Welcome to Chapter 1

So its time to get ready for chapter 1 exercises.

Let's get start with a brief overview of this handout: - You will find the following folders: - **AEM** - contains all files required to set the AEM instances environment - **MongoDB** - same has the above but for the MongoDB instances - **JCR** - environment setup to launch Apache Jackrabbit Oak standalone process - Each folder will boot different virtual machines so we can isolate the instances - If you are following the lesson videos you might find some variations from the video examples and the configuration that you will find on your environment (mostly differences on ip addresses)

You will also find all command helpers in this file

Chapter 1 folder

```
> ls .
AEM
README.md
lesson1
```

Boot MongoDB Environment

Raise one virtual machine dedicated to MongoDB standalone instance

```
cd lesson1/MongoDB
vagrant up
```

Verify instance status

```
vagrant status mongod
```

Launch MongoDB Instance

Now that we have an running vm dedicated to MongoDB is time to setup the instance

Let's check if `mongod` is properly installed

```
cd lesson1/MongoDB
vagrant ssh mongod
mongod -version
```

Let's boot up `mongod`

```
mongod --dbpath data --storageEngine wiredTiger --logpath data/log --fork
```

Alternatively you can also run the following command:

```
mongod -f mongod.conf
```

We recommend you to proceed with the first command so you can get a better understanding of different options we are setting MongoDB with.

Boot Jackrabbit Oak Standalone

For the purposed exercises on Jackrabbit Oak Standalone we will need to boot and virtual machine where we should install the JCR standalone module

```
cd lesson1/JCR
vagrant up jcr
```

Let's check if the image is correctly boot up

```
vagrant status jcr
```

If all went well now it's time to setup the JCR

Launch JCR Standalone

We need to install in the `jcr` instance oak-run and point it to the previously instantiated `mongod` instance. For this particular setup we are going to use `screen` to run our instance of oak-run on the background.

```
vagrant ssh jcr
screen -a
java -jar /vagrant/oak-run-1.4-SNAPSHOT.jar server http://localhost:7979 Oak-Mongo --db oak
```

To detach from the loaded screen just press `ctrl+a+d`

Mount Webdav JCR folder

One of the options we have to drill down on the data contained on the content repository is through it's Webdav plugin. This will be a bit different for each version of the OS that you might be running so let's highlight the most common ones:

Windows

1. Go to your Windows Explorer address bar and type paste the following

- `\\192.168.11.200@7979\webdav\default`
- Once the system requires you to provide user name and password
- user = `admin`
- password = `admin`

MacOSX

1. Go to Finder -> Go -> Connect To Server
2. On the server address please type

- `http://192.168.11.200:7979/webdav/default`

3. Once the system requires you to provide user name and password

- user = `admin`
- password = `admin`

Install AEM software on local author folder

To boot the AEM environment and to have a correct installation you need to copy your version of AEM and place it under the following folder:

```
cp YOUR_AEM_VERSION_JAR AEM/author/cq-author-p4502.jar
```

Boot AEM Environment

Raise one virtual machine dedicated to AEM standalone instance

```
cd lesson1/AEM
vagrant up
```

Verify instance status

```
vagrant status aem
```

Launch AEM Instance

Once we have an environment for our AEM installation, its time to launch our `author` instance

```
vagrant ssh
#let's create a screen
screen -a
java -Xmx2g -XX:MaxPermSize=512m -jar /vagrant/cq-author-p4502.jar -r crx3,crx3mongo -Doak.m
```

To detach from the loaded screen just press ctrl+a+d

Stop Instances

Make sure to stop the vagrant VM's after you finished the exercises.

```
cd MongoDB
vagrant halt
cd ../AEM
vagrant halt
cd ../JCR
vagrant halt
```