

RayPack Release Notes 2.0 SP1

Prepared for Dell KACE

December 2015

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RayPack Release Notes

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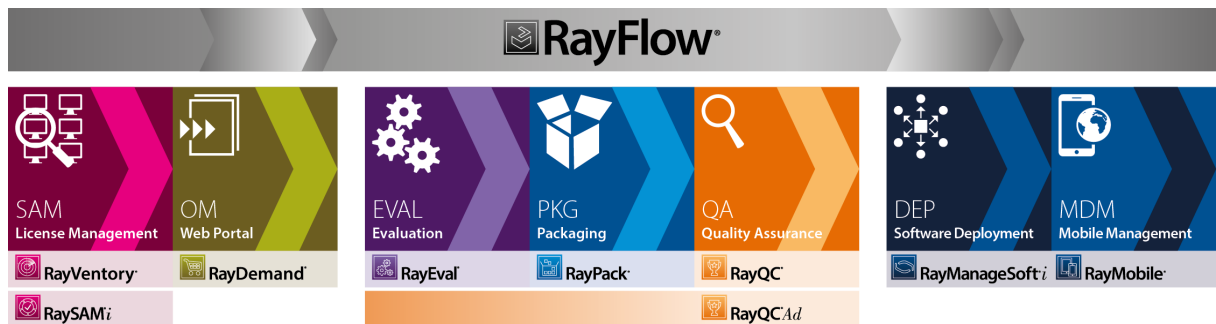
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Introduction

RayPack for Dell KACE 2.0 SP1 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 for Dell KACE is available as a stand-alone product as well as having the ability to be integrated into the RaySuite solution powered by RayFlow.



Enterprise Application Lifecycle Management

The RayPack for Dell KACE 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 SP1 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.

Dell KACE Special Edition

This special product edition for Dell KACE has been designed to provide a functional yet lightweight packaging tool for customers who are running a Dell KACE K1000 instance. The set of features available within this edition is aligned with the basic packaging needs a typical K1000 usage scenario implies. Therefore, whilst exploring the product interface and functions, sooner or later users are likely to discover options that are generally present but at the same time restricted according to the license limitations. Especially in nowadays highly flexible and volatile IT world, business need changes may arise each and every day due to technical advancement, enterprise growth, and new strategies for infrastructure maintenance.

However, we want to empower our users with tools and methods to accommodate to those ever changing needs. The special RayPack for Dell KACE edition is an initial starting point for individual usage, growth and development.

Companies who are entitled to get the special edition as a free, optional extension of their system maintenance appliance may upgrade to any other product edition by applying a privileged upgrade path. Please contact our Raynet sales team for further information about options and possibilities. We are very looking forward to supporting your business.

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]*
- *ISM/WSI to RPP conversion [RPK-1427]*
- *PackCommander - package discovery, download and tuning [RPK-1775]*
- *Import wizard for Universal (Windows 10) and Modern Windows (8.1 + 10) applications [RPK-1777]*
- *Extended shortcut behavior, support for Windows 10 Start Menu [RPK-1778]*
- *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]*

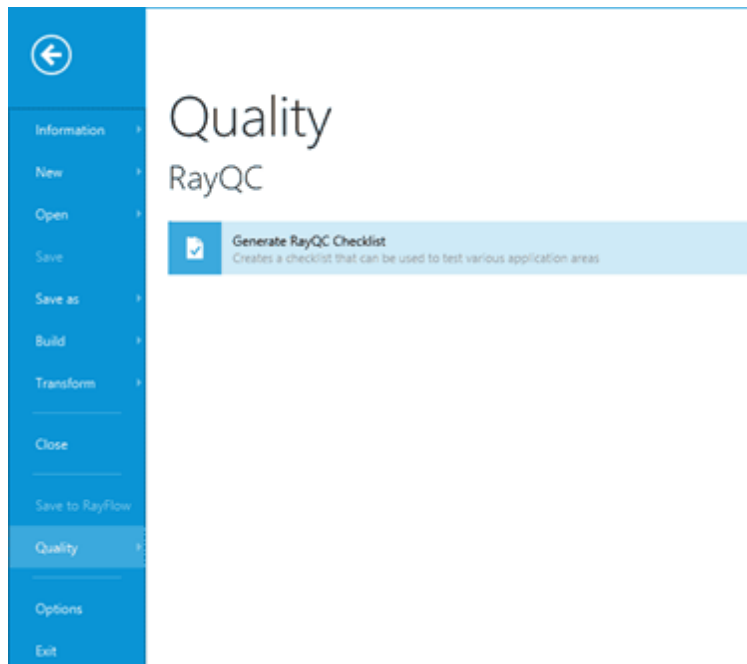
- *Ability to change the naming convention for CAB files when building MSI projects from PackDesigner [RPK-1339,1349]*
- *Configurable exclusions directory [RPK-1388]*
- *Extended ThinApp options and configuration [RPK-1474]*
- *Configurable user profile component settings [RPK-1496]*
- *Configurable 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?

New features

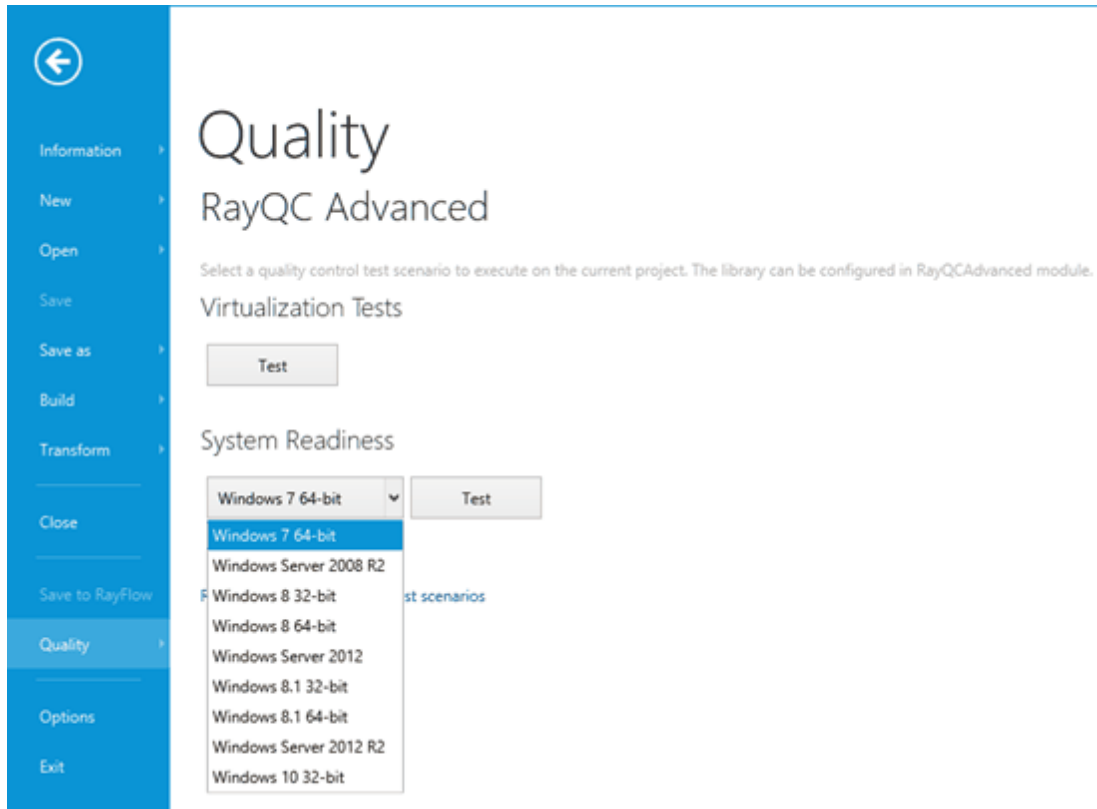
RayQC and RayQC Advanced integration [RPK-1339,1349,RTS-194]

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

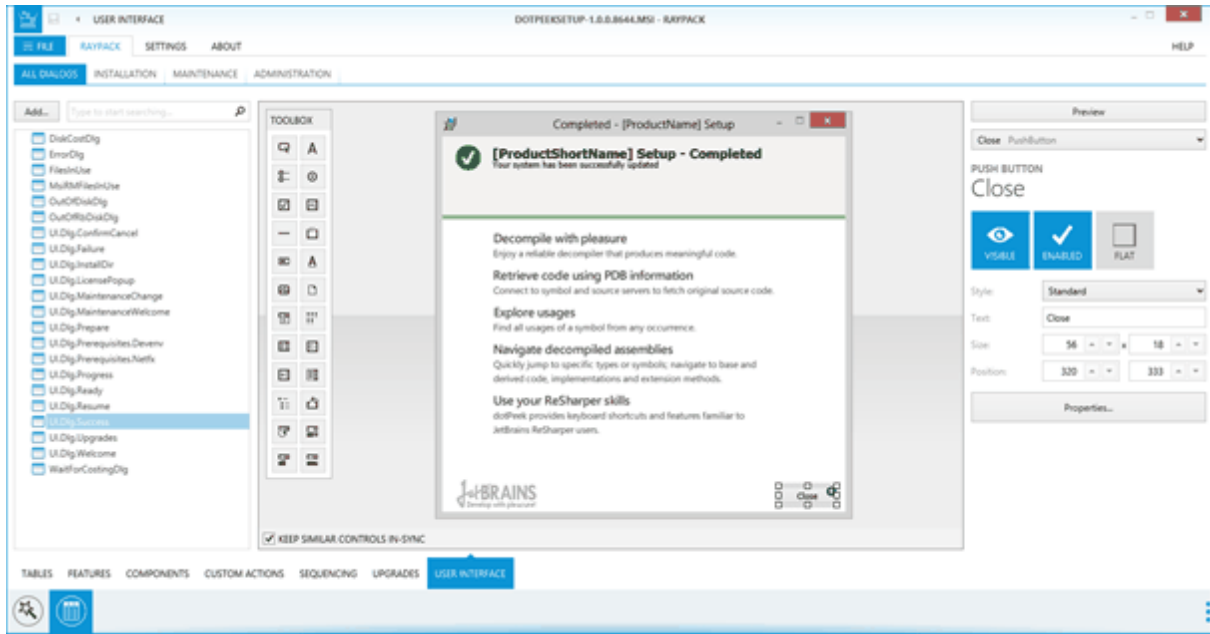
The new Quality menu can be used to perform various quality checks against the current project. Wide range of rulesets available in RayQC Advanced are available, from virtualization to collision management. Custom rulesets are also supported, and the configuration of RayQC Advanced is respected. The 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

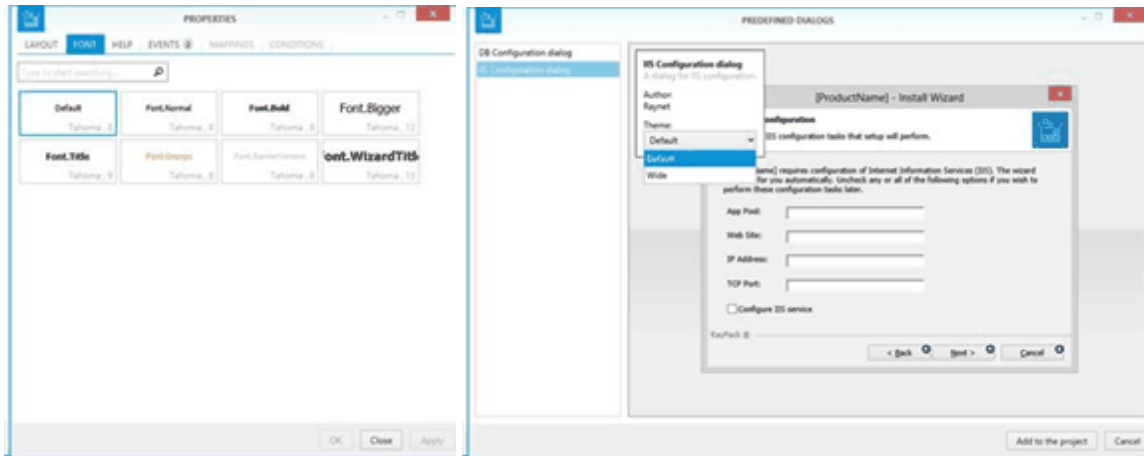
New MSI dialog editor [RPK-143,1300]

RayPack for Dell KACE 2.0 SP1 contains a brand new MSI Dialog Designer, which extends the functionalities of RayPack for Dell KACE 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 for Dell KACE:** 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 for Dell KACE:** 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.)

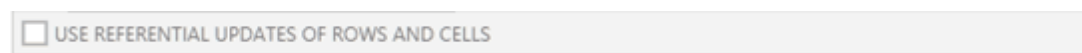


Row tracking and cascade updates [RPK-245]

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 for Dell KACE 2.0 SP1 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

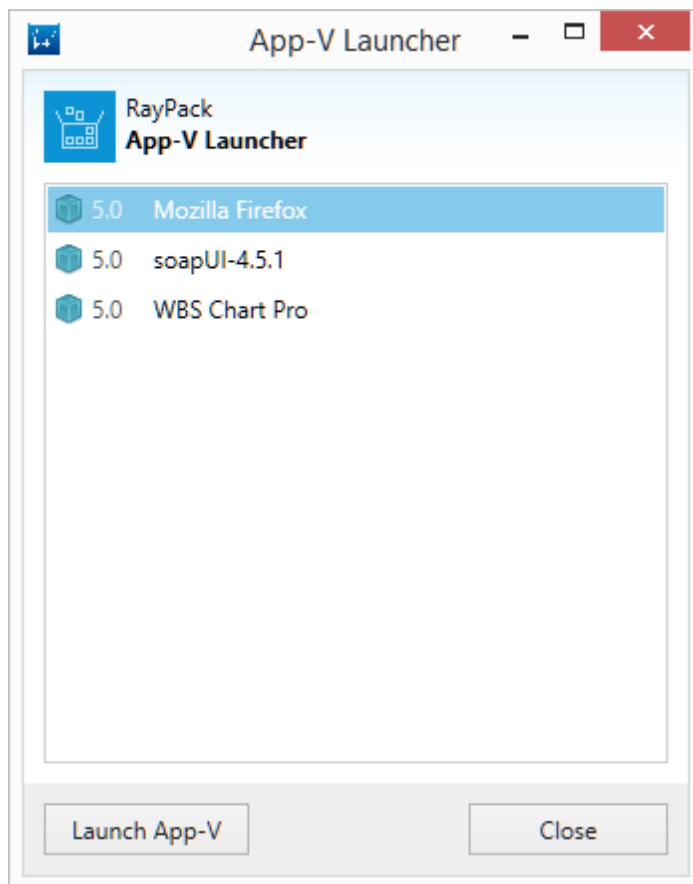
Name	Value
------	-------

- 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 for Dell KACE'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 for Dell KACE\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 for Dell KACE, 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:

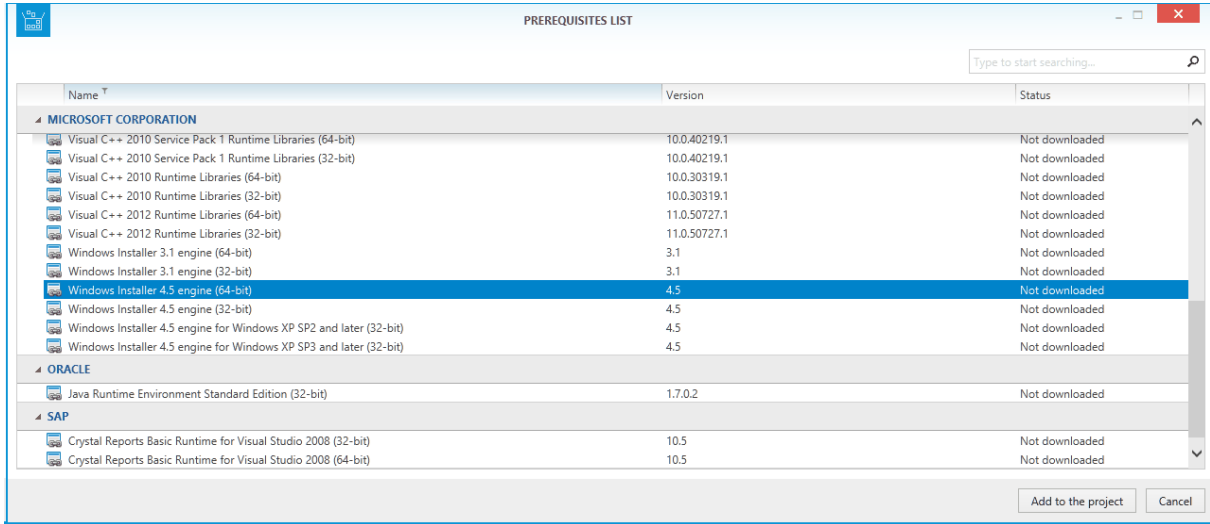
In RayPack for Dell KACE 2.0 it will be possible to define prerequisites and have them present in the wrapper as well.

Prerequisites handling [RPK-1073]

The new Prerequisites screen provides an easy way to define critical dependencies of the currently edited project. RayPack for Dell KACE 2.0 SP1 contains a predefined list of commonly used prerequisites, with ability to download necessary files, internal dependencies, conditions etc.

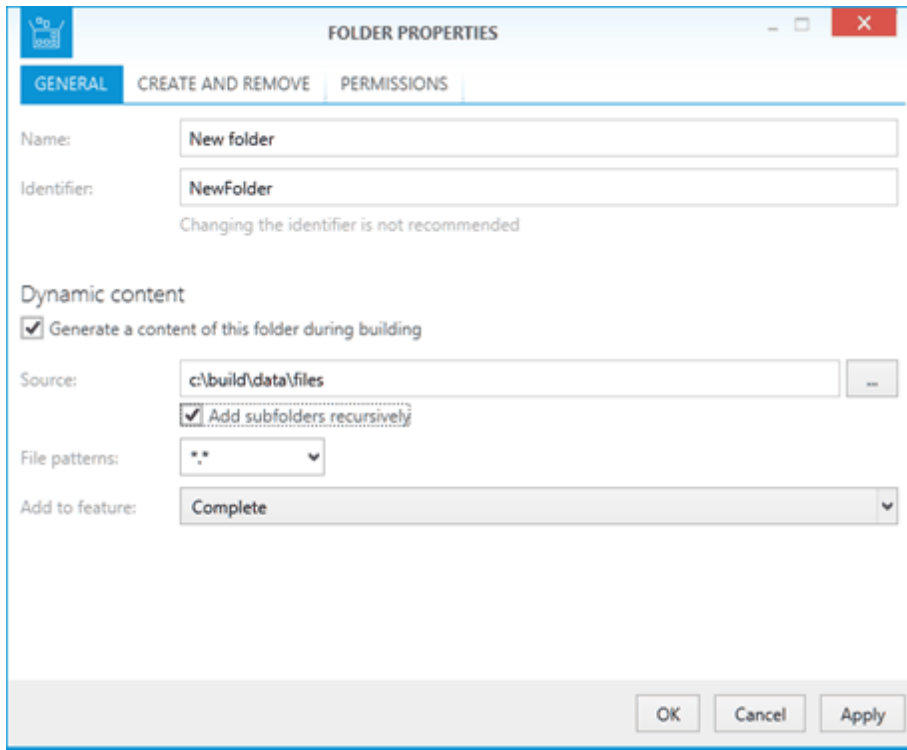
When building the projects, CMD or EXE wrappers respect these settings in order to provide a robust and standalone entry point to install all necessary components of the package.

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.

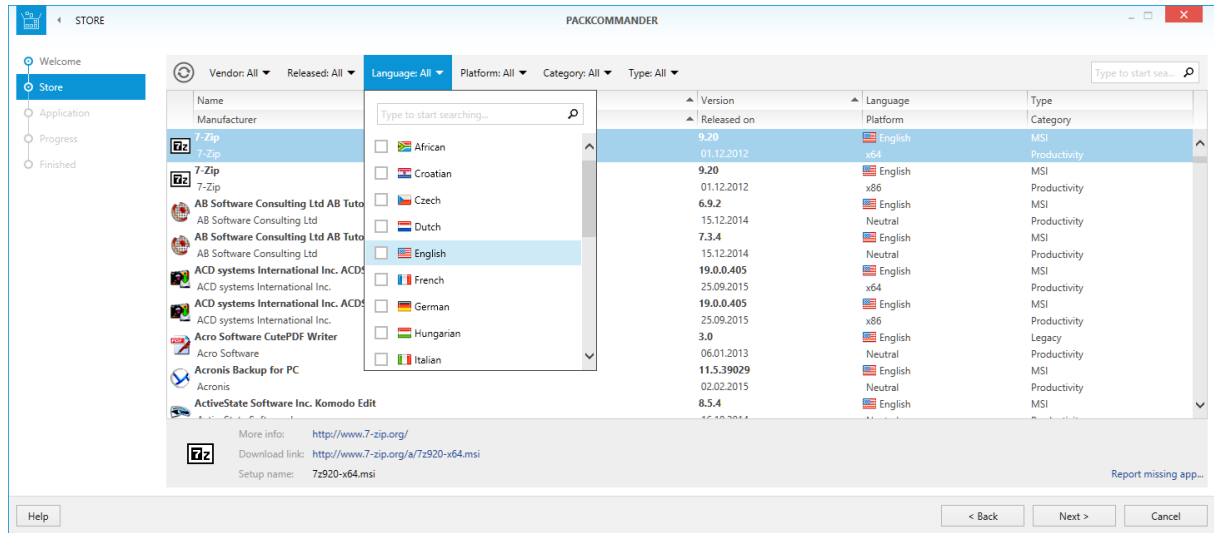
ISM/WSI to RPP conversion [RPK-1427]

RayPack for Dell KACE 2.0 SP1 introduces a new silent module for conversion of existing `.ism` and `.wsi` projects into native `.rpp` format.

PackCommander - package discovery, download and tuning [RPK-1775]

The new **discover + download packages** menu provides access to tools speeding up packaging of typical and highly repetitive applications, as well as discovery of recent updates.

The store view shows the list of available software resources in a functional and customizable manner. It can be sorted using various criteria, including release dates, vendor, category, language, platform etc.

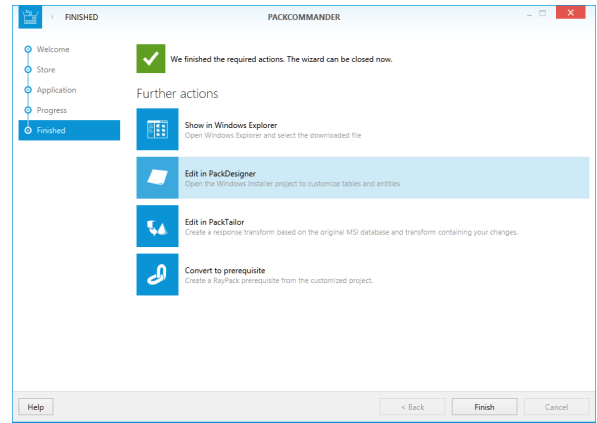
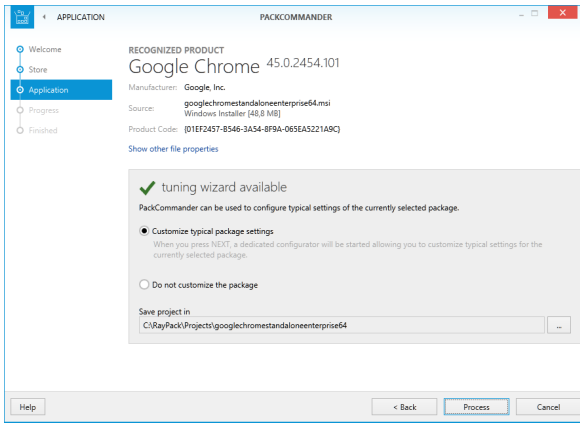


Packages can be quickly downloaded from official vendor websites.



Note:

This functionality requires additional license components.

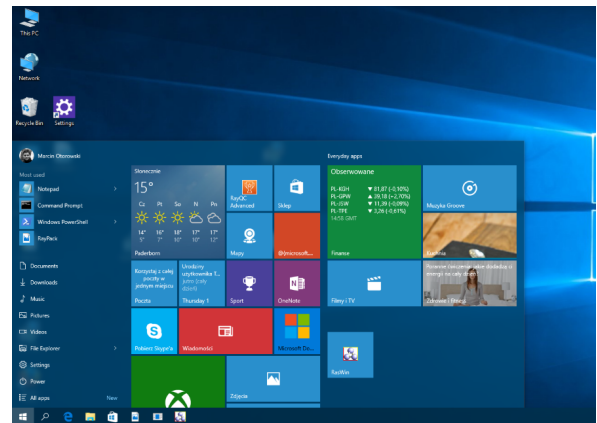
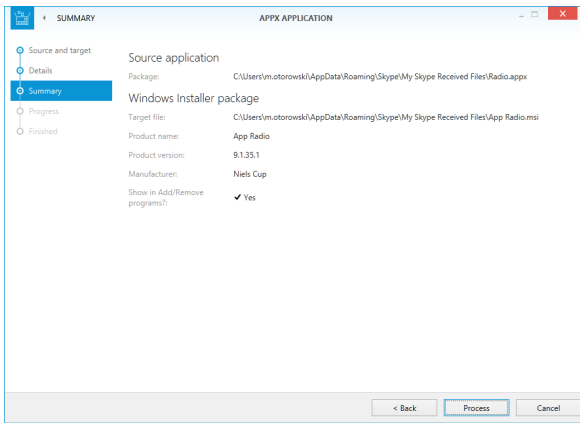


Discovered applications can be customized and saved as deployment-ready packages in no time. For many popular software versions, wizards are provided for easy one-click configuration. Several generic installation methods can be recognized and used to automatically generate silent command line switches.

After initial customization, packages can be further tweaked or repackaged. This way enterprise-specific features can be easily applied on top of deployment-ready packages, including branding, customized registry information, advanced custom actions etc.

Import wizard for Universal (Windows 10) and Modern Windows (8.1 + 10) applications [RPK-1777]

RayPack for Dell KACE 2.0 SP1 contains a new import wizard, allowing packagers to create Windows Installer based packages that side-load Universal and Modern Applications (in .appx format). Side-loaded applications are accessible by all users. Installing Universal / Modern apps has never been simpler, with no need to set up a rather complex infrastructure.

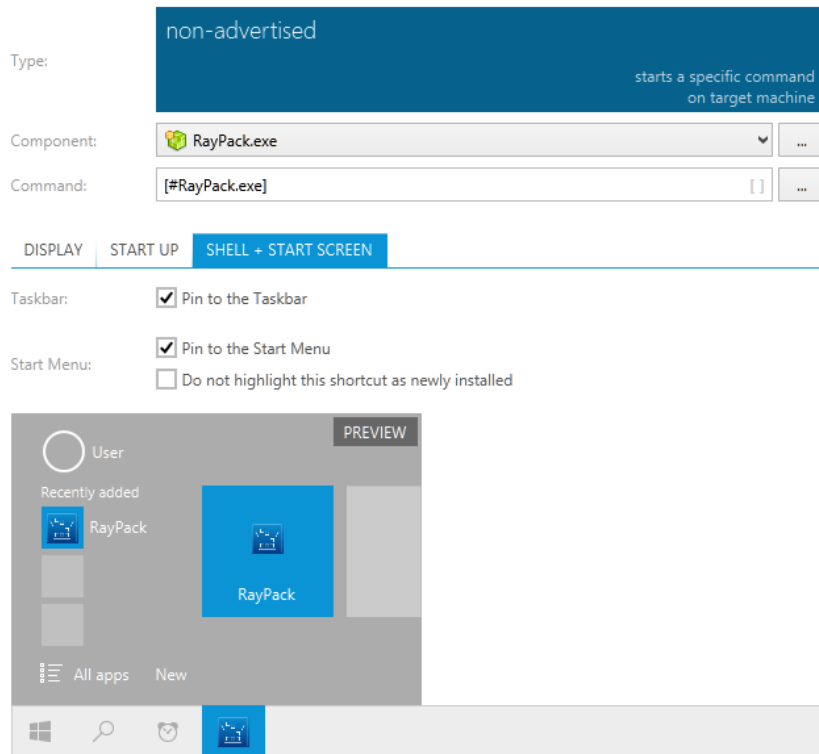


The import wizard offers simple guided steps, after which a new Windows Installer project is created. It can be freely customized using advanced capabilities of PackDesigner.

Universal and modern applications are installed right-away, for all users.

Extended shortcut behavior, support for Windows 10 Start Menu [RPK-1778]

Shortcuts can be easily pinned to Start Screen / Start Menu or Windows Taskbar. New options are available in a new tab **SHELL + START SCREEN** that has been added to the shortcut management view of the Visual Designer Mode in PackDesigner.



Also, RayPack for Dell KACE allows to configure a shortcut so that it will be not displayed within the *Recently added* section, allowing to keep the desktop experience less cluttered in managed environments. This approach matches the Microsoft strategy of minimal shortcut presence on essential OS navigation zones.

Improvements and enhancements

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

The core modules of RayPack for Dell KACE 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 astonishing 99%.

Improved MST management + templates support [RPK-342]

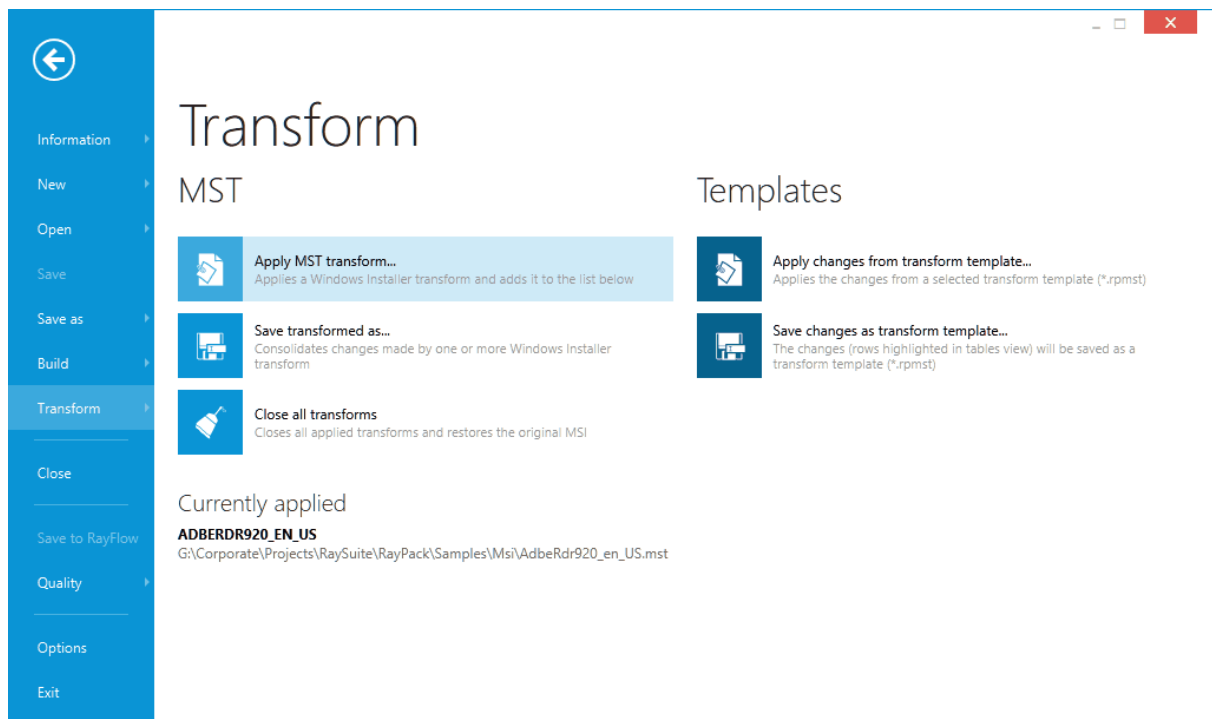
RayPack for Dell KACE 2.0 SP1 offers a better productivity with a support for transform templates (.rpmst) and better management of MST transforms. The transform template is a small XML file containing a list of changes to be present in MST transform file. Before version 2.0 SP1, these configuration files were only used by PackTailor (when creating a new MST file) and by PackRecorder (when creating repackaged MST file).

In version 2.0 SP1, 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 for Dell KACE 2.0 SP1, it is possible to apply multiple transforms to a single MSI project and close them at once using the new FILE > TRANSFORM menu.

With introduction of RayPack for Dell KACE 2.0 SP1 the transform templates are now fully supported by all components:

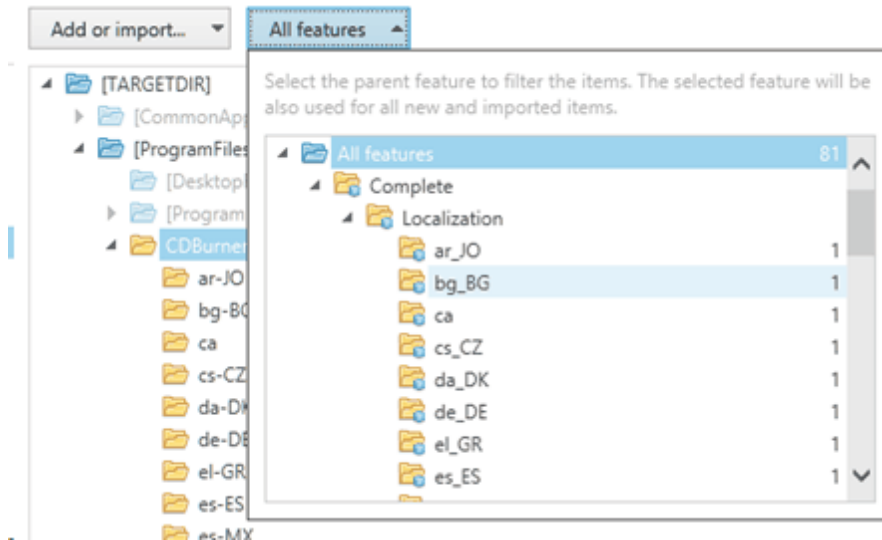
- **PackRecorder:** when generating an MST transform from repackaged MSI file.
- **PackDesigner:** when saving MSI changes as an MST transform, or applying/creating transform templates on demand.
- **PackTailor:** when creating a new response transform.

**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]

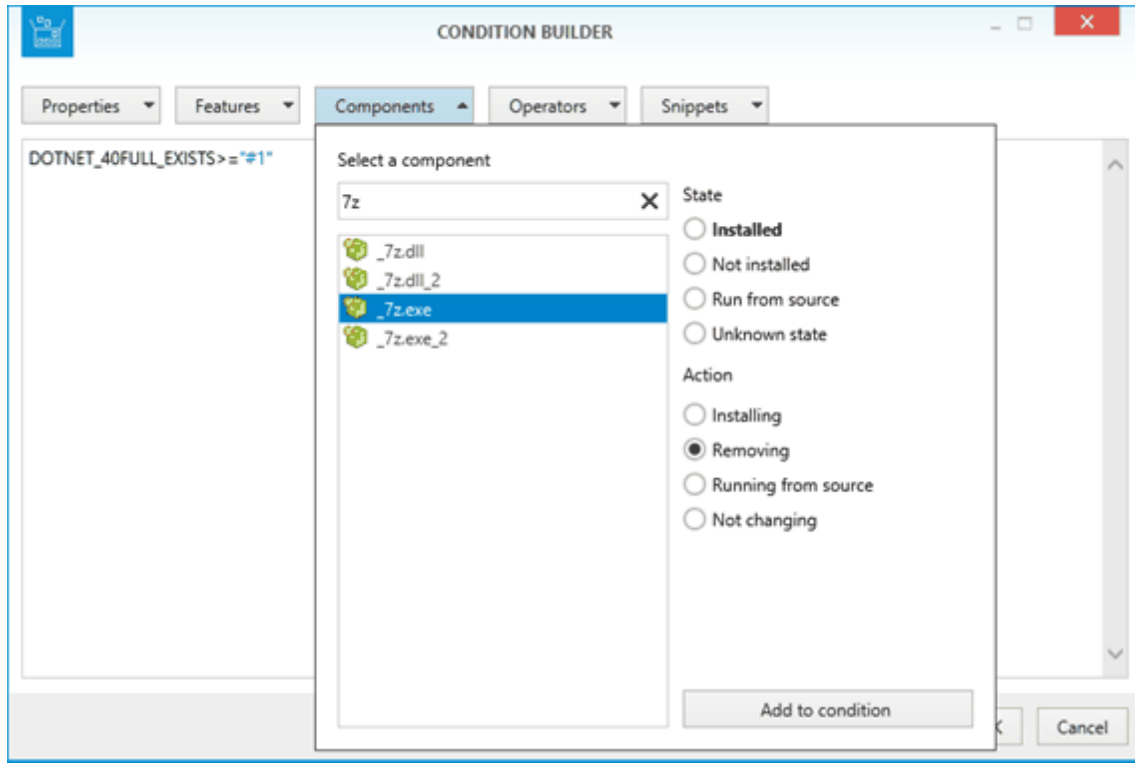
Both Files & Folders and Registry view in PackDesigner offer a feature selector, which can be used to filter the main list. The selector shows the number of items per feature. The current selection is automatically pre-selected to be the target feature for any new item created within the view.



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.

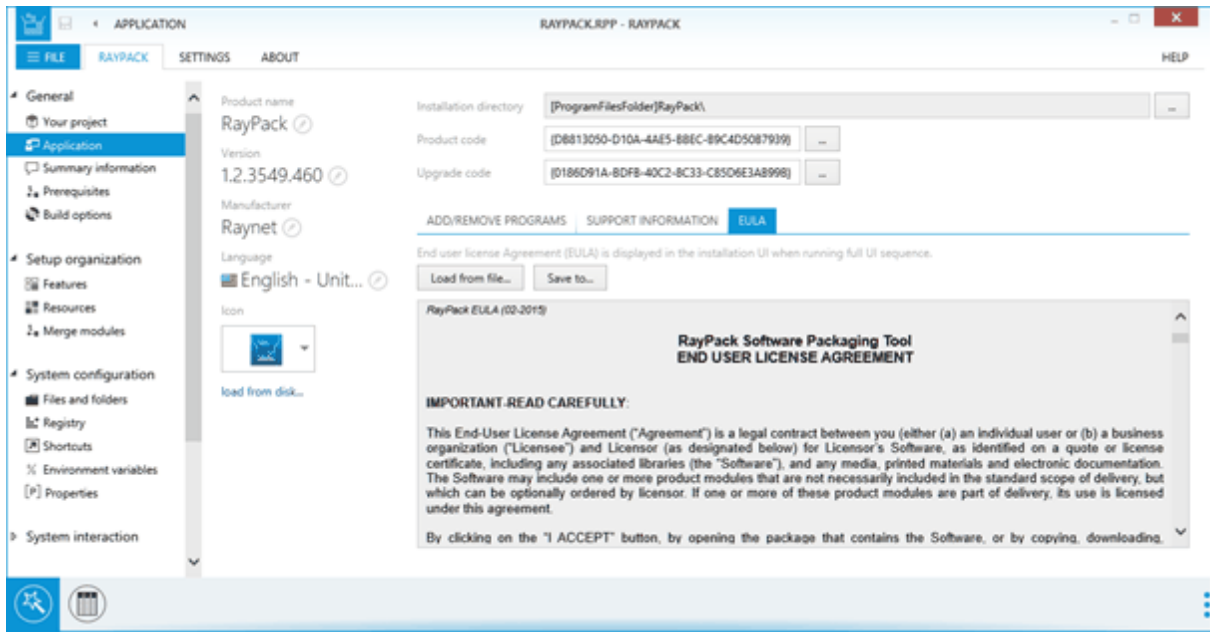


Also, the SNIPPETS section has been extended. It is now fully configurable via PackPoint resources by simply editing the provided XML file.

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.

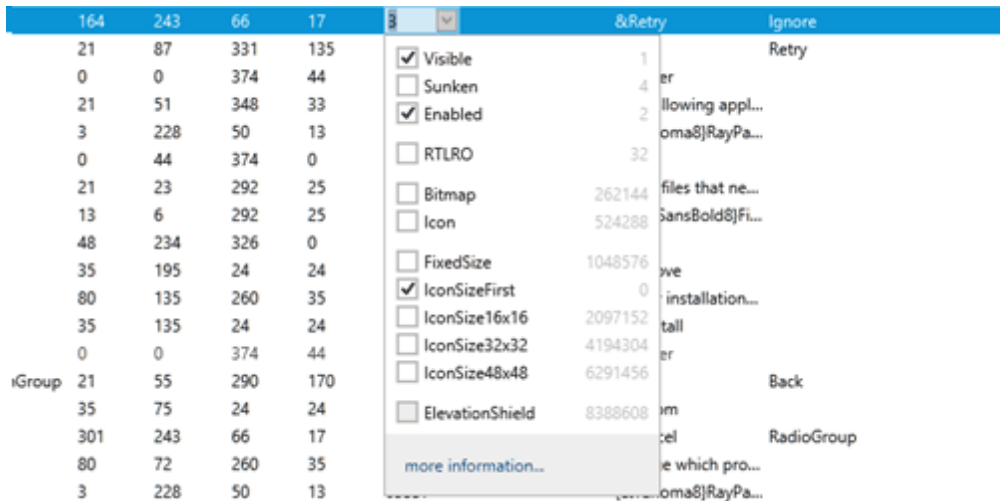


Note:

If you are upgrading from RayPack for Dell KACE 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]

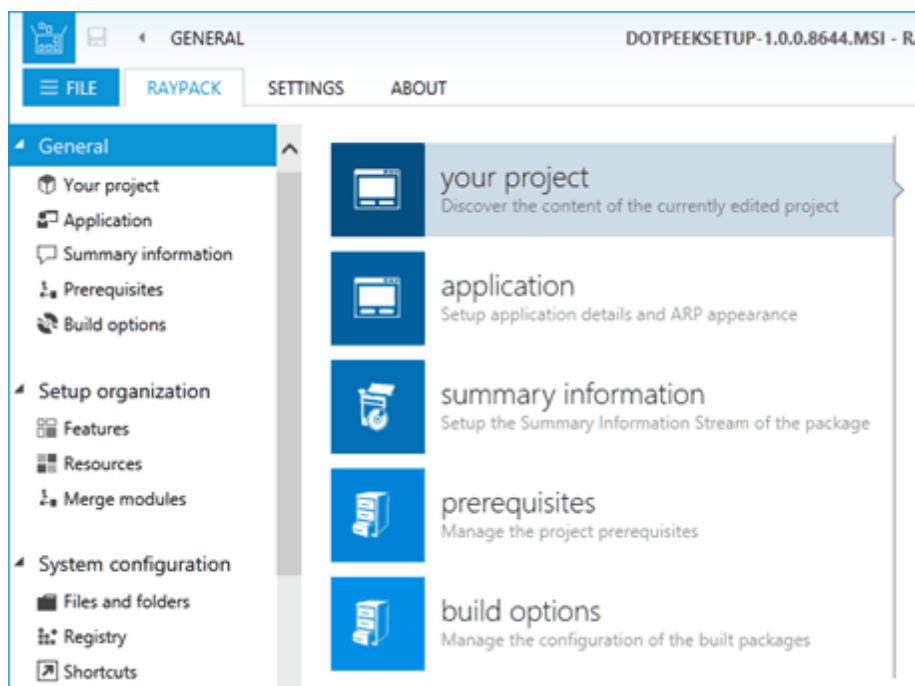
Administrator Properties (AdminProperties) can be edited directly from within the *Setup options > Administrator options* section.

User interface

Improved sidebar menu in PackDesigner [RSC-134]

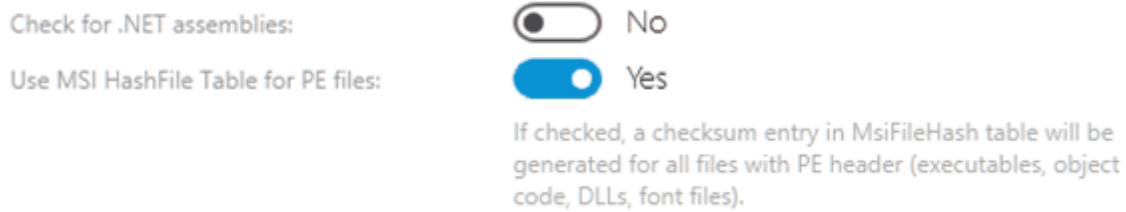
The PackDesigner sidebar has been improved: The main view groups have been separated more significantly, and a couple of items have been moved to expose the important ones. As a result:

- 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 for Dell KACE integrates better with the upcoming Windows 10 Look & Feel.



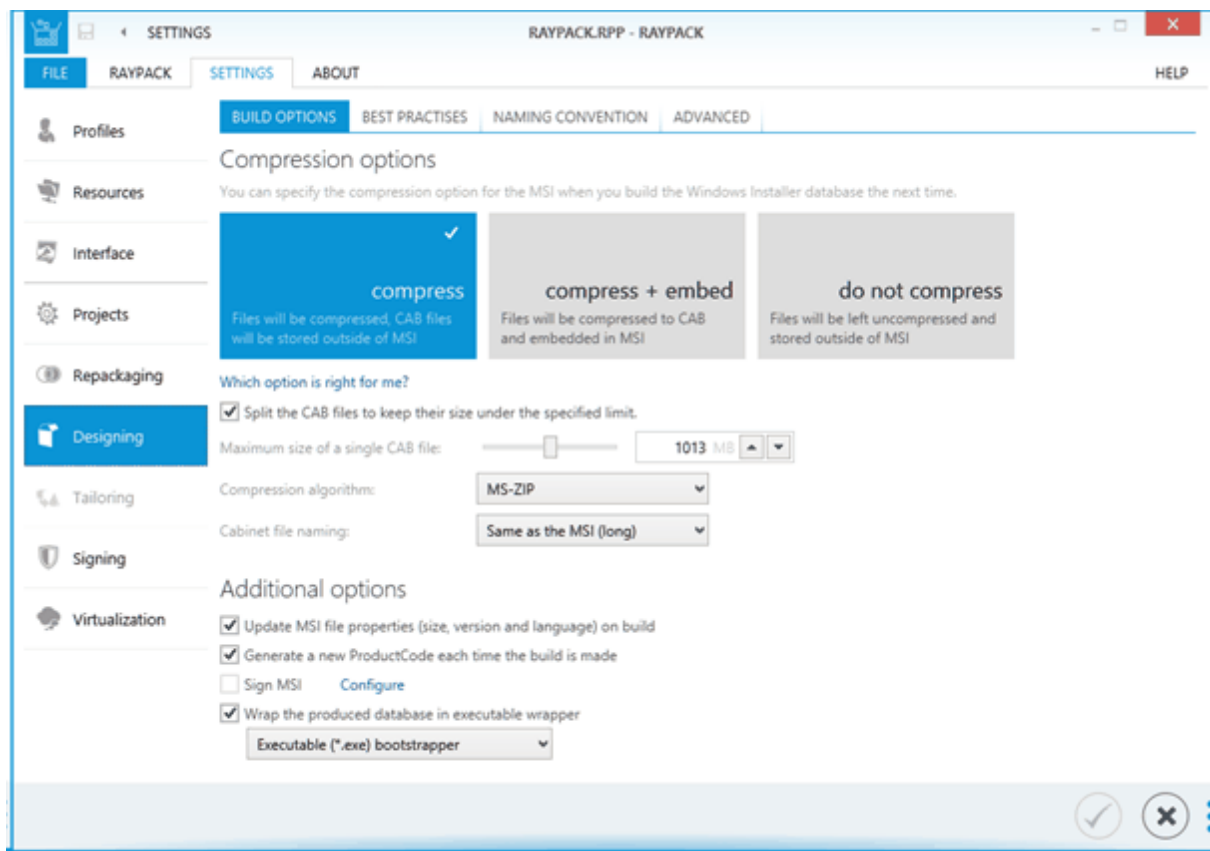
Opening RPP/MSI projects directly after building [RPK-1026]

When a project is built from an `.rcp` file, RayPack for Dell KACE 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 for Dell KACE 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 for Dell KACE 1.4) this was only possible via direct XML manipulation):

The screenshot shows the RayPack Settings interface with the 'EXCLUSIONS' tab selected. The 'Exclusions configuration directory' is set to 'C:\Users\m.otorowski\AppData\Roaming\RayPack\Filters'. Below this, there is a section for 'Exclusion lists' with a table of active lists.

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 for Dell KACE 2.0 SP1 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 for both ThinApp 4/5 can be customized.

The settings are configurable per-profile.

Configurable user profile component settings [RPK-1496]

RayPack for Dell KACE 2.0 SP1 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 for Dell KACE 2.0 SP1 works better with multiple licenses present in a single folder. It can automatically pick up the best-matching license file from available ones. RayPack for Dell KACE 2.0 SP1 looks for licenses in following locations:

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

Additionally, extended logging (%appdata%\RayPack for Dell KACE\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 for Dell KACE 2.0 SP1 will not be compatible and not recognized by RayPack for Dell KACE 1.4 and previous.
- Projects saved in RayPack for Dell KACE 1.4 and earlier are forward compatible (can be opened by RayPack for Dell KACE 2.0 SP1 without loss of functionality). However, saving from RayPack for Dell KACE 2.0 SP1 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
- RPK-1819: RayPack for Dell KACE 2.0 SP1 produces App-V 5.1 compatible packages.
- RPK-1612: It is possible to import and export binary streams directly from the Binary and Icon tables
- RPK-1763: Importing binary resources and icons is now much easier thanks to the redesigned Resource wizard
- RPK-1817: The New Project screen has been redesigned and offers a better overview of available tools and actions
- RPK-1815: Standalone (remote) repackager is now easier to use - it can automatically apply a correct license when running from shared locations or flash drives
- RPK-1759: Ability to set installation folder (INSTALLDIR) directly from a context menu in the Files and Folders view
- RPK-1754: Added support for MSI Billboards within the User Dialog Editor
- RPK-1771: Improvements to sequence generation for new Custom Actions
- RPK-1779: Extended list of predefined AppSearch items and prerequisites

Resolved issues

- RPK-1828: File import may crash with certain combinations of project UNC paths.
- RPK-1827: Incorrect handling of build paths containing braces.
- RPK-1826: Custom Action permission flag set to immediate execution.
- RPK-1824: It is possible to use invalid characters in PackRecorder project names.
- RPK-1823: `Default.profile` from PackPoint is getting values overridden by environment initialization service on first RayPack launch.
- RPK-1814: Changing the source path of linked folders is ignored when changes are applied.

- RPK-1796: New line character combination is not preserved during text replacement CA.
- RPK-1795: When using "Save as" functionality, files stored in relative folders are not automatically copied to a new location.
- RPK-1764: Dialog tree is empty when project is opened from RayFlow.
- RPK-1762: Row reference tracking does not show correct results for Control/Dialog references.
- RPK-1757: Improved AppSearch behavior.
- RPK-1755: Wrong UTF characters after importing a Reg4 file with expandable string values.
- RPK-1748: The summary page in TXT replacement wizard shows empty value for "Include files" option.
- RPK-1744: Crash to desktop on collision test execution on MSI.
- RPK-1718: When creating features for an RPP from RCP the created Features are marked as optional.
- RPK-1671: Improved detection of Wise Package Studio instances.
- RPK-1661: Settings -> Projects, the "Use a template for new RPP projects" has a check box that cannot be disabled / enabled.
- RPK-1577: Reset of active filters in PackDesigner > Files & Folders is not performed when a new file is opened.
- RPK-1497: Incorrect focus after clicking on Import file(s)... menu item.
- RPK-1473: Unnecessary comma at the last position of service dependencies.
- RPK-1461: More information link in `RPPPermissions` table column Attributes is not working.
- RPK-1460: MIME creation from Extension view does not establish relation between new Mime and selected extension.
- RPK-1414: Behavior of "Open the license wizard" button on the LICENSE AND EDITION tab is confusing.
- RPK-1397: Table and Advanced view are not in sync.
- RPK-1185: Broken MSI formatted string selector interface within Create SQL Script wizard step 3.
- RPK-1184: Auto-generated SQL Script Sequence values are inconvenient.
- RPK-1130: Incorrect window label of the New Environment Variable Wizard.
- RPK-1110: Registry value icons are not consistent in PackDesigner and PackRecorder.
- RPK-1081: File name is not focused when creating non-advertised shortcuts.
- RPK-1075: Open containing folder inside Merge module wizard doesn't work if MM are excluded during installation.
- RPK-1017: Pressing enter when changing the path in Saving output view automatically activates the Finish button as well.
- RPK-807: Useless checkbox when there is no license for PackDesigner.
- RPK-792: Imprecise warning when generating MST from MSI without changes.
- RPK-572: Not all service-related information is shown in the UI neither converted to MSI/RPP.

- RPK-548: Missing Custom Action name update on auto-correction.
- RPK-526: Unnecessary last wizard page in Custom Action wizard.
- RPK-465: Incorrect wording of feature relation messages in COMPONENTS view.
- RPK-464: Obsolete rename patter for a component name in COMPONENTS view.
- RPK-436: Adding an icon to a Shortcut (instead of Resources) imports the complete dll / exe.
- RPK-281: Unnecessary GO TO ROW button in services view.
- RPK-240: Adding a new special folder collapses the entire tree.
- 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 for Dell KACE - 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 for Dell KACE 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 for Dell KACE 2.0 SP1:

- The 1.4 RPP format is not forward compatible - that means projects created or saved with RayPack for Dell KACE 2.0 SP1 can only be opened with RayPack for Dell KACE 2.0 SP1 and later. On the other hand, the 2.0 SP1 release is backwards compatible, which means it can load and operate old formats..
- The profiles saved by RayPack for Dell KACE 2.0 SP1 use a formatted syntax in the profile files (`.rppprofile`). Prior to version 2.0 SP1 this syntax was not supported. A profile file saved using the newest version is therefore not compatible with RayPack for Dell KACE 1.4 anymore.
- Pinning to start screen is supported only for the following operating systems (Windows 8.1 is not supported due to Microsoft's decision to restrict its API capabilities)
 - Windows 7
 - Windows 8
 - Windows 10
- PackCommander is a separate module requiring additional license. Refer to <http://raypack.net/packcommander> for more information.
- For the list of other known-issues, refer to corresponding KB articles in our Knowledge Base.

Migration

Migration from 1.4 to 2.0 SP1

The migration from version 1.4 is a straightforward process. In order to migrate, simply start the setup of the RayPack for Dell KACE 2.0 SP1 installation media.

It is recommended to install RayPack for Dell KACE 2.0 SP1 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 SP1 resources, simply remove the PackPoint folder (C : \RayPack for Dell KACE\PackPoint by default) and re-run RayPack for Dell KACE 2.0 SP1.

Note: When a previous version of PackPoint is detected during the installation, 2.0 SP1 will offer an upgrade option.

RPP FORMAT CHANGES

- The syntax of RPP projects has changed**
 RayPack for Dell KACE 2.0 SP1 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 for Dell KACE 1.4 and older.

PROFILES

- The syntax of profile files has changed**
 RayPack for Dell KACE 2.0 SP1 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 for Dell KACE 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 SP1, 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 SP1 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

Feature	Prior 2.0	Since 2.0
<i>PackRecorder options</i>	Profile > packrecorder	Settings > Repackaging
<i>COM Extraction options</i>	Profile > packdesigner > BEST PRACTISES	Settings > Designing > 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 for Dell KACE 1.4 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 for Dell KACE 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 for Dell KACE 2.0 SP1. 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 older versions

Please refer to the product Knowledge Base for information about migration paths from versions prior to 1.4.

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 for Dell KACE 2.0 SP1. 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 for Dell KACE*.license)
- 3) Uninstall the previous version of RayPack for Dell KACE
- 4) Delete the content of the installation folder (by default C:\Program Files (x86)\RayPack for Dell KACE)
- 5) Install RayPack for Dell KACE 2.0 SP1.
- 6) Start the main application (raypack.exe) to re-activate RayPack for Dell KACE 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 for Dell KACE
- 8) Backup and then remove the content of the following folders:
 - %AppData%\RayPack for Dell KACE
 - 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 for Dell KACE\PackPoint)
- 9) Start RayPack for Dell KACE 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 for Dell KACE.

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 for Dell KACE 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 for Dell KACE.

- 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 for Dell KACE have their own, individual set of target OS. The list above is not designed to display which target OS are reachable by RayPack for Dell KACE 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 for Dell KACE 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.

PackCommander

Contact our Support / Sales to obtain a license for PackCommander module.

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 for Dell KACE 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 for Dell KACE development roadmap!

Our Raynet support team gladly assists you on any question or issue you encounter regarding RayPack for Dell KACE. 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.

About Raynet

Raynet GmbH is a leading and innovative service and solution provider in information technology and specialized in the architecture, implementation and operation of all tasks within "Application Lifecycle Management". Raynet's Headquarters is in Germany and presently the company has additional locations throughout Germany, the USA, Poland, UK and Belgium.

For over 15 years, Raynet has supported hundreds of customers and partners with its products and solutions for enterprise application management projects worldwide. These include license management, software packaging, software deployment, migrations, client engineering and much more. Additionally, Raynet maintains and cultivates strong partnerships with leading companies in Application Lifecycle Management.

Raynet products and solutions are unique in design and functionality. Their development is highly driven by our customers and partners who play a big role in the design process of our products and are a key reason why our products are always cutting edge. Whether you want to introduce a new deployment tool or start a SAM project, whether you want to plan a packaging factory or do a migration - Raynet is the choice for best-of-breed practices in services, products, and solutions for Application Lifecycle Management.

Next Steps

Please visit our website for more information: www.raynet.de, or contact our sales team: +49 5251 54009-0 or sales@raynet.de

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 **RayPack** for **Dell KACE**