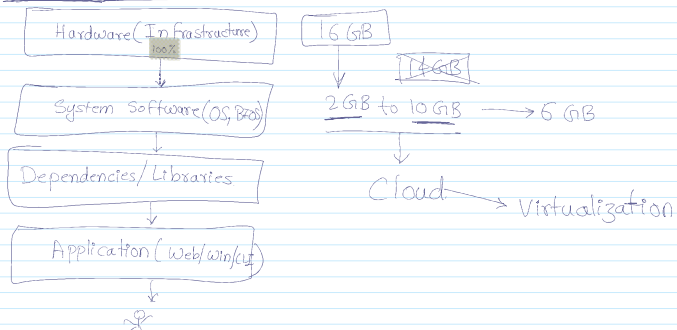
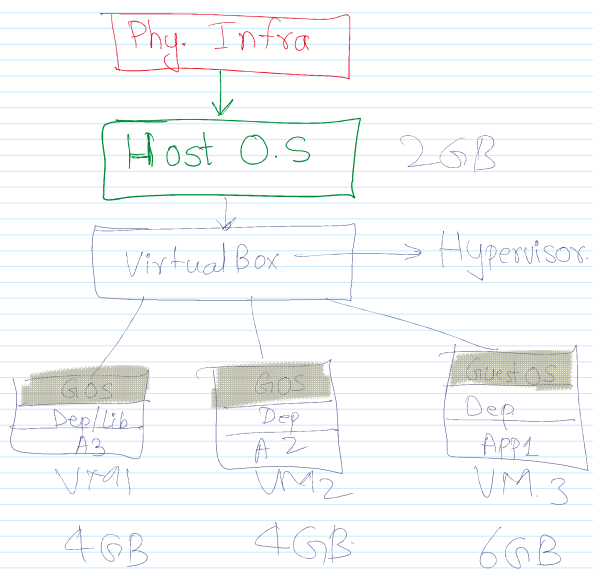
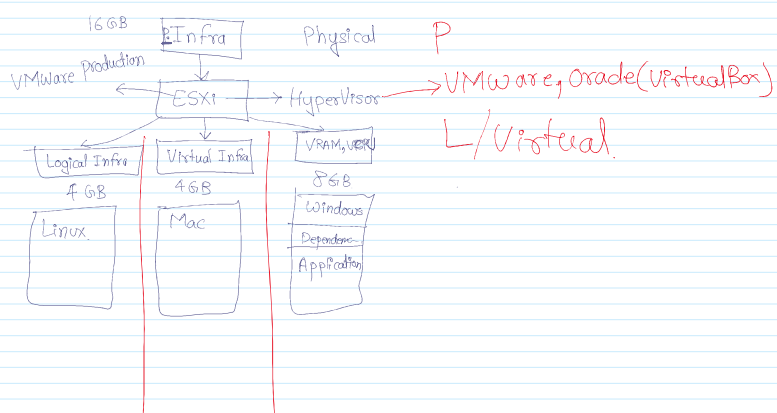


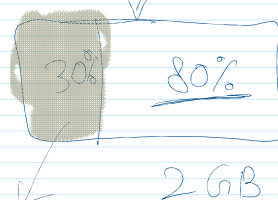
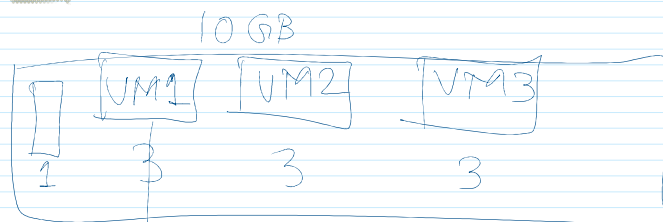
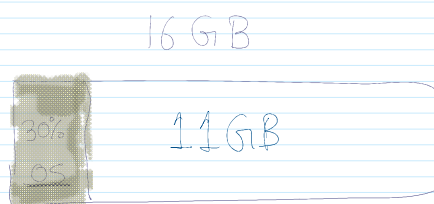
### ① Dedicated / Bare Metal / On-Prem.



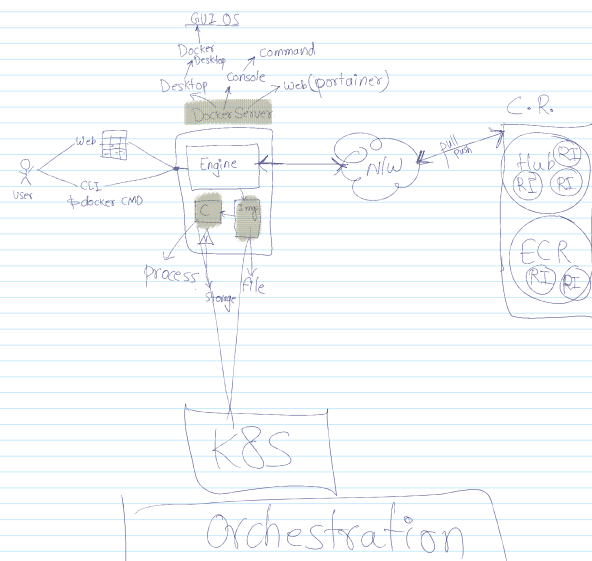
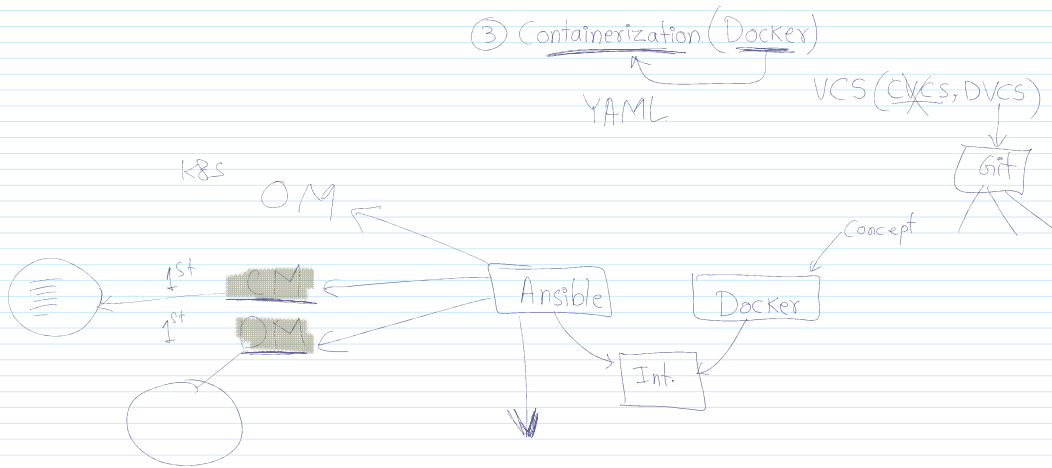
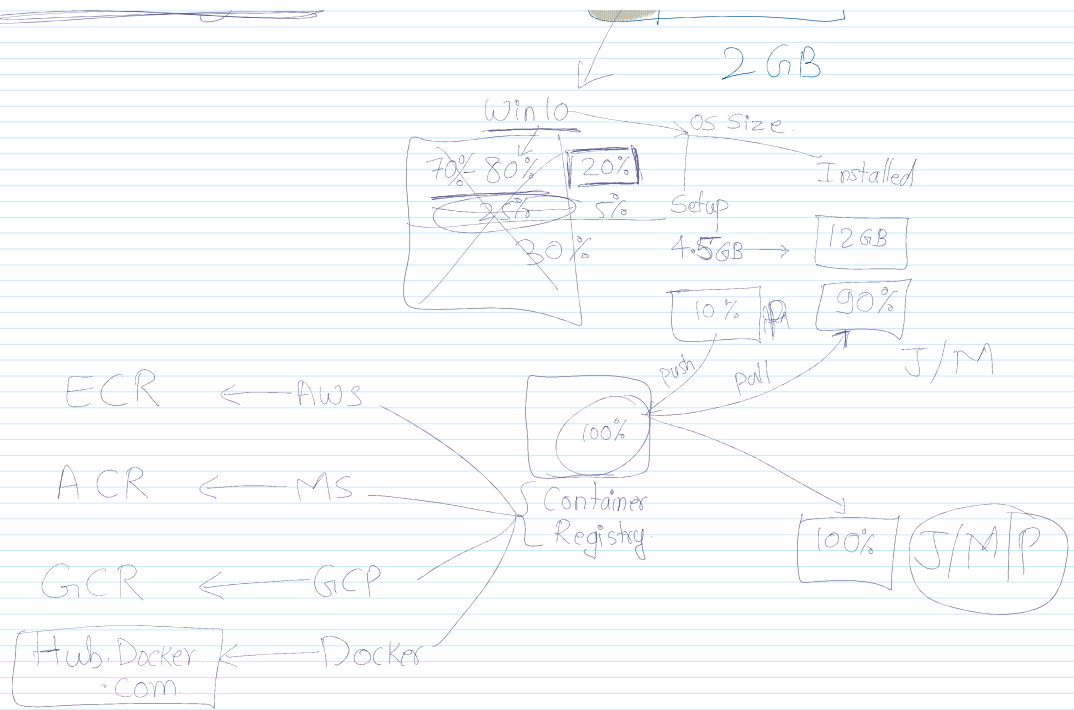
### ② Virtualization / Sharable / Pay As you Go



16 GB



### ③ Containerization



# Orchestration Tool

```
#!/bin/bash
sudo apt update
sudo apt install python3-pip -y
sudo mkdir /etc/ansible
sudo bash -c 'cat <EOF> > /etc/ansible/hosts'
host1
127.0.0.1
EOF
sudo apt install ansible -y
ssh-keygen -b 2048 -t rsa -f ~/.ssh/sshkey -q -N ""
cat ~/.ssh/sshkey.pub | cat >> ~/.ssh/authorized_keys
sudo bash -c 'cat <EOF> > ~/.ssh/config'
Host *
  User root
  IdentityFile ~/.ssh/sshkey
EOF
sudo ansible --version > /tmp/ansibleVersion.txt
```

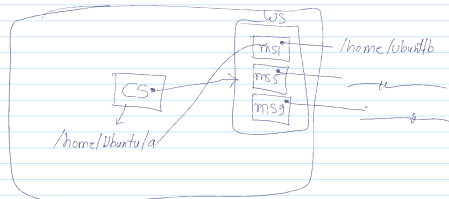
\$ wget <https://raw.githubusercontent.com/HubotEra/Practical-ansible-playbooks/main/04-copyFile.yml>

\$ cat 04-copyFile.yml

```
---
- hosts: ws
  become: yes
  tasks:
    - name: Copy file with owner and permissions
      copy:
        src: /home/ubuntu/a
        dest: /home/ubuntu/b
        owner: ubuntu
        group: ubuntu
        mode: '0644'
```

1, 5, 9 → src → /home/ubuntu/a  
dest → /home/ubuntu/b

\$ ansible-playbook 04-copyFile.yml



Ansible Vault:

\$ ansible-vault --version

```
# ansible-vault create myCopyFile.yml
New Vault password:
Confirm New Vault password:
# cat myCopyFile.yml
```

# ansible-vault view myCopyFile.yml

Vault password:

```
# export EDITOR= nano
# ~/.bashrc
# echo $EDITOR
```

# ansible-vault decrypt myCopyFile.yml

Vault password:

# ansible-vault encrypt myCopyFile.yml

# ansible-playbook --ask-vault-pass myCopyFile.yml

# ansible-vault rekey myCopyFile.yml

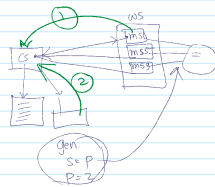
Ansible Facts:

\$ ansible ws -m MH -a "ls -l"

\$ ansible ws -m ansible.builtin.setup -a "filter=ansible\_local"

# cat > GatherFacts.yml

```
---
- name: Gathering Variables
  hosts: ws
  become: yes
  tasks:
    - name: Print all available facts
      ansible.builtin.debug:
        var: ansible_facts
```



```
# mkdir /etc/ansible/facts.d
# touch /etc/ansible/facts.d/preferences.fact
[general]
server=prod
processes=2
```

```
# sudo bash -c 'cat <EOF> > /etc/ansible/facts.d/preferences.fact'
[general]
server=prod
processes=2
EOF
```

```
# ansible-playbook GatherFacts.yml
"ansible_local": {
  "preferences": {
    "general": {
      "processes": "2",
      "server": "prod"
    }
  }
}
```

