SOP: Installing OpenJDK on Windows Systems

Title: Installing Microsoft Build of OpenJDK on Company Computers
SOP ID: IT-JDK-001
Version: 1.0
Effective Date: 2025-09-16
Prepared By: William Christner
Approved By: [Manager Name]

Purpose

This SOP describes the standardized process for installing the Microsoft Build of OpenJDK (Java Development Kit) on company Windows computers. Following this procedure ensures consistency, compatibility, and proper configuration for development environments.

Scope

This SOP applies to all company-issued Windows computers. It is intended for IT staff performing software setup for developers. End users should not perform this installation without IT support.

Definitions

- OpenJDK: Open-source implementation of the Java Platform, Standard Edition (SE).
- Microsoft Build of OpenJDK: Microsoft's distribution of OpenJDK, used in this SOP.
- IT Staff: Employees responsible for software installation and configuration.

Responsibilities

- IT Staff: Install OpenJDK correctly, configure environment variables, and verify system readiness.
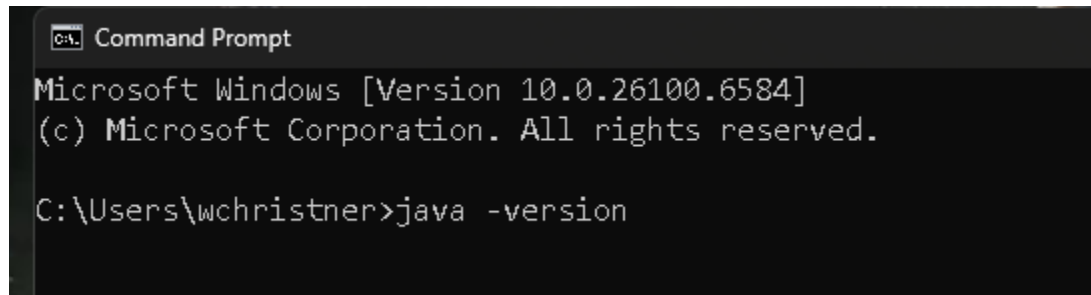- Developers/Employees: Submit installation requests through the official software request process.

Prerequisites

- Computer running Windows 10 or later
- Minimum 4 GB RAM
- Internet access
- Administrator privileges
- Antivirus enabled

Procedure
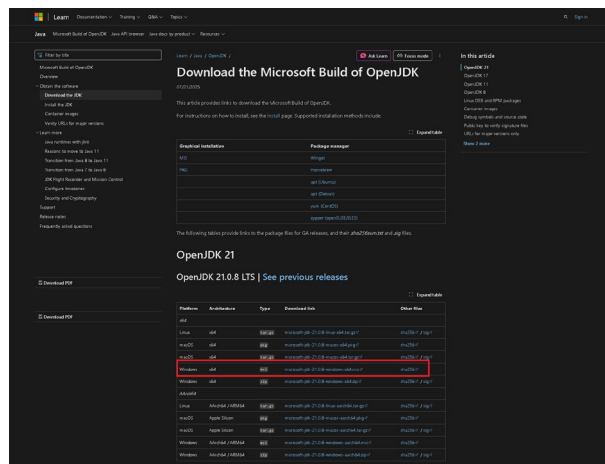
1. Verify Requirements

Open Command Prompt and check if OpenJDK is already installed:

If installed, record the version and skip installation.
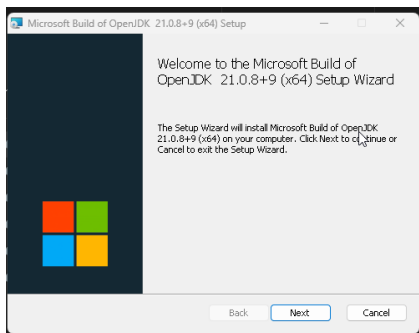
2. Download OpenJDK

1. Open a web browser and navigate to the official Microsoft Build of OpenJDK site:
   https://learn.microsoft.com/en-us/java/openjdk/download
2. Select the appropriate version (e.g., Microsoft Build of OpenJDK 21) and download the Windows installer (.msi).
3. By default, the installer is saved to the Downloads folder unless otherwise configured.
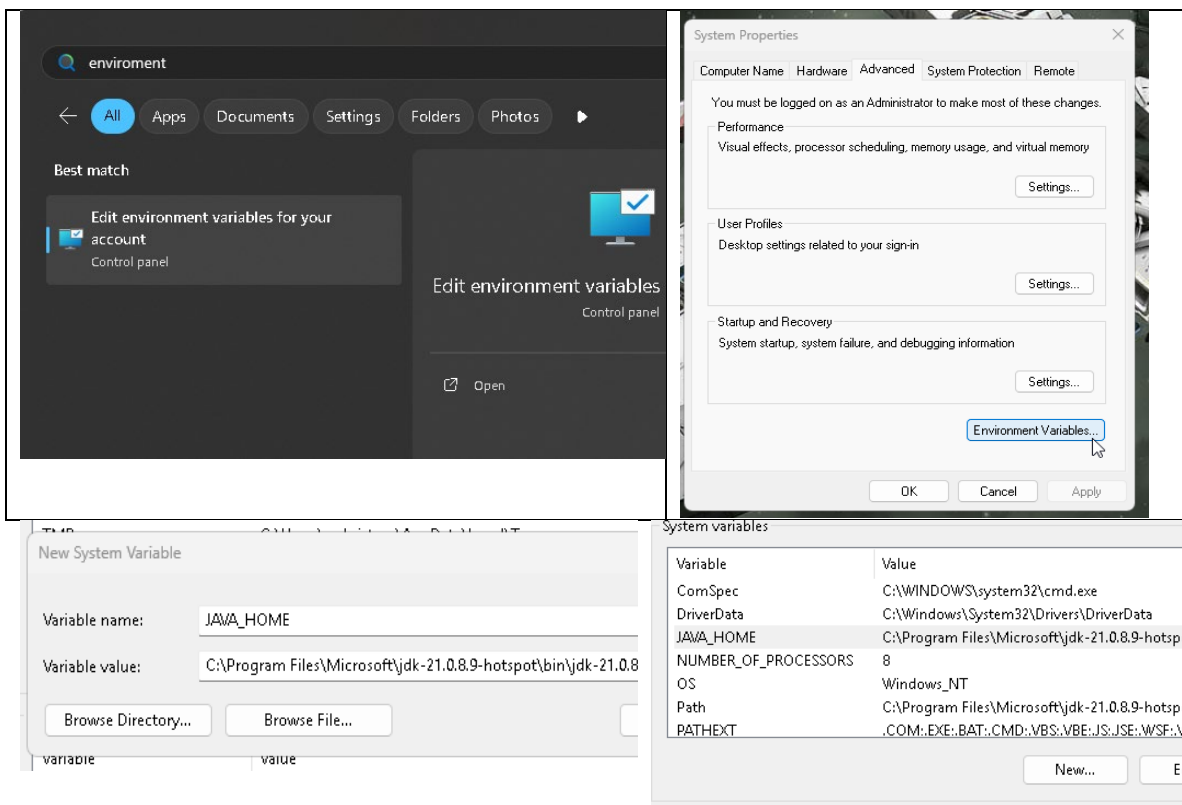

3. Install OpenJDK

1. Locate the installer (e.g., microsoft-jdk-21.0.8-windows-x64.msi).
2. Right-click and select 'Run as administrator'.
3. Follow the installation wizard:

- Accept the license agreement
- Select the installation path (default: C:\Program Files\Microsoft\jdk-21.0.8.9-hotspot)
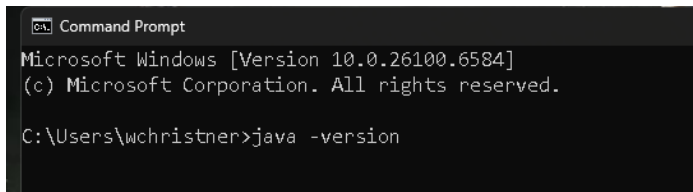- Click Install, then Finish.

4. Configure Environment Variables

1. Open System Properties → Advanced → Environment Variables.
2. Under System Variables, add a new variable:
   Variable Name: JAVA_HOME
   Variable Value: C:\Program Files\Microsoft\jdk-21.0.8.9-hotspot
3. Update the Path variable:
   Append: %JAVA_HOME%\bin
4. Click OK to save changes.
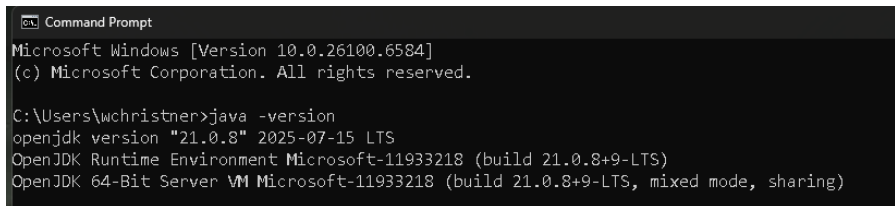
5. Verify Installation

Open a new Command Prompt and run:

```
Command Prompt
Microsoft Windows [Version 10.0.26100.6584]
(c) Microsoft Corporation. All rights reserved.

C:\Users\wchristner>java -version
```

Confirm the output matches the installed version (e.g., 21.0.8).

```
Command Prompt
Microsoft Windows [Version 10.0.26100.6584]
(c) Microsoft Corporation. All rights reserved.

C:\Users\wchristner>java -version
openjdk version "21.0.8" 2025-07-15 LTS
OpenJDK Runtime Environment Microsoft-11933218 (build 21.0.8+9-LTS)
OpenJDK 64-Bit Server VM Microsoft-11933218 (build 21.0.8+9-LTS, mixed mode, sharing)
```

6. Document Installation

Record the following details in the company's software inventory system:
- JDK version installed
- Installation date
- Computer ID and/or employee name

7. Notify User

Inform the employee/developer that OpenJDK has been installed. Provide verification commands and installation path for reference.

Troubleshooting

- Error: 'java' is not recognized
  - Ensure that JAVA_HOME is set and %JAVA_HOME%\bin is appended to the Path variable.
- Installer fails to run
  - Confirm you are running the installer as Administrator.
- Antivirus blocks installation
  - Temporarily allow the installer, then re-enable antivirus.

Safety & Compliance

- Only download from the official Microsoft OpenJDK site.
- Keep antivirus active during download and installation.
- Ensure compliance with company licensing and security policies.

Revision History

Version	Date	Description	Author
1.0	2025-09-16	Initial SOP creation	William Christner