

Java Platform, Standard Edition

MSI Enterprise JRE Installer Guide



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Preface

This guide describes how to use the Microsoft Windows Installer (MSI) Enterprise JRE Installer to install and uninstall the Java Runtime Environment on Windows.

**Note:**

MSI Enterprise JRE Installer requires a commercial license for use in production. To learn more about commercial features and how to enable them, see [Oracle Java SE Advanced & Suite Products](#).

Audience

This document is intended for administrators who have licenses for Java SE Advanced or Java SE Suite and need to install the JRE for Microsoft Windows across their enterprises.

Documentation Accessibility

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Related Documents

For more information about installing Java SE 10, see:

- Overview of JDK 10 and JRE 10 Installation in *Java Platform, Standard Edition Installation Guide*
- [Oracle Java SE Advanced and Oracle Java SE Suite](#)

For more information about installing Java SE 8, see:

- [JDK 8 and JRE 8 Installation Start Here](#) in *Java Platform, Standard Edition Installation Guide*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Use the MSI Enterprise JRE Installer to Install the JRE

You can use the Microsoft Windows Installer (MSI) Enterprise Installer to install and uninstall the Java Runtime Environment (JRE) for Windows.

Note:

The MSI Enterprise JRE Installer requires a commercial license for use in production. To learn more about commercial features and how to enable them, see [Oracle Java SE Advanced & Suite Products](#).

The Microsoft Windows Installer (MSI) Enterprise JRE Installer enables you to install the Java Runtime Environment across your enterprise. Because it fully supports Windows Installer 3.0, it is fully compatible with system management software, such as Systems Management Server (SMS) and Systems Center Configuration Manager (SCCM). These software management suites enable you to deploy software across your enterprise securely. In addition to the features and options you can specify with the JRE Offline Installer, you can specify a Java Usage Tracker configuration file and a deployment rule set.

This section includes the following topics:

- [System Requirements](#)
- [Installing the JRE from the MSI Enterprise Installer](#)
- [Installing the JRE from the Command Line](#)
- [Creating a Log File](#)
- [Performing a Static Installation of the JRE](#)
- [Uninstalling the JRE with Java Removal and Uninstall Tools](#)
- [Uninstalling the JRE from the Command Line](#)

System Requirements

Before installing the JRE, verify that your system meets the minimum system requirements.

See *System Requirements for Installing the JDK and the JRE on Windows* in the *Java Platform, Standard Edition Installation Guide* for minimum processor, disk space, and memory requirements.

If you have any difficulties, see *General Java Troubleshooting* in the *Java Platform, Standard Edition Troubleshooting Guide* or submit a bug report at <http://bugreport.java.com/bugreport/>.

Installing the JRE from the MSI Enterprise Installer

You can install the JRE by downloading and running the appropriate Oracle JRE MSI Enterprise Installer for your system.

You must have administrative permissions in order to install the JRE.

1. Download the required version of the MSI Enterprise Installer from [Information Center: Installation & Configuration for Oracle Java SE \(Doc ID 1412103.2\)](#) on My Oracle Support.
 - a. Click the Complete List of Java SE downloads (document ID 1439822.1) link in the Downloads (Latest JDK/JRE) section.
 - b. Click the link of the appropriate Oracle JRE MSI Enterprise Installer for your system and download it.
2. Run the installer with administrative permissions under the supported Windows Installer environments.

Follow the instructions that the installer provides. The installer notifies you if Java content is disabled in web browsers, and provides instructions for enabling it. If you previously hid some of the security prompts for applets and Java Web Start applications, then the installer provides an option for restoring the prompts.

The JRE is installed on your system. By default, Java Access Bridge is disabled. See Enabling and Testing Java Access Bridge in *Java Platform, Standard Edition Java Accessibility Guide* for instructions required to enable the Java Access Bridge.

3. After you complete the installation, you can delete the installer file to recover disk space.

After installation, use the **Java** item in the Windows **Start** menu to access essential Java information and functions, the help, the Java Control Panel, and to check for updates.

Installing the JRE from the Command Line

You can install the JRE by downloading the appropriate Oracle JRE MSI Enterprise Installer for your system and running it from the command line.

1. Click the MOS link on the [Oracle Java SE Advanced & Suite Products](#) page and download the appropriate MSI Enterprise Installer for your system.
 - a. Click the Complete List of Java SE downloads (document ID 1439822.1) link in the Downloads (Latest JDK/JRE) section.
 - b. Click the link of the appropriate Oracle JRE MSI Enterprise Installer for your system and download it.
2. Open an MS-DOS prompt with Administrative permissions.
3. Run one of the following commands depending on the type of installation that you want to perform:
 - Basic UI mode:

```
msiexec.exe /i installer.msi [INSTALLCFG=configuration_file_path]  
[options] /qb
```

- Silent or unattended mode:

```
msiexec.exe /i installer.msi [INSTALLCFG=configuration_file_path]  
[options] /qn
```

The following items describe the variables used in these commands:

- *installer.msi*: The name of the MSI Enterprise JRE Installer that you obtained in the previous step.
- *configuration_file_path*: The path of the installer configuration file. See [Use an Installer Configuration File to Install the JRE](#).
- *options*: Options with specified values, separated by spaces. Use the same options as listed in [Installer Configuration File Options](#). You can also use standard Windows Installer options.

Creating a Log File

You can use a log file to verify that an installation succeeded.

To create a log file describing the installation, append `/L C:\path\setup.log` to the install command and scroll to the end of the log file to verify.

The following is an example of creating a log file:

```
msiexec.exe /i installer.msi /qn /L C:\path\setup.log
```

This example causes the log to be written to the `C:\path\setup.log` file.

Performing a Static Installation of the JRE

You can perform a static installation of the JRE if you want the Java Auto Update feature to leave that JRE installed during a Java update.

To perform a static installation of the JRE, specify the command-line option or the configuration file option `STATIC=1`. The Java Auto Update feature will leave that JRE installed during a Java update.

A later version of the same JRE family will be installed in a separate directory. This mode ensures that vendors, who require a specific version of the JRE for their product, can be certain that the JRE will not be overwritten by a newer version.

Prior to JDK 9, the default installation directory of a static JRE is `C:\Program Files (x86)\Java\jren` (for 32-bit versions) or `C:\Program Files\Java\jren` (for 64-bit versions), where *n* is the full Java SE release and update number (for example, *n* = 18.0_20 for JRE release 8 update 20).

Beginning with JDK 9, the default installation directory of a static JRE is `C:\Program Files\Java\jren`, where *n* is the full Java SE release and update number.

Uninstalling the JRE with Java Removal and Uninstall Tools

You can uninstall the JRE by using either the Java Removal Tool or the Java Uninstall tool.

To uninstall the JRE, with the Java Removal Tool, use the **Add/Remove Programs** utility in the Microsoft Windows Control Panel. The Java Removal Tool is integrated with the uninstallation process, and it will guide you through the removal of older JREs.

To uninstall the JRE, with the online Java Uninstall tool, go to <https://www.java.com/en/download/uninstallapplet.jsp>

The Java Uninstall tool helps you improve your computer security by finding and uninstalling older versions of Java. The Uninstall tool shows you a list of the Java versions on your computer and then removes those that are out-of-date.

Note:

The Java Uninstall tool will not run if your system administrator specified a deployment rule set in your organization.

The deployment rule set enables enterprises to directly manage their Java desktop environment and continue using legacy business applications in an environment of ever-tightening Java applet and Java Web Start application security policies. The deployment rule set enables administrators to specify rules for applets and Java Web Start applications. These rules might specify that a specific JRE version must be used. Consequently, the Java Uninstall tool will not run if it detects a deployment rule set that ensures required JREs are not uninstalled.

See *Deployment Rule Set* in the *Java Platform, Standard Edition Deployment Guide*.

Uninstalling the JRE from the Command Line

You can uninstall the JRE from the command line.

Run the following command to uninstall the JRE:

```
msiexec /x {MSI product code of JRE}
```

In the command, use the MSI product code of the JRE version that you want to uninstall. In the following examples, the values that are in braces are the MSI product code of the JRE that you want to uninstall. The text in bold represents the JRE version that you want to uninstall.

Prior to JDK 9:

- The following command uninstalls the 32-bit JRE, version 1.8.0_25:

```
msiexec /x {26A24AE4-039D-4CA4-87B4-2F83218025F0}
```

- The following command uninstalls the 64-bit JRE, version 1.8.0_25:

```
msiexec /x {26A24AE4-039D-4CA4-87B4-2F86418025F0}
```

Beginning with JDK 9:

- The following command uninstalls JRE, version 9.0:

```
msiexec /x {MSI product code of JRE 9}
```

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Use an Installer Configuration File to Install the JRE

When installing the Java Runtime Environment (JRE) from the command line, you can use an installer configuration file to supplement the JDK command-line installation options.

Note:

The MSI Enterprise JRE Installer requires a commercial license for use in production. To learn more about commercial features and how to enable them see [Oracle Java SE Advanced & Suite Products](#).

An installer configuration file is an alternative to and extension of options specified on the installer's command line. You can use this configuration file to standardize installations and to specify options that are not available on the command line.

This section includes the following topics:

- [Installer Configuration File Options](#)
- [Example of an Installer Configuration File](#)
- [System Runtime Configuration File](#)

Installer Configuration File Options

The following table lists all of the installer configuration file options.

Note:

You can substitute `Enable` for 1 and `Disable` for 0.

With the exception of `AUTO_UPDATE` and `STATIC`, you can use these options when running the MSI Enterprise JRE Installer from the command line. See [Installing the JRE from the Command Line](#).

Table 2-1 Configuration File Options




Option	Values	Description
AUTO_UPDATE=	Enable, Disable	Enables the auto update feature. Default: Enable
<div>  Note: This option is not available for the MSI Enterprise JRE Installer. </div>		
DEPLOYMENT_RULE_SET=	<i>path</i>	Specifies the path and file name of your organization's deployment rule set. See <i>Deployment Rule Set</i> in the <i>Java Platform, Standard Edition Deployment Guide</i> .
EULA=	Enable, Disable	If a Java applet or Java Web Start application is launched, then the user is prompted to accept the end-user license agreement (EULA). Default: Disable
INSTALL_DIR=	<i>path</i>	Folder or directory into which the files are installed. The default install directory for Java is: %ProgramFiles%\Java\jre\$version For Windows, this only works for the first-time installation of a family. Linux and Solaris use operating system tools for this purpose and the installation directory relocation is handled by operating system tools. For example: rpm --prefix= <i>path</i>
NOSTARTMENU=	Enable, Disable	Specifies that the installer installs the JRE without setting up Java start-up items. Default: Disable
REMOVEOLDERJRES=	0, 1	Applicable to Enterprise MSI only. Enables uninstallation of all existing JREs on the system during JRE installation. The REMOVEOLDERJRES option does not remove static JRE installations. Using REMOVEOLDERJRES=0 leaves all Java versions on the system. Using REMOVEOLDERJRES=1 removes <i>all</i> existing non-statically installed Java versions from the system. For example, running msiexec /i jreversion-number.msi REMOVEOLDERJRES=1 removes <i>all</i> of the existing non-statically installed JREs from the system.

Table 2-1 (Cont.) Configuration File Options

Option	Values	Description
REMOVEOUTOFDATEJRES=	0, 1	<p>Applicable to online and offline installers.</p> <p>Used to uninstall any existing out-of-date Java versions during JRE install. This flag will work with the JRE installer executable in the silent mode.</p> <p>For example, running</p> <pre>msiexec /i jreversion-number.msi REMOVEOUTOFDATEJRES=1</pre> <p>removes <i>all</i> of the insecure JREs. JREs above the security baseline will not be uninstalled</p>
<div>  Note: <p>Use the REMOVEOUTOFDATEJRES option in place of attempting to use modifyremove support.</p> </div>		
REBOOT=	Enable, Disable	<p>If disabled, then the installer never prompts you to restart your computer after installing the JRE. However, in most cases, the installer does not need to restart your computer after installing the JRE.</p> <p>Default: Enable</p>
STATIC=	Enable, Disable	<p>Performs a static installation (see Performing a Static Installation of the JRE).</p> <p>Default: Disable</p>
<div>  Note: <p>This option is not available for the MSI Enterprise JRE Installer.</p> </div>		
USAGETRACKERCFG=	<i>path</i>	Specifies the path and file name of the Java Usage Tracker properties file.
WEB_ANALYTICS=	Enable, Disable	<p>Allows or disallows the installer to send installation-related statistics to an Oracle server.</p> <p>Default: Enable</p>
WEB_JAVA_SECURITY_LEVEL=	H (high), VH (very high)	<p>Configures the installation's security level for Java applications running in a browser or running with Java Web Start.</p> <p>Default: H</p>
WEB_JAVA=	Enable, Disable	<p>Configures the installation so that downloaded Java applications are, or are not, allowed to run in a web browser or by Java Web Start.</p> <p>Default: Enable</p>

Example of an Installer Configuration File

You can use the example of an installer configuration file to create your own configuration files for Windows.

The following is an example of an installer configuration file for Windows. It specifies the following:

- Perform a silent installation.
- Install the JRE in the directory `C:\java\jre`.
- Set the security level for unsigned Java applications running in a browser to very high.

Example 2-1 Example of an Installer Configuration File for Windows

```
INSTALL_SILENT=Enable
INSTALL_DIR=C:\java\jre
WEB_JAVA_SECURITY_LEVEL=VH
```

System Runtime Configuration File

After installing the JRE, the installer creates the system runtime configuration file.

In JDK 6, after using an installer configuration file to install the JRE, the installer saves it as a system runtime configuration file in `%ALLUSERSPROFILE%\Oracle\Java\java_settings.cfg`.

In JDK 8 and above, after using an installer configuration file to install the JRE, the installer saves it as a system runtime configuration file in `C:\Program Files (x86)\Common Files\Oracle\Java\java_settings.cfg`.

The value of the environment variable `%ALLUSERSPROFILE%` is typically `C:\ProgramData`.