COMPUTER NETWORKS

Practice

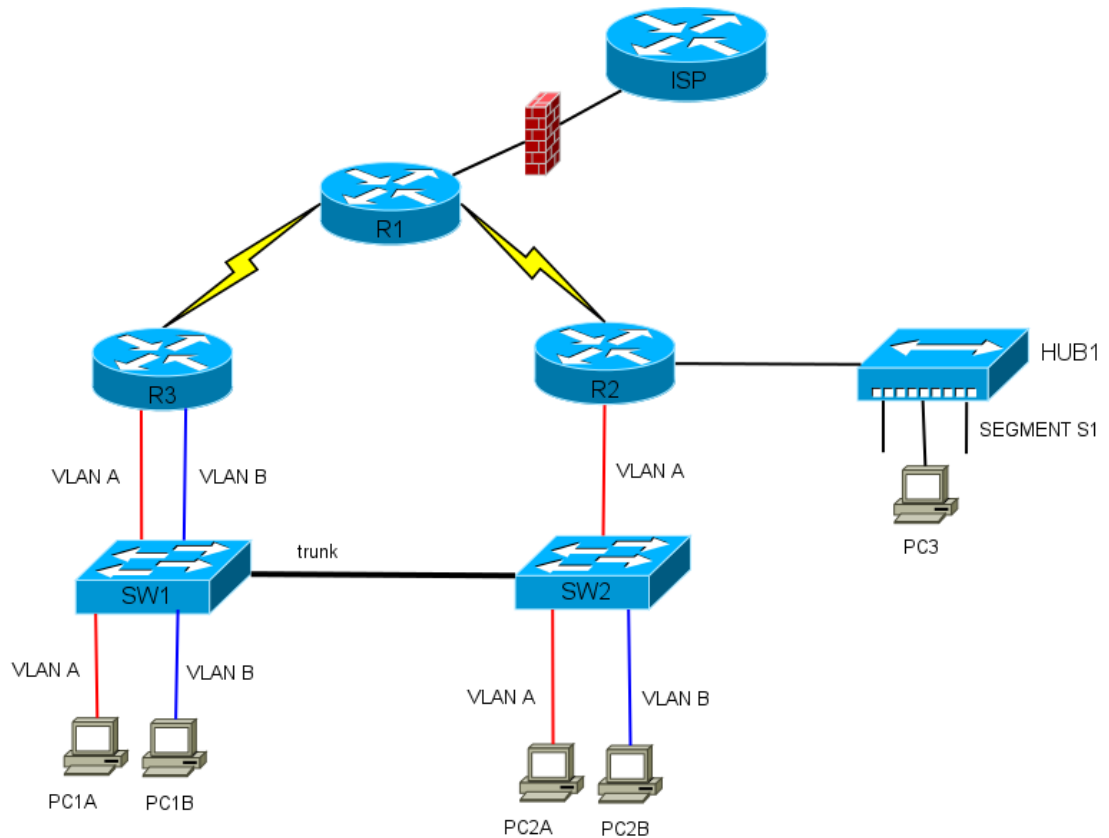# Information

- Domain   : pooza
- Topology ID   : D
- VLAN Numbers   : VLAN A = 113, VLAN B = 136
- Stations on Segments   : VLAN A = 41, VLAN B = 15, Segment S1 = 362
- Public Prefix   : 85.121.128.0/17
- Private Prefix   : 192.168.189.64/26
- IPV6 Prefix   : 2002:94e8:96ba:e000::/52
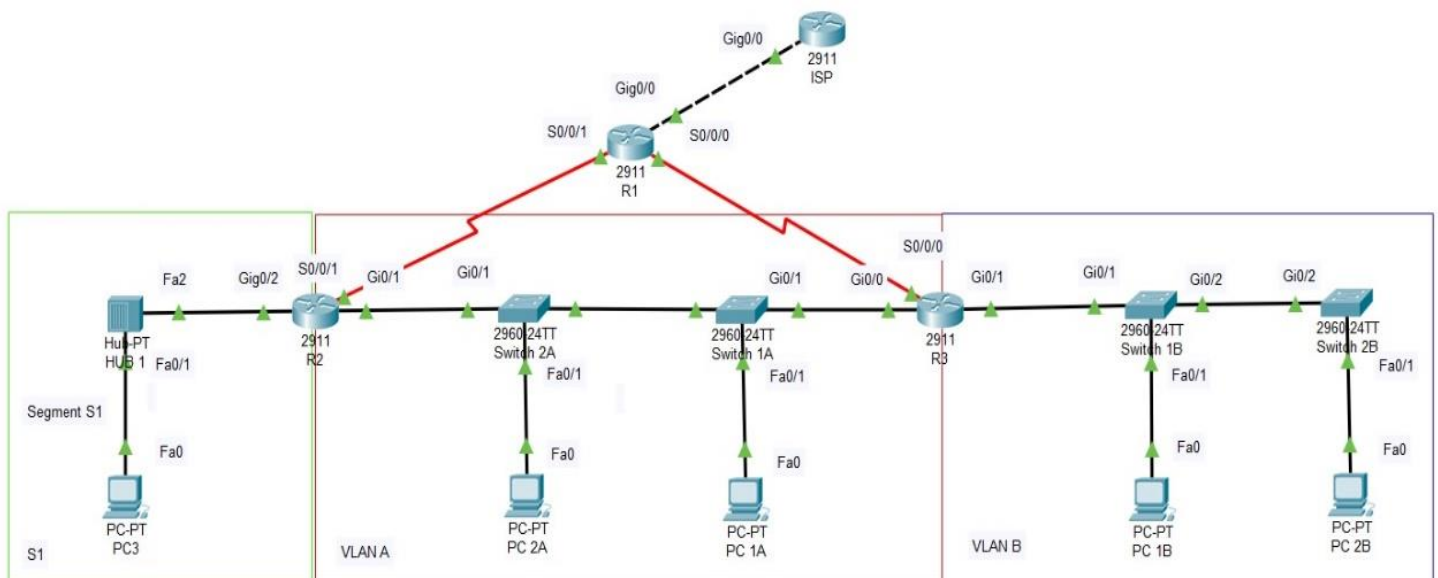- NAT Pool   : 26
- Routing Protocol   : OSPF

Schema of Topology D

Network Topology

Network Topology Divided By VLANs

Gig0/0

2911
ISP

Gig0/0

S0/0/1   S0/0/0

2911
R1

S0/0/0

Fa2   Gig0/2   S0/0/1   Gi0/1   Gi0/1   Gi0/1   Gi0/0   Gi0/1   Gi0/1   Gi0/2   Gi0/2

Hub-PT   2911   2960-24TT   2960-24TT   2911   2960-24TT   2960-24TT
HUB 1   Fa0/1   R2   Switch 2A   Switch 1A   R3   Switch 1B   Switch 2B
                                            Fa0/1   Fa0/1   Fa0/1   Fa0/1

Segment S1

            Fa0   Fa0   Fa0   Fa0   Fa0

PC-PT   PC-PT   PC-PT   PC-PT   PC-PT
PC3   PC 2A   PC 1A   PC 1B   PC 2B

S1   VLAN A   VLAN B

IPv4 Addressing Scheme

Segment	Network Address	Network Mask	Range of IP Addresses	Broadcast Address	Default Gateway
VLAN B (Private)	192.168.189.64	255.255.255.224	192.168.189.65 192.168.189.94	192.168.189.95	192.168.189.65
S1	85.121.128.0	255.255.255.248	85.121.128.1 85.121.129.254	85.121.129.255	85.121.128.1
VLAN A	85.121.130.0	255.255.255.252	85.121.130.1 85.121.130.62	85.121.130.63	85.121.130.1
NAT	85.121.130.64	255.255.255.252	85.121.130.65 85.121.130.94	85.121.130.95	85.121.130.65
R1-R3	85.121.130.96	255.255.255.252	85.121.130.97 85.121.130.98	85.121.130.99	85.121.130.97
R1-R2	85.121.130.100	255.255.255.252	85.121.130.101 85.121.130.102	85.121.130.103	85.121.130.101
R1-ISP	10.0.0.0	255.255.255.252	10.0.0.1 10.0.0.2	10.0.0.3	10.0.0.1

IPv6 Addressing Scheme

SEGMENT	Network address/mask	Range of IP address
Segment S1	2002:94e8:96ba:e000::0/64	2002:94e8:96ba:e000::0::1- 2002:94e8:96ba:e000::0::FFFF
VLAN A	2002:94e8:96ba:e000::1/64	2002:94e8:96ba:e000::1::1- 2002:94e8:96ba:e000::1::FFFF
VLAN B	2002:94e8:96ba:e000::2/64	2002:94e8:96ba:e000::2::1- 2002:94e8:96ba:e000::2::FFFF
R1-R3	2002:94e8:96ba:e000::3/64	2002:94e8:96ba:e000::3::1- 2002:94e8:96ba:e000::3::FFFF
R1-R2	2002:94e8:96ba:e000::4/64	2002:94e8:96ba:e000::4::1- 2002:94e8:96ba:e000::4::FFFF
R1-ISP	2002:94e8:96ba:e000::5/64	2002:94e8:96ba:e000::5::1- 2002:94e8:96ba:e000::5::FFFF