

## Prometheus Installation:

The screenshot displays the AWS Management Console and the CloudShell terminal. The top portion shows the AWS console's 'Instances' page, where two instances are listed: 'Prometheus Server' (ID: i-0cb33229b76c6b308) and 'Jenkins server' (ID: i-0bd517d52714c13b9). Both are in a 'Running' state. Below this, the details for the 'Prometheus Server' instance are shown, including its public IPv4 address (3.149.246.203) and private IPv4 addresses (172.31.12.198).

The bottom portion of the image shows the CloudShell terminal window. The terminal output shows the command `yum install docker -y` being executed. The output indicates that the package `docker.x86_64 0:20.10.25-1.amzn2.0.4` will be installed. The transaction test passed, and the package was successfully installed.

```
[root@ip-172-31-12-198 ec2-user]# yum install docker -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
--> Running transaction check
--> Package docker.x86_64 0:20.10.25-1.amzn2.0.4 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch          Version           Repository        Size
=====
Installing:
docker                 x86_64        20.10.25-1.amzn2.0.4  amzn2extra-docker 43 M

Transaction Summary
-----
Install 1 Package

Total download size: 43 M
Installed size: 170 M
Downloading packages:
docker-20.10.25-1.amzn2.0.4.x86_64.rpm | 43 MB 00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : docker-20.10.25-1.amzn2.0.4.x86_64 1/1
  Verifying  : docker-20.10.25-1.amzn2.0.4.x86_64 1/1

Installed:
docker.x86_64 0:20.10.25-1.amzn2.0.4
```

```
Prometheus Server
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
You are sharing your entire screen. Stop Sharing
X server Exit

Quick connect...
/home/ec2-user/
Name
ssh
.bash_logout
.bash_profile
.bashrc
Remote monitoring
Follow terminal folder

Complete!
[root@ip-172-31-12-198 ec2-user]# systemctl docker start
Unknown operation 'docker'.
[root@ip-172-31-12-198 ec2-user]# systemctl start docker
[root@ip-172-31-12-198 ec2-user]# systemctl enable docker
Created symlink from /etc/systemd/system/multi-user.target.wants/docker.service to /usr/lib/systemd/system/docker.service.
[root@ip-172-31-12-198 ec2-user]# systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; vendor preset: disabled)
   Active: active (running) since Fri 2024-03-22 05:24:40 UTC; 19s ago
     Docs: https://docs.docker.com
   Main PID: 4513 (dockerd)
    CGroup: /system.slice/docker.service
            └─4513 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock --default-ulimit nofile=32768:65536

Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal dockerd[4513]: time="2024-03-22T05:24:40.513875436Z" level=info...y2"
Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal dockerd[4513]: time="2024-03-22T05:24:40.517874085Z" level=warn...ht"
Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal dockerd[4513]: time="2024-03-22T05:24:40.517902179Z" level=warn...ce"
Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal dockerd[4513]: time="2024-03-22T05:24:40.518068780Z" level=info...t."
Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal dockerd[4513]: time="2024-03-22T05:24:40.610132672Z" level=info...ss"
Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal dockerd[4513]: time="2024-03-22T05:24:40.650723841Z" level=info...e."
Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal dockerd[4513]: time="2024-03-22T05:24:40.663959884Z" level=info...25
Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal dockerd[4513]: time="2024-03-22T05:24:40.664019451Z" level=info...on"
Mar 22 05:24:40 ip-172-31-12-198.us-east-2.compute.internal systemd[1]: Started Docker Application Container Engine.
Hint: Some lines were ellipsized, use -l to show in full.
[root@ip-172-31-12-198 ec2-user]# mkdir prometheus
[root@ip-172-31-12-198 ec2-user]# cd prometheus/
[root@ip-172-31-12-198 prometheus]# ls
[root@ip-172-31-12-198 prometheus]# vi prometheus.yml
[root@ip-172-31-12-198 prometheus]# pwd
/home/ec2-user/prometheus
[root@ip-172-31-12-198 prometheus]# docker run -d -p 9090:9090 -v /home/ec2-user/prometheus:/etc/prometheus prom/prometheus

Hint: Some lines were ellipsized, use -l to show in full.
[root@ip-172-31-12-198 ec2-user]# mkdir prometheus
[root@ip-172-31-12-198 ec2-user]# cd prometheus/
[root@ip-172-31-12-198 prometheus]# ls
[root@ip-172-31-12-198 prometheus]# vi prometheus.yml
[root@ip-172-31-12-198 prometheus]# pwd
/home/ec2-user/prometheus
[root@ip-172-31-12-198 ec2-user]# docker run -d -p 9090:9090 -v /home/ec2-user/prometheus:/etc/prometheus prom/prometheus
Unable to find image 'prom/prometheus:latest' locally
latest: Pulling from prom/prometheus
9fa9226be034: Pull complete
1617e25568b2: Pull complete
6023ee08d811: Pull complete
2b691bf7f991: Pull complete
2920c060ae8d: Pull complete
4b003b069552: Pull complete
0c45a15cfa05: Pull complete
989588be44d4: Pull complete
09c4b67e875b: Pull complete
485fa33d8772: Pull complete
158609c34028: Pull complete
e1ecd933bde0: Pull complete
Digest: sha256:5ccad477d0057e62a7cd1981ffcc43785ac10c5a35522dc207466ff7e7ec845f
Status: Downloaded newer image for prom/prometheus:latest
e83025b3b75bb54b472739c07ed6cd762d862fe825517e2f0e5f783805a4b18b
[root@ip-172-31-12-198 prometheus]# docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS
e83025b3b75b  prom/prometheus  "/bin/prometheus --c..."  7 seconds ago  Up 4 seconds  0.0.0.0:9090->9090/tcp, :::9090->9090/tcp
p_unruffled_keller
[root@ip-172-31-12-198 prometheus]# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
prom/prometheus  latest   1d3b7f56885b   2 days ago    262MB

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```

Prometheus

AlertsGraphStatus▼Help

Targets

All scrape pools▼

Docker-jenkins (0/1 up)show more

jenkins (1/1 up)show more

prometheus (1/1 up)show less

Runtime & Build Information

TSDB Status

Command-Line Flags

Configuration

Rules

Targets

Service Discovery

by endpoint or labels

Unknown

Unhealthy

Healthy

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9090/metrics	UP	instance="localhost:9090"job="prometheus"	45m 13s ago	6.046ms	

3.149.246.203:9090/targets

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Prometheus

AlertsGraphStatus▼Help

Targets

All scrape pools▼

Docker-jenkins (0/1 up)show more

jenkins (1/1 up)show more

prometheus (1/1 up)show less

Filter by endpoint or labels

Unknown

Unhealthy

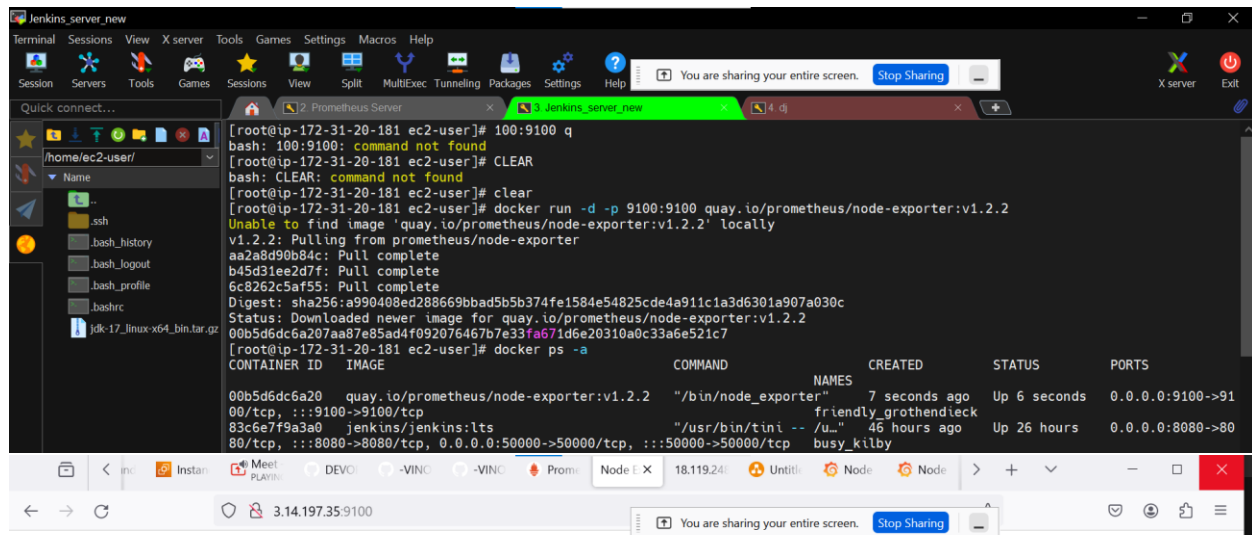
Healthy

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9090/metrics	UP	instance="localhost:9090"job="prometheus"	45m 13s ago	6.046ms	

3.149.246.203:9090/targets

Page 2 of 20 wordsEnglish (United States)Accessibility: Investigate

## Slave Installation:



```
[root@ip-172-31-20-181 ec2-user]# 100:9100 q
bash: 100:9100: command not found
[root@ip-172-31-20-181 ec2-user]# CLEAR
bash: CLEAR: command not found
[root@ip-172-31-20-181 ec2-user]# clear
[root@ip-172-31-20-181 ec2-user]# docker run -d -p 9100:9100 quay.io/prometheus/node-exporter:v1.2.2
Unable to find image 'quay.io/prometheus/node-exporter:v1.2.2' locally
v1.2.2: Pulling from prometheus/node-exporter
aa2a8d90b84c: Pull complete
b45d31ee2d7f: Pull complete
6c8262c5af55: Pull complete
Digest: sha256:a990408ed288669bbad5b5b374fe1584e54825cde4a911c1a3d6301a907a030c
Status: Downloaded newer image for quay.io/prometheus/node-exporter:v1.2.2
00b5d6dc6a207aa87e85ad4f092076467b7e33fa671d6e20310a0c33a6e521c7
[root@ip-172-31-20-181 ec2-user]# docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	NAMES	CREATED	STATUS	PORTS
00b5d6dc6a20	quay.io/prometheus/node-exporter:v1.2.2	"/bin/node_exporter"	friendly_grothendieck	7 seconds ago	Up 6 seconds	0.0.0.0:9100->9100/tcp, :::9100->9100/tcp
83c6e7f9a3a0	jenkins/jenkins:lts	"/usr/bin/tini -- /u..."	busy_kilby	46 hours ago	Up 26 hours	0.0.0.0:8080->8080/tcp, :::8080->8080/tcp, 0.0.0.0:50000->50000/tcp, :::50000->50000/tcp

## Node Exporter

[Metrics](#)

The image is a composite of two screenshots. The top screenshot shows a terminal window with a Prometheus configuration file being edited. The configuration includes a global scrape interval of 15s and three scrape jobs: 'prometheus' (static config, localhost:9090), 'jenkins' (static config, 3.14.197.35:9100), and 'Docker-jenkins' (static config, 18.119.248.107:9100). The terminal also shows the execution of Docker commands to run Prometheus and restart the 'Docker-jenkins' target.

The bottom screenshot shows the Prometheus web interface. The 'Targets' page displays a table of discovered targets. The 'Docker-jenkins' target is shown as 'DOWN' with an error message: 'Get "http://18.119.248.107:9100/metrics": dial tcp 18.119.248.107:9100: connect: connection refused'. The 'jenkins' target is shown as 'UP' with a successful scrape. The 'prometheus' target is also shown as 'UP'.

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://18.119.248.107:9100/metrics	DOWN	instance="18.119.248.107:9100" job="Docker-jenkins"	53m 5s ago	1.385ms	Get "http://18.119.248.107:9100/metrics": dial tcp 18.119.248.107:9100: connect: connection refused
http://3.14.197.35:9100/metrics	UP	instance="3.14.197.35:9100" job="jenkins"	53m 8s ago	18.658ms	
http://18.119.248.107:9100/metrics	UP	instance="18.119.248.107:9100" job="prometheus"	53m 8s ago	18.658ms	

The screenshot shows the Prometheus web interface with a table of targets. The 'jenkins' target is in a DOWN state, while the 'prometheus' and 'localhost' targets are in an UP state. The error message for the jenkins target indicates a connection refused.

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://18.119.248.107:9100/metrics	DOWN	instance="18.119.248.107:9100" job="Docker-jenkins"	53m 5s ago	1.385ms	Get "http://18.119.248.107:9100/metrics": dial tcp 18.119.248.107:9100: connect: connection refused
jenkins (1/1 up) <a href="#">show less</a>					
Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://3.14.197.35:9100/metrics	UP	instance="3.14.197.35:9100" job="jenkins"	53m 8s ago	18.658ms	
prometheus (1/1 up) <a href="#">show less</a>					
Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9090/metrics	UP	instance="localhost:9090" job="prometheus"	53m 2s ago	6.046ms	