



RAYPACK[®] STUDIO

Enterprise Software Packaging

Release Notes RayPack Studio 7.3

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Release Notes RayPack Studio

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Introduction

RayPack Studio 7.3 is the next iteration of Raynet's framework for the creation and management of software packages. RayPack Studio 7.3 includes powerful tools with new features that automate and accelerate holistic packaging projects.

RayPack Studio covers all the steps: From compatibility checks of software applications and packages to the evaluation to the packaging and the subsequent quality control as well as to the clearly structured workflow management. The perfectly matched software products allow to efficiently pass through the individual phases of a packaging process. At the same time, they enormously accelerate the workflow: the integration of all products into RayFlow enables an extremely comfortable exchange of data and information.



This release contains new features, enhancements, and bug fixes for all these applications: RayPack (PackDesigner, PackRecorder, PackTailor, PackWrapper, PackBot), PackBench, RayQC, RayQC Advanced, RayEval and PackLayering.

Visit www.raynet.de for further information regarding the product and current community incentives.

Raynet is looking forward to receiving your feedback from your RayPack Studio experience. Please contact your Raynet service partner or write an e-mail to sales@raynet.de to add your ideas or requirements to the RayPack Studio development road map!

What's New?

The following chapters contain an overview of the improvements, resolved issues, and the new features that are part of the new release of RayPack Studio 7.3.

RayPack

Easy Package Creation with EasyPack RPK-4607 RPK-4610

EasyPack is a new, interactive way of creating projects and setups with RayPack. It integrates most basic and advanced options in different packaging projects, providing a smooth and consistent experience. The goal of this new UI is to expose the most important information about the selected setup, present available paths and features, collect the necessary feedback in project-specific steps, and finally to create a new project. The following scenarios are covered by EasyPack:

EasyPack

SELECT WHAT YOU WANT TO DO:

	I have a setup I want to convert or modify package	>
	I have loose sources I want to create new package	>
	I do not have sources I want to find product in PackageStore	>

- Local repackaging
- Repackaging on a virtual machine
- Creating a blank project (MSI/MSIX)
- Creating a modification package (MSIX) or blank Windows Installer Transform (MST)
- Creating packages with PackageStore

EasyPack

SELECT PACKAGE:

 **Selected package** Change ^

C:\Program Files (x86)\RayPack\RayPack.exe

Product name: RayPack
Manufacturer: Raynet GmbH
Product version: 7.2.6754.3834-493889788
Type: Legacy

AVAILABLE OPTIONS:

 **Repackage package** This machine v >

Use selected machine to repackage machine

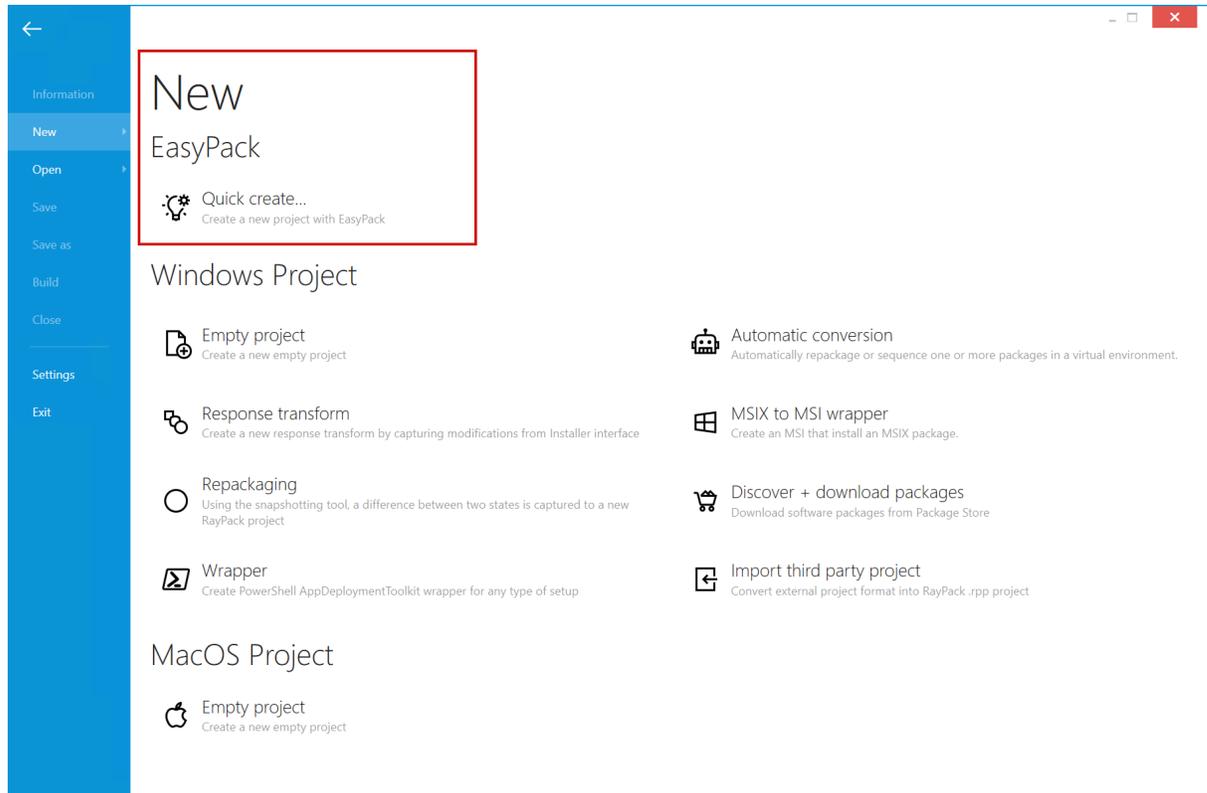
 **Wrap package** >

Use PSAppDeployToolkit to wrap this package

 **Create Intune package** >

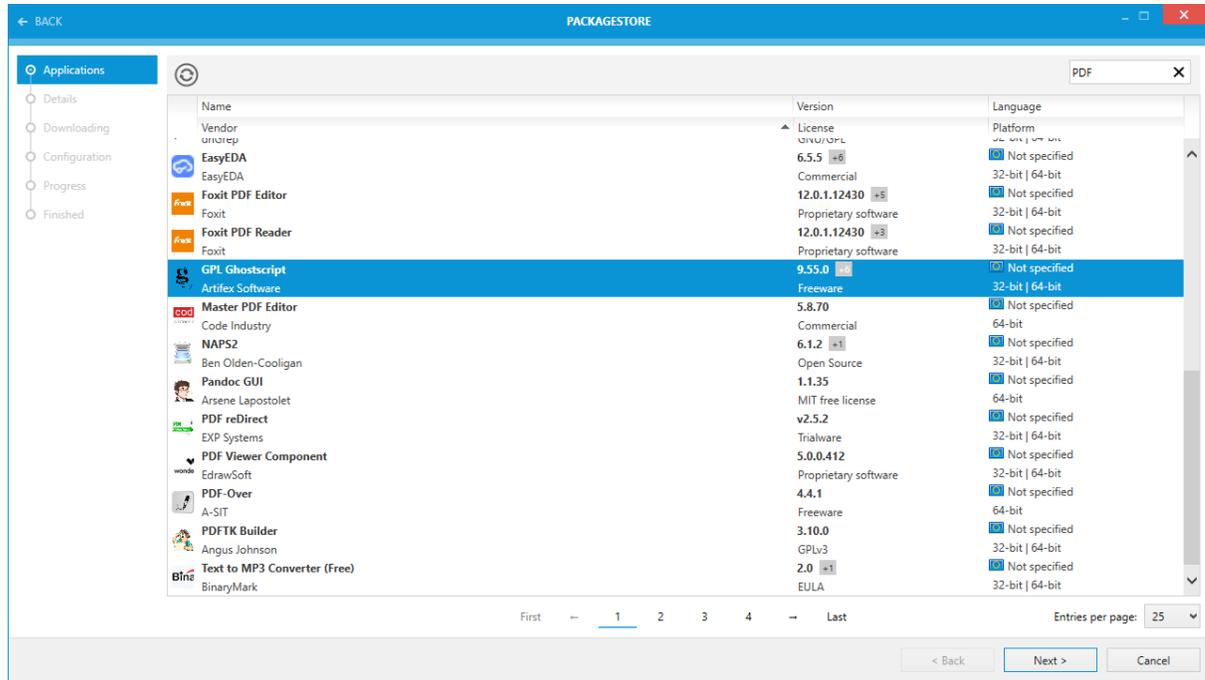
Prepare package to deployment

This new wizard can be used side-by-side of the already existing functionality. Also in this version, we reorganized the groups of projects in the *New project* menu to be better accessible and functionally related.



PackageStore Integration with 10K+ Packages RPK-4538 RPK-4675

Relaunched Package Store platform offers several thousands of apps in 10K different versions, most of them with further configuration options. Package Store has a simple interface, which guides through the complete process, from automatic downloading of sources, through the configuration, to the package generation. The packages are deployment-ready and can be deployed to popular deployment systems, like Intune, SCCM or RMS UEM.

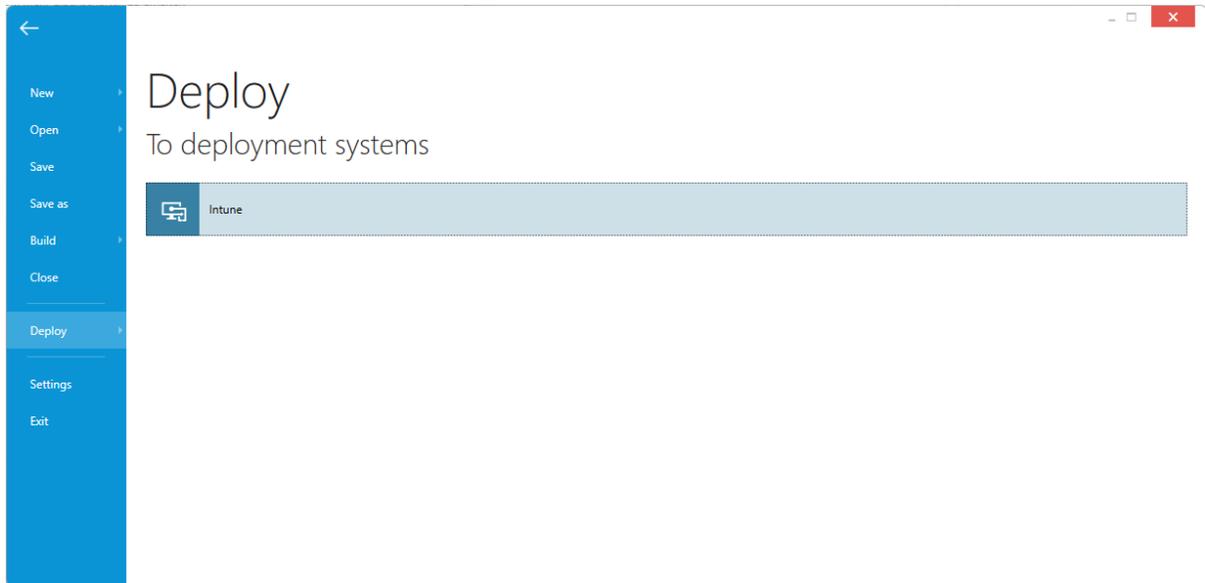


Once the automatic packaging is finished, the user still has the ability to continue editing the project using the Visual Designer component for PSADT projects.

Direct Deployment from PSADT and MSIX Projects to Intune RPK-3994

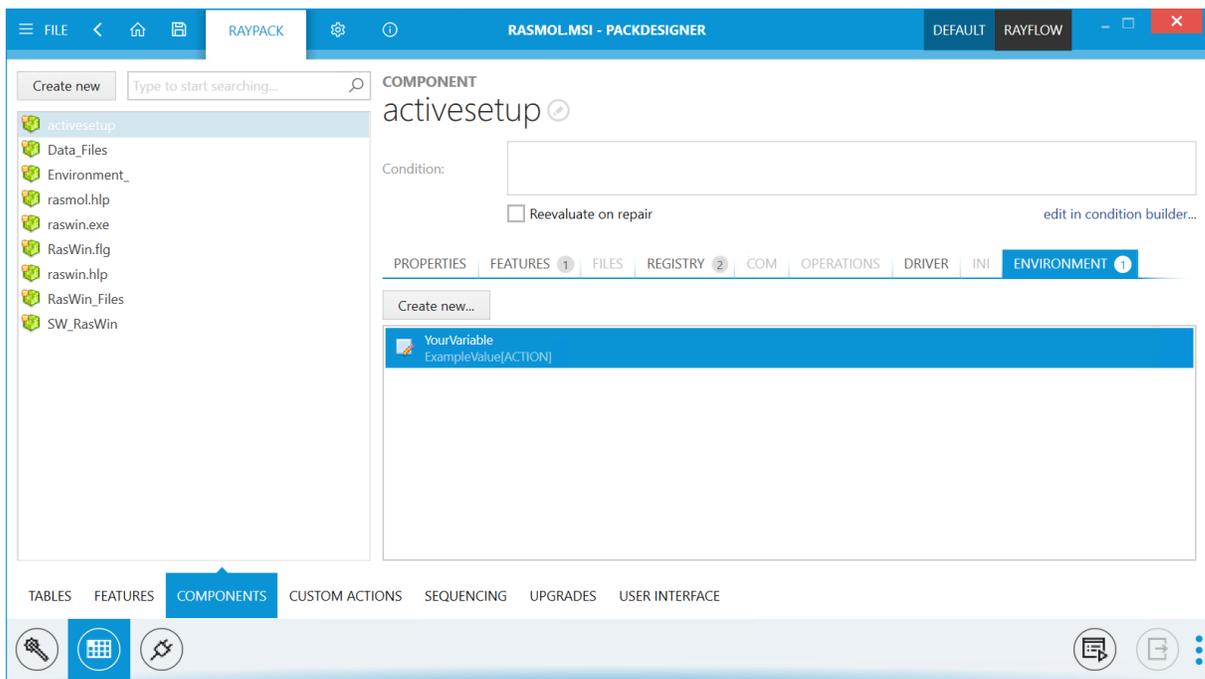
RPK-4521 RPK-4518

A new option for direct deployment has been added to our PSADT and MSIX project editors. This feature means, it is now possible to deployment from any Windows packaging project: MSI, MSIX and wrapped setup (PSADT).



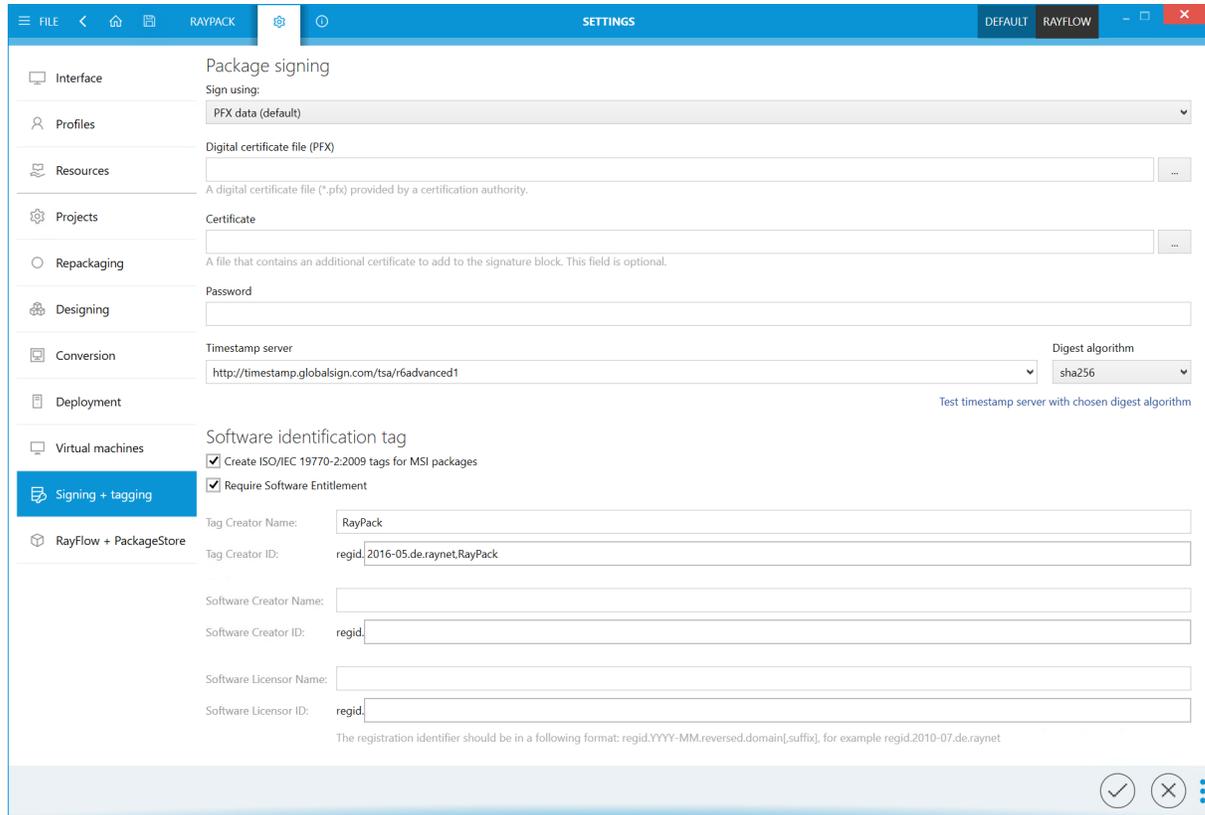
Editing of MSI Environment Variables from the Content View RPK-4558

In PackDesigner, we added a new tab in the Component view. This context-aware view shows the list of environment variables assigned to a selected component and provides an easy way of adding a new content that should go to a specific component.



Advanced Options for Signing and Timestamping RPK-4609

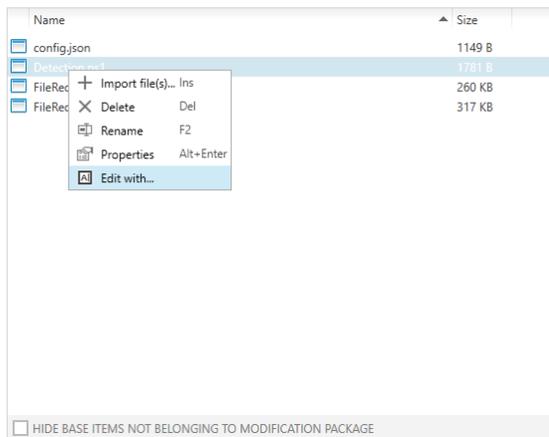
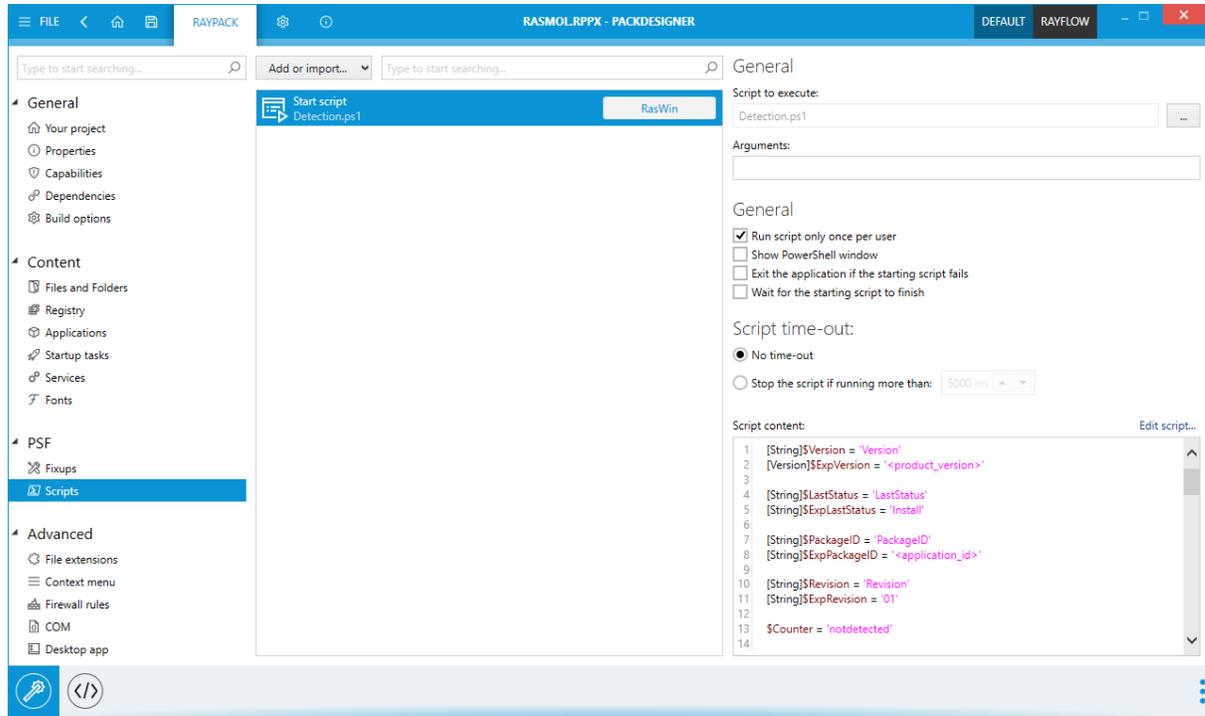
Based on popular feedback, we improved the signing dialog by adding a list of predefined public timestamp server, available for free. To support custom scenarios, the user can now also specify the digest algorithm used for timestamping. Finally, to make sure the configuration is accepted for MSIX packaging, a new button to test the settings is available. This means that signing issues related to timestamping can now be identified very early on, directly during the initial setup.



Ability to Edit Files and Scripts Directly from the MSIX Project Editor

RPK-4609

Editing files or scripts from any MSIX-based project has never been easier. In this version, there is an extra context-menu option to open any file in an editor of choice. RayPack does the heavy lifting and ensures the new content overwrites the existing one without time-consuming manual decompression and compression of resources.

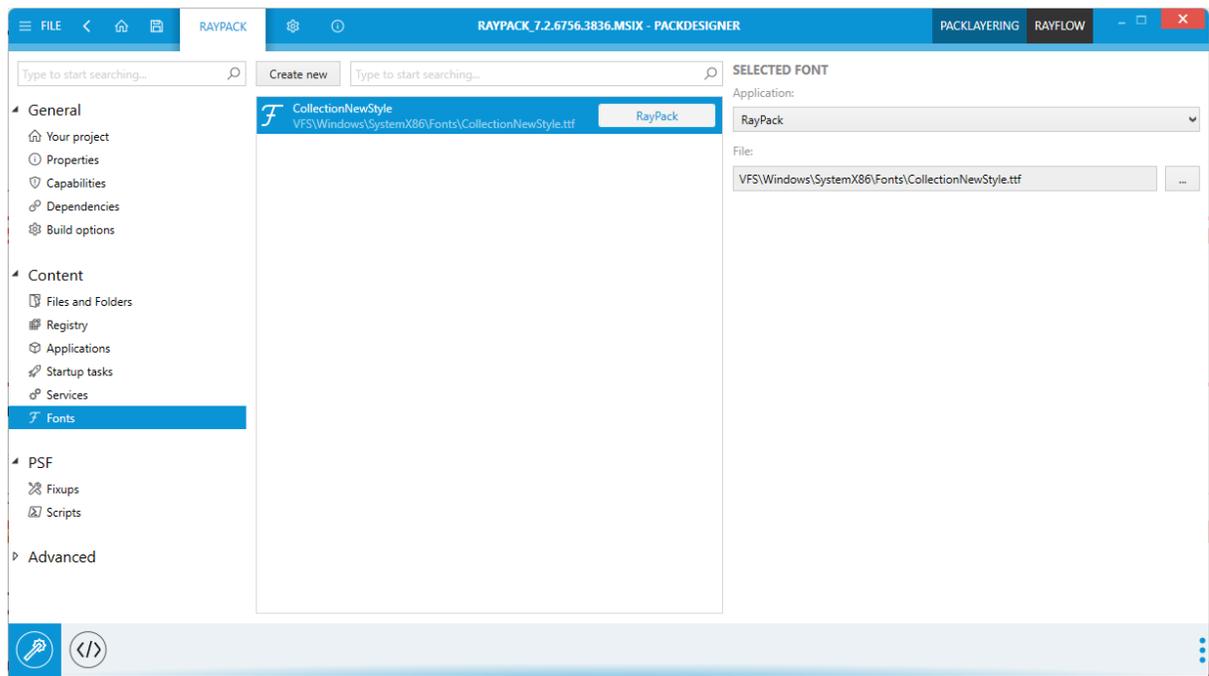


Improvements and New Features for MSIX Projects

RPK-4448

Based on popular demand, we implemented several new MSIX features, which can be now managed and edited using the visual designer:

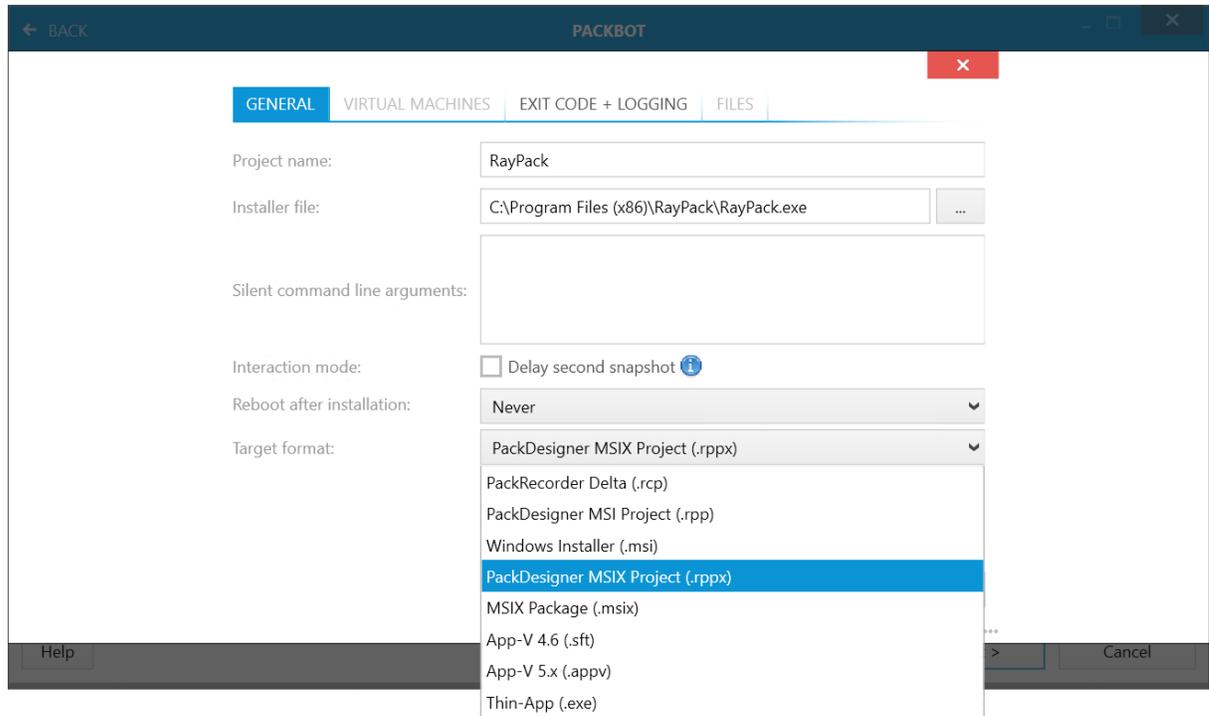
- With the new **Fonts** page it is possible to register fonts.
- With the new **Desktop app** page it is possible to define in-depth behavior for apps that blend MSIX and classic deployment.
- The **Dependencies** page now supports driver dependencies and host runtime dependencies
- The **Properties** page now exposes options for multi-user awareness and file/registry write virtualization.
- The **Applications** page has now several extra options to set the runtime behavior, trust level and other in-depth settings for MSIX deployment.



Additionally, the structure of options in the main menu has been reorganized. Similar options are now grouped, and less-frequently used were moved to the Advanced group.

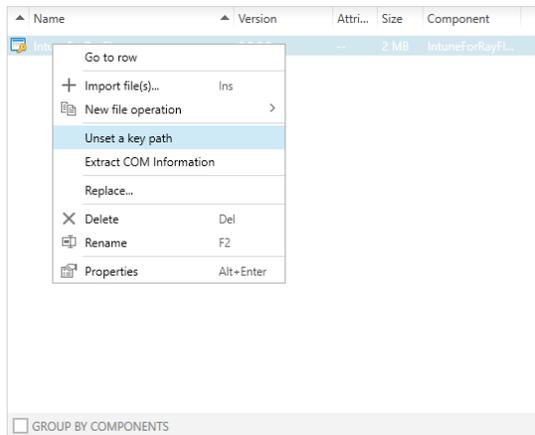
Repackaging to RPPX Format Is Now Available in PackBot [RPK-4647](#)

We added a new target format (RPPX) to the PackBot configuration dialog. RPPX is a project format for MSIX-based setups.



Better Control of KeyPath Resources RPK-4659

Based on a popular feature request, we implemented new context menu options to provide a quick removal of component key paths. This new function is available on both, the global (Registry, Files + folders) and on the Component level. When a key path is removed, the empty key path (component directory) is used automatically according to MSI best practices.



Improvements

- In MSIX/RPPX projects, the build menu can now be accessed with the `F7` hotkey. [RPK-4640](#)
- More options have been added to control the user interaction and UI of PSADT projects. [RPK-4569](#)
- Minor UI improvements of PackWrapper PSADT actions. [RPK-4572](#) [RPK-4568](#) [RPK-4573](#)
- Inline script editing in PSADT projects is now more convenient due to a bigger editing area. [RPK-4552](#)
- It is now possible to use the **File > Save** as functionality to save an MSIX project under a different name. [RPK-4648](#)
- PSADT projects (`.ps1` format) can now be opened from the `RayPack.exe` command-line. [RPK-4619](#)
- Improved conversion of ODBC entries from RCP to App-V. [RPK-4554](#) [ZEN-19607](#)
- Improved performance of INI file building from RCP projects. [RPK-4525](#) [ZEN-19356](#)
- It is now possible to drag and drop Registry entries between local browser and project view. [RPK-4533](#) [ZEN-19309](#) [ZEN-19608](#)
- When importing a REG file with special MSI characters, RayPack now asks whether to treat them literally or as MSI properties. [RPK-4534](#) [ZEN-19309](#) [ZEN-19608](#)
- Pressing `F1` (to open contextual help) now reuses previously opened windows. [RPK-1974](#)
- When importing an invalid `.reg` key, RayPack no longer creates an empty component for new content. [RPK-4577](#)
- Updated bundled the NSIS framework to version 3.08. [RPK-4691](#)

Resolved Issues

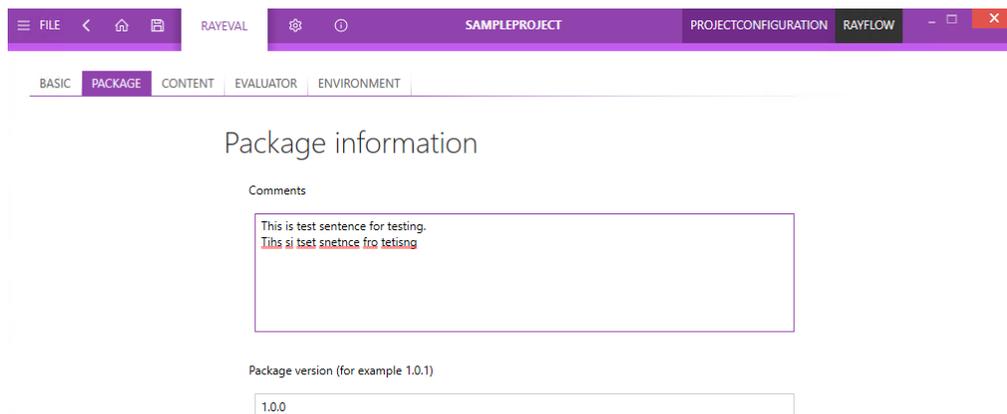
- Fixed the handling of the PSADT `Resolve-Error` function and conversion to PowerShell. RPK-4483
- Fixed an issue, where the first or the second snapshot could fail while repackaging on a virtual machine. RPK-4547
- Resolved minor UI bugs and issues in the MSIX Designer. RPK-4463
- Fixed an issue, where the saving of the MST file for the second time could not complete. RPK-4527 RPK-4531 ZEN-19743
- Fixed the import of DLL containing multiple icons into an MSI project. RPK-3684
- Fixed an issue with the command-line tool `RpCmd.exe`, where it was not possible to sign packages while converting from `.rcp` to `.msi/.msix` using the parameters `-Certificate` and `-Password`. RPK-4512 RPK-4520 RPK-4522
- Fixed an issue where COM `TypeLib` entries and registry keys could be duplicated in the UI after making manual changes in the Tables view. RPK-4519 RPK-4576 ZEN-19309 ZEN-19608
- Fixed an issue with the import of nested files structures in PSADT projects. RPK-4520
- Fixed a possible crash when removing a previously added fixup in the MSIX editor. RPK-4524
- Fixed the handling of parameters for the functions `Get-InstalledApplication`, `Execute-MSI`, `Execute-Process`, and `Remove-MSIApplications` in PSADT projects. RPK-4529 RPK-4530 RPK-4535 RPK-4537
- Fixed an issue where packaging was not possible on machines where the Windows Defender feature was not installed. RPK-4542 ZEN-19577
- Fixed an issue with the MSI shortcut editor where some localized texts were overlapping the content. RPK-4545
- Fixed the adjustment of complex conditions after removing an MSI property with row tracking enabled. RPK-4578 ZEN-19309 ZEN-19608
- Fixed an UI issue with a missing description and an example of usage for PSADT functions. RPK-4559
- Fixed a warning shown when saving a PSADT project that removes a registry key. RPK-4595
- Fixed an issue with the creation of MST files from RCP projects. RPK-4596
- Fixed an exception when generating an executable bootstrapper for MSI projects. RPK-4591
- Fixed minor bugs with MSIX Registry handling (adding and removal). RPK-4601 RPK-4600
- Fixed an exception when changing signatures in the Build Options followed by starting an MSIX build. RPK-4604
- Fixed an issue with partially clipped buttons in the COM class properties dialog. RPK-4654 ZEN-19608

-
- Fixed the conversion of RCP to MSIX with empty multi-string Registry values. [RPK-4617](#)
 - Fixed an exception when pressing `CTRL + Z` and typing paths to Visual Basic scripts in the Custom Action editor. [RPK-4618](#)
 - Fixed issues with the removal of MSIX packages from PSADT files. [RPK-4653](#)
 - Fixed the adding of scripts in MSIX projects. [RPK-4636](#) [RPK-4602](#)
 - Fixed various minor issues with registry importing which was not possible with some REG files. [RPK-4655](#)

RayEval

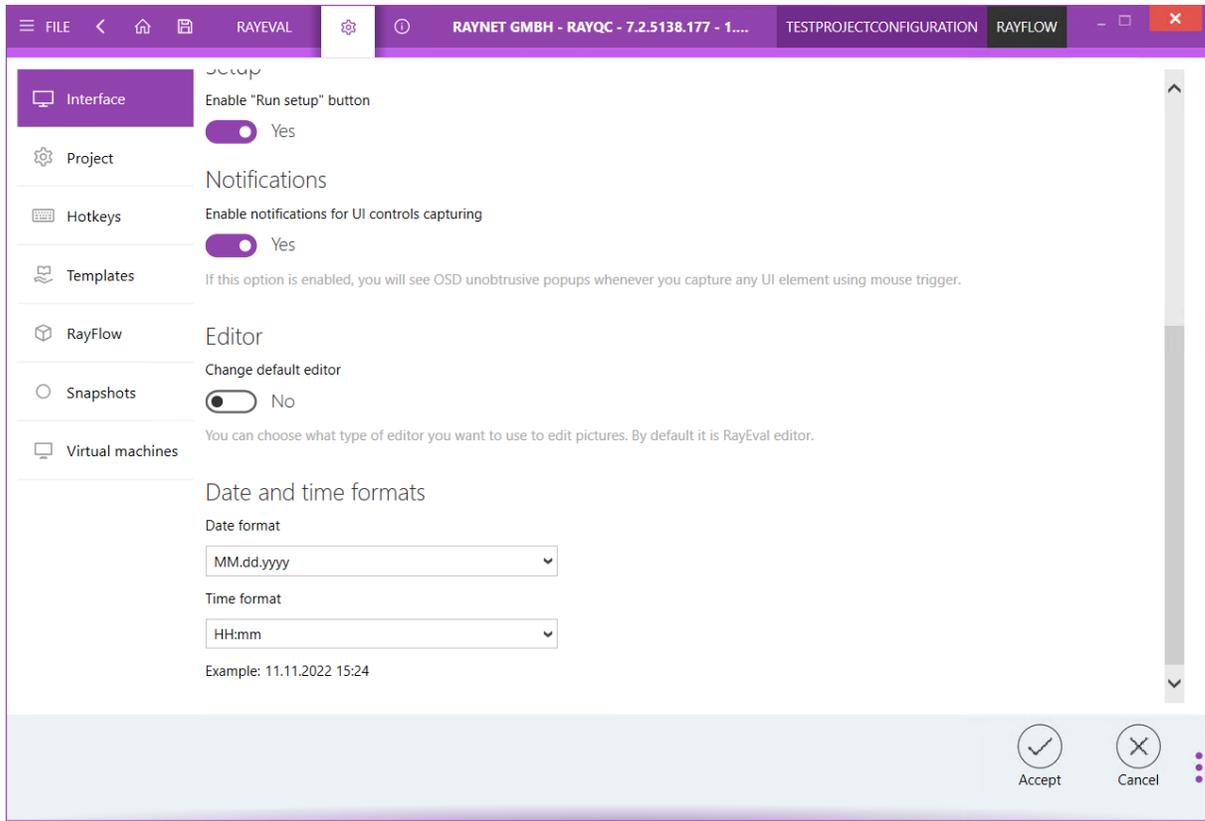
Spell-Checking for Step Descriptions RVL - 128

When editing the description of a step, the text is automatically checked against spell-checks and offers auto-suggestions (availability of the support of a language depends on the Windows settings). This way it is easy to eliminate spelling errors and grammar mistakes without additional proof-reading.

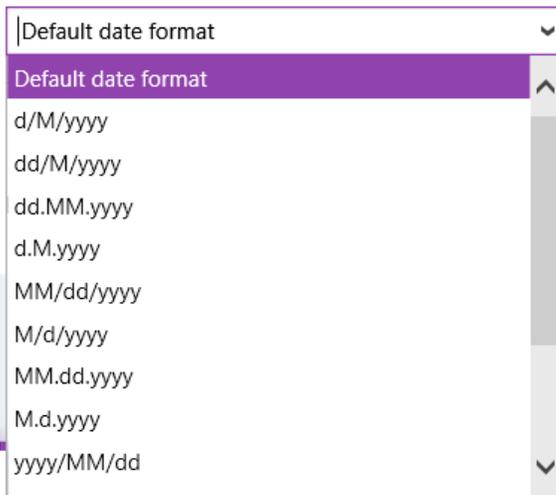


Configurable Regional Settings for Date Formats RVL - 378

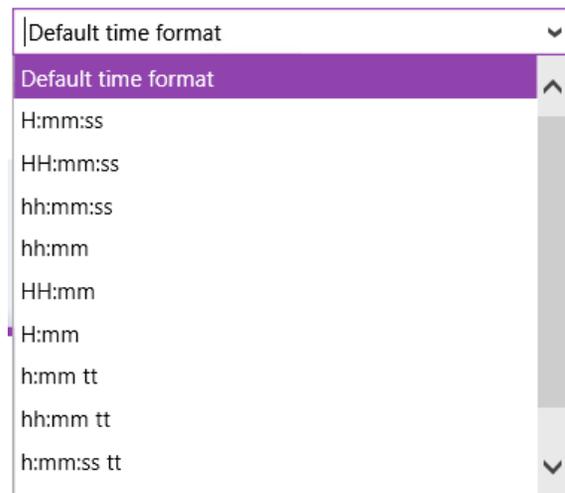
Date format is now configurable in the program settings. RayEval now offers multiple different ways the dates are presented.



Date format



Time format



Improvements

- Improved scrolling when dragging steps RVL - 584
- Improved the handling of the clipboard RVL - 362

Resolved Issues

- Improved the German localization. RVL-131

RayQC Advanced

Support for Compatibility Tests Against Windows 11 22H2 September 2022 Update RTS-2434

In this build there are two separate rule sets for both versions of Windows 11: 21H2 October 2021 and 22H2 September 2022 Update. They replace the previous single generic Windows 11 rule set.

Improvements

- The PowerShell commandlet `Import-Package` now support an extra parameter to define the MST transform path. RTS-2470 ZEN-20392
- When starting RayQC Advanced for the first time, the UI language is chosen based on the system language. RTS-2477 ZEN-20781
- Improved validation for user input and its completeness in the Test Wizard / Rule selector. RTS-2441
- When selecting a folder, all packages from it are now shown in the details panel. RTS-2441

Resolved Issues

- Fixed issues with the installation of SQL tables with custom schema. RTS-2467
- Fixed the expansion of folders when opening a package from the command-line. RTS-2340
- Fixed an issue where it was not possible to remove a single package family during the import process. RTS-2450
- Fixed a missing rule name in the Rule page (Test wizard). RTS-2451
- Fixed an `DispatcherUnhandledException` error in the **Reimport** package wizard. RTS-2449
- Fixed an issue where the first connection attempt after changing the database from an invalid state to the right state was still failing. RTS-2449
- Fixed inconsistent test results between the testing sessions invoked from RayQC Advanced and from RayPack. RTS-2447 RPK-4526
- Improved the stability of the PowerShell module. RTS-2445 ZEN-19320 ZEN-19307
- Fixed an issue with the opening of the application console dialog. RTS-2442
- Fixed the visibility of the dialog buttons in the Custom property dialog. RTS-2444
- Fixed error messages during import of incomplete or broken packages. RTS-2480
- Fixed context menu operation to restore and delete packages from the library. RTS-2472 RTS-

2473

RayQC

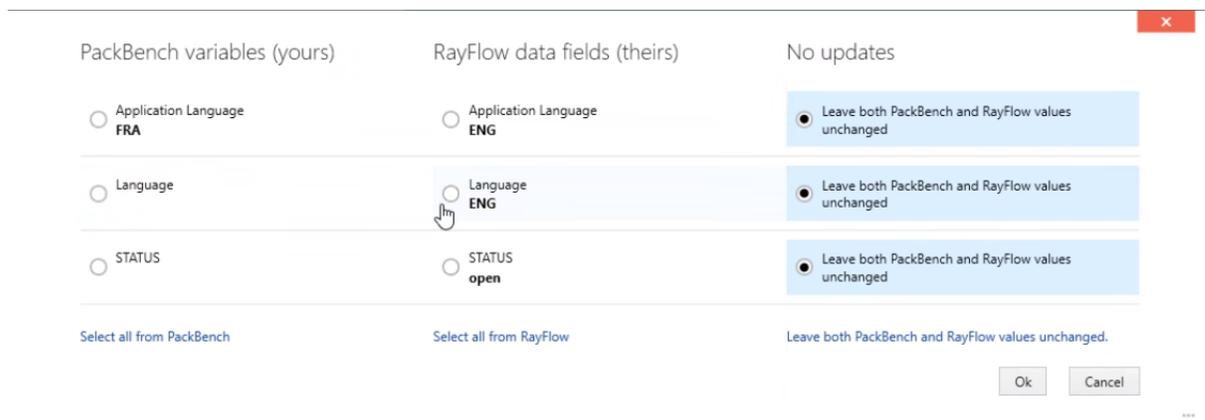
Resolved Issues

- Fixed an issue where it was not possible to replace a plugin. RQC-1037
- Fixed several issues with the PowerShell automation module if RayQC was activated with a floating license. RPK-4461 RQC-1038

PackBench

Ability to Synchronize Values with RayFlow BEN-368

A new dialog has been added where two-way synchronization between RayFlow and PackBench can be started. PackBench automatically detects the conflicts and shows the overview of conflicts between both products allowing the user to choose which value should be kept.



Command-line Parameters to Open a Specific Run BEN-378

With the newly introduced command-line parameter, it is possible to open a specific run directly on the page where the tasks can be viewed and interacted with.

Improvements

- Improved sorting of dates in the columns **Created** and **Modified**. BEN-374 ZEN-20329
- When PackBench starts, the current language is detected and used as preferred UI language for PackBench. BEN-379

Resolved Issues

- Fixed an issue where RayFlow values could be incorrectly mapped to PackBench variables when using localized data field names. BEN-375 ZEN-20328
- Fixed the migration and creation scripts to use the `dbo` prefix. BEN-373
- Fixed minor UI issues in the Properties window. BEN-381
- Fixed a problem with the data fields of the `Date-Time` type where it was not possible to select years starting from 2000. BEN-367 ZEN-19433

PackLayering

Improvements

- PackLayering now automatically detects the current system language and uses it as the default program language. [CIT-277](#)
- Added automatic clean-up of logs. [CIT-274](#)

Resolved Issues

- Improved the performance and the stability of the VHD layer handling. [CIT-278](#) [CIT-273](#)
- Fixed various issues in the file system and registry handling. [CIT-275](#) [CIT-271](#) [CIT-169](#)
- Fixed issues with the floating license activation. [CIT-269](#)

Migration and Breaking Changes

In this release, all products and components have been migrated to .NET Framework 4.7.2, which is now a prerequisite for RayPack Studio.

RayPack

Upgrading RayPack

General Upgrade Preparations

RayPack 7.3 is delivered as part of the RayPack Studio Installer. To install it safely execute the following steps:

1. Download the RayPack Studio Installer 7.3 from the Raynet resource repository (If you have not already received the credentials, please contact the Raynet support team via the [Raynet support portal](#) to receive them using the ticket system)
2. Copy all files that need to be kept for later use or look-up (such as resources of global external plugins, logs, settings, config files, the *.rs1 file, etc.) to a temporary transfer directory outside of the RayPack Studio application directory (where they usually reside)
3. Execute the RayPack Studio Installer and work through the setup routine. The installation of RayPack 7.3 using the RayPack Studio Installer is described in the *RayPack Studio Installer User Guide*

Migration from RayPack 7.2

PackPoint and User Files Upgrade

- It is recommended to perform a PackPoint upgrade during the installation (MSI). The upgrade is done automatically when starting the RayPack Studio Installer. If no update could be performed, it can be done manually by using the command-line tools (see Product User Guide for details on the `rpcmd.exe`)
- Certain PackPoint resources (profiles, templates) are not automatically updated for users who worked with previous versions of RayPack. Increase the PackPoint version to force an update or have them started using the `rpcmd.exe` with command-line switches to perform the upgrade manually (see Product User Guide for more information)

Migration from Older Versions

Refer to the *Release Notes* of previous version of RayPack Studio to determine which breaking changes are affecting your upgrade.

Troubleshooting

If you experience abnormal symptoms (like the program not starting, missing features, etc.) after the upgrade, we highly recommend performing a clean installation of RayPack / PackBench 7.3. To do that, please perform the following steps:

- 1) Locate your product order number. If you cannot find it, contact our support.
- 2) Make a backup of your license file (by default installed to `<ProgramData>\Raynet\Licenses*.rsl`).
- 3) Uninstall the previous version of RayPack.
- 4) Delete the content of the installation folder (by default `C:\Program Files (x86)\RayPackStudio\RayPack`).
- 5) Install RayPack 7.3.
- 6) Start the main application (`raypack.exe`) to reactivate RayPack.

If the issues are not resolved after performing the steps described above, the following steps will revert the profile to the original state:

- 7) Close RayPack.
- 8) Backup and then remove the content of the following folder:
 - `%AppData%\RayPack`
 - Optionally, you can also revert the `<%PACKPOINT%>` to the default state by removing the `<%PACKPOINT%>` folder (standard installation path is `C:\RayPack\<%PACKPOINT%>`).
- 9) Start RayPack again.

If the procedures given above do not resolve the issue, please contact our support.

PackBench

Upgrading PackBench

General Upgrade Preparations

PackBench 7.3 is delivered as part of the RayPack Studio Installer. In order to install it safely:

1. Download the RayPack Studio Installer 7.3 from the Raynet resource repository. (If you have not already received the credentials, please contact the Raynet support team via the [Raynet support portal](#) to receive them using the ticket system).
2. Copy all files that need to be kept for later reuse or look-up (such as resources of global external plugins, logs, settings, config files, the *.rsl file, etc.) to a temporary transfer directory outside of the RayPack Studio application directory (where they usually reside).
3. Make a backup of the SQL Server database which is used by PackBench.
4. Execute the RayPack Studio Installer and work through the setup routine. The installation of PackBench 7.3 using the RayPack Studio Installer is described in the *RayPack Studio Installer User Guide*.



Note:

Ensure that a **running** SQL server is available before starting the migration / installation.

Migration from PackBench 7.2

There are no breaking changes.

Migration from Older Versions

Refer to *Release Notes* of previous version of RayPack Studio to determine which breaking changes are affecting your upgrade.

Troubleshooting

If you experience abnormal symptoms (like program not starting, missing features, etc.) after the

upgrade, we highly recommend performing a clean installation of PackBench 7.3. To do that, please perform the following steps:

- 1) Locate your product order number. If you cannot find it, contact our support.
- 2) Make a backup of your license file (by default installed to `<ProgramData>\Raynet\Licenses*.rsl`).
- 3) Uninstall the previous version of PackBench.
- 4) Delete the content of the installation folder (by default `C:\Program Files (x86)\RayPackStudio\RayPack\PackBench`).
- 5) Install PackBench 7.3.
- 6) Start the main application (`packbench.exe`) to reactivate PackBench again.

If the issues are not resolved after performing the steps described above, the following steps will revert the profile to the original state:

- 7) Close PackBench.
- 8) Backup and then remove the content of the following folder:
 - `%AppData%\RayBench` and `%ProgramData%\RayBench`
 - You may try to install a new database with sample data to see if the problem persists.
- 9) Start PackBench again.

If the procedures given above did not resolve the issue, please contact our support.

RayQC

Upgrading RayQC

General Upgrade Preparations

RayQC 7.3 is delivered as part of the RayPack Studio Installer. In order to install it safely:

1. Download the RayPack Studio Installer 7.3 from the Raynet resource repository. (If you have not already received the credentials, please contact the Raynet support team via the [Raynet support portal](#) to receive them using the ticket system).
2. Copy all files that need to be kept for later reuse or look-up (such as resources of global external plugins, logs, settings, config files, the `*.rsl` file, etc.) to a temporary transfer directory outside of the RayPack Studio application directory (where they usually reside).
3. Execute the RayPack Studio Installer and work through the setup routine. The installation of RayQC 7.3 using the RayPack Studio Installer is described in the *RayPack Studio Installer User Guide*.

Migration from RayQC 7.2

There are no breaking changes.

Migration from Older Versions

Refer to *Release Notes* of previous version of RayPack Studio to determine which breaking changes are affecting your upgrade.

RayQC Advanced

Upgrading RayQC Advanced

General Upgrade Preparations

RayQC Advanced 7.3 is delivered as part of the RayPack Studio Installer. In order to install it safely:

1. Download the RayPack Studio Installer 7.3 from the Raynet resource repository. (If you have not already received the credentials, please contact the Raynet support team via the [Raynet support portal](#) to receive them using the ticket system).
2. Copy all files that need to be kept for later reuse or look-up (such as resources of global external plugins, logs, settings, config files, the *.rs1 file, etc.) to a temporary transfer directory outside of the RayPack Studio application directory (where they usually reside).
3. Make a backup of the SQL Server database which is used by RayQC Advanced.
4. Execute the RayPack Studio Installer and work through the setup routine. The installation of RayQC Advanced 7.3 using the RayPack Studio Installer is described in the *RayPack Studio Installer User Guide*.



Note:

Ensure that a **running** SQL server is available before starting the migration / installation.

Migration from RayQC Advanced 7.2

There are no breaking changes.

Migration from Older Versions

Refer to *Release Notes* of previous version of RayPack Studio to determine which breaking changes are affecting your upgrade.

RayEval

Upgrading RayEval

General Upgrade Preparations

RayEval 7.3 is delivered as an MSI software package. In order to install it safely:

1. Download the MSI package for RayEval 7.3 from the Raynet resource repositories. (If you have not already received credentials, please contact the Raynet support team via our [Support Panel](#)).
2. Copy all files that need to be kept for later reuse or look-up to a temporary transfer directory outside of the RayEval application directory (where they usually reside). This is important for all files that have been customized like the project configuration file (`Projectconfiguration.xml`), the export plugins configuration file (`PluginTemplates.xml`), and the folder which contains all the template documents (`<INSTALLDIR>\Plugins\Templates\`).
3. Execute the RayEval 7.3 MSI package and work yourself through the setup routine. The installation of RayEval 7.3 is described in the *RayEval 7.3 User Guide*.
4. After the installation has been finished, copy the files that have been backed-up to their previous locations.

Migration from RayEval 7.2

There are no breaking changes.

Migration from Older Versions

Refer to *Release Notes* of previous version of RayPack Studio to determine which breaking changes are affecting your upgrade.

Known issues

- It is not recommended to install RayPack from both MSIX and MSI on the same machine. In some cases, this configuration may cause issues with handling of RayPack user profile. We recommend to stick to either an MSI or MSIX installation.

System Requirements

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 RayPack Studio framework itself requires about 600MB of disk space. The amount of additional space needed depends on the volume of your packaging material and the location of the data store.

Supported OS

The following operating systems are supported for the installation and running of RayPack Studio 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



Note:

Packages generated with RayPack Studio have their own, individual set of target OS. The list above is not designed to display which target OS are reachable by RayPack Studio packages.

Prerequisite Software

General

- Microsoft .NET Framework 4.7.2

General Requirements

To use RayFlow functionality directly from RayPack Studio components, a running RayFlow server must be accessible.

To use *RayManageSoft* integration, *Management Console* must be installed on the machine on which RayPack is running.

RayPack

Virtualization

- To create SWV packages, the Symantec Workspace Virtualization Agent 7.5 must be installed on the packaging machine
- To create Thin-App packages, the VMware ThinApp must be installed on the packaging machine

Compatibility and Quality Control

To use Quality features (checklists, compatibility, virtualization, and conflict testing) RayQC and / or RayQC Advanced must be installed on the local machine.

Generation of MSIX Files

If using Windows 8.1 or Windows Server 2012 R2 or an older version of Windows or Windows Server, an update for the CRT in Windows is needed to be able to generate MSIX files.

More information on the CRT update can be found here: <https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows>.

PackBench

Depending on the configuration of RayPack Studio, additional tools and/or components of RaySuite may be required. To get more information about the command line usage of these tools refer to the respective *User Guides* of these products.

For PackBench: SQL Server, version 2012 or higher. Express editions are also supported.

RayQC

To install and use the product, PowerShell 3.0 or newer must be installed.

RayQC Advanced

To install and use the product, SQL Server version 2012 or higher. Express editions are also supported.

Virtual Machines

Sequencing to App-V 4.6 / App-V 5.x Using PackBot

In order to sequence legacy setups to Microsoft App-V 4.6 / 5.x format using a virtual machine, the virtual machine must have Microsoft App-V Sequencer installed. Additional requirements for specific Operating System version/platform may be required by Microsoft Sequencer tools.



Note:

There is a difference between "Sequencing" and "Converting" as denoted in the PackBot configuration. The latter one uses a native converter and does not require Sequencer at all.

Converting to Thin-App Using PackBot

To convert legacy setups to Thin-App, Thin-App converter must be installed either on host or on the virtual machine.

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 RayPack Studio subfolder `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

RayPack Studio 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 experimentally 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 (<https://my.vmware.com/web/vmware/details?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
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 14 or earlier	Workstation-12.0.0 Workstation-14.0.0

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:
 - System.Anonymous
 - System.Read
 - System.View
 - VirtualMachine.GuestOperations.Execute
 - VirtualMachine.GuestOperations.Modify
 - VirtualMachine.GuestOperations.Query
 - VirtualMachine.Interact.CreateScreenshot
 - VirtualMachine.Interact.GuestControl
 - VirtualMachine.Interact.PowerOff
 - VirtualMachine.Interact.PowerOn
 - VirtualMachine.State.CreateSnapshot
 - 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:

	VMware PowerCLI															
	12.0.0	11.5.0	11.4.0	11.3.0	11.2.0	11.1.0	11.0.0	10.2.0	10.1.1	10.1.0	10.0.0	6.5.4	6.5.3	6.5.2	6.5.1	6.5.0
▼ VMware vSphere Hypervisor (ESXi)																
7.0	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6.7 U3	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—	—	—
6.7 U2	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—	—
6.7 U1	✓	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—
6.7.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—
6.5 U3	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—	—	—
6.5 U2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—
6.5 U1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—
6.5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.0 U3	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.0.0 U2	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.0.0 U1	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.0.0	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.5 U3	—	—	—	—	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.5 U2	—	—	—	—	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.5 U1	—	—	—	—	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.5	—	—	—	—	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓

More information about PowerCLI:

- <https://pubs.vmware.com/vsphere-51/index.jsp?topic=%2Fcom.vmware.powercli.cmdletref.doc%2FGet-VMGuest.html>
- <https://pubs.vmware.com/vsphere-51/topic/com.vmware.powercli.cmdletref.doc/Invoke-VMScript.html>
- https://pubs.vmware.com/vsphere-50/index.jsp?topic=%2Fcom.vmware.wssdk.pg.doc_50%2FPG_ChD_Privileges_Reference.22.3.html

Additional Information

Visit www.raynet.de for further information regarding the product and current community incentives. It is also recommended to take a look at additional resources available at the Knowledge Base for Raynet products:
<https://raynetgmbh.zendesk.com/hc/en-us>.

Raynet is looking forward to receiving your feedback from your RayPack Studio experience. Please contact your Raynet service partner or write an e-mail to sales@raynet.de to add your ideas or requirements to the RayPack Studio development roadmap!

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



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