

DevOps for Web Developers

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Video 5.2

Installing and Configuring Docker on CentOS



In this Video, we are going to take a look at...

- Learning to create a virtual machine using VMware Workstation or VirtualBox, install CentOS 6.6 or 6.7
- Running the sample hello-world image of Docker
- Verifying the Docker installation

user@localhost:/home/user

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```
[root@localhost user]# yum install docker
```


user@localhost:/home/user

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```
[root@localhost user]# systemctl status docker
```

```
● docker.service - Docker Application Container Engine
```

```
Loaded: loaded (/usr/lib/systemd/system/docker.service; disabled; vendor preset: disabled)
```

```
Active: active (running) since Tue 2016-11-15 17:24:32 IST; 22s ago
```

```
Docs: http://docs.docker.com
```

```
Main PID: 4601 (docker-current)
```

```
CGroup: /system.slice/docker.service
```

```
└─4601 /usr/bin/docker-current daemon --exec-opt native.cgroupdriver=systemd --seli...
```

```
Nov 15 17:24:30 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:30.4261244..."
```

```
Nov 15 17:24:30 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:30.6897927..."
```

```
Nov 15 17:24:30 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:30.7212694..."
```

```
Nov 15 17:24:31 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:31.0857622..."
```

```
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1043106..."
```

```
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1056118..."
```

```
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1056609..."
```

```
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1056960...3
```

```
Nov 15 17:24:32 localhost.localdomain systemd[1]: Started Docker Application Container Engine.
```

```
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1555845..."
```

```
Hint: Some lines were ellipsized, use -l to show in full.
```

```
[root@localhost user]# systemctl enable docker
```


user@localhost:/home/user

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```
Docs: http://docs.docker.com
Main PID: 4601 (docker-current)
CGroup: /system.slice/docker.service
└─4601 /usr/bin/docker-current daemon --exec-opt native.cgroupdriver=systemd --seli...

Nov 15 17:24:30 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:30.4261244..."
Nov 15 17:24:30 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:30.6897927..."
Nov 15 17:24:30 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:30.7212694..."
Nov 15 17:24:31 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:31.0857622..."
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1043106..."
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1056118..."
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1056609..."
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1056960...3
Nov 15 17:24:32 localhost.localdomain systemd[1]: Started Docker Application Container Engine.
Nov 15 17:24:32 localhost.localdomain docker-current[4601]: time="2016-11-15T17:24:32.1555845..."
Hint: Some lines were ellipsized, use -l to show in full.
[root@localhost user]# systemctl enable docker
Created symlink from /etc/systemd/system/multi-user.target.wants/docker.service to /usr/lib/systemd/system/docker.service.
[root@localhost user]# docker run hello-world
Unable to find image 'hello-world:latest' locally
Trying to pull repository docker.io/library/hello-world ...
```



docker.x86_64 0:1.10.3-46.el7.centos.14

Dependency Installed:

docker-common.x86_64 0:1.10.3-46.el7.centos.14

oci-register-machine.x86_64 1:0.1.5-1.el7.centos.17

docker-selinux.x86_64 0:1.10.3-4

oci-systemd-hook.x86_64 1:0.1.4-

Complete!

[user@localhost ~]\$ sudo yum install docker-io

Loaded plugins: fastestmirror, langpack

Loading mirror speeds from cached hostfile

* base: mirror.dhakacom.com

* epel: ftp.riken.jp

* extras: mirror.dhakacom.com

* nux-dextop: mirror.linux.ro

* updates: mirror.dhakacom.com

Package docker-1.10.3-46.el7.centos.14.x86_64 already installed and latest version

Nothing to do

[user@localhost ~]\$ docker run hello-world

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

See '/usr/bin/docker-current run --help'.

[user@localhost ~]\$ service docker start

Redirecting to /bin/systemctl start docker.service



Authentication Required

Authentication is required to manage system services or units.



user

Password:

..

Cancel

Authenticate

user@localhost:~

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Redirecting to /bin/systemctl start docker.service

[user@localhost ~]\$ service docker status

Redirecting to /bin/systemctl status docker.service

● docker.service - Docker Application Container Engine

Loaded: loaded (/usr/lib/systemd/system/docker.service; disabled; vendor preset: disabled)

Active: **active (running)** since Wed 2016-12-14 11:39:22 IST; 20s ago

Docs: <http://docs.docker.com>

Main PID: 2518 (docker-current)

CGroup: /system.slice/docker.service

└─2518 /usr/bin/docker-current daemon --exec-opt native.cgroupdriver=systemd --seli...

Dec 14 11:39:15 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:15.7533248..."

Dec 14 11:39:17 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:17.4082731..."

Dec 14 11:39:19 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:19.0910255..."

Dec 14 11:39:20 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:20.4441834..."

Dec 14 11:39:22 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:22.8436061..."

Dec 14 11:39:22 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:22.8437332..."

Dec 14 11:39:22 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:22.8437530..."

Dec 14 11:39:22 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:22.8437832...3

Dec 14 11:39:22 localhost.localdomain systemd[1]: Started Docker Application Container Engine.

Dec 14 11:39:22 localhost.localdomain docker-current[2518]: time="2016-12-14T11:39:22.8961292..."

Hint: Some lines were ellipsized, use -l to show in full.

[user@localhost ~]\$

user@localhost:/home/user

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```
oring syscall.  
2016/11/15 11:55:57 Error resolving syscall name breakpoint: could not resolve name to syscall -  
ignoring syscall.  
2016/11/15 11:55:57 Error resolving syscall name cacheflush: could not resolve name to syscall -  
ignoring syscall.  
2016/11/15 11:55:57 Error resolving syscall name set_tls: could not resolve name to syscall - ign  
oring syscall.
```

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 Hub account:

Next Video

Creating your First Docker Container