VSB - TUO COMPUTER NETWORKS

2018/2019 FALL SEMESTER PROJECT

.....

Onur Tekin TEK0005

Long Van Tam LON0015

Information

Domain : poozaTopology 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

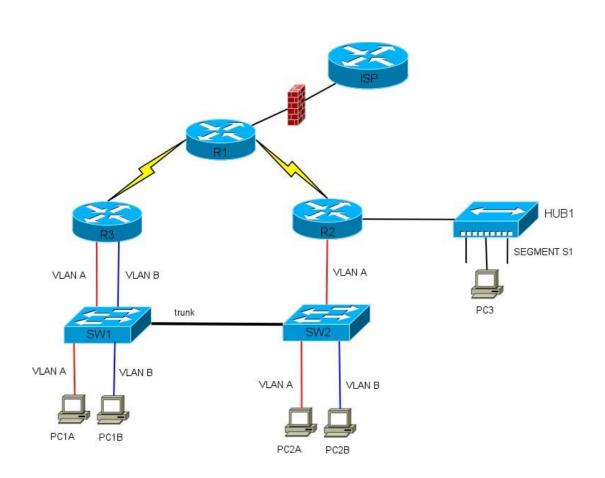
IPV6 Prefix : 2002:94e8:96ba:e000::/52

• Segments with special meanings: NAT: VLAN B, DNS: VLAN A (PC1A), DHCP:

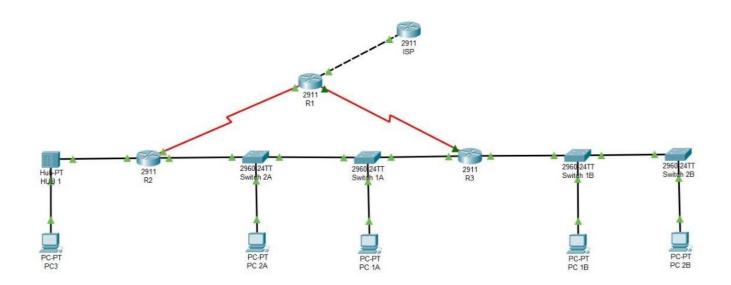
Segment S1, T: VLAN A, N: VLAN A

NAT Pool 26Routing Protocol : OSPF

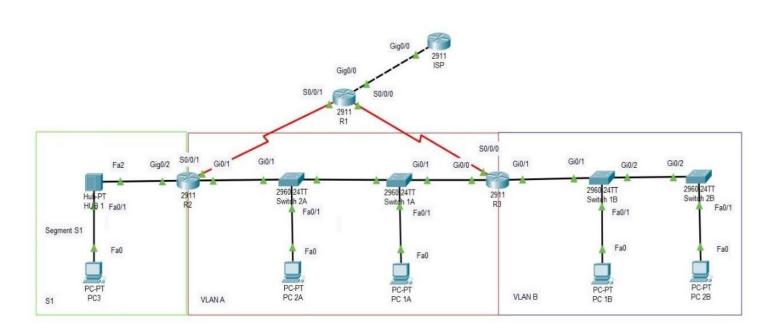
Schema of Topology D



Network Topology



Network Topology Divided By VLANs



IPv4 Addressing Scheme

Segment	Network Address/mask	Range of IP Addresses	Broadcast Address	Default Gateway
VLAN B (Private)	192.168.189.64/27	192.168.189.65 192.168.189.94	192.168.189.95	192.168.189.65
S 1	85.121.128.0/23	85.121.128.1 85.121.129.254	85.121.129.255	85.121.128.1
VLAN A	85.121.130.0/26	85.121.130.1 85.121.130.62	85.121.130.63	85.121.130.1
NAT	85.121.130.64/27	85.121.130.65 85.121.130.94	85.121.130.95	85.121.130.65
R1-R3	85.121.130.96/30	85.121.130.97 85.121.130.98	85.121.130.99	85.121.130.97
R1-R2	85.121.130.100/30	85.121.130.101 85.121.130.102	85.121.130.103	85.121.130.101
R1-ISP	10.0.0.0/30	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::/64	2002:94e8:96ba:e000::1-
Segment 31	2002.94e6.96ba.e000/64	2002:94e8:96ba:e000::FFFF
VLAN A	2002:94e8:96ba:e001::/64	2002:94e8:96ba:e001::1-
VLAN A	2002.94e6.96ba.e001/64	2002:94e8:96ba:e001::FFFF
VLAN B	2002:94e8:96ba:e002::/64	2002:94e8:96ba:e002::1-
VLAN D	2002.94e6.96ba.e002/64	2002:94e8:96ba:e002::FFFF
R1-R3	2002:94e8:96ba:e003::/64	2002:94e8:96ba:e003::1-
KI-KS	2002.94e6.96ba.e003/64	2002:94e8:96ba:e003::FFFF
R1-R2	2002:94e8:96ba:e004::/64	2002:94e8:96ba:e004::1-
NI-NZ	2002.9466.900a.6004/04	2002:94e8:96ba:e004::FFFF
R1-ISP	2002:94e8:96ba:e005::/64	2002:94e8:96ba:e005::1-
KI-ISP	2002.94e6.96bd:e005::/64	2002:94e8:96ba:e005::FFFF