**[root@localhost ~]# yum install docker bridge-utils**

Loaded plugins: fastestmirror

Loading mirror speeds from cached hostfile

\* base: centos.mirror.cdnetworks.com

\* extras: centos.mirror.cdnetworks.com

\* updates: centos.mirror.cdnetworks.com

Resolving Dependencies

--> Running transaction check

---> Package docker.x86\_64 2:1.12.6-32.git88a4867.el7.centos will be installed

--> Processing Dependency: docker-common = 2:1.12.6-32.git88a4867.el7.centos for package: 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64

--> Processing Dependency: docker-client = 2:1.12.6-32.git88a4867.el7.centos for package: 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64

--> Processing Dependency: oci-systemd-hook >= 1:0.1.4-9 for package: 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64

--> Processing Dependency: oci-register-machine >= 1:0-3.10 for package: 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64

--> Processing Dependency: container-selinux >= 2:2.12-2 for package: 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64

--> Processing Dependency: skopeo-containers for package: 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64

--> Processing Dependency: libseccomp.so.2()(64bit) for package: 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64

--> Running transaction check

---> Package container-selinux.noarch 2:2.19-2.1.el7 will be installed

--> Processing Dependency: policycoreutils-python for package: 2:container-selinux-2.19-2.1.el7.noarch

---> Package docker-client.x86\_64 2:1.12.6-32.git88a4867.el7.centos will be installed

---> Package docker-common.x86\_64 2:1.12.6-32.git88a4867.el7.centos will be installed

---> Package libseccomp.x86\_64 0:2.3.1-2.el7 will be installed

---> Package oci-register-machine.x86\_64 1:0-3.11.gitdd0daef.el7 will be installed

---> Package oci-systemd-hook.x86\_64 1:0.1.7-4.gite533efa.el7 will be installed

--> Processing Dependency: libyajl.so.2()(64bit) for package: 1:oci-systemd-hook-0.1.7-4.gite533efa.el7.x86\_64

---> Package skopeo-containers.x86\_64 1:0.1.20-2.el7 will be installed

--> Running transaction check

---> Package policycoreutils-python.x86\_64 0:2.5-11.el7\_3 will be installed

--> Processing Dependency: setools-libs >= 3.3.8-1 for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: libsemanage-python >= 2.5-5 for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: audit-libs-python >= 2.1.3-4 for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: python-IPy for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: libqpol.so.1(VERS\_1.4)(64bit) for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: libqpol.so.1(VERS\_1.2)(64bit) for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: libcgroup for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: libapol.so.4(VERS\_4.0)(64bit) for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: checkpolicy for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: libqpol.so.1()(64bit) for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

--> Processing Dependency: libapol.so.4()(64bit) for package: policycoreutils-python-2.5-11.el7\_3.x86\_64

---> Package yajl.x86\_64 0:2.0.4-4.el7 will be installed

--> Running transaction check

---> Package audit-libs-python.x86\_64 0:2.6.5-3.el7\_3.1 will be installed

---> Package checkpolicy.x86\_64 0:2.5-4.el7 will be installed

---> Package libcgroup.x86\_64 0:0.41-11.el7 will be installed

---> Package libsemanage-python.x86\_64 0:2.5-5.1.el7\_3 will be installed

---> Package python-IPy.noarch 0:0.75-6.el7 will be installed

---> Package setools-libs.x86\_64 0:3.3.8-1.1.el7 will be installed

--> Finished Dependency Resolution

Dependencies Resolved

=====================================================================================================================================

Package Arch Version Repository Size

=====================================================================================================================================

Installing:

docker x86\_64 2:1.12.6-32.git88a4867.el7.centos extras 14 M

Installing for dependencies:

audit-libs-python x86\_64 2.6.5-3.el7\_3.1 updates 70 k

checkpolicy x86\_64 2.5-4.el7 base 290 k

container-selinux noarch 2:2.19-2.1.el7 extras 28 k

docker-client x86\_64 2:1.12.6-32.git88a4867.el7.centos extras 3.2 M

docker-common x86\_64 2:1.12.6-32.git88a4867.el7.centos extras 77 k

libcgroup x86\_64 0.41-11.el7 base 65 k

libseccomp x86\_64 2.3.1-2.el7 base 56 k

libsemanage-python x86\_64 2.5-5.1.el7\_3 updates 104 k

oci-register-machine x86\_64 1:0-3.11.gitdd0daef.el7 extras 1.0 M

oci-systemd-hook x86\_64 1:0.1.7-4.gite533efa.el7 extras 30 k

policycoreutils-python x86\_64 2.5-11.el7\_3 updates 445 k

python-IPy noarch 0.75-6.el7 base 32 k

setools-libs x86\_64 3.3.8-1.1.el7 base 612 k

skopeo-containers x86\_64 1:0.1.20-2.el7 extras 7.8 k

yajl x86\_64 2.0.4-4.el7 base 39 k

Transaction Summary

=====================================================================================================================================

Install 1 Package (+15 Dependent packages)

Total download size: 20 M

Installed size: 69 M

**Is this ok [y/d/N]: y**

Downloading packages:

(1/16): container-selinux-2.19-2.1.el7.noarch.rpm | 28 kB 00:00:00

(2/16): docker-common-1.12.6-32.git88a4867.el7.centos.x86\_64.rpm | 77 kB 00:00:00

(3/16): audit-libs-python-2.6.5-3.el7\_3.1.x86\_64.rpm | 70 kB 00:00:00

(4/16): libseccomp-2.3.1-2.el7.x86\_64.rpm | 56 kB 00:00:00

(5/16): checkpolicy-2.5-4.el7.x86\_64.rpm | 290 kB 00:00:00

(6/16): libsemanage-python-2.5-5.1.el7\_3.x86\_64.rpm | 104 kB 00:00:00

(7/16): oci-systemd-hook-0.1.7-4.gite533efa.el7.x86\_64.rpm | 30 kB 00:00:00

(8/16): libcgroup-0.41-11.el7.x86\_64.rpm | 65 kB 00:00:01

(9/16): policycoreutils-python-2.5-11.el7\_3.x86\_64.rpm | 445 kB 00:00:00

(10/16): python-IPy-0.75-6.el7.noarch.rpm | 32 kB 00:00:00

(11/16): skopeo-containers-0.1.20-2.el7.x86\_64.rpm | 7.8 kB 00:00:00

(12/16): yajl-2.0.4-4.el7.x86\_64.rpm | 39 kB 00:00:00

(13/16): docker-client-1.12.6-32.git88a4867.el7.centos.x86\_64.rpm | 3.2 MB 00:00:04

(14/16): oci-register-machine-0-3.11.gitdd0daef.el7.x86\_64.rpm | 1.0 MB 00:00:03

(15/16): setools-libs-3.3.8-1.1.el7.x86\_64.rpm | 612 kB 00:00:02

(16/16): docker-1.12.6-32.git88a4867.el7.centos.x86\_64.rpm | 14 MB 00:00:54

-------------------------------------------------------------------------------------------------------------------------------------

Total 379 kB/s | 20 MB 00:00:54

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Installing : 2:docker-common-1.12.6-32.git88a4867.el7.centos.x86\_64 1/16

Installing : 2:docker-client-1.12.6-32.git88a4867.el7.centos.x86\_64 2/16

Installing : setools-libs-3.3.8-1.1.el7.x86\_64 3/16

Installing : libseccomp-2.3.1-2.el7.x86\_64 4/16

Installing : 1:skopeo-containers-0.1.20-2.el7.x86\_64 5/16

Installing : 1:oci-register-machine-0-3.11.gitdd0daef.el7.x86\_64 6/16

Installing : yajl-2.0.4-4.el7.x86\_64 7/16

Installing : 1:oci-systemd-hook-0.1.7-4.gite533efa.el7.x86\_64 8/16

Installing : libcgroup-0.41-11.el7.x86\_64 9/16

Installing : libsemanage-python-2.5-5.1.el7\_3.x86\_64 10/16

Installing : audit-libs-python-2.6.5-3.el7\_3.1.x86\_64 11/16

Installing : checkpolicy-2.5-4.el7.x86\_64 12/16

Installing : python-IPy-0.75-6.el7.noarch 13/16

Installing : policycoreutils-python-2.5-11.el7\_3.x86\_64 14/16

Installing : 2:container-selinux-2.19-2.1.el7.noarch 15/16

Stopping containers...

Cannot connect to the Docker daemon. Is the docker daemon running on this host?

"docker stop" requires at least 1 argument(s).

See 'docker stop --help'.

Usage: docker stop [OPTIONS] CONTAINER [CONTAINER...]

Stop one or more running containers

Installing : 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64 16/16

Verifying : 2:docker-1.12.6-32.git88a4867.el7.centos.x86\_64 1/16

Verifying : python-IPy-0.75-6.el7.noarch 2/16

Verifying : 1:oci-systemd-hook-0.1.7-4.gite533efa.el7.x86\_64 3/16

Verifying : checkpolicy-2.5-4.el7.x86\_64 4/16

Verifying : audit-libs-python-2.6.5-3.el7\_3.1.x86\_64 5/16

Verifying : libsemanage-python-2.5-5.1.el7\_3.x86\_64 6/16

Verifying : policycoreutils-python-2.5-11.el7\_3.x86\_64 7/16

Verifying : 2:container-selinux-2.19-2.1.el7.noarch 8/16

Verifying : 2:docker-common-1.12.6-32.git88a4867.el7.centos.x86\_64 9/16

Verifying : libcgroup-0.41-11.el7.x86\_64 10/16

Verifying : yajl-2.0.4-4.el7.x86\_64 11/16

Verifying : 1:oci-register-machine-0-3.11.gitdd0daef.el7.x86\_64 12/16

Verifying : 1:skopeo-containers-0.1.20-2.el7.x86\_64 13/16

Verifying : 2:docker-client-1.12.6-32.git88a4867.el7.centos.x86\_64 14/16

Verifying : libseccomp-2.3.1-2.el7.x86\_64 15/16

Verifying : setools-libs-3.3.8-1.1.el7.x86\_64 16/16

Installed:

docker.x86\_64 2:1.12.6-32.git88a4867.el7.centos

Dependency Installed:

audit-libs-python.x86\_64 0:2.6.5-3.el7\_3.1 checkpolicy.x86\_64 0:2.5-4.el7

container-selinux.noarch 2:2.19-2.1.el7 docker-client.x86\_64 2:1.12.6-32.git88a4867.el7.centos

docker-common.x86\_64 2:1.12.6-32.git88a4867.el7.centos libcgroup.x86\_64 0:0.41-11.el7

libseccomp.x86\_64 0:2.3.1-2.el7 libsemanage-python.x86\_64 0:2.5-5.1.el7\_3

oci-register-machine.x86\_64 1:0-3.11.gitdd0daef.el7 oci-systemd-hook.x86\_64 1:0.1.7-4.gite533efa.el7

policycoreutils-python.x86\_64 0:2.5-11.el7\_3 python-IPy.noarch 0:0.75-6.el7

setools-libs.x86\_64 0:3.3.8-1.1.el7 skopeo-containers.x86\_64 1:0.1.20-2.el7

yajl.x86\_64 0:2.0.4-4.el7

Complete!

**[root@localhost ~]# ip a**

1: lo: <LOOPBACK,UP,LOWER\_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1

link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00

inet 127.0.0.1/8 scope host lo

valid\_lft forever preferred\_lft forever

inet6 ::1/128 scope host

valid\_lft forever preferred\_lft forever

2: ens33: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP qlen 1000

link/ether 00:0c:29:2b:9e:6c brd ff:ff:ff:ff:ff:ff

inet 192.168.17.200/24 brd 192.168.17.255 scope global dynamic ens33

valid\_lft 1365sec preferred\_lft 1365sec

inet6 fe80::ac7c:18e5:fadc:ebe9/64 scope link

valid\_lft forever preferred\_lft forever

[root@localhost ~]# **systemctl start docker**

[root@localhost ~]# **ip a**

1: lo: <LOOPBACK,UP,LOWER\_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1

link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00

inet 127.0.0.1/8 scope host lo

valid\_lft forever preferred\_lft forever

inet6 ::1/128 scope host

valid\_lft forever preferred\_lft forever

2: ens33: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP qlen 1000

link/ether 00:0c:29:2b:9e:6c brd ff:ff:ff:ff:ff:ff

inet 192.168.17.200/24 brd 192.168.17.255 scope global dynamic ens33

valid\_lft 1350sec preferred\_lft 1350sec

inet6 fe80::ac7c:18e5:fadc:ebe9/64 scope link

valid\_lft forever preferred\_lft forever

3: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN

link/ether 02:42:08:91:95:57 brd ff:ff:ff:ff:ff:ff

inet 172.17.0.1/16 scope global docker0

valid\_lft forever preferred\_lft forever

Complete!

[root@localhost ~]# **brctl show**

bridge name bridge id STP enabled interfaces

docker0 8000.024208919557 no

[root@localhost ~]# **dockere version**

-bash: dockere: command not found

[root@localhost ~]# docker version

Client:

Version: 1.12.6

API version: 1.24

Package version: docker-1.12.6-32.git88a4867.el7.centos.x86\_64

Go version: go1.7.4

Git commit: 88a4867/1.12.6

Built: Mon Jul 3 16:02:02 2017

OS/Arch: linux/amd64

Server:

Version: 1.12.6

API version: 1.24

Package version: docker-1.12.6-32.git88a4867.el7.centos.x86\_64

Go version: go1.7.4

Git commit: 88a4867/1.12.6

Built: Mon Jul 3 16:02:02 2017

OS/Arch: linux/amd64

[root@localhost ~]# **ps -ef | grep docker**

root 20489 1 0 06:11 ? 00:00:01 /usr/bin/dockerd-current --add-runtime docker-runc=/usr/libexec/docker/docker-runc-current --default-runtime=docker-runc --exec-opt native.cgroupdriver=systemd --userland-proxy-path=/usr/libexec/docker/docker-proxy-current --selinux-enabled --log-driver=journald --signature-verification=false

root 20492 20489 0 06:11 ? 00:00:00 /usr/bin/docker-containerd-current -l unix:///var/run/docker/libcontainerd/docker-containerd.sock --shim docker-containerd-shim --metrics-interval=0 --start-timeout 2m --state-dir /var/run/docker/libcontainerd/containerd --runtime docker-runc --runtime-args --systemd-cgroup=true

root 23258 19636 0 07:01 pts/0 00:00:00 grep --color=auto docker

[root@localhost ~]# **docker run hello-world**

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

Trying to pull repository docker.io/library/hello-world ...

latest: Pulling from docker.io/library/hello-world

b04784fba78d: Pull complete

Digest: sha256:f3b3b28a45160805bb16542c9531888519430e9e6d6ffc09d72261b0d26ff74f

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.

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.

To try something more ambitious, you can run an Ubuntu container with:

$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:

https://cloud.docker.com/

For more examples and ideas, visit:

https://docs.docker.com/engine/userguide/

[root@localhost ~]# **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: nimi88

Password:

[root@localhost ~]# **docker search tomcat**

INDEX NAME DESCRIPTION STARS OFFICIAL AUTOMATED

docker.io docker.io/tomcat Apache Tomcat is an open source implementa... 1417 [OK]

docker.io docker.io/tomee Apache TomEE is an all-Apache Java EE cert... 38 [OK]

docker.io docker.io/dordoka/tomcat Ubuntu 14.04, Oracle JDK 8 and Tomcat 8 ba... 37 [OK]

docker.io docker.io/davidcaste/alpine-tomcat Apache Tomcat 7/8 using Oracle Java 7/8 wi... 19 [OK]

docker.io docker.io/consol/tomcat-7.0 Tomcat 7.0.57, 8080, "admin/admin" 16 [OK]

docker.io docker.io/cloudesire/tomcat Tomcat server, 6/7/8 15 [OK]

docker.io docker.io/andreptb/tomcat Debian Jessie based image with Apache Tomc... 7 [OK]

docker.io docker.io/jeanblanchard/tomcat Minimal Docker image with Apache Tomcat 7

docker.io docker.io/tutum/tomcat Base docker image to run a Tomcat applicat... 7

docker.io docker.io/fbrx/tomcat Minimal Tomcat image based on Alpine Linux 4 [OK]

docker.io docker.io/bitnami/tomcat Bitnami Tomcat Docker Image 3 [OK]

docker.io docker.io/picoded/tomcat tomcat 8 with java 8, and MANAGER\_USER / M... 2 [OK]

docker.io docker.io/antoineco/tomcat-mod\_cluster Apache Tomcat with JBoss mod\_cluster 1 [OK]

[root@localhost ~]# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

docker.io/hello-world latest 1815c82652c0 2 weeks ago 1.84 kB

[root@localhost ~]# **docker run ubuntu:14.04 echo "hello"**

Unable to find image 'ubuntu:14.04' locally

Trying to pull repository docker.io/library/ubuntu ...

14.04: Pulling from docker.io/library/ubuntu

7ee37f181318: Pull complete

df5ffabe5e97: Pull complete

ae2040ed51a1: Pull complete

3ce7010d244b: Pull complete

2538b201d2a6: Pull complete

Digest: sha256:13eecbc0e57928c1cb3ccca3581e2a6f4b0f39c1acf5a279e740e478accd119b

hello

[root@localhost ~]# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

docker.io/ubuntu 14.04 54333f1de4ed Less than a second ago 188 MB

docker.io/hello-world latest 1815c82652c0 2 weeks ago 1.84 kB

[root@localhost ~]# **docker ps -a**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

c6d8dbd7cf47 ubuntu:14.04 "echo hello" 48 seconds ago Exited (0) 47 seconds ago berserk\_panini

957b14b126af hello-world "/hello" About an hour ago Exited (0) About an hour ago

[root@localhost ~]# **docker run ubuntu:14.04 ps ax**

PID TTY STAT TIME COMMAND

1 ? Rs 0:00 ps ax

[root@localhost ~]# **docker ps -a**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

d3af65149ce3 ubuntu:14.04 "ps ax" 18 seconds ago Exited (0) 18 seconds ago prickly\_volhard

c6d8dbd7cf47 ubuntu:14.04 "echo hello" About a minute ago Exited (0) About a minute ago berserk\_panini

957b14b126af hello-world "/hello" About an hour ago Exited (0) About an hour ago

[root@localhost ~]# **docker run -it ubuntu:14.04 /bin/bash**

root@63cdf89de7e7:/# **ps**

PID TTY TIME CMD

1 ? 00:00:00 bash

14 ? 00:00:00 ps

root@63cdf89de7e7:/# **adduser choga88**

Adding user `choga88' ...

Adding new group `choga88' (1000) ...

Adding new user `choga88' (1000) with group `choga88' ...

Creating home directory `/home/choga88' ...

Copying files from `/etc/skel' ...

Enter new UNIX password:

Retype new UNIX password:

passwd: password updated successfully

Changing the user information for choga88

Enter the new value, or press ENTER for the default

Full Name []: choga88

Room Number []:

Work Phone []:

Home Phone []:

Other []:

Is the information correct? [Y/n] **y**

root@63cdf89de7e7:/# **adduser choga88 sudo**

Adding user `choga88' to group `sudo' ...

Adding user choga88 to group sudo

Done.

root@63cdf89de7e7:/# **exit**

exit

[root@localhost ~]# **docker ps -a**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

63cdf89de7e7 ubuntu:14.04 "/bin/bash" 7 minutes ago Exited (0) 3 seconds ago admiring\_poitras

d3af65149ce3 ubuntu:14.04 "ps ax" 15 minutes ago Exited (0) 14 minutes ago prickly\_volhard

c6d8dbd7cf47 ubuntu:14.04 "echo hello" 16 minutes ago Exited (0) 16 minutes ago berserk\_panini

957b14b126af hello-world "/hello" About an hour ago Exited (0) About an hour ago prickly\_franklin

[root@localhost ~]# **docker run -it ubuntu:14.04 /bin/bash**

root@0ab8ec158c4d:/# **cat /etc/passwd | grep choga88**

root@0ab8ec158c4d:/# **exit**

exit

[root@localhost ~]# **docker ps -a**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

0ab8ec158c4d ubuntu:14.04 "/bin/bash" About a minute ago Exited (1) 22 seconds ago backstabbing\_swanson

63cdf89de7e7 ubuntu:14.04 "/bin/bash" 9 minutes ago Exited (0) 2 minutes ago admiring\_poitras

d3af65149ce3 ubuntu:14.04 "ps ax" 17 minutes ago Exited (0) 17 minutes ago prickly\_volhard

c6d8dbd7cf47 ubuntu:14.04 "echo hello" 18 minutes ago Exited (0) 18 minutes ago berserk\_panini

957b14b126af hello-world "/hello" About an hour ago Exited (0) About an hour ago pri

[root@localhost ~]# **docker run -it ubuntu:14.04 /bin/bash**

root@c9861a51faea:/# **ps**

PID TTY TIME CMD

1 ? 00:00:00 bash

14 ? 00:00:00 ps

root@c9861a51faea:/# [root@localhost ~]# **CTRL + P+ Q**

[root@localhost ~]# **ps -ef**

UID PID PPID C STIME TTY TIME CMD

[root@localhost ~]# **ps -ef | grep docker**

root 20489 1 0 06:11 ? 00:00:11 /usr/bin/dockerd-current --add-runtime docker-runc=/usr/libexec/docker/docker-runc-current --default-runtime=docker-runc --exec-opt native.cgroupdriver=systemd --userland-proxy-path=/usr/libexec/docker/docker-proxy-current --selinux-enabled --log-driver=journald --signature-verification=false

root 20492 20489 0 06:11 ? 00:00:00 /usr/bin/docker-containerd-current -l unix:///var/run/docker/libcontainerd/docker-containerd.sock --shim docker-containerd-shim --metrics-interval=0 --start-timeout 2m --state-dir /var/run/docker/libcontainerd/containerd --runtime docker-runc --runtime-args --systemd-cgroup=true

root 26354 20492 0 08:45 ? 00:00:00 /usr/bin/docker-containerd-shim-current c9861a51faeab55da6353eb5cd18d4226a1f6379c90e302299e7549886ef5415 /var/run/docker/libcontainerd/c9861a51faeab55da6353eb5cd18d4226a1f6379c90e302299e7549886ef5415 /usr/libexec/docker/docker-runc-current

root 26600 24566 0 08:54 pts/0 00:00:00 grep --color=auto dockerroot 26365 26354 0 08:45 pts/1 00:00:00 /bin/bash

[root@localhost ~]# **ps -ef | grep /bin/bash**

root 26365 26354 0 08:45 pts/1 00:00:00 /bin/bash

root 26617 24566 0 08:55 pts/0 00:00:00 grep --color=auto /bin/bash

[root@localhost netns]# **docker stop 957b14b126af**

[root@localhost netns]# **docker rm 957b14b126af**

957b14b126af

[root@localhost netns]# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

docker.io/ubuntu 14.04 54333f1de4ed Less than a second ago 188 MB

docker.io/hello-world latest 1815c82652c0 2 weeks ago 1.84 kB

[root@localhost netns]# **docker rmi docker.io/hello-world**

Untagged: docker.io/hello-world:latest

Untagged: docker.io/hello-world@sha256:f3b3b28a45160805bb16542c9531888519430e9e6d6ffc09d72261b0d26ff74f

Deleted: sha256:1815c82652c03bfd8644afda26fb184f2ed891d921b20a0703b46768f9755c57

Deleted: sha256:45761469c965421a92a69cc50e92c01e0cfa94fe026cdd1233445ea00e96289a

[root@localhost ~]# **docker run -d ubuntu:14.04 ping 127.0.0.1 -c 50**

69a7397f0ac12126efdcfe1803c19651c7be1fa4f1ac92198b4f915167ee671c

[root@localhost ~]# **docker ps**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

69a7397f0ac1 ubuntu:14.04 "ping 127.0.0.1 -c 50" 5 seconds ago Up 4 seconds stoic\_shockley

[root@localhost ~]# **docker logs 69a7397f0ac1**

PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data.

64 bytes from 127.0.0.1: icmp\_seq=1 ttl=64 time=0.046 ms

64 bytes from 127.0.0.1: icmp\_seq=2 ttl=64 time=0.102 ms

64 bytes from 127.0.0.1: icmp\_seq=3 ttl=64 time=0.074 ms

64 bytes from 127.0.0.1: icmp\_seq=4 ttl=64 time=0.118 ms

64 bytes from 127.0.0.1: icmp\_seq=5 ttl=64 time=0.081 ms

64 bytes from 127.0.0.1: icmp\_seq=6 ttl=64 time=0.082 ms

[root@localhost ~]# **docker run -d -P tomcat:7**

Unable to find image 'tomcat:7' locally

Trying to pull repository docker.io/library/tomcat ...

7: Pulling from docker.io/library/tomcat

9f0706ba7422: Pull complete

d3942a742d22: Pull complete

0d17d95ac33c: Pull complete

f04ca3b17351: Pull complete

5a62e7f41ccf: Pull complete

7d3e99d707e2: Pull complete

3f19a9c1223f: Pull complete

36c4b40d46b9: Pull complete

3ddad7eb3e6b: Pull complete

cb2d23e2caf6: Pull complete

355c36479a25: Pull complete

233705a01875: Pull complete

Digest: sha256:c61a08d34380232b945b6fbdf9ce128b41cff42fd7441826092a101725b82d55

8f700c147b3ffd3ca8fffa319431146f246c913c7ed6f17ebb1e37e8383e5c5b

[root@localhost ~]# **docker ps**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

8f700c147b3f tomcat:7 "catalina.sh run" 7 seconds ago Up 6 seconds 0.0.0.0:32768->8080/tcp mad\_elion

[root@localhost ~]# **docker run -it ubuntu:14.04 bash**

root@5ed375aafa36:/#

root@5ed375aafa36:/# **mkdir IMAGE\_TEST**

root@5ed375aafa36:/# **ls**

IMAGE\_TEST bin boot dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var

root@5ed375aafa36:/# **exit**

exit

[root@localhost ~]# **docker commit 5ed375aafa36 nimi88/myapp:1.0**

sha256:564ecdee887c29139d38a7f7b3ae633003caf7dd2913ae9572ff62ea13eb773a

[root@localhost ~]# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

docker.io/tomcat 7 3bad47798a2c Less than a second ago 357.3 MB

docker.io/ubuntu 14.04 54333f1de4ed Less than a second ago 188 MB

nimi88/myapp 1.0 564ecdee887c 36 seconds ago 188 MB

[root@localhost ~]# **docker run -it 564ecdee887c bash**

root@1156aa3ff71f:/# **ls**

IMAGE\_TEST bin boot dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var

root@1156aa3ff71f:/#

[root@localhost ~]# **mkdir test**

[root@localhost ~]# **cd test**

[root@localhost test]# **vi Dockerfile**

**FROM ubuntu:14.04**

**RUN apt-get update**

**RUN apt-get install -y curl**

[root@localhost test]# **docker build -t nimi88/test:1.0 .**

Sending build context to Docker daemon 2.048 kB

Step 1 : FROM ubuntu:14.04

---> 54333f1de4ed

Step 2 : RUN apt-get update

---> Running in 0d940d8a29ea

Ign http://archive.ubuntu.com trusty InRelease

Get:1 http://archive.ubuntu.com trusty-updates InRelease [65.9 kB]

Get:2 http://archive.ubuntu.com trusty-security InRelease [65.9 kB]

Get:3 http://archive.ubuntu.com trusty Release.gpg [933 B]

Get:4 http://archive.ubuntu.com trusty Release [58.5 kB]

Get:5 http://archive.ubuntu.com trusty-updates/main Sources [495 kB]

Get:6 http://archive.ubuntu.com trusty-updates/restricted Sources [6470 B]

Get:7 http://archive.ubuntu.com trusty-updates/universe Sources [234 kB]

Get:8 http://archive.ubuntu.com trusty-updates/main amd64 Packages [1247 kB]

Get:9 http://archive.ubuntu.com trusty-updates/restricted amd64 Packages [21.2 kB]

Get:10 http://archive.ubuntu.com trusty-updates/universe amd64 Packages [541 kB]

Get:11 http://archive.ubuntu.com trusty-security/main Sources [171 kB]

Get:12 http://archive.ubuntu.com trusty-security/restricted Sources [5068 B]

Get:13 http://archive.ubuntu.com trusty-security/universe Sources [71.8 kB]

Get:14 http://archive.ubuntu.com trusty-security/main amd64 Packages [789 kB]

Get:15 http://archive.ubuntu.com trusty-security/restricted amd64 Packages [17.9 kB]

Get:16 http://archive.ubuntu.com trusty-security/universe amd64 Packages [224 kB]

Get:17 http://archive.ubuntu.com trusty/main Sources [1335 kB]

Get:18 http://archive.ubuntu.com trusty/restricted Sources [5335 B]

Get:19 http://archive.ubuntu.com trusty/universe Sources [7926 kB]

Get:20 http://archive.ubuntu.com trusty/main amd64 Packages [1743 kB]

Get:21 http://archive.ubuntu.com trusty/restricted amd64 Packages [16.0 kB]

Get:22 http://archive.ubuntu.com trusty/universe amd64 Packages [7589 kB]

Fetched 22.6 MB in 52s (432 kB/s)

Reading package lists...

---> 11e4d11c2f67

Removing intermediate container 0d940d8a29ea

Step 3 : RUN apt-get install -y curl

---> Running in af8d7a61931f

Reading package lists...

Building dependency tree...

Reading state information...

The following extra packages will be installed:

ca-certificates krb5-locales libasn1-8-heimdal libcurl3 libgssapi-krb5-2

libgssapi3-heimdal libhcrypto4-heimdal libheimbase1-heimdal

libheimntlm0-heimdal libhx509-5-heimdal libidn11 libk5crypto3 libkeyutils1

libkrb5-26-heimdal libkrb5-3 libkrb5support0 libldap-2.4-2

libroken18-heimdal librtmp0 libsasl2-2 libsasl2-modules libsasl2-modules-db

libwind0-heimdal openssl

Suggested packages:

krb5-doc krb5-user libsasl2-modules-otp libsasl2-modules-ldap

libsasl2-modules-sql libsasl2-modules-gssapi-mit

libsasl2-modules-gssapi-heimdal

The following NEW packages will be installed:

ca-certificates curl krb5-locales libasn1-8-heimdal libcurl3

libgssapi-krb5-2 libgssapi3-heimdal libhcrypto4-heimdal libheimbase1-heimdal

libheimntlm0-heimdal libhx509-5-heimdal libidn11 libk5crypto3 libkeyutils1

libkrb5-26-heimdal libkrb5-3 libkrb5support0 libldap-2.4-2

libroken18-heimdal librtmp0 libsasl2-2 libsasl2-modules libsasl2-modules-db

libwind0-heimdal openssl

0 upgraded, 25 newly installed, 0 to remove and 0 not upgraded.

Need to get 2683 kB of archives.

After this operation, 11.6 MB of additional disk space will be used.

Get:1 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libroken18-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [39.9 kB]

Get:2 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libasn1-8-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [160 kB]

Get:3 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libkrb5support0 amd64 1.12+dfsg-2ubuntu5.3 [30.7 kB]

Get:4 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libk5crypto3 amd64 1.12+dfsg-2ubuntu5.3 [79.6 kB]

Get:5 http://archive.ubuntu.com/ubuntu/ trusty/main libkeyutils1 amd64 1.5.6-1 [7318 B]

Get:6 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libkrb5-3 amd64 1.12+dfsg-2ubuntu5.3 [262 kB]

Get:7 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libgssapi-krb5-2 amd64 1.12+dfsg-2ubuntu5.3 [114 kB]

Get:8 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libhcrypto4-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [84.1 kB]

Get:9 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libheimbase1-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [29.0 kB]

Get:10 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libwind0-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [47.9 kB]

Get:11 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libhx509-5-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [104 kB]

Get:12 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libkrb5-26-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [196 kB]

Get:13 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libheimntlm0-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [15.2 kB]

Get:14 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libgssapi3-heimdal amd64 1.6~git20131207+dfsg-1ubuntu1.2 [89.7 kB]

Get:15 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libidn11 amd64 1.28-1ubuntu2.1 [94.4 kB]

Get:16 http://archive.ubuntu.com/ubuntu/ trusty/main libsasl2-modules-db amd64 2.1.25.dfsg1-17build1 [14.9 kB]

Get:17 http://archive.ubuntu.com/ubuntu/ trusty/main libsasl2-2 amd64 2.1.25.dfsg1-17build1 [56.5 kB]

Get:18 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libldap-2.4-2 amd64 2.4.31-1+nmu2ubuntu8.4 [153 kB]

Get:19 http://archive.ubuntu.com/ubuntu/ trusty-updates/main librtmp0 amd64 2.4+20121230.gitdf6c518-1ubuntu0.1 [50.4 kB]

Get:20 http://archive.ubuntu.com/ubuntu/ trusty-updates/main libcurl3 amd64 7.35.0-1ubuntu2.10 [173 kB]

Get:21 http://archive.ubuntu.com/ubuntu/ trusty-updates/main openssl amd64 1.0.1f-1ubuntu2.22 [489 kB]

Get:22 http://archive.ubuntu.com/ubuntu/ trusty-updates/main ca-certificates all 20160104ubuntu0.14.04.1 [190 kB]

Get:23 http://archive.ubuntu.com/ubuntu/ trusty-updates/main krb5-locales all 1.12+dfsg-2ubuntu5.3 [13.5 kB]

Get:24 http://archive.ubuntu.com/ubuntu/ trusty/main libsasl2-modules amd64 2.1.25.dfsg1-17build1 [64.3 kB]

Get:25 http://archive.ubuntu.com/ubuntu/ trusty-updates/main curl amd64 7.35.0-1ubuntu2.10 [123 kB]

debconf: unable to initialize frontend: Dialog

debconf: (TERM is not set, so the dialog frontend is not usable.)

debconf: falling back to frontend: Readline

debconf: unable to initialize frontend: Readline

debconf: (This frontend requires a controlling tty.)

debconf: falling back to frontend: Teletype

dpkg-preconfigure: unable to re-open stdin:

Fetched 2683 kB in 18s (148 kB/s)

Selecting previously unselected package libroken18-heimdal:amd64.

(Reading database ... 11569 files and directories currently installed.)

Preparing to unpack .../libroken18-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libroken18-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libasn1-8-heimdal:amd64.

Preparing to unpack .../libasn1-8-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libasn1-8-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libkrb5support0:amd64.

Preparing to unpack .../libkrb5support0\_1.12+dfsg-2ubuntu5.3\_amd64.deb ...

Unpacking libkrb5support0:amd64 (1.12+dfsg-2ubuntu5.3) ...

Selecting previously unselected package libk5crypto3:amd64.

Preparing to unpack .../libk5crypto3\_1.12+dfsg-2ubuntu5.3\_amd64.deb ...

Unpacking libk5crypto3:amd64 (1.12+dfsg-2ubuntu5.3) ...

Selecting previously unselected package libkeyutils1:amd64.

Preparing to unpack .../libkeyutils1\_1.5.6-1\_amd64.deb ...

Unpacking libkeyutils1:amd64 (1.5.6-1) ...

Selecting previously unselected package libkrb5-3:amd64.

Preparing to unpack .../libkrb5-3\_1.12+dfsg-2ubuntu5.3\_amd64.deb ...

Unpacking libkrb5-3:amd64 (1.12+dfsg-2ubuntu5.3) ...

Selecting previously unselected package libgssapi-krb5-2:amd64.

Preparing to unpack .../libgssapi-krb5-2\_1.12+dfsg-2ubuntu5.3\_amd64.deb ...

Unpacking libgssapi-krb5-2:amd64 (1.12+dfsg-2ubuntu5.3) ...

Selecting previously unselected package libhcrypto4-heimdal:amd64.

Preparing to unpack .../libhcrypto4-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libhcrypto4-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libheimbase1-heimdal:amd64.

Preparing to unpack .../libheimbase1-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libheimbase1-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libwind0-heimdal:amd64.

Preparing to unpack .../libwind0-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libwind0-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libhx509-5-heimdal:amd64.

Preparing to unpack .../libhx509-5-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libhx509-5-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libkrb5-26-heimdal:amd64.

Preparing to unpack .../libkrb5-26-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libkrb5-26-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libheimntlm0-heimdal:amd64.

Preparing to unpack .../libheimntlm0-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libheimntlm0-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libgssapi3-heimdal:amd64.

Preparing to unpack .../libgssapi3-heimdal\_1.6~git20131207+dfsg-1ubuntu1.2\_amd64.deb ...

Unpacking libgssapi3-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Selecting previously unselected package libidn11:amd64.

Preparing to unpack .../libidn11\_1.28-1ubuntu2.1\_amd64.deb ...

Unpacking libidn11:amd64 (1.28-1ubuntu2.1) ...

Selecting previously unselected package libsasl2-modules-db:amd64.

Preparing to unpack .../libsasl2-modules-db\_2.1.25.dfsg1-17build1\_amd64.deb ...

Unpacking libsasl2-modules-db:amd64 (2.1.25.dfsg1-17build1) ...

Selecting previously unselected package libsasl2-2:amd64.

Preparing to unpack .../libsasl2-2\_2.1.25.dfsg1-17build1\_amd64.deb ...

Unpacking libsasl2-2:amd64 (2.1.25.dfsg1-17build1) ...

Selecting previously unselected package libldap-2.4-2:amd64.

Preparing to unpack .../libldap-2.4-2\_2.4.31-1+nmu2ubuntu8.4\_amd64.deb ...

Unpacking libldap-2.4-2:amd64 (2.4.31-1+nmu2ubuntu8.4) ...

Selecting previously unselected package librtmp0:amd64.

Preparing to unpack .../librtmp0\_2.4+20121230.gitdf6c518-1ubuntu0.1\_amd64.deb ...

Unpacking librtmp0:amd64 (2.4+20121230.gitdf6c518-1ubuntu0.1) ...

Selecting previously unselected package libcurl3:amd64.

Preparing to unpack .../libcurl3\_7.35.0-1ubuntu2.10\_amd64.deb ...

Unpacking libcurl3:amd64 (7.35.0-1ubuntu2.10) ...

Selecting previously unselected package openssl.

Preparing to unpack .../openssl\_1.0.1f-1ubuntu2.22\_amd64.deb ...

Unpacking openssl (1.0.1f-1ubuntu2.22) ...

Selecting previously unselected package ca-certificates.

Preparing to unpack .../ca-certificates\_20160104ubuntu0.14.04.1\_all.deb ...

Unpacking ca-certificates (20160104ubuntu0.14.04.1) ...

Selecting previously unselected package krb5-locales.

Preparing to unpack .../krb5-locales\_1.12+dfsg-2ubuntu5.3\_all.deb ...

Unpacking krb5-locales (1.12+dfsg-2ubuntu5.3) ...

Selecting previously unselected package libsasl2-modules:amd64.

Preparing to unpack .../libsasl2-modules\_2.1.25.dfsg1-17build1\_amd64.deb ...

Unpacking libsasl2-modules:amd64 (2.1.25.dfsg1-17build1) ...

Selecting previously unselected package curl.

Preparing to unpack .../curl\_7.35.0-1ubuntu2.10\_amd64.deb ...

Unpacking curl (7.35.0-1ubuntu2.10) ...

Setting up libroken18-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libasn1-8-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libkrb5support0:amd64 (1.12+dfsg-2ubuntu5.3) ...

Setting up libk5crypto3:amd64 (1.12+dfsg-2ubuntu5.3) ...

Setting up libkeyutils1:amd64 (1.5.6-1) ...

Setting up libkrb5-3:amd64 (1.12+dfsg-2ubuntu5.3) ...

Setting up libgssapi-krb5-2:amd64 (1.12+dfsg-2ubuntu5.3) ...

Setting up libhcrypto4-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libheimbase1-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libwind0-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libhx509-5-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libkrb5-26-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libheimntlm0-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libgssapi3-heimdal:amd64 (1.6~git20131207+dfsg-1ubuntu1.2) ...

Setting up libidn11:amd64 (1.28-1ubuntu2.1) ...

Setting up libsasl2-modules-db:amd64 (2.1.25.dfsg1-17build1) ...

Setting up libsasl2-2:amd64 (2.1.25.dfsg1-17build1) ...

Setting up libldap-2.4-2:amd64 (2.4.31-1+nmu2ubuntu8.4) ...

Setting up librtmp0:amd64 (2.4+20121230.gitdf6c518-1ubuntu0.1) ...

Setting up libcurl3:amd64 (7.35.0-1ubuntu2.10) ...

Setting up openssl (1.0.1f-1ubuntu2.22) ...

Setting up ca-certificates (20160104ubuntu0.14.04.1) ...

debconf: unable to initialize frontend: Dialog

debconf: (TERM is not set, so the dialog frontend is not usable.)

debconf: falling back to frontend: Readline

debconf: unable to initialize frontend: Readline

debconf: (This frontend requires a controlling tty.)

debconf: falling back to frontend: Teletype

Setting up krb5-locales (1.12+dfsg-2ubuntu5.3) ...

Setting up libsasl2-modules:amd64 (2.1.25.dfsg1-17build1) ...

Setting up curl (7.35.0-1ubuntu2.10) ...

Processing triggers for libc-bin (2.19-0ubuntu6.13) ...

Processing triggers for ca-certificates (20160104ubuntu0.14.04.1) ...

Updating certificates in /etc/ssl/certs... 173 added, 0 removed; done.

Running hooks in /etc/ca-certificates/update.d....done.

---> 68f10f66c3fe

Removing intermediate container af8d7a61931f

Successfully built 68f10f66c3fe

[root@localhost test]# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

docker.io/tomcat 7 3bad47798a2c Less than a second ago 357.3 MB

docker.io/ubuntu 14.04 54333f1de4ed Less than a second ago 188 MB

nimi88/test 1.0 68f10f66c3fe 2 minutes ago 222 MB

nimi88/myapp 2.0 700acd2a8fc1 43 minutes ago 188 MB

nimi88/myapp 1.0 564ecdee887c 52 minutes ago 188 MB

[root@192 test]# **vi Dockerfile**

[root@192 test]# **cat Dockerfile**

FROM ubuntu:14.04

RUN apt-get update && apt-get install -y curl

CMD ping 127.0.0.1 -c 50

[root@192 test]# **docker build -t nimi88/test:1.1 .**

Sending build context to Docker daemon 2.048 kB

Step 1 : FROM ubuntu:14.04

---> 54333f1de4ed

Step 2 : RUN apt-get update && apt-get install -y curl

---> Using cache

---> 82dd1a27a29a

Step 3 : CMD ping 127.0.0.1 -c 50

---> Running in 57d40b173e8d

---> e873bfb243ac

Removing intermediate container 57d40b173e8d

Successfully built e873bfb243ac

[root@192 test]# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

docker.io/tomcat 7 3bad47798a2c Less than a second ago 357.3 MB

docker.io/ubuntu 14.04 54333f1de4ed Less than a second ago 188 MB

nimi88/test 1.1 e873bfb243ac 17 seconds ago 222 MB

nimi88/test 1.0 82dd1a27a29a 13 minutes ago 222 MB

<none> <none> 68f10f66c3fe 3 hours ago 222 MB

nimi88/myapp 2.0 700acd2a8fc1 3 hours ago 188 MB

nimi88/myapp 1.0 564ecdee887c 3 hours ago 188 MB

[root@192 test]# **docker run nimi88/test:1.1**

PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data.

64 bytes from 127.0.0.1: icmp\_seq=1 ttl=64 time=0.135 ms

64 bytes from 127.0.0.1: icmp\_seq=2 ttl=64 time=0.049 ms

64 bytes from 127.0.0.1: icmp\_seq=3 ttl=64 time=0.041 ms

[root@192 test]# **docker run nimi88/test:1.1 echo "hello"**

hello

[root@192 test]# **vi Dockerfile**

[root@192 test]# **cat Dockerfile**

FROM ubuntu:14.04

RUN apt-get update && apt-get install -y curl

#CMD ping 127.0.0.1 -c 50

ENTRYPOINT ["ping"]

[root@192 test]# **docker build -t nimi88/test:1.2 .**

Sending build context to Docker daemon 2.048 kB

Step 1 : FROM ubuntu:14.04

---> 54333f1de4ed

Step 2 : RUN apt-get update && apt-get install -y curl

---> Using cache

---> 82dd1a27a29a

Step 3 : ENTRYPOINT ping

---> Running in 04038a34a001

---> fd9da68d04c8

Removing intermediate container 04038a34a001

Successfully built fd9da68d04c8

[root@192 test]# **docker run nimi88/test:1.2**

Usage: ping [-aAbBdDfhLnOqrRUvV] [-c count] [-i interval] [-I interface]

[-m mark] [-M pmtudisc\_option] [-l preload] [-p pattern] [-Q tos]

[-s packetsize] [-S sndbuf] [-t ttl] [-T timestamp\_option]

[-w deadline] [-W timeout] [hop1 ...] destination

[root@192 test]# **docker run nimi88/test:1.2 127.0.0.1 -c 10**

PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data.

64 bytes from 127.0.0.1: icmp\_seq=1 ttl=64 time=0.038 ms

64 bytes from 127.0.0.1: icmp\_seq=2 ttl=64 time=0.024 ms

64 bytes from 127.0.0.1: icmp\_seq=3 ttl=64 time=0.061 ms

[root@192 test]# **docker run -d tomcat:7**

07dad6eeb39aa339ea477960c9d6925c0d6e55f4ea15ca4a1dcfda99e84f564e

[root@192 test]# **docker ps**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

07dad6eeb39a tomcat:7 "catalina.sh run" 11 seconds ago Up 9 seconds 8080/tcp pensive\_mcclintock

3b867ea4e7ae nimi88/test:1.0 "bash" About an hour ago Up About an hour silly\_montalcini

dfccf44bb15e nimi88/myapp:2.0 "bash" 4 hours ago Up 4 hours admiring\_morse

1156aa3ff71f 564ecdee887c "bash" 4 hours ago Up 4 hours big\_leakey

[root@192 test]# **docker exec -it 07dad6eeb39a bash**

root@07dad6eeb39a:/usr/local/tomcat# **ps -ef**

UID PID PPID C STIME TTY TIME CMD

root 1 0 9 20:19 ? 00:00:02 /docker-java-home/jre/bin/java -Djava.util.logging.config.file=/u

root 20 0 0 20:19 ? 00:00:00 bash

root 24 20 0 20:19 ? 00:00:00 ps –ef

root@07dad6eeb39a:/usr/local/tomcat# **exit**

exit

[root@192 test]# **docker ps**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

07dad6eeb39a tomcat:7 "catalina.sh run" About a minute ago Up About a minute 8080/tcp pensive\_mcclintock

3b867ea4e7ae nimi88/test:1.0 "bash" About an hour ago Up About an hour silly\_montalcini

dfccf44bb15e nimi88/myapp:2.0 "bash" 4 hours ago Up 4 hours admiring\_morse

1156aa3ff71f 564ecdee887c "bash" 4 hours ago Up 4 hours big\_leakey

[root@192 test]# **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 (nimi88):

Password:

Login Succeeded

[root@192 test]# **docker push nimi88/test:1.0**

The push refers to a repository [docker.io/nimi88/test]

75164612741f: Pushed

4455b4d81934: Mounted from library/ubuntu

4622ee8f36ae: Mounted from library/ubuntu

1ae9c3d1e0b7: Mounted from library/ubuntu

150e95c79e16: Mounted from library/ubuntu

1b0c71361973: Mounted from library/ubuntu

1.0: digest: sha256:474c2e430740f9f646743955a001af557f5685fadde52508ce0bc230a91adbb7 size: 1571

[root@192 test]# **docker tag 564ecdee887c nimi88/choga88:3.0**

[root@192 test]# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

docker.io/tomcat 7 3bad47798a2c Less than a second ago 357.3 MB

docker.io/ubuntu 14.04 54333f1de4ed Less than a second ago 188 MB

nimi88/test 1.2 fd9da68d04c8 About an hour ago 222 MB

nimi88/test 1.1 e873bfb243ac About an hour ago 222 MB

nimi88/test 1.0 82dd1a27a29a About an hour ago 222 MB

<none> <none> 68f10f66c3fe 4 hours ago 222 MB

nimi88/myapp 2.0 700acd2a8fc1 5 hours ago 188 MB

nimi88/choga88 3.0 564ecdee887c 5 hours ago 188 MB

nimi88/myapp 1.0 564ecdee887c 5 hours ago 188 MB

[root@192 test]# **docker push nimi88/choga88:3.0**

The push refers to a repository [docker.io/nimi88/choga88]

92ffa279c1e9: Pushed

4455b4d81934: Mounted from nimi88/test

4622ee8f36ae: Mounted from nimi88/test

1ae9c3d1e0b7: Mounted from nimi88/test

150e95c79e16: Mounted from nimi88/test

1b0c71361973: Mounted from nimi88/test

3.0: digest: sha256:f6f2ac40e2366eaf02276085fdb765efee0e2437e95ce94dabc8d7912acd8219 size: 1566

[root@192 test]# **docker rmi nimi88/choga88:3.0**

Untagged: nimi88/choga88:3.0

Untagged: nimi88/choga88@sha256:f6f2ac40e2366eaf02276085fdb765efee0e2437e95ce94dabc8d7912acd8219

[root@192 test]# **docker rmi nimi88/test:1.0**

Untagged: nimi88/test:1.0

Untagged: nimi88/test@sha256:474c2e430740f9f646743955a001af557f5685fadde52508ce0bc230a91adbb7

[root@192 test]# **docker pull nimi88/test:1.0**

Trying to pull repository docker.io/nimi88/test ...

1.0: Pulling from docker.io/nimi88/test

Digest: sha256:474c2e430740f9f646743955a001af557f5685fadde52508ce0bc230a91adbb7

[root@192 test]# **docker pull nimi88/choga88:3.0**

Trying to pull repository docker.io/nimi88/choga88 ...

3.0: Pulling from docker.io/nimi88/choga88

Digest: sha256:f6f2ac40e2366eaf02276085fdb765efee0e2437e95ce94dabc8d7912acd8219

[root@192 test]# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

docker.io/tomcat 7 3bad47798a2c Less than a second ago 357.3 MB

docker.io/ubuntu 14.04 54333f1de4ed Less than a second ago 188 MB

nimi88/test 1.2 fd9da68d04c8 About an hour ago 222 MB

nimi88/test 1.1 e873bfb243ac About an hour ago 222 MB

docker.io/nimi88/test 1.0 82dd1a27a29a About an hour ago 222 MB

<none> <none> 68f10f66c3fe 4 hours ago 222 MB

nimi88/myapp 2.0 700acd2a8fc1 5 hours ago 188 MB

docker.io/nimi88/choga88 3.0 564ecdee887c 5 hours ago 188 MB

nimi88/myapp 1.0 564ecdee887c 5 hours ago 188 MB

[root@localhost ~]# **docker run -d -P -v /myvolume nginx:1.7**

87b69c43f6e92232612a29ea62d5075f8dd8af8fc6a11a279980087ffba8b569

[root@localhost ~]# **docker ps**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

87b69c43f6e9 nginx:1.7 "nginx -g 'daemon off" 18 seconds ago Up 17 seconds 0.0.0.0:32771->80/tcp, 0.0.0.0:32770->443/tcp ecstati c\_mestorf

[root@localhost ~]# **docker exec -it 87b69c43f6e9 bash**

root@87b69c43f6e9:/# **ls**

bin dev home lib64 mnt opt root sbin srv tmp var

boot etc lib media myvolume proc run selinux sys usr

root@87b69c43f6e9:/# **cd myvolume/**

root@87b69c43f6e9:/myvolume# **touch test**

root@87b69c43f6e9:/myvolume# **CTRL+P+Q**

[root@localhost ~]# **cd /var/lib/docker/volumes/**

[root@localhost volumes]# **ls -lrt**

total 24

drwxr-xr-x. 3 root root 19 Jul 25 07:28 9f79a000418d5d5f3d6739b221977918ef10132eaffc3b2b26844528e50bb309

drwxr-xr-x. 3 root root 19 Jul 25 07:28 352bf1340f40a44a7bdfdd20d3d1282149bbdc2b9268c6573a614c780a754230

drwxr-xr-x. 3 root root 19 Jul 25 07:34 5401db0fee1196200f32ab7ec596205fa1b98ba4daca68097af1c878ec186b67

-rw-------. 1 root root 32768 Jul 25 07:34 metadata.db

drwxr-xr-x. 3 root root 19 Jul 25 07:34 48168328706e011e16c2d923b20bc71dfecaed2abf0a7c142a5090484e248c1d

[root@localhost volumes]# **cd 5401db0fee1196200f32ab7ec596205fa1b98ba4daca68097af1c878ec186b67/**

[root@localhost 5401db0fee1196200f32ab7ec596205fa1b98ba4daca68097af1c878ec186b67]# **ls -al**

total 4

drwxr-xr-x. 3 root root 19 Jul 25 07:34 .

drwx------. 6 root root 4096 Jul 25 07:34 ..

drwxr-xr-x. 2 root root 18 Jul 25 07:35 \_data

[root@localhost 5401db0fee1196200f32ab7ec596205fa1b98ba4daca68097af1c878ec186b67]# **cd \_data/**

[root@localhost \_data]# **ls**

test

[root@localhost \_data]# **docker stop 87b69c43f6e9**

87b69c43f6e9

[root@localhost \_data]# **docker commit 87b69c43f6e9 volume:1.0**

sha256:94ccbd627bfd7419647225507f1e2d4865442b41ceb699b9f6c2ad0ba1273c3c

[root@localhost \_data]# **docker run -it volume:1.0 bash**

root@9304fea883d3:/# **ls**

bin boot dev etc home lib lib64 media mnt myvolume opt proc root run sbin selinux srv sys tmp usr var

root@9304fea883d3:/# **cd myvolume/**

root@9304fea883d3:/myvolume# ls

[root@localhost ~]# **docker run -d -p 8080:80 nginx**

a751190070990832af680530830e5c3588864002aa66f67719f7913a9302b36c

[root@localhost ~]# **docker run -d -P nginx**

7a3442f54c31982f8aec88430644fd41c2a8a6e50d8b1f483b989cc0c8ff1665

[root@localhost ~]# **docker ps**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

7a3442f54c31 nginx "nginx -g 'daemon off" 4 seconds ago Up 2 seconds 0.0.0.0:32776->80/tcp jolly\_leakey

a75119007099 nginx "nginx -g 'daemon off" 15 minutes ago Up 15 minutes 0.0.0.0:8080->80/tcp suspicious\_dijkstra

6393fbfcf99d ubuntu "/bin/bash" 3 hours ago Up 3 hours hello-volume1

9304fea883d3 volume:1.0 "bash"

[root@localhost ~]# **iptables -t nat -L**

Chain PREROUTING (policy ACCEPT)

target prot opt source destination

DOCKER all -- anywhere anywhere ADDRTYPE match dst-type LOCAL

Chain INPUT (policy ACCEPT)

target prot opt source destination

Chain OUTPUT (policy ACCEPT)

target prot opt source destination

DOCKER all -- anywhere !loopback/8 ADDRTYPE match dst-type LOCAL

Chain POSTROUTING (policy ACCEPT)

target prot opt source destination

MASQUERADE all -- 172.17.0.0/16 anywhere

MASQUERADE tcp -- 172.17.0.3 172.17.0.3 tcp dpt:http

MASQUERADE tcp -- 172.17.0.4 172.17.0.4 tcp dpt:http

Chain DOCKER (2 references)

target prot opt source destination

RETURN all -- anywhere anywhere

DNAT tcp -- anywhere anywhere tcp dpt:webcache to:172.17.0.3:80

DNAT tcp -- anywhere anywhere tcp dpt:filenet-peior to:172.17.0.4:80

[root@localhost ~]# **netstat -anlp | grep 8080**

tcp6 0 0 :::8080 :::\* LISTEN 11093/docker-proxy-

[root@localhost ~]# **netstat -anlp | grep 32776**

tcp6 0 0 :::32776 :::\* LISTEN 11633/docker-proxy-

[root@localhost ~]# **docker run -d --name dbms postgres**

Unable to find image 'postgres:latest' locally

Trying to pull repository docker.io/library/postgres ...

latest: Pulling from docker.io/library/postgres

9f0706ba7422: Already exists

df3070b9fd62: Pull complete

945954562465: Pull complete

4fa64a58ef1a: Pull complete

796db2a3276b: Pull complete

10e84c2461e4: Pull complete

22e2459f9d56: Pull complete

c5037dff1690: Pull complete

98b61d2ebe8d: Pull complete

3dd32c7a376f: Pull complete

3e120e164d93: Pull complete

e3b494ed0617: Pull complete

34cfe40f51e3: Pull complete

Digest: sha256:e92fe21f695d27be7050284229a1c8c63ac10d88cba58d779c243566e125aa34

968b9a4b6101203b2350352c94dcd5218793971ebec95921d2f2cf5555a66a2a

[root@localhost ~]# **docker run -d -P --name web --link dbms:db nginx**

15567d0b4bb32e4fec78c187027b3a0395906f235ae6ed148b29ee8d2d861621

[root@localhost ~]# **dokcer ps**

-bash: dokcer: command not found

[root@localhost ~]# docker ps

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

15567d0b4bb3 nginx "nginx -g 'daemon off" 6 seconds ago Up 5 seconds 0.0.0.0:32778->80/tcp web

968b9a4b6101 postgres "docker-entrypoint.sh" 8 minutes ago Up 8 minutes 5432/tcp dbms

7a3442f54c31 nginx "nginx -g 'daemon off" 32 minutes ago Up 32 minutes 0.0.0.0:32776->80/tcp jolly\_leakey

a75119007099 nginx "nginx -g 'daemon off" 48 minutes ago Up 48 minutes 0.0.0.0:8080->80/tcp suspicious\_dijkstra

6393fbfcf99d ubuntu "/bin/bash" 4 hours ago Up 4 hours hello-volume1

9304fea883d3 volume:1.0 "bash" 5 hours ago Up 5 hours 80/tcp, 443/tcp si

[root@localhost ~]# **docker exec -it 15567d0b4bb3 bash**

root@15567d0b4bb3:/# **cat /etc/hosts**

127.0.0.1 localhost

::1 localhost ip6-localhost ip6-loopback

fe00::0 ip6-localnet

ff00::0 ip6-mcastprefix

ff02::1 ip6-allnodes

ff02::2 ip6-allrouters

172.17.0.5 db 968b9a4b6101 dbms

172.17.0.6 15567d0b4bb3

[root@localhost ~]# **docker network ls**

NETWORK ID NAME DRIVER SCOPE

918f79c72b8e bridge bridge local

f5805744dc61 host host local

b206c0ee9a81 none null local

[root@localhost ~]# **docker run --net=host --name web05 -P -d httpd**

e5c1958aa5221715bd7c1d12bf1cdd5e8469681bd9d93953fff99beab9834b54

[root@localhost ~]# **docker ps**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

e5c1958aa522 httpd "httpd-foreground" 5 seconds ago Up 4 seconds web05

5d4adea2060a nginx "nginx -g 'daemon off" 5 hours ago Up 5 hours 0.0.0.0:8081->80/tcp web4

cdda10943e88 mongo "docker-entrypoint.sh" 5 hours ago Up 5 hours 27017/tcp db

15567d0b4bb3 nginx "nginx -g 'daemon off" 6 hours ago Up 6 hours 0.0.0.0:32778->80/tcp web

968b9a4b6101 postgres "docker-entrypoint.sh" 6 hours ago Up 6 hours 5432/tcp dbms

7a3442f54c31 nginx "nginx -g 'daemon off" 6 hours ago Up 6 hours 0.0.0.0:32776->80/tcp jolly\_leakey

a75119007099 nginx "nginx -g 'daemon off" 6 hours ago Up 6 hours 0.0.0.0:8080->80/tcp suspicious\_dijkstra

6393fbfcf99d ubuntu "/bin/bash" 10 hours ago Up 10 hours hello-volume1

[root@localhost ~]# **docker exec -it e5c1958aa522 bash**

root@localhost:/usr/local/apache2# **ip a**

1: lo: <LOOPBACK,UP,LOWER\_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1

link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00

inet 127.0.0.1/8 scope host lo

valid\_lft forever preferred\_lft forever

inet6 ::1/128 scope host

valid\_lft forever preferred\_lft forever

2: ens33: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc pfifo\_fast state UP group default qlen 1000

link/ether 00:0c:29:2b:9e:6c brd ff:ff:ff:ff:ff:ff

inet 192.168.17.203/24 brd 192.168.17.255 scope global dynamic ens33

valid\_lft 1141sec preferred\_lft 1141sec

inet6 fe80::ac7c:18e5:fadc:ebe9/64 scope link

valid\_lft forever preferred\_lft forever

3: docker0: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc noqueue state UP group default

link/ether 02:42:b1:20:0a:e6 brd ff:ff:ff:ff:ff:ff

inet 172.17.0.1/16 scope global docker0

valid\_lft forever preferred\_lft forever

inet6 fe80::42:b1ff:fe20:ae6/64 scope link

valid\_lft forever preferred\_lft forever

31: veth5d990b0@if30: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc noqueue master docker0 state UP group default

link/ether 52:d7:44:53:f4:3b brd ff:ff:ff:ff:ff:ff

inet6 fe80::50d7:44ff:fe53:f43b/64 scope link

valid\_lft forever preferred\_lft forever

[root@localhost **~]# docker run --net=none --name web06 -P -d httpd**

d64a09ac0a32d859d3a17afc0044dc1c6a77cb584647f5695998540b80a8d868

[root@localhost ~]# docker ps

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

d64a09ac0a32 httpd "httpd-foreground" 5 seconds ago Up 4 seconds web05

5d4adea2060a nginx "nginx -g 'daemon off" 6 hours ago Up 6 hours 0.0.0.0:8081->80/tcp web4

cdda10943e88 mongo "docker-entrypoint.sh" 6 hours ago Up 6 hours 27017/tcp db

15567d0b4bb3 nginx "nginx -g 'daemon off" 6 hours ago Up 6 hours 0.0.0.0:32778->80/tcp web

968b9a4b6101 postgres "docker-entrypoint.sh" 6 hours ago Up 6 hours 5432/tcp dbms

7a3442f54c31 nginx "nginx -g 'daemon off" 6 hours ago Up 6 hours 0.0.0.0:32776->80/tcp jolly\_leakey

a75119007099 nginx "nginx -g 'daemon off" 7 hours ago Up 7 hours 0.0.0.0:8080->80/tcp suspicious\_dijkstra

6393fbfcf99d ubuntu "/bin/bash" 10 hours ago Up 10 hours hello-volume1

[root@localhost ~]# **docker exec d64a09ac0a32 ip a**

1: lo: <LOOPBACK,UP,LOWER\_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1

link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00

inet 127.0.0.1/8 scope host lo

valid\_lft forever preferred\_lft forever

inet6 ::1/128 scope host

valid\_lft forever preferred\_lft forever