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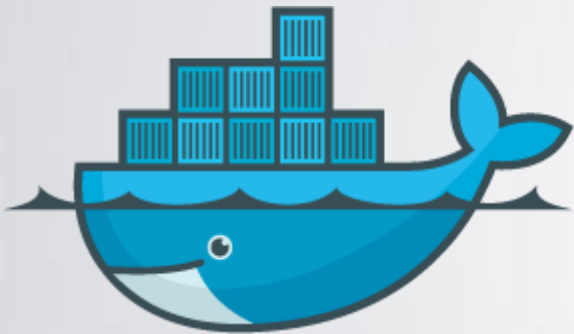
Docker

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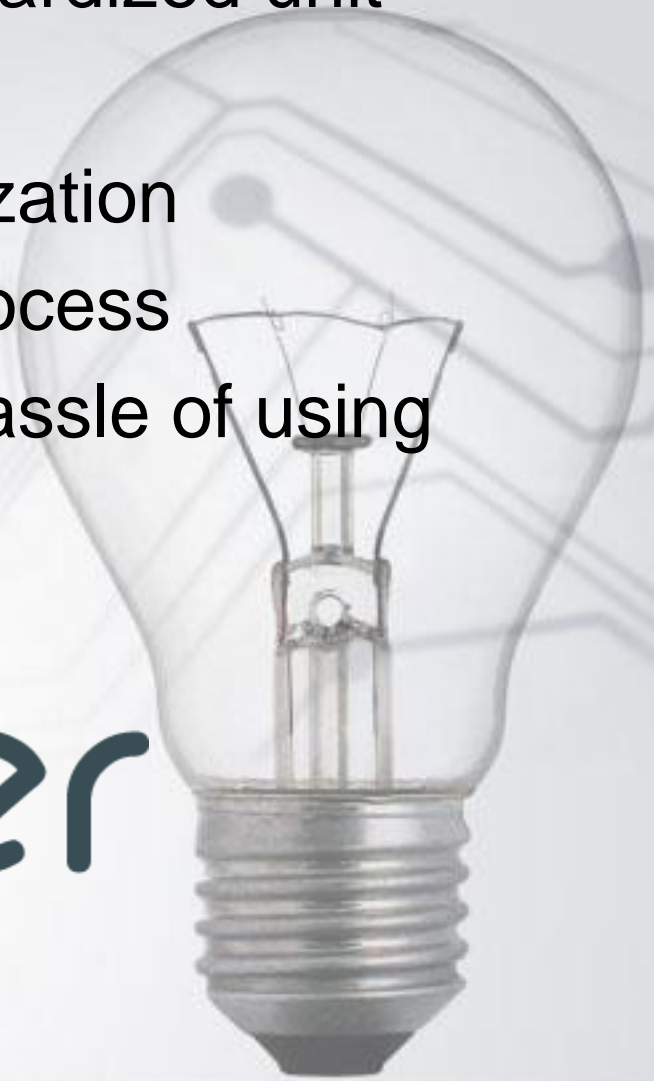


Docker

- Package applications in a standardized unit
- Images -> Containers
- Faster/cheaper than full Virtualization
- Improve the deployment/test process
- Provides isolation without the hassle of using VMs

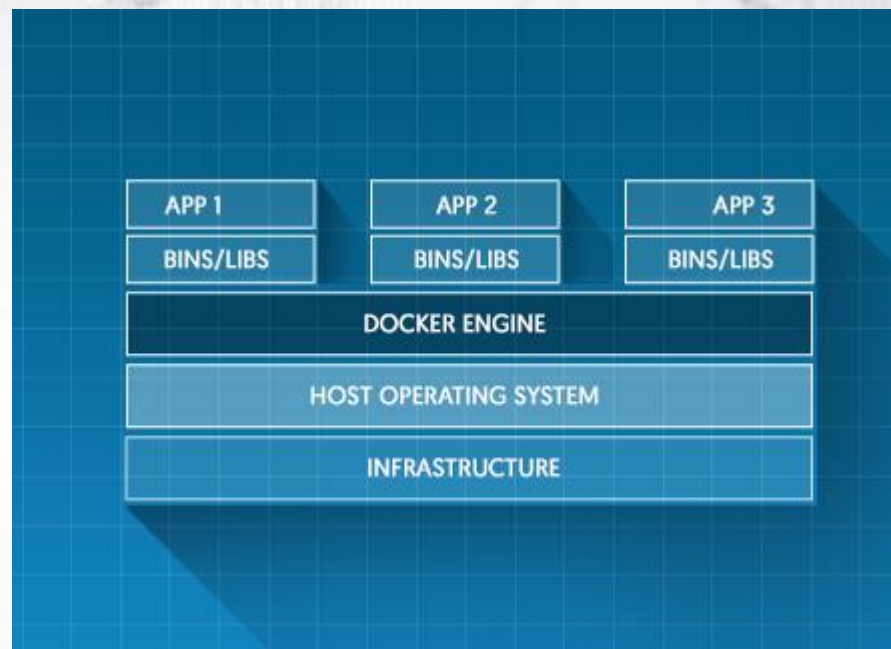
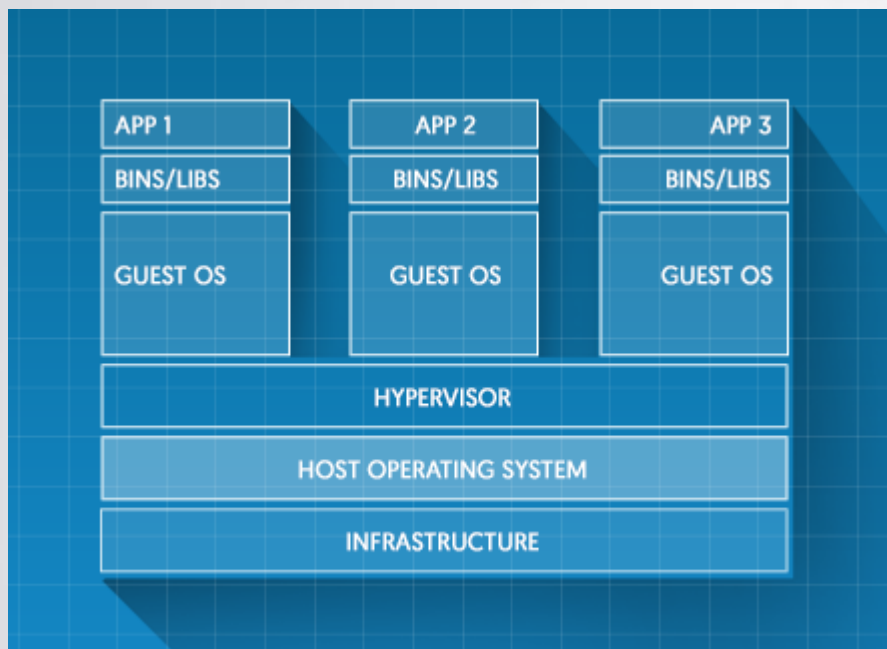


docker



Containers vs VM

- Less overhead
- Share the kernel (isolated processes)
- Not tied to any specific infrastructure
- Make better use of host resources



Storage

- Makes use of snapshot capabilities
 - Git Repo
 - Commits -> Revisions
 - Branching
- Supports AUFS and Devicemapper
- Image Layering and Sharing
 - Works at the block level (instead of the file level)

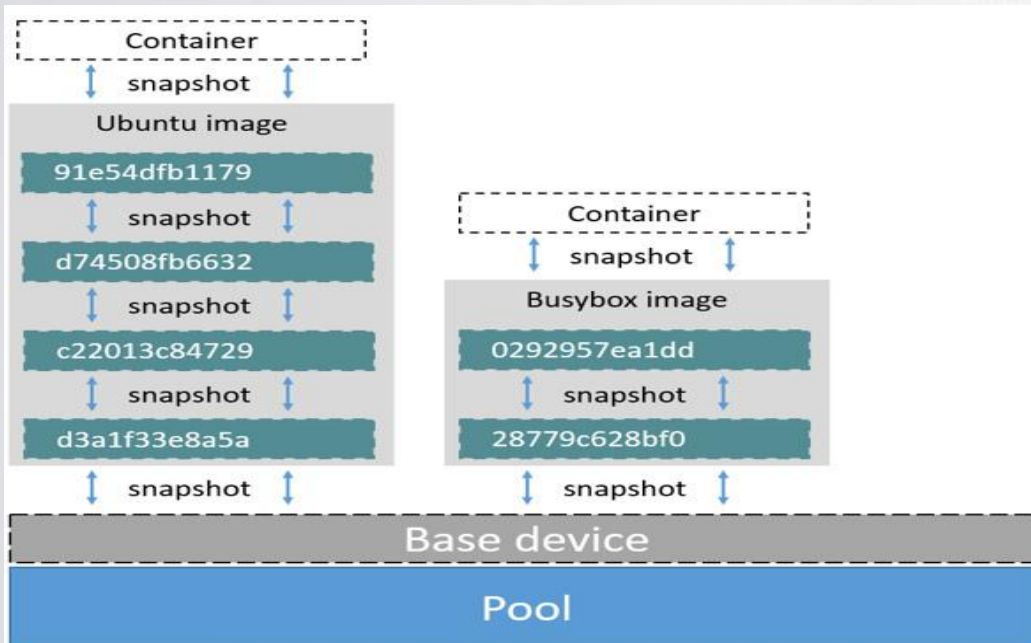
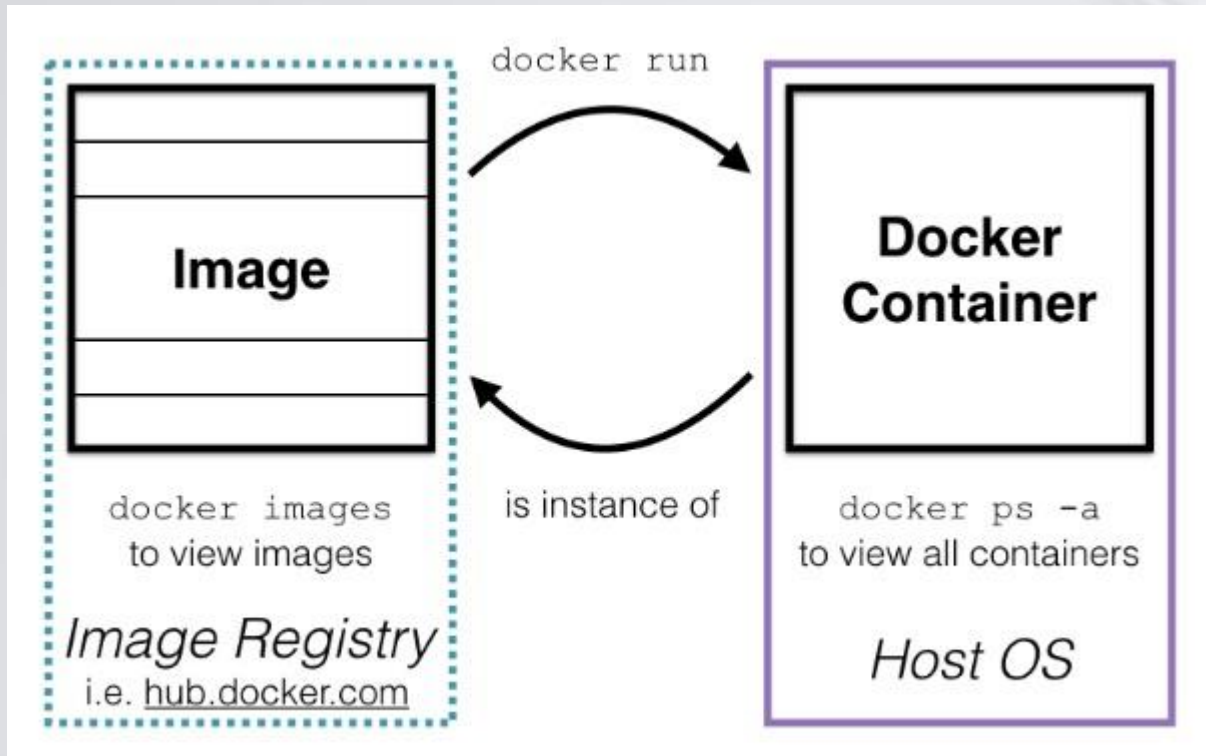
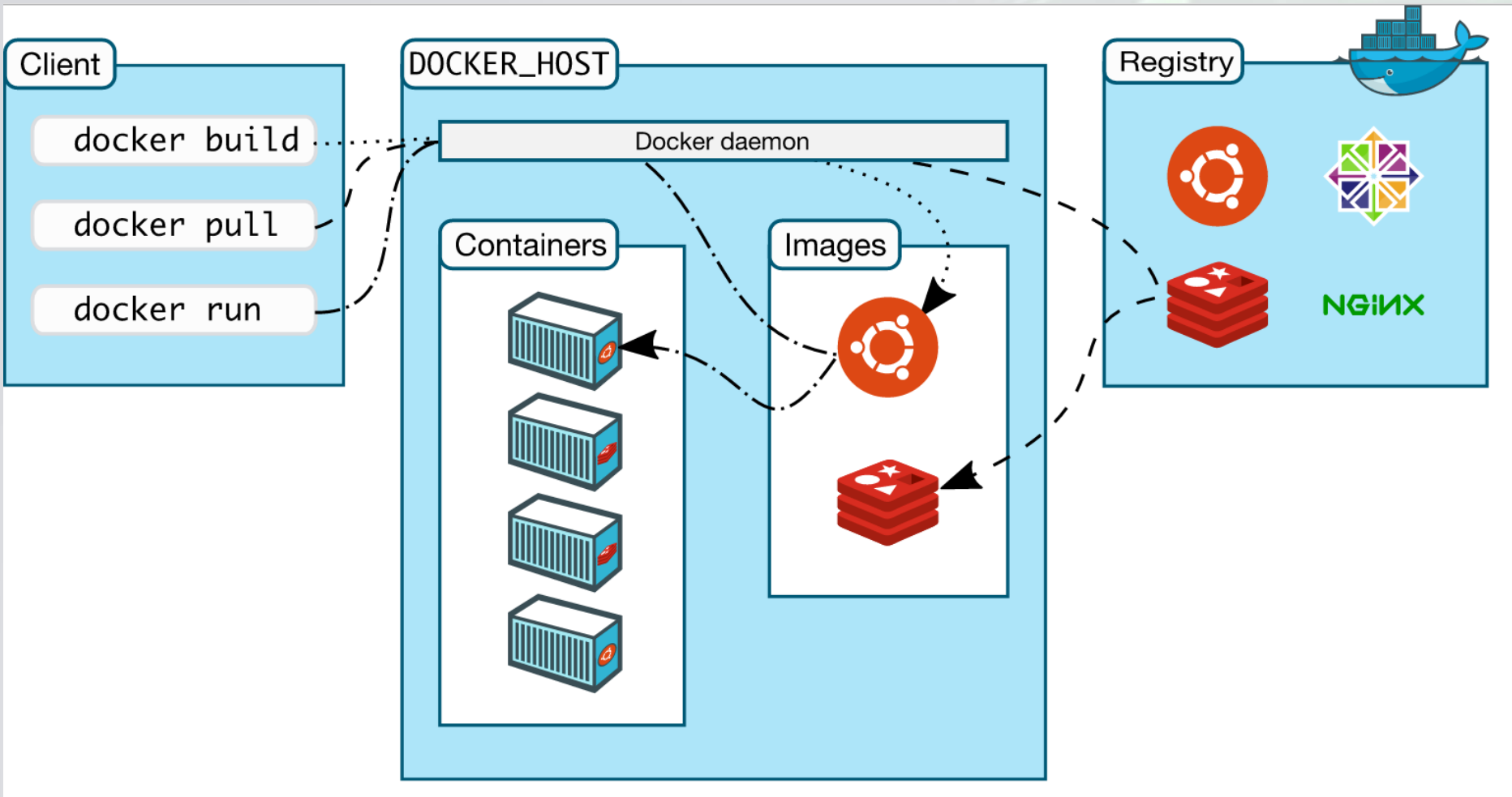


Image vs Containers

Images: A persisted state of a particular container

Container: A running machine started from an image







Dockerfile

```
# Firefox over VNC
```

```
#
```

```
# VERSION          0.3
```

```
FROM ubuntu
```

```
# Install vnc, xvfb in order to create a 'fake' display and firefox
```

```
RUN apt-get update && apt-get install -y x11vnc xvfb firefox
```

```
RUN mkdir ~/.vnc
```

```
# Setup a password
```

```
RUN x11vnc -storepasswd 1234 ~/.vnc/passwd
```

```
# Autostart firefox (might not be the best way, but it does the trick)
```

```
RUN bash -c 'echo "firefox" >> ~/.bashrc'
```

```
EXPOSE 5900
```

```
CMD ["x11vnc", "-forever", "-usepw", "-create"]
```

Usage Examples

- Run a service (MySQL, Tomcat, Jekyll) – standard images
- Automate deployments
 - Create an image
 - Deploy multiple times
- Execute a job (not a daemon)
- Sharing disk images
- Reproduce exact same environment in local machine vs production machine

Show it to me already!

- Further reading:

- Dã: <http://imgtfy.com?q=docker>
- Building Docker with Microservices: http://www.dwmkerr.com/learn-docker-by-building-a-microservice/?utm_source=hackernewsletter&utm_medium=email&utm_term=fav
- Docker Compose: <https://docs.docker.com/compose/overview/>



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