Ministerul Educaţiei, al Culturii și Cercetării al Republicii Moldova

Universitatea Tehnică a Moldovei Departamentul Informatică și Ingineria Sistemelor

RAPORT

Lucrarea de laborator nr. 4.2 ASR

A efectuat:

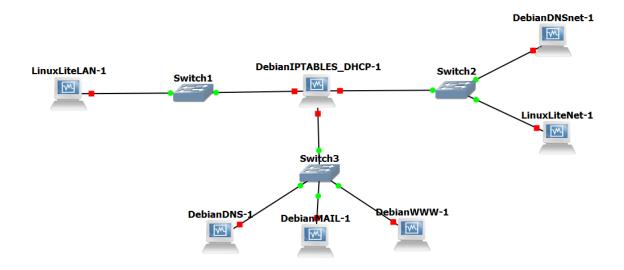
st. gr. C-171 D. Melniciuc

A verificat:

dr., conf.univ. M. Pavlov

Chişinău 2020

Schema:



Instalam DHCP-server

```
osboxes@osboxes: ~
 File Edit View Search Terminal Help
osboxes@osboxes:~$ su -
Password:
root@osboxes:~# apt install isc-dhcp-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  isc-dhcp-client isc-dhcp-common
Suggested packages:
   resolvconf isc-dhcp-server-ldap
The following NEW packages will be installed:
  isc-dhcp-server
The following packages will be upgraded:
  isc-dhcp-client isc-dhcp-common
2 upgraded, 1 newly installed, 0 to remove and 367 not upgraded.
Need to get 382 kB/844 kB of archives.
After this operation, 1,041 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://security.debian.org/ jessie/updates/main isc-dhcp-server amd64 4.3.1-6+deb
8u4 [382 kB]
Fetched 382 kB in 0s (554 kB/s)
Reading changelogs... Done
Preconfiguring packages ..
(Reading database ... 133282 files and directories currently installed.)
Preparing to unpack .../isc-dhcp-client_4.3.1-6+deb8u4_amd64.deb ...
Unpacking isc-dhcp-client (4.3.1-6+deb8u4) over (4.3.1-6+deb8u3) ...
Preparing to unpack .../isc-dhcp-common_4.3.1-6+deb8u4_amd64.deb ...
```

```
osboxes@osboxes: ~
File Edit View Search Terminal Help
GNU nano 2.2.6 File: /etc/dhcp/dhcpd.conf
 option routers rtr-239-0-1.example.org, rtr-239-0-2.example.org;
t This declaration allows BOOTP clients to get dynamic addresses,
# which we don't really recommend.
fsubnet 10.254.239.32 netmask 255.255.255.224 {
f range dynamic-bootp 10.254.239.40 10.254.239.60;
t option broadcast-address 10.254.239.31;
f option routers rtr-239-32-1.example.org;
# A slightly different configuration for an internal subnet.
#subnet 10.5.5.0 netmask 255.255.254 {
 range 10.5.5.26 10.5.5.30;
f option domain-name-servers nsl.internal.example.org;
f option domain-name "internal.example.org";
f option routers 10.5.5.1;
f option broadcast-address 10.5.5.31;
t default-lease-time 600;
f max-lease-time 7200;
‡}
                             G Get Help
X Exit
              ^O WriteOut
^J Justify
```

```
Osboxes@osboxes:~$ ping 10.10.10.1

PING 10.10.10.1 (10.10.10.1) 56(84) bytes of data.
64 bytes from 10.10.10.1: icmp_seq=1 ttl=64 time=1.28 ms
64 bytes from 10.10.10.1: icmp_seq=2 ttl=64 time=1.40 ms
^C
--- 10.10.10.1 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 1.287/1.344/1.402/0.068 ms
osboxes@osboxes:-$ ping 170.180.190.3

PING 170.180.190.3 (170.180.190.3) 56(84) bytes of data.
64 bytes from 170.180.190.3: icmp_seq=1 ttl=63 time=3.39 ms
64 bytes from 170.180.190.3: icmp_seq=2 ttl=63 time=2.70 ms
64 bytes from 170.180.190.3: icmp_seq=3 ttl=63 time=2.79 ms
^C
--- 170.180.190.3 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2003ms
rtt min/avg/max/mdev = 2.708/2.963/3.392/0.311 ms
osboxes@osboxes:-$ ping 170.180.190.130

PING 170.180.190.130 (170.180.190.130)
FORG 170.180.190.130: icmp_seq=2 ttl=63 time=2.46 ms
64 bytes from 170.180.190.130: icmp_seq=2 ttl=63 time=2.46 ms
64 bytes from 170.180.190.130: icmp_seq=2 ttl=63 time=2.46 ms
64 bytes from 170.180.190.130: icmp_seq=2 ttl=63 time=2.77 ms
^C
--- 170.180.190.130 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3004ms
rtt min/avg/max/mdev = 2.462/2.934/4.028/0.644 ms
osboxes@osboxes:-$
```

Configuram fisierele

```
@ IN SOA dns.lab.local. root.localhost. (
12345 ; Serial
1D ; Refresh
1H ; Retry
1W ; Expire
3H ) ; Minimum

IN NS dns.lab.local.
IN NS dns.lab.local.
www.lab.local IN A 170.180.190.131
mail.lab.local IN A 170.180.190.132
```

```
@ IN SOA lab.local. root.lab.local. (
12345 ; Serial
1D ; Refresh
1H ; Retry
1W ; Expire
3H ) ; Minimum

IN NS dns.lab.local.
dns IN PTR 170.180.190.130
dns1 IN PTR std19.lab.local.
14 IN PTR std14.lab.local.
14 IN PTR std14.lab.local.
```

```
osboxes@osboxes:~$ ifconfig
enpOs3 Link encap:Ethernet Hwaddr 08:00:27:c3:e7:cd
inet addr:10.10.10.3 Bcast:10.10.10.255 Mask:255.255.0
inet6 addr: fe80::4e6e:33f2:2172:66/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:156 errors:0 dropped:0 overruns:0 frame:0
TX packets:118 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:14361 (14.3 KB) TX bytes:15587 (15.5 KB)

lo Link encap:Local Loopback
inet addr:127.0.0.1 Mask:255.0.0.0
inet6 addr: ::1/128 Scope:Host
UP LOOPBACK RUNNING MTU:65536 Metric:1
RX packets:480 errors:0 dropped:0 overruns:0 frame:0
TX packets:480 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1
RX bytes:38128 (38.1 KB) TX bytes:38128 (38.1 KB)
```