Release Notes
RayPack 1.3

Release Notes RayPack

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Introduction

RayPack 1.3 is a 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 stand-alone product as well as having the ability to be integrated into the RaySuite solution powered by RayFlow.
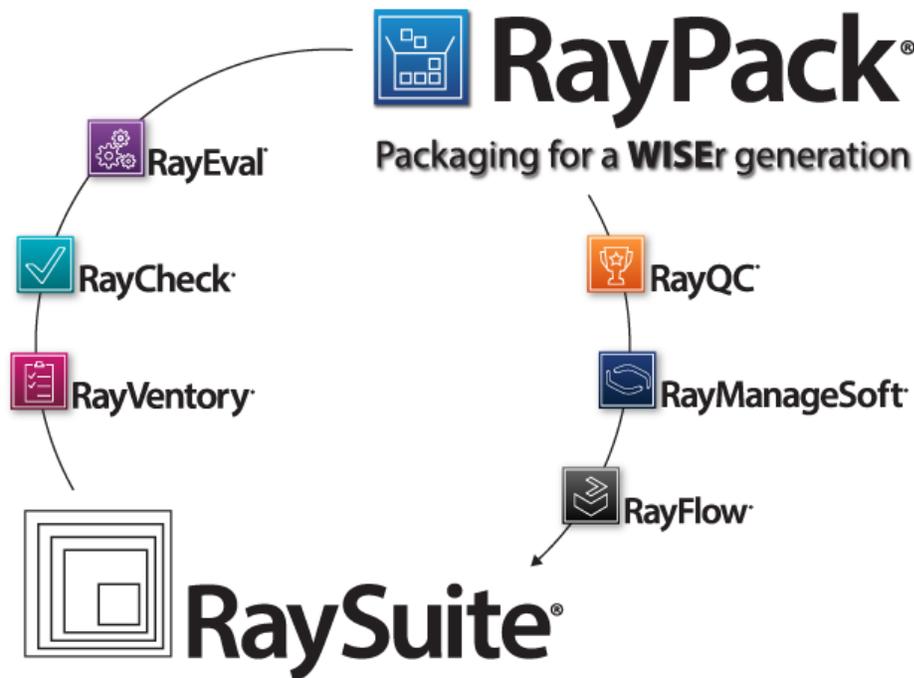
The RayPack components allow enterprises to implement well-structured processes, which control package evaluation, creation, manipulation, import, export, validation, storage, and deployment.

In the upcoming release 1.3, 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 and SWV packages from packaging projects.

Development Roadmap

Upcoming releases will introduce additional new components and features, resulting in boosted productivity, time and resource saving, and improving the overall product experience. The development of RayPack is customer-oriented - should you have any ideas or suggestions of how you see your ideal packaging tool: simply let us know and watch the product growing according to your business needs. Our sales team will be happy to assist you!

Please make sure to check our website http://raynet.de to stay up to date with our next RaySuite product and service releases, announcements, special offers, and product trainings.

What's new?

General

App-V 4.6 support (virtualization pack) [RPK-621]

With this release, RayPack is further extending its virtualization support, joining the already available choice of Symantec Workspace Virtualization (SWV) and Microsoft App-V 5.0 formats. Users prepare their packaging projects with the substantial feature set of PackDesigner or PackRecorder, and simply export to App-V 4.6. Clean, simple and with minimal effort.
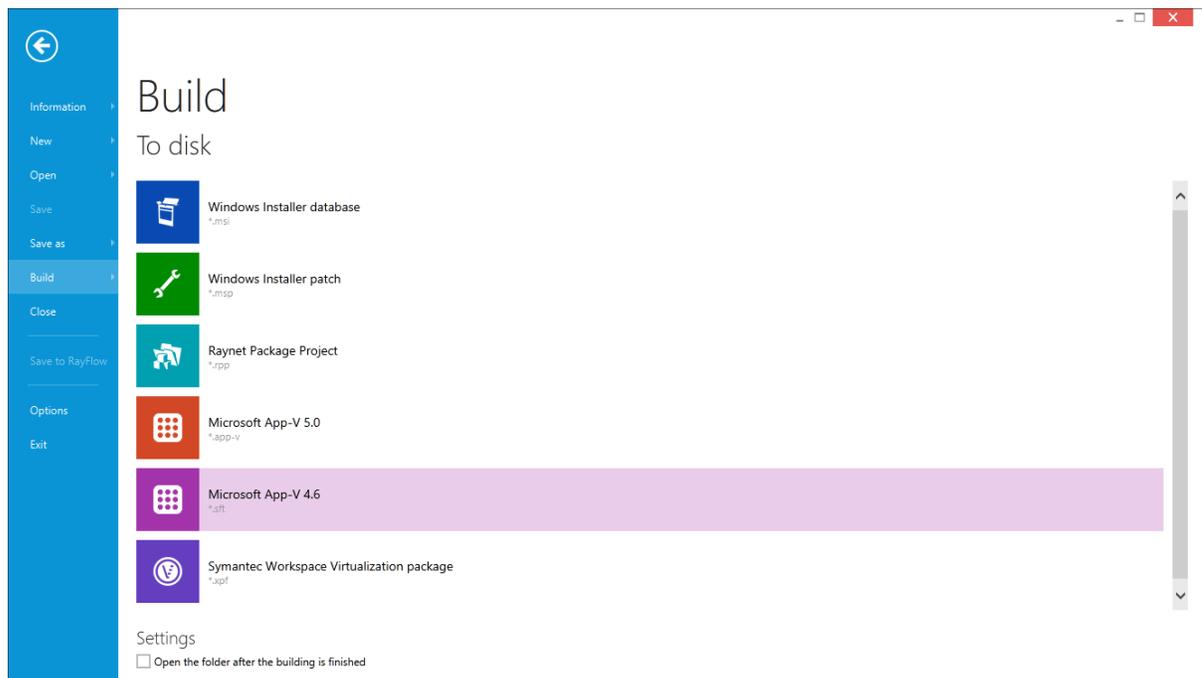
The combination of RayPack's broad set of handy package content manipulation and evaluation options is a simple yet powerful way of going virtual, now also for App-V 4.6 SP2.

Other

- Improved stability, performance, and long filenames [RPK-291,665,666,668,815,818,827,897,898]

- Improved start-up time [RSC-68]

- The MSI template section has been moved to the GENERAL tab in the settings [RPK-884]

- The default projects path changed to `C:\RayPack\Projects` [RPK-291,877,878]

- A new default template to support big projects (32767+ files) is now included out-of-the-box (by default the standard template is used) [RPK-802,804]

- Icons in context menus [RSC-98]

- Improved license manager (deactivate, delete existing licenses) [RSC-89, RPK-861]

- Ability to start RayPack directly after installation [RPK-379]

- Ability to activate RayPack directly from the installation UI

- Ability to install the standalone/remote PackRecorder from the installation UI [RPK-151]

Resolved issues

- The default Feature schema has invalid key definition (s32) (RPK-772)

- Could not create an App-V 5.0 package for certain applications (RPK-665)

- The profile selection does not support discarding the changed (RPK-620)

PackDesigner

Windows Installer Patch (MSP) generation [RPK-260,762,763]

As an extension to the existing functionality, any Windows Installer database (`.msi`) can be built to an industry-standard format MSP. Creating patches with RayPack is straightforward and requires close to no technical knowledge at all. A patch can be created from two MSI files, or from quick adjustments made in the current session against the originally edited file. It is a great way of deploying both small and minor upgrades, but also fixes to custom made, already deployed packages.
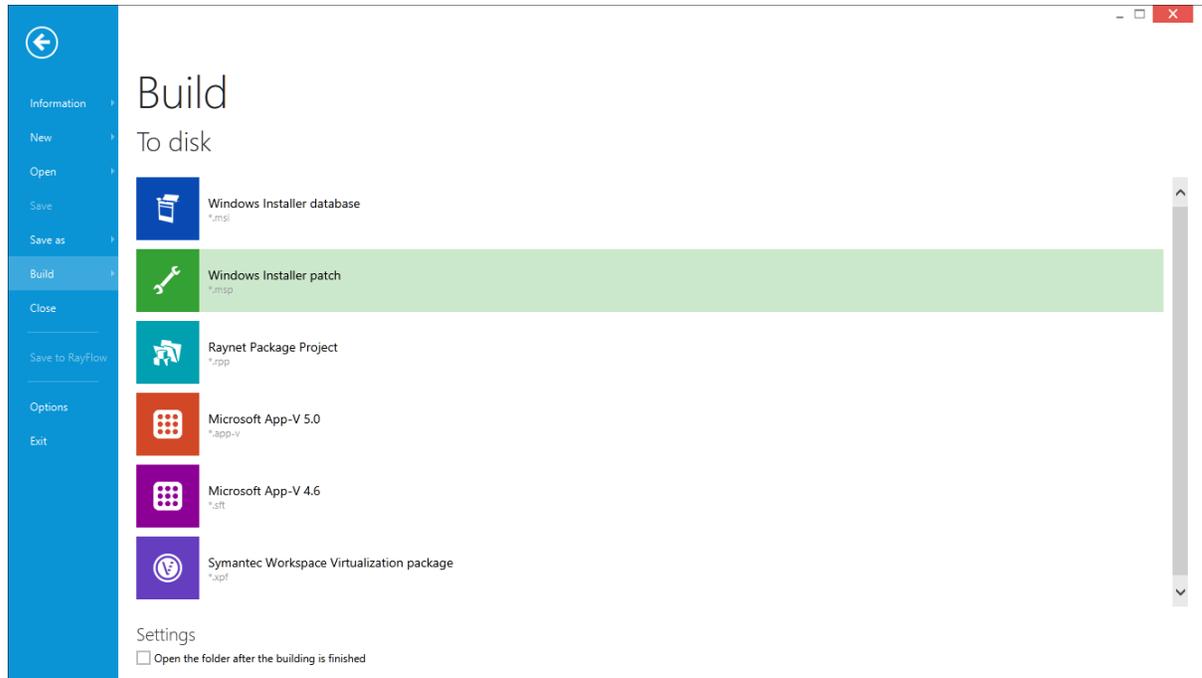
To update a single file, simply right click a file to be replaced and select a new one. The file will be gracefully updated on save/rebuild, leaving the original structure of files, components and other connections intact.

Run-time file and folder operations [RPK-242,776,825,866]

Making a backup of a file, removing logs on installation, copying and renaming or doing a cleanup have turned into trivial tasks with the introduction of the new unified Files & Folders view. All possible standard operations involving DuplicateFile, MoveFile, RemoveFile and CreateFolder are supported out-of-the-box.
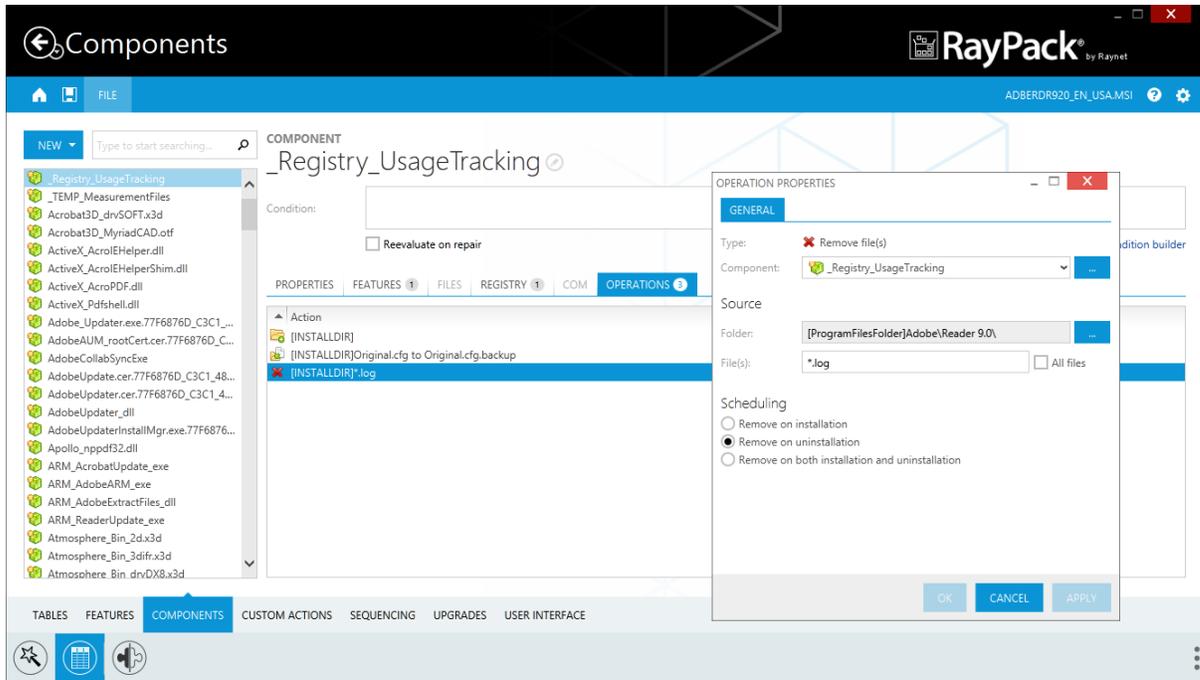
With the intuitive wizards and context menu integration setting up complicated operations is as easy as never before.

COM extraction and Self-registration [RPK-205,859]

PackDesigner is now able to extract the COM registration from certain types of files (both on import as well as on demand) and store them as the registration in the component to which a target DLL file belongs to. Additionally, self-registration at runtime may be handled via the newly integrated tab of the file properties dialog.
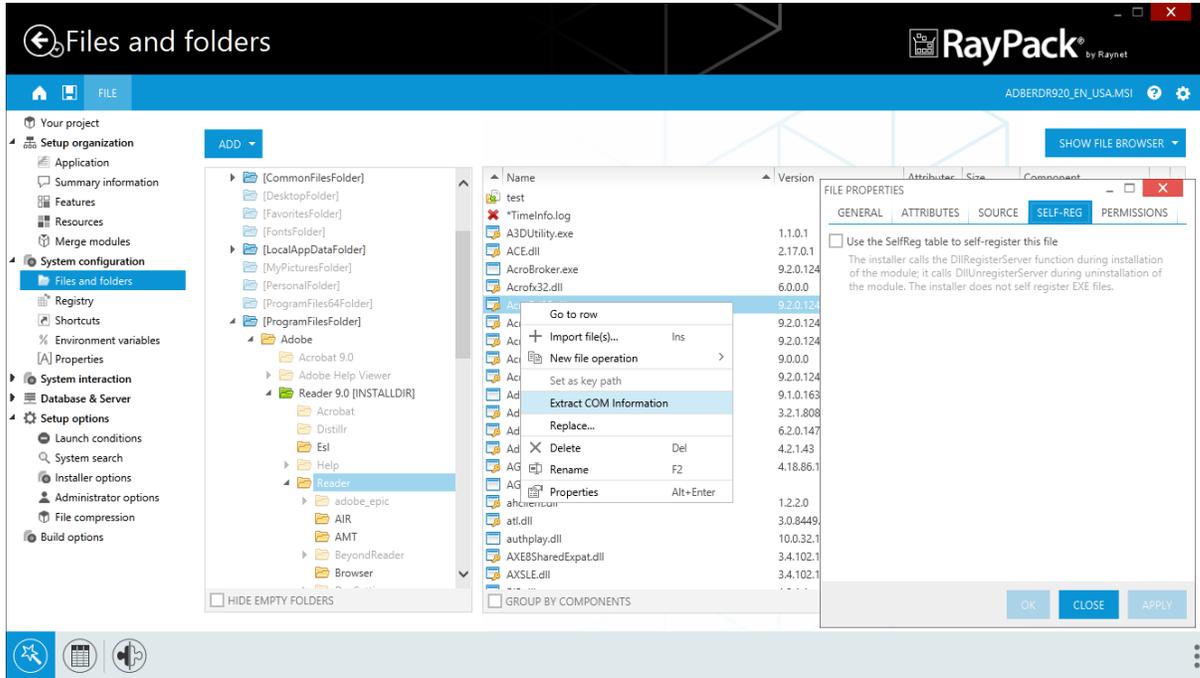
Note: COM extraction can negatively affect the import speed for large file collections, therefore the option is disabled by default.

Extended feature management [RPK-148,302,422,423, 424,429]

The management of features, component assignments and the visual structure of the feature tree have been improved in RayPack 1.3. With full support for drag&drop (for example moving files to another component, rearranging/reordering of features or components), common tasks have become simple, and require no more additional database look-ups or table editing.
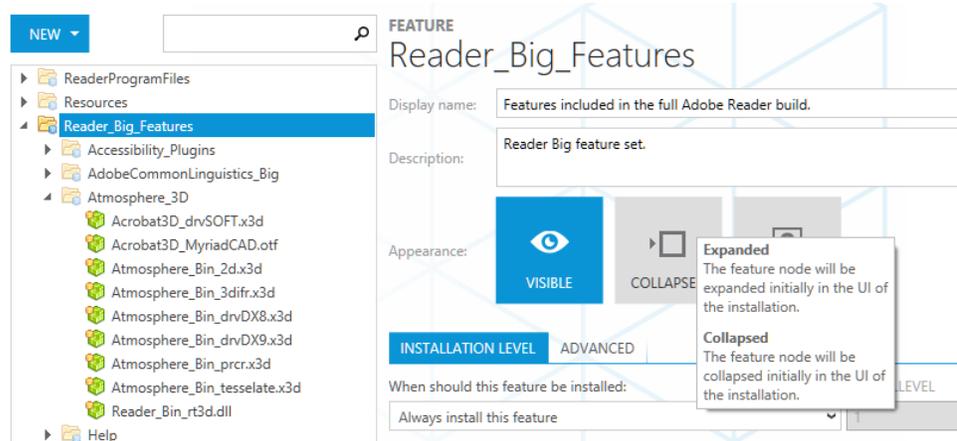
The retreaded view has a context menu to quickly create new components in the selected feature. Additionally, all newly created features automatically inherit parameters from their parents.

Additionally, the meaning of grayed-out feature icon has changed. In RayPack 1.2 it denoted a feature to be empty, whilst starting from release 1.3, it indicates that a feature is hidden for users within the installer interface.

Improved component view [RPK-846,899]

The new component view shows the visual representation of the content in each tab. A number represents the count of items/features present in the tab. If the tab is empty, its header is grayed out.
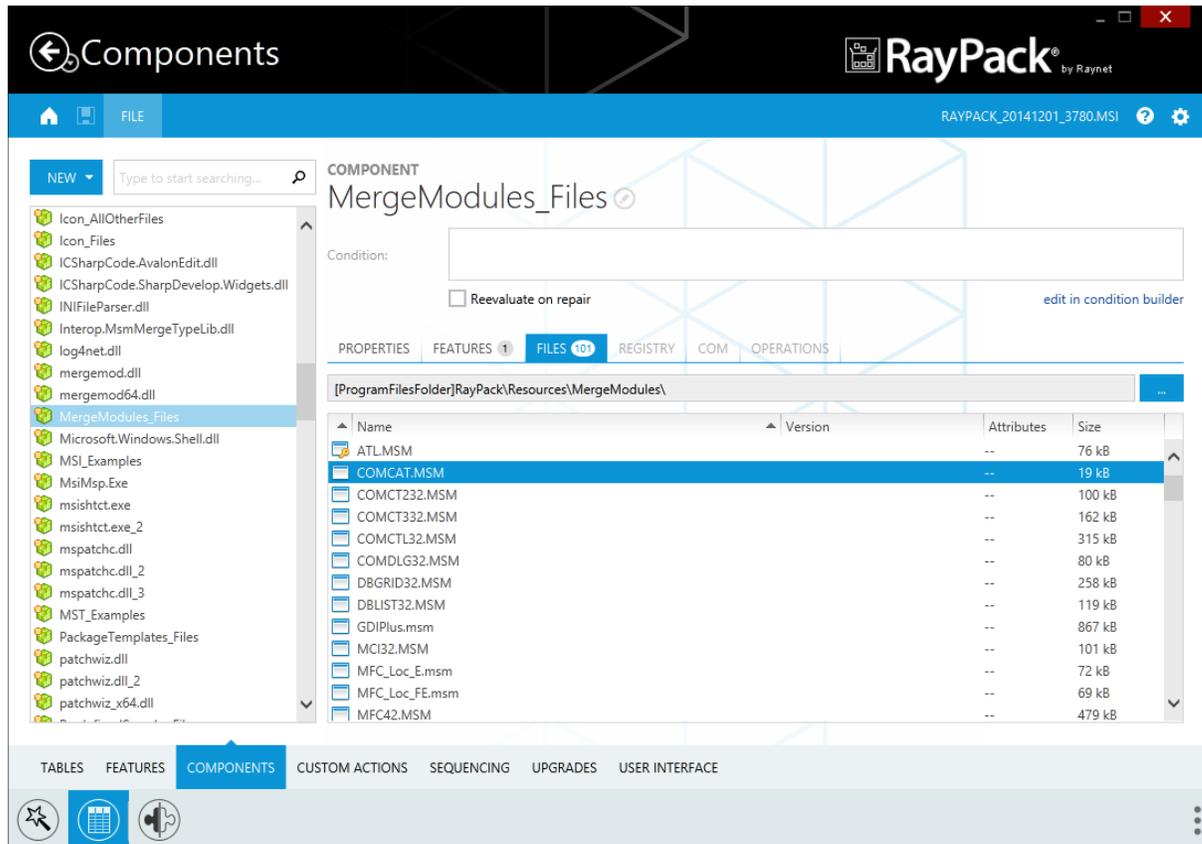
Import registry directly into component [RPK-225]

RayPack 1.3 allows importing registry entries from a `.reg` file directly to a specified component. In RayPack 1.2, the import was only possible in the global registry view.
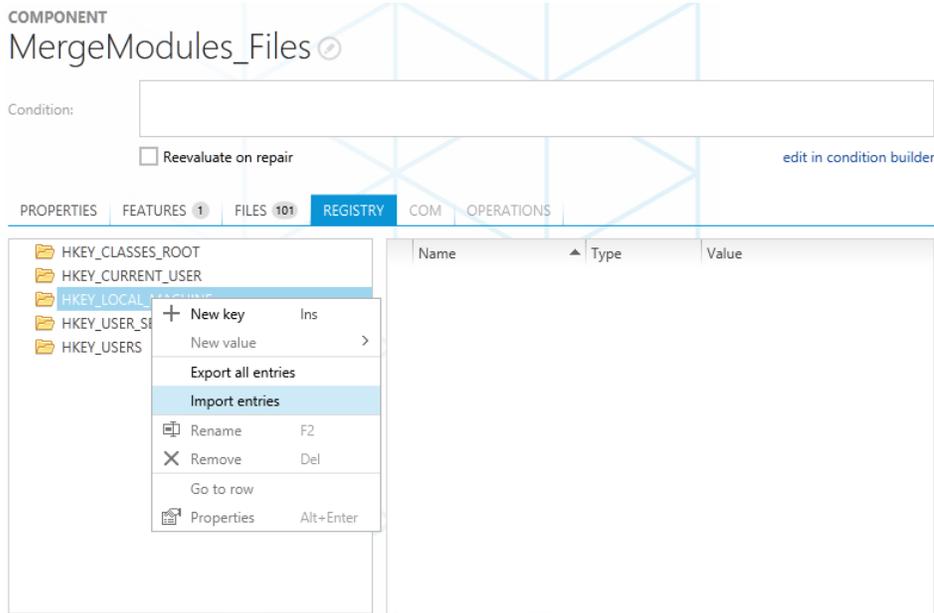
Extended MSI syntax suggestions [RPK-853]

The extended formatted field textbox (available for registry values, path information, and the like) supports new types of syntax:

- The resolved path of the component directory ([$ComponentName])

- The 8.3 filename ([!FileId])

- Escaped and special syntax ([~], [\[], [\]])

- The preview of the environment variable shows the actual value on the current machine
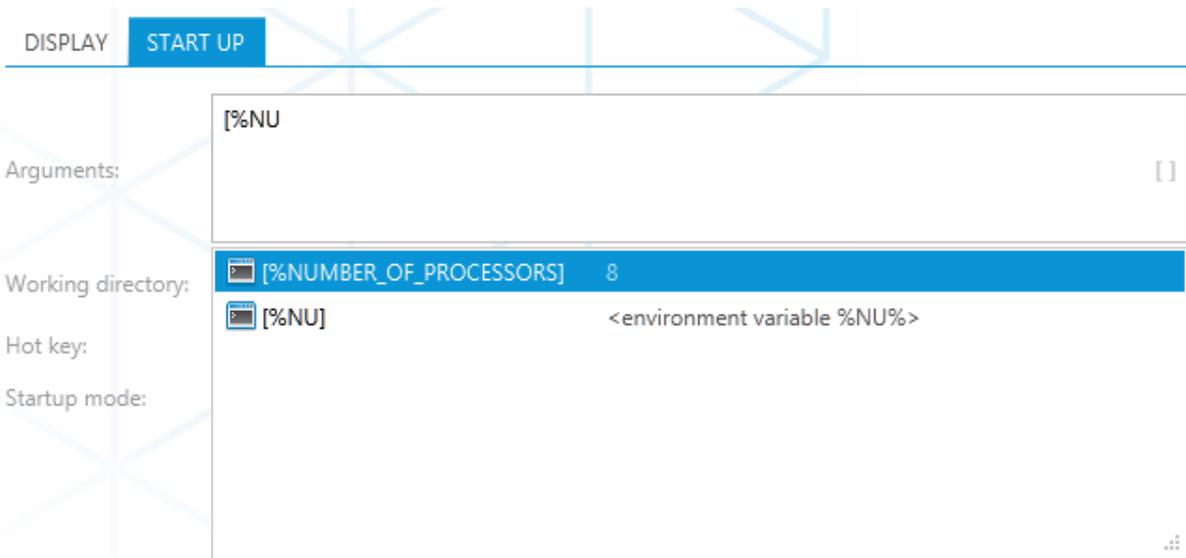
Merge modules content viewer [RPK-237]

Files, folders and registry information of Merge Modules from the library (or the stock of MSM files present within a packaging project), may be reviewed within the newly designed Merge Module Content Viewer.

Editable Summary Information Stream for MST projects [RPK-734,699]

The summary information stream of MST files is now editable. A subset of fields can be edited, and internal or unchangeable properties are shown as read-only.
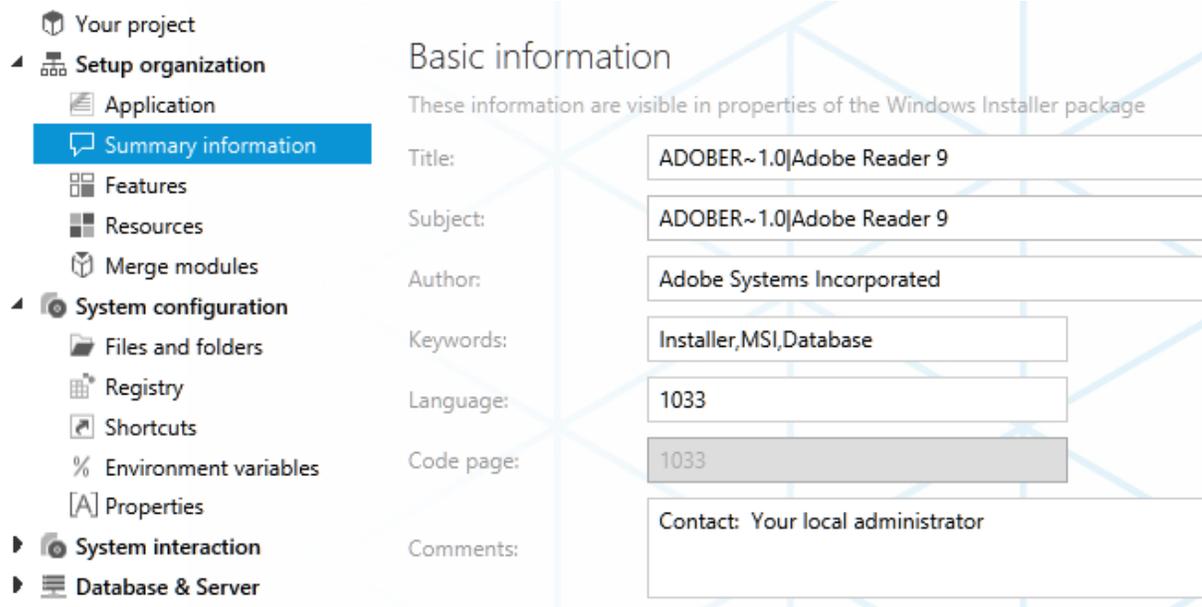
Additionally, the code page is shown in this section. The section itself has been renamed to "Summary information" (previously "Package").

Improved custom actions and sequencing view [RPK-832,743]

Both views received a visual update and new functionality:

- Search box in custom actions view

- Multi-selection in the Sequencing view

- Drag-and-drop improvements

- Better sequence reordering

- Visual indication of the in-script mode (deferred, commit, rollback, immediate)

- Additional controls for the reordering of sequences

- Improved readability for the modern view of custom action details
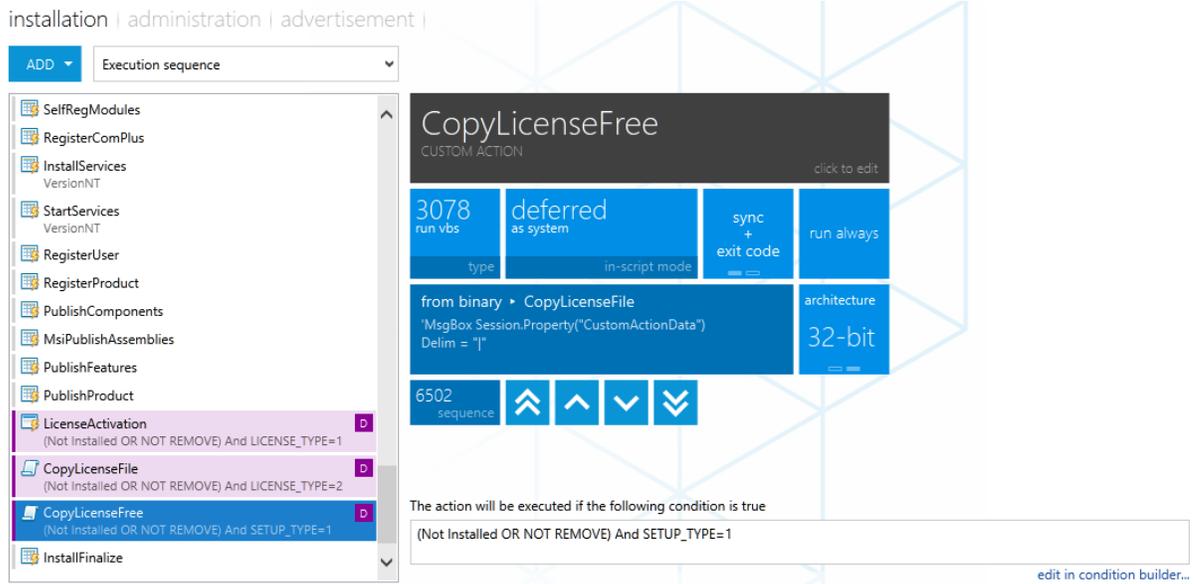
Improved properties view [RPK-851]

The properties view has been extended to be searchable and to display descriptions for standard MSI properties.
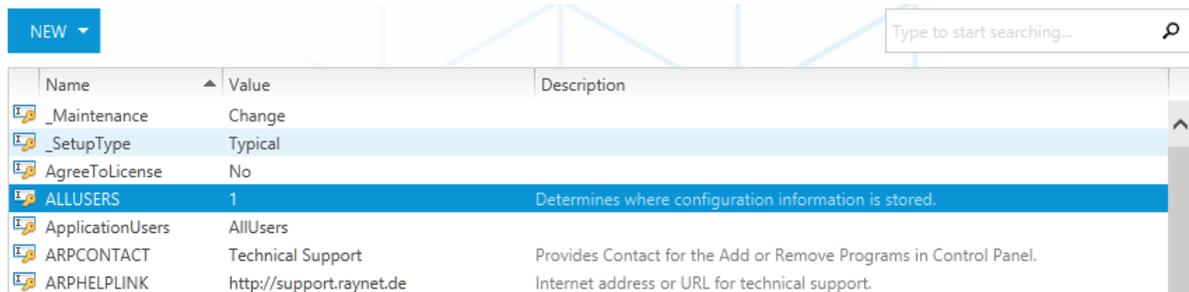
Syntax highlighting for INI files and scripted custom actions
[RPK-637,845]

Both INI files and scripted custom actions are now supporting syntax highlighting, line numbering and indentation.
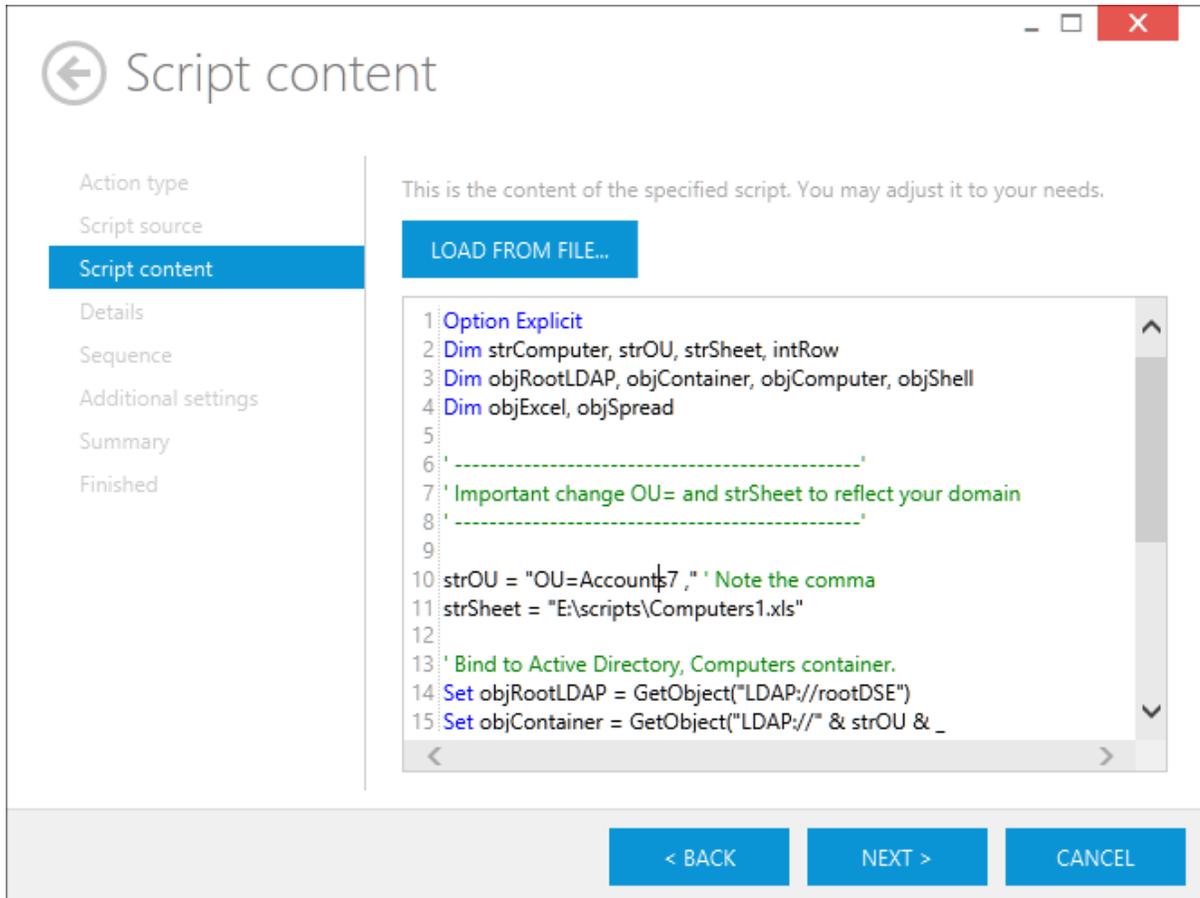
Extended IIS support in PackDesigner [RPK-613]

It is possible to define web site extensions via the context menu.

Extensive drag and drop support [RPK-423,545,553,611,791,817]

A lot of RayPack controls have been augmented to support drag and drop operations:

- Moving files between folders (in the files and folders view, multi-selection supported)
- Rearranging folder trees (in the files and folders view)
- Importing files from the local file browser (multi-selection supported)
- Importing folders from the local file browser
- Moving files between components (in the component view, multi-selection supported)
- Assigning components to features (multi-selection supported)
- Rearranging features (multi-selection supported)

- Reordering features (multi-selection supported)
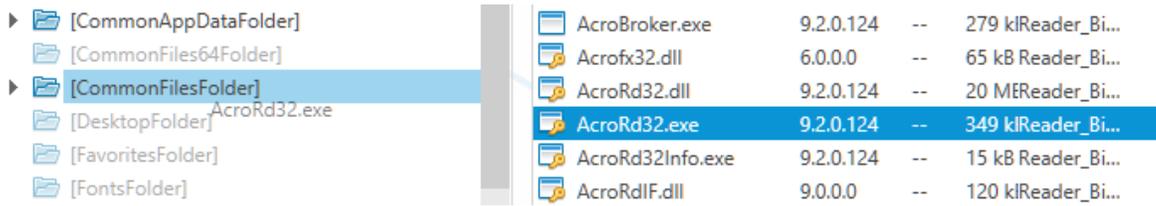
Conversion between advertised and non-advertised shortcut [RPK-98]

The shortcut type tile is now clickable. Upon a mouse click, the shortcut type will be toggled between advertised and non-advertised (if possible and applicable).
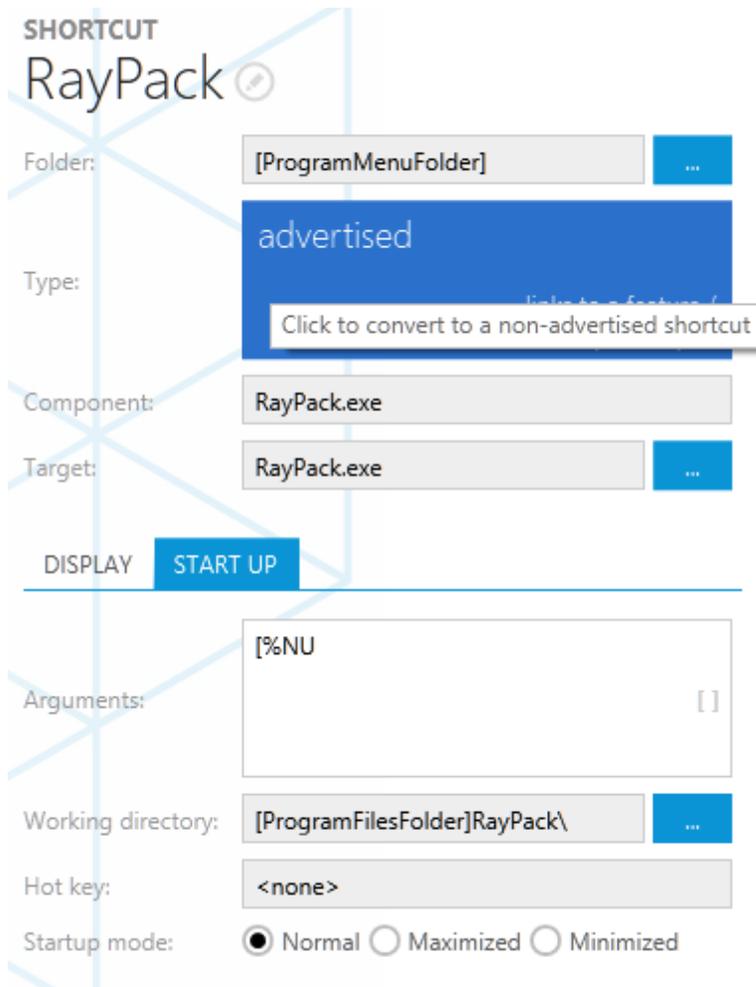
Replace file functionality [RPK-8]

Each single file in the MSI/RPP project can be replaced with a later version. Typically this kind of operation requires a lot of manual work by either creating administrative images or manually re-adding files which may drastically change the existing component/files relationship. In RayPack 1.3, a simple replace function is provided, available from the file context menu. This option updates the sources, but leaves the references, component relations etc. intact.

New default row sorting [RPK-769, 770]

The version 1.3 changes the way rows are sorted. By default, the following order is applied

1. Removed rows

2. Added rows

3. Updated rows

4. Other rows

Within the same level, the presentation order depends on the method originally used to add the data object to the package. The status column is now sortable.

Additionally, when any cell value is changed the rows are not re-sorted automatically. With this improvement, packagers can smoothly change several cells (e. g. values of a sequence number column, or any other value type that is used for sorting), without suffering from the current table focus jumping back and forth.

Enhanced drop-downs in the table view [RPK-242,274]

The tables Shortcut, RemoveFile, DuplicateFile and MoveFile have dropdown lists of entries in folder-related columns.
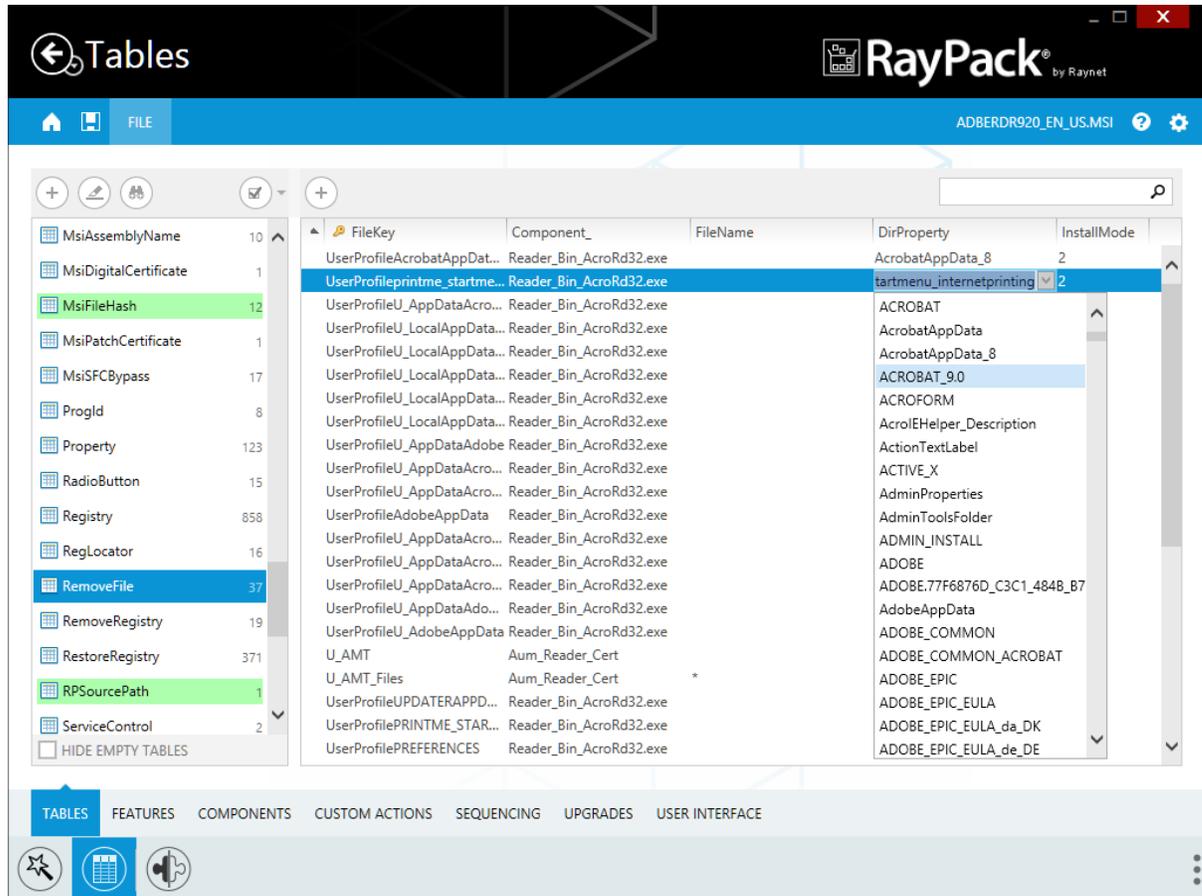
Other

- New keyboard shortcuts layout + drag and drop [RPK-117,241,655,378,775]

    - CTRL+N: New project

    - CTRL+O: Open project

    - CTRL+S: Save project

    - CTRL+F4: Close project

    - F7: Build project

    - CTRL+1, CTRL+2: Switch between Visual/Advanced mode

    - CTRL+C, CTRL+X, CTRL+V, DEL, INS: In tables view: copy, cut, paste, delete and add new row

    - In the advanced view

        - CTRL+SHIFT+T: Tables

        - CTRL+SHIFT+F: Features

- CTRL+SHIFT+C: Components

- CTRL+SHIFT+A: Custom Actions

- CTRL+SHIFT+S: Sequences

- CTRL+SHIFT+U: Upgrades

- CTRL+SHIFT+I: User interface

- Creating a new row in the Component table automatically generates a new GUID [RPK-888]

- The UpgradeCode is shown in the application view [RPK-684]

- New GET STARTED examples showing how to correctly setup the IIS application and SQL Database [RPK-865]

- Component picker sort the components alphabetically [RPK-821, 837]

- SQL login dialog added to the default template [RPK-499]

- Redesigned ODBC, IIS and environment variable wizards [RPK-821,850,852,881]

- In the File table, manual adjustments of the Sequence are now respected and kept when the new MSI is build using the File > Build menu [RPK-408]

- Added a search box to the merge modules wizard [RPK-749]

Resolved issues

- Default new DWORD values in Registry table is "#" [RPK-717]

- Possible overflow when entering large numbers to the registry HEX fields [RPK-890]

- The component is not removed from the features tree when its original data object is removed from the Component table [RPK-885]

- Double-clicking the component header opens the properties of its first file [RPK-329]

- Go to row not working for launch conditions [RPK-755]

- Missing icon in the Ini view [RPK-845]

- Sometimes deleting the registry key does not remove the entire key structure [RPK-846,849]

- Clearing the visual changes in the tables view is slow on big tables [RPK-849]

- Editing the IniFile table manually slows down over time [RPK-845]

- Missing ellipsis sign in the files view when there is not enough width [RPK-839]

- When a new feature is created for a new registry, its Directory_ is different than the Directory_ of the component [RPK-302]

- Clipped operator popup in the condition editor [RPK-868]

- Not wrapping launch condition textbox [RPK-868]

- Duplicated key label in the context menu of a component [RPK-926]

- Rare error in the administrator options view when changing the installation context [RPK-645]

- The component table does not show new guid button in the tables view in ComponentId column [RPK-923]

- Exporting a binary stream may result in a file path being exported instead of the stream [RPK-482]

- Opening a package without the _Validation table may crash [RPK-506]

- Opening corrupted MSI may crash [RPK-785]

- Applying a corrupted MST may crash [RPK-741]

- The local file browser does not support long file names [RPK-774]

- Could not build a project without the Media table [RPK-771]

- Importing a .reg file may trim the trailing square brackets [RPK-729]

- Re-adding previously deleted file may shows the error message [RPK-772]

- Changing the scheduling bit from the table editor in the CustomAction table behaves incorrectly [RPK-689]

- Custom action editors do not support indentation [RPK-639]

- Could not merge MSXML4 merge module [RPK-630]

- Rare problems with MsiFileHash population [RPK-609]

- Manually adding an entry to the ServiceInstall table that references a ServiceControl entry may create a duplicated entry [RPK-579]

- Merge now option crashing the merge module wizard [RPK-560]

- Unnecessary options shown in the tables context menu when clicking on table header [RPK-518]

- Merging MSM shows no information if any of selected merge modules is invalid or incomplete [RPK-434]

- Missing Cancel button at building screen [RPK-360]

- Manually adding features via the feature view may create non-deterministic Display values in the Feature table [RPK-424]

PackRecorder

New features and improvements

- New keyboard shortcuts layout [RPK-117,775]

    - CTRL+N: New project

    - CTRL+O: Open project

- CTRL+S: Save project

- CTRL+F4: Close project

- When building RCP files, a message box is shown informing which resources are missing or locked (if any) [RPK-751]

- When generating RCP > RPP > MSI chain, no unnecessary nesting is created anymore – RayPack will build the output to the direct descendant of root project folder [RPK-819]

Resolved issues

- It is possible to automatically open the recaptured project after the capture wizard finishes [RPK-456]

- When working in RayFlow mode, a confirmation message box is shown before uploading the built package to RayFlow [RPK-471]

- Custom value of the author property is now converted to the MSI from RCP [RPK-532]

PackTailor

Resolved issues

- Some custom-action driven UI elements are not executed [RPK-705,943]

Migration

Migration from version 1.2

The migration from version 1.2 is a straightforward process. In order to migrate, simply start the installation of the RayPack 1.3 installation media.

The following areas have changed in RayPack 1.3 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. The version 1.3 changed the name of 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 1.3 supports Windows Installer patches (.msp). If you are migrating from RayPack 1.2 or earlier, your license data does not contain necessary information to activate the feature, making in 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 contact our consultants to adjust the

RayFlow subsystem in your environment.

Migration from version 1.0 & 1.1

The licensing system in RayPack 1.3 is far more flexible, allowing tailoring your license to actual business needs. Therefore, all licenses generated for versions 1.0 and 1.1 have to be reactivated for productive use in RayPack 1.3. 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 release 1.3 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 1.3. 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 content of the installation folder (by default C:\Program Files (x86)\RayPack)

5) Install RayPack 1.3.

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

9) Start RayPack again.

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

System Requirements

Hardware Requirements for Devices Running RayPack

This section lists the minimal hardware requirements for 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 for RayPack Framework Installations

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

- Windows 8.1
- Windows 8.1 x64
- Windows 8
- Windows 8 x64
- Windows 7
- Windows 7 x64
- Windows Vista
- Windows Vista x64
- Windows XP Professional SP3

- Windows 2012 R2 Server
- Windows 2012 Server
- Windows 2008 R2 Server
- Windows 2008 Server SP1-SP2
- Windows 2008 Server x64 SP1-SP2
- Windows 2003 R2 Server
- Windows 2003 R2 Server x64
- Windows 2003 Server SP2

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)

As a packaging best practice, it is recommended to install available .NET versions onto the base instead of including it within a package.

Virtualization pack prerequisites

In order to create SWV packages, the Symantec Workspace Virtualization Agent 7.5 has to be installed on the packaging machine.

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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