

Enterprise Software Packaging

User Guide PackLayering 7.4





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Introduction

The PackLayering is a program for the creation and management of software applications that can be deployed to the Citrix Layering server.

PackLayering Features at a Glance

The core features of PackLayering cover the following evaluation requirements:

- Opening and viewing *.laypkg files layers exported from Citrix AppLayering.
- Rebuilding, consolidating and trimming *.laypkg files.
- Advanced clean-up, both interactive and automatic (powered by proven set of exclusions from RayPack).
- Support for files, registry and metadata.

PackLayering is an editing tool. In order to create new layers from existing sources (for example legacy apps, MSI etc.) you should use RayPack instead. Refer to chapter <u>Typical workflows</u> for more information how to work efficiently with PackLayering.

PackLayering Is Part of RaySuite

Best-Practice Workflow for Enterprise Application Lifecycle Management

RaySuite offers product solutions for the creation, operation, and control of individually customized Enterprise Application Lifecycle Management projects in automatically administered environments.





Designed as part of the RaySuite, Raynet's product suite for Enterprise Application Lifecycle Management, PackLayering is a packaging process related documentation tool. It may be used either way - as standalone or as integrated part of the RaySuite.

When PackLayering is used as part of the RaySuite, it is connected at RayFlow, the workflow mangement component of the RaySuite. Please refer to the <u>RaySuite website</u> for further information regarding the benefits this product offers for your daily business tasks.

Development Roadmap

Upcoming releases will introduce additional new components and features, resulting in boosted productivity, time and resource savings, and improvements regarding the product experience. As the development of PackLayering is customer oriented, please let us know if you have any ideas or suggestions of how you see your ideal documentation tool. Our sales team will be happy to get in touch with you. Also make sure to check our website <u>http://raynet.de</u> to never miss our next releases, announcements, special offers, and product trainings.



Additional Resources

Further information regarding PackLayering can be found in several resources.

- The *Release Notes* provide an overview about the changes and new features that are part of this version of PackLayering.
- The *Operations Supplement* provides information about third-party software packages and libraries redistributed with PackLayering.
- The product website https://raynet.de/produkte/raypack-studio/raypack/components/ provides information about the product, news, and support.
- Raynet and its partners offer a range of training courses that can also be customized to meet your requirements. For more information on these courses, speak with your Raynet consultant or visit our RayAcademy website https://raynet.de/en/Training.



System Requirements

The given requirements name the prerequisites for devices running the PackLayering application.

Hardware Requirements

Minimal:

- CPU: Intel Core i3 / AMD Ryzen first gen.
- Screen resolution: 1024 x 768 pixels
- RAM: 500MB
- Disk space: 5GB

Recommended

- CPU: Intel Core i5 / AMD Ryzen second gen.
- Screen resolution: 1280 x 1024 pixels
- RAM: 1GB
- Disk space: 20GB

Supported OS

The following represents the list of supported operating systems at the time of release.

- Windows 8.1
- Windows 10
- Windows 11
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016
- Windows Server 2019
- Windows Server 2022

Prerequisite Software

General

Microsoft .NET Framework 4.7.2



Product Installation

Preparing the Installation

The PackLayering installation resources come along as an MSI file with additional documents, such as the current *Release Notes*. Usually, these documents are delivered via FTP server as provided by our support which can be contacted via our <u>Support Panel</u>.

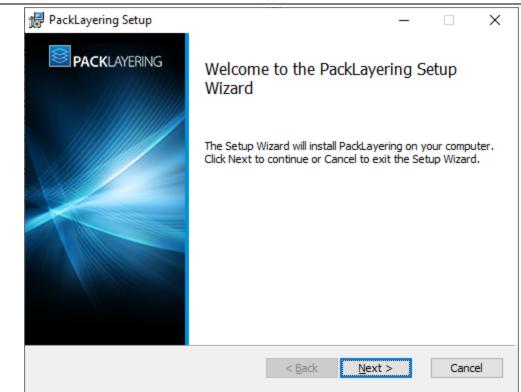
Before the application is installed on a device some preparations are needed:

- 1. Please make sure, to have the order number or license file at hand. Either one will be provided by a Raynet sales representative or our support team which can be contacted via our <u>Support Panel</u>.
- 2. The target system needs to meet the system requirements described within the <u>Requirements</u> chapter.
- 3. A Windows user with sufficient rights for installations must be logged in. Administration rights are required for the installation of PackLayering.
- 4. Close all dispensable applications during the setup routine execution.

Installing PackLayering

Launch the PackLayering setup with a double-click on the MSI file and wait for the **Welcome Screen** to be prepared.





Click on the **Next >** button to proceed with the installation.

11 F	PackLayering Setup	_		\times
E	nd-User License Agreement			\Leftrightarrow
	Please read the following license agreement carefully			\bigotimes
				^
	RayPack Software Packaging Tool END USER LICENSE AGREEMENT			1
	IMPORTANT-READ CAREFULLY:			
	This End-User License Agreement ("Agreement") is a legal between you (either (a) an individual user or (b) a business ("Licensee") and Licensor (as designated below) for License as identified on a quote or license certificate, including any	organiz or's So	zation ftware,	~
[✓ I accept the terms in the License Agreement			
	< <u>B</u> ack <u>N</u> ext >		Can	cel



The End User License Agreement dialog appears. To install PackLayering, the End User License Agreement has to be accepted. To proceed, read the End User License Agreement, select the I accept the license agreement option, and click on the Next > button.

👘 PackLay	ering Setup		-		×
	on Folder kt to install to this folder or clic	k Change to install	to a different folder.		\bigotimes
Þ	Install PackLayering to: C:\Program Files (x86)\RayP	'ackStudio\PackLaye	ering\	C <u>h</u> ar	nge
RayPack ® -					
		< <u>B</u> ack	Next >	<u>C</u> a	incel

Click the **Next >** button to proceed.



🔀 PackLayering Setup	_		×
License Type			\Leftrightarrow
Choose the license type that best suits your needs.			\otimes
Order Number Select for online activation.			
O License File Offline activation using license file.			
		Bro <u>w</u> se.	
O <u>Skip activation</u> The activation wizard wil be run at the start of the PackLayering. RayPack ®			
< <u>B</u> ack <u>N</u> ext	>	<u>C</u> a	ncel

The **License Type** screen provides options to either activate the PackLayering instance via order number and online activation service, by using an already prepared file (*.license), or to skip activation for now. If the activation is skipped, it will need to be performed later when PackLayering is launched. For more information on product activation at the first launch of PackLayering read this <u>section</u>.

To use an already existing license file, which most likely has been provided by the Raynet support team, the **Browse...** button must be clicked. Use the controls of the system browser dialog to navigate to the *.license file and select it with a click on the **Open** button.

Click the **Next >** button to proceed.

If activation by order number has been selected during the previous step, the **Customer Information** screen is displayed:



🔀 PackLayering Setup	_		×
Customer Information			\diamond
Please enter your information.			\otimes
<u>O</u> rder number:			
XXXX-XXXX-XXXX-XXXX			
Email:			
you@company.com			
User name:			
You			
Company:			
Your company			
RayPack ®			
< <u>B</u> ack <u>N</u> ext	>	<u>C</u> ar	ncel

Please enter your individual PackLayering Order number and provide user information, such as Email, Username, and Company. The information will be used to verify the order number during the upcoming execution procedure.

Click the **Next >** button to proceed.



1	PackLayering Setup	_		×
	Ready to install PackLayering			\bigotimes
	Click Install to begin the installation. Click Back to review or change a installation settings. Click Cancel to exit the wizard.	ny of ye	bur	
	< <u>B</u> ack		Car	ncel

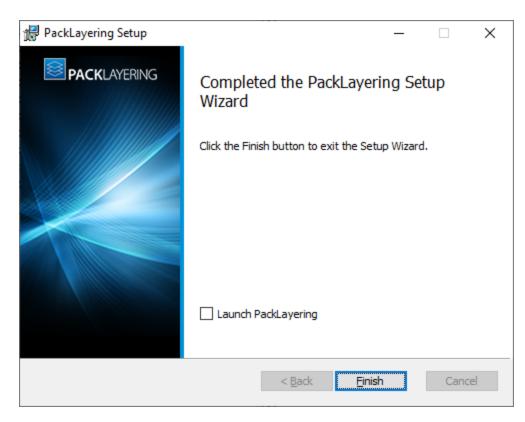
Click **Install** to start the installation.

A **Progress Indication** dialog is displayed as long as the installation steps are executed.

🖟 PackLayering Setup		_		×
Installing PackLayering				\bigotimes
Please wait while the Setup Wizard installs PackLayering.				
Status:				
< <u>B</u> ack	<u>N</u> ext >	>	<u>C</u> an	cel



As soon as all required measures are done, the **Install Completed** dialog is presented.



Click the **Finish** button to exit the setup. You can also start PackLayering directly, by ticking the checkbox **Launch PackLayering** before closing the Wizard.

If activation was not performed during the installation process, the product will be activated at the first launch.

For more information on the product activation read this section.

Product Activation

The product can be activated using one of the following methods:

- Directly within installation
 - o By supplying the order number
 - o By supplying an already generated license file (.rsl format)
- When the product is started for the first time.

If PackLayering detects that no valid license is present on start-up, the license activation wizard will be shown after starting the main executable. The tool can be also started manually, by executing the Raynet.LicenseActivation.exe from the main installation folder.

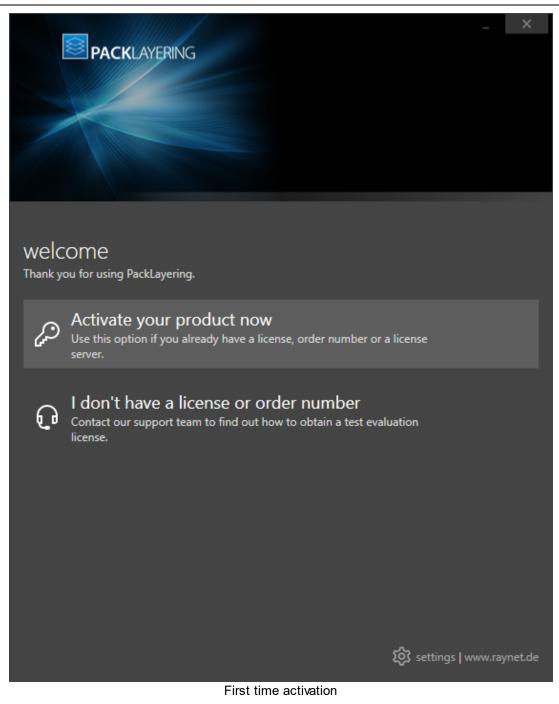


License Wizard

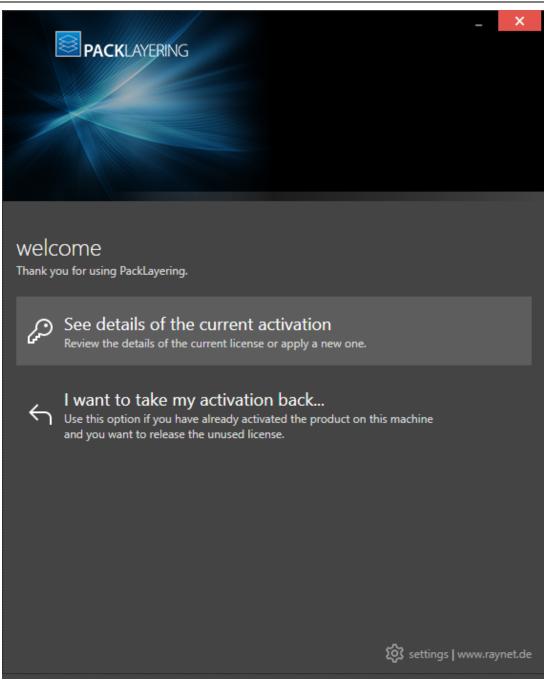
This section describes the usage of the licensing wizard.

On the initial start of PackLayering, the License Activation Tool is shown. If the need to transfer an existing license arises, the License Activation Tool can be started manually. There are a variety of ways in which a license can be activated and below they are described in detail.







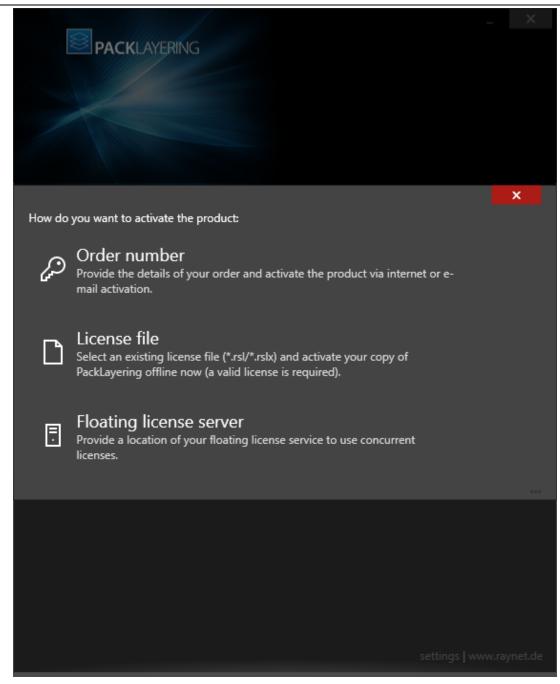


The main screen when the product has been already activated

Activate Your Product Now

This option should be used to activate the product using one of the following methods:





- <u>Use order number</u> Online activation using a valid order number received from Raynet (recommended for most users)
- <u>Use license file</u> Offline activation using a license file (.rs1) received from Raynet
- <u>Use floating license server</u> Activation using a local floating license server.

See details of the current activation



This options shows the details of the current activation. This option is only visible if the product has already been activated or if a floating license server has been configured. This option also allows to reactivate the product using a different order number or a different floating.

license server connection details.

I do not have a license or order number

Choose this option if there is neither a license nor an order number available. For in-depth information please read this <u>section</u>. This option is only visible if the product has not been activated yet.

I want to take my activation back...

Use this option to deactivate a currently licensed version of PackLayering. For in-depth information please read this <u>section</u>. This option is only visible if the product has been already activated.

Once the license file has been generated or copied to the correct location the following will be shown:



- X							
Your license ha	s been suc	cessf	ully activated.				
Licensed for:							
Expires on:	12/31/2020 12:00:0	0 AM					
Maintenance valid until:	12/31/2020 12:00:0	0 AM					
PackBench 6. Enterprise	3	\bigotimes	PackLayering 6.3 Enterprise				
PackManage Standard	r for App-V 6.3	مېرې: مېرې:	RayEval 6.3 Enterprise				
RayFlow [clien Enterprise	nt] 6.0		RayPack 6.3 Enterprise				
RayQC 6.3 Enterprise		Y	RayQC Advanced 6.3 Enterprise				
Start Start the activated	application right no	ow.					
Close the license w	vizard.						

Note:

Depending on the license, the products shown may differ from the products shown above.

Then the option of starting PackLayering or just closing the activation wizard is made available. Troubleshooting

If any issues arise during the activation process, please contact our <u>support team</u> to receive assistance in activating PackLayering.



Use Order Number

PackLayering can be activated either directly online or via email once the order number has been delivered. The activation process generates a license file (*.rsl) that is created (or must be copied) to the installation directory of PackLayering (in the same location as the PackLayering.exe). When performing an online activation, sufficient permissions must be readily available to allow the creation of the license file in the installation directory. The activation **binds** the license to the machine on which it was activated on. This is the only time that an active connection to the internet is required (if activating online).

				-	×
	١G				
Please enter the details of yo	ur order				
Order number:					
XXXX-XXXX-XXXX-XXXX					?
User name:					
You					?
Company:					
Your company					?
E-mail address:					
you@company.com					?
Show advanced options					
	ACTIVATE NOW	-	CANCEL		



Choosing the **ACTIVATE NOW** button, connects to the Raynet license server using the information provided and will dynamically generate a license file. Pressing a little arrow next to it and then choosing the **ACTIVATE MANUALLY** button will open a dialog as <u>shown here</u>. Choosing the **CANCEL** button will abort the activation process.

Order Details

Order number:

This is the unique order number received when PackLayering has been purchased. If it is necessary to recover the order number, please contact our <u>sales team</u>.

Username:

This is the name of the user that is activating PackLayering. It does not need to be the same name used to order PackLayering.

Company:

This is the name of the company for which PackLayering will be licensed. This name will appear in the <u>License and Edition</u> view of PackLayering.

E-mail address:

This is the email address of the person that performs the activation. We respect the privacy of our customers; this email address will only be used by Raynet and only when there are any problems or important information regarding the license.



Advanced Options

On choosing the advanced options check box, extended information and possibilities of the licensing and activation of PackLayering are shown.

Hardware ID:

This is an ID calculated based on the hardware on which the activation is taking place on. The ID is unique but cannot be used to personally identify a user. It is used to generate the license for the machine on which the activation process is carried out on.

Transfer the license

If this option is selected, the order number and details may be used to activate PackLayering on a second machine, which has a differing hardware (which will obviously result in a different Hardware ID). This assumes that PackLayering has been uninstalled from the machine on which it was previously activated on. The transfer license functionality is logged on our license servers and is periodically checked to ensure that no abuse is being made of this functionality.

If the license transfer is part of a regular maintenance and can therefore be prepared and scheduled, it is highly recommended to use the deactivation function first, to disconnect the license from the machine. This is the standard way for transferring licenses. The option offered here is intended for unscheduled transfers, required if a machine, for whatever reason, cannot be accessed or used operational any longer.



Manual Activation On choosing the manual activation, the dialog shown below is displayed.

		- 🗆	×					
MANUAL ACTIVATION								
(https://raynetgmbh.zend	We kindly ask you to go to the following URL (https://raynetgmbh.zendesk.com/hc/en-us/requests/new?ticket_form_id=190886) and enter the following activation data:							
Your email address:	you@company.com							
Subject:	PackLayering License request (XXXX-XXXX-XXXX-XXXX)							
Order/License Number:	XXXX-XXXX-XXXX-XXXX							
Hardware ID:	6127-A69C-45E9-A1E8-8B4B							
User name:	You							
Contact:								
Company:	Your company							
	GO TO URL CLOSE							

This basically shows the contents of the ticket form that will be opened at Raynet. If there is an internet connection available on the machine, click on the **GO TO URL** button to open the URL shown in the top of the window in the default browser of the system. After a File Order has been opened in the Raynet Support Panel, a license file will be delivered. Information of how to use this file are available <u>here</u>.

If no internet connection is present on the machine on which the activation process is taking place, copy the contents of the dialog onto a machine which has an internet connection and use the URL on that machine. On receiving the ticket, a license file will be generated and sent back. Information on how to use the license file can be found <u>here</u>.

Plea

Please ensure that when copying the information from the **MANUAL ACTIVATION** dialog everything is added as shown above.

Once the license file has been generated the following will be shown:



PACKLAYER	ING			-	×
Your license ha	s been suc	cessf	ully activated.		
Licensed for:					
Expires on:	12/31/2020 12:00:0	0 AM			
Maintenance valid until:	12/31/2020 12:00:0	0 AM			
PackBench 6 Enterprise	.3	\bigotimes	PackLayering 6.3 Enterprise		
PackManage Standard	r for App-V 6.3	هېرې هېرې	RayEval 6.3 Enterprise		
RayFlow [clie Enterprise	nt] 6.0		RayPack 6.3 Enterprise		
RayQC 6.3 Enterprise		9	RayQC Advanced 6.3 Enterprise		
Start Start the activated	application right ne	ow.			
Close the license v	vizard.				

Note:

Depending on the license, the products shown may differ from the products shown above.

The option of starting PackLayering or just closing the activation wizard are available now.

Troubleshooting

If there are any problems during the activation process, please contact our <u>support team</u> for receiving assistance in activating PackLayering.



Use License File

If a license is already available, or a license file has been received as a result of activating PackLayering via URL, then all that is required is to copy the license file into the installation directory of PackLayering (the directory in which the PackLayering.exe resides). Clicking on the **I have a license** button on the **License wizard** dialog opens a dialog box which allows to choose the license file. Once chosen, the file will be copied automatically to the PackLayering installation directory. Please ensure that sufficient permissions to allow the creation/copying of a file to the installation directory of PackLayering are available.

(ⓒ) ▼ ↑ (≦→ This PC → Local Disk (C:) → ∨ C) Sea						, p
Organize 🔻 New fold	der				•== +	
🔆 Favorites	Name	Date modified	Туре	Size		
🛄 Desktop	퉬 inetpub	30.07.2015 17:33	File folder			
🐌 Downloads	PerfLogs	22.08.2013 17:52	File folder			
📃 Recent places	🌗 Program Files	30.07.2015 18:00	File folder			
	Program Files (x86)	01.02.2016 13:23	File folder			
🖳 This PC	🌗 RayPack	01.02.2016 13:23	File folder			
🛚 膧 Desktop	🌗 Users	30.07.2015 17:39	File folder			
🛛 📄 Documents	Windows	30.07.2015 17:56	File folder			
🖻 〕 Downloads						
🛚 🌗 Music						
🛛 📄 Pictures						
🛛 📔 Videos						
🛿 🚢 Local Disk (C:)						
辑 Network						
Fil	e name:			~	RaySuite license file (*.licen	se) v

Once the license file has been copied to the correct location the following will be shown:



PACKLAYERING						
Your license ha	is been suc	cessf	ully activated.			
Licensed for:						
Expires on:	12/31/2020 12:00:0	0 AM				
Maintenance valid until:	12/31/2020 12:00:0	0 AM				
PackBench 6 Enterprise	3	\bigotimes	PackLayering 6.3 Enterprise			
PackManage Standard	r for App-V 6.3	هېرې ه	RayEval 6.3 Enterprise			
RayFlow [clie Enterprise	nt] 6.0		RayPack 6.3 Enterprise			
RayQC 6.3 Enterprise		9	RayQC Advanced 6.3 Enterprise			
Start Start the activated application right now.						
Exit Close the license wizard.						

Note:

Depending on the license, the products shown may differ from the products shown above.

The option of starting PackLayering or just closing the activation wizard are available now.

Troubleshooting

If there are any problems during the activation process, please contact our <u>support team</u> for receiving assistance in activating PackLayering.



Use Floating License Server

PackLayering can be activated using a local floating license server. This requires that the server component is installed (the installation is available separately from the product installer).

Once the server is configured, the following details are required from the server administrator:

- Server name or IP address
- Configured port (by default 26627)

PACKLAYERING	_ X
Please enter the host and the port of the license server:	
Host	
localhost	?
Port	
26627	?
SAVE CAN	CEL



Enter required values and confirm them by clicking on the **SAVE** button. The server will be contacted once to verify the correctness of the data. If the server is not available at that time, an option will be presented to write the data anyway.

Once the connection details are saved, please restart the product to activate it using the floating license server.

I Do Not Have a License or Order Number

If neither a license nor an order number is available, then just simply register with Raynet to download an evaluation license for PackLayering. This allows potential customers to test and work with PackLayering before purchasing it. Choosing **I don't have a license or order number** opens the Raynet website in the default browser, allowing potential customers to download an evaluation copy of PackLayering.

I Want to Take My Activation Back

Deactivating an existing license for PackLayering may be required if the machine used has to be switched. Whenever there is a scheduled migration, e. g. when a virtual machine is transferred in a way that affects the **Hardware ID**, or when a physical machine is no longer used for evaluation purposes, deactivating the license is the right thing to do.

To Deactivate a Licensed PackLayering Installation

- 1. Launch PackLayering and open the license and edition tab in the **about** section.
- 2. Click on the **Open the license wizard** button on the lower left hand side of the application window.
- 3. Use the option I want to take my activation back...
- 4. Enter the **order number** that was originally used to activate PackLayering on the current machine. It was part of the resources and information material delivered during product purchase.
- 5. If required, adjust the username already entered into the input field **Username**. The users who activate and deactivate an installation do not necessarily have to be the same.

6. Click on **DEACTIVATE NOW**.

The license wizard will connect to the Raynet licensing server and send the deactivation information. On success, the number of licenses available for activation, which are bound to the used order number, is incremented by one. With this new free license it is possible to activate any PackLayering installation, on the current machine or any other.



Troubleshooting

If any problems during this process occur, please contact our <u>support team</u> for receiving assistance in deactivating PackLayering.

Working With PackLayering

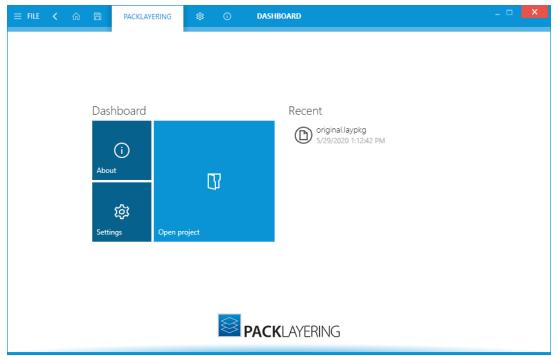
Once PackLayering is installed, launching the program executable from the application installation directory (e.g. C:\Program Files (x86)\PackLayering\PackLayering.exe) invokes the PackLayering home screen.



To work with PackLayering administration rights are needed.

The Home Screen

The Home Screen of PackLayering contains a **dashboard** and **recent** section for quick file access. Whenever the application is launched without a specific file trigger, this view is the starting point for the new PackLayering session.



The Dashboard Tiles

The PackLayering **dashboard** contains tiles which provide quick links to underlying content. In this release of PackLayering the **dashboard** contains four tiles titled **About**, **Start new project**, **Open project...**, and **Settings**. These tiles provide direct access to the linked contents and features when clicking upon.



Dashboard

The tiles shown in the image before representing:

- About Opens the About section of PackLayering. This section contains information about licensing, troubleshooting, etc.
- Open project... Opens an existing layer (.laypkg).
- **Settings** Selecting this tile, opens the <u>Settings</u> section of PackLayering. Within this section, a user can configure settings for the general user interface and build options for layers.

The Recent List

The recent list is shown on the right-hand side of the dashboard content area. It lists recently opened layers in the reverse chronological order.

The list by default contains the last files that have been opened in PackLayering. Clicking on a list item immediately opens the related file in PackLayering.



The context menu allows to remove items from the recent list, as well as opening their location in Windows Explorer.

The items can be pinned and unpinned from the list - to toggle pinning, first hover its button with mouse and then press the little pin icon next to the file name. Same technique can be used to perform reverse operation of unpinning.

The Main Toolbar

Throughout PackLayering, the main tool bar is visible, which, dependent on the contents of the view shown adds or removes menu items dynamically. As a rule of thumb, the items shown below are always present on the main tool bar.

≡ FILE < ŵ ₿	PACKLAYERING	愈		SOSW_INKSCAPE - PACKLAYERING	_ 🗆 🗙
	6	6	-0-	8	9



1. FILE

This opens the FILE menu. The FILE menu is dynamically created, dependent on what tool is currently active. Please refer to <u>the FILE menu</u> section to read more about it.

2. View history

With a left-click on the arrow button, users navigate one step back within the history of recently opened views. Right-clicking the arrow displays the recently visited views and allows to return to a specific view from that list. This view history is limited to those views without project relation, or with relation to the currently opened project. Thus, returning back to a view is not possible if it was called for a project that is no longer opened.

3. Home

Choosing this button will return you to the Home Screen. If any projects and or files are opened and there is a requirement to save any changes, you will be prompted to save before returning to the Home Screen.

4. Save

This button can be used to save the currently selected project

5. PACKLAYERING

This is the product name which will be highlighted when either on the Dashboard or in a project.

6. SETTINGS

Opens the <u>configurations</u> for PackLayering. When the **Settings** screen, this will be highlighted.

7. ABOUT

Contains information on licensing, troubleshooting, etc. When in the **About** screen, this will be highlighted.

8. Window title

The window title displays the current scope of activity. If an editor is active, the file name of the currently opened project is part of the window title as well.

9. Standard window controls

The standard window controls allow to minimize, maximize, resize, and close the application window. The availability of each control follows the Windows schema for standard controls as known from any desktop application.

The File Menu

Clicking the **FILE** button contained within the Main Toolbar opens the file menu. This menu allows users to quickly access common functions.

		PACI	
← Information Open Save Save as Close Settings Esit	Information original.laypkg cwwebulaypkg	- Properties Size 14.68 Created 1/29/2020 9:56:53 AM Modified 2:19/2019 2:39:00 PM Author Marcin Otorowski	
		Supporting files Open file location CAWEB/LAYPKG Show all properties	

1. Information

Shows a list of recent projects and their related properties. Hovering over an item under the **recent** title will update the **properties** section accordingly. Additionally, clicking on an item will load the related project. At the bottom-right of this view, users can click on **Show all properties...** to view the properties related to the currently loaded project file.

2. Open

Open an existing layer. If an existing project is loaded and there are outstanding changes, the user will be asked to save them before continuing.

Be aware:

PackLayering can open existing, exported layers. They are usually saved in *.LAYPKG format. If you do not have the file yet, export it first from your Layering Management console, by following the steps outlined in the following chapter: <u>Typical workflows</u>.

3. Save

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Saves any outstanding changes in the currently open layer. Saving can take some moments, depending on the size of the layer and the performance of your hardware. The button will be greyed out if there are no pending changes to save.

4. Save as

Allows to save the currently opened layer under another name or location.

5. Close

G



Closes the current layer. If any changes are pending, the user will be asked to save them before continuing.

6. Settings

Opens the <u>Settings</u> view.

7. Exit

Closes the current layer and the whole PackLayering application. If any changes are pending, the user will be asked to save them before continuing.

Typical Workflows

The following represents a typical workflow in PackLayering:

Before Editing

PackLayering is an editing tool, which means you should already have your layer created elsewhere, for example available in your Citrix Layering Management Console.

If you would rather like to create a new layer from scratch or from an existing project, use RayPack - the packaging component from RayPack Studio Suite, which provided facilities for repackaging and conversion between different formats.

1. Log-in to the Layering Management Console

🖶 Citrix Layering Managemen × 🚺	
	CITRIX* App Layering
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- 2. Go to the Layers tab
- 3. Select the layer that you would like to edit.



4. From the actions menu (right sidebar) press Export

🌻 Citrix Layering Manageme × 🔯	
	wout Logout (Marcin@citrix.lab)
Integers Clayers OS Layers App Layers Platform Layers OS Layers 7Zlp Operations Deprovable	Create App Layer Delete Versions Add Version Edit Properties Clone Layer Add Assignments Update Assignments Analyze Layer Finalize Export Import
	App Layers Help
Tasks •••••	

5. Select the combination of versions to be exported.

Layers Users System		
Layer Name	Search Text Search	
Platform Layers OS Layers		Create App Layer Delete Versions
File Share	Export Layers Wizard - Version Selection Select the versions you want to export. Any combination of OS, Application, and Platform layer versions can be elected. However when these versions are imported there must be at least one version of the OS layer available either in the file share or local repository an application or platform layer is associated with.	Add Version Edit Properties Clone Layer
Version Selection	Show versions which cannot be selected Available Layers Search Text Search	Add Assignments Update Assignments Remove Assignments Analyze Layer
Confirm and Complete	Server_2016 Control	Finalize Export Import
		App Layers Help
		Actions

6. This will export your package in *.LAYPKG format. Bear in mind that the process can take some time, depending on the size of the layer and system performance.



Layers Users	System		
Layer Name		Search Text Search	
Platform Layers	OS Layers // Export Layers Wizard		Create App La Delete Version
	File Share	Export Layers Wizard - Confirm and Complete Click Export to start the process of exporting all the specified layer versions and make them available for import.	Add Version Edit Properties Clone Layer
	Version Selection	Export Location: \\share\Layering Space Available: 816370 MB Space Required: 686 MB Version Count: 1 Versions To Export: 7Zip - 1.0.0	Add Assignme Update Assign Remove Assig Analyze Layer
	Confirm and Complete		Finalize
			Export Import
			App Layers He
		Comment: Type a comment here.	Actio
• • •			

Editing Layers

PackLayering provides various functions and management views for a convenient work with package resources (file, registry), meta data and overrides (for example removed files). This User Guide explains how to use them.

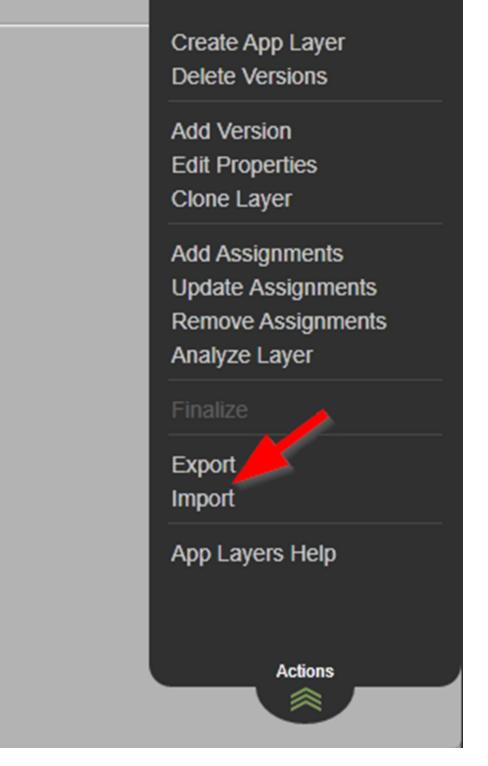
Once ready, save the layer again to get an updated * . LAYPKG archive.

Post-editing...

The layer must be now imported back in the console to reflect the changes.

- 1. Log-in to the Citrix Layering Management console
- 2. Select the package you would like to update
- 3. From the **Actions** menu, press **Import**





4. Follow the on-screen instructions and select the right \star . LAYPKG file when asked.



Opening a Project

To provide easy access for users to the recently edited projects, in PackLayering users can open a recently edited project directly from the **Home** screen of PackLayering. The recently edited project is available on the right side of the **dashboard**.

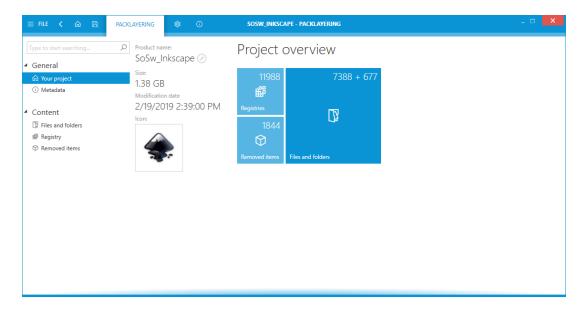
To open a PackLayering project from the disk, select the **Open project** tile on the **dashboard**. Once selected the file explorer dialog is opened. Navigate to the location of the project file (.rex). Select the file and click on **Open**. The PackLayering project will be opened.

While working on a project, a user can open another project by going to the <u>File menu</u> and then selecting the **Open** option. Nonetheless, only one project may be opened for editing at a time. If there are unsaved changes in the current project, a notification is shown to the users, asking whether they want to save or not save the changes made to the project. Additionally, users can return to the current project by selecting **CANCEL**.

Project Editor

Your Project

This view shows the various properties and fields that are relevant to the project.



Each tile displayed within the Project overview symbolizes a specific package content type, such as files, folders, registry, etc. Clicking a tile directly opens the management view required to manipulate the project values regarding the content type.

The tiles additionally indicate the number of objects currently stored within the project file for a specific type of content.

Once editing has been triggered, the direct value editor interface is activated.



Product Name

This is the name of the application.

Size

The total size of layer files. This is useful to estimate whether a clean-up of package may be required.

Modification date

The last time when the layer was modified.

Metadata

Revision

This is the place where some revision-relevant information may be viewed and changed.

- Version controls the internal revision version of the layer.
- Description changes the description attribute of the layer.

Note:

It is not recommended to change the revision version. By doing so, the package identity is recreated, and importing the layer back in the Layering Console may lead to undesired results.

Layer

The layer sections contain critical information used by the layering engine to properly merge the layers.

Layer

Type:	Application Layer		
ID:	3cf102f8-6c57-405b-96e8-e47714567e86	{}	
OS Layer ID:	4c793396-2f98-42b8-9615-92abf8e37138	Import	
Parent package:	c4507fac-32c0-4c40-b03d-87343e812b8a	Import	
	7Zip installation		
Description:			

Туре

This read-only field shows the type of the layer. PackLayering can open all types of layers, but due to the nature of resources only application layers are properly supported by the editors.

ID



This is the internal ID of a layer. In most cases you should not change it in case a change is required the button {...} ensures that a new, globally unique identifier is assigned to the current layer.

OS Layer ID

This is the ID of the parent layer. Layers must be always targeting a concrete OS layer. In order to read its ID, press **Import...** button and select another LAYPKG archive, containing your exported OS layer. For more information about exporting layers, refer to chapter <u>Working with PackLayering</u>.

Parent Package

This is the ID of the parent package. In order to read its ID, press **Import...** button and select another LAYPKG archive, containing your exported OS layer. For more information about exporting layers, refer to chapter <u>Working with PackLayering</u>.

Files and Folders

The Files and folders view contains the definition of folders and deployable files.

Type to start searching	○ Add or import ▼ Apply filters		Show file browser
General	 E UDiskP7A0004V0R1 Program Files E doc E doc E etc E bib E share ProgramData E Users Windows 	Name AUTHORS COPVING GPI2.btt gspawn-win64-helper-exe gspawn-win64-helper-console.exe inkscape.com inkscape.com inkview.com inkview.com UGP12.1xt UBaste1-15.dll Hibaste1-1-0.dll Hibaste1-1.6-1.dll Hibaziromm-1.0-1.dll Hibcairo-2.dll Hibcrac-0.6-3.dll Hibcru-4.dll Hibcru-4.dll Hibcru-1.dll	 ▶ Size 3 KB 576 B 18 KB 24 KB 24 KB 24 KB 24 KB 20 KB 387 KB 20 KB 320 KB 26 KB 661 KB 132 KB 245 KB 73 KB 991 KB 141 KB 588 KB 226 KB 558 KB 22 MB 52 KB

The left tree shows the structure of folders, as defined in the underlying virtual disk.

- To create a new subfolder, right click on a parent folder and select New folder option.
- In order to import files to a folder, select it and invoke **Import file(s)**... function from a context menu (for a bulk import) or right click the empty area in the right panel and invoke **Import file(s)**... to be able to import single or selected files.

Applying Filters

It is possible to apply exclusion filters for a fast clean-up procedure. This is especially important when working with LAYPKG files created by original tools from Citrix, as they tend to contain much noise and irrelevant data In order to automatically delete items that should be excluded:



- 1. Press **Apply filters** in the top menu bar
- Select which exclusions are to be applied. You can choose between default exclusions (providing some reasonable defaults), RayPack exclusions (from the current RayPack profile) and custom exclusions (accepting *.rpexl files, which can be created by RayPack).
- 3. You can also choose the scope of filtering (files, registries or both)
- 4. The list will be automatically cleaned-up based on your selection.

Note:

This operation is irreversible. Once the list is cleaned-up you cannot restore the deleted resources. If you find that too much has been deleted, revert to the last saved version of your layer (without saving the changes in the current layer).

Registry

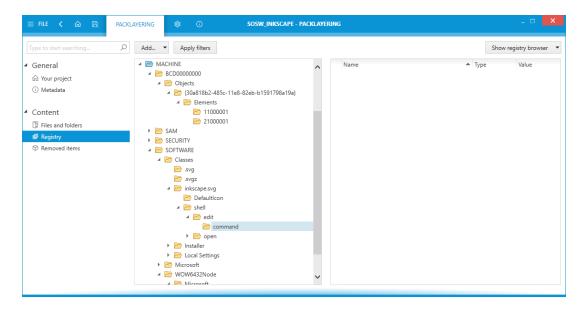
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This view shows the registry keys and values of the currently opened layer.

The main view consists of two sections: the registry tree on the left and the value details on the right.

The Registry Tree Area

The tree displays all keys that are present in the layer.



Click on the black arrow at the left hand side of the icons to expand the tree. As an alternative, it is also possible to navigate with the arrow keys on the keyboard; simply select a hive or key from the tree and move the focus by using the up, down, right and left arrows on your keyboard.

Applying Filters



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Mote:

This operation is irreversible. Once the list is cleaned-up you cannot restore the deleted resources. If you find that too much has been deleted, revert to the last saved version of your layer (without saving the changes in the current layer).

Removed Items

0	Ð 😣	Type to start searching	Q	
	Path		*	
××××	C:\Program Files\7-Zip			

All these resources will take a part in layer build-up process, where the resources present in packages with lower priority will be overridden (= marked as "not present"). You can use this setting to hide some parts of other layers (application or OS).

The editor allows you to enter the paths (one entry for each line).



Settings

Before starting a new evaluation project, users have the possibility to configure various useful options for working on the project.

Different configuration options are categorized in the **Interface** and **Build options** tabs. The configuration screen can either be accessed via the **Settings** tile on dashboard or by choosing the **Settings** item in <u>main tool bar</u>.

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The setting screen contains the following tabs:

- Interface
- Build options





Interface

In the **INTERFACE** tab, users can enable or disable user interface options and the language used by PackLayering.

Language	
User interface language:	
English	~
Animations	
Enable user interface animations	

Language

In the current release, only English is available. More languages will be added in future product updates.

Animations

When PackLayering is going to be used via remote connections, it may save bandwidth and performance if the user interface animations are deactivated. They are active by default, but may be deactivated by setting the slide toggle **Enable user interface animations** to **No**.

Build Options

This screen controls two important aspects of exported layers.

Trim VHD upon saving

Never Keep original size	✓ Automatic Automatic resizing	Always Compress to minimal size	
Package compressior	1		
None Without compression	Fast Use fastest option	✓ Normal Compress optimally	Maximum Minimize package size

Trim VHD Upon Saving

VHD will be automatically extended to a required size once more resources are added to it. However, when doing a clean-up by removing bulk of files and/or registries, there is usually free space left which is



not automatically trimmed. As such, VHDs tend to keep their sizes, even though a lot of package content may be already removed. Trimming ensures that the VHD is scaled down to actually benefit from reclaimed space.

Trimming can be disabled by selecting the **Never** option.

In order to enable trimming, select one of two options:

- Automatic ensures that the VHD is trimmed if a certain threshold is reached.
- Always VHD is always trimmed with every save operation.

Trimming can be considered a costly operation which may take some time. Therefore the automatic trimming ensures, that it is only executed if the gains outperform eventual performance penalty. The automatic trimming uses the following conditions and thresholds:

- The size is optimized if the package is considered "big" (more than ca. 77 MB), or...
- The trimming would result in the output disk be at least 10% smaller in size than before the operation.

This means, that the automatic routine will never trim small packages (less than ca. 77 MB) or the ones, that would not otherwise benefit much from the trimming.

Note:

PackLayering arranges around 30% free space to be reserved. The numbers and estimates above consider the total size of the package without this extra margin.

Package Compression

By default, exported packages are not compressed. Enabling one of the provided options sets the compression level. Lower compression results in bigger *.laypkg files, but faster import in Citrix console. On the other hand, higher compression produces smaller *.laypkg files, but the import may take longer.



About

Choosing the **About** tile from the Home Screen displays the **ABOUT** area.



It contains the **GET STARTED** tab which provides a short introduction on how to start with the first evaluation project. Furthermore, the **ABOUT** area contains the **LICENSE AND EDITION** tab, which contains information about the currently used license, and the **TROUBLESHOOTING** tab, which contains further supportive information.

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GET STARTED	LICENSE AND EDITION TROUBLESHOOTI	NG	PackLayering

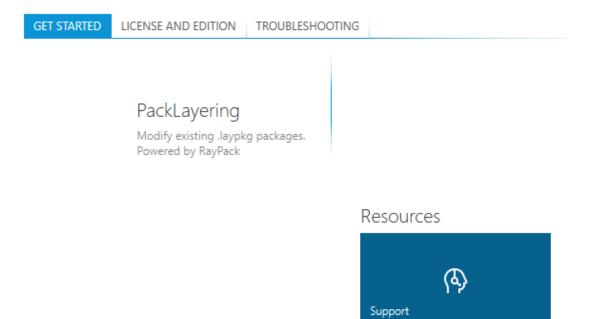


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Get Started

This section is meant to provide a starting point to new users of PackLayering. This section offers the user a short introduction on how to create the first evaluation project.





License and Edition

This area contains the **LICENSE AND EDITION** view, providing all usage relevant information about the current product instance.

GET STARTED	LICENSE AND EDITION	TROUBLESHOOTING	
Product version:	6.3.442.60		
Software edition	unknown		
Licensed for:			
License type:	Seat		
Activation status	s: Activated		
Expires on:	2020-12-31 (in 215 days)	
Activated on:	2020-05-25		
Your hardware I	D:		



Open the license wizard Change the license or start the activation process.

Here, a variety of information is shown regarding the current version of PackLayering and the applied license file. Changing the license using the license wizard can be achieved by choosing the **Open the license wizard** option.



Troubleshooting

The **ABOUT** area also contains the **TROUBLESHOOTING** view, providing handy information about crucial system paths defined for the current product instance.

Any information displayed within this tab is read-only. It is provided to ensure transparency about the current instance settings, which is vital for proper troubleshooting measures in case of support relevant issues.

GET STARTED	LICENSE AND EDITION	TROUBLESHOOTING					
Installation fol	nstallation folder						
PackLayering has	been started from the follo	wing location:					
C:\Program Files	s (x86)\PackLayering						
Open installation	Open installation folder						
Logging and performance diagnostics							
PackLayering writes the performance and diagnostics information to the following folder:							
C:\Users\Administrator\AppData\Roaming\PackLayering\Logs							
Dpen logs folder							

Installation Folder

This path shows where the currently running instance of PackLayering is located. Click on the **Open installation folder** link to open a Windows Explorer instance at the displayed location to access the application files.

Logging

PackLayering is by default configured to write log files with information about each product work session. A new log file will be generated for every launch of the current application instance. These log files contain vital information for any troubleshooting or help desk measure, such as environment information about the physical machine PackLayering resides on, the steps performed during a session, and exception details thrown by the application in case of operational issues. Please make sure that the target directory displayed here provides sufficient disk space and is accessible for the currently logged in user. Click on the **Open logs folder** link to open a Windows Explorer instance at the displayed location to access the log files.

Additional Information

Visit <u>https://raynet.de/produkte/raypack-studio/raypack/components/</u> for further information regarding the product and current community incentives.

Raynet is looking forward to receiving feedback from your PackLayering experience. Please contact your Raynet service partner or use our <u>Support Panel</u> to add your ideas or requirements to the PackLayering development roadmap!

We welcome suggestions and input on the various documentation resources available for PackLayering and its components. Feedback and other concerns can be forwarded through your local Raynet support representative.

Need Help?

Request PackLayering Support

Our Raynet support team gladly assists you on any question or issue you encounter regarding PackLayering. Feel free to sign in and open incidents via our Raynet support panel, please open an incident using the Raynet Support Panel.

Join the RaySuite Community

The RaySuite community resides within our KnowledgeBase: <u>https://raynet.de/Support/</u>. Once you have signed up for access to the Raynet support panel, you automatically have access to the KnowledgeBase, too. You will surely come to a point where you would love to suggest a new feature for the future development of PackLayering. Maybe you need to find some tips and tricks to hit your target right. the RaySuite community is your place for discussing such topics, for sharing and expanding your own experience.

Contact Your Raynet Sales Representative

Our sales team is the right contact for any license or edition question you might encounter. Would you like to benefit from a professional PackLayering training? Ask for dates and locations to find the right training to meet your needs. You are highly welcome to step in contact via <u>sales@raynet.de</u>.



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