



OpenJDK 11

Installing and using OpenJDK 11 for Windows

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Abstract

OpenJDK 11 for Windows is a Red Hat offering on the Microsoft Windows platform. The Installing and using OpenJDK 11 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 11 FOR WINDOWS INSTALLATION OPTIONS	5
CHAPTER 2. INSTALLING OPENJDK 11 FOR WINDOWS WITH THE ARCHIVE	6
CHAPTER 3. UPDATING OPENJDK 11 FOR WINDOWS USING THE ARCHIVE	7
CHAPTER 4. INSTALLING OPENJDK WITH THE MSI INSTALLER	8
CHAPTER 5. OPENJDK MSI INSTALLER COMPONENTS	9
APPENDIX A. MSI-BASED INSTALLER PROPERTIES	10

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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This section explains how to submit feedback.

Prerequisites

- You are logged in to the Red Hat Customer Portal.
- In the Red Hat Customer Portal, view the document in **Multi-page HTML** format.

Procedure

To provide your feedback, perform the following steps:

1. Click the **Feedback** button in the top-right corner of the document to see existing feedback.



NOTE

The feedback feature is enabled only in the **Multi-page HTML** format.

2. Highlight the section of the document where you want to provide feedback.
3. Click the **Add Feedback** pop-up that appears near the highlighted text.
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 11 FOR WINDOWS INSTALLATION OPTIONS

OpenJDK 11 for Windows can be installed 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 2. INSTALLING OPENJDK 11 FOR WINDOWS WITH THE ARCHIVE

This procedure describes how to manually install OpenJDK 11 for Windows using the archive.

Procedure

1. [Download the archive](#) of OpenJDK 11 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. Update the **PATH** as below:
 - a. Add the **bin** directory contained in your OpenJDK 11 for Windows installation path to the **%PATH%** environment variable:

```
C:\> setx /m PATH "%PATH%;C:\Progra~1\RedHat\java-11-openjdk-11.0.1.13-1\bin"
```

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

- b. Restart Command Prompt to reload the environment variables.
4. Verify the OpenJDK 11 for Windows is successfully installed, run **java -version** command in a command prompt and you must get the following output:

```
openjdk version "11.0.3-redhat" 2019-04-16 LTS
OpenJDK Runtime Environment 18.9 (build 11.0.3-redhat+7-LTS)
OpenJDK 64-Bit Server VM 18.9 (build 11.0.3-redhat+7-LTS, 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 11 for Windows installation path:

```
C:\> setx /m JAVA_HOME "C:\Progra~1\RedHat\java-11-openjdk-11.0.1.13-1"
```

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

- c. Restart Command Prompt to reload the environment variables.

CHAPTER 3. UPDATING OPENJDK 11 FOR WINDOWS USING THE ARCHIVE

OpenJDK 11 for Windows can be manually update using the archive.

Procedure

1. [Download the archive](#) of OpenJDK 11.
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 11 for Windows installation path:

```
C:\> setx /m JAVA_HOME "C:\Progra~1\RedHat\java-11-openjdk-11.0.1.13-1"
```

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
openjdk version "11.0.3" 2019-04-16 LTS
OpenJDK Runtime Environment (build 11.0.3+7-LTS)
OpenJDK 64-bit Server VM (build 11.0.3+7-LTS, mixed mode)
```

CHAPTER 4. INSTALLING OPENJDK WITH THE MSI INSTALLER

This procedure describes how to install OpenJDK 11 for Windows using the MSI-based installer.

Procedure

1. [Download the MSI-based installer](#) of OpenJDK 11 for Windows.
2. Run the installer for OpenJDK 11 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 11 for Windows is successfully installed, run **java -version** command in the command prompt and you must get the following output:

```
openjdk version "11.0.3-redhat" 2019-04-16 LTS
OpenJDK Runtime Environment 18.9 (build 11.0.3-redhat+7-LTS)
OpenJDK 64-Bit Server VM 18.9 (build 11.0.3-redhat+7-LTS, mixed mode)
```

CHAPTER 5. OPENJDK MSI INSTALLER COMPONENTS

(Optional) Set the following OpenJDK 11 for Windows MSI-based installer components:

jdk

Java Development Kit (JDK) files.

jdk-registry-standard

Registry keys:

```
HKLM\Software\JavaSoft\JDK\<version>, entries:  
  JavaHome: <INSTALLDIR>  
  RuntimeLib: <INSTALLDIR>\bin\server\jvm.dll
```

```
HKLM\Software\JavaSoft\JDK, entries:  
  CurrentVersion: <version>
```

jdk_env_path

Appends **<INSTALLDIR>\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 with the OpenJDK context menu.

jmc

JDK Mission Control files, installed into **<INSTALLDIR>\missioncontrol**.

jmc_env

Appends **<INSTALLDIR>\missioncontrol** to the system **%PATH%** environment variable.

APPENDIX A. MSI-BASED INSTALLER PROPERTIES

The OpenJDK 11 for Windows MSI-based installer includes the *JDK Files* component and the following optional properties:

Table A.1. OpenJDK 11 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 <install_dir>\missioncontrol directory.	No
Mission Control - Path Variable	Appends <install_dir>\missioncontrol to the system PATH environment variable.	No

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