

一、配置 DHCP 服务器端虚拟机：

1) 服务器端安装 dhcp 软件包（为了安装软件包，要先保持外网畅通）

```
[root@JSJXY-server ~]# yum install dhcpd
```

2) 软件包安装后，把服务器端的 ip 改成静态

```
[root@JSJXY-server network-scripts]# pwd
/etc/sysconfig/network-scripts
[root@JSJXY-server network-scripts]# cat ifcfg-ens33
TYPE=Ethernet
PROXY_METHOD=none
BROWSER_ONLY=no
#BOOTPROTO=dhcp
BOOTPROTO=none
DEFROUTE=yes
IPV4_FAILURE_FATAL=no
IPV6INIT=yes
IPV6_AUTOCONF=yes
IPV6_DEFROUTE=yes
IPV6_FAILURE_FATAL=no
IPV6_ADDR_GEN_MODE=stable-privacy
NAME=ens33
UUID=d1ee9b7a-098e-4c8d-ab4e-1042ddd4c14b
DEVICE=ens33
ONBOOT=yes
IPADDR=20.5.5.11
PREFIX=24
GATEWAY=20.5.5.1
DNS1=20.5.5.2
```

3) 配置/etc/dhcp/dhcpd.conf 文件，参考内容如下：

```
[root@JSJXY-server ~]# cat /etc/dhcp/dhcpd.conf
#
# DHCP Server Configuration file.
#   see /usr/share/doc/dhcp*/dhcpd.conf.example
#   see dhcpd.conf(5) man page
#
# option domain-name "example.org";
# option domain-name-servers ds1.example.org
#
ddns-update-style none;
ignore client-updates;
#
default-lease-time 18000;
max-lease-time 36000;
#
subnet 20.5.5.0 netmask 255.255.255.0 {
    option routers 20.5.5.1;
    option subnet-mask 255.255.255.0;
    option domain-name "jsjxy.xju";
    option domain-name-servers 20.5.5.2;
    range 20.5.5.101 20.5.5.150;
}
```

启动 dhcpd 服务，设置开机启动模式：

```
systemctl start dhcpd  
systemctl enable dhcpd
```

防火墙添加 dhcp 服务并永久生效：

```
firewall-cmd --add-service=dhcp --permanent
```

4) 将 DHCP 服务器虚拟机的网络设置为主机模式。



重启 DHCP 服务器，查看 ip 地址：

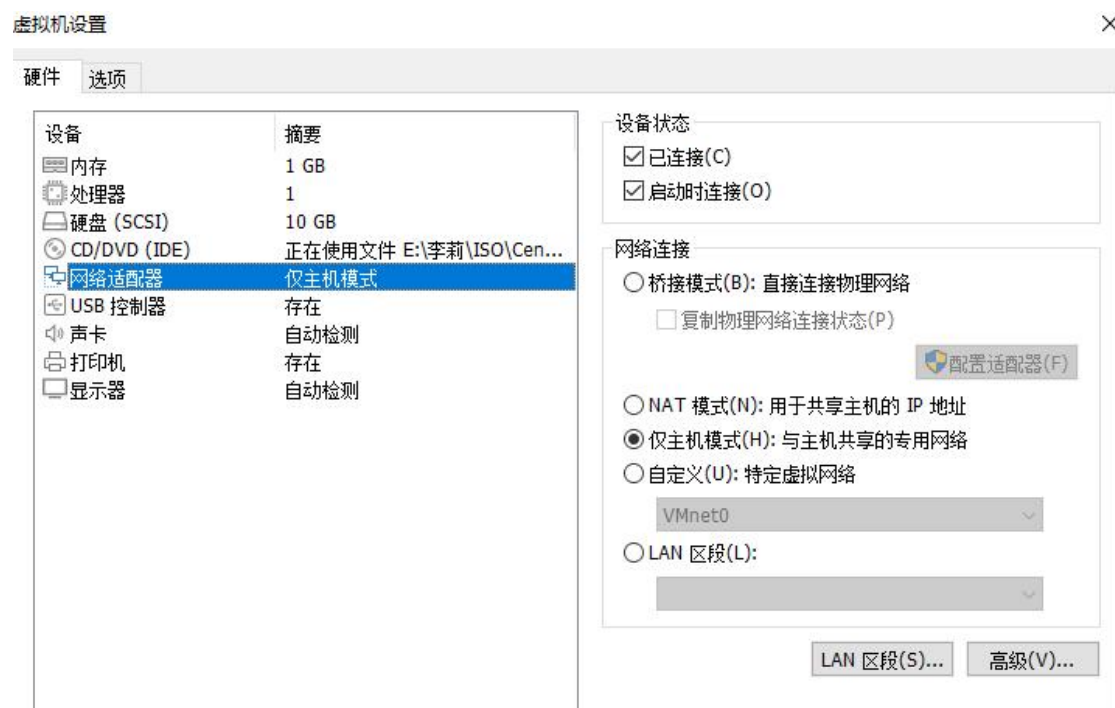
```
[root@JSJXY-server ~]# ip a  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group def  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        valid_lft forever preferred_lft forever  
    inet6 ::1/128 scope host  
        valid_lft forever preferred_lft forever  
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state U  
00  
    link/ether 00:0c:29:b4:25:9a brd ff:ff:ff:ff:ff:ff  
    inet 20.5.5.11/24 brd 20.5.5.255 scope global noprefixroute ens33  
        valid_lft forever preferred_lft forever  
    inet6 fe80::1cbe:fd9:519c:cccb/64 scope link noprefixroute  
        valid_lft forever preferred_lft forever
```

二、DHCP 客户端的设置：

1) 设置 DHCP 客户端的网络配置文件

```
[root@JSJXY-client1 ~]# cat /etc/sysconfig/network-scripts/ifcfg-ens33
TYPE=Ethernet
PROXY_METHOD=none
BROWSER_ONLY=no
BOOTPROTO=dhcp
DEFROUTE=yes
IPV4_FAILURE_FATAL=no
IPV6INIT=yes
IPV6_AUTOCONF=yes
IPV6_DEFROUTE=yes
IPV6_FAILURE_FATAL=no
IPV6_ADDR_GEN_MODE=stable-privacy
NAME=ens33
UUID=55869619-fd7b-44bb-a199-4e8a98bd5a7a
DEVICE=ens33
ONBOOT=yes
```

2) DHCP 客户端的虚拟机设置网络如下图所示。



3) 重启 DHCP 客户端虚拟机，2 个客户端的 IP 如图所示：

```
[root@JSJXY-client1 ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    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: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 00:0c:29:5a:89:2e brd ff:ff:ff:ff:ff:ff
    inet 20.5.5.102/24 brd 20.5.5.255 scope global noprefixroute dynamic ens33
        valid_lft 17594sec preferred_lft 17594sec
    inet6 fe80::97e0:af69:6b60:58c4/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
[root@JSJXY-client1 ~]#
```

```
[root@JSJXY-client2 ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    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: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 00:0c:29:20:de:bf brd ff:ff:ff:ff:ff:ff
    inet 20.5.5.104/24 brd 20.5.5.255 scope global noprefixroute dynamic ens33
        valid_lft 10904sec preferred_lft 10904sec
    inet6 fe80::3fc3:73c2:dc5c:7259/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
```