SEK - Cert renewal (x509: certificate has expired or is not yet valid)

When you use *kubectl* in order to check the status of your Kubernetes (K8s) pods. **you got the following error:**

```
x509: certificate has expired or is not yet valid
```

Troubleshooting

```
kubeadm certs check-expiration
```

To check for the expiration, and:

```
kubeadm certs renew all
```

To renew all of them.

Steps to fix

First get the *container_id*:

```
docker ps -a
```

Then *exec* interactively in it with *bash*:

```
docker exec -it <container_id> bash
```

Now, run the `kubeadm certs renew all` command and, finally, restart `kubelet` for the changes to take effect:

```
systemctl restart kubelet
```

You will probably see an error like this when trying to run `kubectl` outside of the container:

```
error: You must be logged in to the server (the server has asked for the client to provide credentials)
```

As outside the docker instance I only have `kubectl` installed and not K8s, I don't have the `~/.kube/config` file defined (even if I did, the certificates would not be updated automatically).

```
sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config
sudo chown $(id -u):$(id -g) $HOME/.kube/config
```