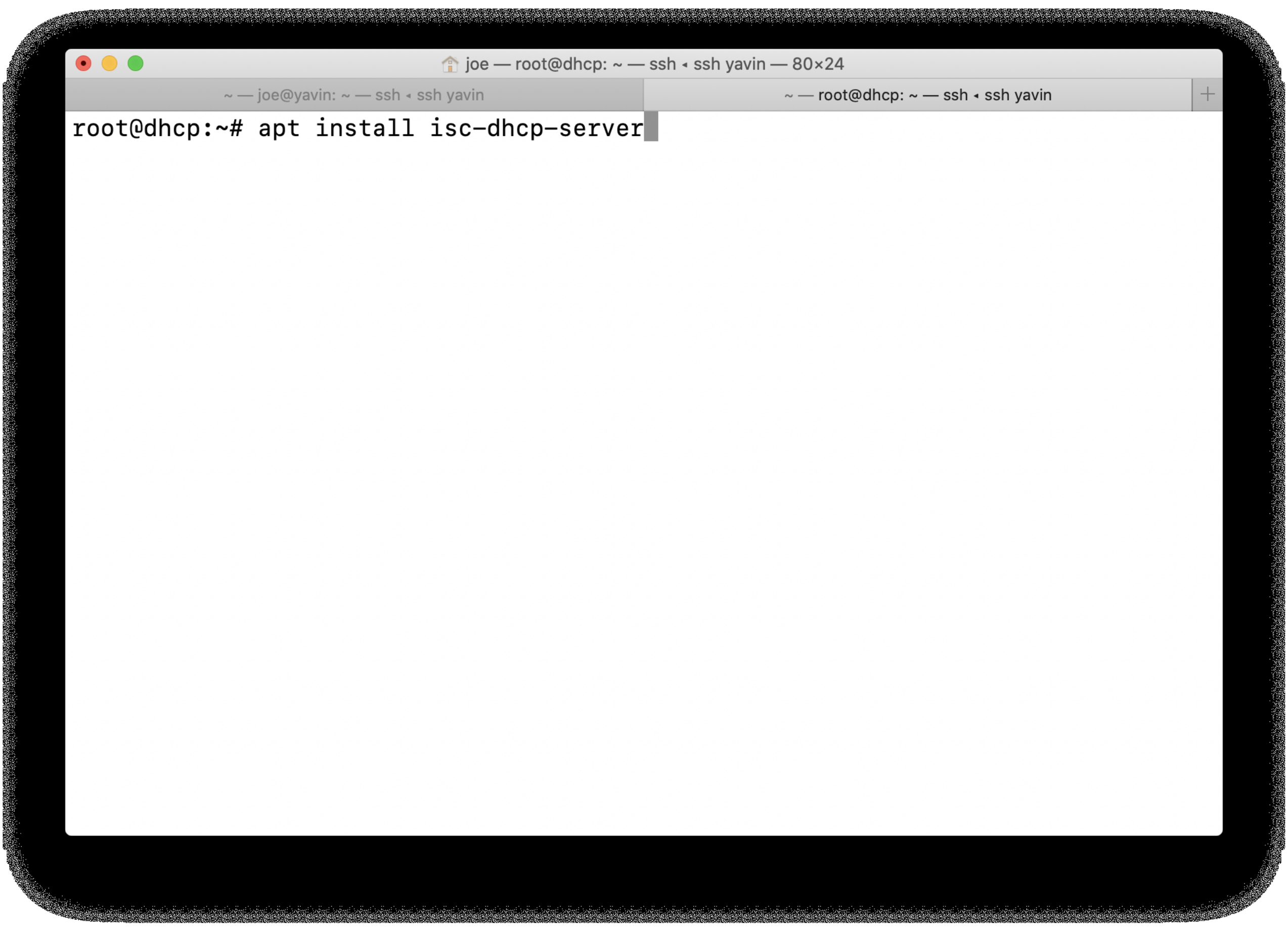
joe — root@dhcp: ~ — ssh ◂ ssh yavin — 80×24
~ — joe@yavin: ~ — ssh ◂ ssh yavin
~ — root@dhcp: ~ — ssh ◂ ssh yavin
root@dhcp:~# apt install isc-dhcp-server

joe — root@dhcp: ~ — ssh ◂ ssh yavin — 80×24

~ — joe@yavin: ~ — ssh ◂ ssh yavin

~ — root@dhcp: ~ — ssh ◂ ssh yavin

```
root@dhcp:~# vi /etc/dhcp/dhcpd.conf
```

```
# 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...
# the following identifies the search domain for the host
option domain-name "cs.dixie.edu";
option domain-name-servers 144.38.192.2, 144.38.192.3;

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
                                                    8,0-1         Top
```

```
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;
#YES we ARE AUTHORITATIVE DHCP FOR THIS NETWORK

# 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 {
#}
"/etc/dhcp/dhcpd.conf" 113L, 3746C written                    26,47         14%
```

joe — root@dhcp: ~ — ssh ◂ ssh yavin — 80×24

~ — joe@yavin: ~ — ssh ◂ ssh yavin | ~ — root@dhcp: ~ — ssh ◂ ssh yavin

```
# If this DHCP server is the official DHCP server for the local
# network, the authoritative directive should be uncommented.
authoritative;
#YES we ARE AUTHORITATIVE DHCP FOR THIS NETWORK

# 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 144.38.199.32 netmask 255.255.255.240 {
        #what part of this range should be dynamic?
        range 144.38.199.40 144.38.199.46;
        #the following line is optional
        #it is given to show that you can override the global options
        option domain-name-servers 8.8.8.8;
        option subnet-mask 255.255.255.240;
        #identify the gateway
        option routers 144.38.199.33;

}
"/etc/dhcp/dhcpd.conf" 47L, 1526C written                     39,69         91%
```

joe — root@dhcp: ~ — ssh ◂ ssh yavin — 80×24

~ — joe@yavin: ~ — ssh ◂ ssh yavin | ~ — root@dhcp: ~ — ssh ◂ ssh yavin

```
root@dhcp:~# service isc-dhcp-server restart
```

joe — root@dhcp: ~ — ssh ◂ ssh yavin — 80×24

~ — joe@yavin: ~ — ssh ◂ ssh yavin | ~ — root@dhcp: ~ — ssh ◂ ssh yavin

```
root@dhcp:~# service isc-dhcp-server restart
root@dhcp:~# service isc-dhcp-server status
● isc-dhcp-server.service - ISC DHCP IPv4 server
     Loaded: loaded (/lib/systemd/system/isc-dhcp-server.service; enabled; vend>
     Active: active (running) since Fri 2021-01-08 19:35:08 UTC; 5s ago
       Docs: man:dhcpd(8)
   Main PID: 2522 (dhcpd)
      Tasks: 4 (limit: 1074)
     Memory: 6.1M
     CGroup: /system.slice/isc-dhcp-server.service
             └─2522 dhcpd -user dhcpd -group dhcpd -f -4 -pf /run/dhcp-server/d>

Jan 08 19:35:08 dhcp sh[2522]: PID file: /run/dhcp-server/dhcpd.pid
Jan 08 19:35:08 dhcp dhcpd[2522]: Wrote 0 leases to leases file.
Jan 08 19:35:08 dhcp sh[2522]: Wrote 0 leases to leases file.
Jan 08 19:35:08 dhcp dhcpd[2522]: Listening on LPF/ens4/52:54:00:08:00:0b/144.3>
Jan 08 19:35:08 dhcp sh[2522]: Listening on LPF/ens4/52:54:00:08:00:0b/144.38.1>
Jan 08 19:35:08 dhcp dhcpd[2522]: Sending on   LPF/ens4/52:54:00:08:00:0b/144.3>
Jan 08 19:35:08 dhcp sh[2522]: Sending on   LPF/ens4/52:54:00:08:00:0b/144.38.1>
Jan 08 19:35:08 dhcp dhcpd[2522]: Sending on   Socket/fallback/fallback-net
Jan 08 19:35:08 dhcp sh[2522]: Sending on   Socket/fallback/fallback-net
Jan 08 19:35:08 dhcp dhcpd[2522]: Server starting service.
root@dhcp:~#
```

joe — root@dhcp: ~ — ssh ◂ ssh yavin — 80×24

~ — joe@yavin: ~ — ssh ◂ ssh yavin | ~ — root@dhcp: ~ — ssh ◂ ssh yavin

```
root@dhcp:~# echo "Also make sure that THIS machine is NOT using dhcp"
Also make sure that THIS machine is NOT using dhcp
root@dhcp:~#
```

joe — root@dhcp: ~ — ssh ◂ ssh yavin — 80×24

~ — joe@yavin: ~ — ssh ◂ ssh yavin | ~ — root@dhcp: ~ — ssh ◂ ssh yavin

```
root@dhcp:~# cat /etc/netplan/00-installer-config.yaml
network:
  ethernets:
    ens4:
      # change the following line to true for dhcp, but comment out the other be
low
      dhcp4: false
      addresses:
      # change this to your address/cidr mask
      - 144.38.199.34/28
      # change this to your gateway
      gateway4: 144.38.199.33
      nameservers:
        addresses:
        - 144.38.192.2
        - 144.38.192.3
        search:
        - cs.dixie.edu
  version: 2
root@dhcp:~#
```