



Release Notes Packaging Suite 4.1

Enterprise Software Packaging

Application Readiness > Evaluation >
Packaging and Virtualization > Quality Assurance

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Release Notes

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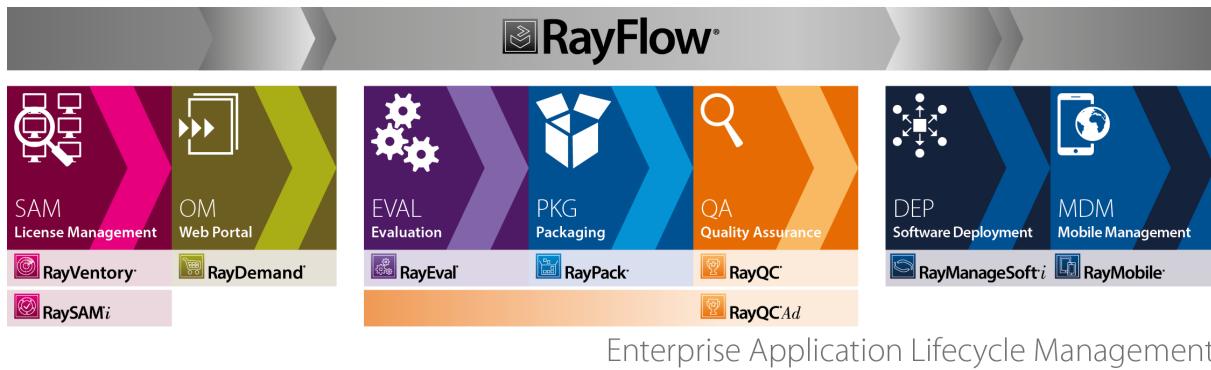
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Introduction

Packaging Suite 4.1 is the next iteration of Raynet's framework for the creation and management of software packages. Packaging Suite 4.1 includes powerful tools with new features that automate and accelerate holistic packaging projects.

Packaging Suite 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.



Enterprise Application Lifecycle Management

This release contains new features, enhancements and bug fixes for all of these applications: RayFlow (client), RayPack, PackBench, RayQC, RayQC Advanced, and RayEval.

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

Raynet is looking forward to receiving your feedback from your Packaging Suite experience. Please contact your Raynet service partner or write an e-mail to sales@raynet.de to add your ideas or requirements to the Packaging Suite 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 Packaging Suite 4.1.

Breaking changes

- The product line 4.1 has been upgraded to use a newer version of .NET Framework (4.5). Previously, .NET Framework 4.0 was in use. This may affect software requirements and supported operating systems and may have an impact on custom plug-ins and frameworks using software that targets older versions of .NET Framework.
- Additional note for RayQC users: Version 4.1 does not support PowerShell 2.0 anymore. Version 3.0 and higher is required in order to use the product.
- Starting from version 4.1, RayQC and RayQC Advanced MSI installation are separated (versions 4.0 had the same MSI installer).

Licensing

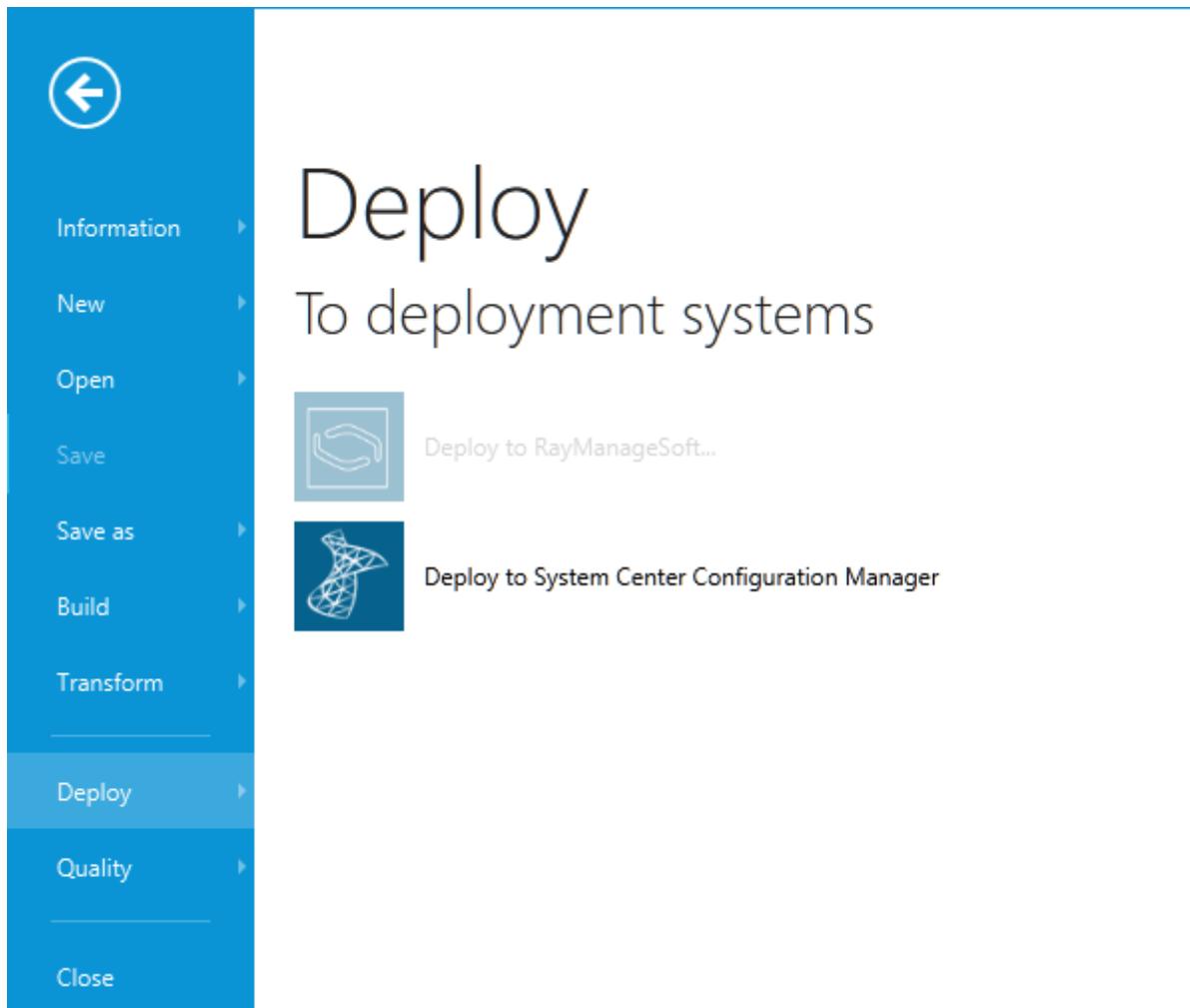
All products now support the concurrent user licensing model, commonly known as "Floating License Model". This provides an efficient and cost-effective method of licensing when the control over hardware bound (seat) licenses is not desired or difficult to regulate.

The Packaging Suite comprises everything that is needed to configure floating licenses on client side. In order to be able to use these, a local server dispatching concurrent licenses is required. This part is not included in Packaging Suite 4.1 installer and can be ordered separately. If you want to configure your licenses to be "floating", contact Raynet for information and pricing.

RayPack

Support for Deployment Systems (RayManageSoft / SCCM) RPK-1790

The new option in the **FILE** menu can be used to prepare the deployment of a package to a supporting deployment system (*RayManageSoft* or *Microsoft SCCM*) using an easy-to-use wizard driven routine.



Scanning Projects for the Presence of Merge Modules RPK-238

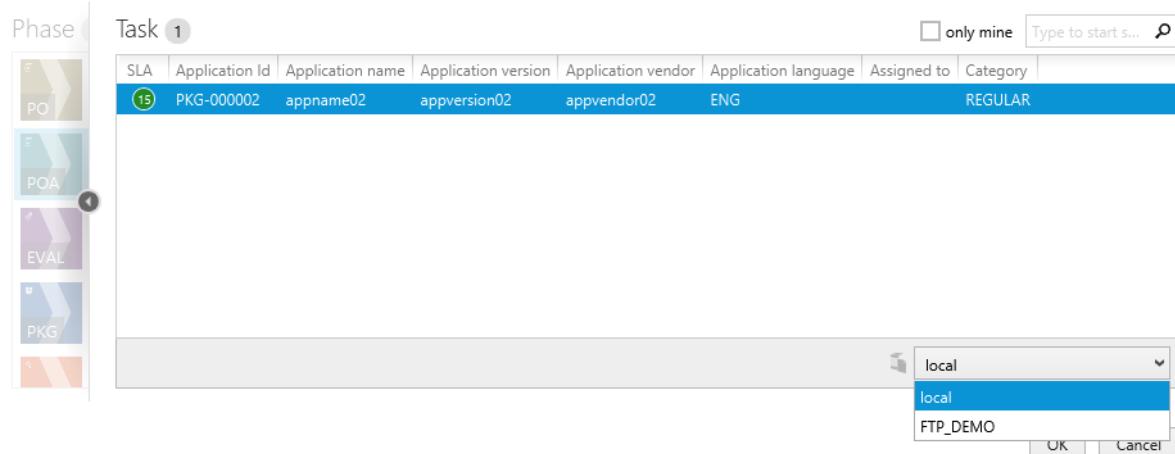
Both PackRecorder (.rcp) and PackDesigner (.rpp, .msi, and .mst files) can now be scanned for the presence of components that could be replaced with one or more Merge Modules available in the library. Scanning is performed on-demand, and depending on the project type applicable modules can be inserted to the project immediately or during build-time.

Additional options

-  **MergeModules in our Knowledge Base**
Read more in our Knowledge Database about usage and impact of MergeModules
-  **Scan for replacable content**
Scans the current project for resources like files and registries which may be replaced by a recognized Merge Module

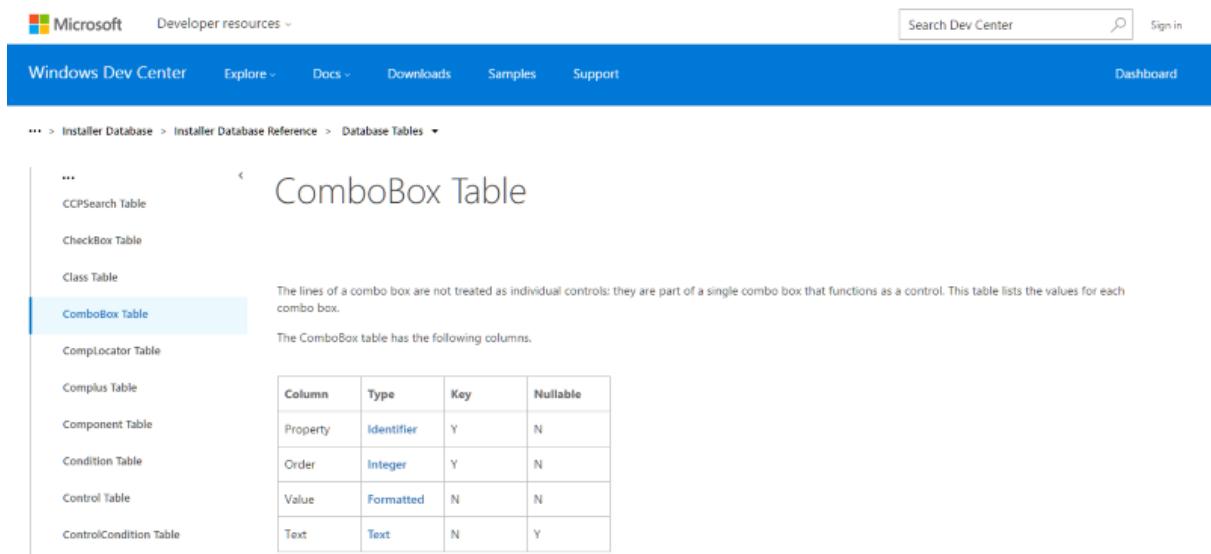
Support for RayFlow File Depots RSC-307

With **File Depots**, an option to upload and download files to and from locations different then the IIS server Rayflow is running on, has been added. The new target location for uploading files can be easily selected using a new dropdown box. Previously, it was not possible to upload files to locations other than the hosting webserver.



Windows Installer Help in TABLES View RPK-2125

When **F1** is pressed in the **TABLES** view, official MSDN help for a currently selected table is shown.



The screenshot shows the Windows Dev Center interface. At the top, there's a navigation bar with the Microsoft logo, 'Developer resources', a search bar ('Search Dev Center'), and a 'Sign in' button. Below the navigation bar, there's a blue header with 'Windows Dev Center' and other links like 'Explore', 'Docs', 'Downloads', 'Samples', and 'Support'. The main content area has a breadcrumb trail: '... > Installer Database > Installer Database Reference > Database Tables'. On the left, there's a sidebar with a list of tables: 'CCPSearch Table', 'CheckBox Table', 'Class Table', 'ComboBox Table' (which is highlighted with a blue background), 'ComLocator Table', 'Complus Table', 'Component Table', 'Condition Table', 'Control Table', and 'ControlCondition Table'. The main content area is titled 'ComboBox Table' and contains a paragraph about how lines in a combo box are treated as individual controls. It also says that the 'ComboBox table has the following columns.' To the right of this text is a table with four columns: 'Column', 'Type', 'Key', and 'Nullable'. The table rows are: Property (Identifier, Y, N), Order (Integer, Y, N), Value (Formatted, N, N), and Text (Text, N, Y).

Column	Type	Key	Nullable
Property	Identifier	Y	N
Order	Integer	Y	N
Value	Formatted	N	N
Text	Text	N	Y

Create a Backup of RPP Projects Before Saving RPK-1971

A configuration option is provided that enables RayPack to store a copy of the current RPP project before it is saved. This allows for an easy fallback to a previous version without using any version control system.

Improved Conversion from RPP/MSI/RCP to App-V 5.0 and Other Virtual Formats RPK-2240

Release 4.1 resolves several minor issues and improves conversion of Shell extensions, services, Verbs and other registry-based entries to their virtual equivalents. While all virtualization technologies benefit from these improvements, especially App-V 5.1 improvements and fixes stand out.

Other

- RPK-2081 Added an option to select the parent in System Search -> Folder settings.
- RPK-2108 It is now possible to configure drivers directly from the **Component** view for existing components.
- RPK-2125 Improved generation of source paths after conversion from RCP to MSI/RPP.
- RPK-2154 Added spinner buttons in the PackRecorder Snapshot Settings.
- RPK-2167 RayPack respects substorages when building from MSI to RPP and vice versa.
- RPK-2208 Added a warning when while saving changes as an MST file the original MSI is not available anymore.
- RPK-2209 Added a warning when users saves an MST transform with another transform(s) already open when the action would result in a new empty transform otherwise.
- RPK-2212 The option **hide empty folders** in file browsers respects linked folder settings.

PackBench

Improved Support for MSI Sources BEN-215

When copying an MSI file to the source folder, its supporting files are now analyzed and copied if necessary. Depending on MSI Media layout, the files may include external compressed files (.cab), or external uncompressed files, or a combination of those.

Prior to 4.1, only selected files were copied.

Create Full Folder Structure for New Runs BEN-212

When a new run is created, the full folder structure is created automatically. Prior to 4.1 only non-empty folders were created. This option is configurable and enabled by default. Existing workflows have this option enabled by default, the user has to opt-out if empty folders are not desired.

RayFlow Client

Plugins Have Been Added to RayFlow RF-3248

With the release of RayFlow 4.1 plugins have been added to RayFlow. At the moment, there are five different kinds of plugins. Triggered plugins, direct plugins, batch plugins, task attached plugins, and the Quick Report Sources where the latter are replacing the old quick reports.

File Depots RF-3347; RF-3351; RF-3352



With File Depots, an option to upload and download files to and from locations different than the IIS server Rayflow is running on, has been added. The new target location for uploading files can be easily selected using a new dropdown box that is available when selecting to upload a file. Previously, it was not possible to upload files to locations other than the hosting webserver.

Visibility of Comments [RF-3171](#)

The screenshot shows the Rayflow Client interface. At the top, there's a navigation bar with 'TASKS', 'RAYFLOW', 'SETTINGS', and 'ABOUT'. On the right, it says 'ADMIN | PACKAGING' and has a 'HELP' link. Below the navigation, there's a progress bar with various stages: PO (21), POA (14), EVAL (2), PKG (2), QA (5), UAT (1), and DEP (1). The main area is titled 'SELECTED ITEM' and shows 'Example App'. It has tabs for 'APPOINTMENTS', 'HISTORY (8)', 'LINKED TASKS', 'DATAFIELDS', 'COMMENTS (1)', and 'FILES (1)'. The 'COMMENTS' tab is active, displaying a comment from 'Admin in PO' that says 'This is an example comment which can either be set to Public, Private, or Default.' with a timestamp of '4 days ago'. There's also a 'SHOW MY TASKS ONLY' checkbox and a 'Add new comment...' button.

There are now different visibility options for comments. Comments can now be set to private, default, or public visibility. This means that users can decide if a comment is just visible for themselves, for those who have access to the phase where the comment is located, or to everyone who can view the task even though the comment was made in a phase they have no view permissions for.

Task Lock Changes [RF-3260](#); [RF-3261](#)

There are changes to how task lock works. Tasks are now only locked if users are making changes to a task. Furthermore, users cannot steal task from other users with the same permission level anymore. Administrative users on the other hand can now release and steal locks from all users which have a permission level that is not higher than their own and can therefore also steal or release locks from users with the same permission level.

Other

- [RF-1030](#) The performance of the **new order** view has been improved.
- [RF-2397](#) Phases permissions have been improved to work like expected.
- [RF-2863](#) It is now possible to upload files which are bigger than 2 GB.
- [RF-3188](#) User content localization has been added to the desktop client.

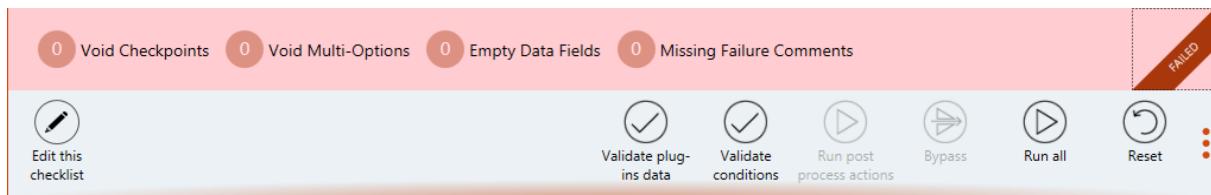
RayQC

Performance Optimizations RQC-593

Performance of large checklist has been vastly improved. As a result, large checklist are executed much faster (up to 400%).

Jumping to the First Failed Item in the Checklist View RQC-644

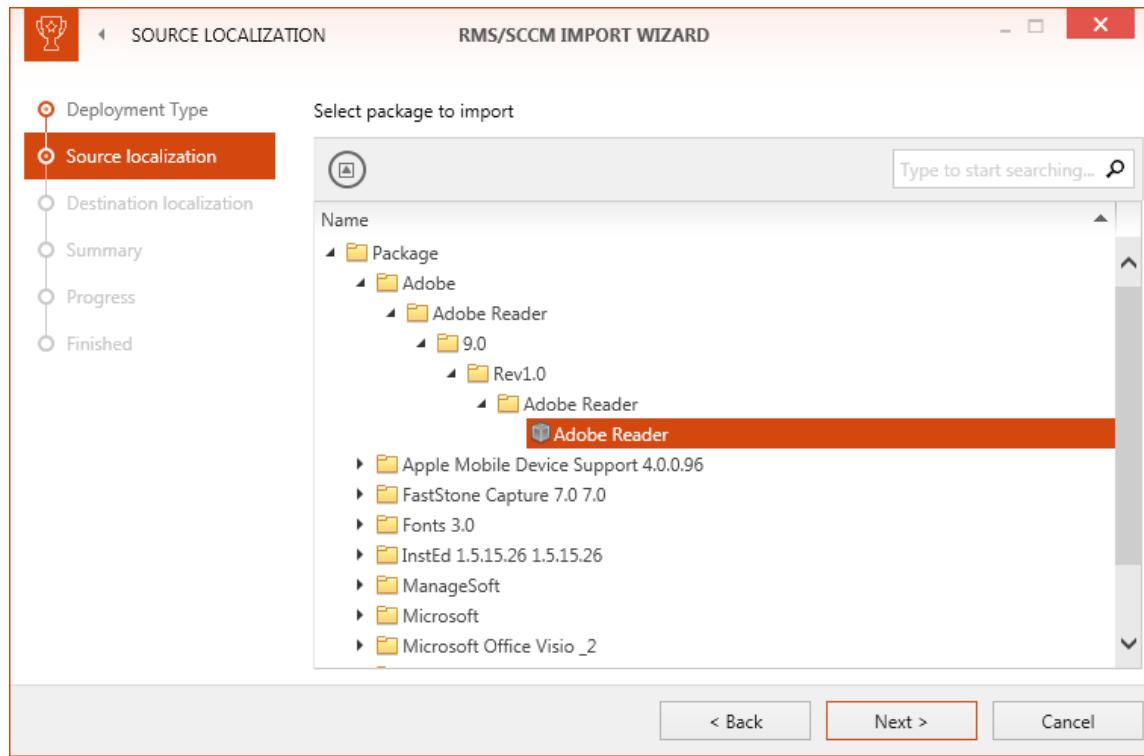
When a checklist is failed, clicking on its **FAILED** badge jumps directly to the first failed element, allowing easier troubleshooting.



RayQC Advanced

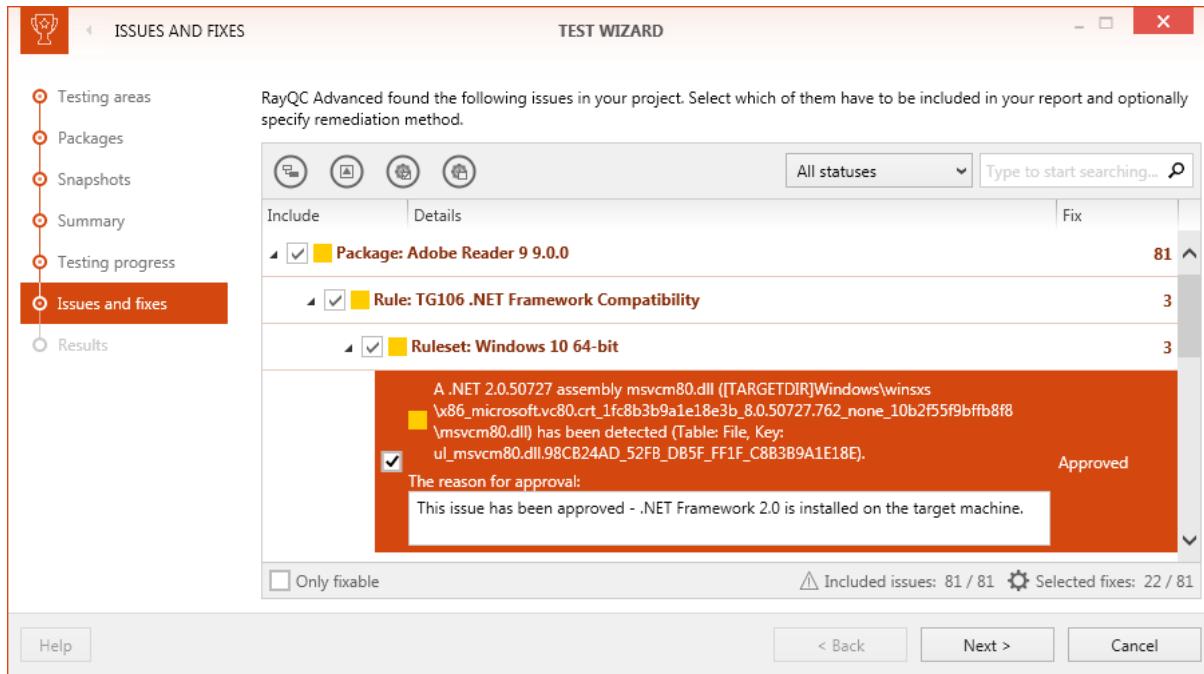
Integration with Deployment Systems (RayManageSoft / SCCM) RTS-1848

It is now possible to import packages from deployment systems. Version 4.1 supports RayManageSoft and SCCM. Similarly, fixed packages can now be easily exported to RMS Software Library or SCCM catalogs.



Advanced Control and Ability to Override / Ignore Certain Test Results [RTS-1914](#)

A possibility to approve a reported issue has been added. The **Approved** status represents a manually overridden issue, whereas RayQC Advanced result type (Warning or Error) is treated as an actually passed test after manual investigation. For other situations, it is possible to simply ignore selected test results, so that they are still present in reports, but do not affect the overall status of the package.



New Reporting Dashboard RTS-1846

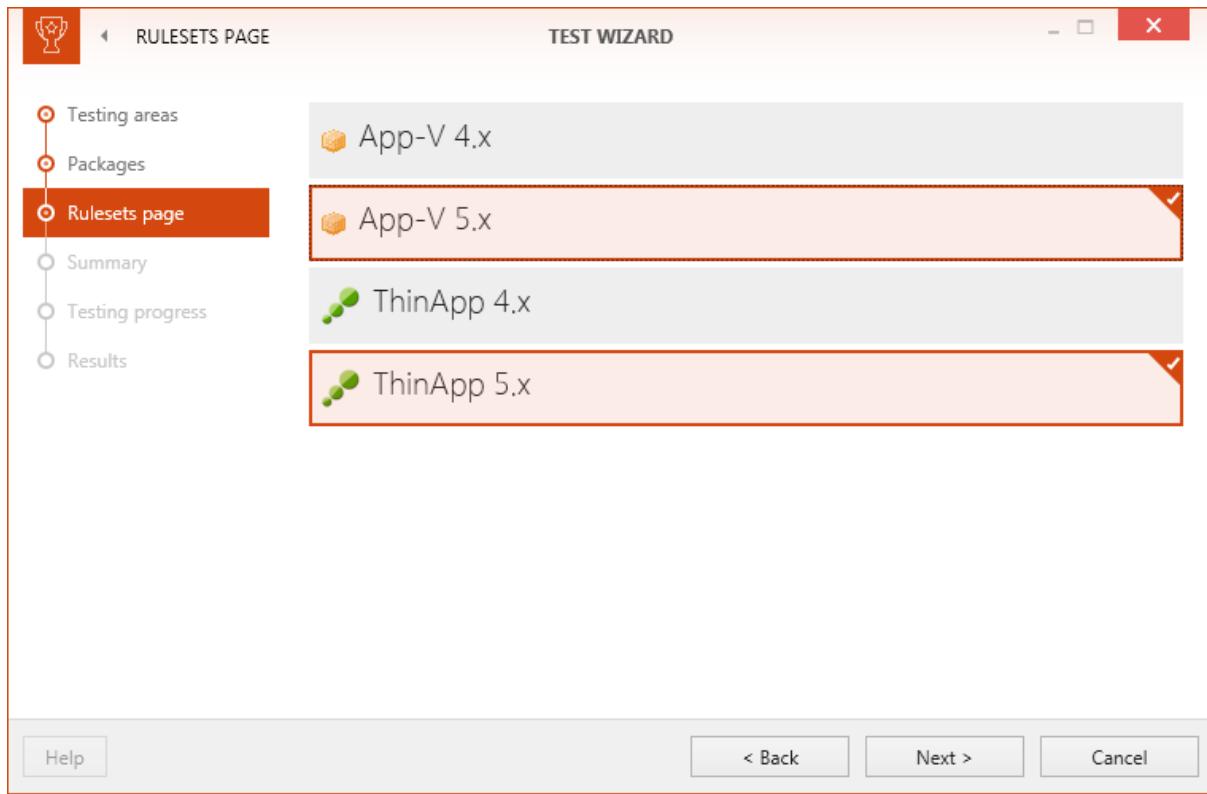
The new reporting dashboard provides a comprehensive overview of the overall status of the **Software** library, allowing an easy identification of packages that require attention and providing managers with a data necessary to carry on packaging and migration projects.

The screenshot shows the RAYQC ADVANCED reporting dashboard interface. On the left, there is a navigation sidebar with icons for Reports, Settings, and About. Below these are sections for App-V Packages, MSI Packages (which is expanded to show sub-categories like From RayManageSoft, Legacy, and Other), and WebApps. A search bar is located at the top of the sidebar. The main area contains a table with the following columns: Name, System readiness, Virtualization, Collision, RayQC, App-V, and Browser readiness. The table lists several software packages, each with a small icon and a status indicator (e.g., green checkmark, yellow warning sign, red error sign). The table has a header row and several data rows. At the bottom of the dashboard, there are three circular icons (refresh, search, and export) and a page number indicator (16).

Name	System readiness	Virtualization	Collision	RayQC	App-V	Browser readiness
ISO Creator 1.0	!	!	✓	▶	■	■
CS-Script for Notepad++	!	!	✓	▶	■	■
MicroProfiler	✗	!	✓	▶	■	■
InstEd 1.5.15.26	!	!	▶	▶	■	■
Microsoft Office Visio Viewer 2007	!	!	▶	▶	■	■
VLC media player	!	▶	▶	▶	■	■
Expresso	!	!	✓	▶	■	■
Fonts	▶	▶	▶	▶	■	■
FastStone Capture 7.0	!	✓	▶	▶	■	■
InstEd 1.5.15.26	▶	▶	▶	▶	■	■
Microsoft Office Visio Viewer 2007	▶	▶	▶	▶	■	■
Adobe Reader 9	▶	▶	▶	▶	■	■

Fine-tuned Control Over Testing Against Specific Virtualization Technologies [RTS-876](#)

Starting with this release, users are able to select the actual target virtualization system. Previously, only a generic **Virtualization tests** category was available.



Batch Import of Packages from a Directory [RTS-841](#)

It is now possible to select a specific folder, including subfolders, and import all supported packages into the RayQC Advanced library. The packages are added to the import list with the default configuration which can be changed manually.

It is now also possible to use drag and drop functionality in the **File selection** step of the **import package** wizard. This can be used to select multiple folders and put them in the wizard. The packages in these folders will be imported with the default configuration.

Import Custom Properties from RayFlow Server [RTS-1828](#)

The possibility to import custom properties from RayFlow to RayQC Advanced has been added with the release of the Packaging Suite 4.1.

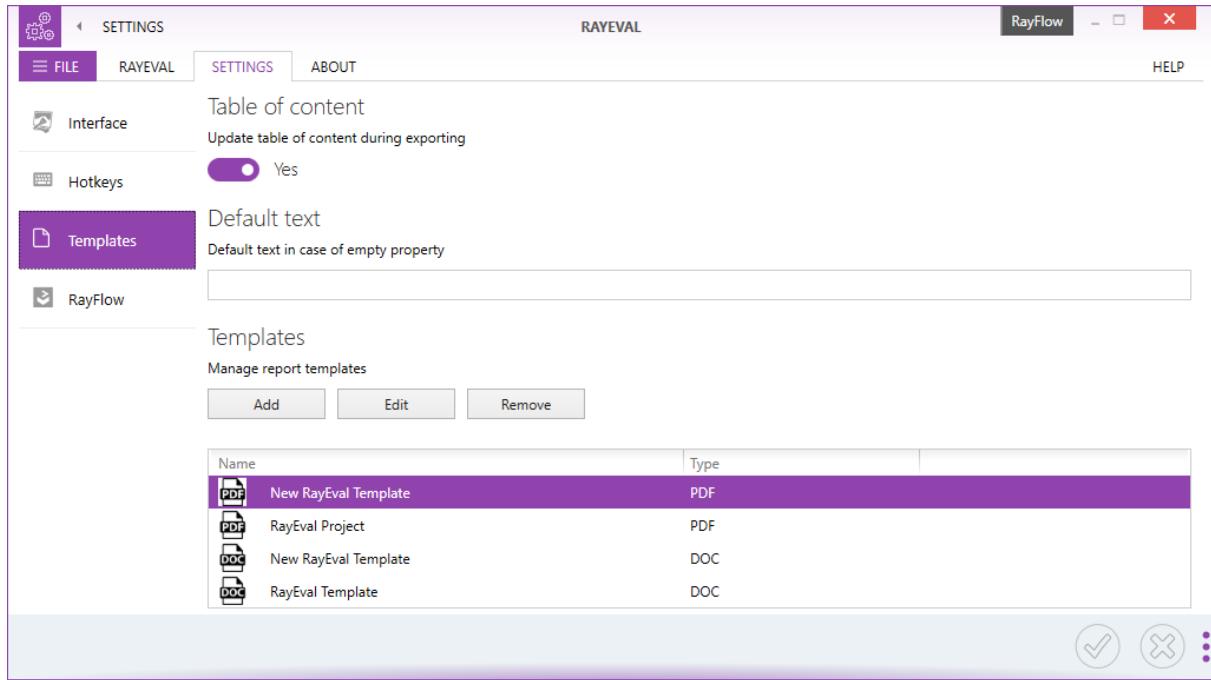
Other

- RTS-1474 It is now possible to restore a complete folder that has been moved to the archive.
- RTS-1810 A new SQL database role called `RayQCAd_Users` will be created on installing RayQC Advanced to guarantee that the users assigned will have read, write, and execute rights on the RayQC Advanced database.
- RTS-1811 The migration scripts have been improved.
- RTS-1812 The database version is now verified when testing the connection to the database on the startup of the application.
- RTS-1850 The package icon is now exported and saved in the database when importing a package.
- RTS-1872 Report information about the tested rule set has been added.
- RTS-1892 The icons in the **Swipe** bar have been improved.
- RTS-1917 Command-line support for reports has been improved.
- RTS-1933 Status icons throughout the application have been unified.
- RTS-1950 Rule sets are now displayed in the **Issues and Fixes** screen.
- RTS-1971 A new **Ruleset** page where the user can choose rulesets for testing has been added to the test wizard.

RayEval

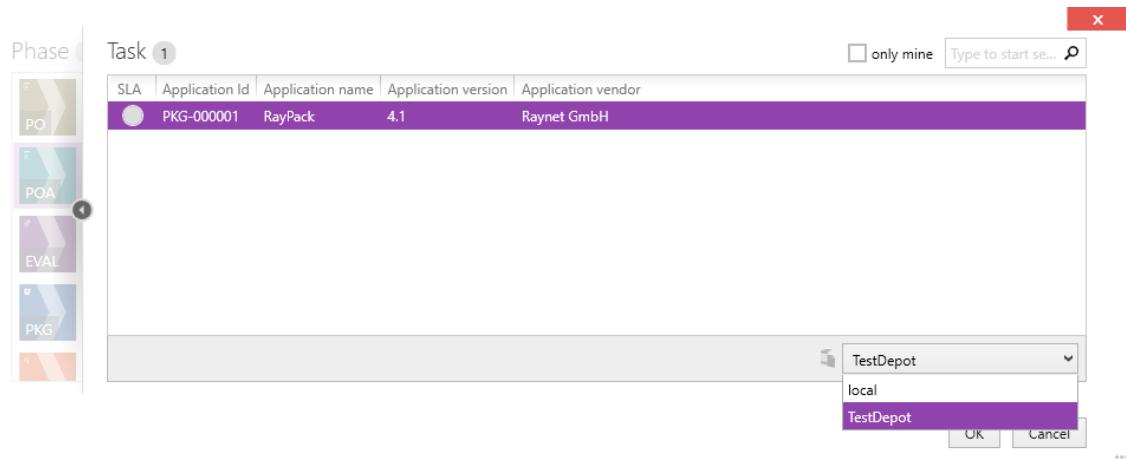
Templates Management RVL-237

Configuration options have been extended in this release of RayEval 4.1. With a brand new editor it is possible to manage template files used to generate end-user documentation in *PDF* or *Microsoft Word®* format.



Support for RayFlow File Depots RSC-307

With **File Depots**, an option to upload and download files to and from locations different than the IIS server Rayflow is running on, has been added. The new target location for uploading files can be easily selected using a new dropdown box that is available when selecting to upload a file. Previously, it was not possible to upload files to locations other than the hosting webserver.



Other

- RVL-47 When moving / changing the order of steps they should automatically receive focus.
- RVL-228 Ability to drag and drop screenshots between tabs.
- RVL-232 New command line parameter has been added that allows to specify paths for new .rex files.
- RVL-251 The **Close** button has been removed from the main view. The project may be still closed by accessing the **FILE** menu..
- RVL-273 Improved support for long file paths.
- RVL-281 Improved performance and stability of report generator (.pdf / .doc).

PackManager for App-V

PackManager for App-V is a new addition to the Packaging Suite product line. It allows to:

- Add, remove, and manage App-V packages on target machines
- Review, set, export App-V client configurations
- Manage connection groups
- Manage publishing servers
- Stop services per user
- Review App-V client events logs
- Export logs and settings to HTML or Excel
- Set PowerShell Execution policies on target machines

Resolved Issues

The following issues from the previous version of Packaging Suite have been resolved in this release:

RayPack

The following is a summary of issues resolved since RayPack 4.0 (4.0.6213.158). This is a cumulative list that also includes changes introduced by RayPack 4.0 Patch 1 (4.0.6318.169).

- RPK-1714 A component created in the MSI template is automatically assigned to another feature when creating a RPP from RCP
- RPK-1959 Importing a corrupted ODBC driver cause loops an error message box
- RPK-2007 Wrong caption in the SQL Database view
- RPK-2020 Missing German translations
- RPK-2048 Adding Registry with registry browser adds unnecessary Wow64Node entity
- RPK-2050 When RPMST file is saved, unchanged nullable cells are missing and component ID is hardcoded
- RPK-2053 Poor performance when deleting hundreds of files at once
- RPK-2054 Crash after fast repeated clicking while renaming a folder
- RPK-2088 Clearing Product Code does not remove ProductCode property
- RPK-2112 Crash when opening a non-existing recent item
- RPK-2131 SysWOW6432 character casing is not ignored during registry parsing
- RPK-2145 Cannot build .rpp project if files are on a share using UNC paths
- RPK-2148 Repackage command line requires mandatory -ApplicationPath while it should be optional
- RPK-2149 Cannot save .rcp file in the same folder
- RPK-2152 After revisiting settings screen, changing selection of exclusions does not work anymore
- RPK-2153 Branding components are being reassigned to another features during RCP->MSI build
- RPK-2161 Crash when using RpCmd.exe on some Windows 7 systems without newest updates to .NET Framework
- RPK-2162 Ignored parameter -Set when building RPP from RCP using silent RpCmd.exe
- RPK-2169 Error when adding non-PE files to projects having schema 100
- RPK-2172 Error when deleting cross-referencing rows whereas for both referenced rows foreign keys are primary keys at the same time
- RPK-2177 Cutting rows does not respect reference update settings

- RPK-2178 Inconsistent documentation of silent command line switches for command "Build"
- RPK-2179 Incorrect label for a **Save transformed as** button in the Transform backstage menu
- RPK-2195 Error when importing very large icons
- RPK-2196 Error when trying to edit a property directly after an icon is imported
- RPK-2197 Inconsistent German translation in PackRecorder -> File menu
- RPK-2210 Error when adding a new feature to which some references already exist
- RPK-2228 Added binary streams are not checked for OLE limitations (up to 31 characters)

PackBench

The following is a summary of issues resolved since PackBench 4.0 (4.0.544.14). This is a cumulative list that also includes changes introduced by PackBench 4.0 Patch 1 (4.0.592.172).

- **BEN-208** When creating new runs custom data field mappings from RayFlow are not respected
- **BEN-209** Progress history is not drawn correctly when item states are changed
- **BEN-210** Custom variables in a task view are not displayed if there is no tool associated within the task
- **BEN-218** Waiting for tools and marking tasks as completed does not work in some special combinations
- **BEN-224** When calling `RpCmd.exe` from PackBench, even though the option to "hide" the callies window is chosen, it is still visible
- **BEN-226** Custom Variables in workflows are not shown correctly when more than one custom variable is present.
- **BEN-227** Custom variable editors are not refreshing correctly on machines having only base .NET 4.0 installed and workflows having different types of variables
- **BEN-228** Server installation does not install assembly `Raynet.RaySuite.Common.Core.dll`
- **BEN-229** In case of insufficient permissions, starting the PackBench Service during installation triggers rollback of the whole installation
- **BEN-234** When adding a custom variable, if the value and display name are equal, when adding / saving it, the value column is deleted and left empty
- **BEN-240** Recent items not shown when no project has been set as default
- **BEN-241** Installation crashing on SQL setup on certain systems
- **BEN-242** When using standalone mode the client fails when started without Admin privileges
- **BEN-243** Server cannot start on multi-user configuration in standalone mode

RayFlow Client

The following is a summary of issues resolved since RayFlow Client 4.0 (4.0.4773.62). This is a cumulative list that also includes changes introduced by RayFlow Client 4.0 Patch 1 (4.0.5166.72)

- RF-863 When a user is trying to add a package and no SLA exists, the RayFlow Client will crash
- RF-864 Datafields will filled with a whitespace, therefore mandatory datafields will be recognized as filled
- RF-877 RayFlow Client does not display the default values that have been set for dropdown datafields
- RF-878 No tooltips with the description of the datafield are shown when hovering over the datafield name
- RF-1490 It is not possible to upload a 0 byte file
- RF-1683 RayFlow Client is not able to update the `PathFieldName` property
- RF-2152 Client cannot connect to the server if a proxy configuration script is used
- RF-2201 The formatting of the tiles on the dashboard differs
- RF-2293 The multi-dropdown list datafields in RayFlow Client do not offer a select all option
- RF-2784 In the current version of RayFlow Client there is an unfavorable space relationship in the task list
- RF-2804 The Package Path auto fill function does not work without enabling the overwrite option
- RF-3038 In RayFlow Client, edit-user is able to assign his own tasks to other users even though this is not possible in RayFlow Web
- RF-3043 In the **Appointment** tab the appointments are not listed in the correct order
- RF-3057 No notifications are sent on the **Status changed** event
- RF-3085 For users with only **View** permissions in a phase blank timepicker values are interpreted as dates by the Client
- RF-3087 Done appointments are listed on top instead of being moved to the bottom of the list
- RF-3119 The **RayFlow Server** window of the RayFlow Client installer shows a typo
- RF-3156 When connecting to a project containing a datafield named `PackageFile` an error message will be shown
- RF-3158 Package path warning and value are not working correctly
- RF-3207 Users are able to see disabled categories and SLAs in the package order
- RF-3210 The tab labels of left arranged datafield groups other than selected one are not displayed
- RF-3211 The entries of **Date and time**-typed datafields are listed in the wrong order
- RF-3228 It is possible to create Appointments for users who do not have permissions for the target phase
- RF-3239 Some history entries are missing in the clients tracking view
- RF-3250 If (multi)dropdown datafields are used for tool command line arguments, they are always empty.
- RF-3254 Deselecting a task unlocks it even if it had not been locked by the user.

- RF-3255 Subphases are not shown in the history of a task and there are no actual entries in the tracking view.
- RF-3263 Emails raised by a client action show an incomplete link.
- RF-3282 Neither on the **Quick Reports** page nor on the **Select Project** page any **Quick Reports** are displayed.
- RF-3283 Sometimes task orders run into an error message.
- RF-3284 **Workflow**, **Phase Bar**, and **Phase view** do not show the correct task counters.
- RF-3285 The **Status changed to** event raises notifications but does not trigger emails.
- RF-3305 If a task has been ordered the **task order** view is reset but the properties are not refilled with their default values.
- RF-3359 When exporting a text datafield to RayEval, sometimes the text is not displayed and all other exports are not set.
- RF-3374 RayFlow Client displays inactive dropdown options during the **Create** phase.
- RF-3396 SLAs can still be set after being disabled using the web application.
- RF-3397 A user can reopen a task that has been deleted by an administrator.

RayQC

The following is a summary of issues resolved since RayQC Advanced 4.0 (4.0.3396.24). This is a cumulative list that also includes changes introduced by RayQC Advanced 4.0 Patch 1 (4.0.3562.36).

- RQC-555 Incorrect German translation
- RQC-567 Incorrect PDF report format if data field contains more characters without spaces
- RQC-569 Rare issues when refreshing content in **Supporting Files** tab
- RQC-574 GetResources Plugin returns nonexistent file-path.
- RQC-577 Order of powershell plugin parameters is limited
- RQC-578 Improved textboxes in plugins and postprocessing to show hints as-you-type
- RQC-611 The **Run All** button is enabled for checklists that have plugin & manual elements and post-processing enabled
- RQC-613 Unlicensed section Settings > signing appears active
- RQC-631 Reading registry value from a multi-string returns incorrect values

RayQC Advanced

The following is a summary of issues resolved since RayQC Advanced 4.0 (4.0.3396.24). This is a cumulative list that also includes changes introduced by RayQC Advanced 4.0 Patch 1 (4.0.3562.36).

- RTS-1780 A warning window with an `InvalidKey` warning appears when trying to import a report into RayFlow and the user is not logged in into RayFlow
- RTS-1788 The field names in the **License and Edition** tab differ from the field names in other Packaging Suite products
- RTS-1796 It is possible to execute a test against a RayQC checklist if RayQC is not installed
- RTS-1832 There is an error which occurs when trying to move a package from a folder to a subfolder with the same name
- RTS-1866 The **Test** wizard and RayFlow option are available in the context menu of the **OS Snapshot** section
- RTS-1890 Incorrect icon shown in the **Properties** window
- RTS-1906 When importing all Merge Modules from a RayPack installation the import of some of them fails
- RTS-1931 Inconsistent placement and functionality of Refresh buttons

RayEval

The following is a summary of issues resolved since RayEval 4.0 (4.0.732.50). This is a cumulative list that also includes changes introduced by RayEval 4.0 Patch 1 (4.0.796.65)

- RVL-217 Some German translations missing
- RVL-224 When no project is loaded, backstage information is not disabled
- RVL-225 Application crashing when moving screenshots between stages
- RVL-226 Some temporary files are not automatically disposed after using
- RVL-229 Unnecessary dialog for selecting RayFlow package if CMD arguments have been specified
- RVL-230 Cut-off text on export screen
- RVL-231 Application closed with an error message when entering wrong RayFlow address and clicking **Go to URL** button
- RVL-233 Incorrect year in template documents
- RVL-234 Some information available in projects is missing in a generated documentation file
- RVL-236 Document date does not get updated when saving a document
- RVL-238 **Hide run button** option is not working correctly
- RVL-240 Fixed German translation
- RVL-242 Missing German translation
- RVL-245 Crash when dragging and dropping an item from a list of steps to a item details sidebar
- RVL-247 Error when adding a new installer
- RVL-248 Application locked after drag notification
- RVL-250 Some application icons are blurry
- RVL-252 Mismatched thumbnails of recent items in the dashboard screen
- RVL-253 Add ability to remove recent items
- RVL-254 Crash when attempting to open a non-existing recent project
- RVL-257 Error when setting up two identical hotkeys
- RVL-258 Error when trying to delete a non-existing recent item
- RVL-261 Inconsistent data source when adding multiple installers to a project
- RVL-269 Incorrect error message when trying to generate a report and the template does not exist
- RVL-272 In some report templates pictures are cropped instead of being resized
- RVL-280 Error when adding two templates with the same name
- RVL-285 No error message is shown when uploading to RayFlow failed

- **RF-3359** When starting RayEval from RayFlow client, data field starting with hyphens (-) or quotation marks ("") could not be correctly analyzed

Migration

RayPack / PackBench

Upgrading the RayPack Application

General upgrade preparations

RayPack 4.1 is delivered as part of the Packaging Suite Installer. In order to install it safely:

1. Download the Packaging Suite Installer 4.1 from the Raynet resource repository.
(If you have not already received credentials, please contact the Raynet support team via the [Raynet support portal](#) to receive them via 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, log, settings and config files, the *.license file, the *.rs1 file, etc.) to a temporary transfer directory outside of the Packaging Suite application directory (where they usually reside).
3. (*only if PackBench is installed*) Make a backup of the SQL Server database which is used by the PackBench.
4. Execute the Packaging Suite Installer and work through the setup routine. The installation of RayPack 4.1 using the Packaging Suite Installer is described in the *Packaging Suite Installer User Guide*.



Note:

If upgrading PackBench, ensure that a **running** SQL server is available before starting the migration/installation.

Migration from RayPack / PackBench 4.0

PackBench 4.1 introduces a minor breaking change to the default behavior of the **New Run Wizard**. Previously, by default no empty subfolders for documentation, sources, packaging etc. were created upon the start of a run. It was up to the tools / scripts to create additional content and make use of the predefined structure. Based on feedback from users, we decided to change this behavior. PackBench 4.0 Patch 2 by default creates all subfolders (including empty ones). This new option is by default enabled on all workflows, even those created prior to the upgrade. In order to continue using the legacy 4.0 behavior, it is necessary to opt-out from this new default setting, by configuring each workflow and using a new option available in the **ADVANCED** tab in the Workflow Properties Dialog.

There are no other breaking changes.



Note:

Make sure to read the chapter **Breaking changes**, as it contains important information about changes in prerequisite software.

Migration from older versions

Refer to the Raynet Knowledge Base for information about migration paths from version 2.1 and older.

Troubleshooting

If you experience abnormal symptoms (like program not starting, missing features, etc.) after the upgrade, we highly recommend to perform the clean installation of RayPack / PackBench 4.1. In order to do that, please perform the following steps:

- 1) Locate your product order number. If you can't find it, contact our support.
- 2) Make a backup of your license file (by default installed to <ProgramData>\Raynet\Licenses\RayPack*.rsl).
- 3) Uninstall the previous version of RayPack / PackBench.
- 4) Delete the content of the installation folder (by default C:\Program Files (x86)\RayPack, C:\Program Files\RayPack\PackBench).
- 5) Install RayPack / PackBench 4.1.
- 6) Start the main application (raypack.exe or packbench.exe respectively) to re-activate RayPack / 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 RayPack / PackBench.
 - 8) Backup and then remove the content of the following folders:
 - Configuration files
 - For RayPack: %AppData%\RayPack
 - For PackBench: %AppData%\RayBench and %ProgramData%\RayBench
 - AppData\Local\Raynet
 - Optionally, you can also revert the PackPoint to the default state by removing the PackPoint folder (standard installation path is C:\RayPack\PackPoint).
 - For PackBench, you may try to install a new database with sample data to see if the problem persists.
- 9) Start RayPack / PackBench again.

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

RayFlow Client

Upgrading the RayFlow Application

General upgrade preparations

RayFlow 4.1 is delivered as an MSI software package. In order to install it safely:

1. Download the MSI package for RayFlow 4.1 from the Raynet resource repositories.
(If you have not already received credentials, please contact the Raynet support team via support@raynet.de to get them via email)
2. Copy all files that need to be kept for later reuse or look-up (such as RayFlow.exe.config for proxy settings, dashboard.xml)
3. Execute the RayFlow 4.1 MSI package and work yourself through the setup routine.

Adjusting the newly installed RayFlow instance

1. Define config files and settings according to the old system state.
2. Launch RayFlow.
3. If there are issues regarding broken or missing functionality, please feel free to contact the Raynet support team via support@raynet.de.

RayQC / RayQC Advanced

Upgrading the RayQC Application

General upgrade preparations

RayQC 4.1 is delivered as part of the Packaging Suite Installer. In order to install it safely:

1. Download the Packaging Suite Installer 4.1 from the Raynet resource repositories.
(If you have not already received credentials, please contact the Raynet support team via the [Raynet support portal](#) to get them via 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, log, settings and config files, the *.license file, the *.rsl file, etc.) to a temporary transfer directory outside the Packaging Suite application directory (where they usually reside).
3. Make a backup of your SQL Server database which is used by the RayQC Advanced Module.
4. Execute the Packaging Suite Installer and work yourself through the setup routine. The installation of RayQC 4.1 using the Packaging Suite Installer is described in the Packaging Suite Installer User Guide.



Note:

If upgrading RayQC Advanced, ensure that a **running** SQL server is available before starting the migration/installation.

If an older version than RayQC 2.1 is installed on the target machine

If an older version than RayQC 2.1 is already installed on the target machine there are two different ways to migrate to the new RayQC 4.1.

- Install RayQC 4.1 and keep the installation of RayQC 1.5 or Packaging Suite 2.0. They will remain untouched by the installation of RayQC 4.1.

General upgrade preparations

RayQC 2.1 is delivered as an MSI software package. In order to install it safely:

1. Download the MSI package for RayQC 2.1 from the Raynet resource repositories.
(If you have not already received credentials, please contact the Raynet support team via support@raynet.de to get them via email)
2. Copy all files that need to be kept for later reuse or look-up (such as resources of global external plugins, log, settings and config files, the *.license file, etc.) to a temporary transfer directory outside the RayQC application directory (where they usually reside).
3. Remove the old RayQC installation manually.
4. Execute the RayQC 4.1 MSI package and work yourself through the setup routine. The installation of RayQC 4.1 is described in the RayQC 4.1 Installation Guide.

Adjusting the newly installed RayQC instance

1. Launch RayQC.
2. Define .config files and settings according to the old system state.
3. Test the new settings and configurations by creating and evaluating checklists, communicating with RayFlow, reviewing log files, etc.
4. If there are issues regarding broken or missing functionality, please feel free to contact the Raynet support team via support@raynet.de.

RayUpdater

During the migration, if database changes are necessary, these will be done automatically. While executing the setup routine, RayUpdater, the tool used for a safe migration of the data, will be launched automatically and perform all necessary steps without the necessity of any user input.

Upgrading RayQC Files

The file formats RQCT and RQCP Raynet introduced in RayQC 1.5 and have been massively reworked to match the needs of the modernized application logic. Therefore, it is not possible to simply reuse templates and projects that have been generated with RayQC 1.5 in the current version 4.1.

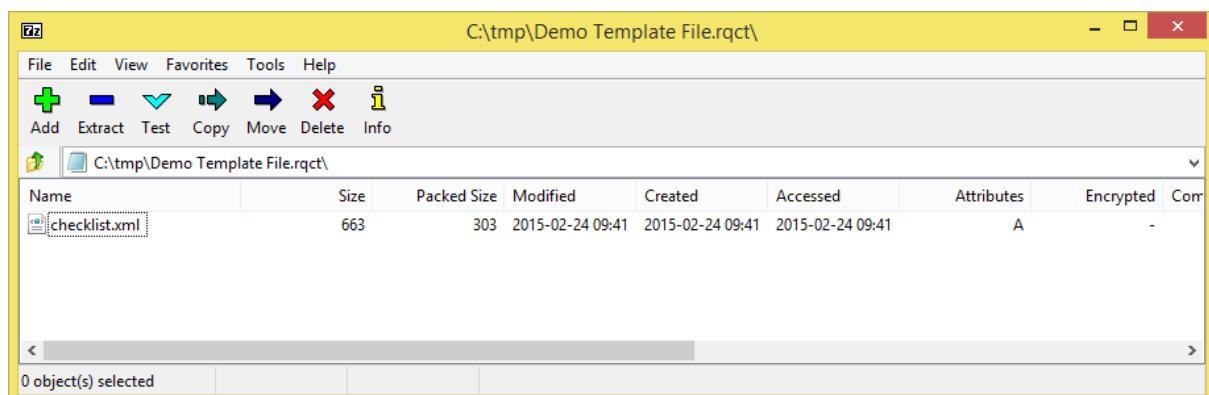
The RQCT files used in RayQC 4.1 are no longer XML structures, but ZIP containers that contain the XML checklist file (`checklist.xml`) as well as all other resources required to run the checklist on RayQC: plugins, help files, images, etc. are stored within dedicated directories wrapped in the ZIP container.

Additional files that represent the current project status of a checklist evaluation (`state.xml`), post-processing settings and signature information, are added when a template is saved as project file RQCP.

Knowing about these changes makes it quite obvious that there must be some manual steps in any kind of checklist transition from version 1.5 to 4.1. Once this is done, the following standard procedure is a valid option for their transition to 4.1:

To transfer a RayQC 1.5 RQCT to the current 4.1 format, users have to run the following procedure:

1. Copy the original RQCT file to a temporary working directory.
2. Change the file
 - a. name to `checklist`
 - b. extension from `.rqct` to `.xml`
3. Create a new ZIP that contains the `checklist.xml` file. Name the ZIP container according to the old checklist file name, and set the file extension to RQCT.
4. The result of steps 1-4 has to be a zip container with the file extension `*.rqct`, that contains a `checklist.xml` file with the original checklist structure.



5. Open this file in RayQC 4.1.
6. It is most likely, that the validation procedure run during checklist loading states issues with the XML source structure. In this case, a dialog is displayed, revealing details about invalid areas with a click on the more button.

Open the `checklist.xml` file from within the RQCT container, and correct all mentioned issues to establish an XML file that is valid according to the `ChecklistSchema.xsd` demanded by RayQC 4.1.

7. Save the changes to the `checklist.xml` file, and re-try to open the RQCT container with RayQC.
8. Repeat steps 6 & 7 until the checklist is successfully validated and opened by the application.

Once this level is achieved, all upcoming changes may be executed directly within the checklist editor. Please refer to the User Guide section about editing checklist templates for further instructions.

**Be aware:**

Checklists with extended plugin and condition usage may be quite difficult to upgrade manually, since both parts of the system logic have undergone revolutionary changes during the development of RayQC 4.1. Therefore, these checklists are recommended to be recreated from scratch.

Also be aware:

There is no direct upgrade path for RayQC projects from product versions prior to 1.5.

Please contact your RayQC service consultant, or the Raynet support team to get information about possible forms of assistance for any required upgrading measures.

RayEval

Upgrading the RayEval Application

General upgrade preparations

RayEval 4.1 is delivered as an MSI software package. In order to install it safely:

1. Download the MSI package for RayEval 4.1 from the Raynet resource repositories.
(If you have not already received credentials, please contact the Raynet support team via support@raynet.de to get them via email)
2. Copy all files that need to be kept for later reuse or look-up to a temporary transfer directory outside 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 4.1 MSI package and work yourself through the setup routine. The installation of RayEval 4.1 is described in the RayEval 4.1 User Guide.
4. After the installation has been finished, copy the files that have been backed-up to their previous locations.

System Requirements

Hardware Requirements

This section lists the minimal hardware requirements for devices running Packaging Suite.

Minimal

- Screen resolution: 1024 x 768 pixels
- Color settings: 16 bit
- RAM: 2GB
- Disk space: 10GB

Recommended

- Screen resolution: 1280 x 1024 pixels
- Color settings: 32 bit
- RAM: 4GB or higher
- Disk space: 100GB or more

**Note:**

The installation of the Packaging Suite framework itself requires about 400MB 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 Packaging Suite.

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

**Note:**

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

Prerequisite Software

- .NET 4.5 Client & Full for Windows XP up to Windows 7 systems (both 32-bit and 64-bit)

General requirements

- In order to use RayFlow functionality directly from Packaging Suite components, a running RayFlow server has to be accessible.
- In order to use *RayManageSoft* integration, *Management Console* has to be installed on the machine on which RayPack is running.

RayPack

- In order to use Quality features (checklists, compatibility, virtualization, and conflict testing) RayQC / RayQC Advanced have to be installed on the local machine.
- Contact our Support / Sales to obtain a license for the PackCommander module.
- In order to create SWV packages, the Symantec Workspace Virtualization Agent 7.5 has to be installed on the packaging machine.
- In order to create Thin-App packages, the VMware ThinApp has to be installed on the packaging machine.

**Note:**

It is recommended to install Packaging Suite on a virtual machine. This allows the packaging machine to always be in a "clean state" and ensures that any packages created are not "polluted" with information (files, registry keys etc.) from other sources other than the package that is to be packaged.

PackBench

- Depending on the configuration of Packaging Suite, 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 2008 or higher. Express editions are also supported.

RayQC

- In order to install and use the product, PowerShell 3.0 or newer must be installed..

RayQC Advanced

- In order to install and use the product, SQL Server version 2008 or higher. Express editions are also supported.

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 Packaging Suite experience. Please contact your Raynet service partner or write an e-mail to sales@raynet.de to add your ideas or requirements to the Packaging Suite development roadmap!

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



Packaging Suite

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