

# BigData Analytics

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## Hadoop on Docker

## sudo apt update

```
sohailimran@SI: ~  
sohailimran@SI:~$ sudo apt update  
[sudo] password for sohailimran:  
Hit:1 http://pk.archive.ubuntu.com/ubuntu jammy InRelease  
Hit:2 http://pk.archive.ubuntu.com/ubuntu jammy-updates InRelease  
Hit:3 http://pk.archive.ubuntu.com/ubuntu jammy-backports InRelease  
Get:4 https://download.docker.com/linux/ubuntu jammy InRelease [48.8 kB]  
Get:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]  
Get:6 https://download.docker.com/linux/ubuntu jammy/stable amd64 Packages [51.0 kB]  
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main i386 Packages [644 kB]  
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2,375 kB]  
Get:9 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [359 kB]  
Get:10 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [54.5 kB]  
Get:11 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [3,513 kB]  
Get:12 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [628 kB]  
Get:13 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 DEP-11 Metadata [208 B]  
Get:14 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [974 kB]  
Get:15 http://security.ubuntu.com/ubuntu jammy-security/universe i386 Packages [659 kB]  
Get:16 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [210 kB]  
Get:17 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [126 kB]  
Get:18 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 DEP-11 Metadata [208 B]  
Fetched 9,769 kB in 19s (507 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
39 packages can be upgraded. Run 'apt list --upgradable' to see them.  
sohailimran@SI:~$
```

# install git

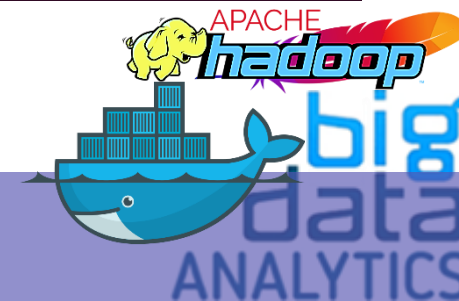


curl --version

sudo apt install git

git --version

```
sohailimran@SI: ~  
sohailimran@SI:~$ curl --version  
curl 7.81.0 (x86_64-pc-linux-gnu) libcurl/7.81.0 OpenSSL/3.0.2 zlib/1.2.11 brotli/1.0.9 zstd/1.4.8 libidn2/  
2.3.2 libpsl/0.21.0 (+libidn2/2.3.2) libssh/0.9.6/openssl/zlib nghttp2/1.43.0 librtmp/2.3 OpenLDAP/2.5.18  
Release-Date: 2022-01-05  
Protocols: dict file ftp ftps gopher gophers http https imap imaps ldap ldaps mqtt pop3 pop3s rtmp rtsp scp  
sftp smb smbs smtp smtps telnet tftp  
Features: alt-svc AsynchDNS brotli GSS-API HSTS HTTP2 HTTPS-proxy IDN IPv6 Kerberos Largefile libz NTLM NTL  
M_WB PSL SPNEGO SSL TLS-SRP UnixSockets zstd  
sohailimran@SI:~$ sudo apt install git  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
git is already the newest version (1:2.34.1-1ubuntu1.12).  
git set to manually installed.  
0 upgraded, 0 newly installed, 0 to remove and 39 not upgraded.  
sohailimran@SI:~$ git --version  
git version 2.34.1  
sohailimran@SI:~$ git clone https://github.com/big-data-europe/docker-hadoop
```





git clone https://github.com/big-data-europe/docker-hadoop

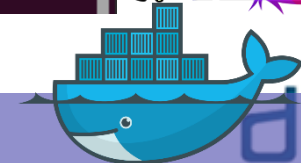
```
sohailimran@SI:~$ git clone https://github.com/big-data-europe/docker-hadoop
```

ls

cd docker-hadoop

```
sohailimran@SI: ~/docker-hadoop

sohailimran@SI:~$ ls
25May10.txt      input.txt      resource_monitor
3Jun25.txt       kapp-controller-v0.38.0.yaml  resource_monitor.c
a.out            kubectrl      'Run Hadoop with Docker.pdf'
assigmnt1.c      mozilla.pdf   shared
cmd              Music        sh.sh
Desktop          mysql        snap
docker-compose.yml  namaz_alert.sh  sshkey
Dockerfile       namaz_schedule.txt  sshkey.pub
docker-hadoop    Pictures     system_monitor
Documents        Project0S1.py  Tanzu-Example.pdf
Downloads        Public        Templates
error            python-docker-test  'Untitled Document 01'
example1.c       read_schedule  'Untitled Document 1'
'GRUB Configuration for Docker.pdf'  read_schedule.sh  Videos
sohailimran@SI:~$ cd docker-hadoop
```







docker compose version

docker compose up -d

```
sohailimran@SI: ~/docker-hadoop
sohailimran@SI:~/docker-hadoop$ docker compose version
Docker Compose version v2.34.0
sohailimran@SI:~/docker-hadoop$ docker compose up -d
```

docker ps

```
sohailimran@SI: ~/docker-hadoop
sohailimran@SI:~/docker-hadoop$ docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS
4511115cd281	bde2020/hadoop-namenode:2.0.0-hadoop3.2.1-java8	"/entrypoint.sh /run..."	37 hours ago	Up 35 minut
es (healthy)	0.0.0.0:9000->9000/tcp, [::]:9000->9000/tcp, 0.0.0.0:9870->9870/tcp, [::]:9870->9870/tcp			namenode
6a48644abe2e	bde2020/hadoop-nodemanager:2.0.0-hadoop3.2.1-java8	"/entrypoint.sh /run..."	37 hours ago	Up 35 minut
es (healthy)	8042/tcp			nodemanager
17ab4d754ed7	bde2020/hadoop-historyserver:2.0.0-hadoop3.2.1-java8	"/entrypoint.sh /run..."	37 hours ago	Up 35 minut
es (healthy)	8188/tcp			historyserver
b3dd1e0185b3	bde2020/hadoop-datanode:2.0.0-hadoop3.2.1-java8	"/entrypoint.sh /run..."	37 hours ago	Up 35 minut
es (healthy)	9864/tcp			datanode
d9354297ec38	bde2020/hadoop-resourcemanager:2.0.0-hadoop3.2.1-java8	"/entrypoint.sh /run..."	37 hours ago	Up 34 minut
es (healthy)	8088/tcp			resourcemanager

```
sohailimran@SI:~/docker-hadoop$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
mysql	5.7	5107333e08a8	17 months ago	501MB
bde2020/hadoop-nodemanager	2.0.0-hadoop3.2.1-java8	4e47dabd148f	5 years ago	1.37GB
bde2020/hadoop-resourcemanager	2.0.0-hadoop3.2.1-java8	3deba4a1885f	5 years ago	1.37GB
bde2020/hadoop-namenode	2.0.0-hadoop3.2.1-java8	839ec11d95f8	5 years ago	1.37GB
bde2020/hadoop-historyserver	2.0.0-hadoop3.2.1-java8	173c52d1f624	5 years ago	1.37GB
bde2020/hadoop-datanode	2.0.0-hadoop3.2.1-java8	df288ee0a7f9	5 years ago	1.37GB

```
sohailimran@SI:~/docker-hadoop$
```

