InstallShield 2021 Release Notes

Originally released September 2021; updated to include R2 (December 2021)

Introduction

InstallShield is the industry standard for authoring high quality Windows Installer, InstallScript–based installations, MSIX package and Microsoft App-V packages.

InstallShield 2021 also offers new features, enhancements, and resolved issues that make it easy to use the latest technologies.

For the latest information about InstallShield 2021, including updates to these release notes, see the online version of the InstallShield 2021 release notes.

Changes in R2

InstallShield 2021 R2 includes the following changes:

- Enhanced Support for Windows 11 and Windows Server 2022
- Full ARM Support

Enhanced Support for Windows 11 and Windows Server 2022

You can now configure install conditions to specifically target Windows 11 and Windows Server 2022.

Full ARM Support

Software installer targeting ARM64 based devices can now install files to native ARM location on Windows ARM machines. InstallShield supports adding ARM specific folders to InstallShield project from predefined folders. This features requires Windows installer version 5.0 and Arm64 in Template summary to install files on an ARM machine. Windows installer target version and the template summary can be configured from the General Information View in InstallShield project.
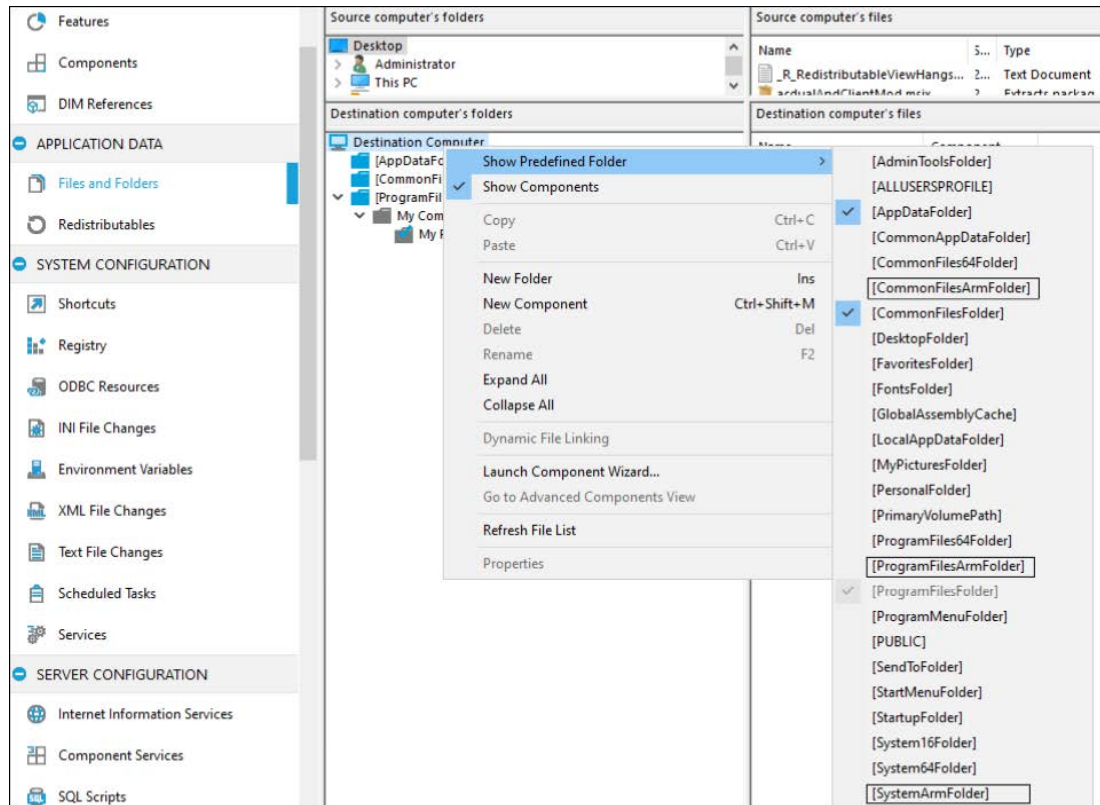
New Features in R1

InstallShield 2021 R1 includes the following new features:

- Licensing with Cloud License Server (CLS)

- Support of Windows Package Manager in Prerequisites

- Support of App Installer File for MSIX Updates

- Simple Modern Installers

- Support for Windows 11

Licensing with Cloud License Server (CLS)

InstallShield introduces the Concurrent Licensing with cloud license server (CLS).

The Cloud License Server (CLS) is hosted in the Revenera FlexNet Cloud Licensing Service that holds license rights for use by InstallShield. Cloud License Server (CLS) eliminate the time and effort required to set up and manage local License Servers, and provide the concurrent licenses to check out the license from multiple machines and easy to configure to build from DevOps build pipeline.

Support of Windows Package Manager in Prerequisites

InstallShield 2021 R1 introduces the Windows Package Manager tab as part of the InstallShield Prerequisite Editor. Windows Package Manager tab lets you specify the Windows Package Manager (WPM) package you want to install as a prerequisite to your product.
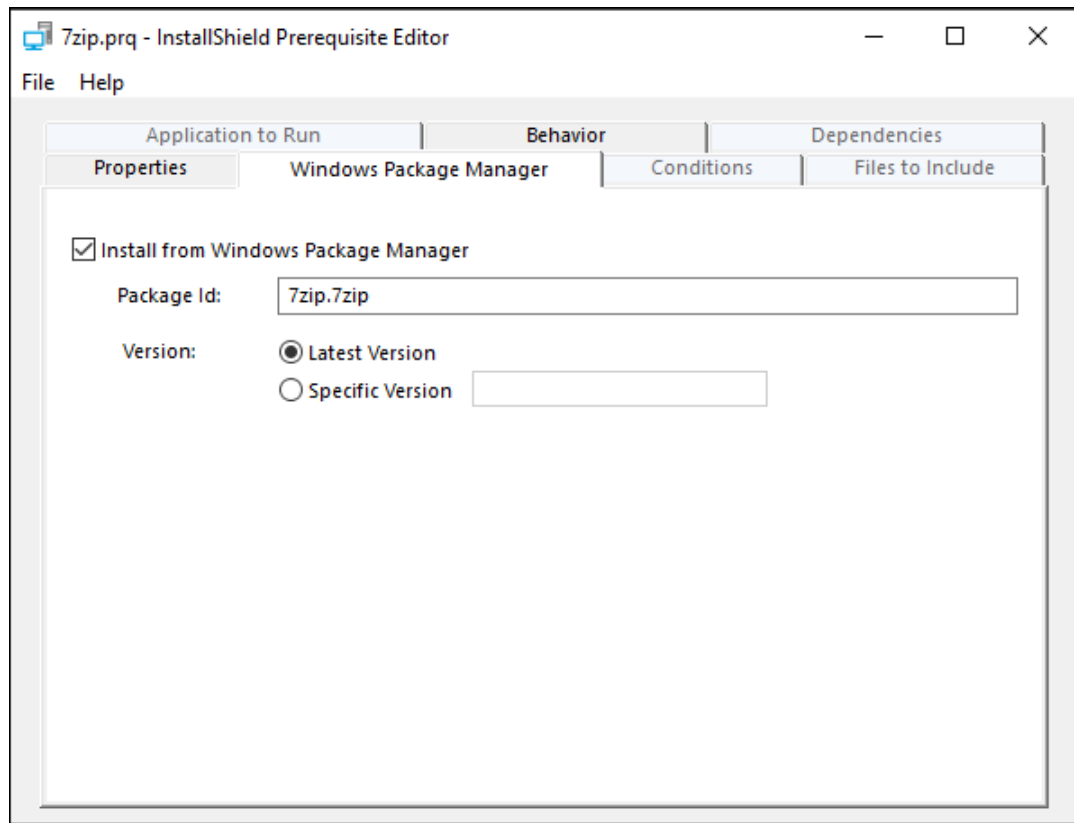
Support of App Installer File for MSIX Updates

Now, the MSIX updates can be Configured using App Installer file.
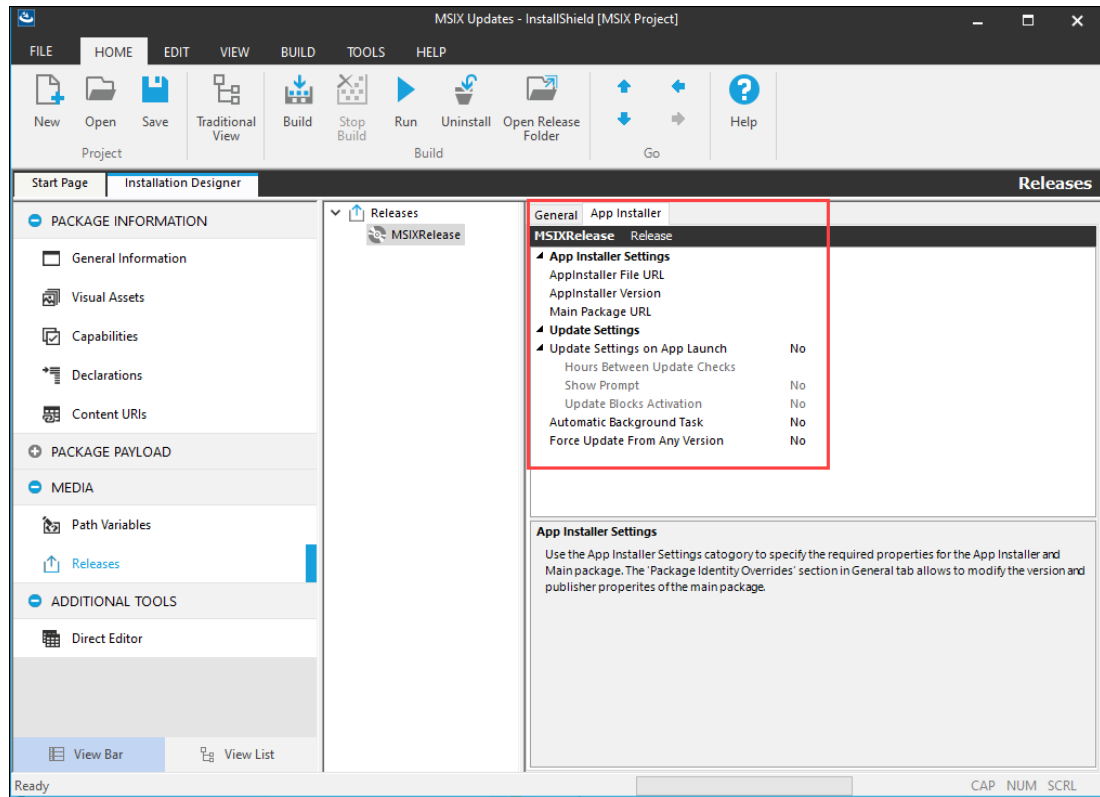
Simple Modern Installers

The Wizard Interface view has been enhanced by adding the Minimal Wizard Pages, which provide modern installation\uninstallation experience to end users using frameless wizard screens.

Support for Windows 11

The Setups created with InstallShield 2021 R1 can now run on Windows 11 version.

Enhancements

The InstallShield 2021 releases include the following enhancements:

- InstallShield 2021 R2
- InstallShield 2021 R1

InstallShield 2021 R2

The InstallShield 2021 R2 release includes the following enhancements:

Support for ARM Architecture in Suite

InstallShield now supports adding platform condition to check the target system architecture whether its an Arm based system or not (Arm/Arm64).

Note ▪ This change was tracked in issue IOJ-2182157.

Support of ISWiFile.AlwaysOverwrite Property in Automation Interface

The ISWiFile.AlwaysOverwrite property now can be set using Automation Interface.

Note ▪ This change was tracked in issue IOJ-1623084.

Provision for Installing Files to ARM Specific Folder

InstallShield now supports adding ARM specific folders to InstallShield project from predefined folders. This features requires Windows installer version 5.0 and Arm64 in Template summary to install files on an ARM machine. Windows installer target version and the template summary can be configured from the General Information View in InstallShield project.

Note ▪ This change was tracked in issue IOJ-1930508.

InstallShield 2021 R1

The InstallShield 2021 R1 release includes the following enhancements:

Enhancement on Custom Icon for the Installer

Support has been added to display a custom icon on the task bar throughout the install/uninstall process. Earlier, the custom icon was displayed only on Setup.exe initialization dialog.

Note ▪ This change was tracked in issue IOJ-2185065.

New Option for Overwriting the Debug Log

In Suite project, added a new UI option to overwrite the debug log when the "Always Create Debug Log" option is set to "YES".

Note ▪ This change was tracked in issue IOJ-2156716.

Important Information

Note the following important information regarding the InstallShield 2021 release:

- Evaluating InstallShield

- 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

Concurrent License Users Must Update the FlexNet Licensing Server Software

If you are using a concurrent license of InstallShield, you must update the version of the FlexNet Licensing Server software on the licensing server before you can start using InstallShield 2021.

The version of the FlexNet Licensing Server software that shipped with previous versions of InstallShield cannot manage licenses of InstallShield 2021. InstallShield 2021 will not check out licenses from older version of the license server even when those licenses are available.

Note ▪ The FlexNet Licensing Server software v11.16.6.0 can manage licenses of InstallShield 2020 and InstallShield 2021. Upgrading from InstallShield 2020 to InstallShield 2021 lets you to use the existing FlexNet Licensing Server software v11.16.6.0. Upgrading from the InstallShield 2019 and older versions require the upgrading of FlexNet Licensing Server software to v11.16.6.0.

You can download the installer for the new FlexNet Licensing Server software from the Revenera Product and License Center.

For instructions on installing the FlexNet Licensing Server software, see Setting Up Your License Server for Concurrent Licenses of InstallShield 2016 and Later.

Evaluating InstallShield

If you have not purchased a license for InstallShield, 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 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 or when you connect it to a license server and check out a license for it.

Note ▪ Starting InstallShield 2021, Professional Edition is renamed to "InstallShield" and Premier Edition continues to be referred to as "InstallShield Premier".

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

The following installations are available for download from the Revenera 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)

Note ▪ As of InstallShield 2021, the Collaboration Edition (DIM Editor) is no longer available.

Installing More than One Edition of InstallShield

Only one edition of InstallShield 2021—InstallShield Premier or InstallShield—can be installed on a system at a time.

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 2021 can coexist on the same machine with other versions of InstallShield.

The InstallShield 2021 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.

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 2021. It also alerts you to possible changes in behavior that you may notice between new InstallShield 2021 projects and projects that are upgraded from InstallShield 2016 or earlier to InstallShield 2021.

- 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 2021 projects in earlier versions of InstallShield.

You can upgrade projects that were created with the following versions of InstallShield to InstallShield 2021: 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 2021.

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. For suites (Advanced UI, and Suite/Advanced UI project types), Windows Vista and Windows Server 2008 are the minimum versions of Windows that are required for target systems.

Localized String Considerations

Changes to the handing 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:

- InstallShield 2021 R2
- InstallShield 2021 R1

InstallShield 2021 R2

The following issues have been resolved in InstallShield 2021 R2.

Issue Number	Issue Summary
IOJ-2222873	When Exit Condition was added on Windows 10 and Windows server 2019 for Suite project, the setup hung and the exit message was not displayed. This issue has been fixed.
IOJ-2213480	The DISK1SETUPEXENAME did not show the current .exe name instead the setup.exe name shown. This issue has been fixed by introducing a new system variable SETUPEXENAME.

Issue Number	Issue Summary
IOJ-2206307	During the IIS web site installation, the Internet Information Server authentication details were removed from the preconfigured web.config file packaged and copied in the payload files. This issue has been fixed by retaining the authentication setting defined in the preconfigured web.config.
IOJ-2163622 IOJ-1591339	InstallScript Setup.exe did not restart after the installation when the prerequisites behavior was set to "Note it, fail to resume if the machine is rebooted, and reboot after the installation". This issue has been fixed.
IOJ-2157223	In InstallScript MSI project, during uninstall, the files were left in the installation information location. This issue has been fixed.
IOJ-1914854	An issue was observed while adding files to MSI package, which had more than 50000 files in MSI Direct Edit Mode. This issue has been fixed.
IOJ-2232274	The ISBEWI64.exe - InstallScript engine redistributable file for IA64 machine was not signed with SHA256. This issue has been fixed.
IOJ-2231277	Introduced digital signature verification for ISBEW64.exe/ISBEWI64.exe while executing InstallScript custom actions. These executable files are part of InstallScript engine to execute the custom actions in the X64/IA64 machine.
IOJ-2222867	Downloading the Microsoft .net 4.7.1 and 4.7.2 prerequisites from Web and offline were unsuccessful. This issue has been fixed.
IOJ-2218565	Found that the broken link for Microsoft ReportViewer 2012 and Microsoft SQL Server 2012 Express SP2 System CLR Types (x64) * (x86) Redistributables. The links for the redistributables are fixed now and the redistributables can be downloaded.
IOJ-2217285	The Microsoft Visual C++ 2008 Redistributable - x86 was unsupported on target machine while installing the InstallShield. This issue has been fixed.
IOJ-2216294	Found that the broken links for Microsoft SQL server 2016 Redistributables. The links for redistributables are fixed now.
IOJ-2202540	Downloading of VC++2010 and 2010SP1 prerequisites using "Download from web" option were unsuccessful and failed to install prerequisites when higher version is installed. This issue has been fixed.
IOJ-2202504	The Installer was not built successfully when Microsoft Report Viewer 2015 and Microsoft SQL Server 2014 Express SP2 System CLR Types (x86) were added to the project. This issue has been fixed.
IOJ-2155594	In Suite, the Setup failed to install from network drive when "Cache packages locally" option is set to NO. This issue has been fixed. However, the option "Cache Packages Locally" should be set to yes to uninstall the EXE packages successfully.

Issue Number	Issue Summary
IOJ-2115802	Unsupported MXSML4 files were used in the InstallShield StandAlone Build (SAB). This has been fixed by removing MXSML4 dependency from SAB installer.
IOJ-2158618	On Windows, PowerShell custom action did not delete the MSI property instead modified it and the associated checkbox remained selected. This issue has been fixed.

InstallShield 2021 R1

The following issues have been resolved in InstallShield 2021 R1.

Issue Number	Issue Summary
IOJ-2200424	An error was thrown while downloading Windows Installer 3.1(x86) prerequisite from redistributable gallery. This issue has been fixed.
IOJ-2111557	The VerFindFileVersion InstallScript function did not find an executable in the PATH environment variable value. By design, the VerFindFileVersion does not support path variables. Hence, the help procedure has been updated to match with the product behavior.
IOJ-1992462	After selecting the InstallationType as custom for a feature and selecting the InstallationType as Complete the InstallationType did not install all the features. This issue has been fixed.
IOJ-2205091	While building MSIX project, the File names are changed to lower case. This issue has been fixed. The File names are now retained with the given letter case.

For descriptions of resolved issues in InstallShield 2020 R3 SP1, refer to Resolved Issues.

System Requirements

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

For Systems Running InstallShield

InstallShield 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)
RAM	256 MB of RAM (512 MB preferred)
Hard Disk	750 MB free space
Display	Designed for XGA resolution at 1024 × 768 or higher
Operating System	• Windows Server 2008 • 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
Privileges	Administrative privileges on the system
Mouse	Microsoft IntelliMouse or other compatible pointing device

Item	Description
Optional Integration with Visual Studio	The following versions of Microsoft Visual Studio can be integrated with InstallShield Premier or InstallShield Editions: • Visual Studio 2008 • Visual Studio 2010 • Visual Studio 2012 • Visual Studio 2013 • Visual Studio 2015 • Visual Studio 2017 • Visual Studio 2019 The following editions of these versions of Visual Studio can be integrated with InstallShield Premier or InstallShield Editions: • Professional • Premium • Ultimate • Enterprise

For Target Systems

For all project types except for Suites (Advanced UI, and Suite/Advanced UI project types), 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. For Suites, Windows Vista and Windows Server 2008 are the minimum versions of Windows that are required for target systems.

Target systems must meet the following minimum operating system requirement:

- Windows XP SP3
- Windows Server 2003 SP2
- Windows Vista
- Windows Server 2008
- 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 is no known issue for InstallShield 2021.

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