

오픈스택 스터디 자료

Chapter 1, 2

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저는...

- ❑ Global IT 기업의 국내 지사에 기술영업 담당
- ❑ Openstack과 전혀 상관없는 업무 지원
- ❑ 순수 스터디 자원에서 조인

About the Openstack Installation

Version : Liberty, OS: Ubuntu 14.04

- VirtualBox 기반, 교재와 동일 환경 구성(1 Controller + 2 Compute nodes)
- 설치 는 2nd Edition의 Appendix B.Virtualizing the Environment를 기준으로 설정
- 작업 시 사용한 명령어는 PackPub.com에서 다운로드 받아 참고함.
- NIC는 4개 구성 (eth0 - vboxnet1, eth1 - internal:overlay, eth2 - vboxnet2, eth3 - NAT)

Network configurations for VirtualBox Environment

전체 구성

- 네트워크 기본 구성은 다음 그림을 참고하여 구성

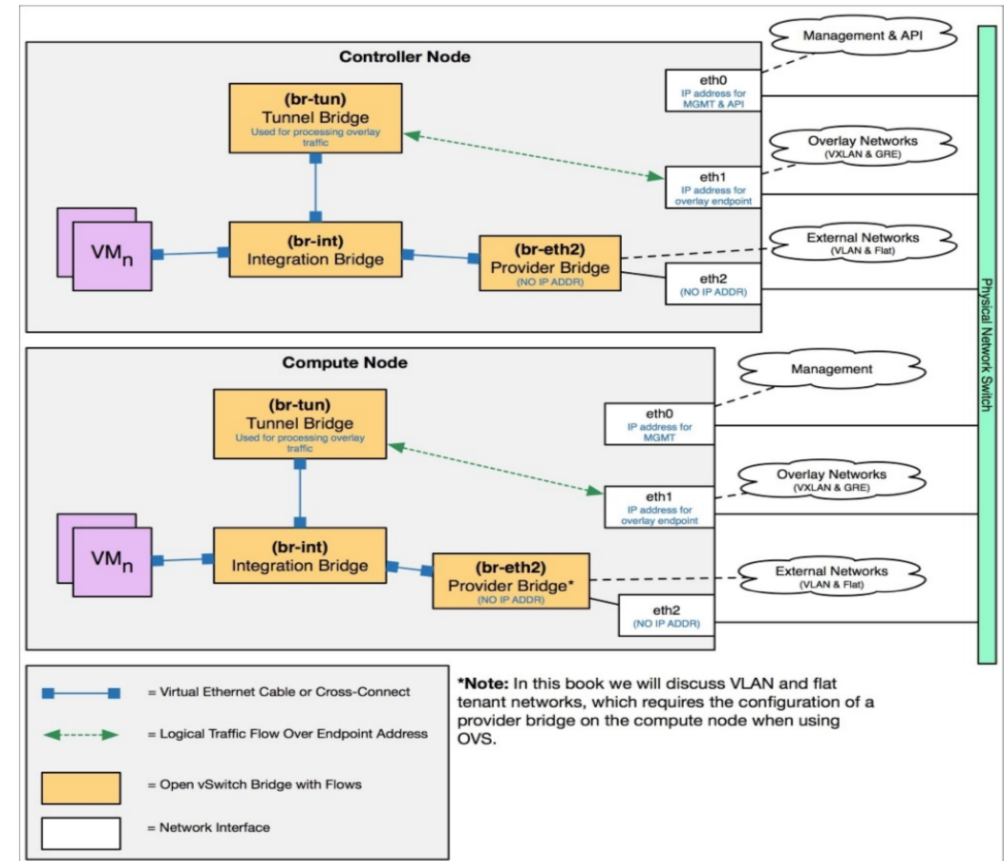
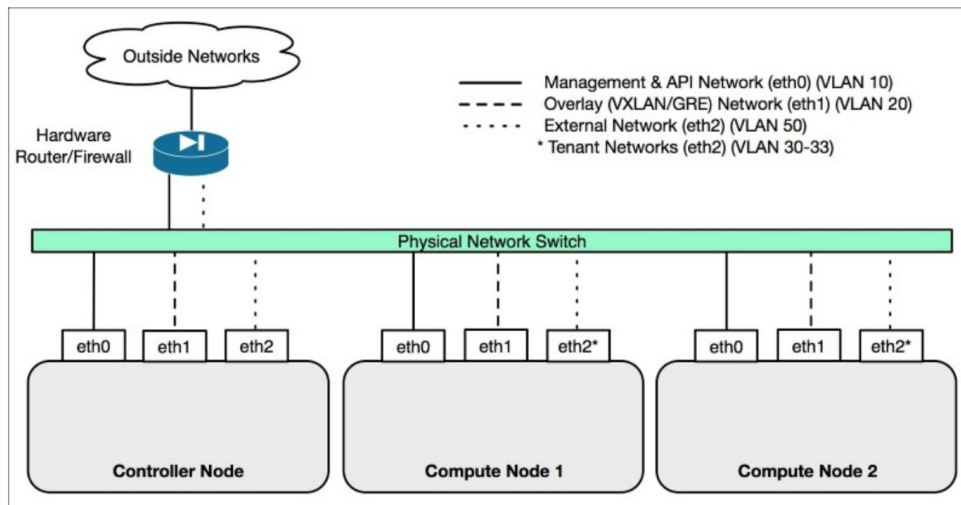


Figure 1.4

Network configurations for VirtualBox Environment

IP Address 정보

- IP 주소는 다음 테이블을 참고하여 구성함.
- Controller : 10.254.254.100/24, Compute nodes : 10.254.254.101~102/24

Network Type	Name	Network	Adapter Address	DHCP
NAT	<default>	<default>	<default>	Yes
Host-only	vboxnet0	10.254.254.0/24	10.254.254.1	No
Host-only	vboxnet1	10.50.0.0/24	10.50.0.1	No
Internal	overlay	172.18.0.0/24	n/a	No

Network configurations for VirtualBox Environment

개별 NIC 구성 – eth0/eth1

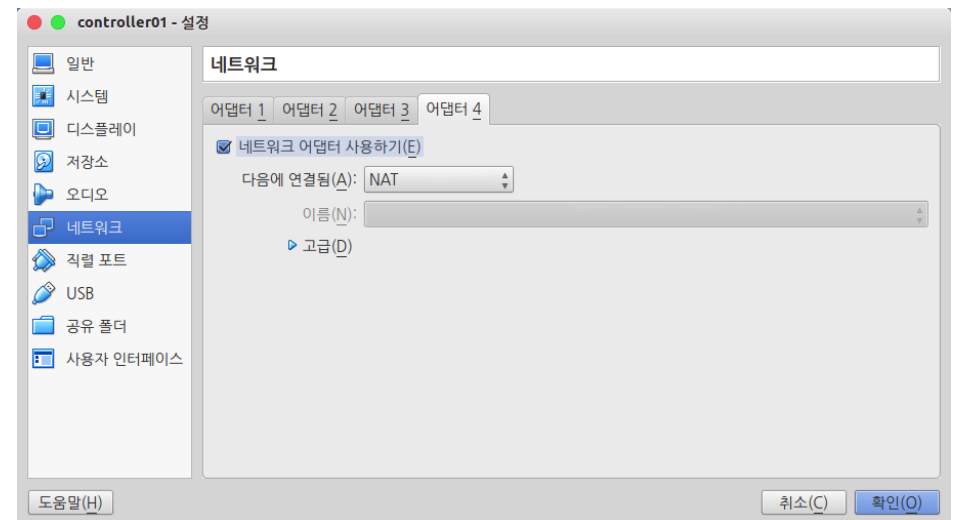
- eth0(호스트 전용)의 네트워크 이름은 vboxnet1, eth1(internal)은 overla로 지정하고, 무작위 모드는 “거부” 설정



Network configurations for VirtualBox Environment

개별 NIC 구성 – eth2/eth3

- eth2(호스트 전용)의 네트워크 이름은 vboxnet2, eth2는 NAT 지정하고, 무작위 모드는 eth2만 “모두 허용”으로 설정



Network configurations for VirtualBox Environment

Guest VM의 Network 구성 이슈

```
# and how to activate them. For more information, see interfaces(5).

# The loopback network interface
auto lo
iface lo inet loopback

auto eth0
iface eth0 inet static
    address 10.254.254.102
    netmask 255.255.255.0
# gateway 10.254.254.1
# dns-nameserver 8.8.8.8

auto eth1
iface eth1 inet static
    address 172.18.0.102
    netmask 255.255.255.0

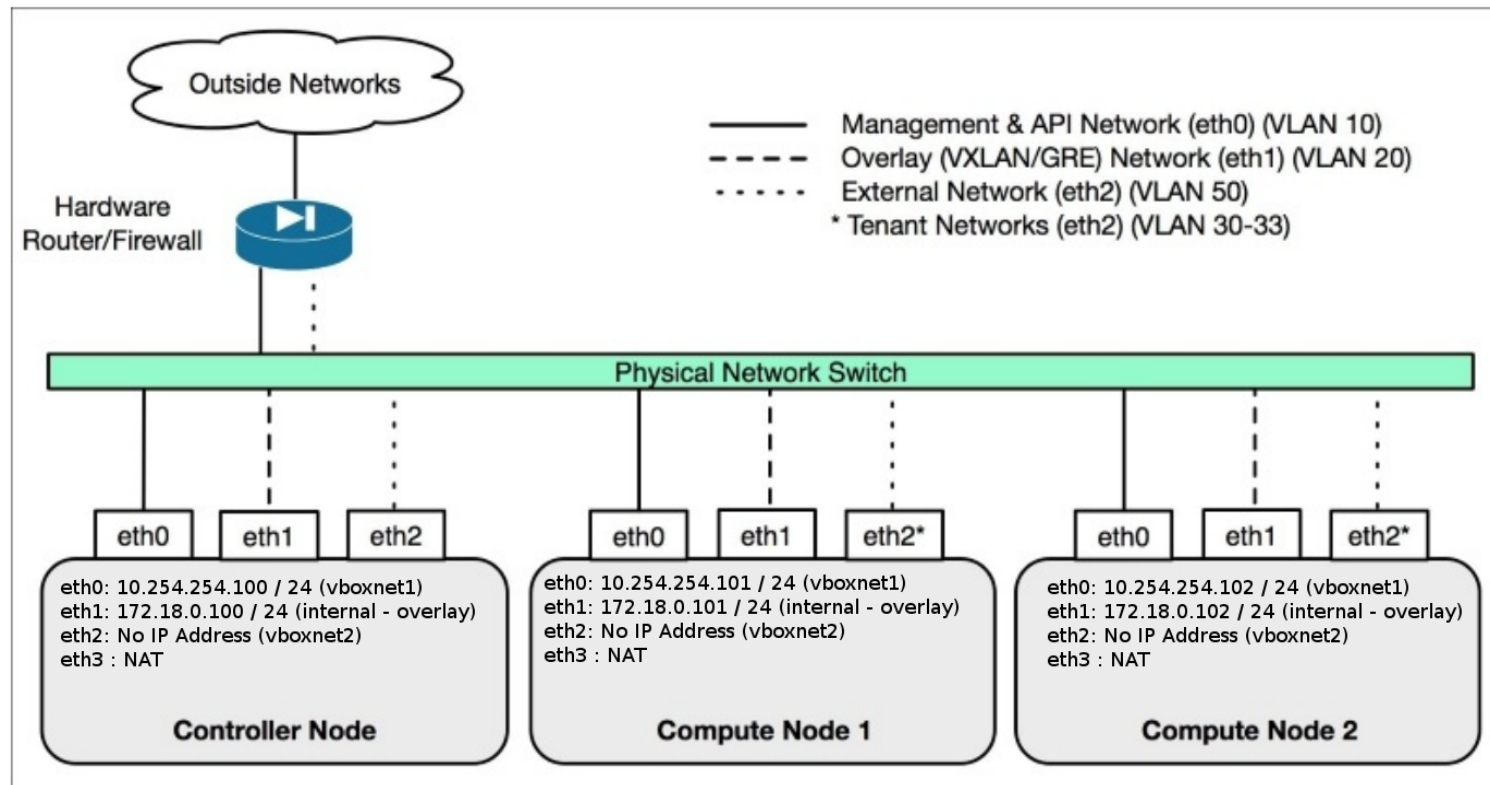
auto eth2
iface eth2 inet manual

auto eth3
iface eth3 inet dhcp
jsp@compute02:~$
```

- eth0의 gateway, dns-nameserver →
NAT 인터페이스 쪽의
Gateway와 중복이
발생하여 Comment 처리 후
정상 동작

Network configurations for VirtualBox Environment

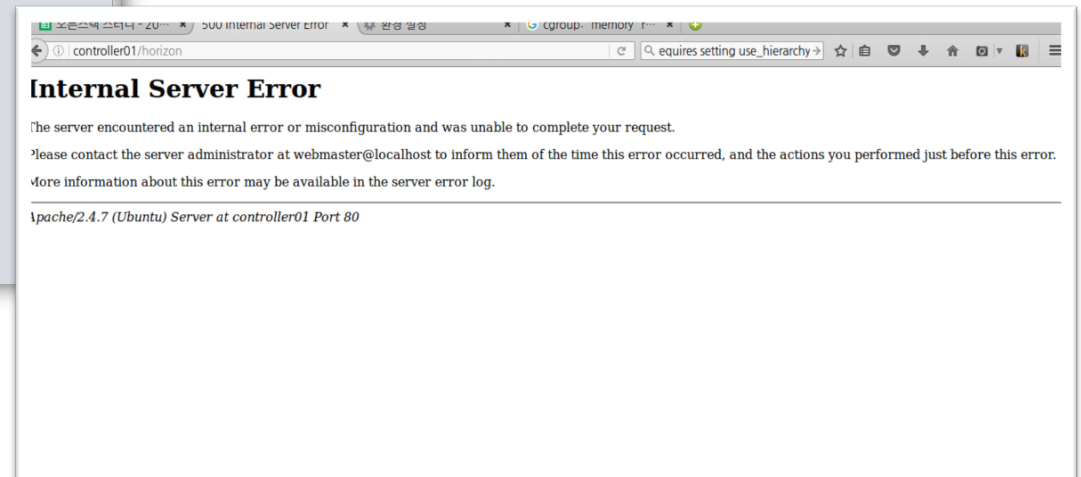
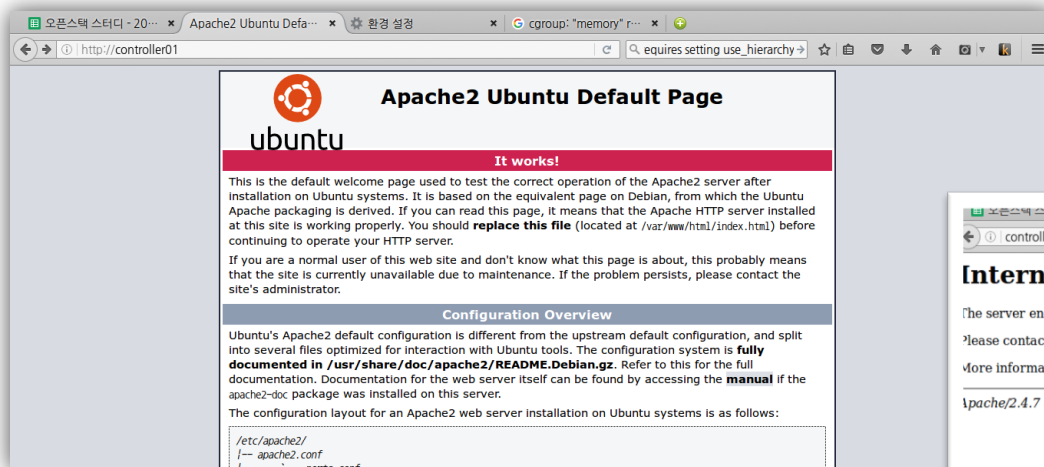
최종 네트워크 구성 정보



설치 시 오류

Horizon UI 접속 시 접속 오류 발생

- Apache 서버 기본 화면에는 접속이 되지만, Horizon 접속 시 오류 발생



설치 시 오류

Horizon UI 접속 시 접속 오류 발생

- 에러 로그 확인 시 NameError : name 'controller1' is not defined 확인
- 환경 구성 파일에서 OPENSTACK_HOST부분 “controller”로 수정

```
[Thu Apr 14 18:31:06.693744 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891] Traceback (most recent call last):
[Thu Apr 14 18:31:06.693763 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/share/openstack-dashboard/openst
ack_dashboard/wsgi/django.wsgi", line 16, in <module>
[Thu Apr 14 18:31:06.693811 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     application = get_wsgi_application()
[Thu Apr 14 18:31:06.693835 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/lib/python2.7/dist-packages/djan
go/core/wsgi.py", line 14, in get_wsgi_application
[Thu Apr 14 18:31:06.693874 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     django.setup()
[Thu Apr 14 18:31:06.693896 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/lib/python2.7/dist-packages/djan
go/__init__.py", line 20, in setup
[Thu Apr 14 18:31:06.693935 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     configure_logging(settings.LOGGING_CONFIG
, settings.LOGGING)
[Thu Apr 14 18:31:06.693950 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/lib/python2.7/dist-packages/djan
go/conf/__init__.py", line 46, in __getattr__
[Thu Apr 14 18:31:06.694020 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     self._setup(name)
[Thu Apr 14 18:31:06.694031 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/lib/python2.7/dist-packages/djan
go/conf/__init__.py", line 42, in _setup
[Thu Apr 14 18:31:06.694046 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     self._wrapped = Settings(settings_module)
[Thu Apr 14 18:31:06.694055 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/lib/python2.7/dist-packages/djan
go/conf/__init__.py", line 94, in __init__
[Thu Apr 14 18:31:06.694069 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     mod = importlib.import_module(self.SETTING
GS_MODULE)
[Thu Apr 14 18:31:06.694080 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/lib/python2.7/importlib/__init__
.py", line 37, in import_module
[Thu Apr 14 18:31:06.694118 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     __import__(name)
[Thu Apr 14 18:31:06.694128 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/share/openstack-dashboard/openst
ack_dashboard/wsgi/../../openstack_dashboard/settings.py", line 261, in <module>
[Thu Apr 14 18:31:06.694198 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     from local.local_settings import * # noq
a
[Thu Apr 14 18:31:06.694210 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]   File "/usr/share/openstack-dashboard/openst
ack_dashboard/wsgi/../../openstack_dashboard/local/local_settings.py", line 153, in <module>
[Thu Apr 14 18:31:06.694327 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891]     OPENSTACK_HOST = controller01
[Thu Apr 14 18:31:06.694346 2016] [error] [pid 3930:ttd 139828882614016] [remote 10.254.254.1:32891] NameError: name 'controller01' is not defined
(END)
```

```
# Or send them to /dev/null
#EMAIL_BACKEND = 'django.core.mail.backends.dummy.EmailBackend'

# Configure these for your outgoing email host
#EMAIL_HOST = 'smtp.my-company.com'
#EMAIL_PORT = 25
#EMAIL_HOST_USER = 'djangomail'
#EMAIL_HOST_PASSWORD = 'top-secret!'

# For multiple regions uncomment this configuration, and add (endpoint, title).
#AVAILABLE_REGIONS = [
#    ('http://cluster1.example.com:5000/v2.0', 'cluster1'),
#    ('http://cluster2.example.com:5000/v2.0', 'cluster2'),
#]

#OPENSTACK_HOST = "127.0.0.1"
#OPENSTACK_HOST = "controller01"
OPENSTACK_KEYSTONE_URL = "http://%s:5000/v2.0" % OPENSTACK_HOST
#OPENSTACK_KEYSTONE_DEFAULT_ROLE = "member_"
OPENSTACK_KEYSTONE_DEFAULT_ROLE = "user"

# Enables keystone web single-sign-on if set to True.
#WEBSO_ENABLED = False

# Determines which authentication choice to show as default.
#WEBSO_INITIAL_CHOICE = "credentials"

# The list of authentication mechanisms
# which include keystone federation protocols.
# Current supported protocol IDs are 'saml2' and 'oidc'
# which represent SAML 2.0, OpenID Connect respectively.
# Do not remove the mandatory credentials mechanism.
```

설치 시 오류

기타

- Keystone 관련 명령어 수행 시 에러..
 - LC_****
 - ubuntu설치 locale : en_US.UTF-8
 - host OS local : ko_KR.UTF-8, adminrc파일에 locale설정 추가하여 해결
- Mysql -u root -p 접속 오류
 - Localhost에서 root 접속 시 오류
 - 일반 사용자로 접속하여 mysql 수정
- Neutron 에이전트 설치 후 상태 이슈
 - :) 대신 xxx
 - agent 구성 파일 오류 (dhcp_agent.ini에 metadata_agent.ini내용을 추가)
- crudini는 왜 설치할까? --> 1st Edition 에서 사용, 2nd Edition은 사용하지 않음