

```
~/De/P/SCRIPTING/A/hosa-ansible-nginx main
docker image pull ubuntu:latest
latest: Pulling from library/ubuntu
de44b265507a: Already exists
Digest: sha256:80dd3c3b9c6cecb9f1667e9290b3bc61b78c2678c02cbdae5f0fea92cc6734a
b
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest
```

```
~/De/P/SCRIPTING/A/hosa-ansible-nginx main
docker tag ubuntu:latest hosa-ubuntu01
```

hosa-ubuntu01	latest	b1d9df8ab815	2 months ago	78.1MB
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```
~/De/P/SCRIPTING/A/hosa-ansible-nginx main
docker container run -itd --name hosa-con1 hosa-ubuntu01
b8ad2e317518502bdd7784d6782163fcc89de70311727ffd5a17bf4c6eeca57d
```

Now that I have the container running on ubuntu, I need to install ssh on it so that I connect with the server from the host!

```
~/De/P/SCRIPTING/A/hosa-ansible-nginx main
docker exec -it hosa-con1 bash
root@b8ad2e317518:/# ssh
bash: ssh: command not found
root@b8ad2e317518:/# sshd
bash: sshd: command not found
root@b8ad2e317518:/# sudo systemctl sshd
bash: sudo: command not found
root@b8ad2e317518:/# systemctl status sshd
bash: systemctl: command not found
root@b8ad2e317518:/#
```

As we can see here, on the container, the ssh is not installed, nothing is installed on the container..



```
root@b8ad2e317518:/# ssh
usage: ssh [-46AaCfGgKkMMNnqsTtVvXxYy] [-B bind_interface] [-b bind_address]
          [-c cipher_spec] [-D [bind_address:]port] [-E log_file]
          [-e escape_char] [-F configfile] [-I pkcs11] [-i identity_file]
          [-J destination] [-L address] [-l login_name] [-m mac_spec]
          [-O ctl_cmd] [-o option] [-P tag] [-p port] [-R address]
          [-S ctl_path] [-W host:port] [-w local_tun[:remote_tun]]
          destination [command [argument ...]]
          ssh [-Q query_option]
```

I installed ssh and started the service

```
root@b8ad2e317518:/# service ssh start
* Starting OpenBSD Secure Shell server sshd [ OK ]
```

Let's find the IP Address of the container hosa-con1

```
~/De/P/SCRIPTING/A/hosa-ansible-nginx main
docker inspect -f '{{range .NetworkSettings.Networks}}{{.IPAddress}}{{end}}'
hosa-con1
172.17.0.2
```

```
~/De/P/SCRIPTING/A/hosa-ansible-nginx main !1 ?4
ssh-copy-id -i ~/.ssh/ansible_rsa.pub root@172.17.0.2
```

Number of key(s) added: 1

```
~/De/P/SCRIPTING/A/hosa-ansible-nginx main ?1
sudo ansible all -i 172.17.0.2, --private-key ~/.ssh/ansible_rsa -u root -m
ping
172.17.0.2 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
```

Ansible is working with the container



1. Update cache
 2. Install latest nginx
 3. Copy index.html from controller to host 1
 4. Restart nginx service
 5. Can you see your index.html file when you hit host 1 on port 80?
- text, use:

Here is the playbook file

```
install-nginx.yml x  inventory  ansible.cfg  index.html
NSIBLE_LAB01 > hosa-ansible-nginx > ansible-config > ! install-nginx.yml > {} 0 > [ ] tasks > {}
1  ---
2  - name: Deploy Nginx and other configs
3    hosts: all
4    become: yes # Run tasks with sudo privileges
5    tasks:
6      - name: Update apt cache
7        apt:
8          update_cache: yes
9          cache_valid_time: 3600 # Cache is valid for 1 hour
10
11     - name: Install the latest version of Nginx
12       apt:
13         name: nginx
14         state: latest
15
16     - name: Copy index.html from controller to host
17       copy:
18         src: ./index.html # Replace with the actual path of the file
19         dest: /var/www/html/index.html
20         owner: www-data
21         group: www-data
22         mode: '0644'
23
24     - name: Restart Nginx service
25       service:
26         name: nginx
27         state: restarted
28         use: service
```



```

~/De/P/SCRIPTING/A/h/ansible-config main
ansible-playbook ./install-nginx.yml
BECOME password:

PLAY [Deploy Nginx and other configs] *****
**

TASK [Gathering Facts] ** 1 *****
**
ok: [172.17.0.2]

TASK [Update apt cache] * 2 *****
**
ok: [172.17.0.2]

TASK [Install the latest version of Nginx] * 3 *****
**
ok: [172.17.0.2]

TASK [Copy index.html from controller to host] ** 4 *****
**
ok: [172.17.0.2]

TASK [Restart Nginx service] ** 5 *****
**
changed: [172.17.0.2]

PLAY RECAP *****
172.17.0.2 : ok=5 changed=1 unreachable=0 failed=0
skipped=0 rescued=0 ignored=0

```



```
root@b8ad2e317518:/var# cd www
root@b8ad2e317518:/var/www# cd html
root@b8ad2e317518:/var/www/html# cat index.html
<!DOCTYPE html>
<html>
<head>
  <title>Welcome to Hosa Root Host 1!</title>
</head>
<body>
  <h1>Hello from Ansible Deployment 🚀</h1>
</body>
</html>
root@b8ad2e317518:/var/www/html#
```

Here we can see that the file got transferred to the directory we assigned inside the container.

