



Docker section 5 - Health check of container

Health check instruction allows the docker to know that the application on the container is properly running or not.

Health check is done by pinging the container at its IP address. And in health check image itself we specify the time interval at which the health check should be performed.

The IP address can also be of some other container as well.

Let's say that we have container 1 which we want to monitor. So we will first try to know its IP address. And then once the IP address is known we will add the IP address in a docker file ahead of the health check command.

```
from ubuntu
HEALTHCHECK --interval=5s cmd ping -c <ip address>
```

Now here the IP address which is given is of container 1.

And now we will build this docker file and then we will name its image as monitoring.

And now when we will run the monitoring image the monitoring container will be formed from this image.

And when we do `docker ps` there will be a health check information saying "healthy". This is the report of the container 1.

Exit code:

When we do `inspect` command on the monitoring container, then we see all the logs of all the health check pings that were performed by monitoring.

There we can see the exit code as 0. This means that everything is fine.

When we go and stop the container 1. The monitoring container keeps on doing its tasks of pinging the container 1 for doing its health check. And this time it won't be able to access the container 1 as the container 1 is off. And hence the exit code will be 1. Which means something is bad. Or health check is failed.

When we do `docker ps` then there status will be updated as unhealthy.

Health check command in runtime:

Instead of creating another container and providing ip address to it to monitor the specific container we can also use the health check command.

```
docker container run -dt --name tmp --health-cmd  
"curl -f http://localhost" busybox ch
```

We can also specify some values of interval, timeout etc.

While writing every command of health check in run command we need to associate the flags of health command with hyphen.

Health-cmd

Health-interval

Health-retries

In curl command we should use -f because if we don't use it then it will give the entire html code as a form or error. And if we use it it will give a single line code as form of error.

Curl -f http://localhost/

So here there will be only one error small one line error of page not found.

We can also use the flag **||exit 1**

If we use this then after getting an error we will exit from the container and we will logout.

Curl -f https://localhost/ ||exit 1

