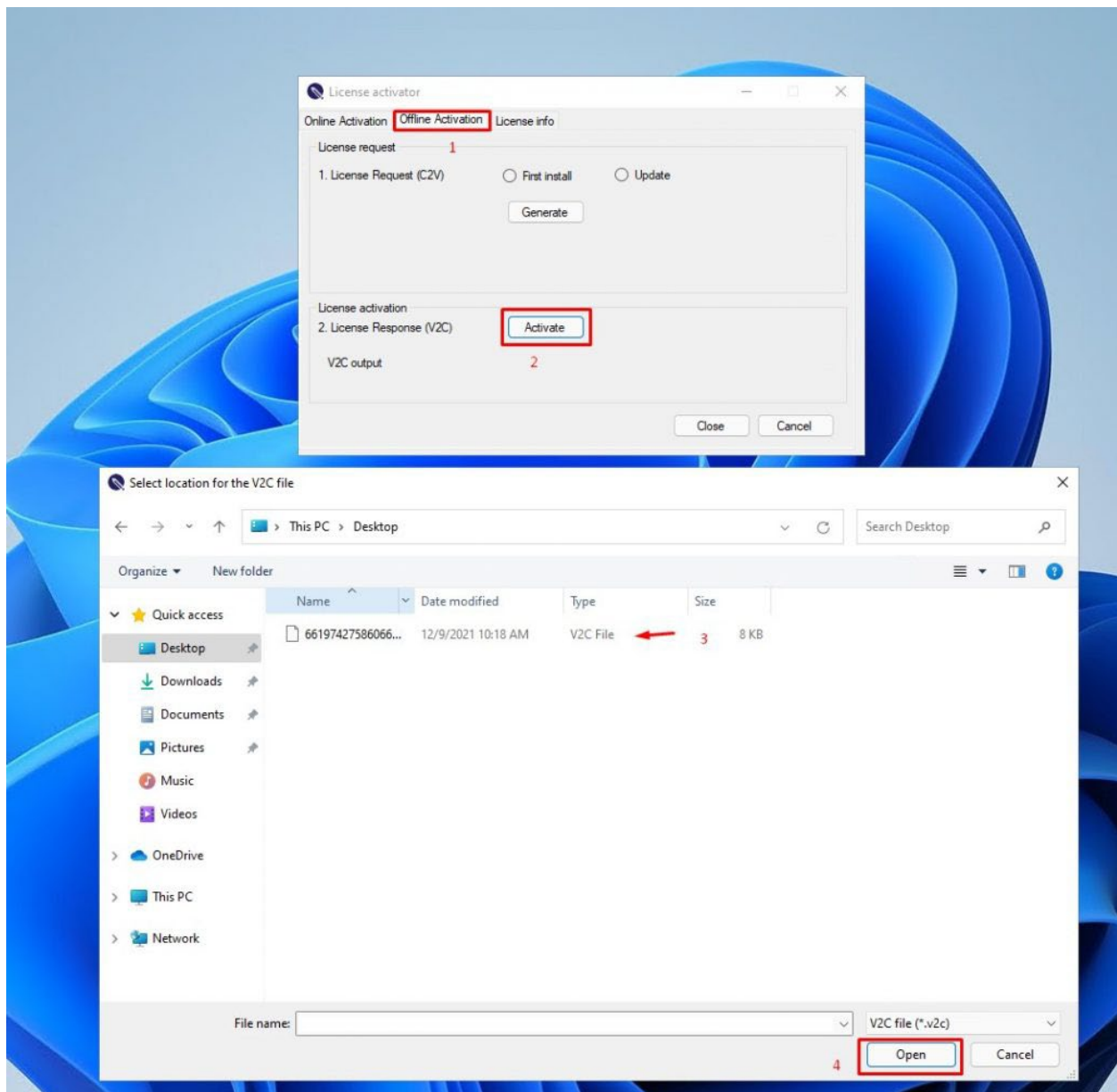
Activate offline with key

In the Browser window select **V2C** file
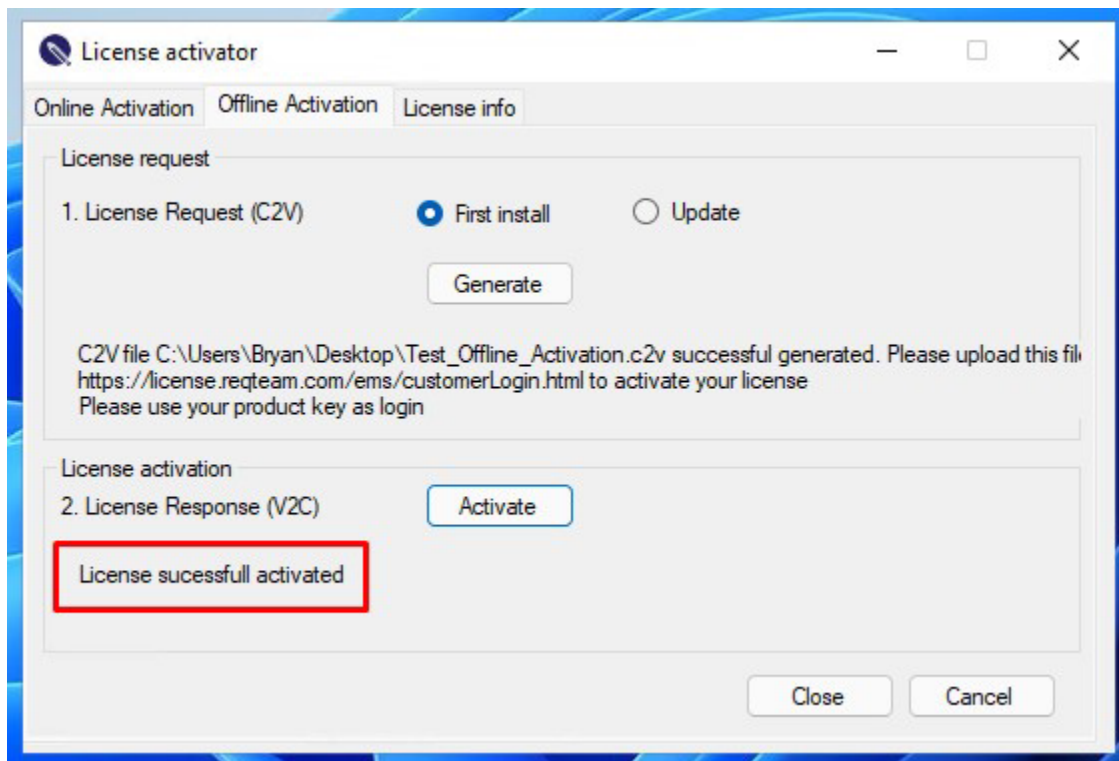
Press **Open**

License activator window, offline activation tab, license activation success

Open ReqEdit and start working with it.

B. You have a license manager installed and you don't have a V2C file

Alternatively you can update automatically if you have installed a license server (Admin Control Center in the minimum version 8.31) on the computer that holds the license. You need to open the url https://license.reqteam.com/ems/customerLogin.html on this computer and click license update.

EMS Login

C. You have a license manager installed, but with no or restricted internet acces

Login to Sentinel EMS Customer Portal. Open the url https://license.reqteam.com/ems/customerLogin.html and enter Product Key.

Sentinel EMS Login
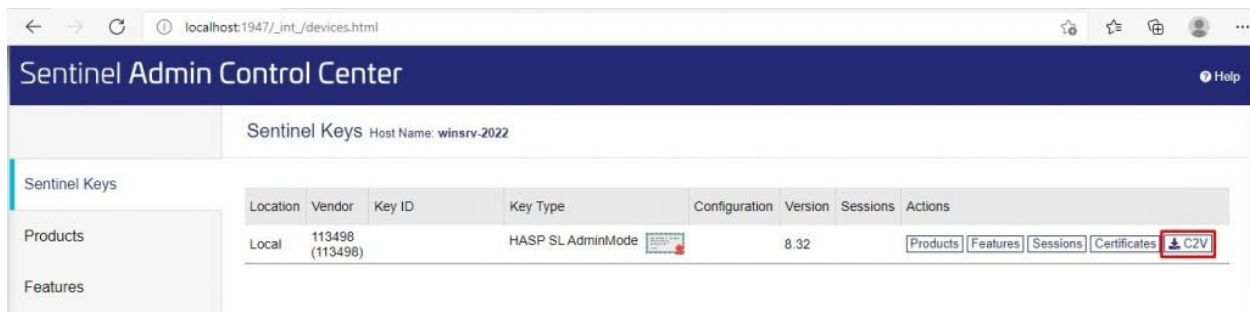
Upload the C2V file to Sentinel EMS. Press **Generate** for generating v2c file.
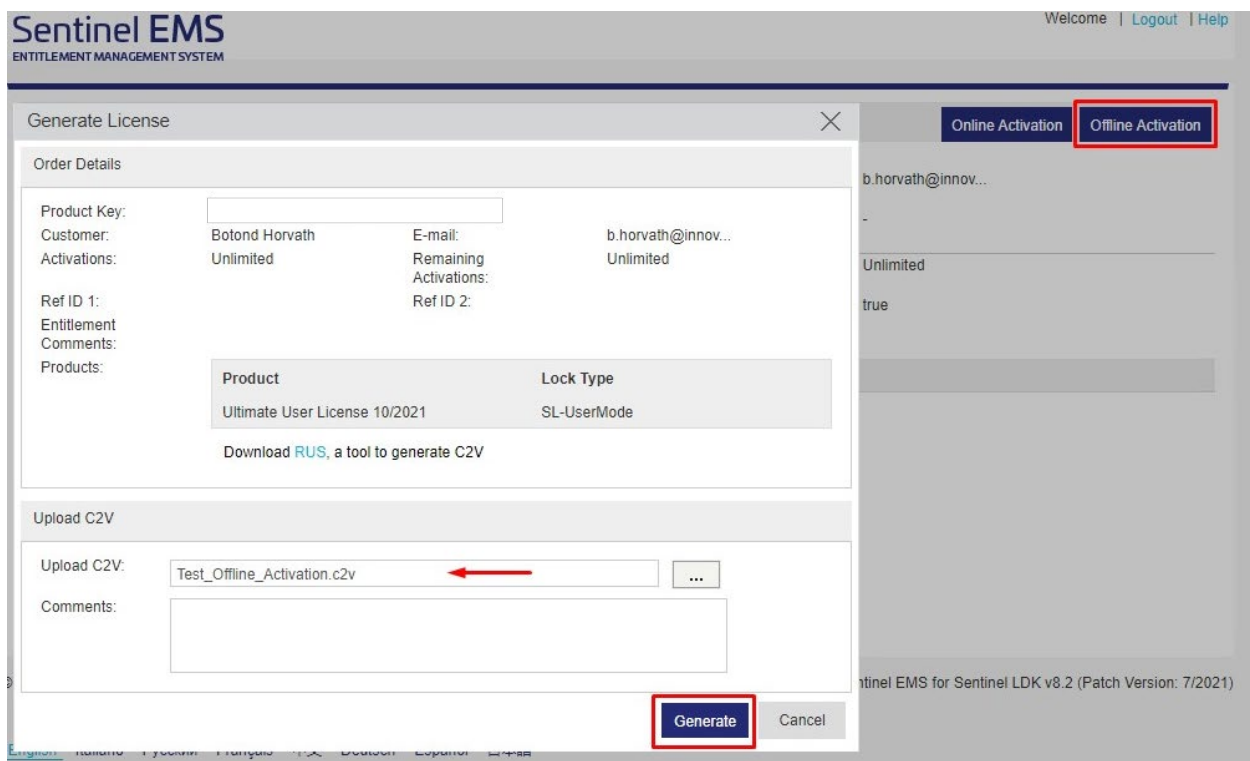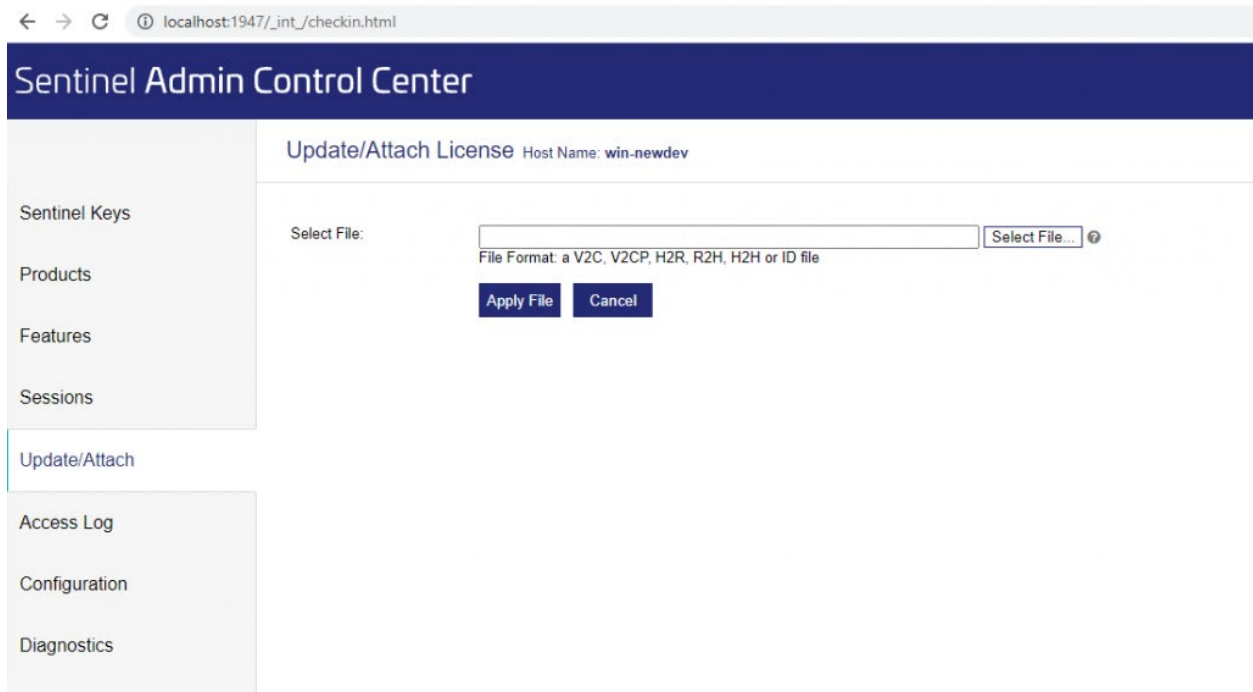
EMS C2V file upload

Download the generated V2C file.

Download V2C file

Upload the generated **.v2c** file to your local server ACC in the menu "Update/Attach".

ACC server update/attach v2c file

Transfering License

To transfer an user license from an old PC to a new PC you need the RUS tool on both PCs.
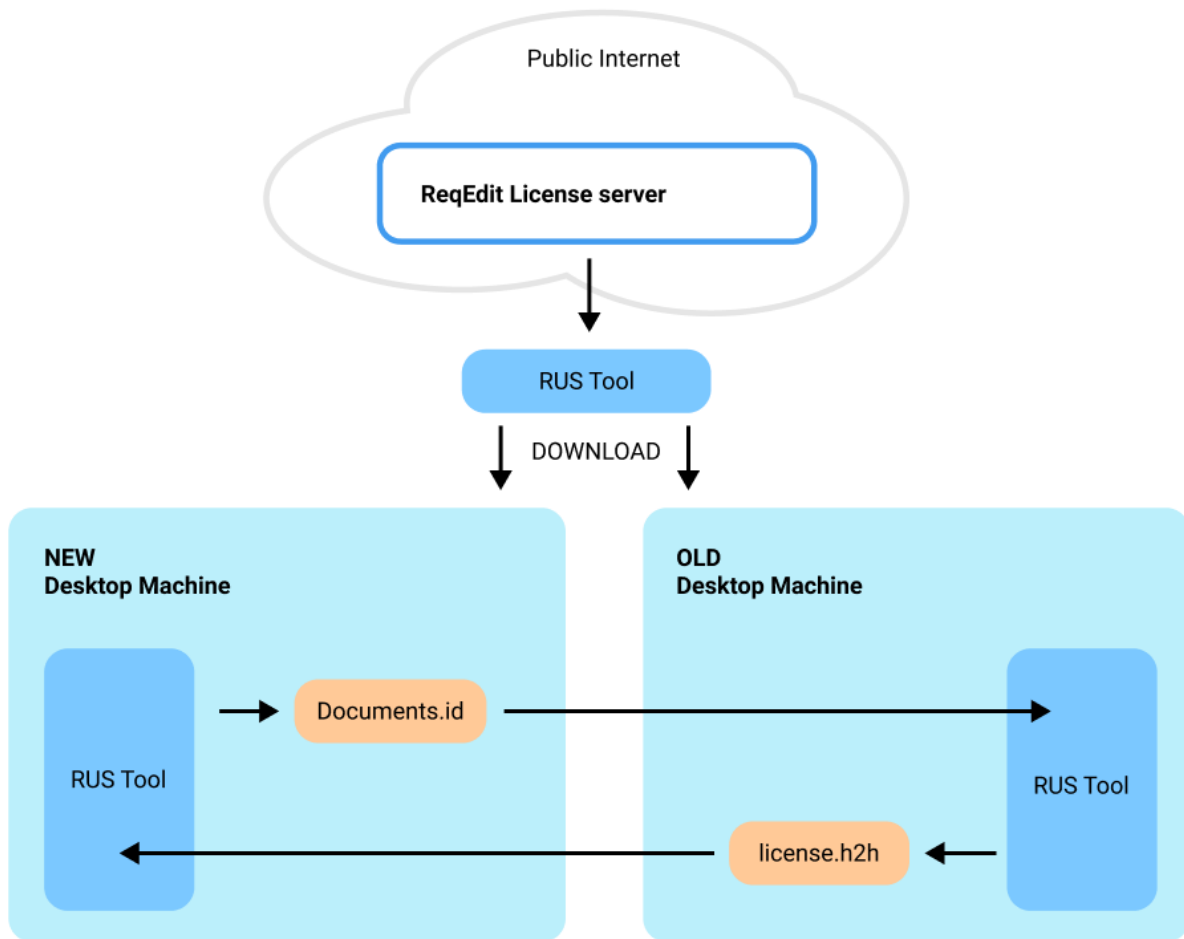
License transfer diagram between two machines

Download RUS Tool

You can download it from our customer area:

https://license.reqteam.com/ems/customerLogin.html

For login you need to enter your product key, use the key you already used for activation.

After login you click on **Offline Activation** button and **download the RUS tool**.

Download RUS tool

Generate ID file

IF YOU USE ACC (LICENSE SERVER)

For transfering License from a Network license server to another , you need to have a Rehostable license.

Open ACC on the new server to generate the ID file

Go to Diagnostics of your license server and click on "Create ID file" button on the top right of the page

Generate ID file for license transfer

Save the file generated.

IF YOU DON'T USE ACC (LICENSE SERVER)

Execute the RUS tool on the new PC, where you want to have the license transferred.
Select the **Transfer License** tab. Please press on the **[...]** button to select the location and choose a name for the Recipient Information ID file (the name of the file is not important).

Press **Collect and Save Information** to generate the file. If the process was successful, you will get a confirmation window.

Generate ID file

Copy the generated Recipient ID file to the old PC, where the active license is.

Please do not close the RUS tool on the new PC, we need it for later.

Generate license transfer file

Run the RUS tool on the OLD PC.

Select the **Transfer License** tab. Check if your license is transferable, it has to be listed in the license list.

*Note: If the license is **not** transferable you need to contact the REQTEAM support team to initiate a manual transfer.*

Note: if you use ACC you need to have Rehostable license.

Rehostable license icon for ACC user

Select the license you want to transfer from the list

Select the Recipient Information ID file copied from the NEW PC.

Select the destination of the Transfer License File, by selecting the [...] button.
Press **Generate License Transfer File** button.

The **.h2h** file needs to be copied to the NEW PC.
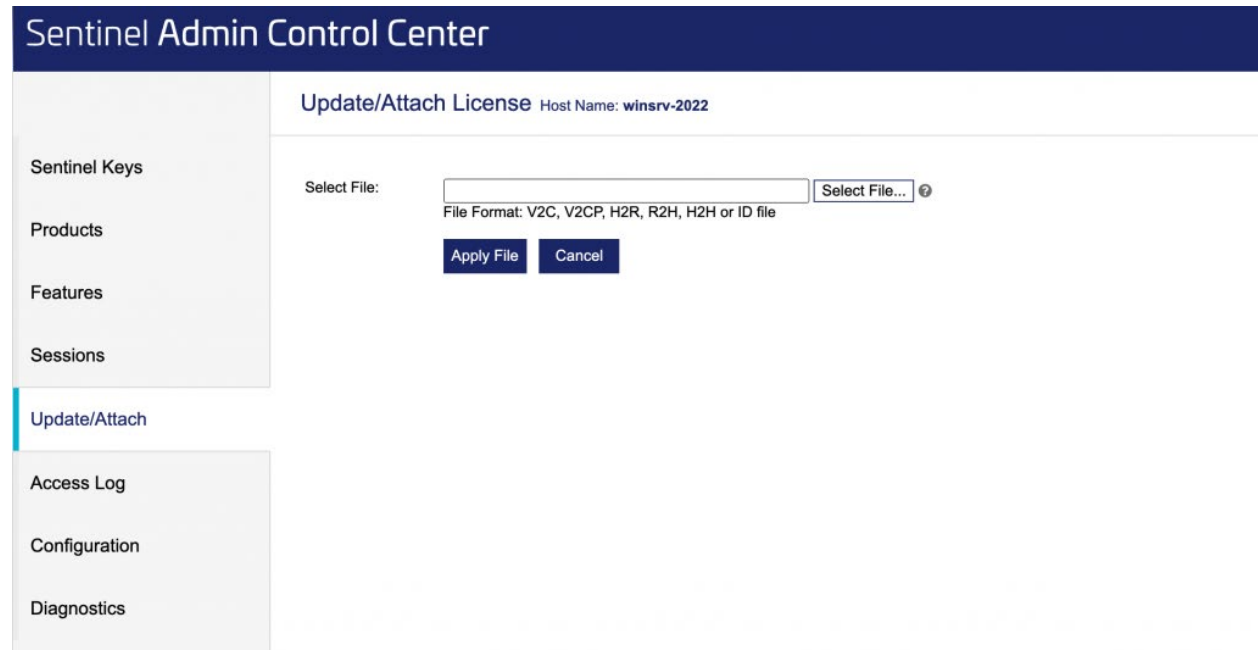
Generate license transfer file

You can close the RUS tool on the OLD PC.

Activate license transfer file

IF YOU USE AN ACC (LICENSE SERVER)

Upload the generated H2H file in your new ACC in the menu "Update/Attach".
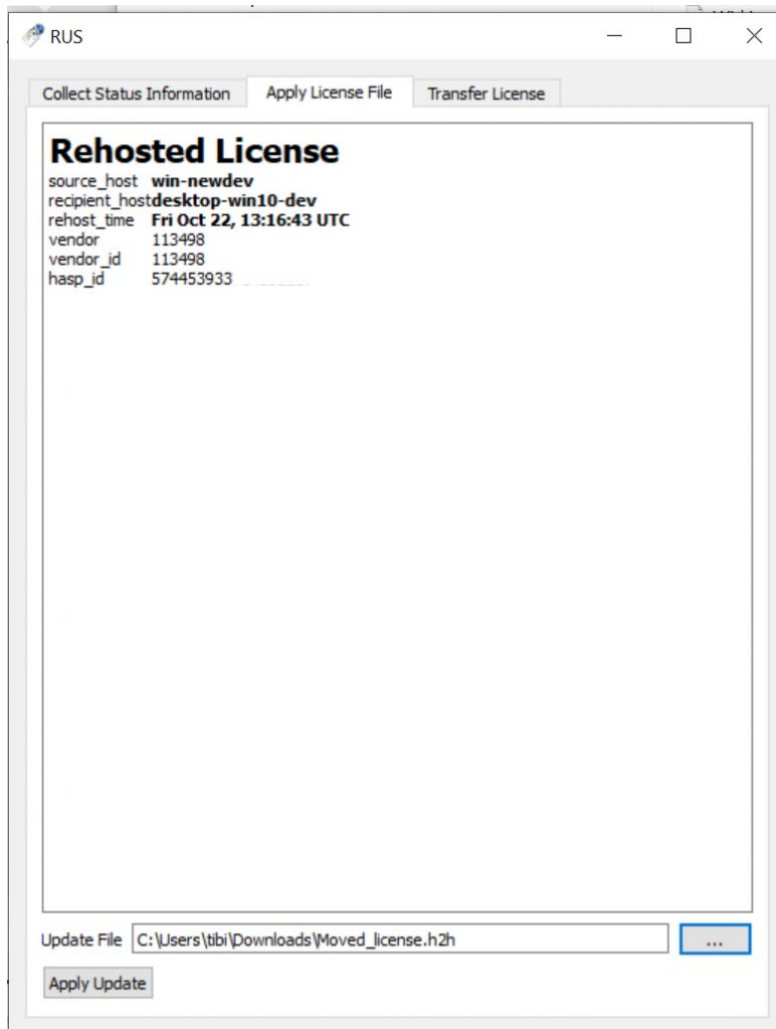

Attach the h2h transfer license file

IF YOU DON'T USE ACC (LICENSE SERVER)

On the NEW PC in the RUS tool select **Apply License File**.

Press the [...] button to select the **.h2h** transfer license file and press **Apply License**.

The output should look similar to the screenshot.

Transfer successfull

Licence update without a licence manager installed (no ACC)

Use case:

License update in case of no license manager installed and more than one PC with ReqEdit installed. The firm becomes the necessary .v2c files for license updating from REQTEAM, conform the license IDs. Each .v2c file is for the PC with the same KeyID.

1. Find the KeyID info.

In File **ReqEdit/LicenseActivation.exe.config**   change settings to **ForceStart.**

```
<setting name="ForceStart" serializeAs="String">
    <value>True</value>
</setting>
```

Than click on **Reqedit / LicenseActivation.exe**
On the **License info** Tab you can find the Key ID of the certain PC
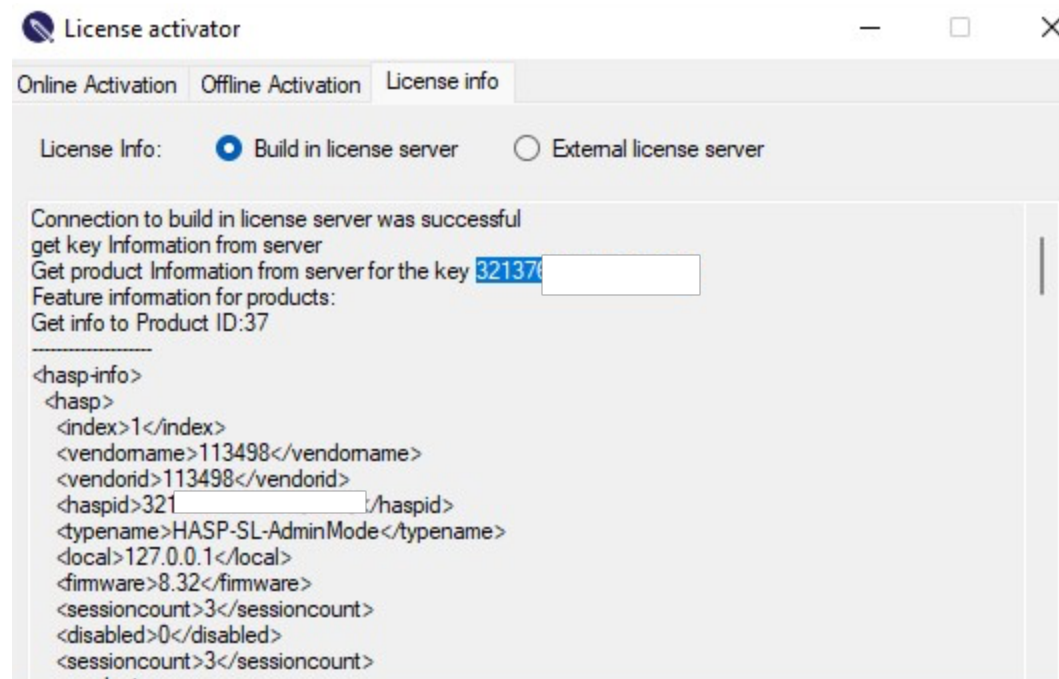
License activator - license info

2. From the .**v2c files** that REQTEAM sent to you **choose** the one with the same KeyID numbers.

3. Go to **LicenseActivator** and click on the button **Activate.**
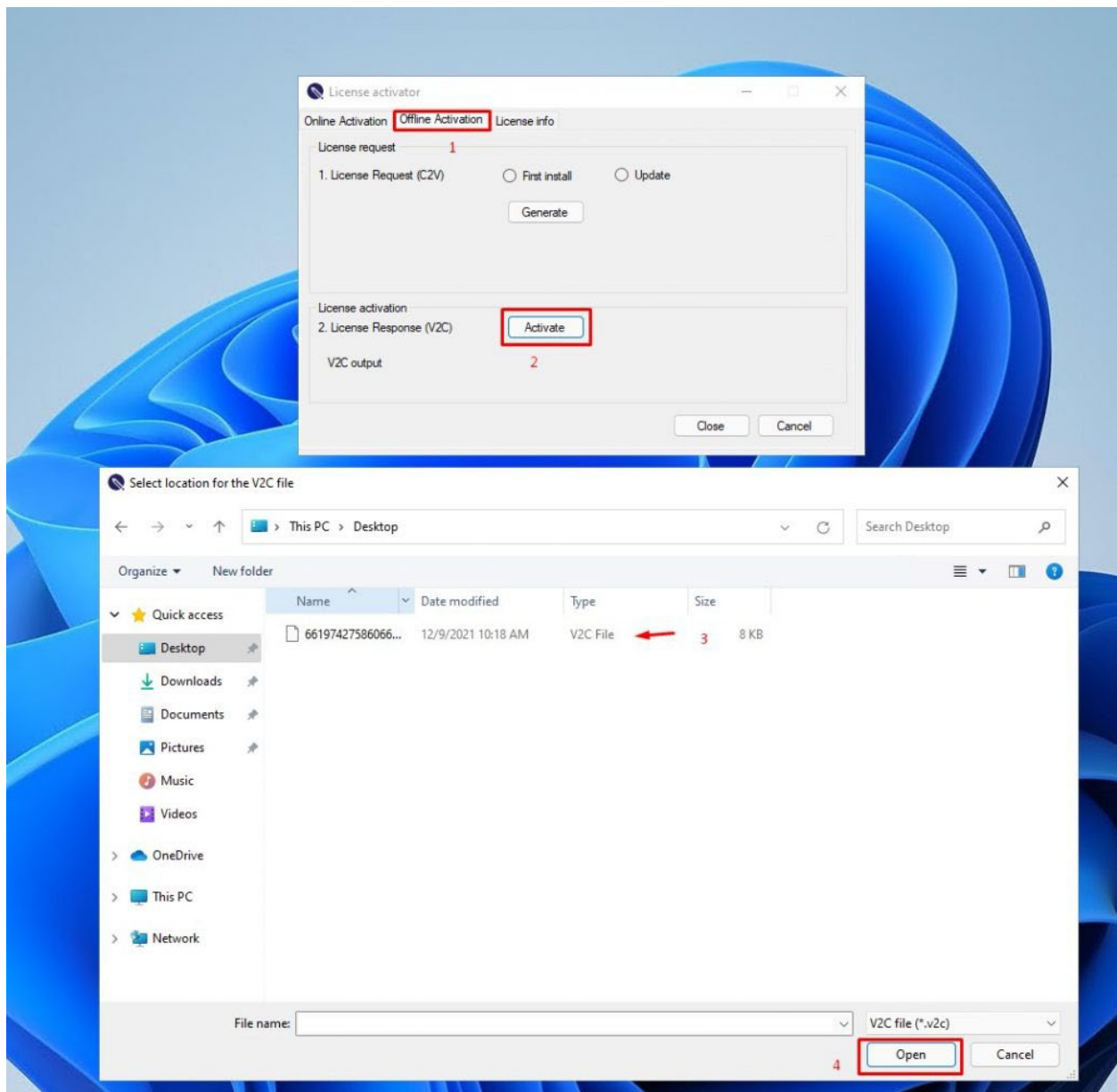
Update license process through offline activation

Choose the .v2c file for that PC.

Click **Open**
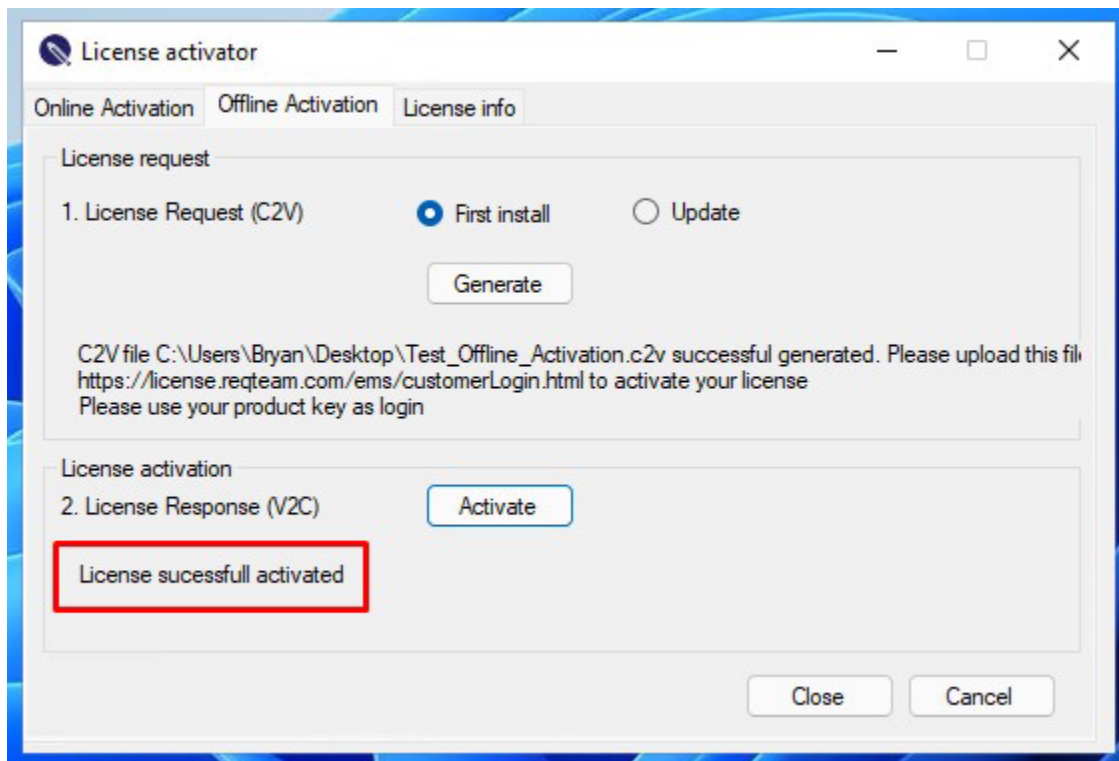
Successful license updating message.

ReqEdit downgrading functionality

The ReqEdit Premium license can be functionally downgraded to a Basic or Reader license.
This requires the delivery of a special software which contains a special "config.svk" file.
This file determines the restriction of Premium functions to Basic or Reader.

To obtain these deliveries please ask your ReqEdit sales partner or the REQTEAM support.

Add "config.svk" to the delivery

1. Create a new folder for ReqEdit.
2. Install ReqEdit Premium in this folder.
3. Copy the file "config.svk" in the folder.
4. Make sure the user cannot edit the folder.

Links

What are links?

Relation between objects are called links. Each object can have incoming and outgoing links to / from other objects.

In ReqIF files links are stored in named LinkSet definitions which basically are a group of specific links between objects.

For example: Satisfies LinkSet has links that are between objects of use cases and tehnical definitions

How links are displayed in ReqEdit?

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.
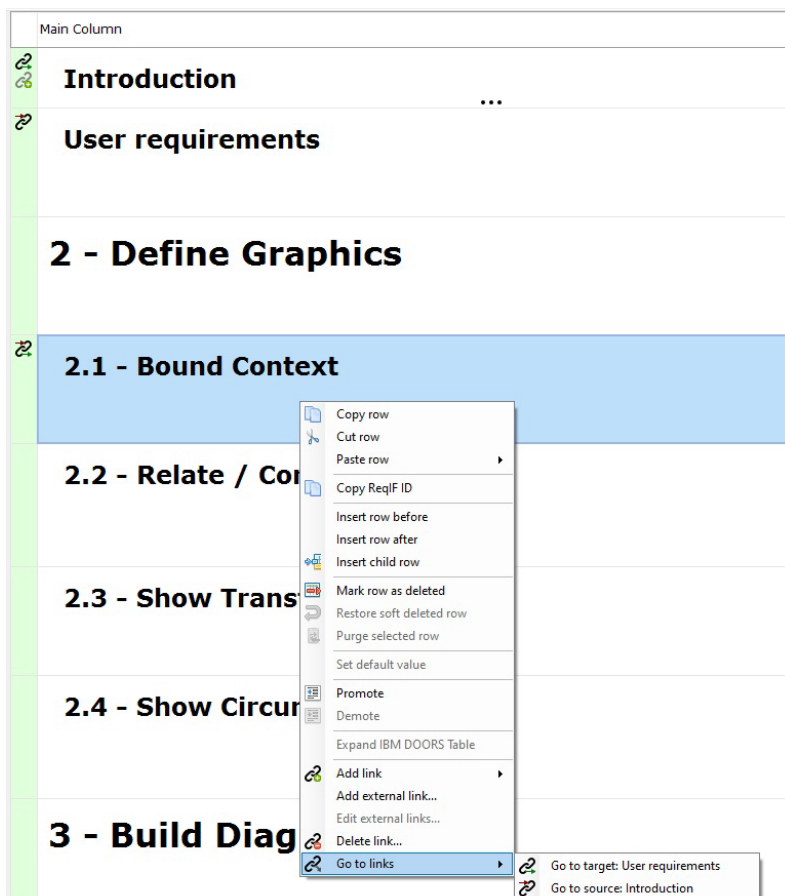
ReqEdit displaying context menu for an object with links

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.

Links administration

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

ReqEdit link 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.

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.
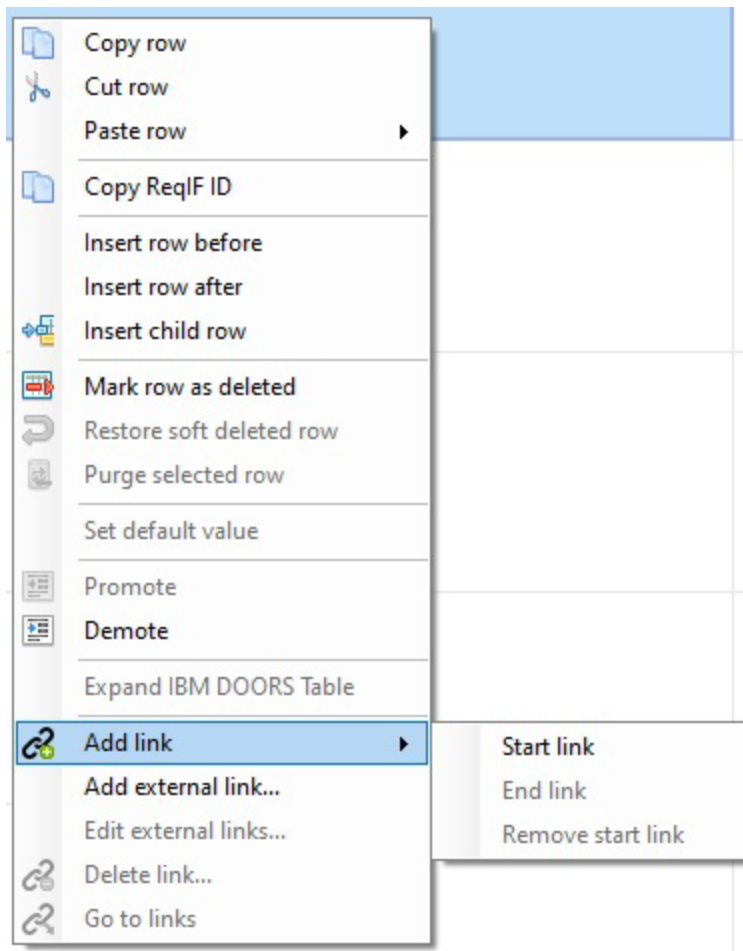
Create link of an object

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.

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.

Delete Links

In order to delete a link, you have to 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 have to 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.

Incoming links have a grey background and cannot be selected.

Error reporting

Crash reports

When a fatal crash happens, ReqEdit tries to collect non sensitive information about the situation. A notification asks to send the crash report to REQTEAM ticketing system for analysis.
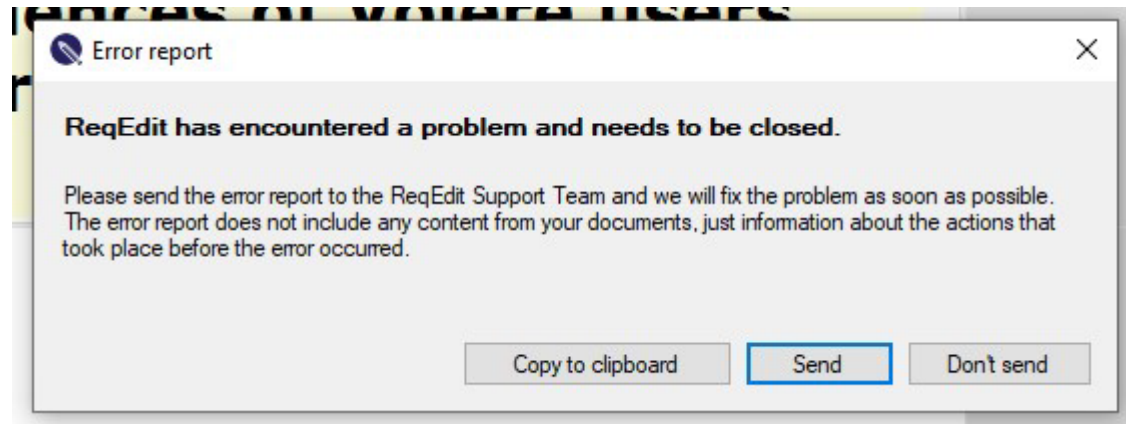
ReqEdit fatal crash popup window

Contact support

For any questions use the documentation platform https://documentation.reqteam.com.

Or contact ReqEdit Support for assistance through email to: **support@reqteam.com**.

Notices and Limitations

HTML import – import quality depends a lot on the html code structure, use basic HTML as much as possible, do a cleanup before import if possible

Cut-copy-paste, promote, demote multiple rows at once – can give unexpected results, please save document before operations

Pasting large amounts of html / content above 32000 characters could have problems on other RM tools when importing the ReqIF file

Comparing DNG ReqIF files is not supported, compare works only with ReqEdit imported files

When working with large ReqIF files and the backup is enabled, the application can become unstable, deactivate periodic backup to improve the stability.

Opening ReqIF files over 10.000 objects can take a long time.

Rif/ReqIF file support

Filetype	Support
RIF 1.0/1.0a/1.1/1.1a	supported
ReqIF 1.0/1.0.1/1.1/1.2	supported, see limitations

RIF/ReqIF version support in ReqEdit

Limitations:

Documents using multiple spec-object types are converted to a single spec-object type that contains all the attributes and an enum that will represent the object type.

ReqIF files that contains the same object multiple times (ex: in the content then in the glossary) are displayed only one time in the application, but the tree structure navigator will display all.

Spec relation types are not used, ReqEdit will create one by default for all links.

Spec relation groups are used internally as a pointer to a specification.

Spec relation attributes are not displayed.

Specification document naming

Document names can only contain alphanumeric, space, period, underscore, hyphens characters.

Logging

ReqEdit is producing the followin log files

- action log for each file (does not contain actual values only action names) of each opened document
- app crash logs
- general app log
- addon action logs
    - %AppData%..\Local\REQTEAM\ReqEdit_Merge
    - %AppData%..\Local\REQTEAM\ReqMerge
    - %AppData%..\Local\REQTEAM\Excel_Import
- server files list cache
- licensing solution logs

The log files can be found here **%AppData%\..\Local\REQTEAM\ReqEdit** and **%AppData%\..\Local\SafeNet Sentinel** folders.

Data retention policy

ReqEdit will keep logs and backup files for 6 months. All older logs and backup files are deleted automatically on each start.

These files can be completely deleted up until now by clicking the Settings > User > **Delete Temporary Files** button.

OLE Objects

OLE was is a proprietary technology developed by Microsoft that allows embedding and linking to documents and other objects.

Only ReqIF Archive .reqifz files support this feature

Import large OLE Files in ReqEdit

In some cases memory limitations will limit the OLE object conversion, in this case the OLE object will be wrapped inside an RTF file. Opening the OLE objects will only be possible through MS Word.

For any OLE conversion ReqEdit needs the memory 20 times the size of the OLE object.

Import large OLE Files to DOORS

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.

Preview

ReqEdit is not able to generate preview images during imports or if they are directly added in the application. A file-type icon will be displayed instead.

Handling

Atego Requirements Synchronizer version 2.4 and IBM Rational DOORS 9.5.2. OLE objects can be imported and opened by ReqEdit.

DOORS roundtrip

- Export always to an empty directory then archive only the contents of this directory to a zip file
- Check if the ReqIF file and all of the OLE objects are in the root folder of the archive
- Rename the file to .reqifz
- Import this file to ReqEdit
- Edit the file
- Export the file to to IBM Rational DOORS

Import to DOORS 9.4

Extract the ReqEdit exported file to an empty directory before importing to DOORS

If exports are done directly by IBM Rational DOORS, in most of the cases DOORS will not make the preview images. Only a small broken link icon is displayed as a preview image, but the linked OLE object still exists in the export.

Don't delete the broken image icons, it is important for the linked OLE object.

Copy / Paste

Copy-paste from external sources will try to keep all formatting from the text.

Image or file copy-paste is partially supported. Drag & Drop of images from external applications like browsers are not supported.

Copy and paste of complex tables may occur problems with ReqEdit.

Limitation of entire function of copy paste on Windows Servers, because of limitation of the Internet Explorer on the server. For detailed description of limitations click here.

Open and save files from ReqEdit Add-ons

The limitation can affect all ReqEdit Add-ons (Excel import, View manager, Compare, XML Editor) where it can not open or save files from / to a network share, which is connected with other user credentials, than the Windows current user.

For detailed description of limitations in the Excel importer Add-on [click here](#).

XML Editor add-on

ReqEdit XML Editor is optimized for ReqIF files. Supports XML validation as well as ReqIF schema validation.

Opening the file in XML Editor

Select **Add-ons > XML Editor**
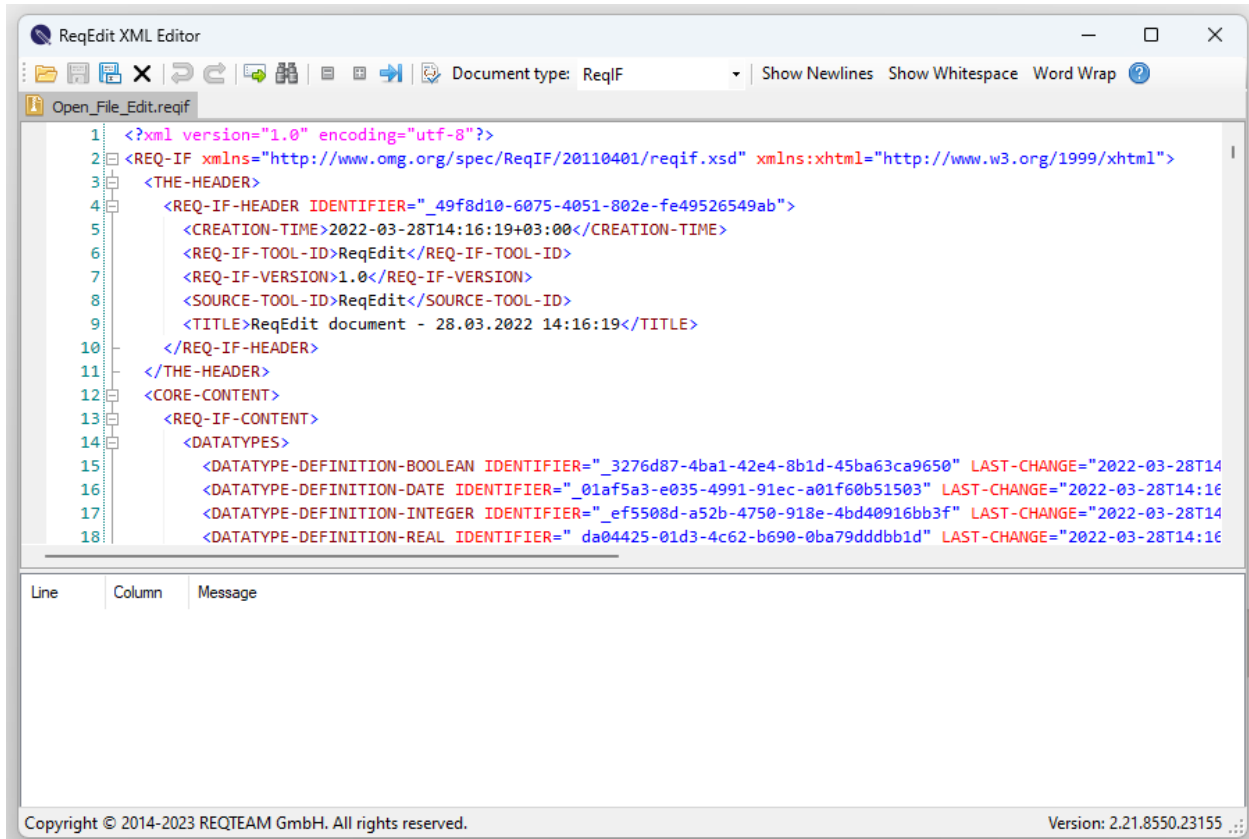
XML Editor Add-on displaying a single ReqIF file

The editor can display multiple ReqIF files in tabs. In the lower part of the interface is the validation / debugger panel.

Validating ReqIF

Validate document as ReqIF icon

The editor supports validation for **ReqIF / RIF1.1a** using the document type toolbar section. After validation the errors will be displayed in the debugger panel. A red mark shows the rows with errors.
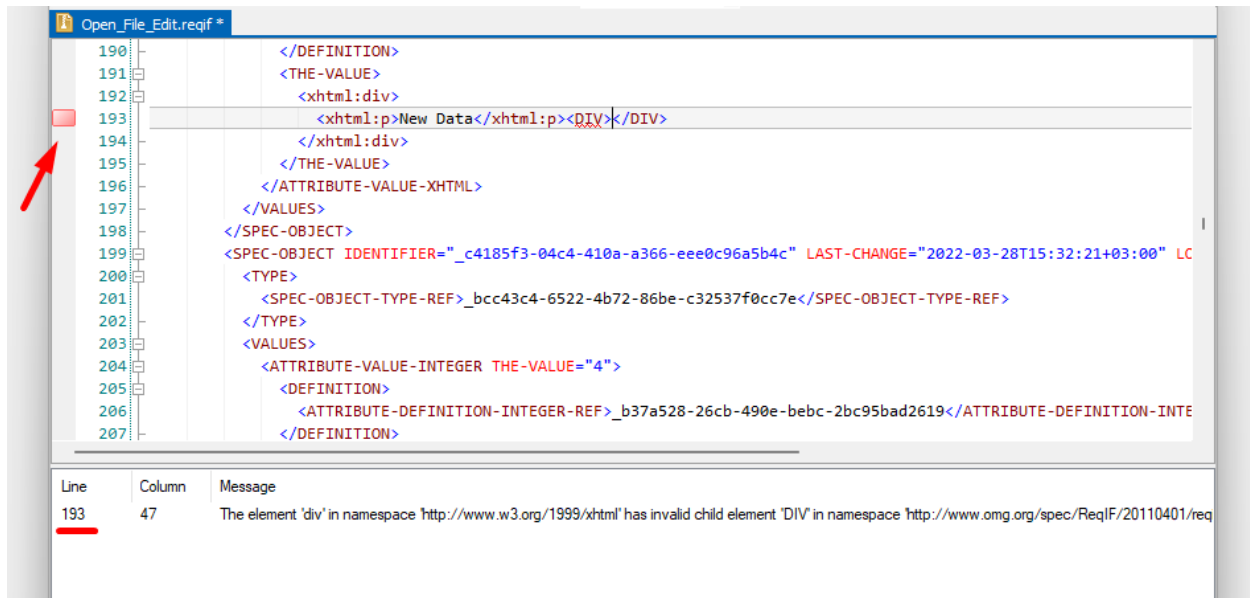
XML Editor Add-on displaying validation errors

Editing content in XML Editor Add-on

To find any text in the file use Find /Replace icon.
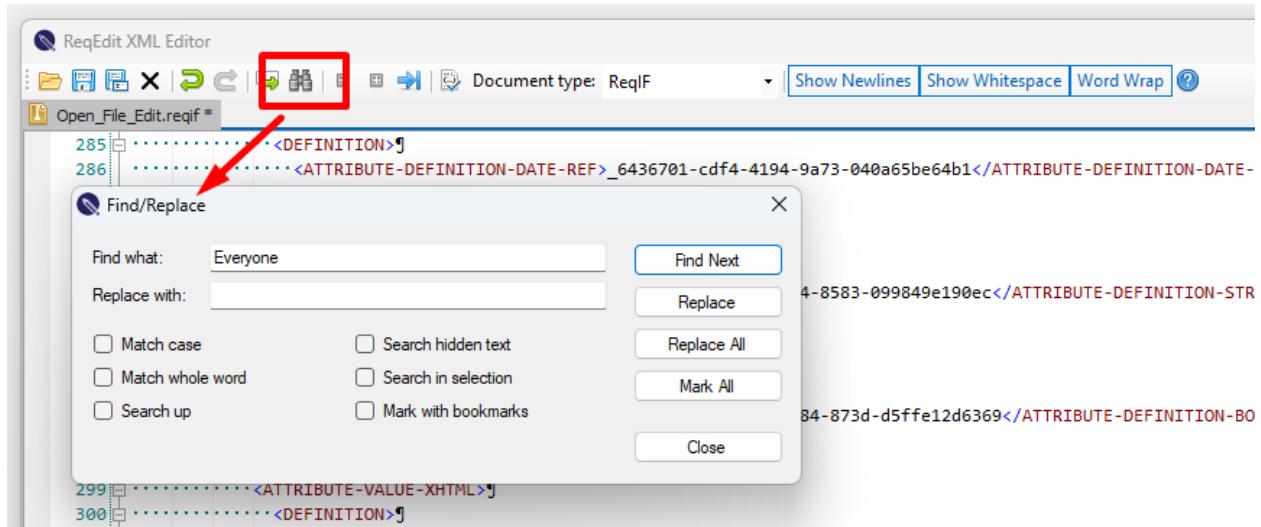
XML Editor Find/replace icon

XML Editor content view icons

Export to MS Excel

File types you can export to MS Excel with ReqEdit

- ReqIF 1.0.1 to ReqIF compatibility mode
- RIF 1.1 / RIF 1.1a archive format
- ReqIFz

Use case for export to MS Excel option

Use "Excel Export" if you want use an Excel file for:

- KPI determination
- statistical analysis
- not for reimport changes to ReqIF document

Due to unique column heading ID needed for the export process, the reimported document can present differences in Attribute names. See Result view

Export to MS Excel

1. Open the document you want to export from.
2. Set the View mode you want in the **View** menu. It can be predefined or newly set. Export function will export the datas you can see on the screen by the active view mode.
3. Open **File/ Export...**
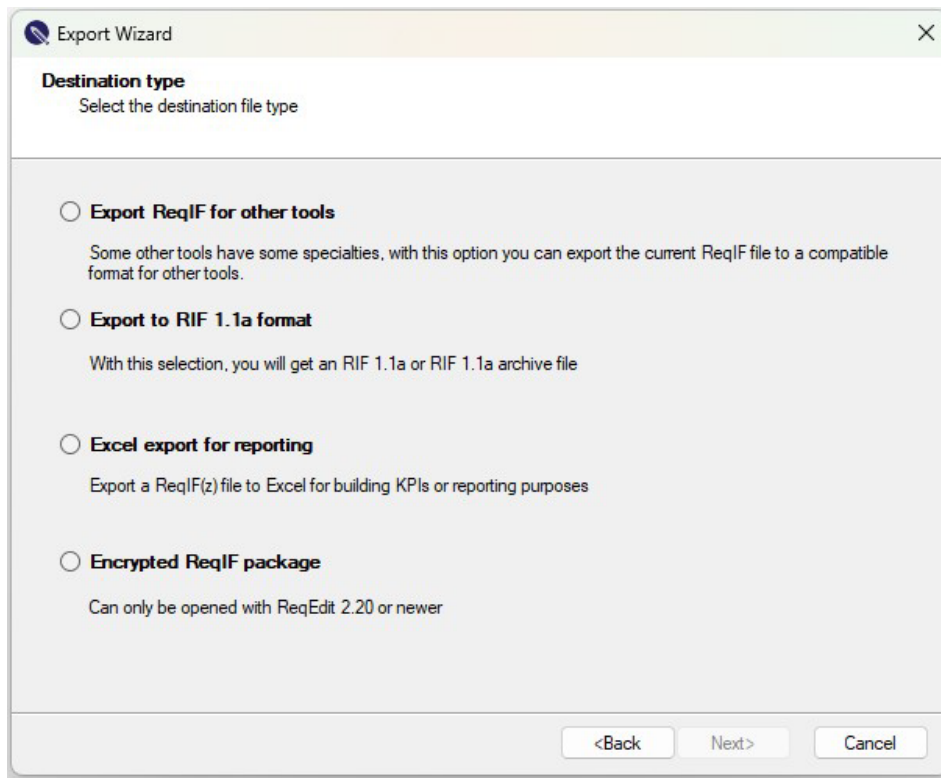
Export wizard

- Follow **Export Wizard**
- Choose **Excel export for reports i**n the Wizard Window
- Choose name and location for excel file. The Wizard will generate automatically the ReqIF documents name and adds 'exported' as excel file name. It can be modified, if needed.
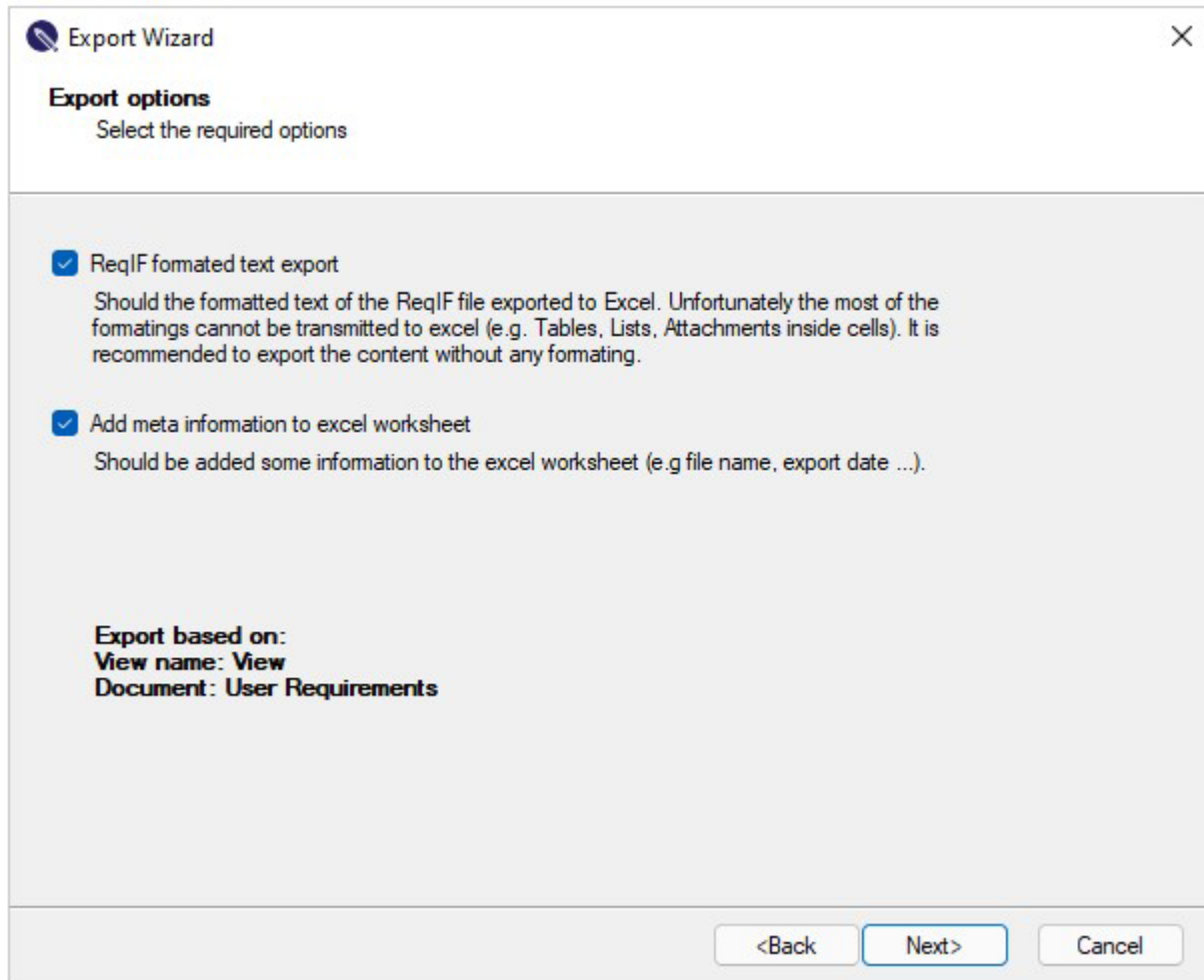
The export of the ReqIF file will be written in a Excel sheet with the name of the visible document. If the name is longer than 30 characters, it will be shortened to this maximum size supported by Excel. If the user choose an existing excel file the sheet with the exported data will be added or replaced if a sheet with the same name exists.
The message "The file XXX already exists. Do you want to replace it?" generated by the Windows file selector, can be confirmed with "Yes"; only the tab named after the document name will be overwritten entirely.

Note: If you want to export a file with an existing excel file name, close the file before click Start on export to Excel.

- Check the **export options** boxes (optionally):
    1. ReqIF formatted text export - Exporting data with formatting (only for text, bold, underlined, strikethrough, italic) Does not support tables, attachments, (limited support of) lists, background colour.
    2. Add meta information to excel worksheet - Exporting meta info based on the View of the document. It shows the following information in the first rows in

the excel worksheet: export date, file name, document name, document ReqIF-ID, view name, user name)

Export options

- Finish export. Log info window appear.
- **Open** the Excel file.
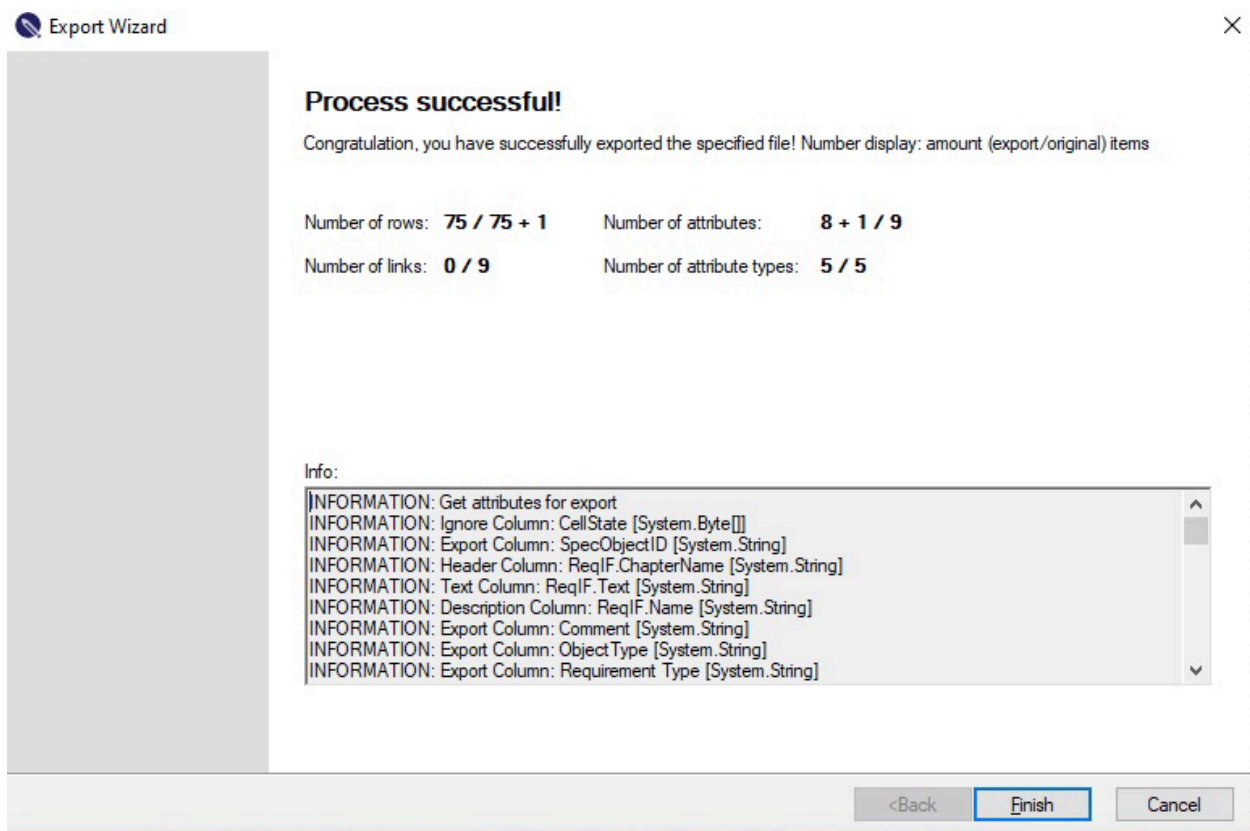
Finish export window

The numbers in the final export wizard window show the amount of hidden attributes (columns) or deleted rows in the original document.

Result export view

If you check Add meta information to the excel worksheet checkbox in the Excel export wizard, the Excel file contains the meta datas in the first rows:

	A	B	C	D	
1	Export date:	3/17/2022 15:45			
2	File name:	S:\Boti\Kaffeeautomat_2.reqifz			
3	Document name:	Kaffeeautomat_2 - User Requirements			
4	Document ReqIF-ID:	_1a8ffb8-eca2-423c-b266-26e94aea7398			
5	View name:	View			
6	User name:	IBL\Bryan			
7					
8	RowNr	Hierarchy ID	Object ReqIF ID	ReqIF.ChapterName	ReqIF.Text
9	1	-#1	_33591b0-a6d5-4f2a-8fb9-d47474a8b15e		based on VolereRequirements

Resulted file view with meta datas

The first 3 columns of the created Excel file contain, independent of the selected View mode:

Row Nr	Each row is numbered conform to the source specification document.
Hierarchy ID	Shows the entry level of the object (text) in the source specification document. The number shows the chapter number it belongs and after the hash sign (#) the entry position in the folder.
ObjectReqIF ID	Shows the ReqIF-ID of each object from the source specification document.

New columns in the exported Excel file

These column headings are **reseved for the Excel export.** They are important to identify the specifications from the Specification document. If these **column names are defined as attributes inside the ReqIF** document, **the attribute will be reanamed to "ReqEdit.<<atributename>>"**. Ex: RowNr -> ReqEdit.RowNr

The name of the tab in the created Excel file are the first 30 characters of the document name.

If you reexport a document to existing Excel file, the final file saves the new version of ReqIF file in the sheet which has the same name. The other sheets /tabs remain the same.

Display of formatted text:

Some elements can be displayed in Excel in a certain mode due to technical limitations:

Formating	Display	Description
Multi Enumeration	multi#1 multi#2	By default any of the multi valued enumeration values will be displayed separated by a new line.
Unordered list	- entry#1 - entry#2	Any of the unordered lists will be displayed as new line separated entries with an starting dash "-" character for each of the list entries
Ordered list	1. entry#1 2. entry#2	Any of the ordered list entries will be displayed with a numeric value and followed by a dot
Table	[col1][col2] [col1][col2]	Each table column inside of ReqIF-table row will be framed with square bracket signs ("[column value]").

Attachments	{"link":"image.png", "type":"image/png"}	Textual information about the linked file and mime type
Attachments with alt text	{"link":"image.png", "type":"image/png"}Alternative text{"endlink"}	Textual information about the linked file and mime type

Limitations in formatting to Excel
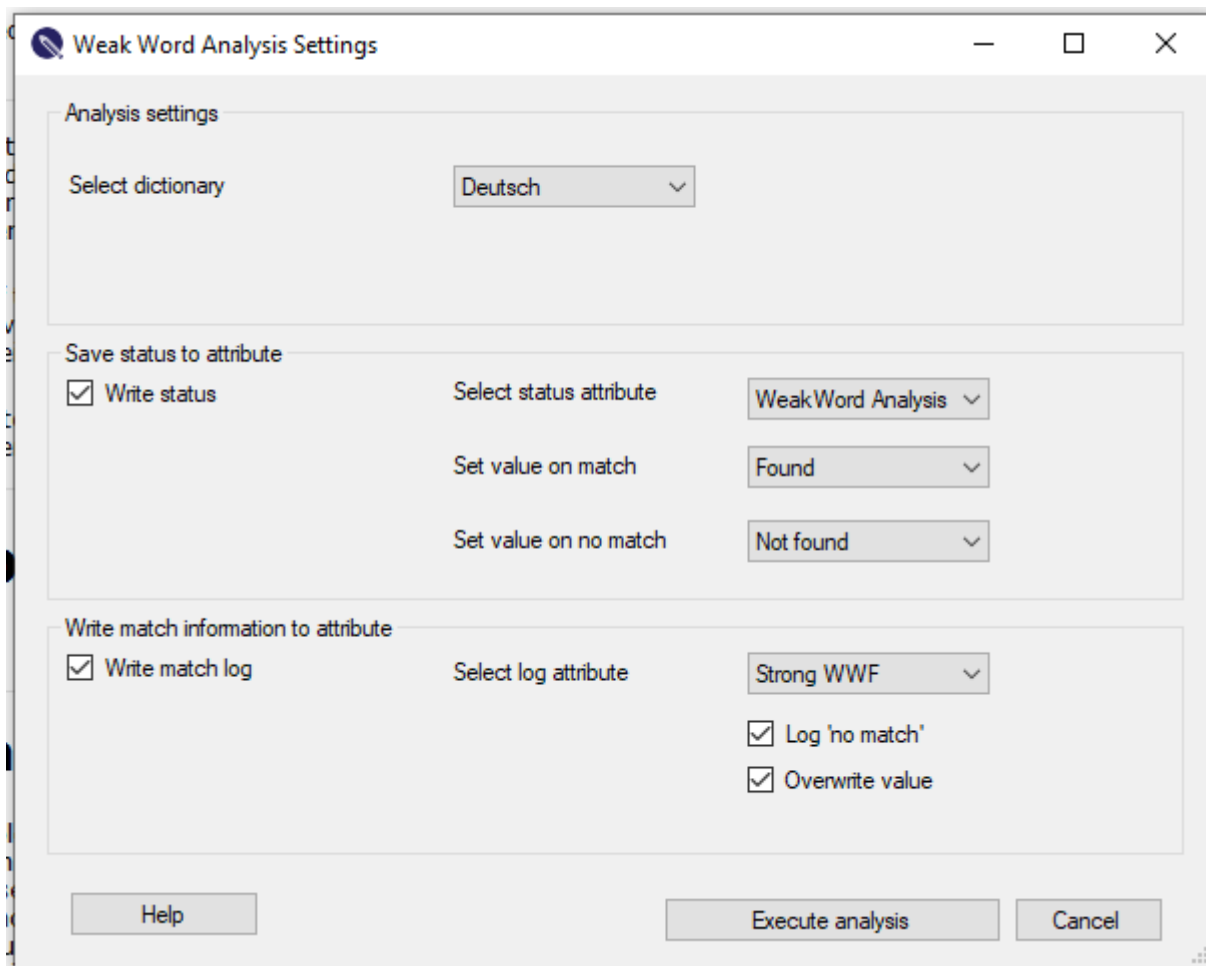
Note: Roundtrip Excel-ReqIF is not supported! (You can reimport this Excel file to a ReqIF file, but you will loose information contained in the original ReqIF).

Add-on for Weak-word analysis

Weak words are words that are confusing for readers and should be avoided if possible. This tool provides a case insensitive whole word search for this purpose, optionally writing the results back in the ReqIF file.

Analyze weak words

Start ReqEdit and open any ReqIF file. Select the specification document that needs to be analyzed. Select **Add-ons > Weak Word Analysis.**

ReqEdit Weak Word Analysis tool window

Language selector – displays the configured dictionaries from the ReqEdit.exe.config file

Write status – update a specific enumeration attribute if there is or not a match in the dictionary

NOTE: Write status for multi value enums will add the selected value, existing values will not be removed. This can be useful for status fields that are used for other markings as well.

Write match log – update an XHTML attribute with the analysis result, optionally overwriting the contents in the selected attribute

Log "no match" - write in the attribute when no match is found
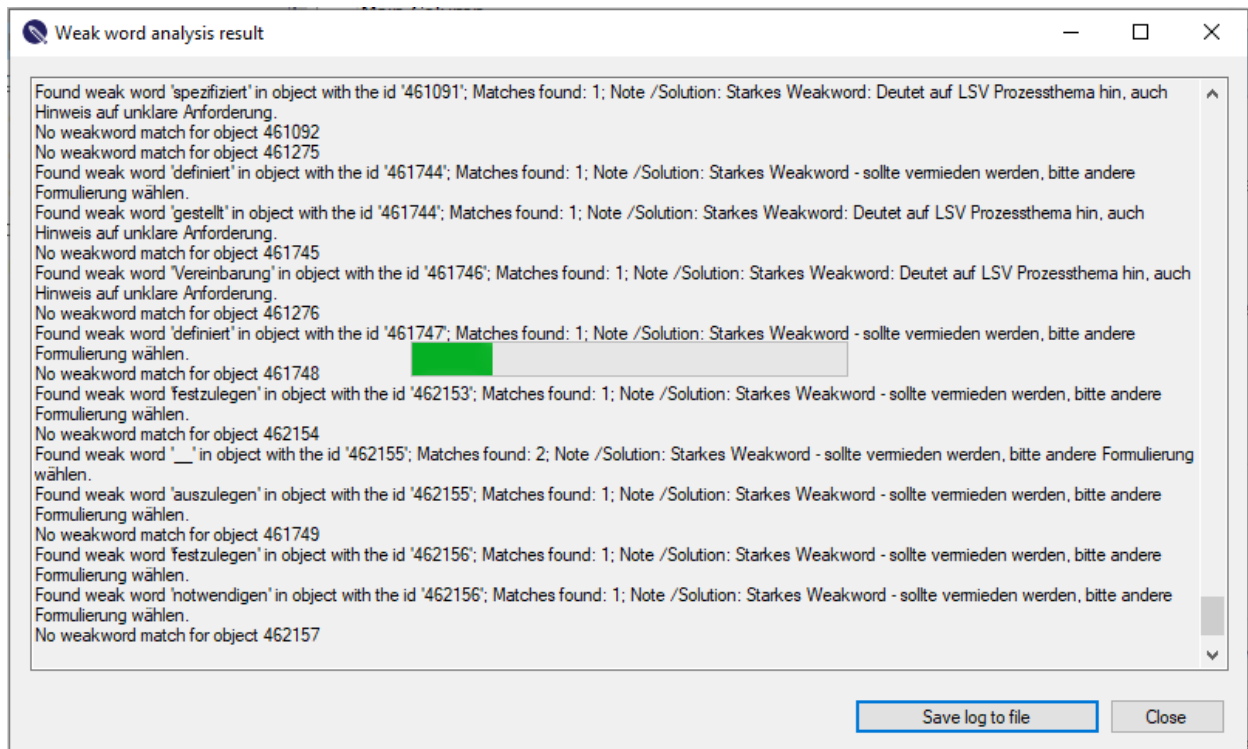
ReqEdit weak word analysis progress window and log

Analysis progress and log is displayed in real-time. After completion the log output can be saved as a file with **[Save log to file]** button

Analysis result in ReqIF

When **Write match log** is enabled, the ReqIF file will be updated with the current results of the analysis.

Main Column	Strong WWF
based on Volere Requirements Specification Template Edition 15—March 2020	2021.09.15 12:41: No weakword match for this object.
Volere is the result of many years of practice, consulting, and research in requirements engineering and business analysis. We have packaged our experience in the form of a generic requirements process, requirements training, requirements consultancy, requirements audits, a variety of downloadable guides and articles, and this requirements template. We also provide requirements specification-writing services. The first edition of the Volere Requirements Specification Template was released in 1995. Since then, organizations from all over the world have saved time and money by using the template as the basis for discovering, organizing, and communicating their requirements. The Volere web site www.volere.co.uk contains articles about the Volere techniques,	2021.09.15 12:41: found 'also' in main column 1 times. Note /Solution: Strong Weakword - should be avoided, please choose another wording..
1 - Project Drivers	2021.09.15 12:41: No weakword match for this object.
1.1 - The Purpose of the Project Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy **eirmod tempor** invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est *Lorem ipsum dolor sit amet.*	2021.09.15 12:41: No weakword match for this object.

Weak word analysis tool result attribute on the right side

Expert knowledge

Dictionary

Dictionary file/s must be created in the **ReqEdit/Dictionary** folder and has to follow the following format:
<Lowercase word><TAB><hint>

```
should    Strong Weakword; should be avoided, please choose another
wording.
about     Strong Weakword; should be avoided, please choose another
wording.
```

Only one word per row.

NOTE: If the hint is not present the analysis still works but the report will be empty for it.

Dictionary config

Edit **ReqEdit.exe.config** and set the **WeakWordList** to use the dictionary files

```
<setting name="WeakWordList" serializeAs="String">
```

```
<value>Deutsch,weakword_list_de.txt;English,weakword_list_en.txt</value>
</setting>
```

The dictionary files has to be added in the following format:
<Language selector label>,<dictionary file name in Dictionary folder>;

There must be at least one dictionary to use the tool. The dictionary should be saved in a text file with UTF-8 encoding.

Only Main Column is used for analysis other attributes are not processed.

Dictionary contents is filtered and **only unique word+hint** pairs are used.

The tool is searching **only for whole words** in the Main Column contents.

The search is **case insensitive** regex search.

All text is converted to lowercase internally and matched with the lowercase weak words.

Weak word	Text	Result
go	I will **GO** TO THE office then **go** home	2 Found
go	John goes to the office	Not found

Status updates

Single value enumeration attributes will have the value from the configuration.

Multi value enumeration attributes will receive the configured values, but the previous values will not be removed from it.

Notices and limitations

If the weak word add-on menu is not active it can have several reasons:

- You do not have the necessary license
- There are no ReqIF files opened
- ReqEdit.exe.config is not configured

The tool was tested in UTF-8 character encoding, using other encodings can produce unintended results.

Excel importer add-on

Convert a single MS Excel file with **XLSX** extension or CSV(experimental) to a ReqIF Archive file (.xlsx to .reqifz)

Usage

Start the Excel Importer add-on by selecting **Add-ons > Excel add-on**.

ReqEdit Excel importer add-on

Sheet Configuration tab

Step 1. **Sheet selection**
display the specific sheet to configure, check Ignore Sheet to skip conversion

Step 2. **Set header row**
select a header row that represent the attributes (table header)

Set import data range
Set the first and last cell coordinate of the converted worksheet section

- Row is row in the excel sheet (1-1048576)
- Column represents the number of column in the excel spreadsheet (A=1, B=2... XFD=16384)

Step 3. **Configure Attributes** (center)

Column represents the number of column in the excel spreadsheet (A=1, B=2... XFD=16384)

Name represent the Header Row Number from the Set header row section,

To **ignore a column** from import check the box near

Data type. Tool will try to guess the data types automatically based on the data type of the first row of the import range.

- **Boolean** – true/false type values
- **Integer** – whole numbers
- **Real** – decimal numbers
- **Date** – date format
- **String** – single line text, no formatting
- **Text** – multi line text with formatting
- **Enumeration** – values can be one or more of a fixed set of values in all the rows in a sheet. Single value if no separator is found. Multi value if separator is found [, ; newline]. **The conversion will combine all values found in all the rows within a single sheet so it can be memory intensive if overused**

Date format

Specify the date format that appears in excel. If it cannot be detected automatically this format will be used to parse the date.
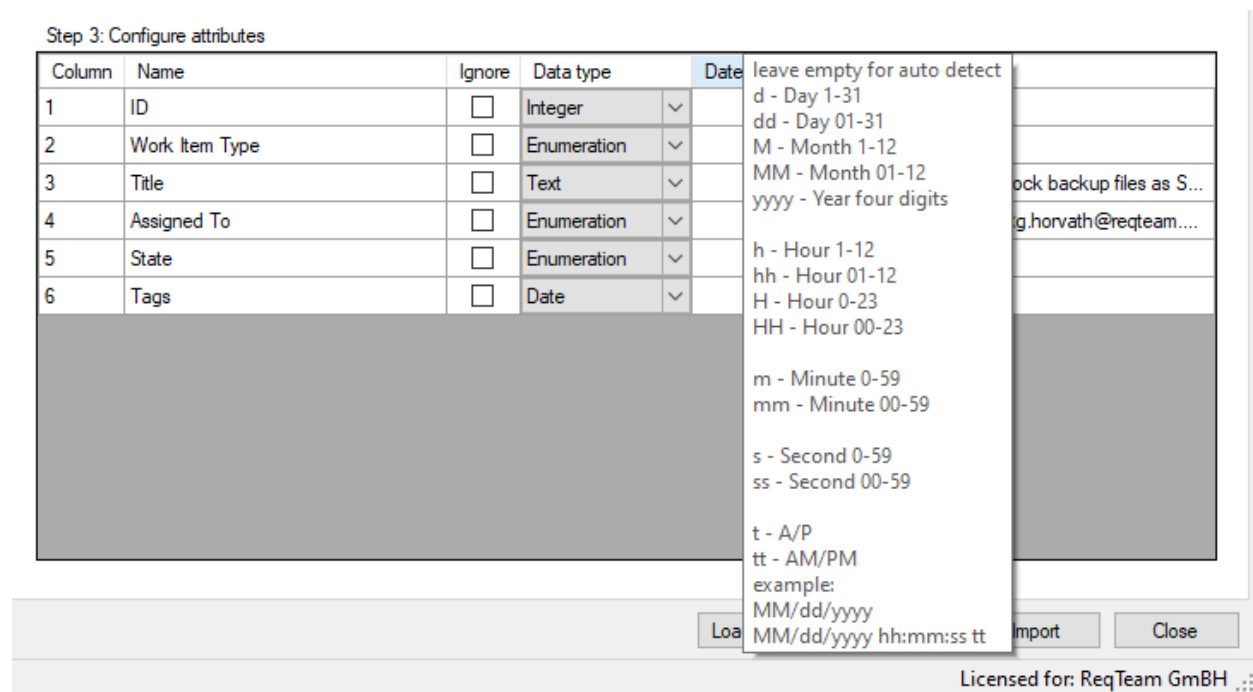
Excel importer displaying date format tooltip over Date Format column

For date type it is possible to define a default date, if date is not set in the Excel cell. To set the Default date please edit "ExcelImport.exe.config" in AddOns/Excel folder. Set the config value "DefaultDate" to the date you want (format YYYY-MM-DD) and set the EnableDefaultDate to "True".

Note: if the conversion is taking long use Integer (instead of Real) and String (instead of Text types)

Reference Shows the first data from the table

Step 4. **Set main column**

Set the type of ReqIF attribute of the imported excel data in the main column

- **ReqIF.ChapterName** - only Text type attributes
- **Level ID** - only Integer type attributes, ReqIF.ChapterName must be already selected
- **ReqIF.Text** - only Text type attributes

Step 5. **Set ID field**
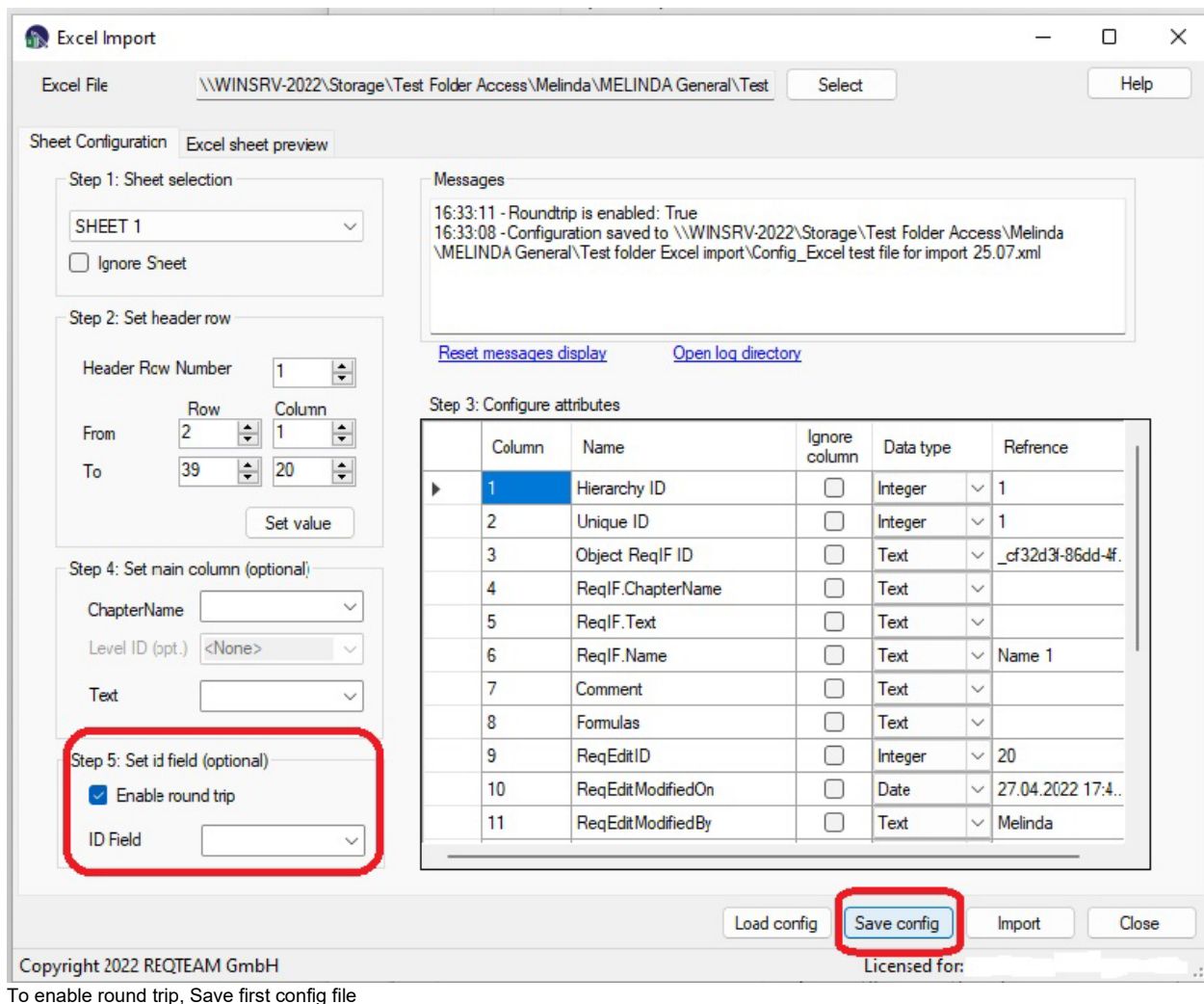
To enable round trip, Save first config file

To enable Excel - ReqIF round trip, use **Save config** and save the config file on your computer.

To reimport an Excel document you click on **Load config** with the saved Config file from the previously saved.

You must select an ID field from the Excel file, if the section is active. The data type of ID Field must be Integer.

Note: The ID cell must have unique value on each excel workbook, to be possible automatically identification of the specific data row.

Details on the roundtrip: the activation of the Roundtrip configuration forces the application to use the stored ReqIF-IDs in the configuration file during the reimport of a "known" Excel file. So the resulting ReqIF file will have identical IDs for all attributes and data rows. ReqEdit ReqIF compare will be possible this way and also the import in an

external RE tool will update existing content instead of recreating it.
Not activating this optional functionality, the new ReqIF file will be generated with new randomly generated IDs.

Configuration reuse

The tool lets the user save file conversion configurations and reuse them later. This is done with the **SAVE / LOAD CONFIG** buttons.

Preview

Preview the data range of each sheet with the configured header row by pressing the **EXCEL SHEET PREVIEW** tab.

Best practice

Use the preview to check import settings periodically, the list can be adjusted to show the start or the end of the range and also the number of the preview rows.

ReqEdit Excel add-on preview tab

Importing Excel to ReqIF

After the excel file is configured press IMPORT to start the conversion.

The tool will generate a reqifz file near the source xlsx file. All actions are logged.

Output files

Each conversion will overwrite any previous REQIFZ files in the original directory

All generated output is REQIFZ archive format and will be saved near the original document.

Important Note: please check the content of the imported ReqIF file against your original Excel! Because of the Excel format we cannot guarantee a loss free import of all data.

Logging

All conversions are logged into the application directory **/logs** folder. The log files are splitted into 10mb files and rotated when needed.

The logging uses the log4net library. Experienced users can configure the file log4net.config to suit the logging needs. Documentation log4net: https://logging.apache.org/log4net/release/manual/introduction.html

Limitations

Only the XLSX format is supported

Additional content will be discarded (images, charts or any other floating elements)

Marcos are not processed

Pivot tables are not supported

Some formulas are not supported (specially formulas regarding to other cell or table references or named labels)

Merged cells will be converted to the first cell the merge starts horizontally or vertically

Importing

The Import add-on opens non-standard ReqIF files and imports MS Word document files, or MS Excel spreadsheets. To import click on **File / Import...**
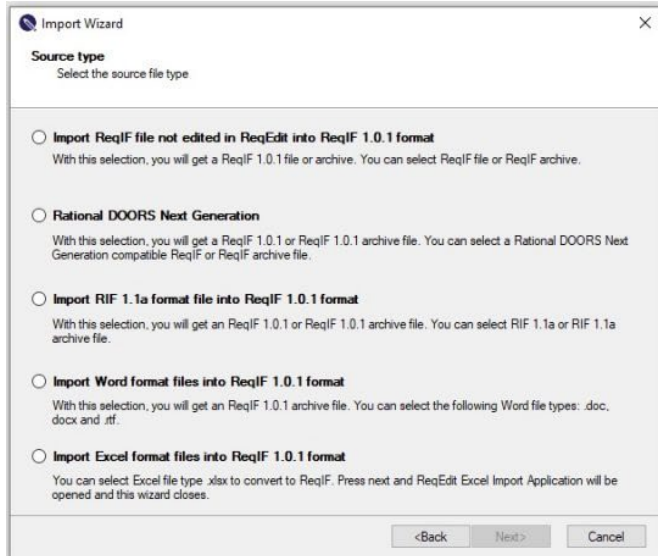
ReqEdit Import wizard window

RIF, ReqIF Import

Some ReqIF files are not following the format standard. ReqEdit can still open these files by converting to a compatible format. Following formats are supported:

IBM Rational DOORS compatible ReqIF file to ReqIF 1.0.1 format

Rational DOORS Next Generation

RIF 1.1a to ReqIF 1.0.1 format

The ReqEdit editor supports the ReqIF Format coming from 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 compatible, but not the standard.

ReqEdit needs to un-wrap this OLE object 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 kept as 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.

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.
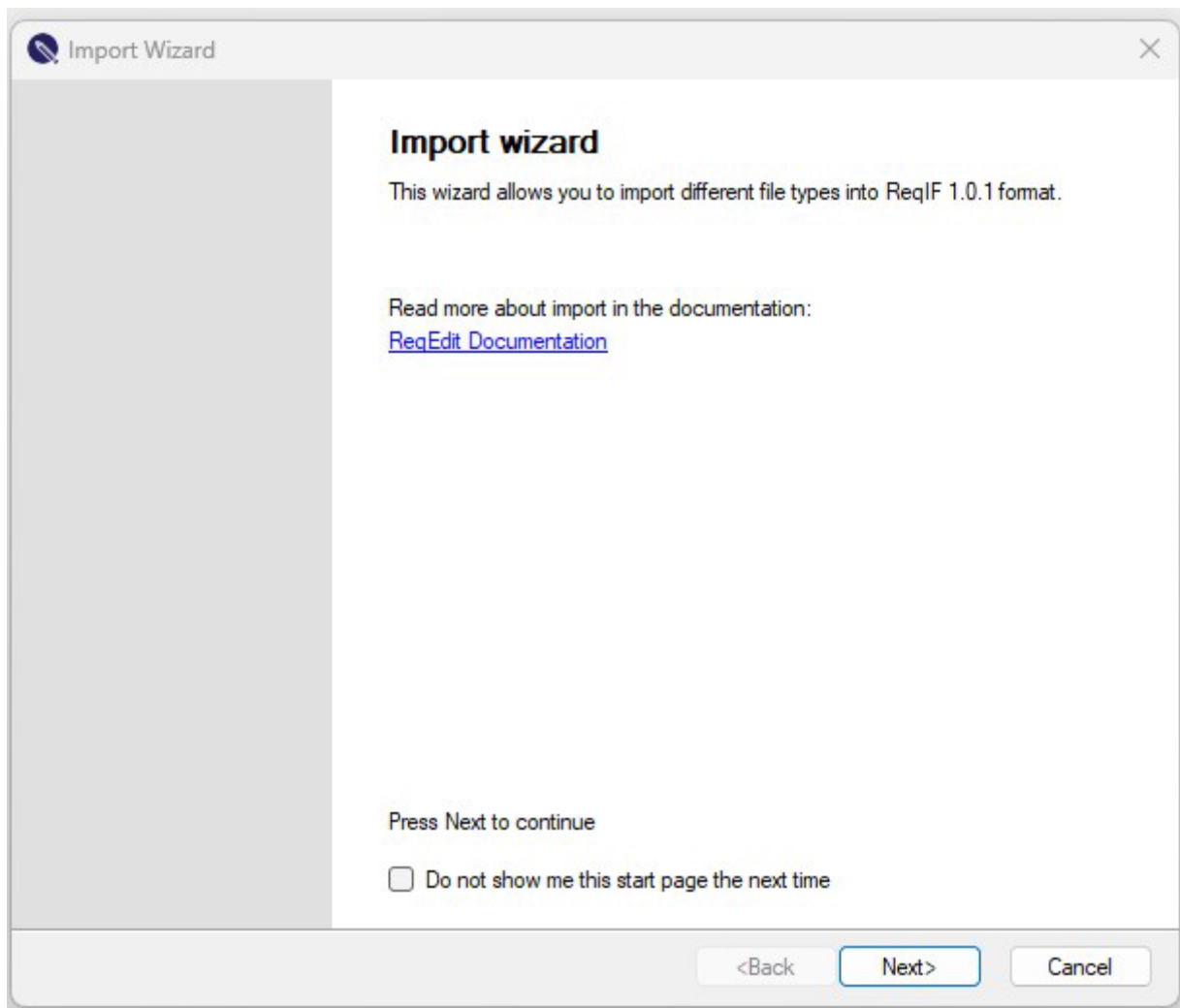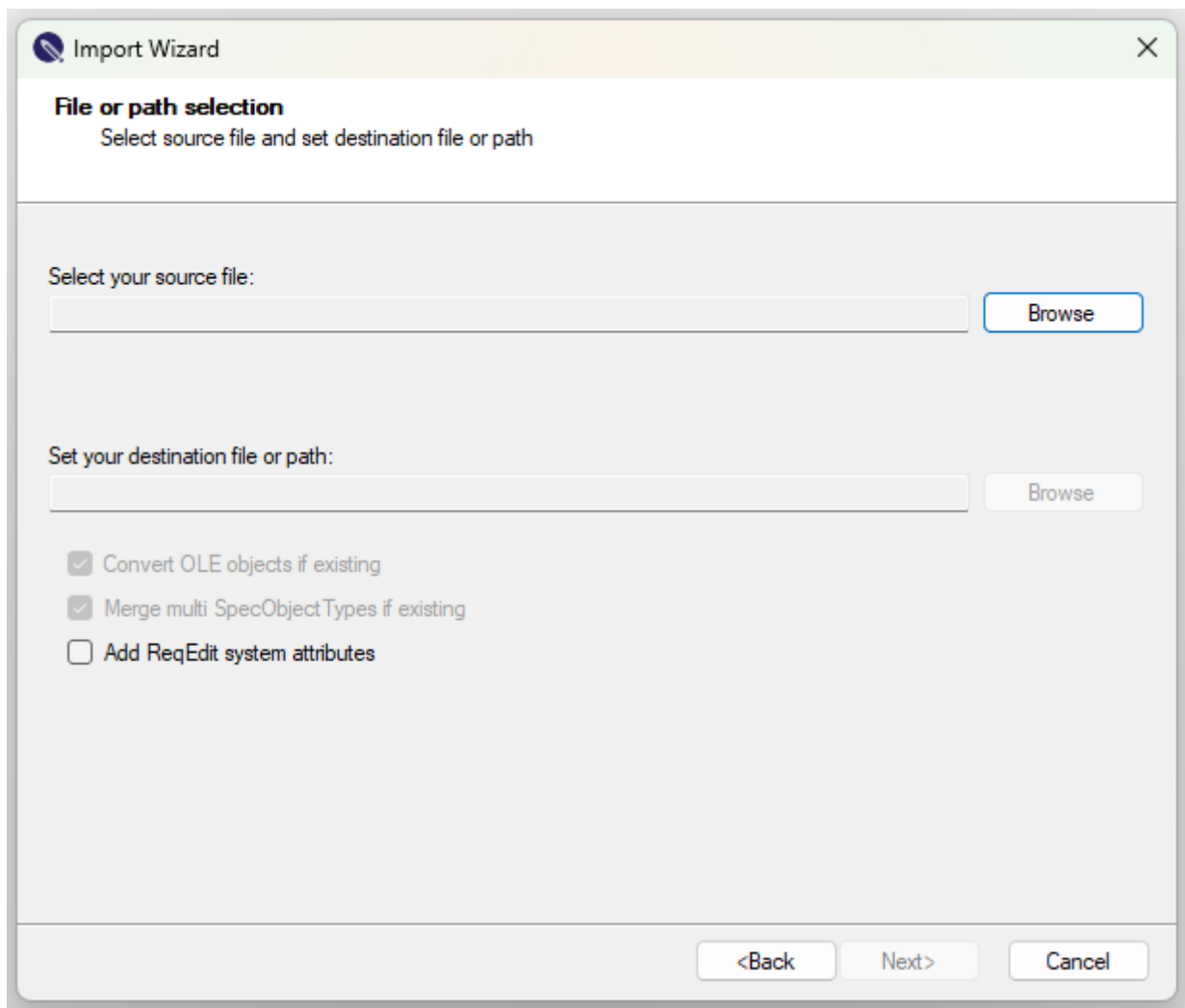
Import wizard

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" and "RIF 1.1a format".

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

File destination selector

After the file is imported, a confirmation page will be displayed. You can select the "Open the imported file" check-box if you want to open the file after the wizard is closed.
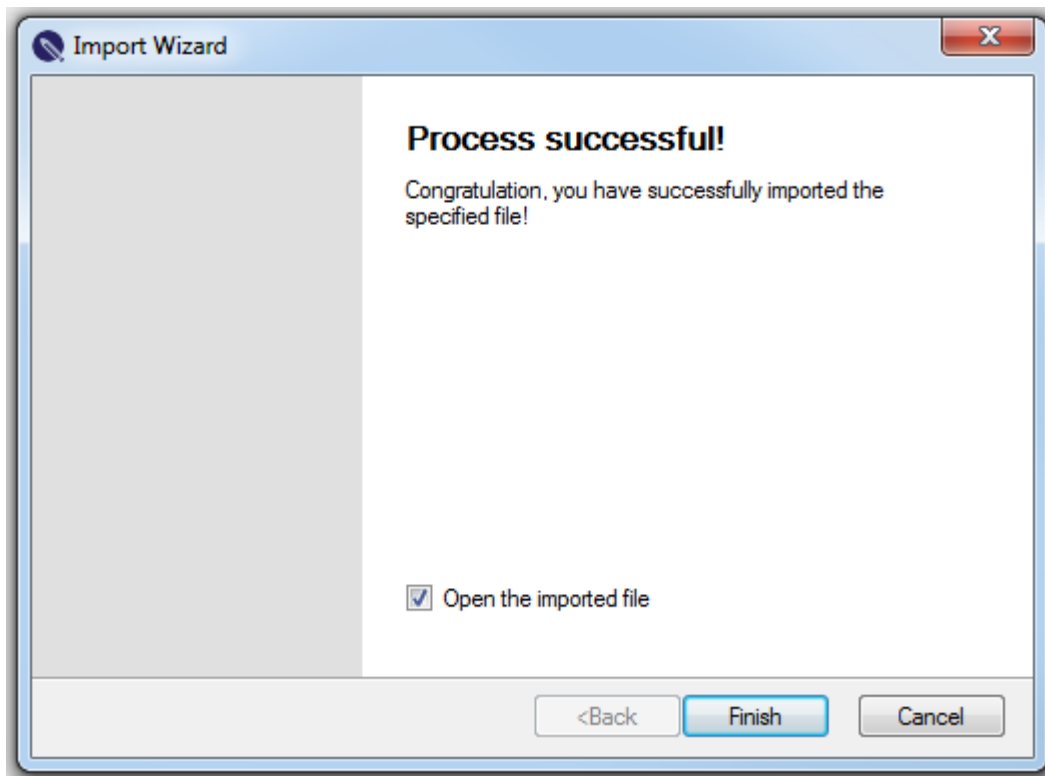
Succesfull import

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.
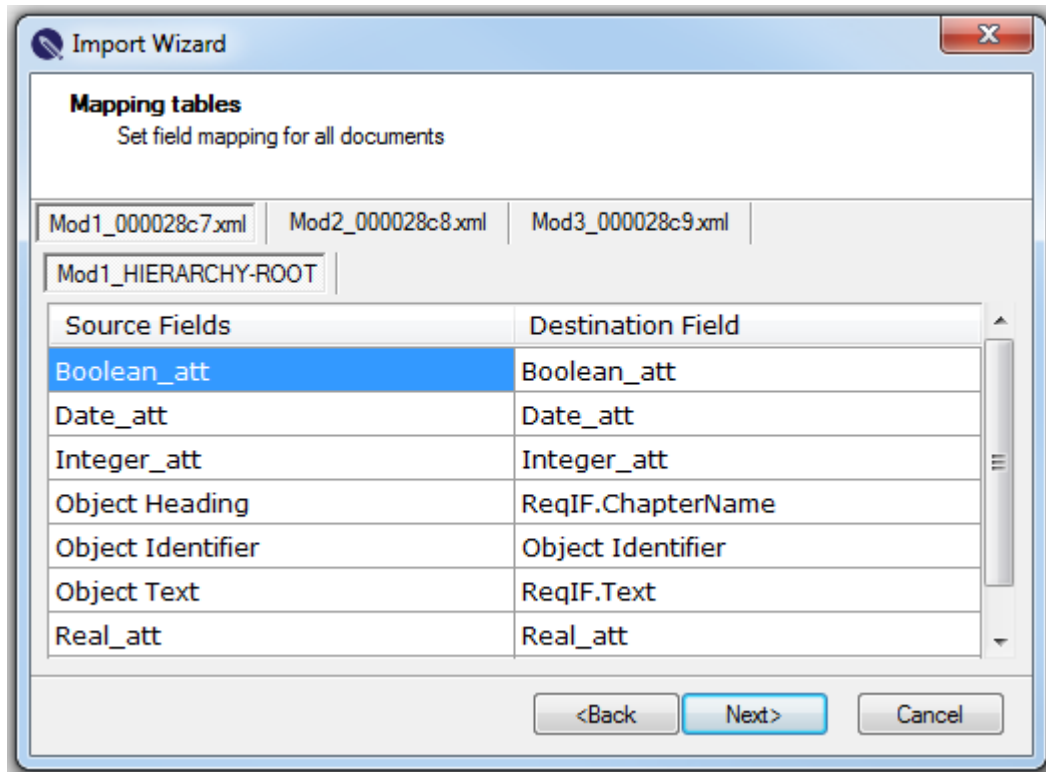
Import Log file

MS Office Word Import

The Word Importer option imports .DOC files (Word 97-2003 type) into ReqIF. Also supports DOCX and HTML files experimentally offering best effort approach to conversions.

Word Import wizard starting from v 2.19

Note: for a precise outcome, a table mapping file is needed for importing Word files, although it is also possible without it.

Note: HTML import quality depends a lot on the html code structure, do a cleanup before import to simplify the HTML as much as possible. A solution to this is to delete all JS and CSS files and then do cleanup with jQuery user scripts, then do the import. To do this open the HTML file in a modern browser (Edge...) and open the developer tools console then inject jQuery and experiment with it until you have a reasonable looking HTML code, then save the changed document and import that. If needed repeat multiple times until the import is looking acceptable.

Note: for HTML the <u>import attachments</u> option is not used.

Structure of the Word file

Before starting the import process

Simple structuring of the document is needed to mark headline depth which will be converted to nested objects

H1...H5

Heading 1

Lorem ipsum dolor sit amet, cu nemore omittam eam. Pri te ipsum zril. Eam an habeo facer, quo ea nisl consulatu. Sea eu iriure equidem forensibus, nobis utinam ridens ex pri. Quidam facete fabellas eam id, abhorreant eloquentiam eu sea.

Heading 2

Lorem ipsum dolor sit amet, cu nemore omittam eam. Pri te ipsum zril. Eam an habeo facer, quo ea nisl consulatu.

Heading 3

Lorem ipsum dolor sit amet, cu nemore omittam eam. Pri te ipsum zril. Eam an habeo facer, quo ea nisl consulatu.

Heading 4

Lorem ipsum dolor sit amet, cu nemore omittam eam. Pri te ipsum zril. Eam an habeo facer, quo ea nisl consulatu.

Heading 5

ID	Heading	Text	Comment	Integer
0001	Table Heading 1	Pri te ipsum zril. Eam an habeo facer, quo ea nisl consulatu. Sea eu iriure equidem forensibus, nobis utinam ridens ex pri.	Coment 1	101
0002	Table Heading 2	Mei cu evertitur pertinacia, graecis deleniti ea eam. Quas sanctus ex pri. Ius id veri necessitatibus. An case altera lobortis eum.	Coment 2	102
0003	Table Heading 3	Id graeci ceteros eum. Eripuit inermis molestiae ex nam. Suscipiantur concludaturque in nam. Ea pro nostrum	Coment 2	103

source Word file with multiple child headlines

resulting ReqIF with nesting

Mapping

Table mapping

To convert tabular data to objects with attributes a manual mapping is needed that will be used throughout the document

```
ID | Renamed ID | integer
```

```
Heading | ReqIF.ChapterName | text
Text| ReqIF.Text | text
Comment | Comment | text
Integer | Integer | integer
Real | Real | real: .
Date | Date | date: dd.MM.yyyy
```

The mapping syntax is **<table column name> | <target attribute name> | <attribute type>**

Where attribute types can be

integer	
text	
real:<decimal separator>	decimal separator string , / . (comma or point)
date:<date format>	date format supports standard date notations
enumeration	NOT SUPPORTED

Mapping file

To convert Headings to objects with attributes a manual mapping is needed that will be used throughout the document

```
ID | Renamed ID | integer
Heading | ReqIF.ChapterName | text
Text| ReqIF.Text | text
Comment | Comment | text
Integer | Integer| integer
Real | Real | real: .
Date | Date | date: dd.MM.yyyy
```

Import .doc file

Before importing a word file please ensure it is not open in any other application, then in ReqEdit click on the **File/Import...** or **Import files** in the dashboard. A Wizard window appears and leads you through the import process.

Browse for the document file and give the imported file destination. Then click **Next.**. Basically, the name of the ReqIFz file will be the same as the document's name plus 'imported'.

Import Wizard ✕

File or path selection
  Select source file and set destination file

Select your source file:
\Test Folder Access\Melinda\MELINDA General\Test folder Word import\Import word test text.doc   Browse

Select your destination file:
er Word import\Import word test text.doc.sb-950a1176-t75bO4\Import word test text_imported.reqifz   Browse

To display the options on the next page, the selected document need to be loaded. This may take some seconds...

<Back   Next>   Cancel

After selecting the source files , destination file becomes the "imported" name

In the next Window you can select the import options.

Word Import Wizard

General options

Keep hierarchy information will show the objects at levels based on Heading settings.

Remove manual chapter numberings option will remove the chapter numberings of ReqIF.

Combine list elements in one object will show the whole list in one object in ReqIF.

Merge Text into Chapters will show the text of a whole paragraphs between two Heading styled rows in one object in ReqIF.

The wizard allows the import options of tables, attributes and attachments.

Attribute parsing is possible only if a mapping file is given.

The *Page selection* allows selecting parts of the document to be imported. Given values must be integers of existing page numbers of the document.

Note: If ReqEdit cannot open the document file, the page selector is not live and the document cannot be imported.

Select the mapping file for Attribute parsing

Resulted ReqIF file after Word import

The resulted ReqIF file contains 5 new Attributes:

- Page - shows the page number in the Word file where the object/row is
- Paragraph - shows the number of paragraph in the Word. For details check the Reqedit/Systemlog/ReqEditEventLog file.
- Item number - shows the bullets or numbers of a list
- Footnote - shows the footnote related to the object in the Word file
- Comments - shows the comments related to the object in the Word file

New attributes in the ReqIFz file after importing a .doc file

Resulted ReqIF file screenshot after some import option settings

Limitation of Word import

Currently the Word import has these limitations:

- Detection of form field, and draw (pen and marker) are not supported
- Importing files bigger as 150 MB not supported

Excel spreadsheet Import

Highlights:

- Roundtrip support
- Import hierarchy
- Import CSV (experimental)

For roundtrip enabled import click on **File / Import** or **Add-ons / Excel Import** and choose the box Enable round trip in the Excel import wizard window.

For details on Excel Import click here.
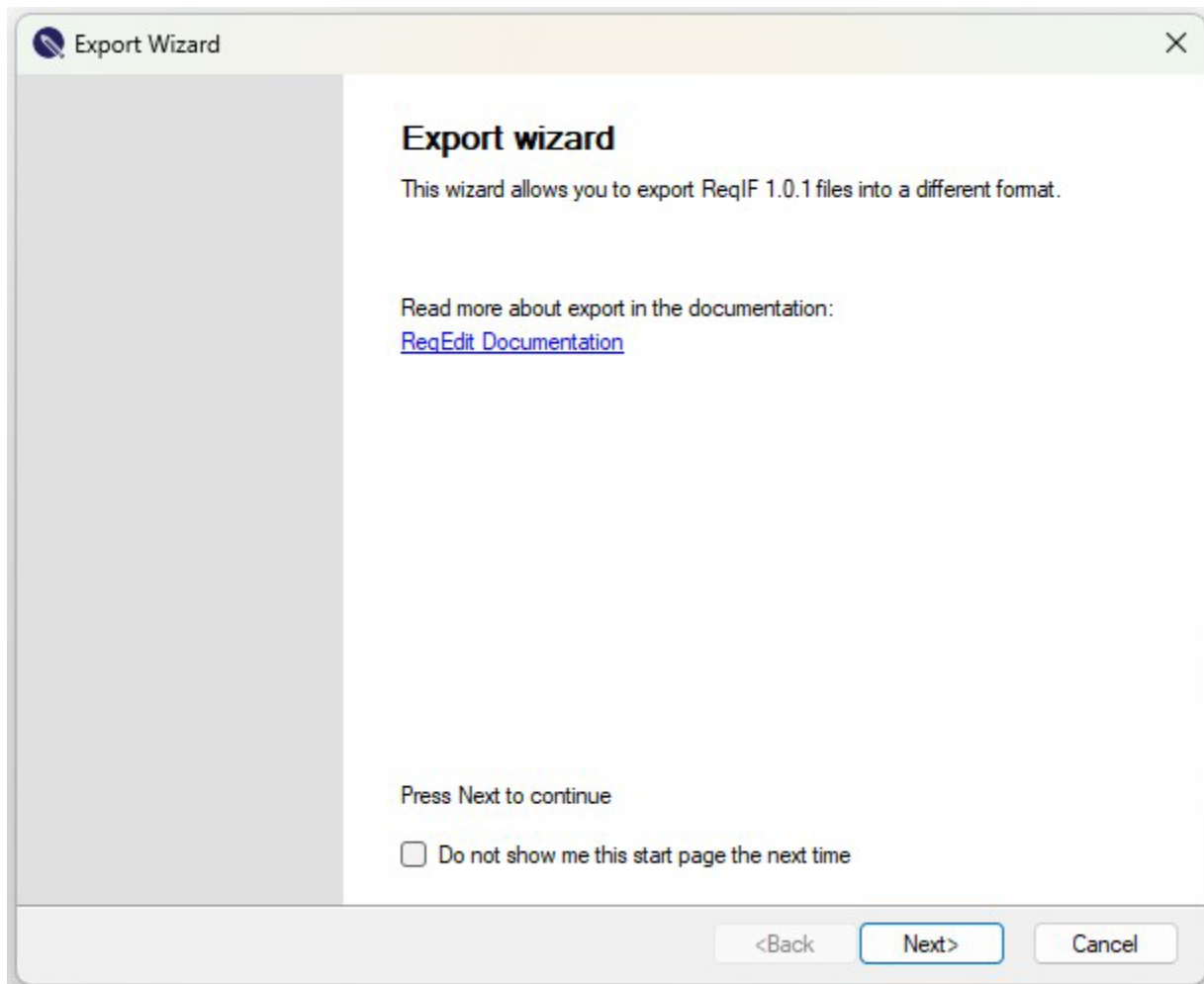

Excel Import Wizard

Exporting

RIF, ReqIF

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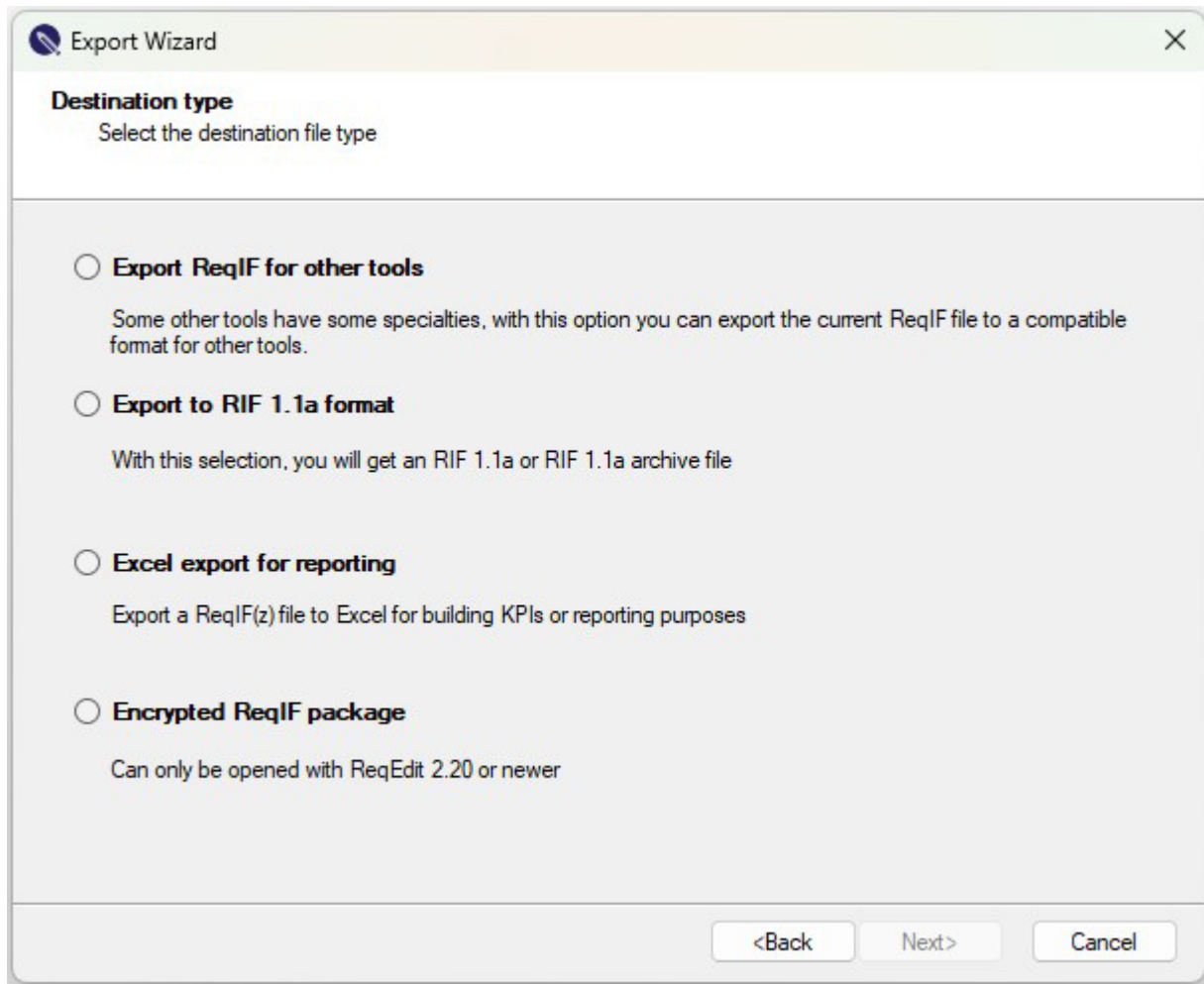
By clicking the "Export" menu item, a wizard will be opened and guide you through the export process.
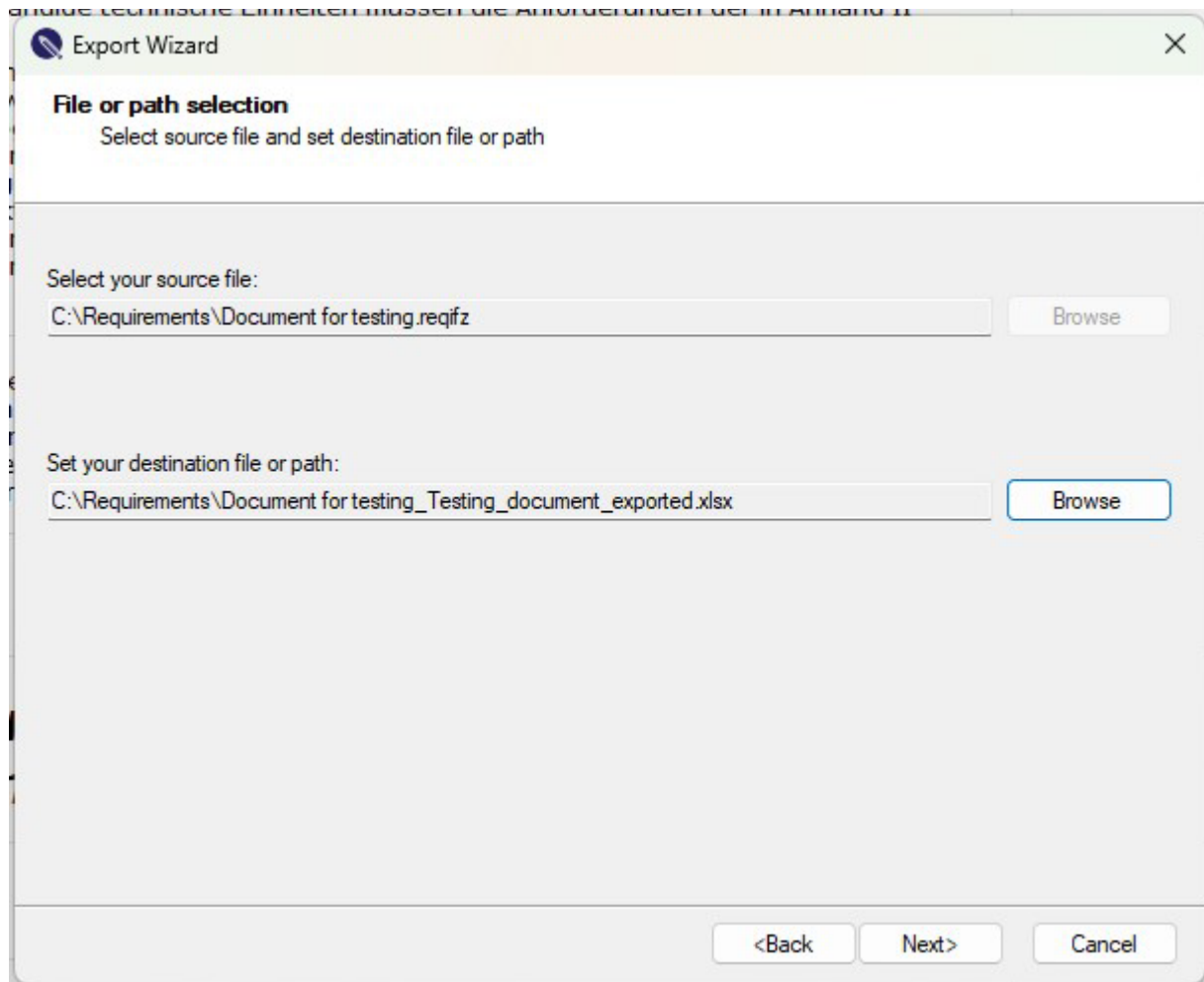

Export wizard

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" and "RIF 1.1a format". It is possible also exporting into an Excel file or to export as an Encrypted file.

Export Wizard Destination type

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.

Export Wizard Path selector

After selecting the file paths, the wizard will convert your file and a confirmation page will be displayed.

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

Successful import

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.

Configuration

This document is incomplete, we are working on making it better

Thank you for your understanding

License Detach Utility

To be able to work outside of the restricted environment and self hosted license server, licenses can be locked for on the go usage. Each detached (locked) license will have an expiration period after which automatically will be restored and the PCs will not be able to use ReqEdit anymore.

Read more about [Detaching Tool setting](#)

For detaching another license the PC has to be inside the network after which the detachment can be done again.

Environment

ReqEdit is used inside a restricted network where the PCs cannot access ReqEdit License Server, a self hosted network license server is used. This server holds all the license pools available to the network.

When ReqEdit has to be used outside this environment a license can be locked and detached for on-the-go usage.

NOTE: Detaching has to be done inside the restricted network before disconnecting.
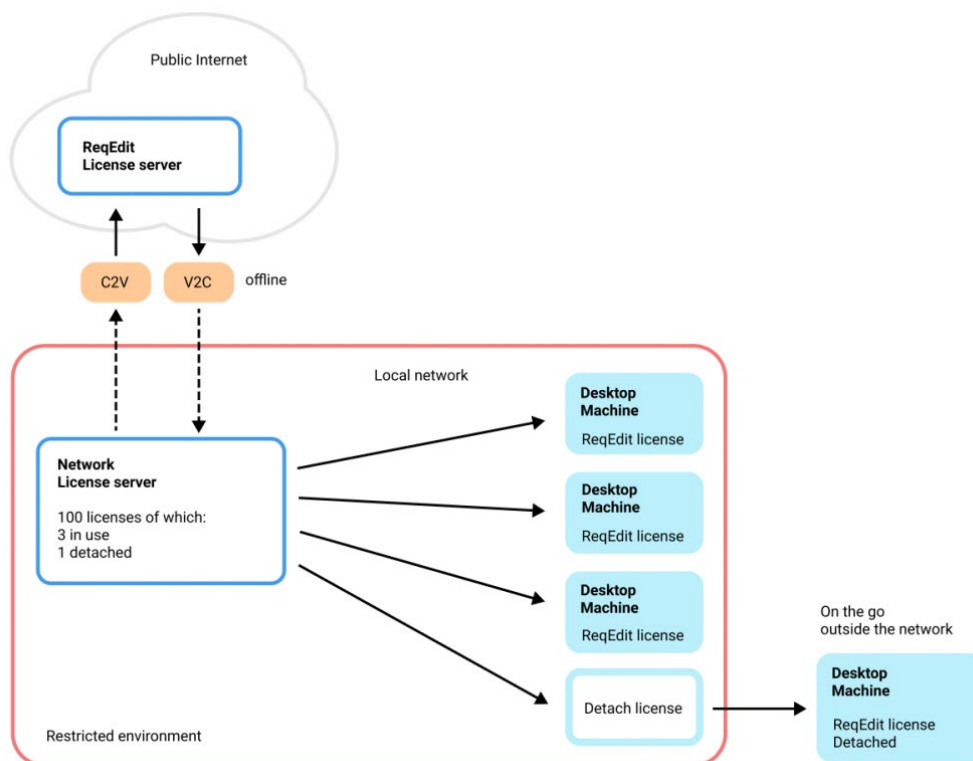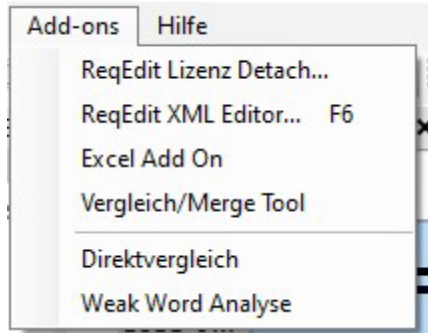

Diagram showing ReqEdit usage in a restricted environment where a stand-alone license server is used, detaching a license for on the go usage

Work on-the-go

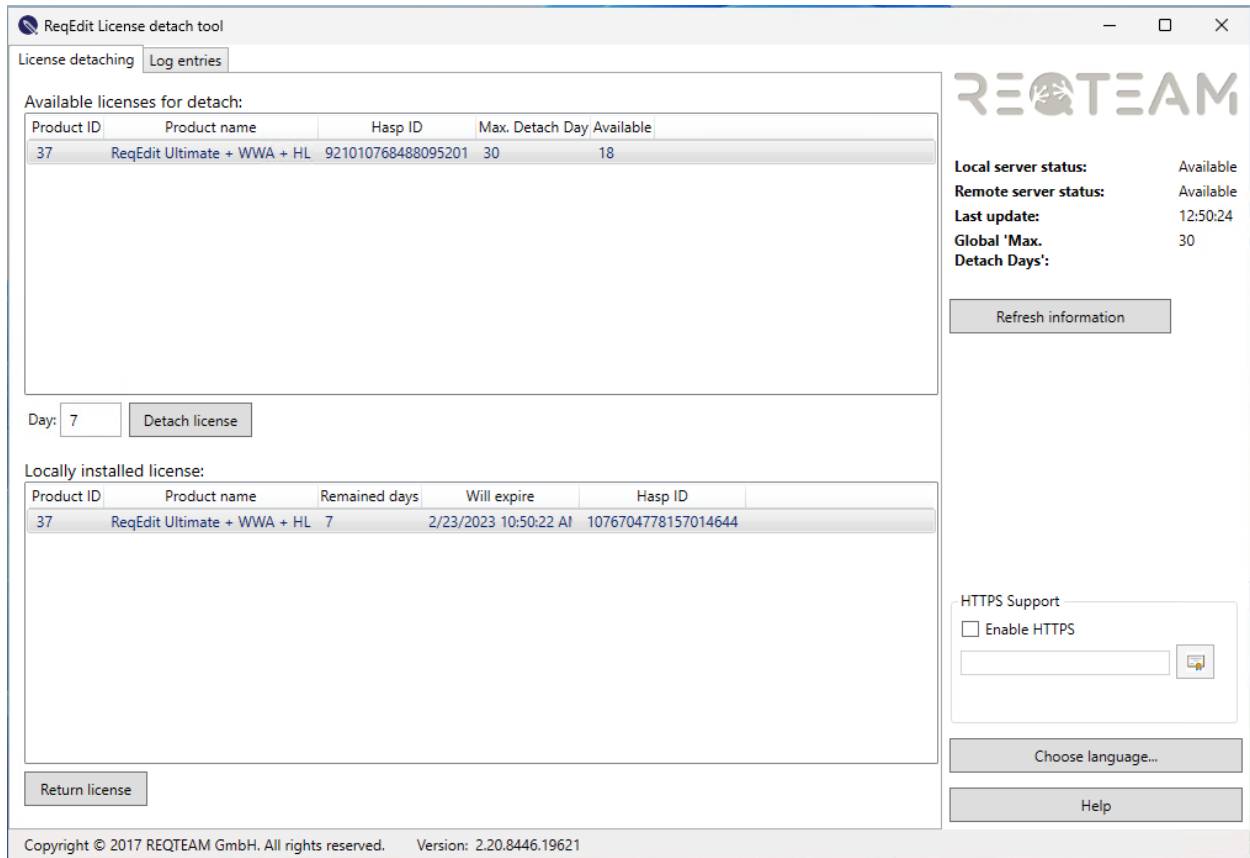**Detaching licenses from network server**

Start the tool by selecting Add-ons > License Detach from the top menu

Detach Tool Add-On Tab

License Detach tool add-on will be displayed. The available number of licenses will be listed in the window (refreshed every 20 seconds).

Select the license that needs to be taken out and configure the period.

Detach tool add-on window

Press **Detach license** to reserve a license and take it out.

Detach tool displaying a detached license

ReqEdit can be used on the go for the configured period, after which the license will expire and cannot be used. Another license has to be detached again from inside the network.
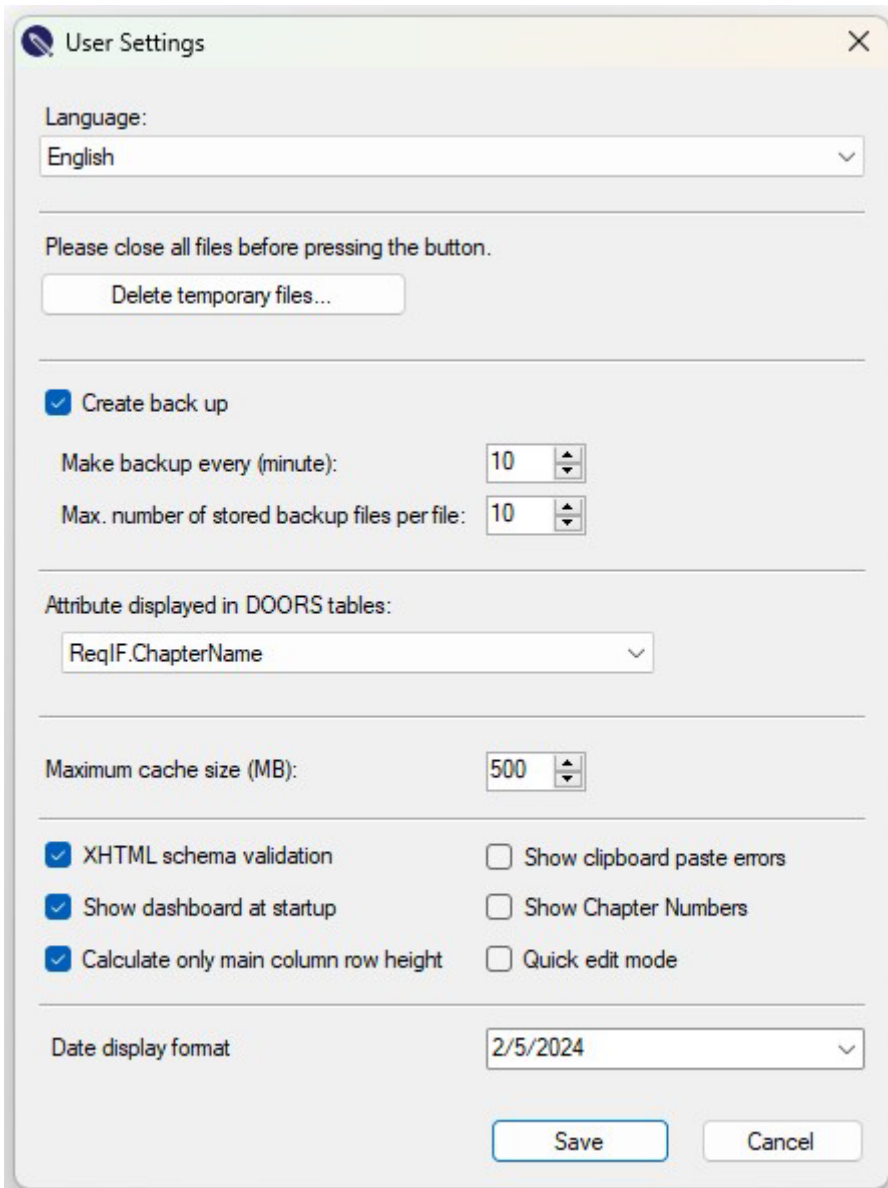
Logging

The **Log entries** tab displays the last 100 messages in reverse order. To get the complete log message click on **Open full log file** on the bottom of the page.

Merge / Compare Addon

Tool for comparing and merging ReqIF/ReqIFz files. Can be used to compare *two versions of the same file* or merge attributes from one specification to another.

Note: this add-on works only on imported or ReqEdit created ReqIF files.

Note: the Compare / Merge tool synchronize at startup the settings of ReqEdit about the HTML validation. To set the HTML Validation status in ReqEdit in the Settings/User menu. After set the value to the desired, please restart the Compare / Merge tool to get the settings synchronized.

XHTML validation in Settings/User menu in ReqEdit.

The tool works in two modes:

- **Direct Compare mode**
  Users can automatically jump to the source of the compared objects
- **Standalone mode**

Compare ReqIF files

The easiest way to compare two documents is to use the Direct Compare mode, follow the steps described below.

Open the two ReqIF files for comparison, select one of the documents,Click **Add-ons > Direct Compare**

ReqEdit Add-ons, highlighted is the Direct Compare tool

A question window will let the user choose the pair of the document for second file as NEW or OLD, Press **YES** or **No** to configure the comparison members

ReqEdit Compare Add-on question popup

Compare overview window will show the compare statistics, then press **Compare**

ReqEdit Compare Add-on overview window

A new window will let the user select additional attributes for quick comparison, and then press **OK**

NOTE: main attributes are completely compared all the time, like the footer note displays

NOTE: the additional attributes are displayed in a single column as a text message

ReqEdit Compare Add-on displaying additional attributes list to include in the comparison result

Display logic for additional attributes:

- **Html attributes** will be compared as HTML but displayed as a text and limited to first 50 characters
- Strings will be limited to 50 first characters
- Dates will be converted to German date format
- Boolean values will be displayed as text
- Enumerations will be displayed as a string

Render Short Description

Compares and displays the ReqIF.Name attribute (in case of DNG export this will be a copy of ReqIF.Text, and should be excluded from comparison for nicer overview)

Display External ID

Shows ReqIF.ForeignID attribute as a separate column

Ignore Main column changes

Ignores the changes made in the Main column of the Reqif/Reqifz file. ReqIF.ChapterName; ReqIF.Name; and ReqIF.Text

If the Render short description box is unchecked, the Short description box in this area cannot be chosen.

The Comparison Window

Displays the result of the comparison in a two sided window.

Right clicking any object the ReqIF.ID and External.ID (ReqIF.ForeignID) can be copied into the clipboard

ReqEdit Comparison Add-on displaying the Comparison Window, with External ID and additional attributes

Column description

ObjectNumber	Hierarchical numbering by Headers similar to chapter structure, optional # character shows text objects under the given chapter, the background color suggests the type of change
External ID	Shows the contents of the ReqIF.ForeignID attribute
Main Column	Displays the content of the objects with changes, green is the new content (right side), red on is the removed or changed content (left side)
Other attributes	Displays the concatenated additional attribute changes with green and changed with red (on the left) *see above Display logic for additional attributes*
Status	Displays the status description: new, changed, moved from source, moved and changed, deleted (only left), referenced

Highlight colors

Structural changes

GREEN	NEW
BLUE	MOVED
ORANGE	CHANGED, CHANGED & MOVED
RED	DELETED
	Referenced, is the source of the moved / changed objects

Content changes

GREEN	New content
RED	Removed content

Display unchanged rows

By default all content is displayed, to show only the changes uncheck the **[Display unchanged rows]** checkbox at the top

Jump to source

Jump to source by right-clicking an object in the comparison window, will select the object in the source document

To see the selected changed object, must change the window view.

HTML Report

Users can save the result of the comparison as a HTML report. Pressing the **Open results in browser** at the bottom will save the file and open the default browser.

ReqEdit Compare tool generated HTML report

The HTML report is a scripted web-page with couple functions:

Highlighting objects/rows

Users clicking any row in the report will be highlighted and if possible, the pair will be shown and also highlighted

Clicking the ObjectNumber or the row to jump to corresponding object pair. Highlighting is similar to the comparison window.

Filter change type

The number of the different types of change are shown at the bottom of the page and can be toggled to be visible or hidden

Show only changes

Show only the rows that are changed, moved, new or deleted, including the reference to changes.

Mark as read

Users can track the progress of the validation of the changes by marking each row as read with the checkbox.

NOTE: this feature uses browser internal WebStorage mechanism, all markers are saved to localStorage. All modern browsers have this feature but can be limited by security policies.

Show only unread

The button will toggle the display of only the rows which are not yet marked as read

Settings

Customize an additional logo and optional HTML content to include in the HTML report, open the Administration > Settings menu.

Compare Add-on settings window

NOTE: The logo image can only replaced with another one, there must always be a logo

Print to PDF

HTML report can be saved as PDF by printing the result to a PDF document within the browser. To get a better viewing experience set the pdf size to A3 landscape or adjust the print scaling and enable background colors.

Notices

In IE11 or other older browsers if "Mark as read" cannot be used it will be hidden. An ActiveX script execution popup will ask to run the scripts inside the html report. Choose Allow Blocked Content to enable the features.

Mark as read is saved inside the browser, moving the html report will not affect the read markings.

Tested on:

- Edge Version 91.0.864.41 (Official build) (64-bit)
- Chrome Version 91.0.4472.77 (Official Build) (64-bit)

Mark as read cannot be exported or transferred, its indented to be used only on one PC.

Standalone mode

Comparison between two unopened files in ReqEdit

Note: Opened files will be locked, other applications (ex: ReqEdit) will not be able to open the files until closed

ReqEdit compare add-on in standalone mode

1. Open the old ReqIF file on the left and the new on the right side
2. Press Compare in the top menu
3. Select the row with the files to be compared and press Compare documents
4. Configure comparison option and attributes for compare in the wizard window
5. Press Compare documents to display the result.

6. Click on Open result in browser or Close button depending on your choice

NOTE: Closing the file will release the exclusive lock and can be used by other applications

NOTE: In Standalone mode cannot jump directly to the changes in the file by right-clicking on the changed cell and choosing the Open in ReqEdit option

Compare limitations

- Compare works only on ReqIF files that can be opened in ReqEdit
- HTML element property changes will be ignored (class, id, style) except attachments (object data tags)
- String and HTML attributes outside of the main column will be shortened the display to 50 characters
- Sometimes if the content comparison is too complex will highlight more new changes than necessary, but will never miss any change
- Opened files are exclusively locked until closed (no other app can open the files)

Merge ReqIF files

Merge attributes one at a time from a ReqIF file to another ReqIF file. Can only be used in standalone mode, meaning the files cannot be opened in other applications.

Open files on each side then select the attributes that needs to be merged and press **Merge** menu item in the top menu. The merge options will be displayed.

ReqEdit merge add-on displayin the options window and the merge details

Merge direction: left to right or right to left, depending on which side of the wizard window are the new and old files

Force update: copies also the empty values from source

After the merge the attributes will be highlighted with green, repeat the merge process for other attributes as well

Save the merge results

Clicking the SAVE icon next to the file location will write the merged content into that file, depending on the direction of the merge.

Data management

All files generated by the tool can be managed from the Administration menu.

Compare and Merge AddOn Administration menu

Open Logs – will show the daily logs folder

Open HTML reports – will show the folder of the comparison results

Cleanup HTML reports – will delete all the comparison results

Cleanup temp files – will delete all generated files

Merge Limitations

- Only spec objects with the same ID can be merged
- Only the same type of attributes can be merged
- Opened files are exclusively locked until closed (no other app can open the files)

Logging

The application will produce a debug log containing all the performed actions Log is saved in daily files.

Contents of log files

- Opening files
- Errors
  - Attribute type mismatches
  - No matches found
  - No attributes selected
- Compare statistics
- Merge execution with details
  - Updated values
  - Skip merging causes
    - identical values
    - empty values

Requirement Templates

Templates for Requirement Engineering

ReqEdit offers templates for different use cases between customer and supplier according to [Prostep ivip Recommendations](). Please keep in mind that only ReqIF Archives (.reqifz) supports images/file attachments.

To open a template click **File / New Archive ...** You can select from different templates.

Template prostep ivip - All attributes

You can use this template in relation with your suppliers for request clarification for a single product variant use case.

Template prostep ivip - All attributes

The template includes the necessary attributes, as

Customer status, with the options Not To Evaluate / To Evaluate / Accepted / Not accepted / To be clarified / Proposed to discard / Discarded.

Supplier status, with the options Agreed / Not Agreed / Agreed with comment/ To be clarified / Discard Deployed.

The attributes of this specification documents are:

	Long Name	Custom Type	Data Type	Last Change	Is editable
	ReqIF.ChapterName	Text	XHTML	15.04.2022	✔
	ReqIF.Name	Text	XHTML	15.04.2022	✔
	ReqIF.Text	Text	XHTML	15.04.2022	✔
	Internal Comment	Text	XHTML	15.04.2022	✔
	ReqEditID	Integer	INTEGER	15.04.2022	⊖
	ReqEditModifiedOn	Date	DATE	15.04.2022	⊖
	ReqEditModifiedBy	String	STRING	15.04.2022	⊖
	ReqIF.ForeignDeleted	Boolean	BOOLEAN	15.04.2022	⊖
	ReqIF-WF.Type	Type	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.Revision	String	STRING	15.04.2022	✔
	ReqIF-WF.CustomerStatus	CustomerStatus	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.SupplierStatus	SupplierStatus	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.CustomerComment	Text	XHTML	15.04.2022	✔
	ReqIF-WF.SupplierComment	Text	XHTML	15.04.2022	✔
	ReqIF-WF.ProductVariant	ProductVariant	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔

Attributes added in the template prostep ivip - All attributes

Template prostep ivip - with Product variant

This template helps tracking the statuses of requests if there are more product variants.

The attributes Customer status and Supplier status have the same values as in case of template Template prostep ivip - All attributes.

Template prostep ivip - with Product variant

	Long Name	Custom Type	Data Type	Last Change	Is editable
	ReqIF.ChapterName	Text	XHTML	15.04.2022	✔
	ReqIF.Name	Text	XHTML	15.04.2022	✔
	ReqIF.Text	Text	XHTML	15.04.2022	✔
	Internal Comment	Text	XHTML	15.04.2022	✔
	ReqEditID	Integer	INTEGER	15.04.2022	⊘
	ReqEditModifiedOn	Date	DATE	15.04.2022	⊘
	ReqEditModifiedBy	String	STRING	15.04.2022	⊘
	ReqIF.ForeignDeleted	Boolean	BOOLEAN	15.04.2022	⊘
	ReqIF-WF.Type	Type	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.CustomerS...	CustomerStatus	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.SupplierSta...	SupplierStatus	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.CustomerC...	Text	XHTML	15.04.2022	✔
	ReqIF-WF.SupplierCo...	Text	XHTML	15.04.2022	✔
	ReqIF-WF.ProductVari...	ProductVariant	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔

Attributes added in the template prostep ivip - with Product variant

Template prostep ivip - with Revision

This template includes an attribute Revision, for use cases where they are needed. The attributes Customer status and Supplier status have the same values as in case of template Template prostep ivip - All attributes.

Template prostep ivip - with Revision

	Long Name	Custom Type	Data Type	Last Change	Is editable
	ReqIF.ChapterName	Text	XHTML	15.04.2022	✔
	ReqIF.Name	Text	XHTML	15.04.2022	✔
	ReqIF.Text	Text	XHTML	15.04.2022	✔
	Internal Comment	Text	XHTML	15.04.2022	✔
	ReqEditID	Integer	INTEGER	15.04.2022	⊖
	ReqEditModifiedOn	Date	DATE	15.04.2022	⊖
	ReqEditModifiedBy	String	STRING	15.04.2022	⊖
	ReqIF.ForeignDeleted	Boolean	BOOLEAN	15.04.2022	⊖
	ReqIF-WF.Type	Type	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.Revision	String	STRING	15.04.2022	✔
	ReqIF-WF.CustomerStatus	CustomerStatus	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.SupplierStatus	SupplierStatus	ENUMERATION MULTIVALUED: FALSE	15.04.2022	✔
	ReqIF-WF.CustomerComment	Text	XHTML	15.04.2022	✔
	ReqIF-WF.SupplierComment	Text	XHTML	15.04.2022	✔

Attributes added in template prostep ivip - with Revision

Template prostep ivip - simple

This template includes only the main attributes of a requirement document. The attributes Customer status and Supplier status have the same values as in case of template Template prostep ivip - All attributes. Attributes as Revision or Product variant are not included.

Template prostep ivip - simple

Attributes added in template prostep ivip - simple

Agile templates

We recommend to use ReqIFz (archive) for the following templates. You can add each of the templates to a single Archive with **File / Add** -> **New document to the current file.** So it's possible to link user stories, bugs and test cases and add images/ file attachments.

Scrum - Backlog

This template can be used to have a list of the client's requirements. You can write epics, user stories, or just mark text as information or heading (in the *Type* column). Different colors for each status help visually the user. Each requirement can have different status: *New / Draft / Final / In Progress / Obsolete / Implemented / Duplicate.* The template includes also "*Business Value"* and "*Definition of Done"* Columns.

Template Scrum - Backlog

Scrum - Buglist

This template collects and lists the bugs reported by users / customers / internal stakeholders. The user of the template can set in the Type column Bug / Heading / Information. The column Status can be set as New / Open / In implementation / Solved / Not Fixed. The Column Scope can be set as Installer / GUI / Business logic / Plugins. There are two additional attributes to add the sprint number/iteration, when a bug is fixed, and also a Bug identifier.

Template Scrum - Backlog

Scrum Test

This template can be used for test documentation. The column Type can set texts as Heading / Information / Test Suite / Test Case / Test step. The Column Status sets as New / Draft / Final / Obsolete / Duplicate. The template includes place for Test description and Expected results.

Template Scrum - Test

ReqXML to ReqIF

Simplified XML format for generating ReqIF files with ReqEdit. The XML schema defines that all XML tags MUST be UPPERCASE and all HTML tags MUST be lowercase.

ReqXML Format

The namespace defined for ReqXML is **http://www.reqteam.com/reqedit/data-exchange** .

Example of a ReqXML file

```
<EXCHANGE-DATA xmlns="http://www.reqteam.com/reqedit/data-exchange"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.reqteam.com/reqedit/data-exchange
file:///D:/Work/ReqEdit/RifSchemas/reqedit_xml/reqedit_xml.xsd">
  <METADATA>
    <DOCUMENT-TYPES>...</DOCUMENT-TYPES>
    ...
    <ITEM-TYPES> ... </ITEM-TYPES>
    ...
  </METADATA>
  <DOCUMENTS>
    <DOCUMENT>
    ...
    </DOCUMENT>
    ...
  </DOCUMENTS>
</EXCHANGE-DATA>
```

Document types - Defines attribute sets for requirement documents

Item types - Defines attribute sets for the requirement objects inside the document.

NOTE: only one item type is supported for one document (multi item type documents are not supported)

Type definition

```
<ITEM-TYPE>
    <ID>_a23fe234-236f-45e5-b321-2342117348</ID>
    <NAME>All attributes</NAME>
    <ATTRIBUTES>
        <ATTRIBUTE-STRING>
            <NAME>RequirementsID</NAME>
        </ATTRIBUTE-STRING>
        <ATTRIBUTE-XHTML>
            <NAME>ChapterName</NAME>
```

```
                                <BASETYPE>
                                        <ID>_8a711c80-1594-48ba-b850-
4855a768e5b3</ID>
                                        <NAME>HTML-TEXT2</NAME>
                                </BASETYPE>
                        </ATTRIBUTE-XHTML>
                        <ATTRIBUTE-ENUM>
                                <ID>_7e9ac904-9c20-4a97-8d73-535cd189212e</ID>
                                <NAME>ObjectType</NAME>
                                <MULTIVALUE>false</MULTIVALUE>
                                <VALUES>
                                        <VALUE ID="_7e9ac904-9c20-4a97-8d73-
535cd189212e-Heading">Heading</VALUE>
                                        <VALUE ID="_7e9ac904-9c20-4a97-8d73-
535cd189212e-Information">Information</VALUE>
                                        <VALUE ID="_7e9ac904-9c20-4a97-8d73-
535cd189212e-Requirement">Requirement</VALUE>
                                </VALUES>
                        </ATTRIBUTE-ENUM>
                </ATTRIBUTES>
```

In the example we defined:

- string attribute with name: RequirementID, For a single import is this enough.
- XHTML attribute with name: ChapterName.
- Single Enum attribute with name: ObjectType with values: Heading, Information, Requirement

Document structure

One file can contain multiple documents. Each of the documents must have a reference to the attribute set, which defines the attributes of the document itself. Even if there are no attributes a document type reference needs to be done. Additionally, a NAME need to be defined.

```
<DOCUMENTS>
        <DOCUMENT>
                <ID>_3_f7e0655f-2099-40fe-bfbc-08346abda405</ID>
                <PARENT>_1_f7e0655f-2099-40fe-bfbc-
08346abda405</PARENT>
                <NAME>FOO</NAME>
                <DOCUMENT-TYPE-REF>_a23fe234-236f-45e5-b321-
document</DOCUMENT-TYPE-REF>
        <ITEMS>
                <ITEM>
                        <ITEM-TYPE-REF>_a23fe234-236f-45e5-b321-
2342117348</ITEM-TYPE-REF>
                                <ATTRIBUTES>
```

```
                       <ATTRIBUTE>
                            <NAME>ChapterName</NAME>
                            <VALUE>
                                 <div
xmlns="http://www.w3.org/1999/xhtml">First main
chapter.<em>ss</em></div>
                            </VALUE>
                       </ATTRIBUTE>
               </ATTRIBUTES>
          </ITEM>
          ...
     </ITEMS>
     </DOCUMENT>
     ...
</DOCUMENTS>
```

Each of the items need to have a reference to an item type which determines the attributes can be used in this requirement and an unique ID for later trace or structure references . To define the attribute reference, use the NAME tag and to set the value the VALUE tag, except the enum attributes.

Enum values always needs to be inside VALUES tag. Even if the Enum is single valued.

<VALUES><VALUE>Heading</VALUE></VALUES>

To build up a tree structure inside the document, it is possible to define parent items (tag PARENT). The value of the tag is the unique ID of the parent item/requirement.

Attribute Types

To define an attribute, you must define a name (NAME tag). Optional you can define an unique ID (ID tag) and a default value (DEFAULT tag). The IDs need to be unique in the complete document and need to be of type XSD:ID (https://www.data2type.de/xml-xslt-xslfo/xml-schema/datentypen-referenz/xs-id/)

Attribute types allowed in ReqXML

Type	XML Tag	Notes
Boolean	ATTRIBUTE-BOOLEAN	
Integer	ATTRIBUTE-INTEGER	Optionally Minimum (Tag MIN) Maximum (Tag MAX)
Real	ATTRIBUTE-REAL	

Date	ATTRIBUTE-DATE	Date format: 2020-07-23T23:59:59
String	ATTRIBUTE-STRING	Text without any formatting or line breaks
XHTML	ATTRIBUTE-XHTML	Supports line breaks, formatting or attachments
Enumeration	ATTRIBUTE-ENUM	Multivalued Enums (Tag MULTIVALUE with value **true** / **false**)

Each attribute needs to refer to a predefined attribute type. For enumerations the valid valued need to be defined

```
<ATTRIBUTE-ENUM>
      <ID>_7e9ac904-9c20-4a97-8d73-535cd189212e</ID>
      <NAME>ObjectType</NAME>
      <MULTIVALUE>false</MULTIVALUE>
      <VALUES>
            <VALUE ID="_7e9ac904-9c20-4a97-8d73-535cd189212e-
Heading">Heading</VALUE>
            <VALUE ID="_7e9ac904-9c20-4a97-8d73-535cd189212e-
Information">Information</VALUE>
            <VALUE ID="_7e9ac904-9c20-4a97-8d73-535cd189212e-
Requirement">Requirement</VALUE>
      </VALUES>
</ATTRIBUTE-ENUM>
```

XHTML Attributes

For formatted content please use attributes of type XHTML. All content MUST be wrapped in a div tag

```
<div xmlns="http://www.w3.org/1999/xhtml">My formatted ...
content</div>
```

NOTE: The div wrapping is necessary to be able to validate the XHTML content internally.

Limitations

Please keep in mind, that ReqXML is only a preformat for the ReqIF, which does not allow all tags from XHTML. So ReqXML allows only tags which are valid in ReqIF, too.
So please use only the basic formatting tags (like cite, em, strong, sup, sub ..) and the predefined heading tags (h1..h6). You can use XHTML Tables and list elements (Tags OL and UL) as well.

In a requirement document the requirements will be linked completely, and not only some words (like in XHTML with the A tag). Please use for tracing definition the link tag of ReqXML to reference between requirements (artefacts)

If you want to reference to external files, please do it only with the tag OBJECT and not with IMG (which is not allowed). Attachments of a single document should be placed in a definite subfolder (which is named like the document itself or its ID).

<object data="./attachments/Anschreiben.docx" type="application/word">
<object data="./attachments/Anschreiben.png" type="image/png">this is an
alternative text</object></object>

It is recommended to create for each of the attached files a small preview, so the requirements engineer could have a quick impression about the content inside the file. Previews has to have PNG format!

For more advanced users, which are already experience with XML Schema the list of valid tags can be traced down in the XML Schema file located at ReqEdit in the folder *<<PATH to REQEDIT>>ReqEdit\RifSchemas\reqif\driver.xsd* and referenced schema files inside.

Relevant ReqIF attribute naming

If you want to use your data in **Requirement Management** systems or want to have a correctly display the data in ReqEdit, please use the following naming conventions:

Attribute Name	Type	Description
ReqIF.ChapterName	XHTML	Requirements heading
ReqIF.Name	XHTML	Short description
ReqIF.Text	XHTML	Requirements text
ReqIF.ForeignDeleted	BOOLEAN	Display this item as deleted if set to true
ReqIf.ForeignID	INTEGER	ID given by the source RM system
ReqIF.ForeignCreatedBy	STRING	User that created this item
ReqIF.ForeignCreatedOn	DATE	Date the item was created
ReqIF.ForeignModifiedBy	STRING	User last modified the item
LAST-CHANGE attribute of item	DATE	Modification date of the item
ReqIF.ChapterNumber	STRING	The chapter number

Best practices

- Please avoid defining a heading and requirements text in one item/requirement.
- Use only headings as structuring element, if its possible
- Please use long IDs (preferred UUIDs) for the unique IDs, so the chance is low to have the same ID for two elements in your complete project.
- Don't use the same attribute names inside the same type definition
- Don't use the same value inside the same Enum definition

IBM specific SAME-AS mapping

DOORS Next support the possibility to define different attributes for different documents, but the meaning of the attribute is identic. To avoid creating multiple instances of the same attribute it is possible to determine a SAME-AS tag with an URL content, that says to DNG not to create the attribute multiple times. This definition needs to be done in the document types or item types definition of the specific attribute

```
<ATTRIBUTE-DATE>
    <NAME>LastModified</NAME>
    <SAME-AS>http://purl.org/dc/terms/modified</SAME-AS>
</ATTRIBUTE-DATE>
```

Updates

If you plan multiple imports of the same document for updates, it is recommended to fix down the Attribute Ids and the referred base type. These values will be stored in the RM system (like DOORS or Polarion) and could be later updated easily. To do so, please define for each of the attributes a unique ID.

For Enum values (Tags VALUES) please define the valid values (Tag VALUE). The definition of unique IDs is only necessary if you plan an update import.

Traces

It is possible to define links between the different items (not necessarily in the same document, but in the same file). The block LINKS should follow the ATTRIBUTES tag inside the item/requirement.

```
<LINKS>
        <LINK-TYPE NAME="verification">
                <LINK TARGET="abc" DOCUMENT-REF="REQ-q23" />
                <LINK TARGET="def" DOCUMENT-REF="REQ-q23" />
        </LINK-TYPE>
        <LINK-TYPE NAME="satisfies">
                <LINK TARGET="abcd" />
        </LINK-TYPE>
</LINKS>
```

The reference to the document is not necessary, if the ID can be identified in the file. The attribute TARGET holds the unique ID of the target item. The Attribute DOCUMENT-REF is the unique ID of the document, where the item ID should be in.

Encrypt /Decrypt files

The En-/Decrypt file feature encrypts files with password. The Encrypt function supports the following encryption formats:

Encrypt method	File extension type	Encryption characteristics
AES-256 - WinZip and 7zip compatible	.reqenc	the password is re-hashed multiple times
Zip compatible	.reqzip	password is not hashed, so it could be opened in windows with the correct password

Encryption method types

Encrypt a file by SAVE AS

Save as window type selector displaying ReqEdit Encrypted File

First open the file you want to be encrypted. To encrypt a file choose File/Save as ... menu. Select ReqEdit Encrypted File (*reqenc, *.reqzip) as file type then click SAVE.

A window appears to set the password for encryption. Password has to be minimum 6 characters.

File Encrypt pop-up window

The encrypted file is saved in the given folder.

Encrypt a file by wizard

In the export wizard select the encrypt option. Will display the same password settings as before and produces an encrypted file.

Export wizard displaying encrypt file option

Decrypt a file by OPEN

To decrypt a file, open ReqEdit and from the File / Open menu select the encrypted file with the extensions: *.reqenc, *.reqzip and click Open

Decrypt File pop-up window

A pop up window appears, where you can fill in the password given during the encryption process. Then click Open. A confirmation message appears and after clicking on OK the file opens.

Customizable Requirement Patterns

ReqEdit offers the possibility for organizations or users to define custom requirement patterns so that the results are well formed requirements.

ReqEdit displaying custom requirement patterns on the right click menu

Customize your requirement patterns according to INCOSE and SEBoK guidelines:

- https://www.incose.org/docs/default-source/working-groups/requirements-wg/rwg_products/incose_rwg_gtwr_summary_sheet_2022.pdf?sfvrsn=a95a6fc7_2
- https://sebokwiki.org/wiki/Stakeholder_Requirements_Definition

Editing the patterns

In the **ReqEdit\Data** folder open the **requirement-patterns.txt** file. This file contains all the submenu items displayed in ReqEdit.

ReqEdit Data folder contents

NOTE: please use a reasonable amount of requirement templates (aprox. 30) so that the users are not confused and the rightclick menu is not too big.

NOTE: after updating the text file ReqEdit needs to be restarted to see the changes

NOTE: there is the chance that text text will be inserted without whitespace, a workaround is to add   between the tags, this will force spacing between the tags

File structure

```
-- Category of pattern
Explanation | The <b>system name</b> shall <b>system response</b>
The <b>Component</b> shall <i>behavior</i>
Legal requirement - do not edit after this!
```

Each line is represents a submenu item in ReqEdit with the following features:

--
will gray out the menu item, so that users cannot click on it. This can be used as a separator to categorize patterns

<title> | <text>
will be displayed as a submenu item where the <title> part is only displayed in the submenu item, on click only the <text> will be inserted into a new row including bold or italic

<text>
without the | sign will be displayed in the submenu and inserted in the content with html formatting

<text> can contain … for bold or <i>…</i> for italic for highlighting parts of the pattern, the bold and italic is not displayed in the submenu item

Userscripts

Execute your own javascript scripts on the currently opened ReqIF document. Mass update attributes conditionally or based on other attributes.

TLDR; Jump to example script

Javascript automation


```
1   //row helper values
2   //global.index  //index of row in the current selection
3   //global.level  //level of the row reported by the hierarchy
4   //global.status //edited status of the current row
5
6   // local variable
7   var s = "Object level:" + global.level + " " + "index:" + global.index ;
8
9   // print output message
10  log(s);
11
12  // conditionals
13  if(global.status == "Edited"){
14      // reset multivalue enum
15      row['StatusM'] = "";
16      // reset single value enum
17      row['Status'] = "";
18  }
19  else{
20      // set multivalue enum
21      row['StatusM'] = "old,no";
22      row['Status'] = "";
23  }
24
25  // trigger row save
26  save(row)
27
```

ReqEdit userscript editor window with javascript code

Notices and limitations

The Javascript execution could produce unexpected results due to the fragile nature of Javascript engine.

Read only attributes cannot be updated.

If a value is invalid the attribute value will be empty.

HTML special characters will be converted to UNICODE so that   will be \u00A0, in regex replace use UNICODE character codes.

The javascript engine in ReqEdit is a basic javascript interpreter and does not have browser capabilities.

Script execution

The User scripts selector displays all the scripts found in ReqEdit scripts folder located at the current user's **%localappdata%\REQTEAM\ReqEdit\UserScripts** folder.

From the editor window it is possible to quickly IMPORT and EXPORT these

scripts.

The script selector is located at the right side of the toolbar

Select a script and then press to execute on all rows or to execute on only the selected row.

Run on document will be executed on each line from top to bottom according to the order in the hierarchy of the document.

Each row will have an index number represented by **global.index** variable (read on to find out more)

On each row you will be able to read all the columns and change them.

To save the changes to the current row use **save(row)**

Attribute type usage

Type	Information
Boolean	use only the values: **true**, **false** without quotation marks
String	update the value as **"text in quotation marks"**
Integer	update with **number**
Date	update with a formatted string "**yyyy-mm-ddThh-mm-ss**"
Enumeration single value	specify the **"value"** case sensitive or **""** to remove
Enumeration multi value	specify as a **"comma,separated"** string case sensitive or **""**
XHTML	update the value as **"html codes"**

Userscript attribute type usage

Javascript

Supports all ECMAScript 3 and ECMAScript 5 functionality, including ES5 strict mode

Read more about the supported Javascript features here [Jurassic library](#)

Variables

row	read/write	holds all attributes of the current row **row["ReqIF.ChapterName"]** is the value **row["ReqIF.ChapterName.type"]** is the attribute type **row["ReqIF.ChapterName.status"]** is **New, Edited, EditedAndSaved, Unchanged, Deleted, SoftDeleted**
links	read	in development
hasChildren	read	true/false if the row has children or not
global	read	metadata of the current row or to be used to pass values between rows
global.index	read	the number of the row in the selected rows starting from 1
global.level	read	the level of the row starting from 1
global.status	read	the status of the field: **New, Edited, EditedAndSaved, Unchanged, Deleted, SoftDeleted**

Javascript variables

Functions

log(string variable)	display the contents of a single string variable to the output
save(row)	IMPORTANT use this as the last line to save the row

Javascript functions

log(variable) will only work when the script editor window is open. The output messages are displayed in the bottom part.

User script editor displaying output text

Example script

1. Create a document by selecting File > New > New Archive ...
2. Select **ReqEdit JS Demo** template and save the file (the name is not important)
3. Select the ReqEdit JS Demo

   script
   (If by any means the **ReqEdit JS Demo** script is not available create it manually, jump to create scripts and use the example script from below)

4. Press Run on document
5. Observe the change of the **ReqIF-WF.CustomerStatus** value

   to **Accepted**
6. Read more in the the ReqIF Info panel

ReqIF Info panel describing the reqif template for the ReqEdit JS Demo

The script

Change a value conditioned by another value

```
if(row["ReqIF-WF.Type"] == "Requirement"){
        row["ReqIF-WF.CustomerStatus"] = "Accepted"
}
save(row);
```

Explanation

1.Using the **if(<logical condition>){ ... }** control statement

2.Test the **<logical condition>** where **ReqIF-WF.Type** column value is equal
to Requirement

3.If the logical condition is true then execute the code betwen **{ ... }**

4.Change the value of **ReqIF-WF.CustomerStatus** value to Accepted

5.Save the changes for the current row by calling **save(row)**

Without **save(row)** the changes are not applied to the document

Creating or modifying scripts

You can create new scripts by **selecting empty** on the script selector then pressing the **edit
button**

Save the script with a descriptive name

The script will then be displayed in the dropdown automatically to be executed easily

User scripts:

2.js
globalcontext update.js
globalcontext update2.js
html.js
log.js
ReqEdit JS Demo.js
types.js
update.js

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Batch Mode Automatization

ReqEdit can be used without GUI in a command line to import or export ReqIF files.

Batch mode functionality:

- Import RIF1.1a to ReqIF
- Export ReqIF to RIF1.1a
- Import from MS Word (.docx) to ReqIF
- REQXML to ReqIF, read the xml format specification

Examples

Import from a RIF11a to a ReqIF file

```
ReqEdit.exe -batch -in "D:\Workplace\Input Folder\requirements.zip"
-out "D:\Workplace\Output Folder" -mapping "D:\
Workplace\RifToReqif.txt" -jobid "001" -logfile
"D:\Workplace\Log.txt"
```

Export from a ReqIF to a RIF11a file

```
ReqEdit.exe -batch -in "D:\Workplace\Input
Folder\requirements.reqifz" -out "D:\Workplace\Output Folder" -
mapping "D:\ Workplace\ReqifToRif.txt" -jobid "002" -outtype RIF11a
-logfile "D:\Workplace\Log.txt"
```

~~Export from a ReqIF to a REQIF DNG file (obsolete)~~

```
ReqEdit.exe -batch -in "D:\Workplace\Input
Folder\requirements.reqifz" -out "D:\Workplace\Output Folder" -
jobid "003" -outtype REQIFDNG -logfile "D:\Workplace\Log.txt"
```

Import from a Word .docx to a ReqIF file

```
ReqEdit.exe -batch -in "D:\Workplace\Input
Folder\requirements.docx" -out "D:\Workplace\Output Folder" -
mapping "D:\ Workplace\WordToReqif.txt" -jobid "004" -logfile
"D:\Workplace\Log.txt" -keephierarchy    -removechapternumberings
-tables -attachments -images    -attributetable row
```

Import from REQXML to ReqIF file, read more here: **REQXML format**

```
ReqEdit.exe -batch -in "D:\Workplace\Input
Folder\requirements.reqxml"
-out "D:\Workplace\Output Folder" -jobid "003"
```

```
-mapping "D:\ Workplace\ReqXmltoReqIF.txt" -logfile
"D:\Workplace\Log.txt"
```

Parameters

General batch parameters

-batch	mandatory enable batch mode without displaying GUI
-in	mandatory indicates the input file
-out	mandatory indicates the output folder
-mapping	optional used only for ReqIF~RIF conversions if a mapping is not specified, the default mapping of the system attributes is used
-jobid	optional sets a custom prefix for the output file if not set, the output file will have a datetime prefix
-logfile	optional indicate the absolute path to the user desired logfile if the logfile already exists, the new information will be appended if not specified, the logs will be written to the standard ReqEdit log

ReqIF and RIF import/export parameters

-outtype	indicate the output type possible values are "RIF11a", "REQIF" or "REQIFDNG" for Rational DOORS Next Generation compatible files

Word import parameters

-keephierarchy	optional will recreate the parent/child hierarchy in the Word file based on Heading levels. If not enabled, all Headings will be displayed on the first level
-removechapternumberings	optional removes manual chapter numberings

-tables	optional all tables will be converted to a ReqIF compatible (HTML) table, else all tables in the file will be ignored
-attachments	optional 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, else all objects in the Word file will be ignored
-images	optional embedded images (JPG, PNG, BMP) in the Word document will be imported to ReqIFz file and referenced inside the ReqIF object, else all images in the Word file will be ignored
-attributetable	optional possible values "row" or "column" the word document parser will look in the first row/column of all tables for the values given in the mapping file to assert if the table should be treated as an attribute table

NOTE: Parameter values which contain empty spaces or special characters like slash, backslash and others, need to be written between quotes

Mapping file

The mapping files are used to translate attribute names from RIF to ReqIF standard and vice-versa. The mapping file is a simple .txt file with the format shown below in two examples with IBM DOORS system attribute names and two custom attributes displayed with red text.

Example of a RifToReqif mapping file

```
Absolute Number - ReqIF.ForeignID
Created By - ReqIF.ForeignCreatedBy
Created On - ReqIF.ForeignCreatedOn
Created Thru - ReqIF.ForeignCreatedThru
Last Modified By - ReqIF.ForeignModifiedBy
Object Heading - ReqIF.ChapterName
Object Number - ReqIF.ChapterNumber
Object Short Text - ReqIF.Name
Object Text - ReqIF.Text
Description - ReqIF.Description
Customer_Description - Supplier_Description
Customer_Status - Supplier_Status
```

Example of a ReqifToRif mapping file

```
ReqIF.ForeignID - Absolute Number
ReqIF.ForeignCreatedBy - Created By
ReqIF.ForeignCreatedOn - Created On
ReqIF.ForeignCreatedThru - Created Thru
ReqIF.ForeignModifiedBy - Last Modified By
ReqIF.ChapterName - Object Heading
ReqIF.ChapterNumber - Object Number
ReqIF.Name - Object Short Text
ReqIF.Text - Object Text
ReqIF.Description - Description
Supplier_Description - Customer_Description
Supplier_Status - Customer_Status
```

Example of a WordToReqif mapping file

```
ID             | ReqIF.ForeignID   | integer
Heading        | ReqIF.ChapterName | text
Text           | ReqIF.Text        | text
Customer_Desc  | Supplier_Descr    | text
Release Date   | Release Date      | date: dd.MM.yyyy
Price          | Price             | real: .
```

Example of a REQXML to ReqIF mapping file

```
Last Modified By - ReqIF.ForeignModifiedBy
Object Heading - ReqIF.ChapterName
Object Number - ReqIF.ChapterNumber
Object Short Text - ReqIF.Name
Object Text - ReqIF.Text
Customer_Description - Supplier_Description
Customer_Status - Supplier_Status
```

REQXML

This is a simplified custom XML format to speed up data exchange to ReqIF format. Read here the [REQXML documentation](#).

Output files

If the target type is ReqIF or ReqIF DNG, there will be only one output file (reqif or reqifz)

If the target type is single Spec RIF, there will be only one output file (xml or zip)

If the target type is multi Spec RIF, there will be one output file for each Specification (xml or zip); the file names will contain the names of the specifications

Logging

For each batch operation, an entry will be added to the logfile. Each entry will contain the date and time of the operation, the input and output file(s) path and names, the output file(s) type and the job ID.

If an error occurs during the operation, the report will include an exit code and message. You can see the complete list of exit codes and messages below.

General Exit Codes

5	Batch Feature ID is missing
10	Error during Conversion
20	Mandatory Parameter "batch" is missing
21	Mandatory Parameter "in" is missing
22	Mandatory Parameter "out" is missing
23	Invalid output type value
24	Job id can not be empty
25	Has invalid parameter
26	Incompatible output type value

Input File Related Exit Codes

110	Input File is not readable or does not exist

120	Input File has not defined type (Autodetection fails)
130	Input File is not valid (Schema validation fails)

Output File Related Exit Codes

210	Not enough space in output folder (3*size of input file required to be free)
220	Outputfolder is not writable
240	Output folder does not exist

Mapping File Related Exit Codes

310	Mapping file does not exist or is not readable
320	Mapping file has wrong format

Log File Related Exit Codes

410	Access denied; Cannot create not existing log file on creation mode
411	Access denied; Cannot write to existing log file on update mode

ReqEdit supply chain

Use ReqEdit in your supply-chain to minimize data loss and risk factors. Give your suppliers the possibility to use ReqIF requirements with our software.

RedEdit Supply Chain solution package including ReqEdit Ultimate on the Manufacturer side and ReqEdit Supplier edition on the Supplier side, diagram illustrates the data exchange between the participants with recommended actions

The package

ReqEdit Ultimate

Starting from 5 network licenses

Internal use within the company

All add-ons are included

ReqEdit Supplier edition
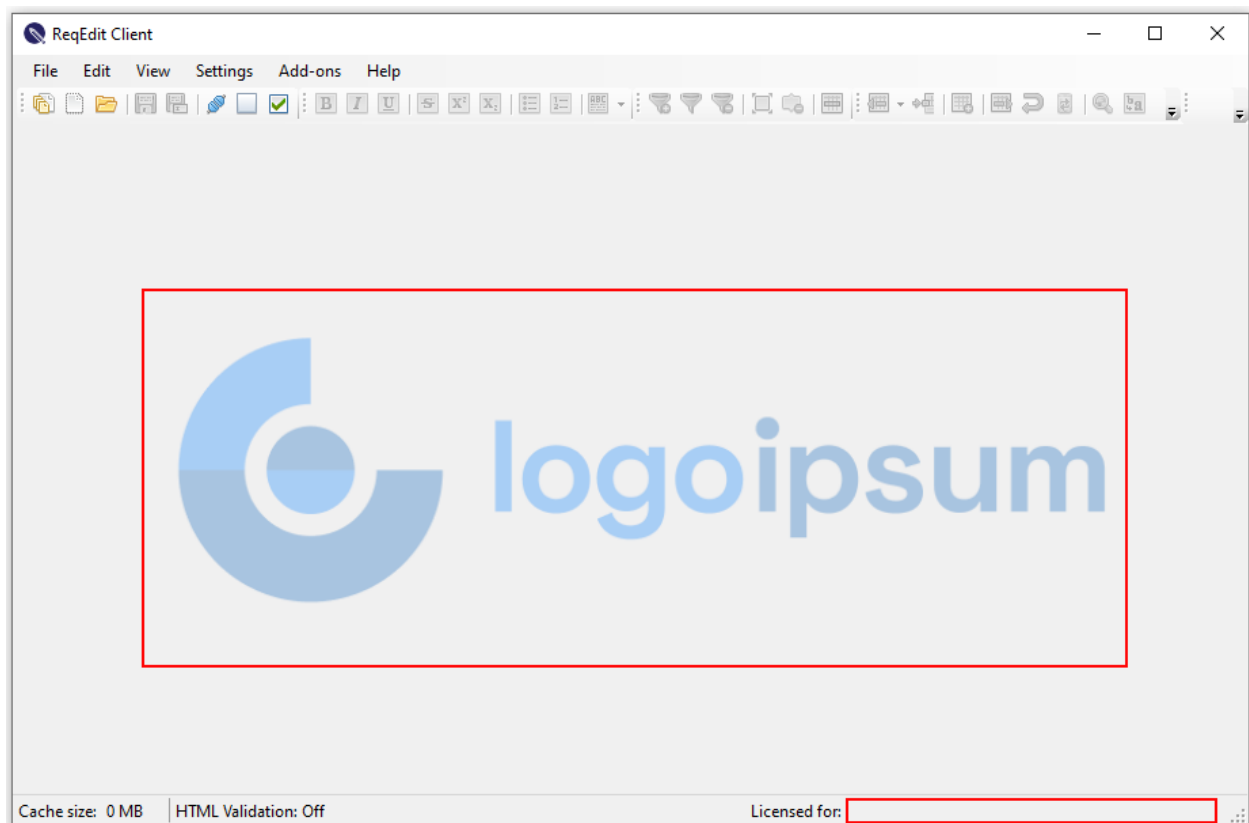
Unlimited licenses

External use by suppliers

Can only fill in specific data

ReqEdit supplier edition

ReqEdit can be branded and distributed to suppliers. Licensing terms and conditions can be configured to accommodate different use cases.

Branding

The main content area of the application can display your logo image, and on the bottom license area the company name can also be included.

ReqEdit branding areas highlighted

Licensing

Whitelabeling uses only a time limited license without locking to a specific machine. Specific license text can be included to represent the usage terms and conditions for the supplier.

Promoting ReqIF format

As your company grows and the requirements are more and more sophisticated, lossless data transfers are a key factor to minimize communication errors and production delays.

Some of the benefits of using ReqIF format include:

Structured data

Lossless data exchange

Traceability

Lossless data round trips between tools

Suppliers can participate in this data exchange easily by offering ReqEdit to them.