7D Student Led Capstone with Checklist

Student Name and Date

Proposal

- At least one page

Schedule

- How many school days do you expect it will take you to complete this project
- Maximum 7 consecutive school days (Friday, M-F, Monday)
- Breakdown of what you plan to do each day (best guess)

Detailed Plan

- Give lots of details, two or more pages, examples can be provided by the teacher

Provide in your Proposal and Detailed Plan:

- Network Equipment and End Device List
- SSH Passwords
- Services being used or offered
- Intermediary Device Passwords
- SSID
- Paraphrase
- Domain Name
- DHCP Scope
- EMAIL Names and Passwords
- VLAN IDs and Names
- IP Scheme
- Labeled Network Topology

Post Proposal

- Essential Questions (these will be provided by the teacher)
- Explanation(s) added to your Detailed Plan as needed to explain your final design
- Reflections (How, Who, What, Where and When)
    - What went well, what went wrong, how did you troubleshoot, what would you do differently
- Note changes from the original proposal to the finished network design
    - Were you able to maintain the proposed schedule?
    - Did you make any changes to your original topology?
    - Did you have to modify your address scheme?
- Completed/Revised IP Scheme
- Detailed Labeled Final Topology

Note

- You may look at Competency 7A, 7B and 7C for examples of well documented network design.
- You may pick more than the minimum, but you must pick the number stated from the checklist.
    - **3000** Maximum Points (100%) - **2200** (72%) points minimum needed to pass.

Addressing (Pick 2)
- [ ] IPv4
  - [ ] FLSM (100)
  - [ ] VLSM (200)
- [ ] IPv6
  - [ ] Subnetting (100)
- [ ] Dual Stack (50)
- [ ] 6to4 (100)

Static Routing (Pick 1)
- [ ] Standard Static Route (25)
- [ ] Default Static Route (25)
- [ ] Floating Static Route (25)
- [ ] Summary Route (supernetting) (100)

Dynamic Routing (Pick 2)

Vector-Distance
- [ ] Ripv2/RIPng Routing (50)

Link-State
- [ ] OSPF Routing Single Area (100)
- [ ] OSPF Routing Multi-area (200)

Hybrid
- [ ] EIGRP Routing (100)

Switching (Pick 4)
- [ ] Layer 2 Switch (25)
- [ ] Layer 3 Switch (100)
- [ ] SVI and Default Gateway (75)
- [ ] DTP (10)
- [ ] VTP (50)
- [ ] VLAN/Trunking (100)
- [ ] SPAN (75)
- [ ] Telnet (20)
- [ ] MOTD (10)

Telecom (Pick 2)
- [ ] Copper Ethernet UTP (5)
- [ ] Copper Ethernet Coaxial (25)
- [ ] Fiber (20)
- [ ] Serial (25)

Wireless (Pick 1)
- [ ] Wireless Router (100)
- [ ] Access Point (50)

WAN (optional)
- [ ] Frame Relay (300)

Redundancy and Performance (Pick 2)
- [ ] Etherchannel - Manual (50)
- [ ] Etherchannel - LACP (50)
- [ ] Etherchannel - PAgP (50)

Security (Pick 3)
- [ ] Password (50)
  - [ ] Console
  - [ ] VTY (User Exec)
  - [ ] Privilege Exec
- [ ] Standard ACL (100)
- [ ] Extended ACL (150)
- [ ] Radius (75)
- [ ] VPN (150)
- [ ] GRE (100)
- [ ] NAT/PAT (50)

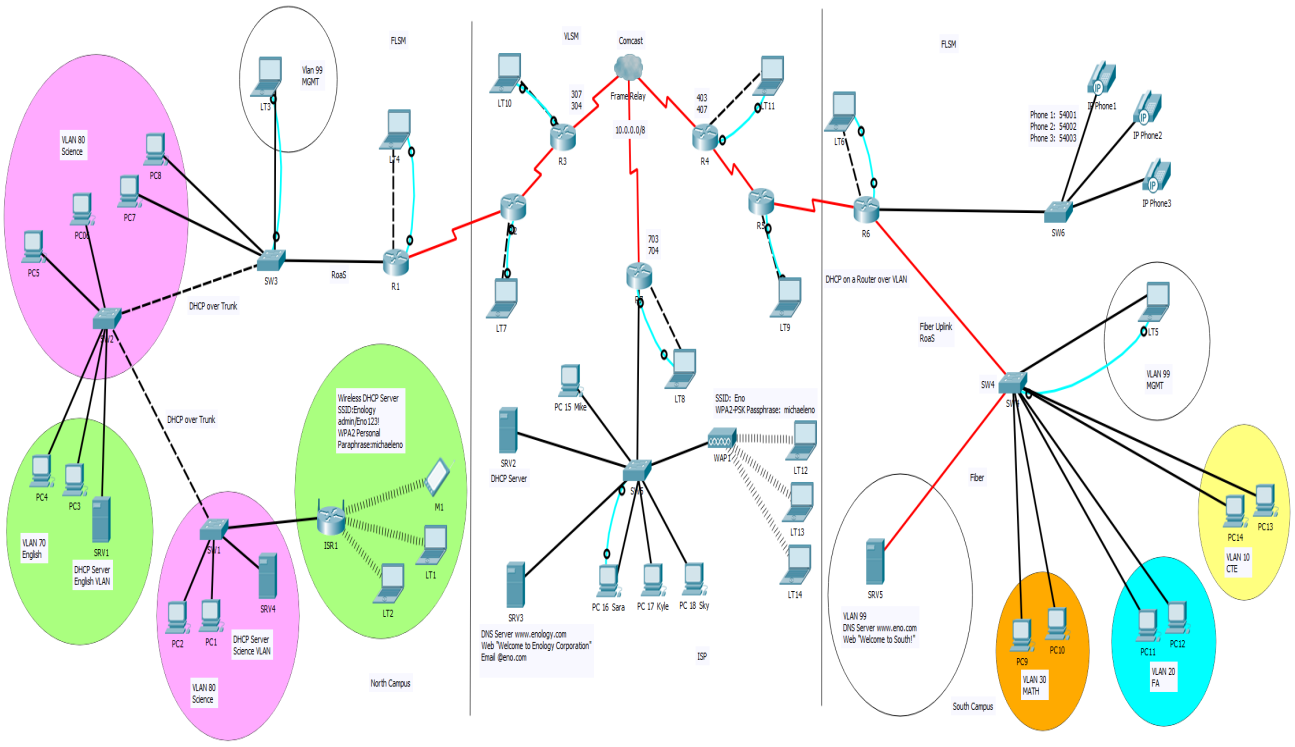
Services (Pick 4)
- [ ] FT/TFTP (20)
- [ ] DNS (25)
- [ ] HTTP (20)
- [ ] DHCP (50)
- [ ] VoIP (100)
- [ ] Email (20)
- [ ] NTP (20)

Routers (Pick 2)
- [ ] SSH (75)
- [ ] Inter-VLAN Routing (Router on a Stick) (100)
- [ ] Redistribution (125)
- [ ] DHCP Helper (100)

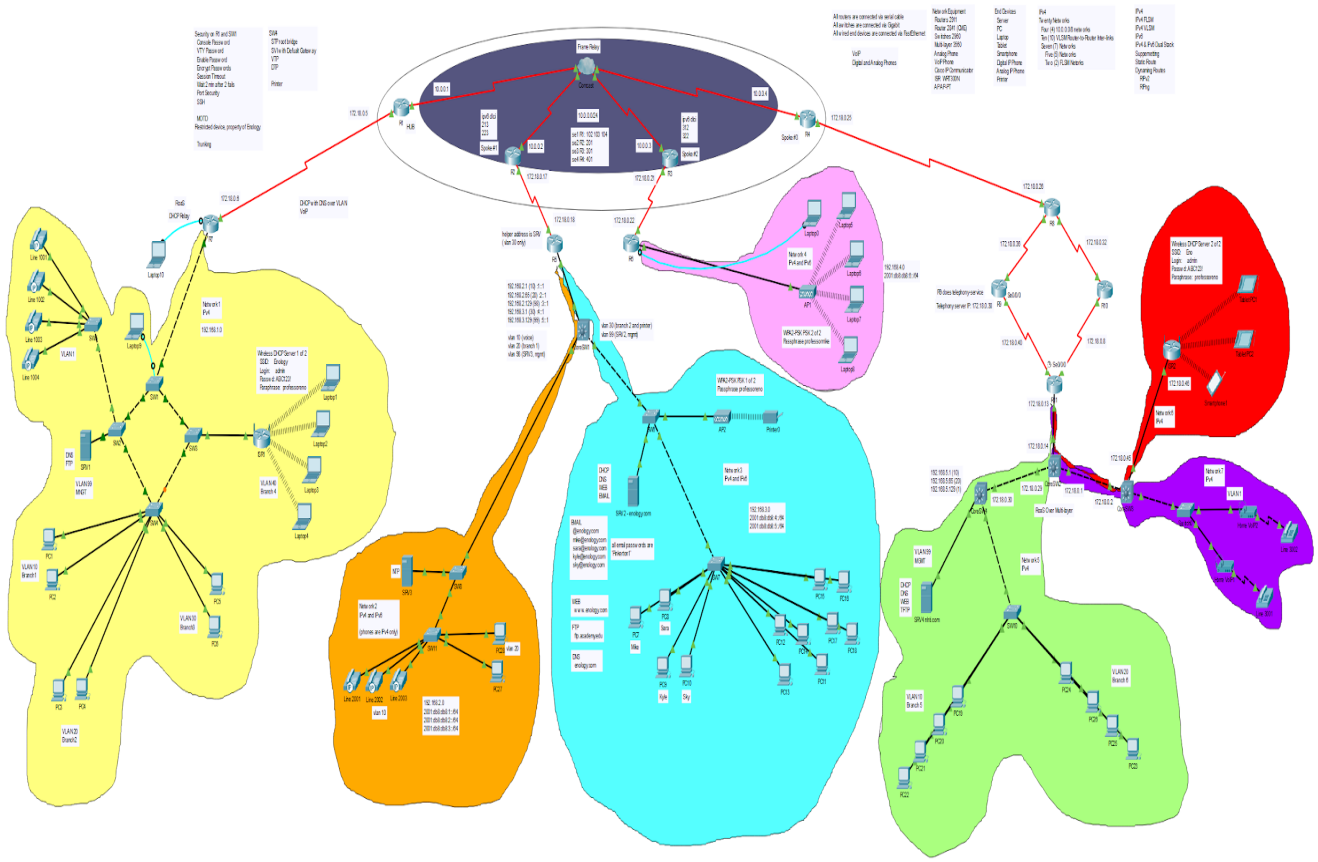
End Devices (Pick 4)
- [ ] PC (5)
- [ ] Laptop (5)
- [ ] Mobile Device (10)
- [ ] Server (25)
- [ ] Printer (15)
- [ ] IoT Device (50)

Documentation (mandatory)
- [ ] Proposal, Schedule and Detailed Plan
- [ ] Labeled Network Topology and Passwords
- [ ] Addressing Scheme and Equipment List
- [ ] Explanation and Reflections
- [ ] Essential Questions

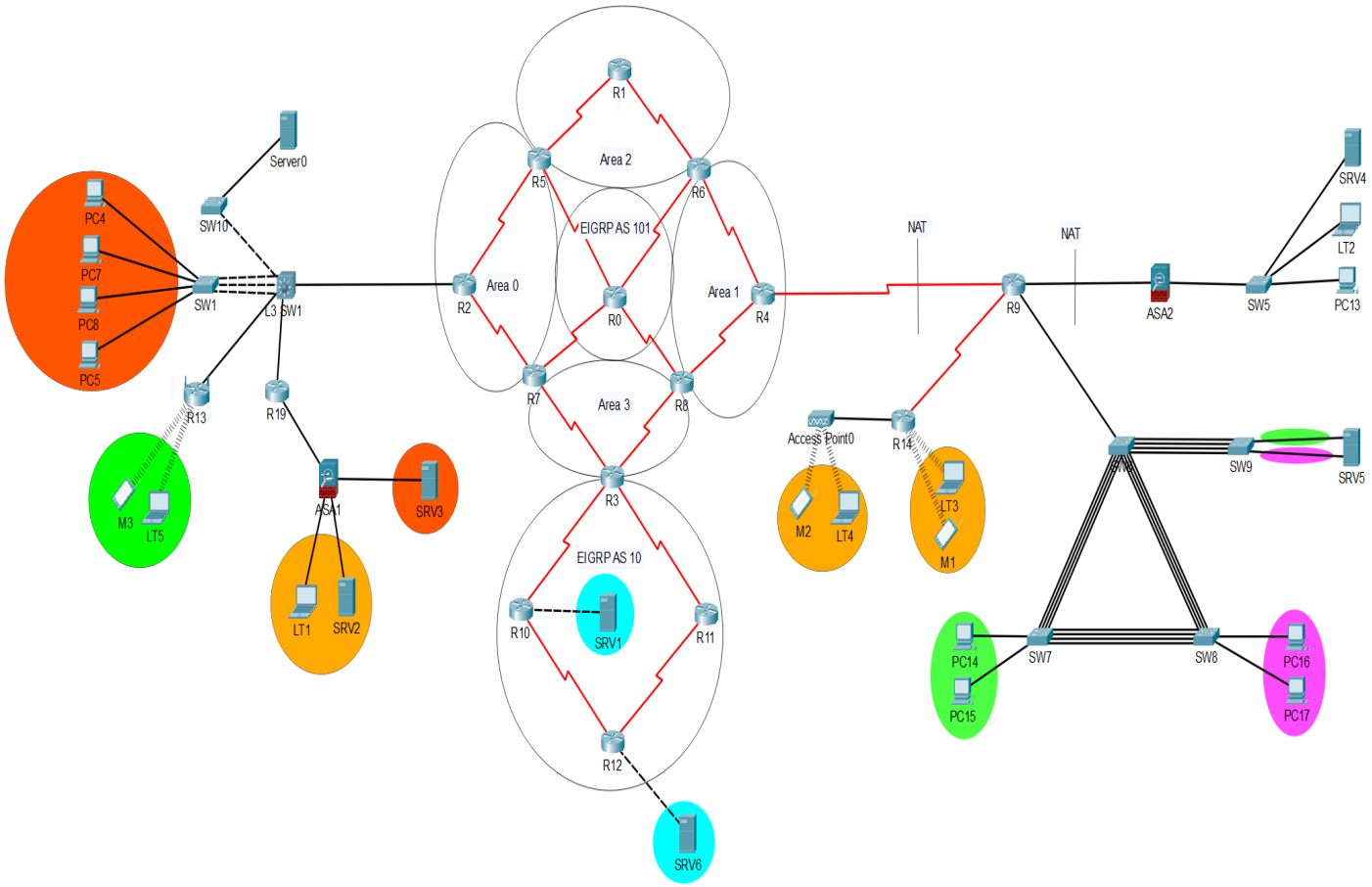
7A IPv4 with Vector-Distance Routing Topology



7B IPv4 and IPv6 with Layer 3 Switches and Vector-Distance Routing Topology



7C IPv4 with Security, Redundancy and Link-State Routing Topology



7D

What will your design look like?