



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.

Table of Contents

MAKING OPEN SOURCE MORE INCLUSIVE	3
PROVIDING FEEDBACK ON RED HAT DOCUMENTATION	4
CHAPTER 1. OPENJDK OVERVIEW	5
CHAPTER 2. OPENJDK 8 FOR WINDOWS INSTALLATION OPTIONS	6
CHAPTER 3. INSTALLING OPENJDK 8 FOR WINDOWS WITH THE ARCHIVE	7
CHAPTER 4. UPDATING OPENJDK 8 FOR WINDOWS USING THE ARCHIVE	8
CHAPTER 5. INSTALLING OPENJDK WITH THE MSI INSTALLER	9
CHAPTER 6. OPENJDK MSI INSTALLER COMPONENTS	10
APPENDIX A. MSI-BASED INSTALLER PROPERTIES	12

MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#).

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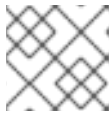
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NOTE

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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.

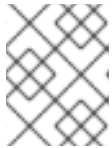
- c. Restart Command Prompt to reload the environment variables

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.

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.

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 8 for Windows
OpenJDK Runtime - Windows Registry	The following registry keys are set HKLM\Software\JavaSoft\JDK\ <version>, <installdir><br="" entries:="" javahome:=""></version>,> RuntimeLib: <INSTALLDIR>\bin\server\jvm.dll HKLM\Software\JavaSoft\JDK, entries: CurrentVersion: <version>	Yes	Yes
OpenJDK Runtime - Path Variable	Adds the Runtime to the Path variable so it is available from the command line.	Yes	Yes
OpenJDK Runtime - JAVA_HOME System Variable	JAVA_HOME is used by some programs to find the Java runtime.	No	Yes
OpenJDK Runtime - REDHAT_JAVA_HOME System Variable	REDHAT_JAVA_HOME will be used in the future for Mission Control.	No	Yes
OpenJDK Runtime - Jar Files Association	This enables Jar files to be run from within Windows Explorer.	No	Yes
Web Start (Beta) - JNLP File Association	Enables the launching of JNLP files downloaded from the web.	No	No
Web Start (Beta) - PATH Variable	Enables the launching of JNLP files downloaded from the web from the local file system.	No	No

Property	Description	Default value	OpenJDK 8 for Windows
Web Start (Beta) - Keep Settings and Cache	Keeps settings and caches on the local file system.	No	No
Mission Control - Path Variable	Adds Mission Control to the Path Variable so it is available from the command line.	No	Yes

Revised on 2021-04-22 14:38:12 UTC