

Docker-TIO-v1.0

Launch an Instance

Instances (1) Info

Find instance by attribute or tag (case-sensitive)

< 1 >

Connect

Instance state

Actions

Launch instances

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input type="checkbox"/>	Docker-1	i-0378963b44fd43446	Running	t2.small	2/2 checks passed	No alarms	us-east-1b	ec2-3-89-101-16.comp...	3.89.101.16	-

Instance Summary

EC2 > Instances > i-0378963b44fd43446

Instance summary for i-0378963b44fd43446 (Docker-1) Info

Updated less than a minute ago

Connect Instance state Actions

Instance ID i-0378963b44fd43446 (Docker-1)	Public IPv4 address 3.89.101.16 open address	Private IPv4 addresses 172.31.22.198
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-3-89-101-16.compute-1.amazonaws.com open address
Hostname type IP name: ip-172-31-22-198.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-22-198.ec2.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.small	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address 3.89.101.16 [Public IP]	VPC ID vpc-0e30fd2ba616470d3	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-0b349f9215d7c4e13	

Security:

Details Security Networking Storage Status checks Monitoring Tags

▼ Security details

IAM Role
-

Security groups
sg-08807b3f266fb8b52 (Docker1)

Owner ID
512497007024

Launch time
Wed Feb 08 2023 01:41:19 GMT+0530 (India Standard Time)

▼ Inbound rules

Filter rules

Name	Security group rule ID	Port range	Protocol	Source	Security groups	Description
-	sg-r-017bdSaadeb5127f5	22	TCP	0.0.0.0/0	Docker1	-
-	sg-r-0597b3b458a15b598	80	TCP	0.0.0.0/0	Docker1	-

▼ Outbound rules

Filter rules

Name	Security group rule ID	Port range	Protocol	Destination	Security groups	Description
-	sg-r-064e6c2602aa9dfa4	All	All	0.0.0.0/0	Docker1	-

Networking:

The screenshot shows the 'Networking' tab in the AWS Management Console. At the top, there is a notification: 'You can now check network connectivity with Reachability Analyzer.' with a 'Run Reachability Analyzer' button. Below this, the 'Networking details' section is expanded, showing various network-related information:

- Public IPv4 address:** 3.89.101.16 | [open address](#)
- Public IPv4 DNS:** ec2-3-89-101-16.compute-1.amazonaws.com | [open address](#)
- Subnet ID:** subnet-0b349f9215d7c4e13 | [open address](#)
- Availability zone:** us-east-1b
- Use RBN as guest OS hostname:** Disabled
- Private IPv4 addresses:** 172.31.22.198
- Private IP DNS name (IPv4 only):** ip-172-31-22-198.ec2.internal
- IPv6 addresses:** -
- Carrier IP addresses (ephemeral):** -
- Answer RBN DNS hostname IPv4:** Enabled
- VPC ID:** vpc-0e30fd2ba616470d3 | [open address](#)
- Secondary private IPv4 addresses:** -
- Outpost ID:** -

Below the details, the 'Network Interfaces (1)' section is expanded, showing a table with one interface:

Interface ID	Description	IPv4 Prefixes	IPv6 Prefixes	Public IPv4 address	Private IPv4 address	Private IPv4 DNS	IPv6 addresses	Attached to
eni-03855db2b51563...	-	-	-	3.89.101.16	172.31.22.198	ip-172-31-22-198.ec2...	-	Wed Feb 7 20:22:11 UTC 2023

At the bottom, the 'Elastic IP addresses (0)' section is expanded, showing a table with no entries:

Name	Allocated IPv4 address	Type	Address pool	Allocation ID
------	------------------------	------	--------------	---------------

Installation of Docker

```
ubuntu@ip-172-31-22-198: ~  
login as: ubuntu  
Authenticating with public key "Docker1"  
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-1028-aws x86_64)  
  
 * Documentation:  https://help.ubuntu.com  
 * Management:    https://landscape.canonical.com  
 * Support:        https://ubuntu.com/advantage  
  
System information as of Tue Feb  7 20:22:11 UTC 2023  
  
System load:  0.0          Processes:      100  
Usage of /:   20.7% of 7.57GB Users logged in:  1  
Memory usage: 11%         IPv4 address for eth0: 172.31.22.198  
Swap usage:   0%  
  
0 updates can be applied immediately.  
  
The list of available updates is more than a week old.  
To check for new updates run: sudo apt update  
New release '22.04.1 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
Last login: Tue Feb  7 20:15:57 2023 from 18.206.107.28  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
  
ubuntu@ip-172-31-22-198:~$  
ubuntu@ip-172-31-22-198:~$  
ubuntu@ip-172-31-22-198:~$
```

```
ubuntu@ip-172-31-22-198: ~  
ubuntu@ip-172-31-22-198:~$  
ubuntu@ip-172-31-22-198:~$ sudo apt update  
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]  
Get:4 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]  
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 Packages [8628 kB]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe Translation-en [5124 kB]  
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 c-n-f Metadata [265 kB]  
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/multiverse amd64 Packages [144 kB]  
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/multiverse Translation-en [104 kB]  
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/multiverse amd64 c-n-f Metadata [9136 B]  
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [2347 kB]  
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main Translation-en [405 kB]  
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 c-n-f Metadata [16.3 kB]  
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages [1570 kB]  
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/restricted Translation-en [221 kB]  
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 c-n-f Metadata [620 B]  
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [1021 kB]  
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/universe Translation-en [237 kB]  
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/universe amd64 c-n-f Metadata [23.5 kB]  
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages [25.2 kB]  
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse Translation-en [7408 B]  
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 c-n-f Metadata [604 B]  
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main amd64 Packages [45.7 kB]  
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main Translation-en [16.3 kB]  
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main amd64 c-n-f Metadata [1420 B]  
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/restricted amd64 c-n-f Metadata [116 B]  
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [24.9 kB]  
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe Translation-en [16.3 kB]  
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 c-n-f Metadata [880 B]  
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/multiverse amd64 c-n-f Metadata [116 B]  
Get:31 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [1968 kB]  
Get:32 http://security.ubuntu.com/ubuntu focal-security/main Translation-en [322 kB]  
Get:33 http://security.ubuntu.com/ubuntu focal-security/main amd64 c-n-f Metadata [12.0 kB]  
Get:34 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [1467 kB]  
Get:35 http://security.ubuntu.com/ubuntu focal-security/restricted Translation-en [207 kB]  
Get:36 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 c-n-f Metadata [624 B]  
Get:37 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [792 kB]  
Get:38 http://security.ubuntu.com/ubuntu focal-security/universe Translation-en [154 kB]  
Get:39 http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata [16.9 kB]  
Get:40 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [22.9 kB]  
Get:41 http://security.ubuntu.com/ubuntu focal-security/multiverse Translation-en [5488 B]  
Get:42 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 c-n-f Metadata [528 B]  
Fetched 25.6 MB in 4s (5704 kB/s)
```

```
ubuntu@ip-172-31-22-198: ~  
ubuntu@ip-172-31-22-198:~$ sudo apt install docker.io  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following additional packages will be installed:  
  bridge-utils containerd dns-root-data dnsmasq-base libidn11 pigz runc ubuntu-fan  
Suggested packages:  
  ifupdown aufs-tools cgroupfs-mount | cgroup-lite deboststrap docker-doc rinse zfs-fuse | zfsutils  
The following NEW packages will be installed:  
  bridge-utils containerd dns-root-data dnsmasq-base docker.io libidn11 pigz runc ubuntu-fan  
0 upgraded, 9 newly installed, 0 to remove and 30 not upgraded.  
Need to get 69.2 MB of archives.  
After this operation, 334 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 pigz amd64 2.4-1 [57.4 kB]  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/main amd64 bridge-utils amd64 1.6-2ubuntu1 [30.5 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 runc amd64 1.1.0-0ubuntu1-20.04.2 [3894 kB]  
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 containerd amd64 1.5.9-0ubuntu1-20.04.6 [33.0 MB]  
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/main amd64 dns-root-data all 2019052802 [5300 B]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/main amd64 libidn11 amd64 1.33-2.2ubuntu2 [46.2 kB]  
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 dnsmasq-base amd64 2.80-1.1ubuntu1.6 [315 kB]  
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/universe amd64 docker.io amd64 20.10.12-0ubuntu2-20.04.1 [31.8 MB]  
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 ubuntu-fan all 0.12.13ubuntu0.1 [34.4 kB]  
Fetched 69.2 MB in 1s (49.8 MB/s)  
Preconfiguring packages ...  
Selecting previously unselected package pigz.  
(Reading database ... 61835 files and directories currently installed.)  
Preparing to unpack .../0-pigz_2.4-1_amd64.deb ...  
Unpacking pigz (2.4-1) ...  
Selecting previously unselected package bridge-utils.  
Preparing to unpack .../1-bridge-utils_1.6-2ubuntu1_amd64.deb ...  
Unpacking bridge-utils (1.6-2ubuntu1) ...  
Selecting previously unselected package runc.  
Preparing to unpack .../2-runc_1.1.0-0ubuntu1-20.04.2_amd64.deb ...  
Unpacking runc (1.1.0-0ubuntu1-20.04.2) ...  
Selecting previously unselected package containerd.  
Preparing to unpack .../3-containerd_1.5.9-0ubuntu1-20.04.6_amd64.deb ...  
Unpacking containerd (1.5.9-0ubuntu1-20.04.6) ...  
Selecting previously unselected package dns-root-data.  
Preparing to unpack .../4-dns-root-data_2019052802_all.deb ...  
Unpacking dns-root-data (2019052802) ...  
Selecting previously unselected package libidn11:amd64.  
Preparing to unpack .../5-libidn11_1.33-2.2ubuntu2_amd64.deb ...  
Unpacking libidn11:amd64 (1.33-2.2ubuntu2) ...  
Selecting previously unselected package dnsmasq-base.  
Preparing to unpack .../6-dnsmasq-base_2.80-1.1ubuntu1.6_amd64.deb ...
```

[illegible]

```
ubuntu@ip-172-31-22-198: ~  
New release '22.04.1 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
Last login: Tue Feb  7 20:22:12 2023 from 171.50.207.205  
ubuntu@ip-172-31-22-198:~$  
ubuntu@ip-172-31-22-198:~$  
ubuntu@ip-172-31-22-198:~$ docker version  
Client:  
Version:           20.10.12  
API version:       1.41  
Go version:        go1.16.2  
Git commit:        20.10.12-0ubuntu2~20.04.1  
Built:             Wed Apr  6 02:14:38 2022  
OS/Arch:           linux/amd64  
Context:           default  
Experimental:      true  
  
Server:  
Engine:  
Version:           20.10.12  
API version:       1.41 (minimum version 1.12)  
Go version:        go1.16.2  
Git commit:        20.10.12-0ubuntu2~20.04.1  
Built:             Thu Feb 10 15:03:35 2022  
OS/Arch:           linux/amd64  
Experimental:      false  
containerd:  
Version:           1.5.9-0ubuntu1~20.04.6  
GitCommit:  
runc:  
Version:           1.1.0-0ubuntu1~20.04.2  
GitCommit:  
docker-init:  
Version:           0.19.0  
GitCommit:  
ubuntu@ip-172-31-22-198:~$
```

```
ubuntu@ip-172-31-22-198:~$  
ubuntu@ip-172-31-22-198:~$ cd /opt  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$ docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$ docker run --rm busybox:latest /bin/echo "Hello World"  
Unable to find image 'busybox:latest' locally  
latest: Pulling from library/busybox  
205dae5015e7: Pull complete  
Digest: sha256:7b3ccabffc97de872a30dfd234fd972a66d247c8cfc69b0550f276481852627c  
Status: Downloaded newer image for busybox:latest  
Hello World  
ubuntu@ip-172-31-22-198:/opt$ wget https://d6opu47qoi4ee.cloudfront.net/project-container/Dockerfile  
--2023-02-07 20:31:25-- https://d6opu47qoi4ee.cloudfront.net/project-container/Dockerfile  
Resolving d6opu47qoi4ee.cloudfront.net (d6opu47qoi4ee.cloudfront.net)... 108.138.61.18, 108.138.61.60, 10  
8.138.61.189, ...  
Connecting to d6opu47qoi4ee.cloudfront.net (d6opu47qoi4ee.cloudfront.net)|108.138.61.18|:443... connected  
.  
HTTP request sent, awaiting response... 200 OK  
Length: 813 [binary/octet-stream]  
Saving to: 'Dockerfile'  
  
Dockerfile 100%[=====>] 813 --.-KB/s in 0s  
  
2023-02-07 20:31:25 (125 MB/s) - 'Dockerfile' saved [813/813]  
ubuntu@ip-172-31-22-198:/opt$
```

```
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$ docker run -d -p 80:8080 helloworld  
b81b4f57d67b339271a0eab1b615f27921012550b53f8666bda676eaa6029f07  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$ docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b81b4f57d67b helloworld "/opt/tomcat/bin/cat..." 15 seconds ago Up 15 seconds 0.0.0.0:80->8080/tcp, :::80->8080/tcp jolly_benz  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$
```



```

ubuntu@ip-172-31-22-198:/opt$ docker run -d -p 80:8080 helloworld
b81b4f57d67b339271a0eab1b615f27921012550b53f866bda676aa6029f07
ubuntu@ip-172-31-22-198:/opt$
ubuntu@ip-172-31-22-198:/opt$ docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
b81b4f57d67b        helloworld         "/opt/tomcat/bin/cat-" 15 seconds ago      Up 15 seconds      0.0.0.0:80->8080/tcp, :::80->8080/tcp  jolly_benz
ubuntu@ip-172-31-22-198:/opt$
ubuntu@ip-172-31-22-198:/opt$
ubuntu@ip-172-31-22-198:/opt$
ubuntu@ip-172-31-22-198:/opt$ docker rm b81b4f57d67b
Error response from daemon: You cannot remove a running container b81b4f57d67b339271a0eab1b615f27921012550b53f866bda676aa6029f07. Stop the container before attempting removal or force remove
ubuntu@ip-172-31-22-198:/opt$
ubuntu@ip-172-31-22-198:/opt$ docker rm helloworld
Error response from daemon: conflict: unable to remove repository reference "helloworld" (must force) - container b81b4f57d67b is using its referenced image 391cc26aa21c
ubuntu@ip-172-31-22-198:/opt$
ubuntu@ip-172-31-22-198:/opt$ docker build -t pulkitkshirsagar
"docker build" requires exactly 1 argument.
See 'docker build --help'.

Usage: docker build [OPTIONS] PATH | URL | -

Build an image from a Dockerfile
ubuntu@ip-172-31-22-198:/opt$ docker build -t helloworld
"docker build" requires exactly 1 argument.
See 'docker build --help'.

Usage: docker build [OPTIONS] PATH | URL | -

Build an image from a Dockerfile
ubuntu@ip-172-31-22-198:/opt$
ubuntu@ip-172-31-22-198:/opt$ docker stop b81
b81
ubuntu@ip-172-31-22-198:/opt$
ubuntu@ip-172-31-22-198:/opt$ docker start b81
b81
ubuntu@ip-172-31-22-198:/opt$

```


Hit the public IP address of the running instance on a new web browser tab to see the Apache Tomcat web page.

Inbox (14,536) - pulkitkshirsagar
Containers and AWS DevOps - H
Learner Lab
Instance details | EC2 Managem
Apache Tomcat/9.0.53


← → ↻ ⚠ Not secure | 3.89.101.16

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Apache Tomcat/9.0.53


SOFTWARE FOUNDATION
<http://www.apache.org/>

If you're seeing this, you've successfully installed Tomcat. Congratulations!



Recommended Reading:

[Security Considerations How-To](#)
[Manager Application How-To](#)
[Clustering/Session Replication How-To](#)

Server Status

Manager App

Host Manager

Developer Quick Start

[Tomcat Setup](#)
[Realms & AAA](#)
[Examples](#)
[Servlet Specifications](#)

[First Web Application](#)
[JDBC DataSources](#)
[Tomcat Versions](#)

Managing Tomcat

For security, access to the [manager webapp](#) is restricted. Users are defined in:

```
$CATALINA_HOME/conf/tomcat-users.xml
```

In Tomcat 9.0 access to the manager application is split between different users.

[Read more...](#)

[Release Notes](#)
[Changelog](#)
[Migration Guide](#)
[Security Notices](#)

Documentation

[Tomcat 9.0 Documentation](#)
[Tomcat 9.0 Configuration](#)
[Tomcat Wiki](#)

Find additional important configuration information in:

```
$CATALINA_HOME/RUNNING.txt
```

Developers may be interested in:

[Tomcat 9.0 Bug Database](#)
[Tomcat 9.0 JavaDocs](#)
[Tomcat 9.0 Git Repository at GitHub](#)

Getting Help

[FAQ and Mailing Lists](#)

The following mailing lists are available:

[tomcat-announce](#)
Important announcements, releases, security vulnerability notifications. (Low volume).

[tomcat-users](#)
User support and discussion

[tomcat-dev](#)
Development mailing list, including commit messages

Other Downloads

[Tomcat Connectors](#)
[Tomcat Native](#)
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Other Documentation

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Stop the running container and remove it;

```
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$ docker stop b81  
b81  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$ docker rm b81b4f57d67b  
b81b4f57d67b  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$
```

Shell In A Box (Advanced)

Pulling the debian OS image.

```
ubuntu@ip-172-31-22-198:/opt$ sudo apt update  
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease  
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease  
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease  
Hit:4 http://security.ubuntu.com/ubuntu focal-security InRelease  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
10 packages can be upgraded. Run 'apt list --upgradable' to see them.  
ubuntu@ip-172-31-22-198:/opt$  
ubuntu@ip-172-31-22-198:/opt$ sudo mkdir /opt/siab  
ubuntu@ip-172-31-22-198:/opt$ cd /opt/siab  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ sudo wget https://d6opu47qi4ee.cloudfront.net/SIABDockerfile  
--2023-02-07 20:46:20-- https://d6opu47qi4ee.cloudfront.net/SIABDockerfile  
Resolving d6opu47qi4ee.cloudfront.net (d6opu47qi4ee.cloudfront.net)... 108.138.61.18, 108.138.61.69, 108.138.61.189, ...  
Connecting to d6opu47qi4ee.cloudfront.net (d6opu47qi4ee.cloudfront.net)|108.138.61.18|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 1564 (1.5K) [binary/octet-stream]  
Saving to: 'SIABDockerfile'  
  
SIABDockerfile 100%[=====] 1.53K --.-KB/s in 0s  
  
2023-02-07 20:46:21 (239 MB/s) - 'SIABDockerfile' saved [1564/1564]  
  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ docker pull debian  
Using default tag: latest  
latest: Pulling from library/debian  
c99cda57d474: pull complete  
Digest: sha256:92277f7108c432febe41beffd367db6dac60b9f8fe517c77208e6457eafc2b  
Status: Downloaded newer image for debian:latest  
docker.io/library/debian:latest  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
bellowsrid latest 310c2caab1c 14 minutes ago 710MB  
debian latest 28473158e8b3 3 days ago 124MB  
bunbyee latest 68a0b0d38e0 4 weeks ago 4.87MB  
openjdk 11 47a932d998b7 6 months ago 654MB  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$
```

Start and exec in the container (siab = shell in a box) by entering the following 3 Commands

```
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ docker run --name siabdebian -d -it debian tail -f /dev/null  
5f60adb50dca7c8920f170daf857b290608bc948d87cc64a32c8bea4e6e31f5d  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
5f60adb50dca debian "tail -f /dev/null" 10 seconds ago Up 9 seconds siabdebian  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ docker exec -it siabdebian bash  
root@5f60adb50dca:/#  
root@5f60adb50dca:/#
```

Now, create the user guest & update/install dependencies in the bash.

```
root@5f60adb50dca:~# apt update
Get:1 http://deb.debian.org/debian bullseye InRelease [116 kB]
Get:2 http://deb.debian.org/debian-security bullseye-security InRelease [48.4 kB]
Get:3 http://deb.debian.org/debian bullseye-updates InRelease [44.1 kB]
Get:4 http://deb.debian.org/debian bullseye/main amd64 Packages [8183 kB]
Get:5 http://deb.debian.org/debian-security bullseye-security/main amd64 Packages [222 kB]
Get:6 http://deb.debian.org/debian bullseye-updates/main amd64 Packages [14.6 kB]
Fetched 8628 kB in 2s (5509 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
All packages are up to date.
root@5f60adb50dca:~#
root@5f60adb50dca:~#
root@5f60adb50dca:~#
root@5f60adb50dca:~# adduser guest
Adding user `guest' ...
Adding new group `guest' (1000) ...
Adding new user `guest' (1000) with group `guest' ...
Creating home directory `/home/guest' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for guest
Enter the new value, or press ENTER for the default
  Full Name []: Pulkit Kshirsagar
    Room Number []: 503
    Work Phone []: 987654321
    Home Phone []: 0987654321
    Other []: 0987654321
Is the information correct? [Y/n] y
root@5f60adb50dca:~#
root@5f60adb50dca:~#
root@5f60adb50dca:~#
root@5f60adb50dca:~# adduser guest sudo
Adding user `guest' to group `sudo' ...
Adding user guest to group sudo
Done.
root@5f60adb50dca:~#
root@5f60adb50dca:~# exit
exit
ubuntu@ip-172-31-22-198:/opt/siab$
```

The below 3 commands will create the Base image. Please enter your name in the Author Placeholder.

```
ubuntu@ip-172-31-22-198:/opt/siab$ docker stop siabdebian
siabdebian
ubuntu@ip-172-31-22-198:/opt/siab$ docker commit -m "Debian with guest user" -a "[Author]" siabdebian debian-siab-base:v1
sha256:86c200b63e12c69fdabfa7338e3e498d2f607c9b973f08c0a908764034ff4954
ubuntu@ip-172-31-22-198:/opt/siab$ docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
debian-siab-base    v1              86c200b63e12   10 seconds ago  142MB
helloworld          latest         391cc26aa21c   20 minutes ago  710MB
debian              latest         20473158e8b3   3 days ago     124MB
busybox             latest         66ba00ad3de8   4 weeks ago    4.87MB
openjdk             11             47a932d998b7   6 months ago   654MB
ubuntu@ip-172-31-22-198:/opt/siab$
ubuntu@ip-172-31-22-198:/opt/siab$
```


Create a security group and open port 443 for the https protocol set to Anywhere. Attach the security group to the ec2 instance. To perform this, follow the below Instructions

EC2 > Security Groups > sg-0b2759b6e78e123b8 - openhttps

sg-0b2759b6e78e123b8 - openhttps

Actions ▾

Details

Security group name openhttps	Security group ID sg-0b2759b6e78e123b8	Description openhttps	VPC ID vpc-0e30fd2ba616470d3
Owner 512497007024	Inbound rules count 1 Permission entry	Outbound rules count 1 Permission entry	

Inbound rules | Outbound rules | Tags

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Inbound rules (1/1)

Filter security group rules

<input checked="" type="checkbox"/>	Name	Security group rule...	IP version	Type	Protocol	Port range	Source	Description
<input checked="" type="checkbox"/>	-	sg-0cff3d4e115814b1c	IPv4	HTTPS	TCP	443	0.0.0.0/0	openhttps

Add Security group in the EC2 Instance

EC2 > Instances > i-0378963b44fd43446 > Change security groups

Change security groups

Amazon EC2 evaluates all the rules of the selected security groups to control inbound and outbound traffic to and from your instance. You can use this window to add and remove security groups.

Instance details

Instance ID i-0378963b44fd43446 (Docker-1)	Network interface ID eni-03855db2b515635bc
---	---

Associated security groups

Add one or more security groups to the network interface. You can also remove security groups.

sg-0b2759b6e78e123b8 Add security group

Security groups associated with the network interface (eni-03855db2b515635bc)

Security group name	Security group ID	
Docker1	sg-08807b3f266fb8b52	Remove
openhttps	sg-0b2759b6e78e123b8	Remove

Cancel Save

Build and run the image as follows

```
ubuntu@ip-172-31-22-198: /opt/siab$
ubuntu@ip-172-31-22-198:/opt/siab$ docker build -f SIABDockerfile -t siab .
Sending build context to Docker daemon  3.584kB
Step 1/4 : FROM debian-siab-base:v1
--> 86c200b63e12
Step 2/4 : MAINTAINER Nirmaliya Mukherjee @ Pointer-Next.com
--> Running in 6b9f96af38e5
Removing intermediate container 6b9f96af38e5
--> 333707b05548
Step 3/4 : RUN apt install -y curl vim && apt install -y openssl shellinabox
--> Running in 7c0d57a0ecd3
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  ca-certificates libbrotli1 libcurl4 libgpm2 libldap-2.4-2 libldap-common
  libnghttp2-14 libpsl5 librtmp1 libssl2-2 libssl-modules
  libssl-modules-db libssh2-1 openssl publicsuffix vim-common vim-runtime
  xxd
Suggested packages:
  gpm libssl-modules-gssapi-mit | libssl-modules-gssapi-heimdal
  libssl-modules-ldap libssl-modules-otp libssl-modules-sql ctags
  vim-doc vim-scripts
The following NEW packages will be installed:
  ca-certificates curl libbrotli1 libcurl4 libgpm2 libldap-2.4-2
  libldap-common libnghttp2-14 libpsl5 librtmp1 libssl2-2 libssl-modules
  libssl-modules-db libssh2-1 openssl publicsuffix vim vim-common
  vim-runtime xxd
0 upgraded, 20 newly installed, 0 to remove and 0 not upgraded.
Need to get 11.2 MB of archives.
After this operation, 43.2 MB of additional disk space will be used.
Get:1 http://deb.debian.org/debian bullseye/main amd64 xxd amd64 2:8.2.2434-3+deb11u1 [192 kB]
Get:2 http://deb.debian.org/debian bullseye/main amd64 vim-common all 2:8.2.2434-3+deb11u1 [226 kB]
Get:3 http://deb.debian.org/debian bullseye/main amd64 openssl amd64 1.1.1n-0+deb11u3 [853 kB]
Get:4 http://deb.debian.org/debian bullseye/main amd64 ca-certificates all 20210119 [158 kB]
Get:5 http://deb.debian.org/debian bullseye/main amd64 libbrotli1 amd64 1.0.9-2+b2 [279 kB]
Get:6 http://deb.debian.org/debian bullseye/main amd64 libssl-modules-db amd64 2.1.27+dfsg-2.1+deb11u1 [69.1 kB]
Get:7 http://deb.debian.org/debian bullseye/main amd64 libssl2-2 amd64 2.1.27+dfsg-2.1+deb11u1 [106 kB]
Get:8 http://deb.debian.org/debian bullseye/main amd64 libldap-2.4-2 amd64 2.4.57+dfsg-3+deb11u1 [232 kB]
Get:9 http://deb.debian.org/debian bullseye/main amd64 libnghttp2-14 amd64 1.43.0-1 [77.1 kB]
Get:10 http://deb.debian.org/debian bullseye/main amd64 libpsl5 amd64 0.21.0-1.2 [57.3 kB]
Get:11 http://deb.debian.org/debian bullseye/main amd64 librtmp1 amd64 2.4+20151223.gitfa8646d.1-2+b2 [60.8 kB]
Get:12 http://deb.debian.org/debian bullseye/main amd64 libssh2-1 amd64 1.9.0-2 [156 kB]
Get:13 http://deb.debian.org/debian-security bullseye-security/main amd64 libcurl4 amd64 7.74.0-1.3+deb11u5 [346 kB]
Get:14 http://deb.debian.org/debian-security bullseye-security/main amd64 curl amd64 7.74.0-1.3+deb11u5 [270 kB]
Get:15 http://deb.debian.org/debian bullseye/main amd64 libgpm2 amd64 1.20.7-8 [35.6 kB]
Get:16 http://deb.debian.org/debian bullseye/main amd64 libldap-common all 2.4.57+dfsg-3+deb11u1 [95.8 kB]
Get:17 http://deb.debian.org/debian bullseye/main amd64 libssl-modules amd64 2.1.27+dfsg-2.1+deb11u1 [104 kB]
Get:18 http://deb.debian.org/debian bullseye/main amd64 publicsuffix all 20220811.1734-0+deb11u1 [127 kB]
Get:19 http://deb.debian.org/debian bullseye/main amd64 vim-runtime all 2:8.2.2434-3+deb11u1 [6226 kB]
Get:20 http://deb.debian.org/debian bullseye/main amd64 vim amd64 2:8.2.2434-3+deb11u1 [1494 kB]
Fetched 11.2 MB in 0s (56.3 MB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package xxd.
(Reading database ... 6661 files and directories currently installed.)
Preparing to unpack .../00-xxd_2%3a8.2.2434-3+deb11u1_amd64.deb ...
Unpacking xxd (2:8.2.2434-3+deb11u1) ...
Selecting previously unselected package vim-common.
Preparing to unpack .../01-vim-common_2%3a8.2.2434-3+deb11u1_all.deb ...
Unpacking vim-common (2:8.2.2434-3+deb11u1) ...
Selecting previously unselected package openssl.
Preparing to unpack .../02-openssl_1.1.1n-0+deb11u3_amd64.deb ...
Unpacking openssl (1.1.1n-0+deb11u3) ...
Selecting previously unselected package ca-certificates.
Preparing to unpack .../03-ca-certificates_20210119_all.deb ...
Unpacking ca-certificates (20210119) ...
Selecting previously unselected package libbrotli1:amd64.
Preparing to unpack .../04-libbrotli1_1.0.9-2+b2_amd64.deb ...
Unpacking libbrotli1:amd64 (1.0.9-2+b2) ...
Selecting previously unselected package libssl-modules-db:amd64.
```

```
ubuntu@ip-172-31-22-198:/opt/siab$
ubuntu@ip-172-31-22-198:/opt/siab$ docker run -d -p 443:4200 --name siab -i siab
ldb4f49eb9aee72ed1d40f5491c66664512e3b447a08b6e9a877056f048c01f5
ubuntu@ip-172-31-22-198:/opt/siab$
```

stop and remove the container

```
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ docker ps -a  
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS      PORTS                               NAMES  
ldb4f49eb9ae   siab      "/bin/sh -c 'service_..." 9 minutes ago    Up 9 minutes    0.0.0.0:443->4200/tcp, :::443->4200/tcp    siab  
5f60adb50dca   debian   "tail -f /dev/null"       22 minutes ago    Exited (137) 17 minutes ago                  siabdebian  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ docker stop ldb  
ldb  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$ docker rm ldb  
ldb  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$  
ubuntu@ip-172-31-22-198:/opt/siab$
```

Terminated EC2

Successfully terminated i-0378963b44fd43446										
Instances (1) Info										
Find instance by attribute or tag (case-sensitive)										
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input type="checkbox"/>	Docker-1	i-0378963b44fd43446	Terminated	t2.small	-	No alarms	us-east-1b	-	-	-

Wordle-TIO-v1.0

Launch an Instance

Name and tagsInfo

Name

Wordle-1

Add additional tags

▼ Application and OS Images (Amazon Machine Image)Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Q Search our full catalog including 1000s of application and OS images

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

S

Q

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 20.04 LTS (HVM), SSD Volume Type

Free tier eligible

ami-0778521d914d23bc1 (64-bit (x86)) / ami-0620aa8714211d0af (64-bit (Arm))

Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Canonical, Ubuntu, 20.04 LTS, amd64 focal image build on 2023-01-12

Architecture

AMI ID

64-bit (x86)

ami-0778521d914d23bc1

Verified provider

▼ Instance type [Info](#)

Instance type

t2.small

Family: t2 1 vCPU 2 GiB Memory

On-Demand Windows pricing: 0.032 USD per Hour

On-Demand Linux pricing: 0.023 USD per Hour

On-Demand RHEL pricing: 0.083 USD per Hour

On-Demand SUSE pricing: 0.053 USD per Hour



[Compare instance types](#)

▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

Wordle1



[Create new key pair](#)

▼ Network settings [Info](#)

[Edit](#)

Network [Info](#)

vpc-0e30fd2ba616470d3

Subnet [Info](#)

No preference (Default subnet in any availability zone)

Auto-assign public IP [Info](#)

Enable

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Create security group

☐ Select existing security group

We'll create a new security group called 'launch-wizard-1' with the following rules:

☒ Allow SSH traffic from

Helps you connect to your instance

Anywhere

0.0.0.0/0

☐ Allow HTTPS traffic from the internet

To set up an endpoint, for example when creating a web server

☒ Allow HTTP traffic from the internet

To set up an endpoint, for example when creating a web server



Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.



Instances (2) [Info](#)

Find instance by attribute or tag (case-sensitive)



Connect

Instance state ▼

Actions ▼

Launch instances ▼

< 1 > ⓘ

<input type="checkbox"/>	Name ▼	Instance ID	Instance state ▼	Instance type ▼	Status check	Alarm status	Availability Zone ▼	Public IPv4 DNS	Public IPv4 ... ▼	Elastic IP	IF
<input type="checkbox"/>	Wordle-1	i-0fa12a3232ba28ab5	Running ⓘ	t2.small	2/2 checks passed	No alarms +	us-east-1b	ec2-50-17-123-105.co...	50.17.123.105	-	-

Installation of docker

```
ubuntu@ip-172-31-26-69:~$  
ubuntu@ip-172-31-26-69:~$ sudo apt update  
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]  
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 Packages [8628 kB]  
Get:5 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe Translation-en [5124 kB]  
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 c-n-f Metadata [265 kB]  
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/multiverse amd64 Packages [144 kB]  
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/multiverse Translation-en [104 kB]  
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/multiverse amd64 c-n-f Metadata [9136 B]  
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [2347 kB]  
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main Translation-en [405 kB]  
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 c-n-f Metadata [16.3 kB]  
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages [1570 kB]  
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/restricted Translation-en [221 kB]  
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 c-n-f Metadata [620 B]  
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [1021 kB]  
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/universe Translation-en [237 kB]  
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/universe amd64 c-n-f Metadata [23.5 kB]  
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages [25.2 kB]  
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse Translation-en [7408 B]  
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 c-n-f Metadata [604 B]  
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main amd64 Packages [45.7 kB]  
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main Translation-en [16.3 kB]  
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main amd64 c-n-f Metadata [1420 B]  
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/restricted amd64 c-n-f Metadata [116 B]  
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [24.9 kB]  
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe Translation-en [16.3 kB]  
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 c-n-f Metadata [880 B]  
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/multiverse amd64 c-n-f Metadata [116 B]  
Get:31 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [1968 kB]  
Get:32 http://security.ubuntu.com/ubuntu focal-security/main Translation-en [322 kB]  
Get:33 http://security.ubuntu.com/ubuntu focal-security/main amd64 c-n-f Metadata [12.0 kB]  
Get:34 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [1467 kB]  
Get:35 http://security.ubuntu.com/ubuntu focal-security/restricted Translation-en [207 kB]  
Get:36 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 c-n-f Metadata [624 B]  
Get:37 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [792 kB]  
Get:38 http://security.ubuntu.com/ubuntu focal-security/universe Translation-en [154 kB]  
Get:39 http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata [17.0 kB]  
Get:40 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [22.9 kB]  
Get:41 http://security.ubuntu.com/ubuntu focal-security/multiverse Translation-en [5488 B]  
Get:42 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 c-n-f Metadata [528 B]  
Fetched 25.6 MB in 5s (5557 kB/s)  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
30 packages can be upgraded. Run 'apt list --upgradable' to see them.  
ubuntu@ip-172-31-26-69:~$
```

```
ubuntu@ip-172-31-26-69:~$
ubuntu@ip-172-31-26-69:~$
ubuntu@ip-172-31-26-69:~$ sudo apt install docker.io unzip
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base libidn11 pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools cgroups-mount | cgroup-lite debotstrap docker-doc rinse zfs-fuse | zfsutils zip
The following NEW packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base docker.io libidn11 pigz runc ubuntu-fan unzip
0 upgraded, 10 newly installed, 0 to remove and 30 not upgraded.
Need to get 69.4 MB of archives.
After this operation, 335 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 pigz amd64 2.4-1 [57.4 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/main amd64 bridge-utils amd64 1.6-2ubuntu1 [30.5 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 runc amd64 1.1.0-0ubuntu1-20.04.2 [3894 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 containerd amd64 1.5.9-0ubuntu1-20.04.6 [33.0 MB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/main amd64 dns-root-data all 2019052802 [5300 B]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/main amd64 libidn11 amd64 1.33-2.2ubuntu2 [46.2 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 dnsmasq-base amd64 2.80-1.1ubuntu1.6 [315 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/universe amd64 docker.io amd64 20.10.12-0ubuntu2-20.04.1 [31.8 MB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 ubuntu-fan all 0.12.13ubuntu0.1 [34.4 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/main amd64 unzip amd64 6.0-25ubuntu1.1 [168 kB]
Fetched 69.4 MB in 2s (45.1 MB/s)
Preconfiguring packages ...
Selecting previously unselected package pigz.
(Reading database ... 61835 files and directories currently installed.)
Preparing to unpack .../0-pigz_2.4-1_amd64.deb ...
Unpacking pigz (2.4-1) ...
Selecting previously unselected package bridge-utils.
Preparing to unpack .../1-bridge-utils_1.6-2ubuntu1_amd64.deb ...
Unpacking bridge-utils (1.6-2ubuntu1) ...
Selecting previously unselected package runc.
Preparing to unpack .../2-runc_1.1.0-0ubuntu1-20.04.2_amd64.deb ...
Unpacking runc (1.1.0-0ubuntu1-20.04.2) ...
Selecting previously unselected package containerd.
Preparing to unpack .../3-containerd_1.5.9-0ubuntu1-20.04.6_amd64.deb ...
Unpacking containerd (1.5.9-0ubuntu1-20.04.6) ...
Selecting previously unselected package dns-root-data.
Preparing to unpack .../4-dns-root-data_2019052802_all.deb ...
Unpacking dns-root-data (2019052802) ...
Selecting previously unselected package libidn11:amd64.
Preparing to unpack .../5-libidn11_1.33-2.2ubuntu2_amd64.deb ...
Unpacking libidn11:amd64 (1.33-2.2ubuntu2) ...
Selecting previously unselected package dnsmasq-base.
Preparing to unpack .../6-dnsmasq-base_2.80-1.1ubuntu1.6_amd64.deb ...
Unpacking dnsmasq-base (2.80-1.1ubuntu1.6) ...
Selecting previously unselected package docker.io.
Preparing to unpack .../7-docker.io_20.10.12-0ubuntu2-20.04.1_amd64.deb ...
Unpacking docker.io (20.10.12-0ubuntu2-20.04.1) ...
Selecting previously unselected package ubuntu-fan.
Preparing to unpack .../8-ubuntu-fan_0.12.13ubuntu0.1_all.deb ...
Unpacking ubuntu-fan (0.12.13ubuntu0.1) ...
Selecting previously unselected package unzip.
Preparing to unpack .../9-unzip_6.0-25ubuntu1.1_amd64.deb ...
Unpacking unzip (6.0-25ubuntu1.1) ...
Setting up unzip (6.0-25ubuntu1.1) ...
Setting up runc (1.1.0-0ubuntu1-20.04.2) ...
Setting up dns-root-data (2019052802) ...
Setting up libidn11:amd64 (1.33-2.2ubuntu2) ...
Setting up bridge-utils (1.6-2ubuntu1) ...
Setting up pigz (2.4-1) ...
Setting up containerd (1.5.9-0ubuntu1-20.04.6) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /lib/systemd/system/containerd.service.
Setting up docker.io (20.10.12-0ubuntu2-20.04.1) ...
Adding group 'docker' (GID 120) ...
Done.
```

 ubuntu@ip-172-31-26-69: ~

```
25 updates can be applied immediately.
21 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable
```

```
New release '22.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
```

```
Last login: Tue Feb  7 21:34:48 2023 from 171.50.207.205
```

```
ubuntu@ip-172-31-26-69:~$
```

```
ubuntu@ip-172-31-26-69:~$
```

```
ubuntu@ip-172-31-26-69:~$
```

```
ubuntu@ip-172-31-26-69:~$
```

```
ubuntu@ip-172-31-26-69:~$ docker version
```

```
Client:
```

```
Version:           20.10.12
API version:        1.41
Go version:         go1.16.2
Git commit:         20.10.12-0ubuntu2~20.04.1
Built:             Wed Apr  6 02:14:38 2022
OS/Arch:            linux/amd64
Context:            default
Experimental:       true
```

```
Server:
```

```
Engine:
Version:           20.10.12
API version:        1.41 (minimum version 1.12)
Go version:         go1.16.2
Git commit:         20.10.12-0ubuntu2~20.04.1
Built:             Thu Feb 10 15:03:35 2022
OS/Arch:            linux/amd64
Experimental:       false
```

```
containerd:
Version:           1.5.9-0ubuntu1~20.04.6
GitCommit:
```

```
runc:
Version:           1.1.0-0ubuntu1~20.04.2
GitCommit:
```

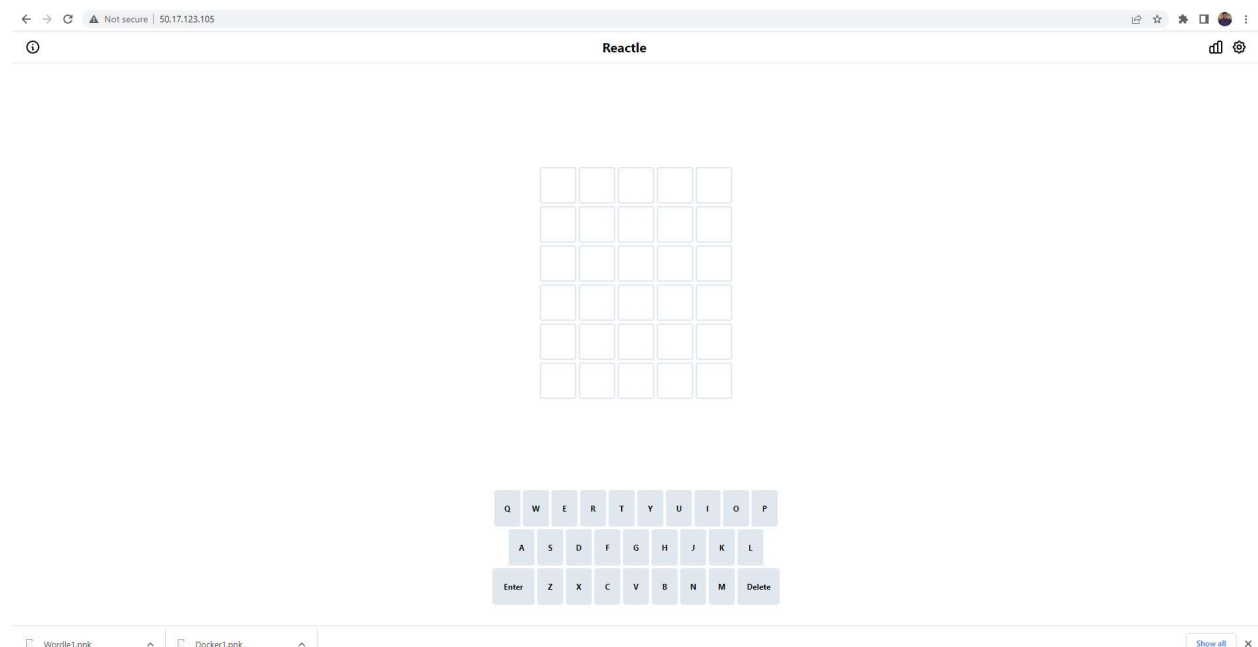
```
docker-init:
Version:           0.19.0
GitCommit:
```

```
ubuntu@ip-172-31-26-69:~$ █
```

Deploying the application

```
ubuntu@ip-172-31-26-69:~$  
ubuntu@ip-172-31-26-69:~$  
ubuntu@ip-172-31-26-69:~$ sudo chown ubuntu:ubuntu -R /opt  
ubuntu@ip-172-31-26-69:~$  
ubuntu@ip-172-31-26-69:~$  
ubuntu@ip-172-31-26-69:~$ cd /opt  
ubuntu@ip-172-31-26-69:/opt$  
ubuntu@ip-172-31-26-69:/opt$ docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
ubuntu@ip-172-31-26-69:/opt$  
ubuntu@ip-172-31-26-69:/opt$  
ubuntu@ip-172-31-26-69:/opt$  
ubuntu@ip-172-31-26-69:/opt$ wget https://github.com/modem7/react-wordle/archive/refs/heads/master.zip  
--2023-02-07 21:41:10-- https://github.com/modem7/react-wordle/archive/refs/heads/master.zip  
Resolving github.com (github.com)... 140.82.113.3  
Connecting to github.com (github.com)|140.82.113.3|:443... connected.  
HTTP request sent, awaiting response... 302 Found  
Location: https://codeload.github.com/modem7/react-wordle/zip/refs/heads/master [following]  
--2023-02-07 21:41:10-- https://codeload.github.com/modem7/react-wordle/zip/refs/heads/master  
Resolving codeload.github.com (codeload.github.com)... 140.82.112.9  
Connecting to codeload.github.com (codeload.github.com)|140.82.112.9|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: unspecified [application/zip]  
Saving to: 'master.zip'  
  
master.zip [ <=> ] 478.48K --.-KB/s in 0.08s  
  
2023-02-07 21:41:10 (6.21 MB/s) - 'master.zip' saved [489966]  
  
ubuntu@ip-172-31-26-69:/opt$  
ubuntu@ip-172-31-26-69:/opt$  
ubuntu@ip-172-31-26-69:/opt$  
ubuntu@ip-172-31-26-69:/opt$ unzip master.zip  
Archive: master.zip
```

Navigate to the public IP address of the running instance on a new web browser tab to see the application using the following format



Terminating / deleting an instance

Successfully terminated i-0fa12a3232ba28ab5

Instances (2) [Info](#)

Find instance by attribute or tag (case-sensitive)

< 1 >

Connect

Instance state

Actions

Launch instances

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input type="checkbox"/>	Wordle-1	i-0fa12a3232ba28ab5	Terminated	t2.small	-	No alarms	us-east-1b	-	50.17.123.105	-