

1、dhcp 安装

```
sudo apt install isc-dhcp-server -y
```

The image shows a terminal window titled "Activities Terminal" with a dark purple background. The terminal displays the output of the command `sudo apt install isc-dhcp-server`. The output includes the following text:

```
root@B22040501:~# sudo apt install isc-dhcp-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  liblrs-export161 libiscscfg-export163
Suggested packages:
  isc-dhcp-server-ldap policycoreutils
The following NEW packages will be installed:
  isc-dhcp-server liblrs-export161 libiscscfg-export163
0 upgraded, 3 newly installed, 0 to remove and 521 not upgraded.
Need to get 529 KB of archives.
After this operation, 1,540 KB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 https://mirrors.tuna.tsinghua.edu.cn/ubuntu jammy/main amd64 libiscscfg-export163 amd64 1:9.11.19+dfsg-2.1ubuntu3 [53.0 kB]
Get:2 https://mirrors.tuna.tsinghua.edu.cn/ubuntu jammy/main amd64 liblrs-export161 amd64 1:9.11.19+dfsg-2.1ubuntu3 [20.0 kB]
Get:3 https://mirrors.tuna.tsinghua.edu.cn/ubuntu jammy-updates/main amd64 isc-dhcp-server amd64 4.4.1-2.3ubuntu2.4 [456 kB]
Fetched 529 KB in 1s (846 KB/s)
Preconfiguring packages ...
Selecting previously unselected package libiscscfg-export163.
(Reading database ... 203989 files and directories currently installed.)
Preparing to unpack .../libiscscfg-export163_1k3a9.11.19+dfsg-2.1ubuntu3_amd64.deb ...
Unpacking libiscscfg-export163 (1:9.11.19+dfsg-2.1ubuntu3) ...
Selecting previously unselected package liblrs-export161.
Preparing to unpack .../liblrs-export161_1k3a9.11.19+dfsg-2.1ubuntu3_amd64.deb ...
Unpacking liblrs-export161 (1:9.11.19+dfsg-2.1ubuntu3) ...
Selecting previously unselected package isc-dhcp-server.
Preparing to unpack .../isc-dhcp-server_4.4.1-2.3ubuntu2.4_amd64.deb ...
Unpacking isc-dhcp-server (4.4.1-2.3ubuntu2.4) ...
Setting up libiscscfg-export163 (1:9.11.19+dfsg-2.1ubuntu3) ...
Setting up liblrs-export161 (1:9.11.19+dfsg-2.1ubuntu3) ...
Setting up isc-dhcp-server (4.4.1-2.3ubuntu2.4) ...
Generating /etc/default/isc-dhcp-server...
Created symlink /etc/systemd/system/multi-user.target.wants/isc-dhcp-server.service → /lib/systemd/system/isc-dhcp-server.service.
Created symlink /etc/systemd/system/multi-user.target.wants/isc-dhcp-server6.service → /lib/systemd/system/isc-dhcp-server6.service.
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Processing triggers for man-db (2.10.2-1) ...
root@B22040501:~#
```

2、配置 DHCP 服务器，修改 DHCP 运行的网络接口

```
sudo vi /etc/default/isc-dhcp-server
```

Activities Terminal 12月 27 23:07 root@B22040501: ~

```
# Defaults for isc-dhcp-server (sourced by /etc/init.d/isc-dhcp-server)

# Path to dhcpd's config file (default: /etc/dhcp/dhcpd.conf).
DHCPDv4_CONF=/etc/dhcp/dhcpd.conf
DHCPDv6_CONF=/etc/dhcp/dhcpd6.conf

# Path to dhcpd's PID file (default: /var/run/dhcpd.pid).
DHCPDv4_PID=/var/run/dhcpd.pid
DHCPDv6_PID=/var/run/dhcpd6.pid

# Additional options to start dhcpd with.
# Don't use options -cf or -pf here; use DHCPD_CONF/ DHCPD_PID instead
#OPTIONS=""

# On what interfaces should the DHCP server (dhcpd) serve DHCP requests?
# Separate multiple interfaces with spaces, e.g. "eth0 eth1".
INTERFACESv4="ens32"
INTERFACESv6=""
```

17/19 ALL

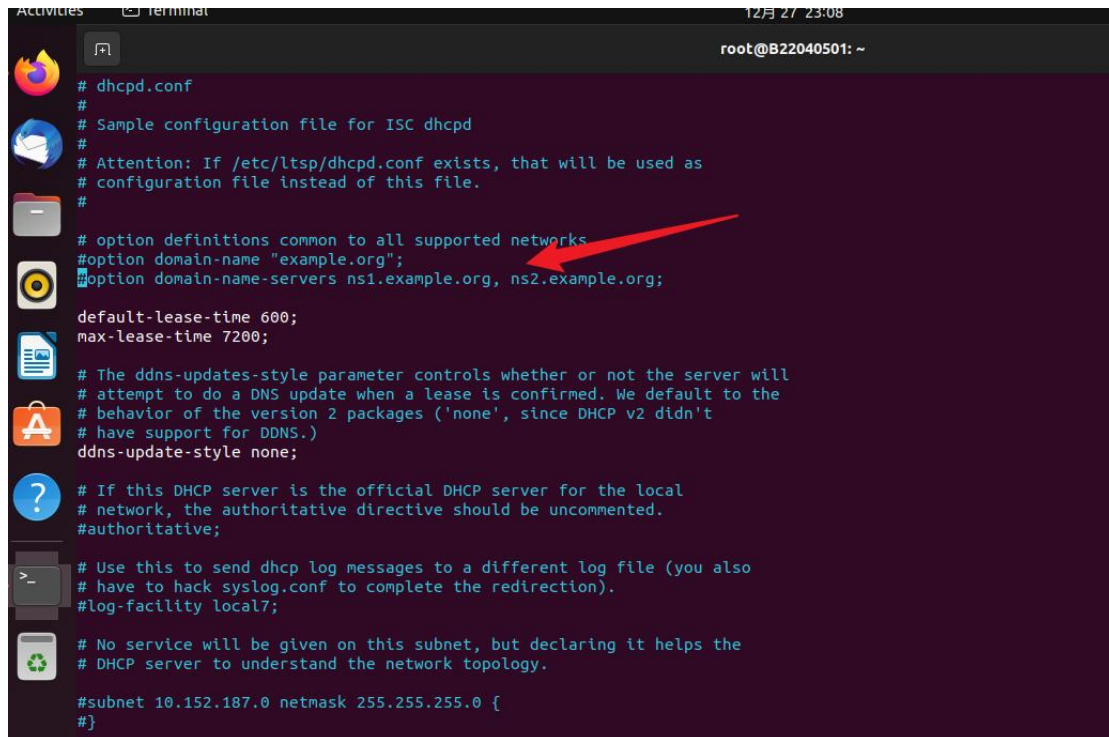
3、修改 DHCP 配置文件

`sudo vi /etc/dhcp/dhcpd.conf`

注释掉域名服务器参数

`#option domain-name "example.org";`

`#option domain-name-servers ns1.example.org, ns2.example.org`



```
root@B22040501: ~  
# dhcpd.conf  
#  
# Sample configuration file for ISC dhcpd  
#  
# Attention: If /etc/ltsp/dhcpd.conf exists, that will be used as  
# configuration file instead of this file.  
#  
# option definitions common to all supported networks  
#option domain-name "example.org";  
#option domain-name-servers ns1.example.org, ns2.example.org;  
  
default-lease-time 600;  
max-lease-time 7200;  
  
# The ddns-updates-style parameter controls whether or not the server will  
# attempt to do a DNS update when a lease is confirmed. We default to the  
# behavior of the version 2 packages ('none', since DHCP v2 didn't  
# have support for DDNS.)  
ddns-update-style none;  
  
# If this DHCP server is the official DHCP server for the local  
# network, the authoritative directive should be uncommented.  
#authoritative;  
  
# Use this to send dhcp log messages to a different log file (you also  
# have to hack syslog.conf to complete the redirection).  
#log-facility local7;  
  
# No service will be given on this subnet, but declaring it helps the  
# DHCP server to understand the network topology.  
  
#subnet 10.152.187.0 netmask 255.255.255.0 {  
#}
```

取消 authoritative 参数注释

```
Activities Terminal 12月 27 23:09 root@B22040501: ~
# dhcpd.conf
#
# Sample configuration file for ISC dhcpd
#
# Attention: If /etc/ltsp/dhcpd.conf exists, that will be used as
# configuration file instead of this file.
#
# option definitions common to all supported networks...
#option domain-name "example.org";
#option domain-name-servers ns1.example.org, ns2.example.org;

default-lease-time 600;
max-lease-time 7200;

# The ddns-updates-style parameter controls whether or not the server will
# attempt to do a DNS update when a lease is confirmed. We default to the
# behavior of the version 2 packages ('none', since DHCP v2 didn't
# have support for DDNS.)
# have support for DDNS.)
ddns-update-style none;

# If this DHCP server is the official DHCP server for the local
# network, the authoritative directive should be uncommented.
authoritative;

# Use this to send dhcp log messages to a different log file (you also
# have to hack syslog.conf to complete the redirection).
#log-facility local7;

# No service will be given on this subnet, but declaring it helps the
# DHCP server to understand the network topology.

#subnet 10.152.187.0 netmask 255.255.255.0 {
#}

# This is a very basic subnet declaration.

#subnet 10.254.239.0 netmask 255.255.255.224 {
# range 10.254.239.10 10.254.239.20;
# option routers rtr-239-0-1.example.org, rtr-239-0-2.example.org;
#}

# This declaration allows BOOTP clients to get dynamic addresses,
# which we don't really recommend.

#subnet 10.254.239.32 netmask 255.255.255.224 {
# range dynamic-bootp 10.254.239.40 10.254.239.60;
# option broadcast-address 10.254.239.31;
# option routers rtr-239-32-1.example.org;
#}

# A slightly different configuration for an internal subnet.
#subnet 10.5.5.0 netmask 255.255.255.224 {
# range 10.5.5.20 10.5.5.30;
# option domain-name-servers ns1.internal.example.org;
# option domain-name "internal.example.org";
# option subnet-mask 255.255.255.224;
# option routers 10.5.5.1;
# option broadcast-address 10.5.5.31;
# default-lease-time 600;
# max-lease-time 7200;
#}

24,1 Top
```

添加 DHCP 服务器所使用的子网和 IP 地址范围。同时指定 enp5s0 接口的 ip 地址为路由器
subnet 192.168.100.0 netmask 255.255.255.0{
range 192.168.100.10 192.168.100.20;
option routers 192.168.100.8;
}

```
Activities Terminal 12月 27 23:09
root@B22040501: ~

# option domain-name-servers ns1.internal.example.org;
# option domain-name "internal.example.org";
# option subnet-mask 255.255.255.224;
# option routers 10.5.5.1;
# option broadcast-address 10.5.5.31;
# default-lease-time 600;
# max-lease-time 7200;
#}

# Hosts which require special configuration options can be listed in
# host statements. If no address is specified, the address will be
# allocated dynamically (if possible), but the host-specific information
# will still come from the host declaration.

#host passacaglia {
# hardware ethernet 0:0:c0:5d:bd:95;
# filename "vmunix.passacaglia";
# server-name "toccata.example.com";
#}

# Fixed IP addresses can also be specified for hosts. These addresses
# should not also be listed as being available for dynamic assignment.
# Hosts for which fixed IP addresses have been specified can boot using
# BOOTP or DHCP. Hosts for which no fixed address is specified can only
# be booted with DHCP, unless there is an address range on the subnet
# to which a BOOTP client is connected which has the dynamic-bootp flag
# set.
#host fantasia {
# hardware ethernet 08:00:07:26:c0:a5;
# fixed-address fantasia.example.com;
#}

# You can declare a class of clients and then do address allocation
# based on that. The example below shows a case where all clients
# in a certain class get addresses on the 10.17.224/24 subnet, and all
# other clients get addresses on the 10.0.29/24 subnet.

#class "foo" {
# match if substring (option vendor-class-identifier, 0, 4) = "SUNW";
#}

#shared-network 224-29 {
# subnet 10.17.224.0 netmask 255.255.255.0 {
# option routers rtr-224.example.org;
# }
# subnet 10.0.29.0 netmask 255.255.255.0 {
# option routers rtr-29.example.org;
# }
# pool {
# allow members of "foo";
# range 10.17.224.10 10.17.224.250;
# }
# pool {
# deny members of "foo";
# range 10.0.29.10 10.0.29.230;
# }
#}
subnet 192.168.100.0 netmask 255.255.255.0 {
range 192.168.100.10 192.168.100.20;
option routers 192.168.100.8;
}

114,2 Bot
```

运行并启动 DHCP Server 服务

`sudo systemctl start isc-dhcp-server`

`sudo systemctl enable isc-dhcp-server`

```
Activities Terminal 12月 27 23:10
root@B22040501: ~

root@B22040501:~# sudo systemctl start isc-dhcp-server
root@B22040501:~# sudo systemctl enable isc-dhcp-server
Synchronizing state of isc-dhcp-server.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable isc-dhcp-server

root@B22040501:~#
root@B22040501:~#
```