**Documentation Of Networks Project**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Vlan ID and name | Hosts Required | CIDR | First Usable | Last usable | Broadcast |
| Vlan 140 | 61 | 172.16.0.0/26 | 172.16.0.1 | 172.16.0.62 | 172.16.0.63 |
| Vlan 120 | 31 | 172.16.0.64/26 | 172.16.0.65 | 172.16.0.126 | 172.16.0.127 |
| Vlan 150 | 30 | 172.16.0.128/27 | 172.16.0.129 | 172.16.0.158 | 172.16.0.159 |
| Vlan 110 | 25 | 172.16.0.160/27 | 172.16.0.161 | 172.16.0.190 | 172.16.0.191 |
| Vlan 170 | 20 | 172.16.0.192/27 | 172.16.0.193 | 172.16.0.222 | 172.16.0.223 |
| Vlan 30 | 12 | 172.16.0.224/28 | 172.16.0.225 | 172.16.0.238 | 172.16.0.239 |
| Vlan 160 | 12 | 172.16.0.240/28 | 172.16.0.241 | 172.16.0.254 | 172.16.0.255 |
| Vlan 180 | 7 | 172.16.1.0/28 | 172.16.1.1 | 172.16.1.14 | 172.16.1.15 |
| SW-S TO MIU-GW | 7 | 172.16.1.16/28 | 172.16.1.17 | 172.16.1.30 | 172.16.1.31 |
| MAIN-MLS TO MIU-GW | 2 | 172.16.1.32/30 | 172.16.1.33 | 172.16.1.34 | 172.16.1.35 |
| N-MLS TO NIU-GW | 2 | 172.16.1.36/30 | 172.16.1.37 | 172.16.1.38 | 172.16.1.39 |
| S-MLS TO MAIN-GW | 2 | 172.16.1.40/30 | 172.16.1.41 | 172.16.1.42 | 172.16.1.43 |
| R-MLS TO MAIN-GW | 2 | 172.16.1.44/30 | 172.16.1.45 | 172.16.1.46 | 172.16.1.47 |

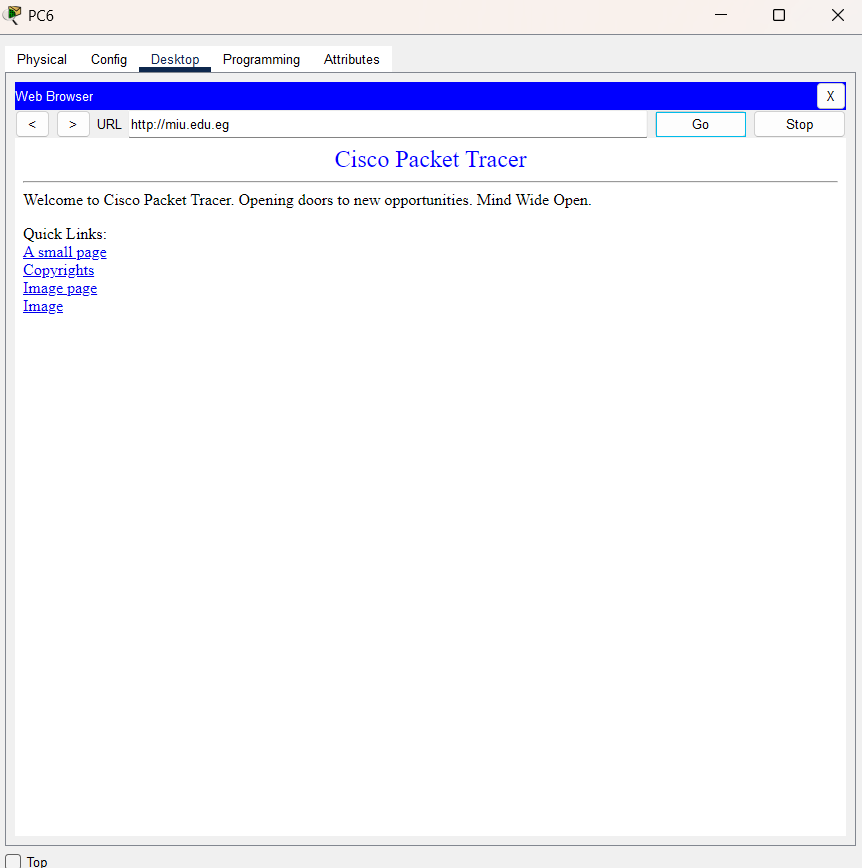
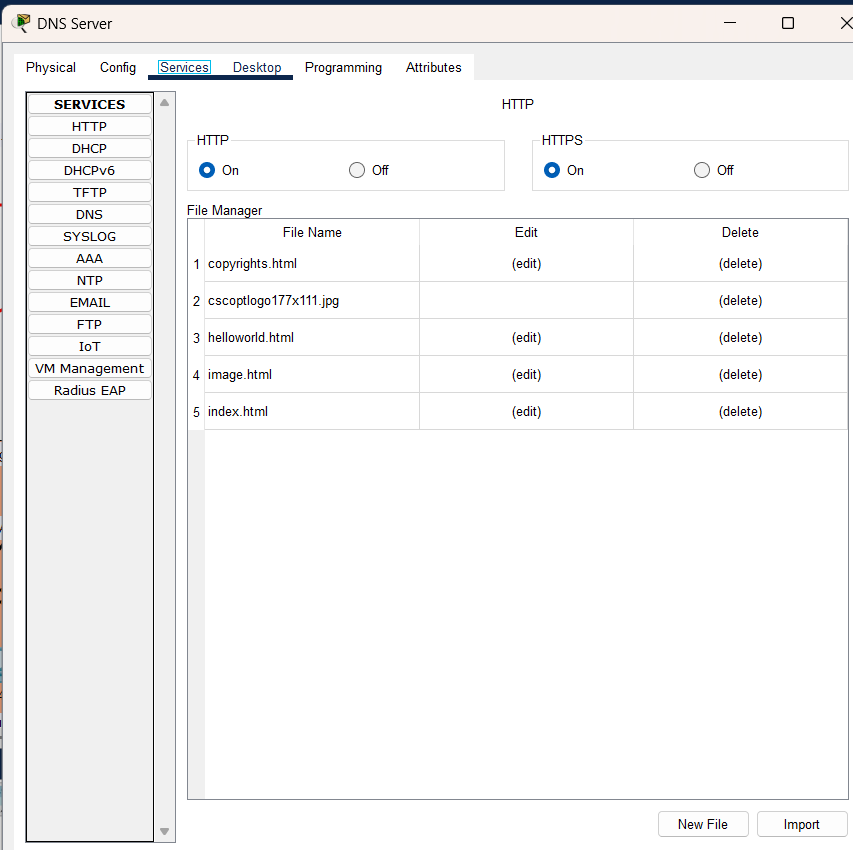
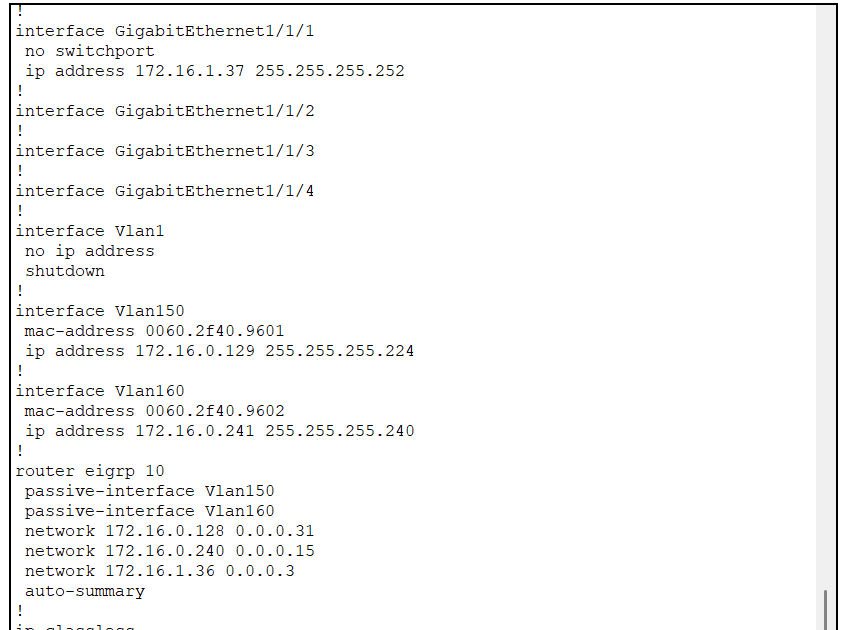
Subnet Table above according to network 172.16.0.0/16

Addressing Table Below:

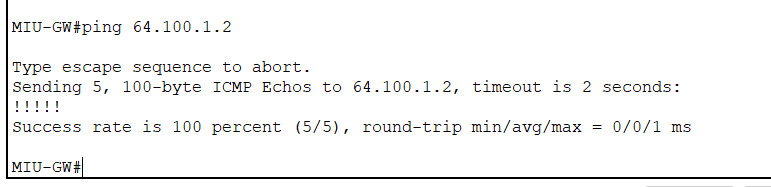
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| --- | --- | --- | --- | --- |
| Device | Interface | Address | Subnet mask | Vlan ID |
| Main-MLS | G1/1/1 | 172.16.1.33 | 255.255.255.252 | N/A |
| MAIN-MLS | VLAN 110 | 172.16.0.161 | 255.255.255.224 | 110 |
| MAIN-MLS | VLAN 120 | 172.16.0.65 | 255.255.255.192 | 120 |
|  |  |  |  |  |
| S-MLS | G1/1/1 | 172.16.1.41 | 255.255.255.252 | N/A |
| S-MLS | VLAN 30 | 172.16.0.225 | 255.255.255.240 | 30 |
| S-MLS | VLAN 140 | 172.16.0.1 | 255.255.255.192 | 140 |
|  |  |  |  |  |
| N-MLS | G1/1/1 | 172.16.1.37 | 255.255.255.252 | N/A |
| N-MLS | VLAN 150 | 172.16.0.129 | 255.255.255.224 | 150 |
| N-MLS | VLAN 160 | 172.16.0.241 | 255.255.255.240 | 160 |
|  |  |  |  |  |
| R-MLS | G1/0/5 | 172.16.1.45 | 255.255.255.252 | N/A |
| R-MLS | VLAN 170 | 172.16.0.193 | 255.255.255.224 | 170 |
| R-MLS | VLAN 180 | 172.16.1.1 | 255.255.255.240 | 180 |
|  |  |  |  |  |
| MIU-MIU-GW | G0/0 | 209.165.200.226 | 255.255.255.240 | N/A |
| MIU-MIU-GW | G0/1 | 172.16.1.46 | 255.255.255.252 | N/A |
| MIU-MIU-GW | G0/0/0 | 172.16.1.17 | 255.255.255.240 | N/A |
| MIU-MIU-GW | G0/1/0 | 172.16.1.34 | 255.255.255.252 | N/A |
| MIU-MIU-GW | G0/2/0 | 172.16.1.42 | 255.255.255.252 | N/A |
| MIU-MIU-GW | G0/3/0 | 172.16.1.38 | 255.255.255.252 | N/A |
|  |  |  |  |  |
| ISP | G0/0 | 209.165.200.225 | 255.255.255.240 | N/A |
| ISP | G0/1 | 64.100.1.1 | 255.255.255.224 | N/A |
| ISP | G0/2 | 64.100.2.1 | 255.255.255.224 | N/A |
|  |  |  |  |  |
| Branch-GW | G0/0.2 | 192.168.2.1 | 255.255.255.0 | N/A |
| Branch-GW | G0/0.3 | 192.168.3.1 | 255.255.255.0 | N/A |
| Branch-GW | G0/1 | 64.100.1.2 | 255.255.255.224 | N/A |
|  |  |  |  |  |
| WIRELESS | G0/1 | 64.100.2.2 | 255.255.255.224 | N/A |
| WIRELESS | ROUTER IP | 192.168.10.1 | 255.255.255.128 | N/A |

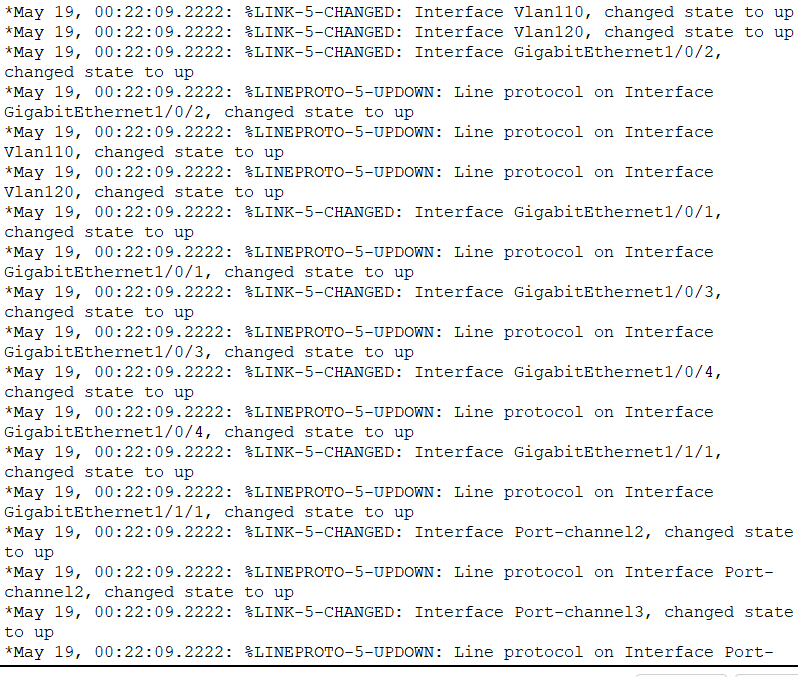
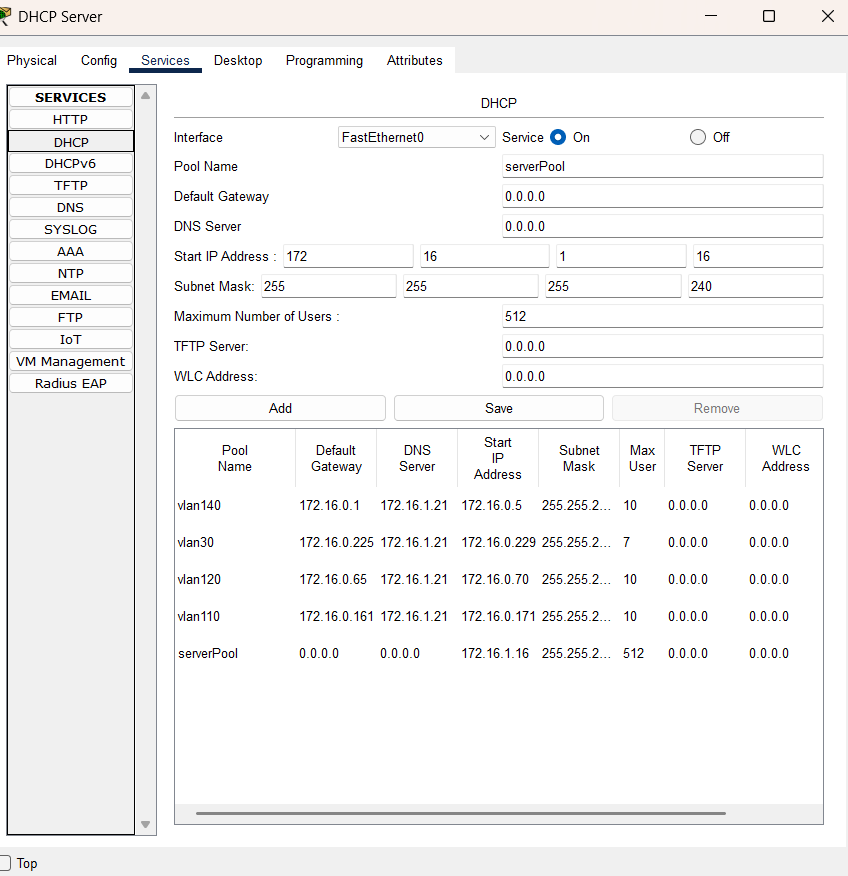
Host Table:

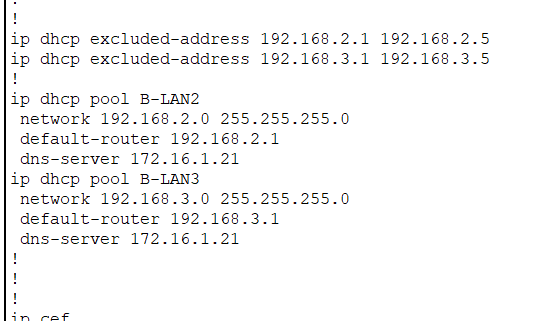
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| --- | --- | --- | --- | --- |
| PC-NUMBER | VLAN ID | IP ADDRESS | SUBNET MASK | DEFAULT GATEWAY |
| PC-1 | 110 | 172.16.0.190 | 255.255.255.224 | 172.16.0.161 |
| PC-2 | 110 | 172.16.0.189 | 255.255.255.224 | 172.16.0.161 |
| PC-3 | 120 | 172.16.0.126 | 255.255.255.192 | 172.16.0.65 |
| PC-4 | 30 | 172.16.0.238 | 255.255.255.240 | 172.16.0.225 |
| PC-5 | 30 | 172.16.0.237 | 255.255.255.240 | 172.16.0.225 |
| PC-6 | 140 | 172.16.0.62 | 255.255.255.192 | 172.16.0.1 |
| PC-7 | 150 | 172.16.0.158 | 255.255.255.224 | 172.16.0.129 |
| PC-8 | 160 | 172.16.0.254 | 255.255.255.240 | 172.16.0.241 |
| PC-9 | 170 | 172.16.0.222 | 255.255.255.224 | 172.16.0.193 |
| PC-10 | 180 | 172.16.1.14 | 255.255.255.240 | 172.16.1.1 |
| PC-11 | 2 | FROM DHCP SERVER | FROM DHCP SERVER | FROM DHCP SERVER |
| PC-12 | 3 | FROM DHCP SERVER | FROM DHCP SERVER | FROM DHCP SERVER |
| LAPTOP | N/A | 192.168.10.10 | 255.255.255.128 | 192.168.10.1 |
| TABLET | N/A | 192.168.10.30 | 255.255.255.128 | 192.168.10.1 |
| SMARTPHONE | N/A | 192.168.10.20 | 255.255.255.128 | 192.168.10.1 |
| DHCP SERVER |  | 172.16.1.18 | 255.255.255.240 | 172.16.1.17 |
| EMAIL SERVER |  | 172.16.1.19 | 255.255.255.240 | 172.16.1.17 |
| WEB SERVER |  | 172.16.1.20 | 255.255.255.240 | 172.16.1.17 |
| DNS SERVER |  | 172.16.1.21 | 255.255.255.240 | 172.16.1.17 |
| NTP AND SYSLOG SERVER |  | 172.16.1.22 | 255.255.255.240 | 172.16.1.17 |

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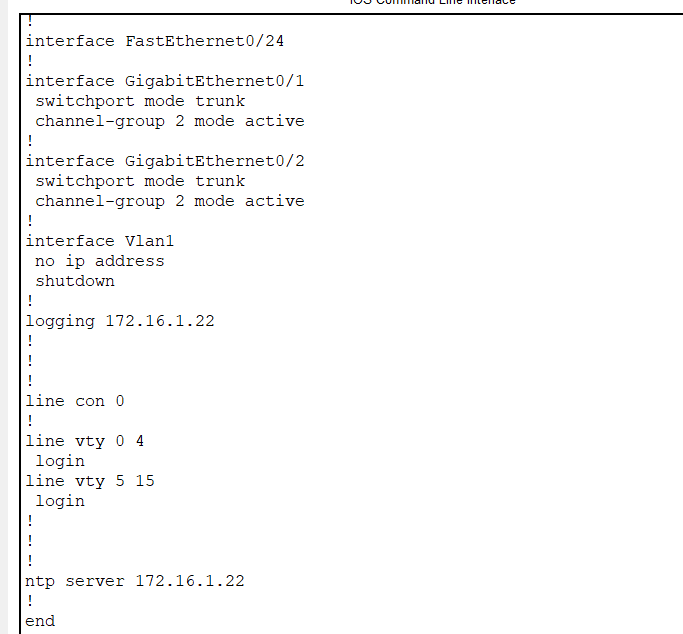
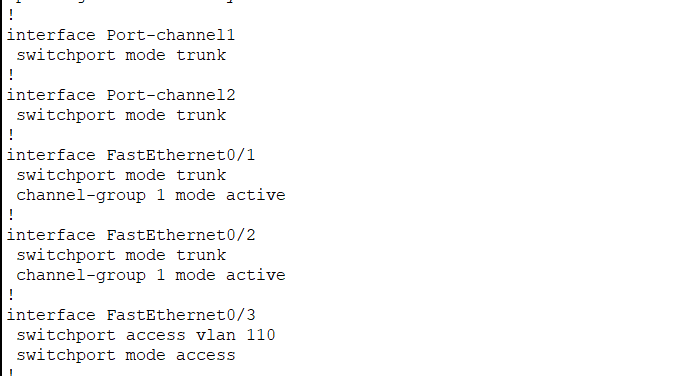
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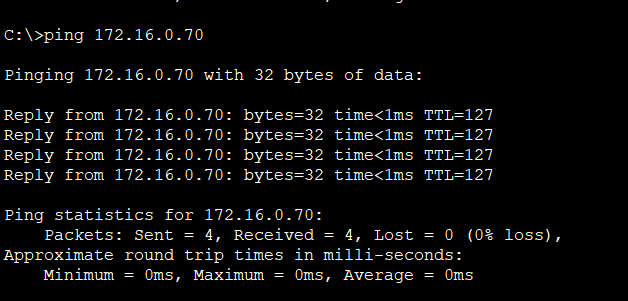
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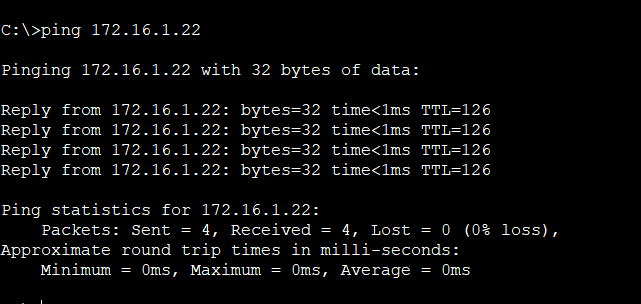
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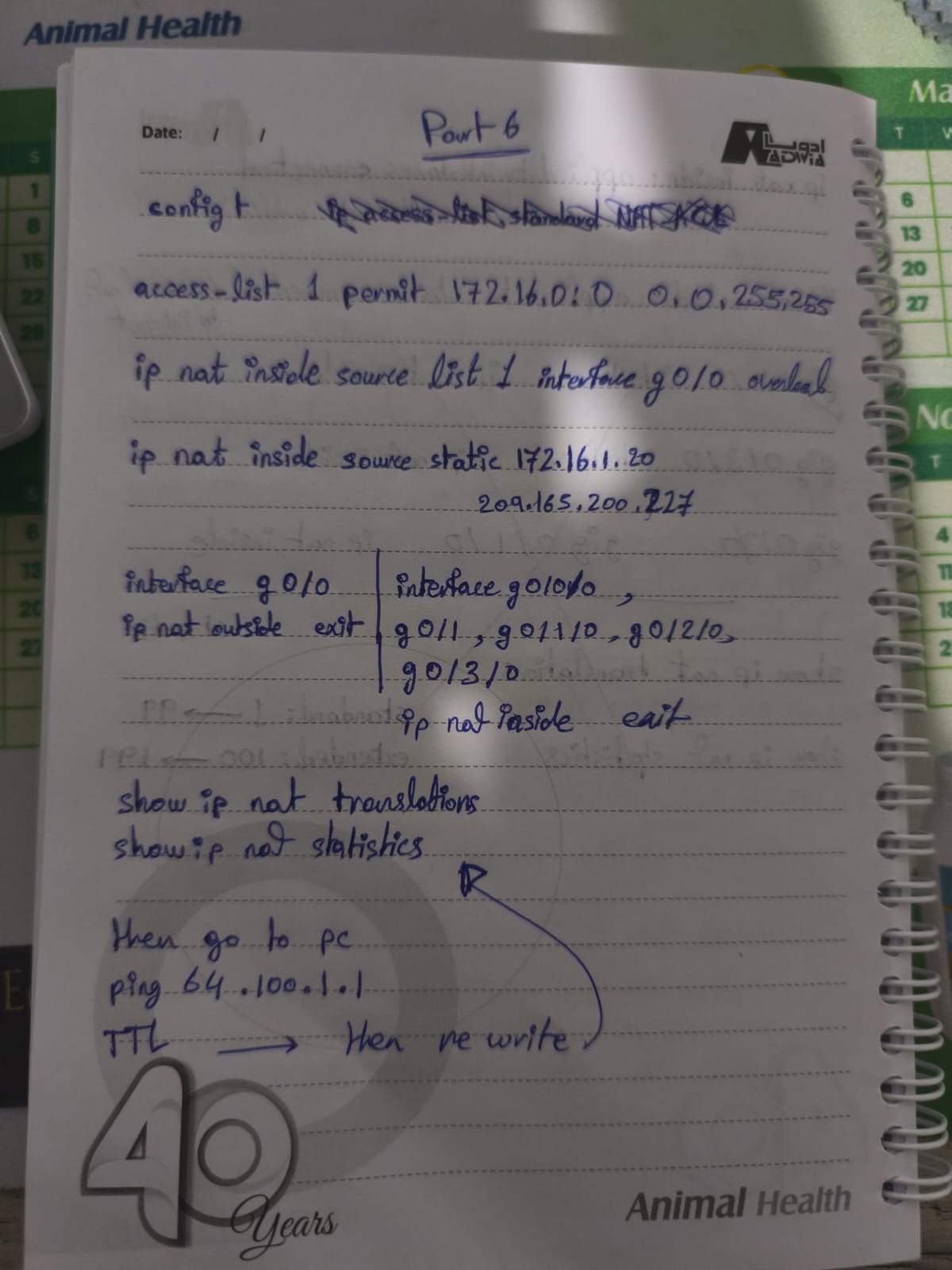
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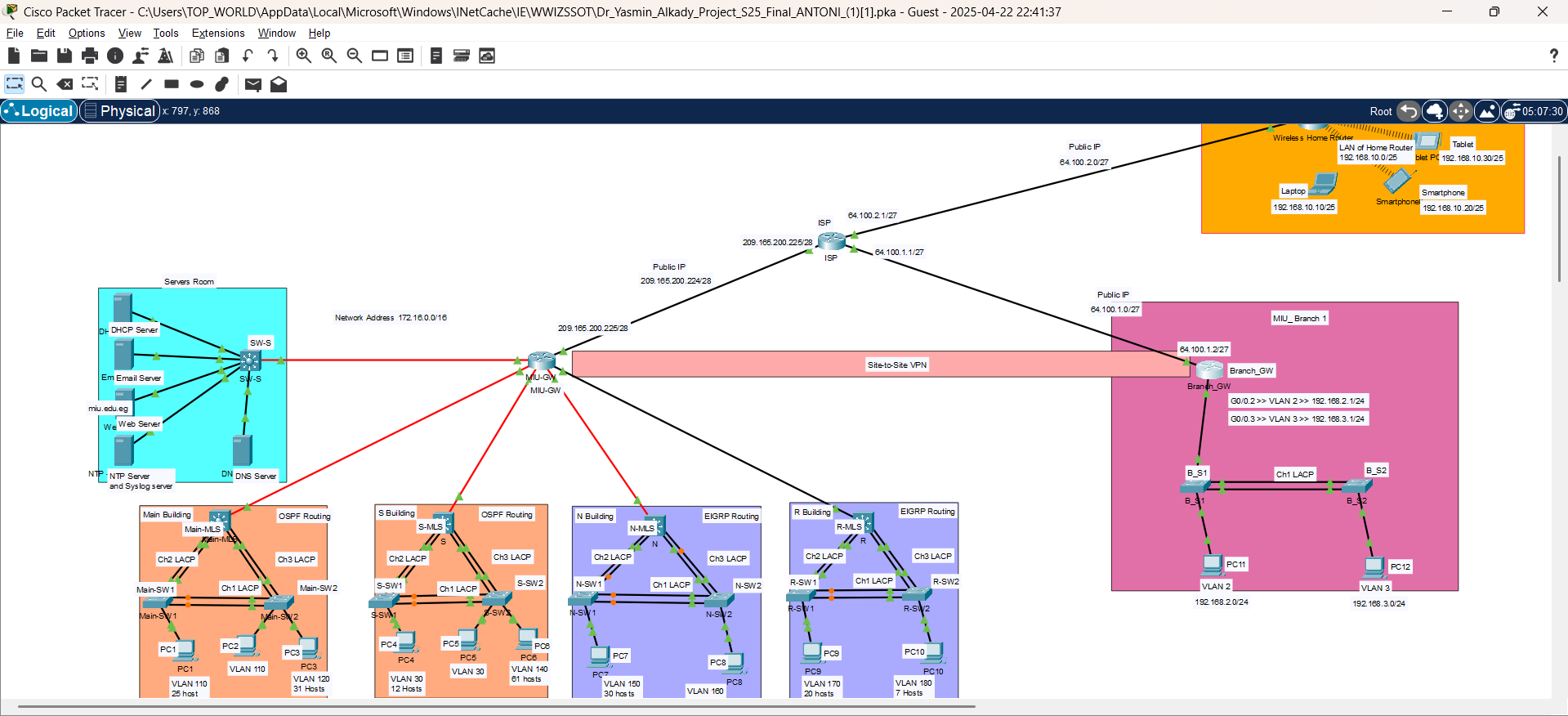
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