

RayPack Release Notes 2.0



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RayPack Release Notes

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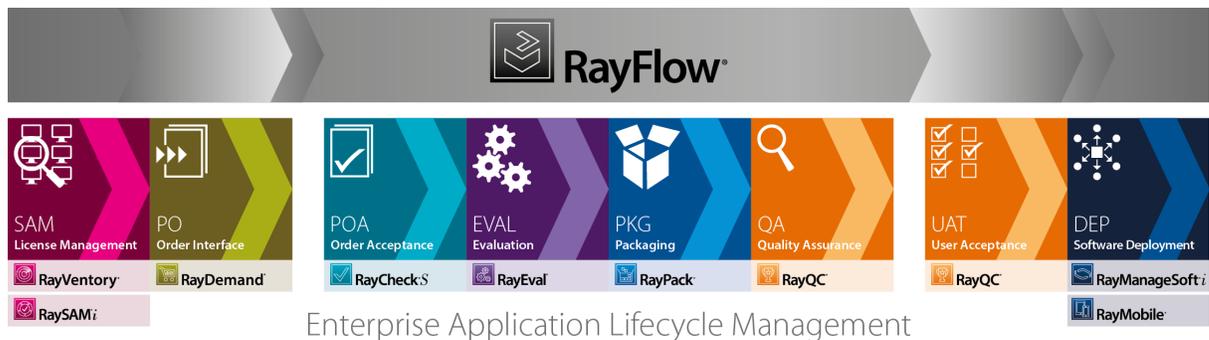
www.raynet.de

Table of Contents

Introduction	4
Quick Summary	4
What's new in RayPack 2.0?	6
New features	6
Improvements and enhancements	15
User interface	21
Profiles, configuration and settings	23
Other	26
Resolved issues	28
Known issues	31
Migration	32
System Requirements	36
Hardware Requirements	36
Supported OS	37
Prerequisite Software	37
Additional Information	39

Introduction

RayPack 2.0 is the next iteration of Raynet's framework for the creation and management of software packages. It is designed to support a broad variety of package formats, target operating systems and deployment systems. RayPack is available as a stand-alone product as well as having the ability to be integrated into the RaySuite solution powered by RayFlow.



The RayPack components allow enterprises to implement well-structured processes, which control package evaluation, creation, manipulation, import, export, validation, storage, and deployment.

In the upcoming 2.0 release, Raynet introduces core components of the framework, which allow users to create MSI packages from scratch or build them based upon the result of installation capturing processes on Windows platforms. It is also possible to extend standard installations with transform files (MST), and edit their native contents, prepare MSP patches and to create App-V, ThinApp and SWV packages.

Quick Summary

The following sections describe the major and minor highlights of this product release in turn and in detail as well. This quick summary allows to quickly jump to topics of special interest:

- *RayQC and RayQC Advanced integration [RPK-1339,1349,RTS-194]*
- *New MSI dialog editor [RPK-143,1300]*
- *Row tracking and cascade updates [RPK-245]*
- *ISO/IEC-19770-2:2009 tagging [RPK-1446]*
- *PowerShell Custom Action Wizard [RPK-786]*
- *App-V Test Launcher [RPK-1296,1154]*
- *IIS Scanner [RPK-1423,170]*
- *Ability to build setup wrapper directly from PackDesigner [RPK-1073]*
- *Prerequisites handling [RPK-1073]*

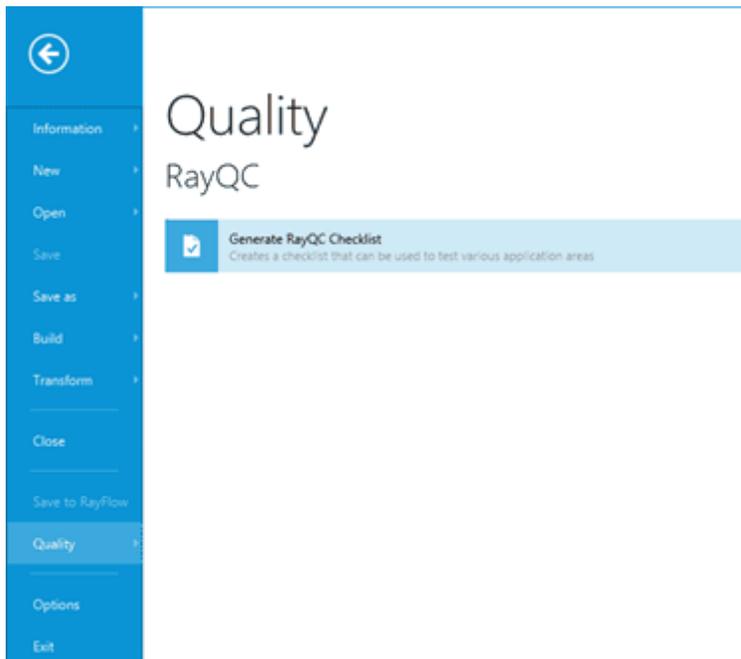
- *Linked folders support [RPK-1425]*
- *Fine-tuned opening and saving of large packages [RPK-1304]*
- *Improved MST management + templates support [RPK-342]*
- *Feature selector in File and Registry views [RPK-93,230]*
- *Improved and configurable condition editor [RPK-1498]*
- *Reorganized Application View + ability to edit the EULA in the Application View [RPK-1302]*
- *Ability to print/sort/group ICE results in the embedded result viewer variant [RPK-1341]*
- *Full support for Control attributes and reflection of the Type of the Control [RPK-631]*
- *Support for LZX compression [RPK-1036]*
- *Support for Administrator Properties [RPK-340]*
- *Improved sidebar menu in PackDesigner [RSC-134]*
- *Windows-10 style adjustments [RSC-132]*
- *Opening RPP/MSI projects directly after building [RPK-1026]*
- *Improved settings and profile management [RPK-1384]*
- *Ability to change the naming convention for CAB files when building MSI projects from PackDesigner [RPK-1339,1349]*
- *Configurable exclusions directory [RPK-1388]*
- *Extended ThinApp options and configuration [RPK-1474]*
- *Configurable user profile component settings [RPK-1496]*
- *Configurable custom folders [RPK-1588]*
- *Improved licensing lookup and troubleshooting [RSC-141]*
- *New RPP 2.0 project format [RPK-1359]*
- *Extended command-line options [RPK-1428]*
- *Monitoring of removed properties in PackTailor [RPK-1378]*
- *And several others...*

What's new in RayPack 2.0?

New features

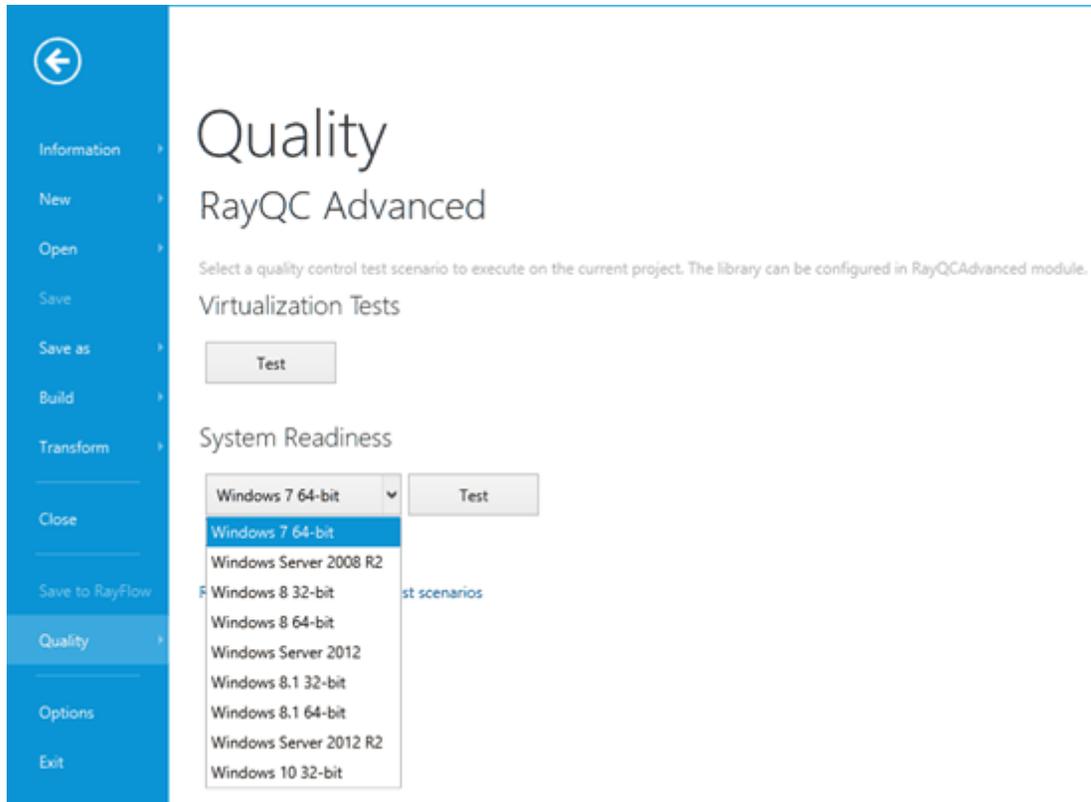
RayQC and RayQC Advanced integration [RPK-1339,1349,RTS-194]

RayPack 2.0 can integrate with RayQC. When both products are installed on the same machine, within one click a checklist can be generated from the FILE > QUALITY menu, providing a simple yet effective checklist to be used during pre-quality checks and by the quality engineering.

**Note:**

This functionality requires RayQC 2.1 or newer to be installed

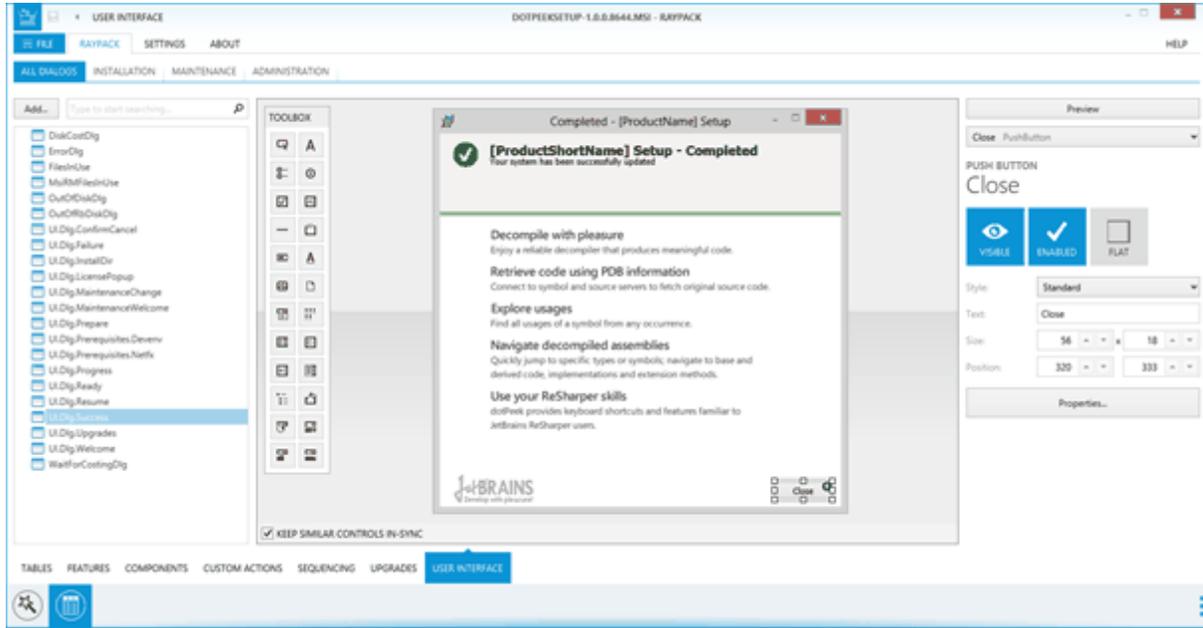
The new Quality menu can be used to perform various quality checks against the current project. Wide range of rulesets available in RayQC Advanced are available, from virtualization to collision management. Custom rulesets are also supported, and the configuration of RayQC Advanced is respected. The results are shown within RayPack validation results, allowing to fix the issues before the package is actually tested against them.

**Note:**

This functionality requires RayQC Advanced 2.1 or newer to be installed

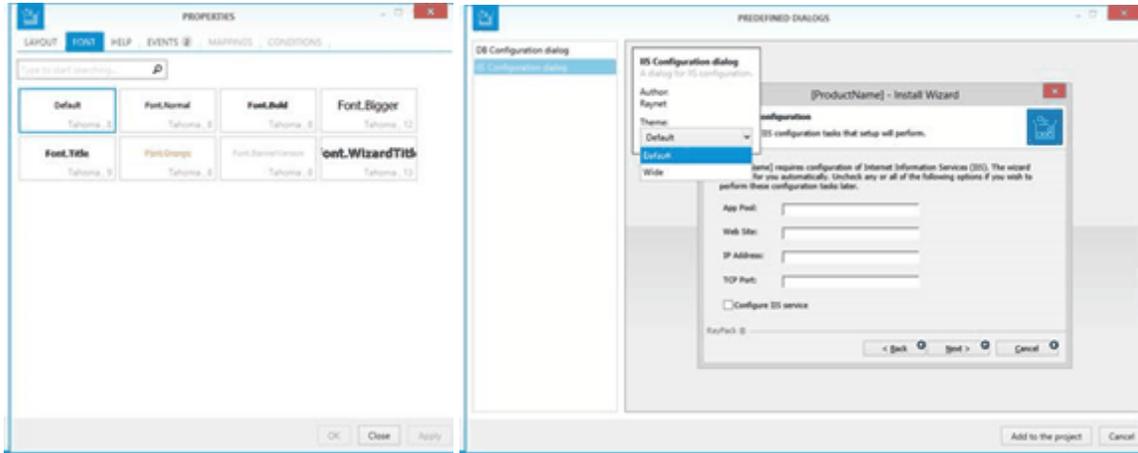
New MSI dialog editor [RPK-143,1300]

RayPack 2.0 contains a brand new MSI Dialog Designer, which extends the functionalities of RayPack 1.4. It significantly improves the UI management interface performance and adds cutting edge features:



The following options are available:

- Showing the list of dialogs within the current project
- **For Wise users:** Showing the estimated dialog flow (individually for install, maintenance, and administration modes)
- Ability to delete and exclude dialogs from sequences
- A designer canvas, supporting drag and drop, creating of new elements, repositioning, resizing, aligning, full support for all MSI controls, adding and modifying images and RTF contents, etc.
 - **Exclusive in RayPack:** Advanced visualization features
 - showing actual fonts, pictures, properties
 - showing event icon on controls that raise them
 - previewing the dialog using the native MSI technology for a pixel-perfect preview
 - **Exclusive in RayPack:** Control synchronization – resizing or changing visual attributes of a control applies the same changes to similar controls on other dialogs
- Sidebar with basic properties and dialogs for advanced settings
- A set of predefined dialogs for common (feature selection, progress etc.) and advanced windows (IIS, database configuration, etc.)

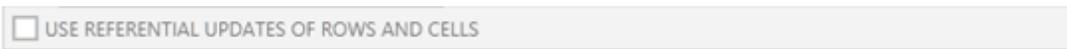


Row tracking and cascade updates [RPK-245]

The row tracking mechanism can be used to track direct references (PK/FK relation, also respecting conditions) and indirect ones (formatted strings for files, folders, properties, components etc.).

	Table	Row	Column	Value	
Type: Direct references (PK/FK relation)					3
↻	Component	lv_LV_Files	KeyPath	filezilla.mo34	
↻	MsiFileHash	filezilla.mo34	File_	filezilla.mo34	
↻	Component	lv_LV_Files	Component	lv_LV_Files	
Type: Indirect references (formatted string)					2
↻	Shortcut	FileZilla	Target	[#filezilla.mo34]	
↻	Shortcut	FileZilla	Arguments	[#filezilla.mo34]	

When editing a cell or removing a row, the connected rows will be also updated (or deleted if required to maintain internal database consistency). This functionality can be enabled/disabled by a checkbox available under the table view.



Also, the layout of the table view has been adjusted to present the new options and switches. The vertical layout of main toolbar buttons allows viewing more rows at once, and collapsible *issues/validation* view and *reference* view can be used to focus on current task without taking too much screen space..

ISO/IEC-19770-2:2009 tagging [RPK-1446]

RayPack 2.0 provides an easy way to generate .swid files (Software Identification Tags) for the packages generated by PackDesigner. The setting is controlled globally per-profile.

Designing

Signing + tagging

Virtualization

Software identification tag

Create ISO/IEC 19770-2:2009 tags for MSI packages Yes

Require Software Entitlement No

Tag Creator Name:

Tag Creator ID:

Software Creator Name:

Software Creator ID:

Software Licensor Name:

Software Licensor ID:

PowerShell Custom Action Wizard [RPK-786]

A new type of Custom Action is available in the Custom Action wizard. It provides an easy way to setup up a call to `PowerShell.exe`, execute a specified script file or a short command:

- Action type
- Details**
- Sequence
- Additional settings
- Summary
- Finished

Execution mode



- Run as system
- Run as current user
- Terminal server aware

PowerShell settings

Script source:

Script to execute:

Execution policy:

Parameters

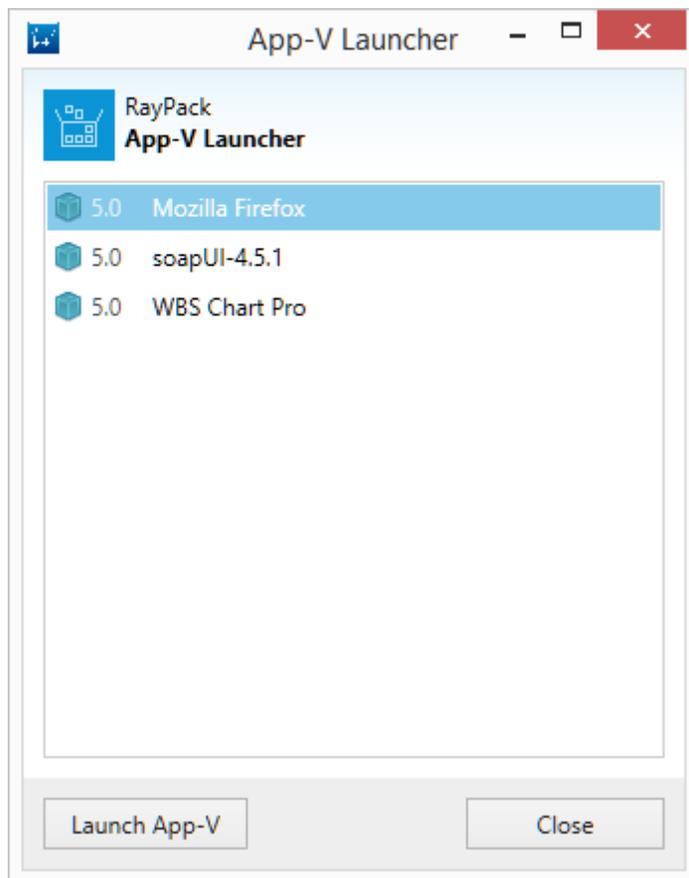
Name	Value
------	-------

- Options
- 64-bit script
 - Hide the copyright banner at startup
 - Use a multi-threaded apartment (MTA)
 - Do not show interactive prompts to the user

PowerShell version:

App-V Test Launcher [RPK-1296,1154]

When App-V packages (both 4.6/5.0) are generated, a setting in the profile can be used to copy RayPack's App-V launcher to the output folder. This small program can be used to quickly start the selected package. It automatically launches the only App-V package found in the very same folder. If there are more packages (or more entry points), a selector interface is displayed, asking the user to pick the desired object..



Command line support – examples:

- `AppvLauncher.exe filezilla3.10.appv "\FileZilla FTP Client\FileZilla.lnk"`
- `AppvLauncher.exe "About IrfanView.osd"`

IIS Scanner [RPK-1423,170]

A standalone IIS scanner is provided in the Tools/IISScanner folder within each RayPack 2.0 installation. This utility can be used to scan and extract the full configuration of a running IIS instance and import the results directly to RayPack project (RPP/MSI). The interactive GUI can be used to view and pick-up the right website to be exported.

The tool can be used on any system without RayPack license. The license is only required to import the results back to the MSI/RPP project.

The scanner is available as a separate tool, present in `C:\Program Files (x86)\RayPack\Tools\IISScanner\IISScanner.exe`. The executable has to be started on a machine with running IIS. The selected websites will be saved as `.rpiis` file, which can be then imported in RayPack, using `Create new > Import IIS...` button.

Ability to build setup wrapper directly from PackDesigner

[RPK-1073]

In the build settings screen, a checkbox can be used to create a wrapper over the current project. Depending on the selection, it can be generated as either an `.exe` file (storing necessary MSI and CAB files inside) or as command line wrapper (`.cmd`) that can be used to install the package.

Additional options

- Update MSI file properties (size, version and language) on build
 - Generate a new ProductCode each time the build is made
 - Sign MSI [Configure](#)
 - Wrap the produced database in executable wrapper
- Executable (*.exe) bootstrapper ▾



Note:

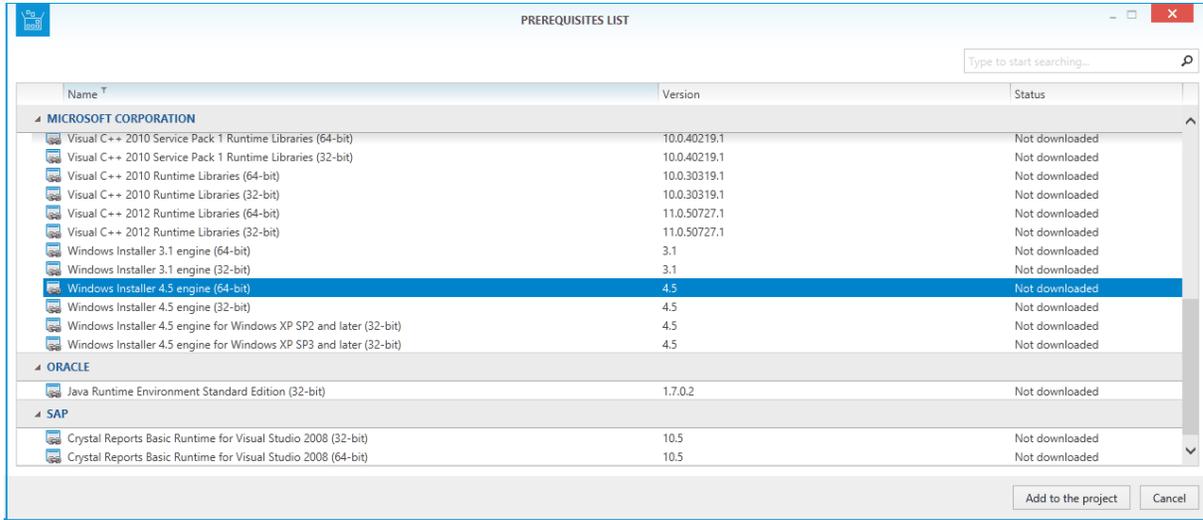
In RayPack 2.0 it will be possible to define prerequisites and have them present in the wrapper as well.

Prerequisites handling [RPK-1073]

The new Prerequisites screen provides an easy way to define critical dependencies of the currently edited project. RayPack 2.0 contains a predefined list of commonly used prerequisites, with ability to download necessary files, internal dependencies, conditions etc.

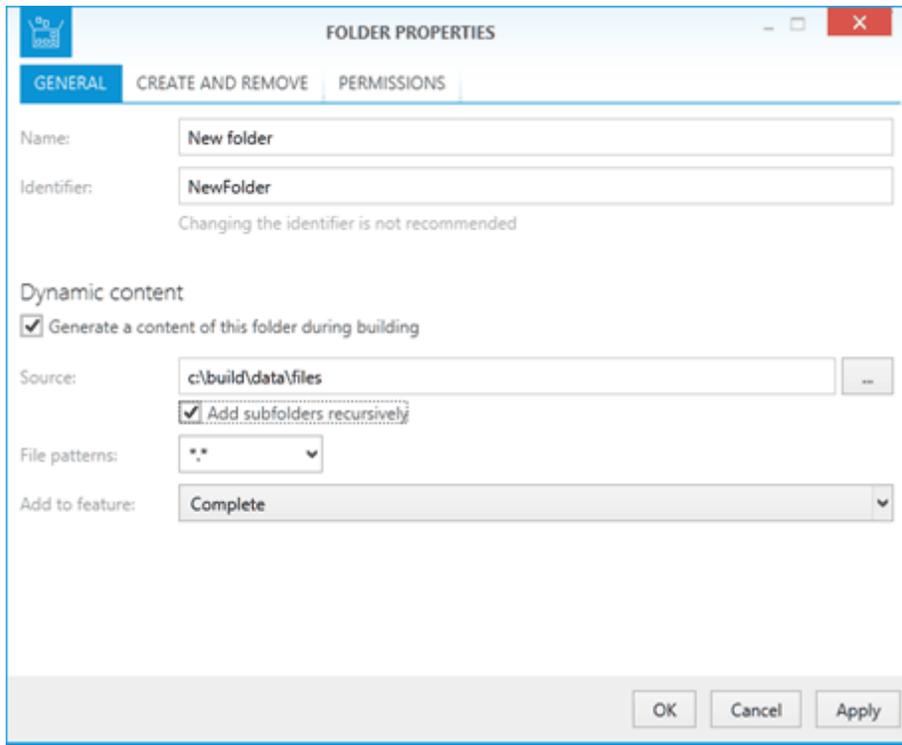
When building the projects, CMD or EXE wrappers respect these settings in order to provide a robust and standalone entry point to install all necessary components of the package.

Prerequisites are shared and available in the PackPoint folder.



Linked folders support [RPK-1425]

A folder can be now marked as “dynamic” by linking it to a physical path on the local drive. This way, when the project is built, the content of the physical folder is read and turned into a structure of components, files and folders in the MSI package. This functionality can be used to define the structures which change frequently (both in terms of file properties and their names and locations) thus making it difficult to update the MSI database each time.



For convenience, it is possible to define the target feature and wildcards to filter out unnecessary files from the

physical folder.

Improvements and enhancements

Fine-tuned opening and saving of large packages [RPK-1304]

The core modules of RayPack have been improved to achieve better performance when working with big packages. As a result, the time required for loading big RPP/MSI projects with tens of thousands of objects should decrease. Depending on the specific scenario, environment, and the actual size of the package, the time required to open a project may decrease by an astonishing 99%.

Improved MST management + templates support [RPK-342]

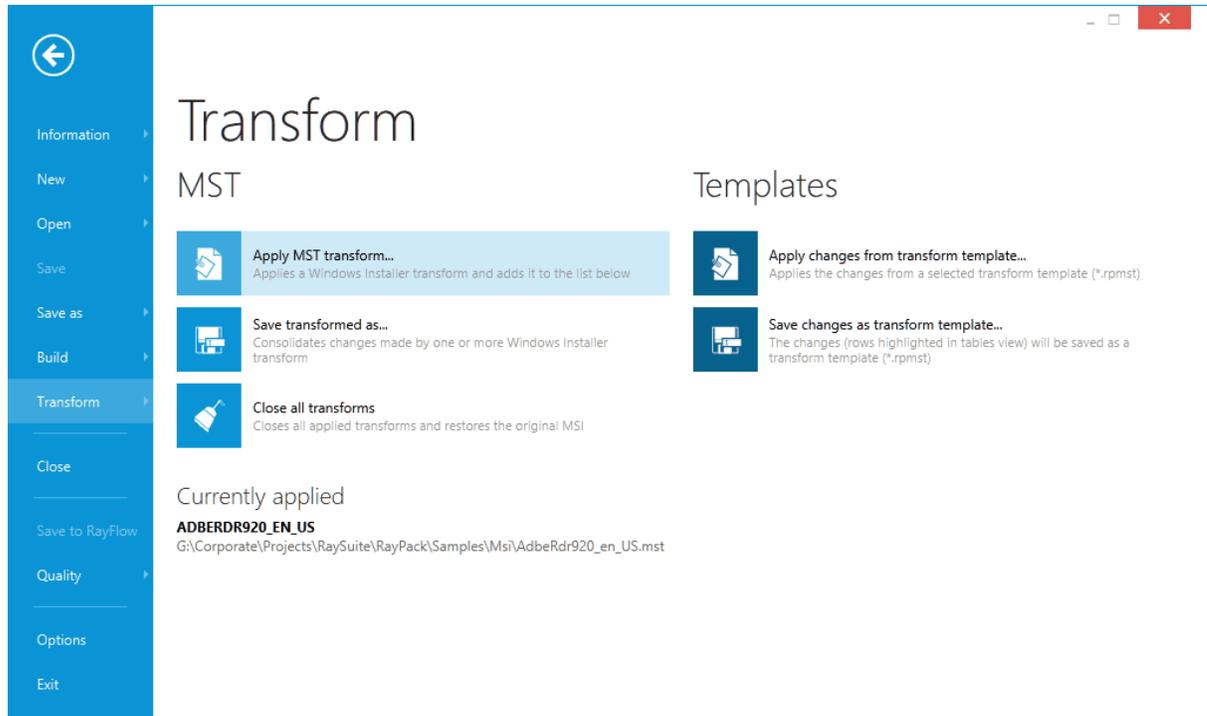
RayPack 2.0 offers a better productivity with a support for transform templates (`.rpmst`) and better management of MST transforms. The transform template is a small XML file containing a list of changes to be present in the MST transform file. Before version 2.0, these configuration files were only used by PackTailor (when creating a new MST file) and by PackRecorder (when creating repackaged MST file).

In version 2.0, new options are available in the FILE > TRANSFORM menu. At any time, the current set of highlighted changes in the tables view can be saved as a transform template (`.rpmst` file). Such set of changes can be applied to any kind of project - RPP, MSI or MST. This is also a great option for storing constant branding templates and applying them on demand when working with vendor MSIs or custom projects.

Also, with the release of RayPack 2.0, it is possible to apply multiple transforms to a single MSI project and close them at once using the new FILE > TRANSFORM menu.

With the introduction of RayPack 2.0 the transform templates are now fully supported by all components:

- **PackRecorder:** when generating an MST transform from a repackaged MSI file.
- **PackDesigner:** when saving MSI changes as an MST transform, or applying/creating transform templates on demand.
- **PackTailor:** when creating a new response transform.

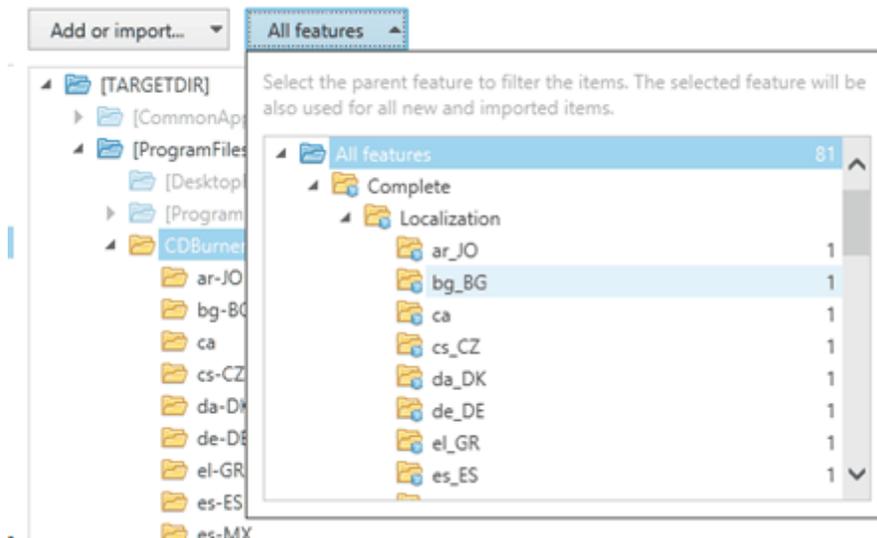


Note:

The MST-management related buttons are only available when working with MSI or MST files.

Feature selector in File and Registry views [RPK-93,230]

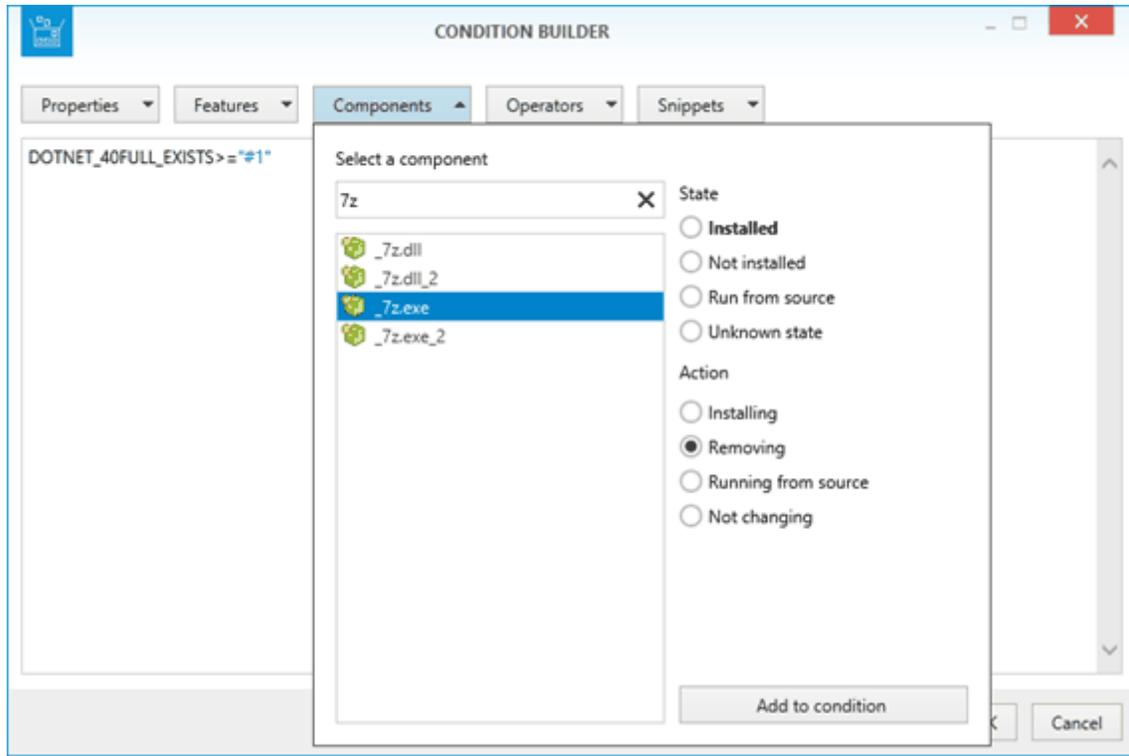
Both Files & Folders and Registry view in PackDesigner offer a feature selector, which can be used to filter the main list. The selector shows the number of items per feature. The current selection is automatically pre-selected to be the target feature for any new item created within the view.



Additionally: In certain controls (like registry browser or file browser, both standalone and in the component view) the initial tree is always expanded to a few first levels. This improves readability and can speed up working with files and registries in the *Components* view.

Improved and configurable condition editor [RPK-1498]

The condition editor allows to easily define conditions for components, features and properties belonging to a current package. It can also recognize the predefined MSI properties, and provides a handy set of comparison and state/action conditions.

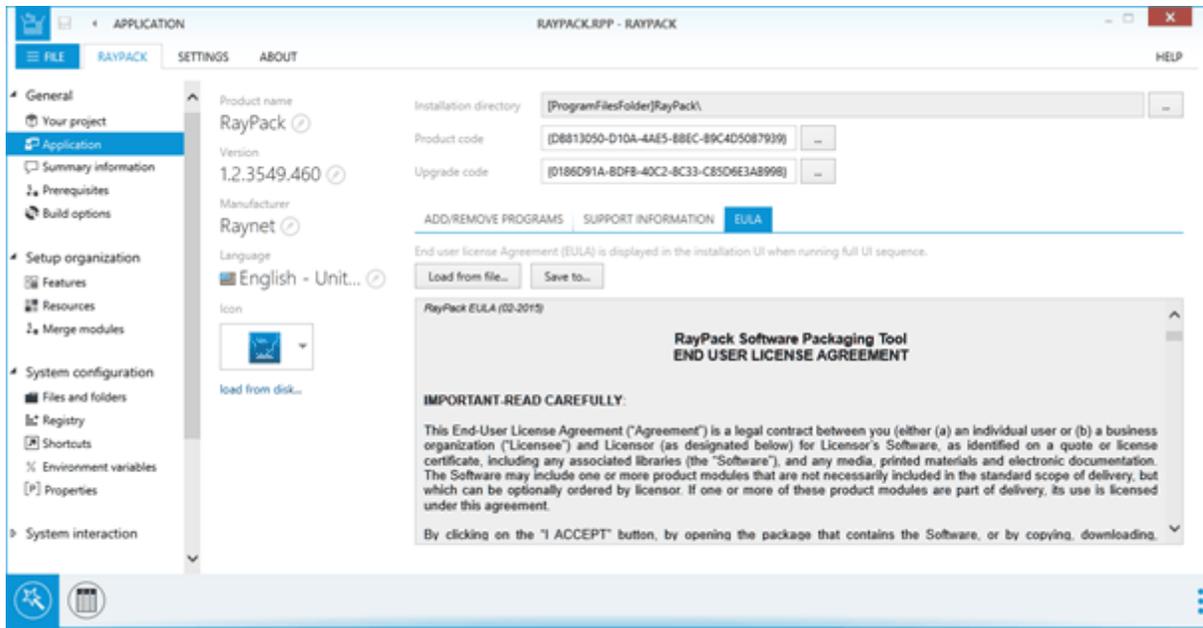


Also, the SNIPPETS section has been extended. It is now fully configurable via PackPoint resources by simply editing the provided XML file.

The new condition editor is now also used by default when creating new launch conditions from the Launch Conditions section.

Reorganized Application View + ability to edit the EULA in the Application View [RPK-1302]

The application view has been redesigned. The settings are grouped in new tabs, and additionally there is a way to specify the End User License Agreement for the current project by loading and saving it from an RTF. (Please note that the availability of this tab depends on the structure of the MSI).



Ability to print/sort/group ICE results in the embedded result viewer variant [RPK-1341]

The validation browser allows filtering, grouping, printing and exporting in the compact view as well. Additionally, the list is searchable and filterable to show errors or warnings only. The ICE errors/warnings are grouped according to the functional relation between single ICE tests. The groups are configurable in PackPoint's ICE.XML file.



The order of the columns has been adjusted (description is presented before Table, Keys and Column fields) and the handling of multi-columned primary keys has been improved, both in terms of row/cells coloring but also in jumping to invalid rows.

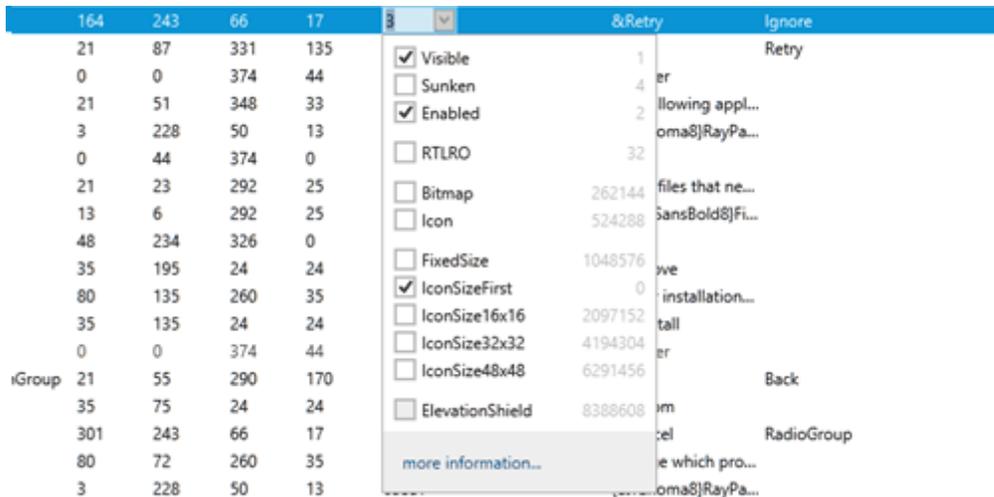


Note:

If you are upgrading from RayPack 1.4, in order to display the groups, there may be a need to update the old PackPoint with the new ICE.XML.

Full support for Control attributes and reflection of the Type of the Control [RPK-631]

The dropdown for control attributes in the Table designer has been extended with context-awareness to offer only relevant options for each type of control. Additionally, the help link leads to the MSDN documentation for a given type of control.



Support for LZX compression [RPK-1036]

Package resources can be now compressed using an efficient LZX algorithm.

Support for Administrator Properties [RPK-340]

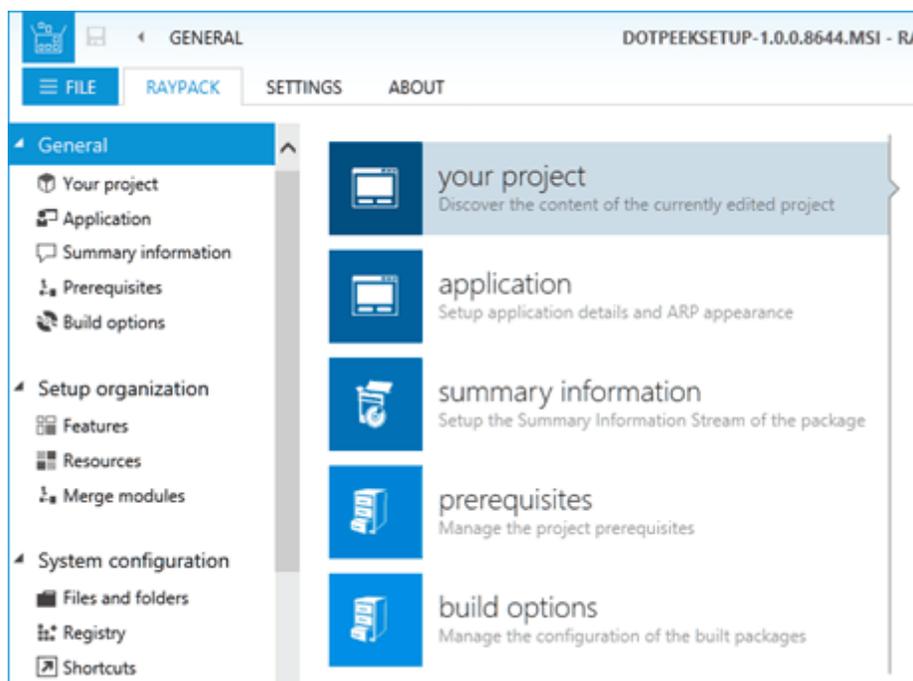
Administrator Properties (AdminProperties) can be edited directly from within the *Setup options > Administrator options* section.

User interface

Improved sidebar menu in PackDesigner [RSC-134]

The PackDesigner sidebar has been improved: The main view groups have been separated more significantly, and a couple of items have been moved to expose the important ones. As a result:

- The Build options screen has been moved from the bottom to the new GENERAL tab.
- The Application and Summary information views have been moved from Setup Organization into a new GENERAL tab.



Windows-10 style adjustments [RSC-132]

RayPack integrates better with the upcoming Windows 10 Look & Feel.

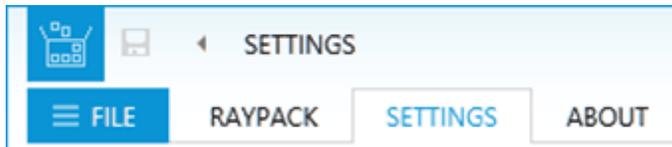
Check for .NET assemblies:

No

Use MSI HashFile Table for PE files:

Yes

If checked, a checksum entry in MsiFileHash table will be generated for all files with PE header (executables, object code, DLLs, font files).



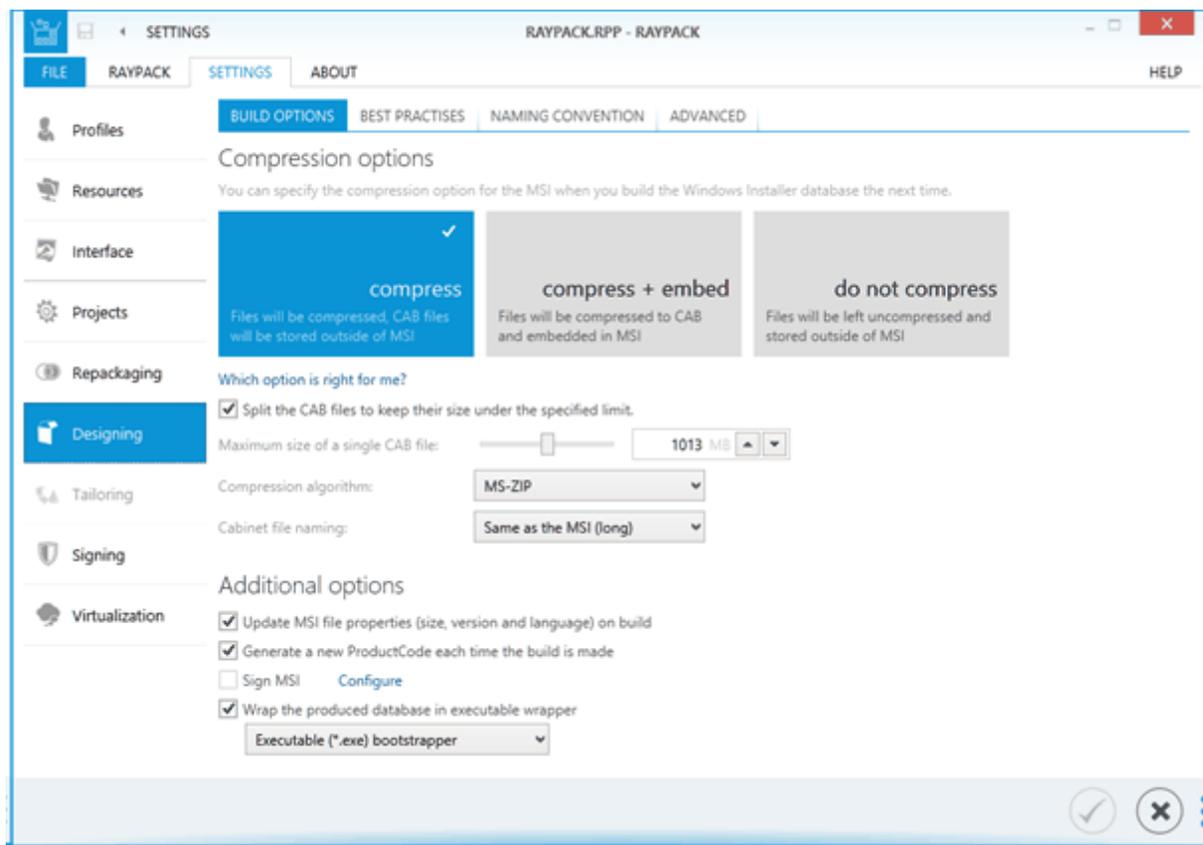
Opening RPP/MSI projects directly after building [RPK-1026]

When a project is built from an `.rcp` file, RayPack shows a prompt asking whether the project should be immediately opened in *PackDesigner*.

Profiles, configuration and settings

Improved settings and profile management [RPK-1384]

A refreshed settings screen aggregates instance and profile settings. First three tabs (Profiles, Resources and Interface) are per-instance, while the second group (Projects, Repackaging, Designing, Tailoring, Signing, Virtualization) are all based on the current profile.



Additionally, the following changes have been made:

- It is possible to define the default MSI build settings (Designing > Build options tab)
- The default capture wizard mode has been moved to the profile settings (Repackaging > Wizard)
- Several new tabs (Virtualization, Signing, Tailoring, Projects) are containing the items from the General tab present in RayPack 1.4.

Ability to change the naming convention for CAB files when building MSI projects from PackDesigner [RPK-1339,1349]

The naming pattern of the CAB files can be modified from within the build options settings. Three predefined selections are offered, extended by the possibility to specify a custom pattern.

Compression options

You can specify the compression option for the MSI when you build the Windows Installer database the next time.

compress

Files will be compressed. CAB files will be stored outside of MSI

compress + embed

Files will be compressed to CAB and embedded in MSI

do not compress

Files will be left uncompressed and stored outside of MSI

Which option is right for me?

Split the CAB files to keep their size under the specified limit.

Maximum size of a single CAB file:

Compression algorithm:

Cabinet file naming:

- Same as the MSI (short)
- Same as the MSI (long)
- Same as the MSI (short)**
- Data.cab**
- Custom

Additional options

Update MSI file properties (size, version, etc.)

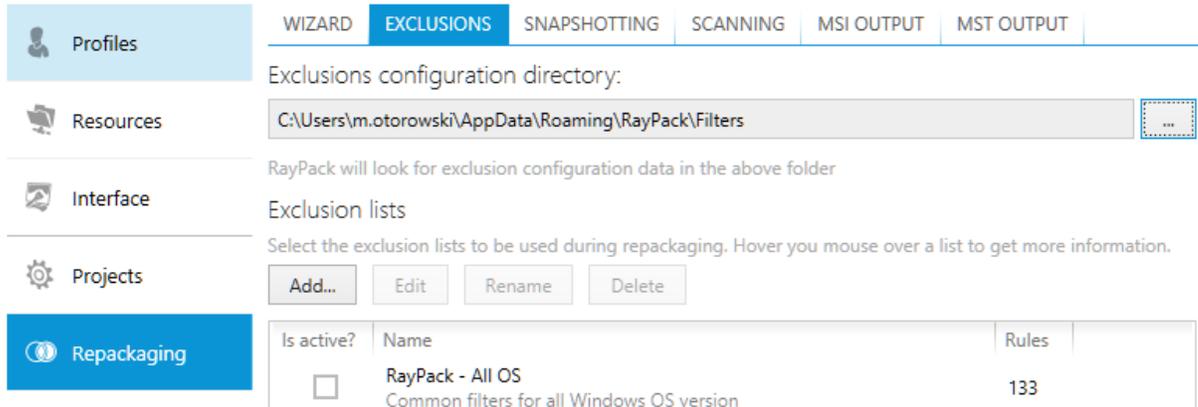
Generate a new ProductCode each time

Sign MSI [Configure](#)

Wrap the produced database in executable wrapper

Configurable exclusions directory [RPK-1388]

The exclusion list location can be now configured within the *Settings* screen (in RayPack 1.4) this was only possible via direct XML manipulation):



WIZARD **EXCLUSIONS** SNAPSHOTTING SCANNING MSI OUTPUT MST OUTPUT

Profiles

Resources

Interface

Projects

Repackaging

Exclusions configuration directory:
 C:\Users\m.otorowski\AppData\Roaming\RayPack\Filters

RayPack will look for exclusion configuration data in the above folder

Exclusion lists
 Select the exclusion lists to be used during repackaging. Hover you mouse over a list to get more information.

Add... Edit Rename Delete

Is active?	Name	Rules
<input type="checkbox"/>	RayPack - All OS Common filters for all Windows OS version	133

Extended ThinApp options and configuration [RPK-1474]

RayPack 2.0 extends the configuration settings for ThinApp 4/5.

- It is now possible to create the ThinApp project next to the output EXE files. The project can be then further fine-tuned in regular ThinApp editor.
- It is now possible to override the default isolation settings (via manual XML editing).
- The default package.ini template fo both ThinApp 4/5 can be customized.

The settings are configurable per-profile.

Configurable user profile component settings [RPK-1496]

RayPack 2.0 provide a configuration panel and ability to disable the default behavior of component creation inside user folders. Additionally, the naming convention for the created registry keys can be adjusted.

BUILD OPTIONS | SAVE OPTIONS | **BEST PRACTISES** | NAMING CONVENTION | ADVANCED

Portable executable files

Create components according to Best Practices

When this option is checked, RayPack will create a separate component for each newly added portable executable files. Such files will be

Portable executable file extensions

Example: DLL,EXE,OCX

Components in user profile

Automatically create components and folder operations for folders in user profile

If this option is selected, folders created in user profile (for example in AppData folder) will automatically receive corresponding entries. This is to ensure that the package passes ICE validation, but may produce more verbose output.

Registry key for user profile components (created in HKCU node):

Key:

Name:

Value:

Use \$(ComponentId) and \$(DirectoryId) as placeholders for the component and directory identifiers respectively.

Configurable custom folders [RPK-1588]

The folders shown in the *Predefined Folder Browser* dialog within PackDesigner Visual Editor can be now configured to include predefined, non-standard entries.

Other

Improved licensing lookup and troubleshooting [RSC-141]

RayPack 2.0 works better with multiple licenses present in a single folder. It can automatically pick up the best-matching license file from available ones. RayPack 2.0 looks for licenses in following locations:

1. The installation folder
2. <CommonProgramFilesX86>\Raynet\Licenses
3. <AppData>\Raynet\Licenses

Additionally, extended logging (%appdata%\RayPack\Logs) indicates which license is checked, what is the hardware ID etc.

New RPP 2.0 project format [RPK-1359]

The new RPP format results in smaller projects (up to 80% smaller RPP files), better support for Version Control Systems (comparing and tracking of changes) and automation (XML traversing, editing etc.)

**Note:**

- Projects saved in RayPack 2.0 will not be compatible and not recognized by RayPack 1.4 and previous.
- Projects saved in RayPack 1.4 and earlier are forward compatible (can be opened by RayPack 2.0 without loss of functionality). However, saving from RayPack 2.0 applies the new RPP 2.0 syntax.

Extended command-line options [RPK-1428]

The command line tool `rpcmd.exe` exposes additional functionality:

- Snapshot creation
- Silent repackaging
- Conversion of 3rd-party formats
- PackPoint maintenance

Start `rpcmd.exe` without parameters to get a detailed information about available parameters and switches.

Monitoring of removed properties in PackTailor [RPK-1378]

When an MSI property gets deleted in the Installer session, it will be also captured by PackTailor and eventually removed in the result `.mst` file.

Other enhancements and improvements

- RPK-1418: Improved patching of packages
- RPK-137: Automatic generation of GUID for component belonging to a template
- RPK-1486: MSI file compression settings moved from the PackDesigner sidebar into the profile settings
- RPK-1540: Added [%PUBLIC] syntax to the list of formatted properties in the intellisense box
- RPK-1518: The "Update file metadata" option is disabled by default in new profiles
- RPK-1518: In PackRecorder, when NEXT button is pressed on "Install application" page without pressing "Execute" beforehand, the setup will start automatically

- RPK-1367: Ability to sign MSI using a certificate using a private key from ID card
- RPK-1388: Paths to the MSI/MST template, projects folder, exclusions folder use environment variable placeholders in profile XML files
- RPK-1516: Improved Upgrades handling
 - Ability to specify multiple languages
 - Improved validation of VersionMin, VersionMax and Language columns in the Advanced Mode screen
 - Improved synchronization of two MSI projects
- RPK-1519: Improved validation of identifier columns
- RPK-1563: Ability to expand / collapse the row tracking and validation results bar
- RPK-1591: Applying MST files to the already opened project is now considerably faster
- RPK-1655: Added a button to build the RCP project directly from Build Options

Resolved issues

- RSC-142: RayPack crashes when pressing asterisk (*) in tree view
- RPK-732: Disabling "Use command-line-arguments" does not reset the previous command line arguments
- RPK-1177: Recent file section is not working correctly after returning from last window to dashboard
- RPK-1212: Could not create App-V package for Spotlight on Windows
- RPK-1305: Custom Action VBS with Script Deployed within this package has a disabled NEXT button
- RPK-1313: Certain predefined folder in generated ThinApp packages may be missing
- RPK-1314: Not optimal default file isolation settings for ThinApp packages
- RPK-1315: Not optimal default registry isolation settings for ThinApp packages
- RPK-1328: App-V conversion of specific MSI fails
- RPK-1329: DateTime parsing fails for specific files during snapshots comparison
- RPK-1332: Crash after pressing asterisk in expanded tree view control in PackRecorder
- RPK-1344: RayPack - Import .reg file removes trailing backslash
- RPK-1369: PackDesigner - Driver wizard - Problem adding Driver
- RPK-1375: Invalid character encoding of UTF-16 files after running the RPTextReplacement custom action
- RPK-1376: Missing Signature table when adding a search for a registry key using the System Search wizard
- RPK-1380: After deleting Merge Modules library, RayPack crashes when adding a Merge Module package from local drive

- RPK-1387: Error while opening the RPP file from examples
- RPK-1390: Cannot enter UNC path in folder picker control
- RPK-1395: Crash when deleting a subfeature in certain packages
- RPK-1398: ProductVersion property out-of-sync
- RPK-1409: Typo in RegExp tester
- RPK-1422: A patch created between 2 MSI is not installable if the sequences are too different
- RPK-1439: The drop-down values for Control_Next, Control_Default etc. are not respecting the current dialog
- RPK-1441: Crash when importing several files at once in Advanced view > Components tab
- RPK-1445: Not all supporting files are imported with the main INF file
- RPK-1449: Redundant *.cab files are left in the _Streams subfolder when converting RCP -> RPP
- RPK-1469: Various synchronization issues between the Registry table and view
- RPK-1516: It is not possible to specify multiple upgrade languages
- RPK-1519: Spaces are allowed in the PK fields (identifier)
- RPK-1527: After rebooting the machine while repackaging RayPack starts and shows error
- RPK-1538: The wizard mode is always reverted to the profile configuration after reboot during repackaging
- RPK-1544: Signing tool does not accept paths containing spaces
- RPK-1552: Crash to desktop when trying to generate an update entry for an MSI file that is blocked by other process
- RPK-1561: Cannot add files to the Visual C++ Redistributable MSI file
- RPK-1579: Pressing CTRL+S in the tables view changes the content of the cell that is both active and focused
- RPK-1582: Random crashes when editing ServiceInstall table manually
- RPK-1584: Misleading handling of registry values having empty name and value
- RPK-1592: Temporary resources are sometimes not properly removed
- RPK-1601: Unrecognized syntax hex(3) in .reg files imported by PackDesigner
- RPK-1604: Invalid Directory structure after tailoring Microsoft Dynamic
- RPK-1660: Could not open iTunes.msi
- RPK-1624: AMD64 platform is not recognized correctly in the Summary Information Stream
- RPK-1635: Files smaller than 1024 B are reported to be 0 KB size
- RPK-1637: When generating transform file from repackaged RCP, previous file entries may be deleted
- RPK-1649: Inconsistent button naming

- RPK-1652: Empty dialog when editing non-advertised shortcut in Autodesk TrueView 2016
- RPK-1656: The predefined folders resolver shows the same paths for ProgramFiles64Folder and ProgramFilesFolder for 64-bit RPP projects
- RPK-1658: File size is not correctly rounded
- RPK-1655: F7 button does not trigger the FILE > BUILD menu from PackRecorder

Known issues

The following list is a summary of known issues present in RayPack 2.0:

- The 1.4 RPP format is not forward compatible - that means projects created or saved with RayPack 2.0 can only be opened with RayPack 2.0 and later. On the other hand, the 2.0 release is backwards compatible, which means it can load and operate old formats..
- The profiles saved by RayPack 2.0 use a formatted syntax in the profile files (`.rppprofile`). Prior to version 2.0 this syntax was not supported. A profile file saved using the newest version is therefore not compatible with RayPack 1.4 anymore.
- For the list of other known-issues, refer to corresponding KB articles in our Knowledge Base.

Migration

Migration from 1.4 to 2.0

The migration from version 1.4 is a straightforward process. In order to migrate, simply start the setup of the RayPack 2.0 installation media.

It is recommended to install RayPack 2.0 on a clean machine having no previous version of PackPoint. Clean install ensures the newest adjustments and enhancements will be enabled out-of-the-box. If you want to re-generate the PackPoint content from 2.0 resources, simply remove the PackPoint folder (C : \RayPack \PackPoint by default) and re-run RayPack 2.0.

Note: When a previous version of PackPoint is detected during the installation, 2.0 will offer an upgrade option.

RPP FORMAT CHANGES

- **The syntax of RPP projects has changed**
 RayPack 2.0 is fully backward compatible. It means that projects created prior version 2.0 are supported and will be opened. However, once the project is saved in the new version, the 2.0 schema will be used. New format of RPP projects is not recognized by RayPack 1.4 and older.

PROFILES

- **The syntax of profile files has changed**
 RayPack 2.0 is fully backward compatible. It means that profiles created prior version 2.0 are supported and will be correctly handled. However, once the profile is saved/updated in the new version, the 2.0 schema will be used. New profiles are still recognized by RayPack 1.4 and older, but may cause unexpected issues when creating new projects, looking for exclusion rules etc.

USER INTERFACE CHANGES

- **The default capture mode is now a part of the profile**
 In version 2.0, the default Capture Wizard Mode settings has been moved from the instance settings to the profile settings. The setup mode can be also changed dynamically directly in the repackaging wizard.
- **Profile settings moved from the Profile Configuration window to the Settings screen**
 In version 2.0 the profile configuration is shown together with other settings in one place - the Settings screen. Also, several adjustments were done to the place where options can be found:

Feature	Prior 2.0	Since 2.0
<i>Sign settings</i>	Profile > general	Settings > Signing + tagging
<i>Thin-App settings</i>	Profile > general	Settings > Virtualization
<i>PackDesigner options</i>	Profile > packdesigner	Settings > Designing
<i>PackRecorder options</i>	Profile > packrecorder	Settings > Repackaging
<i>COM Extraction options</i>	Profile > packdesigner > BEST PRACTISES	Settings > Designing >

Feature	Prior 2.0	Since 2.0
		ADVANCED
<i>File compression options for MSI/MST</i>	PackDesigner > Setup options > File compression	Settings > Designing > SAVE OPTIONS
<i>Templates and project folder</i>	Profile > general	Settings > Projects
<i>User interface settings</i>	Settings	Settings > Interface
<i>Profile management</i>	Settings	Settings > Profiles
<i>PackPoint settings</i>	Settings	Settings > Resources

LICENSING

- **New licensed feature for Prerequisites Setup Wrapping and Quality center**

If you are migrating from RayPack 2.0 or earlier, your license data does not contain the necessary information to activate these features, making it not visible in the UI. If this is the case, simply reactivate RayPack using the same order number, and the necessary license information will be automatically downloaded from the server.

CUSTOM INSTALLATION PATHS

If previous version was installed to a custom location (other than `C:\Program Files (x86)\RayPack` and `C:\RayPack\PackPoint` for PackPoint location) that location has to be reentered during the installation of RayPack 2.0. Both folders can be changed either directly from the UI, or by adjusting two public MSI properties from command line, for example to perform a silent installation to a custom location, execute the following command:

```
msiexec.exe /i RayPack2.0.msi INSTALLDIR="C:\Program Files (x86)\MyCustomRayPack" PACKPOINTDIR="\\SHARE\MyCustomPackPoint" /qb!-
```

Migration from 1.3 to 2.0

The migration from version 1.3 is a straightforward process. In order to migrate, simply start the setup of the RayPack 2.0 installation media.

Migration from 1.2 to 2.0

The following areas have changed compared to RayPack 1.2 and may require additional attention when migrating an existing installation:

PROFILES

Note: If you delete the `%APPDATA%\RayPack` folder before starting the application, the default profile will be recreated. In this case you can skip the following advisory information.

- **The exclusion filters for services have a different syntax**

Previously, the location attribute was used to filter the services in `*.rpexl` files. Version 2.0 changes the name of the attribute from "location" to "name". If you are using an exclusion list created/delivered

with RayPack 1.2 or earlier, you may want to adjust the name of the attribute manually.

- **The default projects folder has changed**

The default folder where projects are saved has been changed from `<MyDocuments>\RayPack\Projects` to `C:\RayPack\Projects`. This change means that projects are by default saved to a location that is accessible for all users on a given machine. The profiles that were created with RayPack 1.2 or earlier will not be updated to automatically use the new location. If you want to change the default project saving path:

Launch RayPack > click on the FILE button present at the left-hand side of the menu bar > select Options > choose the required path in the GENERAL section.

- **The default template has changed**

We introduced several improvements to the default template and also included an optional template supporting more than 32767 files per project (MSI limitation). When using an old profile, your template will not be updated to preserve any custom changes you may have made since the installation. In order to use the new templates, simply copy them from `<RayPackInstallDir>\ConfigurationTemplates\PackageTemplates` to your profile (default `%APPDATA%\RayPack\PackageTemplates\`). If you have a highly customized template, contact our support team via support@raynet.de, we will be happy to migrate it to include the new features present in the recent templates.

LICENSING

- **New licensed feature for MSP creation.**

RayPack 2.0 supports Windows Installer patches (`*.msp`). If you are migrating from RayPack 1.2 or earlier, your license data does not contain the necessary information to activate the feature, making it not visible in the UI. If this is the case, simply reactivate RayPack using the same order number, and the necessary license information will be automatically downloaded from the server.

INTEROPERABILITY

- **The RayFlow command line has changed**

If you are using RayPack in conjunction with RayFlow, please refer to the RayFlow product documentation, or contact our consultants to adjust the RayFlow subsystem in your environment.

Migration from earlier releases to 2.0

The licensing system in current RayPack releases is far more flexible, allowing the tailoring of your license to actual business needs. Therefore, all licenses generated for versions 1.1 and earlier have to be reactivated for productive use in RayPack 2.0. Please make sure that you delete all `*.license` files from the installation folder (default `C:\Program Files (x86)\RayPack`) and then simply start RayPack or contact our support in order to get a new license.

Of course all order numbers generated for earlier product versions are still valid, and were automatically converted to the new edition.

Additionally, in recent RayPack releases, Raynet improved the settings and packaging environment by merging the templates for the new MSI (RPP) and repackaged projects (RCP). For the best packaging experience it is recommended to clear the old profiles folder on the machine that is actually affected by the upgrade. The old profiles are located in `%AppData%\RayPack` folder.

If you use a highly customized profile, please contact our support team via support@raynet.de, we will be happy to assist you on the migration process.

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 2.0. 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 `C:\Program Files (x86)\RayPack*.license`)
- 3) Uninstall the previous version of RayPack
- 4) Delete the content of the installation folder (by default `C:\Program Files (x86)\RayPack`)
- 5) Install RayPack 2.0.
- 6) Start the main program to re-activate RayPack 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
- 8) Backup and then remove the content of the following folders:
 - `%AppData%\RayPack`
 - `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`)
- 9) Start RayPack again.

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

System Requirements

Hardware Requirements

This section lists the minimal hardware requirements for devices running RayPack.

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 RayPack framework itself requires about 100MB 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.

- Windows Server 2003 R2 Server
- Windows Server 2003 SP2
- Windows Server 2008 R2
- Windows Server 2008 SP1-SP2
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016
- Windows XP Professional SP3
- Windows Vista
- Windows 7
- Windows 8
- Windows 8.1
- Windows 10

**Note:**

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

Prerequisite Software

- .NET 4.0 Client & Full for Windows XP up to Windows 7 systems (both 32bit and 64bit)

Virtualization pack prerequisites

- 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 RayPack 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.

Additional Information

Visit www.raypack.net for further information regarding the product and current community incentives. It's also recommended taking a look at additional resources available at the Knowledge Base for Raynet products: <http://knowledgebase.raypack.net>

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

Our Raynet support team gladly assists you on any question or issue you encounter regarding RayPack. Feel free to sign in and open incidents via our Raynet support panel, or by simply sending an email to support@raynet.de if you are an already registered Raynet customer.

RayPack is part of the RaySuite

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