InstallAnywhere 2023 R1 Release Notes

Originally released July 2023

Introduction

InstallAnywhere is the leading multiplatform installation and container development solution for application producers who need to deliver a professional and consistent installation experience for physical, virtual, and cloud environments as well as container deployments.

For the latest information about this release of InstallAnywhere, including updates to these release notes, see the online version of the InstallAnywhere 2023 Release Notes.

New Features in InstallAnywhere 2023 R1

InstallAnywhere 2023 R1 includes the following new features:

- Support for LZMA2 Compression Using Expand 7-Zip Action
- Ability to Customize Image, Label, and Help Settings for Pre-Uninstall and Post-Uninstall Sequences
- Support for the Windows 11 Smart App Control
- Support for the macOS Sonoma

Support for LZMA2 Compression Using Expand 7-Zip Action

In previous releases, InstallAnywhere let you use the **Expand Archive (7-zip)** action in the **Install** view on the **Sequence** page to expand a 7-Zip archive (.7z or .xz) with the LZMA compression method only.

This release includes the LZMA2 compression method to expand a 7-Zip archive (.7z or .xz). As a consequence, the **Expand Archive (7-Zip)** action supports both the LZMA and LZMA2 compression methods to expand a 7-Zip archive (.7z or .xz) on a target system.

Note ▪ This change was tracked in issue IOJ-1850268.

Ability to Customize Image, Label, and Help Settings for Pre-Uninstall and Post-Uninstall Sequences

In this release, you can enable and customize the following tabs on the **Properties Customizer** of panels in the **Pre-Uninstall** and **Post-Uninstall** views on the **Sequence** page to configure the uninstaller steps that are displayed on the navigation panel for the uninstaller:

- **Image settings**—On the **Installer UI > Look & Feel Settings > Customer UI Designer** dialog box, under the **Installer Steps** area, selecting **Images** from the **Installer Steps Type** drop-down menu enables you to customize the **Image Settings** tab on the **Properties Customizer**. By default, the **Image Settings** tab is disabled.

- **Label Settings**—On the **Installer UI > Look & Feel Settings > Customer UI Designer** dialog box, under the **Installer Steps** area, setting **Enable Uninstall Label Settings** to **Yes** enables you to customize the **Label Settings** tab on the **Properties Customizer**. By default, the **Label Settings** tab is disabled.

- **Help Settings**— On the **Installer UI > Help** view, selecting the **Enable installer help** and **Use different help text for each panel** options enables you to to customize the **Help Settings** tab on the **Properties Customizer.** By default, the **Help Settings** tab is disabled.

*Note ▪ To configure the uninstaller step labels, the **Enable Uninstall Label Settings**, **Configure Uninstall Labels** and **Uninstall Progress Label** settings have been introduced in the **Installer Steps** section on the **Customer UI Designer** dialog box in the **Look & Feel Settings** view on the **Installer UI** page.*

Note ▪ This change was tracked in issue IOJ-1555870.

Support for the Windows 11 Smart App Control

InstallAnywhere now supports the Smart App Control feature of the Windows 11 operating system.

Note ▪ This change was tracked in issue IOK-1047118.

Support for the macOS Sonoma

The Setups created with InstallAnywhere 2023 R1 can now run on the macOS Sonoma version.

Enhancements in InstallAnywhere 2023 R1

This section lists enhancements that were included in InstallAnywhere 2023 R1:

- Ability to Customize the Choose Alias, Link, Shortcut Folder

- Ability to Prevent Automatic Reading of Default Response File

- Ability to Prevent Default Response File Creation in Silent Mode

- Usage Message for a Missing or Invalid Argument

- Encrypted the Notarization Information

Ability to Customize the Choose Alias, Link, Shortcut Folder

On the **Sequence > Pre-Install > Panel: Choose Alias, Link, Shortcut Folder: Choose Shortcut Folder > Properties** tab in the **Properties Customizer** area, under the **General Settings**, the **Configure** setting has been added to customize the **Choose Alias, Link, Shortcut Folder** panel.

This new setting lets you to select the default options for Windows Shortcuts, UNIX Links and macOS Aliases which will be displayed during the installer run time. When you click **Configure**, the following **Customize Shortcut/Link/Alias Options** dialog box shows the options available to customize:
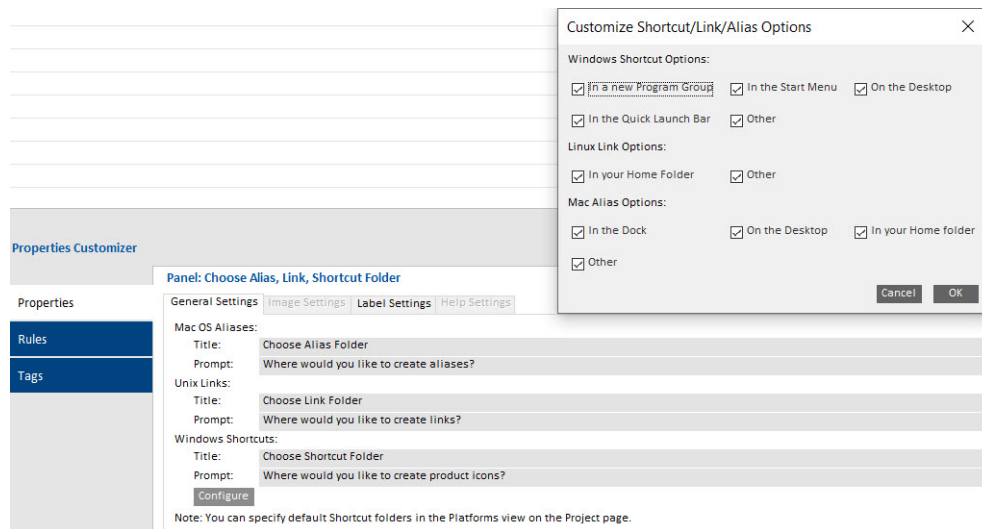

Figure 1: Customize Shortcut/Link/Alias Options Dialog Box

Note ▪ This change was tracked in issue IOJ-2177119.

Ability to Prevent Automatic Reading of Default Response File

On the **Project > General Settings** view, under the **Project Information** area, a new setting named **Prevent Automatic Reading From Default Response File** has been introduced to disable the installers' ability to automatically read the default response file.

When this setting is set to **Yes**, the `installer.properties` file will be utilized as a response file only if it is passed with the `-f` command-line switch and is not utilized by default when the installer is launched. By default, this setting is set to **No**.

The following shows the **Prevent Automatic Reading From Default Response Files** setting enabled:
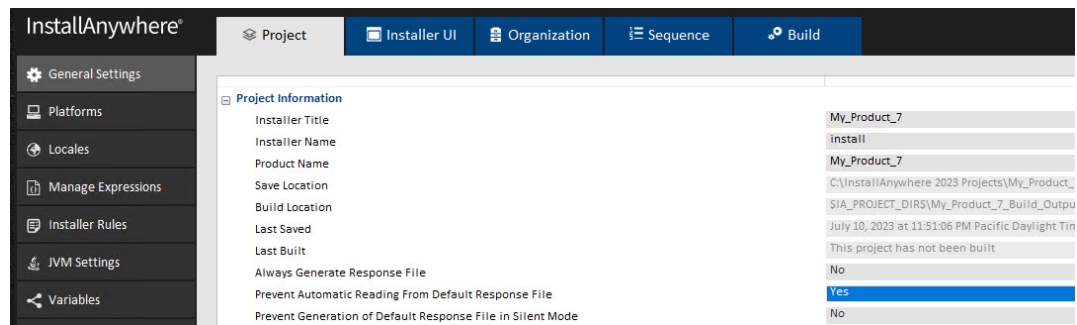
Figure 2: Prevent Automatic Reading From Default Response File Setting Enabled

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Note ▪ This change was tracked in issue IOJ-1874652.

Ability to Prevent Default Response File Creation in Silent Mode

A new setting named **Prevent Generation of Default Response File in Silent Mode** has been introduced in the **Project Information** area of the **General Settings** view on the **Project** Page which enables you to prevent end users from being able to generate the default response file in the silent mode installation or uninstallation.

When this setting is set to **Yes**, the `installer.properties` file (default response file) will be generated only if it is passed with `-r` command-line switch and is not generated by default when the installer and uninstaller are launched in silent mode. By default, this setting is set to **No**.

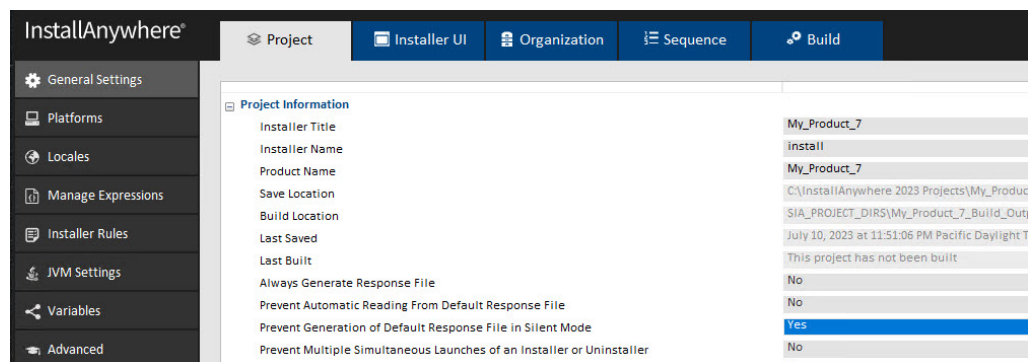The following shows the **Prevent Generation of Default Response File in Silent Mode** setting enabled**:**

Figure 3: Prevent Generation of Default Response File in Silent Mode Setting Enabled

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Note ▪ This change was tracked in issue IOJ-1990554.

Usage Message for a Missing or Invalid Argument

Previously, there was no usage message displayed on the console while passing `-i` command-line switch without an argument or with an invalid argument for launching the installer.

In this release, a usage message including the appropriate available options will be displayed on the console when you pass `-i` command-line switch without an argument or with an invalid argument for launching the installer.

Note ▪ This change was tracked in issue IOJ-2159703.

Encrypted the Notarization Information

In this release, the following notarization credential information saved in the project are encrypted:

- Apple user name
- Apple dev password
- Team identifier

Note ▪ This change was tracked in issue IOK-1000261.

Important Information

Note the following important information regarding InstallAnywhere 2023:

- Evaluating InstallAnywhere
- Obtaining the Installation and License Files for InstallAnywhere

Evaluating InstallAnywhere

Note that if you have not purchased a license for InstallAnywhere, you can install it and use it for a limited number of days without setting up the licensing. When you are using InstallAnywhere in this scenario, it operates in evaluation mode. The licensing wizard that InstallAnywhere displays whenever you launch InstallAnywhere in evaluation mode shows you how many days are left in the evaluation period. If you do not set up the licensing within the evaluation period, InstallAnywhere stops working when the evaluation period ends. You can set up licensing at any time before or after the evaluation period ends.

When you use InstallAnywhere in evaluation mode, there is a time limit for running installers that it creates. If you build an installer in the evaluation version of InstallAnywhere, your installer will stop working after 3 days.

Obtaining the Installation and License Files for InstallAnywhere

You can obtain the installation and license files for InstallAnywhere through the Revenera Product and License Center. For instructions, see the Download and licensing instructions for InstallAnywhere. If you purchased concurrent licenses of InstallAnywhere, the license server software is also available for download from that same site.

Resolved Issues

This section lists the customer issues that were resolved in the following versions of InstallAnywhere 2023.

- InstallAnywhere 2023 R1

InstallAnywhere 2023 R1

The following issues have been fixed in InstallAnywhere 2023 R1:

Issue Number	Issue Summary
IOK-1023476	The NoVM installer failed to utilize the first suitable JRE available in the PATH environment variable. This issue has been fixed.
IOK-961669	The **Choose Install Folder** panel's path displayed with / instead of Yen symbol as a path seperator on a Japanese machine. This issue has been fixed.
IOK-927557	When the icon source path was changed and the project was rebuilt, the Uninstaller icon and the Uninstaller launcher failed to appear and generate, respectively, during installation. This issue has been fixed.
IOJ-2218757	The UAC prompt failed to display the consistent value for the Program Name due to the Project settings and sometimes displayed the value `lax_gui_highest`. This issue has been fixed.
IOJ-1873367	The **||** (or) operator between the rules was incorrectly replaced with the **&&** (and) operator after copying and appending the rules. This issue has been fixed.
IOJ-1559991	Installation with `-i` command-line switch failed to write the reponse file with expected values. This issue has been fixed.
IOJ-1920853	The Inline help for the settings **Executable Icon Path** and **Installer Title Image** in the **Installer Icon** area of the **Look & Feel Settings** view on the **Installer UI** page failed to mention that these settings are available if an installer builds only on Windows. This issue has been fixed.

Issue Number	Issue Summary
IOK-1017408	A Java application using the LaunchAnywhere launcher was unable to launched on the macOS Ventura. This issue has been fixed.
IOK-1011225	When the Compare InstallAnywhere Variable Rule included no value for the `Operand 2` and the installer launched with the Java 15 or later, there was a change in behaviour. This issue has been fixed.
IOK-1010051	The `SimpleRegistryManager.getRegistryKeyValue` key name failed to retrieve the default value from a registry key. This issue has been fixed.
IOK-1001990	Comparison with empty string failed with the JRE for the Java 15 and later. This issue has been fixed.
IOK-1001425	The variable value in the **Get User Input** panel got revamped even though the condition was met. This issue has been fixed
IOK-999005	The **does not exist already exist** property in the **Check File/ Folder Attributes** rule was not evaluated properly. This issue has been fixed.
IOK-995588	When the installer launched from the folder containing space on the Linux, the `unexpected operator` error message displayed on the console. This issue has been fixed.
IOK-993106	The macOS installer failed to utilize the value of the `lax.nl.current.vm` property. This issue has been fixed.
IOK-928024	The **Move Folder** action caused to remove the hidden attribute from a shortcut in the folder. This issue has been fixed.
IOK-757435	When the installer including the **Get User Input-Advanced** panel action launched in the console mode on the target machine with an invalid value of `DISPLAY`, generated the `AWTError` and `NoClassDefFoundError`. This issue has been fixed.
IOK-756221	Using the **Set InstallAnywhere Variable-Single Variable** action to set the value of an encrypted variable led to generation of the `NumberFormatException`. This issue has been fixed.
IOJ-2250681	Copied and pasted the multiple rules with a complex rule expression from an action to a different action failed to maintain the rule expression. This issue has been fixed.
IOJ-2245703	Launched the installer on the Linux without read permissions on the `/etc/issue`, displayed an error message on the console. This issue has been fixed.
IOJ-2211925	On high DPI **Get User Input-Advanced** panel action with the **Use fixed height for Prompt** option not selected, displayed large amount of whitespace between the panel prompt and components. This issue has been fixed.

Issue Number	Issue Summary
IOJ-2210464	When the installed bundled virtual machine directory was copied from the *$TEMP_DIR$* to the *$USER_INSTALL_DIR$* using the **Copy Folder** action in the **Install** sequence, during uninstallation that installed bundled virtual machine directory was unable to removed completely. This issue has been fixed.
IOJ-2177296	Native Windows libraries/executables distributed with installers, were not compiled with the Control Flow Guard enabled. This issue has been fixed.
IOJ-1910516	In the console mode, the **License Agreement Console** panel failed to scroll through the licence agreement after using the Enter key. This issue has been fixed.
IOJ-1819001	The Windows desktop flickered/ refreshed each time any shortcut was installed. This issue has been fixed.
IOJ-2171906	Using the `-r` command-line switch with a specific file name led to generate the response file with the default name. This issue has been fixed.
IOJ-1912077	Using the `-r` command-line switch without the file name and path specification for the response file, resulted to failure in the installer launch. This issue has been fixed.
IOJ-1912074	Documentation failed to describe the response file creation conditions for the installer while using `-r` command-line switch. This issue has been fixed.
IOJ-1830662	Documentation mentioned the `-productVersion` build-related argument instead of the `productVersion` build-related argument. This issue has been fixed.
IOK-791946	Documentation failed to mention the detail information for the Set System Environment Variable action. This issue has been fixed.
IOK-1012969	The required argument for running the Automation APIs with a JAVA 11 JRE failed to mention in the documents. This issue has been fixed.
IOJ-1846138	Documentation failed to include the impact of DPI awareness and scaling on the installer size. This issue has been fixed.
IOJ-1805890	Documentationn failed to mention the recommended dimensions for the image displayed behind the Installer steps. This issue has been fixed.
IOJ-1769747	Ability of the uninstaller to operate in silent mode was not explained in the documentation. This issue has been fixed.
IOJ-1740619	Limitation of the Windows-based installers in the Maintenance mode for a cross bit installation was not mentioned in the documentation. This issue has been fixed

System Requirements

The following are the system requirements for InstallAnywhere 2023:

- Requirements for Systems that are Running InstallAnywhere (Authoring Environment)

- Requirements for Target Systems (Installer Run-Time Environment)

- Requirements for Target Systems (Installer Run-Time Environment)

- Supported Java Virtual Machines

Requirements for Systems that are Running InstallAnywhere (Authoring Environment)

RAM

256 MB; 512 MB preferred

Hard Disk Free Space

500 MB

Color

High color (16-bit color depth)

Resolution

Minimum 1200 x 800

Operating System

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

Operating System	Supported Versions
Windows	- Windows 11 - Windows 10 - Windows Server 2012 R2, 2016, 2019, and 2022 - Windows 7 and 8.1 (x86 and x64)

Operating System	Supported Versions
Apple	• macOS Sonoma (14) with Oracle and Amazon Corretto Java 11.0.15+ • macOS Ventura (13) with Oracle and Amazon Corretto Java 11.0.15+ • macOS Ventura (13) with Oracle and Amazon Corretto Java 11.0.15+ on Apple M1 • macOS Montarey (12) with Oracle and Amazon Corretto Java 11.0.7+ on Apple M1 • macOS Big Sur (11) with Oracle and Amazon Corretto Java 11.0.7+ • macOS Big Sur (11) with Oracle and Amazon Corretto Java 11.0.7+ on Apple M1 • macOS Catalina (10.15) with Oracle Java 11.0.7+ • macOS Mojave (10.14) with Oracle Java 11.0.7+
Linux	• Red Hat Enterprise Linux 7.9, 8 (x64), 8.3, 8.4, 8.5, 8.6, 8.7, 9.0, and 9.1 • OpenSUSE Leap 42.3 (x64) • OpenSUSE Linux 15.3, and 15.4 • SUSE Linux Enterprise 15 • Linux PPC 64-bit (build time only) only with Java 11 • Ubuntu 21.4, 22.04, and 22.10 • Fedora 34, 36, and 37 • CentOS Stream 9.0 *Note ▪ When you install InstallAnywhere on a Linux system, the installation attempts to create a symbolic link to the default Linux loader (/lib/ld-linux.so.2) if a link with the same name is not already present. The symbolic link is necessary for the host ID to be displayed on the Host ID dialog, and it is also necessary for successful node-locked licensing. The link is present on systems that are Linux Standard Base (LSB) 3 compliant, but it may not be present on systems that are not LSB compliant. For more information, see Knowledge Base article Q209204.*

Installers can be built from any supported authoring platform for any other supported target platform or language. Localizations for 32 languages are included.

Requirements for Target Systems (Installer Run-Time Environment)

RAM

64 MB

Color

High color (16-bit color depth)

Resolution

Minimum 640 x 480

Operating System

Installers run on any version of these operating systems, as long as the operating system supports Java 11 or 17. InstallAnywhere-generated installers are not supported on beta versions or on early-access releases unless they are explicitly mentioned.

Operating System	Supported Versions
Windows	- Windows 11 - Windows 10 - Windows Server 2012 R2, 2016, 2019, and 2022 - Windows 7 and 8.1 (x86 and x64) *Note ▪ Windows-based target systems must also support the SSE2 instruction set.*
Apple	- macOS Sonoma (14) with Oracle and Amazon Corretto Java 11.0.15+ - macOS Ventura (13) with Oracle and Amazon Corretto Java 11.0.15+ - macOS Ventura (13) with Oracle and Amazon Corretto Java 11.0.15+ on Apple M1 - macOS Montarey (12) with Oracle and Amazon Corretto Java 11.0.7+, Java 17 on Apple M1 - macOS Big Sur (11) with Oracle and Amazon Corretto Java 11.0.7+, Java 17 - macOS Big Sur (11) with Oracle and Amazon Corretto Java 11.0.7+, Java 17 on Apple M1 - macOS Catalina (10.15) with Oracle Java 11.0.7+ - macOS Mojave (10.14) with Oracle Java 11.0.7+

Operating System	Supported Versions
Linux	• CentOS Stream 9.0
	• Red Hat Enterprise Linux 7.9, 8 (x64), 8.3, 8.4, 8.5, 8.6, 8.7, 9.0, and 9.1
	• Red Hat Enterprise Linux 7.2 and 8 for PowerPC (little endian)
	• Red Hat Linux 7.1 and 8 for PowerPC (little endian - silent and console mode only)
	• OpenSUSE Linux 15.3 and 15.4
	• Oracle Linux 8.5 and 9
	• SUSE Linux Enterprise 15
	• Ubuntu 21.4, 22.04, and 22.10.
	• Fedora 34, 36, and 37.
Solaris	• Solaris 11 (x86 and SPARC)
	• Solaris 9, 10 (x86, SPARC, and AMD-64)
	• HP-UX
HP-UX	• HP-UX 11i (Itanium 2 and PA-RISC)
AIX	• AIX 7.1 and 7.2 (Power/PowerPC)
IBM	• i5/OS (OS/400) on System i - V5R3 and V5R4 (Enterprise Edition only), IBM i 6.1, and IBM i 7.1
	• z/OS
Other	• FreeBSD
	• Other Linux and UNIX operating systems (POSIX-compliant shell required)

Supported Java Virtual Machines

InstallAnywhere supports the following Java virtual machines:

Manufacturer	Supported Versions
IBM	11 and 17
HP	11.0.2
Sun/Oracle	11, 11.0.7, 12, 14.0.1, 15, 17, 18, 19, and 20
OpenJDK	11, 11.0.7, 12, 14.0.1, 15, 17, 18, 19, and 20

Manufacturer	Supported Versions
Amazon Corretto	11, 11.0.7, 15, 17, 18, 19, and 20
AdoptOpenJDK	11.0.7, 15, and 16
Azul Platform Core JRE	11, 17, 18 , 19, and 20

The InstallAnywhere installer installs OpenJDK11.0.2 and OracleJRE180u202. Any Java virtual machine can be bundled with an installer ensuring that the target system meets the minimum requirements for both the installers and your applications. To download additional JRE VM packs, visit https://www.revenera.com/install/products/installanywhere/installanywhere-files-utilities.html and click the VM Packs option.

InstallAnywhere-generated installers are not supported on beta versions or on early-access releases of Java.

Known Issues

There is no known issue in InstallAnywhere 2023.

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