Docker learnings

Learnings from using Docker after 3 years

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This talk is not about Kubernetes or Docker Swarm

You shouldn't run your container as root

How to build smaller images

Cleanup up your Docker with prune

Cleanup

- · Remove dangling images with docker image prune
- Remove stopped containers with docker container prune
- Same for network and volume or all in once with docker system prune
- · Autoremove a container after it's stopped with docker --rm...

Using a UI in the browser or terminal

Use portainer locally without a password

```
alias portainer="docker run --rm -d
  -p 9000:9000
  --name=portainer
  -v /var/run/docker.sock:/var/run/docker.sock
  portainer/portainer --no-auth"
```

Hint: call it in an anonymus browser session

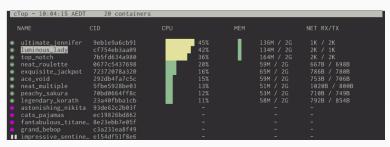
Use sen as terminal ui to inspect the layers of your images

```
alias sen="docker run --rm --name=sen
    -v /var/run/docker.sock:/run/docker.sock
    -ti -e TERM tomastomecek/sen"
```

```
scratch
*fa5be2806d4c /bin/sh -c #(nop) MAINTAINER The CentOS Project <cloud-ops@centos.org>
    ▶86bcb57631bd /bin/sh -c #(nop) LABEL name=CentOS Base Image vendor=CentOS license=GPLv2
         ▶d41e6e6bfdf8 /bin/sh -c #(nop) ENV container=docker
           235218c@d@71 /bin/sh -c #(nop) LABEL INSTALL=docker run -t -i --rm --privileged
             3f8341e3ed1b /bin/sh -c vum -v install postgresgl-server
               51ce5a01237d /bin/sh -c #(nop) ADD dir:1543912f127caa2263603d5f3ff11fddddfe
                 1efd5268689e /bin/sh -c systemctl disable getty.service console-getty.ser
                   9efdb56ef4ec /bin/sh -c #(nop) VOLUME [/var/lib/pgsql/data]
                         55c64acbaef1 /bin/sh -c #(nop) ENTRYPOINT &{["/usr/bin/container-e
                           9e6c06b57ed7 docker.io/praiskup/postgresgl:latest /bin/sh -c #(
≻6888fc827a3f /bin/sh -c #(nop) MAINTAINER Patrick Uiterwijk <puiterwijk@gmail.com>
 ▶9bdb5101e5fc docker.io/fedora:23 /bin/sh -c #(nop) ADD file:bcb5e5cddd4c4d1cac6f05788cfa50
 >c23bf6e72b30 docker.io/rhel7/rsyslog:latest
 ba3ffhc337ah docker io/rhel7/sadc-latest
```

Use ctop for monitoring your local containers

· github ctop



Keep an eye on your logfiles

How to grep the logs

```
docker logs {container} | grep {term}
```

This will not work as expected

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This will not work as expected

```
docker logs {container} 2>&1 | grep {term}
```

The reason why it's not working in the way you would expect is, that docker is not logging to stdout. Instead it's logging the stderror. So you have to redirect stderror to stdout before your can pipe it to grep.

Cleanup the Docker logs

To delete all log files, you can use the following command

```
find /var/lib/docker/containers/
    -type f -name "*.log" -delete
```

