

Software Evaluation

User Guide RayEval 7.2

RayEval is part of RaySuite.





Copyright © Raynet GmbH (Germany, Paderborn HRB 3524). All rights reserved. Complete or partial reproduction, adaptation, or translation without prior written permission is prohibited.

User Guide RayEval 7.2

Raynet and RayFlow are trademarks or registered trademarks of Raynet GmbH protected by patents in European Union, USA and Australia, other patents pending. Other company names and product names are trademarks of their respective owners and are used to their credit.

The content of this document is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Raynet GmbH. Raynet GmbH assumes no responsibility or liability for any errors or inaccuracies that may appear in this document. All names and data used in examples are fictitious unless otherwise noted.

Any type of software or data file can be packaged for software management using packaging tools from Raynet or those publicly purchasable in the market. The resulting package is referred to as a Raynet package. Copyright for any third party software and/or data described in a Raynet package remains the property of the relevant software vendor and/or developer. Raynet GmbH does not accept any liability arising from the distribution and/or use of third party software and/or data described in Raynet packages. Please refer to your Raynet license agreement for complete warranty and liability information.

Raynet GmbH Germany
See our website for locations.

www.raynet.de



# **Contents**

Introduction	6
RayEval Features at a Glance	6
RayEval is Part of RaySuite	7
Development Roadmap	7
Additional Resources	8
System Requirements	9
Hardware Requirements	9
Supported OS	9
Prerequisite Software	10
Product Installation	13
Install RayEval Using an MSI	13
Install RayEval Using an MSIX	22
Product Activation	23
License Wizard	24
Start Express edition	30
Use Order Number	32
Use License File	38
Use Floating License Server	40
I Do Not Have a License or Order Number	41
I Want to Take my Activation Back	41
Working with RayEval	43
Typical Workflows	43
The Home Screen	43
The Main Toolbar	46
The File Menu	47
Start a New Project	48
New Project From Scratch	49
New Evaluation From RayFlow	50
New Evaluation on a Virtual Machine	51
Opening a Project	54
Editing Projects	55
Project Properties	55
Evaluation	62
Project Tools	63
Changing the Order of Steps	64
Editing a Screenshot	65



Removing a Step	66
Importing Steps	68
Working With Snapshots	70
Saving the Project	72
Starting Setups	75
Exporting Documents	86
Find and Replace	90
TestRail Integration	93
Snipping Tool	94
Working With RayFlow	95
Introduction	95
Signing in to RayFlow	95
Signing out from RayFlow	99
Settings	100
Interface	101
Project	103
Hotkeys	104
Templates	105
RayFlow	107
TestRail	108
Snapshots	109
Virtual Machines	110
Snapshot Selector	113
Preparing Virtual Machines	114
Advanced Configuration Options	117
About	121
Get Started	122
License and Edition	123
Troubleshooting	124
Command Line Interface	125
Advanced Information	129
Elements and Special Properties	129
Standard Properties and Values	143
Troubleshooting Virtual Machine Problems	146
Project Configuration	148
General Information	148
Project Custom Properties	149
Configuration of Evaluation Stages	151
Adjustment and Configuration of Template Documents	152



Example Project (	Configuration XML	157
Documentati	onConfiguration.xml	157
TestProjectCo	onfiguration.xml	158
ProjectConfig	uration.xml	162
Need Help?		168



# Introduction

RayEval facilitates a semi-automated capture of an installation routine including choice selections, configuration input, and etc. Captured data can then be edited followed by an export into Word or PDF format documents.

Generally, such documentation must be created manually with screenshots of button choices, generation of text boxes, writing of instructional text, and so on. However, RayEval accomplishes this semi-automatically in three easy steps.

In the first step the user (typically a packaging engineer, evaluator, or tester) prepares the templates for his evaluation project. With these templates the project phases and the Word or PDF document for export are defined.

The second step is the creation of the project itself with screenshots from the whole screen or screen sections, which can be easily taken by clicking the middle mouse button (default) or a different combination of keys of the preferences of the user and the project properties.

After this, the project can be saved as file (.rex) or exported to Word, PDF, or RayFlow.

The outcome is a professional document with a table showing the separate sections and screenshots. If needed, additional information can be added at a later time.

# RayEval Features at a Glance

The core features of RayEval cover the following evaluation requirements:

- Easy capturing of screenshots by a simple mouse click.
- Automatic creation of text boxes.
- Fully configurable by using an .xml file.
- Easy export to .pdf, .docx, .doc, or directly to RayFlow
- Integral part of RaySuite and <u>fully integrated in RayFlow</u>.



# RayEval is Part of RaySuite

# Best-Practice Workflow for Enterprise Application Lifecycle Management

RaySuite offers product solutions for the creation, operation, and control of individually customized Enterprise Application Lifecycle Management projects in automatically administered environments.



Designed as part of the RaySuite, Raynet's product suite for Enterprise Application Lifecycle Management, RayEval is a packaging process related documentation tool. It may be used either way - as standalone or as integrated part of the RaySuite.

When RayEval is used as part of the RaySuite, it is connected at RayFlow, the workflow mangement component of the RaySuite. Please refer to the <u>RaySuite website</u> for further information regarding the benefits this product offers for your daily business tasks.

# **Development Roadmap**

Upcoming releases will introduce additional new components and features, resulting in boosted productivity, time and resource savings, and improvements regarding the product experience. As the development of RayEval is customer oriented, please let us know if you have any ideas or suggestions of how you see your ideal documentation tool. Our sales team will be happy to get in touch with you. Also make sure to check our website <a href="http://raynet.de">http://raynet.de</a> to never miss our next releases, announcements, special offers, and product trainings.



## **Additional Resources**

Further information regarding RayEval 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 RayEval.
- The *Operations Supplement* provides information about third-party software packages and libraries redistributed with RayEval.
- The product website <a href="https://raynet.de/en/Raynet-Products/RayEval">https://raynet.de/en/Raynet-Products/RayEval</a> 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 or visit our RayAcademy website <a href="https://raynet.de/en/Training.">https://raynet.de/en/Training.</a>



# System Requirements

RayEval is a portable application. The given requirements name the prerequisites for devices running the RayEval application.

## Hardware Requirements

#### Minimal

CPU: Intel Core i5

• Screen resolution: 1024 x 768 pixels

• RAM: 4GB

• Disk space: 10GB

#### Recommended

• CPU: Intel Core i7

• Screen resolution: 1280 x 1024 pixels

• RAM: 16GB or higher

• Disk space: 100GB or more



#### Note:

The installation of the RayEval framework itself requires about 70MB of disk space. The amount of additional space required depends on the amount of packaging material and the location of your data store.

# Supported OS

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

- Windows 8.1
- Windows 10
- Windows 11
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016
- Windows Server 2019
- Windows Server 2022



## Prerequisite Software

#### General

Microsoft .NET Framework 4.7.2

## RayFlow

In order to use the RayFlow functionality directly from RayEval, a running RayFlow server has to be accessible.

## Hyper-V Integration

- Both host and guest machine must have PowerShell 3.0 or newer installed.
- Windows Remote Management
- RayPack Studio Tools for Hyper-V need to be installed on the guest machine.

The tools can be installed from a Windows Installer package that is present in the RayEval sub folder Tools\HyperVTools\Packaging Suite Tools for Hyper-V.msi.

The installation of the tools is required, so that the user can see interactive prompts and windows on Hyper-V machines. It is recommended to install the tools as a part of the base snapshot.

### VMware Workstation / ESXi5.5 - 6.0

RayEval supports the following products:

- VMware vSphere 5.5-6.0
- VMware Workstation 10 and newer
- VMware Workstation 7, 8, 9 and for VMware vSphere 4.x, 5 and 5.1 are <u>experimentally</u> supported.

To use any of VMware Workstation / ESXi machines, one of the following must be installed in an appropriate version:

- VMware Workstation
- VMware VIX API (<a href="https://my.vmware.com/web/vmware/details?">https://my.vmware.com/web/vmware/details?</a> productId=26&downloadGroup=VIX-API-162)
- vSphere

The required VIX API version depends on the systems that it needs to connect to. The below table presents the supported versions of VMware products depending on the installed VIX API version.

VIX API Version	VMware Platform Products	Library Location
1.11	Workstation 8 or earlier	Workstation-8.0.0-and-vSphere-5.0.0



VIX API Version	VMware Platform Products	Library Location
1.12	Workstation 9 or earlier	Workstation-9.0.0-and-vSphere-5.1.0
1.13	Workstation 10 or earlier	Workstation-10.0.0-and-vSphere-5.5.0
1.14	Workstation 11 or earlier	Workstation-11.0.0
1.15.0	Workstation 12 or earlier	Workstation-12.0.0

#### ESXi 6.5 and newer

To make use of ESXi 6.5+ servers, the following prerequisites must be met:

- PowerShell 3.0 or higher
- PowerShell Execution Policy set to Unrestricted or RemoteSigned
- PowerCLI module (www.powershellgallery.com/packages/VMware.PowerCLI)
- VMware Tools installed on the VM
- **Guest operations** and **System** permissions granted to the user executing the product.
- The following privileges should be assigned to the role:
  - O System. Anonymous
  - O System.Read
  - o System. View
  - O VirtualMachine.GuestOperations.Execute
  - O VirtualMachine.GuestOperations.Modify
  - O VirtualMachine.GuestOperations.Query
  - O VirtualMachine.Interact.CreateScreenshot
  - O VirtualMachine.Interact.GuestControl
  - O VirtualMachine.Interact.PowerOff
  - O VirtualMachine.Interact.PowerOn
  - O VirtualMachine.State.CreateSnapshot
  - O VirtualMachine.State.RevertToSnapshot



#### Be aware:

The **System roles** in vCenter are permanent and it is not possible to edit the privileges associated with these roles.

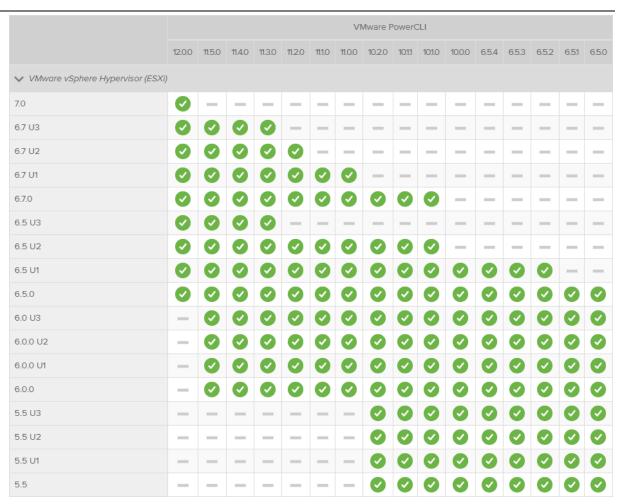


#### Note:

If the full path to the .vmx file is specified, it is necessary that the user also has Datastore.Browse privileges. If only the VM name (without datastore, folder, and .vmx extension) is specified, Datastore.Browse privileges are not needed.

Combination of supported versions is presented in the following table:





#### More information about PowerCLI:

- https://pubs.vmware.com/vsphere-51/index.jsp?topic=% 2Fcom.vmware.powercli.cmdletref.doc%2FGet-VMGuest.html
- <a href="https://pubs.vmware.com/vsphere-51/topic/com.vmware.powercli.cmdletref.doc/Invoke-VMScript.html">https://pubs.vmware.com/vsphere-51/topic/com.vmware.powercli.cmdletref.doc/Invoke-VMScript.html</a>
- https://pubs.vmware.com/vsphere-50/index.jsp?topic=%2Fcom.vmware.wssdk.pg.doc\_50% 2FPG\_ChD\_Privileges\_Reference.22.3.html



# **Product Installation**

RayEval is delivered both as an MSIX file and as an MSI file.



#### Note:

The installation using an MSIX only works on Microsoft Windows 10 and Microsoft Windows 11. For all other OS it is necessary to use the MSI file for installation. The installation using the MSIX file will also work on Microsoft Server 2019 and Microsoft Server 2022 if they are using the Desktop Experience feature.

# Install RayEval Using an MSI

### Preparing the Installation

Before the application is installed on a device some preparations are needed:

- 1. The target system needs to meet the system requirements described within the Requirements chapter.
- 2. A Windows user with sufficient rights for installations has to be logged in. Administration rights are required for the installation of RayEval.
- 3. Close all dispensable applications during the setup routine execution.

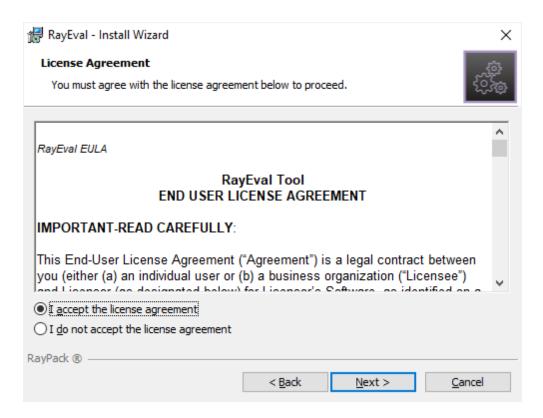
## Installing RayEval

Launch the RayEval setup with a double-click on the MSI file and wait for the **Welcome Screen** to be prepared.





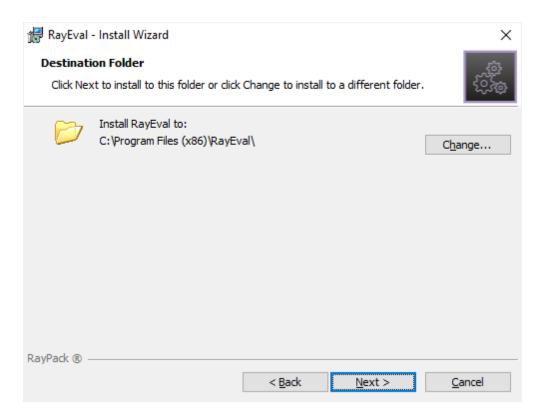
Click on the **Next** > button to proceed with the installation.



The **End User License Agreement** dialog appears. In order to install RayEval, the *End User* 

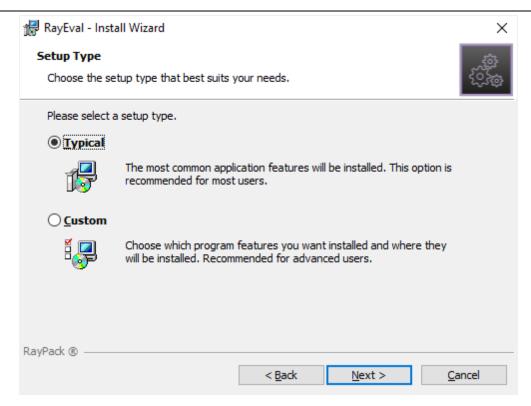


License Agreement has to be accepted. To proceed, read the End User License Agreement, select the I accept the license agreement option, and click on the Next > button.



The **Destination Folder** dialog appears. Select the folder where the program will be installed (default C:\Program Files (x86)\RayEval). Once ready, press **Next>** to continue.





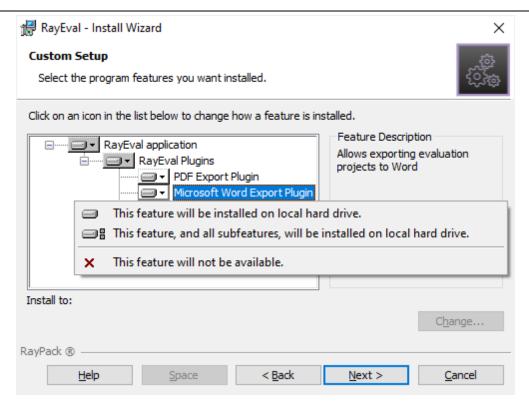
The **Choose Setup Type** screen is displayed, presenting the three options available for the installation of RayEval:

- **Typical** installs the RayEval application with all plugins.
- **Custom** allows to install only selected resources (for example specific plug-ins).

After pressing **Next>** and if **Custom** installation was selected, the **Custom Setup** screen is displayed, presenting the application features. If a typical installation was required, the RayFlow configuration will be shown instead.

To remove a feature from the installation expand the installations status modificator menu as displayed within the screenshot below and then select **Entire feature will be unavailable**.



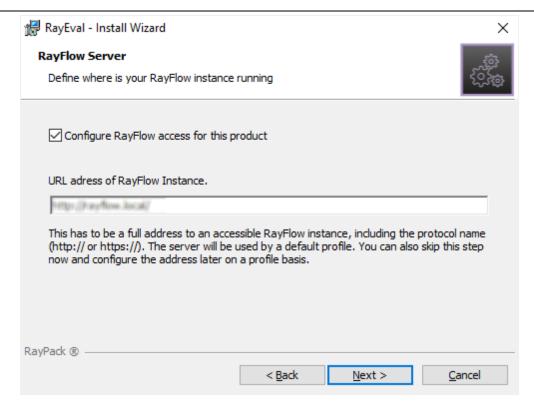


Furthermore, different functionalities are offered by additional buttons.

- **Browse...**: This button offers the ability to change the installation path.
- **Reset**: This button is used to reset the customizations defined by the user.
- **Disk Usage**: This button shows the size of the currently chosen installation, the size of the currently chosen disk, and the space that will be available on the disk before and after the installation.

Click **Next** > to proceed.



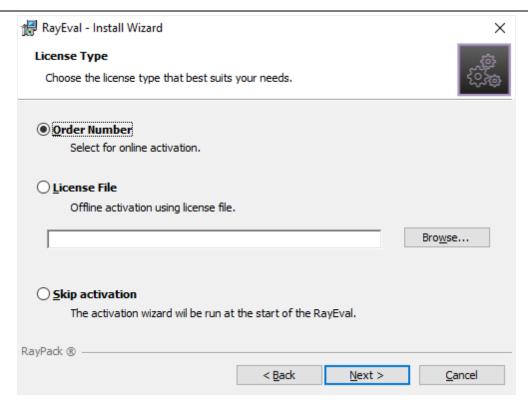


The **RayFlow Server** screen is displayed. This is where the RayFlow access for this product needs to be configured.

If the **Configure RayFlow access for this product** checkbox is checked, the RayFlow server can be configured. The full address of the RayFlow instance that is about to be used needs to be entered in the text field. If the **Configure RayFlow access for this product checkbox** is left unchecked, RayFlow access can still be configured in the **Settings** page of RayEval after the installation has been successfully completed.

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





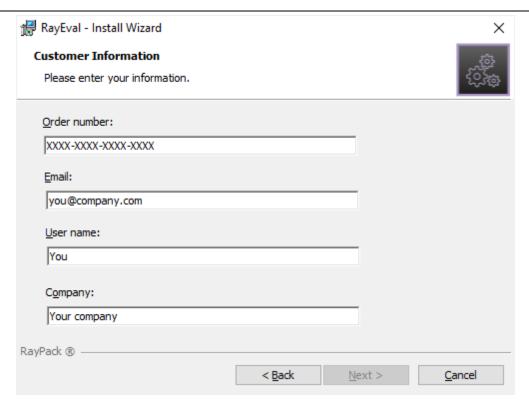
The **License Type** screen provides options to either activate the RayEval instance via order number and online activation service, by using an already prepared file (\*.license), or to skip activation for now. If the activation is skipped, it will need to be performed later when RayEval is launched. For more information on product activation at the first launch of RayEval read this section.

To use an already existing license file, which most likely has been provided by the Raynet support team, the **Browse...** button has to be clicked. Use the controls of the system browser dialog to navigate to the \*.license file and select it with a click on the **Open** button.

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

If activation by order number has been selected during the previous step, the **Customer Information** screen is displayed:

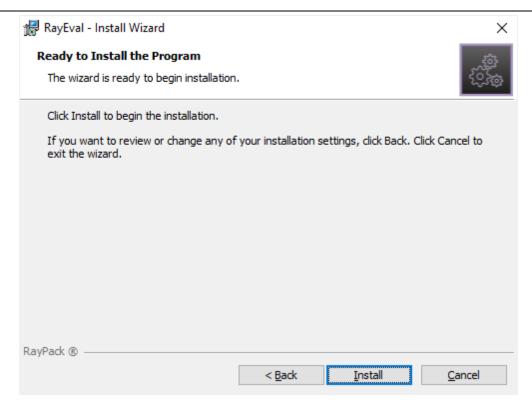




Please enter your individual RayEval Order number and provide user information, such as Email, User name, and Company. The information will be used to verify the order number during the upcoming execution procedure.

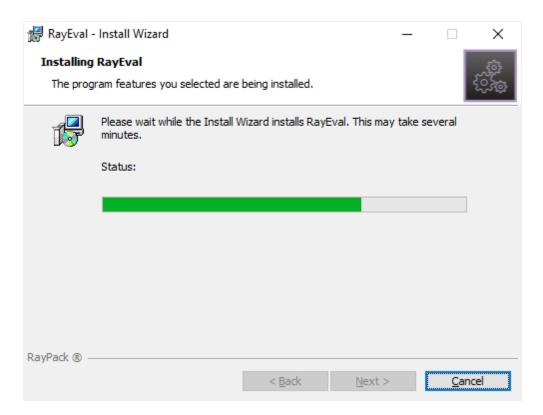
Click the **Next >** button to proceed.





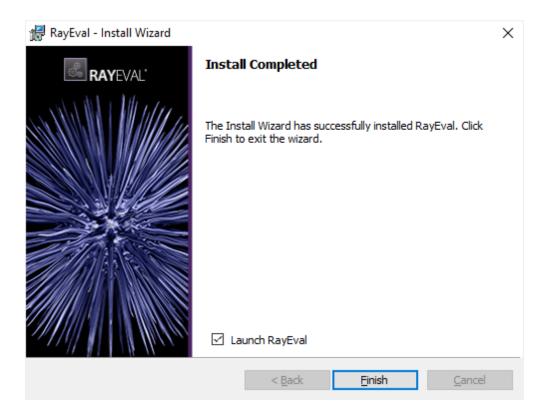
Click **Install** to start the installation.

A **Progress Indication** dialog is displayed as long as the installation steps are executed.





As soon as all required measures are done, the **Install Completed** dialog is presented.



Click the **Finish** button to exit the setup. You can also start RayEval directly, by ticking the checkbox **Launch RayEval** before closing the Wizard.

If activation was not performed during the installation process, the product will be activated at the first launch.

For more information on the product activation read this section.

# Install RayEval Using an MSIX

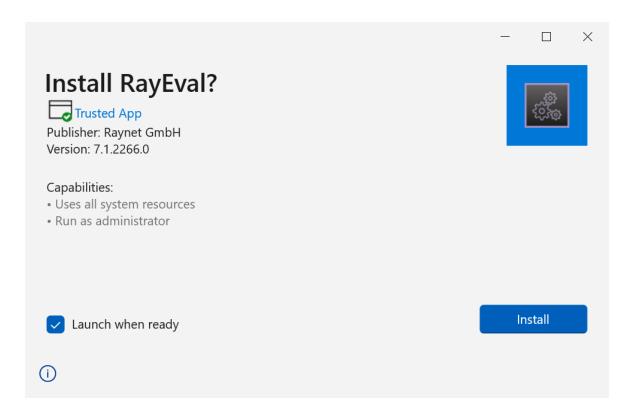
## Preparing the Installation

- 1. The packaging machine has to meet the system requirements described within the previous chapter.
- 2. A Windows User with sufficient rights for installations has to be logged in.
- 3. Close all dispensable applications during the setup routine execution.



### Installing RayEval

Launch the RayEval setup with a double-click on the MSIX file and wait for the App Installer to start.



It is possible to either automatically launch RayEval after the App Installer has been closed or to decide against an automatic launch of the application by checking or unchecking the **Launch when ready** checkbox.

Click on the Install button to start the installation. The App Installer will now start the installation process and automatically install the product.

After RayEval has been successfully installed click on the **Launch** button to start RayEval. When RayEval is started for the first time and has not been licensed on the machine before, the License Activation tool will now be started.

## **Product Activation**

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

- Directly within installation
  - By supplying the order number
  - o By supplying an already generated license file (.rsl format)



• When the <u>product is started for the first time</u>.

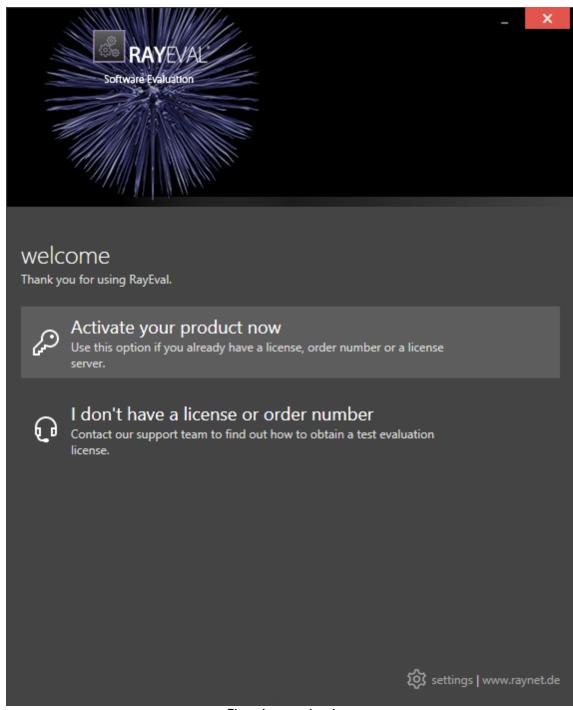
If RayEval detects that no valid license is present on start-up, the license activation wizard will be shown after starting the main executable. The tool can be also started manually, by executing the Raynet.LicenseActivation.exe from the main installation folder.

#### **License Wizard**

This section describes the usage of the licensing wizard.

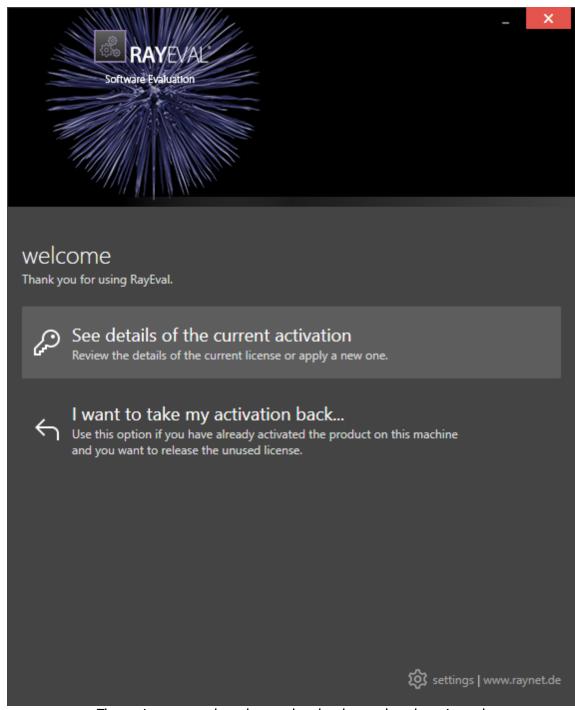
On the initial start of RayEval, the License Activation Tool is shown. If the need to transfer an existing license arises, the License Activation Tool can be started manually. There are a variety of ways in which a license can be activated and below they are described in detail.





First time activation



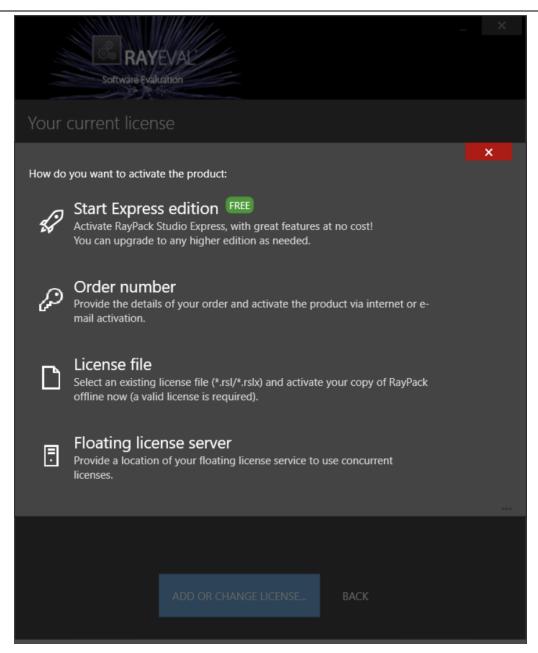


The main screen when the product has been already activated

#### **Activate Your Product Now**

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





#### Start Express edition

Used to activate the RayEval Express edition, which offers great features at no cost. It can be easily upgraded to any higher edition.

#### 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 (.rsl) received from Raynet

• Use floating license server



Activation using a local floating license server.

#### 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 do not have a license or order number

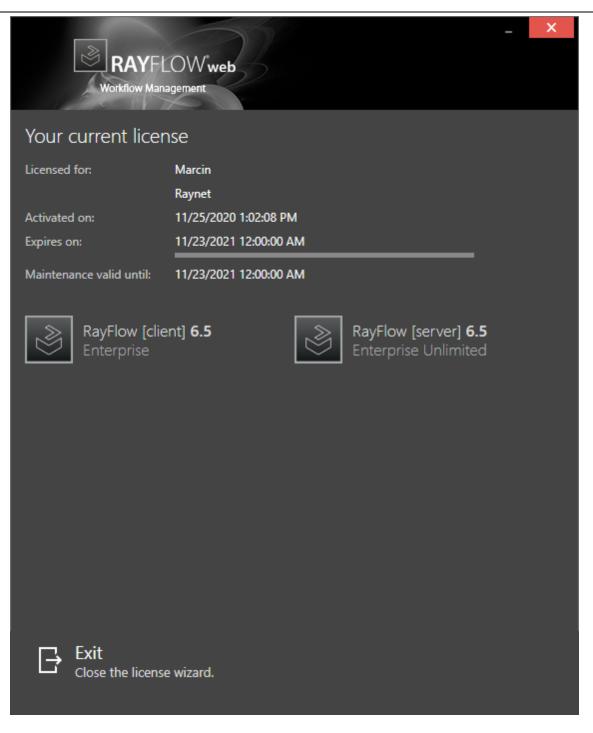
Choose this option if there is neither a license nor an order number available. For in-depth information please read this <u>section</u>. This option is only visible if the product has not been activated yet.

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

Use this option to deactivate a currently licensed version of RayEval. For in-depth information please read this <u>section</u>. 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, the products shown may differ from the products shown above.

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

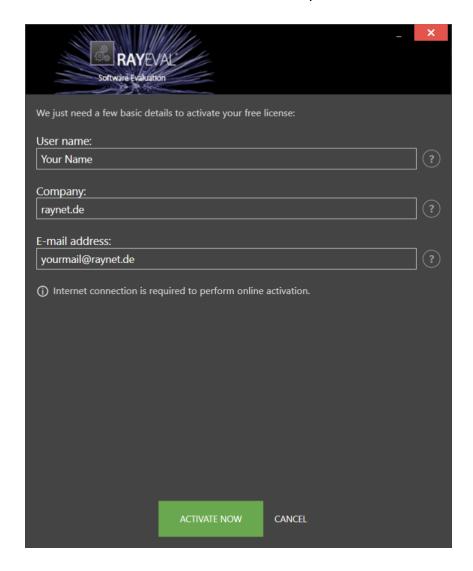


## Troubleshooting

If any issues arise during the activation process, please contact our <u>support team</u> to receive assistance in activating RayEval.

#### **Start Express edition**

The Express edition of RayEval can be activated online. The activation process generates a license file (\*.rs1) that is created (or must be copied) to the installation directory of RayEval (in the same location as the RayEval.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.



Choosing the **ACTIVATE NOW** button, connects to the Raynet license server using the information provided and will dynamically generate a license file. Choosing the **CANCEL** button



will abort the activation process.



## **Details**

#### User name:

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

#### Company:

This is the name of the company for which RayEval will be licensed. This name will appear in the <u>License and Edition</u> view of RayEval.

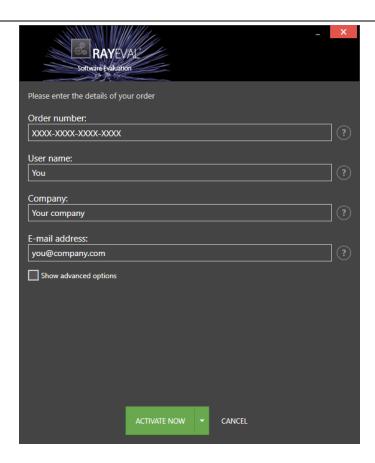
#### E-mail address:

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.

#### **Use Order Number**

RayEval can be activated either directly online or via email once the order number has been delivered. The activation process generates a license file (\* .rsl) that is created (or must be copied) to the installation directory of RayEval (in the same location as the RayEval.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).





Choosing the **ACTIVATE NOW** button, connects to the Raynet license server using the information provided and will dynamically generate a license file. Pressing a little arrow next to it and then choosing the **ACTIVATE MANUALLY** button will open a dialog as <u>shown here</u>. Choosing the **CANCEL** button will abort the activation process.

## **Order Details**

#### Order number:

This is the unique order number received when RayEval has been purchased. If it is necessary to recover the order number, please contact our <u>sales team</u>.

#### User name:

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

#### Company:

This is the name of the company for which RayEval will be licensed. This name will appear in the <u>License and Edition</u> view of RayEval.

#### 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 RayEval are shown.

#### Hardware ID:

This is an 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

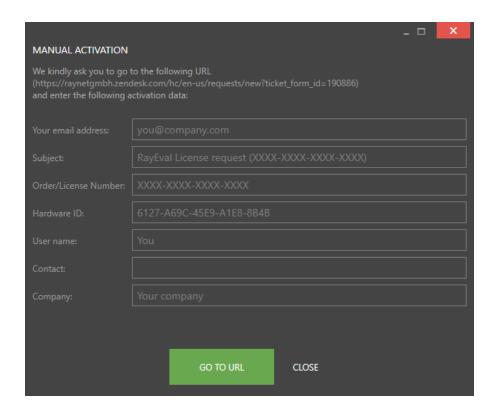
If this option is selected, the order number and details may be used to activate RayEval on a second machine, which has a differing hardware (which will obviously result in a different Hardware ID). This assumes that RayEval has been uninstalled from the machine on which it was previously activated on.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



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 <a href="https://example.com/here/exam

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, the products shown may differ from the products shown above.

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

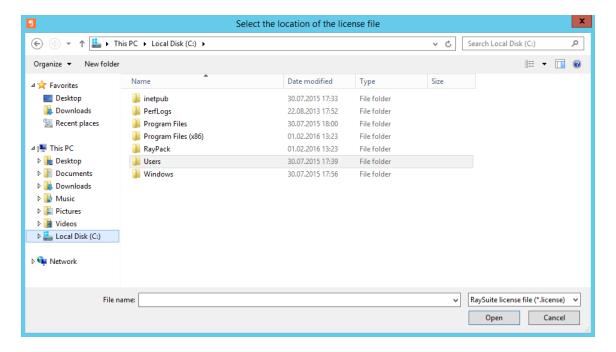
## Troubleshooting

If there are any problems during the activation process, please contact our <u>support team</u> for receiving assistance in activating RayEval.



### Use License File

If a license is already available, or a license file has been received as a result of activating RayEval via URL, then all that is required is to copy the license file into the installation directory of RayEval (the directory in which the <code>RayEval.exe</code> 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 RayEval installation directory. Please ensure that sufficient permissions to allow the creation/copying of a file to the installation directory of RayEval are available.



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









#### Note:

Depending on the license, the products shown may differ from the products shown above.

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

## Troubleshooting

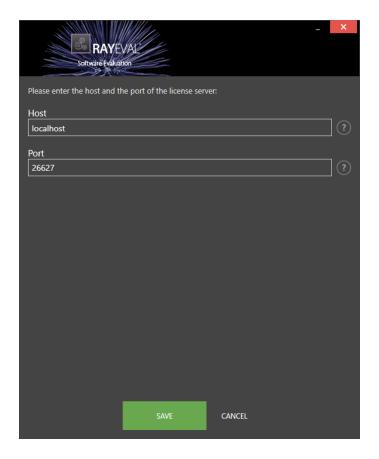
If there are any problems during the activation process, please contact our <u>support team</u> for receiving assistance in activating RayEval.

## **Use Floating License Server**

RayEval 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 nor an order number is available, then just simply register with Raynet to download an evaluation license for RayEval. This allows potential customers to test and work with RayEval before purchasing it. 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 RayEval.

## I Want to Take my Activation Back

Deactivating an existing license for RayEval may be required if the 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 evaluation purposes, deactivating the license is the right thing to do.

## To Deactivate a Licensed RayEval Installation

- 1. Launch RayEval and open the license and edition tab in the **about** section.
- 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 RayEval 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.
- 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 RayEval installation, on the current machine or any other.

## Troubleshooting



If any problems during this process occur, please contact our <u>support team</u> for receiving assistance in deactivating RayEval.



## Working with RayEval

Once RayEval is installed, launching the program executable from the application installation directory (e.g. C:\Program Files (x86)\RayEval\RayEval.exe) invokes the RayEval home screen.



#### Be aware:

To work with RayEval administration rights are needed.

## **Typical Workflows**

The following represents a typical workflow in RayEval:

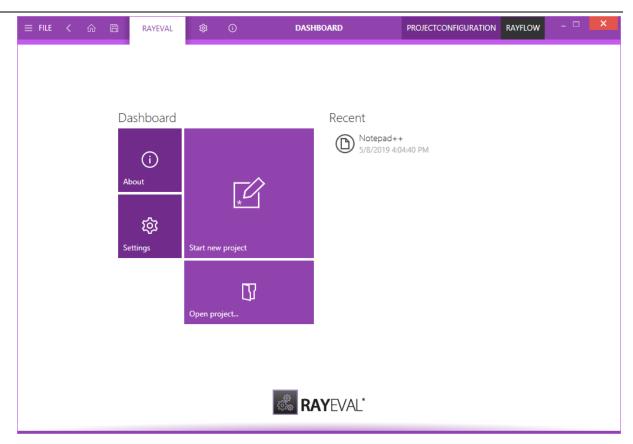
- 1. Start a new project by clicking on the **start new evaluation** tile on the dashboard.
- 2. Select the installation sources and provide necessary details. RayEval will automatically extract the common properties and thereby provide some of these information like application name, version, manufacturer, etc.
- 3. Perform the installation and configuration of the application. Use the mouse (by default, the trigger is assigned to the **Middle Mouse Button**) to capture UI elements or take screenshots of whole windows. Default texts for comments and descriptions of actions will be automatically added by RayEval and can be edited afterwards.
- 4. When ready, export the project to another format e.g. .pdf. or .docx, save it as RayEval file, or export it directly to RayFlow.

More information on how to work with RayEval is found in the chapter Start a new Project.

## The Home Screen

The Home Screen of RayEval contains a **dashboard** and **recent** section for quick file access. Whenever the application is launched without a specific file trigger, this view is the starting point for the new RayEval session.



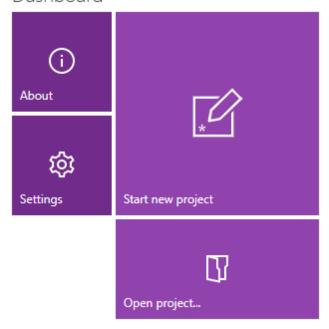


## The Dashboard Tiles

The RayEval **dashboard** contains tiles which provide quick links to underlying content. In this release of RayEval the **dashboard** contains four tiles titled **About**, **Start new project**, **Open project...**, and **Settings**. These tiles provide direct access to the linked contents and features when clicking upon.



## Dashboard



The tiles shown in the image before represent:

- **About** Opens the **About** section of RayEval. This section contains information about licensing, troubleshooting, etc.
- **Start new project** Selecting this tile, opens the Project properties window of RayEval. In this window, users can start with defining the properties for their new evaluation project and then start with the package evaluation.
- Open project... Opens an existing RayEval evaluation project (. rex).
- **Settings** Selecting this tile, opens the *Settings* section of RayEval. Within this section, a user can configure triggers for their evaluation project, interface, and export template properties.

## The Recent List

The recent list is shown on the right-hand side of the dashboard content area. It lists recently accessed checklists and files of the currently logged in User Profile.

The list by default contains the last files that have been opened in RayEval. Clicking on a list item immediately opens the related file in RayEval.



The context menu allows to remove items from the recent list, as well as opening their location in Windows Explorer.



The items can be pinned and unpinned from the list - to toggle pinning, first hover its button with mouse and then press the little pin icon next to the file name. Same technique can be used to perform reverse operation of unpinning.

It is also possible to clear the entire recent list items via the **INTERFACE** screen of RayEval.

## The Main Toolbar

Throughout RayEval, the main tool bar is visible, which, dependent on the contents of the view shown adds or removes menu items dynamically. As a rule of thumb, the items shown below are always present on the main tool bar.



#### 1. FILE

## 2. View history

With a left-click on the arrow button, users navigate one step back within the history of recently opened views. Right-clicking the arrow displays the recently visited views, and allows to return to a specific view from that list. This view history is limited to those views without project relation, or with relation to the currently opened project. Thus, returning back to a view is not possible if it was called for a project that is no longer opened.

### 3. Home

Choosing this button will return you to the Home Screen. If any projects and or files are opened and there is a requirement to save any changes, you will be prompted to save before returning to the Home Screen.

#### 4. Save

This button can be used to save the currently selected project

#### 5. RAYEVAL

This is the product name which will be highlighted when either on the Dashboard or in a project.

#### 6. SETTINGS

Opens the <u>configurations</u> for RayEval. When the **Settings** screen, this will be highlighted.

### 7. ABOUT

Contains information on licensing, troubleshooting, etc. When in the **About** screen, this will be highlighted.

#### 8. Window title

The window title displays the current scope of activity. If an editor is active, the file name of the currently opened project is part of the window title as well.



#### 9. Profile switcher

This button can be used to switch between the different available project configurations.

### 10.RayFlow button

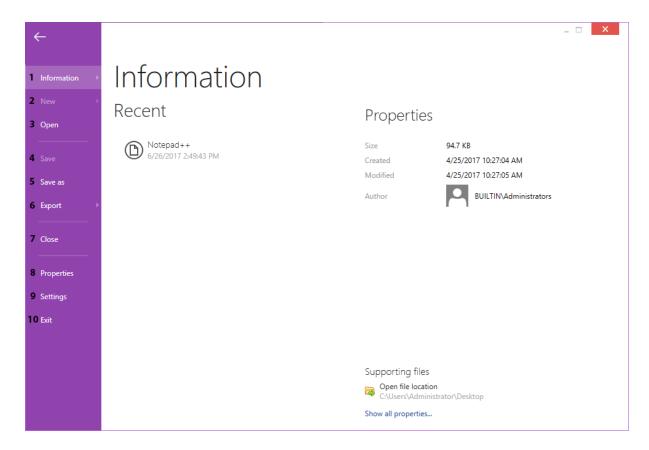
This tile shows the current status of the RayFlow connection. Clicking on it enables a user to log into RayFlow or log out of the current RayFlow instance.

#### 11.Standard window controls

The standard window controls allow to minimize, maximize, resize and close the application window. The availability of each control follows the Windows schema for standard controls as known from any desktop application.

### The File Menu

Clicking the **FILE** button contained within the Main Toolbar opens the file menu. This menu allows users to quickly access common functions.



### 1. Information

Shows a list of recent projects and their related properties. Hovering over an item under the **recent** title will update the **properties** section accordingly. Additionally, clicking on an item will load the related project. At the bottom-right of this view, users can click on **Show all properties...** to view the properties related to the currently loaded project file.



### 2. New

Opens the dialog that allows to create a new evaluation project. If an evaluation project is loaded and there are outstanding changes, the user will be asked to save them before continuing.

## 3. Open

Open an existing evaluation project. If an existing project is loaded and there are outstanding changes, the user will be asked to save them before continuing.

### 4. Save

Saves any outstanding changes in the currently open evaluation project. Please note that this button is only active when pending changes are detected.

### 5. Save as

Allows to save the currently opened evaluation project under another name or location.

## 6. Export

Allows the user to export evaluation results in either PDF or Word format. When a format is selected, the user can then select the desired template for export using the drop-down option. An additional option RayFlow is added to the export page, when the user is authenticated in RayFlow (using the button in the top bar of the window or via command line)

#### 7. Close

Closes the current evaluation project. If any changes are pending, the user will be asked to save them before continuing.

## 8. Properties

Opens the <u>Project Properties</u> view of the currently loaded project.

## 9. Settings

Opens the **Settings** view.

### 10.Exit

Closes the current project and the whole RayEval application. If any changes are pending, the user will be asked to save them before continuing.

## Start a New Project

This chapter of the document explains how to start a new project using RayEval, through a series of steps. To start a new project, first click on the tile **Start new project** on the RayEval **dashboard**. This will open a new evaluation project.



# New

## Create



## Software evaluation

Create a new Evaluation project



### TestRail

Create a new TestRail test case



## RayFlow

Create a new project based on a package from RayFlow

Currently there are three different types of projects available.

- **Software evaluation** Choose this option to create a new evaluation project.
- Documentation Choose this option to create a new documentation project.
- RayFlow Choose this option to create a project based on a RayFlow package.

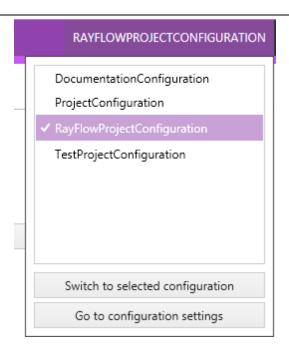
## **New Project From Scratch**

This chapter of the document explains how to start a new project using RayEval. To start a new project first click on the tile **Start new project** on the RayEval **dashboard**. This will open a new project selection screen. Choose the **Software evaluation** option to continue with a new empty evaluation project.

## **Selecting Project Configurations**

When a new project is created, the current configuration (determining for example the layout, tabs, input fields etc.) is taken. To change to a different configuration, select it by clicking on the **Profile switcher** located in the right part of the header. The current selection is highlighted like in the following picture:





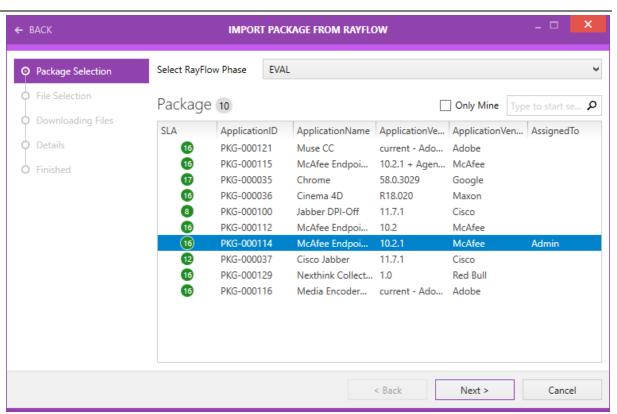
The view shows all available configurations. In the example screenshot only the default configurations are available. To add a new configuration file press the **Go to configuration settings** button located underneath the list. More regarding the configuration settings can be found in the **Project** chapter.

## **New Evaluation From RayFlow**

This chapter of the document explains how to start an evaluation project using RayEval, from an existing RayFlow task. To start a new evaluation project, first click on the tile **Start new project** on the RayEval **dashboard**.

This will open a new evaluation project selection screen. Choose the **RayFlow** option to continue with a new evaluation project from RayFlow.





In order to create a new evaluation project, start by selecting a RayFlow project and then a phase within that project. The grid will be updated with a list of tasks belonging to the selected phase.

Once a task is selected, select the file to be used as a setup and the RayEval project is automatically created.

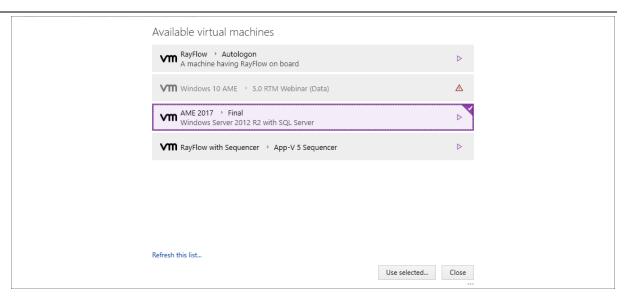
### New Evaluation on a Virtual Machine

It is possible to use a virtual machine for an evaluation instead of the local machine. This can be done by using the **Virtual machine...** button located in the swipe-bar of the evaluation.



Using this button will open the **Available virtual machine** screen.



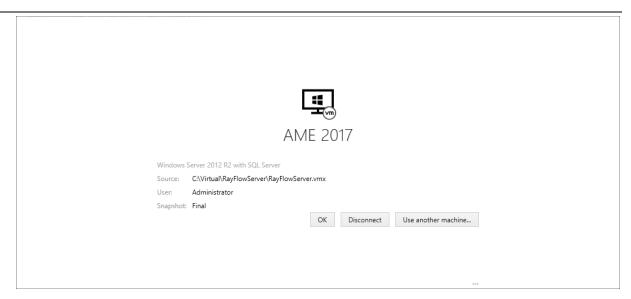


In this screen, the virtual machines that shall be used for the evaluation can be selected. Machines that have been configured but are currently not available are grayed out and marked by a warning symbol. The selected machines are highlighted as shown in the screenshot above. Click on the **Use selected...** button to use the selected machines or click on the **Close** button to return to the local machine.



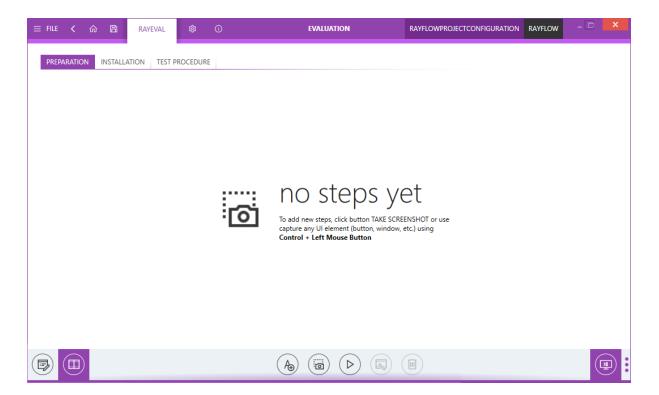
RayEval will now connect to the selected virtual machine. While plugging in to the machine, the action can be aborted by clicking on the **Cancel** link. After the connection has been successfully established, the **Overview** screen for the virtual machine is shown.





This screen can be used to either change the virtual machine, continue with the evaluation, or disconnect. Furthermore, some information about the virtual machine like path, user, and the selected snapshot are shown in this screen.

Use the **OK** button to continue, the **Disconnect** button to return to the local machine, or the **Use another machine...** button to select another virtual machine from the list of available virtual machines.



After continuing with the evaluation it can be used as if working on a local machine. Only the highlighted **Virtual machine...** button shows that the evaluation is currently done on a virtual



machine and not on the local machine.



#### Note:

After plugging in to a virtual machine, capturing of windows and controls on a local machine is disabled. Additionally, when connected to a virtual machine, the option to take a full screen screenshot is not available.



Clicking on the **Virtual machine...** button will open the **Overview** screen once more, which can be used to disconnect or change the virtual machine. When leaving the currently selected virtual machine, a confirmation screen will be shown.



In the **Confirm** prompt, there are three options available:

- **POWER OFF**: Can be used to power off the virtual machine and return to the evaluation on the local machine or to select another virtual machine.
- **LEAVE RUNNING**: Can be used to return to the evaluation on the local machine or to select another virtual machine, but the current virtual machine will not be turned off but stay active.
- CANCEL: Is used to abort the action and return to the currently used virtual machine.

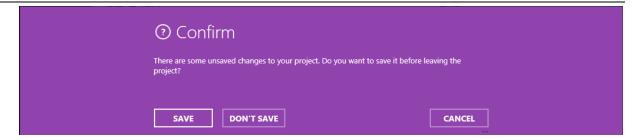
## Opening a Project

To provide easy access for users to the recently edited projects, in RayEval users can open a recently edited project directly from the **Home** screen of RayEval. The recently edited project is available on the right side of the **dashboard**.

To open a RayEval project from the disk, select the **Open project** tile on the **dashboard**. Once selected the file explorer dialog is opened. Navigate to the location of the project file (. rex). Select the file and click on **Open**. The RayEval project will be opened.

While working on a project, a user can open another project by going to the <u>File menu</u> and then selecting the **Open** option. Nonetheless, only one project may be opened for editing at a time. If there are unsaved changes in the current project, a notification is shown to the users, asking whether they want to save or not save the changes made to the project. Additionally, users can return back to the current project by selecting **CANCEL**.



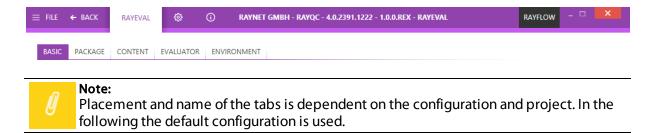


## **Editing Projects**

## **Project Properties**

One of the first steps in the evaluation is defining the project properties. Properties available as part of **project properties** page can be defined in the projectconfiguration.xml file. Properties defined by the user are organized within tab based categories.

For more information on how to define properties by using the projectconfiguration.xml read the chapter on Project Configuration.

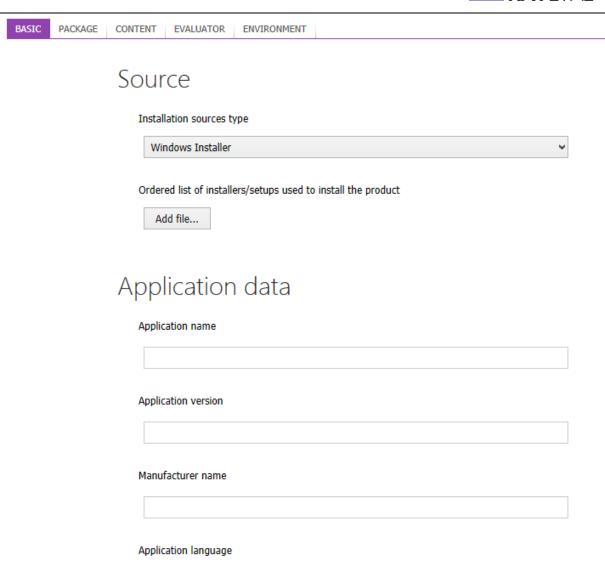


Follow the next steps to successfully complete the evaluation project and save it:

### **BASIC:**

1. Click on the **BASIC** tab to edit the basic properties of the project.





2. Either select the installation source type from the drop-down menu or it will be automatically set, based on the selection in the Installer selector property of tge **Select file to add** dialog. This dialog is available when a user clicks upon the **Add file...** button.

English



## Source

### Installation sources type

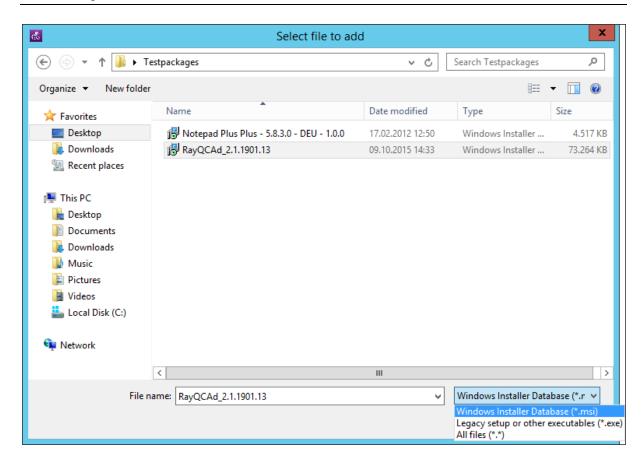


- 3. To add files to your project, click on the **Add file...** button.
- 4. **Select file to add** dialog will open. Select the installer source type from the drop-down menu, navigate to target file, select the target file, and then click on the **Open** button. This step can be repeated several times to add multiple files to an evaluation project and it is also possible to add any other file type to the project.



### Tip:

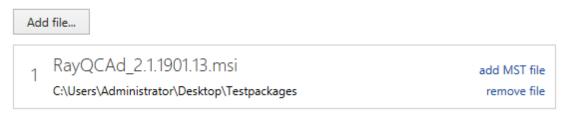
The ability to add all file types to the project is best used to add files that may be needed for product implementation to the project. For example: legacy setups (\*.exe) or script files (\*.bat, \*'.vba, \*.ps1, etc.).





5. The file is added to the project.

Ordered list of installers/setups used to install the product

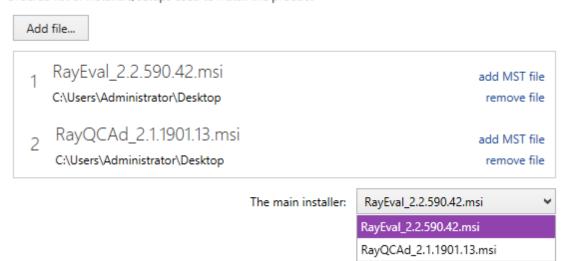


After adding a Microsoft Installer to the project, it is possible to add a transform file (\*.mst) by using the **add MST file** option next to the package.

- 6. With the addition of the files, the **Application data** is updated automatically.
- 7. If needed, it is possible to change the application data by selecting the field you want to change and setting the desired value.
- 8. To set a different **Application Language**, select the desired language from the drop-down menu.

If more than one file has been added to the project the main installer needs to be chosen from the drop-down menu.

Ordered list of installers/setups used to install the product



The information which is filled in by RayEval is taken from the installer which is defined as main installer in this field.

### PACKAGE:

Under the **PACKAGE** tab there is the option to define the **Package information**. The following



information needs to be provided:

- Comments
- Package version
- Size of sources

## Package information

Comments				
Package versio	n (for example 1.	0.1)		
1.0.0				
Size of sources				
25 87 MB				

## **CONTENT:**

Under the **CONTENT** tab, it is possible to set information pertaining to the **Special Handling** and **Security and permissions** of the package. As part of the special handling, the user can define whether the package contains any drivers. By default, the slide bar is set to **NO**. Under security and permissions, the user can define whether or not the package requires administrator privileges; by default the slide bar is set to **YES**. If desired, the default settings can be changed using the slide bar.



## Special handling

Does the package contain drivers?



NO

## Security and permissions

Does the package require administrator privileges?



YES

### **EVALUATOR:**

Under the **EVALUATOR** tab, the name of the author needs to be provided. Usually, the author for the evaluation project is an evaluator. However, based on the defined roles in work environments of the user the roles of the author may vary from packager, to consultant, or something else.

EV	ı.	11	I A	$T \cap$	п
E۷	А	LU	JΑ	IU	ĸ

**ENVIRONMENT** 

## **Author**

Evaluator

Max Mustermann

### **ENVIRONMENT:**

Under the **ENVIRONMENT** tab, information regarding the machine that is used during the evaluation is automatically set. RayEval provides the possibility to change the values that have been automatically set by selecting the field which should be revised and then entering a new value.

The various information that is gathered and set by RayEval under the section **Machine information** include:

• The architecture of the system



- The edition of the operating system
- The service pack of the operating system
- The version of the operating system
- The name of the operating system
- The name of the machine

BASIC	PACKAGE	CONTENT	EVALUATOR	ENVIRONMENT				
	Machine information							
			Specify the operating system architecture used during the evaluation					
			64-bit					
		Specify the operating system edition used during the evaluation						
			Standard Server					
			Specify the operating system service pack used during the evaluation					
	Specify the operating system version used during the evaluation							
		6.3.9600						
	Specify the operating system name used during the evaluation							

Under the **User Information** section the account name under which the evaluation is performed, is specified.

## User information

Specify the account name under which the evaluation is performed

RAYNET\m.mustermann



Tip:

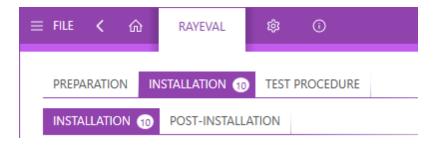
After the project properties have been added, it is recommended to the save the project. For information on how to save a project refer to the chapter <u>Saving the Project</u>.



### **Evaluation**

A user can define various stages for the evaluation project in the Projectconfiguration.xml file. For more information on how to configure an evaluation project with the Projectconfiguration.xml file read the Project Configuration chapter.

For this document a default configuration is used. In this configuration, the evaluation stages of RayEval are divided into three major stages: **preparation**, **installation**, and **test procedure**. These stages are organized as tabs and can be accessed by clicking them.



The subsection **Installation** is further divided into **Installation** and **Post-installation**.



#### Note:

For this guide, the default settings are applied. For information on how to modify the defaults to suit individual needs read the <u>Project Configuration</u> chapter.

## Preparation:

This section contains screenshots of the steps and the configuration required before installing a package.

### Installation:

This chapter is further divided into installation and post-installation

### Installation:

This section will contain screenshots concerning the installation steps of the package that is undergoing the evaluation.

### Post-installation:

This section will contain screenshots about what needs to be done after the package has been installed.

### Test Procedure:

This section will contain screenshots about what is required to be done to test the package.



## **Project Tools**

Along with the different sections pertaining to the evaluation of a package, various tools are available, which are located at the bottom of the RayEval application in the project editor > evaluation view.



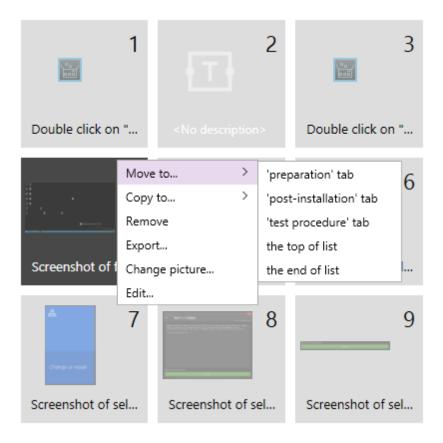
- Edit project properties: If Evaluation is highlighted, users can select this to return to the project editor > properties view and fill in any missing information. If already in the project editor > properties view, this option is highlighted.
- **Evaluation**: If **Edit project properties** is highlighted, users can select this to return to the project editor > evaluation view. If already in the project editor > evaluation view, this option is highlighted.
- **Snapshot comparison**: This will open a tool that creates snapshots and embeds the comparison result in your project.
- **New text step**: This will add a new step of the type text in the selected stage of evaluation project.
- **Take screenshot**: This is used to take a screenshot of the entire screen or a particular region.
- **Run the setup**: This will start the installation of the package. This button is only visible if activated in the Interface tab in the Settings.
- **Remove current step**: This will be activated in the installation process once a screenshot has been made. Afterward, the user can use this button to delete the selected step.
- **Virtual machine:** This will open the <u>Virtual Machine selector</u>.



## **Changing the Order of Steps**

If there is a need to change the order of the steps, select the step, drag it to the desired position and drop it. The sequence (numbered steps) is now changed.

Furthermore, using the options available in the context menu a screenshot or step can be deleted, moved or copied to another stage, or send to the first or last position of the current sequence of the evaluation project.



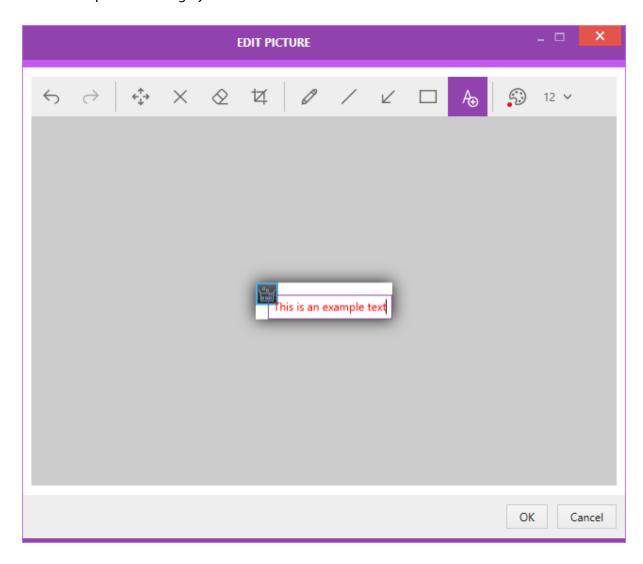
The following options are available in the context menu:

- **Move to...**: With this option a step can be moved to another tab. When selecting this option, there is the choice between all other tabs which are part of the project.
- **Copy to...**: With this option a step can be copied. When selecting this option, all tabs which belong to the project are available as target.
- **Remove**: With this option the selected step can be removed.
- **Export...**: With this option the screenshot in the step can be exported to a folder by using the file browser.
- **Change picture...**: With this option the screenshot in the step can be changed with a picture selected from a folder by using the file browser.
- **Edit...**: With this option the screenshot in the selected step can be edited. Selecting this step will open the screenshot in the integrated editor.



## **Editing a Screenshot**

The screenshot editor for a specific screenshot can be opened by clicking on the **Edit...** option in the context menu when opening the context menu on a step containing a screenshot or in the swipe-bar at the bottom with the **Edit picture** button. If the step does not contain a screenshot, the **Edit...** option will be grayed out.



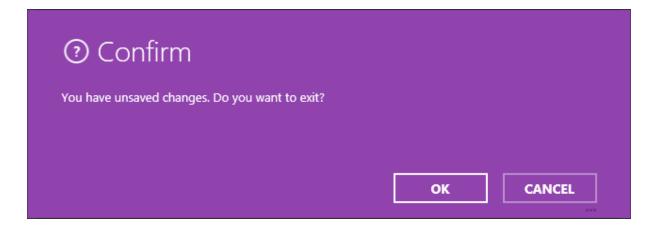
The following options are available in the editor.

- **Undo** Can be used to undo the last action.
- **Redo** Can be used to redo the last action that has been undone.
- **Move** Move the currently selected content to another position.
- **Delete** Delete the currently selected content.
- **Eraser** Can be used to erase a part of the screenshot.
- **Crop** Crop the screenshot to the borders of the currently selected content.
- Pencil Can be used to draw a free-form line.
- Line Can be used to draw a straight line.



- Arrow Can be used to draw an arrow.
- **Rectangle** Can be used to insert a rectangle.
- Text Can be used to insert a text.
- Color Can be used to select the color that will be used by the aforementioned tools.
- Size Can be used to select the size of the text that will be entered.

Changes can be saved by clicking on the **OK** button at the bottom of the editor. When clicking on the **Cancel** button or closing the editor without saving a confirmation prompt will be shown.



## Removing a Step

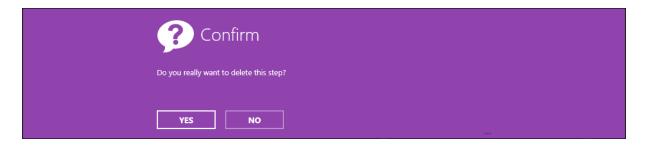
There are different possibilities to remove a step.

The first way to remove a step is to select the step and then click the **Remove current step** button.

The second way to remove a step is to select the step and then click on the **Delete** key on the keyboard.

The third way to remove a step is to right-click on the step and then select the **Remove** option from the context menu.

Before the step is deleted a confirmation dialog appears.





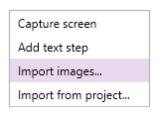
Click on the **YES** button to permanently delete the step from the project.



## **Importing Steps**

Steps can be imported from external formats: graphic files (PNG, JPG) or from other RayEval projects.

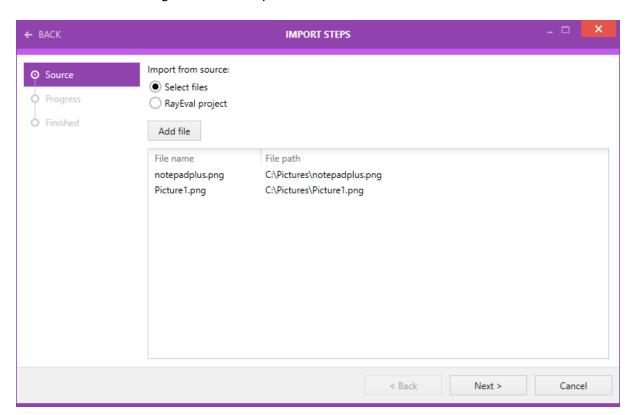
The import wizard is available from a context menu, invoked on an empty space:



## To Import Graphic Files...

The wizard is invoked by pressing the **Import images...** menu item from the context menu.

1. Select one or more image files to be imported



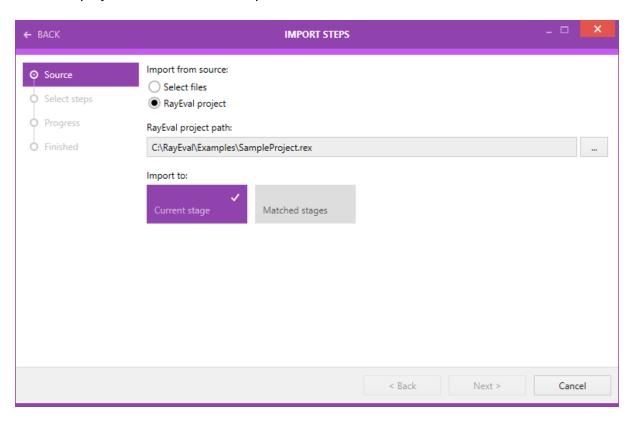
- 2. You can add more images by pressing the **Add file** button
- 3. Once ready, press **Next >** to go to perform the import process
- 4. The new steps will be added at the end of the currently selected sequence
- 5. If required, you can now reorder or move the imported steps to other tabs



## To Import Steps From Another RayEval Project...

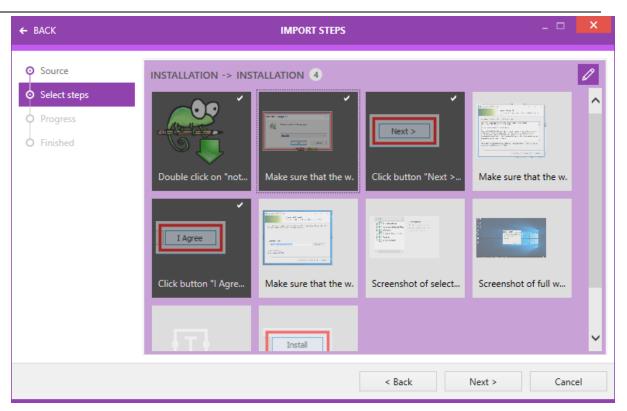
The wizard is invoked by pressing the **Import from project...** menu item from the context menu.

1. Select the project to be used as the import source



2. Select the type of the import. **Current stage** will look-up all steps (regardless of their parent stage) and import the selected ones to the currently selected tab. On the other hand, the **Matched stages** option will give more control, by grouping the steps to the matching tabs and offering the user to import to the corresponding ones.





Ø

#### Note:

Empty stages are not shown in the **Select Steps** wizard page. Also, if **Matched stages** option is used, stages from the source projects that are not present in the target project will not be shown.

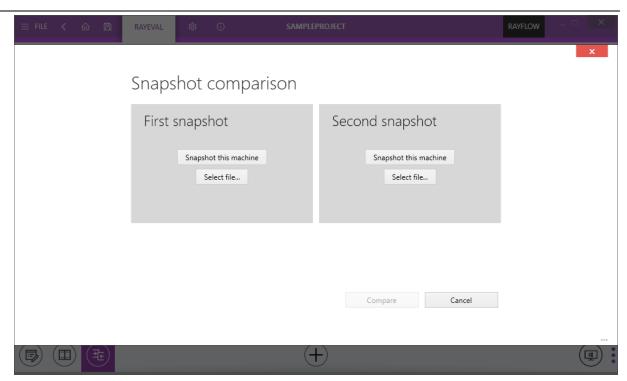
- 3. Once ready, press **Next >** to perform the import
- 4. Depending on the option selected, the new steps will be added either at the end of the currently selected sequence, or appended to their corresponding stage
- 5. If required, you can now reorder or move the imported steps to other tabs

## **Working With Snapshots**

The tab **Snapshot comparison** can be used to determine the difference between two snapshots, which helps with the identification of installed applications, required complexity, and in some cases the input format.

When the view is initially open, it is empty. Press + button to open an overlay window.



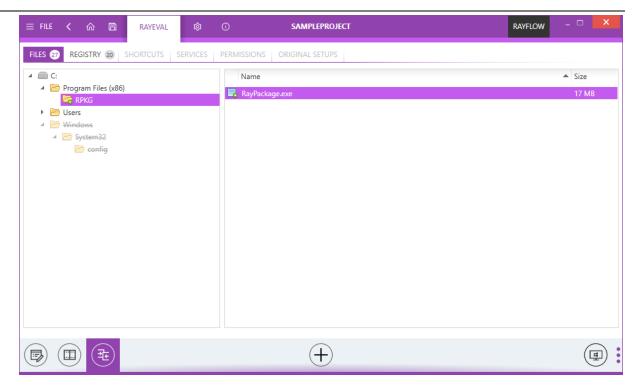


Depending on the current project settings (working locally or with a virtual machine), you can perform a snapshot on a local machine or on a virtual machine, as well as import the snapshot from an already prepared snapshot file. Usually, the first snapshot should be done as one of the first things before even starting the installation and the second snapshot once the work is finished.

To compare two snapshots press the **Compare** button.

If both snapshots are available and compared, the view changes and shows an overview of changes done between the two snapshots.





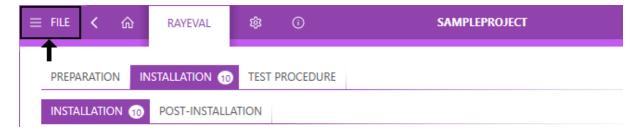
The tabs aggregate the following information:

- **FILES** the list of added / removed / changed files and folders.
- **REGISTRY** the list of added / removed / changed registry keys and values.
- **SHORTCUTS** the list of added or removed shortcuts.
- **SERVICES** the list of added or removed services.
- **PERMISSIONS** the list of permissions changed between snapshots.
- ORIGINAL SETUPS the list of vendor setups (EXE, MSI) detected during the installation.

Depending on the snapshot settings, not all of these options may be visible. The configuration of the snapshot configuration is taken from the current profile of RayPack (if it is installed on the same machine as RayEval). Itherwise reasonable defaults are used for the snapshot comparison.

## Saving the Project

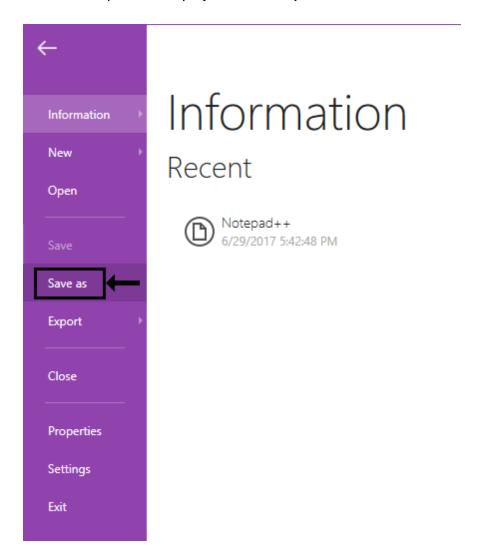
To save the progress of the project go to the **FILE** Menu.



If the project has not been saved before, the **Save** option cannot be selected. In this case, select

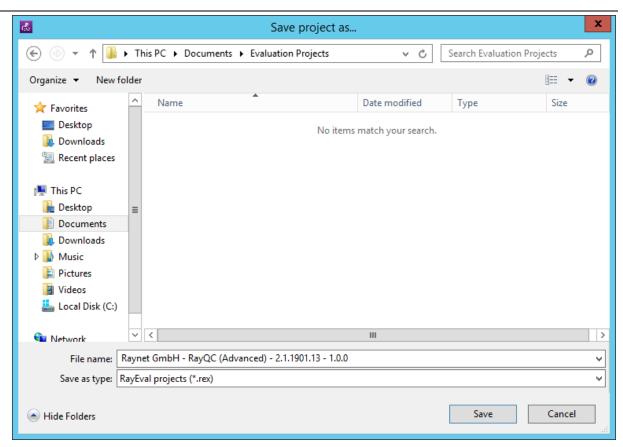


the Save as option. If the project has already been saved, select the Save option.

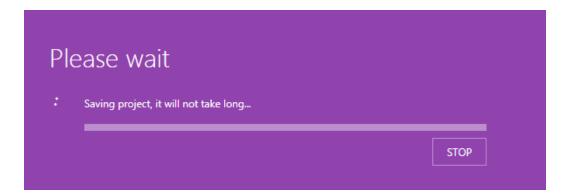


The **Save project as...** dialog will open. Navigate to the target folder. Either choose the default name that RayEval generated for the project or assign a custom name. The default name for the save file is specified in the ProjectConfiguration.xml under the DefaultSaveFileName attribute. For more information on the ProjectConfiguration.xml refer to the chapter Project Configuration. The screenshot below shows an example of how a default name created by RayEval can look like.





Click the **Save** button to save the project. The progress screen will be displayed showing the saving progress of the project.

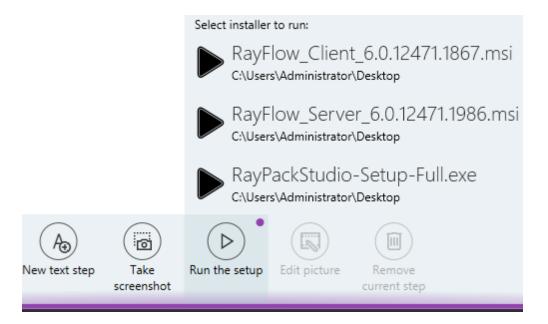




## **Starting Setups**

To start the evaluation process click on the **Run the setup** button located at the bottom. The installation of the package is started and added in the **Project details** step.

If more than one file was added, the user may choose which package to install first after clicking on the **Run the setup** button.



After selecting the package file that is to be installed, the package installer is initiated, and a screenshot is taken automatically. This screenshot will be used as the first step in evaluation process.

If a Virtual Machine configured for evaluation is active and the setup path is in UNC format, then RayEval asks how to proceed:



Selecting **COPY** makes a copy operation from UNC path to the Virtual Machine and then starts the file from there. Pressing **USE UNC PATH** only sends the URI to the machine, and the file will be started from that location directly on the VM. For this to work, the shared location must be available from both host and guest machine.

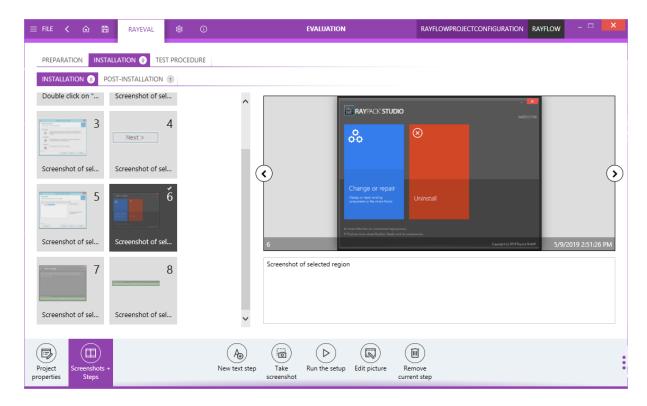


## Capturing Screenshots and Screen Regions

During the installation process, the user is able to take screenshots of the steps using the trigger set in the <a href="Hotkeys">Hotkeys</a> section of RayEval. It provides the opportunity to either capture the entire screen, the whole window, or a specific element. When capturing the whole window it is possible to mark a specific area of the screen. By default, the <a href="Middle Mouse Button">Middle Mouse Button</a> is the button that is defined for capturing a screenshot and <a href="Alt and the Middle Mouse Button">Alt and the Middle Mouse Button</a> are used as shortcut to capture the whole window while marking a target element.

The entire screen is captured by clicking the **Middle Mouse Button** while the pointer is hovering on the desktop. To capture the window either use the defined shortcut for capturing the whole window in a target element or click on the **Middle Mouse Button** while on the title bar of the window. Finally, a single element can be captured by clicking on the **Middle Mouse Button** while on the element.

For each screenshot a new step is added to the project.

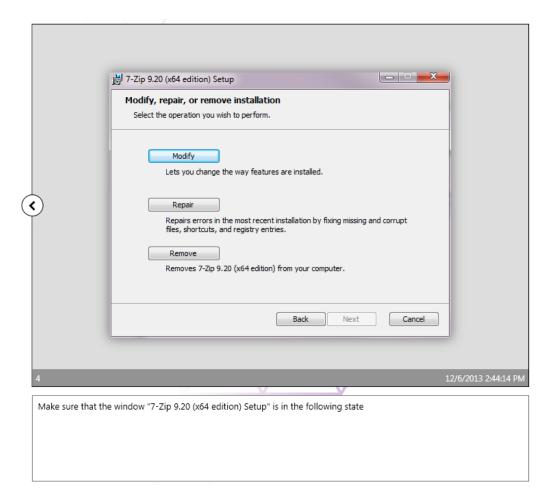


Concurrently, notification regarding these new steps to be added will transpire. This notification can be viewed when RayEval is minimized.



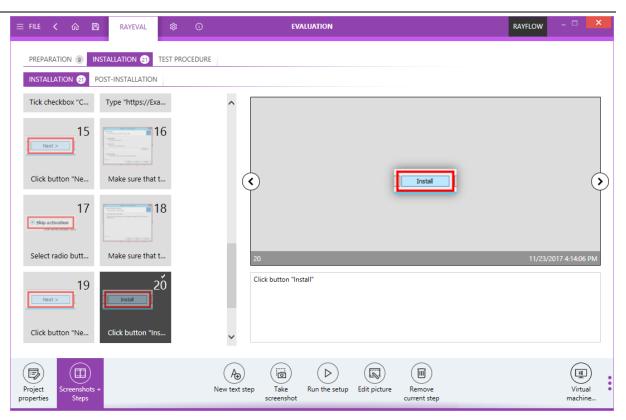


Apart from the notification, a textbox with default comments will always appear after selecting an option on the screen. These comments are brief instructions or tips that will help the person who is using RayEval, and they can be tailored to the after the specifications of the customer.

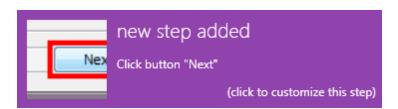


Like mentioned before, it is also possible to take a screenshot of an individual user interface element; for example the currently active dialogue / window or individual controls (buttons etc.) that are present on a dialogue or window.





## Concurrently on the bottom:



After finalizing the installation steps of a package and making the necessary changes (sorting and arranging screenshots), save the project as described in the <u>Saving the project</u> section of this document.

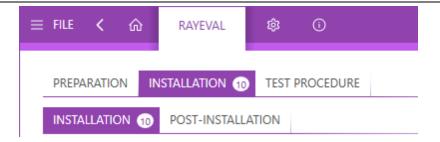
## Post-Installation:

This section of the evaluation contains screenshots of the post installation steps taken after installation of a package.

The screenshots of the steps are based on the requirements from the customer or others.

To start with the post-installation evaluation process, select the **Post-installation** tab under the **Installation** tab of the **EVALUATION** section.



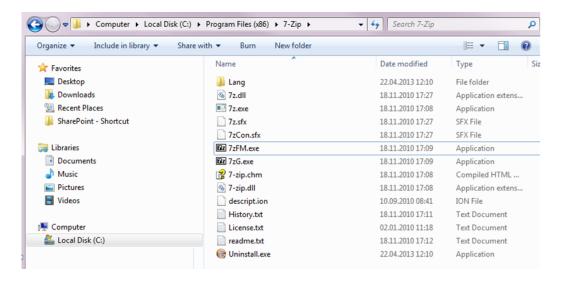


## **Example of Post Installation:**

This example illustrates how RayEval is used to capture some of the post-installation configuration in the packaging process as screenshots. In this example the capture trigger to take screenshots is set to the **middle mouse** button.

For this example, the post installation configuration requirement is, that the application language has to be set to English.

1. Go to the folder where the program is installed. Capture a screenshot by clicking the middle mouse button.



2. Select the application icon from the installation folder and capture a screenshot by using the capture trigger.



3. Click on the application executable file to open it. In this case, open the 7-Zip data manager.

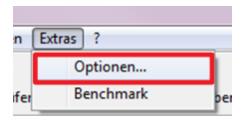




4. Use the capture trigger to capture a screenshot of **Extras**.

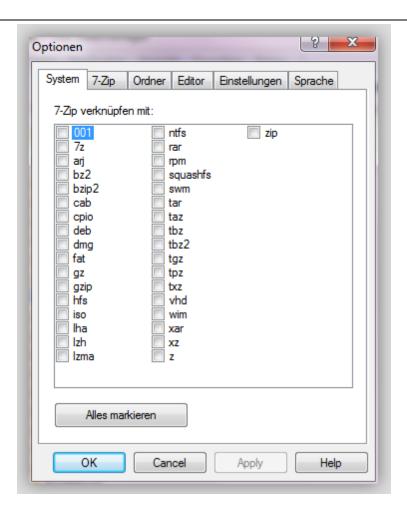


5. Click on **Extras** to expand it and then capture a screenshot of the **Optionen** button.



6. Click on the "**Optionen**" button to open the options window and capture a screenshot of the option window.



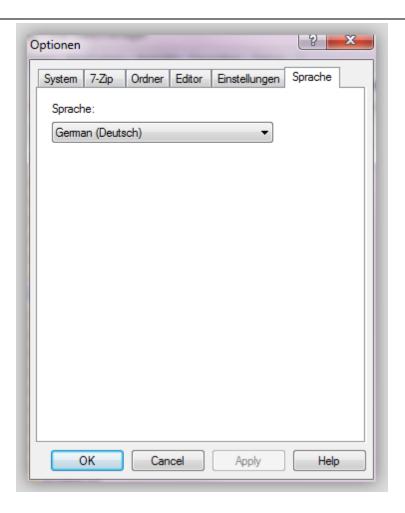


7. On the "**Optionen**" window, select the option "**Sprache**", to select the language of the application. Capture a screenshot of the "**Sprache**" button.



8. Expand the drop-down menu and select the **English** language as application language.



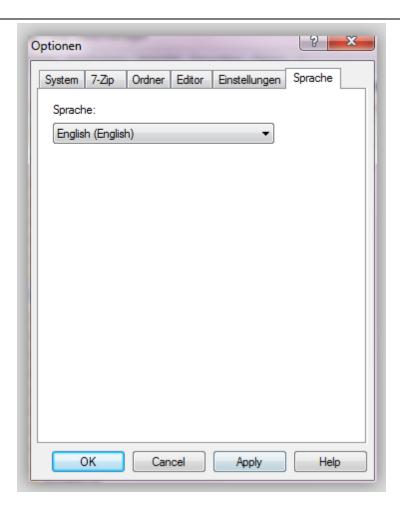


9. Capture a screenshot of **English** as the selected language for the application.



10. **English** is now selected as the language for the application. The next step towards applying the changes to the application is to click on the **Apply** button.





11. Capture a screenshot of the **Apply** button.



12. Capture a screenshot of the **OK** button using the capture trigger and confirm the changes by clicking on the **OK** button.



## **Test Procedure:**

This section of the evaluation process contains steps involving the process taken to test if the

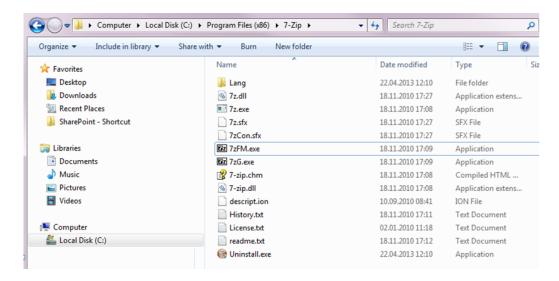


installed package runs properly after the installation.

## **Example test procedure:**

Here we have taken 7-Zip as the application that is under evaluation and illustrated some of the steps involved in the testing of the package after installation.

1. Go to the folder where your program is installed. Capture a screenshot by clicking the **middle mouse button**.

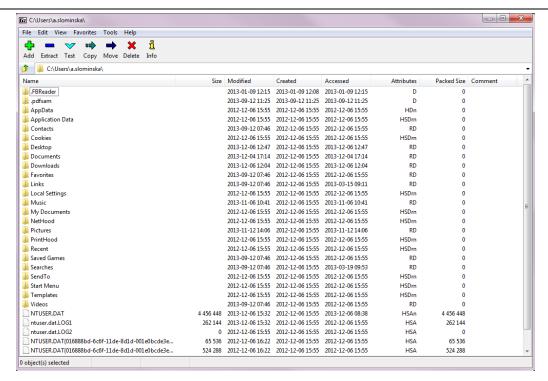


2. Select the application icon from the installation folder and capture a screenshot by using the capture trigger.



3. Double-click on the application executable file to run it. Capture a screenshot of the correct behavior of the application when the executable file is run. In this instance 7-Zip data manager is opened.





4. Verify the test steps captured under the **test procedure** section of the RayEval evaluation project. Additional details pertaining to the steps can be added in the text section beneath the screenshots when they are selected.

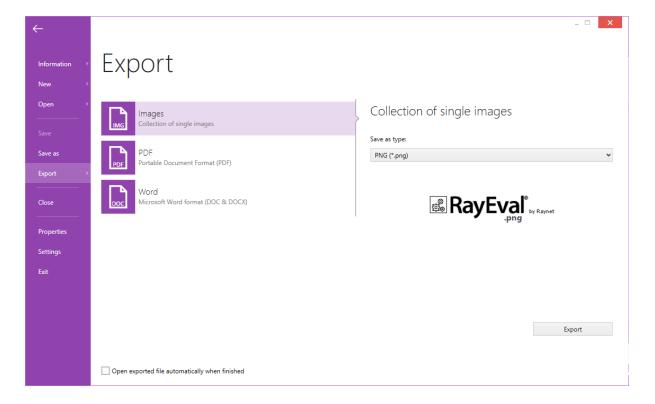


## **Exporting Documents**

Now that the evaluation process for a package is completed and all the essential details have been provided, continue to the last step towards finalizing the evaluation. This step involves saving the changes made to the project and exporting them as a document which could be provided to persons with defined roles ranging from packager or tester to project manager.

RayEval provides the possibility to export the evaluation project as Word and PDF formats or to export them directly to RayFlow. Follow the next steps to successfully export your evaluation project:

From the RayEval **File** menu, select the option **Export**. The **Export** screen will be shown.



# **Export as Images:**

- 1. To save the evaluation project as a collection of images, go to the **Export** section of the RayEval.
- 2. If not already selected, select Images from the available export formats.
- 3. Select the desired format from the dropdown menu.. The available types are PNG, JPG, and BMP.
- 4. Click on the **Export** button to start the export of the file. The file explorer is opened.



- 5. Select the target location for the export file. The name of the file is provided by default (see Project Configuration), however it may be changed as desired.
- 6. Click on the **Save** button.
- 7. The progress of the export process is shown.



## **Export to PDF:**

- 1. To save the evaluation project as a .pdf file, go to the **Export** section of the RayEval.
- 2. Select PDF from the available export formats.
- 3. Select the desired **Template** for the .pdf document from the drop down menu.
- 4. When the option, **Open exported file automatically when finished** is set to **YES**, the generated file opens after the export process is successfully concluded.
- 5. Click on the **Export** button to start the export of the file. The file explorer is opened.
- 6. Select the target location for the export file. The name of the file is provided by default (see <a href="Project Configuration">Project Configuration</a>), however it may be changed as desired.
- 7. Click on the **Save** button.
- 8. The progress of the export process is shown.





## **Export to Word:**

- 1. To save the evaluation project as a word file, go to the **Export** section of the RayEval.
- 2. Select Microsoft Word from the available export formats.
- 3. Select the desired template (for information on templates see the <u>Project Configuration</u> chapter) for the word document from the drop-down menu.

# Portable Document Format (PDF)





Export

4. When the option, Open exported file automatically when finished is set to YES, the



generated file opens after the export process is successfully concluded.

- ✓ Open exported file automatically when finished
- 5. Click on the **Export** button to start the export of the file. The file explorer will be opened.
- 6. Select the location target location for the file. The name of the file is provided by default, however it may be changed as desired. It is also possible to select the type of the file. Choose if the file should be saved as either .docx file or as .doc file.
- 7. Click on the **Save** button.
- 8. The progress of the export process is shown.
- 9. The exported word file is opened automatically.

## **Export to RayFlow:**

To be able to export an evaluation project to RayFlow, the RayFlow Server URL needs to be specified in the RayEval settings or RayEval needs to be started with command line arguments that allow the export to RayFlow. Command line arguments are usually used in the RayFlow Client. To learn how to configure RayEval as a tool in RayFlow refer to the chapter *Tool Configuration* in the *RayFlow Administration and Configuration Guide*.

- 1. To export the evaluation project to RayFlow, go to the **Export** section of RayEval.
- 2. Select RayFlow as the target location for saving the file...

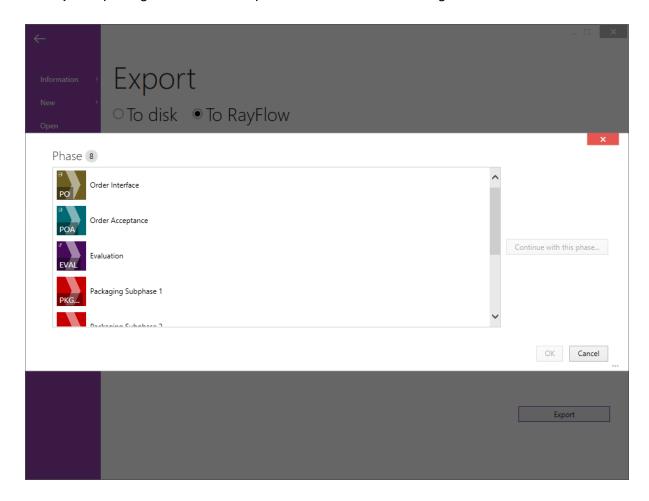


- 3. Select the PDF or Word plugin depending on the document format you want to upload.
- 4. Select the desired template from the drop-down menu.



# New RayEval Template New RayEval Template RayEval Project RayEval Project Page RayEval Project Page RayEval Project

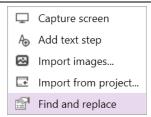
4. Click on the **Export** button which is available in the bottom-right corner of the window. If a user is logged in to RayFlow a pop-up window will appear that allows to select the destination of the RayFlow package to which the exported document will be assigned.



# **Find and Replace**

It is possible to find single words or whole sentences and replace them by using the **FIND AND REPLACE** dialog.



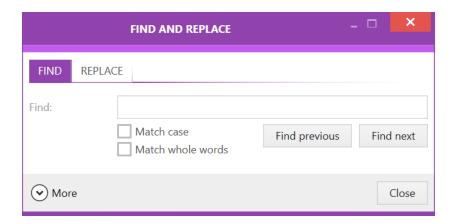


In order to use the dialog, open it by right clicking next to the different steps and selecting the **Find and replace** option from the context menu.

The dialog is divided into two tabs.



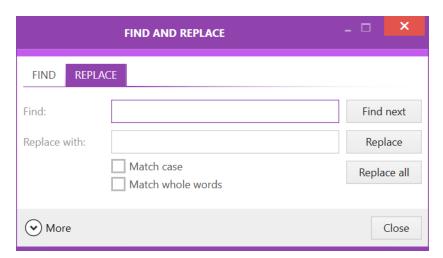
## Find



In the **FIND** tab it is possible to search for one or more words. If **Match case** is checked, only results matching the whole string will be shown. If **Match whole words** is checked, only results where the words are found will be shown but the result does not need to match the sequence. The **Find previous** and the **Find next** button can be used to switch through the results.

It is also possible to focus the search on specific stages. To do this click on the **More** button and select the stage from the **Stage** dropdown menu that will become available.

## Replace



In the **REPLACE** tab use the **Find** field to search for one or more words. If **Match case** is checked, only results matching the whole string will be shown. If **Match whole words** is checked, only results where the words are found will be shown but the result does not need to match the sequence. Enter the string that will be used if the result is replaced into the **Replace** with field. The Find next button can be used to jump to the next result. Clicking on the **Replace** button will replace the current result with the string that has been entered into the **Replace with** field. Clicking on the **Replace all** button will replace all results matching the current search.



It is also possible to focus the search on specific stages. To do this click on the **More** button and select the stage from the **Stage** dropdown menu that will become available.

# TestRail Integration

A new testcase for TestRail can be created by clicking on the **Create new project** tile on the RayEval Dashboard. Select the **TestRail** option to create a testcase project.



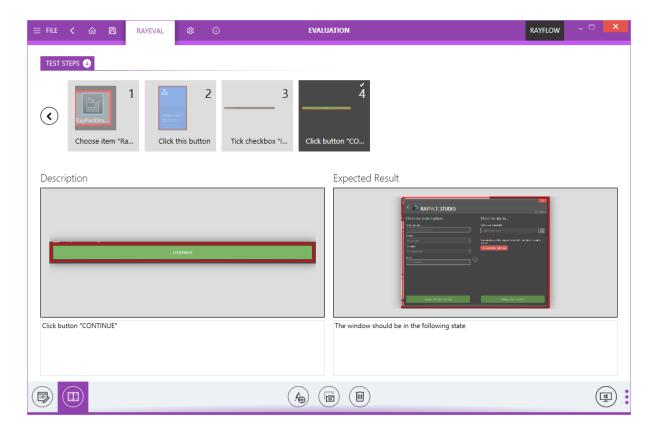
#### Be aware:

Availability of this feature depends on your RayPack Studio license level.

## Differences Between Standard and TestRail Evaluations

While the core features are shared between these two types of projects, some important differences are present:

- 1. The basic project properties for a TestRail project represents TestRail fields and are not configurable as in the case of standard evaluation.
- 2. Only a single group of steps (called **TEST STEPS**) are available.
- 3. The layout is adjusted to accommodate the requirement of two side-by-side panels representing the actual test and its expected result (these panels are created for each captured screenshot):





# **Snipping Tool**

The RayEval Snipping Tool is activated by either minimizing RayEval or by starting it separately in the application list.



Once started, the RayEval Snipping Tool can be found in the top middle of the screen.



The interface consists of three buttons and a hint which hotkey can be used to capture UI controls.

- Open RayEval window This button can be used to open the main application of RayEval or fall back to the main application if it had already been opened.
- Capture a region of the current screen This button can be used to create a screenshot from a selected region on the screen.
- Capture full screen This button is used to create a screenshot from the whole screen. The RayEval Snipping Tool itself will not be shown on the screenshot.
- Capturing UI controls: The hotkey which is mentioned in this are can be used to capture UI controls while the RayEval Snipping Tool is active.



# Working With RayFlow

# Introduction

RayFlow is a workflow process management tool with the ability to support diverse workflow processes. The possibility to be customized to fit the needs and requirements of the user makes it one of the most efficient and user friendly workflow management tools. This guide shows how to configure and manage RayFlow so that IT departments can stay ahead, save time, increase productivity, and decrease IT costs.

RayFlow is based on a client-server architecture in which all the information, data, and configuration is stored on the RayFlow server. Users work on this server remotely through the RayFlow web and Windows-based clients.

## Where to find the latest information about RayFlow

For further information on RayFlow including its features, functionality, and latest updates visit www.raynet.de.

## **Enabling RayFlow features in RayEval**

RayFlow connections are stored in profile configuration. The minimal configuration requires entering the URL address containing a valid and running instance of RayFlow server. See RayFlow configuration for RayEval for information how to configure this feature.

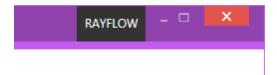
# Signing in to RayFlow

Saving and opening files from RayFlow requires that the current user is signed into the RayFlow instance specified within the configuration screen of RayEval.

The sign-in procedure makes sure that:

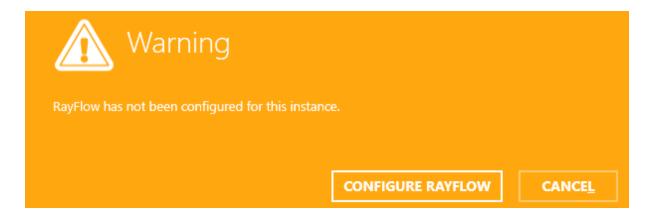
- The user has permissions to a specified RayFlow project.
- The user has permissions to see / edit the required RayFlow tasks.

In order to sign-in, press the RayFlow button, located in the top right corner of the screen.

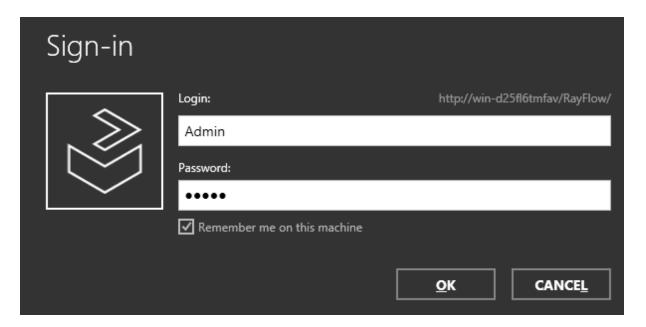




If the server is not valid or not specified, the following warning will be shown:



Otherwise, the sign-in overlay will be displayed over the current window:



The overlay contains the following information:

- The URL address of the current RayFlow instance, as configured in the profile settings.
- The text fields for user name and user password.
- A checkbox to remember the credentials on the current machine.



### Note:

RayFlow credentials have to be delivered by the local RayFlow administrator.

Login and password are required to sign into RayFlow. Make sure the checkbox **Remember me on this machine** is marked before pressing **OK**, if you wish to save the credentials of a successful login.



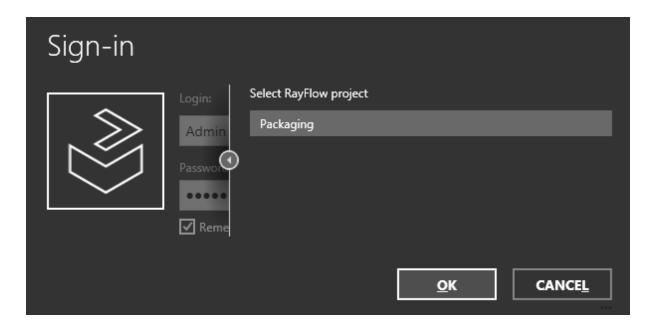
Once the credentials are verified, a selection of projects available in the current RayFlow instance will be shown.





#### Note:

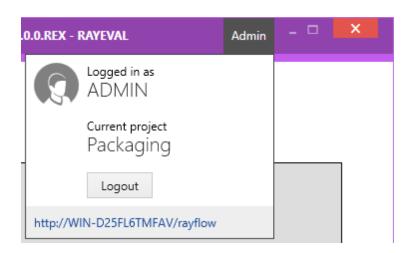
Only projects to which the current user has permissions to are displayed.



Once the project is selected, the sign-in procedure is complete and certain RayEval functions like opening and saving files to RayFlow are available.

Once authenticated, the RayFlow button in the top right corner of the screen changes its color and displays the user name of currently authenticated user. After clicking on it additional details are shown, including:

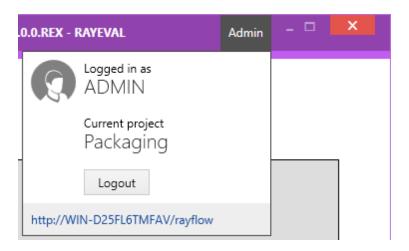
- The current project.
- The URL address of the current instance.
- A button to logout.





# Signing out from RayFlow

In order to sign-out from RayFlow or sign-in as another user, press the RayFlow button in the top right corner:



And then click the **Logout** button to sign-out from RayFlow.



# Settings

Before starting a new evaluation project, users have the possibility to configure various useful options for working on the project.

Different configuration options are categorized in the **Interface**, **Hotkeys**, **Templates**, **RayFlow**, **TestRail**, and the **Virtual Machines** tab. The configuration screen can either be accessed via the **Settings** tile on dashboard or by choosing the **Settings** item in *main tool bar*.



The setting screen contains the following tabs:

- Interface
- Project
- Hotkeys
- Templates
- RayFlow
- TestRail
- Snapshots
- Virtual Machines



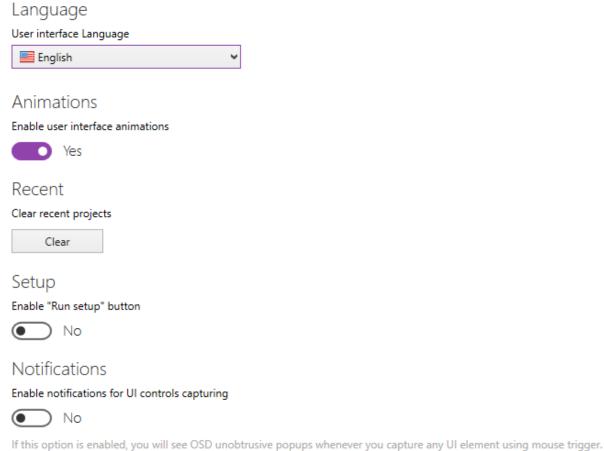
### Note:

In order to apply these settings, press the **Accept** button in the swipe-bar on the bottom of the screen.



# Interface

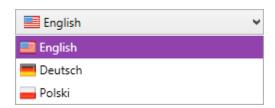
In the INTERFACE tab, users can enable or disable user interface options and the language used by RayEval.



# Language

The language option enables users to choose the language that should be used for the RayEval application. the language is chosen by selecting one of the options that can be found in the drop-down menu which is available underneath the **User language interface** option.

As shown in the screenshot there are currently three different languages available for the user interface of RayEval: The available languages are English, German, and Polish. The active language can be chosen by selecting it in the drop-down menu and then saving the changes by clicking on the **Save changes** button which is located in the swipe-bar.







#### Note:

In order to apply the language settings, it is necessary to restart RayEval.

## **Animations**

When RayEval is going to be used via remote connections, it may save precious bandwidth and performance if the user interface animations are deactivated. They are active by default, but may be deactivated by setting the slide toggle **Enable user interface animations** to **No**.

## Recent

Click on the Clear button to clear items in the **recent** list which is available on the Home screen.

## Setup

If a source file has been added to an evaluation project, switching this option to **YES** will enable the **Run the setup** button in the swipe-bar of evaluation screen.

## **Notifications**

If this option is enabled, a user will see OSD un-obtrusive pop-ups whenever a user captures any UI element using mouse trigger.



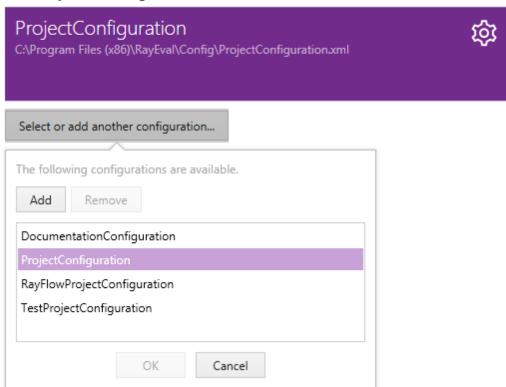
# **Project**

In the Project tab of the Settings, the different projects can be managed. Configurations are always stored in the .xml format. In this tab it is possible to either select an already existing configuration or to add a new (already prepared) configuration.

## Project

RayEval supports the use of special user configurations for projects.

Currently used configuration:



The default configurations can be found in the C:\Program Files (x86\RayEval\Config\ folder. New configurations can be added by clicking on the Add button and selecting the .xml file.



## Be aware:

If a configuration is located in the Program Files folder, it cannot be edited or removed afterwards. Custom configurations should be stored at a location that is accessible to everyone who is working with RayEval.

For information on how to customize a project configuration refer to the <u>Project Configuration</u> chapter.



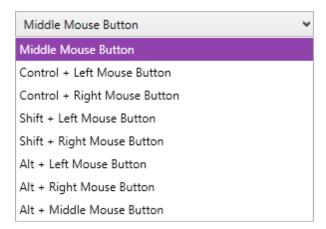
# Hotkeys

In the **Hotkeys** configuration tab, users can select the triggers for automatic screen captures. The trigger could be a button or combination of buttons.

# Screen capture Choose hotkey to trigger automatic screen capture Middle Mouse Button Capture the whole window Choose hotkey to trigger automatic capture the whole window Alt + Middle Mouse Button

# Screen Capture

Under the **Screen Capture** option a hotkey to trigger the automatic screen capture can be chosen.

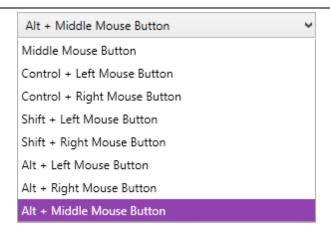


Various options to set a hotkey are provided in the drop-down menu of the **Screen Capture** section. By default the **Middle Mouse Button** is set as the trigger.

# Capture the Whole Window

Under the **Capture the whole window** option a hotkey to trigger the automatic capturing of the whole window can be chosen. This option allows its user to automatically trigger capture of the full active window with UI element under focus being red-squared.

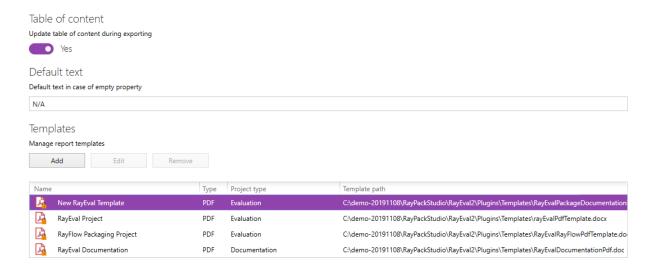




Various options to set a hotkey are provided in the drop-down menu of the **Capture the whole screen** section. By default the **Alt + Middle Mouse Button** is set as the trigger.

# **Templates**

In the **TEMPLATES** tab of the **SETTINGS** view there are two options available for configuration.



## **Table of Content**

Enable or disable the **Update table of content during exporting** option to update the table of content in an evaluation document being exported to Microsoft Word or PDF format.

## **Default Text**

The text entered in this field will be provided as an alternative text that is shown in the evaluation document for the properties that have not received a value from the user.



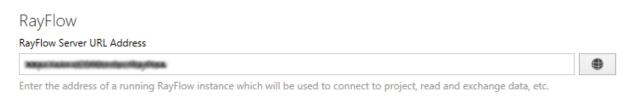
# **Templates**

This is where the different templates can be added, edited, or removed. Use the **Add** button to add a new template to the list or mark an existing template and use the **Edit** or the **Remove** button to either edit or delete an existing template from the list.



# **RayFlow**

This is where the settings for the connection with the RayFlow server can be configured.



The URL address of the RayFlow Server is shown here. Click on the button to open the link to the server in a web browser.



# **TestRail**

In the **TestRail** tab of the RayEval Settings, all necessary settings for the integration of TestRail can be configured.





### Be aware:

Availability of this tab depends on your RayPack Studio license level.

In order for the TestRail integration to work, all fields on this page must contain valid entries. There are two sections for configuration. The first section contains the configuration for the connection to TestRail, and the second section contains the configuration of the Cloudinary Credentials. The Cloudinary Credentials are needed for a fully functional TestRail integration. The following fields are available:

## Test Rail

- TestRail Server URL Address: The URL of the TestRail server needs to be entered here. For example: https://example.testrail.com.
- TestRail Username: This is where the TestRail username needs to be entered. For example: name@company.de.
- TestRail Password: The password for the user given above needs to be entered here.

# Cloudinary

- **Cloudinary Cloud**: The name of the Cloudinary Cloud needs to be entered here. For example: testCloud123.
- **Cloudinary Api Key**: The API Key needs to be entered here. For example:



123123123123123123.

• Cloudinary Api Secret: The API Secret needs to be entered here. For example: xxxxxx-xxxx.

# Snapshots

In the **Snapshots** section settings related to the snapshot and comparison module can be configured.

Display
Do not show excluded items
Suggest making a snapshot before starting the installation file
Export
Maximum number of items included in the documentation
10 🔺

# Do Not Show Excluded Items

Enable this option to not show items considered as "noise" (excluded). If you leave this option unchecked, RayEval shows the items, but with partial opacity to make them stand out from the actual changes.

# Suggest Making a Snapshot Before Starting the Installation File

If this option is enabled, RayEval intercepts starting the installation of the vendor installation and reminds you that a snapshot can be done beforehand. If you uncheck this option, no prompt will be shown even if no snapshot has been done.

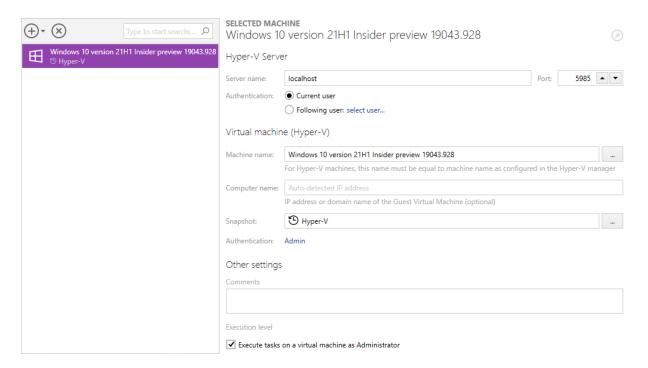
# Maximum Number of Items Included in the Documentation

Determines how many elements from the snapshot difference are exported to the PDF documentation. The more items you enable, the longer it takes to create a report and the more place it takes. The full file content is always included as an attachment for a complete review.



# Virtual Machines

The settings for virtual machines can be configured in this tab of the **Settings** section.



By default, the list of machines is empty. Each machine that needs to be used, has to be imported first. The view is divided into three sections:

## • Function Buttons (Add, Remove, Search)

This panel is used to add a new machine, remove a selection, and search for machines in the list. In order to filter the list, type a few letters into the search field and the list will be filtered automatically. To clear the results, either click **X** or clear the content of the search box.

## List of Machines

This is a list of all the machines defined for RayPack Studio products. Each machine is represented by an icon representing its type (VMware Workstation, VMWare ESX, or Hyper-V), machine name, and (if configured) the name of the snapshot that is to be used. Select any machine from the list to see its details shown on the right side.

### Virtual Machine Editor

The panel on the right side contains various controls and inputs about the currently selected machine. Their meaning is discussed in this chapter, together with slight differences between the different machine types.



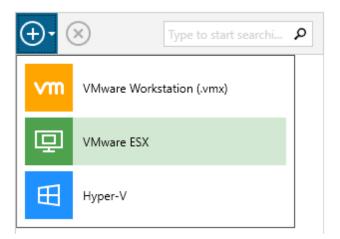
# To Import a Virtual Machine...



### Warning:

It is not possible to import VMware Workstation virtual machines if RayEval is already installed on a guest system virtualized by Workstation.

1. Press the + button to expand the new machine drop-down menu.



- 2. Select type of the target machine.
- 3. The machine will be added to the list. Use the editor to configure the details for the machine.

## To Delete a Virtual Machine...

- 1. Select a machine from the list.
- 2. Press the **X** button in the functional panel.

# **Editing Virtual Machines**

The virtual machine editor is divided into up to three different sections. The visibility of the options depend on the type of the currently selected machine.

# Host- or Server Section (Hyper-V and ESX only)

This section contains the properties of the hypervisor server. Because VMware Workstation uses solely local files, the tab is not visible when working with Workstation machines. When this section is shown, all values presented here are mandatory.

# • Server name + Port

Defines the location and the port of the host. Contact the responsible administrator to find out these values. By default port 5985 is used for Hyper-V and 443 for ESX machines, but they can



be overridden individually.

### Authentication

This setting configures the credentials used to connect to the host. This field is mandatory, even if auto-logon is enabled on the guest operating system. In order to configure the credentials press the button **Configure credentials...** and enter the user name and password. In order to log in as a domain user, use the DOMAIN\USER syntax.



### Note:

The credentials for the host are usually not the same as the credentials that are used to connect to the VM.



### Be aware:

Passwords are stored in an encrypted form in a text file. This however offers by no mean a state-of-art security. Expect that these values can be decrypted easily, and as such never store confidential data on machines with shared access to RayEval configuration files.

# Virtual Machine

This section contains common properties which are valid for all types of supported virtual machines.

## Machine Name (Hyper-V only)

This is the name under which the machine is shown in the list. This value must be equal to the name that is visible in the Hyper-V manager.

### • Computer Name (Hyper-V only)

This should be the full DNS computer name of a virtual machine.

## • Path to VMX File (only Workstation and ESX)

This is the full path to the .vmx container file. For Workstation machines, this must be a full absolute path to a file, for example C:\Virtual\Machine\Machine.vmx). For ESX, the name must include a datastore token (name surrounded by square brackets) followed by the relative path of the .vmx file. The path can be viewed in the properties dialog directly in a vSphere client. A sample value would be <code>[DATASTORE]Machine\Machine.vmx</code>.



### Be aware:

Failure to provide valid file paths to VMX makes the machine unable to work with. Machines with invalid paths or unsupported file formats will be marked as invalid and the user will not be allowed to use them.

## Snapshot

Defines which snapshot is to be used. While it is generally possible to always use the last snapshot (the current one), in a production environment the name of a snapshot should always be specified either by typing the name manually in the textbox below or by pressing the ...



button and using the selector dialog.

### Authentication

This setting configures credentials used to connect to a virtual machine. This field is always required, even if auto-logon is enabled on the guest Operating System. In order to configure the credentials, press the button **Configure credentials...** and enter the user name and password. In order to log in as a domain user, use DOMAIN\USER syntax.



### Be aware:

Passwords are stored in an encrypted form in a text file. This however offers by no mean a state-of-the-art security. Expect that these values can be decrypted easily and as such never store confidential data on machines with shared access to RayEval configuration files.

# Other Settings

### Comments

This is an additional invisible field that can be used for notes and remarks about the machine.

### Execute tasks on a virtual machine as Administrator

By default, the tasks are executed as Administrator, to ensure that the setup files changing machine files and registries are allowed to do it. For certain environments and operations this behavior may not be desired. Unchecking this checkbox makes Raynet start the tasks as the invoker.



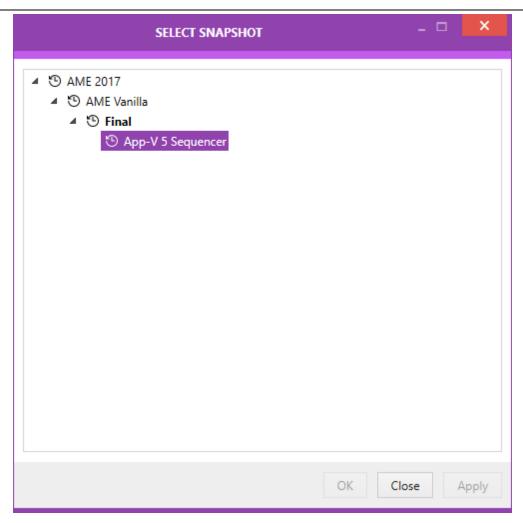
### Be aware:

This option is only recommended for troubleshooting or for tasks not requiring administrative privileges. Certain Raynet capturing functions may not work when the task is not running as administrator (for example capturing certain shell elements, capturing Windows from higher integrity context, etc.).

# **Snapshot Selector**

To start the **Snapshot Selector** first select the **Before starting the machine revert it to the following snapshot** option that is available beneath the Snapshot heading in the **Virtual Machines** tab in the **Settings**. After the option has been selected, click on the **Browse** [...] button to open the **Snapshot Selector**.





In the **Snapshot Selector** the available snapshots for the virtual machine are shown in a tree structure. Either select a snapshot or close the **Snapshot Selector** without changing the current selection. The following options are available in the **Snapshot Selector**:

- **OK**: This option is used to close the **Snapshot Selector** saving the currently selected status.
- Close: This option is used to close the **Snapshot Selector** without saving the changes.
- Apply: This option is used to save the currently selected status without closing the Snapshot Selector.

# **Preparing Virtual Machines**

Depending on the type of the virtual machine, some extra steps may be required for it to work with RayEval. The following guide outlines the required steps.

# General (All Types)

• The guest machine must be able to see the host machine by its DNS name. For example, if the host machine name is MWS0189, then the guest must be able to resolve its name to an IP



address.

- On the host machine, incoming traffic on a specific port must be enabled. The same remote port must be allowed by the firewall configuration on the guest machine. The port range used by default is 48654-48999 starting from the lowest available. The port range can be configured by changing the configuration files.
- It is highly recommended to disable the User Access Control (UAC) on the guest machine. This is especially important for silent operations, so that the setups can be started without user interaction.
- It is highly recommended to enable auto-logon to the machine for the configured user. This ensures that the machine can be automatically powered on and started, without waiting for the user to log-in interactively. The following link describes how to configure it: https://support.microsoft.com/en-us/help/324737/how-to-turn-on-automatic-logon-in-windows.
- Even if auto-logon is enabled on the guest machine, the matching credentials must be provided in the RayEval configuration. These are used to execute the programs and commands on the VM in the right context (so that the user is able to see dialogs etc.), but due to technical limitations regarding virtualization solutions they cannot be used to bypass the initial login / lock screen.
- Although possible, we do not recommend using machines without snapshots. It is recommended to have at least one snapshot on the VM, and have it selected in the VM configuration.

## **VMware Workstation**

- VMWare Tools must be installed on the guest machine.
- VIX API must be installed on the host machine (this is already done if VMware Workstation is installed on your host machine).
  - There is a known issue in VMware Workstation 14 and later, where necessary COM interfaces are not registered by default. You can fix this problem by applying the steps described in the following Knowledge Base Article: https://raynetgmbh.zendesk.com/hc/en-us/ articles/360000277786-RSC200351-Executing-Virtual-Machine-Operations-on-VMware-Workstation-14.

# VMware vSphere / ESXi

- VMWare Tools must be installed on the guest machine.
- PowerCLI in a version that is compatible with the vSphere / ESXi version must be installed on the host machine. See https://code.vmware.com/web/dp/tool/vmware-powercli/11.0.0 for more information.
- PowerShell 3.0 or higher must be installed on the host.

# Hyper-V

Configuring Hyper-V requires a few extra steps. A comprehensive guide can be found in the following Support Knowledge Base Article:

https://raynetgmbh.zendesk.com/hc/en-us/articles/360000308223-RSC200355-How-to-



Configure-a-RayPack-Studio-Application-for-Hyper-V.

Short checklist of the prerequisites for Hyper-V machines:

- WINRM has to be configured with TrustedHosts entries on both the guest and the host.
- PowerShell 3.0 or higher must be installed on the host.
- RayPack Studio Tools for Hyper-V must be installed on the guest machine and be a part of the base snapshot (so that they start each time when the machine boots after reverting to a selected snapshot).

The following checklist helps to find and fix any possible issues when working with Hyper-V machines:

- 1. Is PowerShell 3.0 installed (both on the guest and the host machine)?
  - a. Check \$PSVersionTable.PSVersion in PowerShell.
- 2. Is the machine properly configured in the **Settings** > **Virtual Machines** screen (pay attention to hardcoded IP addresses which may be dynamically assigned by DHCP).
- 3. Is RayPack Studio Tools for Hyper-V installed on the guest machine? Is the process vm-proxy.exe from RayPack Studio Tools for Hyper-V running?
- 4. Is WINRM configured?
  - a. Check winrm qc.
- 5. Does WINRM have the proper TrustedHosts entries on both the VM and the server?
  - a. winrm s winrm/config/client '@{TrustedHosts="RemoteComputer"}'.
  - b. winrm g winrm/config/client shows the current TrustedHosts lists.
  - c. More information: https://technet.microsoft.com/en-us/library/ff700227.aspx.
- 6. Does WINRM have a connection to the VM and vice-versa?
  - a. Test-WSMan -ComputerName IP.
- 7. Are all necessary ports unblocked on the physical machine?
  - a. The default port range is 48654-48999.



### Note:

This version of RayEval does not support connecting to Hyper-V clusters.

# Changing TCP / IP Configuration

In some cases it may be required to use custom port ranges, timeouts, etc. for VM related functionality.

The following table summarizes the available options:

Setting name	Default value	Description
TcpIpDefaultPort	48654-	The port range used for TCP / IP communication. Use



Setting name	Default value	Description
	48999	minus (-) and comma (,) to indicate which ports are valid for incoming communication. Make sure that these ports are not blocked by your firewall. PackBot tries to find first valid free port and listens for it from the lower to higher numbers.
TcpIpMaxRetry	3	Maximum number of retries before asserting that the machine is not available.
TcpIpDefaultReceiveT	240000	Reverts to the default value if Windows does not define its own timeouts.
TcpIpDefaultSendTime out	240000	Reverts to the default value if Windows does not define its own timeouts.

The options can be configured by editing the configuration file <code>RayEval.exe.config.Each</code> option is defined as a pair of key and value in the <code><appSettings</code> />. For example, to change the default port to 50000 and the maximum number of connection retries configure the following:



### Note:

These options are not present out-of-the-box in the configuration file, in which case the defaults from the table above should be used.

# **Advanced Configuration Options**

Besides the product configuration options that are available from the Settings section of the application UI, there are some additional configuration settings users may adjust to tailor RayEval towards their individual requirements.

# Logging RayEval Activity

The program data directory (%AppData%\Roaming\RayEval\Logs) is used by default to store the application activity log file (dd-MM-yyyy-HH-mm-ss.log). If the default settings remain unchanged, RayEval adds a new line to this log file for every system DEBUG level message that is generated during application use.

The log is by default to be used as in a rolling appender manner, which means that one global log file is permanently extended until a certain file size is reached. As soon as it is reached, the oldest lines are automatically transferred into an archive of log files, which is by default limited



to 10 files. When this second limit is reached, the oldest archive is removed to free a slot for the newest archive file.

In order to change the default settings for the log file behavior, users have to manually edit the log4net.config file, which resides in the root of the installation folder of RayEval (usually something like C:\Program Files (x86)\RayEval\). The settings which are most likely to be of interest for adjustments are:

# Log File Storage Location

The log file is by default "%appdata%\RayEval\Logs\dd-MM-yyyy-HH-mm-ss.log". However, it is possible to define any other absolute local paths as well as shared network locations for logging resource storage.





#### Be aware:

The user that runs RayEval must have write permissions in the log file location in order to initiate and maintain the message flow to the log file. If the user does not have sufficient access rights, there will be no error message, or actual product usage cutback, but simply a loss of system activity documentation. Please refer to the **Troubleshooting** section for additional instructions in case of missing logs.

# Max. Log File Size

The max. log file size may be defined as "KB", "MB" or "GB". The default setting for newly installed RayEval instances is "2048KB"

```
<maximumFileSize value="2048KB" />
```

# Log Level

The most frequently used log level settings are DEBUG, INFO, WARN, ERROR, FATAL, OFF, whilst OFF prevents logging at all, FATAL is the most restrictive but still writing setting, and DEBUG the most talkative option.

The recommendation is to use the DEBUG level for newly setup systems, since a lot of the information logged in this mode may help to adjust settings regarding access rights, and the like. As soon as the application and system are up and running productively, setting the log level to WARNING should be sufficient for permanent maintenance.

```
<level value="DEBUG" />
```

# **Default Logging Configuration**

The default configuration file is given below as a review and backup support:



```
<maximumFileSize value="10240KB" />
        <rollingStyle value="Once" />
        <maxSizeRollBackups value="2" />
        <layout type="log4net.Layout.PatternLayout,log4net">
           HEADER **********************/

"/>
           FOOTER ***********************/

"/>
           <param name="ConversionPattern" value="%d [%t] %-5p %c - %m%n" />
        </layout>
        <threshold value="INFO" />
     </appender>
     <root>
        <level value="ALL" />
        <appender-ref ref="RayEval" />
     </root>
  </log4net>
</configuration>
```

# **Further Information**

RayEval uses an external library to provide logging functionality. Please refer to the online documentation provided for the log4net project (http://logging.apache.org/log4net/) in order to get further details regarding available configuration and usage options. log4net can be adjusted to connect directly with databases or event-loggers. There are numerous options for layout and behavior manipulations. RayEval system administrators with a slight affection for perfection are highly welcome to configure their very own logger version.



# **About**

Choosing the **About** tile from the Home Screen displays the **ABOUT** area.



It contains the **GET STARTED** tab which provides a short introduction on how to start with the first evaluation project. Furthermore, the **ABOUT** area contains the **LICENSE AND EDITION** tab, which contains information about the currently used license, and the **TROUBLESHOOTING** tab, which contains further supportive information.





# **Get Started**

This section is meant to provide a starting point to new users of RayEval. This section offers the user a short introduction on how to create the first evaluation project.

GET STARTED LICENSE AND EDITION TROUBLESHOOTING

RayEval

Professional tool for documentation tasks and

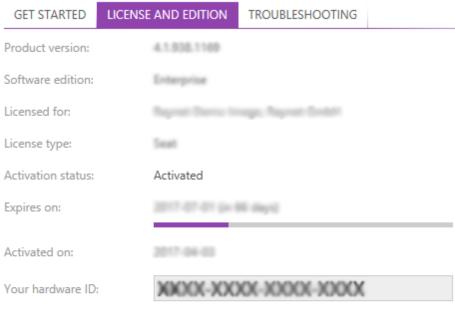
packaging manuals





# License and Edition

This area contains the **LICENSE AND EDITION** view, providing all usage relevant information about the current product instance.





Here, a variety of information is shown regarding the current version of RayEval and the applied license file. Changing the license using the license wizard can be achieved by choosing the **Open the license wizard** option.



# Troubleshooting

The **ABOUT** area also contains the **TROUBLESHOOTING** view, providing handy information about crucial system paths defined for the current product instance.

Any information displayed within this tab is read-only. It is provided to ensure transparency about the current instance settings, which is vital for proper troubleshooting measures in case of support relevant issues.

Installation folder
RayEval has been started from the following location:

C:\Program Files (x86)\RayEval

Open installation folder

Logging
RayEval writes the diagnostic information to the following folder:

C:\Users\Administrator\AppData\Roaming\RayEval\Logs

Open logs folder

# Installation Folder

This path shows where the currently running instance of RayEval is located. Click on the **Open installation folder** link to open a Windows Explorer instance at the displayed location to access the application files.

# Logging

RayEval is by default configured to write log files with information about each product work session. A new log file will be generated for every launch of the current application instance. These log files contain vital information for any troubleshooting or help desk measure, such as environment information about the physical machine RayEval resides on, the steps performed during a session, and exception details thrown by the application in case of operational issues. Please make sure that the target directory displayed here provides sufficient disk space and is accessible for the currently logged in user. Click on the **Open logs folder** link to open a Windows Explorer instance at the displayed location to access the log files.

About



# Command Line Interface

RayEval offers a standardized command line interface for parametrized application initialization. The following parameters may be used in conjunction with the RayEval executable.

# 1. Creating a new project

## Syntax:

```
RayEval.exe -new [-[<PropertyId>] [<PropertyValue>]] [-save [<path_to_local_file>]]
[-pa [<plugin arguments>]]
```

## Example:

```
RayEval.exe -new -@INSTALLERPATH "C:\Projects\Notepad++.exe" -@APPLANGUAGE POL -save "C:\Projects\Project.rex" -MYPROPERTY "Test Value" -ANOTHERPROPERTY "Test Value"
```

### Parameters:

Parameter	Mandat ory	Description
-new	Υ	Opens the RayEval user interface and initializes a new project.
-[ <propertyid>] [<propertyvalue>]</propertyvalue></propertyid>	N	Optional parameters that will add the specified value into the project property with the specified ID.
-pa [ <pluginarguments>]</pluginarguments>	N	Optional arguments that are passed to the export plugins, for example RayFlow.
-save [ <path_to_local_file>]</path_to_local_file>	N	Optional parameter to define a location at which the new project file will be created.

# 2. Opening an existing project

### Syntax:

```
RayEval.exe -open [<PathToRexFile>]
[-[<PropertyId>] [<PropertyValue>]]
[-pa [<PluginArguments>]]
[-minimize]
[-evaluate]
[-export]
```



```
[-export [PDF|DOC] -pa [<path_to_local_file>]]
[-export [PDF|DOC] -pa [<rayflow_url>] [<rayflow_username>] [<rayflow_password>]
  [<rayflow uploadinguser>] [<rayflow projectID>] [<rayflow packageID>]]
```

# Example:

RayEval.exe -open "C:\Projects\Notepad++ - 6.1.37 - 1.0.0.rex" -export -pa
"C:\Users\Username\Documents\Notepad++ - 6.1.37 - 1.0.0.docx"

Parameter	Mandato ry	Description
-open	Υ	Opens the RayEval user interface and opens the selected project.
-[ <propertyid>] [<propertyvalue>]</propertyvalue></propertyid>	N	Optional parameters that will add the specified value into the project property with the specified ID.
-pa [ <pluginarguments>]</pluginarguments>	N	Optional arguments that are passed to the export plugins, for example RayFlow.
-minimize	N	Opens the project, goes to the <b>Evaluate</b> screen, and shows the window in minimized state.
-evaluate	N	Opens the project and goes to the <b>Evaluate</b> screen.
-machineName <machinename> -vm <machinename></machinename></machinename>	N	When provided, the virtual machine with a given name is automatically started. The machine must be preconfigured in Settings screen.
-export	N	Opens the project and goes to the <b>Export</b> screen.
<pre>-export [PDF DOC] -pa <path_to_local_file></path_to_local_file></pre>	N	Opens project and exports the documentation in the selected format (either PDF or DOC) to a local file.
-export [PDF DOC] -pa <rayflow_url> <rayflow_username> <rayflow_password> <rayflow_uploadinguser> <rayflow_projectid> <rayflow_packageid></rayflow_packageid></rayflow_projectid></rayflow_uploadinguser></rayflow_password></rayflow_username></rayflow_url>	N	Opens project and exports the documentation in the selected format (either PDF or DOC) to RayFlow.

# 3. Open Help



# Syntax:

RayEval.exe -? Or RayEval.exe -help



# Example:

RayEval.exe -help

Parameter	Mandatory	Description
-help	Υ	This shows the information about every command that can be used with the command line interface of RayEval.

# 4. Custom project configuration

# Syntax:

RayEval.exe -projectConfiguration "<path>"

# Example:

RayEval.exe -projectConfiguration "C:\Program Files (x86)\RayEval\Config \ProjectConfiguration-custom.xml"



### Note:

This switch can be combined with other actions (for example -open and -new). If the configuration does not exists, an error is written to the log file and RayEval silently reverts to a fallback default configuration.



# Advanced Information

Visit https://raynet.de/en/Raynet-Products/RayEval for further information regarding the product and current community incentives.

Raynet is looking forward to receiving feedback from your RayEval experience. Please contact your Raynet service partner or use our <u>Support Panel</u> to add your ideas or requirements to the RayEval development roadmap!

We welcome suggestions and input on the various documentation resources available for RayEval and its componets. Feedback and other concerns can be forwarded through your local Raynet support representative.

# **Elements and Special Properties**

To specify the default value for any element, the user should add a **Value** attribute to the property definition:

Example: <Property Id="TEST TEXT" Type="Text" Value="Test value">



#### WARNING

Keep in mind that identifiers of variables are case sensitive!

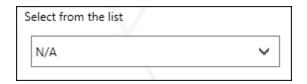
## Elements

### Label



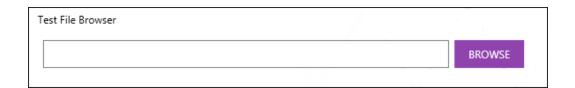


## List



```
<Property Id="TEST LIST" Type="List">
      <Group>
        <Group.en>Test</Group.en>
        <Group.pl>Test</Group.pl>
        <Group.de>Test</Group.de>
      </Group>
      <Name>
        <Name.en>Select from the list</Name.en>
        <Name.pl>Select from the list</Name.pl>
        <Name.de>Select from the list</Name.de>
      </Name>
      <Options>
        <Option Id="n/a">
          <Value>
            <Value.en>N/A</Value.en>
            <Value.de>N/A</Value.de>
            <Value.pl>N/A</Value.pl>
          </Value>
        </Option>
        <Option Id="EXAMPLE">
          <Value>
            <Value.en>Example</Value.en>
            <Value.de>Example</Value.de>
            <Value.pl>Example</Value.pl>
          </Value>
        </Option>
      </Options>
</Property>
```

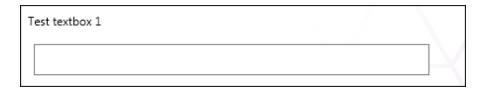
## File



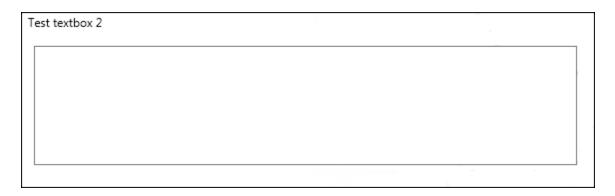




# **Text**



# **Large Text**



# Yes/No



### Test Yes/No Checkbox



## **Text Block**

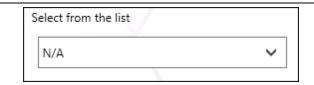
Add file...

This is to demonstrate the new property of type "TextBlock"

# Application data

## List

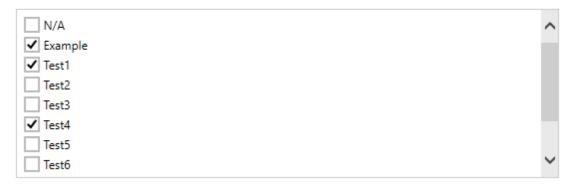




```
<Property Id="TEST LIST" Type="List">
      <Group>
        <Group.en>Test</Group.en>
        <Group.pl>Test</Group.pl>
        <Group.de>Test</Group.de>
      </Group>
      <Name>
        <Name.en>Select from the list/Name.en>
        <Name.pl>Select from the list</Name.pl>
        <Name.de>Select from the list</Name.de>
      </Name>
      <Options>
        <Option Id="n/a">
          <Value>
            <Value.en>N/A</Value.en>
            <Value.de>N/A</Value.de>
            <Value.pl>N/A</Value.pl>
          </Value>
        </Option>
        <Option Id="EXAMPLE">
          <Value>
            <Value.en>Example</Value.en>
            <Value.de>Example</Value.de>
            <Value.pl>Example</Value.pl>
          </Value>
        </Option>
      </Options>
</Property>
```

## Multi-value list

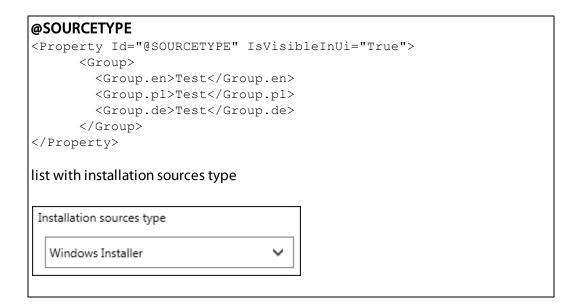
Select from the list





```
<Group>
   <Group.en>Basic</Group.en>
   <Group.de>Grundlagen</Group.de>
 </Group>
 <Name>
   <Name.en>Select from the list</Name.en>
   <Name.de>Einen Wer aus der Liste auswählen
  </Name>
  <Options>
   <Option Id="n/a">
     <Value>
        <Value.en>N/A</Value.en>
        <Value.de>N/A</Value.de>
     </Value>
   </Option>
   <Option Id="Example">
     <Value>
        <Value.en>Example</Value.en>
        <Value.de>Beispiel</Value.de>
     </Value>
   </Option>
   <Option Id="Test">
     <Value>
        <Value.en>Test1</Value.en>
        <Value.de>Test1</Value.de>
     </Value>
   </Option>
  </Options>
</Property>
```

# **Special Properties**



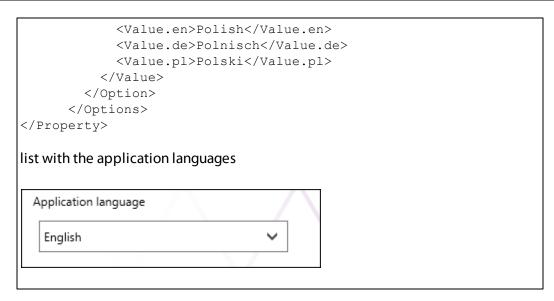




Application version	

```
@APPLANGUAGE
<Property Id="@APPLANGUAGE">
      <Group>
        <Group.en>Test</Group.en>
        <Group.pl>Test</Group.pl>
        <Group.de>Test</Group.de>
      </Group>
      <Options>
        <Option Id="ENG">
          <Value>
            <Value.en>English</Value.en>
            <Value.de>Englisch</Value.de>
            <Value.pl>Angielski</Value.pl>
          </Value>
        </Option>
        <Option Id="DEU">
          <Value>
            <Value.en>German</Value.en>
            <Value.de>Deutsch</Value.de>
            <Value.pl>Niemiecki</Value.pl>
          </Value>
        </Option>
        <Option Id="POL">
          <Value>
```









```
Package version (for example 1.0.1)

1.0.0
```



<group.pl>Test</group.pl> <group.de>Test</group.de>	
textbox with the project creation date	
Date	
12/9/2013	
	_





Specify the operating system name used during the evaluation
Windows 7



# Standard Properties and Values

Property	Description	Value
@APPNAME	This is the name of the application.	The value is generated automatically and does not need to be added in the command line interface.
@APPVERSION	This is the version of the application.	The value is generated automatically and does not need to be added in the command line interface.
@APPLANGUAGE	This is the language of the application.	The value is generated automatically and does not need to be added in the command line interface.
@MANUFACTURER	This is the manufacturer of the application.	The value is generated automatically and does not need to be added in the command line interface.
@SOURCETYPE	This is the source type of the installer.	The value is generated automatically and does not need to be added in the command line interface.
@INSTALLERPATH	This is the full path to the installer.	The path to the installer file needs to be set. For example: "C:\Projects\Notepad++.exe".
@OSARCHITECTURE	This is the architecture of the operating system.	The value is generated automatically and does not need to be added in the command line interface.
@OSEDITION	This is the edition of the operating system.	The value is generated automatically and does not need to be added in the command line interface.
@OSSERVICEPACK	This is the operating system service pack.	The value is generated automatically and does not need to be added in the command line interface.
@OSVERSIONSTRING	This is the version of the operating system.	The value is generated automatically and does not need to be added in the command line interface.
@OSNAME	This is the name of the operating system.	The value is generated automatically and does not need to be added in the command line interface.



Property	Description	Value
@USERNAME	This is the user name of the current user.	The value is generated automatically and does not need to be added in the command line interface.
@MACHINENAME	This is the name of the current machine.	The value is generated automatically and does not need to be added in the command line interface.
@SOURCESIZE	This is the size of the installer source.	The value is generated automatically and does not need to be added in the command line interface.
@DATETIME	This is the current date and the current time.	The value is generated automatically and does not need to be added in the command line interface.
@DATE	This is the current date.	The value is generated automatically and does not need to be added in the command line interface.
@PACKAGER	This is the name of the packager.	The value is generated automatically and does not need to be added in the command line interface.
@EVALUATOR	This is the name of the evaluator.	The value is generated automatically and does not need to be added in the command line interface.
@PKGVERSION	This is the version of the package.	The value is generated automatically and does not need to be added in the command line interface.
@COMMENTS	This is a comments block.	The value is generated automatically and does not need to be added in the command line interface.
@SHORTCUTS	These are the shortcuts found in the MSI package.	The value is generated automatically and does not need to be added in the command line interface.
@PROPERTIES	These are the properties.	The value is generated automatically and does not need to be added in the command line interface.
@TESTNAME	Name of TestRail case.	The value is generated automatically and does not need to be added in the command line interface.
@TESTSTATE	Status of TestRail case.	The value is generated automatically and does not need to be added in the command



Property	Description	Value
		line interface.
@TESTPRIORITY	Priority of TestRail case.	The value is generated automatically and does not need to be added in the command line interface.
@TESTTYPE	Type of TestRail case.	The value is generated automatically and does not need to be added in the command line interface.
@TESTESTIMATE	TestRail case estimated duration.	The value is generated automatically and does not need to be added in the command line interface.
@PRECONDITIONS	TestRail case preconditions.	The value is generated automatically and does not need to be added in the command line interface.
@EXPRESULT	TestRail caes expected result.	The value is generated automatically and does not need to be added in the command line interface.
@REFERENCE	References to other TestRail cases.	The value is generated automatically and does not need to be added in the command line interface.
@LABEL_SOURCE	This is the label for the source.	The value is generated automatically and does not need to be added in the command line interface.
@LABEL_APPDATA	This is the label for the appdata.	The value is generated automatically and does not need to be added in the command line interface.
@LABEL_PKINFO	This is the label for the package info.	The value is generated automatically and does not need to be added in the command line interface.
@LABEL_MACHINEINFO	This is the label for the machine info.	The value is generated automatically and does not need to be added in the command line interface.
@LABEL_SPECIALHANDLING	This is the label for the special handling.	The value is generated automatically and does not need to be added in the command line interface.
@LABEL_AUTHOR	This is the label for the author.	The value is generated automatically and does not need to be added in the command line interface.
@LABEL_USER	This is the label	The value is generated automatically and



Property	Description	Value
	for the user.	does not need to be added in the command line interface.
@LABEL_SECURITY	This is the label for the security.	The value is generated automatically and does not need to be added in the command line interface.
@LABEL_SHORTCUTS	This is the label for the shortcuts.	The value is generated automatically and does not need to be added in the command line interface.

# Troubleshooting Virtual Machine Problems

# Troubleshooting Problems With Hyper-V Connectivity

The following checklist helps to find and fix any possible issues when working with Hyper-V machines:

- 1. Is PowerShell 3.0 installed (both on Guest and Host Machine)?
  - a. Check \$PSVersionTable.PSVersion in PowerShell
- 2. Is the machine properly configured in the **Settings** > **Virtual Machines** screen (pay attention to hardcoded IP addresses which may be dynamically assigned by DHCP)?
- 3. Is RayPack Studio Tools for Hyper-V installed on the Guest machine? Is the process vm-proxy.exe from RayPack Studio Tools for Hyper-V running?
- 4. Is WINRM configured?
  - a. Check winrm qc.
- 5. Does WINRM have proper TrustedHosts entries on both VM and server?
  - a. winrm s winrm/config/client '@{TrustedHosts="RemoteComputer"}'
  - b. winrm g winrm/config/client shows the current TrustedHosts lists
  - c. More information: https://technet.microsoft.com/en-us/library/ff700227.aspx
- 6. Does WINRM have a connection to the VM and vice-versa?
  - a.- Test-WSMan -ComputerName IP
- 7. Are all necessary ports unblocked on the physical machine?
  - a. The default port range is 48654-48999.

# Changing TCP / IP Configuration

In some cases it may be required to use custom port ranges, timeouts, etc. for the virtual machine related functionality.



# The following table summarizes the available options:

Setting name	Default value	Description
TcpIpDefaultPort	48654- 48999	Port range used for TCP/IP communication. Use minus (-) and comma (,) to indicate which ports are valid for incoming communication. Make sure that these ports are not blocked by your firewall. The virtual machine functionality tries to find the first valid free port and listens on it from lower to higher numbers.
TcpIpMaxRetry	3	Maximum number of retries before asserting the machine is not available.
TcpIpDefaultReceiveT	240000	Reverts to default value if Windows does not define its own timeouts.
TcpIpDefaultSendTime out	240000	Reverts to default value if Windows does not define its own timeouts.



# **Project Configuration**

### **General Information**

a) RayEval allows the user to configure the content of the final evaluation documentation by using XML files. The file which is used for this (named ProjectConfiguration.xml) can be found in the **Config** folder located in the main directory of RayEval.



#### Tip:

Raynet recommends to save a copy of the default ProjectConfiguration.xml before it is modified.

When using this file, a user is able to fully customize tabs, stages, and content of the **project properties** and the **evaluation** screens.



#### WARNING

Keep in mind that XML attributes are case sensitive!

b) The following box shows an example project configuration. A custom project configuration should contain a structure that is similar to the following structure:

```
<?xml version="1.0" encoding="utf-8" ?>
<ProjectConfiguration DefaultSaveFileName="[@MANUFACTURER] - [@APPNAME] -</pre>
[@APPVERSION] - [@PKGVERSION]">
 <!-- Project custom properties -->
 <Properties>
    <!-- Tab PROJECT -->
   <Property Id="@LABEL DOCUMENTATION">
     <Group>
        <Group.en>Project</Group.en>
        <Group.pl>Projekt</Group.pl>
        <Group.de>Projekt</Group.de>
      </Group>
    </Property>
  <!-- Documentation stages -->
  <Stages>
   <Stage Id="SCREENSHOTS">
     <Title>
        <Title.en>Steps</Title.en>
        <Title.pl>Kroki</Title.pl>
        <Title.de>Schritte</Title.de>
      </Title>
    </Stage>
  </Stages>
```



</ProjectConfiguration>

- The <ProjectConfiguration> is the root node for this document.
- The <ProjectConfiguration> should contain the attribute called DefaultSaveFileName, which specifies the default name that will be suggested during saving of Project file (\* . rex) or during exporting evaluation documentation (\* . docx, \* . pdf, etc.). The definition of this name can contain special properties. A complete list of this properties can be found in the Appendix A: Elements and Special Properties.
- (optional) The <ProjectConfiguration > node can also contain attributes like Name and Id for the specific project (example: <ProjectConfiguration Name="MyProject" Id="ProjectId" DefaultSaveFileName=" [@MANUFACTURER] [@APPNAME] 1.0.0">)

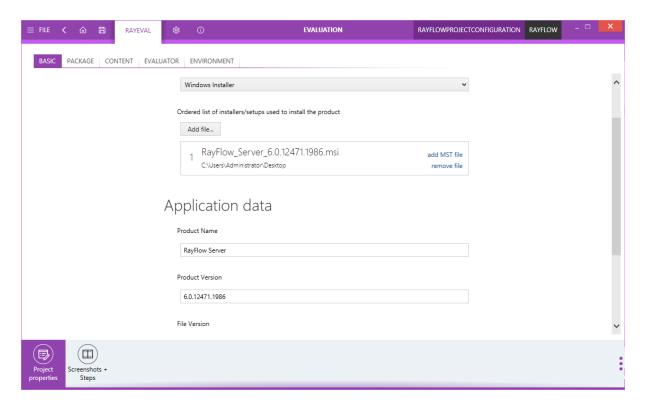


#### Note:

It is not possible to use special characters (e.g. '<') in the Projectconfiguration.xml file. A user can avoid this by using predefined entities in XML e.g. '&It;'. Further definitions can be found under http://www.w3.org/TR/xml-entity-names/.

### **Project Custom Properties**

a) The roperties node contains a definition of each element located in the project
properties screen.





#### b) Tabs:

To add a new tab in the **project properties** screen, the user should define a new element and correctly specify the name for the tab where this element should appear (the name of the tab should be specified in the <group> tag - notice that the tab can have a different name depending on the language). Examples of definitions can be found in the Appendix A: Elements and Special Properties, where all elements and special properties that can be used when creating a project with custom properties are listed with examples of their usage.

- c) The available elements for the creation of a project with custom properties are:
  - Label
  - Text
  - Large Text
  - Yes/No

- Multi-value List
- File
- **Text Block** (By using this property, users can add wrapped text blocks to their evaluation projects)
- d) **Default values** can be used to specify the default value for any element. This is done by adding a **Value** attribute to the proper definition of the element for which the default value should be specified. See example:

<Property Id="UNIQUE TEST TEXT" Type="Text" Value="Test value">

- e) **Special properties** are properties that only have a basic definition in the ProjectConfiguration.xml file (the <Group> node has to be specified to define the name of the tab where this property should appear), but what is displayed in the UI will be the default element that is assigned to this special property. Special properties must have an ID that starts with the @ character. The available special properties are:
- languages
- **@APPNAME** textbox with the application name that will be filled automatically after the importing of installer
- @APPVERSION textbox with the application version
- **@AUTHOR** textbox with the author of the technical documentation project
- **@COMMENTS** textbox with comments
- **@DATETIME** textbox with the project creation date and time
- @DATE textbox with the project creation date
- @DESCRIPTION textbox with the description of the technical documentation project.

- @APPLANGUAGE list with the application
   @PKGVERSION textbox with package version
  - @OSARCHITECTURE textbox with the Operating System architecture
  - @OSEDITION textbox with the Operating System edition
  - @OSNAME textbox with the Operating System name
  - @OSSERVICEPACK textbox with the Operating System service pack
  - **@OSVERSIONSTRING** textbox with the Operating System version
  - **@REVISION** textbox with the revision of the technical documentation project
  - @SHORTCUTS large textbox with basic information about shortcuts included in the package



- @INSTALLERPATH the control that handles @SOURCESIZE textbox with the size of the adding of installers (\*.msi, \*.exe, etc.)
- **@MACHINENAME** textbox with the evaluation machine name
- @MANUFACTURER textbox with the application manufacturer
- main installation file
- @SOURCETYPE list with installation source types
- **@TITLE** textbox with the title of the technical documentation project
- @USERNAME textbox with the username

# **Configuration of Evaluation Stages**

a) Each stage of the evaluation should be defined inside the <stages> tag.



b) The definition of the stage contains the **title** (in different languages) and the **name of the** parent stage (optional).

Example:

```
<Stage Id="PREPARATION">
      <Title>
        <Title.en>Preparation</Title.en>
        <Title.pl>Przygotowanie</Title.pl>
        <Title.de>Vorbereitung</Title.de>
      </Title>
</Stage>
```

or

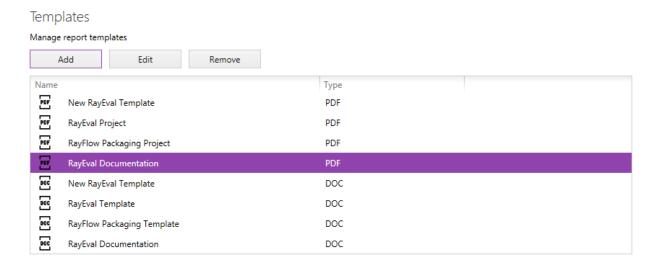
```
<Stage Id="POSTINSTALL">
     <Title>
       <Title.en>Post-installation</Title.en>
       <Title.pl>Po instalacji</Title.pl>
       <Title.de>Nach Installation</Title.de>
     </Title>
     <ParentName>
       <ParentName.en>Installation/ParentName.en>
       <ParentName.pl>Instalacja</ParentName.pl>
       <ParentName.de>Installation
     </ParentName>
</Stage>
```



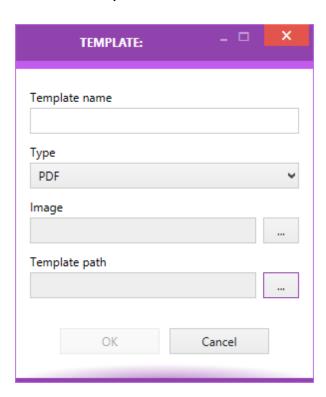
# **Adjustment and Configuration of Template Documents**

# **Configuration of Template Documents**

The Templates for the reports can be managed in the **Templates** tab of the **Settings**. It is possible to either **Add**, **Edit**, or **Remove** templates.



After clicking on the **Add** button the window shown on the screenshot below will be opened and all necessary information need to be added.



• **Template name** - Configure a name for the template.



- **Type** Select the type of the template that will be added.
- **Image** An image for the template can be added by clicking on the **Browse** [...] button and selecting the image. This is optional.
- **Template path** The path to the file which is now used as template needs to be entered here. Click on the **Browse** [...] button and select the file.

The template will be added to the list of templates after clicking on the **OK** button.

The default templates which are part of the RayEval sources are stored at C:\Program Files (x86)\RayEval\Plugins\Templates.





#### Be aware:

If a custom template is located in the Program Files (x86) folder or any of it subfolders, it cannot be edited or removed afterwards. Custom templates should be stored at a location that is accessible to everyone who is working with RayEval.

### Adjusting a Template Document

- a) A list of plugins and templates is specified in the <RayEval>\Plugins \PluginTemplates.xml folder.
- c) The name of the template document should be placed in the Id attribute of a Template property in the PluginTemplates.xml. In the following example, RayEval looks for a template that will be called sampleProjectTemplateWord in the Templates folder.



#### Note:

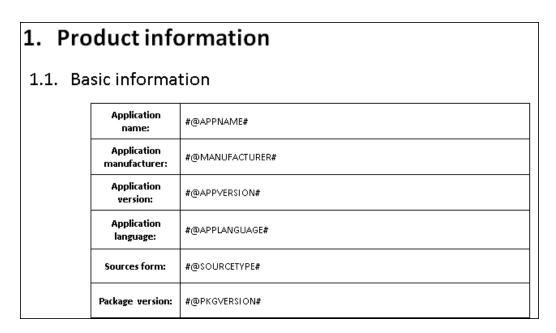
If a template for a plugin which has not been installed is added, it will not show in RayEval. Templates will only show if the respective plugin has been installed.

d) The template itself must be stored in the \*.docx format. Inside the \*.docx template, the stages are defined by using tables. To add a table to the stage, **Title** of a table where selected stage should be inserted must be the same as the ld of this stage. This is defined in the **Table Properties**. For example:





e) To insert any property inside the \*.docx template, please put in the **Id** of this property with the # character around this **Id**. For example:



f) Furthermore, all layout options offered by the word processing program that is used to create



the new template can be applied.

A list of the special properties which are used in RayEval can be found in the <u>Appendix A:</u> <u>Elements and Special Properties</u>.



## **Example Project Configuration XML**

Some examples of the default project configuration can be found here.

### DocumentationConfiguration.xml

```
<?xml version="1.0" encoding="utf-8" ?>
<ProjectConfiguration DefaultSaveFileName="RayEval Technical Documentation"</pre>
  <!-- Project custom properties -->
  <Properties>
    <!-- Tab PROJECT -->
    <Property Id="@LABEL DOCUMENTATION">
      <Group>
        <Group.en>Project</Group.en>
        <Group.pl>Projekt</Group.pl>
        <Group.de>Projekt</Group.de>
      </Group>
    </Property>
    <Property Id="@TITLE">
      <Group>
        <Group.en>Project</Group.en>
        <Group.pl>Projekt</Group.pl>
        <Group.de>Projekt</Group.de>
      </Group>
    </Property>
    <Property Id="@DESCRIPTION">
      <Group>
        <Group.en>Project</Group.en>
        <Group.pl>Projekt</Group.pl>
        <Group.de>Projekt</Group.de>
      </Group>
    </Property>
    <Property Id="@REVISION">
      <Group>
        <Group.en>Project</Group.en>
        <Group.pl>Projekt</Group.pl>
        <Group.de>Projekt</Group.de>
      </Group>
    </Property>
       <Property Id="@AUTHOR">
      <Group>
        <Group.en>Project</Group.en>
        <Group.pl>Projekt</Group.pl>
        <Group.de>Projekt</Group.de>
      </Group>
    </Property>
  </Properties>
```



### TestProjectConfiguration.xml

```
<?xml version="1.0" encoding="utf-8" ?>
<ProjectConfiguration DefaultSaveFileName="TestRail Testcase DefaultName">
  <Type Value="TestRail" />
 <!-- Project custom properties -->
  <Properties>
    <!-- Tab BASIC -->
   <Property Id="@Properties">
      <Group>
        <Group.en>Basic</Group.en>
        <Group.pl>Podstawowe</Group.pl>
        <Group.de>Basis</Group.de>
      </Group>
    </Property>
    <Property Id="@TESTNAME">
      <Group>
        <Group.en>Basic</Group.en>
        <Group.pl>Podstawowe</Group.pl>
        <Group.de>Basis</Group.de>
      </Group>
    </Property>
      <Property Id="@TESTSTATE">
      <Group>
        <Group.en>Basic</Group.en>
        <Group.pl>Podstawowe</Group.pl>
        <Group.de>Basis</Group.de>
      </Group>
      <Options>
        <Option Id="None">
          <Value>
            <Value.en>None</Value.en>
            <Value.de>Keinen</Value.de>
            <Value.pl>Brak</Value.pl>
          </Value>
        </Option>
```



```
<Option Id="Active">
      <Value>
        <Value.en>Active</Value.en>
        <Value.de>Aktiv</Value.de>
        <Value.pl>Aktywny</Value.pl>
      </Value>
    </Option>
    <Option Id="Inactive">
      <Value>
        <Value.en>Inactive</Value.en>
        <Value.de>Inaktiv</Value.de>
        <Value.pl>Nieaktywny</Value.pl>
      </Value>
    </Option>
  </Options>
</Property>
  <Property Id="@TESTPRIORITY">
  <Group>
    <Group.en>Basic</Group.en>
    <Group.pl>Podstawowe</Group.pl>
    <Group.de>Basis</Group.de>
  </Group>
  <Options>
    <Option Id="Must">
      <Value>
        <Value.en>5 - Must Test</Value.en>
        <Value.de>5 - Sehr Wichtig</Value.de>
        <Value.pl>5 - Koniecznie trzeba przetestowac</Value.pl>
      </Value>
    </Option>
    <Option Id="MustTwo">
      <Value>
        <Value.en>4 - Must Test</Value.en>
        <Value.de>4 - Wichtig</Value.de>
        <Value.pl>4 - Trzeba przetestowac</Value.pl>
      </Value>
    </Option>
    <Option Id="IfTime">
      <Value>
        <Value.en>3 - Test If Time</Value.en>
        <Value.de>3 - Falls Zeit</Value.de>
        <Value.pl>3 - Jezeli jest czas</Value.pl>
      </Value>
    </Option>
    <Option Id="IfTimeTwo">
      <Value>
        <Value.en>2 - Test If Time</Value.en>
        <Value.de>2 - Optional</Value.de>
        <Value.pl>2 - Opcjonalny</Value.pl>
      </Value>
    </Option>
    <Option Id="Dont">
```



```
<Value>
        <Value.en>1 - Don't Test</Value.en>
        <Value.de>1 - Unwichtig</Value.de>
        <Value.pl>1 - Nie testowac</Value.pl>
      </Value>
    </Option>
  </Options>
</Property>
  <Property Id="@TESTTYPE">
  <Group>
    <Group.en>Basic</Group.en>
    <Group.pl>Podstawowe</Group.pl>
    <Group.de>Basis</Group.de>
  </Group>
  <Options>
    <Option Id="AUT">
      <Value>
        <Value.en>Automated</Value.en>
        <Value.de>Automatisiert</Value.de>
        <Value.pl>Automatyczny</Value.pl>
      </Value>
    </Option>
    <Option Id="FUNC">
      <Value>
        <Value.en>Functionality</Value.en>
        <Value.de>Funktionalität</Value.de>
        <Value.pl>Funkcjonalny</Value.pl>
      </Value>
    </Option>
    <Option Id="OTH">
      <Value>
        <Value.en>Other</Value.en>
        <Value.de>Anderes</Value.de>
        <Value.pl>Inny</Value.pl>
      </Value>
    </Option>
    <Option Id="PERF">
      <Value>
        <Value.en>Performance</Value.en>
        <Value.de>Performance</Value.de>
        <Value.pl>Wydajnosc</Value.pl>
      </Value>
    </Option>
    <Option Id="REG">
      <Value>
        <Value.en>Regression</Value.en>
        <Value.de>Regression</Value.de>
        <Value.pl>Regresja</Value.pl>
      </Value>
    </Option>
    <Option Id="USA">
      <Value>
```



```
<Value.en>Usability</Value.en>
          <Value.de>Nutzbarkeit</Value.de>
          <Value.pl>Uzytecznosc</Value.pl>
        </Value>
      </Option>
    </Options>
  </Property>
  <Property Id="@TESTESTIMATE">
    <Group>
      <Group.en>Basic</Group.en>
      <Group.pl>Podstawowe</Group.pl>
      <Group.de>Basis</Group.de>
    </Group>
  </Property>
 <!-- Tab Advanced -->
 <Property Id="@ADVANCED">
   <Group>
      <Group.en>Advanced</Group.en>
      <Group.pl>Zaawansowane</Group.pl>
      <Group.de>Erweitert</Group.de>
    </Group>
  </Property>
  <Property Id="@PRECONDITIONS">
    <Group>
      <Group.en>Advanced</Group.en>
      <Group.pl>Zaawansowane</Group.pl>
      <Group.de>Erweitert</Group.de>
    </Group>
  </Property>
  <Property Id="@EXPRESULT">
   <Group>
      <Group.en>Advanced</Group.en>
      <Group.pl>Zaawansowane</Group.pl>
      <Group.de>Erweitert</Group.de>
    </Group>
  </Property>
 <Property Id="@REFERENCE">
    <Group>
      <Group.en>Advanced</Group.en>
      <Group.pl>Zaawansowane</Group.pl>
      <Group.de>Erweitert</Group.de>
    </Group>
  </Property>
</Properties>
```



```
<!-- Evaluation stages -->

<Stages>

<Stage Id="TESTSTEPS">

<Title>

<Title.en>Test steps</Title.en>

<Title.pl>Kroki testowe</Title.pl>

<Title.de>Testschritte</Title.de>

</Title>

</Stage>

</Stages>
</ProjectConfiguration>
```

#### ProjectConfiguration.xml

```
<?xml version="1.0" encoding="utf-8" ?>
<ProjectConfiguration DefaultSaveFileName="[@MANUFACTURER] - [@APPNAME] -</pre>
  <!-- Project custom properties -->
  <Properties>
   <!-- Tab BASIC -->
    <Property Id="@LABEL SOURCE" IsVisibleInUi="True">
        <Group.en>Basic</Group.en>
        <Group.pl>Podstawowe</Group.pl>
        <Group.de>Basis</Group.de>
      </Group>
   </Property>
    <Property Id="@SOURCETYPE" IsVisibleInUi="True">
      <Group>
        <Group.en>Basic</Group.en>
        <Group.pl>Podstawowe</Group.pl>
        <Group.de>Basis</Group.de>
      </Group>
    </Property>
    <Property Id="@INSTALLERPATH">
      <Group>
        <Group.en>Basic</Group.en>
        <Group.pl>Podstawowe</Group.pl>
        <Group.de>Basis</Group.de>
      </Group>
    </Property>
    <Property Id="@LABEL APPDATA">
      <Group>
        <Group.en>Basic</Group.en>
        <Group.pl>Podstawowe</Group.pl>
        <Group.de>Basis</Group.de>
```



```
</Group>
</Property>
<Property Id="@APPNAME">
  <Group>
    <Group.en>Basic</Group.en>
    <Group.pl>Podstawowe</Group.pl>
    <Group.de>Basis</Group.de>
  </Group>
</Property>
<Property Id="@APPVERSION">
  <Group>
    <Group.en>Basic</Group.en>
    <Group.pl>Podstawowe</Group.pl>
    <Group.de>Basis</Group.de>
  </Group>
</Property>
<Property Id="@MANUFACTURER">
  <Group>
    <Group.en>Basic</Group.en>
    <Group.pl>Podstawowe</Group.pl>
    <Group.de>Basis</Group.de>
  </Group>
</Property>
<Property Id="@APPLANGUAGE">
  <Group>
    <Group.en>Basic</Group.en>
    <Group.pl>Podstawowe</Group.pl>
    <Group.de>Basis</Group.de>
  </Group>
  <Options>
    <Option Id="ENG">
      <Value>
        <Value.en>English</Value.en>
        <Value.de>Englisch</Value.de>
        <Value.pl>Angielski</Value.pl>
      </Value>
    </Option>
    <Option Id="DEU">
      <Value>
        <Value.en>German</Value.en>
        <Value.de>Deutsch</Value.de>
        <Value.pl>Niemiecki</Value.pl>
      </Value>
    </Option>
    <Option Id="POL">
      <Value>
        <Value.en>Polish</Value.en>
        <Value.de>Polnisch</Value.de>
        <Value.pl>Polski</Value.pl>
```



```
</Value>
    </Option>
  </Options>
</Property>
<!-- Tab PACKAGE -->
<Property Id="@LABEL PKGINFO">
  <Group>
    <Group.en>Package</Group.en>
    <Group.pl>Pakiet</Group.pl>
    <Group.de>Paket</Group.de>
  </Group>
</Property>
<Property Id="@COMMENTS">
  <Group>
    <Group.en>Package</Group.en>
    <Group.pl>Pakiet</Group.pl>
    <Group.de>Paket</Group.de>
  </Group>
</Property>
<Property Id="@PKGVERSION" Value="1.0.0">
  <Group>
    <Group.en>Package</Group.en>
    <Group.pl>Pakiet</Group.pl>
    <Group.de>Paket</Group.de>
  </Group>
</Property>
<Property Id="@SOURCESIZE">
  <Group>
    <Group.en>Package</Group.en>
    <Group.pl>Pakiet</Group.pl>
    <Group.de>Paket</Group.de>
  </Group>
</Property>
<Property Id="@DATE" IsVisibleInUi="False">
  <Group>
    <Group.en>Package</Group.en>
    <Group.pl>Pakiet</Group.pl>
    <Group.de>Paket</Group.de>
  </Group>
</Property>
<!-- Tab CONTENT -->
<Property Id="@LABEL SPECIALHANDLING">
    <Group.en>Content</Group.en>
    <Group.pl>Zawartosc</Group.pl>
    <Group.de>Inhalt</Group.de>
  </Group>
```



```
</Property>
   <Property Id="FIELD DRIVERS" Type="YesNo" Value="False" IsVisibleInUi="</pre>
     <Group>
       <Group.en>Content</Group.en>
        <Group.pl>Zawartosc</Group.pl>
        <Group.de>Inhalt</Group.de>
     </Group>
     <Name>
        <Name.en>Does the package contain drivers?
        <Name.pl>Czy paczka zawiera sterowniki?</Name.pl>
        <Name.de>Beinhaltet das Paket Treiber?</Name.de>
     </Name>
   </Property>
   <Property Id="@LABEL SECURITY">
     <Group>
        <Group.en>Content</Group.en>
        <Group.pl>Zawartosc</Group.pl>
       <Group.de>Inhalt</Group.de>
     </Group>
   </Property>
   <Property Id="FIELD ADMIN" Type="YesNo" Value="True">
       <Group.en>Content</Group.en>
       <Group.pl>Zawartosc</Group.pl>
        <Group.de>Inhalt</Group.de>
     </Group>
     <Name>
        <Name.en>Does the package require administrator privileges?/Name.el
        <Name.pl>Czy paczka wymaga uprawnien administratora?
        <Name.de>Erfordert das Paket adminstrative Berechtigungen?</Name.de</pre>
     </Name>
   </Property>
<!--
   <Property Id="@LABEL SHORTCUTS">
     <Group>
        <Group.en>Content</Group.en>
       <Group.pl>Zawartosc</Group.pl>
       <Group.de>Inhalt</Group.de>
     </Group>
   </Property>
   <Property Id="@SHORTCUTS">
     <Group>
        <Group.en>Content</Group.en>
        <Group.pl>Zawartosc</Group.pl>
        <Group.de>Inhalt</Group.de>
     </Group>
   </Property>
```



```
<!-- Tab Evaluation -->
<Property Id="@LABEL AUTHOR">
  <Group>
    <Group.en>Evaluator</Group.en>
    <Group.pl>Ewaluator</Group.pl>
    <Group.de>Evaluierer</Group.de>
  </Group>
</Property>
<Property Id="@EVALUATOR">
  <Group>
    <Group.en>Evaluator</Group.en>
    <Group.pl>Ewaluator</Group.pl>
    <Group.de>Evaluierer</Group.de>
  </Group>
</Property>
<!-- Tab ENVIRONMENT -->
<Property Id="@LABEL MACHINEINFO">
  <Group>
    <Group.en>Environment</Group.en>
    <Group.pl>Srodowisko</Group.pl>
    <Group.de>Umgebung</Group.de>
  </Group>
</Property>
<Property Id="@OSARCHITECTURE">
  <Group>
    <Group.en>Environment</Group.en>
    <Group.pl>Srodowisko</Group.pl>
    <Group.de>Umgebung</Group.de>
  </Group>
</Property>
<Property Id="@OSEDITION">
  <Group>
    <Group.en>Environment</Group.en>
    <Group.pl>Srodowisko</Group.pl>
    <Group.de>Umgebung</Group.de>
  </Group>
</Property>
<Property Id="@OSSERVICEPACK">
  <Group>
    <Group.en>Environment</Group.en>
    <Group.pl>Srodowisko</Group.pl>
    <Group.de>Umgebung</Group.de>
  </Group>
</Property>
<Property Id="@OSVERSIONSTRING">
  <Group>
```



```
<Group.en>Environment</Group.en>
      <Group.pl>Srodowisko</Group.pl>
      <Group.de>Umgebung</Group.de>
    </Group>
  </Property>
  <Property Id="@OSNAME">
    <Group>
      <Group.en>Environment</Group.en>
      <Group.pl>Srodowisko</Group.pl>
      <Group.de>Umgebung</Group.de>
    </Group>
  </Property>
 <Property Id="@MACHINENAME">
    <Group>
      <Group.en>Environment</Group.en>
      <Group.pl>Srodowisko</Group.pl>
      <Group.de>Umgebung</Group.de>
    </Group>
  </Property>
  <Property Id="@LABEL USER">
    <Group>
      <Group.en>Environment</Group.en>
      <Group.pl>Srodowisko</Group.pl>
      <Group.de>Umgebung</Group.de>
    </Group>
  </Property>
  <Property Id="@USERNAME">
    <Group>
      <Group.en>Environment</Group.en>
      <Group.pl>Srodowisko</Group.pl>
      <Group.de>Umgebung</Group.de>
    </Group>
  </Property>
</Properties>
<!-- Evaluation stages -->
<Stages>
 <Stage Id="PREPARATION">
    <Title>
      <Title.en>Preparation</Title.en>
      <Title.pl>Przygotowanie</Title.pl>
      <Title.de>Vorbereitung</Title.de>
    </Title>
  </Stage>
  <Stage Id="INSTALL">
```



```
<Title>
       <Title.en>Installation</Title.en>
       <Title.pl>Instalacja</Title.pl>
       <Title.de>Installation</Title.de>
     </Title>
     <ParentName>
       <ParentName.en>Installation/ParentName.en>
       <ParentName.pl>Instalacja</ParentName.pl>
       <ParentName.de>Installation
     </ParentName>
   </Stage>
   <Stage Id="POSTINSTALL">
     <Title>
       <Title.en>Post-installation</Title.en>
       <Title.pl>Po instalacji</Title.pl>
       <Title.de>Nach Installation</Title.de>
     </Title>
     <ParentName>
       <ParentName.en>Installation/ParentName.en>
       <ParentName.pl>Instalacja/ParentName.pl>
       <ParentName.de>Installation/ParentName.de>
     </ParentName>
   </Stage>
   <Stage Id="TEST">
     <Title>
       <Title.en>Test procedure</Title.en>
       <Title.pl>Procedura testowa</Title.pl>
       <Title.de>Testverfahren</Title.de>
     </Title>
   </Stage>
 </Stages>
</ProjectConfiguration>
```

# **Need Help?**

## Request RayEval Support

Our Raynet support team gladly assists you on any question or issue you encounter regarding RayEval. Feel free to sign in and open incidents via our Raynet support panel, please open an incident using the Raynet Support Panel.

## Join the RaySuite Community

The RaySuite community resides within our KnowledgeBase: <a href="https://raynet.de/Support/">https://raynet.de/Support/</a>. Once you have signed up for access to the Raynet support panel, you automatically have access to the KnowledgeBase, too. You will surely come to a point where you would love to suggest a new feature for the future development of RayEval. Maybe you need to find some tips and 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 RayEval training? Ask for dates and locations to find the right training to meet your needs. You are highly welcome to step in contact via <a href="mailto:sales@raynet.de">sales@raynet.de</a>.



# Raynet GmbH

Technologiepark 22 33100 Paderborn, Germany T +49 5251 54009-0 F +49 5251 54009-29 info@raynet.de support@raynet.de

www.raynet.de