

Linux基础网络设置

目录

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- 一、设置本机静态IP
 - 1、查看本机ip: ifconfig
 - 2、设置静态ip -> 编辑ip文件: vim /etc/sysconfig/network-scripts/ifcfg-ens33
 - 3、设置查看网关
 - 4、配置 vim /etc/hosts 映射关系
 - 5、重新启动网络服务
 - 5、ip配置成功
 - 6、ping: ctrl+z 退出
- 二、访问网络www.baidu.com, 外网
添加DNS:

一、设置本机静态IP

1、查看本机ip: ifconfig

```
[root@yu ~]# ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        ether 00:0c:29:90:77:2b  txqueuelen 1000  (Ethernet)
        RX packets 1823  bytes 118664 (115.8 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

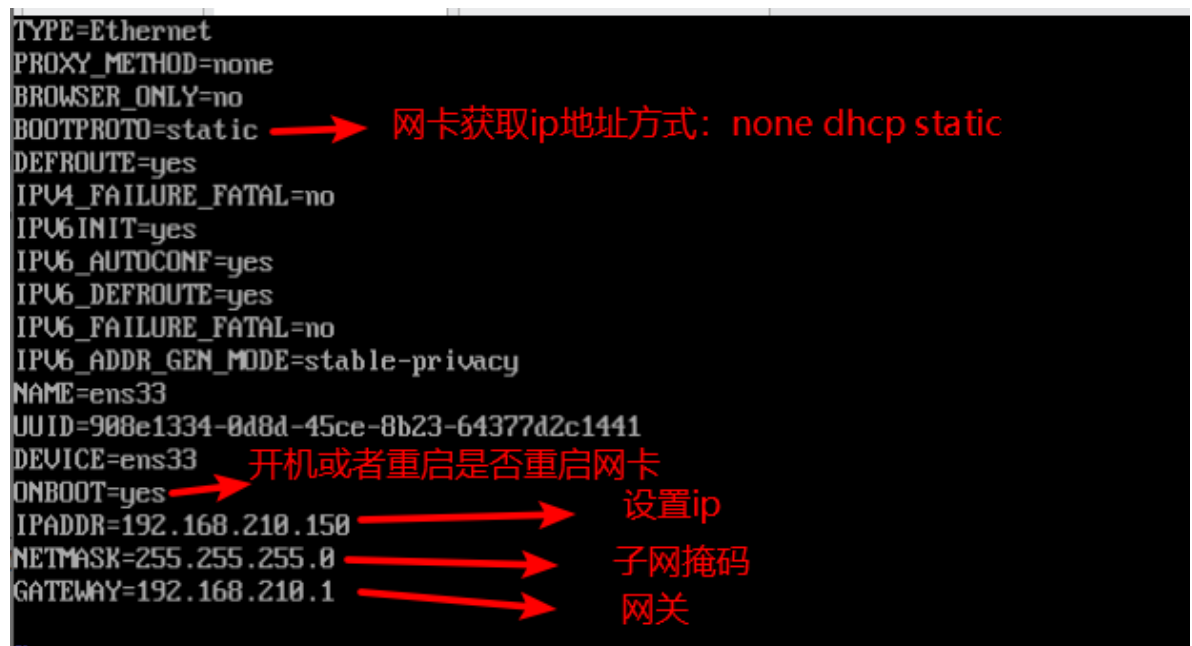
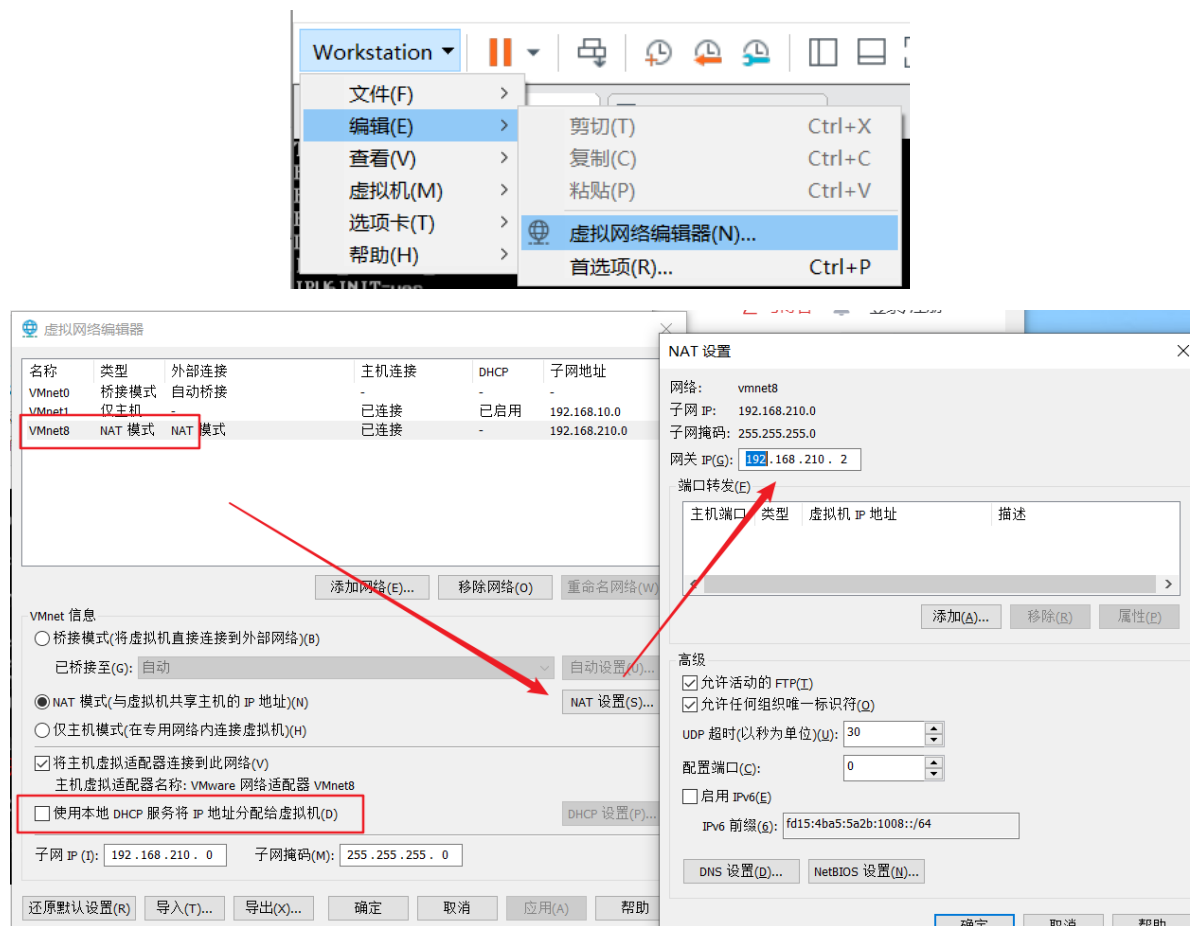
lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop txqueuelen 1000  (Local Loopback)
        RX packets 20  bytes 1564 (1.5 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 20  bytes 1564 (1.5 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

2、设置静态ip -> 编辑ip文件: vim /etc/sysconfig/network-scripts/ifcfg-ens33

将ONBOOT=no改为yes, 将BOOTPROTO=dhcp改为BOOTPROTO=static,并在后面增加几行内容:

```
IPADDR=192.168.210.150
NETMASK=255.255.255.0
GATEWAY=192.168.210.1
//具体网络配置详解: 百度嗨嗨一下
```

3、设置查看网关



4、配置 vim /etc/hosts 映射关系

```
//添加ip+主机名
127.0.0.1    localhost localhost.localdomain localhost4 localhost4.localdomain4
192.168.210.150 yu
::1          localhost localhost.localdomain localhost6 localhost6.localdomain6
```

5、重新启动网络服务

//网络命令

```
service network start    //启动网络服务
service network stop     //停止网络服务
service network restart  //重启网络服务
service network status   //查看网络服务状态
systemctl restart network.service //重启网络服务,
```

service与systemctl的区别:

service: 这是当前有效, 重启后就没用了

systemctl: 一直有效, 虚拟机启动后就自动启动服务

```
"/etc/sysconfig/network-scripts/ifcfg-ens33" 19L, 350C written
[root@yu ~]# service network restart
Restarting network (via systemctl):                  [ OK ]
[root@yu ~]#
```

```
[root@yu ~]# systemctl status network.service
■ network.service - LSB: Bring up/down networking
   Loaded: loaded (/etc/rc.d/init.d/network; bad; vendor preset: disabled)
   Active: active (exited) since Sat 2019-12-21 07:01:28 CST; 32s ago
     Docs: man:systemd-sysv-generator(8)
```

5、ip配置成功

```
[root@yu ~]# ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.210.150 netmask 255.255.255.0 broadcast 192.168.210.255
    inet6 fe80::d0bf:201a:450e:ea9e prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:90:77:2b txqueuelen 1000 (Ethernet)
    RX packets 1823 bytes 118664 (115.8 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 15 bytes 1104 (1.0 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 80 bytes 7576 (7.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 80 bytes 7576 (7.3 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

6、ping: ctrl+z 退出

```
[root@yu ~]# service network restart
Restarting network (via systemctl):                  [ 确定 ]
[root@yu ~]# ping yu
PING yu (192.168.210.150) 56(84) bytes of data.
64 bytes from yu (192.168.210.150): icmp_seq=1 ttl=64 time=0.035 ms
^Z
[3]+  已停止                  ping yu
[root@yu ~]# ping 192.168.210.150
PING 192.168.210.150 (192.168.210.150) 56(84) bytes of data.
64 bytes from 192.168.210.150: icmp_seq=1 ttl=64 time=0.035 ms
64 bytes from 192.168.210.150: icmp_seq=2 ttl=64 time=0.053 ms
^Z
[4]+  已停止                  ping 192.168.210.150
```

ping 语法

```
-c    # 设定ping的次数，如果没有设定默认会一直ping下去直到按 Ctrl + C 结束
-f    # 洪水ping，也就是以最快的速度去ping，可以用来测试丢包率
-i    # 设定ping的时间间隔，如 ping -i 0.5 www.baidu.com 表示每隔0.5秒ping一次，如果没有设置默认是一秒一次
-s    # 设置发送的数据包的大小，默认发送56字节，最大只能设置为65507字节
```

```
C:\Users\18285>ping 192.168.210.150
```

```
正在 Ping 192.168.210.150 具有 32 字节的数据:
来自 192.168.210.150 的回复: 字节=32 时间<1ms TTL=64
来自 192.168.210.150 的回复: 字节=32 时间<1ms TTL=64
来自 192.168.210.150 的回复: 字节=32 时间<1ms TTL=64
来自 192.168.210.150 的回复: 字节=32 时间<1ms TTL=64

192.168.210.150 的 Ping 统计信息:
    数据包: 已发送 = 4, 已接收 = 4, 丢失 = 0 (0% 丢失),
    往返行程的估计时间(以毫秒为单位):
        最短 = 0ms, 最长 = 0ms, 平均 = 0ms
```

二、访问网络www.baidu.com，外网

添加DNS:

vim /etc/sysconfig/network-scripts/ifcfg-ens33

```
TYPE=Ethernet
PROXY_METHOD=none
C BROWSER_ONLY=no
BOOTPROTO=static
DEFROUTE=yes
E 0 IPV4_FAILURE_FATAL=no
I P V 6 I N I T = y e s
I P V 6 _ A U T O C O N F = y e s
I P V 6 _ D E F R O U T E = y e s
I P V 6 _ F A I L U R E _ F A T A L = n o
I P V 6 _ A D D R _ G E N _ M O D E = s t a b l e - p r i v a c y
NAME=ens33
UUID=908e1334-0d8d-45ce-8b23-64377d2c1441
DEVICE=ens33
ONBOOT=yes
IPADDR=192.168.210.150
NETMASK=255.255.255.0
GATEWAY=192.168.210.2
D N S 1 = 8 . 8 . 8 . 8
D N S 2 = 8 . 8 . 4 . 4
```

配置 vim /etc/resolv.conf

```
# Generated by NetworkManager
nameserver 8.8.8.8
nameserver 8.8.4.4
```

如果存在就不用修改了

添加域名解析

vim /etc/hosts

```
root@yu ~]# cat /etc/hosts
127.0.0.1    localhost localhost.localdomain localhost4 localhost4.localdomain4
192.168.121.110 yu
::1          localhost localhost.localdomain localhost6 localhost6.localdomain6
12.80.248.75 www.baidu.com
14.205.93.*  mirrors.aliyun.com
```