

InstallShield 2023 Express Edition Release Notes

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Introduction

InstallShield is the industry standard for authoring high-quality Windows Installer-based installations.

InstallShield 2023 Express Edition also offers new features, enhancements, and resolved issues that make it easy to use the latest technologies.

New Features in R2

InstallShield 2023 R2 Express Edition includes the following new features:

- [Ability to Configure Custom Signing Solution for Digital Signing](#)
- [Ability to Store Token Password for EV Digital Signing](#)

Ability to Configure Custom Signing Solution for Digital Signing

InstallShield 2023 R2 Express Edition introduces new signing type settings that enable you to select and configure a custom signing solution to digitally sign build-generated files.

These settings are required only if the customer would like to use a custom signing solution instead of the InstallShield Express Edition standard signing solution. Selecting the **Custom** signing type enables additional fields where a custom signing utility path and arguments can be configured. To configure a custom signing solution, you can use the following new settings available in the **Signing** tab for a release in the **Releases** explorer on the **Media** view:

- **Signing Type**—This setting enables you to specify the method to digitally sign build-generated files. The available options for this setting are:
 - **Standard**—Select this option to use the default InstallShield Express Edition sign tool to digitally sign build-generated files.
 - **Custom**—Select this option to use a customized sign tool to digitally sign build-generated files. Selecting this option enables the **Path** and **Arguments** settings.
- **Path**—Specify the sign tool's location to digitally sign build-generated files by using that sign tool. To specify sign tool's location, click the ellipsis button (...) in this setting.
- **Arguments**—Specify the command-line argument for a sign tool's configuration. For example, the command-line argument below can be used if the Microsoft built-in signing tool is configured as a custom option to sign the binaries:

```
sign /fd SHA256 /f "<ProgramFilesFolder>\testCA.pfx" /t http://timestamp.digicert.com  
/p MyPassword [filename]
```



Note • A custom signing tool path uses <ProgramFilesFolder>\Windows Kits\10\bin\<WinSDKVer>\x86\signtool.exe.

The [filename] variable is a place holder for the full file path to be signed. It resolves to the full path of the binary file to be signed during build time. By default, a file path will be added at the end of an argument and passed to a custom sign tool. Instead of using a hard-coded path, you can use any path variables and environment variables that are defined in your project.



Note - By default, the **Signing Type** setting is set to **Standard**.

Ability to Store Token Password for EV Digital Signing

InstallShield 2023 R2 Express Edition now provides an option to encrypt and store an EV token password in a project file. Prior InstallShield Express Edition versions supported EV certificates via the **Use a certificate store** option. However, when using this option, the user would be asked for the token password each time the file is signed with an EV certificate.

There is also an option called Enable single logon that comes with an EV vendor which would restrict user interventions per session with only one token password request. Configuring the token password in the InstallShield Express Edition signing tab will continue to work until the password expires. The token password can be changed using the the InstallShield Express Edition IDE.

For more information, see the following sections in InstallShield Express Edition product documentation:

- [Signing Tab](#)
- [Digital Signature Tab](#)
- [Digitally Sign Setup Dialog Box](#)

New Features in R1

InstallShield 2023 R1 Express Edition includes the following new features:

- [New Setup Prerequisites Available](#)
- [Ability to Build Setup launcher with Security Features](#)
- [Ability to Handle Installers Above 2 Gigabytes](#)

New Setup Prerequisites Available

In the **Redistributables** explorer of the **Application Data** view, InstallShield 2023 R1 Express Edition introduces the following new setup prerequisites:

- Microsoft OLEDB Driver for SQL Server 19.3.0 (x64)
- Microsoft OLEDB Driver for SQL Server 19.3.0 (x86)
- Microsoft .NET 6.0 SDK 6.0.408 (x64)
- Microsoft .NET 6.0 SDK 6.0.408 (x86)
- Microsoft .NET 7.0 SDK 7.0.302 (x64)
- Microsoft .NET 7.0 SDK 7.0.302 (x86)



Note - This issue was tracked in [ISDEV-43005](#).

Ability to Build Setup launcher with Security Features

All InstallShield 2023 R1 Express Edition setup launchers are now built with the the latest security features like control-flow-guard, enforced-code-integrity, and aslr.



Note - This issue was tracked in ISDEV-42510.

Ability to Handle Installers Above 2 Gigabytes

InstallShield 2023 R1 Express Edition enables **LargeAddressAware** flag for all setup.exe setup launchers, so that setup.exe setup launchers can handle addresses larger than 2 gigabytes during runtime.



Note - This issue was tracked in ISDEV-43244.

Enhancements

The enhancements for InstallShield 2023 R2 Express Edition:

- [New Prerequisite for SQL Server 2022](#)
- [New Setting to Enable 64-Bit Signing Framework](#)
- [Setup.exe's New Parameter to Customize Temporary Extraction Directory](#)

New Prerequisite for SQL Server 2022



Project - This information applies to the following project types:

- Basic MSI
- InstallScript
- InstallScript MSI

InstallShield 2023 R2 Express Edition introduces a prerequisite named Microsoft SQL Server 2022 Express (x64) for SQL Server 2022. This prerequisite has been added in the **Redistributables** explorer of the **Application Data** view.



Note - This change was tracked in ISDEV-43523.

New Setting to Enable 64-Bit Signing Framework

InstallShield 2023 R2 Express Edition introduces a new setting named **Use 64-Bit Signing** on the **Signing** tab of the **Releases** explorer on the **Media** view, that enables you to use the 64-bit signing framework to digitally sign a package. Available options are:

- **Yes**—Enables the 64-bit signing framework to digitally sign.

- **No**—Enables the 32-bit signing framework to digitally sign.

By default, this setting is set to **No**.



Note ▪ This setting is required if the cloud-based signing solutions like the Amazon Cloud HSM are used.



Note ▪ This change was tracked in ISDEV-43436.

Setup.exe's New Parameter to Customize Temporary Extraction Directory

For the Setup.exe launcher, InstallShield 2023 R2 Express Edition introduces a new command-line parameter named `/tempextractpath`.

By default, the InstallShield Express Edition setup extracts temporary files to the `%TEMP%` directory, loads these files to complete the installation, and then removes them once installation is completed. These temporary files include support files, billboards, and other InstallShield engine files used for executing custom actions. There are a few environment restriction scenarios, such as an antivirus which blocks an application from running executables from this `%TEMP%` extracted directory.

Using this parameter is recommended to customize the extraction directory in these scenarios. Security aspects have been considered by InstallShield while extracting and loading these files and binaries from a customized location.



Note ▪ This change was tracked in issue ISDEV-42332.

Important Information

Note the following important information regarding the InstallShield 2023 Express Edition release:

- [Concurrent License Users Must Update the FlexNet Licensing Server Software](#)
- [Evaluating InstallShield Express Edition](#)
- [Obtaining the Installations for InstallShield, InstallShield Add-Ons, and the Redistributable Files](#)
- [Installing More than One Edition of InstallShield](#)
- [Installing More than One Version of InstallShield](#)
- [Removal of Update Notifications View](#)
- [Remove .NET/J# Tab and Include MSI Engine Options from the Releases View](#)

Concurrent License Users Must Update the FlexNet Licensing Server Software

If you are using a concurrent license of InstallShield Express Edition, you must update the version of the FlexNet Licensing Server software on the licensing server before you can start using InstallShield 2023 Express Edition.

The version of the FlexNet Licensing Server software that shipped with previous versions of InstallShield Express Edition cannot manage licenses of InstallShield 2023 Express Edition. InstallShield 2023 Express Edition will not check out licenses from older versions of the license server even when those licenses are available.



Note - The FlexNet Licensing Server software v11.19.0 can manage licenses of InstallShield 2022 Express Edition and InstallShield 2023 Express Edition. Upgrading from InstallShield 2022 Express Edition to InstallShield 2023 Express Edition lets you to use the existing FlexNet Licensing Server software v11.19.0. Upgrading from the InstallShield 2021 Express Edition and older versions require the upgrading of FlexNet Licensing Server software to v11.19.0.

You can download the installer for the new FlexNet Licensing Server software from the [Reverera Product and License Center](#).

For instructions on installing the FlexNet Licensing Server software, see [Setting Up Your License Server for Concurrent Licenses](#).

Evaluating InstallShield Express Edition

If you have not purchased a license for InstallShield Express Edition, you can install it and use it for a limited number of days without activating it or connecting it to a license server. When you use InstallShield Express Edition before activating it or connecting it to a license server, it operates in evaluation mode, and some of its functionality is not available. For details, see [Functionality Notes for the Evaluation Version of InstallShield](#). Note that the evaluation limitations are removed when you activate InstallShield Express Edition or when you connect it to a license server and check out a license for it.

Obtaining the Installations for InstallShield, InstallShield Add-Ons, and the Redistributable Files

The following installations are available for download from the Reverera Software Product and License Center as documented in the [InstallShield download and licensing instructions](#):

- InstallShield
- Redistributable files (for example, InstallShield prerequisites and InstallScript objects)
- Add-ons (if you are entitled to them) such as the Standalone Build and the InstallShield MSI Tools
- FlexNet Licensing Server software (if you purchased concurrent licenses and you need to set up your organization's license server)

- Skin Customization Kit
- InstallScript Object templates
- InstallShield service packs (if available)

Installing More than One Edition of InstallShield

Only one edition of InstallShield 2023—InstallShield Premier, InstallShield, or Express—can be installed on a system at a time. In addition, the InstallShield 2023 DIM Editor cannot be installed on the same machine with any edition of InstallShield 2023.

Microsoft Visual Studio can be integrated with only one version of InstallShield at a time. The last version of InstallShield that is installed or repaired on a system is the one that is used for Visual Studio integration.

Installing More than One Version of InstallShield

InstallShield 2023 Express Edition can coexist on the same machine with other versions of InstallShield.

The InstallShield 2023 Express Edition Standalone Build can coexist on the same machine with other versions of the Standalone Build. In most cases, the Standalone Build is not installed on the same machine where InstallShield is installed. If you do install both on the same machine and you want to use the automation interface, review the *Installing the Standalone Build and InstallShield on the Same Machine* topic in the InstallShield Help Library to learn about special registration and uninstallation considerations.

Removal of Update Notifications View

Starting InstallShield 2021 R1, Update Notifications, where you can integrate FlexNet Connect and InstallShield to check for updates, is no longer supported. The merge modules used for this integration are no longer bundled with InstallShield. If you are an existing customer using this integration, you can continue using the integration by copying the merge modules from a previous InstallShield installation. For more details, [click here](#).

Remove .NET/J# Tab and Include MSI Engine Options from the Releases View

The .NET/J# tab and Include MSI Engine options in the Releases explorer on the Media view of the Installation Designer were originally provided to support .NET 1.1/2.0, Windows Installer 3.1 and J# redistributables. These technologies have become obsolete and no longer supported by the Microsoft. Therefore, in InstallShield 2023 Express all editions, the .NET/J# tab and Include MSI Engine options in the Releases explorer on the Media view of the Installation Designer have been removed (as well as the associated .NET 1.1/2.0 Core Language and .NET 1.1/2.0 Language Packs dialog boxes). InstallShield 2023 build task will simply ignore these options if detected in the older version of project files.

Project Upgrade Alerts

The following information describes possible upgrade issues that may occur when you upgrade projects that were created with InstallShield 2016 and earlier to InstallShield 2023. It also alerts you to possible changes in behavior that you may notice between new InstallShield 2023 projects and projects that are upgraded from InstallShield 2016 or earlier to InstallShield 2023.

- [General Information about Upgrading Projects that Were Created in Earlier Versions of InstallShield](#)
- [Changes to the List of Supported Versions of Windows for Target Systems](#)
- [Localized String Considerations](#)

General Information about Upgrading Projects that Were Created in Earlier Versions of InstallShield

InstallShield creates a backup copy of the project with a file extension such as .777 (for an .ism project) or .2016 (for an .issuite project) before converting it. Delete the .777 or .2016 part from the original project's file name if you want to reopen the project in the earlier version of InstallShield. Note that you cannot open InstallShield 2023 projects in earlier versions of InstallShield.

You can upgrade projects that were created with the following versions of InstallShield to InstallShield 2023: InstallShield 2016 and earlier, InstallShield 12 and earlier, InstallShield DevStudio, InstallShield Professional 7 and earlier, and InstallShield Developer 8 and earlier. Note that projects that were created with InstallShield MultiPlatform or InstallShield Universal cannot be upgraded to InstallShield 2023.

Changes to the List of Supported Versions of Windows for Target Systems

For all project types except for Suites, Windows XP SP3 and Windows Server 2003 SP2 are the minimum versions of Windows that are required for target systems that run the installations that are created in InstallShield.

Localized String Considerations

Changes to the handling and detection of localized strings were introduced starting in InstallShield 2016. For example, localized string content that includes square brackets around invalid characters can now trigger a build time warning or error. Accordingly, the following new warning and errors might occur when you are working with your installation.

Error or Warning Number	Message	Troubleshooting Information
-7355	The %4 value for string %2 does not meet validation criteria for table %1 column %3.	This warning occurs if a localized string value does not meet validation criteria for a column in the String Editor table. To resolve this warning, update the flagged value in the String Editor.
-7354	The %4 value for string %2 does not contain a legitimate value for table %1 column %3.	This error occurs if a localized string value does not contain a legitimate value in the named column of the String Editor table. To resolve this error, update the flagged value in the String Editor.

Resolved Issues


This section lists the customer issues that were resolved in the following versions of InstallShield Express Edition:

- [InstallShield 2023 R2 Express Edition](#)
- [InstallShield 2023 R1 Express Edition](#)

InstallShield 2023 R2 Express Edition

The following issues has been resolved in InstallShield 2023 R2 Express Edition:

Issue Number	Issue Summary
ISDEV-43575	A vulnerability was reported in the Zlib library (v1.2.13) used in InstallShield Express Edition. Now, the Zlib is upgraded to the latest version (v1.3.0.1).
ISDEV-43500	Possibility for the DLL hijacking security vulnerability to be observed due to a malicious DLL being copied into the Disk1 folder of a built installer which included the setup.exe with a different name. This issue has been fixed.
ISDEV-43354	Building a QuickPatch project with the Extract COM Information checkbox checked led to crash the InstallShield Express Edition IDE. This issue has been fixed.

Issue Number	Issue Summary
ISDEV-43265	All locally copied items were included in the File MSI table when an installer was built with Visual Studio, but one locally copied item was not included in the File table when an installer was built with MS Build. This issue has been fixed.
	 <p>Note ▪ Locally copied MSBuild target is available only for MSBuild shipped with Visual Studio 2019 or later. Therefore, this fix is only applicable to MSbuild shipped with Visual Studio 2019 or later.</p>

InstallShield 2023 R1 Express Edition

The following issues has been resolved in InstallShield 2023 R1 Express Edition:

Issue Number	Issue Summary
ISDEV-42703	A forced repair on a manipulated / replaced executable in SUPPORTDIR led to regeneration of a security vulnerability. This issue has been fixed.
ISDEV-43166	When Visual Studio 2022 was not launched in an administrative mode for the first time, it failed to start. This issue has been fixed.
ISDEV-43217	Manual installation of the Docker SAB failed and displayed an error message: ISDEV : fatal error -7159: The product license has expired or has not yet been initialized. This issue has been fixed.

System Requirements

This section contains the minimum requirements for systems that run InstallShield Express Edition (the authoring environment), as well as for target systems that run the installations created with InstallShield Express Edition (the run-time environment).

- [For Systems Running InstallShield Express Edition](#)
- [For Target Systems](#)

For Systems Running InstallShield Express Edition

InstallShield Express Edition runs on the latest versions of these operating systems, fully updated with the most recent patches and service packs.

Item	Description
Processor	Pentium III-class PC (500 MHz or higher recommended)

Item	Description
RAM	1 GB of RAM (2 GB preferred)
Hard Disk	1 GB free space
Display	Designed for XGA resolution at 1024 × 768 or higher
Operating System	<ul style="list-style-type: none"> • Windows Server 2008 R2 • Windows Server 2012 • Windows 8.1 • Windows Server 2012 R2 • Windows 10 • Windows Server 2016 • Windows Server 2019 • Windows 11 • Windows Server 2022
Privileges	Administrative privileges on the system
Mouse	Microsoft IntelliMouse or other compatible pointing device
Optional Integration with Visual Studio	<p>The following versions of Microsoft Visual Studio can be integrated with InstallShield Premier or InstallShield (previously called InstallShield Professional):</p> <ul style="list-style-type: none"> • Visual Studio 2012 • Visual Studio 2013 • Visual Studio 2015 • Visual Studio 2017 • Visual Studio 2019 • Visual Studio 2022 <p>The following editions of these versions of Visual Studio can be integrated with InstallShield Premier or InstallShield:</p> <ul style="list-style-type: none"> • Professional • Premium • Ultimate • Enterprise

For Target Systems

Target systems must meet the following minimum operating system requirement:

- Windows 7
- Windows Server 2008 R2
- Windows 8
- Windows Server 2012
- Windows 8.1
- Windows Server 2012 R2
- Windows 10
- Windows Server 2016
- Windows Server 2019
- Windows 11
- Windows Server 2022

Target systems must also support the SSE2 instruction set.

Known Issues

There are no known issues in InstallShield 2023 Express Edition.

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