

서버 & 인프라 개념 교육 (3차시)

박지호

개요



가상⁵ 假想 [가: 상]  ★ 

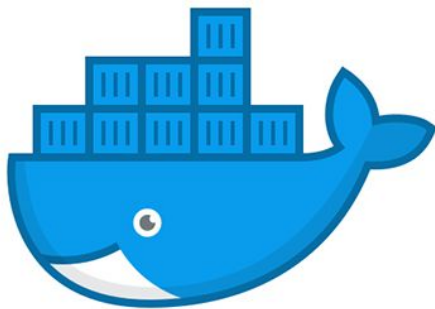
noun 사실이 아니거나 사실 여부가 분명하지 않은 것을 사실이라고 가정하여 생각함.

Standard Korean Dict.

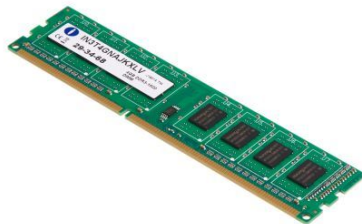
개요



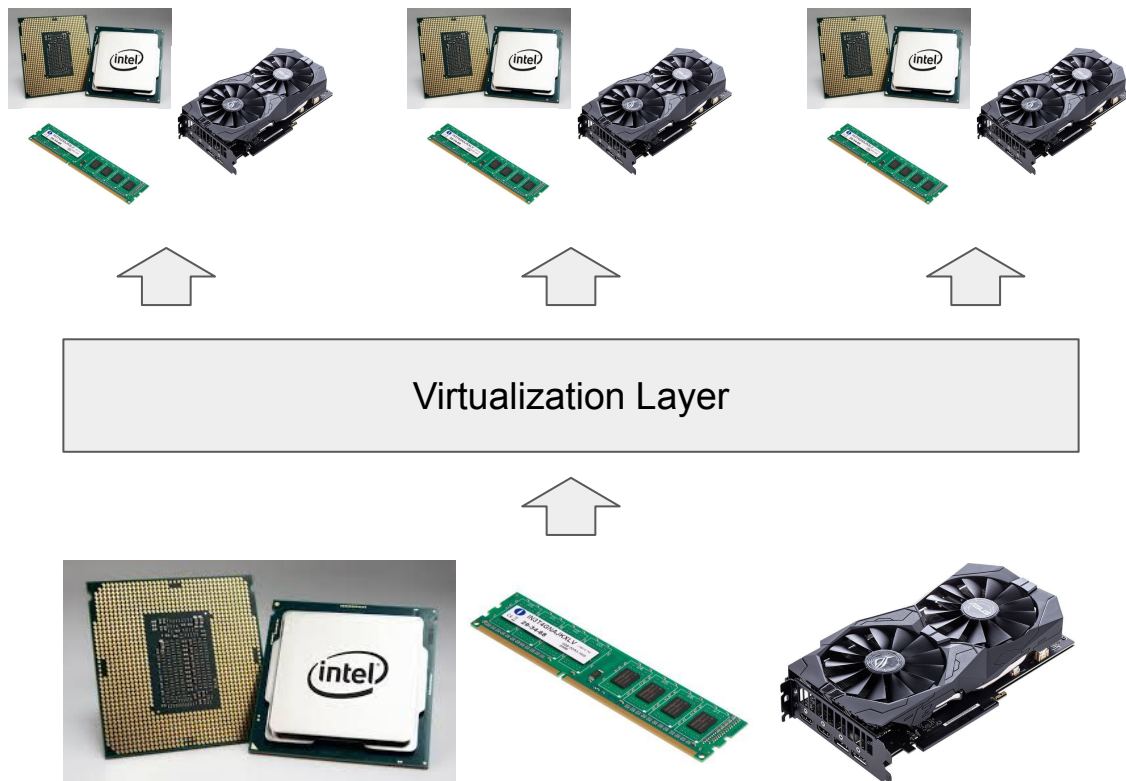
개요



원리

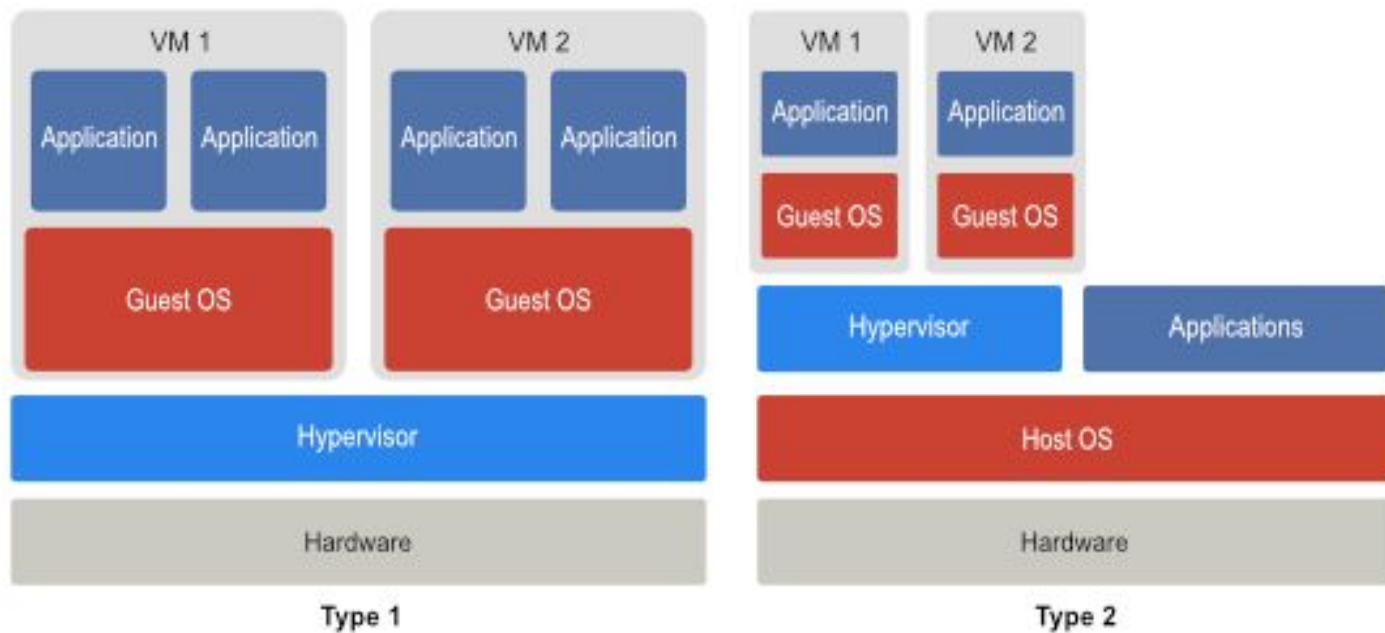


원리

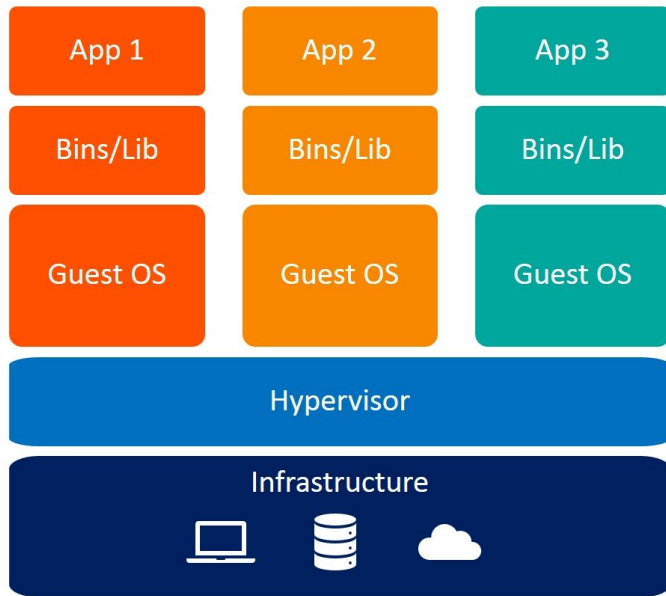


원리

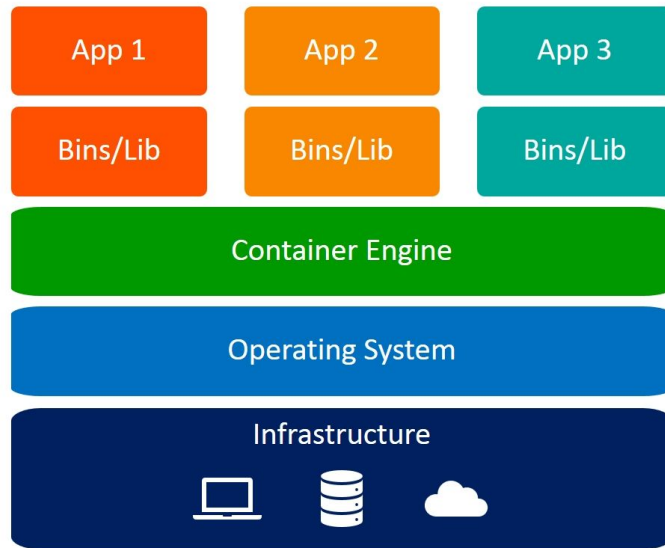
Hypervisor Types



원리



Virtual Machines



Containers

Docker를 사용하는 이유

```
[minds@182.162.19.23 /]$tree -L 1 -d /home
/home
├── bhlim
├── changho
├── dh7
├── hcshin
├── hee
├── isaac
├── juho
├── mcjoe
├── minds
├── ShynarT
└── swpark
```

```
[minds@182.162.19.23 /]$tree -L 1 -d /
/
├── bin -> usr/bin
├── boot
├── data1
├── DATA1
├── dev
├── diarl_data
├── etc
├── home
├── lib -> usr/lib
├── lib64 -> usr/lib64
├── lost+found
├── media
├── mnt
├── opt
├── proc
├── root
├── run
├── sbin -> usr/sbin
├── srv
├── sys
├── tmp
├── usr
└── var
```

Docker를 사용하는 이유

Time	Client	Command
29/04/20 11:10:46	A	python -m multiproc -d 4 -d 5 trainerd.py -c 2020_03_19-132051/checkpoint_13000 --hparams=distributed_run=True
29/04/20 11:20:36	B	python -m multiproc -d 4 -d 5 trainerd.py -c 2019_09_02_fp16_22k_kor_base_2_178000 --warm_start --hparams=distributed_run=True

Docker 개념

- Dockerfile: Docker image를 생성하기 위한 텍스트 기반의 명령어 모음집.
- Docker Image: Docker Container를 실행하기 위한 설정값들을 포함하고 있으며, 상태를 가지지 않음.
- Docker Container: Docker Image를 실행하여 실제 상태를 가지고 응용프로그램의 형태를 가지게 됨.

Docker 개념



Dockerfile



build



Docker Image



run

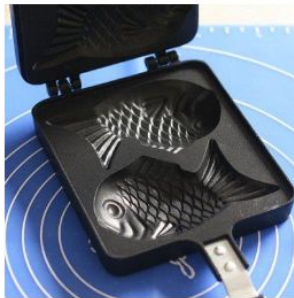


Docker Container

Docker 개념



재료



붕어빵 틀

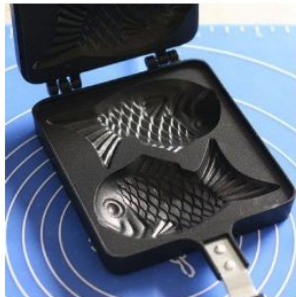


붕어빵

Docker 개념



Config



Image



Container

출처: CLI 기초강의 3강

꼭 Docker는 아니어도...

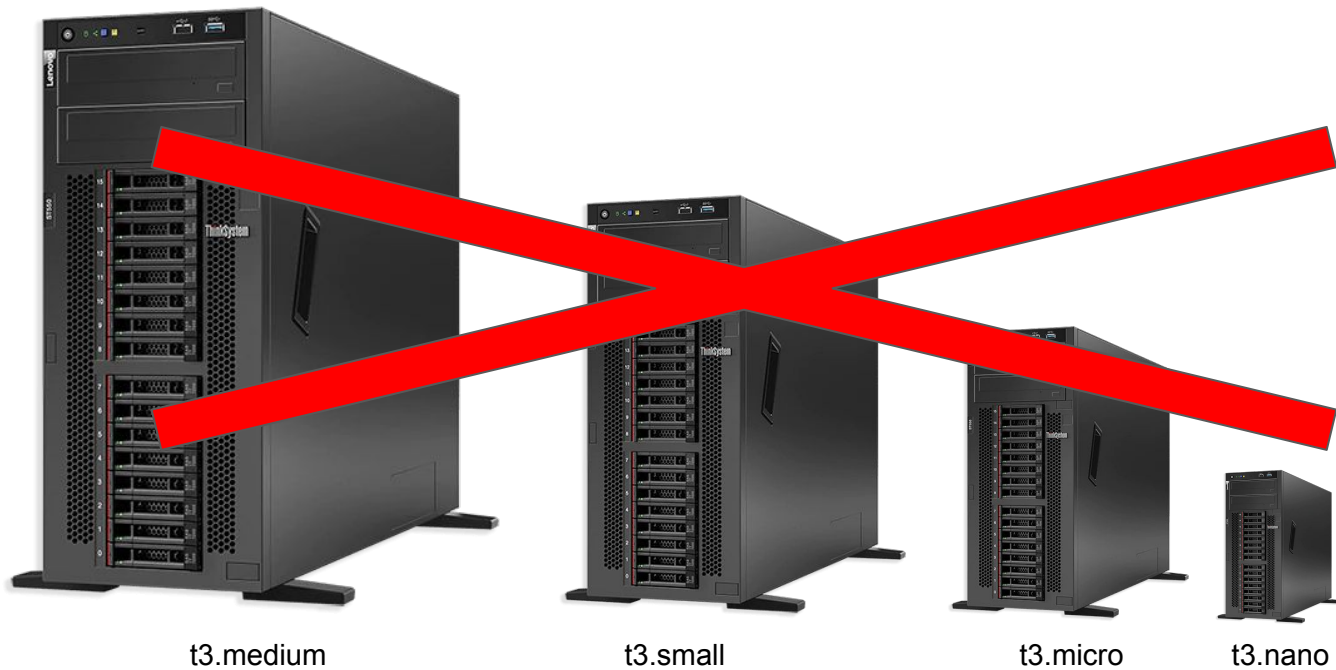
Instance	vCPU*	CPU Credits/hour	Mem (GiB)
t3.nano	2	6	0.5
t3.micro	2	12	1
t3.small	2	24	2
t3.medium	2	24	4
t3.large	2	36	8
t3.xlarge	4	96	16
t3.2xlarge	8	192	32

aws ec2

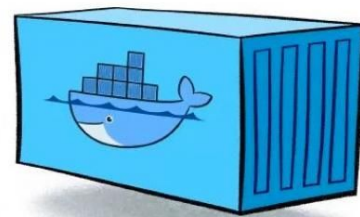
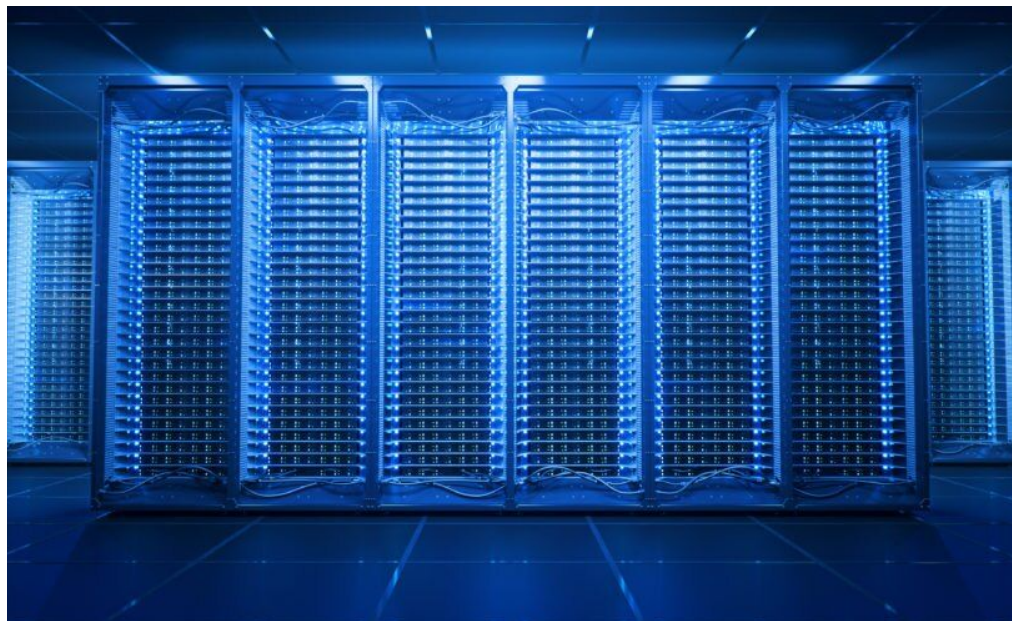
Machine type	Virtual CPUs	Memory
e2-standard-2	2	8GB
e2-standard-4	4	16GB
e2-standard-8	8	32GB
e2-standard-16	16	64GB
e2-standard-32	32	128GB

GCP compute engine

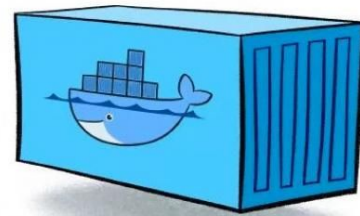
꼭 Docker는 아니어도...



꼭 Docker는 아니어도...



t3.medium



t3.small

Docker 기초 사용법

- docker build: Build an image from a Dockerfile
- docker image: Manage images
- docker run: Run a command in a new container
- docker ps: List containers
- docker rm: Remove one or more containers
- docker rmi: Remove one or more images
- docker attach: Attach local standard input, output, and error streams to a running container
- docker exec: Run a command in a running container
- docker push: Push an image or a repository to a registry
- docker pull: Pull an image or a repository from a registry

Docker 실습...?

Kubernetes

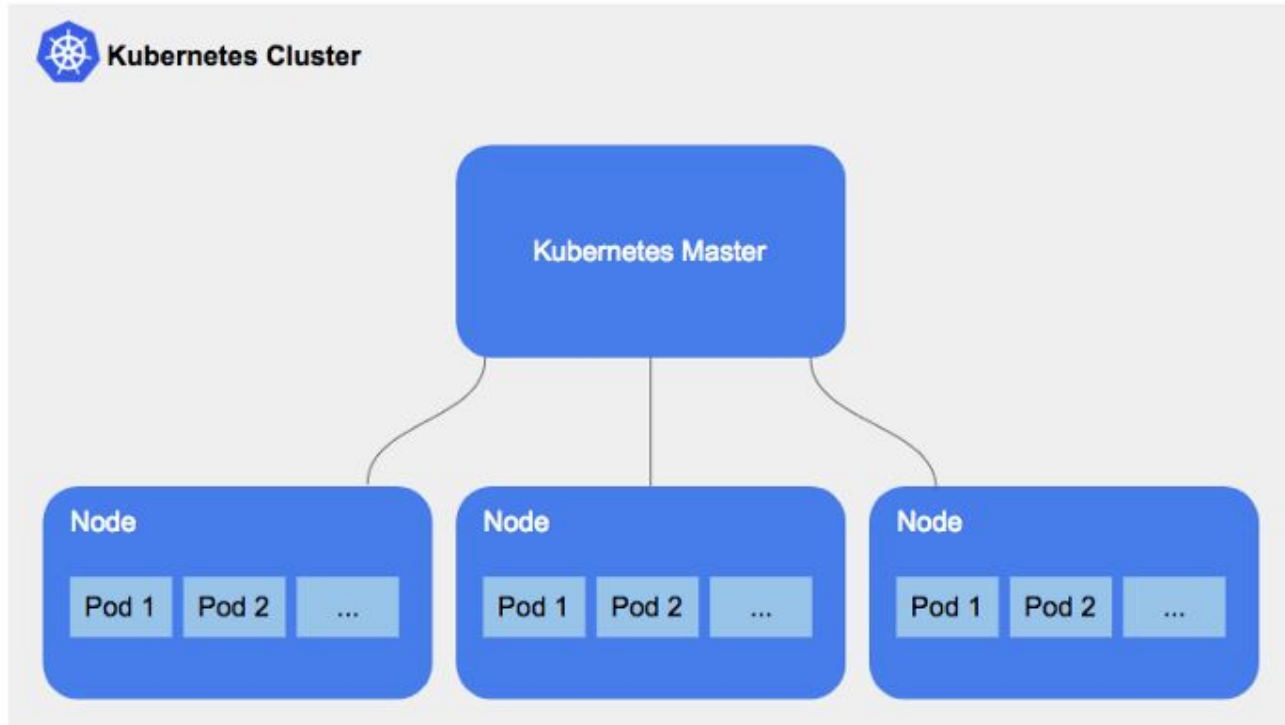
Container Orchestration System

or·ches·trate

1. (음악을) 오케스트라용으로 편곡하다 2. (복잡한 계획·행사를 세심히 또는 은밀히) 조직하다



Kubernetes



Kubernetes

