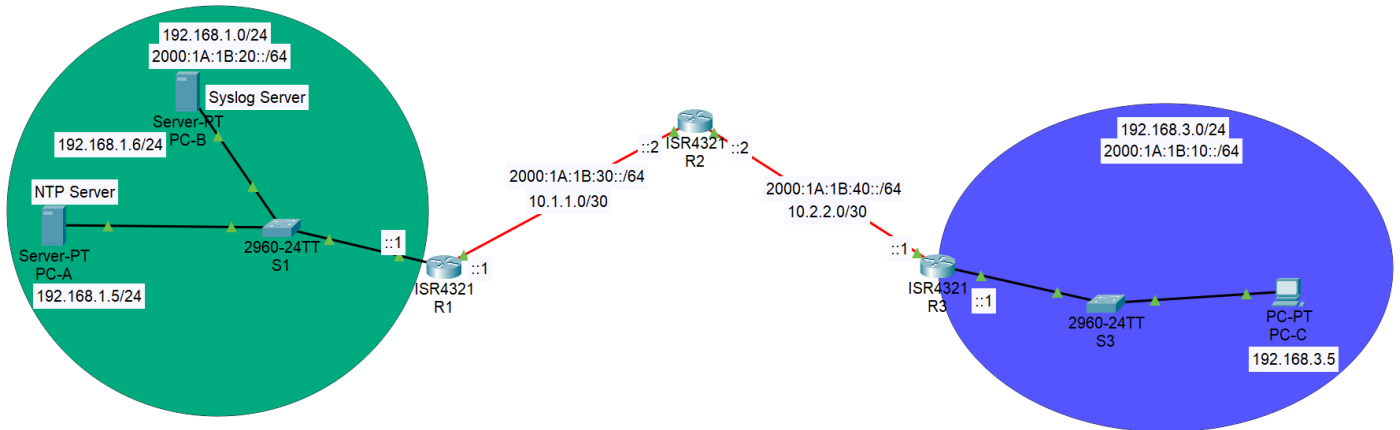


# Syslog-NTP-IPv6-OSPF-Networking

## Network Topology



## Addressing Table

Device	Interface	IP Address	Subnet/Prefix	Default Gateway
R1	S0/1/0	10.1.1.1	255.255.255.252	N/A
		2000:1A:1B:30::1	/64	N/A
	G0/0/1	192.168.1.1	255.255.255.0	N/A
		2000:1A:1B:20::1	/64	N/A
R2	S0/1/0	10.1.1.2	255.255.255.252	N/A
		2000:1A:1B:30::2	/64	N/A
	S0/1/1	10.2.2.2	255.255.255.252	N/A
		2000:1A:1B:40::2	/64	N/A
R3	S0/1/0	10.2.2.1	255.255.255.252	N/A
		2000:1A:1B:40::1	/64	N/A
	G0/0/1	192.168.3.1	255.255.255.0	N/A
		2000:1A:1B:10::1	/64	N/A
PC-A	NIC (Static)	192.168.1.5	255.255.255.0	192.168.1.1
	NIC (SLAAC)	2000:1A:1B:20:240:BFF:FEA7:A935	/64	2000:1A:1B:20::1/64
PC-B	NIC(Static)	192.168.1.6	255.255.255.0	192.168.1.1
	NIC (SLAAC)	2000:1A:1B:20:20A:F3FF:FEC5:A6C	/64	2000:1A:1B:20::1/64
PC-C	NIC (Static)	192.168.3.5	255.255.255.0	192.168.3.1
	NIC (SLAAC)	2000:1A:1B:10:201:C9FF:FEA3:E527	/64	2000:1A:1B:10::1/64

## Objectives

- **Basic Configuration**
  - Change Hostname.
  - Create Password Encrypted for Privileged EXEC Mode.
  - Activate IPv6.
  - Use “2001:db8:1::/48” to meet network addressing requirements.
  - Configure interface IPv4 & IPv6 addressing.
  - Disable DNS lookup for unrecognized commands.
  - Banner Message.

- Configure Domain Name, Username and Password for SSH.
  - Encrypt all passwords.
  - Configure SLAAC for end-devices.
- **Configure Dynamic Routing Protocol (OSPFv2).**
- **Configure Dynamic Routing Protocol (OSPFv3).**
- **Configure OSPF MD5 authentication.**
- **Configure NTP.**
- **Configure routers to log messages to the syslog server.**
- **Configure R3 to support SSH connections.**

*The routers have been pre-configured with the following:*

*User: admin*

*Any password: 123*