

# LABORATORIUM SIECI KOMPUTEROWYCH

**Data wykonania  
ćwiczenia:**

25.05.2023

**Rok studiów:**

2

**Semestr:**

4

**Grupa studencka:**

2

**Grupa laboratoryjna:**

2B

**Ćwiczenie nr.**

13

**Temat:** Projektowanie i stosowanie adresacji VLSM

**Osoby wykonujące ćwiczenia:**

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Katedra Informatyki i Automatyki

Urządzenie	Interfejs	Adres IP	Maska podsieci	Brama domyślna
East	G0/0	10.1.1.97	255.255.255.240	ND
	G0/1	10.1.1.65	255.255.255.224	ND
	S0/0/0	10.1.1.121	255.255.255.252	ND
West	G0/0	10.1.1.113	255.255.255.248	ND
	G0/1	10.1.1.1	255.255.255.192	ND
	S0/0/0	10.1.1.122	255.255.255.252	ND
ES-1	VLAN1	10.1.1.98	255.255.255.240	10.1.1.97
ES-2	VLAN1	10.1.1.66	255.255.255.224	10.1.1.65
WS-1	VLAN1	10.1.1.114	255.255.255.248	10.1.1.113
WS-2	VLAN1	10.1.1.2	255.255.255.192	10.1.1.1
PC E1-22	NIC	10.1.1.110	255.255.255.240	10.1.1.97
PC E2-47	NIC	10.1.1.94	255.255.255.224	10.1.1.65
PC W1-201	NIC	10.1.1.118	255.255.255.248	10.1.1.113
PC W2-87	NIC	10.1.1.62	255.255.255.192	10.1.1.1

Opis podsieci	Ilość wymaganych hostów	Adres sieci/CIDR	Pierwszy użyteczny adres hosta	Adres rozgłoszeniowy
WS-2 LAN	47	10.1.1.0/26	10.1.1.1	10.1.1.63
ES-2 LAN	28	10.1.1.64/27	10.1.1.65	10.1.1.95
ES-1 LAN	11	10.1.48.96/28	10.1.1.97	10.1.1.111
WS-1 LAN	5	10.1.48.112/29	10.1.1.113	10.1.1.119
WAN Link	2	10.1.48.120/30	10.1.1.121	10.1.1.123

## East Config

```

East>en
East#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
East(config)#int g0/0
East(config-if)#ip add 10.1.1.97 255.255.255.240
East(config-if)#no shut

East(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state
to up

```

```
East(config-if)#int g0/1
East(config-if)#ip add 10.1.1.65 255.255.255.224
East(config-if)#no shut

East(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

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

East(config-if)#int s0/0/0
East(config-if)#ip add 10.1.1.121 255.255.255.252
East(config-if)#no shut

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to down
```

## West Config

```
West>en
West#conf t
Enter configuration commands, one per line. End with CNTL/Z.
West(config)#int g0/0
West(config-if)#ip add 10.1.1.113 255.255.255.248
West(config-if)#no shut

West(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state
to up

West(config-if)#int g0/1
West(config-if)#ip add 10.1.1.1 255.255.255.192
West(config-if)#no shut

West(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

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

West(config-if)#int s0/0/0
West(config-if)#ip add 10.1.1.122 255.255.255.252
West(config-if)#no shut

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to down
```

## ES-1 Config

```
ES-1>en
ES-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
ES-1(config)#int vlan 1
ES-1(config-if)#ip add 10.1.1.98 255.255.255.240
ES-1(config-if)#no shut

ES-1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
ip def 10.1.1.97
```

## ES-2 Config

```
ES-2>en
ES-2#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
ES-2(config)#int vlan 1
ES-2(config-if)#ip add 10.1.1.66 255.255.255.224
ES-2(config-if)#no shut

ES-2(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
ip def 10.1.1.65
```

## WS-1 Config

```
WS-1>en
WS-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
WS-1(config)#int vlan 1
WS-1(config-if)#ip add 10.1.1.114 255.255.255.248
WS-1(config-if)#no shut

WS-1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
ip def 10.1.1.113
```

## WS-2 Config

```
WS-2>en
WS-2#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
WS-2(config)#int vlan 1
WS-2(config-if)#ip add 10.1.1.2 255.255.255.192
WS-2(config-if)#no shut

WS-2(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
ip def 10.1.1.1
```