Switch - Biuro1 ,Biuro2 ,Druk: Podstawowa konfiguracja

en
conf t

hostname
biuro1 line
console 0
password cisco
login exit

enable password cisco no ip
domain-lookup banner motd
#wymaga autoryzacji# service
password-encryption do wr

MultilayerSwitch1/2, CORE1,CORE2 : Podstawowa konfiguracja, SSH:
en
conf t

hostname
MultiLayerSwitch2 line
console 0 password cisco
login exit

enable password cisco no ip
domain-lookup banner motd
#wymaga autoryzacji# service
password-encryption

do wr ip domain name psk.net
username admin password
cisco crypto key generate rsa
1024 line vty 0 15
login local
transport input
ssh ip ssh version
2
exit

do wr

Konfiguracja vlanow: Biuro1, Biuro2, Druk:
conf t int range fa0/1-2
switchport mode trunk vlan 10 name biuro1
exit int range fa0/3-24
switchport mode access
switchport access vlan
10
exit
do wr

Konfiguracja vlanow: Multilayer, Core:
int range gig1/0/3-6
switchport mode trunk

vlan 10
name biuro1
vlan 20
name biuro
vlan 30
name druk
vlan 40
name admin

exit

do wr

Przypisanie VLAN do MultiLayerów:

vlan 10

name biuro1

vlan 20

name biuro

vlan 40

name druk

vlan 30

name admin

Dodanie adresacji do VLAN:

172.16.1.0/28 - VLAN10

172.16.2.0/28 - VLAN20

172.16.3.0/28 - VLAN30

172.16.4.0/28 - VLAN40

CORE1, CORE2

Router(config)#hostname CORE1
CORE1(config)#line console 0
CORE1(config-line)#password cisco

```
CORE1(config-line)#login
CORE1(config-line)#exit
CORE1(config)#enable password cisco
CORE1(config)#no ip domain-lookup
CORE1(config)#banner motd #dostep autoryzowany#
CORE1(config)#service password-encryption
CORE1(config)#do wr
Building configuration...
[OK]
CORE1(config)#
CORE1(config)#ip domain name cisco.net
CORE1(config)#username admin password cisco
CORE1(config)#crypto key generate rsa
The name for the keys will be: CORE1.cisco.net
Choose the size of the key modulus in the range of 360 to 4096 for your
General Purpose Keys. Choosing a key modulus greater than 512 may
take
a few minutes.
How many bits in the modulus [512]: 1024
% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]
CORE1(config)#line vty 0 15
*Mar 1 0:15:0.866: %SSH-5-ENABLED: SSH 1.99 has been enabled
CORE1(config-line)#login local
CORE1(config-line)#transport input ssh
CORE1(config-line)#exit
CORE1(config)#do wr
```

```
biuro1(config)#int range fa0/3-8
biuro1(config-if-range)#switchport port-security maximum 1
biuro1(config-if-range)#switchport port-security mac-address sticky
```

```
MultiLayerSwitch1(config)#int range gig1/0/5
```

```
MultiLayerSwitch1(config-if-range)#ip address 172.16.3.145
255.255.255.252
MultiLayerSwitch1(config-if-range)#no shutdown
MultiLayerSwitch1(config-if-range)#exit
MultiLayerSwitch1(config)#int gig1/0/6
MultiLayerSwitch1(config-if)#ip address 172.16.3.149 255.255.255.252
MultiLayerSwitch1(config-if)#no shutdown
```

```
MultiLayerSwitch2(config)#int gig1/0/6
MultiLayerSwitch2(config-if)#ip address 172.168.3.153 255.255.255.252
MultiLayerSwitch2(config-if)#no sh
MultiLayerSwitch2(config-if)#exit
MultiLayerSwitch2(config)#int gig1/0/5
MultiLayerSwitch2(config-if)#ip address 172.16.3.157 255.255.255.252
```

```
CORE1(config-if)#ip add 172.16.3.146 255.255.255.252
CORE1(config)#interface GigabitEthernet0/1
CORE1(config-if)#ip address 172.16.3.154 255.255.255.252
CORE1(config)#interface Serial0/3/0
CORE1(config-if)#ip address 192.168.32.1 255.255.255.252
CORE1(config)#interface Serial0/3/1
CORE1(config-if)#ip address 192.168.32.5 255.255.255.252
CORE1(config-if)#no sh
CORE1(config-if)#do wr
```

```
CORE2(config)#interface GigabitEthernet0/0
CORE2(config-if)#ip add 172.16.3.150 255.255.255.252
CORE2(config)#interface GigabitEthernet0/1
CORE2(config-if)#ip add 172.16.3.158 255.255.255.252
CORE2(config)#interface GigabitEthernet0/0
CORE2(config)#interface Serial0/3/0
CORE2(config-if)#ip add 192.168.32.9 255.255.255.252
CORE2(config)#interface Serial0/3/0
```

CORE2(config)#interface Serial0/3/1
CORE2(config-if)#ip add 192.168.32.13 255.255.255.252
CORE2(config-if)#no sh
CORE2(config-if)#do wr

ISP1
Router(config)#interface Serial0/3/0
Router(config-if)#ip address 192.168.32.2 255.255.255.0
Router(config-if)#ip address 192.168.32.2 255.255.255.252
Router(config)#interface Serial0/3/1
Router(config-if)#ip address 192.168.32.10 255.255.255.252
Router(config-if)#ip address 192.168.32.10 255.255.255.252
Router(config-if)#do wr

ISP2
Router(config)#interface Serial0/3/0
Router(config-if)#ip address 192.168.32.6 255.255.255.0
Router(config-if)#ip address 192.168.32.6 255.255.255.252
Router(config)#interface Serial0/3/1
Router(config-if)#ip address 192.168.32.14 255.255.255.252
Router(config-if)#ip address 192.168.32.14 255.255.255.252
Router(config-if)#no sh
Router(config-if)#do wr

multilayer2
MultiLayerSwitch2(config)#ip routing
MultiLayerSwitch2(config)#router ospf 10
MultiLayerSwitch2(config-router)#router-id 1.1.1.1
network 172.16.1.0 0.0.0.127 area 0
network 172.16.2.0 0.0.0.127 area 0
network 172.16.3.0 0.0.0.127 area 0
network 172.16.4.0 0.0.0.127 area 0
network 172.16.3.152 0.0.0.3 area 0
network 172.16.3.156 0.0.0.3 area 0
MultiLayerSwitch2(config-router)#
MultiLayerSwitch2(config-router)#

multilayer1

MultiLayerSwitch2(config)#ip routing
MultiLayerSwitch2(config)#router ospf 10
MultiLayerSwitch2(config-router)#router-id 2.2.2.2
network 172.16.1.0 0.0.0.127 area 0
network 172.16.2.0 0.0.0.127 area 0
network 172.16.3.0 0.0.0.127 area 0
network 172.16.4.0 0.0.0.127 area 0
network 172.16.3.144 0.0.0.3 area 0
network 172.16.3.148 0.0.0.3 area 0
MultiLayerSwitch2(config-router)#

CORE1
router ospf 10
router-id 3.3.3.3
network 172.16.3.144 0.0.0.3 area 0
network 172.16.3.152 0.0.0.3 area 0
network 192.168.32.0 0.0.0.3 area 0
network 192.168.32.4 0.0.0.3 area 0
do wr
ex

CORE2
router ospf 10
router-id 4.4.4.4
network 172.16.3.148 0.0.0.3 area 0
network 172.16.3.156 0.0.0.3 area 0
network 192.168.32.8 0.0.0.3 area 0
network 192.168.32.12 0.0.0.3 area 0

do wr
ex

ISP1

router ospf 10
router-id 5.5.5.5
network 192.168.32.0 0.0.0.3 area 0
network 192.168.32.8 0.0.0.3 area 0
do wr
ex

ISP2

Interface VLAN

VLAN10

MultiLayerSwitch1# conf t
MultiLayerSwitch1(config)#interface vlan10
MultiLayerSwitch1(config-if)#no shutdown

MultiLayerSwitch1(config-if)#ip address 172.16.1.1 255.255.255.240
MultiLayerSwitch1(config-if)#ip helper-address
MultiLayerSwitch1(config)#interface vlan10
MultiLayerSwitch1(config-if)#ip helper-address 172.16.3.2
MultiLayerSwitch1(config-if)#exit

VLAN20

MultiLayerSwitch1#conf t
MultiLayerSwitch1(config)#interface vlan20
MultiLayerSwitch1(config-if)#ip address 172.16.2.1 255.255.255.240
MultiLayerSwitch1(config-if)#ip helper-address 172.16.3.2
MultiLayerSwitch1(config-if)#no shutdown
MultiLayerSwitch1(config-if)#exit
MultiLayerSwitch1(config)#

VLAN30

MultiLayerSwitch1(config)#interface vlan30
MultiLayerSwitch1(config-if)#ip address 172.16.3.1 255.255.255.240
MultiLayerSwitch1(config-if)#ip helper-address 172.16.3.2
MultiLayerSwitch1(config-if)#no shutdown

MultiLayerSwitch1(config-if)#exit

VLAN40

MultiLayerSwitch1(config)#interface vlan40
MultiLayerSwitch1(config-if)#no shutdown
MultiLayerSwitch1(config-if)#ip address 172.16.4.1 255.255.255.240
MultiLayerSwitch1(config-if)#ip helper-address 172.16.3.2
MultiLayerSwitch1(config-if)#exit

ip route

MultiLayerSwitch1(config)#ip route 0.0.0.0 0.0.0.0 g1/0/5
MultiLayerSwitch1(config)#ip route 0.0.0.0 0.0.0.0 g1/0/6 70
MultiLayerSwitch1(config)#do wr

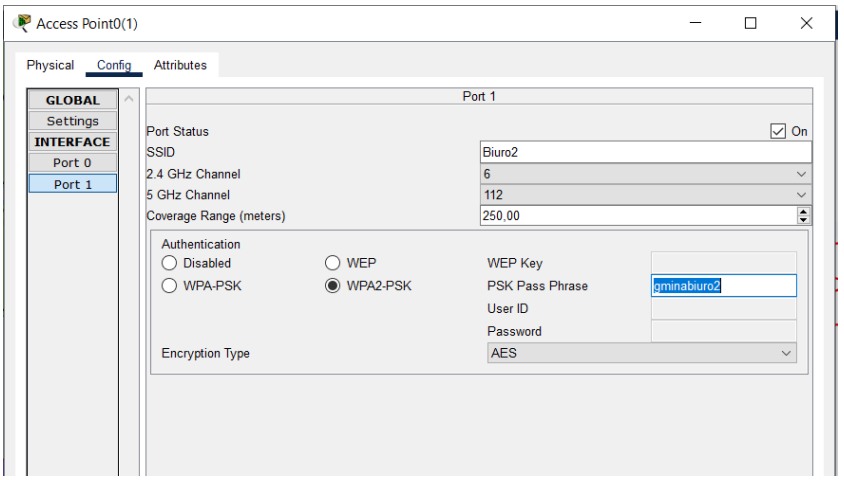
CORE1#conf t
CORE1(config)#ip route 0.0.0.0 0.0.0.0 s0/3/0
CORE1(config)#ip route 0.0.0.0 0.0.0.0 s0/3/1 70

CORE MULTILAYERY I ZWYKLE SWITCHE - NTP

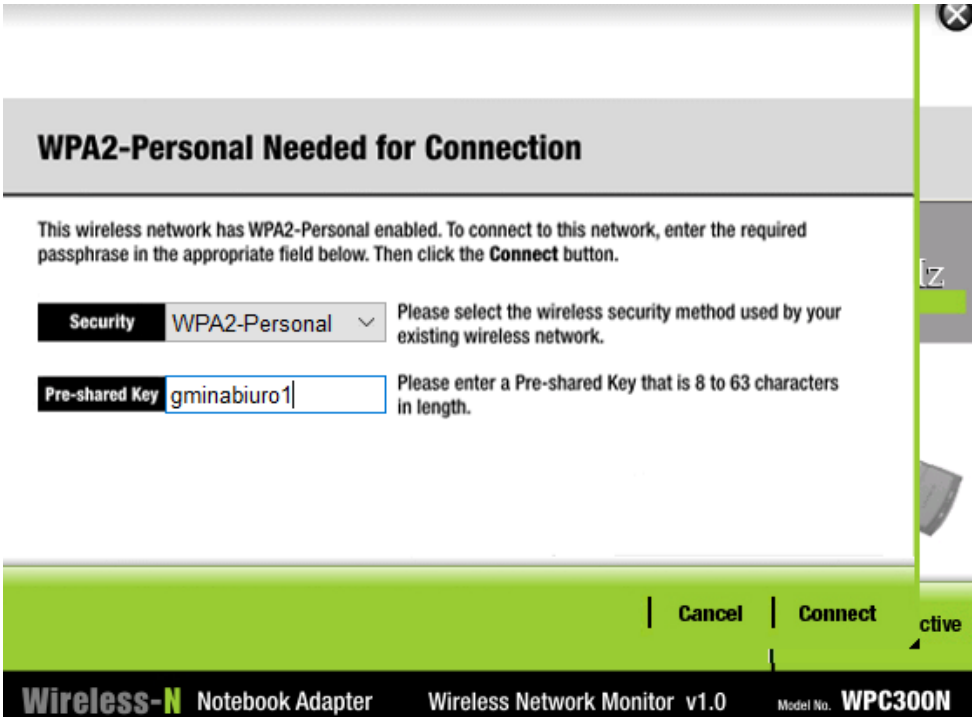
CORE1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
CORE1(config)#ntp authenticate
CORE1(config)#ntp authentication-key 15 md5 cisco
CORE1(config)#ntp trusted-key 15
CORE1(config)#ntp server 172.16.3.2 key 15
CORE1(config)#exit

AccesPoint0 zabezpieczenie:

SSID - Biuro2
PSK Pass Phrase - gminabiuro2



Połączenie laptopa z AccesPointem



SYSLOG:

CORE1,CORE2, MutliLayerSwitch1,MultiLayerSwitch2, switche vlanowe

logging 172.16.3.2
logging on
logging trap debuging

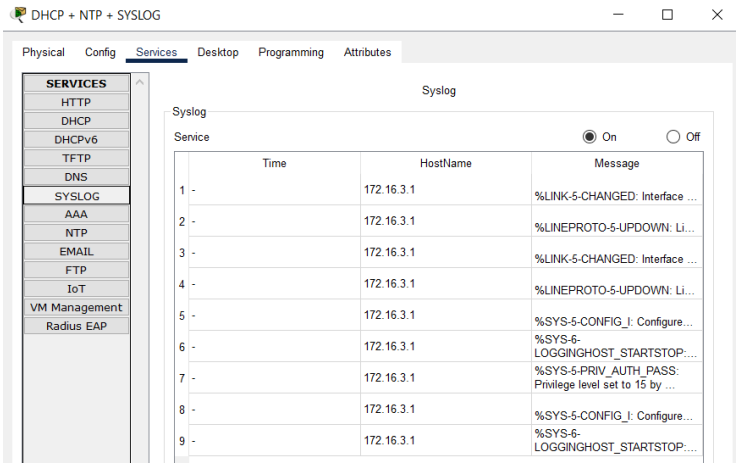
LOOPBACK DO SYSLOG:

Na MultiLayerSwitch1

interface loopback0
ip address 192.168.10.1 255.255.255.255
no shutdown
logging source-interface loopback0

MultiLayerSwitch2:

interface loopback0
ip adress 192.168.10.1 255.255.255.255
no shutdown
logging on
logging userinfo



Syslog na CORE1, CORE2:

logging 172.16.3.2
logging on
logging trap debugging
logging userinfo
do wr