Title: Prometheus in Docker container can't reach Spring Boot application

Post Body:

I have a Spring Boot application that is running on 9000 port locally (not in container). The application has configured actuator with Prometheus micrometer and the whole stats is available by URL localhost:9000/actuator/prometheus.

I run Prometheus in Docker container using the following command:

docker run --name spring_boot_prometheus -p 9090:9090 -p 9000:9000 -v /Users/xyz/docker/prometheus/prometheus.yml:/etc/prometheus

prometheus.yml

global: scrape_interval: 5s evaluation_interval: 5s scrape_configs: - job_name: 'users-app' metrics_path: '/actuator

The command docker ps returns the following:

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS

The UI says that prometheus can't connect to spring boot endpoint but it's available. If I click on endpoint it redirects me to 1568ec9e8353:9000 instead of localhost:9000

How can I fix the problem?

Appreciate for your help!

Accepted Answer:

In prometheus.yml, instead of localhost: 9000 put the specific name of the container: spring_boot_prometheus: 9000.

Docker best practice is to use container names instead of container IP addresses.

Highest Rated Answer:

For the prometheus docker container 'localhost' means local. So prometheus tries to connect within the container to port 9000. This will not work.

Also, within the prometheus container does not run a service on port 9000 as far as I can know from your post.

If both apps are in a docker container:

The target container has it's own IP address within your docker installation. Typically 172.17.y.z.

A simple docker network is necessary and after that you run both you containers with that:

\$ docker network create mynet \$ docker run --name foo --net mynet img \$ docker run --name bar --net mynet img

Found here: forums.docker.com

If you have the service (9000) running on your machine without docker:

This is not a standard use case

Read here how to set this up.

You have to obtain the IP address of your physical computer. For example 192.168.0.10. This is then the target for prometheus.