SimpleTimeService - Deployment Guide

The following documentation will guide you through the steps needed to clone the repository, set up the environment, and run the container.

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Prerequisites

Before you can deploy the **SimpleTimeService** container, ensure you have the following tools installed on your local machine:

1. **Docker**: Docker will be used to build and run the container.
2. **Git**: Git will be used to clone the repository.

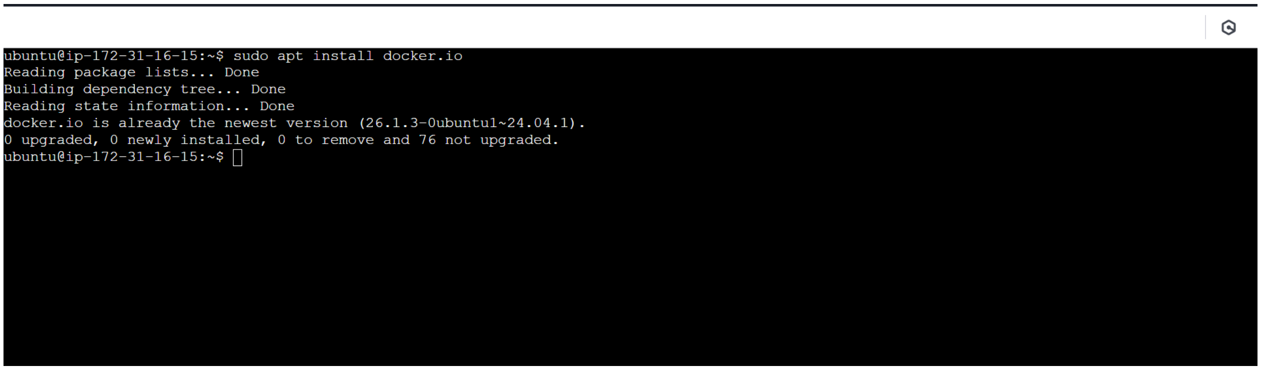
Tools Installation

1. Install Docker

Follow the instructions to install Docker:

- **Docker Installation Guide**: https://docs.docker.com/get-docker/
- **If you are using Ubuntu OS: sudo apt update && apt install docker.io**

  (Or simply “sudo snap install docker”)

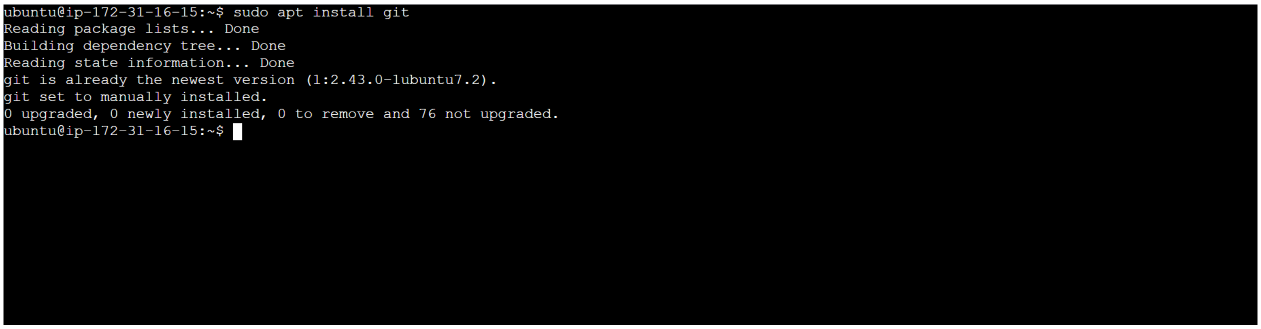


```
ubuntu@ip-172-31-16-15:~$ sudo apt install docker.io
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
docker.io is already the newest version (26.1.3-0ubuntu1~24.04.1).
0 upgraded, 0 newly installed, 0 to remove and 76 not upgraded.
ubuntu@ip-172-31-16-15:~$
```

2. Install Git

Follow the instructions to install Git:

- **If you are using Ubuntu OS: sudo apt install git**
- **Git Installation Guide**: https://git-scm.com/book/en/v2/Getting-Started-Installing-Git

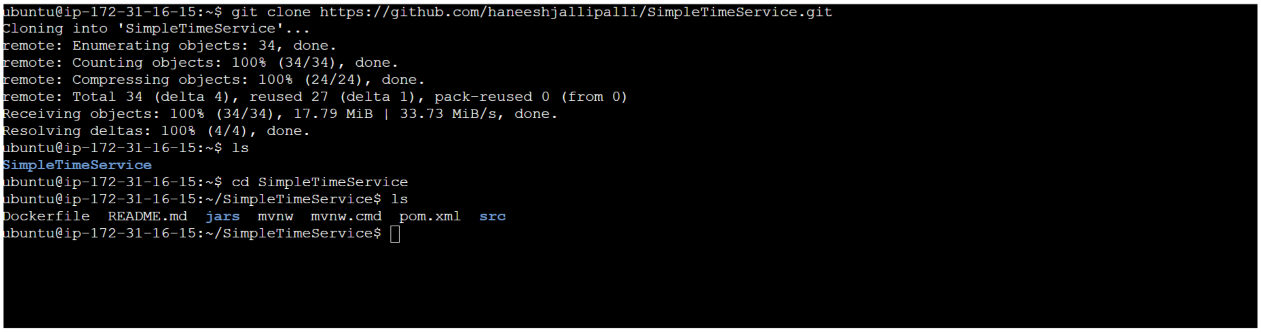


```
ubuntu@ip-172-31-16-15:~$ sudo apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.43.0-1ubuntu7.2).
git set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 76 not upgraded.
ubuntu@ip-172-31-16-15:~$
```

Repository Setup

Clone the repository to your local machine:

git clone https://github.com/haneeshjallipalli/SimpleTimeService.git
cd SimpleTimeService



```
ubuntu@ip-172-31-16-15:~$ git clone https://github.com/haneeshjallipalli/SimpleTimeService.git
Cloning into 'SimpleTimeService'...
remote: Enumerating objects: 34, done.
remote: Counting objects: 100% (34/34), done.
remote: Compressing objects: 100% (24/24), done.
remote: Total 34 (delta 4), reused 27 (delta 1), pack-reused 0 (from 0)
Receiving objects: 100% (34/34), 17.79 MiB | 33.73 MiB/s, done.
Resolving deltas: 100% (4/4), done.
ubuntu@ip-172-31-16-15:~$ ls
SimpleTimeService
ubuntu@ip-172-31-16-15:~$ cd SimpleTimeService
ubuntu@ip-172-31-16-15:~/SimpleTimeService$ ls
Dockerfile  README.md  jars  mvnw  mvnw.cmd  pom.xml  src
ubuntu@ip-172-31-16-15:~/SimpleTimeService$ 
```

This will pull the project files and move you into the project directory.

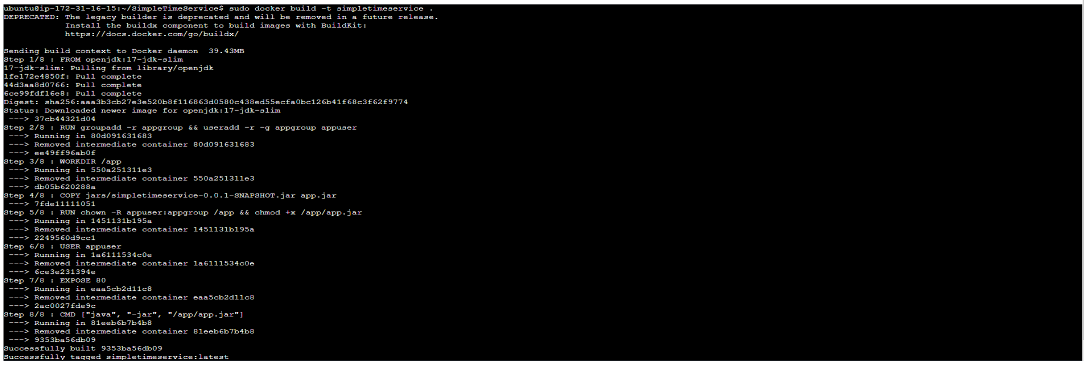
Running the Docker Container

Once the repository is set up locally, you can run the **SimpleTimeService** container.

1. Build the Docker Image

If you have a custom Dockerfile or want to ensure you have the latest build, use the following command to build the Docker image locally:

sudo docker build -t simpletimeservice .



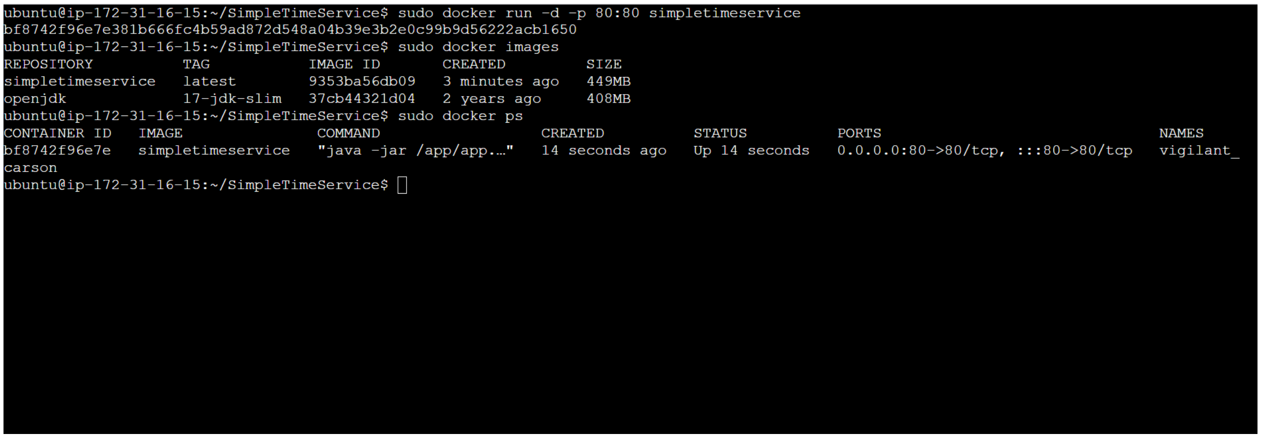
```
ubuntu@ip-172-31-16-15:~/SimpleTimeService$ sudo docker build -t simpletimeservice .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

Sending build context to Docker daemon  39.43MB
Step 1/8 : FROM openjdk:17-jdk-slim
17-jdk-slim: Pulling from library/openjdk
1fe172e4850f: Pull complete
44d3aa8d0766: Pull complete
6ce99fdf16e8: Pull complete
Digest: sha256:aaa3b3cb27e3e520b8f116863d0580c438ed55ecfa0bc126b41f68c3f62f9774
Status: Downloaded newer image for openjdk:17-jdk-slim
 ---> 37cb44321d04
Step 2/8 : RUN groupadd -r appgroup && useradd -r -g appgroup appuser
 ---> Running in 80d091631683
 ---> Removed intermediate container 80d091631683
 ---> ee49ff96ab0f
Step 3/8 : WORKDIR /app
 ---> Running in 550a251311e3
 ---> Removed intermediate container 550a251311e3
 ---> db05b620288a
Step 4/8 : COPY jars/simpletimeservice-0.0.1-SNAPSHOT.jar app.jar
 ---> 7fde11111051
Step 5/8 : RUN chown -R appuser:appgroup /app && chmod +x /app/app.jar
 ---> Running in 1451131b195a
 ---> Removed intermediate container 1451131b195a
 ---> 2249560d9cc1
Step 6/8 : USER appuser
 ---> Running in 1a6111534c0e
 ---> Removed intermediate container 1a6111534c0e
 ---> 6ce3e231394e
Step 7/8 : EXPOSE 80
 ---> Running in eaa5cb2d11c8
 ---> Removed intermediate container eaa5cb2d11c8
 ---> 2ac0027fde9c
Step 8/8 : CMD ["java", "-jar", "/app/app.jar"]
 ---> Running in 81eeb6b7b4b8
 ---> Removed intermediate container 81eeb6b7b4b8
 ---> 9353ba56db09
Successfully built 9353ba56db09
Successfully tagged simpletimeservice:latest
```

This will build the image using the `Dockerfile` in the root of the repository and tag it as `simpletimeservice`.

2. Run the Docker Container

To run the **SimpleTimeService** container in detached mode, use the following command:

sudo docker run -d -p 80:80 simpletimeservice



```
ubuntu@ip-172-31-16-15:~/SimpleTimeService$ sudo docker run -d -p 80:80 simpletimeservice
bf8742f96e7e381b666fc4b59ad872d548a04b39e3b2e0c99b9d56222acb1650
ubuntu@ip-172-31-16-15:~/SimpleTimeService$ sudo docker images
REPOSITORY          TAG           IMAGE ID       CREATED         SIZE
simpletimeservice   latest        9353ba56db09   3 minutes ago   449MB
openjdk             17-jdk-slim   37cb44321d04   2 years ago     408MB
ubuntu@ip-172-31-16-15:~/SimpleTimeService$ sudo docker ps
CONTAINER ID   IMAGE               COMMAND                  CREATED          STATUS          PORTS                               NAMES
bf8742f96e7e   simpletimeservice   "java -jar /app/app.…"   14 seconds ago   Up 14 seconds   0.0.0.0:80->80/tcp, :::80->80/tcp   vigilant_
carson
ubuntu@ip-172-31-16-15:~/SimpleTimeService$ 
```

This command does the following:

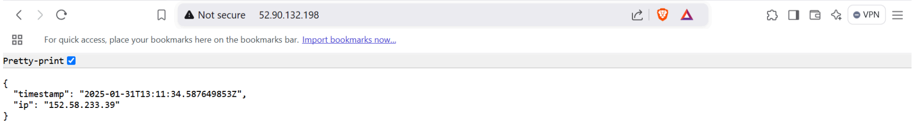
- `-d`: Runs the container in detached mode (in the background).
- `-p 80:80`: Maps port 80 on the host to port 80 on the container.
- `Simpletimeservice` is the docker image name

The container should now be running and accessible on port 80.

Accessing the Service

Once the container is up and running, you can access the **SimpleTimeService** by opening your browser and navigating to:

http://localhost:80


Not secure
52.90.132.198
VPN
For quick access, place your bookmarks here on the bookmarks bar. Import bookmarks now...
Pretty-print ☑

```
{
  "timestamp": "2025-01-31T13:11:34.587649853Z",
  "ip": "152.58.233.39"
}
```

Live demo: simpletimeservice.haneesh.cloud

You should see a simple response indicating that the service is running and serving the current time or similar functionality based on your container's configuration.

Additional Information

- **Docker Documentation**: https://docs.docker.com/
- **Docker Hub - haneeshdevops/simpletimeservice**: https://hub.docker.com/repository/docker/haneeshdevops/simpletimeservice

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This documentation should guide you through the process of setting up and running the **SimpleTimeService** container. If you have any questions or run into issues, feel free to open an issue on the GitHub repository.
