

Packet Tracer -
VLSM

		IP-		
Branch1	G0/0	192.168.72.129	/28	
	G0/1	192.168.72.97	/27	
	S0/0/0	192.168.72.145	/30	—
Branch2	G0/0	192.168.72.65	/27	—
	G0/1	192.168.72.1	/28	—
	S0/0/0	192.168.72.146	/30	—
Room-114	VLAN 1	192.168.72.130	/26	192.168.72.129
Room-279	VLAN 1	192.168.72.98	/27	192.168.72.97
Room-312	VLAN 1	192.168.72.66	/27	192.168.72.65
Room-407	VLAN 1	192.168.72.2	/26	192.168.72.1
PC-A	NIC	192.168.72.142	/28	192.168.72.129
PC-B	NIC	192.168.72.126	/27	192.168.72.97
PC-C	NIC	192.168.72.94	/26	192.168.72.65
PC-D	NIC	192.168.72.62	/26	192.168.72.1

1.
2. VLSM
3. IP-

/24

VLSM.

1.

1:

192.168.72.0/24.

) Room-114 IP- 7
) Room-279 IP- 15
) Room-312 IP- 29
) Room-407 IP- 58

? 5

2.

a. IP- Room-114?
28
? 14
IP- Room-279? 27
? 30
IP- Room-312? 27
? 30
IP- Room-407? 26
? 62
IP-
Branch1 Branch2? 30

2:

VLSM

1. 192.168.72.0/24

a. LAN.
LAN.
(LAN).
(LAN).
Branch1 Branch2.

2. VLSM.

, (, Room-114 LAN),

		/CIDR		
Room-407	58	192.168.72.0/26	192.168.72.1/26	192.168.72.63/26
Room312	29	192.168.72.64/27	192.168.72.65/27	192.168.72.95/27
Room279	27	192.168.72.96/27	192.168.72.97/27	192.168.72.127/27

		/CIDR		
Room114	7	192.168.72.128/28	192.168.72.129	192.168.72.143
Branch1- Branch2	2	192.168.72.144/30	192.168.72.145	192.168.72.147

3.

- a.
 - (LAN) IP- Branch1
 - WAN.
 - IP- Branch2
 - (LAN). IP- WAN.
 - IP-
 - IP-

3.

IP-

IP-

- 1: IP- (LAN)
Branch1.

```
Branch1(config-if)#ip address 192.168.72.129 255.255.255.240
Branch1(config-if)#
%DUAL-5-NBRCHANGE: IP-EIGRP 1: Neighbor 192.168.72.146 (Serial0/0/0) is down: interface down

Branch1(config-if)#no shutdown
% Invalid input detected at '^' marker.

Branch1(config-if)#no shutdown

Branch1(config)#interface G0/1
Branch1(config-if)#ip address 192.168.72.97 255.255.255.224
Branch1(config-if)#no shutdown
```

- 2. IP- Room-312,

```
Room-312(config-if)#interface VLAN1
Room-312(config-if)#ip address 192.168.72.66 255.255.255.224
Room-312(config-if)#
```

- 3. IP- PC-D,

IPv4 Address	192.168.72.62
Subnet Mask	255.255.255.192
Default Gateway	192.168.72.1

4.

Branch1, [S3Name]] PC-D.
IP- ,

```
Branch1#ping 192.168.72.94
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.72.94, timeout is 2 seconds:
.!!!!
Success rate is 80 percent (4/5), round-trip min/avg/max = 1/6/21 ms
```

ID:212