

Network: Linux

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대한민국 NTP 서버 목록

서버명	Ping 결과	소속
time.bora.net	O	LG
ntp.kornet.net	X	KT
time2.kriss.re.kr	X	한국과학기술연구원 (KRISS)
time.nist.gov	X	미국 국립표준기술연구소
time.windows.com	X	마이크로소프트
asia.pool.ntp.org	O	

Domain Name Server

DNS □□ □□□

Domain Name Server



TTL

Time To Live [seconds], [seconds] [seconds]. [seconds] FQDN (= [hostname] [domain]) [seconds] [seconds] [seconds], FQDN [seconds] IP [seconds]

[seconds] [seconds] DNS [seconds] [seconds] [seconds] [seconds] [seconds] [seconds]. [seconds] [seconds] [seconds] authority [seconds] [seconds] [seconds] [seconds].

SOA

Start Of Authority [seconds]. [seconds] [seconds] [seconds] AUTHORITY [seconds].

[seconds], [seconds] DNS [seconds].

NS

[seconds] [seconds] [seconds] [seconds].

IN

[seconds] [seconds] [seconds], Internet [seconds]. [seconds] IN [seconds] [seconds]. [seconds] [seconds] [seconds] [seconds] [seconds].

A

[seconds] [seconds] [seconds]. [seconds] [seconds] [seconds] [seconds].

PTR

[seconds] [seconds] [seconds]

CNAME

'Canonical [seconds]' [seconds] [seconds], [seconds] [seconds] [seconds]. [seconds] [seconds] [seconds] [seconds] [seconds] [seconds] [seconds] [seconds].

bind configuration

```
$TTL 1W
@IN SOA ns1.example.com. root (
  2019070700; serial
  3H; refresh (3 hours)
  30M; retry (30 minutes)
  2W; expiry (2 weeks)
  1W ) ; minimum (1 week)
IN NS ns1.example.com.
IN MX 10 smtp.example.com.
;
;
ns1.example.com. IN A 192.168.1.5
smtp.example.com. IN A 192.168.1.5
;
helper.example.com. IN A 192.168.1.5
helper.ocp4.example.com. IN A 192.168.1.5
;
api.ocp4.example.com. IN A 192.168.1.5
api-int.ocp4.example.com. IN A 192.168.1.5
;
*.apps.ocp4.example.com. IN A 192.168.1.5
;
bootstrap.ocp4.example.com. IN A 192.168.1.96
;
master0.ocp4.example.com. IN A 192.168.1.97
master1.ocp4.example.com. IN A 192.168.1.98
master2.ocp4.example.com. IN A 192.168.1.99
;
worker0.ocp4.example.com. IN A 192.168.1.11
worker1.ocp4.example.com. IN A 192.168.1.7
;
;EOF
```

Domain Name Server



SOA

```
movie.edu. IN SOA terminator.movie.edu. al.robocop.movie.edu. (  
    1          ; serial  
    10800     ; refresh after 3 hours  
    3600      ; retry after 1 hour  
    604800    ; expire after 1 week  
    86400     ; minimum TTL of 1 day  
)
```

terminator.movie.edu 的 DNS 记录在 terminator.movie.edu 的服务器上。
al.robocop.movie.edu 的 DNS 记录在 terminator.movie.edu 的服务器上。
al@robocop.movie.edu 的邮件记录在 terminator.movie.edu 的服务器上。
movie.edu 的 DNS 记录在 terminator.movie.edu 的服务器上。

NS

```
movie.edu. IN NS terminator.movie.edu.  
movie.edu. IN NS whormhole.movie.edu.
```

movie.edu 的 DNS 记录在 terminator.movie.edu 的服务器上。
• terminator.movie.edu 的 DNS 记录在 terminator.movie.edu 的服务器上。

terminator.movie.edu

```
terminator.movie.edu. IN A 192.249.249.3
```

terminator.movie.edu 的 DNS 记录在 terminator.movie.edu 的服务器上。
terminator.movie.edu 的 IP 地址是 192.249.249.3。

```
wormhole.movie.edu. IN A 192.249.249.1  
wormhole.movie.edu. IN A 192.253.253.1
```

terminator.movie.edu 的 DNS 记录在 terminator.movie.edu 的服务器上， terminator.movie.edu 的 IP 地址是 192.249.249.3， terminator.movie.edu 的邮件记录在 terminator.movie.edu 的服务器上 (terminator.movie.edu - terminator.movie.edu)。
DNS 记录在 terminator.movie.edu 的服务器上， terminator.movie.edu 的 IP 地址是 192.249.249.3。

```
localhost.movie.edu. IN A 127.0.0.1  
diehard.movie.edu. IN A 192.249.249.4
```

localhost.movie.edu 的 DNS 记录在 terminator.movie.edu 的服务器上， diehard.movie.edu 的 IP 地址是 192.249.249.4。

bigt.movie.edu. IN A CNAME terminator.movie.edu.

dh.movie.edu. IN A CNAME diehard.movie.edu.

CNAME bigt.movie.edu terminator.movie.edu.

DNS NTP FQDN IP

RHEL

zone 

1. /etc/named.rfc1912.zones    .

```
// private zones
zone "spelix.com" IN {
    type master;
    file "/etc/named/spelix.com.zone";
    allow-update { none; };
    //allow-transfer {  }; //secondary DNS   .
};
```

```
allow-update { none; };
any , none   IP   .
,  .
```

2. /etc/named/  zone  .

db ,  spelix.com.zone .

```
$TTL 1D
spelix.com. IN SOA ns1.spelix.com. krauss.spelix.com. (
    1          ; serial
    10800     ; refresh after 3 hours
    3600      ; retry after 1 hour
    604800    ; expire after 1 week
    86400     ; minimum TTL of 1 day
)

spelix.com. IN NS ns1.spelix.com.

ns1.spelix.com. IN A 192.168.0.2
m1.packstack.spelix.com. IN A 192.168.0.190
```

; web server that is places out side of this local network

www.spelix.com. IN A 34.149.87.45

ntp.spelix.com. IN CNAME ns1.spelix.com.

Ubuntu

 

```
sudo apt install bind9 bind9utils bind9-doc
```

IPv4    

```
sudo vi /etc/default/named
```

```
OPTIONS="-u bind -4"
```

/etc/bind/named.conf.local

```
zone "spelix.com" IN {  
    type master;  
    file "/etc/bind/zones/db.spelix.com";  
    allow-update { none; };  
};
```

/etc/bind/zones/db.spelix.com

- zones    .
- zone    (row, )   .

```
$TTL 1D  
spelix.com. IN SOA ns1.spelix.com. krauss.spelix.com. (  
    1          ; serial  
    10800     ; refresh after 3 hours  
    3600      ; retry after 1 hour  
    604800    ; expire after 1 week  
    86400     ; minimum TTL of 1 day  
)
```

spelix.com. IN NS ns1.spelix.com.

ns1.spelix.com. IN A 115.71.1.39

m1.packstack.spelix.com. IN A 115.71.1.40

; web server that is places out side of this local network

www.spelix.com. IN A 34.149.87.45

ntp.spelix.com. IN CNAME ns1.spelix.com.