

WA2451 DevOps Fundamentals

Classroom Setup Guide

Web Age Solutions Inc.

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Part 1 - Qwiklabs

This course requires the following credits. Please contact support@webagesolutions.com to request credits.

1 CREDIT

Part 2 - Minimum Hardware Requirements to host the VMs

- 64-bit x86 CPU that supports hardware virtualization (Intel-VT or AMD-V).
- 16 GB RAM
- 50 GB Hard Disk
- Access to internet

Part 3 - Software

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

- **VM_WA2451_1.zip**
- **VM_WA2451_2.zip**
- **WA2451_REL_8_0.zip [Windows setup]**
- **VM_WA2919_REL_1_0.7z.001**
- **VM_WA2919_REL_1_0.7z.002**

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 4 - Setup # 1 [learning-vmware]

__1. Extract **VM_WA2451_1.zip** and **VM_WA2451_2.zip** directly to **C:**

__2. Verify the following folders were created:

- **C:\VMs\learning-vmware**
- **C:\VMs\LabServer_C2**

NOTES:

- LabServer_C2 VM is not used during this course but is part of the zips.
- learning-vmware VM needs to be accessed by PUTTY from the Windows **WA2451_REL_8_0** machine.

__3. Create a shortcut from the **learn_puppet_centos-6.5 VM**.

__4. Start the VM called **learn_puppet_centos-6.5**.

After you click the above-mentioned link, the VM hosting the Lab server will start and after a short while, you will be presented with the Lab server's terminal window displaying the server's IP address as shown in the screenshot below.

```
CentOS release 6.5 (Final)
Kernel 2.6.32-431.el6.i686 on an i686

learning login:
My IP information
  inet addr:192.168.89.128 Bcast:192.168.89.255 Mask:255.255.255.0
  inet addr:127.0.0.1 Mask:255.0.0.0
```

Don't start entering commands in this terminal window.

__5. Write down the IP address listed in the terminal; it is 192.168.89.128 in our case.

Part 5 - Setup # 2 [VM_WA3003_REL_3_0]

__1. Download the following files:

- `VM_WA3003-REL_3_0.7z.001`
- `VM_WA3003-REL_3_0.7z.002`

__2. Make you you have installed VMWare Workstation, you can download it from:

<https://www.vmware.com/ca/products/workstation-player.html>

__3. Make sure you have installed 7zip, you can download it from:

<https://www.7-zip.org/>

__4. Open the folder where you downloaded the files and then right click the `VM_WA3003-REL_3_0.7z.001` file and select **7-Zip** → **Extract here**.

__5. This will extract all the compressed files from the 2 files (001 and 002) in the folder where you are located. After extraction you will see a new folder called `VM_WA3003-REL_3_0`

__6. Open the `VM_WA3003-REL_3_0` folder.

__7. Right click `Ubuntu 64-bit.vmx` and select **Send to** → **Desktop (create a shortcut)**

__8. On the desktop, rename the create shortcut to `VM_WA3003-REL_3_0`

__9. Double click on the shortcut named as `VM_WA3003-REL_3_0`. This will start the VM.

__10. Select **I Moved It** if prompt.

__11. Login using **wasadmin** for user and password.

__12. Open a terminal and enter the following command:

```
sudo -i
```

[Enter **wasadmin** as password]

__ 13. Make sure you have internet by entering:

```
ping www.google.com
```

__ 14. Press Ctr + C to stop the ping.

Important: If you cannot reach www.google.com means you don't have internet, check that the Network Adapter in the VM is configured as NAT.

__ 15. Enter the following command:

```
~/pull-images.sh
```

__ 16. Wait for it to complete.

__ 17. Type **exit** to close the Terminal.

Creating a Docker Account and Obtain an Access Token

This part needs to be done by the Students or by the setup person

In this part, you will create a Docker account and obtain an access token. With the free Docker account, you can pull up to 200 Docker images every 6 hours. Without the account, you will most likely run into Docker pull rate-limiting issue where anonymous users get restricted to 100 Docker image pulls every 6 hours and that can cause issues especially when multiple anonymous users connect from the same network.

__ 18. Open a browser and navigate to the following URL:

```
https://hub.docker.com/
```

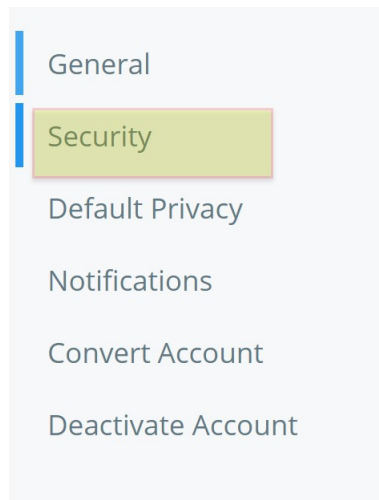
__ 19. Click **Sign Up** and create a new account.

__ 20. Sign in with your newly created account.

__ 21. Click on your username in the top right corner and select Account Settings.

Alternatively, click navigate to <https://hub.docker.com/settings/general> to access Account Settings.

__22. Select **Security**.



__23. Click **New Access Token**.

__24. Add the token description, such as *docker & Kubernetes labs*.

__25. Keep Access permissions as default (**Read, Write, Delete**).

__26. Click **Generate**.

Notice it shows the following information on the page:

To use the access token from your Docker CLI client:

1. Run `docker login -u [redacted]`
2. At the password prompt, enter the personal access token.



__27. Make a note of both the steps displayed on the page.

__28. In the lab environment, open a new terminal window. If you are running more than one VM you will have to repeat the following steps in all VM's.

__29. Switch to the root user. [enter the sudo password]

```
sudo -i
```

__30. Verify you are logged in as root.

```
whoami
```

It should show root.

__31. Run the following command to log into Docker.

```
docker login -u {your-docker-id} -p {your-access-token}
```

__32. Close the Terminal.

Part 6 - Setup # 3 [WA2451_REL_8_0]

__1. We recommend installing locally in a Windows machine, but you can create a Windows Virtual Machine and install the software for the next steps in this VM, call the VM: **VM_WA2451_REL_8_0**

__2. Create a shortcut in the desktop and rename it to **VM_WA2451_REL_8_0**

This name is used during the labs.

If you decide to install the software directly on the machine OS then make sure that the instructor is informed.

Part 7 - Minimum Hardware Requirements

- 64 bits OS
- 2 cores
- 12 GB RAM minimum; 16 GB RAM recommended
- 20 GB in the hard disk
- Internet access

Part 8 - Minimum Software Requirements

- Windows 8.1
- Chrome latest
- Firefox latest
- Adobe Acrobat Reader
- Zip extraction utility
- JDK *
- Eclipse *
- Jenkins *
- Git *
- Maven *
- Putty *

* Indicates software provided as part of the courseware.

Part 9 - Instructions

__1. Extract the **ZIP** file to **C:**

__2. Review that the following folders were created:

- **C:\LabFiles**
- **C:\Software**
- **C:\Software\apache-maven-3.6.3**
- **C:\Software\Jenkins-2.361.4-LTS-Windows**

__3. Review that the following files were created:

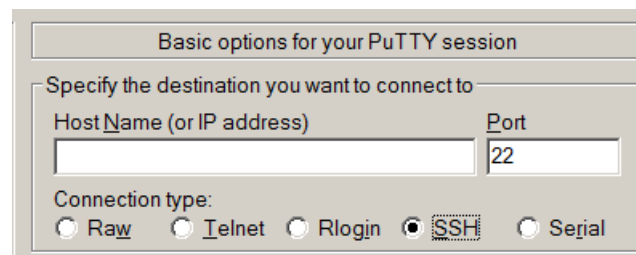
- C:\Software\Eclipse-IDE-2020-03-eclipse-inst-win64.exe
- C:\Software\Git-2.26.0-64-bit.exe
- C:\Software\jdk-11.0.8_windows-x64_bin.exe
- C:\Software\putty.exe

Part 10 - Putty connectivity

__1. Make a shortcut on the desktop of C:\Software\putty.exe

__2. Double-click the *PuTTY* shortcut on your desktop.

__3. In the PuTTY dialog window that opens, make sure that the *Connection type* is set to **SSH** and the port is **22**:

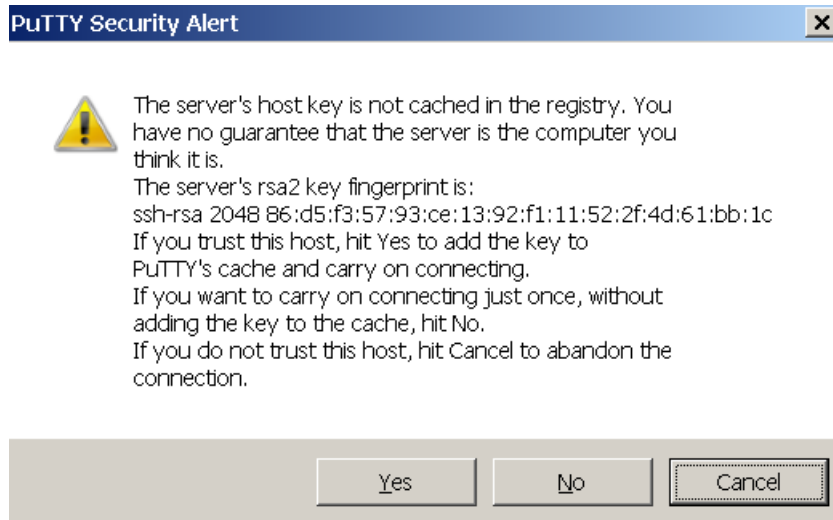


__4. In the *Host Name (or IP address)* input box, enter the IP address of your Lab server that you saved in previous steps (**192.168.89.128**, in our case).

__5. Click the **Open** button at the bottom of the PuTTY dialog window.

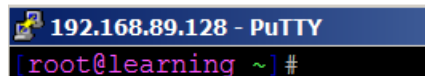
If you are presented with security warnings or other such alerts requiring your actions, confirm that you trust the target server and accept the responsibilities of doing so by clicking **Yes**, or **OK** as appropriate.

For example, if you see the dialog below, click the **Yes** button.



__6. In the PuTTY terminal window that opens enter (without quotes) '**root**' for *logon id* and '**puppet**' for *password*.

You should be able to connect to the Lab server and placed at its command prompt.



__7. Type exit and close Putty.

Part 11 - 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
```

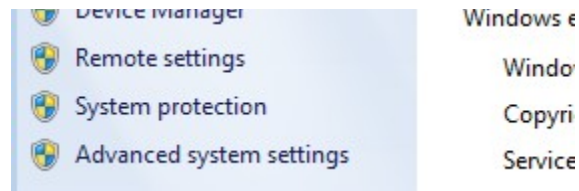
Note: The installation directory may be slightly different depending your operating system. You may need to use the following directory instead of the one listed above:

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

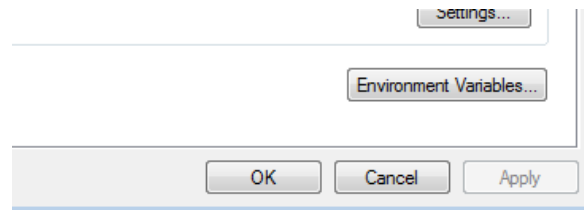
Some of the remaining steps will use the slightly different directory.

- __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.

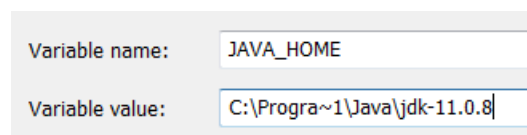
__9. As Variable name enter:

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.

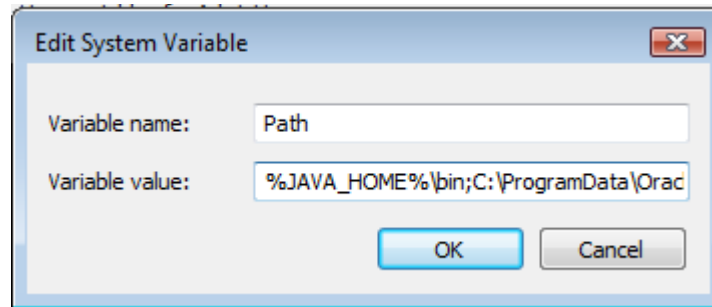


__12. From the *System Variables* list, select **Path** and click **Edit**.

__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.

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 12 - Installing Git 2.26

IMPORTANT: Setup is easy but you need to make sure you do the change in Step 8.

__ 1. From the **C:\Software** directory run the following file:

Git-2.26.0-64-bit.exe

__ 2. You may need to allow the program to run.

__ 3. In the Information page, click **Next**.

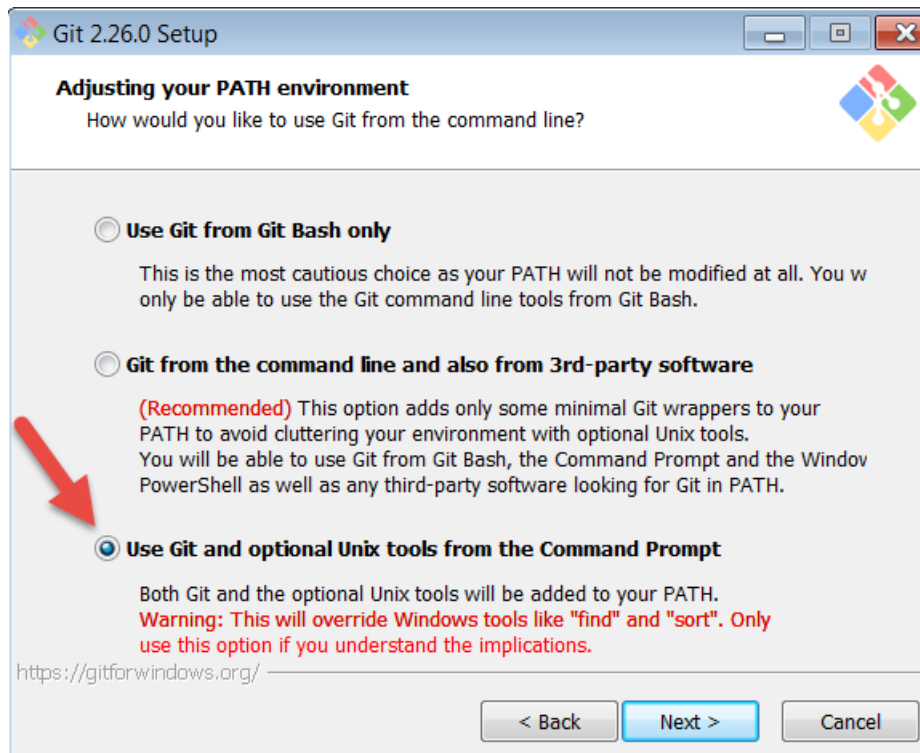
__ 4. In the Select Destination Location page, leave defaults and click **Next**.

__ 5. In the Select Components page, leave defaults and click **Next**.

__ 6. In the Select Start Menu Folder page, leave defaults and click **Next**.

__ 7. In the Choosing the default editor used by Git page, leave defaults and click **Next**.

__ 8. In the Adjusting your PATH environments page, select **Use Git and Optional Unix tools from the Windows Command Prompt**.



- __ 9. Make sure you select the 3rd option as shown above and then click **Next**.
- __ 10. In the Choosing HTTP transport backend page, leave defaults and click **Next**.
- __ 11. In the Configuring the terminal emulator to use with Git Bash page, leave defaults and click **Next**.
- __ 12. In the Configuring the line ending conversions page, leave defaults and click **Next**.
- __ 13. Finally, in the Configuring extra options page, leave defaults and click **Install**.

Configuring extra options

Which features would you like to enable?



Enable file system caching

File system data will be read in bulk and cached in memory for certain operations ("core.fscache" is set to "true"). This provides a significant performance boost.

Enable Git Credential Manager

The [Git Credential Manager for Windows](#) provides secure Git credential storage for Windows, most notably multi-factor authentication support for Visual Studio Team Services and GitHub. (requires .NET framework v4.5.1 or later).

Enable symbolic links

Enable [symbolic links](#) (requires the SeCreateSymbolicLink permission). Please note that existing repositories are unaffected by this setting.

<https://gitforwindows.org/>

< Back Install Cancel

__14. Check the box for **Launch Git Bash** and Click **Next**.

Completing the Git Setup Wizard

Setup has finished installing Git on your computer. The application may be launched by selecting the installed shortcuts.

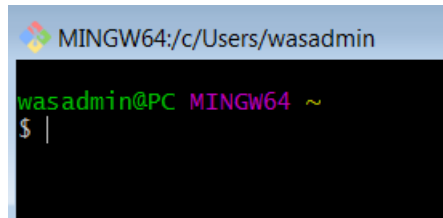


Click Finish to exit Setup.

- Launch Git Bash
- View Release Notes

Next >

__15. You will see a Terminal Git window like below.



__16. Close all.

You have completed GIT installation.

Part 13 - 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 (cecedd343002696d0abb50b32f
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: "x86_64"
```

__ 13. Close all.

Part 14 - Install Jenkins 2.361.4 LTS Windows

__ 1. Open a command prompt window and ensure that the Java JDK is installed.

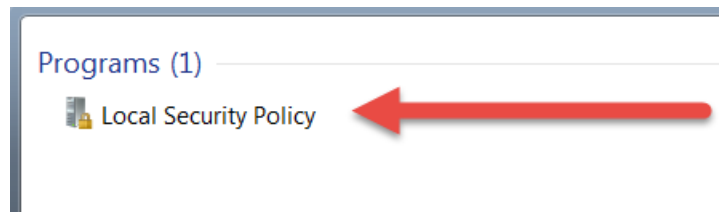
```
java -version
```

__ 2. If you are using a computer where possibly Jenkins was used before then delete the following folders in case they exist:

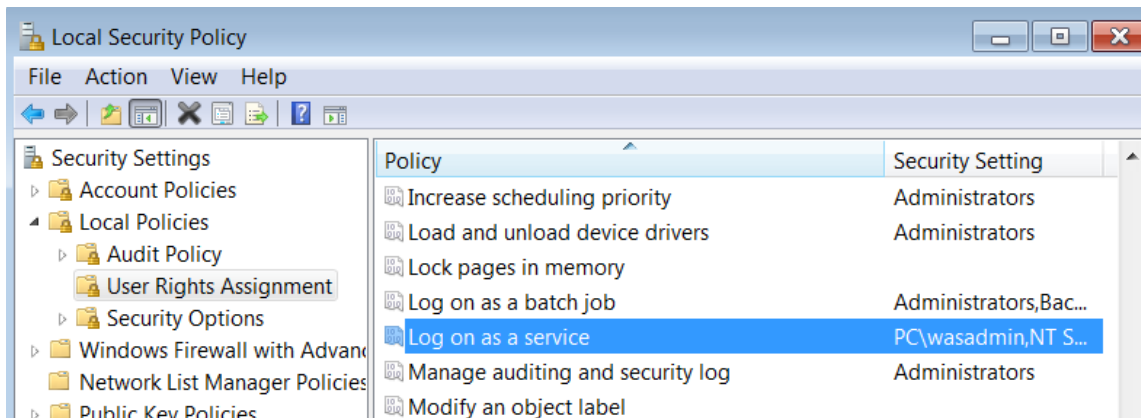
```
C:\Program Files\Jenkins
C:\Program Files(x86)\Jenkins
C:\Users\\.m2
```

__ 3. Make Chrome your default browser and make sure the latest Chrome version is installed.

__ 4. Before installing Jenkins you need to make sure that the user using Jenkins have the privileges to start a Service. To do that, from the star menu, start typing **Local Security** and the **Local Security Policy** will show up. Click on it. On **Windows 8/10** search for **secpol.msc** and click on it.



__5. Expand **Local Policies** > **User Rights Assignment** and double click on **Log on as a service** on the right panel.

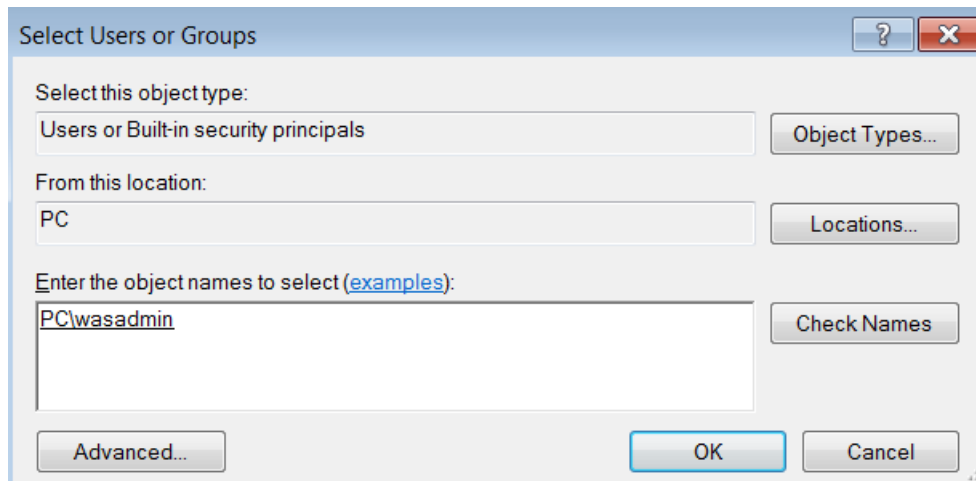


__6. Click **Add User or Group**.

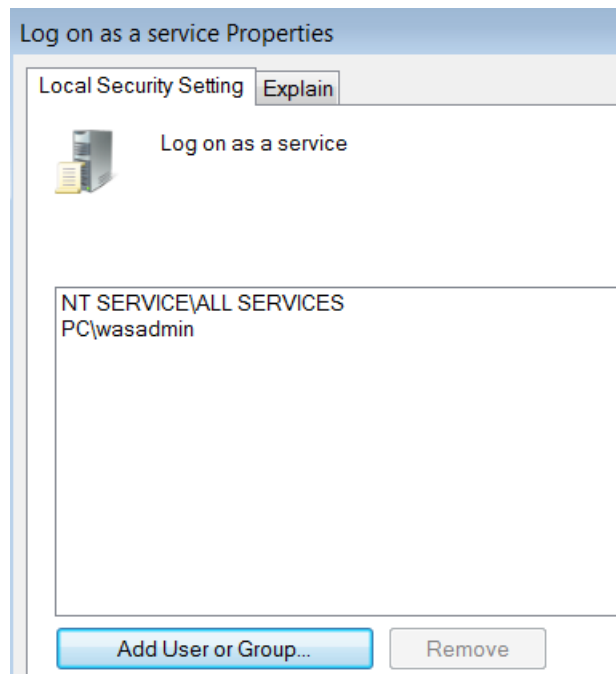
__7. Enter the name of the user that the students will use to do the Labs.

__8. Click **Check Names** to verify is the correct user.

__9. Click **OK**.



__10. You will see your user listed in this example 'wasadmin'. Click **OK**.



__11. In Windows Explorer, navigate to:

C:\Software\Jenkins-2.361.4-LTS-Windows

__12. Double-click on:

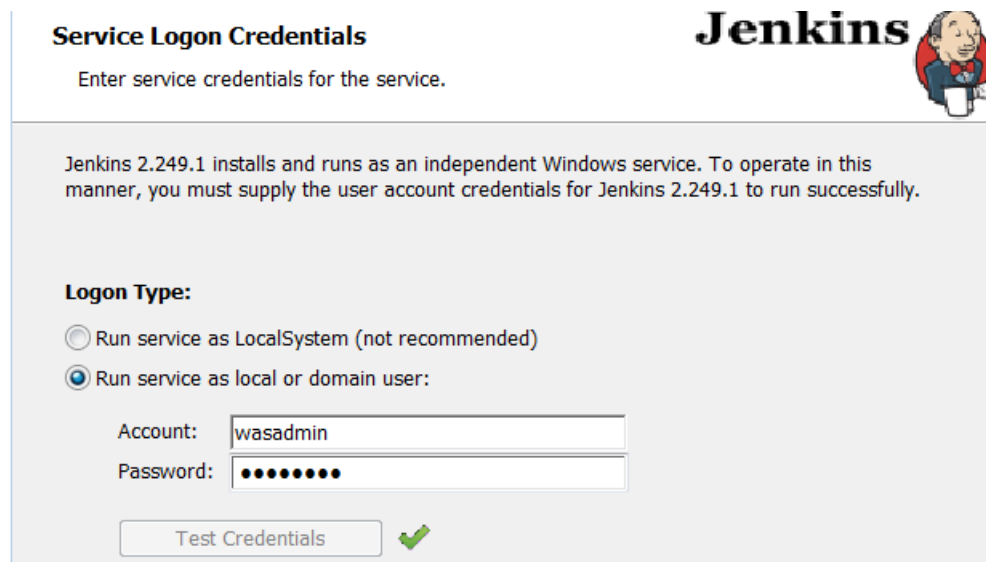
`jenkins.msi`

The installer will show the initial dialog.

__13. Click **Next**.

__14. On the **Destination Folder** panel, leave the defaults and click **Next**.

__15. Select **Run service as local or domain user** and enter your **user / password** and click **Test Credentials**. Make sure the test passes.



The screenshot shows the "Service Logon Credentials" dialog box in the Jenkins installer. The title bar includes the Jenkins logo and the text "Jenkins". Below the title bar, there is a sub-header "Service Logon Credentials" and a prompt: "Enter service credentials for the service." The main content area contains a message: "Jenkins 2.249.1 installs and runs as an independent Windows service. To operate in this manner, you must supply the user account credentials for Jenkins 2.249.1 to run successfully." Under the heading "Logon Type:", there are two radio button options: "Run service as LocalSystem (not recommended)" and "Run service as local or domain user:". The second option is selected. Below these options are two input fields: "Account:" with the text "wasadmin" and "Password:" with a masked password of ten dots. At the bottom, there is a "Test Credentials" button with a green checkmark icon to its right.

__16. Click **Next**.

__17. Click **Test Port** and make sure it works fine.

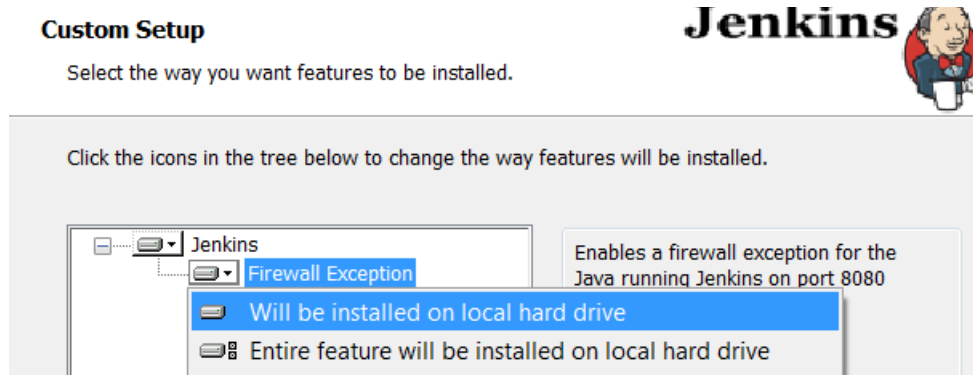


The screenshot shows the "Port Number (1-65535):" dialog box in the Jenkins installer. It features a single input field containing the number "8080". Below the input field is a "Test Port" button with a green checkmark icon to its right.

__18. Click **Next**.

__19. Leave the default **Java home directory (JDK or JRE)** and click **Next**.

__20. Click on **Firewall Exception** and select **Will be installed on local hard drive**.



__21. Click **Next**.

__22. On the **Ready to Install...** page, click **Install**.

__23. Windows may show a security dialog. If it does, click **Yes**.

__24. In the final dialog panel, click **Finish**.

The installer will open the default browser window to the Jenkins home page. The page shows the location of a file where you can find the initial administration password, and also a text box to enter the password into.

__25. Open chrome and enter **localhost:8080**

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log (**not sure where to find it?**) and this file on the server:

```
C:\Users\wasadmin\AppData\Local\Jenkins.jenkins\secrets\initialAdminPassword
```

Please copy the password from either location and paste it below.

Administrator password

Continue

__26. Open the indicated file with an editor such as Notepad, and copy the password to the clipboard with Ctrl-C.

__27. Paste the password into the **Administrator Password** box and click **Continue**.

__28. If you are prompted to save the password just close that window.

__29. Click on **Install Suggested Plugins**.

Customize Jenkins

Plugins extend Jenkins with additional features to support many different needs.

Install suggested plugins

Install plugins the Jenkins community finds most useful.

Select plugins to install

Select and install plugins most suitable for your needs.

Getting Started will begin. Wait until is done.

Getting Started

✓ Folders Plugin	✓ OWASP Markup Formatter Plugin	✓ build timeout plugin	✓ Credentials Binding Plugin	** Jenkins C
✓ Timestamper	✓ Workspace Cleanup Plugin	✓ Ant Plugin	✓ Gradle Plugin	** Jenkins G
✓ Pipeline	⌛ GitHub Organization Folder Plugin	✓ Pipeline: Stage View Plugin	✓ Git plugin	** Pipeline:
⌛ Subversion Plug-in	⌛ SSH Slaves plugin	✓ Matrix Authorization	✓ PAM Authentication	Libraries

```
** Jenkins C
** Jenkins G
** Pipeline:
Libraries
** Branch AP
** Pipeline:
** Durable T
** Pipeline:
Processes
** Pipeline:
** Pipeline:
```

In case a plugin failed to be installed, you can retry or click Continue.

__30. In the **Create First Admin User** screen. Enter the following fields:

Username: wasadmin
Password: wasadmin
Confirm Password: wasadmin
Full name: Administrator
E-mail address: wasadmin@wasadmin.com

__31. When the input looks like below, click **Save and Continue**.

Create First Admin User

Username:

Password:

Confirm password:

Full name:

E-mail address:

__32. Instance Configuration page will open, just click **Save and Finish**.

Instance Configuration

Jenkins URL:

The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the `BUILD_URL` environment variable provided to build steps.

The proposed default value shown is not saved yet and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

150.3

Not now

Save and Finish

__33. If you are prompted to save the password just close that window.

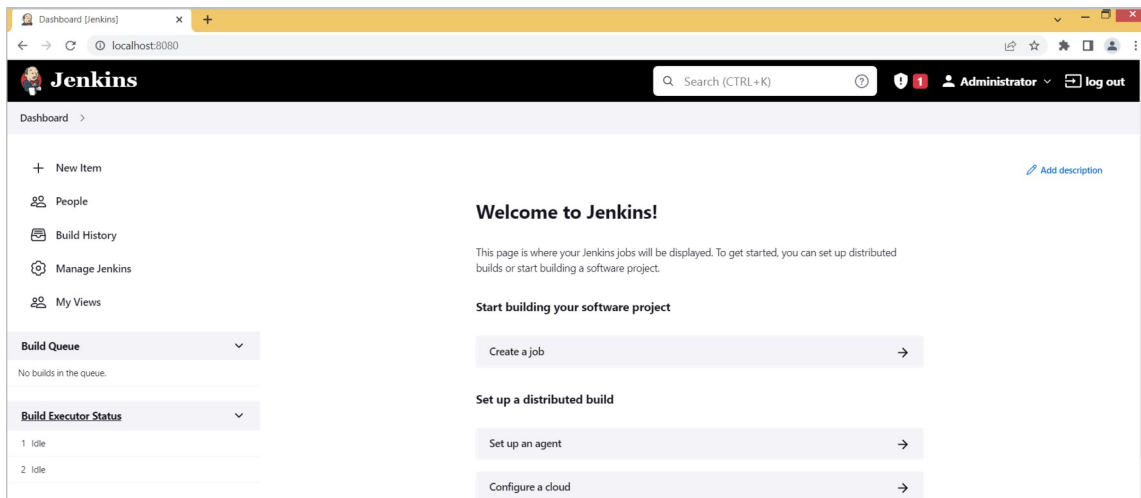
__34. You will see that Jenkins is ready. Click **Start using Jenkins**.

Jenkins is ready!

Your Jenkins setup is complete.

Start using Jenkins

Jenkins will open.



__35. Jenkins installation is complete. Close the browser.

__36. Edit the following file with notepad or similar text editor:

C:\Program Files\Jenkins\Jenkins.xml

__37. Find this line:

```
<arguments>-Xrs -Xmx256m -Dhudson.lifecycle=udson.lifecycle.WindowsServiceLifecycle -jar  
"C:\Program Files\Jenkins\jenkins.war" --httpPort=8080 --webroot="%LocalAppData%\Jenkins\  
war"</arguments>
```

__38. Insert the following text **before** the first "-Dhudson ...":

```
-Dhudson.plugins.git.GitSCM.ALLOW_LOCAL_CHECKOUT=true
```

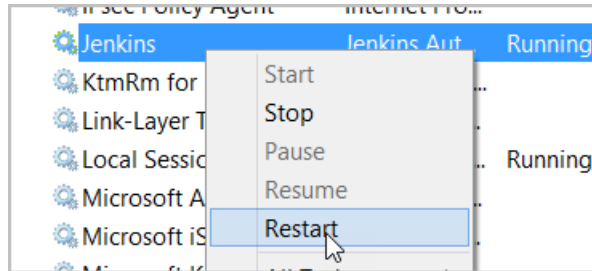
__39. The updated line will look like this:

```
<arguments>-Xrs -Xmx256m -Dhudson.plugins.git.GitSCM.ALLOW_LOCAL_CHECKOUT=true
-Dhudson.lifecycle=udson.lifecycle.WindowsServiceLifecycle -jar "C:\Program
Files\Jenkins\jenkins.war" --httpPort=8080 --webroot="%LocalAppData%\Jenkins\
war"</arguments>
```

__40. Save and close the file.

__41. Open Services.

__42. Restart Jenkins.



__43. Open a Chrome and go to Jenkins homepage:

http://localhost:8080/

__44. Login using **wasadmin** for user and password.

__45. Make sure login Jenkins is successful and you can see the home page.



__46. Close all.

Part 15 - 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**.

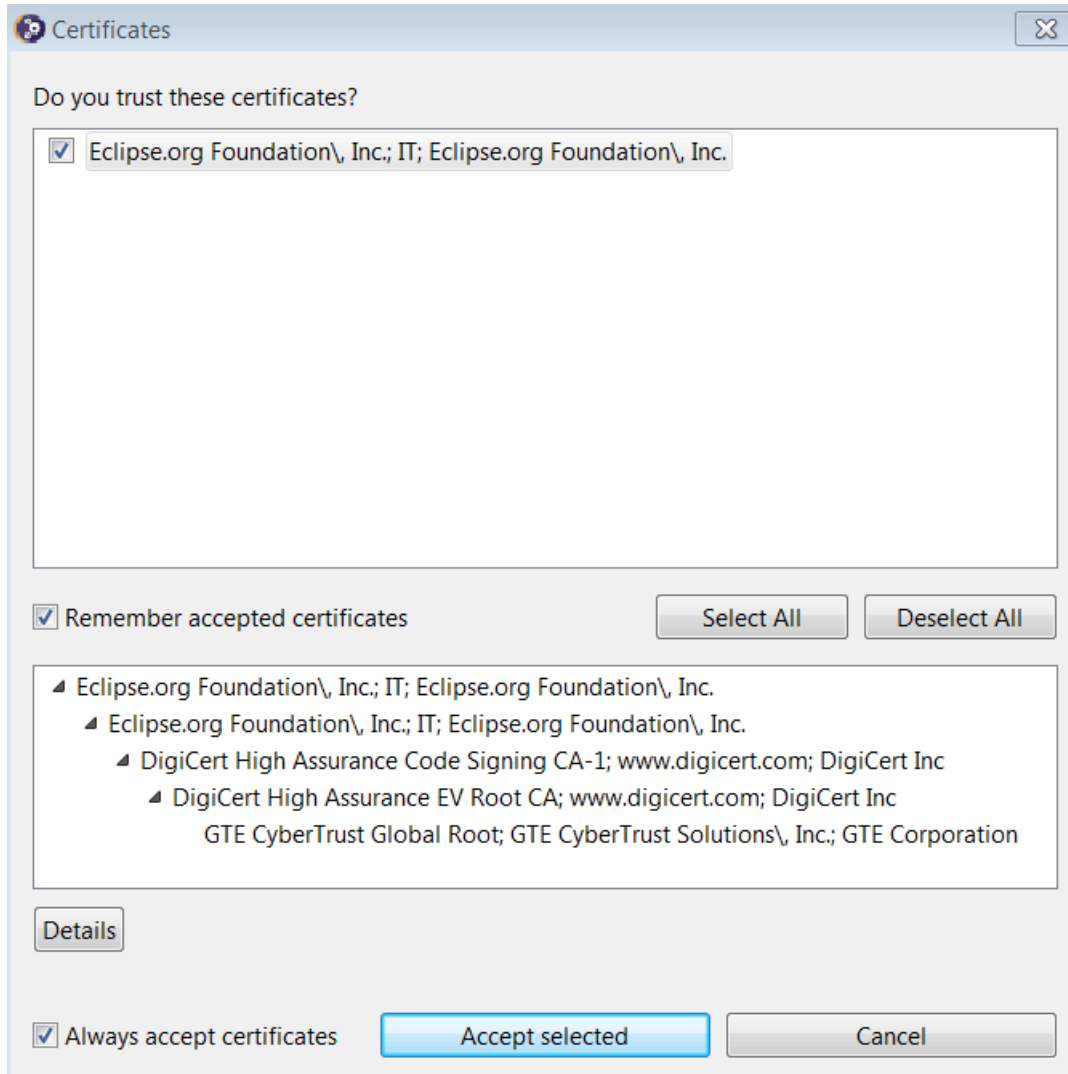
The installation will start and may take a while.

__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 16 - Verification

__1. Make sure there are shortcut's in the desktop called as:

- **learn_puppet_centos-6.5**
- **VM_WA2451_REL_8_0**
- **VM_WA3003_REL_3_0**

__2. Close all VM's and make sure there are shortcut in the desktop for all the VMs.

Part 17 - 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