# Step 1 - Show docker version and settings info

PS C:\WINDOWS\system32> docker version

Client:

Version: 18.06.0-ce

API version: 1.38

Go version: go1.10.3

Git commit: 0ffa825

Built: Wed Jul 18 19:05:28 2018

OS/Arch: windows/amd64

Experimental: false

Server:

Engine:

Version: 18.06.0-ce

API version: 1.38 (minimum version 1.12)

Go version: go1.10.3

Git commit: 0ffa825

Built: Wed Jul 18 19:13:46 2018

OS/Arch: linux/amd64

Experimental: true

# Step 2 - Login to hub.docker.com

PS C:\WINDOWS\system32> docker login

Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.

Username: cwaid

Password:

Login Succeeded

# Step 3 - Run "hello-world"

PS C:\WINDOWS\system32> docker run hello-world

Unable to find image 'hello-world:latest' locally

latest: Pulling from library/hello-world

9db2ca6ccae0: Pull complete

Digest: sha256:4b8ff392a12ed9ea17784bd3c9a8b1fa3299cac44aca35a85c90c5e3c7afacdc

Status: Downloaded newer image for hello-world:latest

Hello from Docker!

This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:

1. The Docker client contacted the Docker daemon.

2. The Docker daemon pulled the "hello-world" image from the Docker Hub.

(amd64)

3. The Docker daemon created a new container from that image which runs the

executable that produces the output you are currently reading.

4. The Docker daemon streamed that output to the Docker client, which sent it

to your terminal.

# Step 4 - Show docker image

PS C:\WINDOWS\system32> docker image ls

REPOSITORY TAG IMAGE ID CREATED SIZE

hello-world latest 2cb0d9787c4d 3 weeks ago 1.85kB

# Step 5 - Show docker containers

PS C:\WINDOWS\system32> docker container ls

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

PS C:\WINDOWS\system32> docker container ls -a

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

6c64241357ad hello-world "/hello" 3 minutes ago Exited (0) 3 minutes ago distracted\_vaughan

# Step 6 - Start tomcat:8.0 container

PS Y:\> docker run -d -p 8080:8080 tomcat:8.0

Unable to find image 'tomcat:8.0' locally

8.0: Pulling from library/tomcat

d660b1f15b9b: Pull complete

46dde23c37b3: Pull complete

ac5ffaa94f61: Pull complete

f7e9f30394f5: Pull complete

3ae3a41d5873: Pull complete

8eea330fdc65: Pull complete

d051bc095250: Pull complete

d4f397a5ced6: Pull complete

8b01e0b079d4: Pull complete

e63b68df2293: Pull complete

e045242e6369: Pull complete

Digest: sha256:af34b623b0920d4f4737d7c9db9df1f92c8372626af5a30685d8cff351e0e8b5

Status: Downloaded newer image for tomcat:8.0

29b5831d1ecefd6257fa3e9757bc265fe674b3672fe86a937f6c0423762eb9f7

# Step 7 - Exec into tomcat container

PS Y:\> docker container ls

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

29b5831d1ece tomcat:8.0 "catalina.sh run" 39 seconds ago Up 35 seconds 0.0.0.0:8080->8080/tcp clever\_kare

PS Y:\>

PS Y:\> docker exec -it 29b5831d1ece bash

root@29b5831d1ece:/usr/local/tomcat# ls

LICENSE NOTICE RELEASE-NOTES RUNNING.txt bin conf include lib logs native-jni-lib temp webapps work

root@29b5831d1ece:/usr/local/tomcat# ls logs

catalina.2018-08-01.log localhost.2018-08-01.log manager.2018-08-01.log

host-manager.2018-08-01.log localhost\_access\_log.2018-08-01.txt

root@29b5831d1ece:/usr/local/tomcat# exit

exit

PS Y:\>

# Step 8 - Inspect tomcat container

docker inspect 29b5831d1ece

# Step 9 - Look at docker logs

PS Y:\> docker logs 29b5831d1ece

01-Aug-2018 21:50:01.118 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Server version: Apache Tomcat/8.0.53

01-Aug-2018 21:50:01.121 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Server built: Jun 29 2018 14:42:45 UTC

01-Aug-2018 21:50:01.122 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Server number: 8.0.53.0

01-Aug-2018 21:50:01.123 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log OS Name: Linux

01-Aug-2018 21:50:01.124 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log OS Version: 4.9.93-linuxkit-aufs

01-Aug-2018 21:50:01.124 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Architecture: amd64

01-Aug-2018 21:50:01.125 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Java Home: /usr/lib/jvm/java-7-openjdk-amd64/jre

01-Aug-2018 21:50:01.125 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log JVM Version: 1.7.0\_181-b01

01-Aug-2018 21:50:01.125 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log JVM Vendor: Oracle Corporation

01-Aug-2018 21:50:01.129 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log CATALINA\_BASE: /usr/local/tomcat

01-Aug-2018 21:50:01.129 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log CATALINA\_HOME: /usr/local/tomcat

01-Aug-2018 21:50:01.133 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djava.util.logging.config.file=/usr/local/tomcat/conf/logging.properties

01-Aug-2018 21:50:01.133 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager

01-Aug-2018 21:50:01.134 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djdk.tls.ephemeralDHKeySize=2048

01-Aug-2018 21:50:01.134 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djava.protocol.handler.pkgs=org.apache.catalina.webresources

01-Aug-2018 21:50:01.134 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Dignore.endorsed.dirs=

01-Aug-2018 21:50:01.134 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Dcatalina.base=/usr/local/tomcat

01-Aug-2018 21:50:01.134 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Dcatalina.home=/usr/local/tomcat

01-Aug-2018 21:50:01.134 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djava.io.tmpdir=/usr/local/tomcat/temp

01-Aug-2018 21:50:01.134 INFO [main] org.apache.catalina.core.AprLifecycleListener.lifecycleEvent Loaded APR based Apache Tomcat Native library 1.2.17 using APR version 1.5.1.

01-Aug-2018 21:50:01.134 INFO [main] org.apache.catalina.core.AprLifecycleListener.lifecycleEvent APR capabilities: IPv6 [true], sendfile [true], accept filters [false], random [true].

01-Aug-2018 21:50:01.155 INFO [main] org.apache.catalina.core.AprLifecycleListener.initializeSSL OpenSSL successfully initialized (OpenSSL 1.1.0f 25 May 2017)

01-Aug-2018 21:50:01.372 INFO [main] org.apache.coyote.AbstractProtocol.init Initializing ProtocolHandler ["http-apr-8080"]

01-Aug-2018 21:50:01.394 INFO [main] org.apache.coyote.AbstractProtocol.init Initializing ProtocolHandler ["ajp-apr-8009"]

01-Aug-2018 21:50:01.399 INFO [main] org.apache.catalina.startup.Catalina.load Initialization processed in 1316 ms

01-Aug-2018 21:50:01.448 INFO [main] org.apache.catalina.core.StandardService.startInternal Starting service Catalina

01-Aug-2018 21:50:01.449 INFO [main] org.apache.catalina.core.StandardEngine.startInternal Starting Servlet Engine: Apache Tomcat/8.0.53

01-Aug-2018 21:50:01.482 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory /usr/local/tomcat/webapps/examples

01-Aug-2018 21:50:04.283 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory /usr/local/tomcat/webapps/examples has finished in 2,796 ms

01-Aug-2018 21:50:04.285 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory /usr/local/tomcat/webapps/docs

01-Aug-2018 21:50:04.381 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory /usr/local/tomcat/webapps/docs has finished in 96 ms

01-Aug-2018 21:50:04.383 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory /usr/local/tomcat/webapps/manager

01-Aug-2018 21:50:04.484 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory /usr/local/tomcat/webapps/manager has finished in 101 ms

01-Aug-2018 21:50:04.486 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory /usr/local/tomcat/webapps/host-manager

01-Aug-2018 21:50:04.561 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory /usr/local/tomcat/webapps/host-manager has finished in 74 ms

01-Aug-2018 21:50:04.563 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory /usr/local/tomcat/webapps/ROOT

01-Aug-2018 21:50:04.624 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory /usr/local/tomcat/webapps/ROOT has finished in 62 ms

01-Aug-2018 21:50:04.671 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["http-apr-8080"]

01-Aug-2018 21:50:04.783 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["ajp-apr-8009"]

01-Aug-2018 21:50:04.859 INFO [main] org.apache.catalina.startup.Catalina.start Server startup in 3460 ms

PS Y:\>

PS Y:\> docker container ls

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

29b5831d1ece tomcat:8.0 "catalina.sh run" 4 minutes ago Up 19 seconds 0.0.0.0:8080->8080/tcp clever\_kare

PS Y:\> docker container stop 29b5831d1ece

29b5831d1ece

PS Y:\> docker container ls

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

PS Y:\> docker container ls -a

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

29b5831d1ece tomcat:8.0 "catalina.sh run" 6 minutes ago Exited (143) About a minute ago clever\_kare

PS Y:\>

PS Y:\> docker container rm 29b5831d1ece

29b5831d1ece

PS Y:\> docker image ls

REPOSITORY TAG IMAGE ID CREATED SIZE

tomcat 8.0 5c4bd237605a 28 hours ago 356MB

hello-world latest 2cb0d9787c4d 3 weeks ago 1.85kB

PS Y:\> docker image rm 5c4bd237605a

Untagged: tomcat:8.0

Untagged: tomcat@sha256:af34b623b0920d4f4737d7c9db9df1f92c8372626af5a30685d8cff351e0e8b5

Deleted: sha256:5c4bd237605a079c443c9e3a4b2c5fe0e3f5b5ea5889c9a6005af20bc9c3dd60

Deleted: sha256:7ef0c2095b2083405cf312bbdf96aabfe701b7e0feec98cc87b2f86a5f09fc31

Deleted: sha256:185fb960aab09bd3ba172ca0f90ed5804a7470669633203a03234ca795d7aace

Deleted: sha256:1bdc9e19193c5c8ef579c6f11d056692976ba4aa0b7107150d8027d687f061f6

Deleted: sha256:89ef1e394cd3053a9c85fcc3f438a4be39805bee2857740184749115b85ee340

Deleted: sha256:a28a0e51d17cfaf651ee3d7605a99c0a3fea5898e1211d0c696937cbc3aa22b8

Deleted: sha256:e651e73e8d92bb9ac330531666254d6d27be82da33b489edeee0583f64def841

Deleted: sha256:f9aaefe9f8527d2716894f483fed949c8c951f88f666c7106a4a2ffa4dea14d7

Deleted: sha256:644f62c7a780081265bf84f81f4affb8cd1772b0b95f2dba3f7311988787942b

Deleted: sha256:2c343a6f9a785b2f2a9e0848be3286da5988a5fc95c1894ebb617d14756ed74d

Deleted: sha256:8a6b78a6a8a45337cd8eac5b8627793fa507d07e142c3ba635b299b476d37524

Deleted: sha256:dd1eb1fd7e08dc9bda0cbea31a89196c453cb218bea80ce64eeb19fadc98d262

PS Y:\>