

Assignment-1 Report

| | |
|---------|----------------------------|
| Name | Shivang Jhalani |
| Section | I |
| SRN | PES1UG23CS548 |
| Project | Exam center network design |

Overview

Built a simulation of an examination center environment in cisco packet tracer.
Has >50 nodes as per assignment requirement

Features

1. DHCP server
2. Web server
3. IoT management
4. Dynamic routing
5. 3 Networks (Left side rooms, management room and right side rooms)
6. Modularized rooms
7. Clean network layout

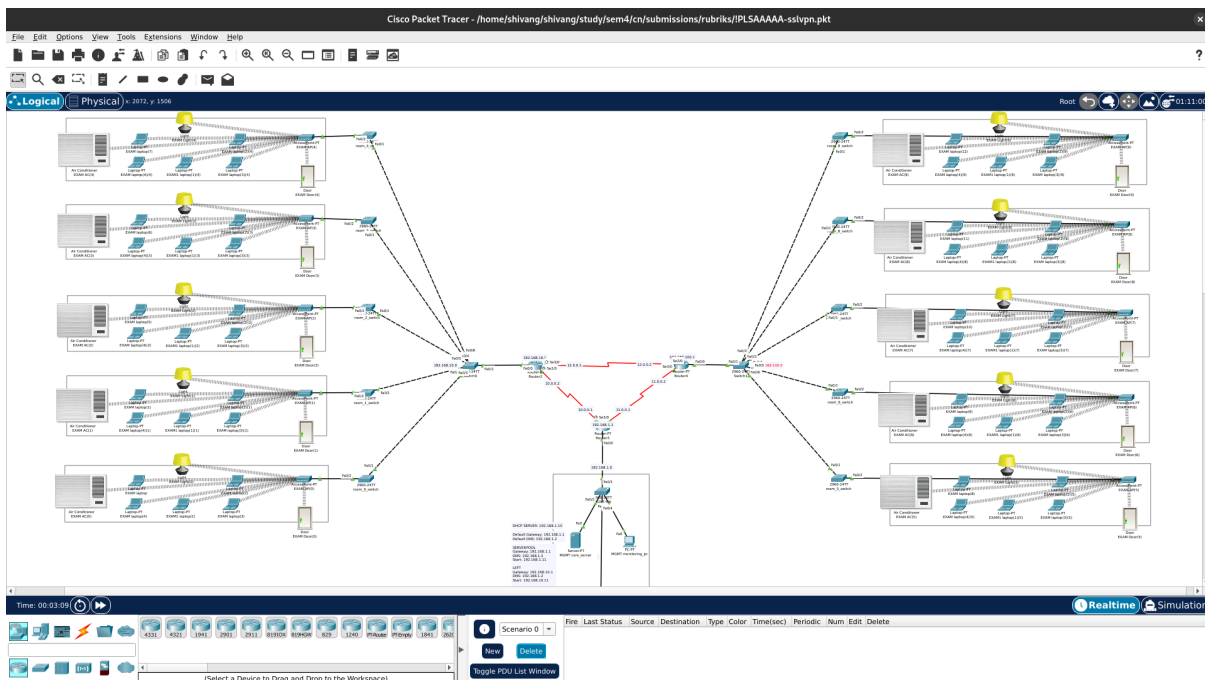
Network Structure

1. Left side: 192.168.10.0
2. Management: 192.168.1.0
3. Right side: 192.168.100.0

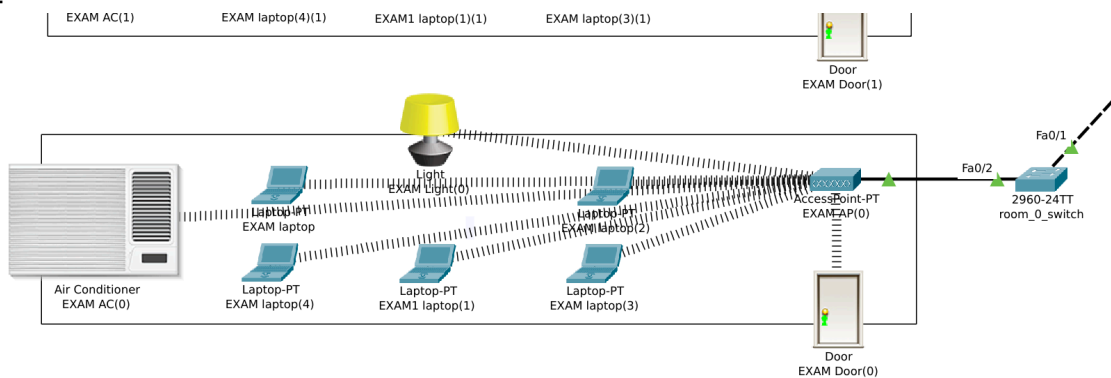
| Pool Name | Default Gateway | DNS Server | Start IP Address | Subnet Mask | Max User | TFTP Server | WLC Address |
|------------|-----------------|-------------|------------------|---------------|----------|-------------|-------------|
| right | 192.168.100.1 | 192.168.1.2 | 192.168.100.11 | 255.255.255.0 | 206 | 0.0.0.0 | 0.0.0.0 |
| left | 192.168.10.1 | 192.168.1.2 | 192.168.10.11 | 255.255.255.0 | 206 | 0.0.0.0 | 0.0.0.0 |
| serverPool | 192.168.1.1 | 192.168.1.2 | 192.168.1.11 | 255.255.255.0 | 206 | 0.0.0.0 | 0.0.0.0 |

Screenshots

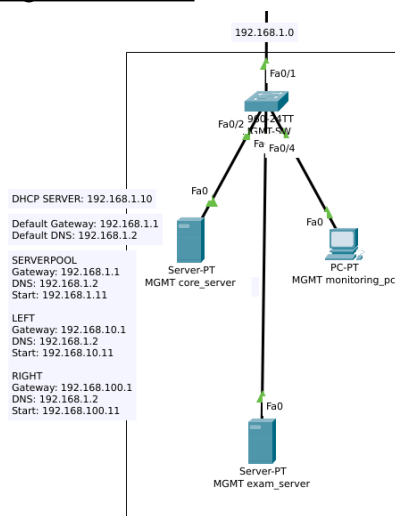
Full view



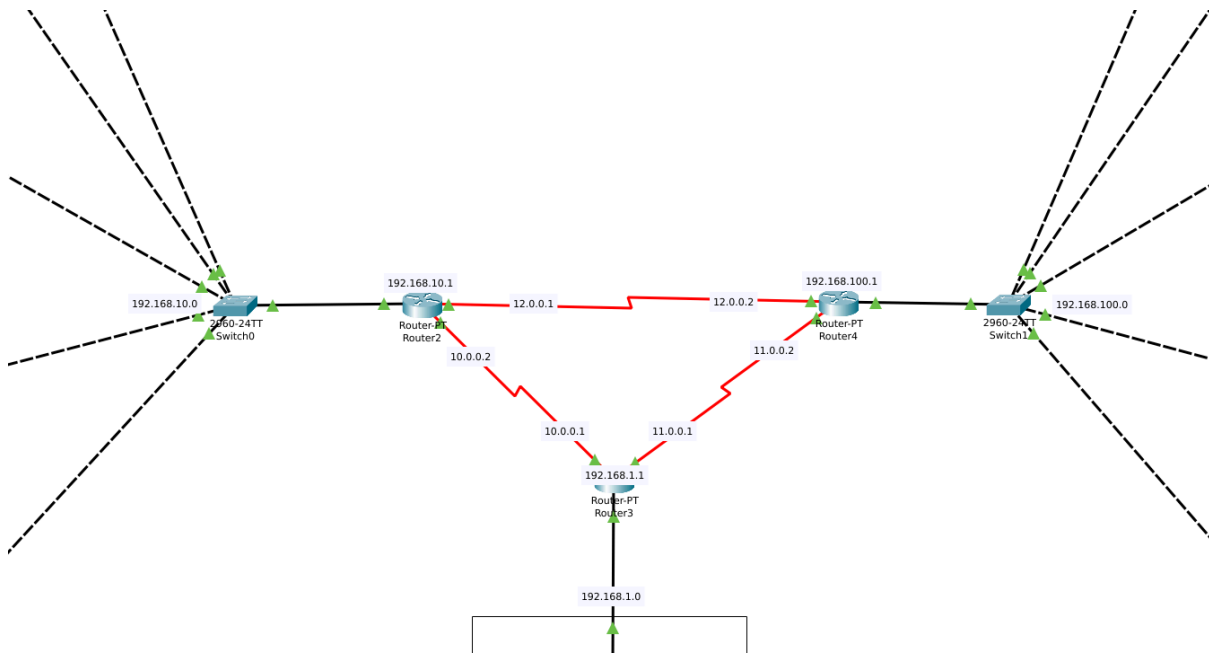
Rooms



Management room



Networks



MGMT core_server

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DHCP

Interface: FastEthernet0
Service: ☒ On ☐ Off

Pool Name: right
Default Gateway: 192.168.100.1
DNS Server: 192.168.1.2

Start IP Address: 192.168.100.11
Subnet Mask: 255.255.255.0
Maximum Number of Users: 206

TFTP Server: 0.0.0.0
WLC Address: 0.0.0.0

Add Save Remove

| Pool Name | Default Gateway | DNS Server | Start IP Address | Subnet Mask | Max User | TFTP Server | WLC Address |
|------------|-----------------|-------------|------------------|---------------|----------|-------------|-------------|
| right | 192.168.100.1 | 192.168.1.2 | 192.168.100.11 | 255.255.255.0 | 206 | 0.0.0.0 | 0.0.0.0 |
| left | 192.168.10.1 | 192.168.1.2 | 192.168.10.11 | 255.255.255.0 | 206 | 0.0.0.0 | 0.0.0.0 |
| serverPool | 192.168.1.1 | 192.168.1.2 | 192.168.1.11 | 255.255.255.0 | 206 | 0.0.0.0 | 0.0.0.0 |

☐ Top