

InstallAnywhere 2020

Release Notes

October 2019

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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 2020 release notes](#).

New Features in 2020

InstallAnywhere 2020 includes the following features:

- [Support for Java 13](#)
- [Mac OS X Notarization](#)
- [Support for Digital Signature using Windows Store](#)
- [Enhancements](#)
- [Resolved Issues](#)

Support for Java 13

InstallAnywhere 2020 now supports the latest version of Java, Version 13.

Using InstallAnywhere 2020, you can:

- Create Java 13 VM packs
- Create installers which uses bundled Java 13 VM pack
- Create installers that can detect a Java 13 on the host and run automatically

Mac OS X Notarization

Starting in macOS 10.14.5, all new or updated kernel extensions and all products from developers new to dispersing with Developer ID must be notarized so as to run. Starting in macOS 10.15, by default, the notarization is required for all products.

Notarization likewise ensures your users if your Developer ID signing key is uncovered. The notary service keeps up a review trail of the product appropriated utilizing your signing key.

In InstallAnywhere 2020, you can automatically notarize your application with ease. InstallAnywhere now supports notarizing macOS or OS X-based installers with a Developer ID Application certificate during the build time.

The process of notarizing your authentication wrappers, your installers, and your uninstallers varies, depending on whether you are performing the notarizing step at build time on the InstallAnywhere build machine or on a separate designated notarization machine.

You can specify whether and how you want InstallAnywhere to notarize your OS X-based installer at build time. If you notarize the installer, end users can download your installer from outside the Mac App Store and install the product without being blocked by the Gatekeeper. The App Notarization settings in this area are:

- [Notarize the Generated Installer](#)
- [Developer Username](#)
- [Developer App Specific Password](#)
- [Notarization Response Timeout \(min\)](#)

Support for Digital Signature using Windows Store

InstallAnywhere 2020 provides the Certificate Selection dialog box to specify which certificate you want to use to sign your files. InstallAnywhere lets you choose between the following options:

- You can specify the .pfx certificate file on your machine that you want to use for signing.
- You can reference a certificate store that contains the certificate that you want to use for signing.

Enhancements

Enhancements in InstallAnywhere 2020

This section lists enhancements that were included in InstallAnywhere 2020:

- [JVM Specification Files for Java 10 and 11](#)
- [HTTPS Protocol Option in Download File Action](#)
- [Edit TextField to Display as Read-Only](#)
- [Warning for an Invalid Java VM](#)
- [Restrict Installation Location](#)
- [Support for OpenJDK](#)
- [New Version of Apache Commons-Codec](#)
- [Support for InstallAnywhere Registration and License](#)
- [Support the Amazon Corretto JVM](#)

JVM Specification Files for Java 10 and 11

Now in InstallAnywhere 2020, you have JVM specification files available for Java 10 and 11 in the default folder (\$IA_HOME\$/resource/jvms).

HTTPS Protocol Option in Download File Action

You can now use the Download File action to download a file during installation using HTTPS protocol. You specify information regarding this action on the Download File Action customizer.

Edit TextField to Display as Read-Only

The new Editable option in the **Configure Textfield** dialog box will help you to configure Textfields to display as read-only. By default, the selection box will be set as True and will remain editable. When you set the Editable option to False, it is non editable.

Warning for an Invalid Java VM

Previously, there was no warning/caution message displayed while selecting a Java VM which was not valid for the InstallAnywhere installation.

In this release, there will be an error message when you select a Java VM that is not on the valid VM list from the **Choose Java VM** panel.

Restrict Installation Location

Previously for projects with Maintenance Mode and Instance Management enabled, the Product Name (Installation Location) was displayed as the Display Name in the Add or Remove Programs (Programs and Features).

Now you have an option, where you can restrict the display of the installation location for an instance in the Display Name displayed in the Add or Remove Programs (Programs and Features).

Support for OpenJDK

Now InstallAnywhere supports OpenJDK Virtual machines.

New Version of Apache Commons-Codec

Now in InstallAnywhere 2020, a newer version of Apache Commons is listed that will make its classes available to Custom Code.

Support for InstallAnywhere Registration and License

Previously, there was no message whether or not InstallAnywhere was registered or licensed.

Now in InstallAnywhere, you have a command output that will display whether your copy of InstallAnywhere is registered and licensed.

Support the Amazon Corretto JVM

Now in InstallAnywhere 2020, the runtime is tested and verified to support the Amazon Corretto JVM.

Important Information

Note the following important information regarding InstallAnywhere 2020:

- [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.

When you use InstallAnywhere in evaluation mode, InstallAnywhere limits you to a maximum of five successful builds of Docker containers.

Obtaining the Installation and License Files for InstallAnywhere

You can obtain the installation and license files for InstallAnywhere through the [Flexera 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 2020:

InstallAnywhere 2020

The following issues have been resolved in InstallAnywhere 2020.

Issue Number	Issue Summary
IOJ-1926696	Previously, while selecting the Windows target in the Build tab, under the 'With VM' checkbox (only on Windows Server 2019), the "VM to bundle with installer" drop-down was disabled; Because of which, the build failed. This issue is resolved in this release.
IOJ-1559270	Previously, if there was an action group with subgroups and the last panel in the last subgroup had a rule that was being resolved to false then the Pre-Install summary of the Installation wizard was skipping all the panels from the enclosing group. This issue is resolved in this release.
IOJ-1559951	Previously, the Custom or IA variable defined in the Project view were displayed in the debug log even though it was configured in the configure variables to "exclude value only" or "Exclude variable entirely". This issue is resolved in this release.
IOJ-1561276	Previously, choosing a 'Get User Input - Advanced Panel' action; After adding/selecting the Textfield, the Configure Textfield dialog box wasn't closing even after clicking on the 'Close/Exit' button. This issue is resolved in this release.
IOJ-1561400	Previously, while navigating to the Pre-Install task, all the collapsed Action Groups in the Pre-Install Task were automatically expanded in Linux. This issue is resolved in this release.
IOJ-1560202	Previously on a Unix/Linux environment, if any environment variable contained \u in value, the installer crashed with an exception "Malformed \uxxx encoding". This issue is resolved in this release.
IOJ-1560688	Previously in the Installer, the scrollbar was missing when the text exceeded the panel size in the Custom Code panel. This issue is resolved in this release.
IOJ-1561455	In the Pre-Uninstall phase, the "Get User Input - Advanced" panel has two radio buttons (Yes/No) and by default - the 'Yes' radio button was selected as the Default value to enable multiple locales. And while performing the uninstallation process, neither of the (Yes/No) radio buttons were selected in a Non-English locale. This issue is resolved in this release.
IOJ-1723088	Previously, during pre-install, install or post-install phase was set to a UNC network path, the log wasn't available in the location. This issue is resolved in this release.
IOJ-1742475	Digital Signing broke when a custom icon was used for the LaunchAnywhere launcher for the target application. This issue is resolved in this release.
IOJ-1924903	Previous versions of InstallAnywhere used zlib version 1.0.4 which was known to have vulnerabilities. This issue is resolved in this release. The version of zlib has been upgraded to 1.2.11 to avoid the vulnerabilities.

Issue Number	Issue Summary
IOJ-1992471	While building a project and running the installer, the text (Cancel and Previous buttons) were truncated when Windows 7 was set at a display resolution of 1920 x 1080 and a scaling of 125%. This issue is resolved in this release.
IOJ-1990585	The Custom code action failed with ClassNotFoundException when using InstallAnywhere 2018 SP1 Hotfix D or Hotfix I. This issue is resolved in this release.
IOJ-1927113	Previously when both, Oracle Java 8 JDK and OpenJDK 11 were present in the target machine and OpenJDK 11 was set as the default JVM. After adding Without VM installer for Linux, an error occurred. This issue is resolved in this release.
IOJ-1991121	Previously the scrollbar wasn't working when the text exceeded the panel size in the Custom Code panel. This issue is resolved in this release.
IOJ-1818811	Previously when using the 64 bit Windows Console launcher, an irrelevant/confusing message (Unable to locate 32 bit installer to execute) was displayed when the launcher was renamed and executed from the command prompt. This issue is resolved in this release.
IOJ-1753361	During the Pre-Install phase, when there were multiple instances in different locations, in Silent mode, the Variable IA_INSTALL_INSTANCE_NUM was not incremented each time. This issue is resolved in the release.
IOJ-1899071	The upgrade that used "Product that Share My Upgrade Code" failed to launch on a machine that had a product created with InstallAnywhere 2013 or earlier. This issue is resolved in this release.
IOJ-1915443	While running the Installer and navigating to Choose Java VM panel, the OJDKBUILD JVM version 8 was missing from the list. Because of which, the JVM Validation failed with a debug output entry for OJKBUILD JVM version 8. This issue is resolved in this release.
IOJ-1913982	Windows DLL failed to load when running the installer on Windows Server 2019 with JVM that outputs correct os.name of Windows Server 2019. This issue is resolved in this release.
IOJ-1895466	Previously the Installer failed to launch when running the With VM target bundled with IBM JRE 1.8 SR5 FP20. This issue is resolved in this release.
IOJ-1896493	<p>While using the ActionGroup.getChildren() on an action group that contained a Get User Input Console, an error (Error setting visual children for 'com.zerog.ia.installer.actions.ActionGroup') occurred in the project automation.</p> <p>In addition, the 'Get User Input Console' along with any actions following it in the action group was getting removed from the project. This issue is resolved in this release.</p>
IOJ-1866007	Earlier, the disk space check reported available free space for root file system /, instead of Targeted File System such as /home. This issues is resolved in this release.

Issue Number	Issue Summary
IOJ-1921600	While silently installing the upgrade, the silent upgrade install failed to upgrade an existing instance and displayed an Instant Management error (Aborting installation as the user has either canceled the installation or exceeded the maximum number of instances allowed.). This issue is resolved in this release.
IOJ-1913353	Previously, when using the Pre-Install Summary panel in the Installer, the panel background color changes while navigating back and forward. This issue is resolved in this release.
IOJ-1913973	When running the uninstaller using the command prompt, the Silent uninstall crashed and exited with java.lang.ClassCastException when passing installvariables.properties file to uninstaller launcher. This issue is resolved in this release.
IOJ-1912814	After uninstalling the project, the install.dir.* directory is left behind in /tmp by the uninstall, which can take up considerable disk space depending on the total size and the number of install.dir.* directories. This issue is resolved in the release.

System Requirements

The following are the system requirements for InstallAnywhere 2020:

- [Requirements for Systems That Are Running InstallAnywhere \(Authoring Environment\)](#)
- [Requirements for Docker Images](#)
- [Requirements for Target Systems \(Installer Run-Time Environment\)](#)
- [Supported Java Virtual Machines](#)
- [Requirements for Virtual Appliances](#)
- [Supported Hypervisors and Platforms for Virtual Appliances](#)

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	<ul style="list-style-type: none">● Windows 10(1809)● Windows Server 2008 R2, 2012, 2012 R2, 2016 and 2019(x64)● Windows 10 Fall Creators● Windows 10 Anniversary Update (x86 and x64)● Windows 7, 8.1 and 10 (x86 and x64)● Windows Vista● Windows Server 2008 (x86 and x64)
Apple	<ul style="list-style-type: none">● macOS Catalina (10.15) with Oracle Java 12● macOS Mojave (10.14) with Oracle Java 8, 9, 10 or 11 or 12● macOS High Sierra (10.13.3) with Java 7 or 8● macOS Sierra (10.12) with Oracle Java 7 or 8● OS X El Capitan (10.11) with Oracle Java 7 or 8

Operating System	Supported Versions
Linux	<ul style="list-style-type: none"> ● Red Hat Enterprise Linux 7.2, 7.3, 7.4, 7.5, 7.6, 7.7 and 8 (x64) ● Red Hat Enterprise Linux 7/7.1 ● Red Hat Enterprise Linux 6.x (desktop and server editions; x86 and x64) ● Red Hat Enterprise Linux 5.x (x86 and x64) ● OpenSUSE Leap 42.3 (x64) ● OpenSUSE Linux 13.2 and 15.1 (x64) ● OpenSUSE Linux 11.x, 12.x and 13.1 (x86 and x64) ● SUSE Linux Enterprise 11 (SP2 and SP3; x64), 12 (SP1, x64) and 15 ● Linux PPC 64-bit (build time only) only with Java 6 ● Ubuntu 14.x, 15.04, 17.04, 17.10, 18.04, 18.04.2 and 19.04 (x64) ● Ubuntu 13.x (desktop and server editions; x86 and x64) ● Ubuntu 10.x, 11.x, and 12.x (x86 and x64) ● Fedora 18, 19, 20, 24, 27, 28, 29 and 30 (desktop editions; x64)



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 Docker Images

Support for building Docker images from InstallAnywhere 2017 when Docker is installed on the platforms below.

Item	Description	
Docker Version Supported	Docker 1.7.1	
Platforms	Windows	<ul style="list-style-type: none">Windows 7
	Linux	<ul style="list-style-type: none">Ubuntu 14.10Red Hat Enterprise Linux 7.1CentOS 7.6
	Apple	<ul style="list-style-type: none">OS X 10.8.x, 10.9.x, and 10.10.3

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 6, 7, or 8 (but Oracle Java 7 or 8 for OS X). InstallAnywhere-generated installers are not supported on beta versions or on early-access releases unless they are explicitly mentioned.

Operating System	Supported Versions
Windows	<ul style="list-style-type: none">● Windows 10 (1809)● Windows Server 2008 R2, 2012, 2012 R2, 2016 and 2019(x64)● Windows 10 Fall Creators● Windows 10 Anniversary Update (x86 and x64)● Windows 7, 8.1 and 10 (x86 and x64)● Windows 8 (x86 and x64)● Windows Vista (x86 and x64)● Windows Server 2008 (x86 and x64) <p>Windows-based target systems must also support the SSE2 instruction set.</p>
Apple	<ul style="list-style-type: none">● macOS Catalina (10.15) with Oracle Java 12● macOS Mojave(10.14) with Oracle Java 8 or 9 or 10 or 11 or 12● macOS High Sierra (10.13.3) with Oracle Java 7 or 8macOS Sierra (10.12) with Oracle Java 7 or 8● OS X El Capitan (10.11) with Oracle Java 7 or 8
Linux	<ul style="list-style-type: none">● CentOS 6.8, 7, 7.3, 7.4 and 7.6 (x86, x64)● Red Hat Enterprise Linux 7.2, 7.3, 7.4, 7.5, 7.6, 7.7 and 8 (x64)● Red Hat Enterprise Linux 7.2 for PowerPC (little endian)● Red Hat Enterprise Linux 7/7.1● Red Hat Linux 7.1 for PowerPC (little endian - silent and console mode only)● Red Hat Enterprise Linux 6.x, SUSE 11.x on zSeries● Red Hat Enterprise Linux 6.x SUSE 11.x PPC 64-bit (build time only) with Java 6● Red Hat Enterprise Linux 6.x (desktop and server editions; x86 and x64)● Red Hat Enterprise Linux 5 (x86, x64, Itanium 2, and AMD-64)● OpenSUSE Linux 13.2, 15.1 and 42.3 (x64)● OpenSUSE Linux 11.x, 12.x and 13.1 (x86 and x64)● SUSE Linux Enterprise 11 (SP2 and SP3; x64), 12 (SP1, x64)● Ubuntu 14.x, 15.04, 16.04 LTS, 17.10, 18.04, 18.04.2 and 19.04 (x64)

Operating System	Supported Versions
	<ul style="list-style-type: none"> Ubuntu 13.x (desktop and server editions; x86 and x64) Ubuntu 9.x, 10.x, 11.x, 12.x (x86 and x64) Fedora 18, 19, 20, 24, 27, 28, 29 and 30 (desktop editions; x64)
Solaris	<ul style="list-style-type: none"> Solaris 11 (x86 and SPARC) Solaris 9, 10 (x86, SPARC, and AMD-64)
HP-UX	<ul style="list-style-type: none"> HP-UX 11i (Itanium 2 and PA-RISC)
AIX	<ul style="list-style-type: none"> AIX 5.2, 5.3, 6.1, and 7.1 (Power/PowerPC)
IBM	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	1.7.x, 1.8.x, 9
HP	1.7.x, 1.8.x, 9
Sun/Oracle	1.7.x, 1.8.x, 9, 10, 11, 12
OpenJDK	1.7.x, 1.8.x, 9, 11, 12
Amazon Corretto	8, 11

The InstallAnywhere installer installs JRE 1.7.0_60 VM packs. 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 <http://www.flexerasoftware.com/installanywhere/utilities> and click the VM Packs tab.

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

Requirements for Virtual Appliances

The following are requirements for virtual appliances:

- [System Requirements for Building and Auto-Deploying Virtual Appliances](#)
- [Supported Hypervisors and Platforms for Virtual Appliances](#)

System Requirements for Building and Auto-Deploying Virtual Appliances

The following table lists the system requirements for building and auto-deploying virtual appliances from within InstallAnywhere.

Hypervisor	Requirements
VMware vSphere 5/ vCenter	<ul style="list-style-type: none">● Credentials to a VMware vSphere 5 Server● If your VMware vSphere 5 Server is managed by a VMware vCenter 5 Server, the credentials to the VMware vCenter Server are also required.● Host machine credentials (credentials to a physical/virtual machine that closely resembles the virtual appliance operating system)
Amazon EC2	<ul style="list-style-type: none">● Amazon EC2 account information (account number, access key, secret key, X.509 certificate, and private key associated with your Amazon EC2 account)● Host machine credentials (credentials to a physical/virtual machine that closely resembles the virtual appliance operating system)

Supported Hypervisors and Platforms for Virtual Appliances

InstallAnywhere supports the creation of virtual appliances that run on VMware vSphere 5 and Amazon EC2 hypervisors. A VMware vSphere 5 virtual appliance is deployable on a licensed VMware vSphere 5 Server (standalone) or a licensed VMware vSphere 5 Server that is managed by a licensed VMware vCenter 5 Server.

The following table identifies the operating systems that are supported on the supported hypervisors.

Supported Hypervisor	Supported Operating Systems
VMware vSphere 5/vCenter	<ul style="list-style-type: none">● CentOS 7, 6.2 and 6.3 (x86 and x64)● OpenSUSE 12.2 (x86 and x64) and SUSE Linux Enterprise Server 11 SP2—Requires the use of an existing SUSE VM or snapshot (No support for using a SUSE VM virtual appliance template)● Red Hat Enterprise Linux 6.4 (x86 and x64)—Requires the use of a Red Hat Network-registered RHEL VM virtual appliance template● Red Hat Enterprise Linux 6.3 (x64)—Requires the use of a Red Hat Network-registered RHEL VM virtual appliance template● Ubuntu 11.10, 12.04, 12.1 and 13.04 (x86 and x64)
Amazon EC2	<ul style="list-style-type: none">● Ubuntu 11.10 and 12.04 (x32)

Known Issues

For a list of known issues, see the [InstallAnywhere 2020 Known Issues](#) knowledge base article.

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