Docker Workshop

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Outline

1. Introduction
2. CI/CD and Agile Methodology
3. Docker
4. CI with Docker

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- Computer Engineering.
- Network and Computer Engineering.
- Researcher visit in Norut, Tromso, Norway.
- Embedded software developer:
  - Defense industry.
  - IPTV industry.
  - Home appliance industry.

Whats Agile

- Agile vs Waterfall
- Redmine

Continuous Integration

- Jenkins
- GIT
- Sonarqube
- Doxygen
- GTest: UnitTesting tool
- Confluence

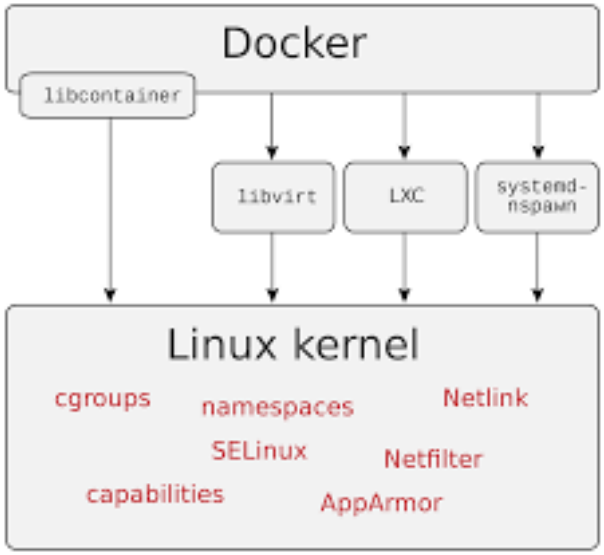
What is Docker?

- Containerization platform
- Container vs Virtual machine
- Why?
  - In-mutable guarantee
- How?

Setting Up Docker

- Docker needs a Linux server to manage.
- This restriction can be solved using a linux virtual machine
- Docker provides tools that makes managing very nearly transparent

How it works



- Computer.
- Docker client.
- Docker daemon.

How it works

- docker
- run
- hello-world

The Docker Flow: Images vs Containers

- An image is a snapshot of an environment, while a container runs the software.
- Images are read-only templates containing instructions for creating a container.
- From a image creates containers to be run.
- From containers, Images can be created too.
- docker pull ¡image-name¿.