

WA3007 Kubernetes for Developers

Classroom Setup Guide

Web Age Solutions Inc.

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Part 1 - Minimum Hardware Requirements

- 64-bit x86 CPU that supports hardware virtualization (Intel-VT or AMD-V)
- Hardware virtualization enabled in the BIOS
- 2 cores
- 12 GB RAM, 16 GB recommended
- 80 GB Hard Disk
- Internet

Part 2 - Minimum Software Requirements

- Windows 8.1 64 bits or later
- 7 Zip
- VMWare Workstation Player 14 or later

Part 3 - Software Provided

List of VMWare images required for this course and used in next steps on this document:

- **VM_WA3003-REL_2_0**

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 - Software and Instructions: VM_WA3003-REL_2_0

__1. Download the following files:

- **VM_WA3003-REL_2_0.7z.001**
- **VM_WA3003-REL_2_0.7z.002**

__2. Open the folder where you downloaded the files and then right click the **VM_WA3003-REL_2_0.7z.001** file and select **7-Zip** → **Extract here**.

__3. 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_2_0**

__4. Open the **VM_WA3003-REL_2_0** folder.

__5. Right click **Ubuntu 64-bit.vmx** and select **Send to** → **Desktop (create a shortcut)**

__6. On the desktop, rename the create shortcut to **VM_WA3003-REL_2_0**

__7. Double click on the shortcut named as **VM_WA3003-REL_2_0**. This will start the VM.

__8. Select **I Moved It** if prompt.

__9. Login using **wasadmin** for user and password.

__10. Open a terminal and enter the following command:

```
sudo -i
```

[Enter **wasadmin** as password]

__11. Make sure you have internet by entering:

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

__12. Press **Ctrl + 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. |
|--|

__ 13. Enter the following command:

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

__ 14. Wait for it to complete.

__ 15. Type **exit** many times to close the Terminal.

Part 5 - 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.

__ 1. Open a browser and navigate to the following URL:

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

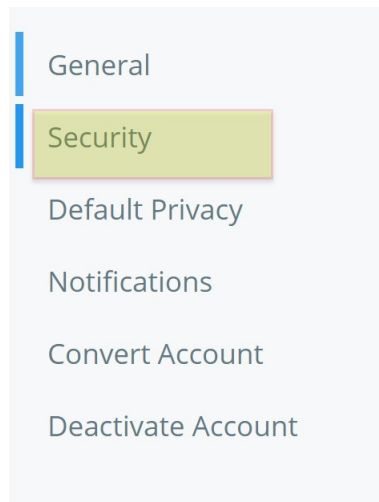
__ 2. Click **Sign Up** and create a new account.

__ 3. Sign in with your newly created account.

__ 4. 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.

__ 5. Select **Security**.



__ 6. Click **New Access Token**.

__ 7. Add the token description, such as *docker & Kubernetes labs*.

__ 8. Keep Access permissions as default (**Read, Write, Delete**).

__ 9. 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.



__ 10. Make a note of both the steps displayed on the page.

__ 11. 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.

__ 12. Switch to the root user. [enter the sudo password]

```
sudo -i
```

__13. Verify you are logged in as root.

```
whoami
```

It should show root.

__14. Run the following command to log into Docker.

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

__15. Close the Terminal.

Part 6 - Verification

__1. Make sure the following shortcuts are located in the desktop:

- **VM_WA3003-REL_2_0**

__2. Stop all VMs.

Part 7 - 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