

InstallAnywhere 2018

Release Notes

March 2018

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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 2018 release notes](#).

New Features

Refer to the following sections for new features in InstallAnywhere 2018:

- [Perform Open Source Risk Assessment and Vulnerability Scan with FlexNet Code Aware](#)
- [All InstallAnywhere Features Now in a Single Edition](#)
- [Redesigned InstallAnywhere Advanced Designer User Interface](#)
- [Enhanced Upgrade Installers Now Accommodate Maintenance Mode and Instance Management](#)

Perform Open Source Risk Assessment and Vulnerability Scan with FlexNet Code Aware

There is an increasing need to understand the licensing obligations of all open source software components being bundled with a software application. At the same time, users are getting increasingly worried about the vulnerabilities that these open source components bring in. With InstallAnywhere's new FlexNet Code Aware scanning feature, users will get the insight into the licensing obligations and vulnerabilities associated with all open source components.

InstallAnywhere now includes full integration with FlexNet Code Aware, an automated open source risk assessment and package discovery solution that enables you to quickly scan your products for security and intellectual property (IP) compliance risk.

- [Supported File Types](#)
- [Running FlexNet Code Aware from Within InstallAnywhere](#)
- [Running FlexNet Code Aware as a Standalone Product](#)
- [Reading the FlexNet Code Aware Report](#)
- [More Information](#)



Note • FlexNet Code Aware is automatically activated when you activate InstallAnywhere. However, the FlexNet Code Aware license expires one year from the date that it is first launched.



Important • FlexNet Code Aware is not supported on 32-bit machines. A 64-bit operating system is required.

Supported File Types

FlexNet Code Aware supports analysis of the following files:

- Java Packages
- Node Packages
- Nuget Packages
- RPM Packages
- Ruby Packages
- EXE & DLL Files

Security vulnerabilities are looked up against the [National Vulnerability Database \(NVD\)](#).

Running FlexNet Code Aware from Within InstallAnywhere

To run FlexNet Code Aware from within InstallAnywhere, click **Run FlexNet Code Aware Analysis** on the InstallAnywhere **Tools** menu.

When FlexNet Code Aware completes the scan of your project, the Results Summary view opens, displaying the number of files scanned, and the number of open-source packages and vulnerabilities found.

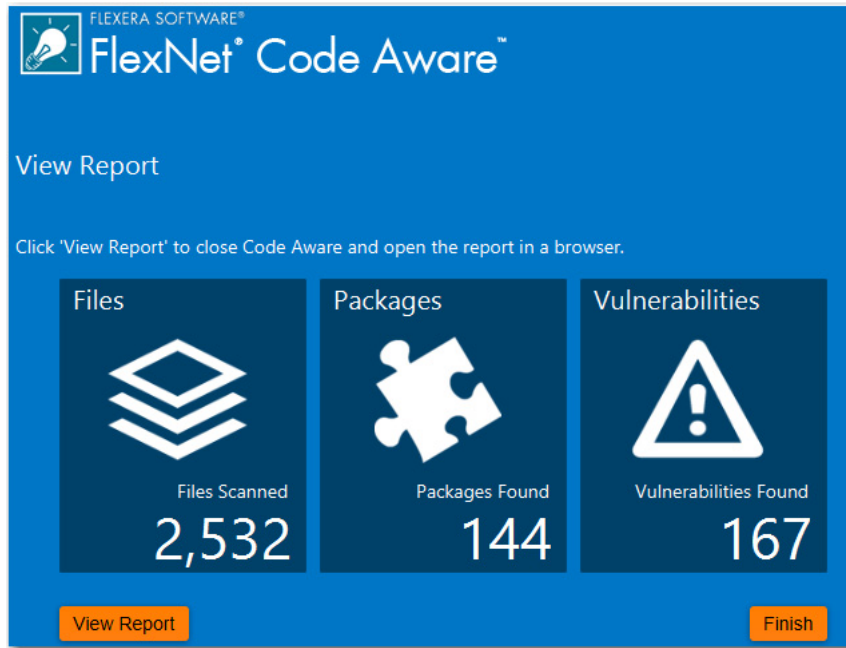


Figure 1: FlexNet Code Aware Results Summary

When you click the **View Report** button, a full report is displayed.

Running FlexNet Code Aware as a Standalone Product

Rather than scanning the files in the open InstallAnywhere project, you can also launch FlexNet Code Aware as a standalone product and select a directory of files to scan.

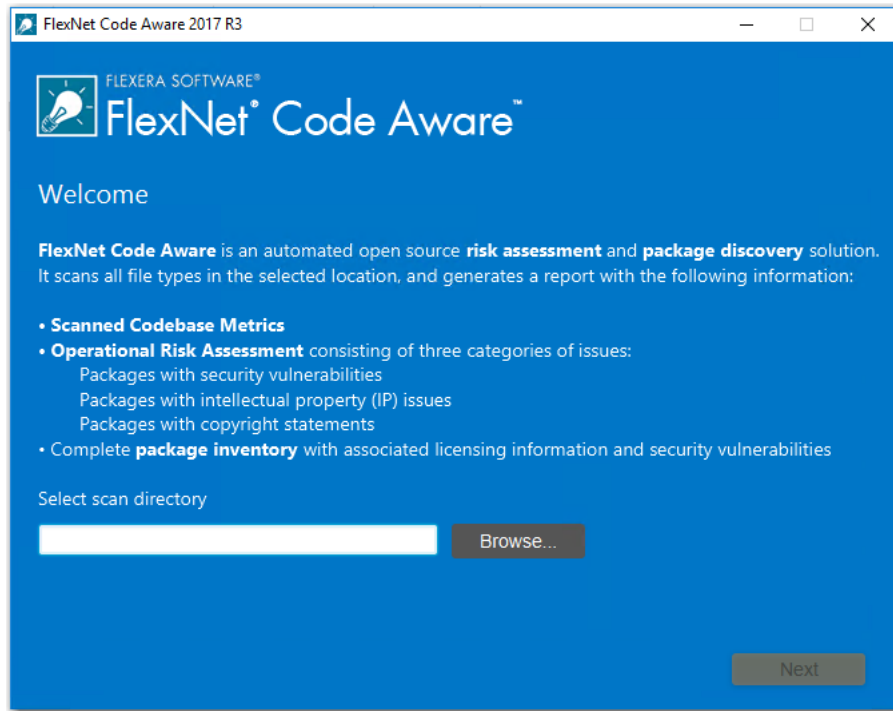


Figure 2: FlexNet Code Aware Welcome Panel

Just click **Browse**, select the directory that you want to scan, and then analysis will begin.

Reading the FlexNet Code Aware Report

When you click **View Report** on the Results Summary screen, the full FlexNet Code Aware report opens, consisting of an **Initial Summary** view and a **Package Inventory** view.

Initial Summary View

The **Initial Summary** view presents the user with a scan summary, and assessments of operational risk, security vulnerability exposure, and license exposure.

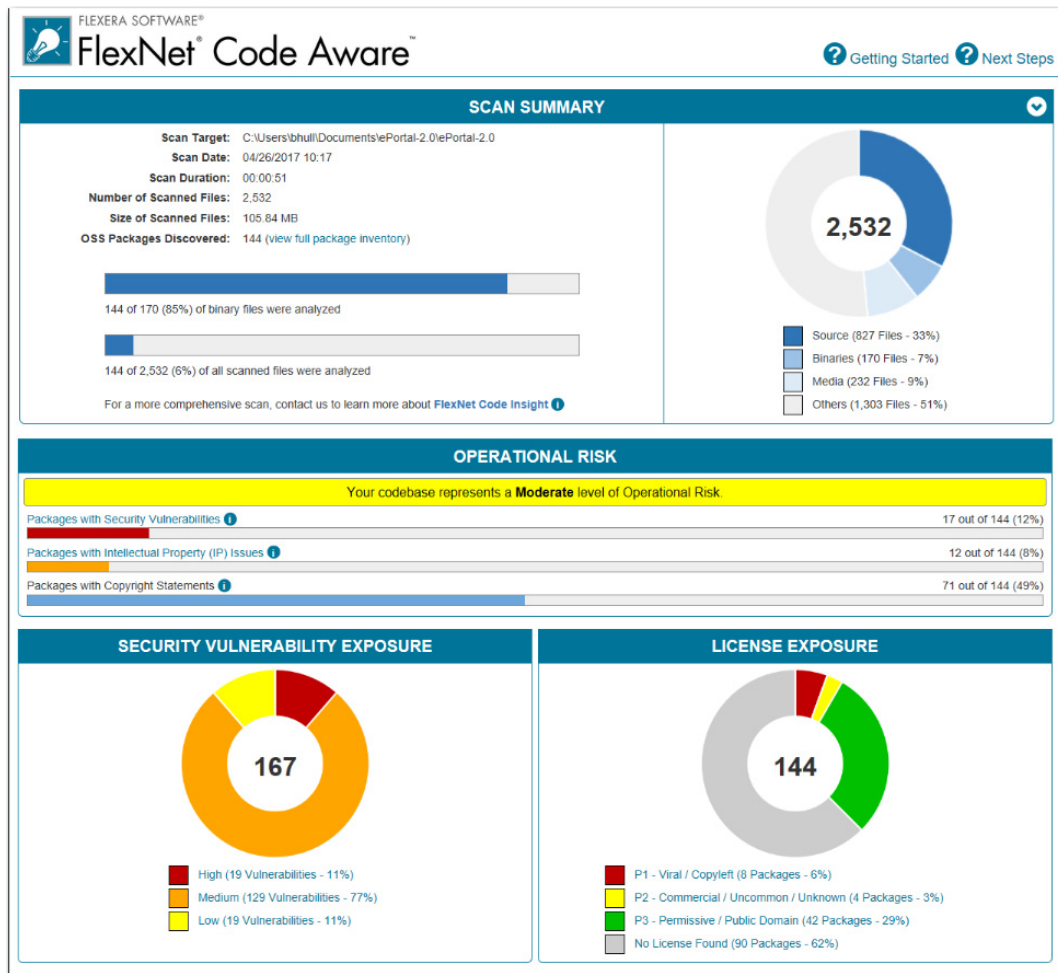


Figure 3: FlexNet Code Aware Initial Summary View

The FlexNet Code Aware Initial Summary View displays the following information:

- **Scan Summary**—This section provides details regarding the codebase that was scanned, including a breakdown of file types, percent of files analyzed, and number of findings.
- **Operational Risk**—This section provides a composite risk rating based on the combination of packages with Intellectual Property (IP) issues and packages with Security Vulnerabilities.
- **Security Vulnerability Exposure and License Exposure**—These sections provide a breakdown of the types and categories of identified issues.

Package Inventory View

The **Package Inventory** view, available by clicking **View full package inventory** in the **Scan Summary** section, provides a complete list of discovered open source and third-party packages with associated licenses, security vulnerabilities, dependencies, and detected copyright statements.

The screenshot shows the FlexNet Code Aware interface. At the top, there's a header with the Flexera Software logo and 'FlexNet Code Aware' text. Below the header, there are three main filter sections: Search, Security Vulnerabilities, and Detected Licenses. The Search section has three input fields: 'Enter keyword...', 'Enter CVE (CVE-XXXX-XXXX)...', and 'Enter copyright holder'. The Security Vulnerabilities section has three checkboxes: 'High Severity (CVSS 7.0 - 10.0)', 'Medium Severity (CVSS 4.0 - 6.9)', and 'Low Severity (CVSS 0.0 - 3.9)'. The Detected Licenses section has three checkboxes: 'P1 - Viral / Copyleft', 'P2 - Commercial / Uncommon / Unknown', and 'P3 - Permissive / Public Domain'. Below these filters, there are 'Apply', 'Or', and 'Criteria' buttons, along with 'Filter' and 'Reset' buttons. The main content area shows a table of packages. The table has columns for Package, License, Vendor, Vulnerabilities, and # Copyrights. The first row shows 'mysql_connector_c 5.1.7' with 'No License Found', 'Mysql' vendor, and 94 vulnerabilities (5 High, 71 Medium, 18 Low). The second row shows 'struts 1.2.7' with 'Apache-2.0' license, 'Apache' vendor, and 7 vulnerabilities (2 High, 5 Medium, 0 Low). The third row shows 'spring_framework 3.0.5.RELEASE' with 'Apache-2.0' license, 'Pivotal_software' vendor, and 6 vulnerabilities (1 High, 5 Medium, 0 Low). The table is paginated, showing 10 of 144 packages. At the bottom, there's a legend for Licenses and Vulnerabilities.

Package	License	Vendor	Vulnerabilities	# Copyrights
mysql_connector_c 5.1.7	No License Found	Mysql	94 (5 High, 71 Medium, 18 Low)	None Found
struts 1.2.7	Apache-2.0	Apache	7 (2 High, 5 Medium, 0 Low)	None Found
spring_framework 3.0.5.RELEASE	Apache-2.0	Pivotal_software	6 (1 High, 5 Medium, 0 Low)	None Found
spring_framework 3.0.5.RELEASE	Apache-2.0	Springsource	6 (1 High, 5 Medium, 0 Low)	None Found
spring_framework 3.0.5.RELEASE	Apache-2.0	Pivotal_software	6 (1 High, 5 Medium, 0 Low)	None Found
spring_framework 3.0.5.RELEASE	Apache-2.0	Pivotal_software	6 (1 High, 5 Medium, 0 Low)	None Found
spring_framework 3.0.5.RELEASE	Apache-2.0	Pivotal_software	6 (1 High, 5 Medium, 0 Low)	None Found
spring_framework 3.0.5.RELEASE	Apache-2.0	Pivotal_software	6 (1 High, 5 Medium, 0 Low)	None Found
spring_framework 3.0.5.RELEASE	Apache-2.0	Pivotal_software	6 (1 High, 5 Medium, 0 Low)	None Found
spring_framework 3.0.5.RELEASE	Apache-2.0	Springsource	6 (1 High, 5 Medium, 0 Low)	None Found

Figure 4: FlexNet Code Aware Package Inventory View

The **Package Inventory** view provides filters that you can use to execute targeted queries to refine the list to various package types of interest.

To view additional package details, click a vulnerability count listed in the **Vulnerabilities** column of the package you want to review:

This image shows a close-up of the 'Vulnerabilities' column from the table in Figure 4. It displays two rows of vulnerability counts. The first row shows 7 High Severity (red), 2 Medium Severity (orange), and 5 Low Severity (yellow) vulnerabilities. The second row shows 6 High Severity (red), 1 Medium Severity (orange), and 5 Low Severity (yellow) vulnerabilities.

Figure 5: Vulnerabilities Column

The **Vulnerabilities Detail** page opens (covering a portion of the Package Inventory view), and displays detailed information on the selected package.

struts 1.2.7


Name

struts 1.2.7


Version


1.2.7


License


 Apache-2.0

Vulnerabilities

 7

 2

 5

 0

Description

The core of the Struts framework is a flexible control layer based on standard technologies like Java Servlets, JavaBeans, ResourceBundle, and Extensible Markup Language (XML), as well as various Jakarta Commons packages. Struts encourages application architectures based on the Model 2 approach, a variation of the classic Model-View-Controller (MVC) design paradigm. Struts provides its own Controller component and integrates with other technologies to provide the Model and the View. For the Model, Struts can interact with any standard data access technology, including Enterprise Java Beans, JDBC, and Object Relational Bridge. For the View, Struts works well with JavaServer Pages, including JSTL and JSF, as well as Velocity Templates, XSLT, and other presentation systems. The Struts framework provides the invisible underpinnings every professional web application needs to survive. Struts helps you create an extensible development environment for your application, based on published standards and proven design patterns.

Path

C:\Users\bhull\Documents\Portal-2.0\Portal-2.0\extras\struts-1.2.7\contrib\struts-elib\struts.jar
C:\Users\bhull\Documents\Portal-2.0\Portal-2.0\extras\struts-1.2.7\lib\struts.jar

Evidence Type

pom.xml

Maven GAV

struts:struts:1.2.7


Vendor

Apache


Copyrights

None Found

Security Vulnerabilities



CVE ID: [CVE-2006-1547](#)

Severity:  High

CVSS Score: 7.8

Figure 6: Vulnerabilities Detail

More Information

For detailed information on using FlexNet Code Aware, see *Using FlexNet Code Aware to Perform Open Source Risk Assessment* in the InstallAnywhere Help Library.

All InstallAnywhere Features Now in a Single Edition

Previous versions of InstallAnywhere were available in two different editions, Professional and Premier, with additional features included in add-on Virtualization and Cloud packs. Starting with InstallAnywhere 2018, all features are included in a single edition.

After upgrading to InstallAnywhere 2018, you will have access to all features, including these features that were previously only available in Premier Edition and with the add-on packs:

- **Extensive run-time language support**—InstallAnywhere includes default run-time strings in 32 supported languages, and gives you the ability to include custom localized splash screens in your installations.
- **Built-in support for creating upgrades**—You can create upgrades that uninstall earlier versions of the product if present before installing the new version.
- **Instance management support**—You can create installers that let end users install multiple instances of a product on the same machine.
- **Predefined and custom source path variables**—You can use predefined source path variables in your installer, such as \$IA_HOME\$, \$IA_PROJECT_DIR\$, and \$USER_HOME\$. You can also use custom source path variables.
- **Build time variables**—You can configure your project to use build-time variables, variables that have their values set at build time.
- **Flexible build configuration management**—You can define tags to bundle related sets of actions, panels, features, and components, and assign the tags to the appropriate items in your project. Then you can associate the tags with specific build configurations to include or exclude items from builds.
- **Flexible build target management**—You can create different build targets for each platform that your product supports.
- **Ability to add custom GUI panels**—You can design your own custom panels that guide end users through the selection or completion of various UI elements such as text boxes, check boxes, and lists.
- **Merge module support**—You can include merge modules in your installer project.
- **Project automation APIs**—InstallAnywhere includes project automation APIs that let you design, modify, build, and test an installation from an InstallAnywhere project via Java code.
- **Docker support**—You can use InstallAnywhere to configure and build Docker images, and deploy Web applications to the cloud as Docker images that are run as Docker containers.
- **Virtual appliance support**—You can build enterprise-ready and cloud-ready multi-tier virtual appliances for VMWare ESX based on your existing InstallAnywhere projects.
- **Ability to share components with other products**—You can optionally identify a component in your project as shared. At run time, if this type of component is not already present on a target system, the installer adds it. If it is already present, the installer registers it as shared.

All existing customers will be upgraded to the full-featured, single edition.

Redesigned InstallAnywhere Advanced Designer User Interface

The user interface of InstallAnywhere 2018's Advanced Designer has been redesigned and updated to provide a cleaner, more modern look, with a new black / gray / blue color scheme.

A user-friendly tabbed interface improves the ease of switching between views. Buttons on the **Sequence** tab have been repositioned to a more logical location above the Action lists.

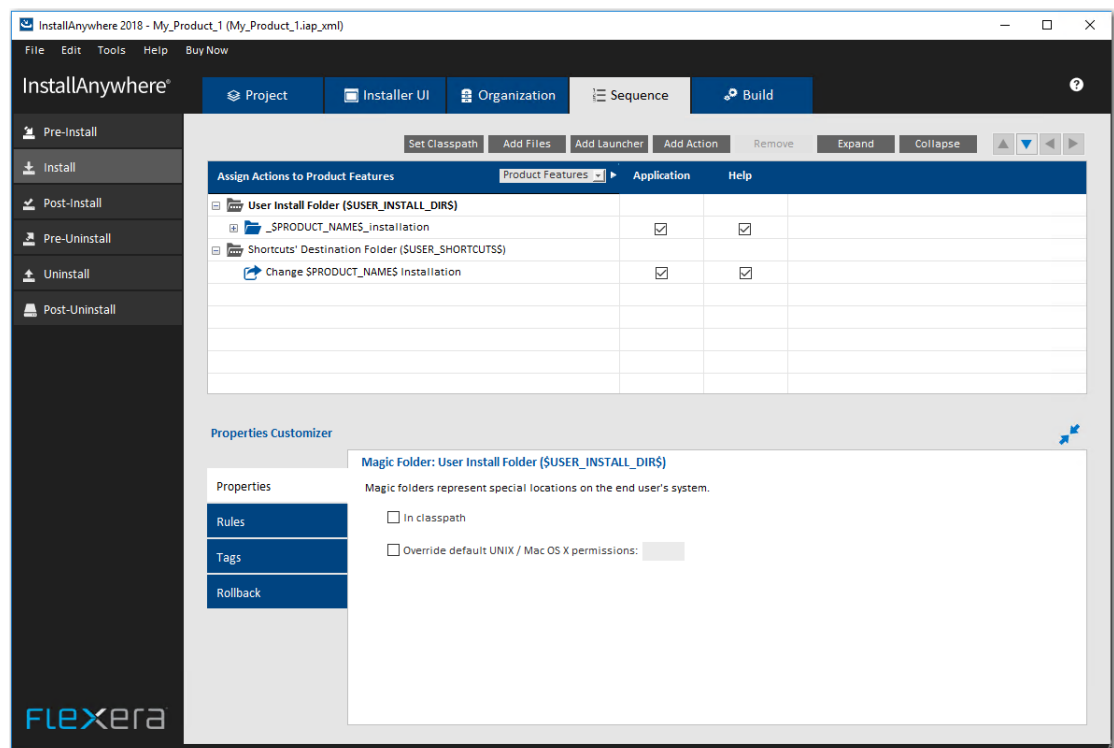


Figure 7: Redesigned Advanced Designer User Interface of InstallAnywhere

The **Create/Open Project** dialog box that opens when you launch InstallAnywhere has also been redesigned to be more user friendly.



Figure 8: Redesigned Create/Open Project Dialog Box

When you click **Create new project** on the **Create/Open Project** dialog box, the redesigned **Create New Project** dialog box opens, prompting you to select the desired template to use, enter a name for the project, and select a location for the project.

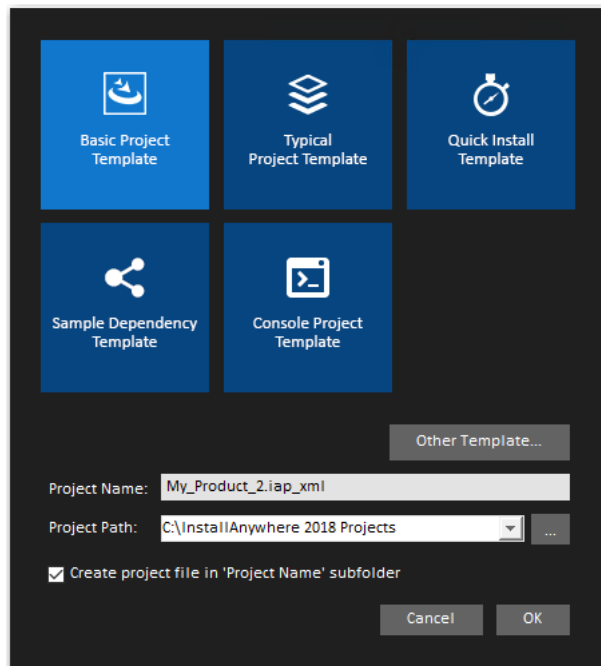


Figure 9: Redesigned Create a New Project Dialog Box

Enhanced Upgrade Installers Now Accommodate Maintenance Mode and Instance Management

In InstallAnywhere 2018, the behavior of upgrade installers has been enhanced to accommodate maintenance mode and instance management.

Previously, upgrade installers did not support maintenance mode or instance management. Upgrade installers could only upgrade an earlier version of an application (by uninstalling the previous version and installing the new version), or, if an earlier version does not exist, just install the new version.

In InstallAnywhere 2018, you can use an upgrade installer to add or remove features of a previously installed version as well as repair broken installations. You can also use an upgrade installer to specify whether multiple instances of a product can be installed on the same machine. At runtime, the user can choose which instance of the product to upgrade or perform maintenance on.



Note • This feature is not supported when performing a silent upgrade.



Note • This change was tracked in issue IOJ-1754674.

Enhancements

This section lists enhancements that were included in InstallAnywhere 2018:

- [Support for Java 9](#)
- [Ability to Customize the Windows File Properties of an Installer Executable File](#)
- [Ability to Customize the Get Info Property Value for Copyright Field for an OS X / macOS Build Target](#)
- [Ability to Add Checkbox to Install Complete Panel to Launch Target Application or README File](#)
- [Option to Disable Logging Upon User Cancellation During Pre-Install Sequence](#)
- [Execute Script/Batch File Action Run in Console Mode Now Writes Identifier to Console](#)
- [In Console Mode, User Can Now Move Forward Without Scrolling Through the Entire License Agreement](#)
- [Ability to Set Compiler Flags, Such as SafeSEH, for Executables Installed on Windows](#)
- [ANT Version Associated with Execute ANT Script Action Updated to ANT 1.9.9](#)
- [New Compare Versions Rule](#)
- [Expand/Collapse Buttons on Sequence Page Views](#)
- [Get Password Action Console Panel Now Available in Pre-Uninstall and Post-Uninstall Phases](#)
- [New User-Defined Range of Installer Exit Codes](#)
- [New Variable to Store Response File Location](#)
- [New Option to Specify Whether to Save Installer Project Before Build](#)

Support for Java 9

InstallAnywhere 2018 now supports the latest version of Java, Version 9. Using InstallAnywhere 2018, you can create installers that support Java 9, including:

- Creating Java 9 VM packs
- Creating installers that bundle a Java 9 VM pack
- Creating installers that can detect a Java 9 VM on the host and run automatically

Ability to Customize the Windows File Properties of an Installer Executable File

In previous releases, when you viewed the **Details** tab of the Windows **Properties** dialog box for an InstallAnywhere installer .exe file, information specific to the version of InstallAnywhere used to create the installer was displayed instead of information specific to the product being installed:

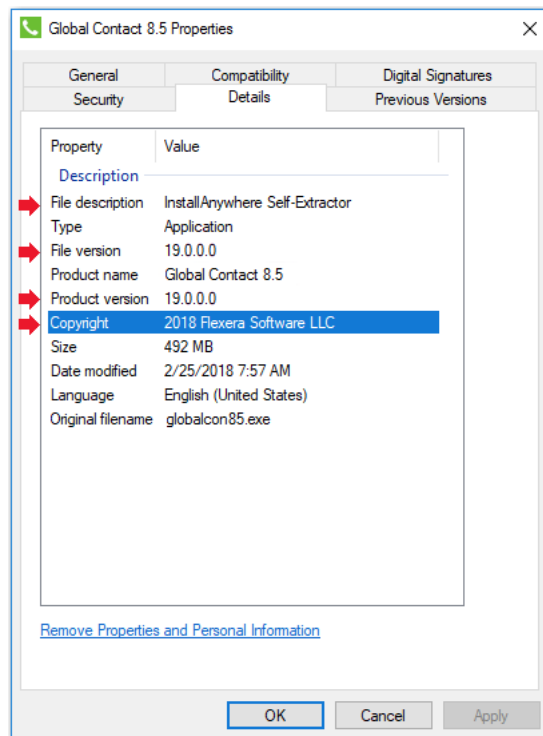


Figure 10: Details Tab of Windows Properties Dialog Box

The following hard-coded values were displayed for all Windows .exe installers created using InstallAnywhere:

- **File description**—Displayed **InstallAnywhere Self-Extractor**.
- **File version**—Displayed the version of InstallAnywhere that was used to create the installer.
- **Product version**—Displayed the version of InstallAnywhere that was used to create the installer.
- **Copyright**—Displayed InstallAnywhere's copyright information.

For Windows installer .exe files created using InstallAnywhere 2018, the project-specific values entered on the on the **Project > General Settings** page of the InstallAnywhere project file are now displayed on the **Details** tab of the Windows **Properties** dialog box, instead of the previously hard-coded values.



Note • This change was tracked in issues IOJ-1559507 and IOJ-1556145.

Ability to Customize the Get Info Property Value for Copyright Field for an OS X / macOS Build Target

In previous releases, when you viewed the **Copyright** field on the **Get Info** dialog box for a Mac OS X build target for an installer targeting a OS X / macOS operating system, the copyright information specific to the version of InstallAnywhere used to create the installer was displayed instead of information specific to the product being installed:

In InstallAnywhere 2018, you can now customize the **Get Info** property value for the **Copyright** field for a Mac OS X build target.

The **Copyright** and **Version** fields can be edited on the InstallAnywhere **Project > General Settings** view under **Product Information**. The values entered here will be displayed on the dialog box that opens in OS X / macOS operating systems when you select the **Get Info** option.



Note • This change was tracked in issue IOJ-1827336.

Ability to Add Checkbox to Install Complete Panel to Launch Target Application or README File

In InstallAnywhere 2018, a new option has been added to configure the **Install Complete** panel to display a checkbox to prompt the user to launch a README file and/or launch a target application. The application could be either the main target application of the product that was just installed, or a utility installed alongside the product.



Note • This change was tracked in issues IOJ-1742892 and IOJ-1744734.

Option to Disable Logging Upon User Cancellation During Pre-Install Sequence

A new option has been added to enable you to disable logging if the user cancels an installation during the Pre-Install sequence.

To disable logging, open the **Project > General Settings** view of the Advanced Designer, scroll down to the **Log Settings** group, and set the **Skip Logging in Pre-Install** option to **Yes**.



Note • This change was tracked in issue IOJ-1769638.

Execute Script/Batch File Action Run in Console Mode Now Writes Identifier to Console

When run in console mode, an InstallAnywhere installer displays a **Please Wait** message during installation for each **Execute Script/Batch File** action and **Execute Command** action included in the **Install Sequence** or **Post-Install Sequence**.

In InstallAnywhere 2018, an installer running in console mode now identifies each action that displays a **Please Wait** message by also displaying the action title/name.



Note • This change was tracked in issues IOJ-1805846 and IOJ-1811765.

In Console Mode, User Can Now Move Forward Without Scrolling Through the Entire License Agreement

In InstallAnywhere 2018, a new option has been added to enable users using a console mode installer to proceed to the next step without scrolling through the entire license agreement.

When you add a License Agreement console screen to an installer on the **Sequence > Pre-Install** page, you can now select the **Do not force user to scroll through license agreement** option.

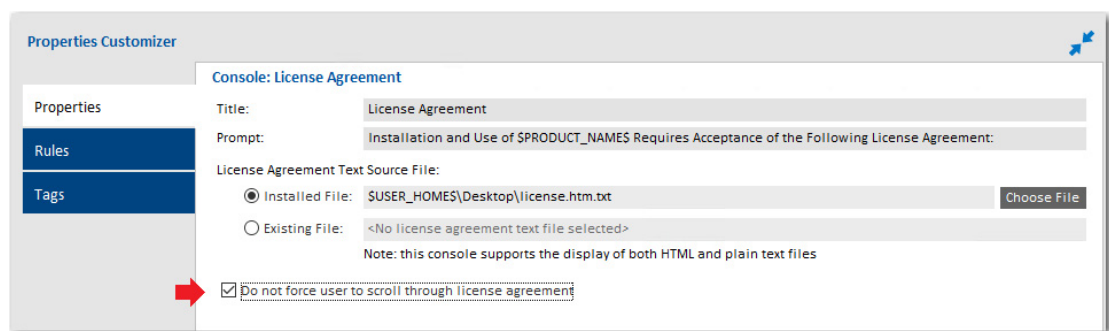


Figure 11: Properties Tab of Console: License Agreement Console Screen

When this option is selected, users using a console mode installer will be able to accept or reject the license agreement without scrolling through all of the text of the license agreement. The following text will be displayed:

PRESS ANY KEY TO CONTINUE TO READ LICENSE AGREEMENT OR PRESS '0' to ADVANCE TO END



Note • To control whether a user using a **panel** mode installer can proceed to the next step without scrolling through the entire license agreement, use the **Force user to scroll through license agreement** option on the **Properties** tab of the **Panel: License Agreement > Properties** tab.



Note • This change was tracked in issue IOJ-1559962.

Ability to Set Compiler Flags, Such as SafeSEH, for Executables Installed on Windows

In previous releases, executables installed on Windows did not meet security requirements because compiler flags, such as SafeSEH, were not set. In InstallAnywhere 2018, compiler flags are now set properly for executables installed on Windows. These executables now pass the SafeSEH check.

Support has been added to LaunchAnywhere (32-bit and 64-bit) and SelfExtractor (32-bit and 64-bit) projects for the following flags:

- **/SAFESEH**—This is applicable only for 32-bit target and not applicable for 64-bit targets. Therefore, for all 64-bit build configurations, we have set this flag to NO.
- **/HIGHENTROPYVA**—This is applicable only for 64-bit executable images. This is not applicable for 32-bit executable images.



Note • This change was tracked in issue IOJ-1838458.

ANT Version Associated with Execute ANT Script Action Updated to ANT 1.9.9

In InstallAnywhere 2018, the ANT version associated with the **Execute ANT Script** action has been updated to ANT 1.9.9 for both InstallAnywhere development and InstallAnywhere runtime.

ANT 1.9.9 supports Java 1.5 and above. For more information, see:

<http://ant.apache.org/manual/install.html>

<https://ant.apache.org/faq.html>



Note • This change was tracked in issue IOJ-1663063.

New Compare Versions Rule

InstallAnywhere 2018 now includes a new **Compare Versions** rule that enables you to specifically compare two version numbers during an installation. This new rule is displayed on the **Choose a Rule/Expression** dialog box that opens when you click Add Rule on the **Organization** or **Sequence** page.

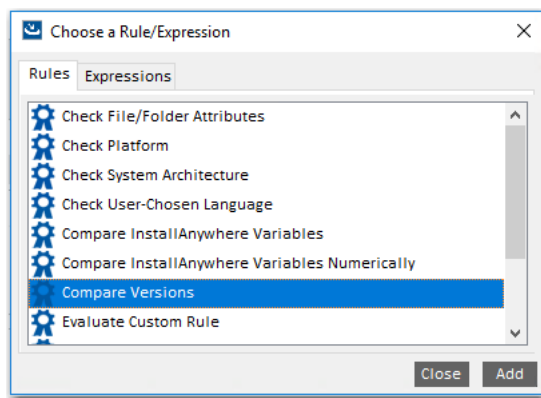


Figure 12: New Compare Versions Rule

When you add a **Compare Versions** rule, you are prompted to enter two operands and an operator in the Compare Versions **Properties Customizer**. Both operands may be expressed as either an InstallAnywhere variable being resolved (such as \$VARIABLE1\$) or as a literal version number string (such as 1.0.0.0).

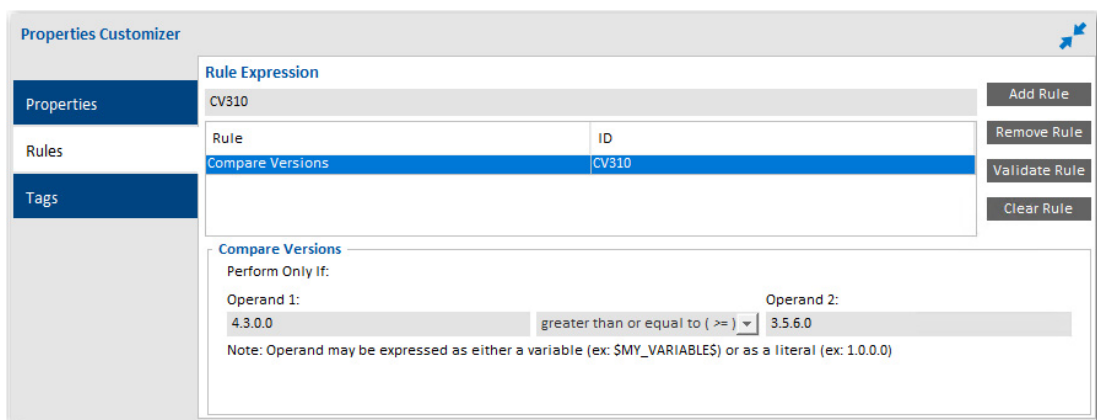


Figure 13: Compare Versions Rule Properties Customizer



Note • This change was tracked in issue IOJ-1806918.

Expand/Collapse Buttons on Sequence Page Views

In InstallAnywhere 2018, an **Expand** and a **Collapse** button have been added to views on the **Sequence** page to quickly collapse or expand the items in the Action List tree.

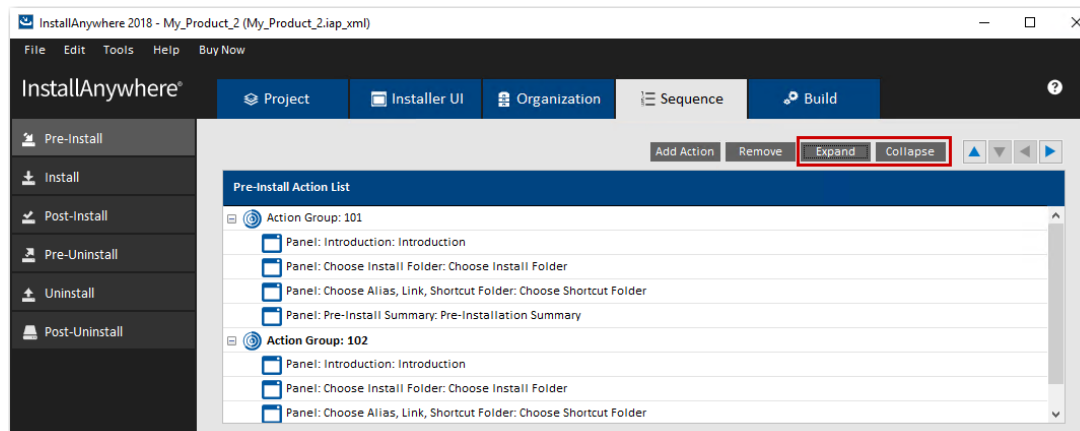


Figure 14: New Expand and Collapse Buttons on the Sequence Page

When you click the **Collapse** button, the items in the tree are collapsed into their primary item:

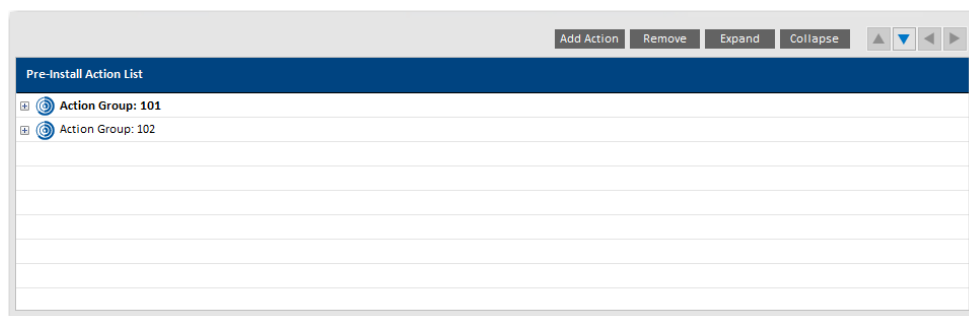


Figure 15: Collapsed Items in the Tree



Note • This change was tracked in issues IOJ-1560032 and IOJ-1559979.

Get Password Action Console Panel Now Available in Pre-Uninstall and Post-Uninstall Phases

Previously, you could not add a **Console: Get Password** action during **Pre-Uninstall** and **Post-Uninstall** tasks for console mode installers.

In InstallAnywhere 2018, you can now add a **Console: Get Password** action during **Pre-Uninstall** and **Post-Uninstall** tasks for console mode installers. You can also add a **Console: Get Password** action during **Pre-Uninstall** and **Post-Uninstall** tasks after adding a merge module project, which previously was not possible.



Note • This change was tracked in issue IOJ-1562099.

New User-Defined Range of Installer Exit Codes

InstallAnywhere 2018 now includes a range of user-defined installer exit codes. These can be used to act upon scripts that are included in your installers. The following 20 exit codes were added for customer use:

Category	Exit Codes
Linux Exit Codes	43 to 62
Other Exit Codes	10795 to 10814



Note • This change was tracked in issue IOJ-1563384.

New Variable to Store Response File Location

A new InstallAnywhere variable named `$IA_RESPONSEFILE_PATH$` has been added to store the complete location of a response file being used by the installer.



Note • This change was tracked in issue IOJ-1562772.

New Option to Specify Whether to Save Installer Project Before Build

In previous releases, when you initiated a build from the InstallAnywhere user interface, InstallAnywhere would first save the current project before performing the build.

In InstallAnywhere 2018, a new option has been added to the **General Settings** tab of the **InstallAnywhere Preferences** dialog box named **Save the project before build** that determines whether a project is saved before the build is performed:

- **Option is selected**—The project is saved prior to building the installer; all settings are saved.
- **Option is not selected**—If you make changes to project settings and then build the installer, the setting changes are in the built installer but they are not saved to the project file.



Note • This change was tracked in issue IOJ-1733987.

Important Information

Note the following important information regarding InstallAnywhere 2018:

- [Project Wizard Interface Removed](#)
- [Runtime Support for Java 1.6 Dropped](#)
- [Solaris Support for InstallAnywhere Designer Dropped](#)
- [Evaluating InstallAnywhere](#)
- [Obtaining the Installation and License Files for InstallAnywhere](#)

Project Wizard Interface Removed

In previous releases of InstallAnywhere, both a Project Wizard and Advanced Designer interface were available. Starting with InstallAnywhere 2018, the Project Wizard interface is no longer available.

Runtime Support for Java 1.6 Dropped

InstallAnywhere 2018 no longer includes runtime support for Java 1.6.

Solaris Support for InstallAnywhere Designer Dropped

InstallAnywhere 2018 no longer supports the Solaris operating system for its designer user interface. However, InstallAnywhere will continue to provide Solaris runtime support.

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

The following issues have been resolved in InstallAnywhere 2018.

Issue Number	Issue Summary
IOA-000034607	When using a Modify Text File action with the Substitute InstallAnywhere variables in file option selected, InstallAnywhere would correctly substitute the InstallAnywhere variable; however it would also remove references to UNIX variables in the file.
IOA-000046943	Request for OpenJDK support.
IOA-000053367	If you add a Choose Java VM Console panel to the Pre-Install phase, build the project with and without JVM, run the installer (either without VM or with VM), and select a VM from the list of installed JVMs on the system, it takes the JVM but displays the following error message: “Unable to install the Java Virtual Machine including with the installer”. This is a meaningless error message for end users. A more helpful message should be displayed.
IOA-000061991	Request to change the name of two component types on the Configure Choice Group dialog box: change Popup Menu to Dropdown List , and change List to List Box .
IOA-000064187	On an installer panel that uses right-to-left text orientation, when there is a long string, the scroll bar should start on the right side instead of the left.

Issue Number	Issue Summary
IOA-000065174	An Execute Uninstaller action will fail if the install path is a UNC path.
IOA-000066612	<p>When executing the following command through Execute Script/Batch File Action and Execute Command Action on Linux:</p> <pre>echo -n \$variable</pre> <p>a newline character is added to the string stored in the \$EXECUTE_STDOUT\$ InstallAnywhere variable set by the Action, even though the -n parameter of the echo command should remove any newline characters in the command output on Linux.</p>
IOA-000067374	Enhance the search functionality in the interface so that it will actually navigate to and select the Actions/Panels returned by the search.
IOC-000064657	When a Get User Input Console is added to a project, and a label is configured in the console that does not have a default value, when the console is displayed at runtime, that label displays the word DEFAULT in the default field for that label. The default field for that label should be empty.
IOJ-1749315	Including JAVA_HOME in any string value will cause double slashes or multiple consecutive slashes to resolve into a single slash.
IOJ-1759801	<p>When a project consists of two build configurations, and tags are utilized to include files that are specific to each build configuration, you should be able to build a build configuration even when the other build configuration references files that are currently missing on the build machine. However, when trying to build through ANT, with a buildproperties.properties file, or a buildproperties.xml file, this fails and displays an error message beginning with:</p> <p>The following resources are missing from the project:</p>
IOJ-1763540	Incorrect features are installed when installing silently and specifying only one feature to be installed with response file.
IOJ-1765167	<p>If the installvariables.properties file is missing from the uninstall directory, launching the uninstaller should cause a fatal application error: This Application has Unexpectedly Quit...</p> <p>However, if the installvariables.properties file is missing from the uninstall directory, and the Default Install Folder setting does not contain \$PRODUCT_NAME\$ or \$INSTALLER_TITLE\$, the Fatal Application Error message dialog fails to appear during uninstall.</p>
IOJ-1766324	The uninstaller displays a Java NullPointerException Exception in Maintenance Mode. This occurs when Maintenance Mode support is enabled and custom Maintenance Mode icons are specified in the project.
IOJ-1771771	When the Remove unused keys from the locale files setting is enabled, the Choose Language Console Panel Title and Prompt with External Resource Bundle fails to get localized.

Issue Number	Issue Summary
IOJ-1781156	Specifying an instance of a product with Instance Management fails on Java 9 with a <code>java.lang.ClassCastException</code> .
IOJ-1806933	When viewing on a Retina Display or a High Definition Display, images and panels inserted into an installer using InstallAnywhere 2017 are disproportionately bigger and more pixelated in contrast to those inserted using InstallAnywhere 2015 SP1. This issue was reported specifically on Mac macOS Sierra 10.12.
IOJ-1807464	On AIX, when the installation directory path matches the name of a filesystem on that machine, the Available Disk Space value on the Pre-Install Summary panel is for the matching filesystem, not the target filesystem.
IOJ-1812779	Setting the Inner Panel to a background color causes increased CPU usage with installers built using InstallAnywhere 2015/2015SP1/2017. The CPU uses goes up by almost 30% as compared to any other background color setting mode.
IOJ-1815731	The Software Manager is unable to download InstallAnywhere 2017 Public Hotfix A. When the download link is clicked, a blank Software Manager window is shown but nothing else happens.
IOJ-1818175	Using the Start Windows Service action after registering the LaunchAnywhere as a service on Windows 2008 fails to start the service. However, the standard installation logs state that the service started successfully.
IOJ-1818724	Check Running Mode Rule shows the wrong options in Install and Uninstall Sequences depending on which sequence was previously selected.
IOJ-1818808	The Close button (X) on the Build information dialog does not work.
IOJ-1824220	Silent installer fails to launch and displays Installer User Interface Mode Not Supported error message with DISPLAY environment variable set.
IOJ-1826255	Help article “Creating CD-ROM/DVD Installers” should no longer use Mac OS X as an example for platforms that cannot be bundled with a VM.
IOJ-1828026	When using a non-default theme, there is 100% CPU usage and a significantly slower install.
IOJ-1828582	When running a machine under French (Canada) locale, Instructions and Confirmation values are not localized on the Language Selection Panel.
IOJ-1829617	When the Windows PATH environment variable contains a trailing semicolon at the end of the value, this causes the LaunchAnywhere launcher to fail to launch the target application from the command prompt.
IOJ-1830212	An installer built with a non-default theme does not display the shadowed masking dot character on a Get User Input Advanced Panel Shadowed text field.

Issue Number	Issue Summary
IOJ-1830655	When the Splash screen OK button is localized via external resource bundle, it displays the \$L string without resolving it to the value contained in the external resource bundle.
IOJ-1830666	There is a build warning / error every time a user builds without configuring digital signing.
IOJ-1830802	Keyboard keys no longer work on License Agreement panel. The panel does not respond to the keyboard keys, such as the Tab key and the Space bar key, like it did with InstallAnywhere 2015 SP1.
IOJ-1831386	When the Default File Overwrite Behavior in Project > General Settings File Settings is set to Always prompt user , the built installer does not have any buttons for Overwrite Existing File Dialog box on Linux and Mac OS X when the installation contains a file whose name and target location matches a file that is already present on a target system.
IOJ-1834583	Request to add a note to the user documentation stating that when setting up instance management, you should not include a variable in the name of the uninstaller launcher. This breaks the instance management feature.
IOJ-1834594	The command-line builder fails to build a project with a java.lang.NoClassDefFoundError error and java.lang.NullPointerException exception, when the DISPLAY environment variable is set to a value that references an inactive port. But since it is the command-line builder, not the Advanced Designer builder, the build should succeed regardless of the DISPLAY environment variable value.
IOJ-1834611	Create Link, Alias, Shortcut Action fails to resolve InstallAnywhere variables in name
IOJ-1834947	When specifying a root drive as the Existing file for the Copy File Action, this causes a slow launch of the installer, a slow display of the Pre-Install Summary Panel, and incorrect Required Disk Space to be displayed.
IOJ-1835596	The Get User Input Console Panel / Action does not accept a blank value, so the user cannot continue without making a selection.
IOJ-1835893	Expand Archive (Tar) action fails to extract the .tar when the target directory has a space in its name.
IOJ-1837797	When opening an existing project from within InstallAnywhere 2017, a browse dialog is displayed. Prior to InstallAnywhere 2017, this path would be set based on the path of the last opened project. In InstallAnywhere 2017, the default path no longer changes.
IOJ-1837914	<p>\$prop.line.separator\$ fails to resolve on InstallAnywhere 2017 SP1. For example, a line such as:</p> <pre>LINE1\$prop.line.separator\$LINE2</pre> <p>should print out on two separate lines.</p>

Issue Number	Issue Summary
IOJ-1838140	The installer displays help information that references swing instead of gui for use with the -i parameter.
IOJ-1838437	The Compare InstallAnywhere Variables rule fails to detect if a string contains a space.
IOJ-1838845	The Compare InstallAnywhere Variables rule is no longer evaluating correctly for values checked for a space character.
IOJ-1844042	In the InstallAnywhere user documentation, Include what library is used for the Match Regular Expression rule.
IOJ-1844850	Question mark ? character in target installation directory path causes the installer to hang after the user tries to Cancel and Exit.
IOJ-1847121	Regardless of the scaling percentage selected in the platform setting, the splash screen is never scaled. Instead, the splash screen is always the same size. With DPI Awareness on a high resolution display, the splash screen size should adjust and increase with a higher percentage for the scaling.
IOJ-1848178	On Windows, if a \$PRODUCT_NAME\$ InstallAnywhere variable contains a space, the Add or Remove Programs entry is left behind after uninstall.
IOJ-1849701	Launching InstallAnywhere generates the following error message: isus.UpdateServiceException: The server digitally signed its response with an untrusted certificate. Bad chain. Java error stack trace
IOJ-1849848	When Frameless Windows is enabled in UI, the close (X) button fails to trigger a rollback, even when rollback is enabled, and a partial install is leftover on the machine. Using the Cancel button instead works fine, and a rollback is properly triggered.
IOJ-1849850	Selecting the Disable Cancel Button When Install Is In Progress option fails to disable the close (X) button when Frameless Windows is enabled in UI.
IOJ-1850269	Request to update the user documentation to state that the Expand Archive action only supports .zip files that are zipped with the DEFLATE compression method.
IOJ-1850733	A java.lang.ArrayIndexOutOfBoundsException is generated when passing the -i parameter without the additional UI Mode parameter on command-line when launching the installer. Instead, an error message should be generated informing the user that the UI Mode parameter is required and must be enabled before building the installer.
IOJ-1851086	An error occurs at build-time when a non-default theme is selected and authentication is enabled for Mac: I/O related error creating Mac OS X web installer.

Issue Number	Issue Summary
IOJ-1855934	Avast Antivirus flags ZGUtil.class as an issue starting with installers built using InstallAnywhere 2017 SP1. Avast also flags files in the InstallAnywhere 2017 directory.
IOJ-1861337	After applying InstallAnywhere 2015 SP1 Public Hotfix A, the License Agreement panel appears blank when running the installation on Linux Machines.
IOJ-1863215	The location provided for the Create JRE VM Pack Wizard is incorrect in the <i>Using the Create JRE VM Pack Wizard</i> Help Page. The Wizards > Create JRE VM Pack command is on the Tools menu, not the File menu.

System Requirements

The following are the system requirements for InstallAnywhere 2017:

- [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 Fall Creators● Windows 10 Anniversary Update (x86 and x64)● Windows 2016 Server (x64)● Windows 10 (x86 and x64)● Windows 8.1 (x86 and x64)● Windows Server 2012 R2 (x64)● Windows 8 (x86 and x64)● Windows Server 2012 (x64)● Windows 7 (x86 and x64)● Windows Server 2008 R2 (x64)● Windows Vista● Windows Server 2008 (x86 and x64)
Apple	<ul style="list-style-type: none">● macOS High Sierra (10.13.3) with Java 7, 8 or 9● macOS Sierra (10.12) with Oracle Java 7 or 8● OS X El Capitan (10.11) with Oracle Java 7 or 8● OS X Yosemite (10.10) with Oracle Java 7 or 8● OS X Mavericks (10.9.2) with Oracle Java 7 or 8● OS X Mountain Lion (10.8) with Oracle Java 7 or 8● OS X Lion (10.7.5) with Oracle Java 7

Operating System	Supported Versions
Linux	<ul style="list-style-type: none"> • Red Hat Enterprise Linux 7.3 and 7.4 • Red Hat Enterprise Linux 7.2 (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 (x64) • OpenSUSE Linux 11.x, 12.x and 13.1 (x86 and x64) • SUSE Linux Enterprise 11 (SP2 and SP3; x64) and 12 (SP1, x64) • Linux PPC 64-bit (build time only) only with Java 6 • Ubuntu 17.04 (x64) • Ubuntu 15.04 (x64) • Ubuntu 14.x (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 and 27 (desktop editions; x64)
	 <p>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.</p>

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 14.10• Red Hat Enterprise Linux 7.1• CentOS 7.1
	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 Fall Creator• Windows 10 Anniversary Update (x86 and x64)• Windows 2016 Server (x64)• Windows 10 (x86 and x64)• Windows 8.1 (x86 and x64)• Windows Server 2012 R2 (x64)• Windows 8 (x86 and x64)• Windows Server 2012 (x64)• Windows 7 (x86 and x64)• Windows Server 2008 R2 (x64)• Windows Vista (x86 and x64)• Windows Server 2008 (x86 and x64)• Windows XP (x86, x64, Itanium 2, and AMD-64)• Windows Server 2003 (x86, x64, Itanium 2, and AMD-64) <p>Windows-based target systems must also support the SSE2 instruction set.</p>
Apple	<ul style="list-style-type: none">• macOS High Sierra (10.13.3)• macOS Sierra (10.12) with Oracle Java 7 or 8• OS X El Capitan (10.11) with Oracle Java 7 or 8• OS X Yosemite (10.10) with Oracle Java 7 or 8• OS X Mavericks (10.9.2) with Oracle Java 7 or 8• OS X Mountain Lion (10.8) with Oracle Java 7 or 8• OS X Lion (10.7.5) with Oracle Java 7

Operating System	Supported Versions
Linux	<ul style="list-style-type: none"> CentOS 7.4 (x86, x64) CentOS 7.3 (x86, x64) CentOS 7 (x86, x64) CentOS 6.8 (x86, x64) Red Hat Enterprise Linux 7.4 (x64) Red Hat Enterprise Linux 7.3 (x64) Red Hat Enterprise Linux 7.2 (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 (x64) OpenSUSE Linux 11.x, 12.x and 13.1 (x86 and x64) SUSE Linux Enterprise 11 (SP2 and SP3; x64) and 12 (SP1, x64) Ubuntu 17.10 (x64) Ubuntu 16.04 LTS (x64) Ubuntu 15.04 (x64) Ubuntu 14.x (x64) 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, and 24 (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

Operating System	Supported Versions
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
Oracle	1.7.x, 1.8.x, 9
OpenJDK	1.7.x, 1.8.x, 9

The InstallAnywhere installer installs JRE 1.8.0_162 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 13.04 (x86 and x64)• Ubuntu 12.10 (x86 and x64)• Ubuntu 12.04 (x86 and x64)• Ubuntu 11.10 (x86 and x64)

Supported Hypervisor	Supported Operating Systems
Amazon EC2	<ul style="list-style-type: none"> ● Ubuntu 11.10 (x32) ● Ubuntu 12.04 (x32)

Known Issues

For a list of known issues, see the [InstallAnywhere 2018 Known Issues](#) knowledge base article.

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