

nmcli 命令详解

nmcli 命令是 redhat7 或者 centos7 之后的命令，该命令可以完成网卡上所有的配置工作，并且可以写入配置文件，永久生效。

```
[ali-yunxiao@yunxiao ~]$ nmcli --help
Usage: nmcli [OPTIONS] OBJECT { COMMAND | help }

OPTIONS
  -t[erse]                terse output
  -p[retty]               pretty output
  -m[ode] tabular|multiline  output mode
  -c[olors] auto|yes|no    whether to use colors in output
  -f[ields] <field1,field2,...>|all|common  specify fields to output
  -g[et-values] <field1,field2,...>|all|common  shortcut for -m tabular -t -f
  -e[scape] yes|no        escape columns separators in values
  -a[sk]                   ask for missing parameters
  -s[how-secrets]          allow displaying passwords
  -w[ait] <seconds>       set timeout waiting for finishing operations
  -v[ersion]               show program version
  -h[elp]                  print this help

OBJECT
  g[eneral]                NetworkManager's general status and operations
  n[etworking]             overall networking control
  r[adio]                  NetworkManager radio switches
  c[onnection]             NetworkManager's connections
  d[evice]                 devices managed by NetworkManager
  a[gent]                  NetworkManager secret agent or polkit agent
  m[onitor]                monitor NetworkManager changes
```

显示参数

show 显示详细信息

status 显示简略信息

1、查看接口信息：

```
[ali-yunxiao@yunxiao ~]$ nmcli device status
DEVICE          TYPE          STATE          CONNECTION
br-f361dd965d17 bridge        connected      br-f361dd965d17
docker0         bridge        connected      docker0
eno1             ethernet     connected      eno1
eno2             ethernet     unavailable    --
lo              loopback     unmanaged      --
[ali-yunxiao@yunxiao ~]$ nmcli d -s
DEVICE          TYPE          STATE          CONNECTION
br-f361dd965d17 bridge        connected      br-f361dd965d17
docker0         bridge        connected      docker0
eno1             ethernet     connected      eno1
eno2             ethernet     unavailable    --
lo              loopback     unmanaged      --
```

命令的选项和参数都可以简写

2、查看连接信息

```
[ali-yunxiao@yunxiao ~]$ nmcli c show
NAME                UUID                                TYPE                DEVICE
br-f361dd965d17    231adc5c-835a-4a03-84ab-75e5491d978a  bridge             br-f361dd965d17
docker0            ef5b5d0e-fe43-47c7-b4c2-ee5f6e8c532b  bridge             docker0
eno1                91276da9-4842-40ee-b771-a178d351bd1c  802-3-ethernet     eno1
eno2                7e35a66f-2ca6-4031-bc09-16f936232bfd  802-3-ethernet     --
[ali-yunxiao@yunxiao ~]$
```

3、启动/停止接口

```
[root@localhost ~]# nmcli c up ens192
Connection successfully activated (D-Bus active path: /org/freedesktop/NetworkManager/ActiveConnection/6)
[root@localhost ~]# nmcli c down ens192
Connection 'ens192' successfully deactivated (D-Bus active path: /org/freedesktop/NetworkManager/ActiveConnection/6)
[root@localhost ~]#
```

或

```
[root@localhost ~]# nmcli device connect ens192
Device 'ens192' successfully activated with 'f71d72c6-b883-494b-a7ea-7b71d37c4dcb'.
[root@localhost ~]# nmcli device disconnect ens192
Device 'ens192' successfully disconnected.
[root@localhost ~]#
```

P.S:建议使用 nmcli device disconnect(connect) interface-name

因为使用该命令, 在启动某个连接前或发生外部事件时不会自动连接

4、创建连接

创建动态获取 ip 地址的连接, con-name 是创建连接的名字, ifname 是物理设备, 网络接口

```
[root@localhost ~]# nmcli c add type eth con-name dhcp-ens192 ifname ens192
Connection 'dhcp-ens192' (96cdd479-e22d-4827-b136-4b0f19699292) successfully added.
[root@localhost ~]#
```

创建静态 ip 地址连接

```
[root@localhost ~]# nmcli c add type eth con-name dhcp-ens192 ifname ens192 ip4 10.0.13.218/24 gw4 10.0.13.1
Connection 'dhcp-ens192' (1f978d60-a21c-46b0-98da-4332997a9420) successfully added.
```

PS: 创建连接的意思, 相当于在/etc/sysconfig/network-scripts/目录下创建了一个 ifcfg-\${con-name}文件, 创建多个连接, 则会同时创建多个文件。

```
[root@localhost ~]# ls /etc/sysconfig/network-scripts/ifcfg-*
/etc/sysconfig/network-scripts/ifcfg-dhcp-ens192
/etc/sysconfig/network-scripts/ifcfg-lo
/etc/sysconfig/network-scripts/ifcfg-static-ens192
[root@localhost ~]#
```

5、修改 IP 地址

```
[root@localhost ~]# nmcli c mod static-ens192 ip4 10.0.13.219
[root@localhost ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens192: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP qlen 1000
    link/ether 00:0c:29:5a:32:5e brd ff:ff:ff:ff:ff:ff
    inet 10.0.13.218/24 brd 10.0.13.255 scope global ens192
        valid_lft forever preferred_lft forever
    inet6 fe80::3f6b:ad50:4cbf:8f89/64 scope link
        valid_lft forever preferred_lft forever
```

修改后不会生效，需要

```
[root@localhost ~]# nmcli c up static-ens192
Connection successfully activated (D-Bus active path: /org/freedesktop/NetworkManager/ActiveConnection/16)
[root@localhost ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens192: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP qlen 1000
    link/ether 00:0c:29:5a:32:5e brd ff:ff:ff:ff:ff:ff
    inet 10.0.13.218/24 brd 10.0.13.255 scope global ens192
        valid_lft forever preferred_lft forever
    inet 10.0.13.219/32 brd 10.0.13.219 scope global ens192
        valid_lft forever preferred_lft forever
    inet6 fe80::8384:6c75:892b:21f3/64 scope link
        valid_lft forever preferred_lft forever
```

6、修改连接是否为自启（默认自启）

```
[root@localhost ~]# nmcli con mod static-ens192 connection.autoconnect no
[root@localhost ~]# grep ONBOOT /etc/sysconfig/network-scripts/ifcfg-static-ens192
ONBOOT=no
[root@localhost ~]#
```

7、删除连接

```
[root@localhost ~]# nmcli con delete dhcp-ens192
Connection 'dhcp-ens192' (1f978d60-a21c-46b0-98da-4332997a9420) successfully deleted.
[root@localhost ~]# ls /etc/sysconfig/network-scripts/ifcfg-*
/etc/sysconfig/network-scripts/ifcfg-lo /etc/sysconfig/network-scripts/ifcfg-static-ens192
[root@localhost ~]#
```

8、配置连接的 dns

为连接配置 dns

```
[root@localhost ~]# nmcli con modify static-ens192 ipv4.dns 10.0.13.214
[root@localhost ~]# grep DNS /etc/sysconfig/network-scripts/ifcfg-static-ens192
DNS1=10.0.13.214
```

为连接添加 dns

```
[root@localhost ~]# nmcli con modify static-ens192 +ipv4.dns 114.114.114.114
[root@localhost ~]# grep DNS /etc/sysconfig/network-scripts/ifcfg-static-ens192
DNS1=10.0.13.214
DNS2=114.114.114.114
```

修改 con 后, 需要重新激活连接方可生效

```
[root@localhost network-scripts]# nmcli con up static-ens192
Connection successfully activated (D-Bus active path: /org/freedesktop/NetworkManager/Act
ion/3)
```