



RAYPACK®

Software
Packaging

User Guide PackManager for App-V 6.1

RayPack is part of RaySuite.



Copyright © Raynet GmbH (Germany, Paderborn HRB 3524). All rights reserved.

Complete or partial reproduction, adaptation, or translation without prior written permission is prohibited.

User Guide PackManager for App-V

Raynet and RayFlow are trademarks or registered trademarks of Raynet GmbH protected by patents in European Union, USA and Australia, other patents pending. Other company names and product names are trademarks of their respective owners and are used to their credit.

The content of this document is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Raynet GmbH. Raynet GmbH assumes no responsibility or liability for any errors or inaccuracies that may appear in this document. All names and data used in examples are fictitious unless otherwise noted.

Any type of software or data file can be packaged for software management using packaging tools from Raynet or those publicly purchasable in the market. The resulting package is referred to as a Raynet package. Copyright for any third party software and/or data described in a Raynet package remains the property of the relevant software vendor and/or developer. Raynet GmbH does not accept any liability arising from the distribution and/or use of third party software and/or data described in Raynet packages. Please refer to your Raynet license agreement for complete warranty and liability information.

Raynet GmbH Germany
See our website for locations.

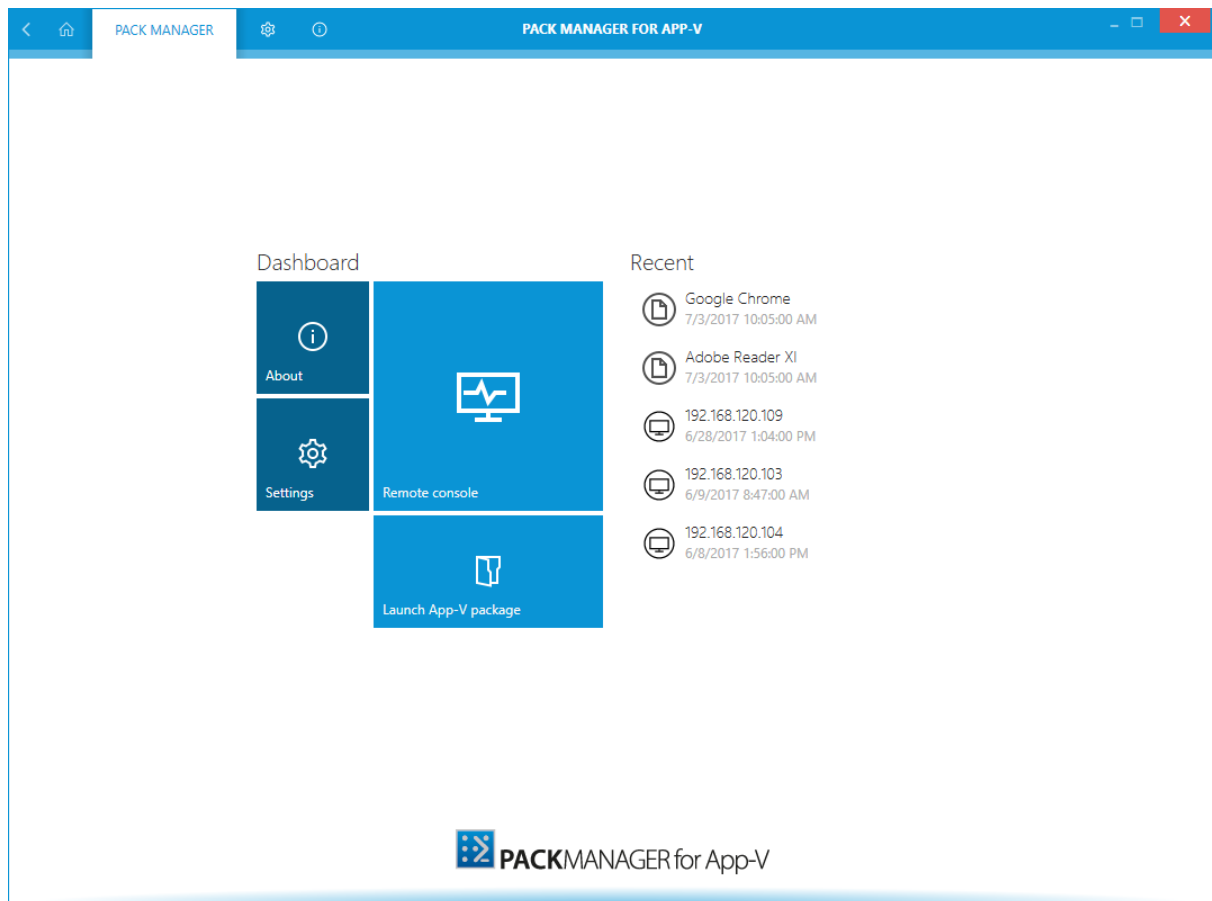
www.raynet.de

Table of Contents

Welcome to PackManager for App-V	4
Architecture Recommendations	5
Prerequisites	6
Prerequisite Hardware	6
Terminal Machine	6
Client Machine	6
Prerequisite Software	7
Terminal Machine	7
Client Machine	7
Licensing	8
No-License Mode	8
Read-Only Mode	8
Read-Write Mode	8
Configuring the Environment	9
Working with PackManager for App-V	10
Remote Console	10
Connection	10
Client	11
Packages	12
Adding a New Package	13
Connection Groups	17
Adding a New Connection Group	18
Processes	21
Publishing Servers	22
Event Log	23
The Bottom Bar	24
Launch an App-V Package	25
Settings	26
Saving and Discarding Changes to Settings	26
Common	26
Files	27
Event Log	27
Need help?	28

Welcome to PackManager for App-V

PackManager for App-V is a solution for IT professionals working with Microsoft App-V in Desktop, VDI, and Citrix environments. It allows to manage App-V clients remotely, reduces the user impact, and facilitates the achievement of user acceptance faster while increasing the quality of the package. This solution also includes a variety of remote troubleshooting functions which assist helpdesk staff and which can publish packages in a standalone environment. Furthermore, it centralizes the administration, deployment, and troubleshooting of App-V in one single, easy to use interface, which is already known from our other RaySuite applications.



Architecture Recommendations

PackManager for App-V should be located on a machine that has a connection to the destination machine on which the Microsoft Application Virtualization Client is installed / enabled. It is necessary to execute scripts using a remote computer on both machines. Some firewall configurations may cause trouble, therefore it is necessary to ensure that the firewall does not block the remote computers from executing these scripts. If there are questions regarding the configuration of a specific firewall, please ask the manufacturer or this firewall.



Prerequisites

In the following chapters the hardware and software requirements necessary to run PackManager for App-V are listed.

Prerequisite Hardware

The hardware requirements for the Terminal Machine and the Client Machine are listed here.

Terminal Machine

Minimal:

CPU Pentium IV / Core2 processor
2 GB RAM

100 MB free space on hard disk
1280 x 1024 screen resolution

Recommended:

CPU Intel Core i5 or i7
4 GB RAM

1 GB free space on hard disk

Supported OS:

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

- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2
- Windows Server 2008
- Windows 10
- Windows 8.1
- Windows 7
- Windows Vista

Client Machine

The client machine should have the Microsoft Application Virtualization Client in version 5.x installed, therefore it should fulfill the requirements provided by Microsoft.

Prerequisite Software

The software requirements for the Terminal Machine and the Client Machine are listed here.

Terminal Machine

The terminal machine should have a Windows operating system with Microsoft .NET Framework 4.5 installed. Additionally, PowerShell 3.0 or higher should be installed on the machine.

PowerShell is part of the Windows Management Framework. The latest version can be found under the following link: <https://www.microsoft.com/en-us/download/details.aspx?id=50395>.

Client Machine

The client machine should have the Microsoft Application Virtualization Client version 5.x installed.

Similar to the terminal machine, the client environment should have PowerShell 3.0 or higher installed.

Licensing

PackManager for App-V can use a standalone license (delivered by Raynet via an unique order number) or use a license file which has already been applied to other RaySuite applications.

Depending on the license, PackManager for App-V can be run in one of three different modes:

- **No-license:** When no RaySuite application was installed on the machine.
- **Read-only:** If the license for any of the RayPack Studio applications has been found on the machine.
- **Read-write:** If a standalone license has been applied or if one of the following to licenses has been found on the machine.
 - A RayPack license with `RayPack.PackDesigner.GenAppV` license term.
 - A RayQC Advanced license.

No-License Mode

In the **No-License** mode, users cannot access the **Remote Console** view.

Read-Only Mode

In the **Read-Only** mode, users can access the Remote Console and are able to connect to the App-V client machine and get all information, but their write permissions are restricted.

Read-Write Mode

In the **Read-Write** mode there are no restrictions.

Configuring the Environment

To establish the connection between the terminal and the client machine, the user needs to configure both machines to allow remote execution of scripts. To do this, the following steps need to be executed:

1. Terminal machine:

- a) Some firewall configurations or configurations of other network security systems might prevent the remote machine from accessing. Please ensure, that the remote machine is able to access the terminal machine, for this port number 5985 needs to be open. (If there are questions regarding the configuration of a specific firewall or network security system, please ask the manufacturer of the firewall or network security system.
- b) Install **PowerShell** version 3.0 or higher.
- c) Enable the **WinRM** service (more information on the **WinRM** service can be found at: <https://technet.microsoft.com/en-us/library/ff700227.aspx>).

2. Client machine:

- a) Some firewall configurations or configurations of other network security systems might prevent the remote machine from accessing. Please ensure, that the remote machine is able to access the terminal machine, for this port number 5985 needs to be open. (If there are questions regarding the configuration of a specific firewall or network security system, please ask the manufacturer of the firewall or network security system.
- b) Install **PowerShell** version 3.0 or higher.
- c) Enable the **WinRM** service (more information on the **WinRM** service can be found at: <https://technet.microsoft.com/en-us/library/ff700227.aspx>).
- d) Set the **PowerShell** execution policy to `RemoteSigned` (more information on this can be found at: <https://technet.microsoft.com/en-us/library/ee176961.aspx>).
- e) Start the `RemoteRegistry` service.

Working with PackManager for App-V

Remote Console

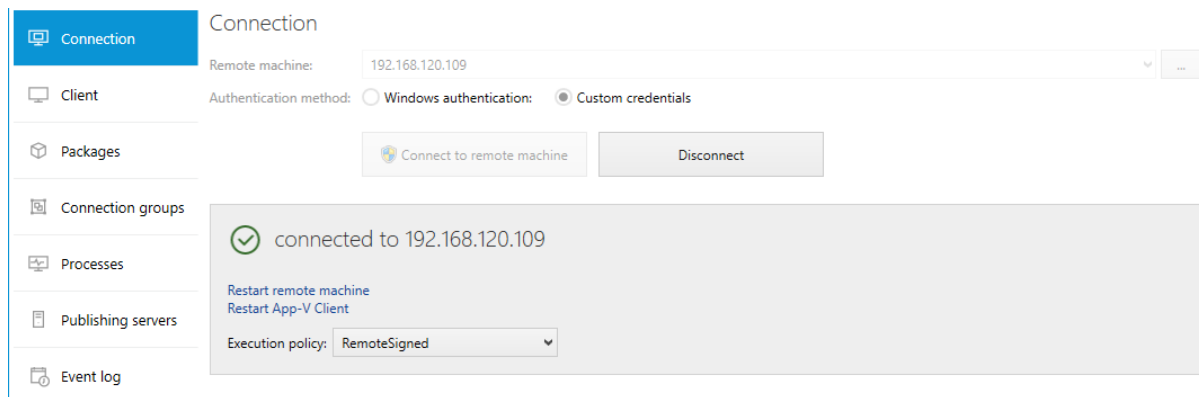
Connection

The **Connection** tab allows to configure the remote connection to the App-V Client machine. The connection can be configured by either using the DNS name or the IP address.

Once the connection is established, the user is able to execute the following actions:

- Restart the remote machine.
- Restart the App-V Client on the remote machine.
- Change the PowerShell execution policy on the remote machine.

Additionally, after the connection to the remote machine has been established, all tabs within the remote machine become enabled.



Client

The **Client** tab contains the information received from the remote machine that refers to the App-V Client configuration.

All rows that are grayed-out in this view are static. This means, the user is not able to change the values in these rows. All other rows can be changed by directly clicking into the value column or using the button that is located in the top-toolbar of the grid.

Information about the Client Configuration Settings can be found at <https://technet.microsoft.com/en-us/itpro/mdop/appv-v5/about-client-configuration-settings>.

192.168.120.109
client data

Connection

Client

Packages

Connection groups

Processes

Publishing servers

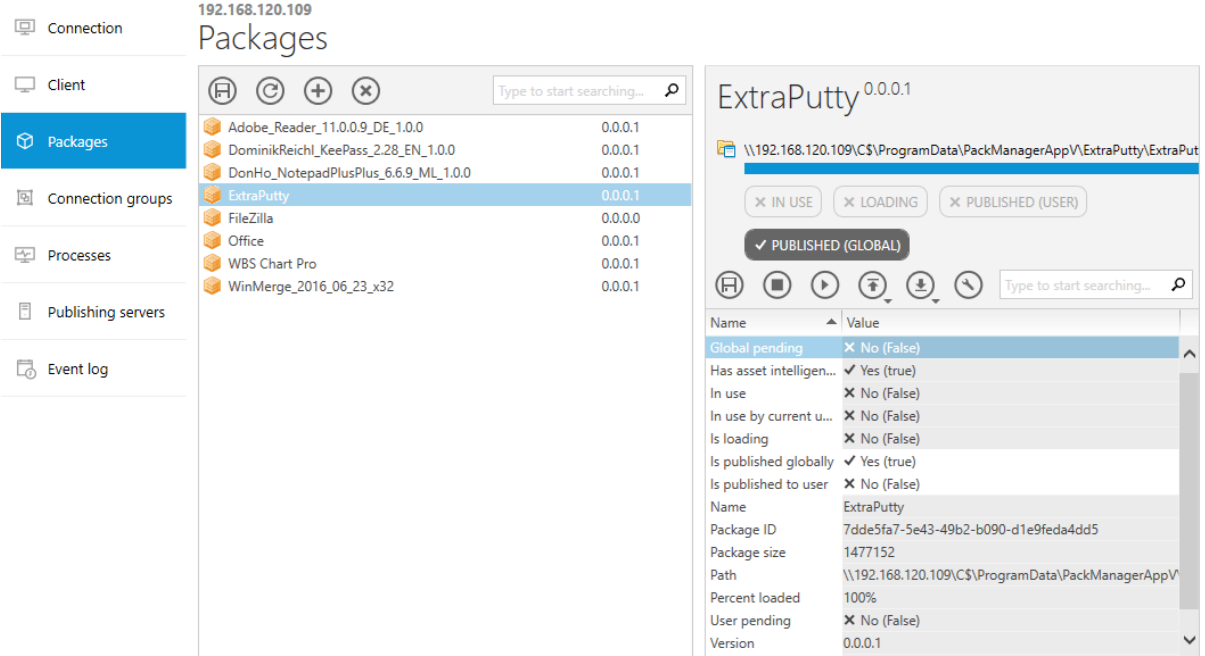
Event log

Name	Value
AllowHighCostLaunch	X No (0)
AutoLoad	X No (0)
CertFilterForClientSsl	
EnableDynamicVirtualization	X No (0)
EnablePackageScripts	✓ Yes (1)
EnablePublishingRefreshUI	✓ Yes (1)
ExperienceImprovementOptIn	X No (0)
IgnoreLocationProvider	X No (0)
IntegrationRootGlobal	%ALLUSERSPROFILE%\Microsoft\AppV\Client\Integration ⓘ
IntegrationRootUser	%LOCALAPPDATA%\Microsoft\AppV\Client\Integration ⓘ
LocationProvider	
MigrationMode	0
PackageInstallationRoot	%programdata%\App-V ⓘ
PackageSourceRoot	
ProcessesUsingVirtualComponents	%SystemRoot%\explorer.exe %ProgramFiles%\Internet Explorer\iexplore.exe %ProgramFiles(x86)\Internet Explor...
ReestablishmentInterval	5
ReestablishmentRetries	3
ReportingDataBlockSize	
ReportingDataCacheLimit	
ReportingEnabled	X No (0)
ReportingInterval	

Packages

The **Packages** tab can be used to manage packages. Once loaded, it lists all packages that have been added on the Client that the user is connected to. The following actions can be performed with packages when using this view:

- Packages can be mounted.
- Packages can be published/unpublished (either to the current user or globally).
- Packages can be repaired.
- Packages can be stopped.
- Packages can be removed.



192.168.120.109

Packages

Package Name	Version
Adobe Reader_11.0.0.9_DE_1.0.0	0.0.0.1
DominikReichl_KeePass_2.28_EN_1.0.0	0.0.0.1
DonHo_NotepadPlusPlus_6.6.9_ML_1.0.0	0.0.0.1
ExtraPutty	0.0.0.1
FileZilla	0.0.0.0
Office	0.0.0.1
WBS Chart Pro	0.0.0.1
WinMerge_2016_06_23_x32	0.0.0.1

ExtraPutty 0.0.0.1

\\192.168.120.109\CS\ProgramData\PackManagerAppV\ExtraPutty\ExtraPutty

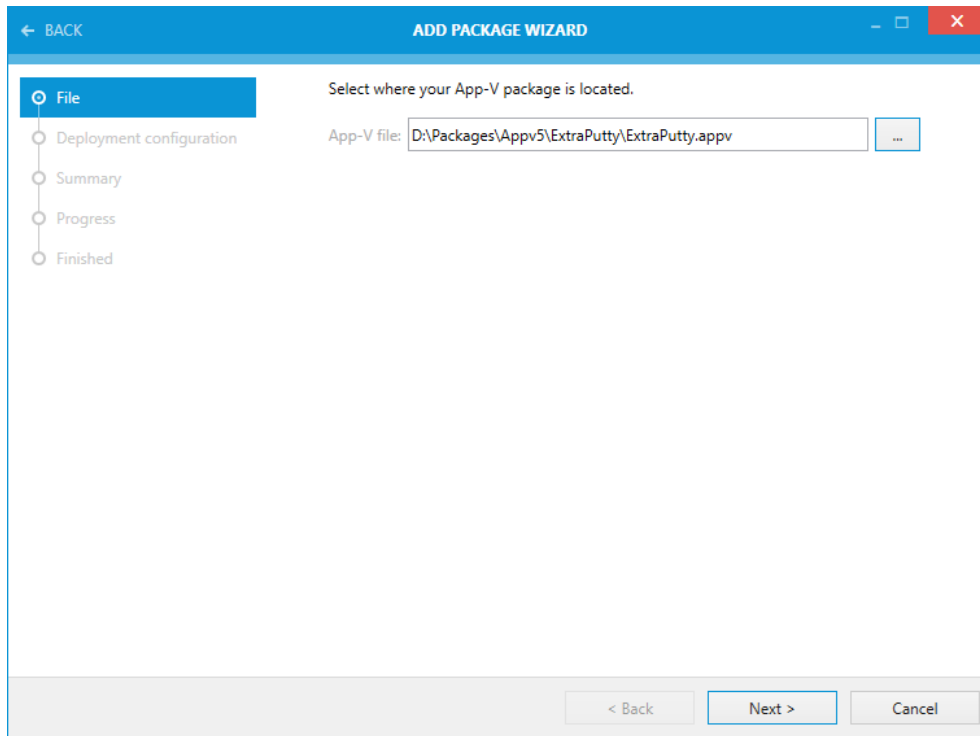
Name	Value
Global pending	<input type="checkbox"/> No (False)
Has asset intelligen...	<input checked="" type="checkbox"/> Yes (true)
In use	<input type="checkbox"/> No (False)
In use by current u...	<input type="checkbox"/> No (False)
Is loading	<input type="checkbox"/> No (False)
Is published globally	<input checked="" type="checkbox"/> Yes (true)
Is published to user	<input type="checkbox"/> No (False)
Name	ExtraPutty
Package ID	7dde5fa7-5e43-49b2-b090-d1e9feda4dd5
Package size	1477152
Path	\\192.168.120.109\CS\ProgramData\PackManagerAppV
Percent loaded	100%
User pending	<input type="checkbox"/> No (False)
Version	0.0.0.1

Adding a New Package

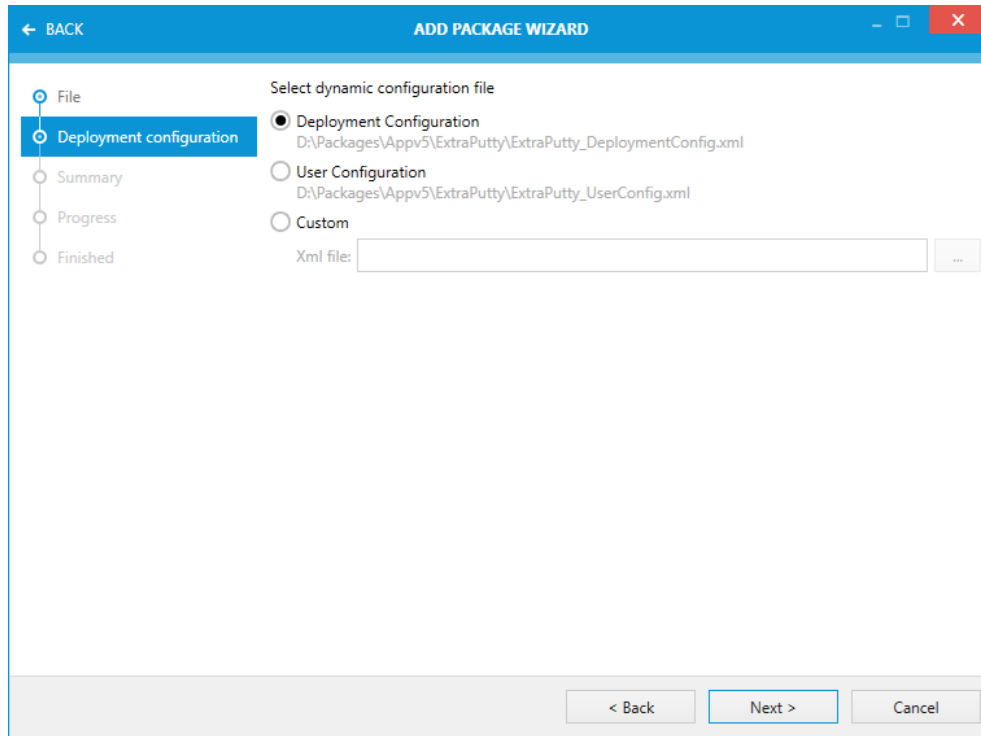
New packages can be added using the **ADD PACKAGE WIZARD**.

The **ADD PACKAGE WIZARD** consists of five different sections.

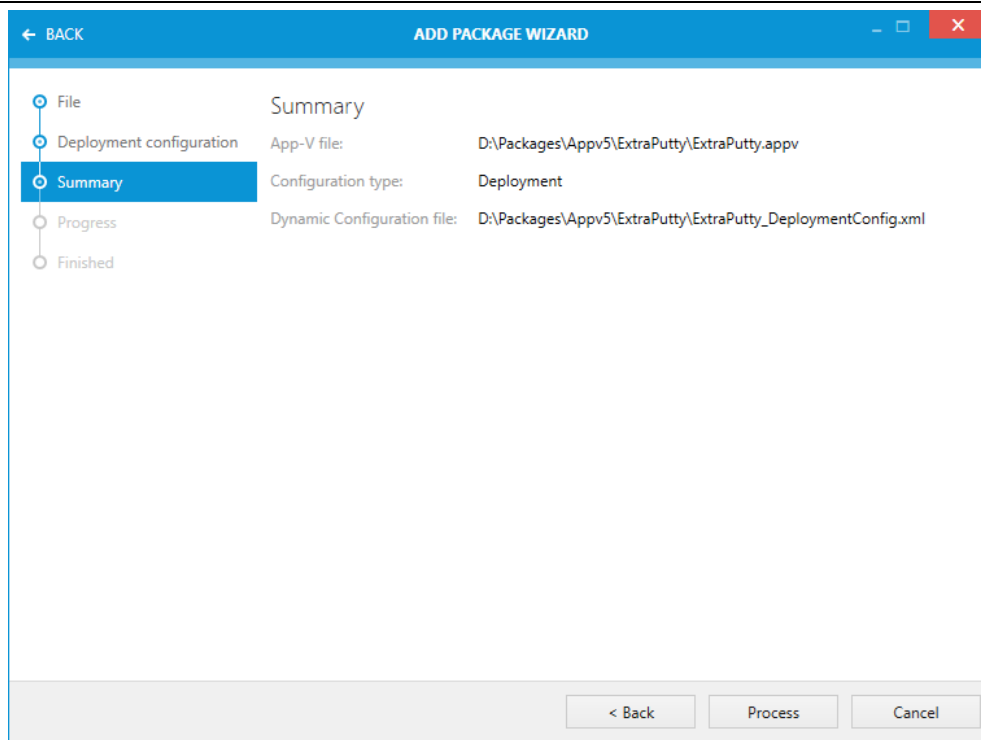
- **File:** In this section, the user needs to specify the path to the `.appv` file. If a local path will be specified, then all sources will be copied to the destination machine. In case of an UNC path, PackManager for App-V will ensure that this path can be accessed from the remote machine and coping of sources will not be performed.



- **Deployment configuration:** In this section, a dynamic configuration file (.xml) needs to be specified. By default, a **Deployment Configuration** file is selected, but it is also possible to select a **User Configuration** or a **Custom** file.

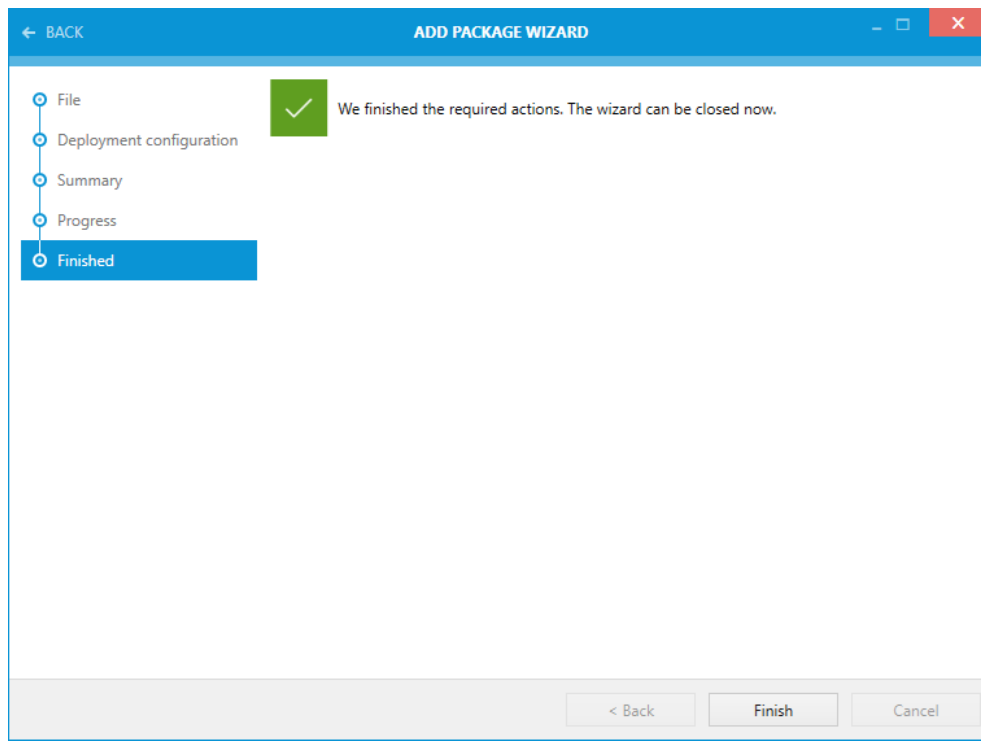


- **Summary:** In this section, a summary of the previous configuration is shown. The configurations made in the previous settings can be confirmed by clicking on the **Process** button.



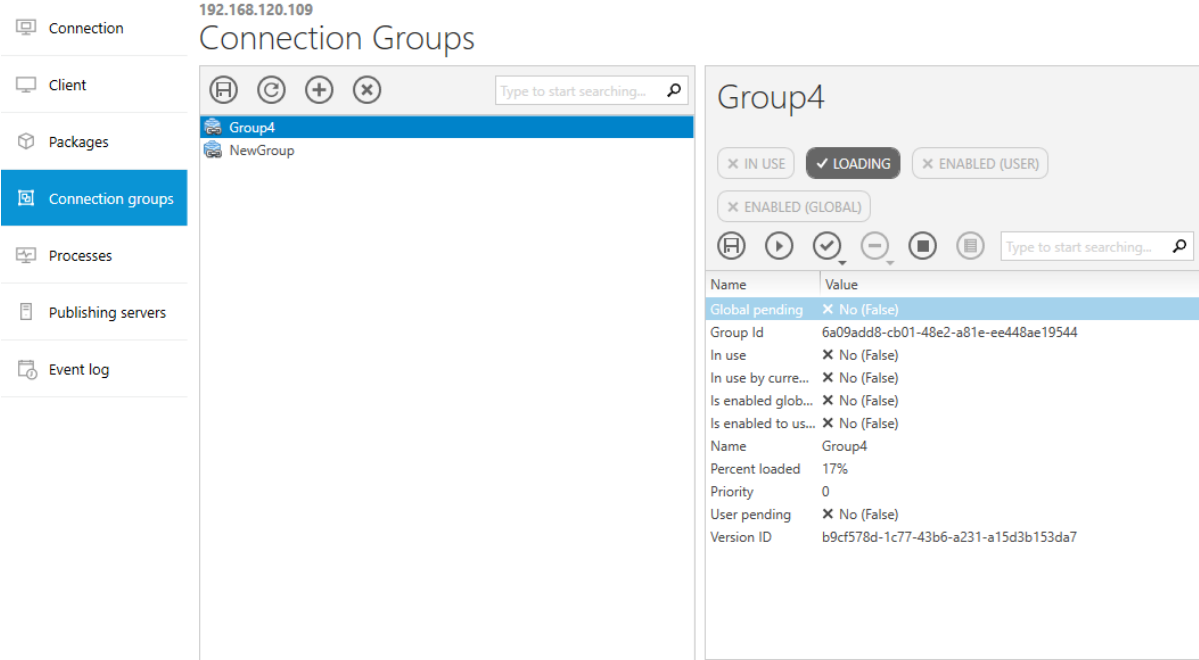
- **Progress:** In this section a progress bar will be shown until the action has been finished. It will then automatically switch to the **Finished** section.

- **Finished:** In the **Finished** section, the result will be shown. The wizard can be closed now by clicking on the **Finish** button.



Connection Groups

Connection groups are used to enable the applications within a package to interact with each other in the virtual environment while remaining isolated from the rest of the system. These groups can be managed by using the **Connection groups** tab in the PackManager for App-V **Remote Console**. Managing these groups from the **Remote Console** includes mounting, enabling (either for the current user or for all users), disabling, stopping, and removing them.



Name	Value
Global pending	✗ No (False)
Group Id	6a09add8-cb01-48e2-a81e-ee448ae19544
In use	✗ No (False)
In use by curre...	✗ No (False)
Is enabled glob...	✗ No (False)
Is enabled to us...	✗ No (False)
Name	Group4
Percent loaded	17%
Priority	0
User pending	✗ No (False)
Version ID	b9cf578d-1c77-43b6-a231-a15d3b153da7

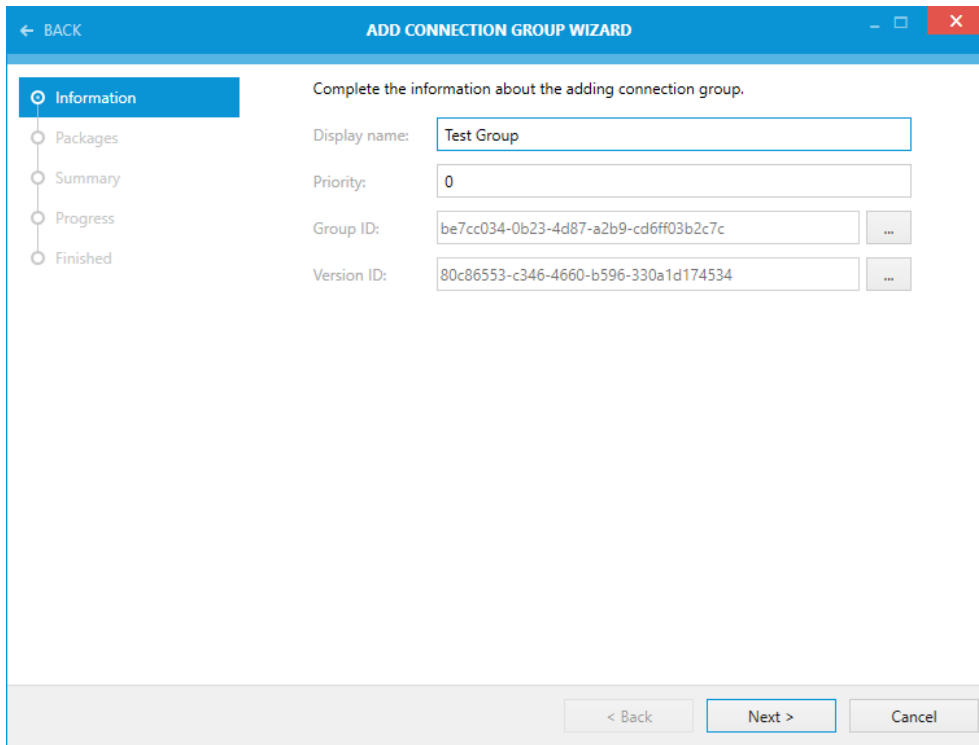
To add a new connection group, the **ADD CONNECTION GROUP WIZARD** can be used.

Adding a New Connection Group

New connection groups can be added using the **ADD CONNECTION GROUP WIZARD**.

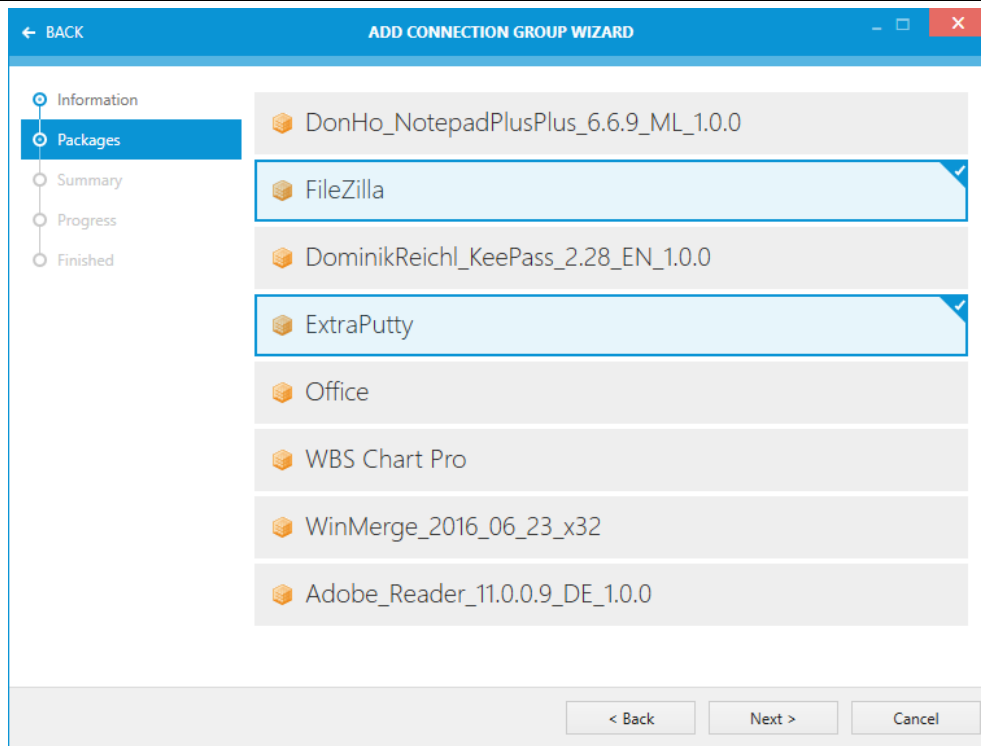
The **ADD CONNECTION GROUP WIZARD** consists of five different sections.

- **Information:** In the first section the information about the group are going to be defined. Information that need to be defined include the **Display name** and the **Priority** of the group.

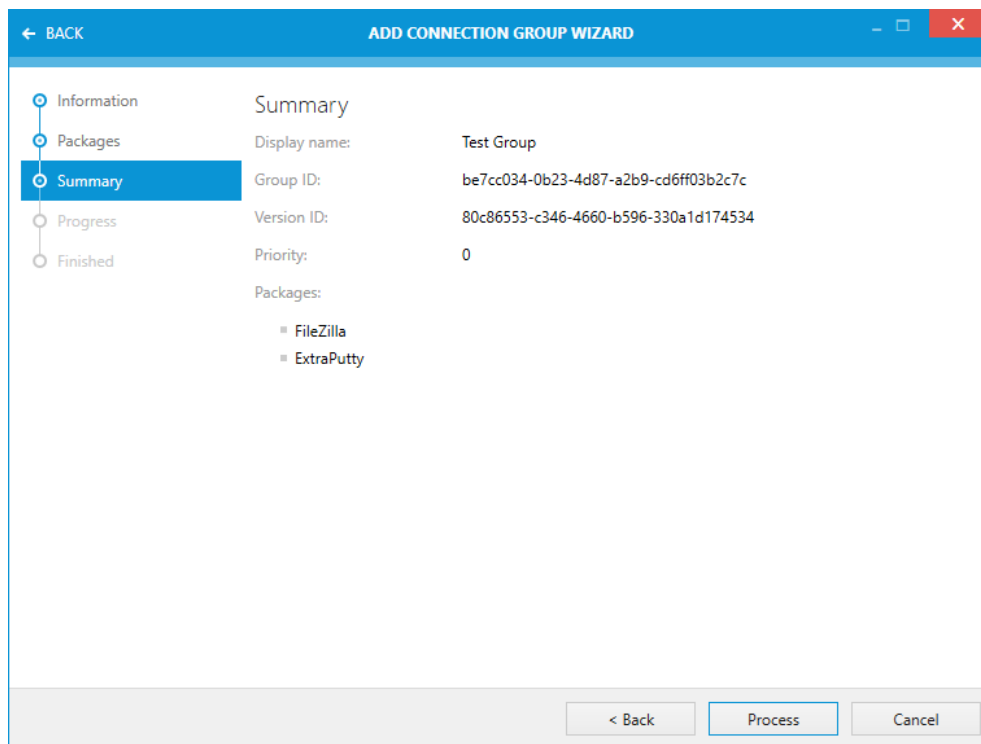


The screenshot shows the 'ADD CONNECTION GROUP WIZARD' window with the 'Information' section selected. The window has a blue header bar with a 'BACK' button and a title bar with standard window controls. On the left, a vertical sidebar lists the wizard steps: 'Information' (selected), 'Packages', 'Summary', 'Progress', and 'Finished'. The main area is titled 'Complete the information about the adding connection group.' and contains four input fields: 'Display name:' with the value 'Test Group', 'Priority:' with the value '0', 'Group ID:' with a UUID-like string, and 'Version ID:' with another UUID-like string. Each of the last two fields has a small '...' button to its right. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- **Packages:** In this section the packages which are part of the group are selected.

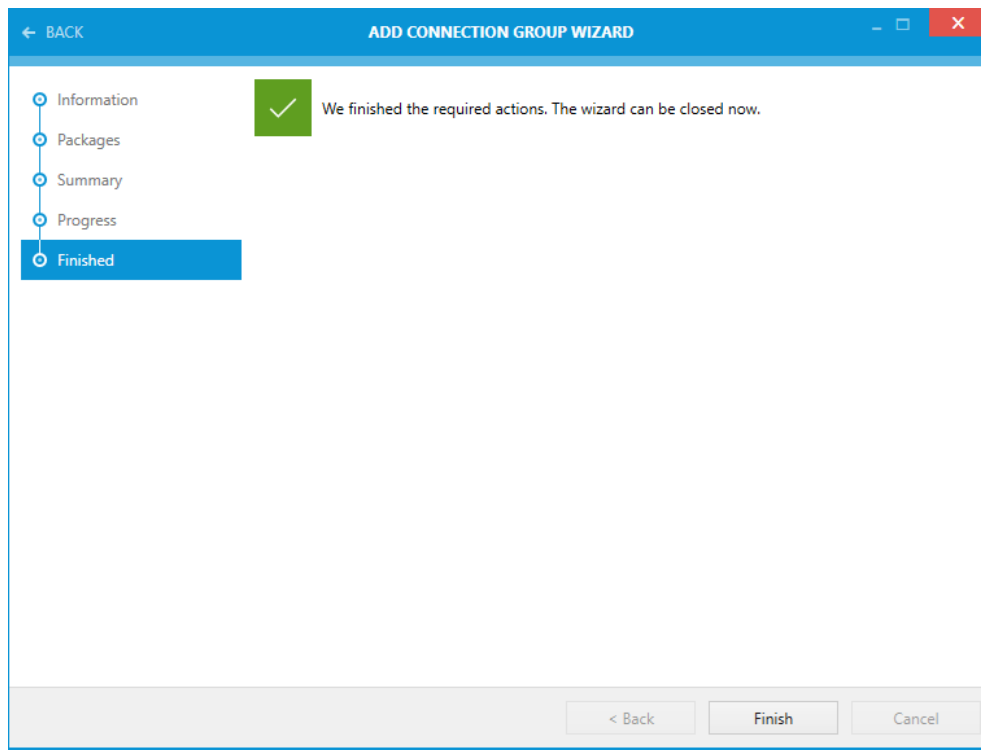


- **Summary:** In this section, a summary of the previous configuration is shown. The configurations made in the previous settings can be confirmed by clicking on the **Process** button.



- **Progress:** In this section a progress bar will be shown until the action has been finished. It will then automatically switch to the **Finished** section.

- **Finished:** In the **Finished** section, the result will be shown. The wizard can be closed now by clicking on the **Finish** button.



Processes

In the **Processes** tab all processes running on the remote machine are listed with detailed information about each of the processes. Users can stop processes in this tab by clicking on the **Stop** button (■ **Stop**).

192.168.120.109

Connection

Client

Packages

Connection groups

Processes

Publishing servers

Event log

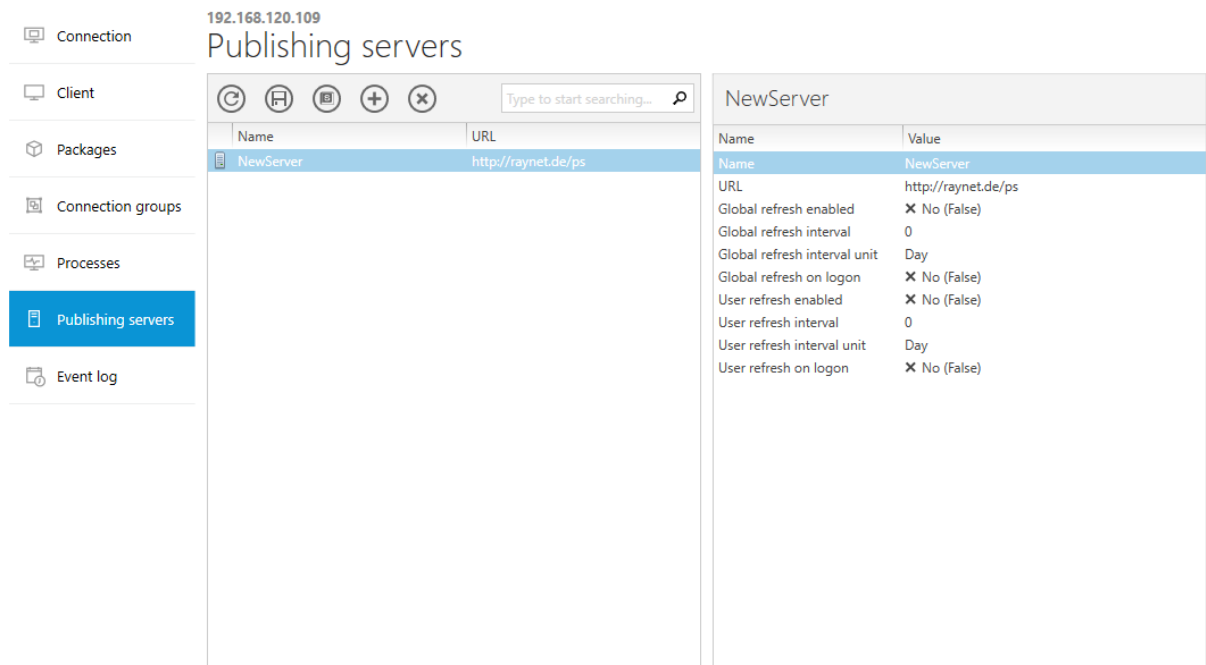
Processes

Type to start searching...

Process name	ID	Owner	Description	Stop process
csrss	476	SYSTEM		■ Stop
csrss	560	SYSTEM		■ Stop
csrss	648	SYSTEM		■ Stop
explorer	5664	Root	Windows Explorer	■ Stop
Idle	0			■ Stop
System	4			■ Stop
Memory Compression	2420	SYSTEM		■ Stop
smss	372	SYSTEM		■ Stop
OneDrive	6164	Root	Microsoft OneDrive	■ Stop
wininit	548	SYSTEM		■ Stop
winlogon	636	SYSTEM	Windows Logon Application	■ Stop
winlogon	3420	SYSTEM	Windows Logon Application	■ Stop
dwm	6616	DWM-3	Desktop Window Manager	■ Stop
LogonUI	1032	SYSTEM	Windows Logon User Interface Host	■ Stop

Publishing Servers

Publishing server provide hosting and streaming functionalities for virtual applications. With PackManager for App-V, users can add them, synchronize them, and remove them with one click.



192.168.120.109

Publishing servers

Name	URL
NewServer	http://raynet.de/ps

NewServer

Name	Value
Name	NewServer
URL	http://raynet.de/ps
Global refresh enabled	✗ No (False)
Global refresh interval	0
Global refresh interval unit	Day
Global refresh on logon	✗ No (False)
User refresh enabled	✗ No (False)
User refresh interval	0
User refresh interval unit	Day
User refresh on logon	✗ No (False)

Event Log

In the **Event Log** tab, events from the event logs and the event tracing log files on remote computers related with the Microsoft App-V Client are displayed. Logs are grouped and can be easily filtered by their severity.

192.168.120.109

Event log entries

Connection

Client

Packages

Connection groups

Processes

Publishing servers

Event log

⌂

⌕

⌕

All levels

Type to start searching...

Time created	Message
Name: Microsoft-AppV-Client/Admin	
3/10/2017 3:53:01 PM	Failed to remove package {0BA84D4D-DF1B-4A54-9F57-2C508E7B7015} version...
2/24/2017 2:17:54 PM	The package {00000000-0000-0000-0000-000000000000} version {00000000-000...
2/24/2017 9:15:40 AM	The package {00000000-0000-0000-0000-000000000000} version {00000000-000...
2/23/2017 2:46:39 PM	Failed to remove package {83FC0F87-C137-4F6B-9595-C302286B05D2} version {...
2/22/2017 10:33:50 AM	Failed to remove package {83FC0F87-C137-4F6B-9595-C302286B05D2} version {...
2/22/2017 10:24:31 AM	The package {83FC0F87-C137-4F6B-9595-C302286B05D2} version {2A64BF5C-1E...
2/22/2017 9:07:16 AM	Failed to remove package {1B80E94E-8391-4E48-B6F4-E60CD2DC8E9E} version {...
2/21/2017 4:58:32 PM	The package {83FC0F87-C137-4F6B-9595-C302286B05D2} version {2A64BF5C-1E...
2/21/2017 4:58:31 PM	Failed to remove package {1B80E94E-8391-4E48-B6F4-E60CD2DC8E9E} version {...
2/21/2017 4:46:16 PM	The package {00000000-0000-0000-0000-000000000000} version {00000000-000...
2/21/2017 4:44:28 PM	The package {00000000-0000-0000-0000-000000000000} version {00000000-000...
2/21/2017 4:29:07 PM	The package {00000000-0000-0000-0000-000000000000} version {00000000-000...
2/16/2017 9:12:44 AM	The package {00000000-0000-0000-0000-000000000000} version {00000000-000...
2/7/2017 4:44:59 PM	The AppVStreamingUX application experienced an AppV error while attempting...
2/7/2017 4:44:58 PM	The package {00000000-0000-0000-0000-000000000000} version {00000000-000...
Name: Microsoft-AppV-Client/Operational	
7/3/2017 10:21:27 AM	App-V client has detected that the system has entered idle state. Background str...
7/3/2017 10:20:29 AM	IAppVClient::RegisterForEvents COM method exited. The operation completed su...
7/3/2017 10:20:29 AM	IAppVClient::RegisterForEvents COM method entered.
7/3/2017 10:20:29 AM	IAppVClient::GetPackageGroupPriority COM method exited. The operation compl...
7/3/2017 10:20:29 AM	IAppVClient::GetPackageGroupPriority COM method entered.

The Bottom Bar

The following options located in the bottom bar are always available to users while working with the **Remote Console**:



Shows or hides the logging panel.



Opens Computer Management in the context of the remote machine.



Opens the services in the context of the remote machine.



Opens the Event Viewer in the context of the remote machine.

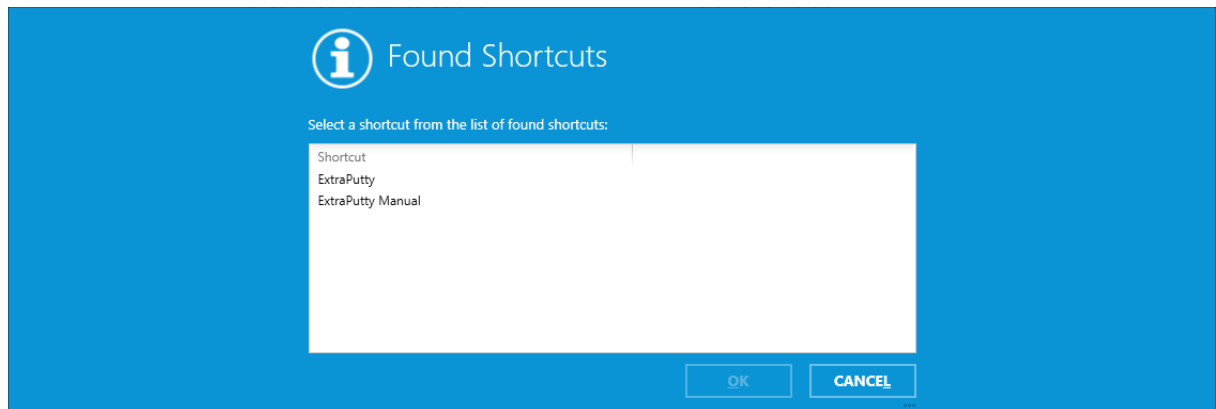


Opens a Remote Desktop connection to the remote machine.

Launch an App-V Package

Launching an App-V package requires the Microsoft Application Virtualization Client to be installed on the machine. When using this tool, it is possible to test an App-V 5.0 package locally before moving it to the deployment server.

To test an App-V package, click on the **launch App-V package** tile on the **Dashboard** and select the App-V package file (`.appv` or `.osd`). If more than one shortcut is found within the App-V package, PackManager for App-V will ask the user to select one of the shortcuts from a list.



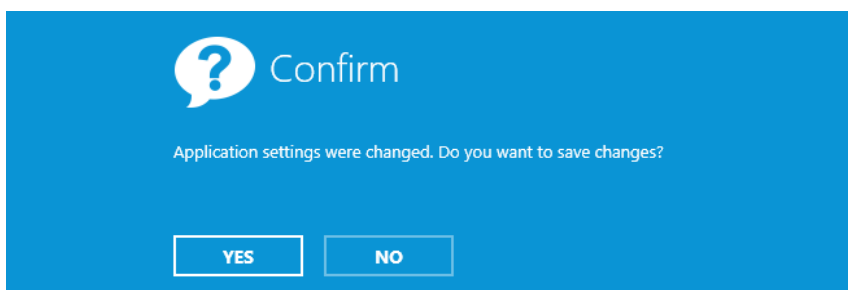
Settings

The **Settings** area of PackManager for App-V can be accessed either by clicking on the **settings** tile on the **Dashboard** or from the **SETTINGS** tab in the main toolbar.

It is strongly recommended to check the settings at least once before starting the productive work with this module. This is important, because the configuration options offered in the **Settings** area determine some properties of the user interface that may help to orientate quickly.

Saving and Discarding Changes to Settings

To apply changes that have been made in the **Settings** view, click on the Save changes button that is located in the bottom swipe-bar of this view. If a user tries to move to another view with unsaved changes in the current view, then a confirmation dialog will be opened.



Selecting **YES** in this dialog will save the changes and selecting **NO** will discard the changes.

Common

The **Common** tab currently contains only one setting that can be used to either enable or disable the animations in the user interface.


Animations

Enable user interface animations



Disabling the animations will switch-off the rich user interface transitions, but may help getting a better performance on slower machines or on clients connecting via remote desktop services.

Files

In the **Files** tab, users can enable or disable the launch of files generated after being exported when in the grid view using the export button () which is located in the grid header.

Export

Launch on export



Enabling export option will switch-on opening documents after export.

Stored connections

Remember connections when accessing remote servers





Storing connection details can be handy if you repeatedly connect to the same machines. Do not use this feature on public locations, because it may store encrypted user name and password.

[Reset stored connections](#)

Event Log

In the **Event Log** tab the number of logs that will be displayed in the **Event log** tab of the **Remote Console** can be specified.

Number of Event Logs

Max number of event logs:  

The number specifies, how many event logs will be downloaded from the remote machine.

Need help?

Request PackManager for App-V support

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

Join the PackManager for App-V community

The PackManager for App-V community resides within our Knowledge Base: <http://knowledgebase.raypack.net>. Once you signed up for access to the Raynet support panel, you automatically have access to the Knowledge Base, too.

You will surely come to a point where you would love to suggest a new feature for the future development of PackManager for App-V. Maybe you need to find some tips & tricks to hit your target right. The community is your place for discussing such topics, for sharing and expanding your own experience.

Step in contact with Raynet's professional packaging teams and learn how to polish your packaging activities to a level of highest quality standards. Since Raynet has years and years of experience in the packaging business, we know what to do, and how to do it. Don't row your boat alone when you have the chance to join our community for free.

Contact your Raynet sales representative

Our sales team is the right contact for any license or edition question you might encounter. You would like to benefit from a professional PackManager for App-V training? Ask for dates and locations to find the fitting training occasion. You are highly welcome to step in contact via sales@raynet.de.



Raynet GmbH

Technologiepark 20
33100 Paderborn, Germany

T +49 5251 54009-0

F +49 5251 54009-29

info@raynet.de

support@raynet.de

www.raynet.de