



## OpenJDK 8

### Installing and using OpenJDK 8 for Windows





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## Abstract

OpenJDK 8 for Windows is a Red Hat offering on the Microsoft Windows platform. The Installing and using OpenJDK 8 for Windows guide provides an overview of this product and explains how to install the software and start using it.

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## MAKING OPEN SOURCE MORE INCLUSIVE

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#### NOTE

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A text box appears in the feedback section on the right side of the page.
4. Enter your feedback in the text box and click **Submit**.  
A documentation issue is created.
5. To view the issue, click the issue tracker link in the feedback view.



## CHAPTER 1. OPENJDK OVERVIEW

OpenJDK (Open Java Development Kit) is a free and open source implementation of the Java Platform, Standard Edition (Java SE). The Red Hat build of OpenJDK is available in two versions, OpenJDK 8u and OpenJDK 11u.

Packages for the Red Hat build of OpenJDK are made available on Red Hat Enterprise Linux and Microsoft Windows and shipped as a JDK and JRE in the Red Hat Container Catalog.

## CHAPTER 2. OPENJDK 8 FOR WINDOWS INSTALLATION OPTIONS

OpenJDK 8 for Windows can be installed manually using an archive or through a graphical user interface using an MSI-based installer.

Depending on your circumstance, use one of the following installation methods:

- [Installing OpenJDK with the archive](#)
- [Installing OpenJDK with the MSI installer](#)

## CHAPTER 3. INSTALLING OPENJDK 8 FOR WINDOWS WITH THE ARCHIVE

This procedure describe how to manually install OpenJDK 8 for Windows using the archive.

### Procedure

1. [Download the archive](#) of OpenJDK 8 for Windows.
2. Extract the contents of the archive to a directory of your choice.



#### NOTE

Extracting the contents of the archive to a directory path that *does not* contain spaces is recommended.

3. Update the **PATH** as below:
  - a. Add the **bin** directory contained in your OpenJDK 8 for Windows installation path to the **%PATH%** environment variable:

```
C:\> setx /m PATH "%PATH%;C:\Progra~1\RedHat\java-1.8.0-openjdk-1.8.0.181-1\bin"
```

If the path contains spaces, use the shortened path name.

- b. Restart Command Prompt to reload the environment variables.
4. Verify the OpenJDK 8 for Windows is successfully installed, run **java -version** command in a command prompt and you must get the following output:

```
java version "1.8.0_181"  
Java(TM) SE Runtime Environment (build 1.8.0_181-b13)  
Java HotSpot(TM) 64-Bit Server VM (build 25.181-b13, mixed mode)
```

5. The **%JAVA\_HOME%** environment variable must also be set to use some developer tools. Set the **%JAVA\_HOME%** environment variable as follows:
  - a. Open Command Prompt as an administrator.
  - b. Set the value of the environment variable to your OpenJDK 8 for Windows installation path:

```
C:\> setx /m JAVA_HOME "C:\Progra~1\RedHat\java-1.8.0-openjdk-1.8.0.181-1"
```

If the path contains spaces, use the shortened path name.

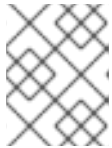
- c. Restart Command Prompt to reload the environment variables

## CHAPTER 4. UPDATING OPENJDK 8 FOR WINDOWS USING THE ARCHIVE

OpenJDK 8 for Windows can be manually update using the archive.

### Procedure

1. [Download the archive](#) of OpenJDK 8 for Windows.
2. Extract the contents of an archive to a directory of your choice.



### NOTE

Extracting the contents of an archive to a directory path that does not contain spaces is recommended.

3. On Command Prompt, update **JAVA\_HOME** environment variable as follows:
  - a. Open Command Prompt as an administrator.
  - b. Set the value of the environment variable to your OpenJDK 8 for Windows installation path:

```
C:\> setx /m JAVA_HOME "C:\Progra~1\RedHat\java-8-openjdk-1.8.0_181"
```

If the path contains spaces, use the shortened path name.

- c. Restart Command Prompt to reload the environment variables.
4. Set the value of **PATH** variable if it is not set already:

```
C:\> setx -m PATH "%PATH%;%JAVA_HOME%\bin";
```

5. Restart Command Prompt to reload the environment variables.
6. Verify that **java -version** works without supplying the full path.

```
C:\> java -version
java version "1.8.0_181"
Java(TM) SE Runtime Environment (build 1.8.0_181-b13)
Java HotSpot(TM) 64-Bit Server VM (build 25.181-b13, mixed mode)
```

## CHAPTER 5. INSTALLING OPENJDK WITH THE MSI INSTALLER

This procedure describes how to install OpenJDK 8 for Windows using the MSI-based installer.

### Procedure

1. [Download the MSI-based installer](#) of OpenJDK 8 for Windows.
2. Run the installer OpenJDK 8 for Windows.
3. Click **Next** on the welcome screen.
4. Check **I accept the terms in license agreement**, then click **Next**.
5. Click **Next**.
6. Accept the defaults or review the [optional properties](#).
7. Click **Install**.
8. Click **Yes** on the **Do you want to allow this app to make changes on your device?**.
9. Verify the OpenJDK 8 for Windows is successfully installed, run **java -version** command in the command prompt and you must get the following output:

```
java version "1.8.0_181"  
Java(TM) SE Runtime Environment (build 1.8.0_181-b13)  
Java HotSpot(TM) 64-Bit Server VM (build 25.181-b13, mixed mode)
```

## CHAPTER 6. OPENJDK MSI INSTALLER COMPONENTS

The OpenJDK 8 for Windows MSI-based installer includes the following components:

### **jdk**

Runtime environment files (excluding development tools).

### **jdk\_devel**

Java Development Kit files.

### **jdk\_registry\_standard**

Registry keys:

```
HKLM\Software\JavaSoft\Java Runtime Environment, entries:
```

```
CurrentVersion: 1.8
```

```
HKLM\Software\JavaSoft\Java Runtime Environment\1.8, entries:
```

```
JavaHome: <INSTALLDIR>\jre\
```

```
RuntimeLib: <INSTALLDIR>\jre\bin\server\jvm.dll
```

```
HKLM\Software\JavaSoft\Java Runtime Environment\1.8_<update>, entries:
```

```
JavaHome: <INSTALLDIR>\jre\
```

```
RuntimeLib: <INSTALLDIR>\jre\bin\server\jvm.dll
```

### **jdk\_registry\_standard\_devel**

Registry keys:

```
HKLM\Software\JavaSoft\Java Development Kit, entries:
```

```
CurrentVersion: 1.8
```

```
HKLM\Software\JavaSoft\Java Development Kit\1.8, entries:
```

```
JavaHome: <INSTALLDIR>
```

```
RuntimeLib: <INSTALLDIR>\jre\bin\server\jvm.dll
```

```
HKLM\Software\JavaSoft\Java Development Kit\1.8_<update>, entries:
```

```
JavaHome: <INSTALLDIR>
```

```
RuntimeLib: <INSTALLDIR>\jre\bin\server\jvm.dll
```

### **jdk\_env\_path**

Appends **<INSTALLDIR>\bin** and **<INSTALLDIR>\jre\bin** to the system **%PATH%** environment variable.

### **jdk\_env\_java\_home**

Sets **<INSTALLDIR>** to the system **%JAVA\_HOME%** environment variable.

### **jdk\_env\_vendor\_java\_home**

Sets **<INSTALLDIR>** to the system **%REDHAT\_JAVA\_HOME%** environment variable.

### **jdk\_registry\_jar**

Association for JAR files. Launch JAR files using the OpenJDK context menu.

### **jmc**

JDK Mission Control Files.

### **jmc\_env**

Appends `<jdk>/missioncontrol` to the 'PATH' system environment variable.

**webstart**

WebStart files, installed into `<INSTALLDIR>\webstart`.

**webstart\_registry**

Association for JNLP files and `jnlp://` URLs.

**webstart\_env**

Appends `<INSTALLDIR>\webstart` to the system `%PATH%` environment variable.

**webstart\_migrate**

Migrate WebStart local settings and cache on update.

**webstart\_plugin**

Installs `plugin.jar` into `<jdk>/jre/lib/` for compatibility with third-party applications. Web browser plugin implementation is *not* included.

## APPENDIX A. MSI-BASED INSTALLER PROPERTIES

The OpenJDK 8 for Windows MSI-based installer includes the *JDK Files* component and the following optional properties:

**Table A.1. OpenJDK 8 for Windows MSI-based installer properties**

Property	Description	Default value
OpenJDK Runtime - Windows Registry	The following registry keys are set HKLM\Software\JavaSoft\JDK\<version>, entries: JavaHome: <INSTALLDIR> RuntimeLib: <INSTALLDIR>\bin\server\jvm.dll HKLM\Software\JavaSoft\JDK, entries: CurrentVersion: <version>	Yes
OpenJDK Runtime - Path Variable	Adds the Runtime to the Path variable so it is available from the command line.	Yes
OpenJDK Runtime - JAVA_HOME System Variable	JAVA_HOME is used by some programs to find the Java runtime.	No
OpenJDK Runtime - REDHAT_JAVA_HOME System Variable	REDHAT_JAVA_HOME can be used by some programs to find the Red Hat OpenJDK runtime.	No
OpenJDK Runtime - Jar Files Association	This enables Jar files to be run from within Windows Explorer.	No
Mission Control - Files	Contains files that are installed in the <installdir>\missioncontrol directory.	No
Mission Control - Path Variable	Appends <installdir>\missioncontrol to the system PATH environment variable.	No
Web Start - JNLP File Association	Enables the launching of JNLP files downloaded from the web.	No
Web Start - PATH Variable	Enables the launching of JNLP files downloaded from the web from the local file system.	No
Web Start - Keep Settings and Cache	Keeps settings and caches on the local file system.	No



Property	Description	Default value
Web Start - Install plugin.jar	Installs <b>plugin.jar</b> into the <b>jre\lib</b> directory.	No

*Revised on 2021-10-25 12:32:28 UTC*