

ftp

```
터미널
ubuntu@server: ~
sudo: apt_get: command not found
ubuntu@server:~$ sudo apt-get install ufw
sudo: apt_get: command not found
ubuntu@server:~$ sudo apt-get install ufw
패키지 목록을 읽는 중입니다... 완료
의존성 트리를 만드는 중입니다
상태 정보를 읽는 중입니다... 완료
ufw is already the newest version (0.35-0ubuntu2).
ufw 패키지는 수동설치로 지정합니다.
0개 업그레이드, 0개 새로 설치, 0개 제거 및 0개 업그레이드 안 함.
ubuntu@server:~$ sudo ufw enable
방화벽이 활성화 상태이며 시스템이 시작할 때 사용됩니다
ubuntu@server:~$ sudo ufw status
상태: 활성화
ubuntu@server:~$ sudo ufw allow 20
규칙이 추가되었습니다
규칙이 추가되었습니다 (v6)
ubuntu@server:~$ sudo ufw allow 21
규칙이 추가되었습니다
규칙이 추가되었습니다 (v6)
ubuntu@server:~$ sudo ufw allow 22
규칙이 추가되었습니다
규칙이 추가되었습니다 (v6)
ubuntu@server:~$
```

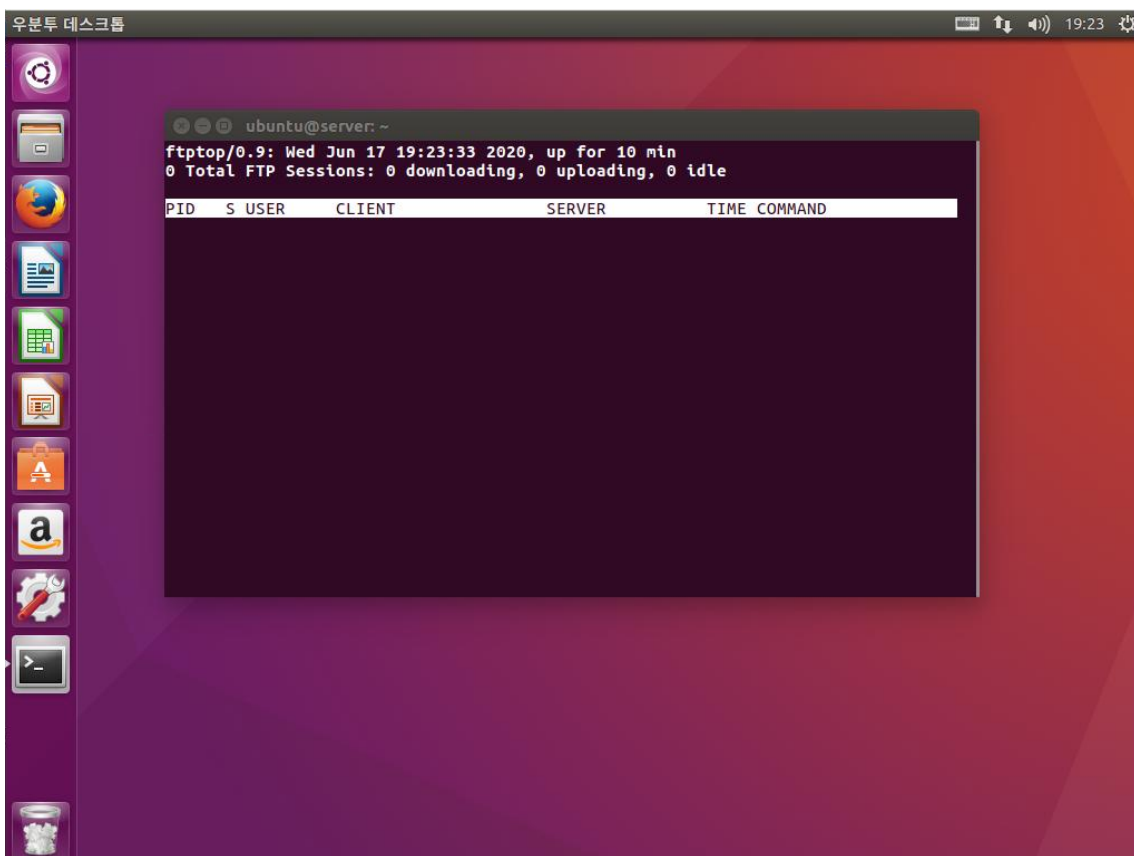
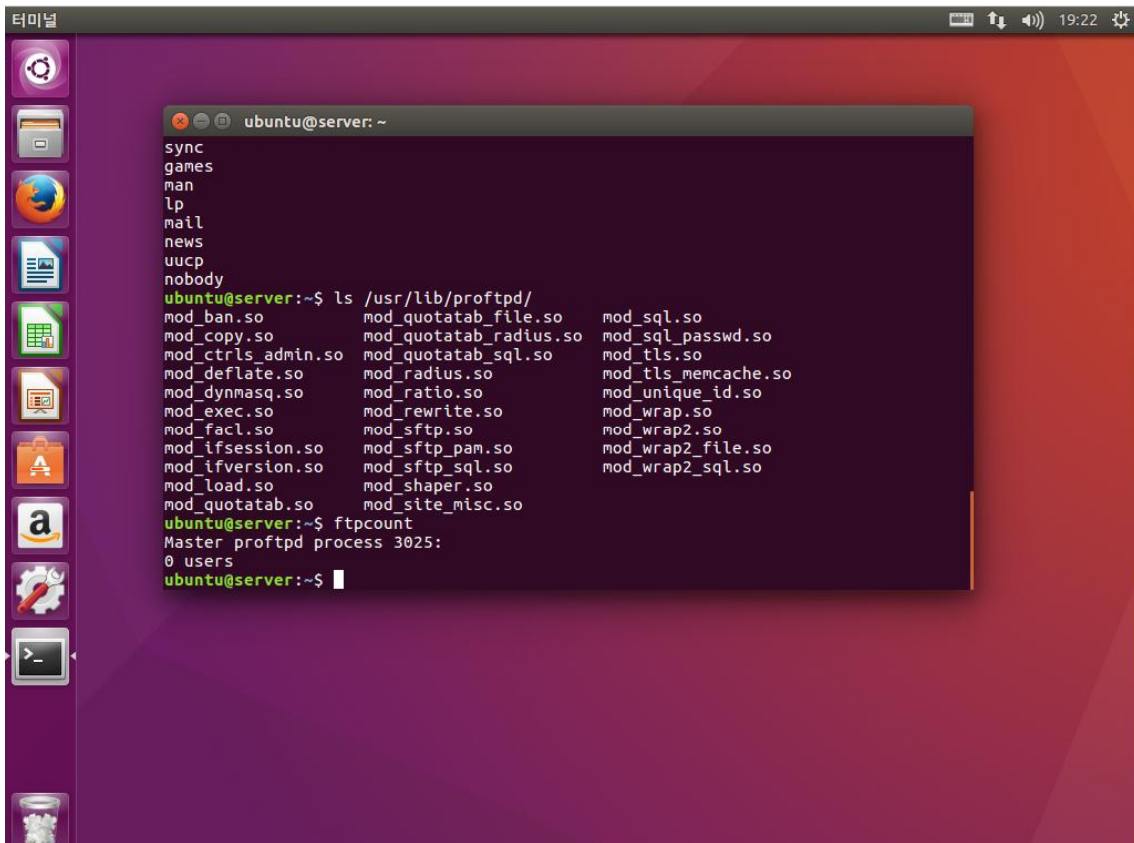
```
터미널
ubuntu@server: ~
ubuntu@server:~$ sudo apt-get install proftpd
[sudo] password for ubuntu:
패키지 목록을 읽는 중입니다... 완료
의존성 트리를 만드는 중입니다
상태 정보를 읽는 중입니다... 완료
주의, 'proftpd' 대신에 'proftpd-basic' 패키지를 선택합니다
The following additional packages will be installed:
  libmemcached11 libmemcachedutil2
제안하는 패키지:
  openssh-inetd | inet-superserver proftpd-doc proftpd-mod-ldap
  proftpd-mod-mysql proftpd-mod-odbc proftpd-mod-pgsql proftpd-mod-sqlite
  proftpd-mod-geoip
다음 새 패키지를 설치할 것입니다:
  libmemcached11 libmemcachedutil2 proftpd-basic
0개 업그레이드, 3개 새로 설치, 0개 제거 및 0개 업그레이드 안 함.
2,081 k바이트 아카이브를 받아야 합니다.
이 작업 후 4,772 k바이트의 디스크 공간을 더 사용하게 됩니다.
계속 하시겠습니까? [Y/n] y
받기:1 http://mirror.kakao.com/ubuntu xenial/main amd64 libmemcached11 amd64 1.0
.18-4.1 [82.7 kB]
받기:2 http://mirror.kakao.com/ubuntu xenial/main amd64 libmemcachedutil2 amd64
1.0.18-4.1 [9,490 B]
받기:3 http://mirror.kakao.com/ubuntu xenial/universe amd64 proftpd-basic amd64
1.3.5a-1build1 [1,989 kB]
```

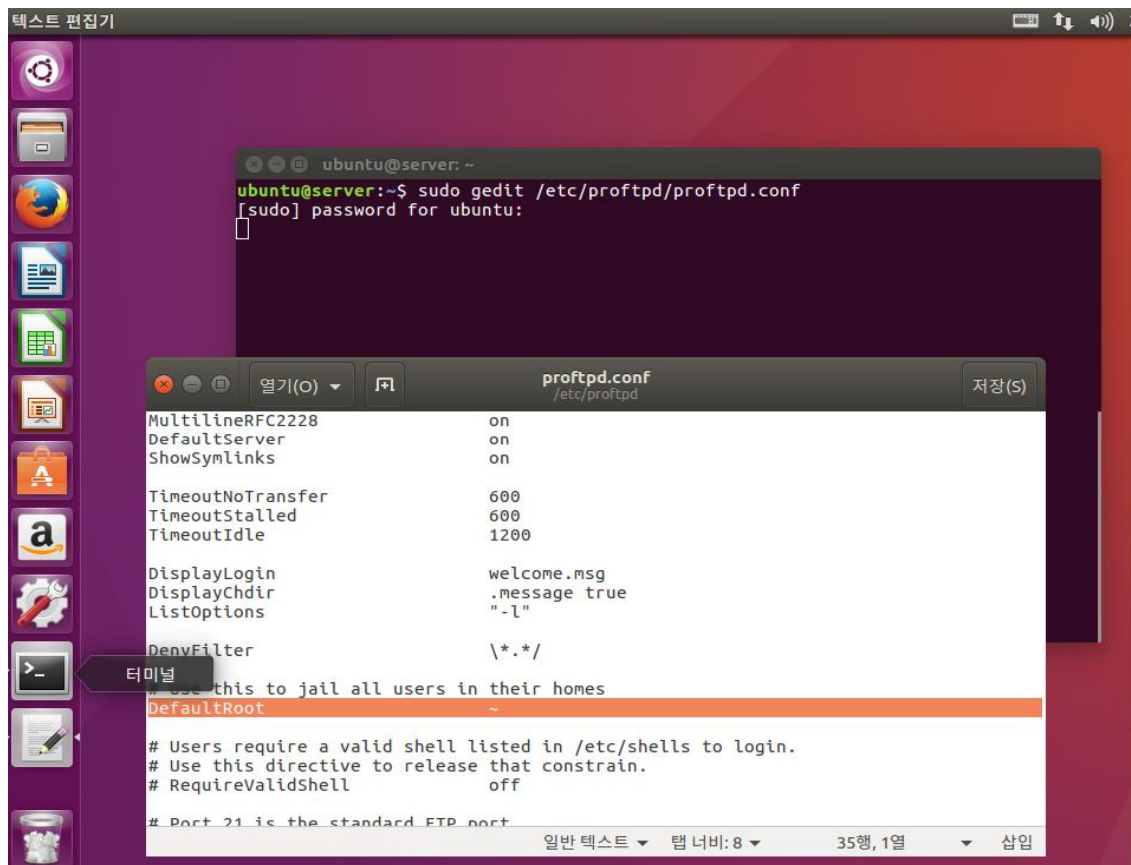
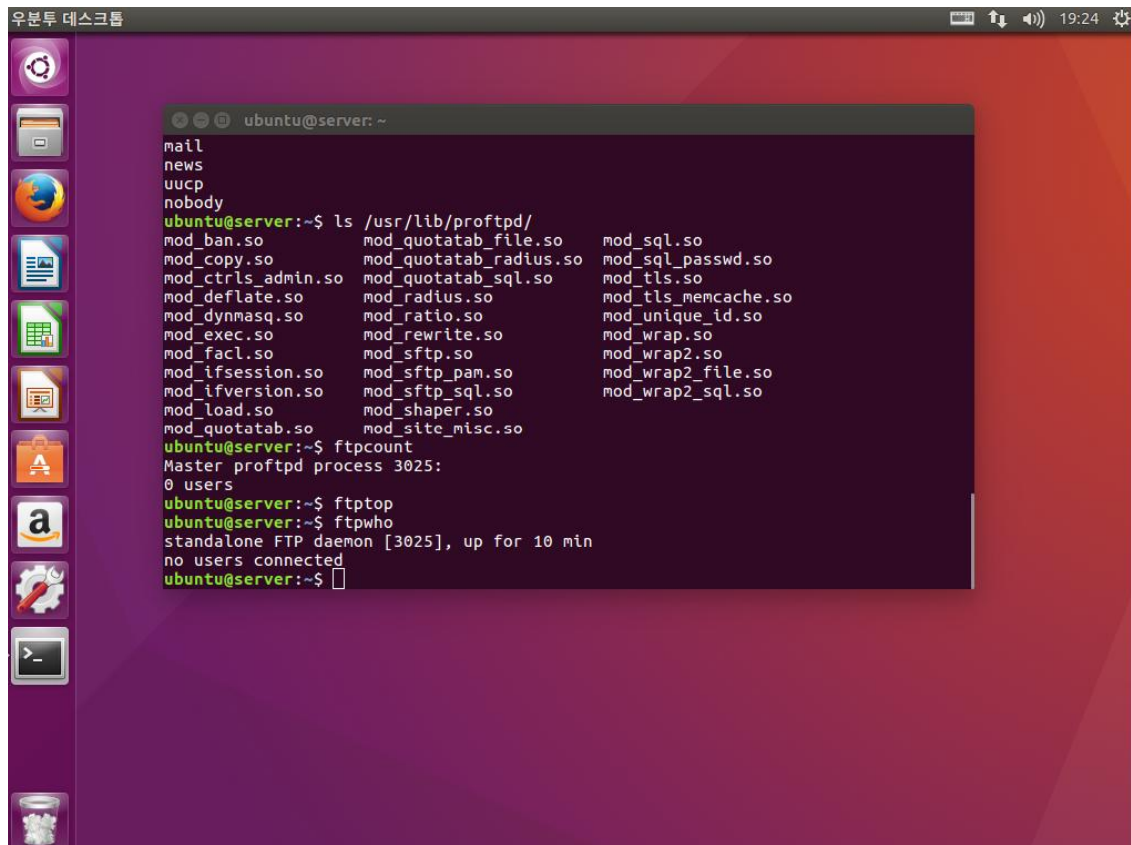
```
터미널
ubuntu@server: ~
내려받기 2,081 k바이트, 소요시간 0초 (4,172 k바이트/초)
패키지를 미리 설정하는 중입니다...
Selecting previously unselected package libmemcached11:amd64.
(데이터베이스 읽는중 ...현재 175450개의 파일과 디렉터리가 설치되어 있습니다.)
Preparing to unpack .../libmemcached11_1.0.18-4.1_amd64.deb ...
Unpacking libmemcached11:amd64 (1.0.18-4.1) ...
Selecting previously unselected package libmemcachedutil2:amd64.
Preparing to unpack .../libmemcachedutil2_1.0.18-4.1_amd64.deb ...
Unpacking libmemcachedutil2:amd64 (1.0.18-4.1) ...
Selecting previously unselected package proftpd-basic.
Preparing to unpack .../proftpd-basic_1.3.5a-1build1_amd64.deb ...
Unpacking proftpd-basic (1.3.5a-1build1) ...
Processing triggers for libc-bin (2.23-0ubuntu3) ...
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for systemd (229-4ubuntu4) ...
Processing triggers for man-db (2.7.5-1) ...
libmemcached11:amd64 (1.0.18-4.1) 설정하는 중입니다 ...
libmemcachedutil2:amd64 (1.0.18-4.1) 설정하는 중입니다 ...
proftpd-basic (1.3.5a-1build1) 설정하는 중입니다 ...
경고: 지정된 /run/proftpd 홈 디렉터리로 접근 불가: No such file or directory
시스템 사용자 'proftpd' (121) 추가 ...
새로운 사용자 'proftpd' (121) 을(를) 그룹 'nogroup'('으)로 추가 ...
홈 디렉토리 '/run/proftpd' 을(를) 만들지 않습니다.
시스템 사용자 'ftp' (122) 추가 ...

휴지통
```

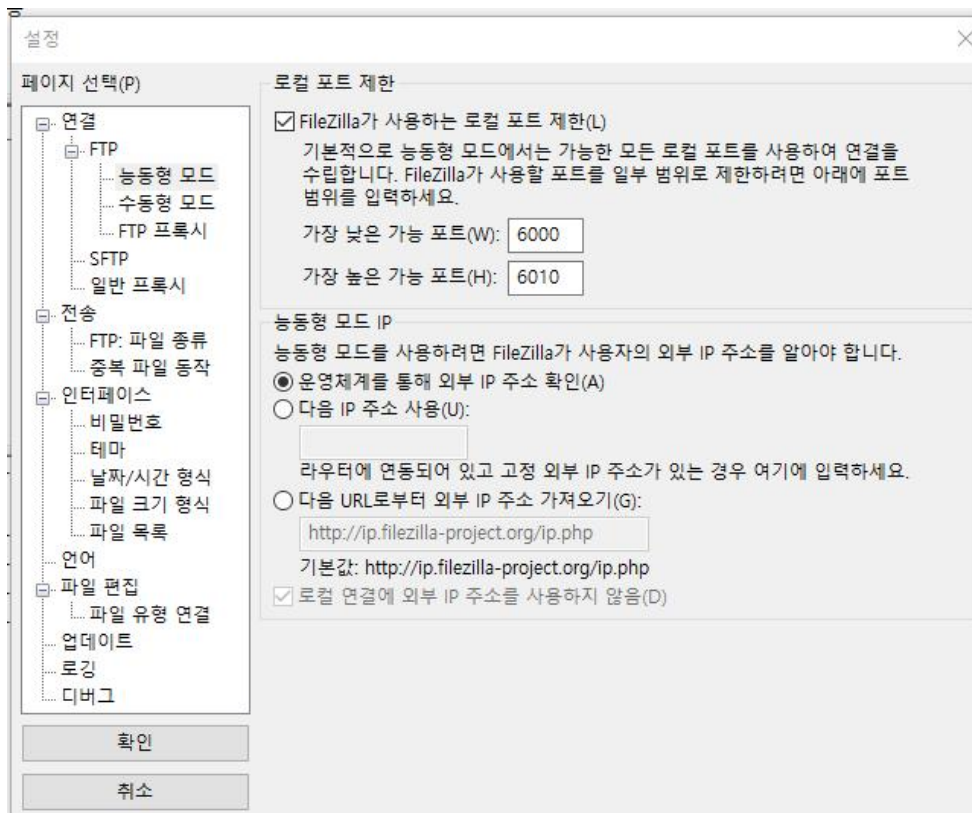
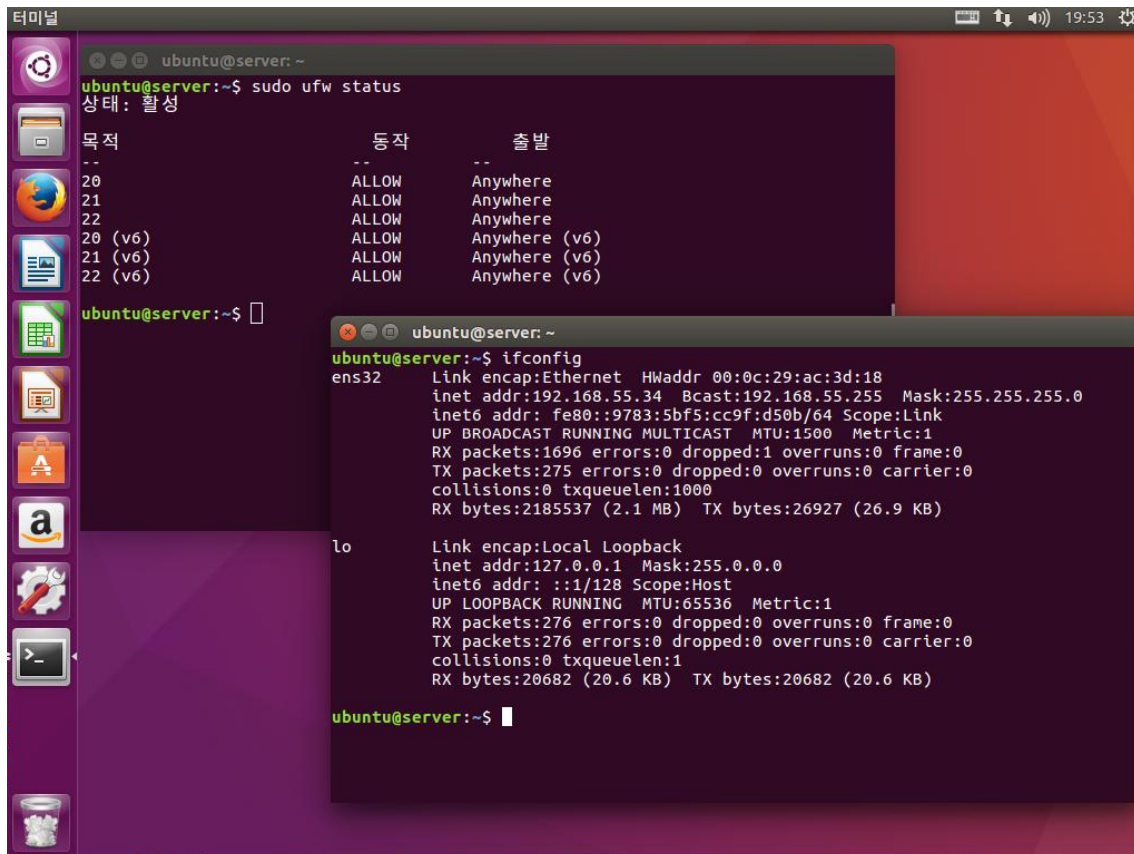
```
터미널
ubuntu@server: ~
새로운 사용자 'ftp' (122) 을(를) 그룹 'nogroup'('으)로 추가 ...
'/srv/ftp' 홈 디렉터리를 생성하는 중...
'/usr/share/proftpd/templates/welcome.msg' -> '/srv/ftp/welcome.msg.proftpd-new'
Processing triggers for libc-bin (2.23-0ubuntu3) ...
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for systemd (229-4ubuntu4) ...
ubuntu@server:~$ cat /etc/ftpusers
# /etc/ftpusers: list of users disallowed FTP access. See ftpusers(5).

root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
nobody
ubuntu@server:~$ ls /usr/lib/proftpd/
mod_ban.so          mod_quotatab_file.so  mod_sql.so
mod_copy.so         mod_quotatab_radius.so mod_sql_passwd.so
```









Microsoft Windows [Version 10.0.18363.900]  
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C:\Users\윤재>ipconfig

Windows IP 구성

이더넷 어댑터 이더넷 2:

미디어 상태 . . . . . : 미디어 연결 끊김  
연결별 DNS 접미사 . . . . . :

이더넷 어댑터 이더넷:

연결별 DNS 접미사 . . . . . :  
링크-로컬 IPv6 주소 . . . . . : fe80::28b4:e46a:b37c:7803%7  
IPv4 주소 . . . . . : 192.168.55.121  
서브넷 마스크 . . . . . : 255.255.255.0  
기본 게이트웨이 . . . . . : 192.168.55.1

이더넷 어댑터 VMware Network Adapter VMnet1:

연결별 DNS 접미사 . . . . . :  
링크-로컬 IPv6 주소 . . . . . : fe80::b18e:f9ae:664e:3cb7%15  
IPv4 주소 . . . . . : 192.168.26.1  
서브넷 마스크 . . . . . : 255.255.255.0  
기본 게이트웨이 . . . . . :

이더넷 어댑터 VMware Network Adapter VMnet8:

연결별 DNS 접미사 . . . . . :  
링크-로컬 IPv6 주소 . . . . . : fe80::14b4:d944:f9fc:5ec8%17  
IPv4 주소 . . . . . : 192.168.111.1  
서브넷 마스크 . . . . . : 255.255.255.0  
기본 게이트웨이 . . . . . :

C:\Users\윤재>ping 192.168.55.34

Ping 192.168.55.34 32바이트 데이터 사용:  
192.168.55.34의 응답: 바이트=32 시간<1ms TTL=64  
192.168.55.34의 응답: 바이트=32 시간<1ms TTL=64  
192.168.55.34의 응답: 바이트=32 시간<1ms TTL=64  
192.168.55.34의 응답: 바이트=32 시간<1ms TTL=64

192.168.55.34에 대한 Ping 통계:  
패킷: 보냄 = 4, 받음 = 4, 손실 = 0 (0% 손실),  
왕복 시간(밀리초):  
최소 = 0ms, 최대 = 0ms, 평균 = 0ms

C:\Users\윤재>■

ubuntu@192.168.55.34 - FileZilla

파일(F) 편집(E) 보기(V) 전송(T) 서버(S) 북마크(B) 도움말(H)

호스트(H): 192.168.55.34 사용자명(U): ubuntu 비밀번호(W): [●●●●●●] 포트(P): [ ] 빠른 연결(Q) [v]

상태: 192.168.55.34:21에 연결...  
 상태: 연결 수립, 환영 메시지를 기다림...  
 상태: 보안되지 않은 서버입니다. TLS를 통한 FTP를 지원하지 않습니다.  
 상태: 로그인  
 상태: 디렉터리 목록 조회...  
 상태: "/home/ubuntu" 디렉터리 목록 조회 성공

로컬 사이트: C:\Ubuntu# 리모트 사이트: /home/ubuntu

파일명	크기	파일 유형	최종 수정	권한	소유자/그룹
..					
Client		파일 폴더	2020-04-12 오후 ...		
Server		파일 폴더	2020-06-17 오후 ...		
Server(8)		파일 폴더	2020-04-11 오후 ...		
WinClient		파일 폴더	2020-04-11 오후 ...		

4 디렉터리

파일명	크기	파일 유형	최종 수정	권한	소유자/그룹
..					
.cache		파일 폴더	2020-06-17 ...	flcdmpe (0...	1000 1000
.config		파일 폴더	2020-06-17 ...	flcdmpe (0...	1000 1000
.dbus		파일 폴더	2016-07-08 ...	flcdmpe (0...	1000 1000
.gconf		파일 폴더	2020-04-12 ...	flcdmpe (0...	1000 1000
.gnupg		파일 폴더	2020-06-17 ...	flcdmpe (0...	1000 1000
.local		파일 폴더	2016-07-08 ...	flcdmpe (0...	1000 1000
.mozilla		파일 폴더	2020-04-11 ...	flcdmpe (0...	1000 1000
.presage		파일 폴더	2016-07-08 ...	flcdmpe (0...	1000 1000
.thunderbird		파일 폴더	2020-04-12 ...	flcdmpe (0...	1000 1000
2020136129		파일 폴더	2020-04-13 ...	flcdmpe (0...	1000 1000
공개		파일 폴더	2016-07-08 ...	flcdmpe (0...	1000 1000

14 파일 및 18 디렉터리. 총 크기: 57,802,207 바이트

서버/로컬 파일    방향    리모트 파일    크기    우선 ...    상태

대기 파일    전송 실패    전송 성공

대기열 비어 있음

dns

```
ubuntu@server: ~  
ubuntu@server:~$ ifconfig  
ens32      Link encap:Ethernet  HWaddr 00:0c:29:ac:3d:18  
            inet addr:192.168.55.34  Bcast:192.168.55.255  Mask:255.255.255.0  
            inet6 addr: fe80::a8b1:f891:ebe1:38f0/64 Scope:Link  
            UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
            RX packets:1657 errors:0 dropped:0 overruns:0 frame:0  
            TX packets:107 errors:0 dropped:0 overruns:0 carrier:0  
            collisions:0 txqueuelen:1000  
            RX bytes:146715 (146.7 KB)  TX bytes:11412 (11.4 KB)  
  
lo         Link encap:Local Loopback  
            inet addr:127.0.0.1  Mask:255.0.0.0  
            inet6 addr: ::1/128 Scope:Host  
            UP LOOPBACK RUNNING  MTU:65536  Metric:1  
            RX packets:198 errors:0 dropped:0 overruns:0 frame:0  
            TX packets:198 errors:0 dropped:0 overruns:0 carrier:0  
            collisions:0 txqueuelen:1  
            RX bytes:14864 (14.8 KB)  TX bytes:14864 (14.8 KB)  
  
ubuntu@server:~$ route  
Kernel IP routing table  
Destination Gateway         Genmask         Flags Metric Ref    Use Iface  
default     192.168.55.1  0.0.0.0         UG        100    0      0 ens32  
link-local  *             255.255.0.0     U         1000   0      0 ens32  
192.168.55.0 *             255.255.255.0   U         100    0      0 ens32
```

터미널

```
ubuntu@server: /etc  
ubuntu@server:~$ sudo apt-get install bind9 bind9utils bind9-doc  
패키지 목록을 읽는 중입니다... 완료  
의존성 트리를 만드는 중입니다  
상태 정보를 읽는 중입니다... 완료  
bind9 is already the newest version (1:9.10.3.dfsg.P4-8).  
bind9-doc is already the newest version (1:9.10.3.dfsg.P4-8).  
bind9utils is already the newest version (1:9.10.3.dfsg.P4-8).  
0개 업그레이드, 0개 새로 설치, 0개 제거 및 0개 업그레이드 안 함.  
ubuntu@server:~$ cd /etc/bind  
ubuntu@server:/etc/bind$ ls  
bind.keys  db.empty  named.conf.default-zones  zones.rfc1918  
db.0       db.local  named.conf.local  
db.127     db.root   named.conf.options  
db.255     named.conf rndc.key  
ubuntu@server:/etc/bind$ cd ./  
ubuntu@server:/etc/bind$ ./  
bash: ./: 디렉터리입니다  
ubuntu@server:/etc/bind$ cd ../  
ubuntu@server:/etc$ cd ../  
ubuntu@server:/etc$ cd ..  
bash: cd: ....: 그런 파일이나 디렉터리가 없습니다  
ubuntu@server:/etc$ cd /etc/bind  
ubuntu@server:/etc/bind$ cd ..  
ubuntu@server:/etc$ ls  
ImageMagick-6  gtk-2.0  popularity-contest.conf
```



```
ubuntu@server: ~  
ubuntu@server:/$ cd ..  
ubuntu@server:/$ ls  
bin      dev      initrd.img  lost+found  opt      run      srv      usr  
boot     etc      lib         media       proc     sbin     sys      var  
cdrom    home    lib64       mnt         root     snap     tmp      vmlinuz  
ubuntu@server:/$ cd /home/ubuntu/  
ubuntu@server:~$
```

```
ubuntu@server:~$ cat /etc/host.conf  
# The "order" line is only used by old versions of the C library.  
order hosts,bind  
multi on  
ubuntu@server:~$ cat /etc/host  
cat: /etc/host: 그런 파일이나 디렉터리가 없습니다  
ubuntu@server:~$ cat /etc/hosts  
127.0.0.1    localhost  
127.0.1.1    server  
  
# The following lines are desirable for IPv6 capable hosts  
::1         ip6-localhost ip6-loopback  
fe00::0     ip6-localnet  
ff00::0     ip6-mcastprefix  
ff02::1     ip6-allnodes  
ff02::2     ip6-allrouters  
ubuntu@server:~$ cat /etc/resolv.conf  
# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)  
#     DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN  
nameserver 127.0.1.1  
ubuntu@server:~$ sudo gedit /etc/resolv.conf
```

```
# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)  
#     DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN  
nameserver 127.0.1.1
```

```
ubuntu@server:~$ ifconfig  
ens32:  Link encap:Ethernet  HWaddr 00:0c:29:ac:3d:18  
         inet addr:192.168.55.34  Bcast:192.168.55.255  Mask:255.255.255.0  
         inet6 addr: fe80::a8b1:f891:ebc1:38f0/64 Scope:Link  
         UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
         RX packets:3211 errors:0 dropped:0 overruns:0 frame:0  
         TX packets:245 errors:0 dropped:0 overruns:0 carrier:0  
         collisions:0 txqueuelen:1000  
         RX bytes:1058908 (1.0 MB)  TX bytes:22530 (22.5 KB)  
  
lo:      Link encap:Local Loopback  
         inet addr:127.0.0.1  Mask:255.0.0.0  
         inet6 addr: ::1/128 Scope:Host  
         UP LOOPBACK RUNNING  MTU:65536  Metric:1  
         RX packets:224 errors:0 dropped:0 overruns:0 frame:0  
         TX packets:224 errors:0 dropped:0 overruns:0 carrier:0  
         collisions:0 txqueuelen:1  
         RX bytes:17125 (17.1 KB)  TX bytes:17125 (17.1 KB)  
ubuntu@server:~$
```

```
# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)  
#     DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN  
nameserver 127.0.1.1  
nameserver 192.168.55.34
```

텍스트 편집기

```
ubuntu@server: ~  
ubuntu@server:~$ ifconfig  
ens32    Link encap:Ethernet  HWaddr 00:0c:29:ac:3d:18  
  
root@server: ~  
ubuntu@server:~$ sudo bash  
root@server:~# rndc-confgen > /etc/rndc.conf  
root@server:~# sudo gedit /etc/rndc.conf
```

rndc.conf /etc 저장(S)

```
# Start of rndc.conf  
key "rndc-key" {  
    algorithm hmac-md5;  
    secret "fX2miDNjY2oP613Ywzn+ww==";  
};  
  
options {  
    default-key "rndc-key";  
    default-server 127.0.0.1;  
    default-port 953;  
};  
# End of rndc.conf  
  
# Use with the following in named.conf, adjusting the allow list as needed:  
# key "rndc-key" {  
#     algorithm hmac-md5;  
#     secret "fX2miDNjY2oP613Ywzn+ww==";  
# };  
# controls {  
#     inet 127.0.0.1 port 953  
#         allow { 127.0.0.1; } keys { "rndc-key"; };  
# };  
# End of named.conf
```

텍스트 편집기

```
ubuntu@server: ~  
ubuntu@server:~$ ifconfig  
ens32    Link encap:Ethernet  HWaddr 00:0c:29:ac:3d:18  
  
root@server: ~  
ubuntu@server:~$ sudo bash  
root@server:~# rndc-confgen > /etc/rndc.conf  
root@server:~# sudo gedit /etc/rndc.conf  
  
root@server:~# sudo gedit /etc/bind/named.conf
```

\*named.conf /etc/bind 저장(S)

```
// This is the primary configuration file for the BIND DNS server named.  
//  
// Please read /usr/share/doc/bind9/README.Debian.gz for information on the  
// structure of BIND configuration files in Debian, *BEFORE* you customize  
// this configuration file.  
//  
// If you are just adding zones, please do that in /etc/bind/named.conf.local  
  
include "/etc/bind/named.conf.options";  
include "/etc/bind/named.conf.local";  
include "/etc/bind/named.conf.default-zones";
```

ion 속성 설정은 지원하지 않습니다

```
root@server:~# sudo gedit /etc/bind/named.conf
```

```
*named.conf
/etc/bind

// This is the primary configuration file for the BIND DNS server named.
//
// Please read /usr/share/doc/bind9/README.Debian.gz for information on the
// structure of BIND configuration files in Debian, *BEFORE* you customize
// this configuration file.
//
// If you are just adding zones, please do that in /etc/bind/named.conf.local

include "/etc/bind/named.conf.options";
include "/etc/bind/named.conf.local";
include "/etc/bind/named.conf.default-zones";

# Use with the following in named.conf, adjusting the allow list as needed:
key "rndc-key" {
    algorithm hmac-md5;
    secret "fX2m1DNjY2oP613Ywzn+ww=";
};

controls {
    inet 127.0.0.1 port 953
        allow { 127.0.0.1; } keys { "rndc-key"; };
};
# End of named.conf
```

Link encap:Ethernet HWaddr 00:0c:29:ac:3d:18

```
root@server:~
```

```
root@server:~# cat /etc/bind/named.conf.default-zones
// prime the server with knowledge of the root servers
zone "." {
    type hint;
    file "/etc/bind/db.root";
};

// be authoritative for the localhost forward and reverse zones, and for
// broadcast zones as per RFC 1912
zone "localhost" {
    type master;
    file "/etc/bind/db.local";
};

zone "127.in-addr.arpa" {
    type master;
    file "/etc/bind/db.127";
};

zone "0.in-addr.arpa" {
    type master;
    file "/etc/bind/db.0";
};

zone "255.in-addr.arpa" {
    type master;
    file "/etc/bind/db.255";
};

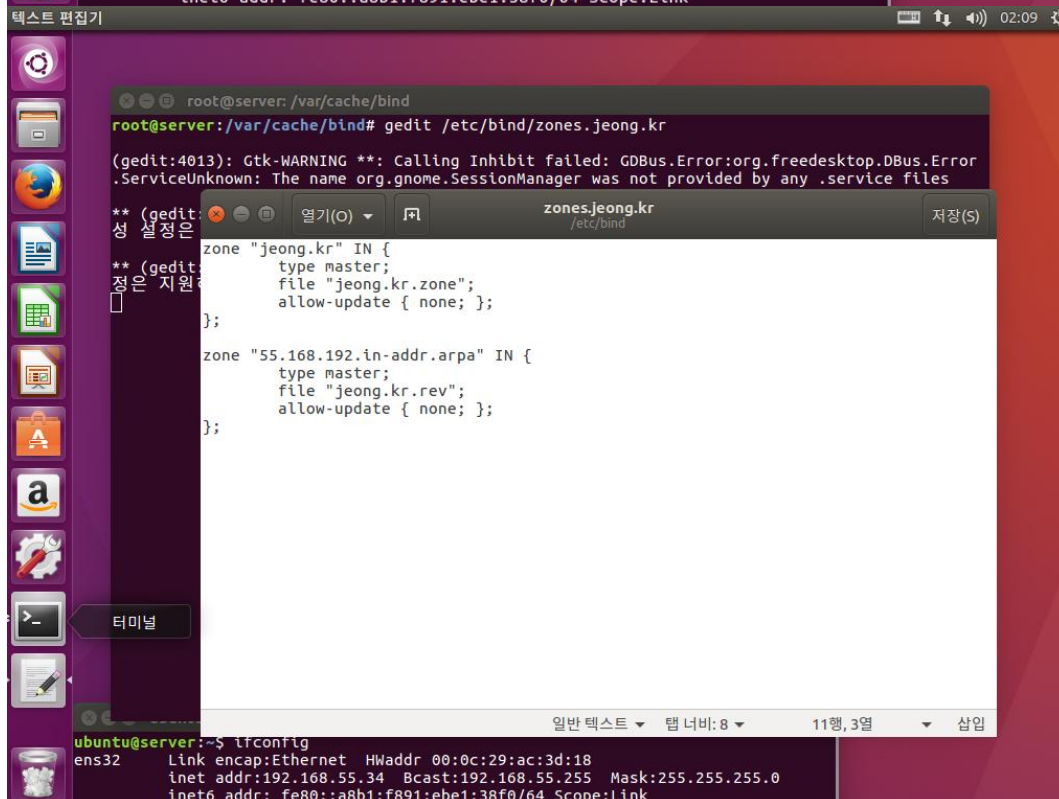
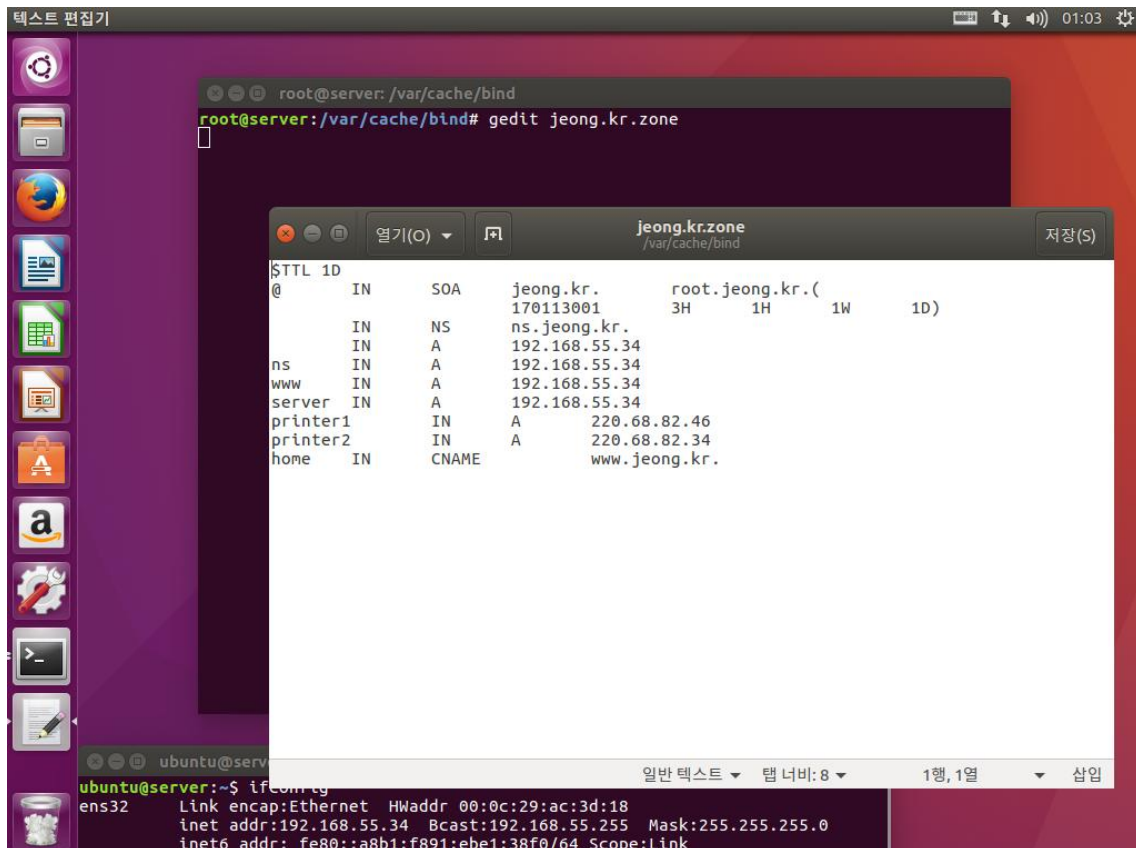
root@server:~#
```

```
Link: encap.Ethernet - hwaddr 00:0c:29:ac:3d:18
root@server: ~
root@server:~# gedit /etc/bind/named.conf.local
(gedit:3476): Gtk-WARNING **: Calling Inhibit failed: GDBus.Error:org.freedesktop
named.conf.local
/etc/bind
열기(O) 저장(S)

//
// Do any local configuration here
//
// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";
// jeong.kr
include "/etc/bind/zones.jeong.kr";

C 탭 너비: 8 1행, 1열 삼입
```





텍스트 편집기

```
root@server: /var/cache/bind
root@server:/var/cache/bind# gedit jeong.kr.rev

(gedit:3640): Gtk-WARNING **: Calling Inhibit failed: GDBus.Error:org.freedesktop.DBus.Error.ServiceUnknown: The name org.gnome.SessionManager was not provided by any .service files

** (gedit:3640): WARNING **: jeong.kr.rev
/var/cache/bind

jeong.kr.rev
/var/cache/bind

저장(S)

STTL 1D
IN SOA jeong.kr. root.jeong.kr. (
170113001 3H 1H 1W 1D)
IN NS ns.jeong.kr.
34 IN PTR jeong.kr.
34 IN PTR ns.jeong.kr.
34 IN PTR www.jeong.kr.
34 IN PTR server.jeong.kr.
34 IN PTR home.jeong.kr.
46 IN PRT printer1.jeong.kr.
34 IN PRT printer2.jeong.kr.]

ubuntu@server:~$ ifconfig
ens32 Link encap:Ethernet HWaddr 00:0c:29:ac:3d:18
inet addr:192.168.55.34 Bcast:192.168.55.255 Mask:255.255.0
inet6 addr: fe80::a8b1:f891:ebe1:38f0/64 Scope:Link
```

터미널

```
root@server: /var/cache/bind
root@server:/var/cache/bind# nslookup www.jeong.kr
;; connection timed out; no servers could be reached

root@server:/var/cache/bind# service bind9 start
root@server:/var/cache/bind# nslookup www.jeong.kr
Server: 192.168.55.34
Address: 192.168.55.34#53

Name: www.jeong.kr
Address: 192.168.55.34

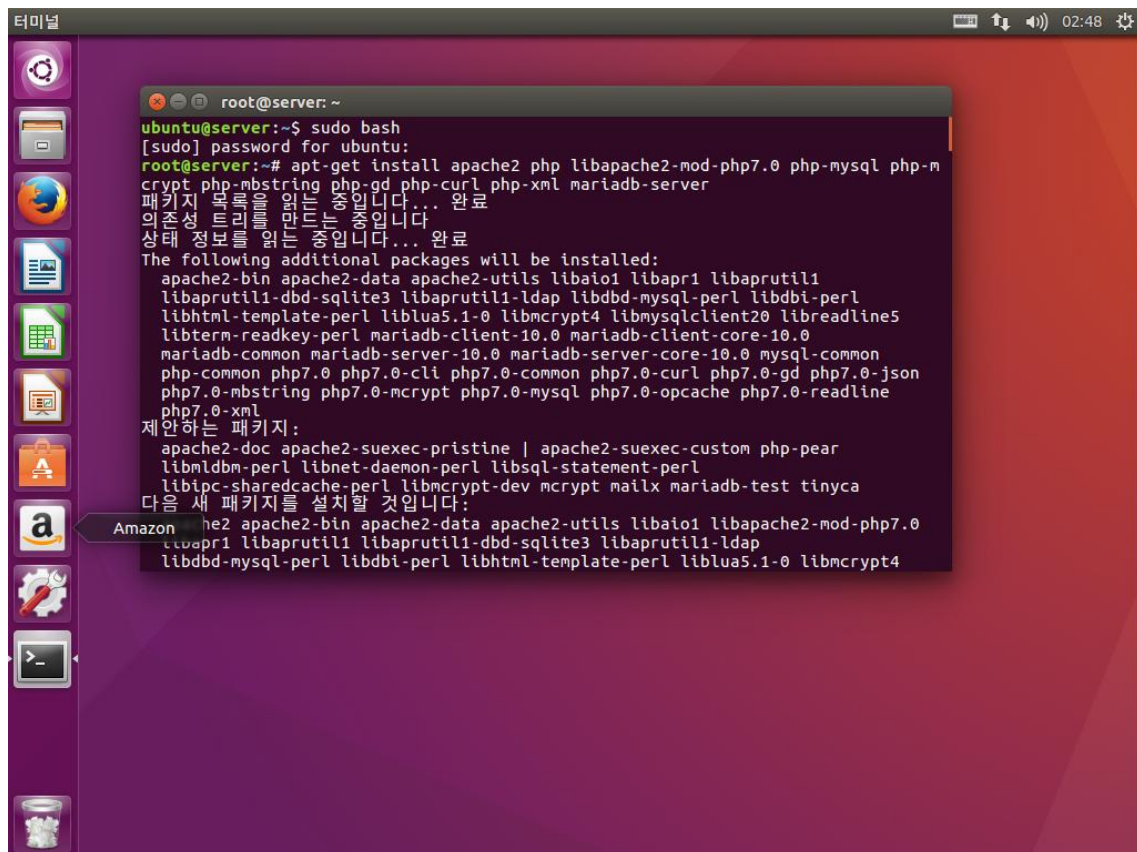
root@server:/var/cache/bind# nslookup printer1.jeong.kr
Server: 192.168.55.34
Address: 192.168.55.34#53

Name: printer1.jeong.kr
Address: 220.68.82.46

root@server:/var/cache/bind#

ubuntu@server:~$ ifconfig
ens32 Link encap:Ethernet HWaddr 00:0c:29:ac:3d:18
inet addr:192.168.55.34 Bcast:192.168.55.255 Mask:255.255.255.0
inet6 addr: fe80::a8b1:f891:ebe1:38f0/64 Scope:Link
```

http



```
터미널
root@server: ~
ubuntu@server:~$ sudo bash
[sudo] password for ubuntu:
root@server:~# apt-get install apache2 php libapache2-mod-php7.0 php-mysql php-mcrypt php-mbstring php-gd php-curl php-xml mariadb-server
패키지 목록을 읽는 중입니다... 완료
의존성 트리를 만드는 중입니다
상태 정보를 읽는 중입니다... 완료
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libaio1 libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap libdbd-mysql-perl libdbi-perl
  libhtml-template-perl liblua5.1-0 libmcrypt4 libmysqlclient20 libreadline5
  libterm-readkey-perl mariadb-client-10.0 mariadb-client-core-10.0
  mariadb-common mariadb-server-10.0 mariadb-server-core-10.0 mysql-common
  php-common php7.0 php7.0-cli php7.0-common php7.0-curl php7.0-gd php7.0-json
  php7.0-mbstring php7.0-mcrypt php7.0-mysql php7.0-opcache php7.0-readline
  php7.0-xml
제안하는 패키지:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom php-pear
  libltdb-perl libnet-daemon-perl libsql-statement-perl
  libipc-sharedcache-perl libmcrypt-dev mcrypt mailx mariadb-test tinyca
다음 새 패키지를 설치할 것입니다:
  Amazon he2 apache2-bin apache2-data apache2-utils libaio1 libapache2-mod-php7.0
  libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap
  libdbd-mysql-perl libdbi-perl libhtml-template-perl liblua5.1-0 libmcrypt4
```



```
터미널 root@server:~
root@server:~# /usr/bin/mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current
password for the root user. If you've just installed MariaDB, and
you haven't set the root password yet, the password will be blank,
so you should just press enter here.

Enter current password for root (enter for none):
OK, successfully used password, moving on...

Setting the root password ensures that nobody can log into the MariaDB
root user without the proper authorisation.

You already have a root password set, so you can safely answer 'n'.

Change the root password? [Y/n]
New password:
Re-enter new password:
Password updated successfully!
Reloading privilege tables..
... Success!

By default, a MariaDB installation has an anonymous user, allowing anyone
into MariaDB without having to have a user account created for
시스템 설정 his is intended only for testing, and to make the installation
go a bit smoother. You should remove them before moving into a
production environment.

Remove anonymous users? [Y/n]
... Success!

Normally, root should only be allowed to connect from 'localhost'. This
ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? [Y/n]
... Success!

By default, MariaDB comes with a database named 'test' that anyone can

터미널 root@server:~
Remove test database and access to it? [Y/n]
- Dropping test database...
ERROR 1008 (HY000) at line 1: Can't drop database 'test'; database doesn't exist
... Failed! Not critical, keep moving...
- Removing privileges on test database...
... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n]
... Success!

Cleaning up...

All done! If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
root@server:~# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 41
Server version: 10.0.24-MariaDB-7 Ubuntu 16.04

Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
+-----+
3 rows in set (0.00 sec)

MariaDB [(none)]> quit
휴지통
root@server:~#
```



```
텍스트 편집기
root@server: ~
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 41
Server version: 10.0.24-MariaDB-7 Ubuntu 16.04

Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
+-----+
3 rows in set (0.00 sec)

MariaDB [(none)]> quit
Bye
root@server:~# gedit /etc/mysql/mariadb.conf.d/50-server.cnf

(gedit:2580): Error.ServiceUnknown: The name org.gnome.SessionManager was not
e files

*50-server.cnf
/etc/mysql/mariadb.conf.d

# ssl-ca=/etc/mysql/cacert.pem
# ssl-cert=/etc/mysql/server-cert.pem
# ssl-key=/etc/mysql/server-key.pem

#
# * Character sets
#
# MySQL/MariaDB default is Latin1, but in Debian we rather default to the full
# utf8 4-byte character set. See also client.cnf
#
character-set-server = utf8mb4
collation-server = utf8mb4_unicode_ci

#
# * Unix socket authentication plugin is built-in since 10.0.22-6
#
# Needed so the root database user can authenticate without a password but
```

```
텍스트 편집기
root@server: /var/www/html

** (gedit:2580): WARNING **: Set document metadata failed: metadata::gedit-spell-enabled 속성 설정은 지원하지 않습니다
** (gedit:2580): WARNING **: Set document metadata failed: metadata::gedit-encoding 속성 설정은 지원하지 않습니다
** (gedit:2580): WARNING **: Set document metadata failed: metadata::gedit-position 속성 설정은 지원하지 않습니다
root@server:~# ^

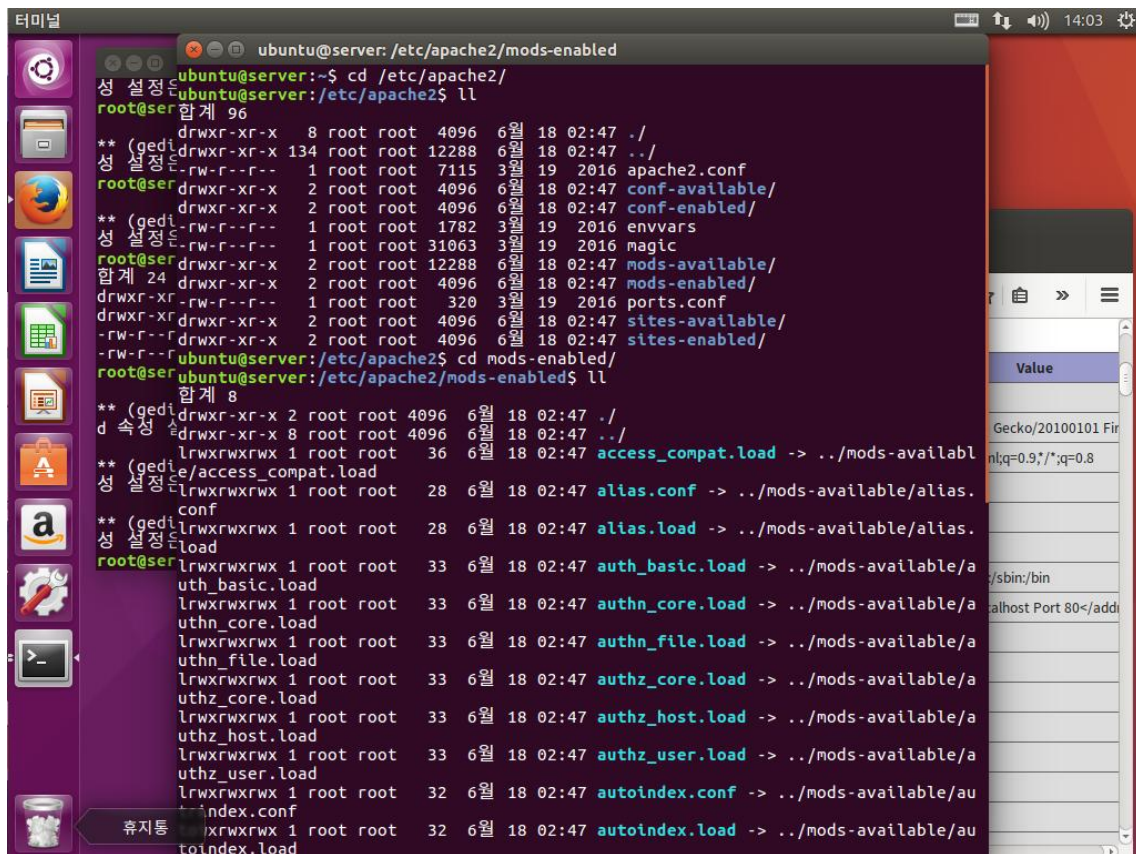
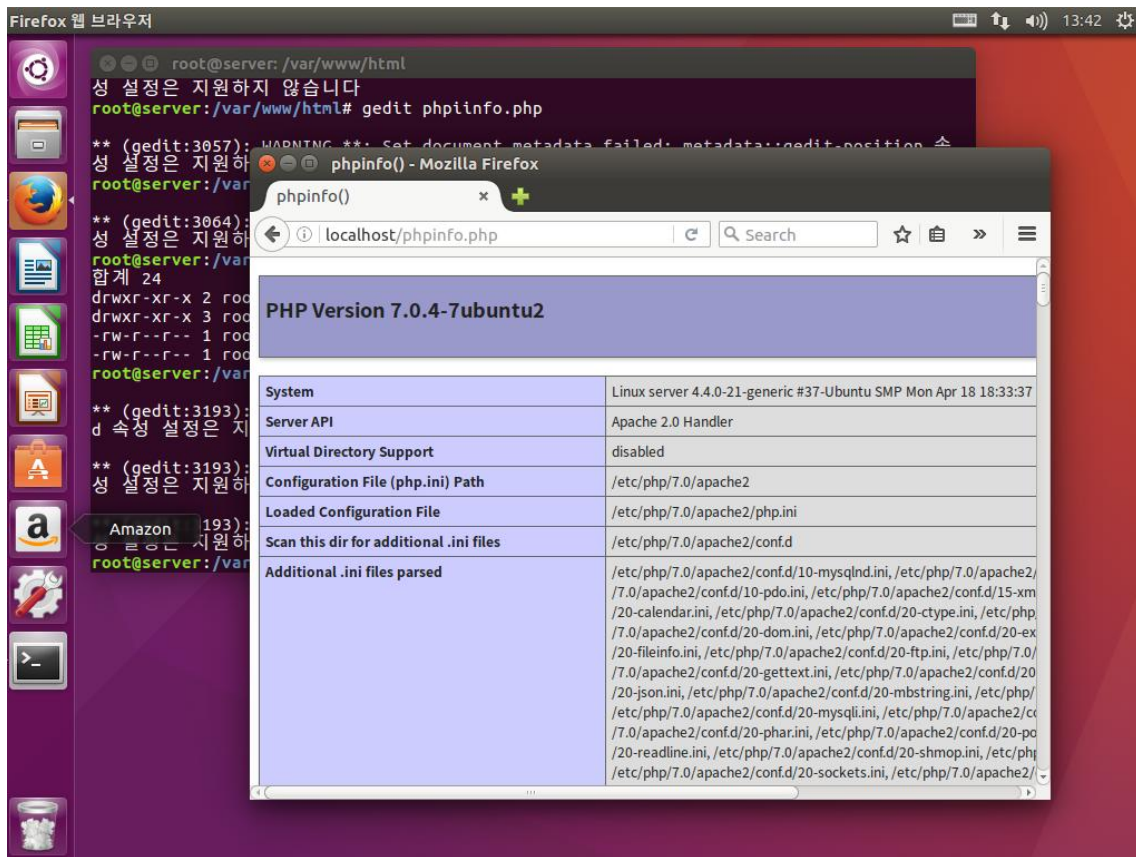
root@server:~# gedit /etc/mysql/mariadb.conf.d/50-server.cnf

** (gedit:2616): WARNING **: Set document metadata failed: metadata::gedit-position 속성 설정은 지원하지 않습니다
root@server:~# service mysql restart
root@server:~# service apache2 restart
Failed to restart apache2.service: Unit apache2.service not found.
root@server:~# service apache2 restart
root@server:~# cd /var/www/html/
root@server:/var/www/html# gedit phpinfo.php

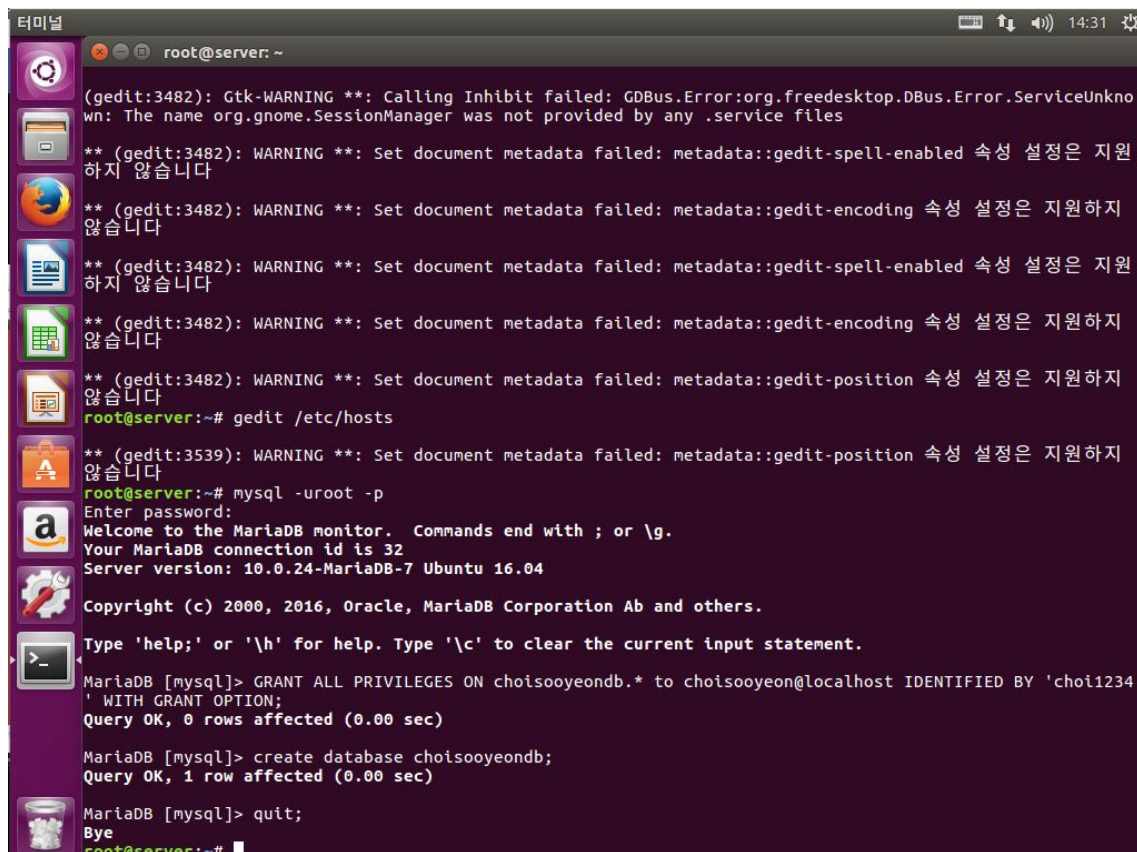
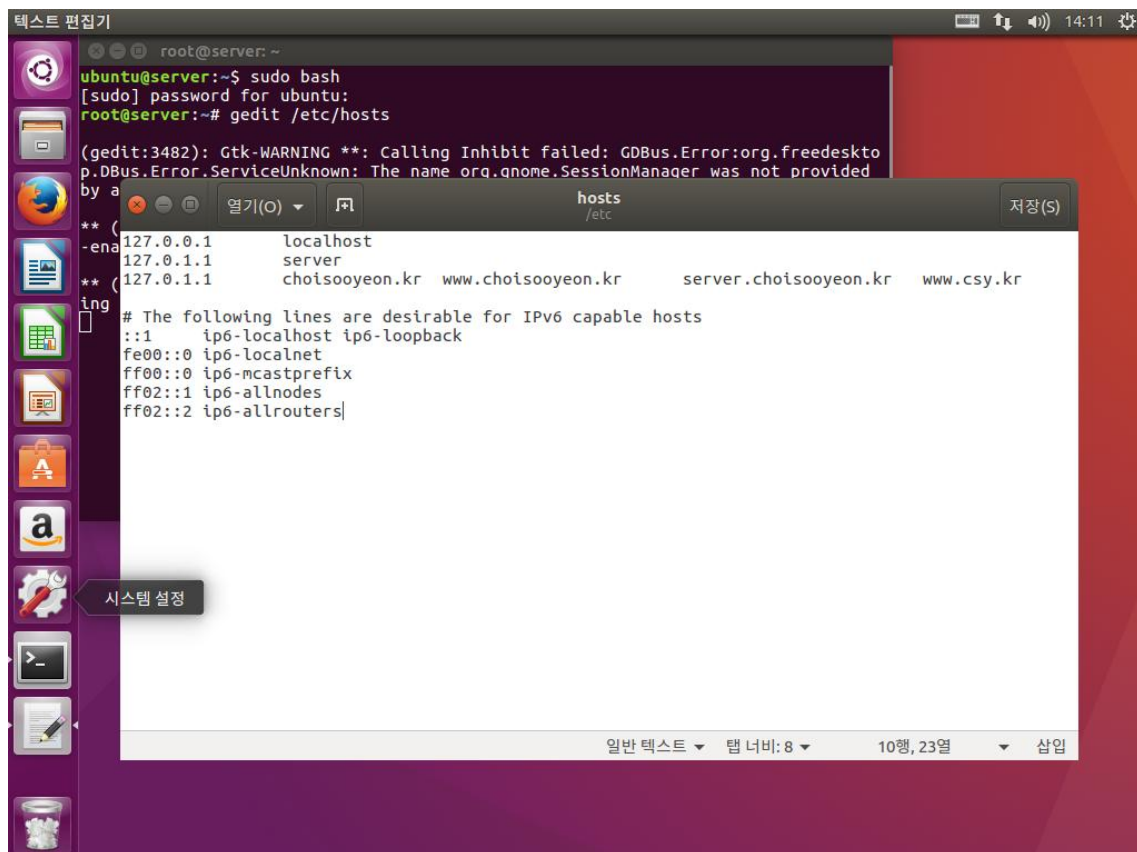
(gedit:3045): Gtk-WARNING **: Calling Inhibit failed: Error.ServiceUnknown: The name org.gnome.SessionManager was not
e files

시스템 설정

<?php
phpinfo();
?>
```







```
터미널 root@server: ~
MariaDB [mysql]> quit;
Bye
root@server:~# mysql -uchoisooyeon -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 33
Server version: 10.0.24-MariaDB-7 Ubuntu 16.04

Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| choisooyeondb |
| information_schema |
+-----+
2 rows in set (0.00 sec)

MariaDB [(none)]> use choisooyeondb
Database changed
MariaDB [choisooyeondb]> quit;
Bye
root@server:~# ls -l /etc/apache2/mods-enabled/u*
ls: '/etc/apache2/mods-enabled/u*'에 접근할 수 없습니다: 그런 파일이나 디렉터리가 없습니다
root@server:~# sudo a2enmod userdir
Enabling module userdir.
To activate the new configuration, you need to run:
  service apache2 restart
root@server:~#
root@server:~# sudo service apache2 restart
root@server:~# ls -l /etc/apache2/mods-enabled/u*
lrwxrwxrwx 1 root root 30 6월 18 14:48 /etc/apache2/mods-enabled/userdir.conf -> ../mods-available/userd
ir.conf
lrwxrwxrwx 1 root root 30 6월 18 14:48 /etc/apache2/mods-enabled/userdir.load -> ../mods-available/userd
ir.load
root@server:~# sudo a2enmod userdir
Module userdir already enabled
root@server:~#
```

```
터미널 root@server: ~/public_html
root@server:~# cat /etc/apache2/mods-enabled/userdir.conf
<IfModule mod_userdir.c>
    UserDir public_html
    UserDir disabled root

    <Directory /home/*/public_html>
        AllowOverride FileInfo AuthConfig Limit Indexes
        Options MultiViews Indexes SymLinksIfOwnerMatch IncludesNoExec
        <Limit GET POST OPTIONS>
            Require all granted
        </Limit>
        <LimitExcept GET POST OPTIONS>
            Require all denied
        </LimitExcept>
    </Directory>
</IfModule>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
root@server:~# pwd
/home/ubuntu
root@server:~# ll
합계 56572
drwxr-xr-x 20 ubuntu ubuntu 4096 6월 18 14:37 ./
drwxr-xr-x 3 root root 4096 7월 8 2016 ../
-rw-r--r-- 1 ubuntu ubuntu 5716 6월 18 12:41 .ICEAuthority
-rw-r--r-- 1 ubuntu ubuntu 102 6월 18 12:41 .Xauthority
-rw-r--r-- 1 ubuntu ubuntu 4589 6월 18 15:08 .bash_history
-rw-r--r-- 1 ubuntu ubuntu 220 7월 8 2016 .bash_logout
-rw-r--r-- 1 ubuntu ubuntu 3771 7월 8 2016 .bashrc
drwxr-xr-x 16 ubuntu ubuntu 4096 6월 17 19:26 .cache/
drwxr-xr-x 19 ubuntu ubuntu 4096 6월 17 18:21 .config/
-ter미널 3 ubuntu ubuntu 4096 7월 8 2016 .dbus/
-rw-r--r-- 1 ubuntu ubuntu 25 7월 8 2016 .dmrc
drwxr-xr-x 2 ubuntu ubuntu 4096 6월 18 13:39 .gconf/
drwxr-xr-x 3 ubuntu ubuntu 4096 6월 18 12:41 .gnupg/
drwxr-xr-x 3 ubuntu ubuntu 4096 7월 8 2016 .local/
drwxr-xr-x 4 ubuntu ubuntu 4096 4월 11 23:50 .mozilla/
-rw-r--r-- 1 root root 213 6월 18 14:37 .mysql_history
drwxr-xr-x 2 ubuntu ubuntu 4096 7월 8 2016 .presage/
-rw-r--r-- 1 ubuntu ubuntu 675 7월 8 2016 .profile
-rw-r--r-- 1 root root 0 7월 8 2016 .sudo_as_admin_successful
-rw-r--r-- 1 ubuntu ubuntu 57778176 4월 12 14:08 .test2.txt.swp
```





