

RELEASE NOTES

PACE Suite 5.5









Table of Contents

1	PACE Suite Overview	3
1.1	Software Prerequisites	4
1.2	Hardware Prerequisites	4
2	Release Notes	5
2.1	About This Release	5
2.2	MSIX runtime fixes (PSF).....	6
2.3	System searches	7
2.4	INI files editor	8
2.5	MSI signing	9
2.6	Feature resources.....	10
2.7	Export & replace file.....	11
2.8	Permission settings	12
2.9	Group operations.....	13
3	Release History	14

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, UWP (MSIX/APPX) and various virtualized formats.

Components:

App	Purpose
 Launcher	<ul style="list-style-type: none">• Combine all PACE Suite tools (listed below)• Collect all major functions in a single place for quick access• Configure virtual machine configuration for remote capturing and testing, etc.
 Setup Capture	<ul style="list-style-type: none">• Run repackaging on remote virtual machine• Run repackaging on local host• Detect embedded (hidden) MSI installers• Take system snapshot on local host• Compare two snapshots on local host
 MSI Generator	<ul style="list-style-type: none">• Edit installation project• Build MSI, MSIX, APPX, APPV, THINAPP package
 MSI Editor	<ul style="list-style-type: none">• Edit MSI/MST• Create MSP, MSM• Integrate MSI upgrade• Estimate package complexity• Run ICE validation• Publish to Microsoft SCCM 2007, 2012, 2016.• Generate package report
 Quality Approver	<ul style="list-style-type: none">• Check MSI readiness• Check MSIX/APPX readiness
 Docu Generator	<ul style="list-style-type: none">• Record on-screen actions into a document

1.1 Software Prerequisites

Ensure that a target system contains necessary software prerequisites:

OS	Windows or Windows Server OS that supports .NET 4.7.2 (https://docs.microsoft.com/en-us/dotnet/framework/get-started/system-requirements) or higher.
	NOTE Building Universal Windows Platform app packages (MSIX/APPX) is available under Windows 10 or Windows Server 2016 and newer. Automated package testing with Quality Approver requires a virtual machine with Windows 10 version 1803 or newer.
Middleware	Microsoft .NET Framework 4.7.2 (https://dotnet.microsoft.com/download/dotnet-framework-runtime) or higher.
	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 and activated with the valid license. 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.

1.2 Hardware Prerequisites

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 PACE Suite on a 64-bit Windows operating system.
RAM	2 GB
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 800 resolution or higher.

2 Release Notes

2.1 About This Release

The 5.5 release of PACE Suite includes the following new features:

- **MSIX runtime fixes (Package Support Framework)**

The MSIX runtime fixes are useful in most cases when your Win32 app fails to run from MSIX. *For details, see section 2.2*

- **System searches (via AppSearch)**

Search for existing files/folders, registry data, INI content or installed component on the target system during installation. The search results can be used as conditions to determine the outcome of the current installation. *For details, see section 2.3*

- **INI files editor**

Easily find all INI files of the package in one place and author their content in a brand new INI editor. *For details, see section 2.4*

- **MSI digital signing**

Digitally sign your MSI package to protect resources from tampering. *For details, see section 2.5*

- **Feature resources**

Discover what resources will be installed by all components of the every feature in a convenient list at the separate view. *For details, see section 2.6*

- **Export & replace file**

Need to modify/replace a file of the package that is stored as a binary? No problem with new **Export file** and **Replace file** functions. *For details, see section 2.7*

- **Permissions settings**

Define the permission settings to meet your corporate packaging standards. *For details, see section 2.8*

- **Group operations**

Edit packages faster than before with multi-select and group operations that allow to select and move/remove many resources at once. *For details, see section 2.9*

2.2 MSIX runtime fixes (PSF)

The **Package Support Framework (PSF)** is an open source kit that allows to apply runtime fixes to the repackaged Win32 app that fails to run in an MSIX container.

Here are some common examples where you can find the **Package Support Framework** useful:

- **Your app can't find some DLLs when launched.**

You may need to set your current working directory. You can learn about the required current working directory in the original shortcut before you converted to MSIX.

- **The app writes into the install folder.**

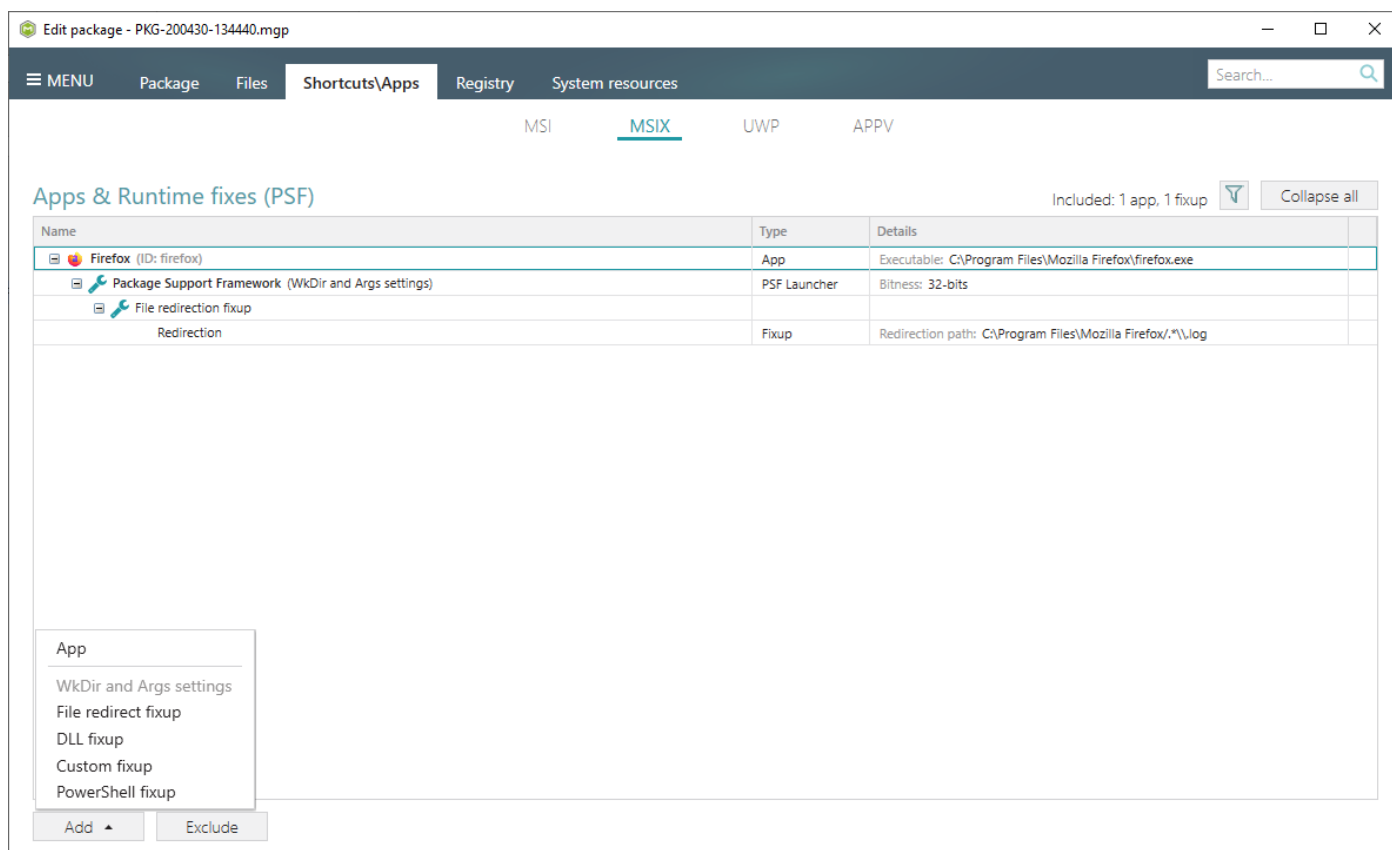
You will typically see it by "Access Denied" errors in Process Monitor.

- **Your app needs to pass parameters to the executable on launch.**

You can learn about the required parameters in the original shortcut before you converted to MSIX.

Using **PACE Suite** you can apply the pre-defined and custom MSIX runtime fixes to the repackaged app just in few clicks. Also, you can run PowerShell scripts before and after app to configure environment inside the MSIX container.

To apply MSIX runtime fixes, navigate to the **Shortcuts\Apps > MSIX** tab of **MSI Generator**.

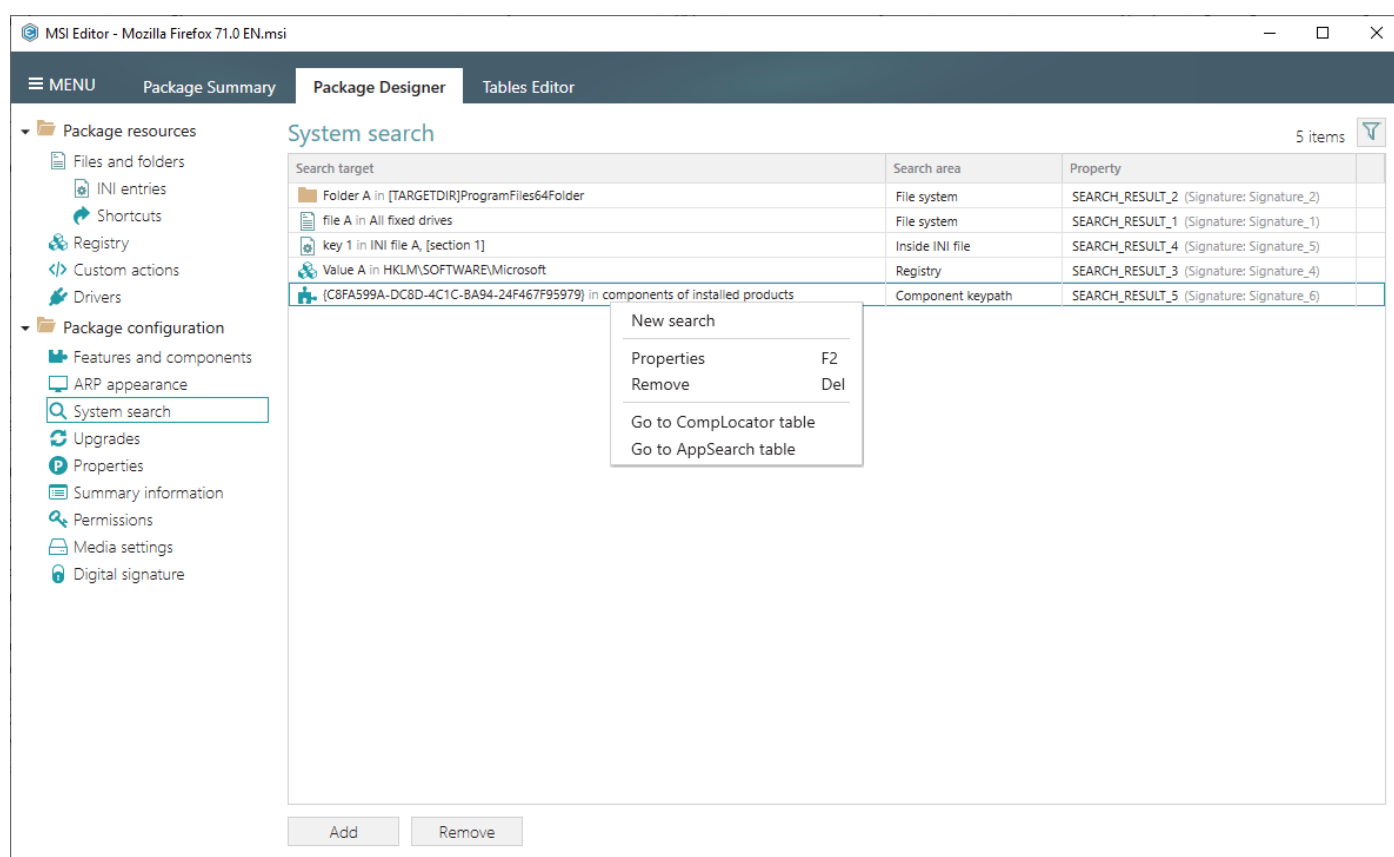


2.3 System searches

System searches (AppSearch) allows to search for existing files/folders, registry data, INI content or installed component on the target system during installation. The search result is saved to a public property that can be used in various condition statements to determine the outcome of the installation (e.g. install components, run custom actions, etc.).

PACE Suite presents the dedicated view with the guided wizard to manage system searches.

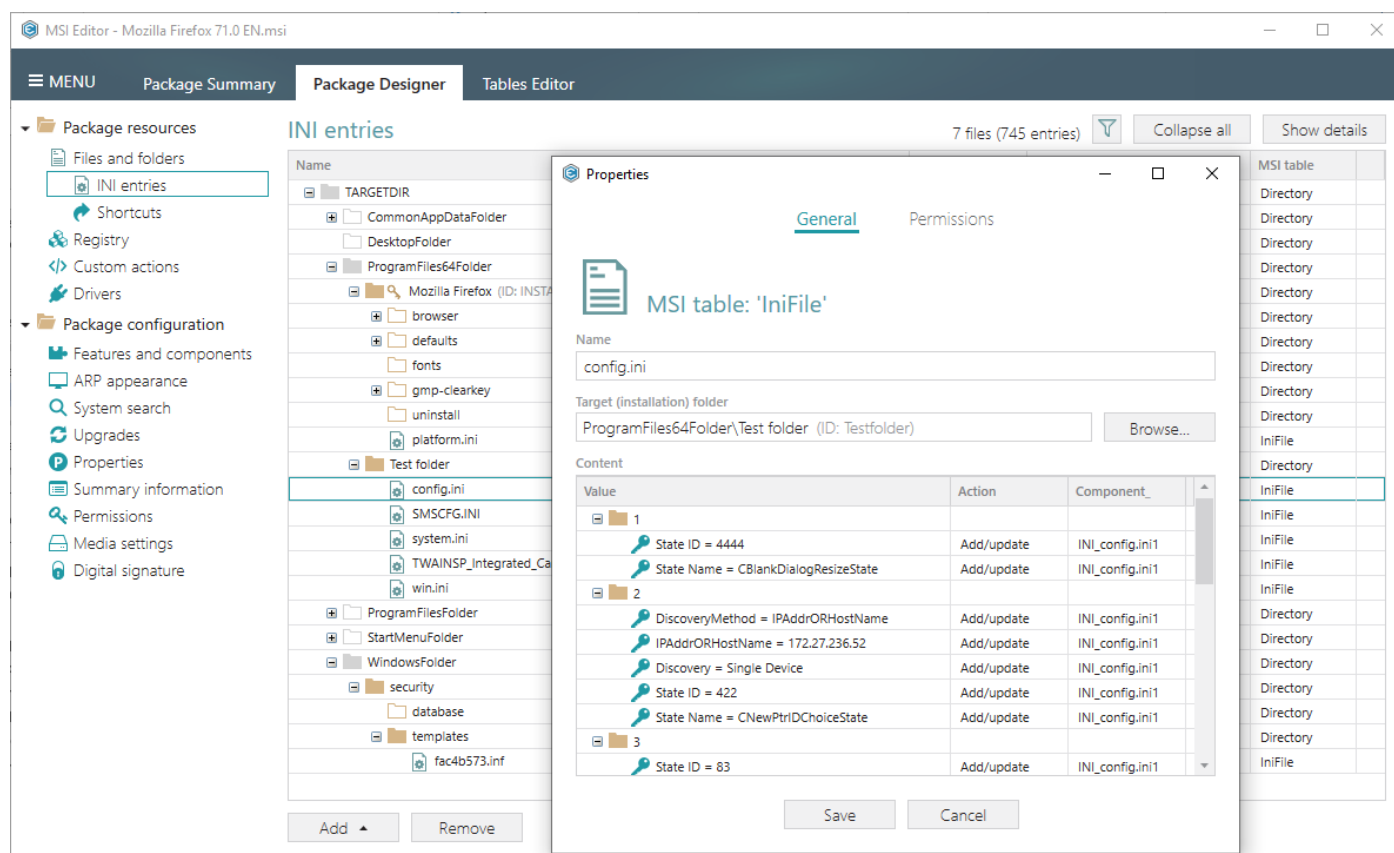
Find system searches at **Package Designer > System searches** tab of MSI Editor.



2.4 INI files editor

In addition to the existing **Files and folders** tab, we developed the **INI entries** sub-view. This new view is laser-focused to work only with INI files. It hides all other files, so you can rapidly find all INI files of your package in one place. The new INI editor displays and allows to easily add/edit INI key-value pairs that are grouped under the INI sections. The INI files import has several options to store the file content and displays the detected invalid INI files.

Find this new view at **Package Designer > INI entries** tab of MSI Editor.

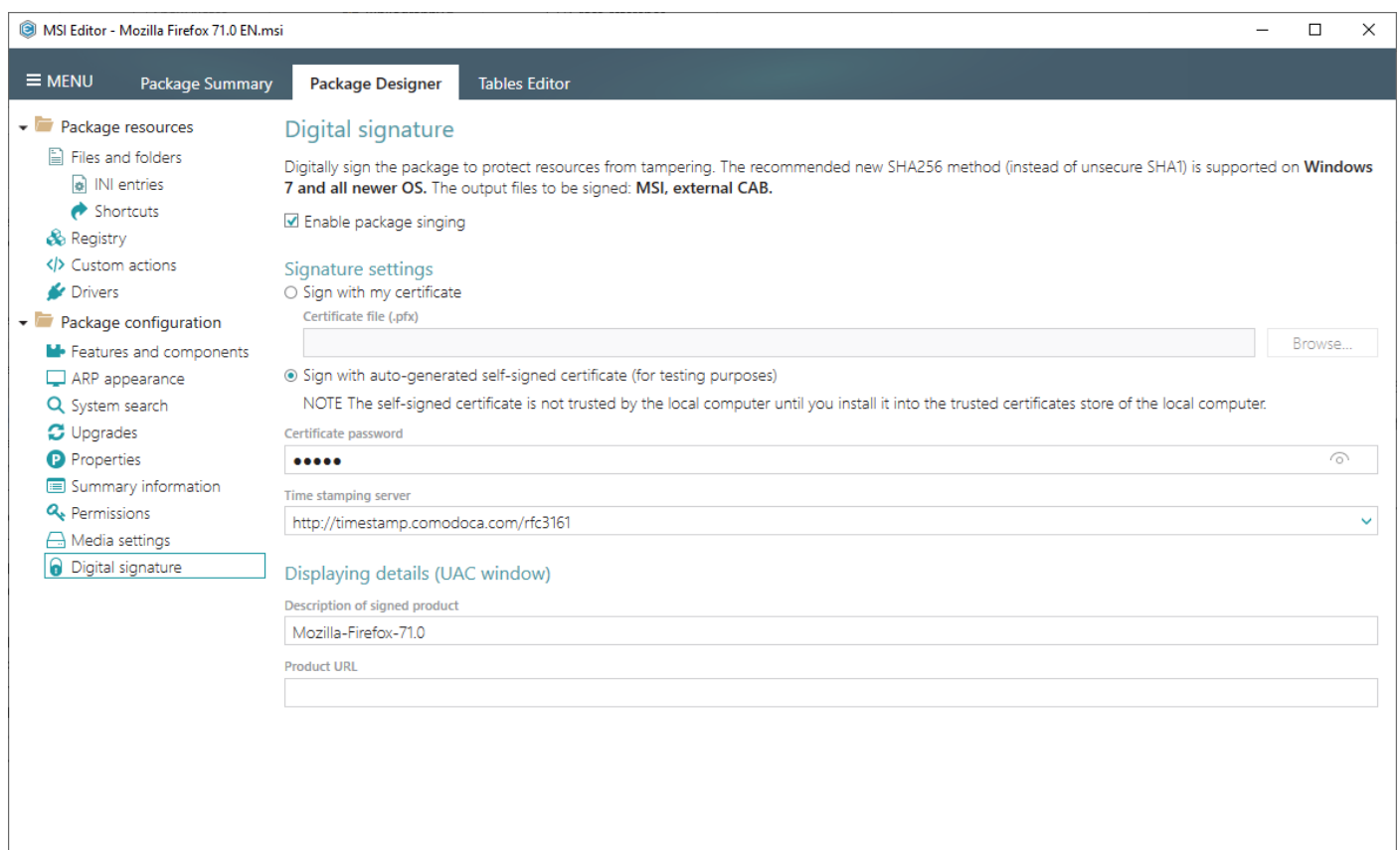


2.5 MSI signing

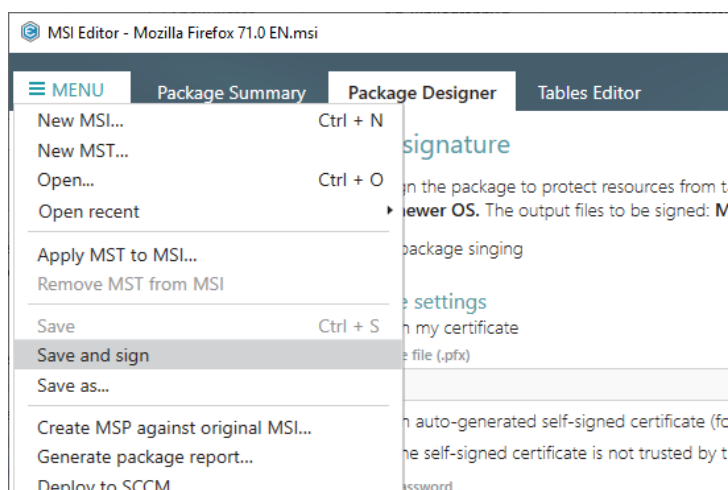
Digital signature allows to protect your package and its resources from tampering. It is highly recommended to digitally sign the package before publishing it on the web and distributing outside of your organization.

With PACE Suite you can generate a self-signed certificate in one click for testing purposes. Also, we have prepared the list of time stamping servers. The use of time stamping allows signatures to be verifiable even after the certificates used for signature have expired.

Find signing option at **Package Designer > Digital signature** tab of MSI Editor.



To sign the package, invoke either **MENU > Save and sign** or **MENU > Save as**.



2.6 Feature resources

Find out what files, registry and other resources will be installed by components of every feature. The resources are displayed in the convenient form at the separate new view.

Find feature resources either on **Details pane** or in the **Properties** window at **Package Designer > Features and components** tab of MSI Editor.

MSI Editor - Mozilla Firefox 71.0 EN.msi

Package Designer | Features and components | Collapse all

Package resources

- Files and folders
- INI entries
- Shortcuts
- Registry
- Custom actions
- Drivers
- Package configuration**
 - Features and components**
 - ARP appearance
 - System search
 - Upgrades
 - Properties
 - Summary information
 - Permissions
 - Media settings
 - Digital signature

Features and components

Name	Path
<no title> (ID: UserPart)	
FeatureResources	
<no title> (ID: Complete)	
crashreporter.exe1	
PACE_Complete (ID: PACE_Complete)	
FeatureResources	
config.ini	
INI_config.ini1	
PACE_Permissions	

Add Remove 3 unresolved issues

Feature resources

Resources that are installed by the feature components.

Files

Name	Path
xul.dll.sig	ProgramFiles64Folder\Mozilla Firefox\xul.dll.sig
api-ms-win-crt-convert-l1-1-0.dll	ProgramFiles64Folder\Mozilla Firefox\api-ms-win-crt-convert-l1-1-0.dll
api-ms-win-core-localization-l1-2-0.dll	ProgramFiles64Folder\Mozilla Firefox\api-ms-win-core-localization-l1-2-0.dll
ucrtbase.dll	ProgramFiles64Folder\Mozilla Firefox\ucrtbase.dll
plugin-container.exe	ProgramFiles64Folder\Mozilla Firefox\plugin-container.exe
xul.dll	ProgramFiles64Folder\Mozilla Firefox\xul.dll
api-ms-win-crt-time-l1-1-0.dll	ProgramFiles64Folder\Mozilla Firefox\api-ms-win-crt-time-l1-1-0.dll
Accessible.dll	ProgramFiles64Folder\Mozilla Firefox\Accessible.dll

Shortcuts

Name	Path	Target
Firefox.Ink	ProgramMenuFolder	ProgramMenuFolder\Firefox.Ink
Firefox.Ink	DesktopFolder	DesktopFolder\Firefox.Ink

Registry entries

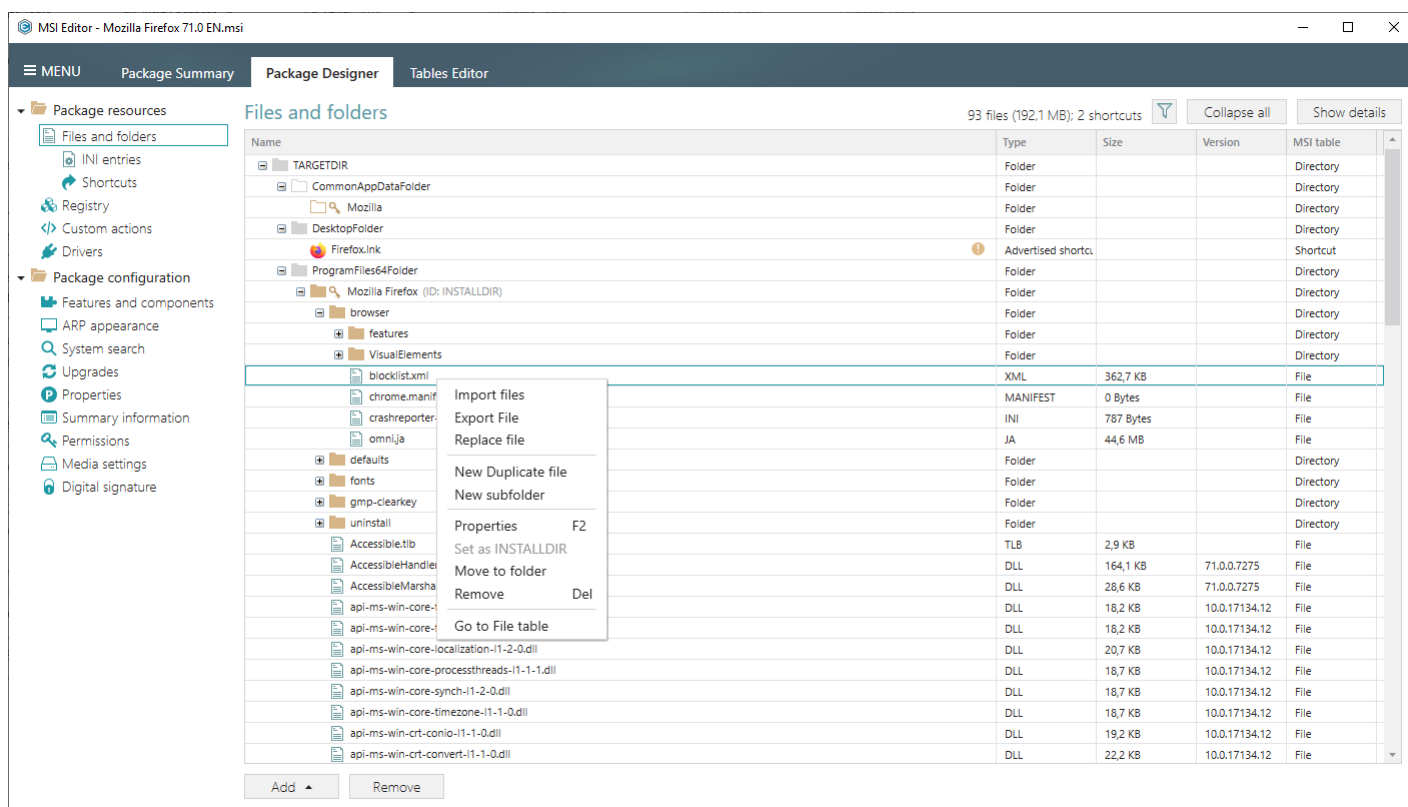
Path	Value name
HKCR\Interface\{1814CEEB-49E2-407F-AF99-FA755A7D2607}	
HKLM\SOFTWARE\Mozilla\MaintenanceService\9b87e891978e3145f0b19953eadc00\1	issuer
HKCR\Interface\{DCA8D857-1A63-4045-8F36-8809EB093D04}\SynchronousInterface	
HKLM\Software\{Manufacturer}\{ProductName}\CreateDirectory	Folder_CreateF

2.7 Export & replace file

Need to modify/replace a file of the package that is stored as binary? Not a problem with new **Export file** and **Replace file** functions in the context menu.

Export file extracts the specific file from the internal/external CAB and saves it where you need. This feature is useful when you want to change data inside an XML or other configuration file and then replace this file in the package.

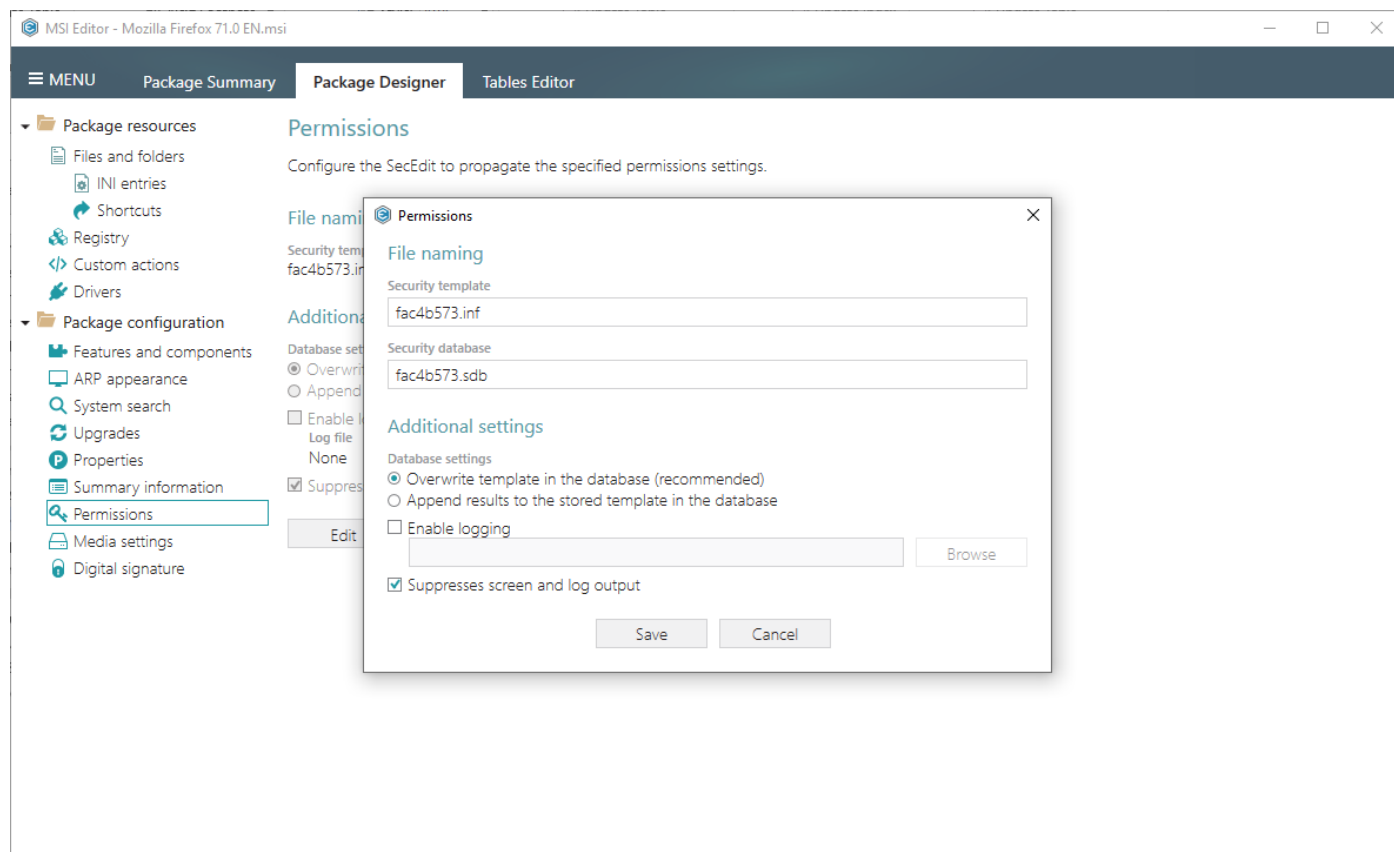
Replace file replaces the selected file in the package in few clicks. The replaced file can be saved to a new CAB (faster) or rebuild the existing CAB with the new file (longer). You can control this option for every replaced file.



2.8 Permission settings

If the default permission settings do not meet your corporate packaging standards, you can change them in the new view. Set names of the security template and database files, override database, logging and silent options.

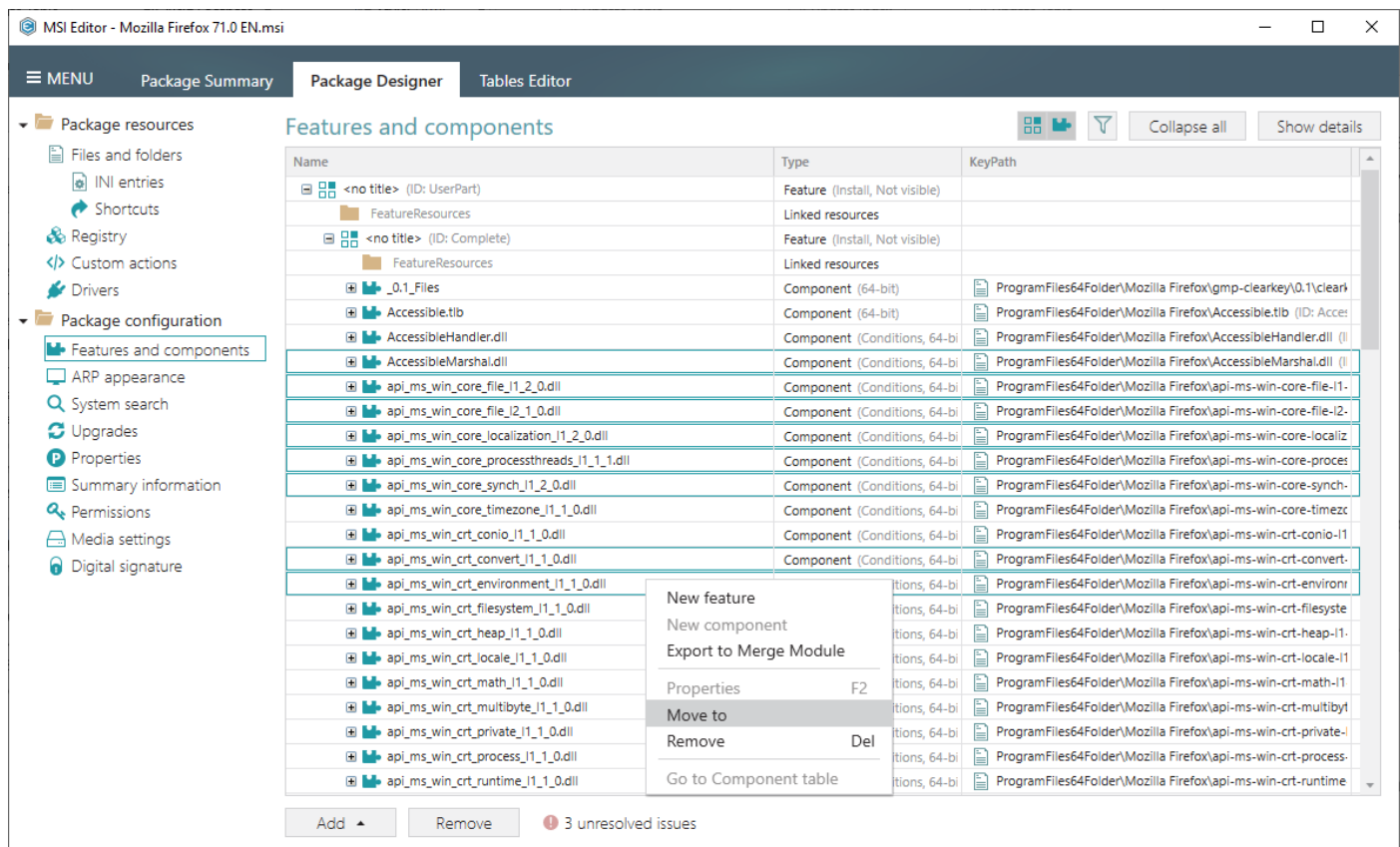
Find the permission settings at **Package Designer > Permissions** tab of the **MSI Editor**.



2.9 Group operations

With PACE Suite you can edit your packages faster than before. The thing is, we've added the support of group operations for managing resources at **Package Designer** of **MSI Editor**. Now you can select many files, located at different places and move them to one folder at once. Also, you can move/remove many components at once as well.

Muti-select and group operations work for all resources that are presented at **Package Designer**.



3 Release History

- [PACE Suite 5.4](#)
- [PACE Suite 5.3](#)
- [PACE Suite 5.2](#)
- [PACE Suite 5.1](#)
- [PACE Suite 5.0](#)
- [PACE Suite 4.7](#)
- [PACE Suite 4.6](#)
- [PACE Suite 4.5](#)
- [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](#)
- [PACE Suite 3.4.2](#)
- [PACE Suite 3.4.1](#)
- [PACE Suite 3.4](#)
- [PACE Suite 3.3 – 3.3.1](#)