

Web Adaptable Application Server

Install JDK



Install JDK



The screenshot shows the Oracle Java download page for Windows. The browser address bar displays <https://www.java.com/en/c>. The page title is "Download Java for Windows".

On the left sidebar, there are links for "Do you use both 32-bit and 64-bit browsers?", "FAQ about 64-bit Java for Windows", "Offline Installation", "Trouble downloading?", and "Try the offline installer".

The main content area features a yellow box with the following text:

different from prior Oracle Java licenses. The new license permits certain uses, such as personal use and development use, at no cost -- but other uses authorized under prior Oracle Java licenses may no longer be available. Please review the terms carefully before downloading and using this product. An FAQ is available [here](#).

Commercial license and support is available with a low cost [Java SE Subscription](#).

Oracle also provides the latest OpenJDK release under the open source [GPL License](#) at [jdk.java.net](#).

A large red button labeled "Agree and Start Free Download" is prominently displayed.

Below the button, a message states: "By downloading Java you acknowledge that you have read and accepted the terms of the [Oracle Technology Network License Agreement for Oracle Java SE](#)".

A lightbulb icon indicates a note: "When your Java installation completes, you may need to restart your browser (close all browser windows and re-open) to enable the Java installation."

Links for "Installation Instructions" and "System Requirements" are provided.

A red box highlights the link "See all Java downloads" under the heading "Not the right operating system?".

At the bottom, a paragraph explains: "Java software for your computer, or the Java Runtime Environment, is also referred to as the Java Runtime, Runtime Environment, Runtime, JRE, Java Virtual Machine, Virtual Machine, Java VM, JVM, VM, Java plug-in, Java plugin, Java add-on or Java download."

The footer contains links for "Select Language", "About Java", "Support", "Developers", "Feedback", "Privacy", "Cookie Preferences", "Terms of Use", "Trademarks", and "Disclaimer". The Oracle logo is in the bottom right corner.

Install JDK

The screenshot shows the Oracle Java Downloads page for Windows. The browser address bar displays <https://www.java.com/en/c>. The page features a red header with the Java logo and a search bar. On the left, a sidebar lists 'Help Resources' with links to 'Troubleshoot Java', 'Where can I get Java 7?', and 'Looking for the JDK?'. The main content area is titled 'Java Downloads for All Operating Systems' and highlights 'Recommended Version 8 Update 241' with a release date of January 14, 2020. A yellow box contains an 'Important Oracle Java License Update' notice, stating that the Oracle Java License has changed for releases starting April 16, 2019. Below this, instructions are provided to select the file according to the operating system. At the bottom, a footer bar includes the Windows logo and a link to 'Which should I choose?'.

https://www.java.com/en/c

Java™

Download Help

Search

Help Resources

- > [Troubleshoot Java](#)

Java 7

- > [Where can I get Java 7?](#)

JDK

- > [Looking for the JDK?](#)

Java Downloads for All Operating Systems

Recommended Version 8 Update 241
Release date January 14, 2020

Important Oracle Java License Update

The Oracle Java License has changed for releases starting April 16, 2019.

The new [Oracle Technology Network License Agreement for Oracle Java SE](#) is substantially different from prior Oracle Java licenses. The new license permits certain uses, such as personal use and development use, at no cost -- but other uses authorized under prior Oracle Java licenses may no longer be available. Please review the terms carefully before downloading and using this product. An FAQ is available [here](#).

Commercial license and support is available with a low cost [Java SE Subscription](#).

Oracle also provides the latest OpenJDK release under the open source [GPL License](#) at [jdk.java.net](#).

Select the file according to your operating system from the list below to get the latest Java for your computer.

- > [Remove Older Versions](#)
- > [What is Java?](#)

By downloading Java you acknowledge that you have read and accepted the terms of the [Oracle Technology Network License Agreement for Oracle Java SE](#)

Windows [Which should I choose?](#)

Install JDK

https://www.java.com/en/c

Oracle C...

Developing Java programs ...

Java™

Download Help

Search

HELP RESOURCES

- [Installing Java](#)
- [Remove Older Versions](#)
- [Disable Java](#)
- [Using Java](#)
- [General Questions](#)
- [Mobile Java](#)
- [Security](#)
- [Support Options](#)

How can I get started developing Java programs with the Java Development Kit (JDK)?

Writing Java applets and applications needs development tools like JDK. The JDK includes the Java Runtime Environment, the Java compiler and the Java APIs. It's easy for both new and experienced programmers to get started.

ORACLE®
TECHNOLOGY NETWORK

Click to learn more

Where can I get JDK download?

To download the latest version of the Java Development Kit (JDK), go [to JDK downloads](#). Developers can also refer to the [Oracle Technology Network for Java Developers](#) for everything you need to know about Java technology, including [documentation](#) and [training](#).

What if I am new to Java?

If you are new and interested to get started developing Java programs, please refer to [new to Java](#) to find useful information for beginners.

How do I get Java certification?

Earning an Oracle Java technology certification provides a clear demonstration of the technical skills, professional dedication and motivation for which employers are willing to pay a premium. Recognized industry-wide, Oracle's Java technology training and certification options help ensure that you have the necessary skills to efficiently meet the challenges of your IT organization.

» Learn more about [Java Certification](#)

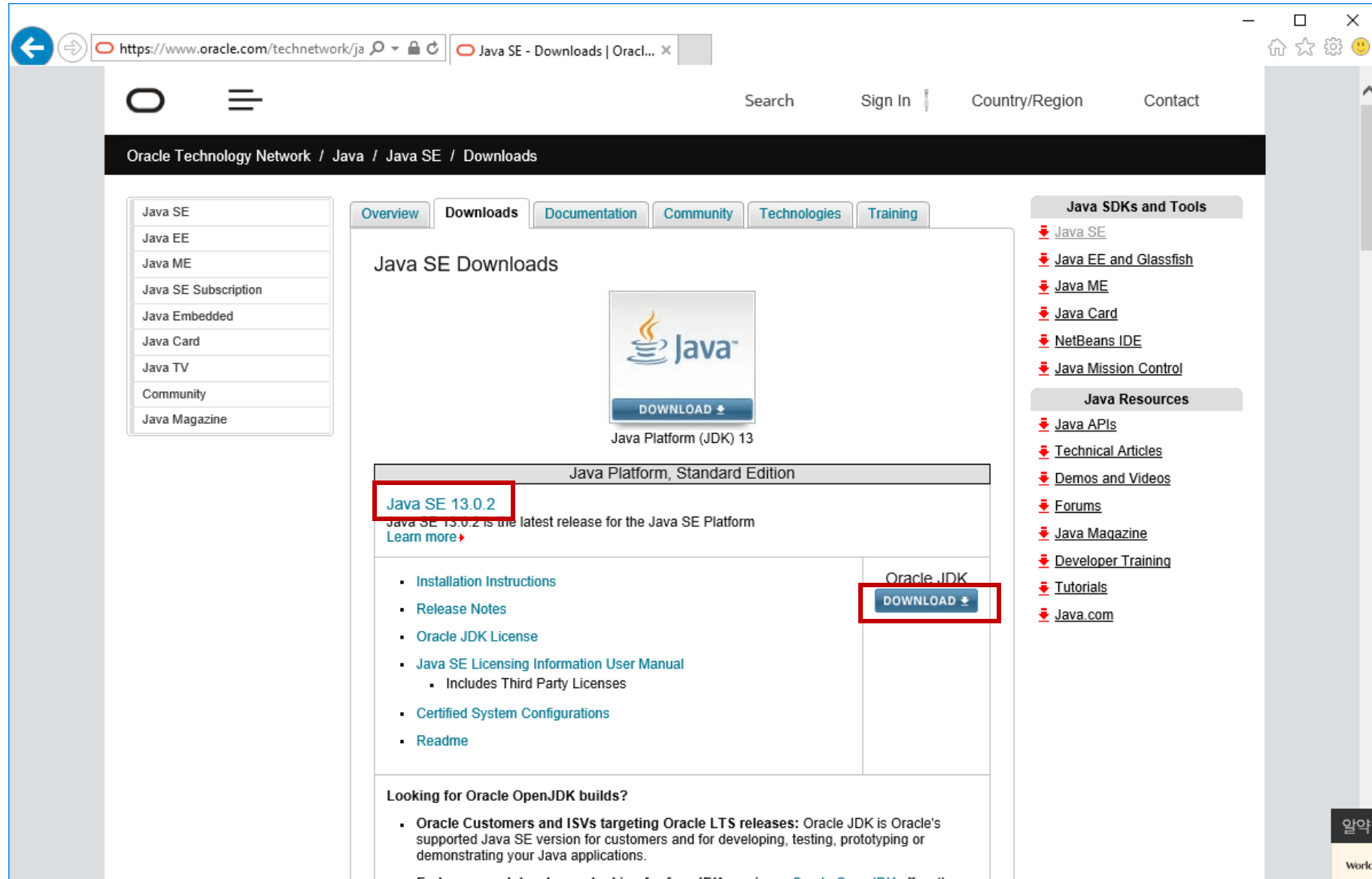
Java Developer Conferences

- JavaOne is the premier Java developer conference where you can learn about the latest Java technologies, deepen your technical understanding, and ask questions directly to your fellow strategists and developers. Oracle runs annual JavaOne conferences, including the flagship JavaOne in San Francisco and regional conferences. Visit [www.oracle.com/javaone](#) for more

[http://www.oracle.com/technetwork/java/javase/downloads/index-jsp-138363.html#javasejdk](#)

» [Oracle Technology Network Developer Days are free, hands-on Java developer workshops](#)

Install JDK



Oracle Technology Network / Java / Java SE / Downloads

Java SE
Java EE
Java ME
Java SE Subscription
Java Embedded
Java Card
Java TV
Community
Java Magazine

Overview Downloads Documentation Community Technologies Training

Java SE Downloads

Java Platform (JDK) 13

Java Platform, Standard Edition

Java SE 13.0.2
Java SE 13.0.2 is the latest release for the Java SE Platform
[Learn more](#)

Installation Instructions
Release Notes
Oracle JDK License
Java SE Licensing Information User Manual
Includes Third Party Licenses
Certified System Configurations
Readme

Oracle JDK
DOWNLOAD

Java SDKs and Tools
[Java SE](#)
[Java EE and Glassfish](#)
[Java ME](#)
[Java Card](#)
[NetBeans IDE](#)
[Java Mission Control](#)

Java Resources
[Java APIs](#)
[Technical Articles](#)
[Demos and Videos](#)
[Forums](#)
[Java Magazine](#)
[Developer Training](#)
[Tutorials](#)
[Java.com](#)

Looking for Oracle OpenJDK builds?

- Oracle Customers and ISVs targeting Oracle LTS releases: Oracle JDK is Oracle's supported Java SE version for customers and for developing, testing, prototyping or demonstrating your Java applications.

Install JDK

https://www.oracle.com/technetwork/java/ Java SE Development Kit 13 ...

Java SE
Java EE
Java ME
Java SE Subscription
Java Embedded
Java Card
Java TV
Community
Java Magazine

Overview Downloads Documentation Community Technologies Training

Java SE Development Kit 13 Downloads

Thank you for downloading this release of the Java™ Platform, Standard Edition Development Kit (JDK™). The JDK is a development environment for building applications, and components using the Java programming language.

The JDK includes tools useful for developing and testing programs written in the Java programming language and running on the Java platform.

Important Oracle JDK License Update

The Oracle JDK License has changed for releases starting April 16, 2019.

The new [Oracle Technology Network License Agreement for Oracle Java SE](#) is substantially different from prior Oracle JDK licenses. The new license permits certain uses, such as personal use and development use, at no cost -- but other uses authorized under prior Oracle JDK licenses may no longer be available. Please review the terms carefully before downloading and using this product. An FAQ is available [here](#).

Commercial license and support is available with a low cost [Java SE Subscription](#).

Oracle also provides the latest OpenJDK release under the open source [GPL License](#) at [jdk.java.net](#).

See also:

- [Java Developer Newsletter](#): From your Oracle account, select **Subscriptions**, expand **Technology**, and subscribe to **Java**.
- [Java Developer Day hands-on workshops \(free\) and other events](#)
- [Java Magazine](#)

JDK 13.0.2 [checksum](#)

Java SE Development Kit 13.0.2

You must accept the [Oracle Technology Network License Agreement for Oracle Java SE](#) to download this software.

☒ Accept License Agreement ☐ Decline License Agreement

Product / File Description	File Size	Download
Linux	155.72 MB	jdk-13.0.2_linux-x64_bin.deb
Linux	162.66 MB	jdk-13.0.2_linux-x64_bin.rpm
Linux	179.41 MB	jdk-13.0.2_linux-x64_bin.tar.gz
macOS	173.3 MB	jdk-13.0.2_osx-x64_bin.dmg
macOS	173.7 MB	jdk-13.0.2_osx-x64_bin.tar.gz
Windows	159.83 MB	jdk-13.0.2_windows-x64_bin.exe
Windows	178.00 MB	jdk-13.0.2_windows-x64_bin.zip

Java SDKs and Tools

- [Java SE](#)
- [Java EE and Glassfish](#)
- [Java ME](#)
- [Java Card](#)
- [NetBeans IDE](#)
- [Java Mission Control](#)

Java Resources

- [Java APIs](#)
- [Technical Articles](#)
- [Demos and Videos](#)
- [Forums](#)
- [Java Magazine](#)
- [Developer Training](#)
- [Tutorials](#)
- [Java.com](#)

Install JDK

The Oracle JDK License has changed for releases starting April 16, 2019.

The new [Oracle Technology Network License Agreement for Oracle Java SE](#) is substantially different from prior Oracle JDK licenses. The new license permits certain uses, such as personal use and development use, at no cost -- but other uses authorized under prior Oracle JDK licenses may no longer be available. Please review the terms carefully before downloading and using this product. An FAQ is available [here](#).

Commercial license and support is available with a low cost [Java SE Subscription](#).

Oracle also provides the latest OpenJDK release under the open source [GPL License](#) at [jdk.java.net](#).

See also:

- [Java Developer Newsletter](#): From your Oracle account, select **Subscriptions**, expand **Technology**, and subscribe to **Java**.
- [Java Developer Day hands-on workshops \(free\) and other events](#)
- [Java Magazine](#)

JDK 13.0.2 [checksum](#)

Java SE Development Kit 13.0.2

You must accept the [Oracle Technology Network License Agreement for Oracle Java SE](#) to download this software.

Thank you for accepting the Oracle Technology Network License Agreement for Oracle Java SE; you may now download this software.

Product / File Description	File Size	Download
Linux	155.72 MB	jdk-13.0.2_linux-x64_bin.deb
Linux	162.66 MB	jdk-13.0.2_linux-x64_bin.rpm
Linux	179.41 MB	jdk-13.0.2_linux-x64_bin.tar.gz
macOS	173.3 MB	jdk-13.0.2_osx-x64_bin.dmg
macOS	173.7 MB	jdk-13.0.2_osx-x64_bin.tar.gz
Windows	159.83 MB	jdk-13.0.2_windows-x64_bin.exe
Windows	178.99 MB	jdk-13.0.2_windows-x64_bin.zip

E-mail this page Printer View

Resources for Partners How We Operate Contact Us

알약 World V

Setup DEV.ENV

modify the waas\bin\run.bat

```
@set HOME_PATH=D:\waas
@set JAVA_HOME=C:\Program Files\Java\jdk-13.0.1
@set JRE_HOME=C:\Program Files\Java\jdk-13.0.1
@set SERVICE_TITLE=WAAS

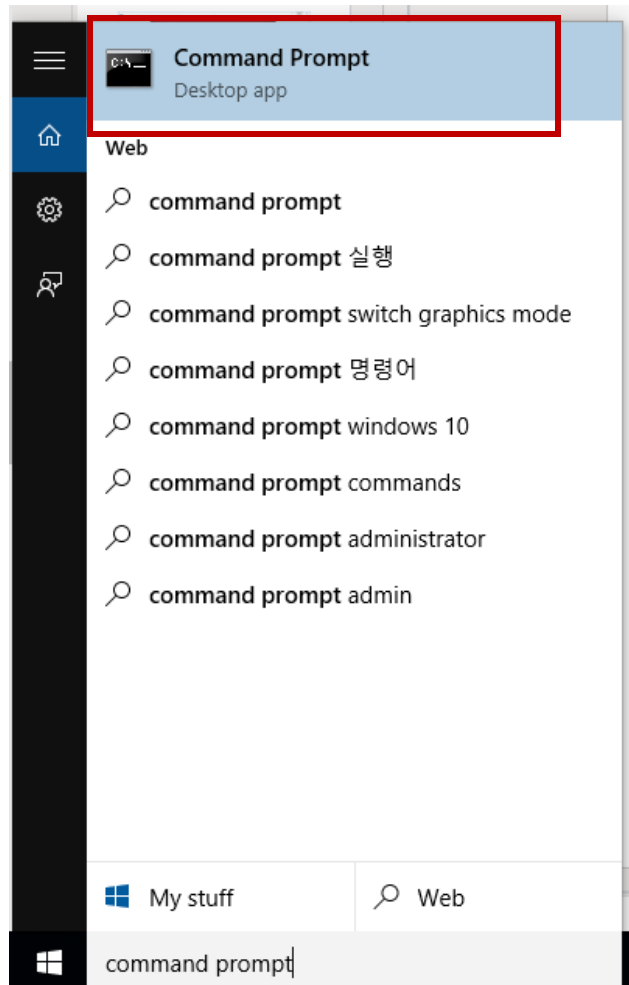
@set DOC_ROOT=%HOME_PATH%\htdocs
@set APACHE_HOME=%HOME_PATH%\apache
@set TOMCAT_HOME=%HOME_PATH%\tomcat
@set CATALINA_HOME=%HOME_PATH%\tomcat
@set CATALINA_BASE=%HOME_PATH%\tomcat
@set CLASSPATH=.;%TOMCAT_HOME%\bin\bootstrap.jar;%TOMCAT_HOME%\bin\tomcat-juli.jar
@set PATH=%PATH%;%JAVA_HOME%\bin;%JRE_HOME%\bin
@set MONGODB_HOME=%HOME_PATH%\mongodb\bin
@set PHP_HOME=%HOME_PATH%\php

@if "%1"=="config" (
@if not exist then mkdir %HOME_PATH%\htdocs
@if not exist then mkdir %HOME_PATH%\apache\logs
@if not exist then mkdir %HOME_PATH%\mongodb\log
@if not exist then mkdir %HOME_PATH%\mongodb\data
@if not exist then mkdir %HOME_PATH%\mongodb\data\diagnostic.data
@if not exist then mkdir %HOME_PATH%\mongodb\data\journal
@if not exist then mkdir %HOME_PATH%\mysql\data
apache.config.bat
tomcat.config.bat
mongodb.config.bat
mysql.config.bat
)

@if "%1"=="start" (
mongodb.start.bat
mysql.start.bat
)
```

Setup DEV.ENV

Run command prompt as Administrator



Setup DEV.ENV

```
D:\waas\bin>run start
2020-01-21T21:14:57.168+0900 F CONTROL [main] Failed global initialization: FileNotOpen: Failed to open "D:\waas\mongodb\log\mongoservice.log"
The requested service has already been started.

More help is available by typing NET HELPMSG 2182.

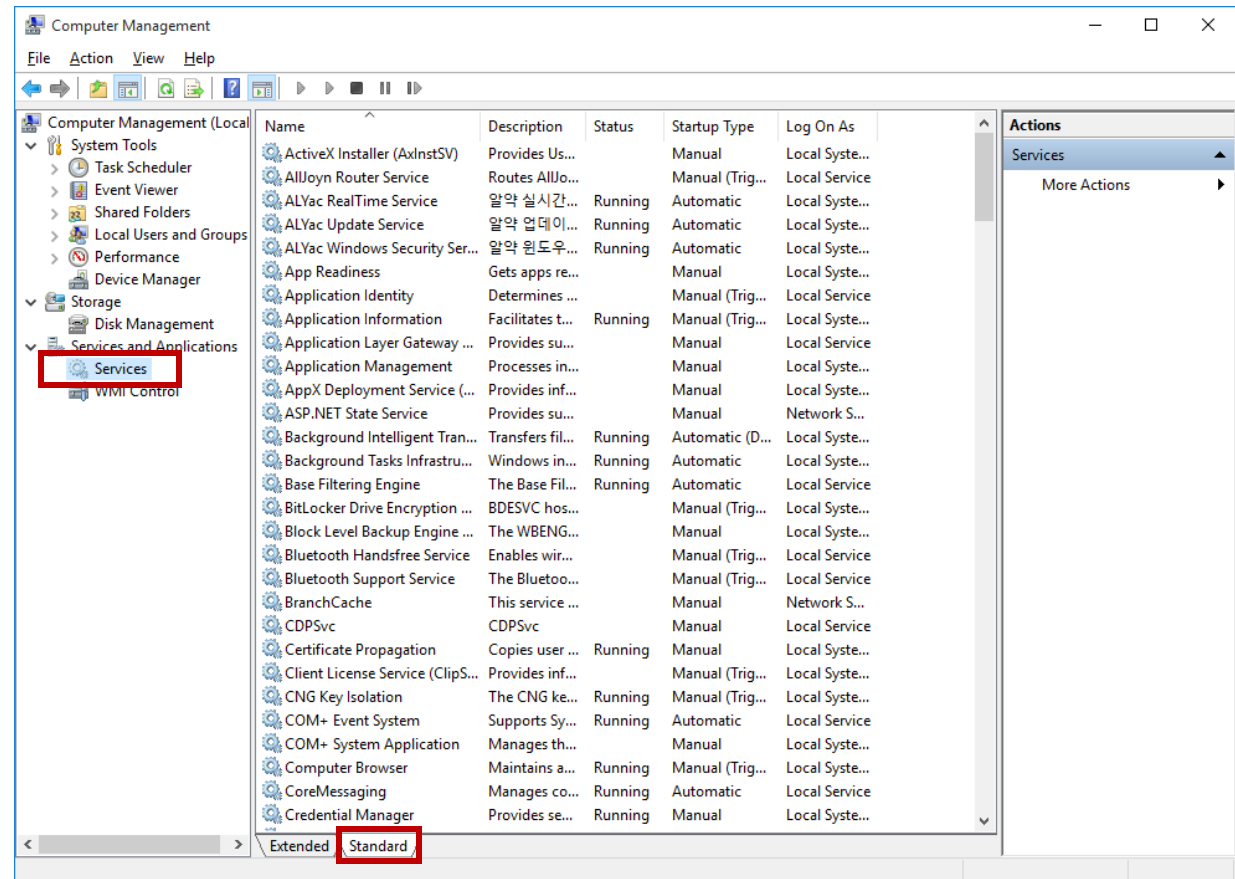
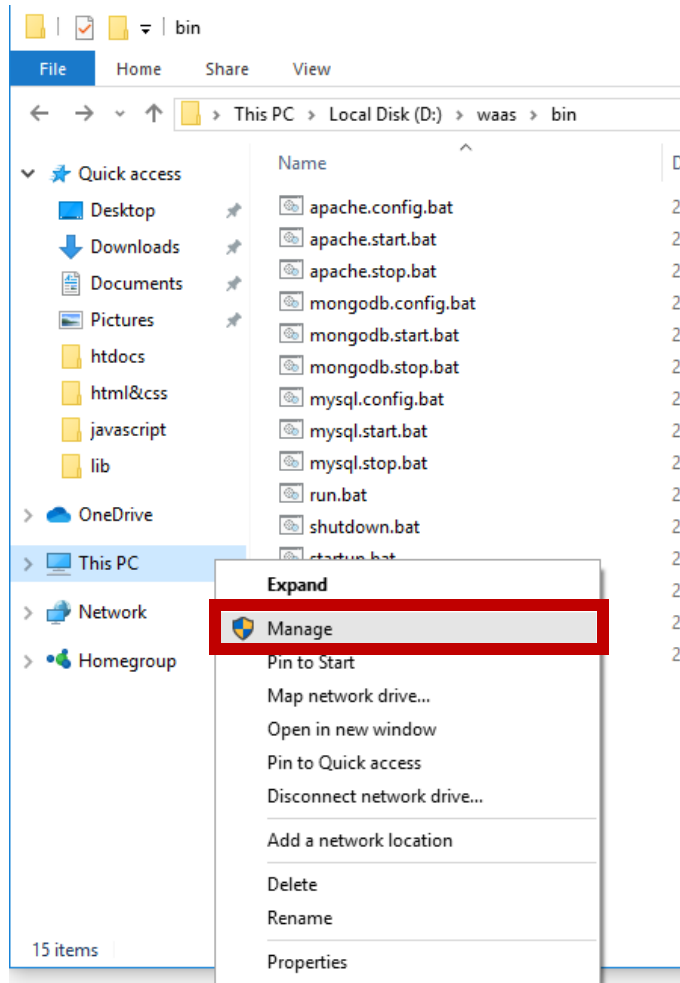
The service already exists!
The current server installed: D:\waas\mysql\bin\mysqld.exe --no-defaults WAAS_SQL
The requested service has already been started.

More help is available by typing NET HELPMSG 2182.

[Tue Jan 21 21:14:57.628996 2020] [mpm_winnt:error] [pid 11332:tid 156] AH00433: WAAS_APACHE: Service is already installed.
(OS 10048)Only one usage of each socket address (protocol/network address/port) is normally permitted. : AH00072: make_sock: could not bind to address [::]:80
(OS 10048)Only one usage of each socket address (protocol/network address/port) is normally permitted. : AH00072: make_sock: could not bind to address 0.0.0.0:80
AH00451: no listening sockets available, shutting down
AH00015: Unable to open logs
The specified service already exists.
Failed to install service
D:\waas\bin>
```

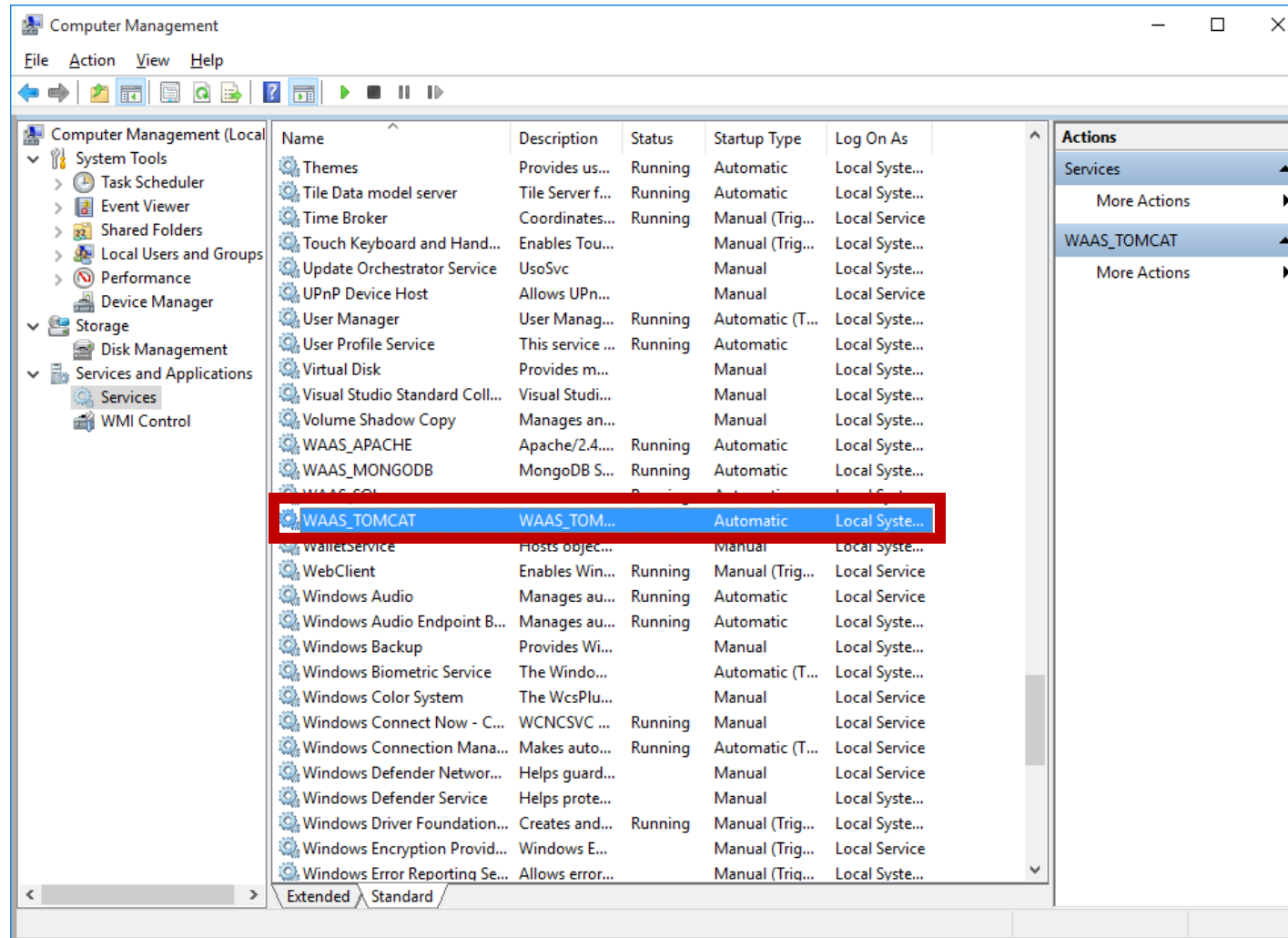
Setup DEV.ENV

Enable Tomcat Service manually



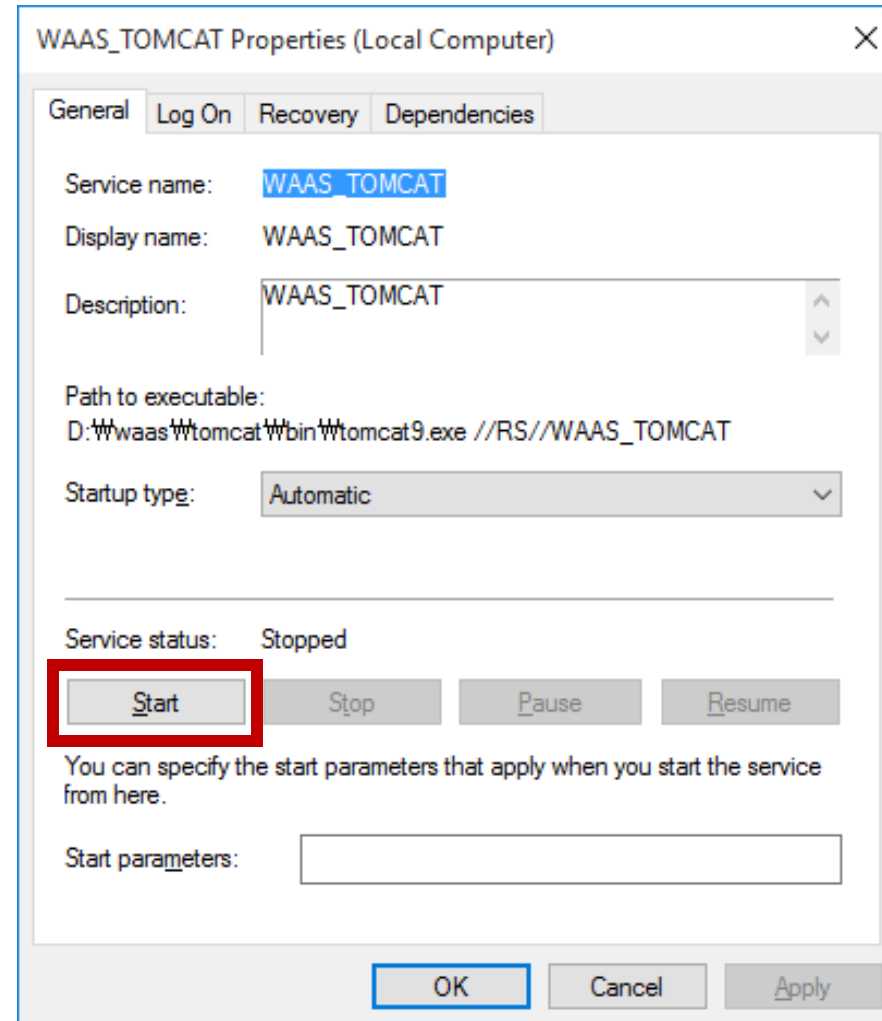
Setup DEV.ENV

Double Click WAAS_TOMCAT



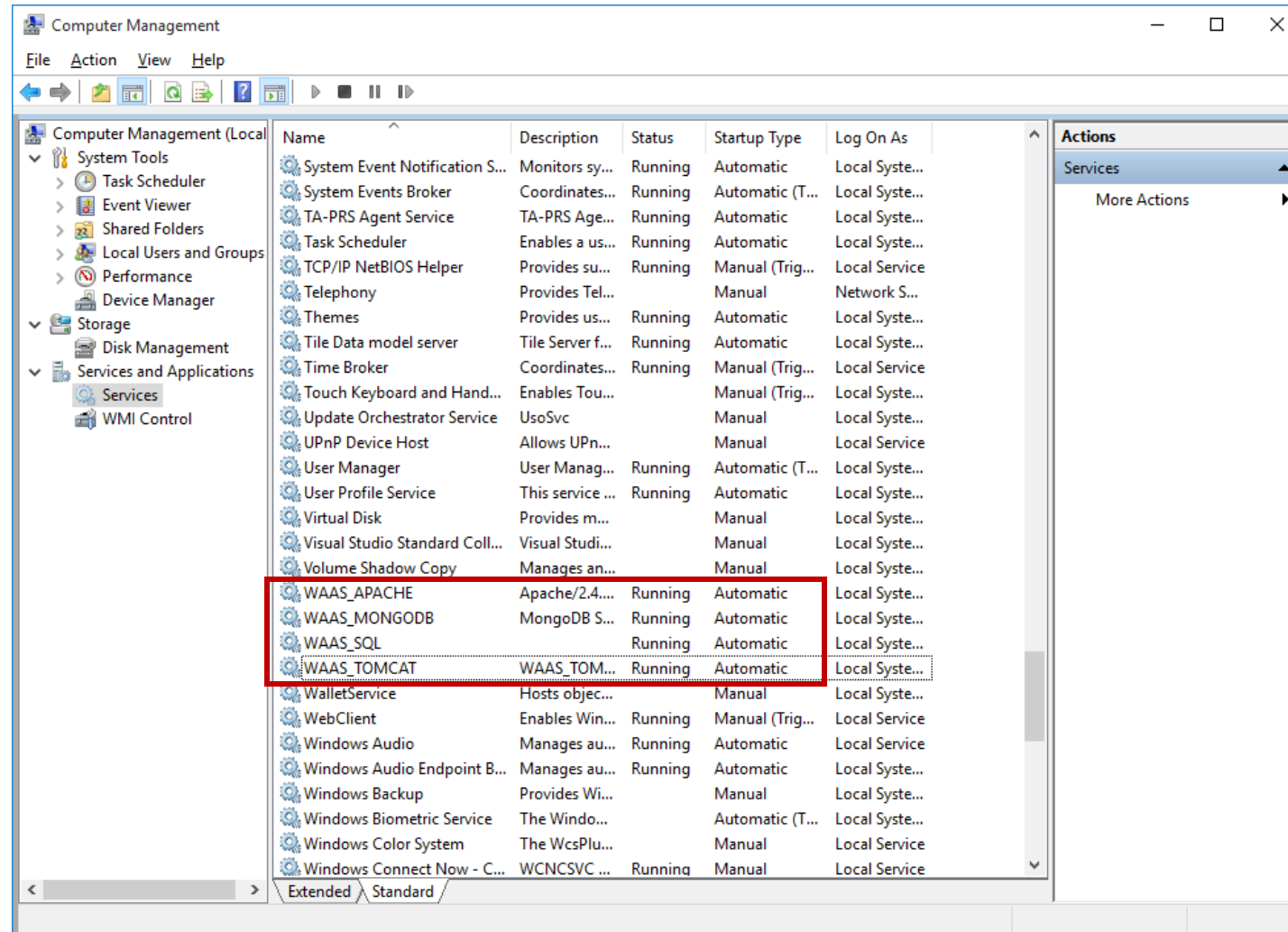
Setup DEV.ENV

Double Click WAAS_TOMCAT



Setup DEV.ENV

Complete WAAS



THANK YOU