

BÁO CÁO THỰC HÀNH

Môn học: Kiến trúc và Bảo mật Điện toán Đám mây

Lab 4: Magnum & Manila

GVHD: Đỗ Thị Phương Uyên

1. THÔNG TIN CHUNG:

(Liệt kê tất cả các thành viên trong nhóm)

Lớp: NT524.Q11.ANTT.1

STT	Họ và tên	MSSV	Email
1	Hà Minh Quân	22521177	22521177@gm.uit.edu.vn

2. NỘI DUNG THỰC HIỆN:¹

STT	Công việc	Kết quả tự đánh giá
1	Magnum	
2	Manila	

Phần bên dưới của báo cáo này là tài liệu báo cáo chi tiết của nhóm thực hiện.

¹ Ghi nội dung công việc, các kịch bản trong bài Thực hành

BÁO CÁO CHI TIẾT

1. Manila.

Virtual Machine Images.

```
(kolla-venv) deployer@kolla:/etc/kolla/ansible/inventory$ sudo nano /etc/kolla/glance.yml
(kolla-venv) deployer@kolla:/etc/kolla/ansible/inventory$ glance image-create --name "manila-service-image" \
--file manila-service-image-master.qcow2 \
--disk-format qcow2 --container-format bare \
--visibility public --progress
[=====] 100%
+-----+
| Property | Value |
+-----+
| checksum | a9b4aebf02c1a67b63cfc935a1e4f05 |
| container_format | bare |
| created_at | 2025-12-13T12:27:07Z |
| disk_format | qcow2 |
| id | 102d95ac-b8b9-4fe7-b431-8f68e2f01107 |
| min_disk | 0 |
| min_ram | 0 |
| name | manila-service-image |
| os_hash_algo | sha512 |
| os_hash_value | 0a04ff15d1ebf7743c93336ae2e80cc723a3da7d94048702d2a9605542ef7e56a84d616740faeb820c5925d98f63d1fbb502228e0ffe20b2ad5de85753ad34d |
| os_hidden | False |
| owner | a4300ca9574e47aabc3df23eb75b402b |
| protected | False |
| size | 50455921 |
| status | active |
| stores | file |
| tags | [] |
| updated_at | 2025-12-13T12:27:08Z |
| virtual_size | 355459072 |
| visibility | public |
+-----+
(kolla-venv) deployer@kolla:/etc/kolla/ansible/inventory$
```

```
(kolla-venv) deployer@kolla:/etc/kolla/ansible/inventory$ openstack flavor list
+-----+
| ID | Name | RAM | Disk | Ephemeral | VCPUS | Is Public |
+-----+
| 100 | manila-service-flavor | 1024 | 5 | 0 | 1 | True |
| de03b48e-12a7-4301-8537-c78c9802f354 | m1.small | 2048 | 10 | 0 | 1 | True |
+-----+
(kolla-venv) deployer@kolla:/etc/kolla/ansible/inventory$
```

```

1  deployer@kolla:/etc/kolla/ansible/inventory$ nano /etc/kolla/config/manila.conf
2  [generic]
3  share_backend_name = GENERIC
4  share_driver = manila.share.drivers.generic.GenericShareDriver
5  driver_handles_share_servers = True
6  service_instance_flavor_id = 100

```

Create a shared network

```
(kolla-venv) deployer@kolla:/etc/kolla/ansible/inventory$ manila share-network-create --name my-share-net \
--neutron-net-id 7897f7d7-372c-4a5b-a501-9fd12d1d729f \
--neutron-subnet-id 95d5c06e-ffa0-4020-b258-27d7d8ad2eb4
+-----+
| Property | Value |
+-----+
| id | 7a7b1117-ae3b-4ef2-b355-9de00ce7e425 |
| name | my-share-net |
| project_id | a4300ca9574e47aabc3df23eb75b402b |
| created_at | 2025-12-13T09:08:45.918018 |
| updated_at | None |
| description | None |
| share_network_subnets | [{"id": "836435aa-7b9d-4249-a87d-4a9545f440ac", "availability_zone": None, "created_at": "2025-12-13T09:08:45.931827", "updated_at": None, "segmentation_id": None, "neutron_net_id": "7897f7d7-372c-4a5b-a501-9fd12d1d729f", "neutron_subnet_id": "95d5c06e-ffa0-4020-b258-27d7d8ad2eb4", "ip_version": None, "cidr": None, "network_type": None, "mtu": None, "gateway": None}] |
| status | active |
| security_service_update_support | True |
+-----+
(kolla-venv) deployer@kolla:/etc/kolla/ansible/inventory$
```

tạo share file.

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ manila type-create share-file True
```

Property	Value
ID	ffca131e-c397-4bd6-a104-e0fee527385b
Name	share-file
Visibility	public
is_default	-
required_extra_specs	driver_handles_share_servers : True
optional_extra_specs	
Description	None

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$
```

Create a NFS share using the share network.

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ manila create NFS 10 --name lab4-share --share-network my-share-net --share-type share-file
```

Property	Value
id	e4de1ba3-37d3-49dd-bbb9-1b4bcd1a943a
size	10
availability_zone	None
created_at	2025-12-13T12:32:56.422418
status	creating
name	lab4-share
description	None
project_id	a4300ca9574e47aabc3df23eb75b402b
snapshot_id	None
share_network_id	8496b242-9051-44c0-8001-93d834af5f3d
share_proto	NFS
metadata	{}
share_type	ffca131e-c397-4bd6-a104-e0fee527385b
is_public	False
snapshot_support	False
task_state	None
share_type_name	share-file
access_rules_status	active
replication_type	None
has_replicas	False
user_id	82569333f72c49ddb1ec9edddc01795
create_share_from_snapshot_support	False
revert_to_snapshot_support	False
share_group_id	None
source_share_group_snapshot_member_id	None
mount_snapshot_support	False
progress	None
is_soft_deleted	False
scheduled_to_be_deleted_at	None
share_server_id	None
host	

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$
```

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ sudo losetup -a
```

Device	Size	File
/dev/loop1	[66312]:2105842	(/var/lib/snapd/snaps/bare_5.snap)
/dev/loop17	[66312]:2097247	(/var/lib/manila-disk.img)
/dev/loop8	[66312]:2105847	(/var/lib/snapd/snaps/snap-store_1113.snap)
/dev/loop15	[66312]:2097658	(/var/lib/snapd/snaps/kubectl_3715.snap)
/dev/loop6	[66312]:2097207	(/var/lib/snapd/snaps/gnome-42-2204_226.snap)
/dev/loop13	[66312]:2097732	(/var/lib/snapd/snaps/snapd-desktop-integration_315.snap)
/dev/loop4	[66312]:2097324	(/var/lib/snapd/snaps/firefox_7423.snap)
/dev/loop11	[66312]:2099906	(/var/lib/snapd/snaps/snapd_25577.snap)
/dev/loop2	[66312]:2097572	(/var/lib/snapd/snaps/core22_2163.snap)
/dev/loop0	[66312]:2097179	(/var/lib/snapd/snaps/core22_2139.snap)
/dev/loop9	[66312]:2097190	(/var/lib/snapd/snaps/snap-store_1216.snap)
/dev/loop16	[66312]:2097826	(/var/lib/snapd/snaps/firefox_7477.snap)
/dev/loop7	[66312]:2105846	(/var/lib/snapd/snaps/gtk-common-themes_1535.snap)
/dev/loop14	[66312]:2097380	(/var/lib/snapd/snaps/core20_2682.snap)
/dev/loop5	[66312]:2105845	(/var/lib/snapd/snaps/gnome-42-2204_176.snap)
/dev/loop12	[66312]:2105848	(/var/lib/snapd/snaps/snapd-desktop-integration_178.snap)
/dev/loop3	[66312]:2097247	(/var/lib/manila-disk.img)
/dev/loop10	[66312]:2105849	(/var/lib/snapd/snaps/snapd_21759.snap)

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ sudo pvcreate /dev/loop17
```

Physical volume "/dev/loop17" successfully created.

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$
```

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ manila type-create lvm-share-type False
```

Property	Value
ID	06ac6582-7170-4ad6-bc73-b2b6c6bf7133
Name	lvm-share-type
Visibility	public
is_default	-
required_extra_specs	driver_handles_share_servers : False
optional_extra_specs	-
Description	None

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ manila list
```

ID	Name	Size	Share Proto	Status	Is Public	Share Type Name	Host	Availability Zone
28375f45-1cc0-45dd-9946-b3d3c6cbf2cd	my-lvm-share	2	NFS	error	False	lvm-share-type	aio@generic#GENERIC	nova
e4de1ba3-37d3-49dd-bbb9-1b4bcd1a943a	lab4-share	10	NFS	error	False	share-file	aio@generic#GENERIC	nova
3a45a0fa-07bd-425a-a312-0e638b76327b	my-nfs-share	10	NFS	error	False	share_type	aio@generic#GENERIC	nova

Tới đoạn này thì dính bug cứ mỗi lần tạo manila thì nó cứ bị error.

2. Magnum openstack flavor list.

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ openstack flavor list
```

ID	Name	RAM	Disk	Ephemeral	VCPUs	Is Public
100	manila-service-flavor	1024	5	0	1	True
de03b48e-12a7-4301-8537-c78c9802f354	m1.small	2048	10	0	1	True

Upload image to Glance

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ openstack coe cluster template create my-swarm-template \
--image ced969a2-6d5f-45c7-91e2-cdd698048f2b \
--keypair mykey \
--external-network public1 \
--dns-nameserver 8.8.8.8 \
--flavor m1.small \
--docker-volume-size 10 \
--network-driver flannel \
--coe swarm
```

```
Request to create cluster template my-swarm-template accepted
```

Field	Value
insecure_registry	-
labels	{}
updated_at	-
floating_ip_enabled	True
fixed_subnet	-
master_flavor_id	-
uuid	0720fac9-8456-416f-b86b-ec63572cff2f
no_proxy	-
https_proxy	-
tls_disabled	False
keypair_id	mykey
public	False
http_proxy	-
docker_volume_size	10
server_type	vm
external_network_id	public1
cluster_distro	fedora-atomic
image_id	ced969a2-6d5f-45c7-91e2-cdd698048f2b
volume_driver	-
registry_enabled	False
docker_storage_driver	overlay2
apiserver_port	-
name	my-swarm-template
created_at	2025-12-13T13:29:07+00:00
network_driver	flannel
fixed_network	-
coe	swarm
flavor_id	m1.small
master_lb_enabled	False
dns_nameserver	8.8.8.8
project_id	a4300ca9574e47aabc3df23eb75b402b
hidden	False
tags	-

Create cluster

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ openstack coe cluster create my-swarm-cluster \  
--cluster-template my-swarm-template \  
--node-count 1  
Request to create cluster c07ba647-64b7-4fc7-af46-80cb8ad6790b accepted
```

Connect to Kubernetes Cluster

```
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ openstack coe cluster config my-swarm-cluster --dir ~/.kube  
WARNING: The cluster's api_address is not known yet.  
export DOCKER_HOST=None  
export DOCKER_CERT_PATH=/home/deployer/.kube  
export DOCKER_TLS_VERIFY=True  
  
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ export KUBECONFIG=~/.kube/my-swarm-cluster.yaml  
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ kubectl get nodes # verify nodes are ready  
E1213 20:45:46.561151 1162399 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"http://localhost:8080/api?timeout=32s\": dial tcp 127.0.0.1:8080: connect: connection refused"  
E1213 20:45:46.561481 1162399 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"http://localhost:8080/api?timeout=32s\": dial tcp 127.0.0.1:8080: connect: connection refused"  
E1213 20:45:46.562610 1162399 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"http://localhost:8080/api?timeout=32s\": dial tcp 127.0.0.1:8080: connect: connection refused"  
E1213 20:45:46.562830 1162399 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"http://localhost:8080/api?timeout=32s\": dial tcp 127.0.0.1:8080: connect: connection refused"  
E1213 20:45:46.564143 1162399 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"http://localhost:8080/api?timeout=32s\": dial tcp 127.0.0.1:8080: connect: connection refused"  
The connection to the server localhost:8080 was refused - did you specify the right host or port?  
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$  
72 words, 345 characters  
Default Page Style  
English (USA)  
---  
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$ openstack coe cluster list  
+-----+-----+-----+-----+-----+-----+  
| uid | name | keypair | node_count | master_count | status | health_status |  
+-----+-----+-----+-----+-----+-----+  
| d34ecae8-9ccc-4cfd-9e55-782fdcc4eddc | Lab04-Cluster | magnum-key | 1 | 1 | CREATE_FAILED | None |  
| c07ba647-64b7-4fc7-af46-80cb8ad6790b | my-swarm-cluster | mykey | 1 | 1 | CREATE_FAILED | None |  
+-----+-----+-----+-----+-----+-----+  
(kolla-venv) deployer@aio:/etc/kolla/ansible/inventory$
```

Sinh viên đọc kỹ yêu cầu trình bày bên dưới trang này

HẾT