

ID2223 – Help installing tools

Note: Copy-pasting from pdf documents can introduce weird characters. It is thus suggested to write the commands by hand.

VirtualBox

If you are hesitant to install docker and other tools on your machine, you can use VirtualBox.

Install VirtualBox following [these](#) instructions.

You can get a Ubuntu 16.04 image from [here](#) and install docker and other tools inside. Password for logging in is **osboxes.org**

When installing the vm image, remember to set amount of memory, cpus, video memory and install the "guest additions".

Note: The copy-paste fix that you will find online doesn't seem to work reliably, so you might want to install openssh on the vm and ssh into the machine in order to be able to use copy-paste for the install commands.

Eclipse

Install java jdk 8.

Install [scala IDE](#) which brings with itself eclipse(oxygen).

Install sbt in [Linux](#), [Mac](#) or [Windows](#) so that you can also run it from command line.

In order to get the skeleton lab, you will need to also install **git**.

Docker

Docker installation (Windows, Mac OS X, Linux)

Docker is a platform for managing containers, bundles of applications and their dependencies for easy deployment. A docker container gives everyone a uniform environment. Please follow [these](#) instructions in order to install docker.

Note: Depending on how you installed docker, you might need to run all docker commands as **sudo**

Enable and start docker daemon

```
1 systemctl enable docker
2 service docker start
```

Stop docker daemon

```
1 service docker stop
```

Load docker image

```
1 docker run --name {CONTAINER_NAME} -it -p {SPARK_HISTORY_PORT}:18080 -p {ZEPPELIN_PORT}:8080 -d {IMAGE_NAME}
```

For example, we can run the zeppelin docker image with:

```
1 docker run --name spark-zeppelin -it -p 28080:18080 -p 38080:8080 -d \
  ↪ mirkoprescha/spark-zeppelin-docker
```

List docker running containers

```
1 docker ps
```

Kill docker container

```
1 docker kill {CONTAINER_NAME}
```

Restart loaded docker container

```
1 docker start {CONTAINER_NAME}
```

Log into the docker container (ssh)

```
1 docker exec -i -t {CONTAINER_NAME} /bin/bash
```

Copy files to the docker container

```
1 docker cp {SRC_PATH} {CONTAINER_NAME}:{DEST_PATH}
```

Other docker CLI commands

You can find useful docker CLI help here, in the docker [documentation](#).

Zeppelin

You can find a good zeppelin-spark docker image at [github](#) and the actual image [here](#)

Eclipse Scala troubleshooting

1. **Problem:** When loading a scala project you get a "could not find/load main class" exception.

Solution: In the IDE do `project -> scala -> set the scala installation` to scala 2.11. Clean the project and rebuild with eclipse.