Laboratorinis darbas 2 – Kompiuterių tinklo įrenginių konfigūravimas

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1. Sukonfigūruokite komutatoriuose VLAN numerius ir VLAN vardus remiantis nurodyta informacija.
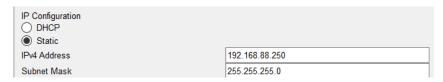
   Komutatorius1:

   ```
   Switch>enable
   Switch#config terminal
   Enter configuration commands, one per line.  End with CNTL/Z.
   Switch(config)#vlan 88
   Switch(config-vlan)#name valdymas
   Switch(config-vlan)#exit
   Switch(config)#vlan 10
   Switch(config-vlan)#name studentai
   Switch(config-vlan)#exit
   Switch(config)#vlan 20
   Switch(config-vlan)#name darbuotojai
   Switch(config-vlan)#exit
   Switch(config)#vlan 30
   Switch(config-vlan)#name administracija
   Switch(config-vlan)#exit
   Switch(config)#exit
   Switch#
   ```

   Komutatorius2:

   ```
   Switch>enable
   Switch#config terminal
   Enter configuration commands, one per line.  End with CNTL/Z.
   Switch(config)#vlan 10
   Switch(config-vlan)#name studentai
   Switch(config-vlan)#exit
   Switch(config)#vlan 20
   Switch(config-vlan)#name darbuotojai
   Switch(config-vlan)#exit
   Switch(config)#vlan 30
   Switch(config-vlan)#name administracija
   Switch(config-vlan)#exit
   Switch(config)#exit
   Switch#
   ```

2. Sukonfigūruokite kompiuterių (PC) IP adresus remiantis jų adresų etiketėmis ir nurodytu VLAN ID.

   NetAdmin (->config->FastEthernet()): 192.168.88.248/29 -> 192.168.88.249 iki 192.168.88.254 | 192.168.88.250

PC0 (->config->FastEthernet()): 192.168.10.0/24 -> 192.168.10.1 iki 192.168.10.254 | 192.168.10.251

IP Configuration
○ DHCP
◉ Static
IPv4 Address   192.168.10.251
Subnet Mask   255.255.255.0

PC1(->config->FastEthernet()): 192.168.20.208/28 -> 192.168.21.208 iki 192.168.20.222 | 192.168.20.221

IP Configuration
○ DHCP
◉ Static
IPv4 Address   192.168.20.221
Subnet Mask   255.255.255.0

PC2 *(->config->FastEthernet()):* 192.168.30.120/30 -> 192.168.30.121 ir 192.168.30.122 | 192.168.30.121

IP Configuration
○ DHCP
◉ Static
IPv4 Address   192.168.30.121
Subnet Mask   255.255.255.0

PC3 (->config->FastEthernet()): 192.168.10.0/24 -> 192.168.10.1 iki 192.168.10.254 | 192.168.10.254

IP Configuration
○ DHCP
◉ Static
IPv4 Address   192.168.10.254
Subnet Mask   255.255.255.0

PC4 (->config->FastEthernet()): 192.168.20.208/28 -> 192.168.21.208 iki 192.168.20.222 | 192.168.20.222

IP Configuration
○ DHCP
◉ Static
IPv4 Address   192.168.20.222
Subnet Mask   255.255.255.0

PC5 (->config->FastEthernet()): 192.168.30.120/30 -> 192.168.30.121 iki 192.168.30.122 | 192.168.30.122

IP Configuration
○ DHCP
◉ Static
IPv4 Address   192.168.30.122
Subnet Mask   255.255.255.0

3. Sukonfigūruokite komutatorių ir maršrutizatoriaus vardus (angl. hostnames) remiantis nurodytais vardais.

Komutatorius1:

```
Switch>enable
Switch#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname Komutatorius1
Komutatorius1(config)#exit
Komutatorius1#
```

Komutatorius2:

```
Switch>enable
Switch#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname Komutatorius2
Komutatorius2(config)#exit
Komutatorius2#
```

Marsrutizatorius1:

```
Router>enable
Router#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname Marsrutizatorius1
Marsrutizatorius1(config)#exit
Marsrutizatorius1#
```

4. Priskirkite/sukonfigūruokite IP adresą kiekvienam komutatoriui ir maršrutizatoriui Interface VLAN88 (SVI).

Komutatorius1 (192.168.88.254):
```
Komutatorius1#enable
Komutatorius1#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius1(config)#interface vlan 88
Komutatorius1(config-if)#ip address 192.168.88.254 255.255.255.0
Komutatorius1(config-if)#exit
Komutatorius1(config)#exit
Komutatorius1#
```

Komutatorius2 (192.168.88.253):

```
Komutatorius2#enable
Komutatorius2#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius2(config)#interface vlan 88
Komutatorius2(config-if)#ip address 192.168.88.253 255.255.255.0
Komutatorius2(config-if)#exit
Komutatorius2(config)#exit
Komutatorius2#
```

Marsrutizatorius1 (192.168.88.252):

```
Marsrutizatorius1#enable
Marsrutizatorius1#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Marsrutizatorius1(config)#interface vlan 88
Marsrutizatorius1(config-if)#ip address 192.168.88.252 255.255.255.0
Marsrutizatorius1(config-if)#exit
Marsrutizatorius1(config)#exit
Marsrutizatorius1#
```

5. Sukonfigūruokite prievadų tipus kaip prieigos (angl. access) remiantis nurodytais vardais.

Komutatorius1:

```
Komutatorius1>enable
Komutatorius1#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius1(config)#interface range FastEthernet0/1-8
Komutatorius1(config-if-range)#switchport mode access
Komutatorius1(config-if-range)#switchport access vlan 10
Komutatorius1(config-if-range)#exit
Komutatorius1(config)#interface range FastEthernet0/9-16
Komutatorius1(config-if-range)#switchport mode access
Komutatorius1(config-if-range)#switchport access vlan 20
Komutatorius1(config-if-range)#exit
Komutatorius1(config)#interface range FastEthernet0/17-23
Komutatorius1(config-if-range)#switchport mode access
Komutatorius1(config-if-range)#switchport acccess vlan 30
                                           ^
% Invalid input detected at '^' marker.

Komutatorius1(config-if-range)#switchport access vlan 30
Komutatorius1(config-if-range)#interface range FastEthernet0/24
Komutatorius1(config-if-range)#switchport mode access
Komutatorius1(config-if-range)#switchport access vlan 88
Komutatorius1(config-if-range)#exit
Komutatorius1(config)#exit
Komutatorius1#
```

Komutatorius2:

```
Komutatorius2>enable
Komutatorius2#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius2(config)#interface range FastEthernet0/1-8
Komutatorius2(config-if-range)#switchport mode access
Komutatorius2(config-if-range)#switchport access vlan 10
Komutatorius2(config-if-range)#exit
Komutatorius2(config)#interface range FastEthernet0/9-16
Komutatorius2(config-if-range)#switchport mode access
Komutatorius2(config-if-range)#switchport access vlan 20
Komutatorius2(config-if-range)#exit
Komutatorius2(config)#interface range FastEthernet0/17-23
Komutatorius2(config-if-range)#switchport mode access
Komutatorius2(config-if-range)#switchport access vlan 30
Komutatorius2(config-if-range)#exit
Komutatorius2(config)#interface range FastEthernet0/24
Komutatorius2(config-if-range)#switchport mode access
Komutatorius2(config-if-range)#switchport access vlan 88
Komutatorius2(config-if-range)#exit
Komutatorius2(config)#exit
Komutatorius2#
```

Rezultatai:

```
VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Gig0/1, Gig0/2
10   studentai                        active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                                Fa0/5, Fa0/6, Fa0/7, Fa0/8
20   darbuotojai                      active    Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                                Fa0/13, Fa0/14, Fa0/15, Fa0/16
30   administracija                   active    Fa0/17, Fa0/18, Fa0/19, Fa0/20
                                                Fa0/21, Fa0/22, Fa0/23
88   valdymas                         active    Fa0/24
```

6. Sukonfigūruokite įrangą taip, kad iš administratoriaus kompiuterio (NetAdmin) vyktų ping'as į Marsrutizatorius1 (pateiktoje ekrano kopijoje turi matytis darbalaukio terminalo langas).

7. Sukonfigūruoti komutatoriuose prievadus kaip magistralę (angl. trunk) ir priskirti tam tikrus VLAN ID.

Komutatorius1:

```
Komutatorius1>enable
Komutatorius1#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius1(config)#interface range Fa0/1-8
Komutatorius1(config-if-range)#switchport mode trunk
Komutatorius1(config-if-range)#switchport trunk allowed vlan 10
Komutatorius1(config-if-range)#exit
Komutatorius1(config)#interface range Fa0/9-16
Komutatorius1(config-if-range)#switchport mode trunk
Komutatorius1(config-if-range)#switchport trunk allowed vlan 20
Komutatorius1(config-if-range)#exit
Komutatorius1(config)#interface range Fa0/17-23
Komutatorius1(config-if-range)#switchport trunk allowed vlan 30
Komutatorius1(config-if-range)#exit
Komutatorius1(config)#exit
Komutatorius1#
```

Komutatorius2:

```
Komutatorius2>enable
Komutatorius2#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius2(config)#interface gig0/1
Komutatorius2(config-if)#switchport mode trunk

Komutatorius2(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan88, changed state to up

Komutatorius2(config-if)#switchport trunk allowed vlan 10,20,30,88,99
Komutatorius2(config-if)#exit
Komutatorius2(config)#exit
Komutatorius2#
```

8. Išjunkite komutatoriuje Komutatorius1 Gig0/2 prievadą.

Komutatorius1:

```
Komutatorius1>enable
Komutatorius1#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius1(config)#interface GigabitEthernet0/2
Komutatorius1(config-if)#shutdown

%LINK-5-CHANGED: Interface GigabitEthernet0/2, changed state to administratively down
Komutatorius1(config-if)#exit
Komutatorius1(config)#exit
Komutatorius1#
```

9. Uždėkite aprašą (angl. description) visiems įrenginių prievadams prie kurių prijungti kompiuterių tinklo įrenginiai.

```
Komutatorius1>enable
Komutatorius1#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius1(config)#interface FastEthernet 0/1
Komutatorius1(config-if)#description LAN
Komutatorius1(config-if)#exit
Komutatorius1(config)#interface FastEthernet 0/2
Komutatorius1(config-if)#description LAN
Komutatorius1(config-if)#exit
Komutatorius1(config)#interface FastEthernet0/3
Komutatorius1(config-if)#description LAN
Komutatorius1(config-if)#exit
Komutatorius1(config)#interface FastEthernet 0/4
Komutatorius1(config-if)#description LAN
Komutatorius1(config-if)#exit
Komutatorius1(config)#exit
Komutatorius1#
```

Komutatorius2:

```
Komutatorius2>enable
Komutatorius2#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Komutatorius2(config)#interface FastEthernet0/1
Komutatorius2(config-if)#description LAN
Komutatorius2(config-if)#exit
Komutatorius2(config)#interface FastEthernet0/2
Komutatorius2(config-if)#description LAN
Komutatorius2(config-if)#exit
Komutatorius2(config)#interface FastEthernet0/3
Komutatorius2(config-if)#description LAN
Komutatorius2(config-if)#interface FastEthernet0/4
Komutatorius2(config-if)#description LAN
Komutatorius2(config-if)#exit
Komutatorius2(config)#exit
Komutatorius2#
```

10. Sukurkite vartotoją administratorius ir uždėkite šiam vartotojui slaptažodį tinklai.

Marsrutizatorius1:

```
Marsrutizatorius1>enable
Marsrutizatorius1#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Marsrutizatorius1(config)#username administratorius
Marsrutizatorius1(config)#password tinklai
                                  ^
% Invalid input detected at '^' marker.

Marsrutizatorius1(config)#username administratorius password tinklai
Marsrutizatorius1(config)#exit
Marsrutizatorius1#
```

11. Nustatykite dienos pranešimą (MOTD) „Prisijungti galima tik įmonės administratoriams".

Marsrutizatorius1:

```
Marsrutizatorius1>enable
Marsrutizatorius1#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Marsrutizatorius1(config)#banner motd #Prisijungti galima tik imones administratoriams#
Marsrutizatorius1(config)#exit
Marsrutizatorius1#
```

12. Nustatykite maršrutizatoriui Marsrutizatorius1 statinį IP route, kad tinklas 192.168.10.0/24 pasiektų tinklą 192.168.2.0/23 per (angl. next hop) 192.168.2.1.

```
Marsrutizatorius1>enable
Marsrutizatorius1#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Marsrutizatorius1(config)#ip route 192.168.10.0 255.255.255.0 192.168.2.1
Marsrutizatorius1(config)#
```

13. Išsaugokite atliktus pakeitimus komutatoriuose.

Komutatorius1:

```
Komutatorius1>enable
Komutatorius1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
```

Komutatorius2:

```
Komutatorius2>enable
Komutatorius2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
```

14. Sukurkite Port-Channel (LACP) tarp Komutatorius1 ir Komutatorius2 su ne mažiau kaip 3 vnt. kabeliais. (žemiau pateikta nuotrauka kaip pvz.)

15. Pridėkite papildomai maršrutizatorių Maršrutizatorius2. Prijunkite jį prie komutatoriaus ir priskirkite IP adresą iš VID88. Sukurkite RIPv2 maršrutizavimą tarp Marsrutizatorius1 ir Marsrutizatorius2. Ataskaitoje turi matytis RIPv2 kelias – show ip route.

16. Kodėl pradedant komutatorių konfigūravimą naudojame komandą enable? Kaip galima įjungti prisijungimą su slaptažodžiu šiai komandai?

Kodėl pradedant komutatorių konfigūravimą naudojame komandą enable?	Kad patektume į EXEC režimą, kuris leidžia nustatyti operacinius parametrus.
Kaip galima įjungti prisijungimą su slaptažodžiu šiai komandai?	Enable secret *pasirinktas slaptažodis*

17. Kokią komanda turime panaudoti, norint sužinoti kuriuos VLAN ID kokie komutatoriaus prievadai šiuo metu naudoja? Kaip kitaip, t. y. naudojant kitą komandą, galime pamatyti?

Kokią komanda turime panaudoti, norint sužinoti kuriuos VLAN ID kokie komutatoriaus prievadai šiuo metu naudoja?	show vlan
Kaip kitaip, t. y. naudojant kitą komandą, galime pamatyti?	show interfaces switchport

18. Ką reiškia SVI ir ką jis atlieka? Kokiais kitais režimais gali dirbti komutatoriaus prievadas?

Ką reiškia SVI?	Komutatoriaus virtuali sąsaja
Ką atlieka SVI?	Suteikti būdą valdyti susijusius VLAN per komutatorių ir jų valdomą įrangą.
Kokiais kitais režimais gali dirbti komutatoriaus prievadas?	Access mode Trunk mode EtherChannel mode

	General mode Dynamic Trunking Protocol (dynamic auto ir dynamic desirable modes)

19. Kokias komandas turėtume įvesti komutatoriuose norėdami turėti PAGP agregavimą?

Atsakymas:	interface range channel-group mode

20. Kokias komandas turime įvesti, norėdami apriboti komunikacijų tarp komutatorių greitaveika iki 10 Mbps?

Atsakymas:	Įvesti komandą „interface *komutatorių sąsajos pavadinimas* ” ten, kur yra dviejų komutatorių sąsaja ir įrašyti greitį „10“.

KONFIGŪRACIJOS

Komutatorius1:

```
Komutatorius1>enable
Komutatorius1#show running-config
Building configuration...

Current configuration : 3215 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Komutatorius1
!
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
 description LAN
 switchport access vlan 10
 switchport trunk allowed vlan 10
 switchport mode trunk
!
interface FastEthernet0/2
 description LAN
 switchport access vlan 10
 switchport trunk allowed vlan 10
 switchport mode trunk
!
interface FastEthernet0/3
 description LAN
 switchport access vlan 10
 switchport trunk allowed vlan 10
 switchport mode trunk
!
interface FastEthernet0/4
 description LAN
 switchport access vlan 10
 switchport trunk allowed vlan 10
 switchport mode trunk
!
interface FastEthernet0/5
 switchport access vlan 10
 switchport trunk allowed vlan 10
 switchport mode trunk
!
interface FastEthernet0/6
 switchport access vlan 10
 switchport trunk allowed vlan 10
 switchport mode trunk
!
interface FastEthernet0/7
 switchport access vlan 10
 switchport trunk allowed vlan 10
 switchport mode trunk
!
interface FastEthernet0/8
 switchport access vlan 10
 switchport trunk allowed vlan 10
 switchport mode trunk
!
interface FastEthernet0/9
 switchport access vlan 20
 switchport trunk allowed vlan 20
 switchport mode trunk
!
interface FastEthernet0/10
 switchport access vlan 20
 switchport trunk allowed vlan 20
 switchport mode trunk
!
interface FastEthernet0/11
 switchport access vlan 20
 switchport trunk allowed vlan 20
 switchport mode trunk
!
interface FastEthernet0/12
 switchport access vlan 20
 switchport trunk allowed vlan 20
 switchport mode trunk
!
interface FastEthernet0/13
 switchport access vlan 20
 switchport trunk allowed vlan 20
 switchport mode trunk
!
interface FastEthernet0/14
 switchport access vlan 20
 switchport trunk allowed vlan 20
 switchport mode trunk
!
interface FastEthernet0/15
 switchport access vlan 20
 switchport trunk allowed vlan 20
 switchport mode trunk
!
```

```
interface FastEthernet0/16
 switchport access vlan 20
 switchport trunk allowed vlan 20
 switchport mode trunk
!
interface FastEthernet0/17
 switchport access vlan 30
 switchport trunk allowed vlan 30
 switchport mode access
!
interface FastEthernet0/18
 switchport access vlan 30
 switchport trunk allowed vlan 30
 switchport mode access
!
interface FastEthernet0/19
 switchport access vlan 30
 switchport trunk allowed vlan 30
 switchport mode access
!
interface FastEthernet0/20
 switchport access vlan 30
 switchport trunk allowed vlan 30
 switchport mode access
!
interface FastEthernet0/21
 switchport access vlan 30
 switchport trunk allowed vlan 30
 switchport mode access
!
interface FastEthernet0/22
 switchport access vlan 30
 switchport trunk allowed vlan 30
 switchport mode access
!
interface FastEthernet0/23
 switchport access vlan 30
 switchport trunk allowed vlan 30
 switchport mode access
!
interface FastEthernet0/24
 switchport access vlan 88
 switchport mode access
!
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
interface Vlan88
 ip address 192.168.88.254 255.255.255.0
!
!
!
!
line con 0
!
line vty 0 4
 login
line vty 5 15
 login
!
!
!
!
end
```

Komutatorius2:

```
Komutatorius2#show running-config
Building configuration...

Current configuration : 2508 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Komutatorius2
!
!
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
 description LAN
 switchport access vlan 10
 switchport mode access
!
interface FastEthernet0/2
 description LAN
 switchport access vlan 10
 switchport mode access
!
interface FastEthernet0/3
 description LAN
 switchport access vlan 10
 switchport mode access
!
interface FastEthernet0/4
 description LAN
 switchport access vlan 10
 switchport mode access
!
interface FastEthernet0/5
 switchport access vlan 10
 switchport mode access
!
interface FastEthernet0/6
 switchport access vlan 10
 switchport mode access
!
interface FastEthernet0/7
 switchport access vlan 10
 switchport mode access
!
interface FastEthernet0/8
 switchport access vlan 10
 switchport mode access
!
interface FastEthernet0/9
 switchport access vlan 20
 switchport mode access
!
interface FastEthernet0/10
 switchport access vlan 20
 switchport mode access
!
interface FastEthernet0/11
 switchport access vlan 20
 switchport mode access
!
interface FastEthernet0/12
 switchport access vlan 20
 switchport mode access
!
interface FastEthernet0/13
 switchport access vlan 20
 switchport mode access
!
interface FastEthernet0/14
 switchport access vlan 20
 switchport mode access
!
interface FastEthernet0/15
 switchport access vlan 20
 switchport mode access
!
interface FastEthernet0/16
 switchport access vlan 20
 switchport mode access
!
interface FastEthernet0/17
 switchport access vlan 30
 switchport mode access
!
interface FastEthernet0/18
 switchport access vlan 30
 switchport mode access
!
interface FastEthernet0/19
 switchport access vlan 30
 switchport mode access
!
interface FastEthernet0/20
 switchport access vlan 30
 switchport mode access
!
```

```
interface FastEthernet0/21
 switchport access vlan 30
 switchport mode access
!
interface FastEthernet0/22
 switchport access vlan 30
 switchport mode access
!
interface FastEthernet0/23
 switchport access vlan 30
 switchport mode access
!
interface FastEthernet0/24
 switchport access vlan 88
 switchport mode access
!
interface GigabitEthernet0/1
 switchport trunk allowed vlan 10,20,30,88,99
 switchport mode trunk
!
interface GigabitEthernet0/2
!
interface Vlan1
 no ip address
 shutdown
!
interface Vlan88
 ip address 192.168.88.253 255.255.255.0
!
!
!
!
line con 0
!
line vty 0 4
 login
line vty 5 15
 login
!
!
!
!
end
```

Marsrutizatorius1:

```
Marsrutizatorius1#show running-config
Building configuration...

Current configuration : 836 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Marsrutizatorius1
!
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!
username administratorius password 0 tinklai
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 198.168.88.252 255.255.255.0
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
```

```
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
interface Vlan88
 mac-address 0004.9abb.d201
 ip address 192.168.88.252 255.255.255.0
!
ip classless
ip route 192.168.10.0 255.255.255.0 192.168.2.1
!
ip flow-export version 9
!
!
!
banner motd ^CPrisijungti galima tik imones administratoriams^C
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

NetAdmin:

PC0:

PC1:

FastEthernet0	
GLOBAL	
Settings	
Algorithm Settings	
INTERFACE	
FastEthernet0	
Bluetooth	

Port Status ☑ On
Bandwidth ◉ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex ○ Half Duplex ◉ Full Duplex ☑ Auto
MAC Address 0001.9736.5023

IP Configuration
○ DHCP
◉ Static
IPv4 Address 192.168.20.221
Subnet Mask 255.255.255.0

IPv6 Configuration
○ Automatic
◉ Static
IPv6 Address /
Link Local Address: FE80::201:97FF:FE36:5023

PC2:

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

FastEthernet0

Port Status ☑ On
Bandwidth ◉ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex ○ Half Duplex ◉ Full Duplex ☑ Auto
MAC Address 0030.F2CE.E753

IP Configuration
○ DHCP
◉ Static
IPv4 Address 192.168.30.121
Subnet Mask 255.255.255.0

IPv6 Configuration
○ Automatic
◉ Static
IPv6 Address /
Link Local Address: FE80::230:F2FF:FECE:E753

PC3:

Physical   Config   Desktop   Programming   Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

FastEthernet0

Port Status ☑ On
Bandwidth ◉ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex ○ Half Duplex ◉ Full Duplex ☑ Auto
MAC Address 00D0.BC65.3E7B

IP Configuration
○ DHCP
◉ Static
IPv4 Address 192.168.10.254
Subnet Mask 255.255.255.0

IPv6 Configuration
○ Automatic
◉ Static
IPv6 Address /
Link Local Address: FE80::2D0:BCFF:FE65:3E7B

PC4:

FastEthernet0		
Port Status		☑ On
Bandwidth	○ 100 Mbps ○ 10 Mbps	☑ Auto
Duplex	○ Half Duplex ● Full Duplex	☑ Auto
MAC Address	0000.0C58.789A	

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

IP Configuration
○ DHCP
● Static
IPv4 Address: 192.168.20.222
Subnet Mask: 255.255.255.0

IPv6 Configuration
○ Automatic
● Static
IPv6 Address: _____ / ____
Link Local Address: FE80::200:CFF:FE58:789A

PC5:

FastEthernet0		
Port Status		☑ On
Bandwidth	○ 100 Mbps ○ 10 Mbps	☑ Auto
Duplex	○ Half Duplex ● Full Duplex	☑ Auto
MAC Address	0001.C979.8262	

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

IP Configuration
○ DHCP
● Static
IPv4 Address: 192.168.30.122
Subnet Mask: 255.255.255.0

IPv6 Configuration
○ Automatic
● Static
IPv6 Address: _____ / ____
Link Local Address: FE80::201:C9FF:FE79:8262