Router on a stick

router na patyku ☺

Krok 1: ustalenie adresacji IP i konfiguracja stacji

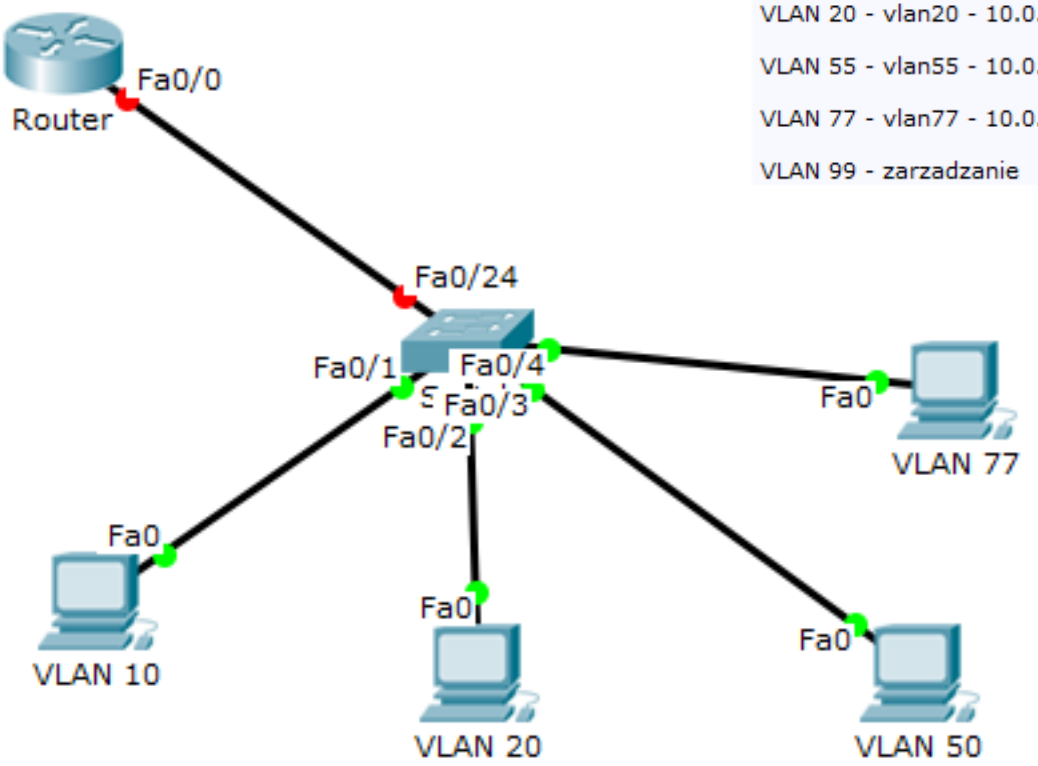
VLAN 10 - vlan10 - 10.0.10.0/24

VLAN 20 - vlan20 - 10.0.20.0/24

VLAN 55 - vlan55 - 10.0.55.0/24

VLAN 77 - vlan77 - 10.0.7.0/24

VLAN 99 - zarzadzanie



10.0.77.2
255.255.255.0
10.0.77.1

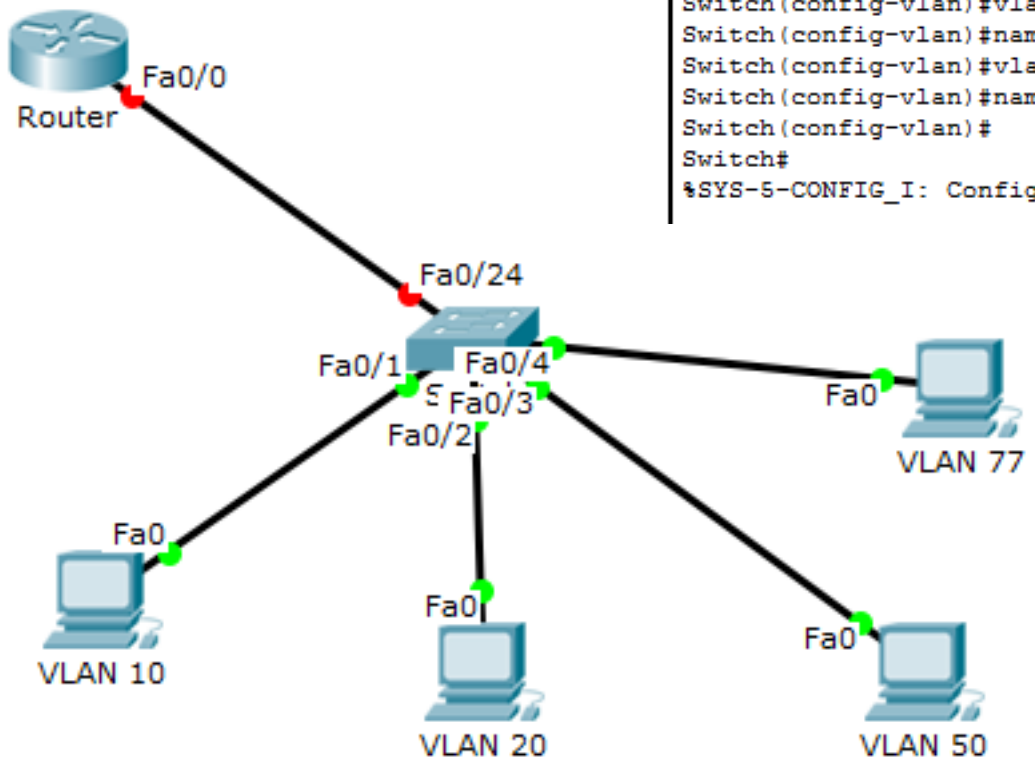
10.0.10.2
255.255.255
10.0.10.1

10.0.20.2
255.255.255.0
10.0.20.1

10.0.50.2
255.255.255.0
10.0.50.1

Krok 2: konfiguracja vlanów na switchu

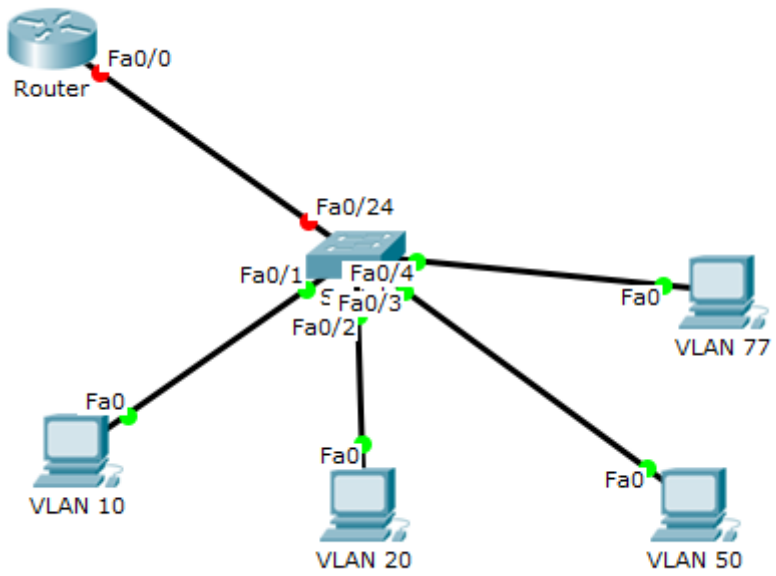
```
Switch>
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name vlan10
Switch(config-vlan)#vlan 20
Switch(config-vlan)#name vlan20
Switch(config-vlan)#vlan 50
Switch(config-vlan)#name vlan50
Switch(config-vlan)#vlan 77
Switch(config-vlan)#name vlan77
Switch(config-vlan)#vlan 99
Switch(config-vlan)#name zarzadzanie
Switch(config-vlan)#
Switch#
%SYS-5-CONFIG_I: Configured from console by console
```



Krok 2: konfiguracja vlanów na switchu cd ..

```
Switch#
Switch#sh vlan brief

VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active    Fa0/1, Fa0/2,
Fa0/3, Fa0/4
                                                 Fa0/5, Fa0/6,
Fa0/7, Fa0/8
                                                 Fa0/9, Fa0/10,
Fa0/11, Fa0/12
                                                 Fa0/13, Fa0/14,
Fa0/15, Fa0/16
                                                 Fa0/17, Fa0/18,
Fa0/19, Fa0/20
                                                 Fa0/21, Fa0/22,
Fa0/23, Fa0/24
                                                 Gig0/1, Gig0/2
10   vlan10                            active
20   vlan20                            active
50   vlan50                            active
77   vlan77                            active
99   zarzadzanie                       active
1002 fddi-default                      active
1003 token-ring-default                active
1004 fddinet-default                   active
1005 trnet-default                     active
Switch#
```



Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Peri
	Failed	VLAN 10	VLAN 20	ICMP		0.000	
	Failed	VLAN 20	VLAN 50	ICMP		0.000	
	Failed	VLAN 77	VLAN 10	ICMP		0.000	

Krok 3: przypisanie portów do odpowiednich vlanów

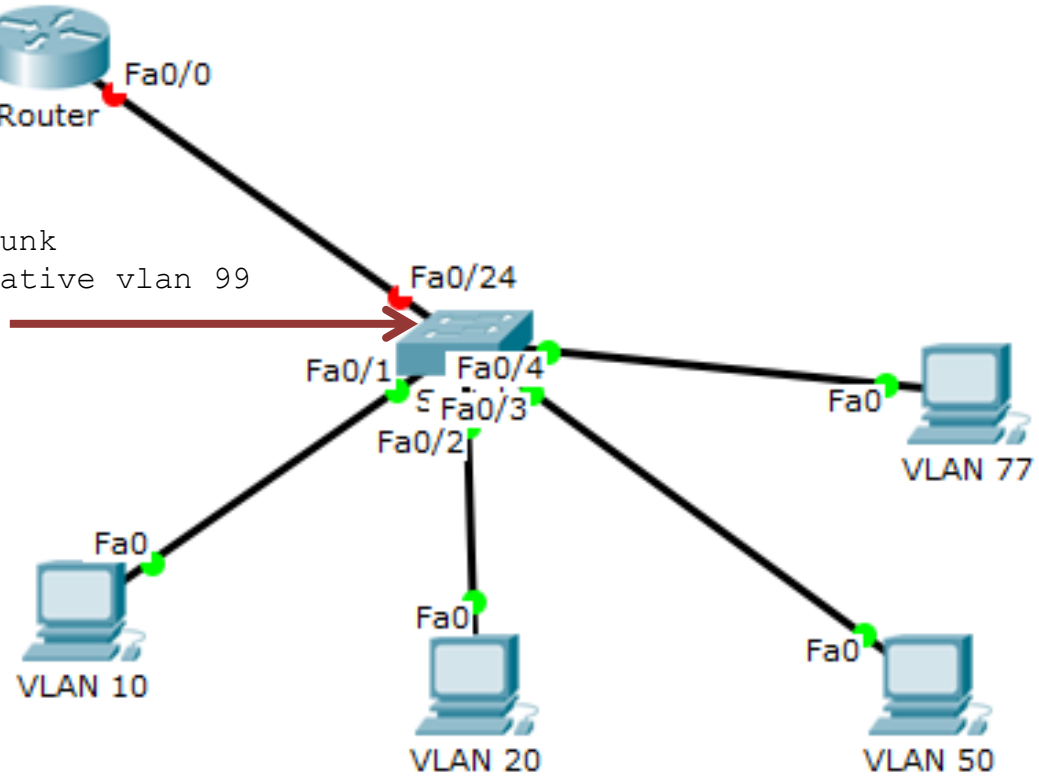
```
Switch#
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int f0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int f0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int f0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 50
Switch(config-if)#int f0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 77
Switch(config-if)#
```

```
Switch#sh vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- ---------
--------------------------------
1    default                          active    Fa0/5, Fa0/6,
Fa0/7, Fa0/8
                                                Fa0/9, Fa0/10,
Fa0/11, Fa0/12
                                                Fa0/13, Fa0/14,
Fa0/15, Fa0/16
                                                Fa0/17, Fa0/18,
Fa0/19, Fa0/20
                                                Fa0/21, Fa0/22,
Fa0/23, Fa0/24
                                                Gig0/1, Gig0/2
10   vlan10                           active    Fa0/1
20   vlan20                           active    Fa0/2
50   vlan50                           active    Fa0/3
77   vlan77                           active    Fa0/4
99   zarzadzanie                      active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

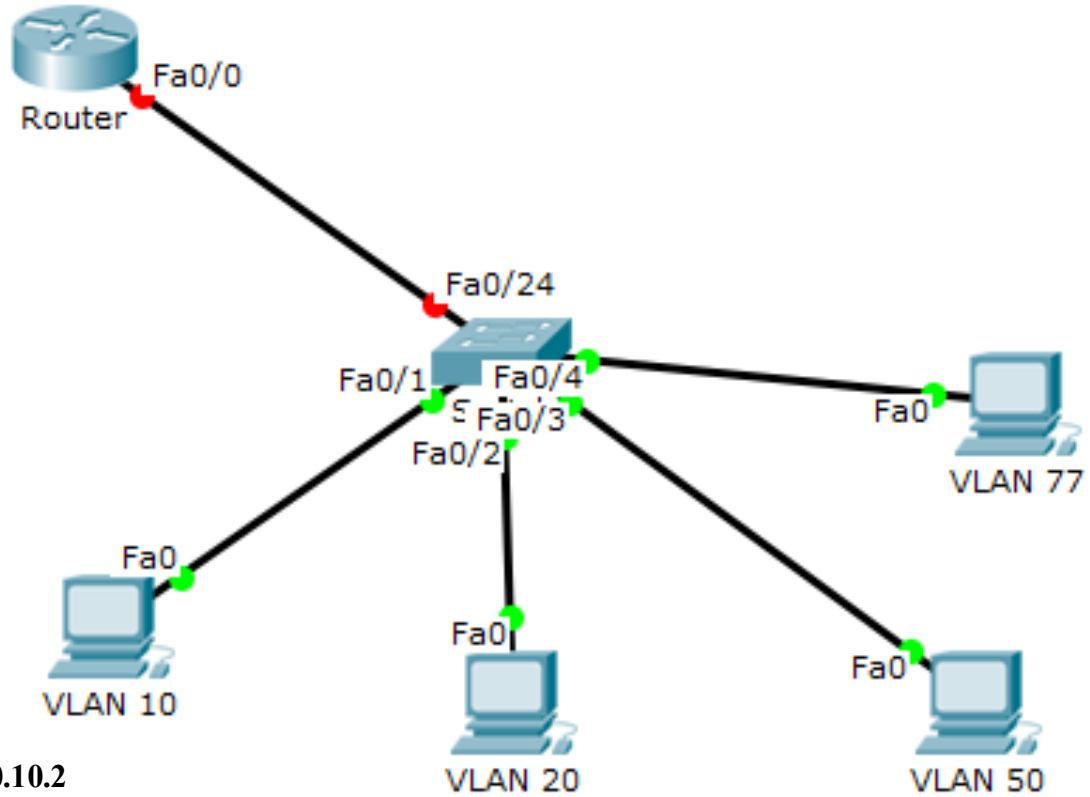
Krok 4: konfiguracja portu trunk na switchu

```
switch(config)#int fa0/24
switch(config-if)#switchport mode trunk
switch(config-if)#switchport trunk native vlan 99
```



Krok 5: konfiguracja routera

```
Router(config)#int fa0/0.10
Router(config-if)#encapsulation dot1q 10
Router(config-if)#ip address 10.0.10.1 255.255.255.0
```



10.0.10.2
255.255.255.0
10.0.10.1

Krok 5: konfiguracja routera cd ..

```
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int f0/0.10
Router(config-subif)#encapsulation dot1q 10
Router(config-subif)#ip address 10.0.10.1 255.255.255.0
Router(config-subif)#int f0/0.20
Router(config-subif)#encapsulation dot1q 20
Router(config-subif)#ip address 10.0.20.1 255.255.255.0
Router(config-subif)#int f0/0.50
Router(config-subif)#encapsulation dot1q 50
Router(config-subif)#ip address 10.0.50.1 255.255.255.0
Router(config-subif)#int f0/0.77
Router(config-subif)#encapsulation dot1q 77
Router(config-subif)#ip address 10.0.77.1 255.255.255.0
Router(config-subif)#exit
Router(config)#int f0/0
Router(config-if)#no shut
```

Fire	Last Status	Source	Destination	Type	Color	Time(sec)
	Successful	VLAN 10	VLAN 20	ICMP		0.000
	Successful	VLAN 20	VLAN 50	ICMP		0.000
	Successful	VLAN 77	VLAN 10	ICMP		0.000

