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Ergebniss

Das ergebnis kann auf dem localhost abgerufen werden
Bei einem Reload wechseln sich die 2 Server.
Bei dem Webserver nr 1 steht:(Webserver1 von Kaspraov)
Bei dem Webserver nr 2 steht: (Webserver2 von Kasparov)

Lösungsweg: Docker

1. Install Docker

https://docs.docker.com/engine/install/ubuntu/#install-using-the-repository

```
docker pull haproxy
docker run -d --name haproxy-load-balancer -v
/pfad/zur/haproxy.cfg:/usr/local/etc/haproxy/haproxy.cfg -p 80:80 haproxy
docker pull httpd
docker run -d --name webserver1 httpd
docker run -d --name webserver2 httpd
```

change the index.html in both servers

To do it access each server container separably and open both index files i

Config file:

```
frontend http_front
    bind *:80
    default_backend http_back

backend http_back
    balance roundrobin
    mode http
    server webserver1 172.17.0.2:80 check
```

```
        server webserver2 172.17.0.3:80 check
```

navigieren zum index

```
cd /usr/local/apache2/htdocs
```

```
echo "This is webserver1" > index.html
exit
```

```
docker exec -it webserver2 /bin/bash
cd /usr/local/apache2/htdocs
echo "This is webserver2" > index.html
```

restart the server

```
root@06c7faef529a:/usr/local/apache2# ls
bin  build  cgi-bin  conf  error  htdocs  icons  include  logs  modules
root@06c7faef529a:/usr/local/apache2# cd /opt/bitnami
bash: cd: /opt/bitnami: No such file or directory
root@06c7faef529a:/usr/local/apache2# cd ..
root@06c7faef529a:/usr/local# ls
apache2  bin  etc  games  include  lib  man  sbin  share  src
root@06c7faef529a:/usr/local# cd ..
root@06c7faef529a:/usr# ls
bin  games  include  lib  lib32  lib64  libexec  libx32  local  sbin  share  src
root@06c7faef529a:/usr# cd ..
root@06c7faef529a:/# ls
bin   dev  home  lib32  libx32  mnt  proc  run   srv  tmp  var
boot  etc  lib   lib64  media   opt  root  sbin  sys  usr
root@06c7faef529a:/# cd opt
root@06c7faef529a:/opt# ls
root@06c7faef529a:/opt# cd bitnami
bash: cd: bitnami: No such file or directory
root@06c7faef529a:/opt# exit
exit
kaperbm@kaperbm-kubuntu:~/Desktop$ docker exec -it webserver1 /bin/bash
root@06c7faef529a:/usr/local/apache2# ls
bin  build  cgi-bin  conf  error  htdocs  icons  include  logs  modules
root@06c7faef529a:/usr/local/apache2# cd usr
bash: cd: usr: No such file or directory
root@06c7faef529a:/usr/local/apache2# ls
bin  build  cgi-bin  conf  error  htdocs  icons  include  logs  modules
root@06c7faef529a:/usr/local/apache2# cd htdocs
root@06c7faef529a:/usr/local/apache2/htdocs# ls
index.html
root@06c7faef529a:/usr/local/apache2/htdocs# echo "Webserver1 von Kaspraov" > index.html
root@06c7faef529a:/usr/local/apache2/htdocs# exit
exit
kaperbm@kaperbm-kubuntu:~/Desktop$ docker exec -it webserver2 /bin/bash
root@ae5de87c9c92:/usr/local/apache2# cd htdocs/
root@ae5de87c9c92:/usr/local/apache2/htdocs# ls
index.html
root@ae5de87c9c92:/usr/local/apache2/htdocs# echo "Webserver2 von Kasparov" > index.html
root@ae5de87c9c92:/usr/local/apache2/htdocs# exit
exit
```

```
kaperbm@kaperbm-kubuntu:~/Desktop$ docker exec -it webserver1 /bin/sh
# pwd
/usr/local/apache2
# cd ../
# pwd
/usr/local
# cd ..
# pwd
/usr
# ls
bin  games  include  lib  lib32  lib64  libexec  libx32  local  sbin  share  src
# cd ..
# ls
bin   dev   home  lib32  libx32  mnt   proc  run   srv   tmp   var
boot  etc   lib   lib64  media   opt   root  sbin  sys   usr
# cd opt
# ls
# pwd
/opt
# ls
# cd ..
# cd var
# ls
backups  cache  lib  local  lock  log  mail  opt  run  spool  tmp
# cd opt
# ls
# tree
/bin/sh: 18: tree: not found
# three
/bin/sh: 19: three: not found
# tree
/bin/sh: 20: tree: not found
# sudo tree
/bin/sh: 21: sudo: not found
# ^C
# ^C
# ^C
```

Quellen

[1]https://www.digitalocean.com/community/tutorials/how-to-set-up-an-apache-active-passive-cluster-using-pacemaker-on-centos-7

[2] https://unixcop.com/pacemaker-ha-cluster-setup-on-centos8-rhel8/

[3]https://drhellberg.de/FHDW/Betriebssysteme/4Quartal2017/20171207_Praesentation_Failover-Cluster_Hellberg_v33.pdf

[4]: Document HAProxy konfigurieren:

(https://elearning.tgm.ac.at/pluginfile.php/109715/mod_assign/introattachment/0/HAproxy.pdf?

forcedownload=1)

[5] ChatGPT4 https://chat.openai.com/