

**WA2607 Comprehensive Spring
Boot/Cloud**

Classroom Setup Guide

Web Age Solutions Inc.

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Part 1 - ABOUT THIS SETUP

This course requires 2 different setups that have similar instructions, they are called WA2607-REL_3_1 and WA2607-REL_2_0, note the difference in the version, [3 and 2]

Labs 1 to 10 are using setup # 1: WA2607-REL_3_1

Labs 11 to 16 are using setup # 2: WA2607-REL_2_0

Please make sure you let the instructor and students know exactly the name they are connecting to do the labs.

The setup instructions below will be divided in Setup # 1 for WA2607-REL_3_1 and Setup # 2 for WA2607-REL_2_0.

Part 2 - SETUP # 1: WA2607-REL_3_1

Create a virtual machine and call it as WA2607-REL_3_1 and follow instructions from here to the END OF SETUP # 1: WA2607-REL_3_1

Part 3 - Minimum Hardware Requirements

- 64 bits OS
- 2 cores
- 8 GB RAM minimum
- 20 GB in the hard disk
- Internet access.

Part 4 - Minimum Software Requirements

- Windows 8.1
- Firefox latest
- Chrome latest
- Adobe Acrobat Reader
- Zip extraction utility
- JDK 11 *
- Eclipse IDE-2020-03 *
- Maven 3.6.3 *
- Postman 7.21.0 *
- MongoDB 4.0.3 *
- Erlang OTP *
- RabbitMQ Server *
- Visual Studio Code

* indicates software provided as part of the courseware.

Part 5 - Software Provided

List of ZIP files required for this course and used in next steps on this document:

WA2607_REL_3_1.zip

Send an email to support@webagesolutions.com in order to obtain a copy of the software for this course if you haven't receive it yet.

All other software listed under Minimum Software Requirements is either commercially licensed software that you must provide or software that is freely available off the Internet.

Part 6 - Instructions

__1. Extract the **WA2607_REL_3_1.zip** file to **C:**

__2. Review that the following folders were created:

- **C:\LabFiles**
- **C:\Software\apache-maven-3.6.3**

__3. Review that the following files were created:

- **C:\Software\Eclipse-IDE-2020-03-eclipse-inst-win64.exe**
- **C:\Software\jdk-11.0.8_windows-x64_bin.exe**
- **C:\Software\mongodb-win32-x86_64-2008plus-ssl-4.0.3-signed.msi**
- **C:\Software\Postman-win64-7.21.0-Setup.exe**
- **C:\Software\otp_win32_19.1.exe**
- **C:\Software\rabbitmq-server-3.6.6.exe**

Part 7 - Privileges to Users

During the labs students will require privileges on several directories. They will need to be able to write, read, and modify files in these directories for the labs. Although the directions below are provided as an example, this may differ depending on Windows version. The important thing is to make sure students have full permissions on the folders below or they may not be able to accomplish some labs.

- **C:\Software**
- **C:\LabFiles**
- **C:\Workspace**

__1. Create the user that the students will use during the class.

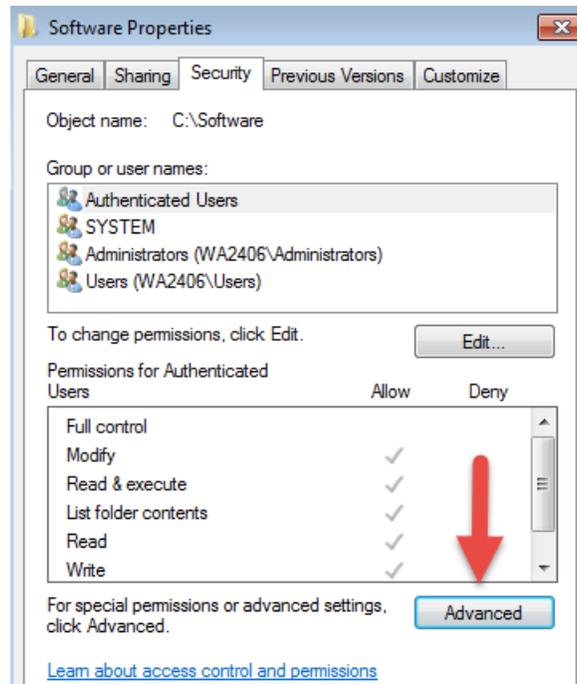
__2. Give the student user account administrative rights. During the labs the student requires this to install software.

__3. Open Windows Explorer.

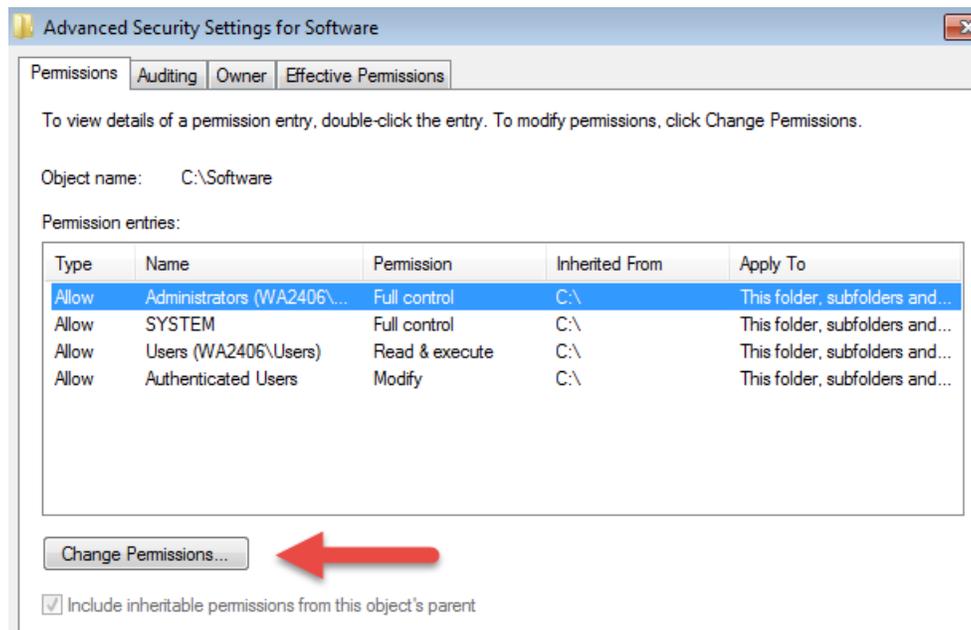
__4. Right click C:**Software** and select **Properties**.

__5. Click the **Security** tab.

__6. Click **Advanced**.

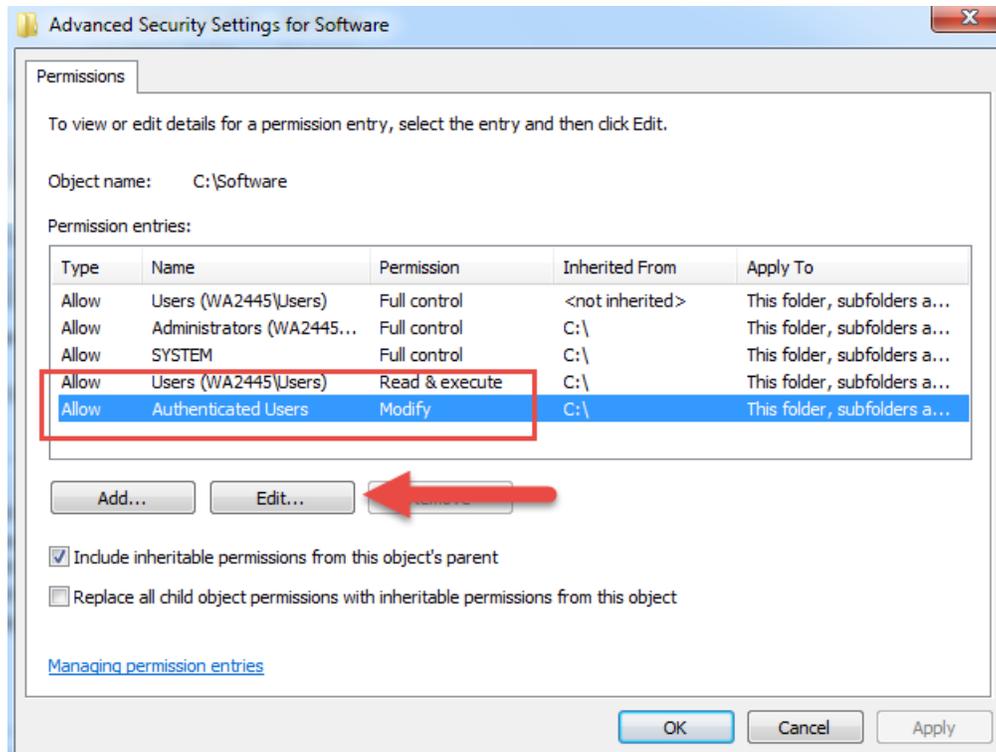


__7. Click **Change Permissions**.

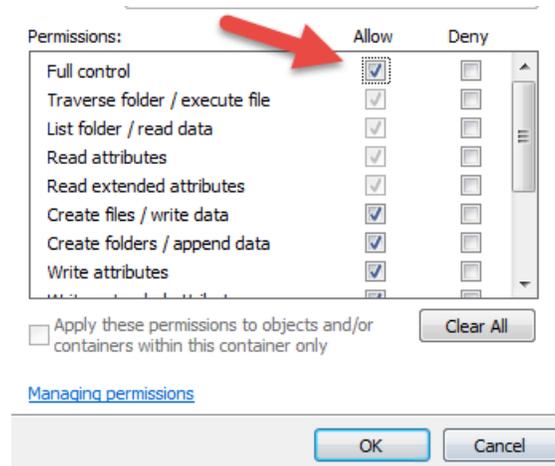


__8. Select the **Authenticated Users** entry and click **Edit...**

Note. If you don't have a domain in your environment the select **Users** instead **Authenticated Users**.



__9. Check the **Allow** checkbox to the right of **Full Control** and click **OK**.



__10. Select the checkbox for **Replace all child permissions with inheritable permissions from this objects** and then click **OK**.



- Include inheritable permissions from this object's parent
- Replace all child object permissions with inheritable permissions from this object

- __ 11. A *Windows Security* dialog will open. Click **Yes**.
- __ 12. Wait until Windows finishes updating security.
- __ 13. Back in the *Advanced Security Settings* dialog, click **OK**.
- __ 14. Back in the *Properties* dialog, click **OK**.
- __ 15. Do the same steps to the **C:\LabFiles** folder.
- __ 16. Create a folder called **C:\Workspace** if its not already created.
- __ 17. Do the same steps to the **C:\Workspace** folder.

Part 8 - Installing JDK 11.0.8 - 64 bit

__1. Make sure there is no previous Java version already installed on the system. You can check this by using the Windows “Add/Remove Programs” utility. For the best compatibility with the labs it is suggested that all previous versions of Java be uninstalled before proceeding with these instructions. If this is an issue, please contact the setup support person for the course.

__2. From the **C:\Software** directory run the following file:

```
jdk-11.0.8_windows-x64_bin.exe
```

Note: If using prompted by a security prompt allow the installation to continue.

__3. When the Welcome page of the setup appears, press the **Next** button.

__4. Leave the defaults for installation location and options, and press the **Next** button.

The installation will begin installing files. Wait until the software is completely installed.

__5. Click **Close**.

Set the Environment variables

__1. Open a Command Prompt. You can do this with '**Start → Programs → Accessories → Command Prompt**'.

__2. Use the 'cd' command to attempt to switch to the following directory. This will verify the presence of a directory used later so make sure you do not get any errors about not being able to “find the path specified”.

```
cd C:\Progra~1\Java\jdk-11.0.8
```

Note: The installation directory may be slightly different depending your operating system. You may need to use the following directory instead of the one listed above:

```
C:\Progra~2\Java\jdk-11.0.8
```

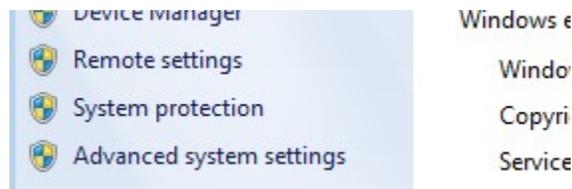
Some of the remaining steps will use the slightly different directory.

__3. Make sure you can reach the java folder and remember the value entered because you will use this value in the following steps.

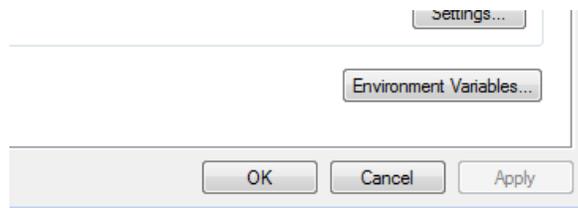
__4. Close the command prompt window.

__5. Open the system properties. The way to do this varies slightly by Windows version. The easiest way is often to open a File Explorer window, right click on the 'This PC' shortcut and select '**Properties**'

__6. Click on **Advanced system settings**.



__7. The system will display the **System Properties** dialog. Select the **Advanced** tab and click **Environment Variables**.



__8. Under the **System Variables** list, click the **New** button.

__9. As Variable name enter:

JAVA_HOME

__10. As Variable value enter the following. This should be the value you verified before.

C:\Progra~1\Java\jdk-11.0.8

__11. Click **OK** to create the variable.

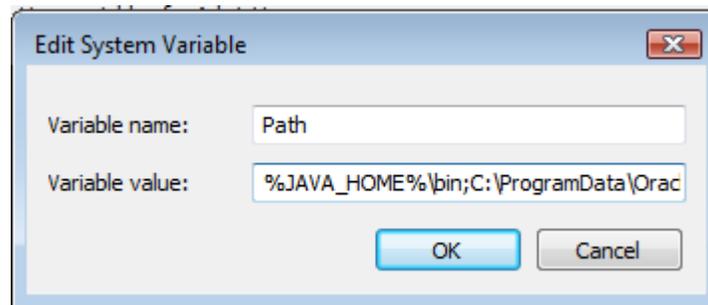
Variable name:	JAVA_HOME
Variable value:	C:\Progra~1\Java\jdk-11.0.8\

__12. From the *System Variables* list, select **Path** and click **Edit**.

__13. At the beginning of the line enter the following. Make sure to include the semi-colon on the end:

```
%JAVA_HOME%\bin;
```

__14. Click **OK**.



The screenshot shows a dialog box titled "Edit System Variable". It has two input fields: "Variable name:" with the text "Path" and "Variable value:" with the text "%JAVA_HOME%\bin;C:\ProgramData\Orac". At the bottom, there are two buttons: "OK" and "Cancel".

__15. Click **OK** to close the *Environment Variables* window.

__16. Click **OK** to close the *System Properties* window.

Verification

__1. Open a Windows command prompt. You can do this by selecting '**Start -> Run**', entering '**cmd**', and then pressing the **OK** button. Make sure it is a new command prompt and not one open previously.

__2. Enter the following command:

```
echo %PATH%
```

Make sure you see the Java 'bin' directory listed at the beginning.

__3. Enter the following command:

```
java -version
```

Make sure you see the response shown below.

```
C:\Users\wasadmin>java -version
java version "11.0.8" 2020-07-14 LTS
Java(TM) SE Runtime Environment 18.9 (build 11.0.8+10-LTS)
Java HotSpot(TM) 64-Bit Server VM 18.9 (build 11.0.8+10-LTS, mixed mode)
```

Troubleshooting: If you get an error message means that your Environment variable was incorrectly entered, go back and fix the values.

__4. Enter the following command:

```
javac
```

Verify that you get the options to run the Java compiler:

```
C:\>javac
Usage: javac <options> <source files>
where possible options include:
  @<filename>           Read options and filenames from file
  -Akey[=value]         Options to pass to annotation proces
  --add-modules <module>(,<module>)*
                        Root modules to resolve in addition to the initial modules,
                        on the module path if <module> is ALL-MODULE-PATH.
  boot-class-path <path>  bootclasspath <path>
```

__5. Enter the following command:

```
java -XshowSettings:all 2>&1 | findstr /c:"sun.arch.data.model"
```

Verify that it displays the correct value of 64. This indicates that it is 64-bit java that is installed.

__6. Close the command prompt window and any extra windows that are open.

You have completed Java installation.

Part 9 - Installing Maven 3.6.3

The following steps are based on Windows 7, other Windows versions instructions may vary.

__1. In the Windows Start Menu, right-click on the **Computer** link in the right-hand side of the Start panel, and then select **Properties**.

__2. Click on **Advanced system settings**.

__3. The system will display the **System Properties** dialog. Select the **Advanced** tab and click **Environment Variables**.

__4. Verify there is a **JAVA_HOME** variable.

__5. In the 'System Variables' panel, locate the entry for '**Path**' and double-click on it.

__6. Add the following to the **end** of the **Variable Value** field (including the semi-colon)

```
;C:\Software\apache-maven-3.6.3\bin
```

__7. Click **OK** on the variable editor dialog.

__8. Click **OK** on the **Environment Variables** dialog.

__9. Click **OK** in the **System Properties** dialog.

__10. Open a command prompt window.

__11. In the command window, type:

```
mvn -version
```

__12. Verify the version is 3.6.3 as shown below:

```
C:\Users\wasadmin>mvn -version
Apache Maven 3.6.3 (cecedd343002696d0abb50b321
Maven home: C:\Software\apache-maven-3.6.3\bin
Java version: 1.8.0_45, vendor: Oracle Corpora
Default locale: en_US, platform encoding: Cp12
OS name: "windows 7", version: "6.1", arch: "x
```

__13. Close all.

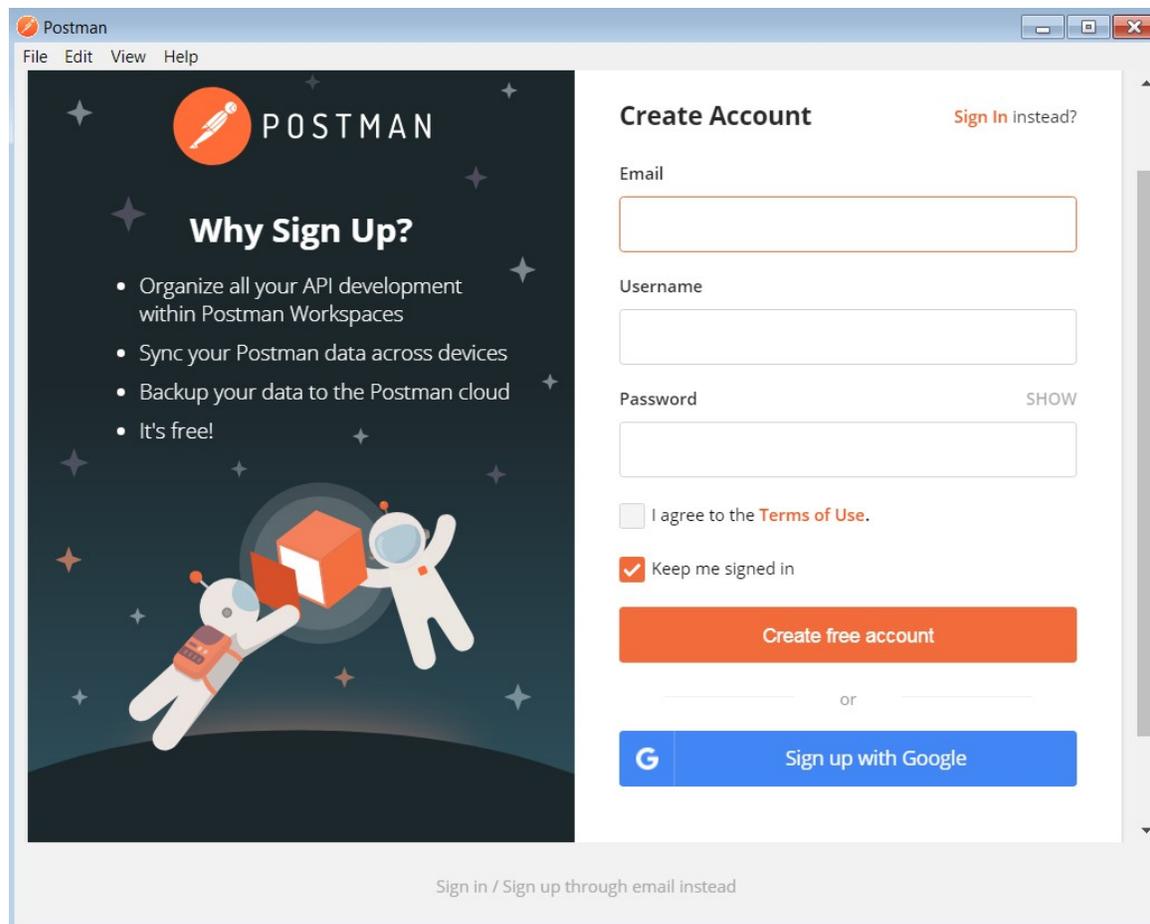
Part 10 - Installing Postman 7.21

__1. Open C:\Software\

__2. Double click this file begin installation:

Postman-win64-7.21.0-Setup.exe

Installation will start and after a while Postman will be launched.



__3. Close Postman.

Part 11 - MongoDB 4.0.3 Installation

__1. Open a file browser to **C:\Software**

__2. Run the following file:

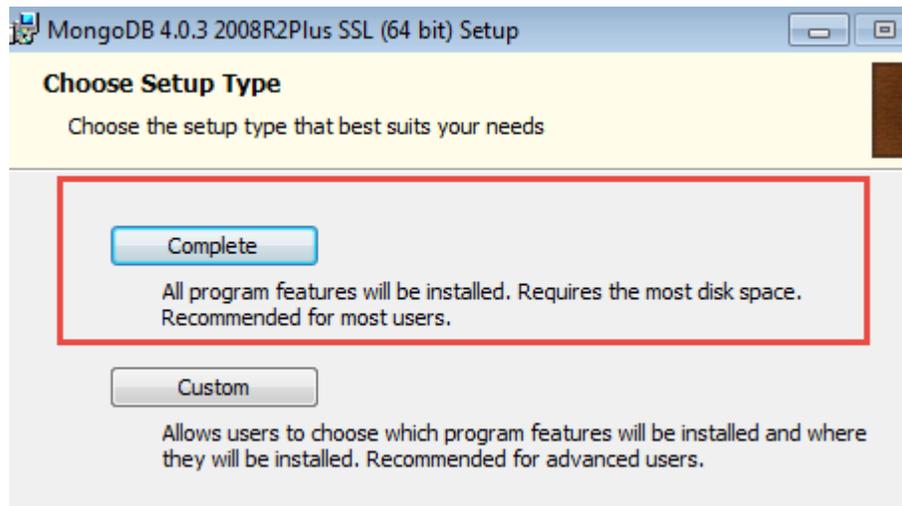
`mongodb-win32-x86_64-2008plus-ssl-4.0.3-signed.msi`

__3. In the Welcome page, click **Next**.

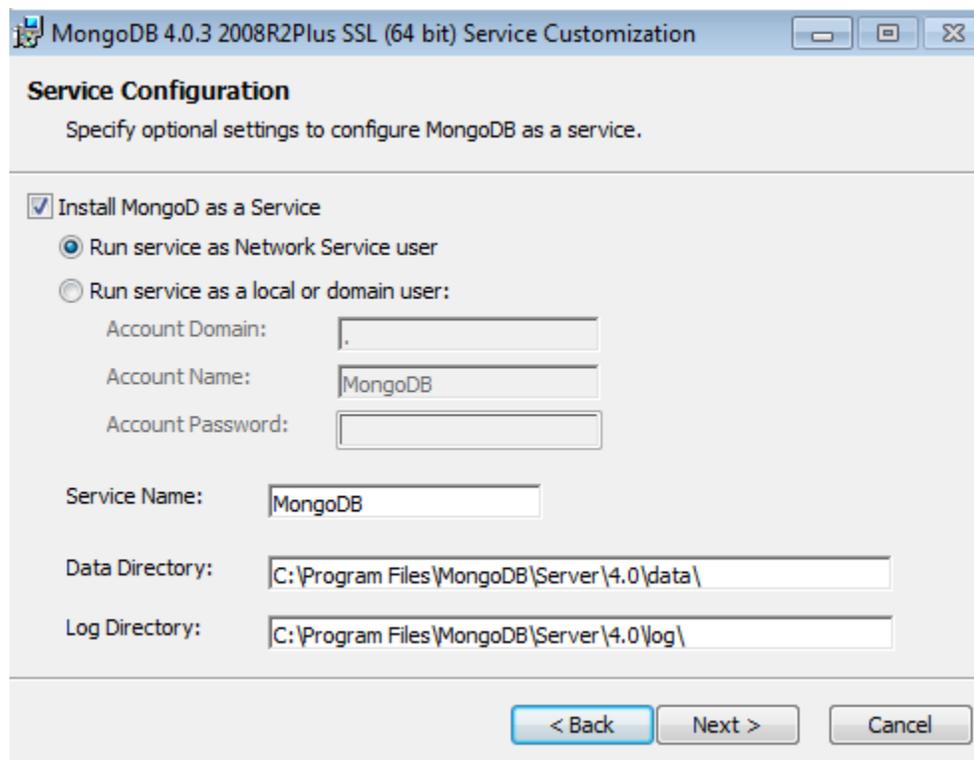


__4. Accept the license agreement and click **Next**.

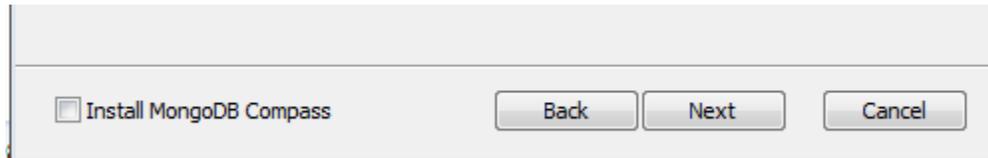
__5. Click the **Complete** button.



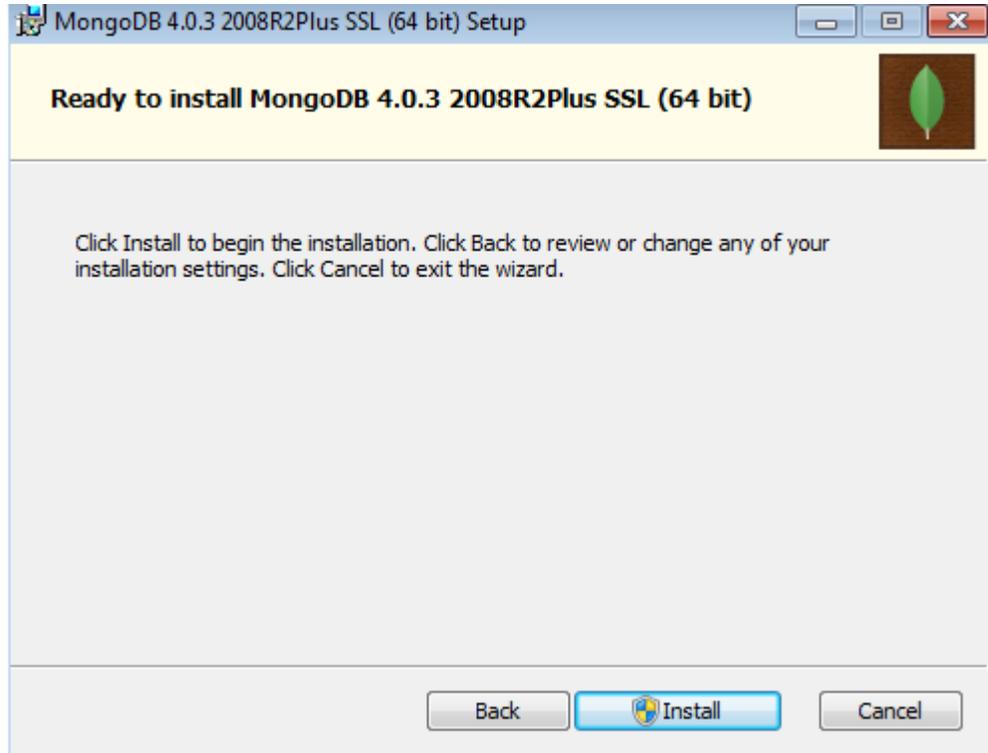
__6. Leave all defaults and click **Next**.



__7. Uncheck **Install MongoDB Compass** and click **Next**.



__8. Click **Install**.



__9. Allow the installation to continue if you get any notification.

__10. Click **Finish**.



__11. In the Windows Start Menu, right-click on the **Computer** link in the right-hand side of the Start panel, and then select **Properties**.

__12. Click on **Advanced system settings**.

__13. The system will display the **System Properties** dialog. Select the **Advanced** tab and click **Environment Variables**.

__14. Under the **System Variables** list, click the **New** button.

__15. Enter **MONGO** as Variable name.

__16. As Variable value enter the following:

`C:\Program Files\MongoDB\Server\4.0\`

Make sure your installation was in this folder or find the right path.

__17. Click **OK** to create the variable.

__ 18. From the *System Variables* list, select **Path** and click **Edit**.

__ 19. At the beginning of the line enter the following. Make sure to include the semi-colon on the end:

```
;%MONGO%\bin
```

__ 20. Click **OK**.

__ 21. Click **OK** to close the *Environment Variables* window.

__ 22. Click **OK** to close the *System Properties* window.

Part 12 - Verification of MongoDB

__ 1. Open a command prompt window.

__ 2. Enter the following command:

```
md "\\data\db" "\\data\log"
```

__ 3. Start MongoDB by entering this command:

```
mongod
```

You will see:

```
behavior is desired, start the
2018-10-18T11:00:57.608-0400 I CONTROL [initandlisten] ** server with --bind_ip 127.0.0.1
to disable this warning.
2018-10-18T11:00:57.608-0400 I CONTROL [initandlisten]
2018-10-18T11:00:57.609-0400 I CONTROL [initandlisten] Hotfix KB2731284 or later update is not inst
alled, will zero-out data files.
2018-10-18T11:00:57.610-0400 I CONTROL [initandlisten]
2018-10-18T11:00:58.731-0400 I FTDC [initandlisten] Initializing full-time diagnostic data captu
re with directory 'C:/data/db/diagnostic.data'
2018-10-18T11:00:58.737-0400 I NETWORK [initandlisten] waiting for connections on port 27017
```

__ 4. Open a new command prompt window.

__ 5. Start Mongo shell by entering this command:

```
mongo
```

After some messages you will see a prompt:

```
C:\Users\wasadmin>mongo
MongoDB shell version v4.0.3
connecting to: mongod://127.0.0.1:27017
Implicit session: session < "id" : UUID("6bc05736-2941-4238-9da1-e9f17b5ec0eb") >
MongoDB server version: 4.0.3
Server has startup warnings:
2018-10-18T09:48:18.507-0400 I CONTROL [initandlisten]
2018-10-18T09:48:18.507-0400 I CONTROL [initandlisten] ** WARNING: Access control is not enabled fo
r the database.
2018-10-18T09:48:18.507-0400 I CONTROL [initandlisten] **          Read and write access to data an
d configuration is unrestricted.
2018-10-18T09:48:18.507-0400 I CONTROL [initandlisten]
2018-10-18T09:48:18.507-0400 I CONTROL [initandlisten] Hotfix KB2731284 or later update is not inst
alled, will zero-out data files.
2018-10-18T09:48:18.507-0400 I CONTROL [initandlisten]
---
Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
>
```

___ 6. To exit Mongo shell, enter this command:

exit

___ 7. In the MongoDB window, press Ctrl+C to shut down MongoDB.

___ 8. Close all.

Part 13 - Installing Eclipse-IDE-2020-03

__ 1. Open C:\Software\

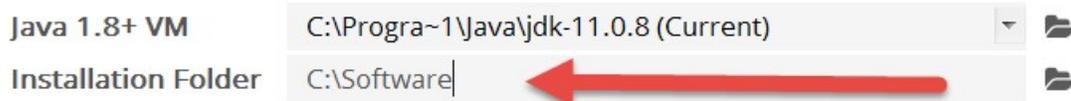
__ 2. Double click in this file to install eclipse:

Eclipse-IDE-2020-03-eclipse-inst-win64.exe

__ 3. Select **Eclipse IDE for Enterprise Java and Web Developers**.



__ 4. Enter the **Installation folder** as C:\Software



Note that Java version may vary.

__ 5. Click **Install**.

__ 6. Click **Accept Now**.

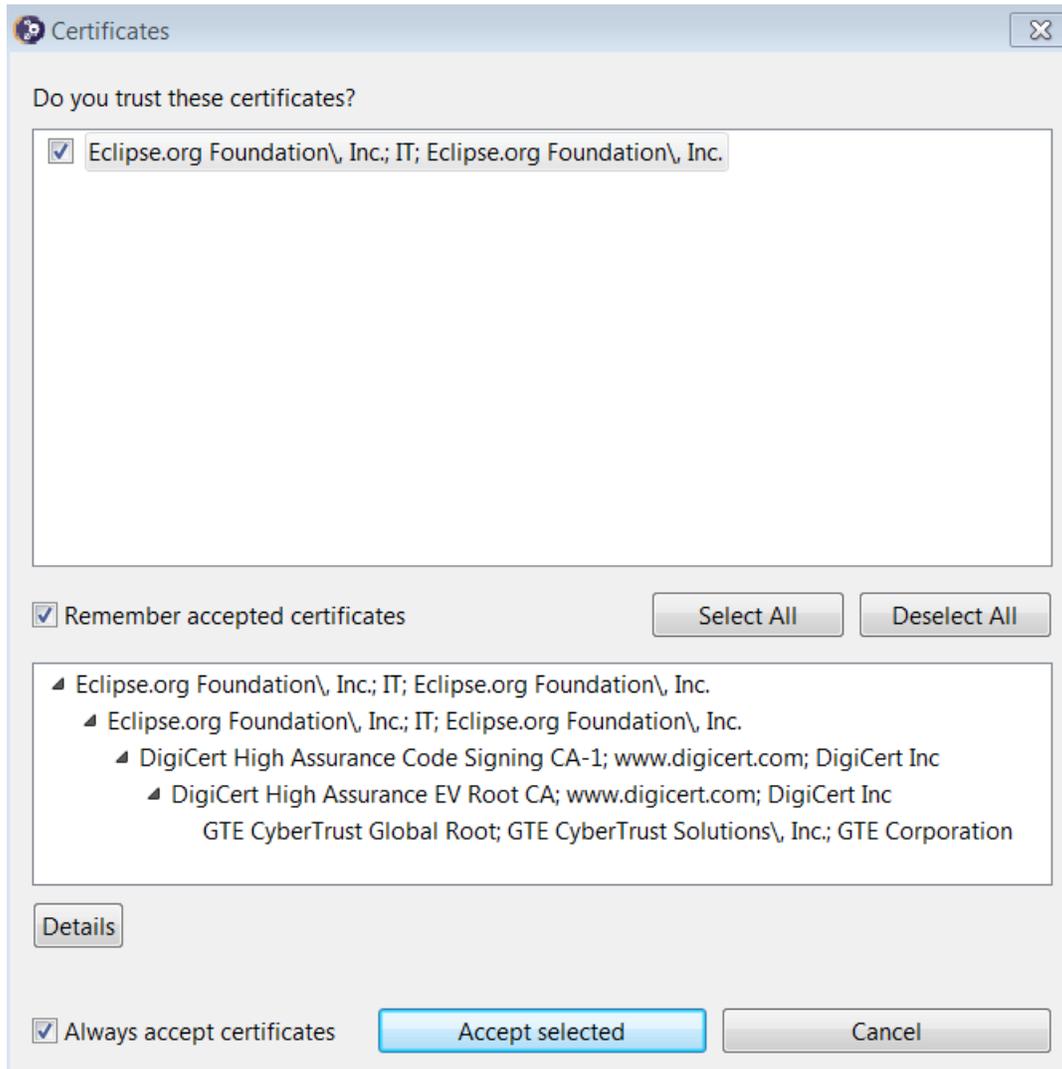
The installation will start and may take a while.

__ 7. In the Certificates page, click **Select All**.

__8. You may see a pop-up message about the installation is taking longer. Just close that pop-up.

__9. Check the boxes for **Remember accepted certificates**.

__10. Check the boxes for **Always accept certificates**.



__11. Click **Accept selected** to continue with the installation.

__12. Finally it will finish installing eclipse. Click **Launch**.



Eclipse IDE for Enterprise Java Developers

[details](#)

Tools for developers working with Java and Web applications, including a Java IDE, tools for Web Services, JPA and Data Tools, JavaServer Pages and Faces, Mylyn, Maven and Gradle, Git, and more.

Java 1.8+ VM	C:\Progra~1\Java\jdk-11.0.8 (Current) 	
Installation Folder	C:\Software	
	<input checked="" type="checkbox"/> create start menu entry	
	<input checked="" type="checkbox"/> create desktop shortcut	
▶ LAUNCH		

Eclipse will start.



__13. Change the workspace directory to **C:\Workspace** and click **Launch**.

__14. Eclipse will open showing the Welcome page. Close the page by clicking on the X in the tab.

__15. From the menu, select **File > Exit** to close Eclipse.

You have completed Eclipse installation.

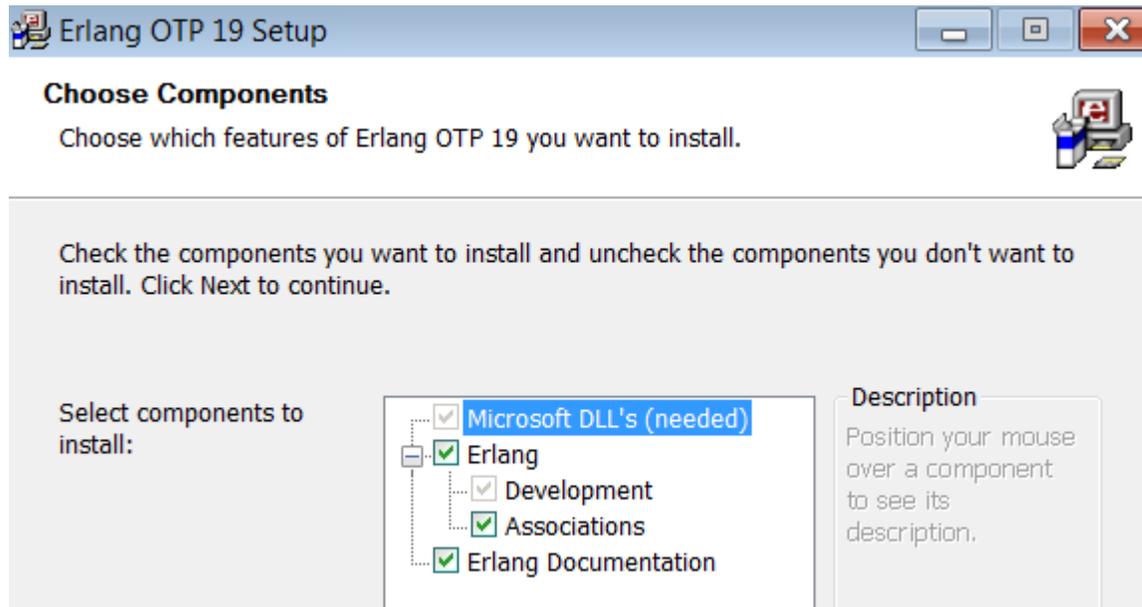
Part 14 - Installing Erlang 19.1

__ 1. Locate and run:

`C:\Software\otp_win32_19.1.exe`

__ 2. If window open, allow access in all similar windows.

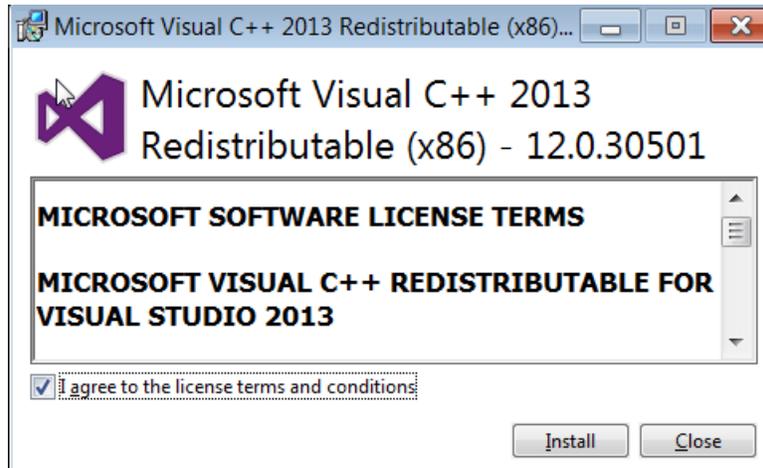
__ 3. Click **Next** in the Choose Components window.



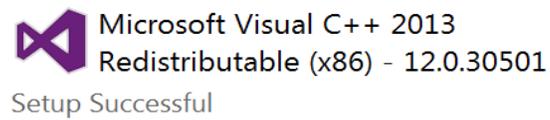
__ 4. Leave the default destination folder and click **Next**.

__ 5. Click **Install**.

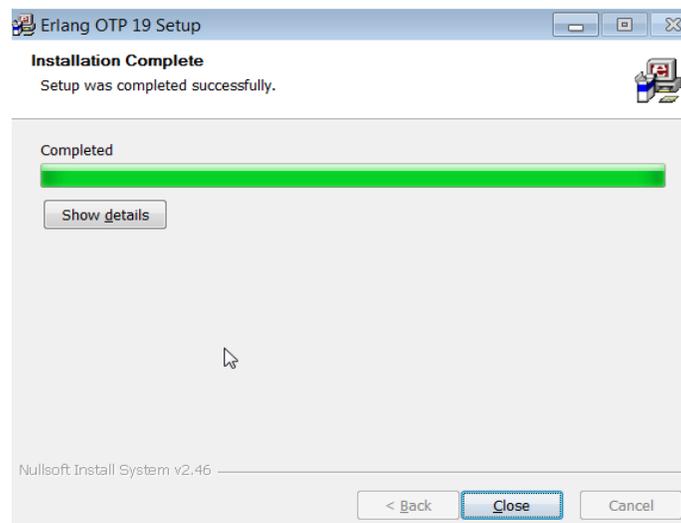
__ 6. If the following window appears then check the agreement box and click **Install**.



__7. If you see this page, click **Close**.



__8. Click **Close**.



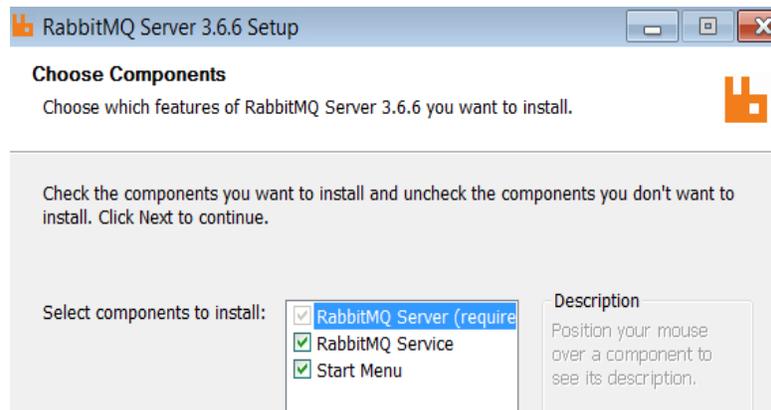
Part 15 - Installing RabbitMQ server 3.6.6

__1. Locate and run:

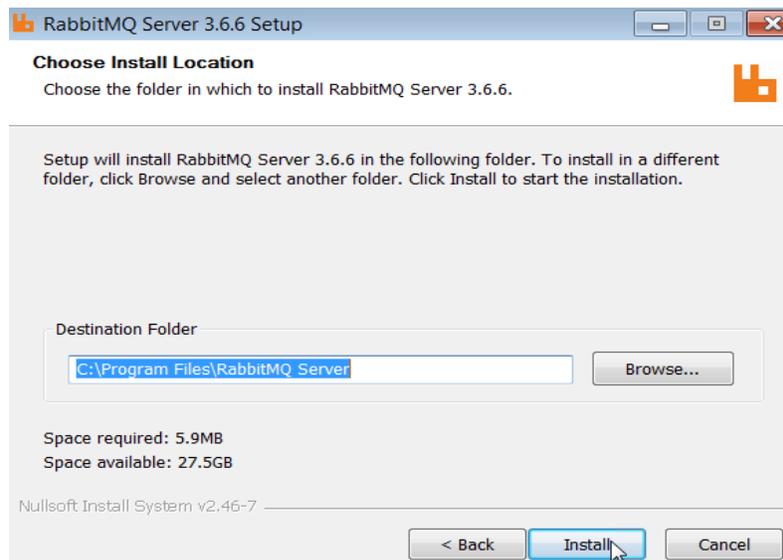
`C:\Software\rabbitmq-server-3.6.6.exe`

__2. If a window open, allow access in all similar windows.

__3. Click **Next**.

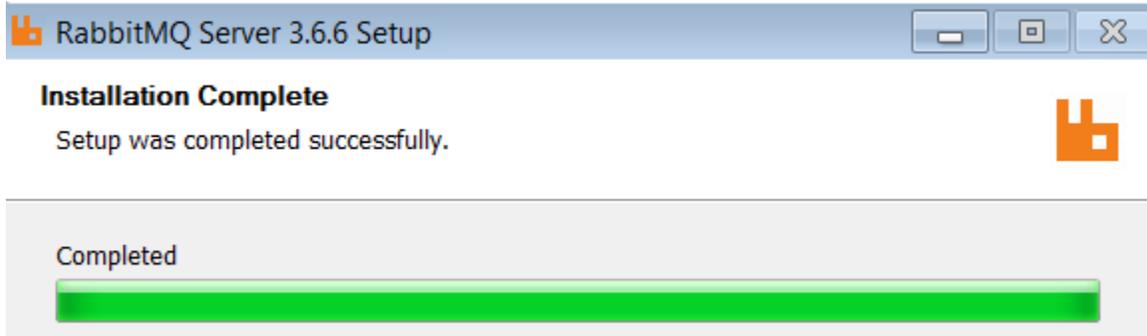


__4. Leave the default destination folder and click **Install**.

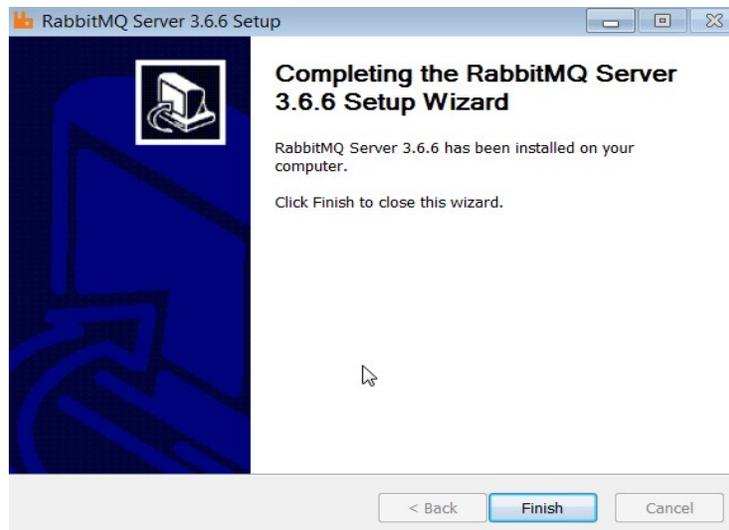


__5. If a Firewall window open, then click **Allow access** in all similar windows.

__6. In the Installation complete page, click **Next**.



__7. Click **Finish**.



Part 16 - Installing Visual Studio Code

__1. Download the latest VScode for Windows (stable build installer) from the following site:

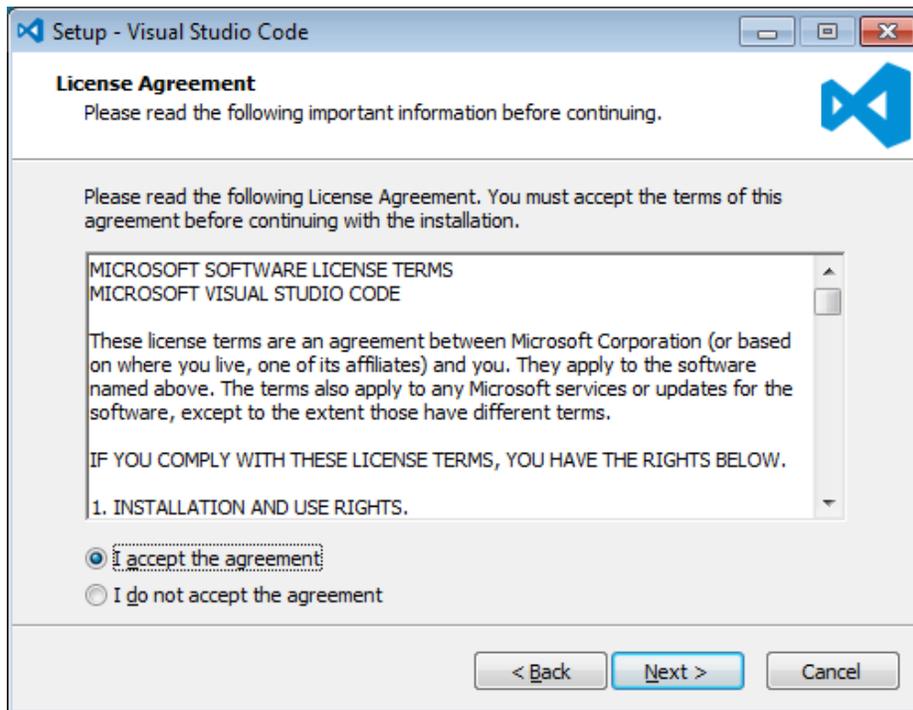
<https://code.visualstudio.com/>

__2. Run the downloaded installer to begin the installation.

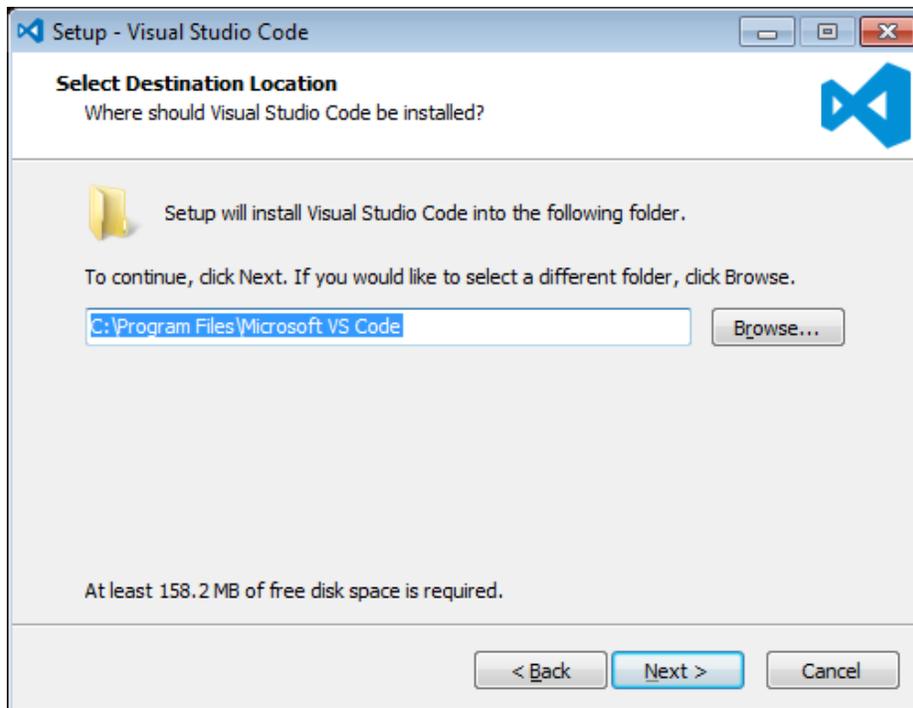
__3. Click **Next** on the welcome screen.



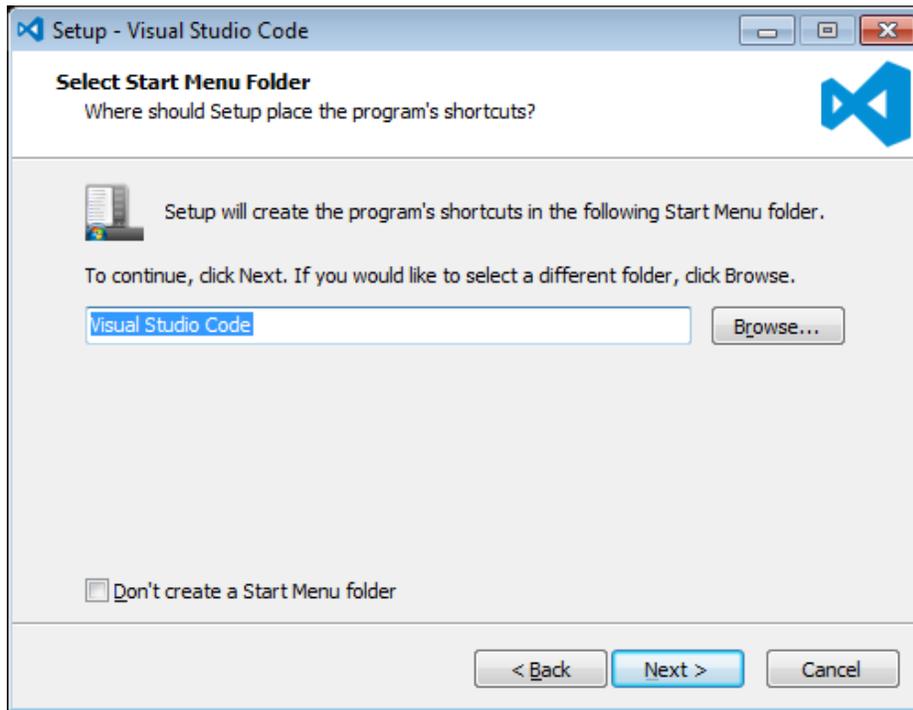
__4. Check **I accept the agreement...** and click **Next**.



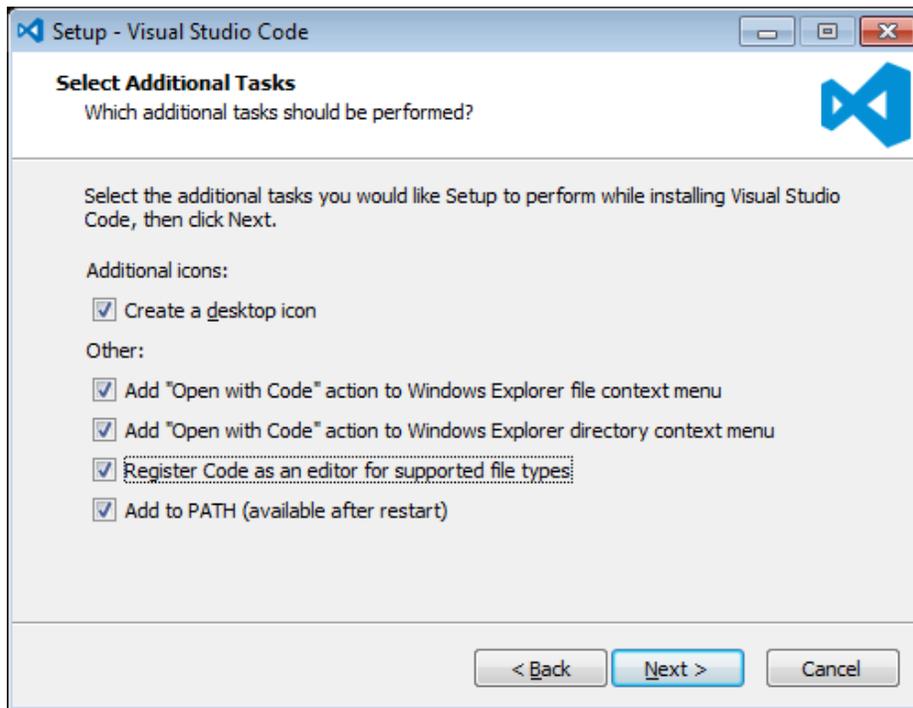
5. Leave the default installation location and click **Next**.



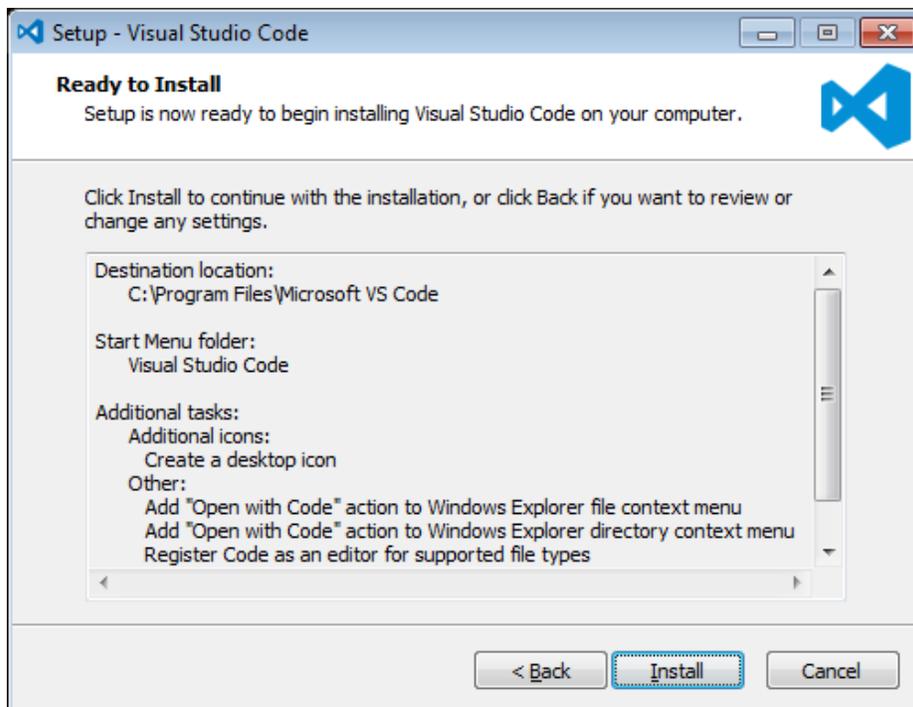
__6. Leave the default start menu folder and click **Next**.



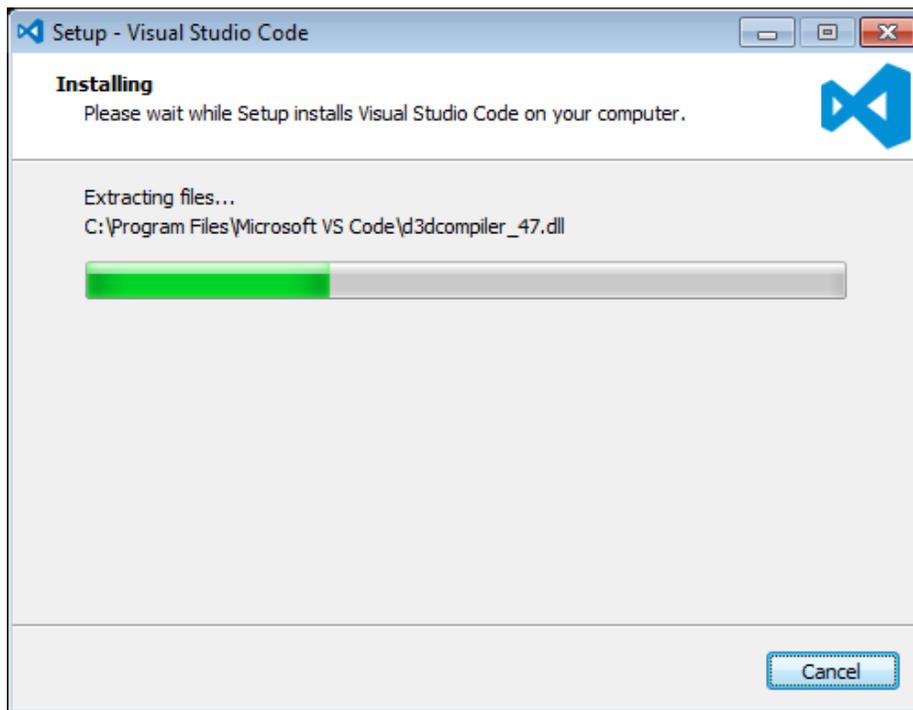
__7. Put a check mark on all items under Additional Tasks and click **Next**.



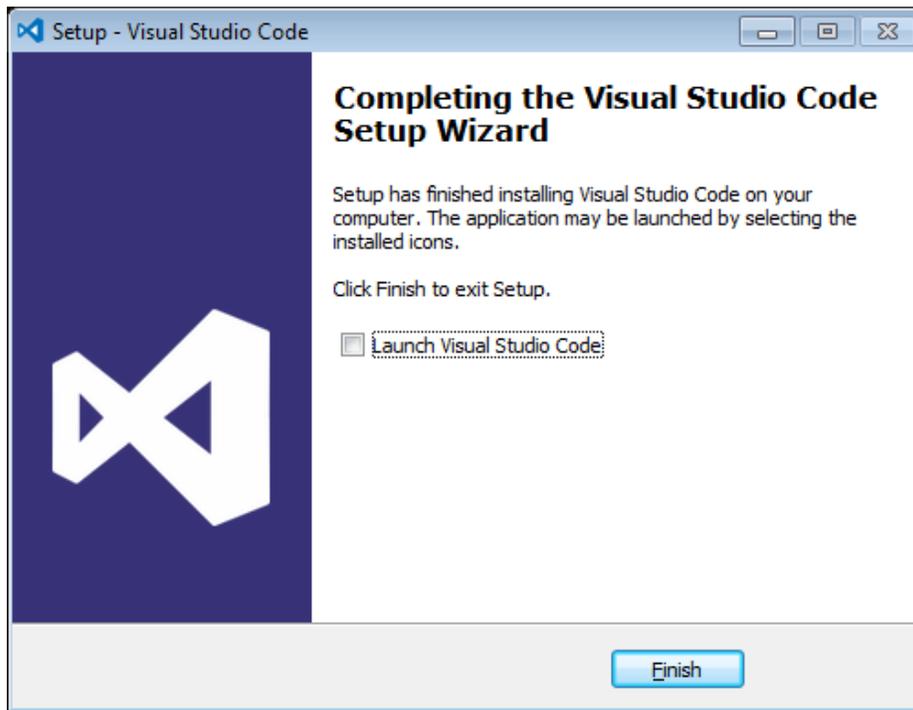
8. Now click **Install**.



__9. Give it some time to install.

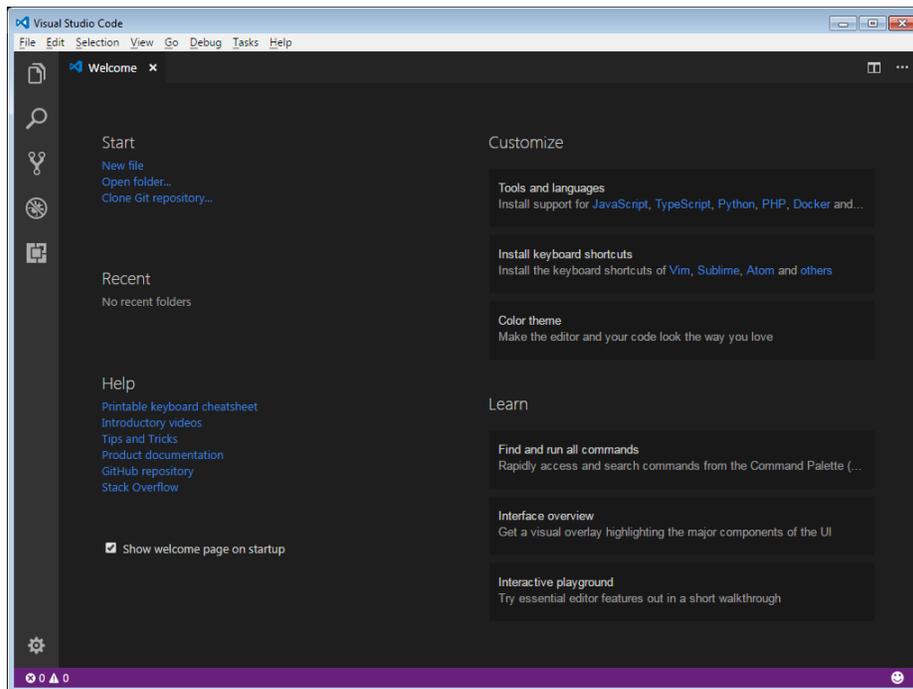


__10. When it is complete, **uncheck Launch Visual Studio Code** and click **Finish**.

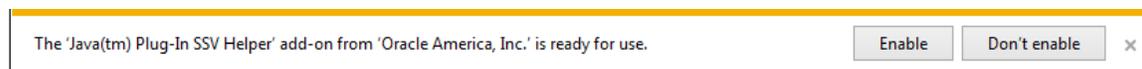


Installation verification of VScode.

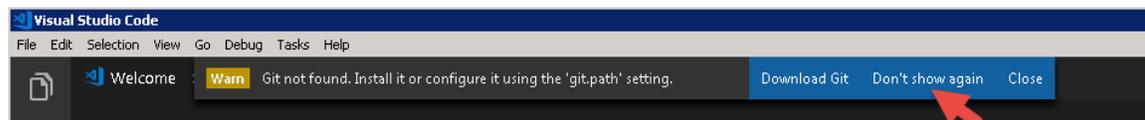
- __1. Launch Visual Studio Code using the shortcut on the desktop.
- __2. Verify Visual Studio Code opens and that you see the Welcome screen.



__3. You may see a message to enable Java(tm) Plug-In, if so click Enable.



__4. You may see a message regarding Git, if so click **Don't show again**.



__5. Close all windows.

Part 17 - END OF SETUP # 1: WA2607-REL_3_1

Shut down the VM called WA2607-REL_3_1

Part 18 - SETUP # 2: WA2607-REL_2_0

Create a virtual machine and call it as WA2607-REL_2_0 and follow instructions from here to the END OF SETUP # 2: WA2607-REL_2_0

Make sure to close the previous VM before starting working on this VM.

Part 19 - Minimum Hardware Requirements

- 64 bits OS
- 2 cores
- 8 GB RAM minimum
- 20 GB in the hard disk
- Internet access.

Part 20 - Minimum Software Requirements

- Windows 8.1
- Adobe Acrobat Reader
- Zip extraction utility
- Chrome
- eclipse *
- JDK *
- Erlang OTP *
- RabbitMQ Server *
- Maven *
- Postman *
- Mongoddb *

* indicates software provided as part of the courseware.

Part 21 - Software Provided

List of ZIP files required for this course and used in next steps on this document:

WA2607_REL_2_0.zip

Send an email to support@webagesolutions.com in order to obtain a copy of the software for this course if you haven't receive it yet.

All other software listed under Minimum Software Requirements is either commercially licensed software that you must provide or software that is freely available off the Internet.

Part 22 - Instructions

__1. Create a user called **wasadmin** with password **wasadmin** and grant this user administrative access, or create an admin user and share this information to the instructor.

__2. Restart the computer and log in as **wasadmin**.

__3. Make sure you have internet access.

__4. Install the latest Chrome version.

__5. Extract the **WA2607_REL_2_0.zip** file to C:\

__6. Review that the following folders were created:

- **C:\LabFiles**
- **C:\Software\eclipse**
- **C:\Software\apache-maven-3.3.9**
- **C:\Software\NotepadPlus**
- **C:\Software\mongodb**

__7. Review that the following files were created:

- **C:\Software\jdk-8u45-windows-i586.exe**
- **C:\Software\otp_win32_19.1.exe**
- **C:\Software\rabbitmq-server-3.6.6.exe**
- **C:\Software\Postman-win32-5.2.0-Setup.exe**

__8. Make a shortcut in the desktop to **C:\Software\NotepadPlus\notepad++.exe**

Part 23 - Privileges to Users

During the labs students will require privileges on several directories. They will need to be able to write, read, and modify files in these directories for the labs. Although the directions below are provided as an example, this may differ depending on Windows version. The important thing is to make sure students have full permissions on the folders below or they may not be able to accomplish some labs.

- **C:\Software**
- **C:\LabFiles**
- **C:\Workspace**

__1. Create the user that the students will use during the class.

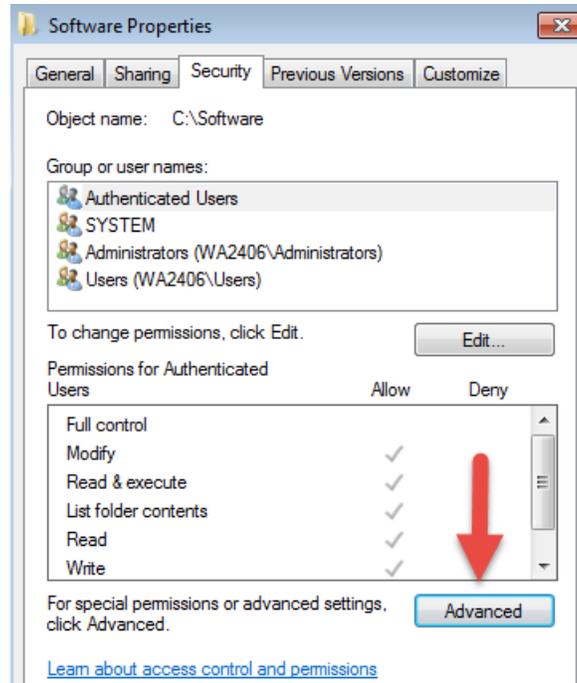
__2. Give the student user account administrative rights. During the labs the student requires this to install software.

__3. Open Windows Explorer.

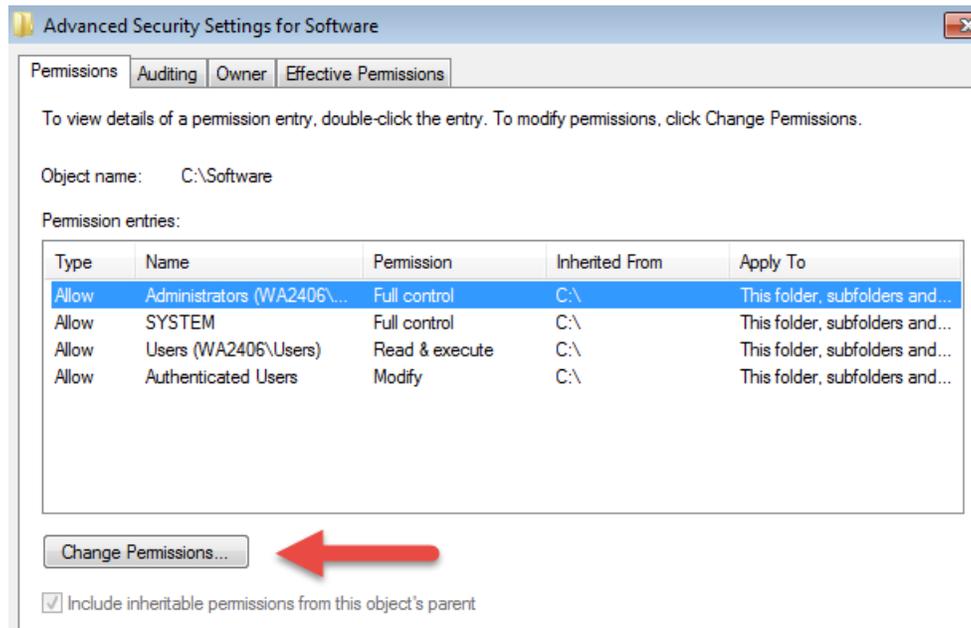
__4. Right click C:**Software** and select **Properties**.

__5. Click the **Security** tab.

__6. Click **Advanced**.

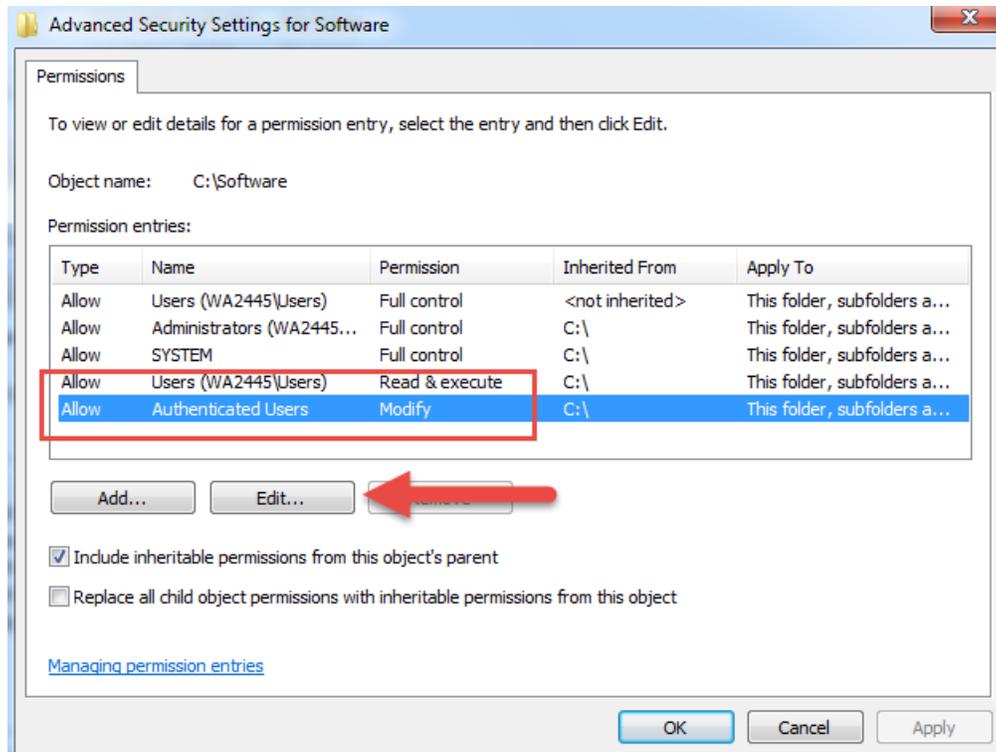


__7. Click **Change Permissions**.

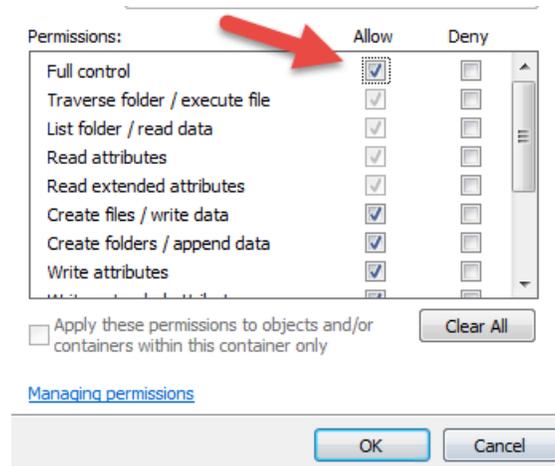


__8. Select the **Authenticated Users** entry and click **Edit...**

Note. If you don't have a domain in your environment the select **Users** instead **Authenticated Users**.



__9. Check the **Allow** checkbox to the right of **Full Control** and click **OK**.



__10. Select the checkbox for **Replace all child permissions with inheritable permissions from this objects** and then click **OK**.



- Include inheritable permissions from this object's parent
- Replace all child object permissions with inheritable permissions from this object

- __ 11. A *Windows Security* dialog will open. Click **Yes**.
- __ 12. Wait until Windows finishes updating security.
- __ 13. Back in the *Advanced Security Settings* dialog, click **OK**.
- __ 14. Back in the *Properties* dialog, click **OK**.
- __ 15. Do the same steps to the **C:\LabFiles** folder.
- __ 16. Create a folder called **C:\Workspace** if its not already created.
- __ 17. Do the same steps to the **C:\Workspace** folder.

Part 24 - Installing JDK 8 Update 45

__ 1. Make sure there is no previous Java version already installed on the system. You can check this by using the Windows “Add/Remove Programs” utility. For the best compatibility with the labs it is suggested that all previous versions of Java be uninstalled before proceeding with these instructions. If this is an issue, please contact the setup support person for the course.

__ 2. From the **C:\Software** directory run the following file:

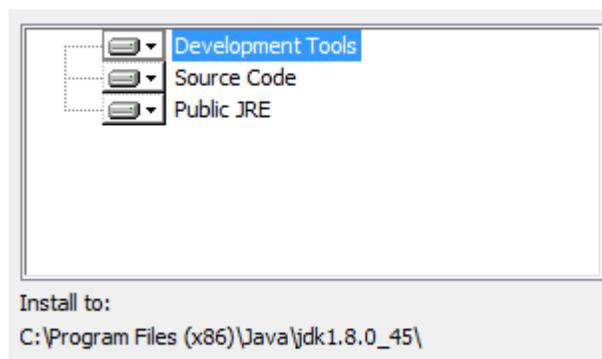
jdk-8u45-windows-i586.exe

Note: If using prompted by a security prompt allow the installation to continue.

__ 3. When the initial step of the setup appears, press the **Next** button.



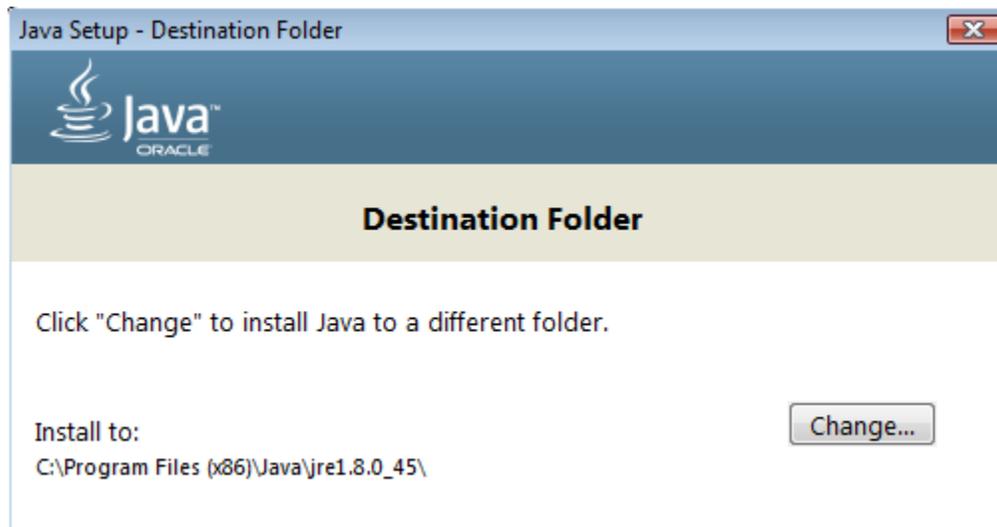
__4. Leave the defaults for installation location and options, and press the **Next** button.



Note: The installation directory may be slightly different.

The installation will begin installing files.

__5. The Destination Folder will appear, leave the default folder and click **Next**.



Note: The installation directory may be slightly different.

Wait until the software is completely installed.

__6. Click **Close**.



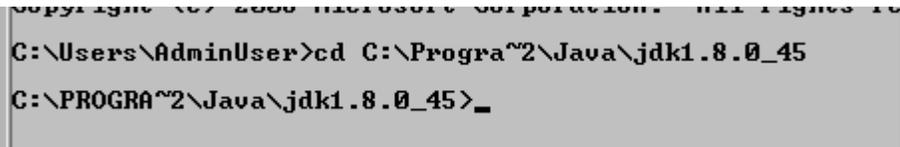
__7. Close any browser that appears asking to register the JDK software.

Set the Environment variables.

__1. Open a Command Prompt. You can do this with '**Start → Programs → Accessories → Command Prompt**'.

__2. Use the 'cd' command to attempt to switch to the following directory. This will verify the presence of a directory used later so make sure you do not get any errors about not being able to “find the path specified”.

```
cd C:\Progra~2\Java\jdk1.8.0_45
```



```
C:\Users\AdminUser>cd C:\Progra~2\Java\jdk1.8.0_45  
C:\PROGRA~2\Java\jdk1.8.0_45>_
```

Note: The installation directory may be slightly different depending your operating system. You may need to use the following directory instead of the one listed above:

C:\Progra~1\Java\jdk1.8.0_45

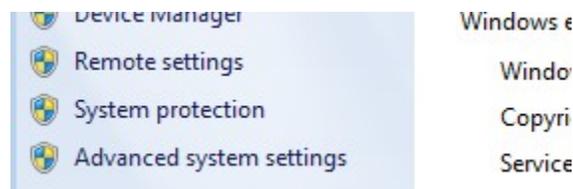
Some of the remaining steps will use the slightly different directory.

__3. Make sure you can reach the java folder and remember the value entered because you will use this value in the following steps.

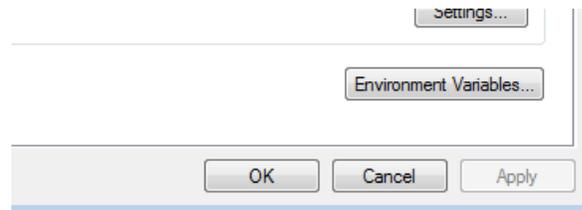
__4. Close the command prompt window.

__5. In the Windows Start Menu, right-click on the **Computer** link in the right-hand side of the Start panel, and then select **Properties**.

__6. Click on **Advanced system settings**.



__7. The system will display the **System Properties** dialog. Select the **Advanced** tab and click **Environment Variables**.



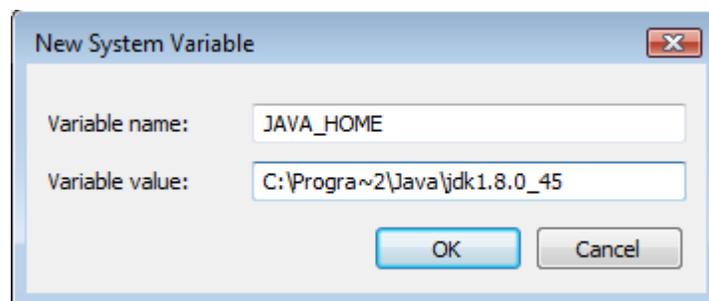
__8. Under the **System Variables** list, click the **New** button.

__9. Enter the following as Variable name:

JAVA_HOME

__10. As Variable value enter the following. This should be the value you verified in the *Set the Environment variables section - step 2*.

C:\Progra~2\Java\jdk1.8.0_45



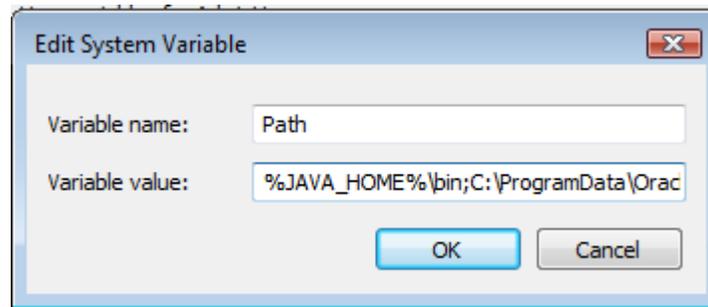
Note: If you are using a 32-bit OS you may have to use **C:\Progra~1\Java\jdk1.8.0_45**

__11. Click **OK** to create the variable.

__12. From the *System Variables* list, select **Path** and click **Edit**.

__13. At the beginning of the line enter the following. Make sure to include the semi-colon on the end:

%JAVA_HOME%\bin;



__14. Click **OK**.

__15. Click **OK** to close the *Environment Variables* window.

__16. Click **OK** to close the *System Properties* window.

Part 25 - Verification of JDK 8 Update 45

__1. Open a Windows command prompt. You can do this by selecting '**Start -> Run**', entering '**cmd**', and then pressing the **OK** button. Make sure it is a new command prompt and not one open previously.

__2. Enter the following command:

```
echo %PATH%
```

Make sure you see the Java 'bin' directory listed at the beginning.

Note: You may see **C:\Progra~1\Java\jdk1.8.0_45** or **C:\Progra~2\Java\jdk1.8.0_45**

__3. Enter the following command:

```
java -version
```

Make sure you see the response shown below.

```
C:\Users\AdminUser>java -version
java version "1.8.0_45"
Java(TM) SE Runtime Environment (build 1.8.0_45-b15)
Java HotSpot(TM) Client VM (build 25.45-b02, mixed mode)

C:\Users\AdminUser>_
```

Troubleshooting: If you get an error message means that your Environment variable was incorrectly entered, go back and fix the values.

__4. Enter the following command:

```
javac
```

Verify that you get the options to run the Java compiler:

```
C:\Users\AdminUser>javac
Usage: javac <options> <source files>
where possible options include:
  -g                Generate all debugging info
  -g:none           Generate no debugging info
  -g:<lines,vars,source> Generate only some debugging info
```

__5. Enter the following command:

```
java -XshowSettings:all 2>&1 | findstr /c:"sun.arch.data.model"
```

```
C:\Users\wasadmin>java -XshowSettings:all 2>&1 | findstr /c:"sun.arch.data.model"
"
sun.arch.data.model = 32
```

Verify that it displays the correct value of 32. This indicates that it is 32-bit java that is installed.

Troubleshooting: If it displays 64 for the value, then you have 64 bit java installed and this will cause issues. Please uninstall the 64-bit java and reinstall the indicated 32-bit jdk.

__6. Close the command prompt window and any extra windows that are open.

Java has been installed.

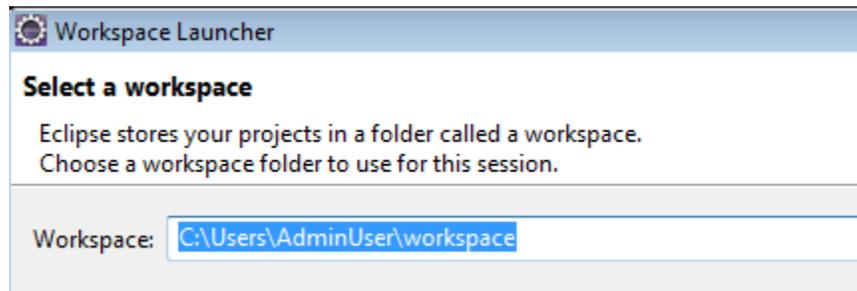
Part 26 - Eclipse Mars 1

__1. Run `C:\Software\eclipse\eclipse.exe`

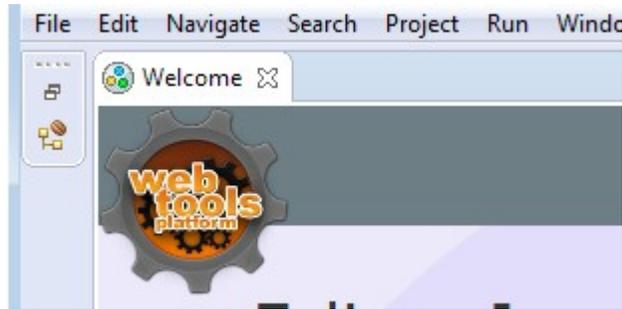
Eclipse Mars 1 will start.



__2. A Workspace Launcher dialog will appear. Leave the default workspace directory and click **OK**.



Eclipse will open showing the Welcome page. (The Welcome screen may vary between versions).



3. From the menu, select **File > Exit** to close Eclipse. Confirm you want to exit Eclipse if prompted.

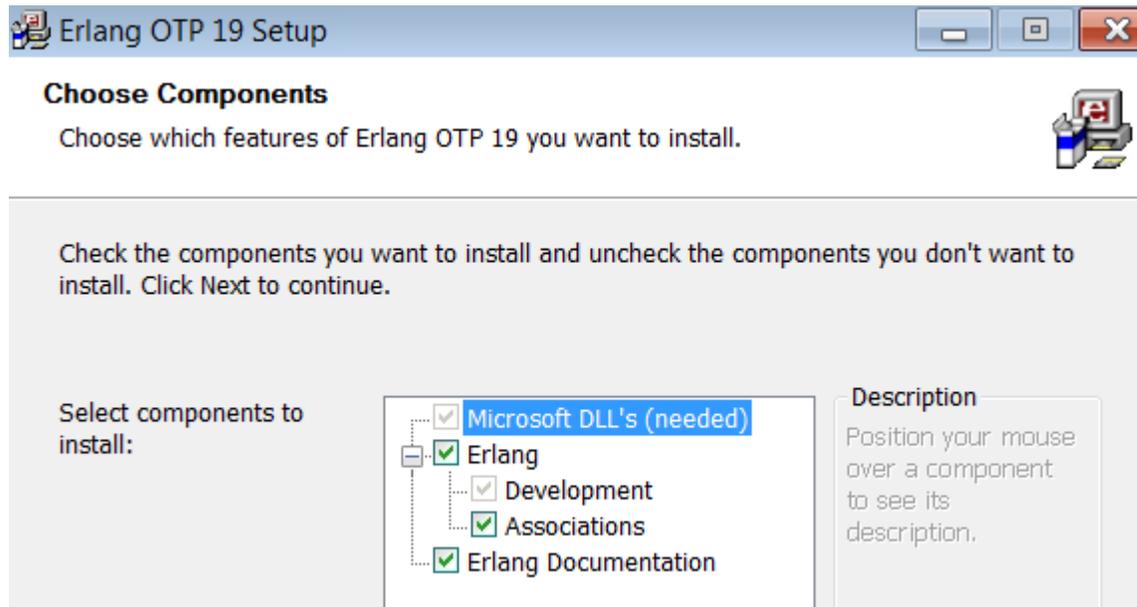
Part 27 - Installing Erlang 19.1

__ 1. Locate and run:

`C:\Software\otp_win32_19.1.exe`

__ 2. If window open, allow access in all similar windows.

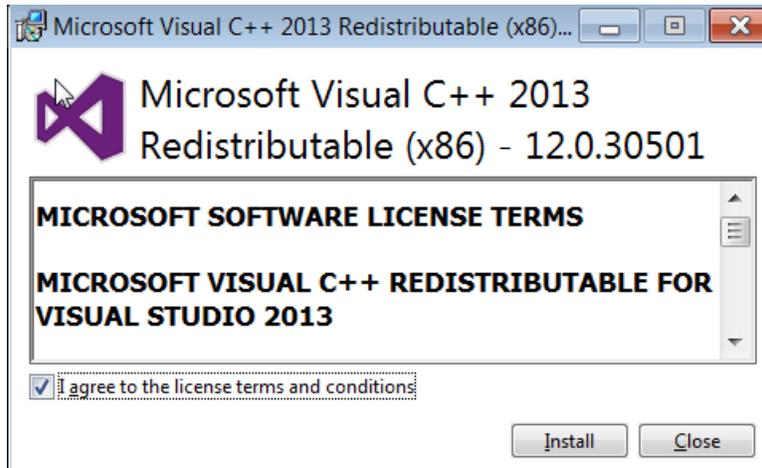
__ 3. Click **Next** in the Choose Components window.



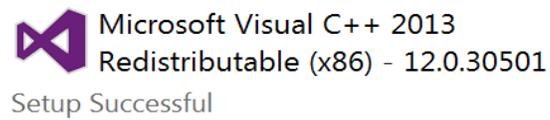
__ 4. Leave the default destination folder and click **Next**.

__ 5. Click **Install**.

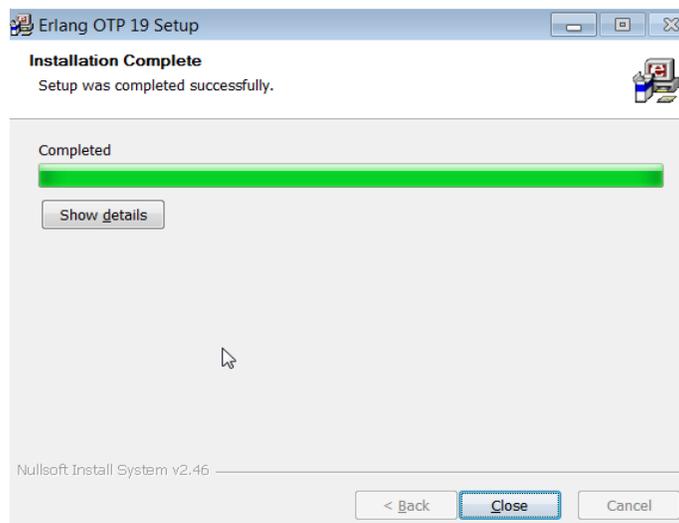
__ 6. If the following window appears then check the agreement box and click **Install**.



__7. If you see this page, click **Close**.



__8. Click **Close**.



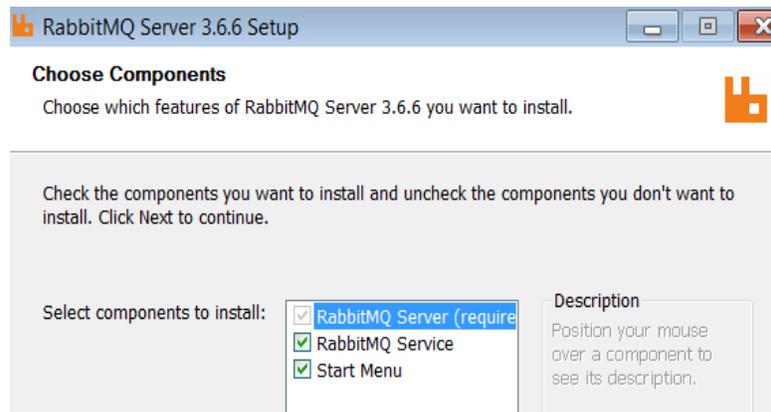
Part 28 - Installing RabbitMQ server 3.6.6

__1. Locate and run:

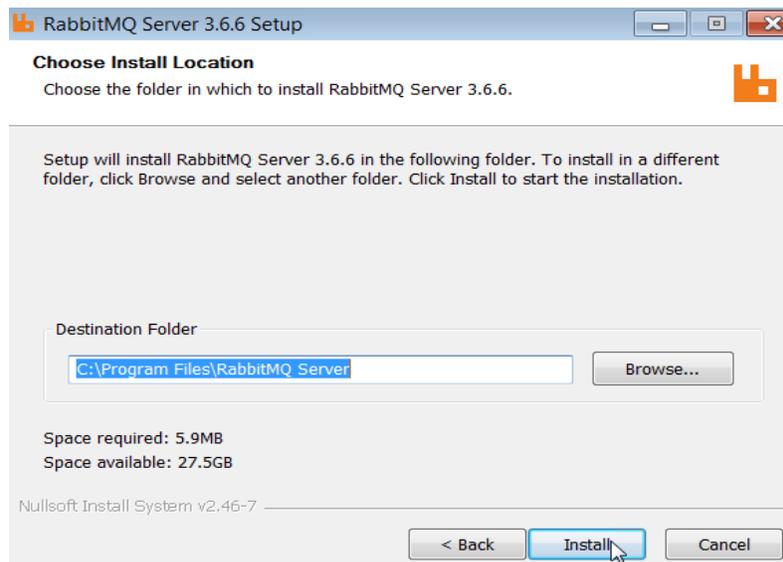
`C:\Software\rabbitmq-server-3.6.6.exe`

__2. If a window open, allow access in all similar windows.

__3. Click **Next**.

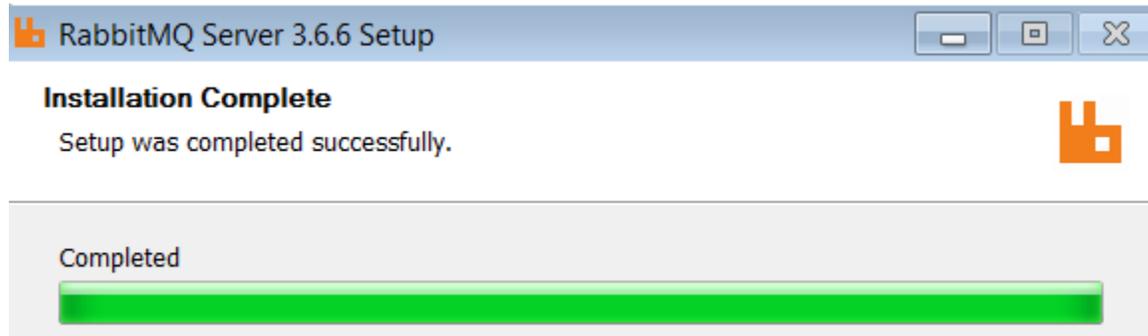


__4. Leave the default destination folder and click **Install**.

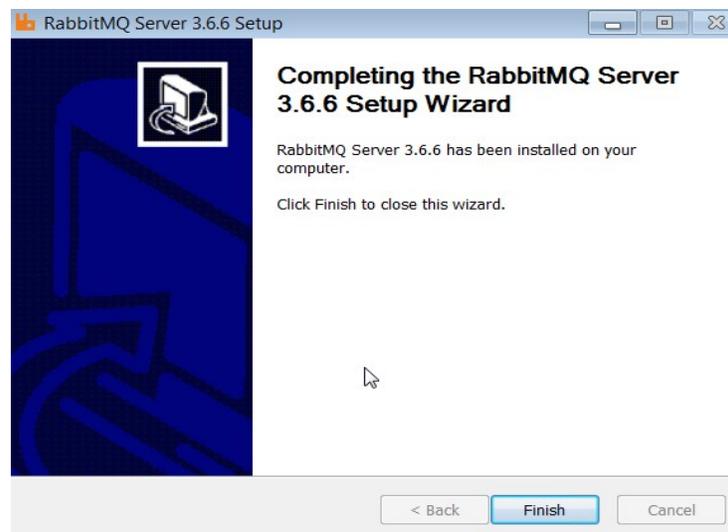


__5. If a Firewall window open, then click **Allow access** in all similar windows.

__6. In the Installation complete page, click **Next**.



__7. Click **Finish**.

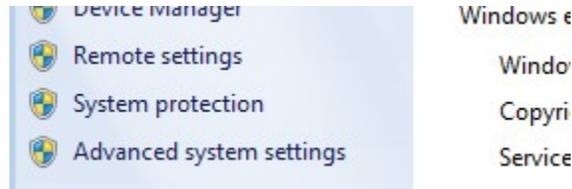


Part 29 - Install Maven 3.3.9

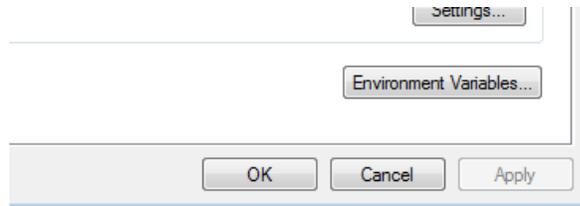
The following steps are based on Windows 7, other Windows versions instructions may vary.

__1. In the Windows Start Menu, right-click on the **Computer** link in the right-hand side of the Start panel, and then select **Properties**.

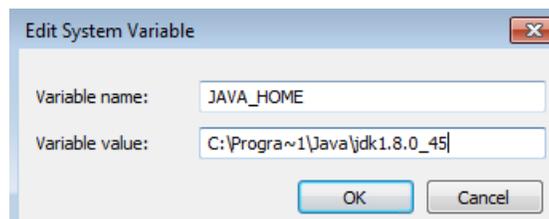
__2. Click on **Advanced system settings**.



__3. The system will display the **System Properties** dialog. Select the **Advanced** tab and click **Environment Variables**.



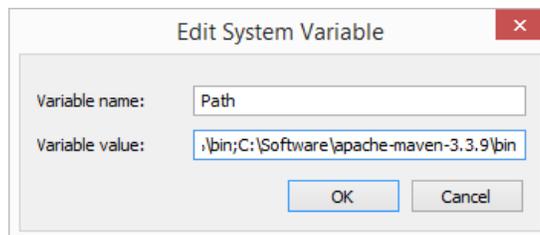
__4. Verify the JAVA_HOME variable is set to **C:\Progra~1\Java\jdk1.8.0_45** or similar path.



__5. In the 'System Variables' panel, locate the entry for 'Path' and double-click on it.

__6. Add the following to the **end** of the **Variable Value** field (including the semi-colon)

`;C:\Software\apache-maven-3.3.9\bin`



__7. Click **OK** on the variable editor dialog.

__8. Click **OK** on the **Environment Variables** dialog.

__ 9. Click **OK** in the **System Properties** dialog.

__ 10. Open a command prompt window (in the start menu, click **All Programs --> Accessories --> DOS Prompt**).

__ 11. In the command window, type:

```
mvn -version
```

__ 12. You should see output similar to:

```
C:\Users\wasadmin>mvn -version
Apache Maven 3.3.9 (bb52d8502b132ec0a5a3f4c09453c07478323dc5; 2015-11-10T11:41:47-05:00)
Maven home: C:\Software\apache-maven-3.3.9\bin\..
Java version: 1.8.0_101, vendor: Oracle Corporation
Java home: C:\Program Files\Java\jdk1.8.0_101\jre
Default locale: en_US, platform encoding: Cp1252
OS name: "windows 8.1", version: "6.3", arch: "amd64", family: "dos"
```

You have completed Apache Maven installation.

Part 30 - Installing Postman 5.2

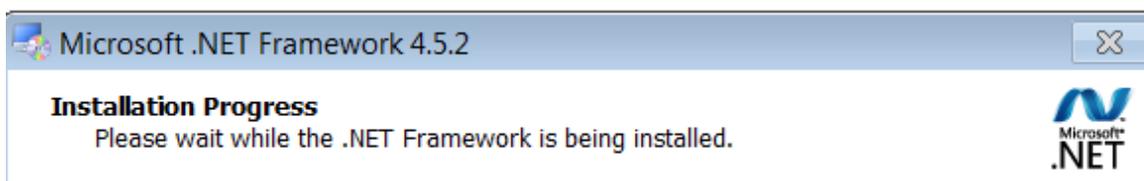
__ 1. Open **C:\Software**

__ 2. Double click **Postman-win32-5.2.0-Setup.exe** to begin installation.

__ 3. Click **Install** if the **.NET Framework 4.5** is required to be installed.

__ 4. Click **Yes** to continue the installation.

__ 5. Wait until Framework is installed.



__ 6. After a while Postman will be installed and will be launched.



Sign Up with Google

OR

email
username
password

Sign Up (it's free)

By signing up you agree to the [EULA](#)

Already have an account? [Sign In](#)

__7. Close Postman.

Part 31 - MongoDB 3.4.13 - 32/64 bits

__1. Open a command prompt window and type in the following command at the prompt and press **ENTER** (execute the command)

```
mkdir c:\data\db
```

__2. Enter the following command:

```
cd C:\Software\mongodb\bin
```

__3. Verify mongodb version

```
mongod -version
```

Make sure your version matches version below.

```
C:\Software\mongodb\bin>mongo -version
MongoDB shell version v3.4.13-20-g1edf4ba
git version: 1edf4baa102a0a26dad5730ebafb5dfcb1714bed
allocator: tcmalloc
modules: none
build environment:
  distarch: x86_64
  target_arch: x86_64
```

__4. Start MongoDB server by running:

```
mongod
```

__5. If a Windows Security Alert open, click **Allow Access**.

```
e Pack 1 ) BOOST_LIB_VERSION=1_49
2015-09-03T15:12:57.935-0400 I CONTROL [initandlisten] allocator: tcmalloc
2015-09-03T15:12:57.936-0400 I CONTROL [initandlisten] options: {}
2015-09-03T15:12:57.943-0400 I NETWORK [initandlisten] waiting for connections
on port 27017
```

You will see the "waiting for connections on port 27017" message.

__6. End MongoDB by hitting **Control+C**.

__7. Close all.

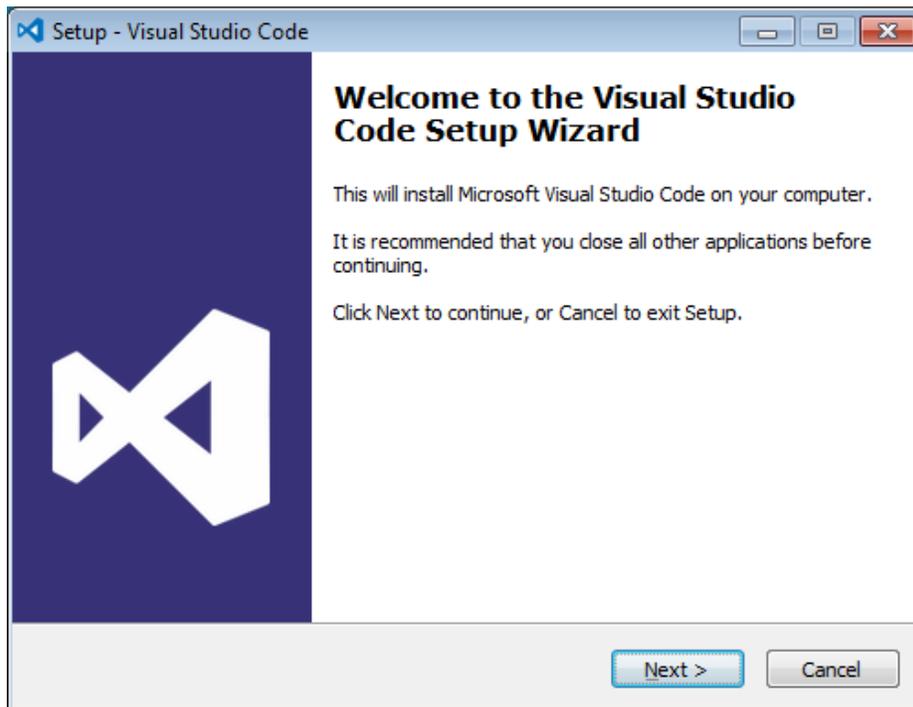
Part 32 - Installing Visual Studio Code

__1. Download the latest VScode for Windows (stable build installer) from the following site:

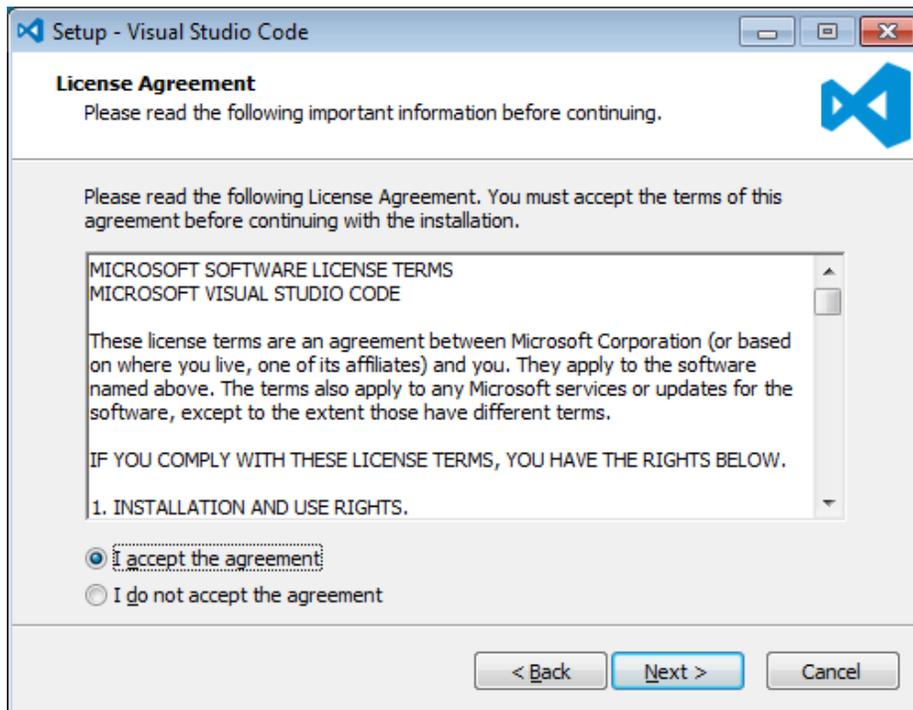
`https://code.visualstudio.com/`

__2. Run the downloaded installer to begin the installation.

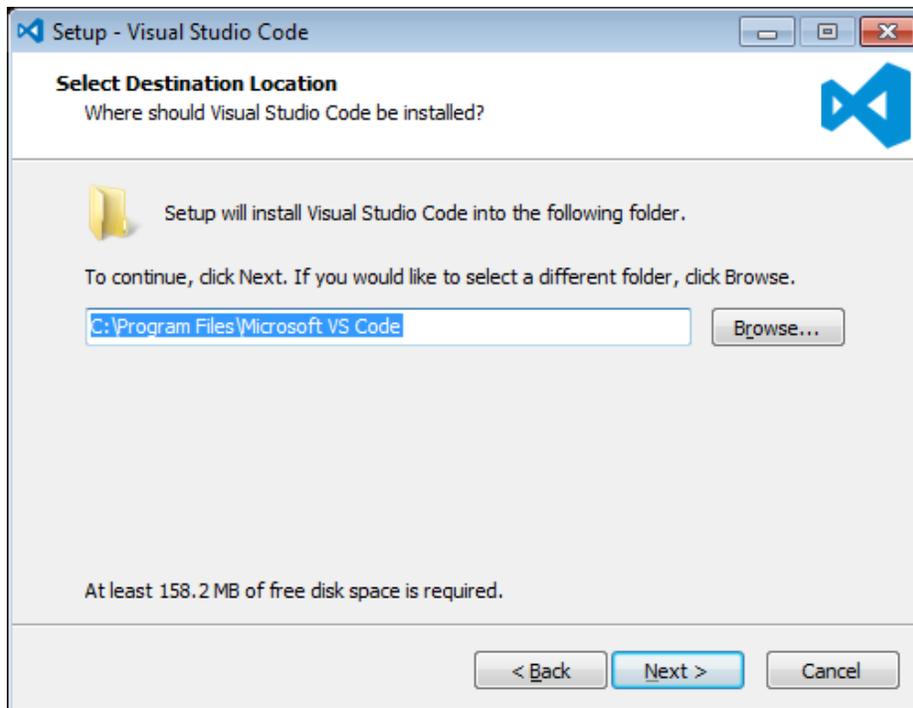
__3. Click **Next** on the welcome screen.



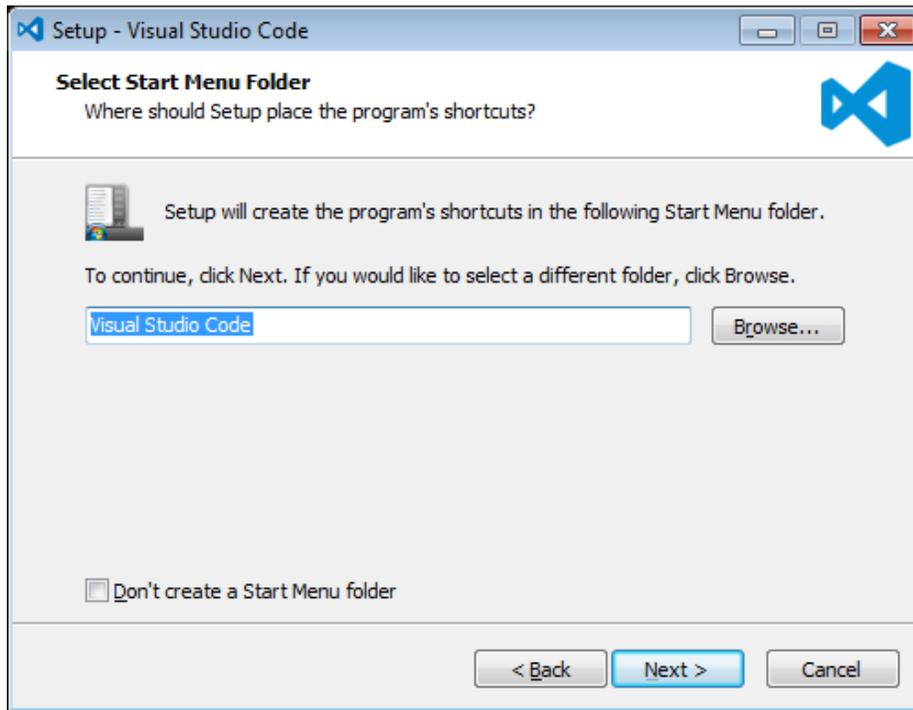
__4. Check **I accept the agreement...** and click **Next**.



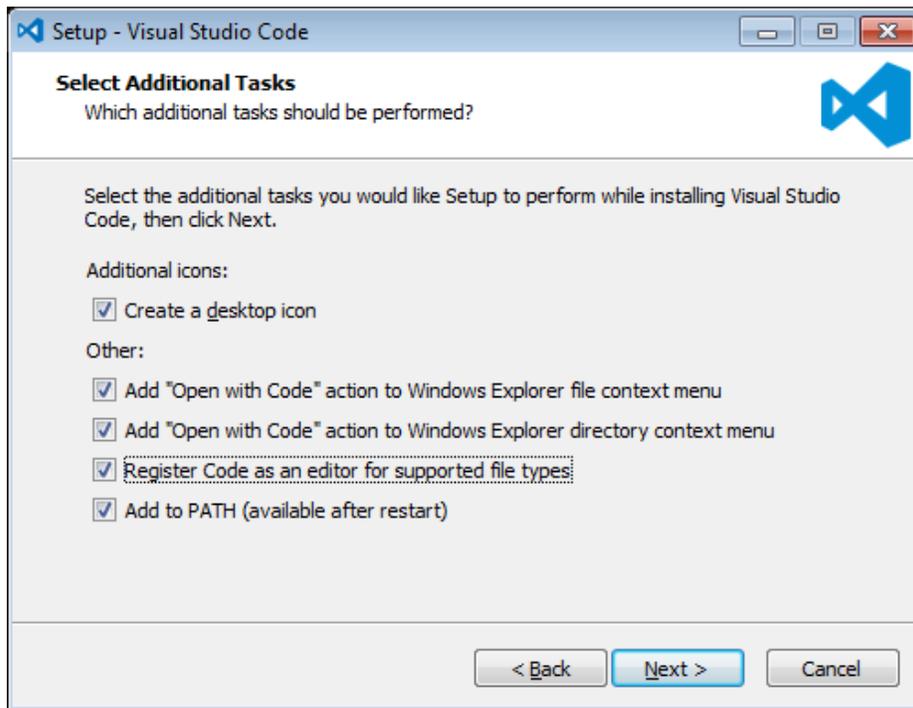
5. Leave the default installation location and click **Next**.



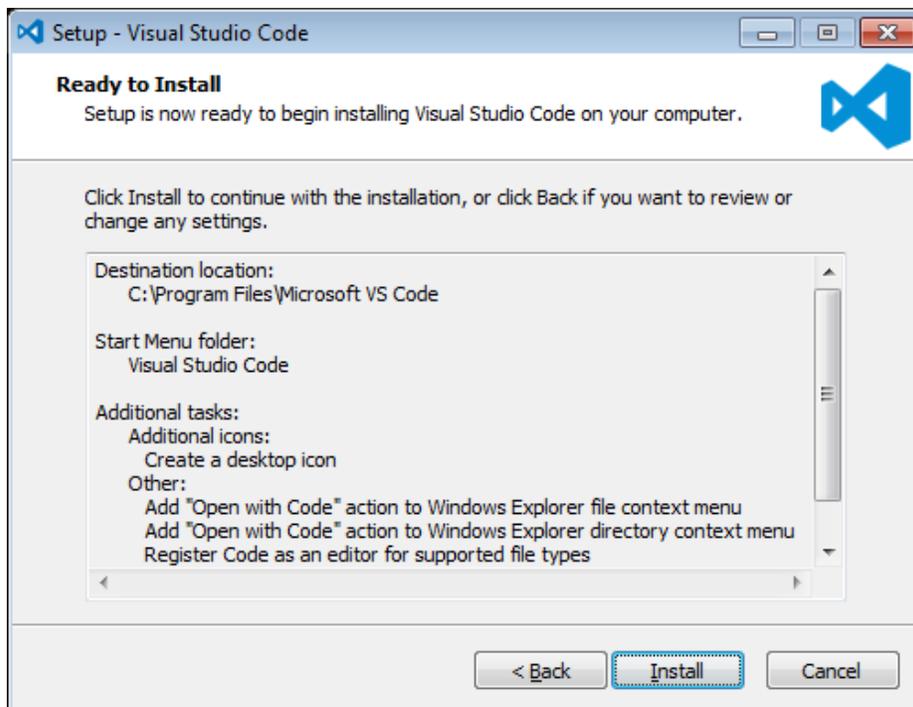
__6. Leave the default start menu folder and click **Next**.



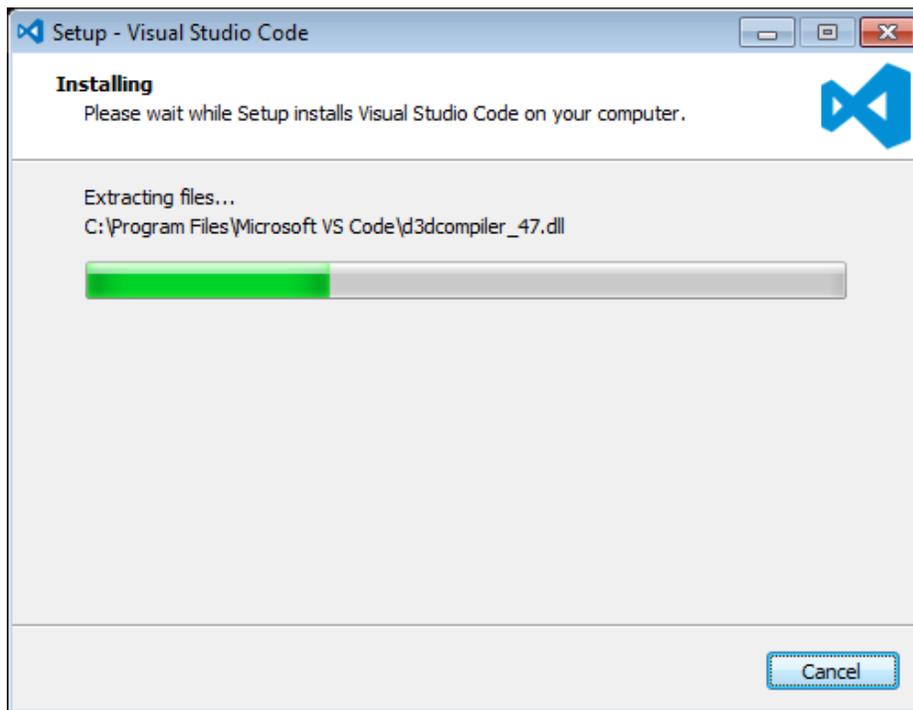
__7. Put a check mark on all items under Additional Tasks and click **Next**.



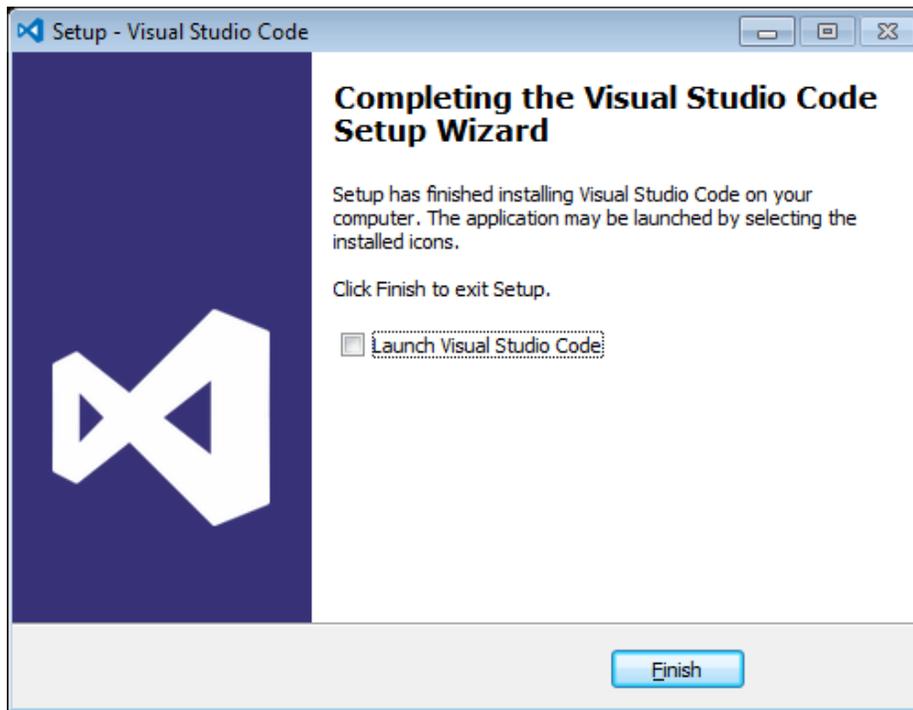
8. Now click **Install**.



__9. Give it some time to install.

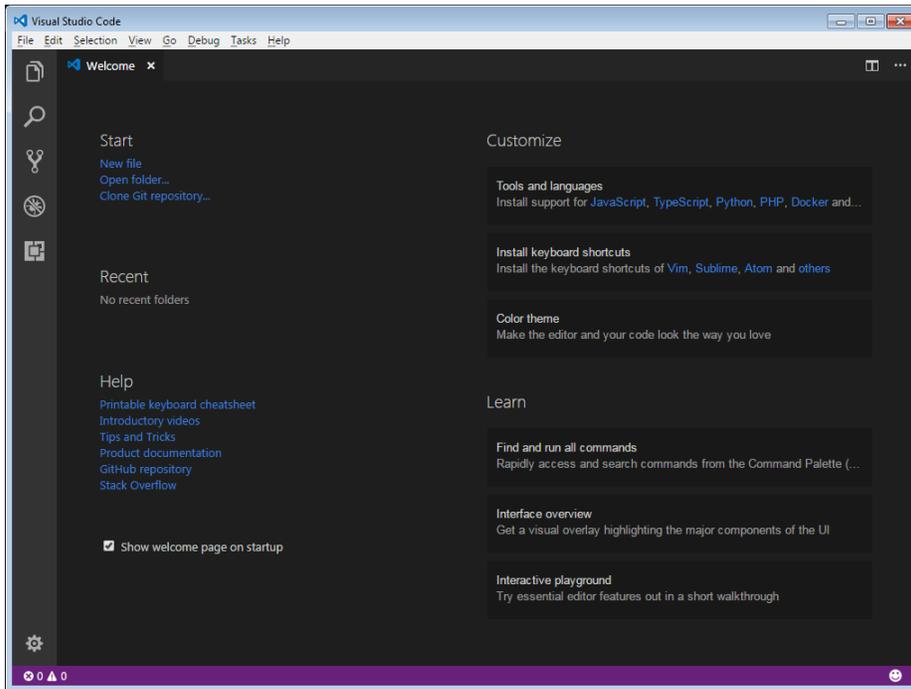


__10. When it is complete, **uncheck Launch Visual Studio Code** and click **Finish**.

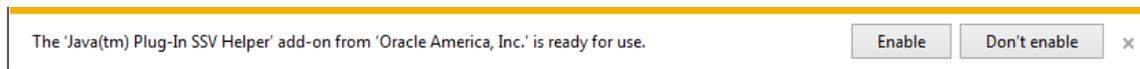


Installation verification of VScode.

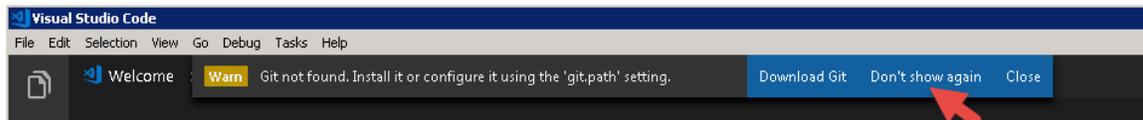
- __1. Launch Visual Studio Code using the shortcut on the desktop.
- __2. Verify Visual Studio Code opens and that you see the Welcome screen.



__3. You may see a message to enable Java(tm) Plug-In, if so click Enable.



__4. You may see a message regarding Git, if so click **Don't show again**.



__5. Close all windows.

Part 33 - END OF SETUP # 2: WA2607-REL_2_0

Shut down the VM called WA2607-REL_2_0

Part 34 - Verification

Make sure you setup the following VMs:

WA2607-REL_3_1

WA2607-REL_2_0

Part 35 - Summary

You have successfully installed the software for this course!

If you have any question please contact us by email at support@webagesolutions.com

From US and Canada call: 1-877-812-8887 ext. 26

International call: 416-406-3994 ext. 26