

블로그

카 CODEHELPER

CentOS

리눅스 - route 명령어 (라우팅 테이블 추가/제거)

CODEHELPER
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이웃추가

route 명령은 라우팅 테이블을 편집하고 출력할 수 있다.
라우팅 테이블이 제대로 설정되어 있지 않으면 외부 네트워크와 연결할 수 없다.

* route 명령으로 경로 추가하기 // 경로제거시 add대신 del

디폴트 게이트웨이 추가	route add default gw x.x.x.x
네트워크 경로 추가	route add -net x.x.x.x netmask x.x.x.x gw x.x.x.x
호스트 경로 추가	route add -host x.x.x.x dev 인터페이스명

[라우팅 테이블에 경로 추가하기 실습]

1. 디폴트 게이트웨이를 추가하는 실습을 위해 미리 제거해둔 상태에서
route add **default gw** 192.168.0.1 이라고 명령을 내려 **default gateway**를 추가하였
다.

대크⁰

```

root@ns1:~
블로그 파일(E) 편집(E) 보기(V) 터미널(T) 탭(B) 도움말(H) CODEHELPER
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway          Genmask         Flags   MSS Window  irtt Iface
192.168.0.0      0.0.0.0         255.255.255.0   U        0  0        0 eth0
169.254.0.0      0.0.0.0         255.255.0.0     U        0  0        0 eth0
[root@ns1 ~]#
[root@ns1 ~]# route add default gw 192.168.0.1
[root@ns1 ~]#
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway          Genmask         Flags   MSS Window  irtt Iface
192.168.0.0      0.0.0.0         255.255.255.0   U        0  0        0 eth0
169.254.0.0      0.0.0.0         255.255.0.0     U        0  0        0 eth0
0.0.0.0          192.168.0.1     0.0.0.0         UG       0  0        0 eth0
[root@ns1 ~]#

```

2. netstat -rn 명령으로 라우팅 테이블을 확인 후

`route add -net 192.168.100.0 netmask 255.255.255.0 gw 192.168.0.1`

이라고 명령을 내려서 네트워크경로를 추가

```

root@ns1:~
파일(E) 편집(E) 보기(V) 터미널(T) 탭(B) 도움말(H)
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway          Genmask         Flags   MSS Window  irtt Iface
192.168.0.0      0.0.0.0         255.255.255.0   U        0  0        0 eth0
169.254.0.0      0.0.0.0         255.255.0.0     U        0  0        0 eth0
0.0.0.0          192.168.0.1     0.0.0.0         UG       0  0        0 eth0
[root@ns1 ~]#
[root@ns1 ~]# route add -net 192.168.100.0 netmask 255.255.255.0 gw 192.168.0.1
[root@ns1 ~]#
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway          Genmask         Flags   MSS Window  irtt Iface
192.168.100.0    192.168.0.1     255.255.255.0   UG       0  0        0 eth0
192.168.0.0      0.0.0.0         255.255.255.0   U        0  0        0 eth0
169.254.0.0      0.0.0.0         255.255.0.0     U        0  0        0 eth0
0.0.0.0          192.168.0.1     0.0.0.0         UG       0  0        0 eth0
[root@ns1 ~]#

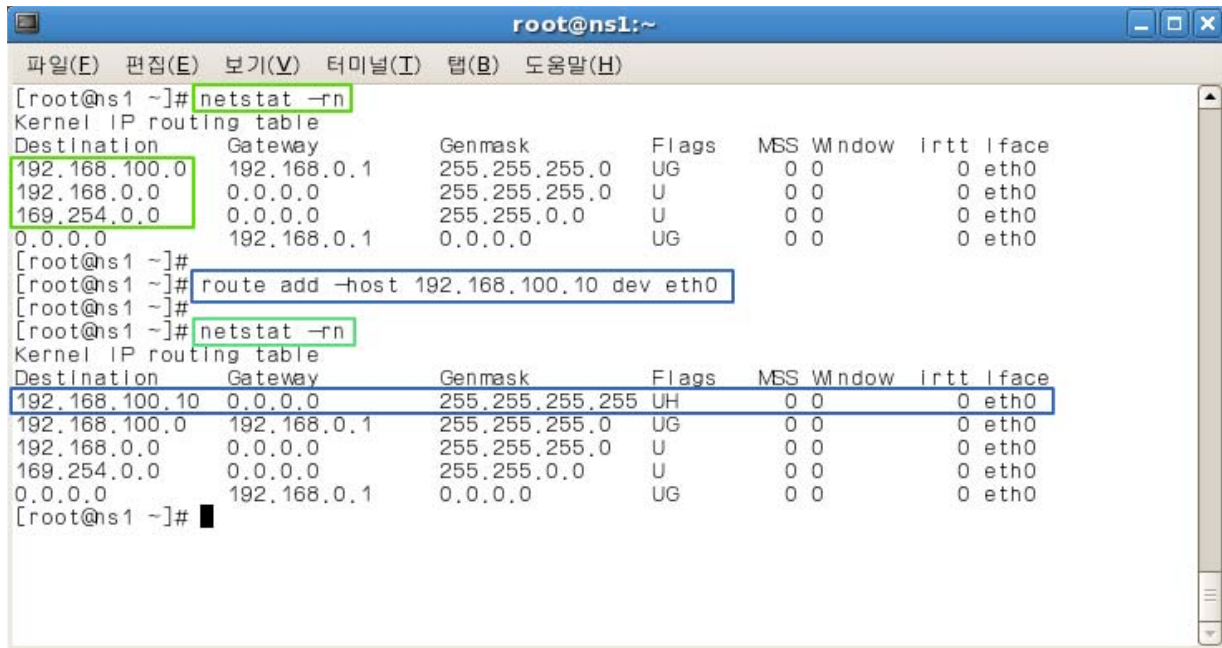
```

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3. 이번에는 호스트 경로를 추가해본다.

`route add -host 192.168.100.10 dev eth0` 이라고 명령을 내리자 호스트 경로가 추가 됨.



The screenshot shows a terminal window titled 'root@ns1:~'. The user runs `netstat -rn` to view the kernel IP routing table. The table lists destinations, gateways, genmasks, flags, MSS, window, irtt, and interface. The initial table shows routes for 192.168.100.0, 192.168.0.0, 169.254.0.0, and 0.0.0.0. Then, the user runs `route add -host 192.168.100.10 dev eth0`. Finally, the user runs `netstat -rn` again, and the routing table is updated to include the new host route for 192.168.100.10 with gateway 0.0.0.0 and interface eth0.

```
root@ns1:~# netstat -rn
Kernel IP routing table
Destination Gateway Genmask Flags MSS Window irtt iface
192.168.100.0 192.168.0.1 255.255.255.0 UG 0 0 0 eth0
192.168.0.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0
169.254.0.0 0.0.0.0 255.255.0.0 U 0 0 0 eth0
0.0.0.0 192.168.0.1 0.0.0.0 UG 0 0 0 eth0
root@ns1:~# route add -host 192.168.100.10 dev eth0
root@ns1:~# netstat -rn
Kernel IP routing table
Destination Gateway Genmask Flags MSS Window irtt iface
192.168.100.10 0.0.0.0 255.255.255.255 UH 0 0 0 eth0
192.168.100.0 192.168.0.1 255.255.255.0 UG 0 0 0 eth0
192.168.0.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0
169.254.0.0 0.0.0.0 255.255.0.0 U 0 0 0 eth0
0.0.0.0 192.168.0.1 0.0.0.0 UG 0 0 0 eth0
root@ns1:~#
```

[라우팅 테이블에 경로 제거하기 실습]

1. 라우팅 테이블에서 default gateway를 제거

`route del default gw 192.168.0.1` 이라고 명령을 내림.

// default gateway가 제거된것을 확인.

```

root@ns1:~
파일(E) 편집(E) 보기(V) 터미널(T) 탭(B) 도움말(H)
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway         Genmask         Flags         MSS Window  irtt  Iface
192.168.100.10   0.0.0.0        255.255.255.255 UH            0  0        0    eth0
192.168.100.0   192.168.0.1    255.255.255.0  UG            0  0        0    eth0
192.168.0.0     0.0.0.0        255.255.255.0  U             0  0        0    eth0
169.254.0.0     0.0.0.0        255.255.0.0    U             0  0        0    eth0
0.0.0.0         192.168.0.1    0.0.0.0        UG            0  0        0    eth0
[root@ns1 ~]#
[root@ns1 ~]# route del default gw 192.168.0.1
[root@ns1 ~]#
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway         Genmask         Flags         MSS Window  irtt  Iface
192.168.100.10   0.0.0.0        255.255.255.255 UH            0  0        0    eth0
192.168.100.0   192.168.0.1    255.255.255.0  UG            0  0        0    eth0
192.168.0.0     0.0.0.0        255.255.255.0  U             0  0        0    eth0
169.254.0.0     0.0.0.0        255.255.0.0    U             0  0        0    eth0
[root@ns1 ~]#
  
```

2. 라우팅 테이블에서 192.168.100.0 네트워크 대역 경로를 제거

`route del -net 192.168.100.0 netmask 255.255.255.0 gw 192.168.0.1` 이라고 명령을 내리고 확인.

// 192.168.100.0 대역 경로가 제거됨을 확인

```

root@ns1:~
블로그 파일(F) 편집(E) 보기(V) 터미널(T) 탭(B) CODEHELPER
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway          Genmask         Flags         MSS   Wndw   Irtr  Iface
192.168.100.10   0.0.0.0         255.255.255.255 UH            0     0      0    eth0
192.168.100.0   192.168.0.1     255.255.255.0   UG            0     0      0    eth0
192.168.0.0     0.0.0.0         255.255.255.0   U             0     0      0    eth0
169.254.0.0     0.0.0.0         255.255.0.0     U             0     0      0    eth0
[root@ns1 ~]#
[root@ns1 ~]# route del -net 192.168.100.0 netmask 255.255.255.0 gw 192.168.0.1
[root@ns1 ~]#
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway          Genmask         Flags         MSS   Wndw   Irtr  Iface
192.168.100.10   0.0.0.0         255.255.255.255 UH            0     0      0    eth0
192.168.0.0     0.0.0.0         255.255.255.0   U             0     0      0    eth0
169.254.0.0     0.0.0.0         255.255.0.0     U             0     0      0    eth0
[root@ns1 ~]#

```

3. 라우팅 테이블에서 192.168.100.10 호스트 경로를 제거

`route del -host 192.168.100.10 dev eth0` 이라고 명령을 내리고 확인

// 192.168.100.10 호스트 경로가 제거됨을 확인

```

root@ns1:~
파일(F) 편집(E) 보기(V) 터미널(T) 탭(B) 도움말(H)
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway          Genmask         Flags         MSS   Wndw   Irtr  Iface
192.168.100.10   0.0.0.0         255.255.255.255 UH            0     0      0    eth0
192.168.0.0     0.0.0.0         255.255.255.0   U             0     0      0    eth0
169.254.0.0     0.0.0.0         255.255.0.0     U             0     0      0    eth0
[root@ns1 ~]#
[root@ns1 ~]# route del -host 192.168.100.10 dev eth0
[root@ns1 ~]#
[root@ns1 ~]# netstat -rn
Kernel IP routing table
Destination      Gateway          Genmask         Flags         MSS   Wndw   Irtr  Iface
192.168.0.0     0.0.0.0         255.255.255.0   U             0     0      0    eth0
169.254.0.0     0.0.0.0         255.255.0.0     U             0     0      0    eth0
[root@ns1 ~]#

```

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대크