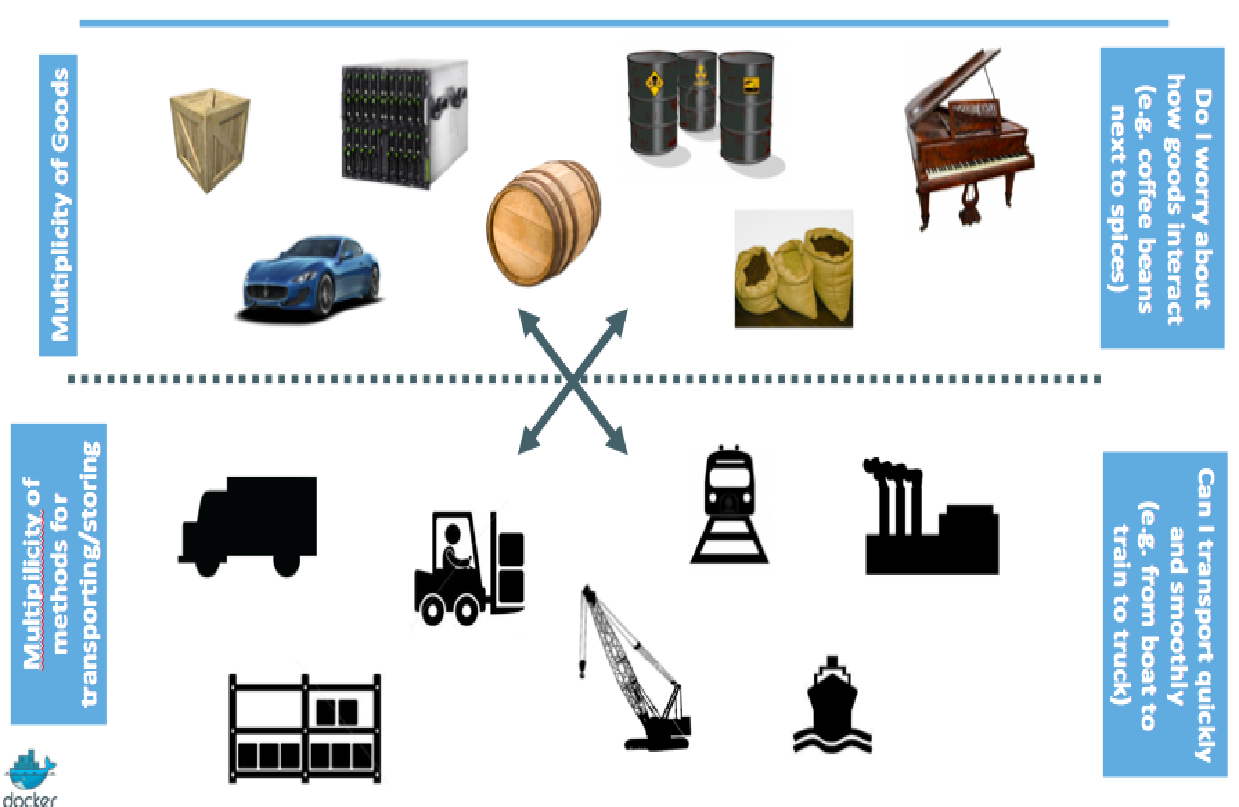
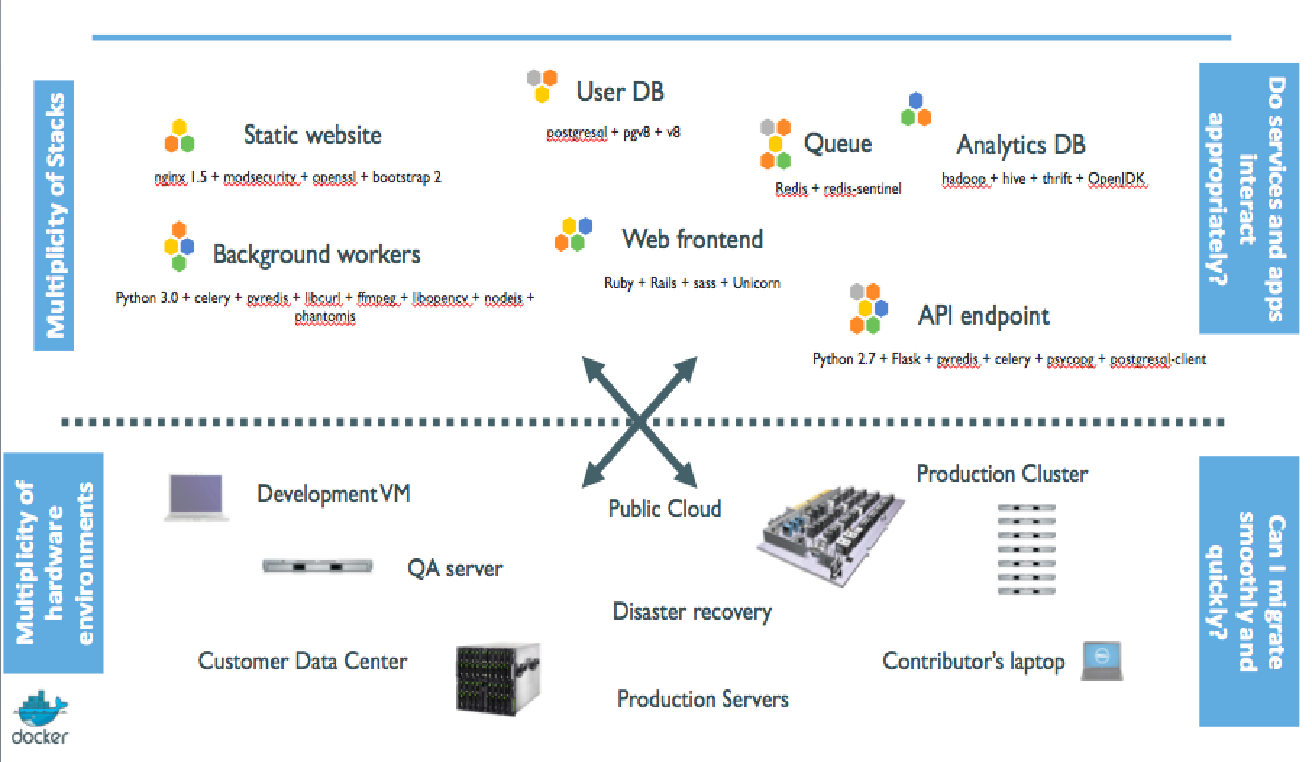
**Docker Tutorial**

**==========**

1. **Why containers (non-technical elevator pitch).**

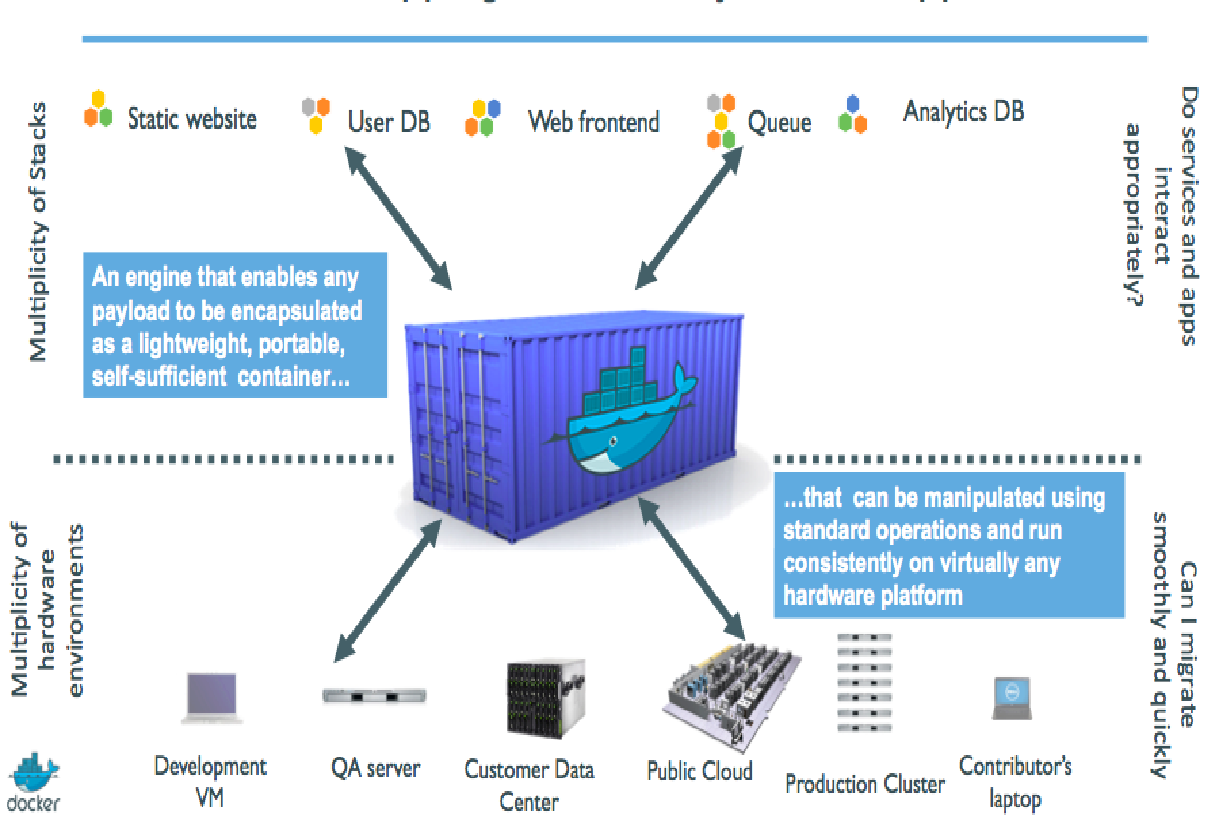


1. **Why containers (technical elevator pitch).**

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1. **How Docker helps us to build, ship, and run.**

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1. **The software industry has changed diff b/w Before and Now.**

Before:

• monolithic applications

• long development cycles

• single environment

• slowly scaling up

Now:

• decoupled services

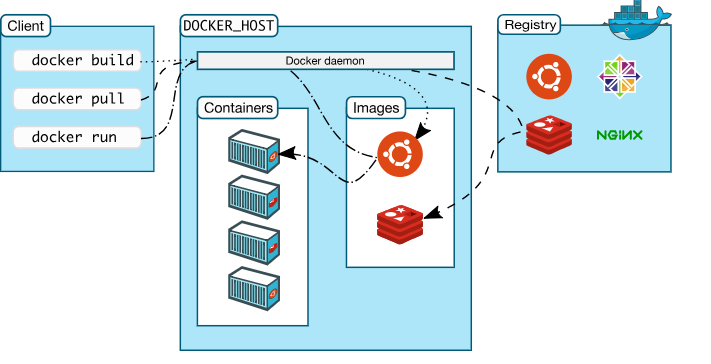
• fast, iterative improvements

• multiple environments

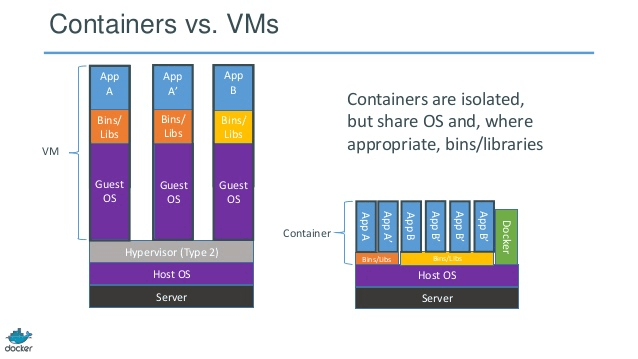
• quickly scaling out

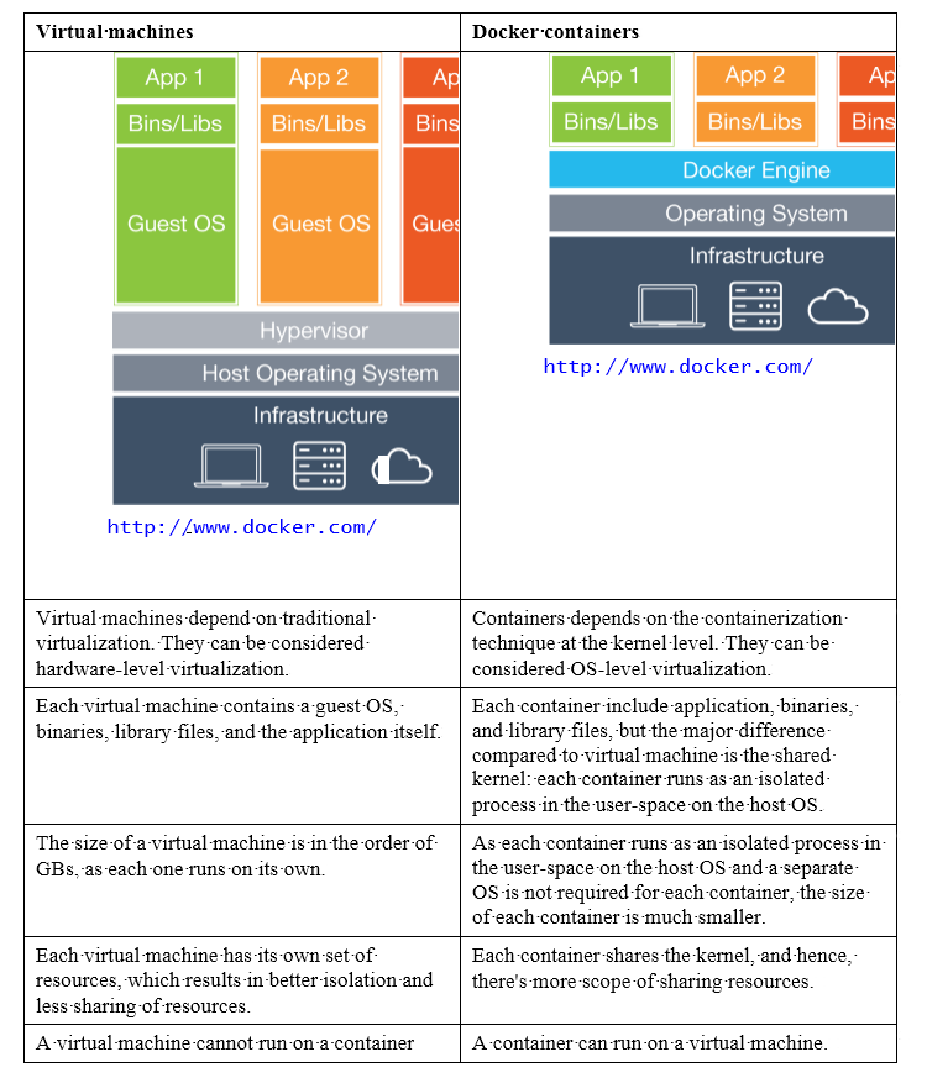
1. **Results Of Docker.**

* Dev-to-prod reduced from 9 months to 15 minutes (ING)
* Continuous integration job time reduced by more than 60% (BBC)
* Dev-to-prod reduced from weeks to minutes (GILT)

**Docker Architecture.** 

1. **Difference between Virtual Machine and Dockers.**

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**7.What is Docker Image?**

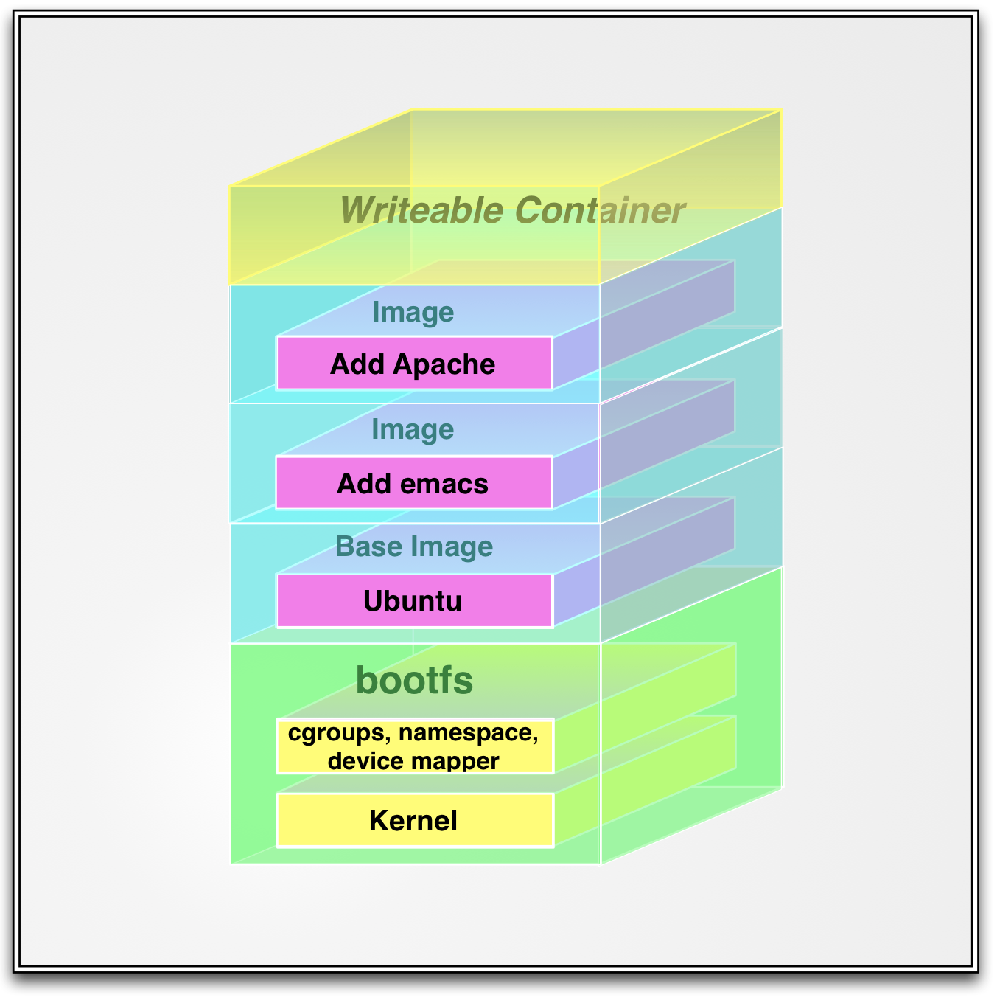
A Docker image is made up of filesystems layered over each other. At the

base is a boot filesystem, bootfs, which resembles the typical Linux/Unix boot

filesystem. A Docker user will probably never interact with the boot filesystem.

Indeed, when a container has booted, it is moved into memory, and the boot

filesystem is unmounted to free up the RAM used by the initrd disk image.image.

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layers are by default stored at /var/lib/docker/graph.

<https://www.projectatomic.io/blog/2015/07/what-are-docker-none-none-images/>

1. **Listing Docker images**

**$** docker images

1. **Pulling images**

Docker pull <images name>

1. Searching for images.

Docker search <image name>

1. Building our own images.

Docker build –t <imagename> .

1. Create Docker Hub account.
2. Login to Docker Hub trough Docker CLI.

Docker login

1. Push to custom image to Docker Hub.

Docker push <imagename>

1. Run Docker Image as a Docker Container.

Docker run –it –p 8181:8080 –name <container name> <image name>

1. Remove Docker images.

Docker rmi <imagename >/<image\_id>

1. Remove Docker Containers.

Docker rm <container name>/<container\_id>

1. Remove Docker Multiple Docker images at a Time.

Docker rmi <image\_id> <image\_Id>

1. Remove <none> Docker images (dangling images) .

docker rmi -f “dangling=true” –q

docker rmi -f $(docker images -f "dangling=true" -q)

1. Stop Docker Container.

Docker stop <container\_id>

1. Kill Docker Container.

Docker kill <container\_id>

1. Difference between Docker kill and stop.
2. Listing Running Containers.

Docker ps

1. Listing Running and stopped containers.

Docker ps -a

Docker ps –f “status=exited”

1. Check the logs of running containers.

Docker logs <container\_Id>

1. Follow up the logs of running containers for troubleshoot.

Docker

1. Login inside running container and troubleshoot.
2. Exit from the container.