Лабораторная работа №7

АДРЕСАЦИЯ IPV4 И IPV6. НАСТРОЙКА DHCP

Российский университет
дружбы народов

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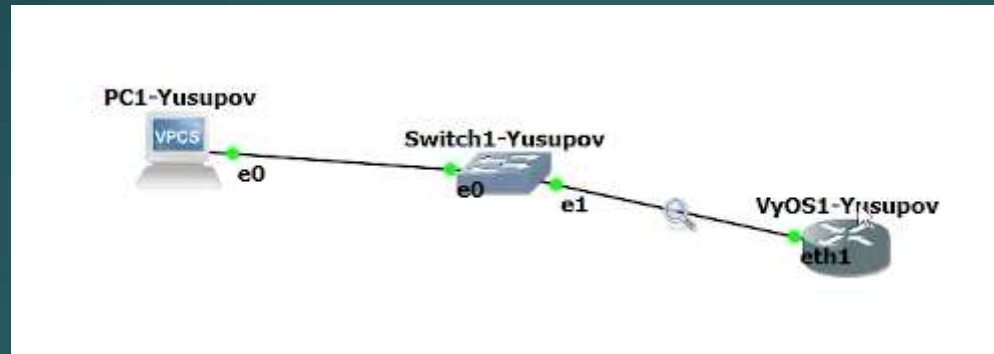Российский университет дружбы народов

Цель:

Получение навыков настройки службы DHCP на сетевом оборудовании для распределения адресов IPv4 и IPv6.

```
vyos login: vyos
Password:
```



```
vyos@vyos:~$ install image
Welcome to the VyOS install program. This script
will walk you through the process of installing the
VyOS image to a local hard drive.
Would you like to continue? (Yes/No) [Yes]: y
Probing drives: OK
Looking for pre-existing RAID groups...none found.
The VyOS image will require a minimum 2000MB root.
Would you like me to try to partition a drive automatically
or would you rather partition it manually with parted?  If
you have already setup your partitions, you may skip this step

Partition (Auto/Parted/Skip) [Auto]:
```

```
vyos@vyos:~$ configure
[edit]
vyos@vyos# set system host-name yusupov-gw-01
[edit]
vyos@vyos# set system domain-name yusupov.net
[edit]
vyos@vyos# set system login user yusupov
[edit]
vyos@vyos# set system login user yusupov authentication plaintext-password 10322
05329
[edit]
vyos@vyos# commit
[edit]
vyos@vyos# save
Saving configuration to '/config/config.boot'...
Done
[edit]
vyos@vyos# exit
exit
vyos@vyos:~$ exit
logout
```

```
yusupov@yusupov-gw-01# set interfaces ethernet eth0 address 10.0.0.1/24
[edit]
yusupov@yusupov-gw-01# set service dhcp-server shared-network-name yusupov yusup
ov.net

  Configuration path: service dhcp-server shared-network-name yusupov [yusupov.n
et] is not valid
  Set failed

[edit]
yusupov@yusupov-gw-01# set service dhcp-server shared-networr-name yusupov name-s
erver 10.0.0.1

  Configuration path: service dhcp-server [shared-networr-name] is not valid
  Set failed

[edit]
yusupov@yusupov-gw-01# set service dhcp-server
[edit]
yusupov@yusupov-gw-01# set service dhcp-server shared-network-name yusupov subne
t 10.0.0.0/24 default-router 10.0.0.1
[edit]
```

```
yusupov@yusupov-gw-01#
[edit]
yusupov@yusupov-gw-01# set service dhcp-server shared-network-name yusupov doma
n-name yusupov.net
[edit]
yusupov@yusupov-gw-01# set service dhcp-server shared-network-name yusupov name
server 10.0.0.1
[edit]
yusupov@yusupov-gw-01# set service dhcp-server shared-network-name yusupov subn
t 10.0.0.0/24 default-router 10.0.0.1
[edit]
yusupov@yusupov-gw-01# set service dhcp-server shared-network-name yusupov subn
t 10.0.0.0/24 range hosts start 10.0.0.2
[edit]
yusupov@yusupov-gw-01# set service dhcp-server shared-network-name yusupov  sub
et 10.0.0.0/24 range hosts stop 10.0.0.253
[edit]
yusupov@yusupov-gw-01# commit
[edit]
yusupov@yusupov-gw-01# save
Saving configuration to '/config/config.boot'...
Done
[edit]
yusupov@yusupov-gw-01# exit
exit
yusupov@yusupov-gw-01:~$
```



```
yusupov@yusupov-gw-01:~$ show dhcp server statistics
Pool        Size     Leases     Available  Usage
-------     ------   --------   ----------- -------
yusupov     252         0          252   0%
yusupov@yusupov-gw-01:~$ show dhcp server leases
IP address    Hardware address     State    Lease start    Lease expiration
maining     Pool    Hostname
-----------   -------------------  --------  --------------  -------------------
----------  ------  ----------
yusupov@yusupov-gw-01:~$
```
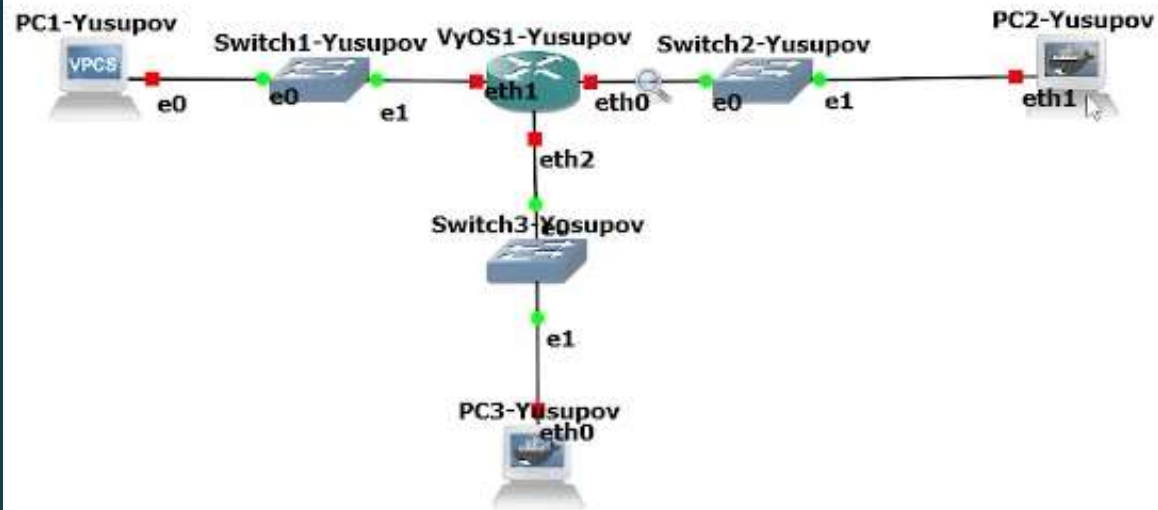
```
yusupov@yusupov-gw-01# set interfaces ethernet eth1 address 2000::1/64
[edit]
yusupov@yusupov-gw-01#
```

```
yusupov@yusupov-gw-01# set interfaceses ehternet eth2 address 2001::1/64
```

```
[edit]
yusupov@yusupov-gw-01# set interfaces ethernet eth2 address 2001::1/64
[edit]
yusupov@yusupov-gw-01# show interfaces
```

```
yusupov@yusupov-gw-01# set service router-advert interface eth1 prefix 2000::/64
[edit]
yusupov@yusupov-gw-01# # set service router-advert yusupov@yusupov-gw-01# # set
service router-advert
```

```
[edit]
yusupov@yusupov-gw-01# set service router-advert interface eth1 prefix 2000::/64
[edit]
yusupov@yusupov-gw-01# # set service router-advert yusupov@yusupov-gw-01# # set
service router-advert
[edit]
yusupov@yusupov-gw-01# set service dhcpv6-server shared-network-name yusupov-sta
teless
[edit]
yusupov@yusupov-gw-01# set service dhcpv6-server shared-network-name yusupov-sta
teless subnet 2000::0/64
[edit]
yusupov@yusupov-gw-01# set service dhcpv6-server shared-network-name yusupov-sta
teless common-options name-server 2000::1
[edit]
yusupov@yusupov-gw-01# set service dhcpv6-server shared-network-name yusupov-sta
teless common-options domain-search yusupov.net
[edit]
```

```
root@PC3-Yusupov:/# ping 2000::1 -c 2
connect: Network is unreachable
root@PC3-Yusupov:/#  cat /etc/resolv.conf
root@PC3-Yusupov:/#
```