



**RAYQC<sup>®</sup> ad**

Collision and Compatibility  
Management

Getting Started with RayQC  
Advanced 6.0

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RayQC Advanced 6.0 Getting Started with RayQC Advanced

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## Table of Contents

|   |    |
|---|----|
| <b>Welcome to RayQC Advanced!</b> .....       | 4  |
| <b>System Requirements</b> .....              | 6  |
| <b>Additional Resources</b> .....             | 7  |
| <b>Product Activation</b> .....               | 8  |
| License Wizard .....                          | 8  |
| Use Order Number .....                        | 13 |
| Use License File .....                        | 17 |
| Use Floating License Server .....             | 19 |
| I do not Have a License or Order Number ..... | 20 |
| I Want to Take My Activation Back .....       | 20 |
| <b>Working with RayQC Advanced</b> .....      | 21 |
| The Home Screen .....                         | 21 |
| Online- / Offline Mode .....                  | 22 |
| Settings .....                                | 23 |
| Library .....                                 | 24 |
| Software .....                                | 30 |
| Merge Modules .....                           | 30 |
| OS Snapshots .....                            | 31 |
| App-V .....                                   | 31 |
| Web Applications .....                        | 32 |
| Import .....                                  | 32 |
| Migration Wizard .....                        | 42 |
| Test Wizard .....                             | 47 |
| Reports .....                                 | 55 |
| Rules .....                                   | 61 |
| <b>Next Steps</b> .....                       | 63 |
| <b>Need Help</b> .....                        | 64 |

# Welcome to RayQC Advanced!

RayQC Advanced is an extension of Raynet's quality control solution RayQC. This extension is meant to provide packagers with the ability to execute automatic collision and conformity tests on software packages, merge modules, legacy setups, OS snapshots, and web applications. Additionally, packages can be verified regarding general requirements of virtualization technologies. For each of the test types, RayQC Advanced contains a set of rules. These rules are essentially the backbone of this product and it will evolve with successive releases of this product.

With RayQC Advanced users can execute tests on packages or web applications, which can either be located on a disk or maintained in the built-in package library. Backed by a SQL Server database, this library contains imported packages and their historical test results.

Extensibility in terms of defining custom test rules, simple user interface, and support for diverse test scenarios are some of the key identifying features of this solution.

**Tip:**

Various online references are used throughout this document. Although an online connection is not required for this help file, further reading and reference material is available if you do have an internet connection for any of the external links present in this document.

## In this Guide

This guide is meant to provide new users with an overview of the main functions of RayQC Advanced and to assist with first steps in this astonishing new world of quality assurance.

## System Requirements and Product Activation



*Hardware Requirements*



*Software Requirements*



*Product Activation*

## Home Screen



*Home Screen*

## Settings



*Settings*

## Import, Testing, Reports, and Rules



*Library*



*Test Wizard*



*Reports*



*Rules*

## Need Help?



*Request RayQC support*



*Join the community*



*Contact your Raynet sales representative*

## Additional information

Visit [www.rayqc.de](http://www.rayqc.de) for further information regarding the product and current community incentives. Raynet is looking forward to receiving feedback from your RayQC Advanced experience. Please contact your Raynet service partner or use our [Support Panel](#) to add your ideas or requirements to the RayQC Advanced development roadmap!

# System Requirements

The given requirements name prerequisites for devices running the RayQC Advanced application.

## Hardware Requirements

### Minimal

- CPU Pentium IV / Core2 processor
- 2 GB RAM
- 1 GB free hard disk
- 1280x1024 screen resolution

### Recommended

- CPU Intel Core i5 or i7
- 8GB RAM
- 40 GB free hard disk (software library usage)

## Supported OS

The following represents the list of supported operating systems at the time of release.

- Windows Vista
- Windows 7
- Windows 8
- Windows 8.1
- Windows 10
- Windows Server 2008 SP1-SP2
- Windows Server 2008 R2
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016

## Prerequisite Software

- .Net 4.5 Full (32bit or 64bit)
- Windows Management Framework (including Windows PowerShell 3.0, WinRM 2.0, and BITS 4.0)
- Microsoft SQL Server Express 2008 or higher is required for RayQC Advanced. The server can either be locally hosted or on a remote machine.

# Additional Resources

Further information regarding RayQC Advanced can be found in several resources.

- The Release Notes provide an overview about the changes and new features that are part of this version of RayQC Advanced.
- The Installation Guide provides IT professionals with a guide on how to install RayQC Advanced for the first time.
- The User Guide provides detailed information about both, the RayQC Checklist management tool and the RayQC Advanced Collision management tool.
- The Get Started Guide provides a new user with an introduction and tips on the use of the RayQC Advanced Checklist management tool.
- The Operations Supplement provides information about third-party software packages and libraries redistributed with RayQC.
- The product website [www.rayqc.de](http://www.rayqc.de) provides information about the product, news, and support.
- Raynet and its partners offer a range of training courses that can also be customized to meet your requirements. For more information on these courses, speak with your Raynet consultant.

# Product Activation

The product can be activated using one of the following methods:

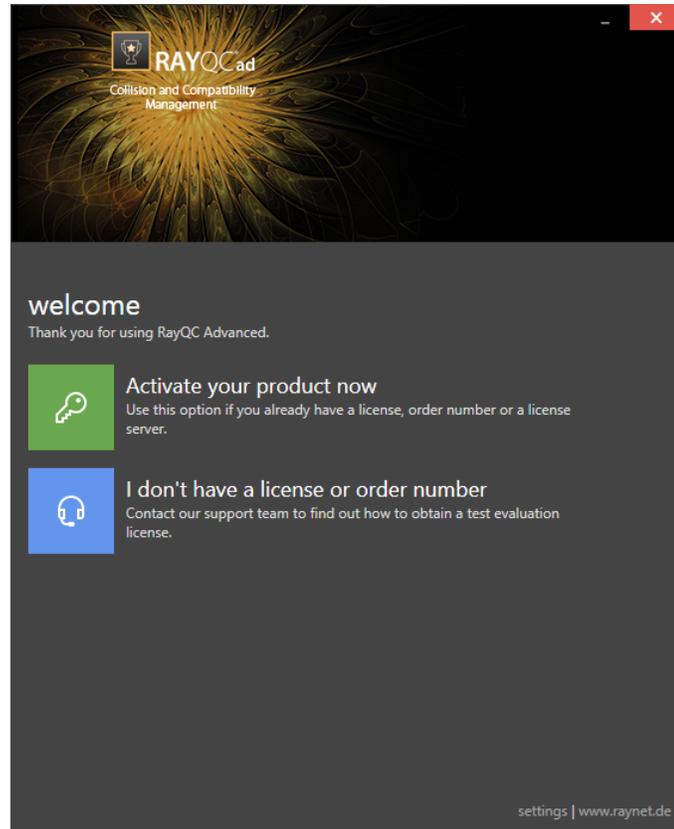
- Directly within the installation
  - By supplying the order number
  - By supplying an already generated license file (.rsl format)
- When the *product is started for the first time*.

If RayQC Advanced detects that no valid license is present on start-up, the license activation wizard will be shown after starting the main executable. The tool can be also started manually, by executing `Raynet.LicenseActivation.exe` from the main installation folder.

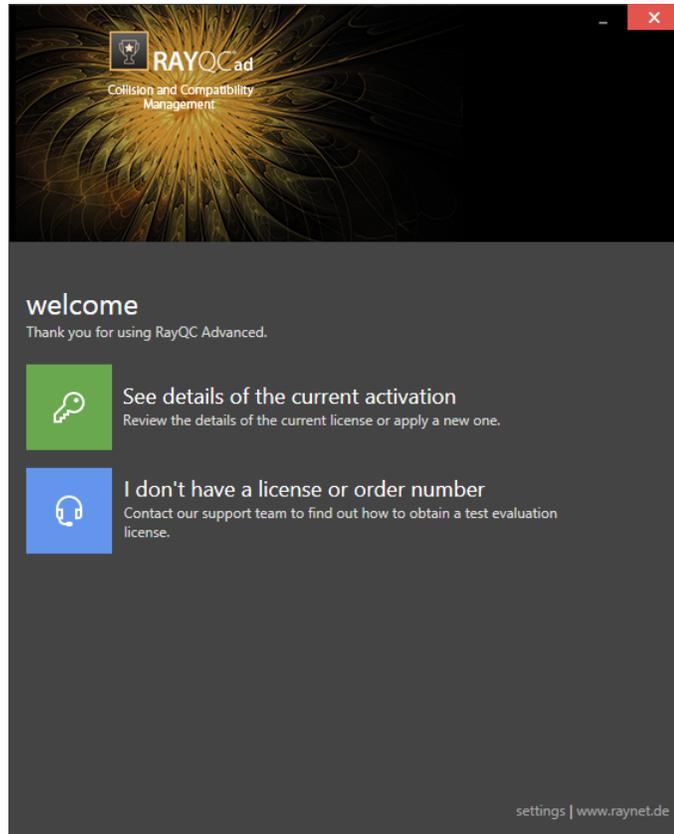
## License Wizard

This section describes the usage of the licensing wizard.

On the initial start of RayQC Advanced, the licensing wizard is shown. If the need to transfer an existing license arises, the license wizard can be started manually. There are a variety of ways in which a license can be activated and below they are described in detail.



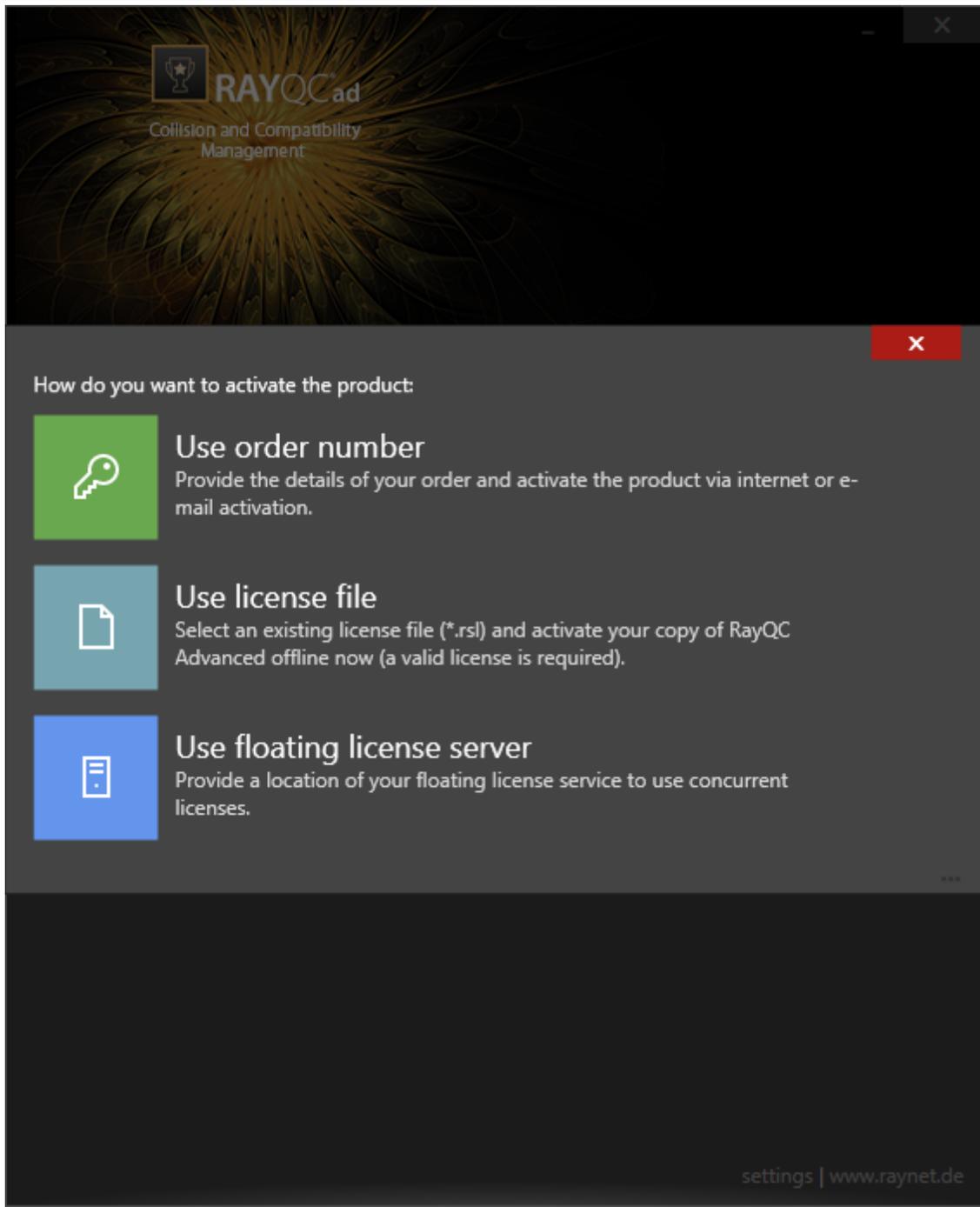
First time activation



The main screen when the product has been already activated

### **Activate your product now**

This option should be used to activate the product using one of the following methods:



- **Use order number**  
Online activation using a valid order number received from Raynet (recommended for most users)
- **Use license file**  
Offline activation using a license file (.rs1) received from Raynet
- **Use floating license server**  
Activation using a local floating license server.

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**See details of the current activation**

This options shows the details of the current activation. This option is only visible if the product has already been activated or if a floating license server has been configured

This option also allows to reactivate the product using a different order number or a different floating license server connection details.

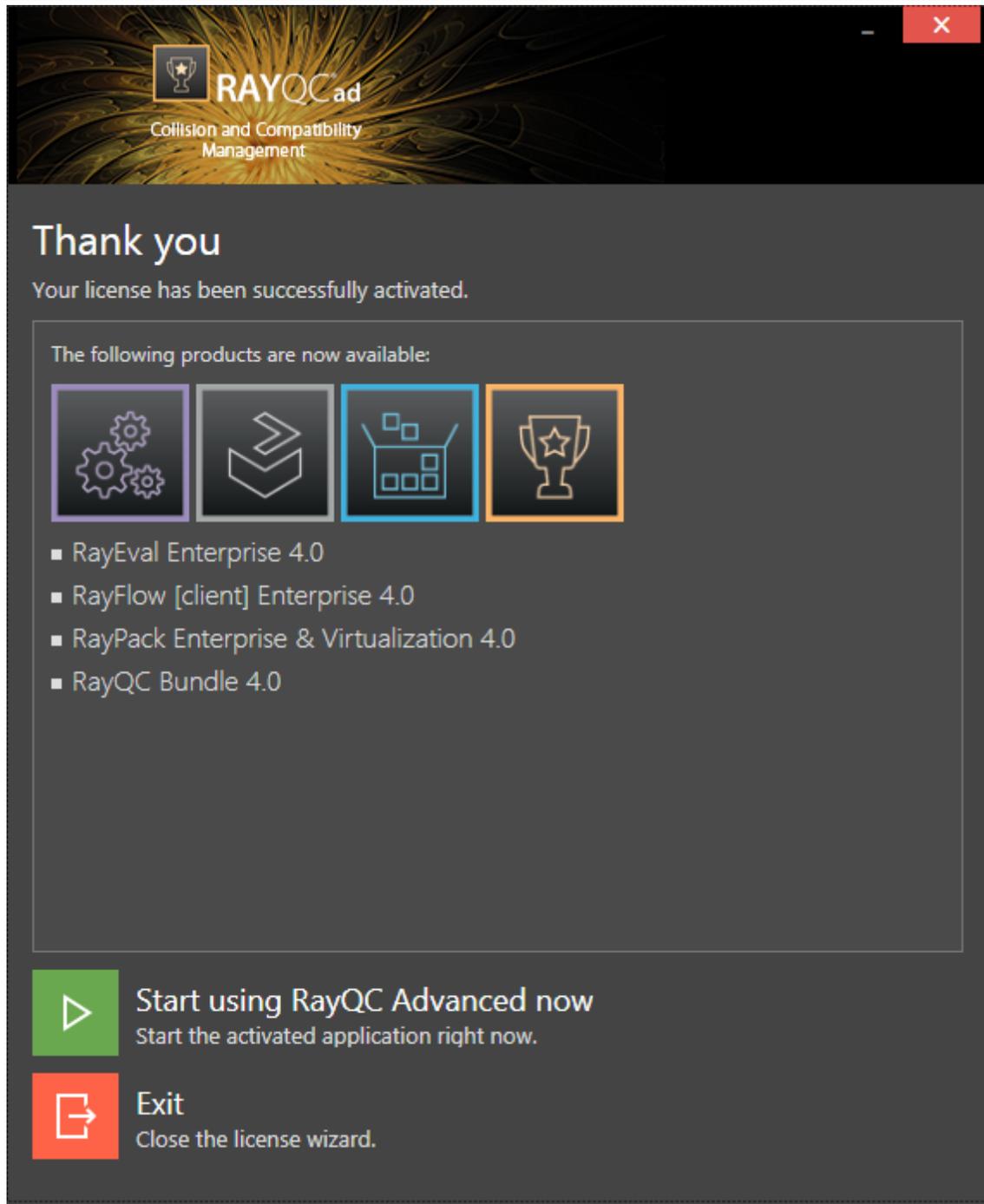
**I don't have a license or order number**

Choose this option if there is neither a license nor an order number available. For in-depth information please read this section. This option is only visible if the product has not been activated yet.

**I want to take my activation back...**

Use this option to deactivate a currently licensed version of RayQC Advanced. For in-depth information please read this section. This options is only visible if the product has been already activated.

Once the license file has been generated or copied to the correct location the following will be shown...



**Note:**

Depending on the license, more available products may be shown, as pictured above.

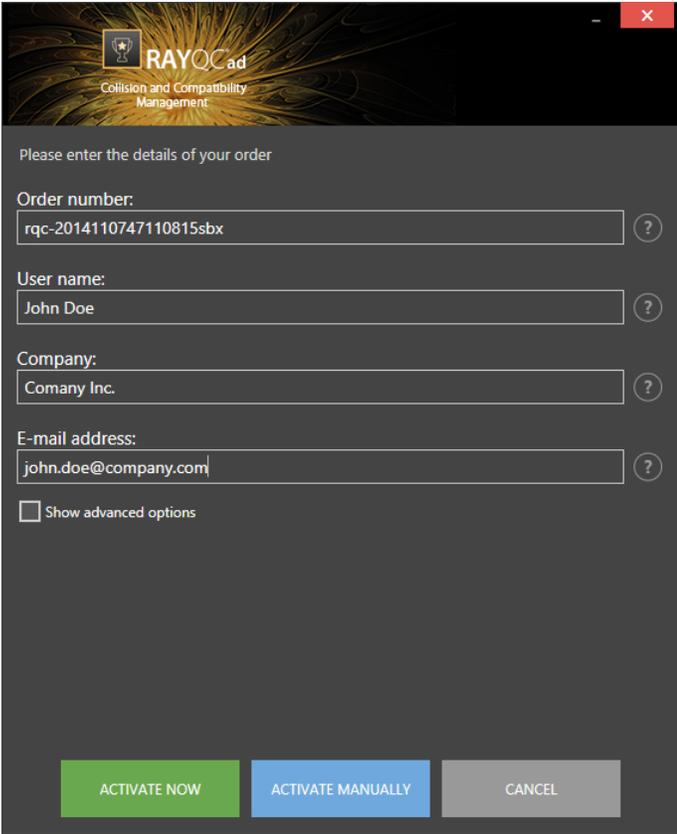
Then the option of starting RayQC Advanced or just closing the activation wizard is made available.

## Troubleshooting

If any issues arise during the activation process, please contact our help desk to receive assistance in activating RayQC Advanced.

### Use Order Number

RayQC Advanced can be activated either directly online or via email once the order number has been delivered. The activation process generates a license file (\*.rs1) that is created (or must be copied) to the installation directory of RayQC Advanced (in the same location as the RayQC Advanced.exe). When performing an online activation, sufficient permissions must be readily available to allow the creation of the license file in the installation directory. The activation **binds** the license to the machine on which it was activated on. This is the only time that an active connection to the internet is required (if activating online).



RAYQC ad  
Collision and Compatibility Management

Please enter the details of your order

Order number:  
rqc-2014110747110815sbx

User name:  
John Doe

Company:  
Comany Inc.

E-mail address:  
john.doe@company.com

Show advanced options

ACTIVATE NOW    ACTIVATE MANUALLY    CANCEL

Choosing the **ACTIVATE NOW** button, connects to the Raynet license server using the information provided and will dynamically generate a license file. Choosing the **ACTIVATE MANUALLY** button will open a dialog as shown here. Choosing the **CANCEL** button will abort the activation process.

## Order Details

### Order number:

This is the unique order number received when RayQC Advanced has been purchased. If it is necessary to

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recover the order number, please contact our sales team.

**User name:**

This is the name of the user that is activating RayQC Advanced. It does not need to be the same name used to order RayQC Advanced.

**Company:**

This is the name of the company for which RayQC Advanced will be licensed. This name will appear in the License and Edition view of RayQC Advanced.

**E-mail address:**

This is the email address of the person that performs the activation. We respect the privacy of our customers, this email address will only be used by Raynet and only when there are any problems or important information regarding the license.

## Advanced Options

On choosing the advanced options check box, extended information and possibilities of the licensing and activation of RayQC Advanced are shown.

### **Hardware ID:**

This is a ID calculated based on the hardware on which the activation is taking place on. The ID is unique, but cannot be used to personally identify a user. It is used to generate the license for the machine on which the activation process is carried out on.

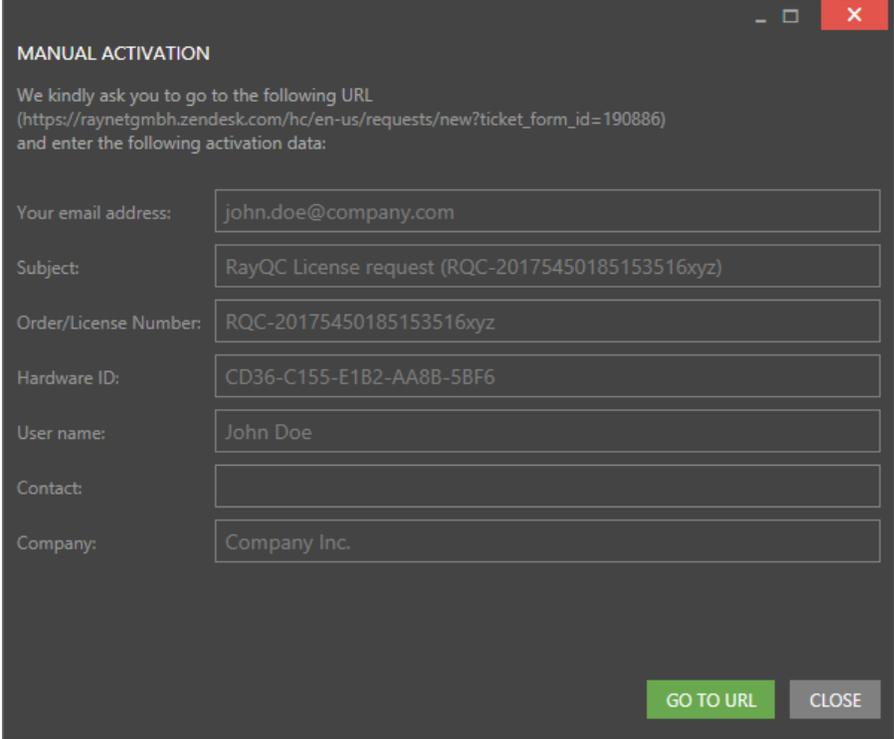
### **Transfer the license**

If this option is selected, the order number and details may be used to activate RayQC Advanced on a second machine, that has differing hardware (which obviously has a different Hardware ID). This assumes that RayQC Advanced has been deinstalled from the machine on which it was previously activated on. The transfer license functionality is logged on our license servers and is periodically checked to ensure that no abuse is made of this functionality.

If the license transfer is part of a regular maintenance and can therefore be prepared and scheduled, it is highly recommended to use the deactivation function first, to disconnect license and packaging machine. This is the standard way for transferring licenses. The option offered here is intended for unscheduled transfers, required if a machine, for whatever reason, cannot be accessed or used operational any longer.

## Manual Activation

On choosing the manual activation, the dialog shown below is displayed.



**MANUAL ACTIVATION**

We kindly ask you to go to the following URL  
([https://raynetgmbh.zendesk.com/hc/en-us/requests/new?ticket\\_form\\_id=190886](https://raynetgmbh.zendesk.com/hc/en-us/requests/new?ticket_form_id=190886))  
and enter the following activation data:

Your email address:

Subject:

Order/License Number:

Hardware ID:

User name:

Contact:

Company:

This basically shows the contents of the ticket form that will be opened at Raynet. If there is an internet connection available on the machine, click on the **GO TO URL** button to open the URL shown in the top of the window in the default browser of the system. After a File Order has been opened in the Raynet Support Panel, a license file will be delivered. Information of how to use this file are available here.

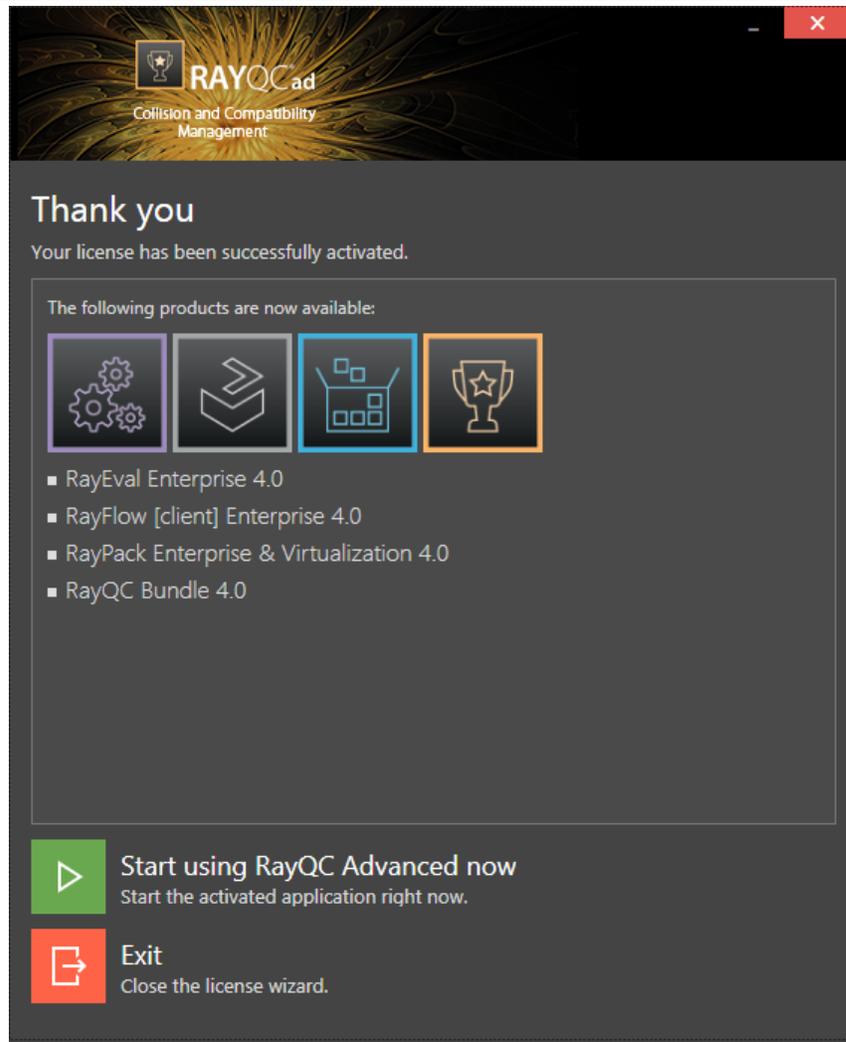
If no internet connection is present on the machine on which the activation process is taking place, copy the contents of the dialog onto a machine which has an internet connection and use the URL on that machine. On receiving the ticket, a license file will be generated and sent back. Information on how to use the license file can be found here.



**Tip:**

Please ensure that when copying the information from the **MANUAL ACTIVATION** dialog everything is added as shown above.

Once the license file has been generated the following will be shown:

**Note:**

Depending on the license, more available products may be shown. As an example, see the image above.

The option of starting RayQC Advanced or just closing the activation wizard are available now.

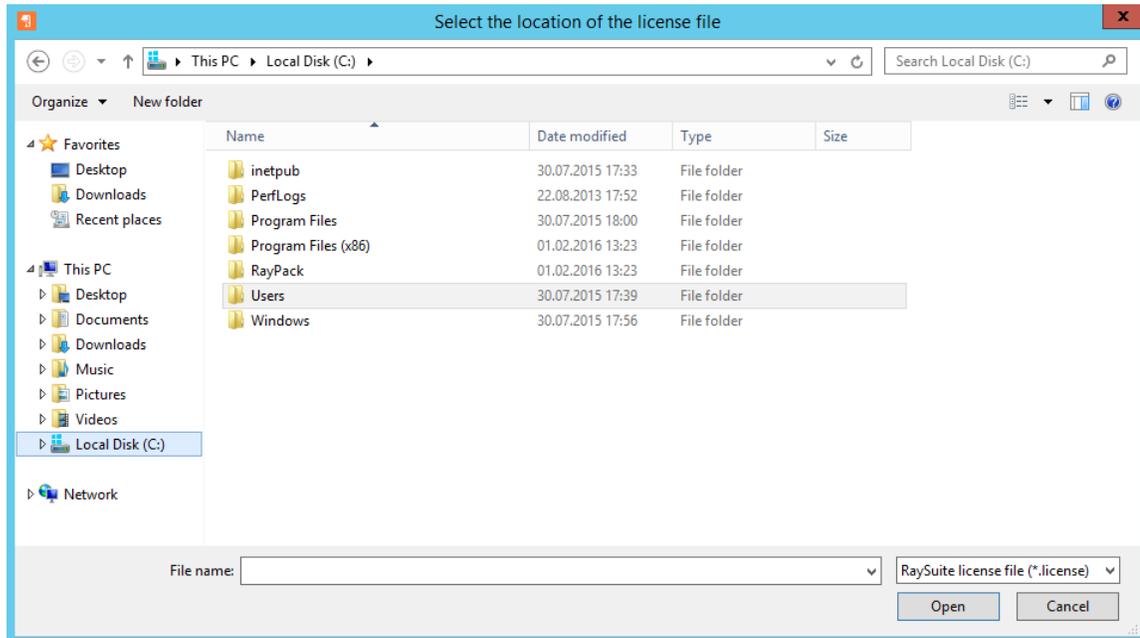
## Troubleshooting

If there are any problems during the activation process, please contact our help desk for receiving assistance in activating RayQC Advanced.

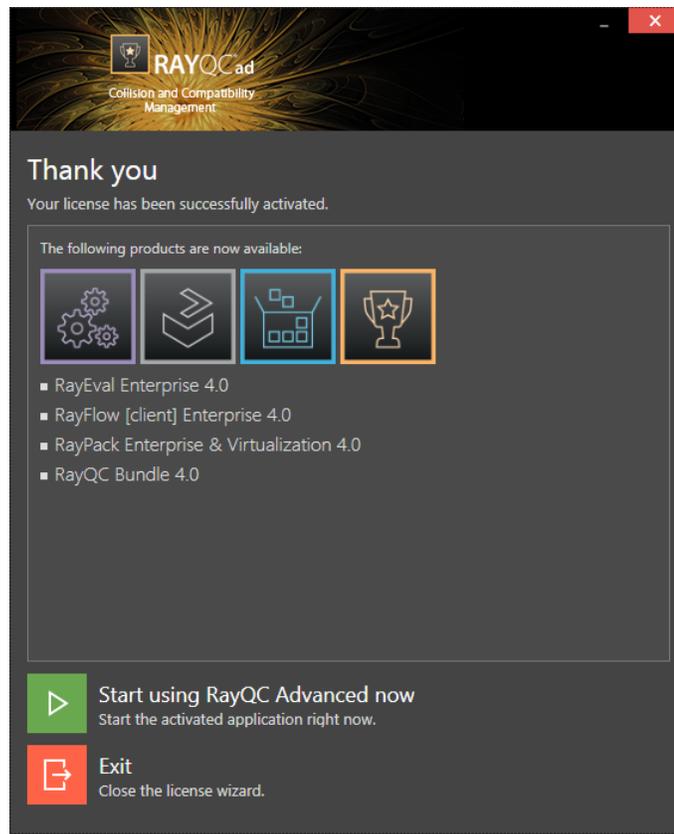
## Use License File

If a license is already available, or a license file has been received as a result of activating RayQC Advanced via e-mail, then all that is required is to copy the license file into the installation directory of RayQC Advanced (the directory in which the `RayPack.exe` resides). Clicking on the **I have a license** button on the **License wizard** dialog opens a dialog box which allows to choose the license file. Once chosen, the file will be copied

automatically to the RayQC Advanced installation directory. Please ensure that sufficient permissions to allow the creation/copying of a file to the installation directory of RayQC Advanced are available.



Once the license file has been copied to the correct location the following will be shown:



**Note:**

Depending on the license, more available products may be shown. As an example, see the image above.

The option of starting RayQC Advanced or just closing the activation wizard are available now.

## Troubleshooting

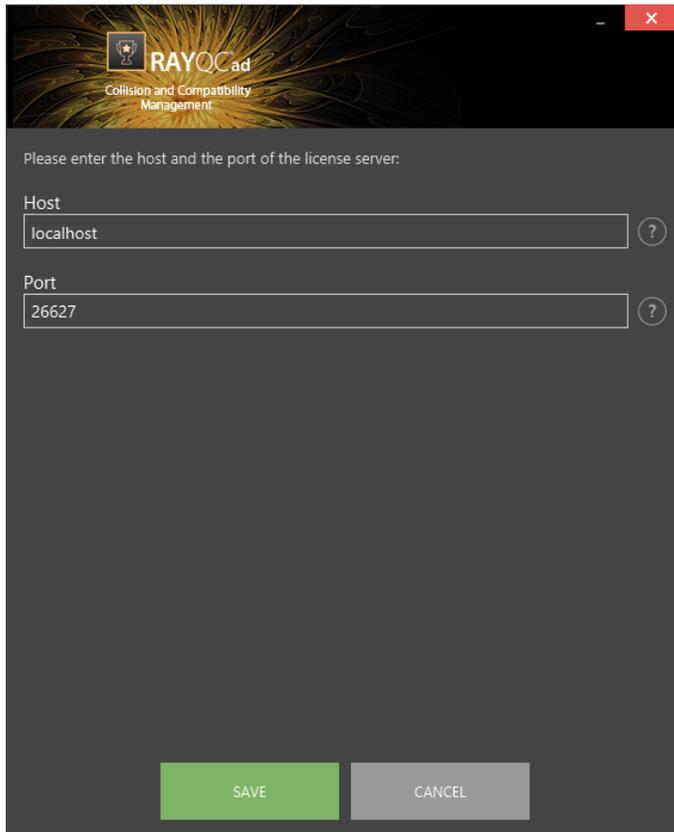
If there are any problems during the activation process, please contact our help desk for receiving assistance in activating RayQC Advanced.

## Use Floating License Server

RayQC Advanced can be activated using a local floating license server. This requires that the server component is installed (the installation is available separately from the product installer).

Once the server is configured, the following details are required from the server administrator:

- Server name or IP address
- Configured port (by default 26627)



Enter required values and confirm them by clicking on the **SAVE** button. The server will be contacted once to verify the correctness of the data. If the server is not available at that time, an option will be presented to write

the data anyway.

Once the connection details are saved, please restart the product to activate it using the floating license server.

## I do not Have a License or Order Number

If neither a license or order number is available, then just simply register with Raynet to download an evaluation license for RayQC Advanced. This allows potential customers to test and work with RayQC Advanced before purchasing. Choosing **I don't have a license or order number** opens the Raynet website in the default browser, allowing potential customers to download an evaluation copy of RayQC Advanced.

## I Want to Take My Activation Back

Deactivating an existing license for RayQC Advanced may be required if the packaging machine used has to be switched. Whenever there is a scheduled migration, e. g. when a virtual machine is transferred in a way that affects the **Hardware ID**, or when a physical machine is no longer used for packaging purposes, deactivating the license is the right thing to do.

## To Deactivate a Licensed RayQC Advanced Installation

1. Launch RayQC Advanced and open the license and edition tab of the **about** area.
2. Click on the **Open the license wizard** button on the lower left hand side of the application window.
3. Use the option **I want to take my activation back...**
4. Enter the **order number** that was originally used to activate RayQC Advanced on the current machine. It was part of the resources and information material delivered during product purchase.
5. If required, adjust the user name already entered into the input field **User name**. The users who activate and deactivate an installation do not necessarily have to be the same.
6. Click on **DEACTIVATE NOW**.

The license wizard will connect to the Raynet licensing server and send the deactivation information. On success, the number of licenses available for activation, which are bound to the used order number, is incremented by one. With this new free license it is possible to activate any RayQC Advanced installation, on the current machine or any other.

## Troubleshooting

If any problems during this process occur, please contact our help desk for receiving assistance in deactivating RayQC Advanced.

# Working with RayQC Advanced

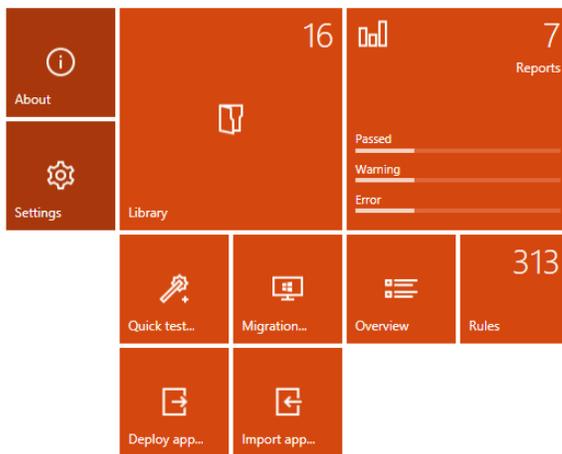
RayQC Advanced is an extension module of RayQC which can be used either in a standalone mode or via the RayQC plug-in interface. For more information on RayQC, see the dedicated *Get Started Guide* for this module or the *RayQC User Guide*.

RayQC Advanced can be launched in a standalone mode directly via the application installation directory (e. g., C:\Program Files (x86)\RayQCAdvanced\RayQCAd.exe). Whenever RayQC Advanced is launched in the standalone mode, the *Home Screen* will be the starting point for a new RayQC Advanced session.

## The Home Screen

The Home screen of RayQC Advanced contains a Dashboard and a Recent section for quick report access. Just like other RaySuite products, the RayQC Advanced **Dashboard** contains tiles which link to the key features and areas of this module.

Dashboard



## The Dashboard Tiles

Each of the tiles on the **Dashboard** links to a specific view:

- **About:** It is highly recommended for first time users to take a look at this area, as you can find e.g. the *Get Started Guide* in this area.
- **Settings:** After the installation of RayQC Advanced, users can visit the settings view to verify if the connection to the SQL database is working. Furthermore, if certain rules are missing in the rules view, users can recache plug-ins in the **Advanced** section of the **Settings** view.
- **Library:** Links to the *library* of RayQC Advanced. Packages and web applications which have been imported can be found here.
- **Reports:** Links to the *reports* view. Historical test results are stored here.
- **Quick test...:** Directly launches the RayQC Advanced *Test Wizard*. This option is relevant for scenarios where a user would like to execute tests immediately, without prior consultation of the library.
- **Rules:** Links to the *rules* library. An overview over the rules contained in RayQC Advanced can be found here.

## Recent List

The **Recent** section of the home screen shows a list of the top five most recent test results stored in the reports view of this module. Selecting an item from this list will open it directly in the report viewer.

### Recent

-  Retest Adobe Reader 9.2 9.2.0  
5/18/2017 9:09:57 AM
-  RayEval 4.1.900.78  
5/5/2017 12:52:14 PM
-  Adobe Reader 9.2 9.2.0  
4/13/2017 10:53:11 AM
-  Adobe Flash Player 18 ActiveX 18.0.0.2...  
4/13/2017 10:52:14 AM
-  RayEval 4.1.900.78  
4/13/2017 10:51:40 AM

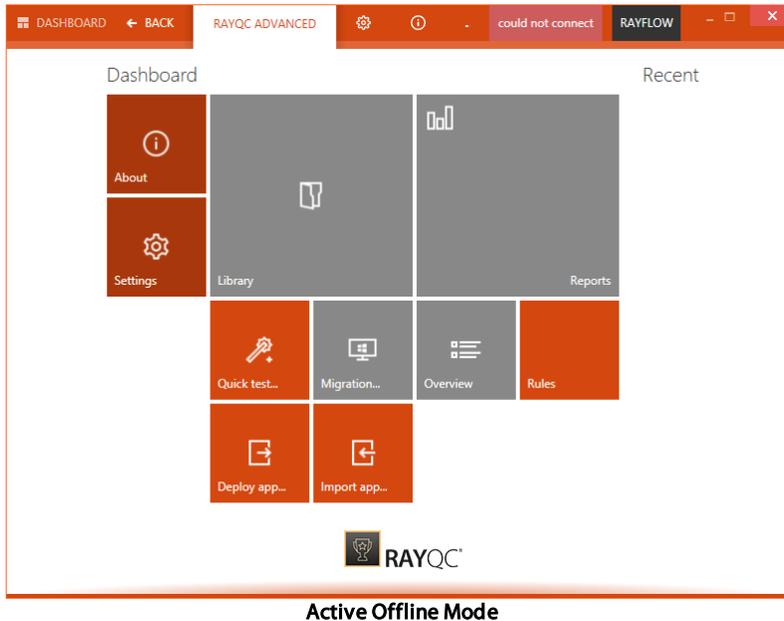
## Online- / Offline Mode

RayQC Advanced usually operates on the database that contains resources such as test results, software packages, merge modules, OS snapshots, and web applications. This is called the **Online** mode. If the database is not available, e. g. due to connection issues, the mode automatically switches to **Offline**.

As long as RayQC Advanced operates in **Offline** mode, testing is only possible by using local software package and merge module resources. Resources that are strictly required to be obtained from the database, such as OS snapshots, are not available. Therefore, test types that depend on these resources are not available as long as RayQC Advanced is working in Offline mode.

Since the **Offline** mode is an exceptional state that should be left as soon as possible, it is indicated by a message on the home screen of RayQC Advanced.

If there are issues with database availability, it is recommended to use the interface of the **Settings** view to check the current connection settings.



## Settings

The **Settings** area of RayQC Advanced can either be accessed via the **Settings** tile on the **Dashboard** or from the **settings** tab in the main toolbar. It is recommended to check the settings at least once before the productive work with this module begins, since the configuration options offered there determine some properties of the user interface that may help to gain quick orientation.

### Available Settings Options

The following options are available under the **Settings** view:

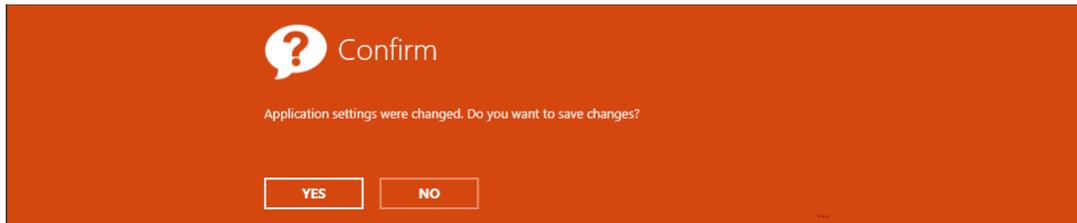
- **Interface**
- **Database**
- **Advanced**
- **Custom fields**
- **Web Apps**
- **RayFlow**

For more information on the different options in the **Settings** view refer to the *RayQC Advanced 6.0 User Guide*.

### Saving and Discarding Changes to Settings

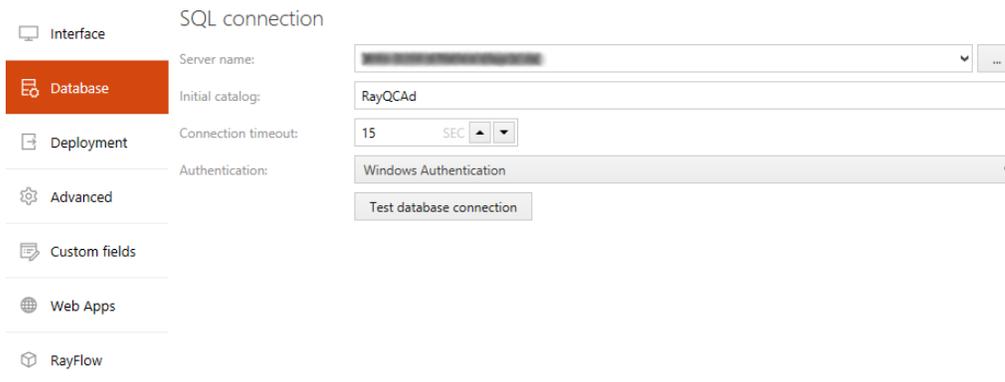
To apply changes made in the settings view, click on the **Save changes** button that is located in the bottom swipe-bar of this view. If a user tries to move to another view with unsaved changes in the current view then a confirmation dialog will be prompted. Selecting **Yes** will save the changes and on the contrary clicking on **No**

will discard the changes.



## Database

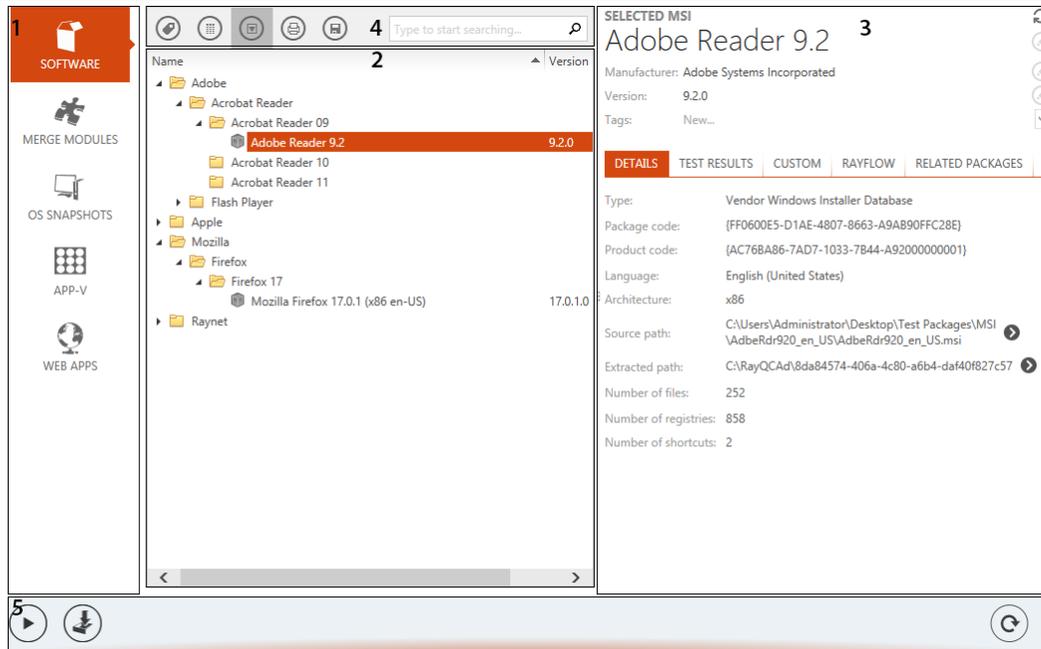
Information pertaining to the packages in the library and rules in the Rule Browser are stored in a SQL database. Connection to this database is configured during the installation of RayQC Advanced. Therefore, it is important that a working connection between RayQC Advanced and the database exists. The **Database** settings option allows a user either to modify or test the connection to this database.



## Library

The packages and web applications which have been imported for testing are stored in the library. It can be accessed by selecting the **library** tile on the RayQC Advanced dashboard. This library is basically a front-end for packages which are imported by users and stored in the back-end SQL database.

The packages in the library are divided into four categories: **SOFTWARE**, **MERGE MODULES**, **OS SNAPSHOTS**, **APP-V**, and **WEB APPS**. Within each of the categories a user can arrange packages by using a hierarchical folder structure.



The library interface can be divided into five areas:

1. Imported file type
2. Content area
3. Side bar
4. Functional Tool Bar
5. Swipe-bar

## Imported File Type

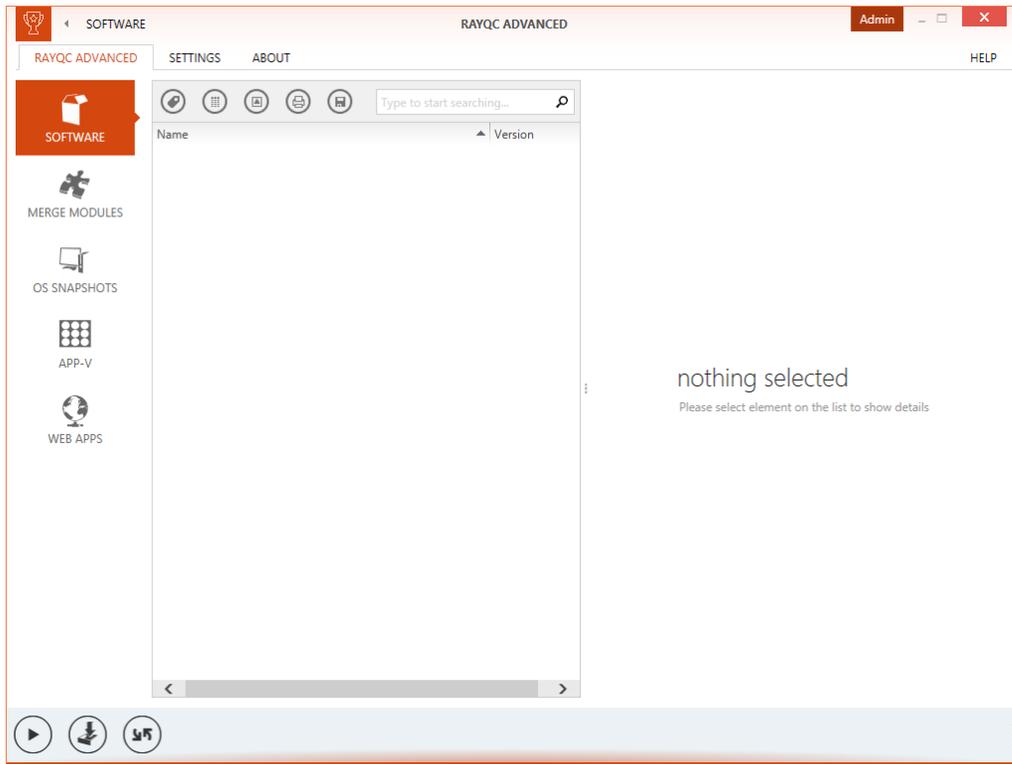
The software library categorizes packages based on their type. These types include software (.msi), merge module (.msm), OS snapshot (.rcs), and web applications. To import a package users first need to select the package type from the imported file type area or they must use the **Import package** button on the swipe-bar.

## Content Area

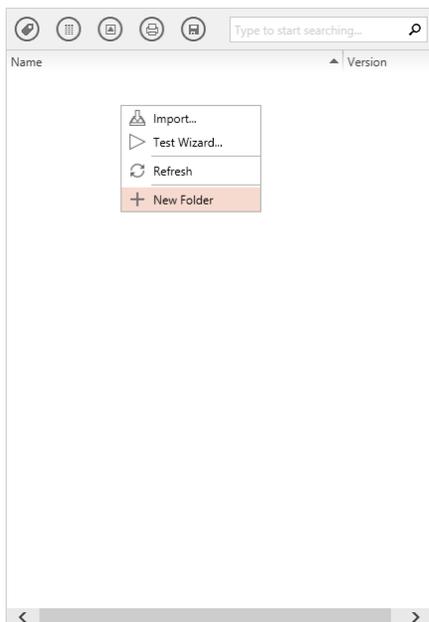
The content area of the library is the area where packages and web applications are stored and cataloged. For an imported package, the name of the package is shown under the **Name** column and the version of the package is shown under **Version** column in the header. For an imported web application, the name of the web application is shown under the **Name** column and the URL is shown under the **Website Url** column in the header.

## Folder Creation

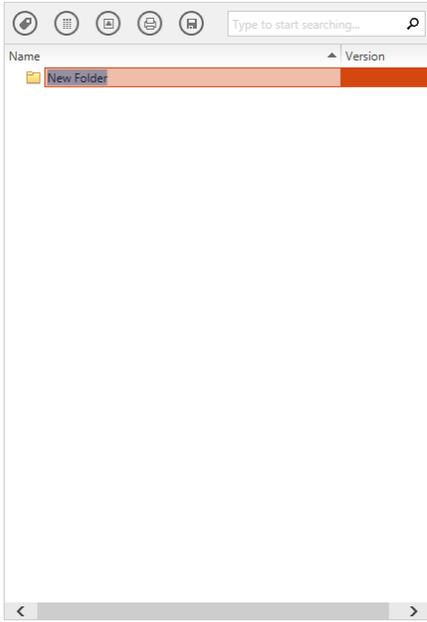
This section describes the creation of folders for software packages as in the proposal for structuring software packages above.



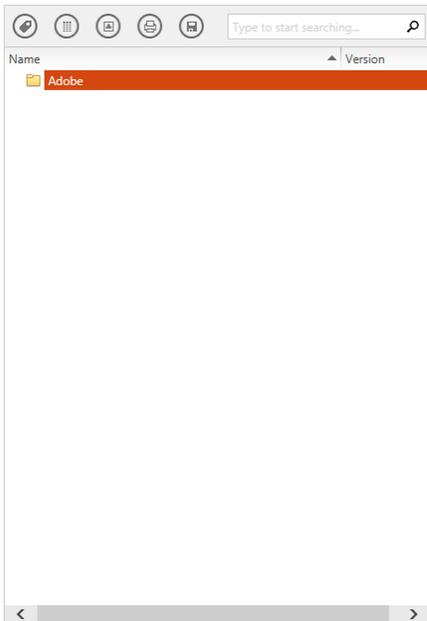
Right-click into the content area to open the context menu.



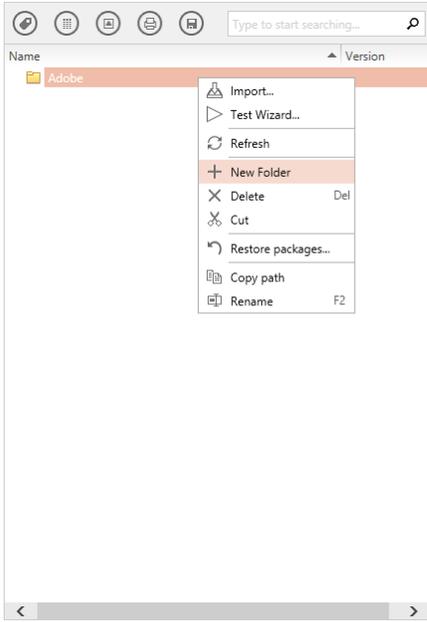
Choose **New Folder** from the context menu.



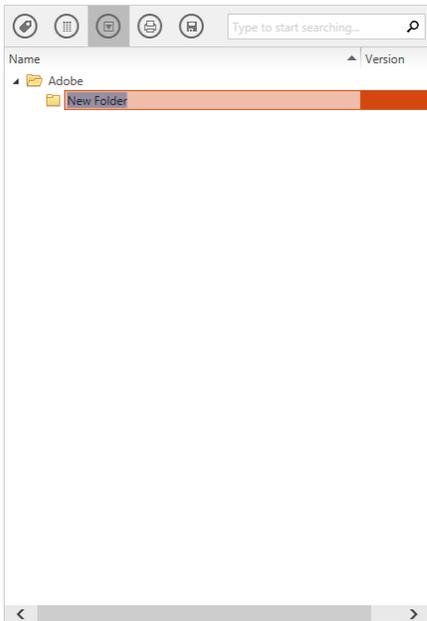
Choose the name of the manufacturer as folder name, e.g. Adobe.



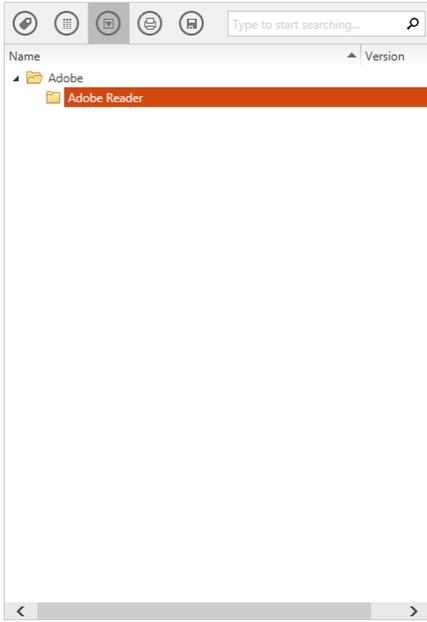
Right-click on the newly created folder to open the context menu.



Choose **New Folder** from the context menu.



Choose the name of the product as folder name, e.g. Acrobat Reader.



Sample folder structures for software packages, merge modules, OS snapshots, App-V packages, and web applications are described in the following.

To learn more about the import of software into the library read this *section*.

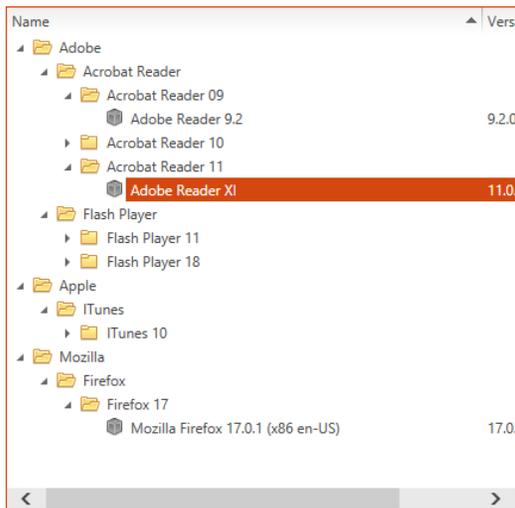
## Software

The **SOFTWARE** category of the library contains packages of the software type (.msi). It can be arranged to use a hierarchical folder structure.

**Tip:**

One way to structure the folders is to structure them based on manufacturer name, product name, and product version. For example: Create a folder called Adobe. Inside this folder, create a folder named Acrobat Reader. In this folder, create a folder named Acrobat Reader 10. After this, import all packages of the Acrobat Reader 10 available for testing into this folder.

This is an example folder structure for the **SOFTWARE** section.



The above is an example of how a software library might look like. Software packages have already been imported into the library.

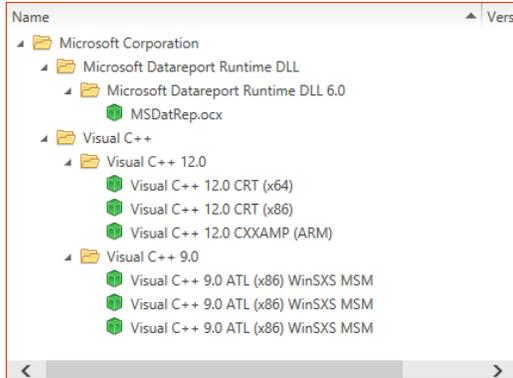
## Merge Modules

The **MERGE MODULES** category of the software library contains the packages of the merge modules type (.msm). It can be arranged to use a hierarchical folder structure.

**Tip:**

One way to structure the folders is to structure them based on manufacturer name, product name, and product version. For example: Create a folder called Microsoft Corporation. Inside this folder, create a folder named Visual C++. In this folder, create a folder named Visual C++ 12. After this, import all merge modules for Visual C++ 12.0 into this folder.

This is an example folder structure for the **MERGE MODULE** section.



## OS Snapshots

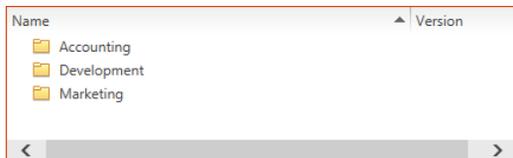
The **OS SNAPSHOTS** category of the software library contains snapshots of operation systems (.rcs). It can be arranged to use a hierarchical folder structure.



### Tip:

Since there is only a small number of operating systems, a possible structure for the folders for the OS snapshots is using the departments of a company. Possible folders are, e.g. Development, Sales, Marketing, and Accounting. This way, OS snapshots can be grouped by the departments which use them.

This is an example folder structure for the **OS SNAPSHOTS** section.



## App-V

The **APP-V** category of the software library contains the packages of the App-V type (.appv). It can be arranged to use a hierarchical folder structure.



### Tip:

One way to structure the folders is to structure them based on the manufacturer name and product name. For example: Create a folder called Mozilla. Inside this folder, create a folder named FileZilla. In this folder, after this, import all App-V packages for FileZilla into this folder.

This is an example folder structure for the **APP-V** section.

| Name                 | Version |
|----------------------|---------|
| Main                 |         |
| Igor Pavlov          |         |
| 7zip                 | 3.9     |
| Mozilla              |         |
| FileZilla            | 1.0.0.0 |
| Simon Tatham         |         |
| PuTTY                | 2.0     |
| ExtraPutty           |         |
| Other                |         |
| BC                   | 7.9     |
| intelIStor 3.5.00.02 | 1.3     |

## Web Applications

The **WEB APPS** category of the software library contains the information for web applications that have been imported into RayQC Advanced. The web applications themselves are not stored inside the RayQC Advanced database but will be downloaded directly before a test is performed. The software library for web applications can be arranged to use a hierarchical folder structure.



### Tip:

One way for structuring web applications is to structure them using the author of a web application or different web applications. Child-folders can be added if needed to distinguish between different web applications from the same author.

This is an example folder structure for the **WEB APPS** section.

| Name    | Website Url |
|---------|-------------|
| Aspera  |             |
| Google  |             |
| Raynet  |             |
| RayFlow |             |
| RayPack |             |
| RayQC   |             |

## Import

After the creation of a folder structure, the next step is to import software or web applications for testing into the library.

In RayQC Advanced the **Import wizard** allows users to import or re-import packages or web applications into the library. It can be accessed either by using the context menu within the library or by using the **Import...** option in the swipe-bar.

The import package function in the context menu is only activated when accessing the context menu either over a folder or an existing package. Additionally, if importing via context menu, the package type chosen for import is dependent on the category of the software library, e.g. if using the **Import...** option in the context menu while in the category **Merge Modules**, the import for a merge module package will be launched.

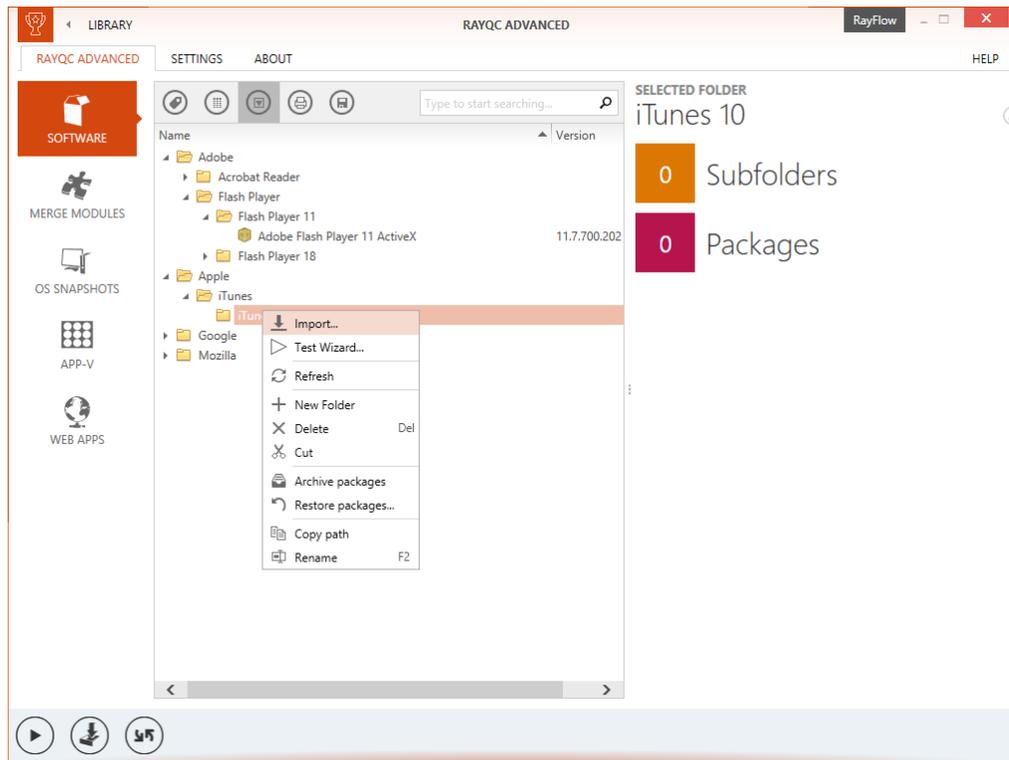
For the import of a package using the **Import package** option in the swipe bar read this *section*.

## Import a Software Package

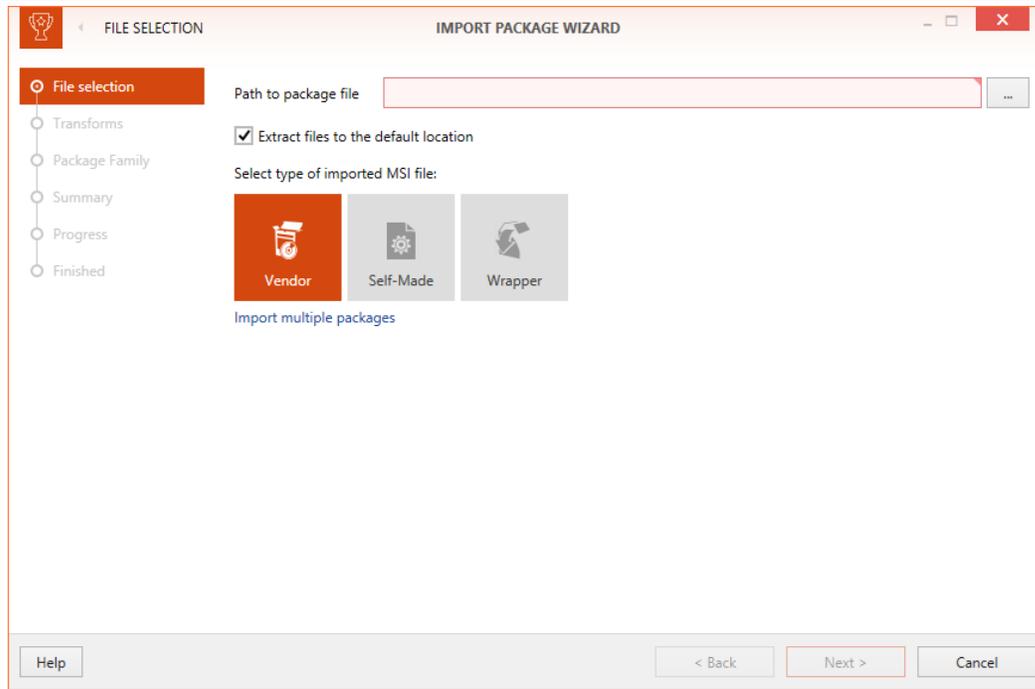
Select the **library** item from the application dashboard to load the **SOFTWARE** view.

Within the software library, either create a new folder or choose an existing folder.

Right-click upon the target folder or a package inside the target folder to show the context menu.



Select the **Import...** option from this menu. The **IMPORT PACKAGE WIZARD** is launched.



The first view is the **File Selection** view. This view allows to specify the `.msi` file, its type and an option to extract the `.msi` to the default extraction folder.

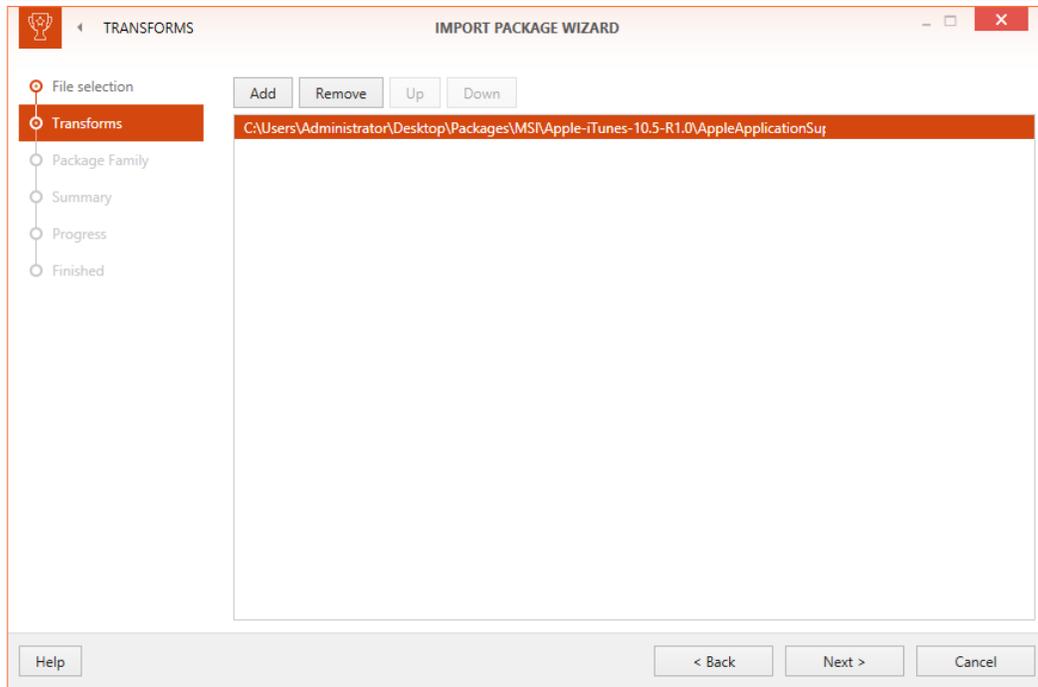
Additionally, the **Import multiple packages** option allows a user to import multiple packages at the same time. On how to import multiple packages at a time, please refer to the **RayQC 2.1 SP1 User Guide**.

There are three different types of imported MSI files in RayQC Advanced Advanced: **Vendor**, **Self-Made** and **Wrapper**.

- **Vendor:** The `.msi` file is delivered by a vendor and includes a valid signature.
- **Self-Made:** The `.msi` file is provided by a packager and may contain a valid signature.
- **Wrapper:** The `.msi` file is usually a program used to execute one or more installation programs.

**Extract files to the default location:** By default, this option is enabled. It extracts the imported `.msi` files to the default extraction directory.

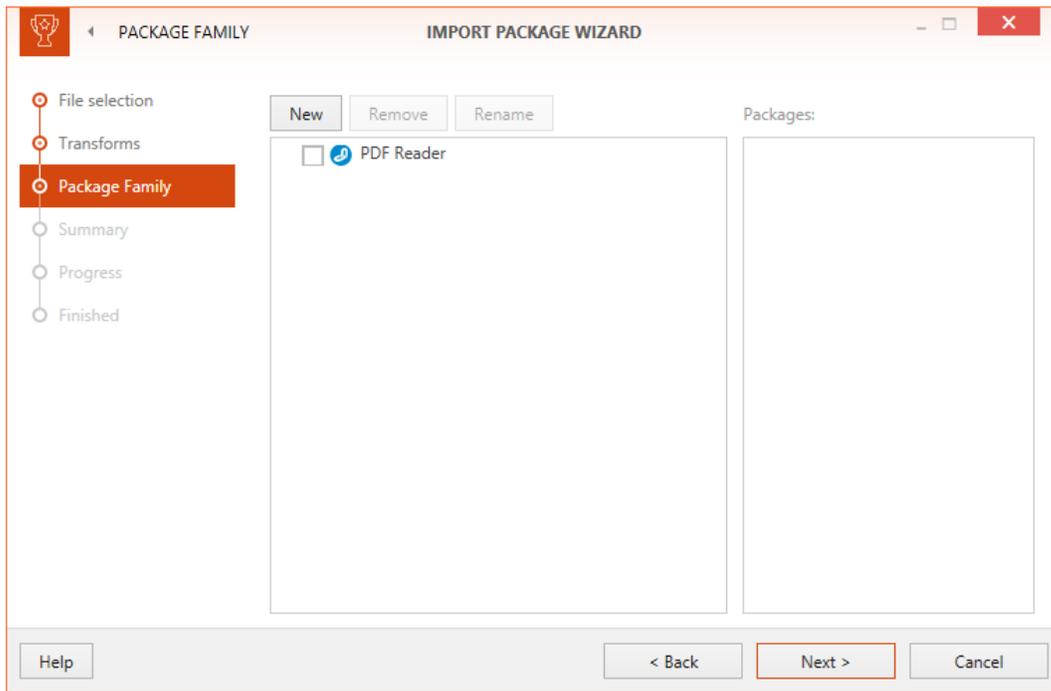
Select the path to the `.msi` file. Click on the **Next >** button to proceed.



The **Transforms** view is shown.

If applicable, add transforms to the package. Click on the **Add** button to add a transform to the package being imported. Existing transforms can be removed and arranged using the **Remove**, **Up**, and **Down** buttons.

Click on the **Next >** button to proceed.



If applicable, assign a **Package Family** to the package. Either select an existing one, create a new one, or select

none.



**Tip:**

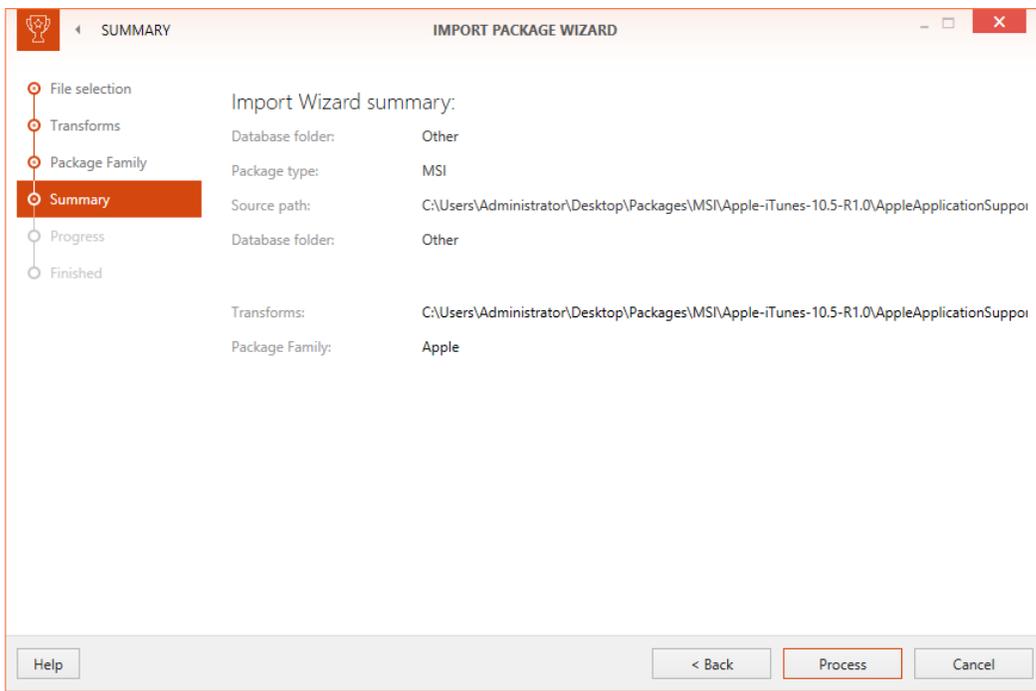
One way to use the **Package Family** is to assign the type of application as **Package Family** to the package which is to be imported. For example, the family PDF Reader can be assigned to a package containing an Adobe Acrobat Reader or the family Web Browser can be assigned to a package containing a Mozilla Firefox or Google Chrome.

Click on the **Next >** button to proceed.



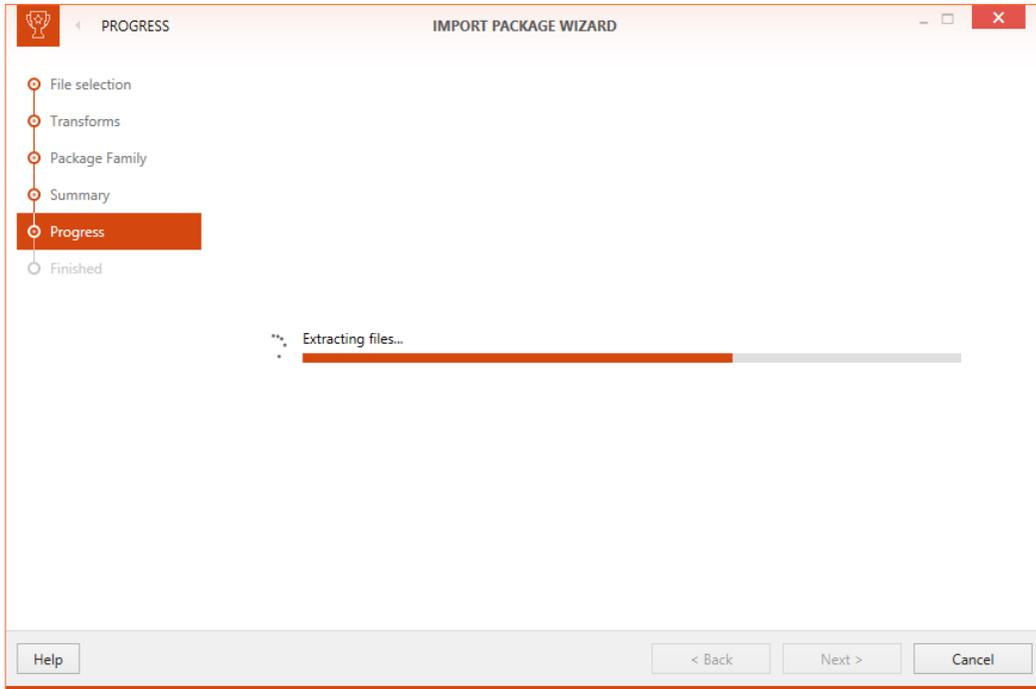
**Note:**

If a new **Package Family** has been created but is not used when clicking on the **Next >** button a confirmation message is shown. Click on **Forward** to continue. The unused **Package Family** will be removed. Click on **Back** to assign the newly created **Package Family** to the package.

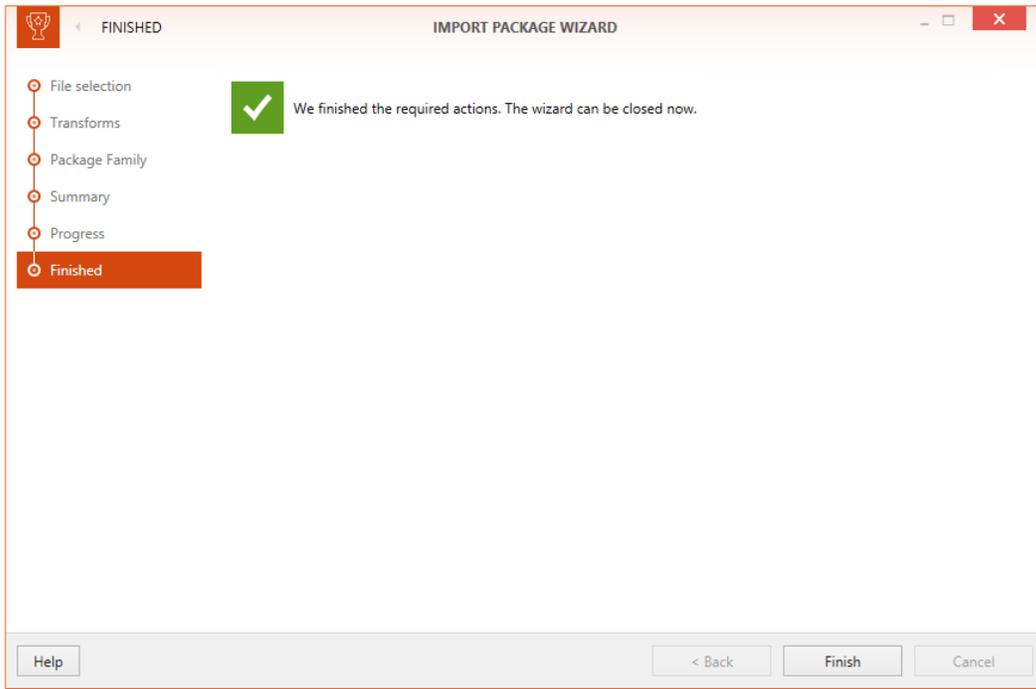


A summary of the package import properties is shown.

Click on the **Process** button to initialize the package import.



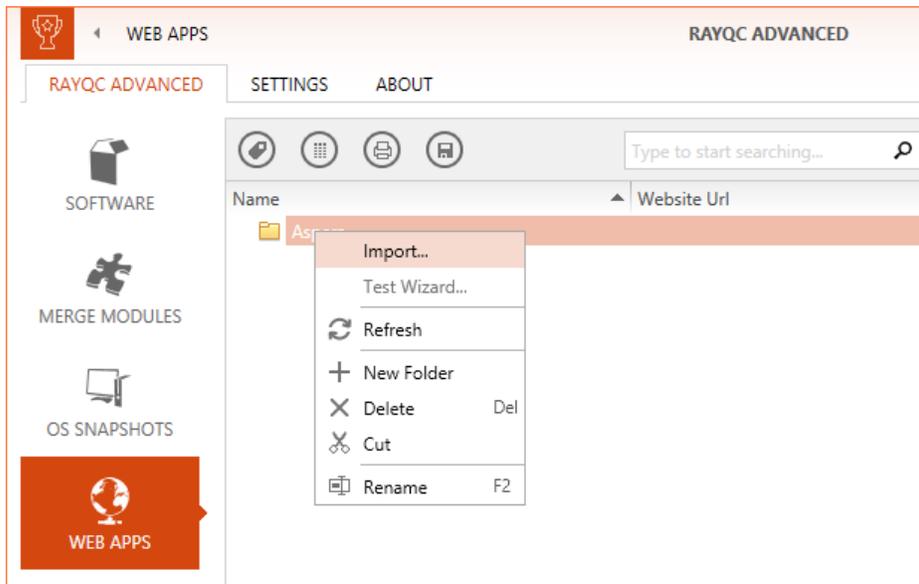
Package import is initialized and a progress bar is shown.



The status pertaining to the package import is shown in the **Finished** view.

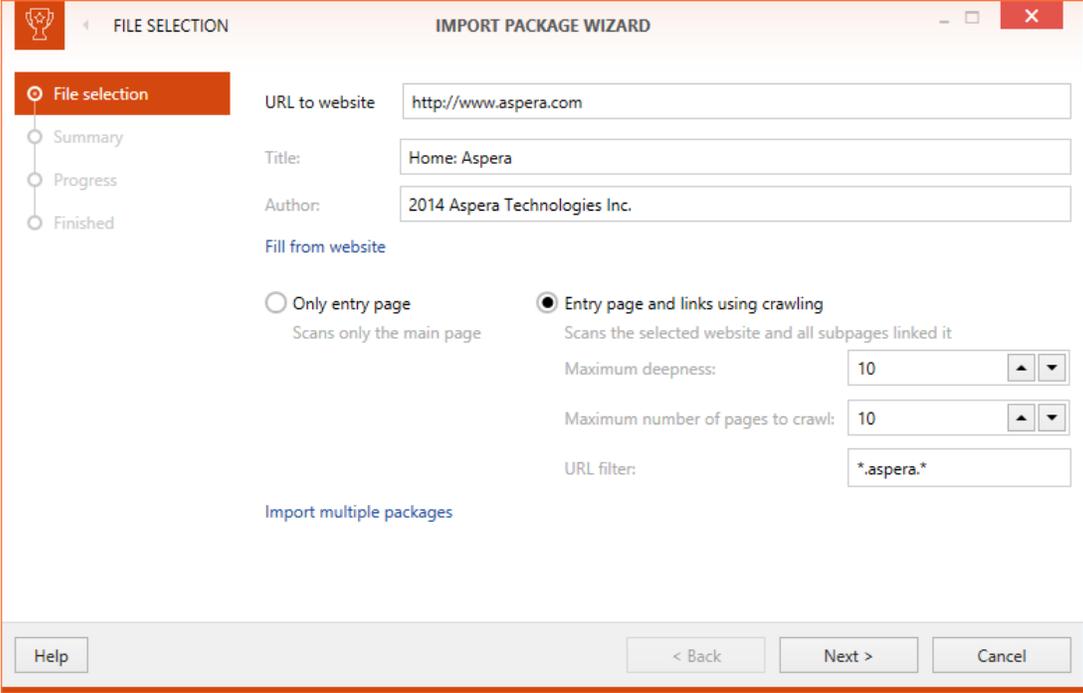
## Import a Web Application

To import a web application into the library, first select the **WEB APPS** view in the library. Either select an existing folder or create a new folder to import a web application into the library.



Right-click on the target folder to open the context menu.

Select the **Import...** item from the context menu. This will launch the **IMPORT PACKAGE WIZARD**.



In the File selection view, specify the URL to the web application that is to be imported. It is possible to scan only the entry page by choosing the **Only entry page** option. It is also possible to specify the maximum deepness and the maximum number of pages to crawl for the scan. Furthermore, an URL filter can be set. If the filter is set, the scan will only include those pages matching the filter and exclude all other pages. If the Entry page and links using crawling is chosen it will take the default values as defined in the **SETTINGS** under the **Web Apps** view.

For more information on the URL filter, the Maximum deepness, and the Maximum number of pages to crawl options refer to the RayQC 2.1 SP1 User Guide.

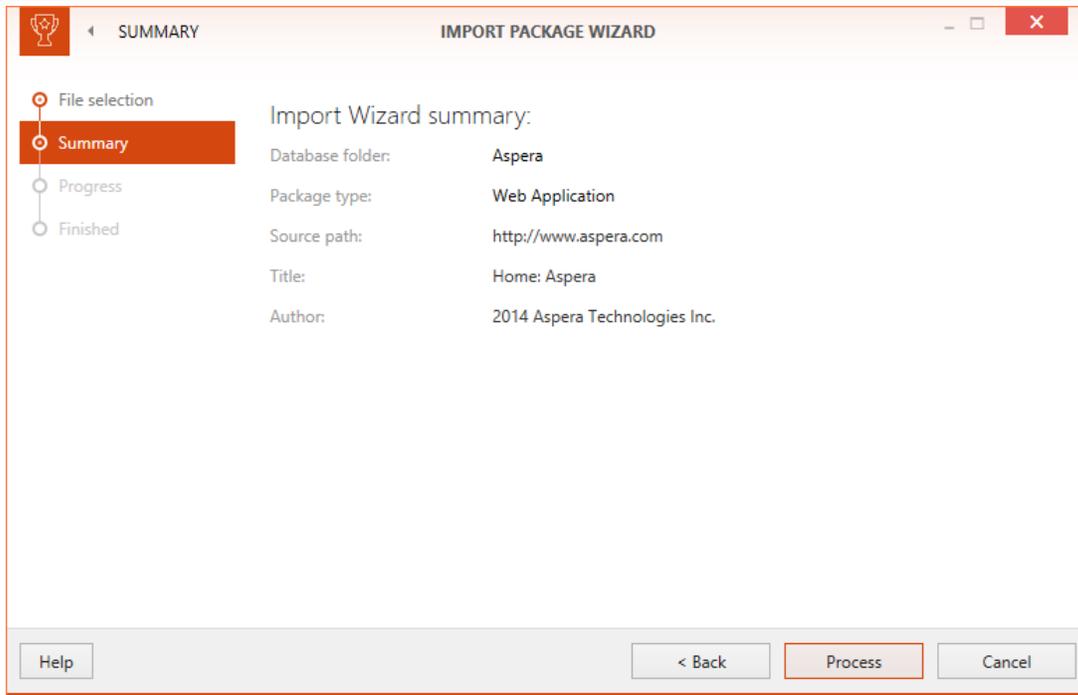
Title and Author of the web application are optional and can be filled either manually or automatically by clicking on the **Fill from website** option.



**Note:**

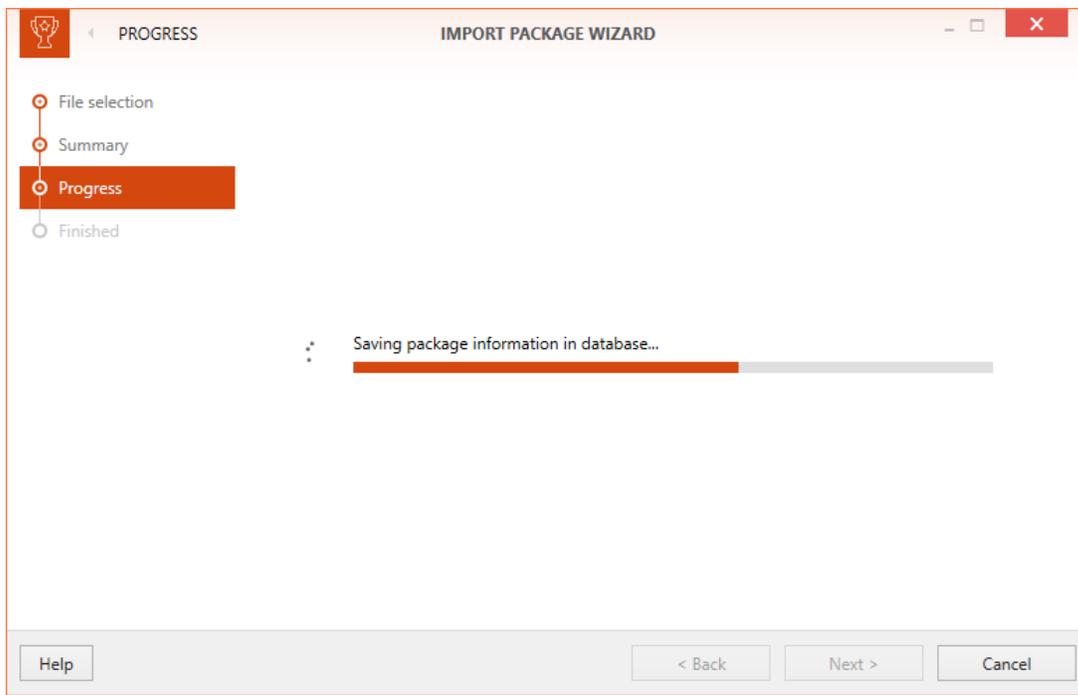
To use the Fill from website option and to continue to the next step a connection to the target web application is necessary. If the web application is located in the intranet a connection to the intranet is needed. If the web application is located in the internet an internet connection is needed. If no connection to the web application is available or an invalid URL is used, RayQC Advanced Advanced will return an error message.

In the example above the web crawler will crawl only pages which contain `*.aspera*` as part of their URL with a maximum deepness of 10 and the maximum number of 10 pages which will be scanned. This means it will follow as many chains of links no deeper than 10 which contain `.aspera.` as part of the URL until a total number of 10 pages that will be scanned is reached.

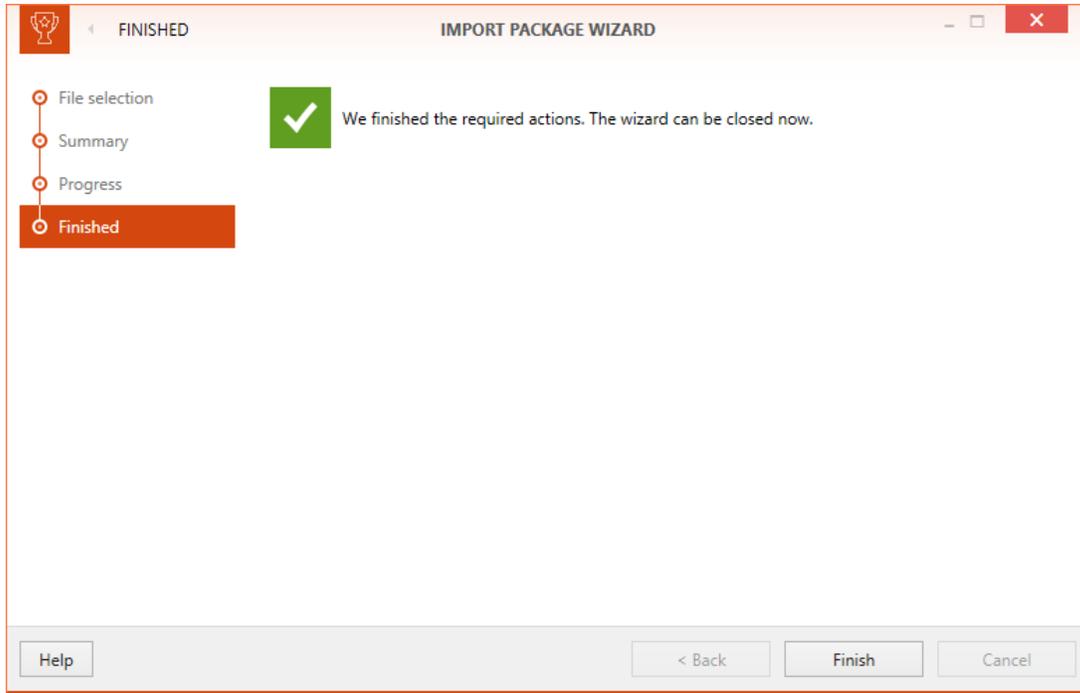


A summary of the web application import is shown in the **Summary** view.

Click on the **Process** button to initialize the web application import.



A progress bar is shown in the **Progress** view.



A status pertaining to the snapshot import is shown in the **Finished** view.

## Migration Wizard

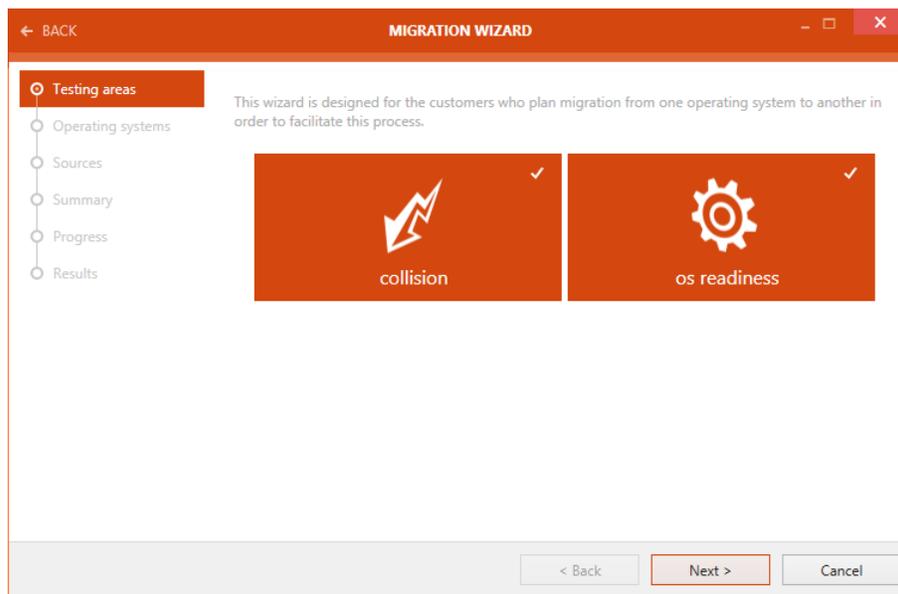
The **Migration Wizard** can be used to check all applications that are necessary on their readiness against a defined operating system and against each other. It can be used to prepare for an upcoming migration.



Start the **Migration Wizard** by clicking on the **migration** tile on the RayQC Advanced **Dashboard**.

### Testing Areas Page

The testing areas page will be shown.

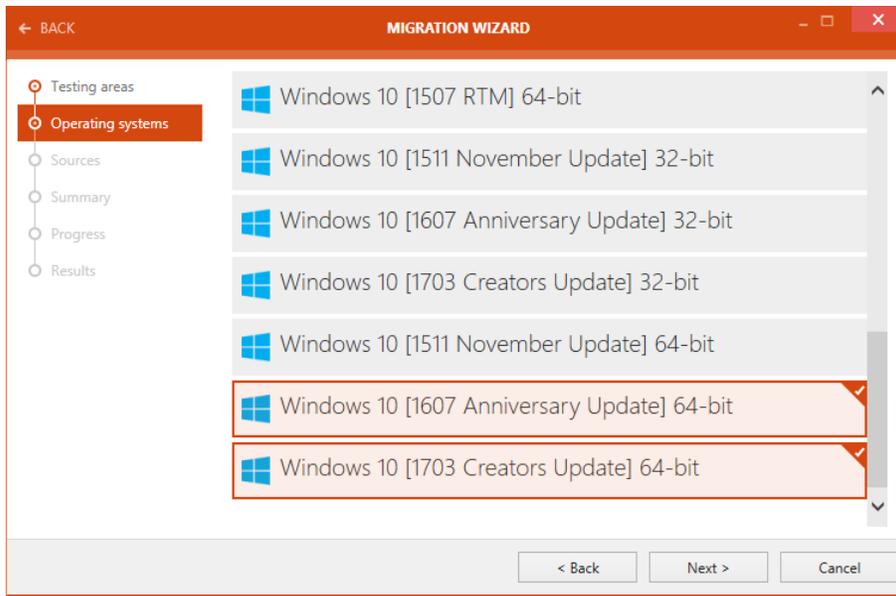


**collision** and **os readiness** are available as testing areas when using the **Migration Wizard**. When selecting **collision**, the packages chosen for testing will be checked for existing conflicts. When selecting **os readiness**, the packages chosen for testing will be tested for readiness against one or more operating systems.

Select the required testing area (in this example both, collision and os readiness, are selected). Then click on the **Next >** button to continue to the next step.

### Operating Systems Page

The **Operating systems** page will be shown.

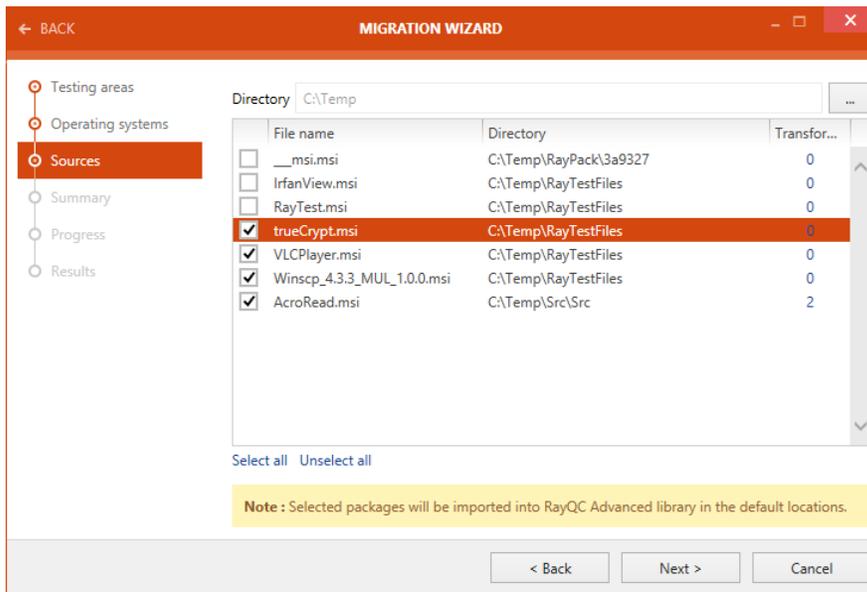


On this page, the operating systems to which the migration is planned can be chosen for testing. Click on a operating system to select it. It will be highlighted when selected. It is possible to select multiple operating system. In this example Windows 10 32-bit and Windows 10 64-bit are selected as target operating systems.

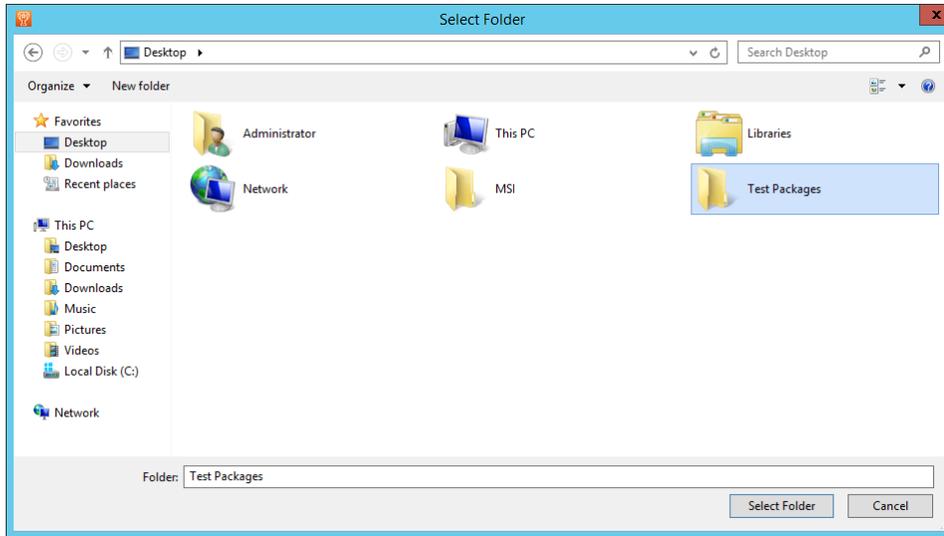
When all operating systems for testing have been chosen, click on the **Next >** button to proceed.

## Sources page

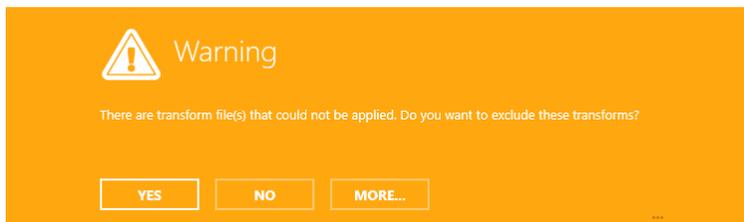
The **Sources** page will be shown.



On the **Sources** page the packages for testing are chosen. Click on the browse button [...] to select the directory in which the target packages are stored.



The **Select Folder** window will open. Browse to the target folder and click on the **Select Folder** button.



The following warning may occur if there are transform files in the folder. Click on the **Yes** button to exclude the transforms and continue or on the **No** button to continue without excluding the transforms.

After the folder for testing has been selected, single packages from the folder can be selected or deselected by activating or deactivating the checkbox in front of the package name.

When all target packages are selected, click on the **Next >** button to proceed.

**Note:**

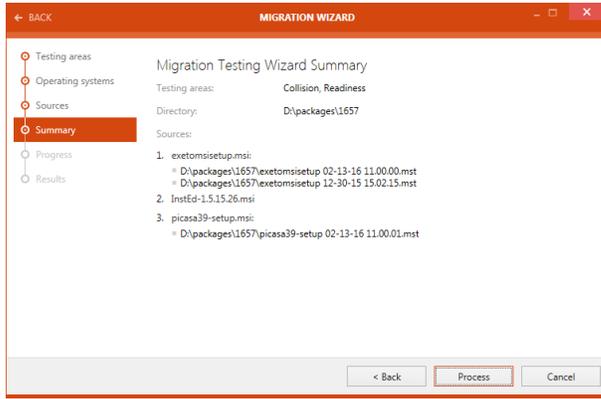
In case of software collision tests, all software is imported into the RayQC Advanced **library** is chosen as target packages (including the newly imported packages from the **Source** screen).

**Note:**

All packages imported via the **MIGRATION WIZARD** are located in the migration folder in the **Software library** tab.

## Summary Page

The **Summary** page will be shown.

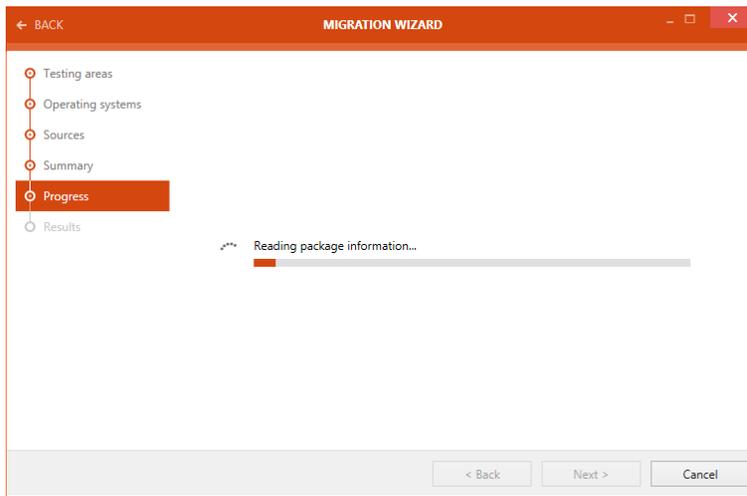


On the **Summary** page a summary of the selected packages and tests is shown. Check the information given on the **Summary** page. If anything is wrong or missing, it is still possible to jump back and change or add what is wrong or missing.

After all settings have been verified click on the **Process** button to execute the test.

## Progress Page

The **Progress** page will be shown.,

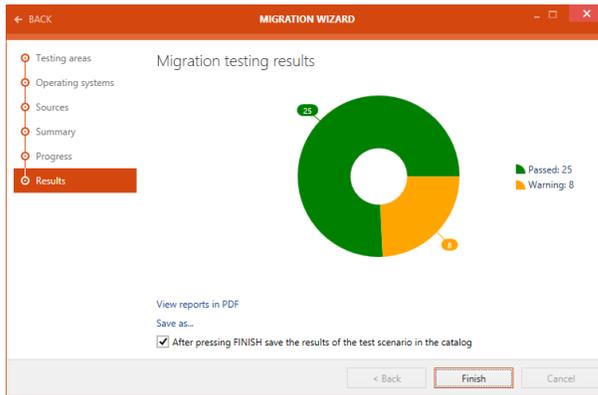


While the tests are executed a progress bar will be shown on the **Progress** page. The current step of the test is shown above the progress bar.

After all tests have been executed the **Migration Wizard** will automatically continue to the next page.

## Results page

The **Results** page will be shown.



After the testing is finished, the result will be shown in the **Results** section. There are different options available:

- **View reports in PDF:** Click on this option to open the test result in `.pdf` format.
- **Save as...:** Click on this option to export the test result in one of various available formats. Possible formats are: `.pdf`, `.docx`, `.doc`, `.html`, `.xps`, and `.xml`.

If the **After pressing FINISH save the results of the test scenario in the catalog** option is checked the results of test will be saved in the catalog after clicking on the **Finish** button. Untick the option if the result should not be saved in the library. By default the checkbox is ticked.

Click on the **Finish** button to close the **MIGRATION WIZARD**.



**Note:**

After **Finish** has been clicked there will not be a redirection to any screen.

# Test Wizard

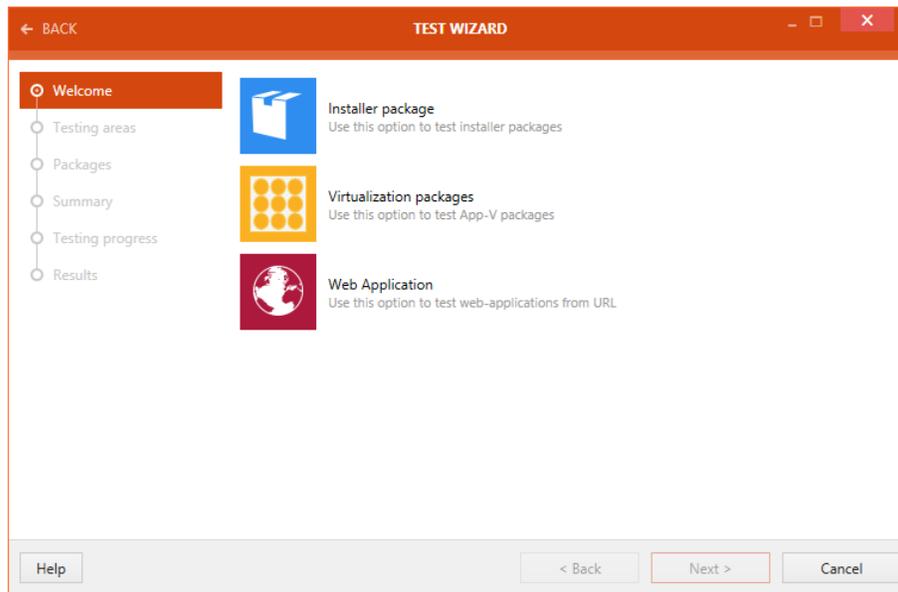
The **TEST WIZARD** can be used to test installer packages, virtualization packages, and web applications which are either stored in the library or locally.



Start the **TEST WIZARD** by clicking on the **quick test** tile on the **Dashboard**.

## Welcome Page

The **Welcome** page will be shown.



On the **Welcome** page the type of the source for the test is chosen. The following options are available:

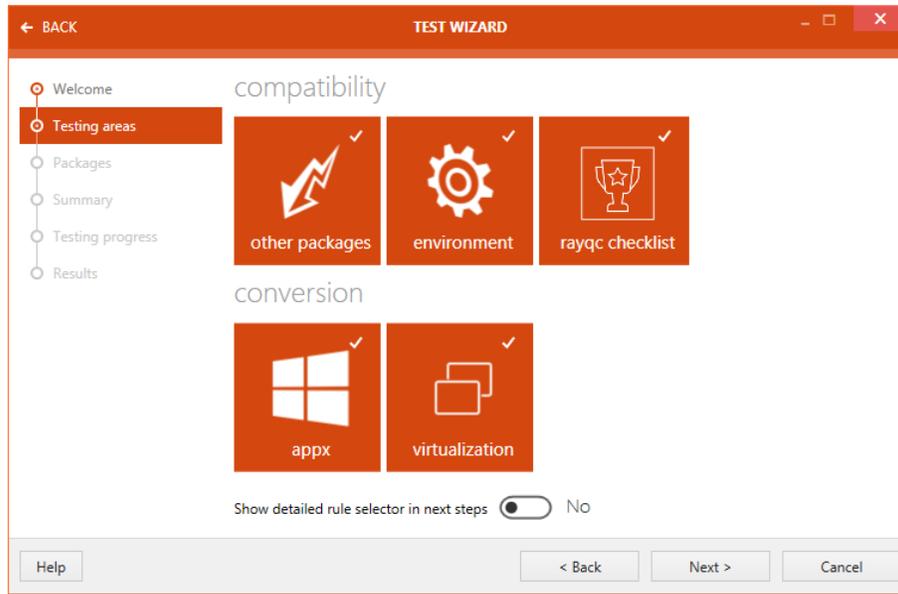
- **Installer package:** This option is chosen when an Installer package (.msi or .exe) is chosen for testing.
- **Virtualization packages:** This option is chosen when an App-V package (.appv) is chosen for testing. For how to perform tests on App-V packages, please refer to the *User Guide*.
- **Web Application:** This option is chosen when a web application is chosen for testing. For how to perform tests on web applications, please refer to the *User Guide*.

All following steps in the **Test Wizard** will depend on the type of the source that is chosen for testing. In the following, the source for testing will be an installer package.

Select the source of the package by clicking on the target option. The wizard will automatically continue to the next step.

## Testing Areas Page

The **Testing areas** page will be shown.



On this page, select the areas against which the tests will be performed. When testing installer packages the following areas will be available:

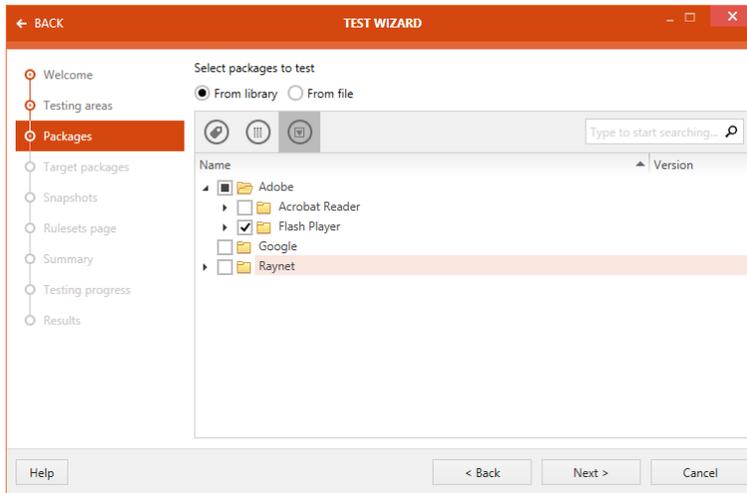
- **other packages:** Select this testing area to perform collision tests against other packages.
- **environment:** Select this testing area to perform a readiness check against a target operating systems or a given system snapshot.
- **virtualization:** Select this testing area to test a package for the possibility of virtualization.
- **rayqc checklist:** Select this testing area to perform customized tests against RayQC checklists. For more information on this, please refer to the *User Guide*.

Select or deselect an area by clicking on it. The selected areas will be highlighted. It is possible to select multiple areas for testing. In the following example other packages, environment, and virtualization are selected as testing areas. The steps in the **Test Wizard** depend on the selected testing areas.

When all target testing areas are selected, click on the **Next >** button to continue.

## Packages Page

The **Packages** page will be shown.

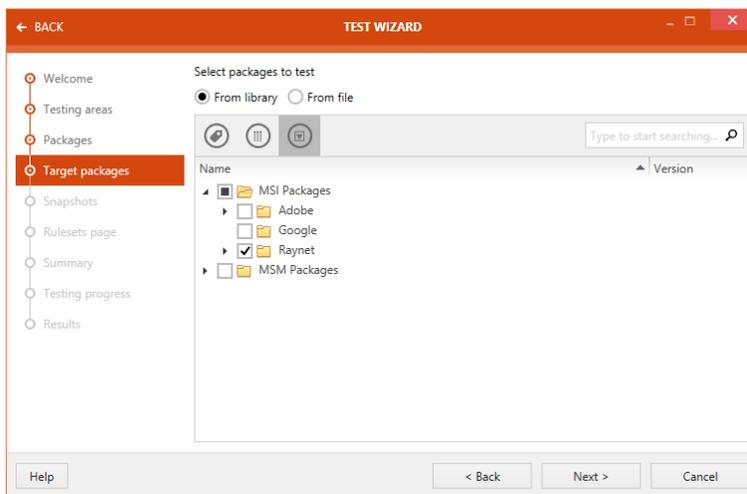


On the **Packages** page the package/-s for testing can be chosen. Browse to the target package/-s and select them by clicking on the checkbox in front of the package name. If a folder is selected, all packages inside the folder will be tested. Packages from outside of the library can be tested by selecting the **From file** option. For more information on testing packages which are not inside the library, please refer to the *User Guide*. In the example above the RayPack StudioInstaller package is

When all packages have been selected, click on the **Next >** button to proceed

## Target Packages Page

The **Target packages** page will be shown.



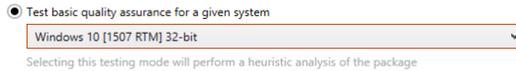
On the **Target packages** page the package/-s against which the tests are to be performed can be chosen. Browse to the target package/-s and select them by clicking on the checkbox in front of the package name. If a

folder is selected, all packages inside the folder will be used. Packages from outside of the library can be chosen by selecting the **From file** option. For more information on testing against packages which are not inside the library, please refer to the *User Guide*.

When all packages have been selected, click on the **Next >** button to proceed.

## Snapshots Page

The **Snapshots** page will be shown.



On the Snapshots page there are two different options available. The package/-s can either be tested against a given system or against the snapshot of a system. Select the system or snapshot for testing.

To select a given system select the **Test basic quality assurance for a given system** radio button and select the target system from the drop-down menu.

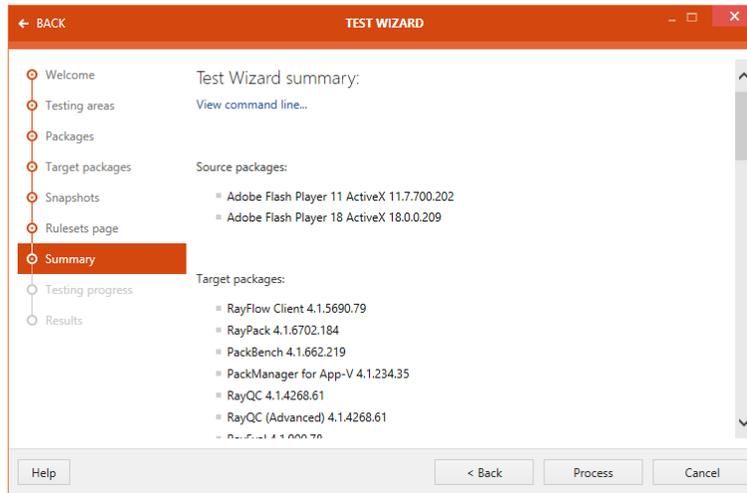
To select a snapshot from the library select the **Test select packages against a specific snapshot from your library** radio button, click on the browse button [...] and browse to the snapshot against which to test the package/-s.

In the example, the package will be tested against Windows 10 64-bit.

When the target has been selected, click on the **Next >** button to proceed.

## Summary Page

The **Summary** page will be shown.



On the **Summary** page a summary of the selected packages and tests is shown. Check the information given on the **Summary** page. If anything is wrong or missing, it is still possible to jump back and change or add what is wrong or missing.

After all settings have been verified click on the **Process** button to execute the test.

## Testing Progress Page

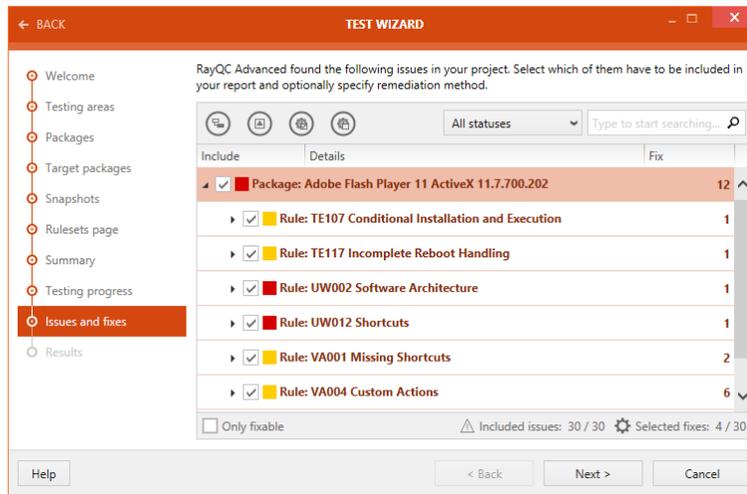
The **Testing progress** page will be shown.

While the tests are executed a progress bar will be shown on the **Progress** page. The current step of the test is shown above the progress bar.

After all tests have been executed the **Test Wizard** will automatically continue to the next page.

## Issues and Fixes Page

The **Issues and fixes** page will be shown.



The issues found in the test are listed here. Select the issues that are going to be displayed in the report by checking the checkbox next to the issue on the left.

If **environment** has been chosen as one of the testing areas, fixes can be directly applied to some of the issues found.

There are two different types of fixes available.

- **Light fix:** Make only minor changes to the package.
- **Power fix:** Which make huge changes to the package.

A fix can be chosen by using the dropdown menu next to the issue on the right. By executing fixes an `.mst`, and in some cases also a `.cab`, for the package will be created.

Select the fixes that should be applied to the package and the issues that will be displayed in the report and click on the **Next >** button.



**Warning:**

Since Power fixes can damage the package, only apply Power fixes if sufficient packaging experience and knowledge is at hand.

In the given example one light fix will be applied to the package.

Click on the **Next >** button to proceed.

## Fixing Progress Page

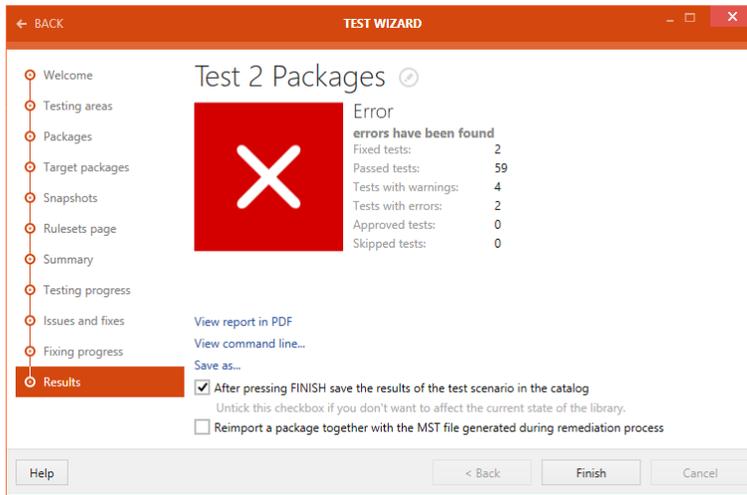
The **Fixing progress** page will be shown.

While the fixes are executed a progress bar will be shown on the **Fixing progress** page. The current fix is shown above the progress bar.

After all fixes have been executed the **Test Wizard** will automatically continue to the next page.

## Results Page

The **Results** page will be shown.



After the fixing is finished, the result will be shown in the **Results** section. There are different options available:

- **See the generated MST file:** Click on this option to open the directory which contains the generated `.mst` file.
- **View reports in PDF:** Click on this option to open the test result in `.pdf` format.
- **View command line...:** Click on this option to view the command line arguments for the current testing scenario.
- **Save as...:** Click on this option to export the test result in one of various available formats. Possible formats are: `.pdf`, `.docx`, `.doc`, `.html`, `.xps`, and `.xml`.

If the **After pressing FINISH save the results of the test scenario in the catalog** option is checked the results of test will be saved in the catalog after clicking on the **Finish** button. Untick the option if the result should not be saved in the library. By default the checkbox is ticked.

If the **After pressing FINISH save the report in RayFlow server** option is checked, the result of the test will be saved to the RayFlow instance after clicking on the **Finish** button. By default, the checkbox is unticked.

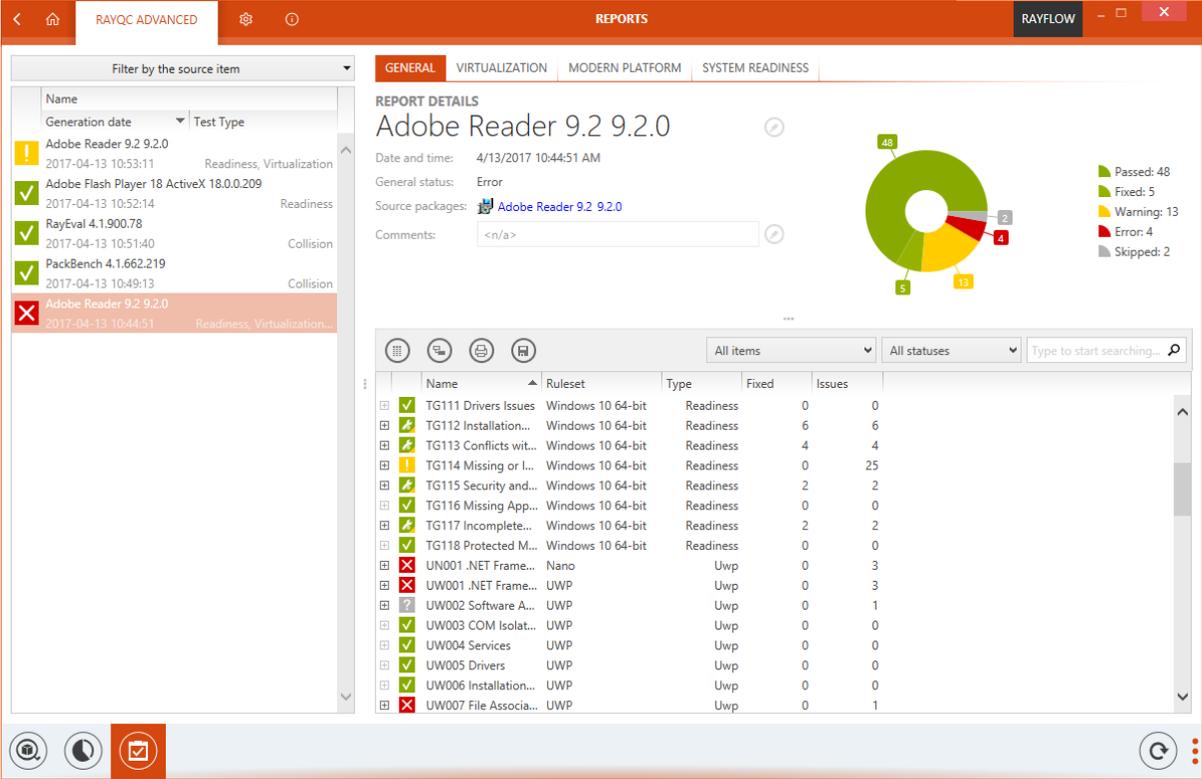
If the **Reimport a package together with the MST file generated during remediation process** option is checked, after clicking on the **Finish** button, the package will be reimported and the `.mst` that was generated when applying the fixes will be imported alongside the package.

---

Click on the **Finish** button to close the **TEST WIZARD**.

## Reports

The **REPORTS** section of RayQC Advanced contains historical test results pertaining to packages and web applications that are stored in the library. It can be reached either by clicking the **Finish** button after a successful test in the **TEST WIZARD** or by clicking on the reports tile on the dashboard. The information in this section is presented in an informative format using various symbols, color coding and pie charts. The reports can not only be viewed but also be exported in various formats.



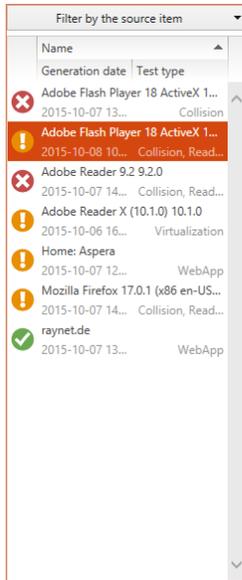
| Name                   | Ruleset           | Type      | Fixed | Issues |
|------------------------|-------------------|-----------|-------|--------|
| TG111 Drivers Issues   | Windows 10 64-bit | Readiness | 0     | 0      |
| TG112 Installation...  | Windows 10 64-bit | Readiness | 6     | 6      |
| TG113 Conflicts wit... | Windows 10 64-bit | Readiness | 4     | 4      |
| TG114 Missing or l...  | Windows 10 64-bit | Readiness | 0     | 25     |
| TG115 Security and...  | Windows 10 64-bit | Readiness | 2     | 2      |
| TG116 Missing App...   | Windows 10 64-bit | Readiness | 0     | 0      |
| TG117 Incomplete...    | Windows 10 64-bit | Readiness | 2     | 2      |
| TG118 Protected M...   | Windows 10 64-bit | Readiness | 0     | 0      |
| UN001 .NET Frame...    | Nano              | Uwp       | 0     | 3      |
| UW001 .NET Frame...    | UWP               | Uwp       | 0     | 3      |
| UW002 Software A...    | UWP               | Uwp       | 0     | 1      |
| UW003 COM Isolat...    | UWP               | Uwp       | 0     | 0      |
| UW004 Services         | UWP               | Uwp       | 0     | 0      |
| UW005 Drivers          | UWP               | Uwp       | 0     | 0      |
| UW006 Installation...  | UWP               | Uwp       | 0     | 0      |
| UW007 File Associa...  | UWP               | Uwp       | 0     | 1      |

The Reports viewer consists of three different parts:

1. Item list
2. Report details
3. Swipe-bar

### Item List

The item list is shown on the left side of the Reports viewer. Here, all tests that have been executed on items which are part of the library are listed.



The list shows the properties of an item including **Name**, **Generation date** (date of the performance of the test), **Test type**, and the result of the test (in an iconic form). The first three columns can be arranged in a desired order by simply dragging the respective column header into a new position.

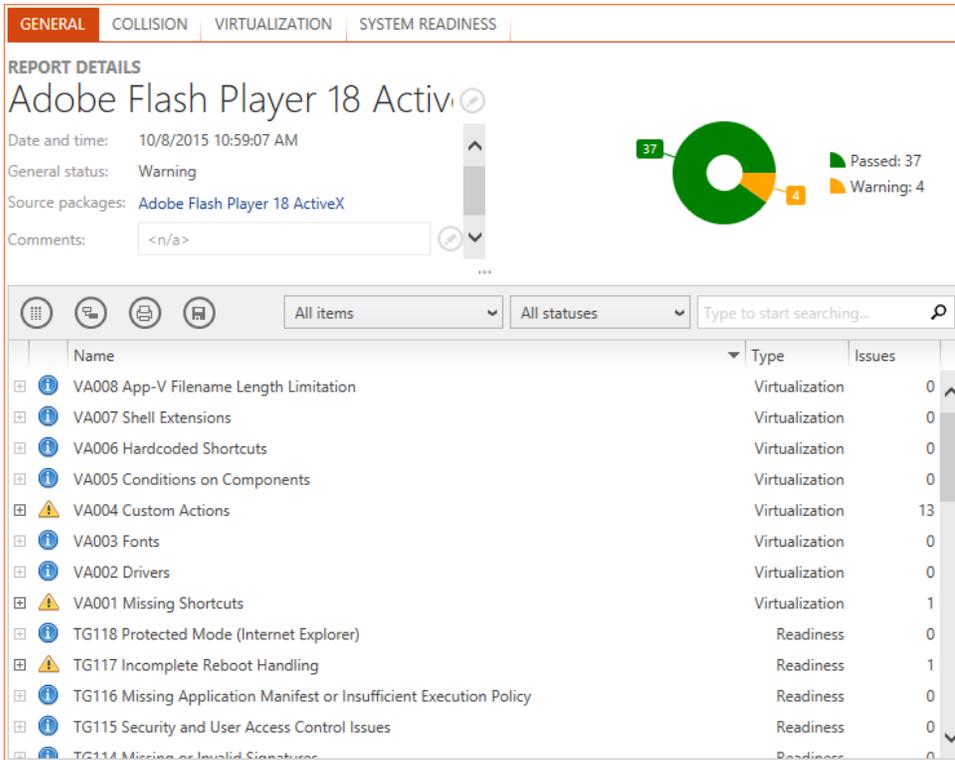
### Iconic representation of test results

There are three different symbols in the item list which represent the overall result of the test that was executed on the item.

|   |   |
|---|---|
|  | Represents that the test against all rules has been passed successfully.  |
|  | Represents that the test against at least one rule resulted in a warning. |
|  | Represents that the test against at least one rule resulted in an error.  |
|  | Represents that the test against at least one rule has been skipped.      |

### Report Details

When an item is selected from the item list, all information pertaining to the test are shown in the **REPORT DETAILS** section.

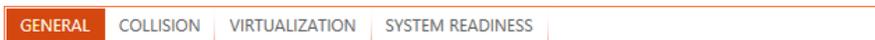


| Name  | Type           | Issues |
|---|----------------|--------|
| VA008 App-V Filename Length Limitation                              | Virtualization | 0      |
| VA007 Shell Extensions  | Virtualization | 0      |
| VA006 Hardcoded Shortcuts   | Virtualization | 0      |
| VA005 Conditions on Components                                      | Virtualization | 0      |
| VA004 Custom Actions  | Virtualization | 13     |
| VA003 Fonts   | Virtualization | 0      |
| VA002 Drivers   | Virtualization | 0      |
| VA001 Missing Shortcuts   | Virtualization | 1      |
| TG118 Protected Mode (Internet Explorer)                            | Readiness      | 0      |
| TG117 Incomplete Reboot Handling                                    | Readiness      | 1      |
| TG116 Missing Application Manifest or Insufficient Execution Policy | Readiness      | 0      |
| TG115 Security and User Access Control Issues                       | Readiness      | 0      |
| TG114 Missing or Invalid Signatures                                 | Readiness      | 0      |

The **REPORT DETAILS** section contains different information in different areas of the screen.

### Test type

This part consists of different tabs which represent the different test types. The **GENERAL** tab is available by default, the other tabs depend on the type of the item and the tests that have been performed.



If the item that was tested is a software package, possible tabs are **COLLISION**, **VIRTUALIZATION**, **SYSTEM READINESS**, and **RAYQC CHECKLIST**. If the item that was tested is a web application, possible tabs are **INTERNET EXPLORER 9**, **INTERNET EXPLORER 10**, and **INTERNET EXPLORER 11**. For virtual packages the only available tab next to **GENERAL** is **APP-V**. Only the tabs for which the test has been performed will be shown.

### Package properties

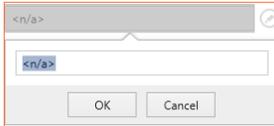
Beneath the test type tabs, the properties of the tested item are shown. the name and version of the item, the date and time of testing, the source package, and possible comments can be found here.



Name and Comments are editable.



Click on the **Click to edit** button which is shown behind the respective field.



Now edit the field, in this case the **Comments** field. Click on the **OK** button when finished or on the **Cancel** button to abort the editing.

## Pie chart

Next to the package properties, there is a pie chart which gives an overview of the test results of the selected test.

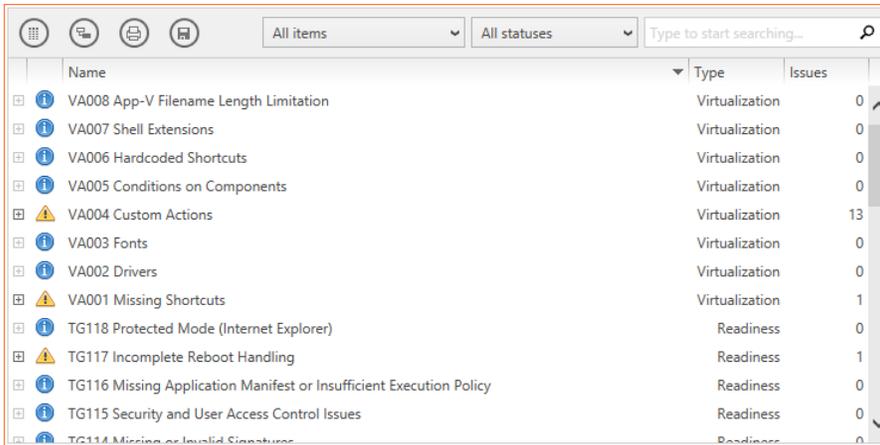


In the pie chart, the test results for the item are plotted against the number of rules, the item has been tested against. The following color convention is used for this chart:

|  |         |
|--|---------|
|  | Passed  |
|  | Fixed   |
|  | Warning |
|  | Error   |
|  | Skipped |

## Result details

In this part of the **REPORTS** view, the test results pertaining to the item are shown. They consist basically of a list of rules the item has been tested against.

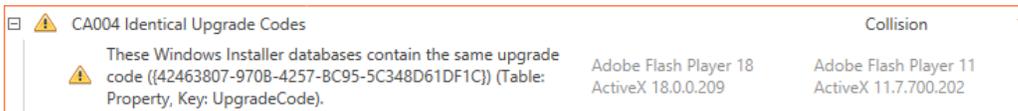


If, like in the example above, the rules against which the item was tested belong to different test types, they can be filtered by using the test type tabs on top of the properties section.

The rules are paired with icons, which visually deliver the test results.

|   |   |
|---|---|
|    | Represents that no issue has been found as result of the test for that particular rule.   |
|    | Represents a warning as result of the test for that particular rule.                      |
|    | Represents a warning which has been fixed as result of the test for that particular rule. |
|   | Represents an error as result of the test for that particular rule.                       |
|  | Represents an error as result which has been fixed of the test for that particular rule.  |
|  | Represents that the test against this particular rule has been skipped.                   |

If the test resulted in a warning or an error, click on the  icon to gain more information about it.



The rule will expand and show details pertaining the warning or error. This example shows a potential collision between Adobe Flash Player 18 and Adobe Flash Player 11, because of an identical upgrade code.

## Swipe-bar

The swipe-bar at the bottom of the **REPORTS** view offers four different buttons. The first button is the **Save report** button, the second one is the **Retest** button, the third is the **dashboard** button, and at the fourth one on the left side of the swipe-bar there is the **Refresh** button.

### Save report

The detailed test result for an item can be directly exported into `.pdf`, `.docx`, `.doc`, `.html`, `.xps`, and `.xml` format by clicking on the **Save report** button. Click on the **Save report** button to open the dialog. Select where to save the report and the format of the report.

After this, click on the **Save** button to save the report to the selected folder.

### Retest

Click on the **Retest** button to execute a retest with the same configuration on the item currently selected in

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the **REPORTS** view. It is still possible to modify the configuration within the **TEST WIZARD**. This comes handy to verify if slight changes to the configuration will lead to the expected results.

#### **dashboard**

Click on the **dashboard** button to return to the overview page of the **REPORTS** section.

#### **Refresh**

The contents of the reports view are not refreshed periodically. After certain events, they are refreshed automatically. To refresh them manually, click on the **Refresh** button in the swipe-bar.

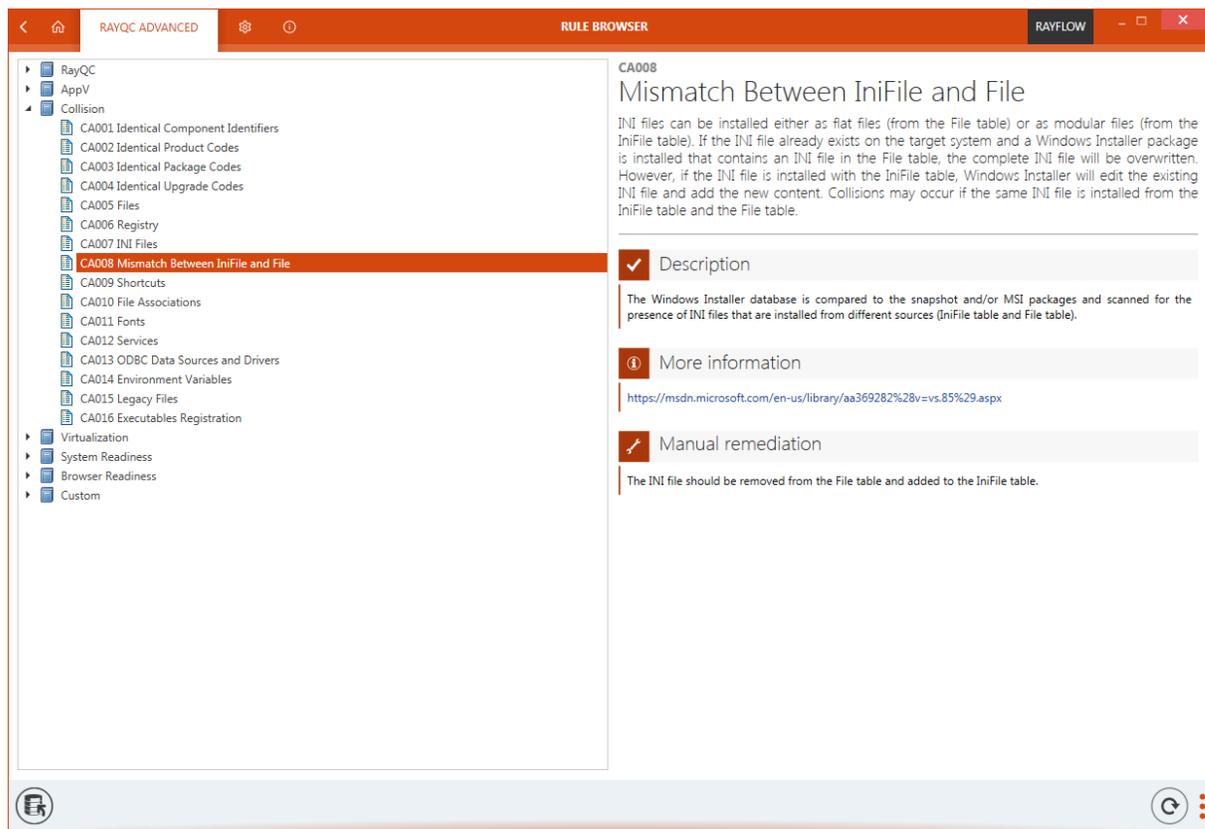
## Rules

Supported by a predefined set of rules, a user has the ability to execute collision, conformity, and virtualization tests, either on a single package or a set of packages, or conformity tests on web applications. These tests can be executed either individually or in a mixed mode. Further details on the execution of tests can be found in the chapter *Test Wizard*.

The rules are the backbone of this module and their algorithm do not only reflect the current industry practice but also Raynet's vast experience in the fields of software packaging.

## Rule Browser

The **RULE BROWSER** view allows users to browse through the rules and view their related properties. To access the rule browser, click on the **rules** tile from the dashboard on the home screen.



At the bottom of the **RULE BROWSER** view there is a swipe-bar. The swipe-bar consist of the **Recache** rules button and the **Refresh** button.

Click on the **Recache rules** button to import missing rules into the database and delete non-existent rules from all rule sets.

Since this action will remove all non-existent rules from all rule sets a warning will be shown after clicking on the **Recache rules** button.

Click on the **YES** button to continue or on the **NO** button or the **CANCEL** button to abort the action and to return to the **RULE BROWSER** view.

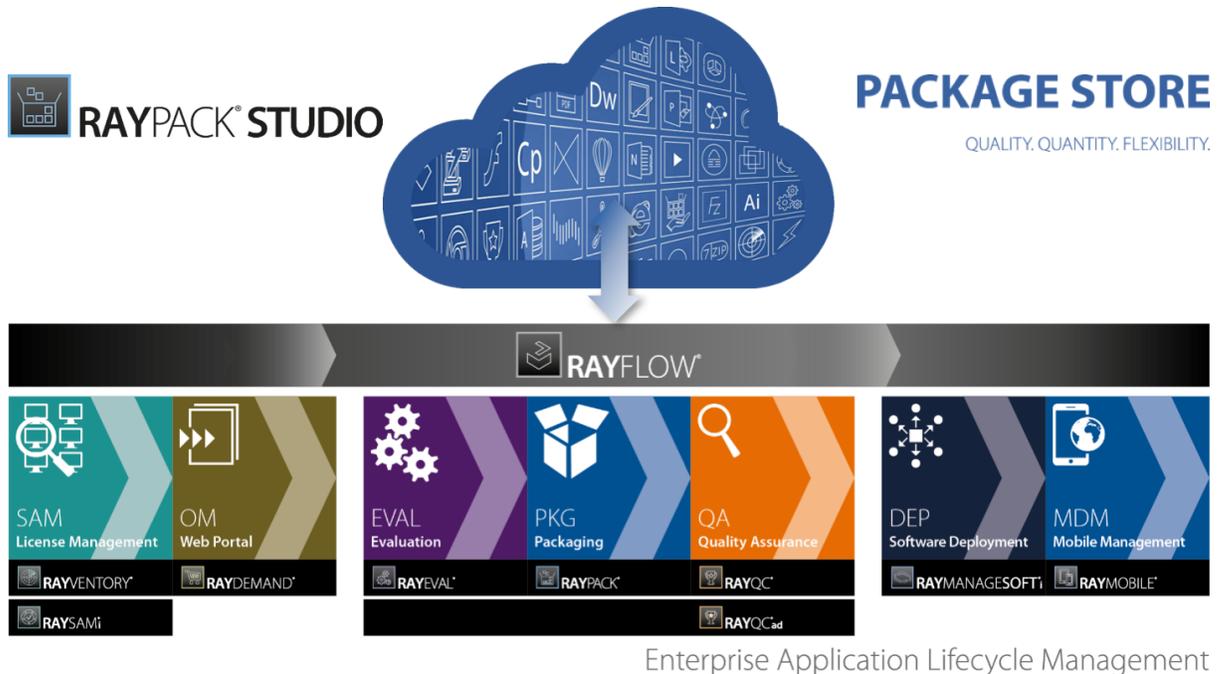
Click on the Refresh button to reload the **RULE BROWSER** view.

It is possible to define new rule sets under the **Custom** category in the **RULE BROWSER** view. For more information on how to create and modify custom rule sets refer to the RayQC 2.1 SP1 User Guide.

## Next Steps

Further information on the main workflows of RayQC Advanced can be found in the User Guide in the chapter Typical Workflows.

Since RayQC Advanced is part of the [RaySuite](#), Raynet's product suite for Enterprise Application Lifecycle Management, it can be directly integrated into different components which are part of the RaySuite.



On how to integrate RayQC Advanced into [RayFlow](#), read the chapter on Tools in the RayFlow Administration and Configuration Guide.

RayQC Advanced can be used directly in [RayPack](#). To learn how this works, please read the chapter on collision and virtualization testing in the RayPack User Guide.

For the integration of RayQC Advanced into the RayQC Advanced Checklist Management Tool, read the RayQC Advanced User Guide.

Please refer to the [RaySuite website](#) for further information regarding the benefits this product family offers for your daily business tasks.

# Need Help

## Request RayQC Advanced support

Our Raynet support team gladly assists you on any question or issue you encounter regarding RayQC Advanced. Feel free to sign in and open incidents via our Raynet [Support Panel](#).

## Join the RaySuite community

The RaySuite community resides within our Knowledge Base: <https://raynet.de/Support/>. Once you have signed up for access to the Raynet support panel, you automatically have access to the Knowledge Base, too. You will surely come to a point where you would love to suggest a new feature for the future development of RayQC Advanced. Maybe you need to find some tips & tricks to hit your target right. the RaySuite community is your place for discussing such topics, for sharing and expanding your own experience.

## Contact your Raynet sales representative

Our sales team is the right contact for any license or edition question you might encounter. Would you like to benefit from a professional RayQC Advanced training? Ask for dates and locations to find the right training to meet your needs. You are highly welcome to step in contact via [sales@raynet.de](mailto:sales@raynet.de).



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