RELEASE NOTES

PACE Suite 4.5



Table of Contents

1	P	ACE Si	uite Overview	. 3
	1.1	Key A	dvantages	3
	1.2	PACE	Components	3
	1.3	Syster	n Requirements	4
	1.4	Hardv	vare Requirements	4
2	Re	elease	Notes	. 5
	2.1	Abou	t This Release	5
	2.2	Impor	tant Highlights	6
	2.	2.1	"Add Driver" Wizard	6
	2.	2.2	New Drivers Tab	7
	2.	2.3	"Add Custom Action" Wizard	7
	2.	2.4	Completely Redesigned Custom Actions Tab	8
	2.3	Other	Improvements	.10
	2.	3.1	Reviewing Wise Package Studio project files	.10
	2.	3.2	MSI Generator	.10
	2.	3.3	MSI Editor	.10
3	Re	elease	History	. 11





1 PACE Suite Overview

PACE Suite is an advanced and fast software packaging tool with an intuitive user interface and set of features providing (re)packaging in Windows Installer, APPX and various virtualized formats.

1.1 Key Advantages

- Out-of-the-box application packaging solution
- Intelligible wizards for running complex user scenarios
- High performance when generating large packages
- Per-user license valid for any number of physical and virtual machines

1.2 PACE Components

PACE Suite consists of the following components:

MSI GENERATOR	 Repackage any existing installation into Windows Installer (MSI), UWP app package (APPX) or a virtualization format (Microsoft App-V 5.x, and VMware ThinApp). Auto-detection of embedded installers. Create a response transform Tune any existing Windows Installer package by applying your settings and saving them as a Windows Installer transform (MST). Include the excluded files/registry back to a package 					
MSI EDITOR	 Manage the contents of an MSI in a tree view Import the necessary resources Edit and manage Custom Actions and Device Drivers Integrate scripts into your package Use a smart and advanced MSI database editor, with formatted string autocompleting, Excel-like formula bar, row reference tracking, and more. Create patches (MSP) Manage permission settings for file system and registry Handle upgrades easily – just let MSI Editor know which MSI you want to be upgraded at runtime. Publish your applications to Microsoft SCCM. See the estimated complexity of an app right away. Generate package documentation containing the details about your package and configuration. Undo-redo any manipulation and see the changes highlighted in the MSI tables 					
DOCU GENERATOR	• Automatically record your on-screen actions into a nice-looking document with screenshots and annotations					





1.3 System Requirements

Ensure that a target system contains necessary software prerequisites:

	Windows 10/8.1/8/7 SP1, Windows Server 2012/2008 R2 SP1
OS	NOTE Building Universal Windows Platform app packages (APPX) is available under Windows 10 or Windows Server 2016 or newer.
	Microsoft .NET Framework 4.6.1 (<u>https://www.microsoft.com/en-</u> <u>us/download/details.aspx?id=49981</u>) or higher.
Middleware	NOTE For building ThinApp packages, ensure that your system contains VMware ThinApp (5.0.0/5.0.1/5.1.0/5.1.1/5.2.0) installed.
	NOTE For publishing MSI packages to Microsoft SCCM 2007 (SP1/SP2/R1/R2) or SCCM 2012 (SP1/SP2/R2/R2 SP1) server, ensure that your system contains Microsoft Management Framework 3.0 and Windows Remote Management (WinRM) service enabled.
Privileges	Administrative privileges on the system.

1.4 Hardware Requirements

Ensure that a target system fulfils the minimum hardware conditions:

Processor	32-bit (x86) or 64-bit (x64) processor at 2 GHz or greater NOTE To repackage 64-bit applications or create 64-bit App-V packages, use
RAM	PACE Suite on a 64-bit Windows operating system.
NAIVI	2 GD
Hard drive free space	1 GB NOTE Additional storage is required for your projects and packages and depends on their size and quantity.
Display	1280 x 768 resolution or higher.





2 Release Notes

2.1 About This Release

In our new **PACE Suite 4.5**, we have focused on one of essential parts of software packaging managing Custom Actions and Device Drivers. Our principal goal in this release was to simplify working with drivers and custom actions and provide enough guidance (especially through smart Wizards) so that even after complex customizations, our users will end up with packages that work.

First, we have created a separate Drivers tab, which lets you review, edit, and remove driver files, as well as apply various customizations like setting the installation options. The new "Add Driver" Wizard guides you through every step of including drivers into your packages and saves you time with useful tricks like automatically detecting and displaying all files that are related to your driver.

Next, we have completely redesigned the Custom Action tab, which now displays custom action details, allows moving custom actions to required sequence positions instantly, as well as highlights your changes and shows errors and warnings.

To simplify adding and editing custom actions, we have developed the "Add Custom Action" Wizard. The most exciting feature of our Wizard is that it takes into consideration your every input on every step and later disables options that are incompatible with your previous choices. Thus, "Add Custom Action" Wizard helps you ensure that your package will work properly in the end.

Finally, as usual, we have improved the stability of how several features work in especially tricky packaging scenarios.





2.2 Important Highlights

2.2.1 "Add Driver" Wizard

New "Add Driver" Wizard enables our users to add device drivers to their packages. You can choose driver installation files, and the Wizard automatically detects files that are related to your driver, and you can deselect ones that are unnecessary or missing from your file system.

Add driver		– 🗆 X
S	ources Sources Installation settings options	
Driver sources		
Driver installation file (INF) C:\Drivers\Bluetooth Driver INF\bth.inf		Browse
Driver files	Add driver	- O X
Select all/none		
BTHUSB.SYS	· · · · · · · · · · · · · · · · · · ·	
✓ bthport.sys	Sources	Sources Installation
✓ BthMini.SYS ✓ bthenum.sys		settings options
	Sources settings Destination folder for driver files ProgramFilesFolder\Evernote (ID: Evernote) Compression type	Browse
	New CAB file	Add driver — — X
	Target feature	
	<pre></pre>	· · · · · · · · · · · · · · · · · · ·
Refresh		Sources Sources Installation
NOTE The only ticked files will be incorporate		settings options
	Prefix for components names	
	Driver_	Driver installation options
	NOTE Prefix in components names is used to make it Microsoft packaging best practices.	Overwrite the existing driver Force the installation of a new driver, even if the driver that is currently installed on a device is a better match than the new one.
		Prompt the user to connect the device to the computer Display this prompt only if a device that matches the driver is not connected to the computer.
		☑ Add a separate entry to Programs and Features in Control Panel
		Install unsigned driver and driver that have missing files For more information about this type of installation, see Installing Unsigned Driver Packages in Legacy Mode online.
		Remove driver files from the system driver store on uninstallation This option should be used with caution and should be used only if the caller can verify that a binary file in the system is not required by any other driver package or application. Starting with Windows 7, this flag setting is ignored by the operating system.
		Installation conditions
		Target architecture
		Install drivers only on 64-bit platforms
		NOTE Driver Install Frameworks (DIFx) tools do not support installation of drivers on both 64-bit and 32-bit platforms using a single package. Use separate packages for each of the platforms.
		Back Finish Cancel

You can choose a folder in your MSI, to which driver files will be imported. For driver files, you can specify compression type and a feature, to which driver files will be assigned. Wizard also allows specifying prefixes in components' names so it will be easier to find driver components.

In the Wizard, you can set driver installation options, conditions, and choose target architecture (32/64bit). Drivers are installed on the system with the help of Driver Install Frameworks (DIFx) tools, a standard solution recommended by Microsoft.



Release Notes PACE Suite 4.5



2.2.2 New Drivers Tab

We have added a new separate tab for Devices Drivers, where you can review, edit, and remove drivers. The tab shows details such as driver installation files (INF), files that are related to a particular driver, conditions, and installation options. You can set various installation options like overwriting an existing driver, adding a separate entry to Programs and Features in the Control Panel and others.

MSI Editor -	Evernote.msi									– 🗆 X
≡ menu	Application	Files	Registry	Shortcuts	Features/Components	Custom Actions	Drivers	Properties	Tables	
Drivers					1 item 💙					Hide details
Drivers (in o	rder of installation) h.inf					Summary Driver Driver_bth.inf Options 6 SOURCES Driver installation file (IP CommonFilesFolderA CommonFilesFolderA CommonFilesFolderA CommonFilesFolderA CommonFilesFolderA CommonFilesFolderA CommonFilesFolderA CommonFilesFolderA	bth\bth.inf (bth\bthport.s bth\BthMini.9 bth\BthMini.9 bth\BTHUSB. Dtions sting driver o connect the stry to Progra river and driv	sys (ID: bthport. SYS (ID: BthMini s.sys (ID: bthenu SYS (ID: BTHUS e device to the c ams and Feature er that have mis	.SYS) im.sys) B.SYS) omputer s in Control Panel sing files	
Add	Edit		Remove	<u>^</u>		None Sequencing				

All the changes you make are highlighted, and validation errors (if any) are displayed. Note that the tab displays drivers that are installed using DIFx – a standard solution recommended by Microsoft.

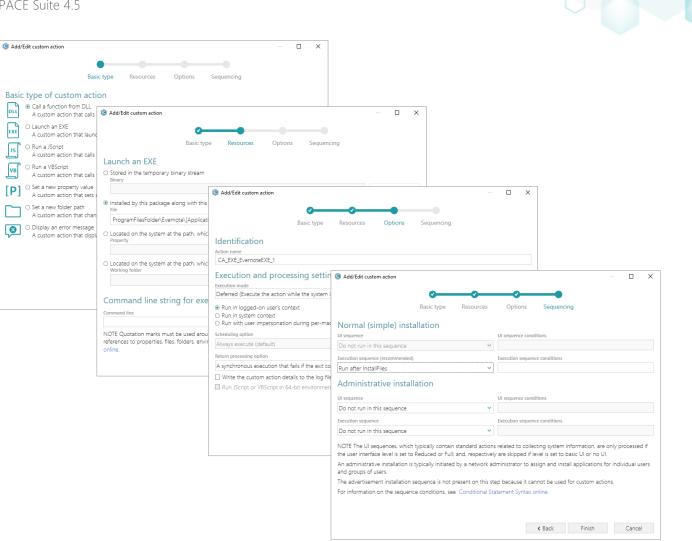
2.2.3 "Add Custom Action" Wizard

Our new Wizard guides you through every step of creating a custom action. Depending on the basic type of custom action that you choose at the first step, the Wizard changes the contents of the next steps respectively.



Release Notes

PACE Suite 4.5



When you choose resources for your custom actions, the Wizard displays only the resources that are related to the basic type you have previously picked. For instance, if the basic type is "Launch an EXE", the tree-like interface displays only EXE files and filters out everything unrelated.

Next, you set custom action options. All options, which are not compatible with your previous choices, are disabled.

Finally, you can select a sequence position where your custom action will be run. Again, all positions, incompatible with your previous choices, are disabled.

In general, our Wizard takes into account all your inputs and helps you ensure that your custom actions will work.

2.2.4 Completely Redesigned Custom Actions Tab

We have completely redesigned the Custom Actions tab, which now displays custom and standard actions from all sequences. In this new tab, you can also find not-sequenced custom actions, which are present only in the CustomAction table and do not have references in other sequence tables.

You can review custom action details such as their basic type, scheduling options, execution mode, sequencing, and others, as well as find information about their resources.



Release Notes

PACE Suite 4.5

MENU	Application	Files	Registry	Shortcuts	Features/Components	Custom Actions	Drivers	Properties	Tables			
Custom	action flow			38	items T Collapse all					F	lide detail	s
Actions (in c	order of execution)					-						
	rmal (simple) installa	tion				Summary						
	UI sequence					Action name SetWixAppFold						
	SetINKNOTESHO	RTCUT					ler					
	> WixSetCustomDe	faultPerUser	Folder			Type		Basic type				
	WixSetCustomDe	faultPerMaci	nineFolder			51		Set a new prop	perty value			
	> WixSetCustomPe	UserFolder				Resources						
	> WixSetCustomPe	MachineFol	der			Source	,					
	> SetWixAppFolder						(Value: WixPe	erMachineFolder)				
• 📂	Execution sequence						(,				
🖃 🗁 Adr	ninistrative installat	ion				Target WixPerUserFold						
	UI sequence					wixPerUserFold	der					
	Execution sequence					Execution	and pro	cessing sett	inas			
	vertisement installat					Scheduling optio		<u>-</u>				
	Execution sequence					Always execute						
	sequenced					Execution mode						
4.	WixUIPrintEula						ecute the acti	on immediately b	before the system is i	modified)		
< >	WixUIValidatePath					Run in logged-						
						Return processing	a option					
								at fails if the exit o	code is not 0			
						Sequencir	ng					
						Sequence numbe						
						1001						
						Conditions						
Add 4	 Edit 		Remove	\sim		NOT (ALLUSER	(2)					

In the tab, standard actions and custom ones have different icons so that you can tell them apart. Any changes you make are highlighted, and errors and warnings (if any) are displayed. If you need to edit your custom actions, the Wizard is again at your service with its guidance mechanism, described above.

You can add standard actions to each of the sequences. You can also move custom actions up or down in a sequence or use "Move to position" feature to put your custom action into the required sequence position (and this feature shows only positions that are available for your particular custom action).





2.3 Other Improvements

2.3.1 Reviewing Wise Package Studio project files

Some of our users still have their old Wise Package Studio project files with valuable information. Though you could have opened those files in PACE Suite previously, now you can open .WSI files with MSI Editor directly from the context menu and review their contents in case you want to use this information for creating new MSI packages in PACE Suite.

2.3.2 MSI Generator

We improved the approach MSI Generator uses to assign 32-bit and 64-bit registry to components in certain complex cases.

2.3.3 MSI Editor

We enhanced the overall stability of MSI Editor in the following cases:

- Using Active Scripting in particularly large packages.
- Rebuilding CAB files.
- Importing registry.





3 Release History

- PACE Suite 4.4
- PACE Suite 4.3
- PACE Suite 4.2
- PACE Suite 4.1
- PACE Suite 4.0
- PACE Suite 3.5.5
- PACE Suite 3.5
- <u>PACE Suite 3.4.2</u>
- PACE Suite 3.4.1
- PACE Suite 3.4
- <u>PACE Suite 3.3 3.3.1</u>

