

COMPUTER NETWORKS

2018/2019 FALL SEMESTER PROJECT

Part 1

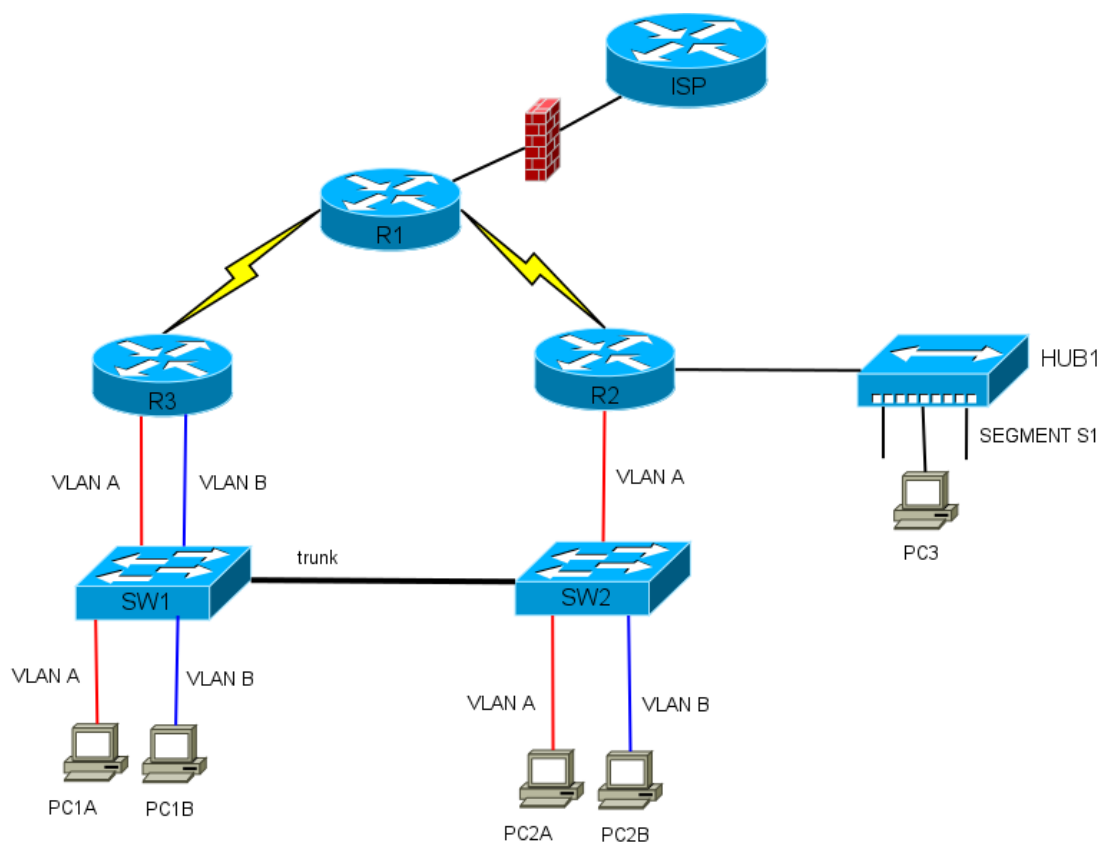
Onur Tekin

Long Van Tam

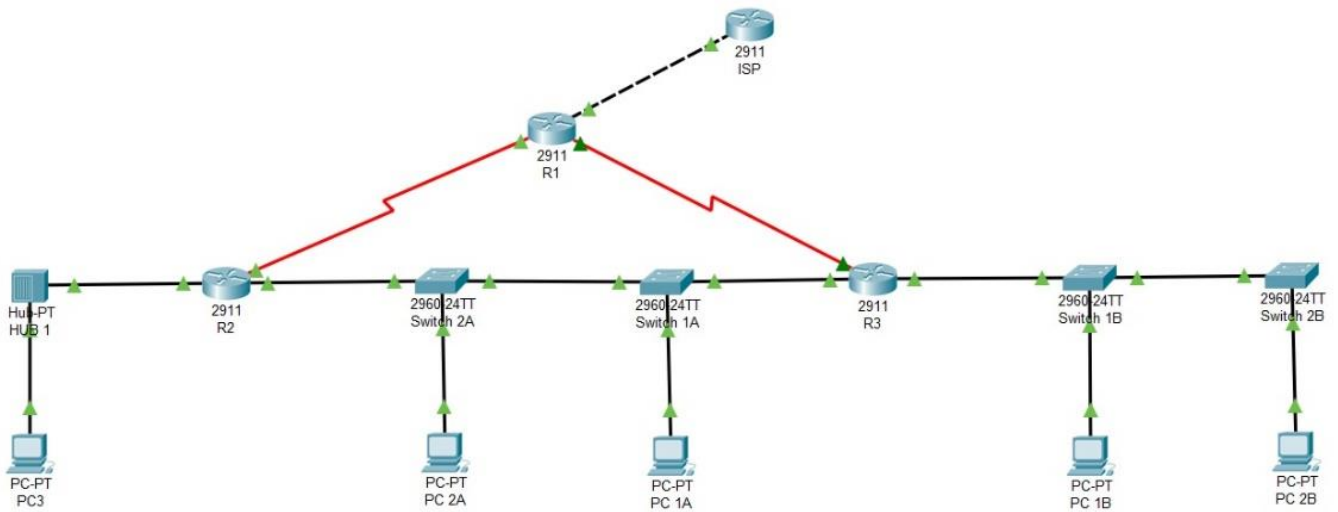
Information

- 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

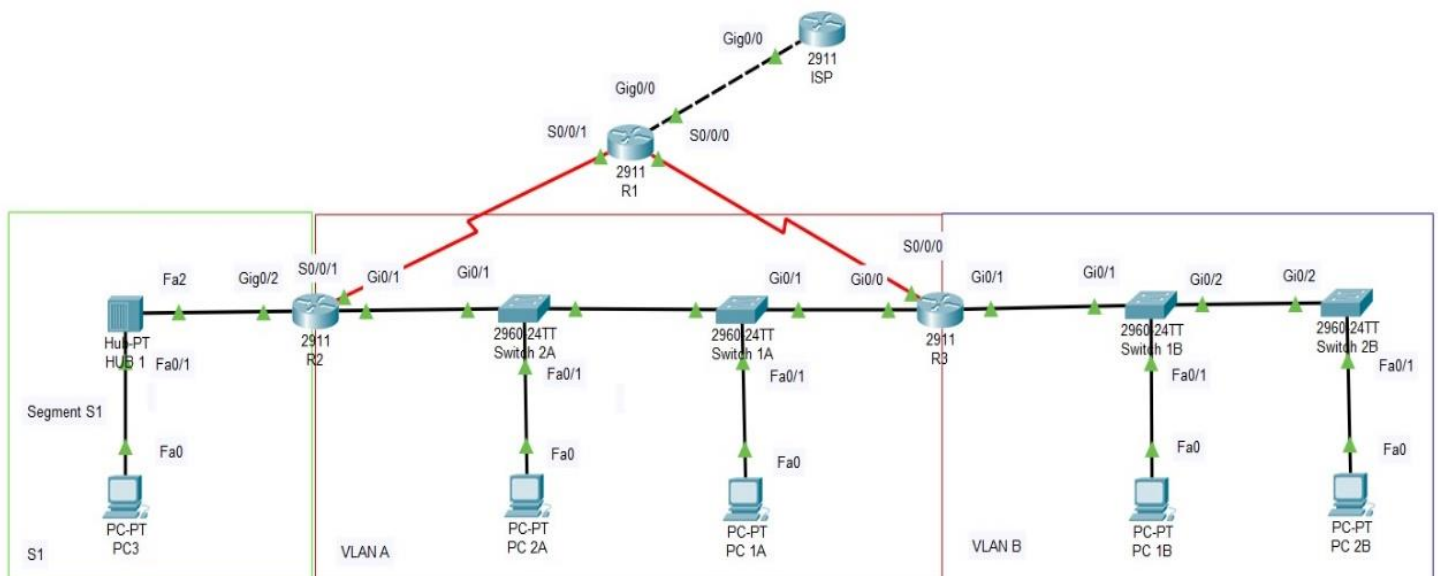
Schema of Topology D



Network Topology



Network Topology Divided By VLANs



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