



How long the docker containers run?

docker container is nothing but a program under execution in an isolated env from other programs or containers on the host.

So until the program terminates the container will run, upon completing the execution of the underlying program, the container would be EXITED.

How long the server processes/programs like databases, web servers, application servers like

1. mysql/postgress/oracle database
2. apache2, nginx http servers
3. tomcat, weblogic application servers

should be running?

These are by nature long-running programs/processes that should be running infinitely until we stop/terminate them explicitly.

These processes/server programs runs in background, without blocking the TTY as these doesnt require any interactive inputs from the user during their execution.

If such programs are packaged aspart of the docker image and runs out of docker container, since they run in background without blocking the TTY immediately upon lauching the container, the container would EXITED or TERMINATED.

So how to run such daemon or long-running process aspart of the docker container INFINETELY.....

Running INFINITE..... containers:



```
FROM ubuntu:24.04
install openjdk-17-jdk
```

```
/u01/middleware
|-apache-tomcat-10.0.12
|  |-webapps
|  |-bin
|    |-startup.sh
|    |-shutdown.sh
```

```
ENV TOMCAT_HOME=/u01/middleware/apache-
tomcat-10.0.12
ENV PATH=$PATH:$TOMCAT_HOME/bin
```

```
ENTRYPOINT ["startup.sh"]
```

upon running the startup.sh, the tomcat server would be started as an background process and releases the TTY that leads to termination of the container.

```
/
|-etc      /dev/null
|-bin      1. if we write anything into /dev/null, it is voided
|-sbin     2. if we read from /dev/null, its an infinte file that keeps emitting the data
|-usr
|-tmp
|-root
|-home
|-opt
|-proc
|-media
|-mnt
|-dev
|-null (magic device, block-hole)
```

Let us apply the trick of running the TOMCAT server infinitely using /dev/null

```
ENTRYPOINT ["startup.sh"]
```

```
CMD ["tail -f /dev/null"] #blocks the TTY infinitely so that it keeps running the
container
```