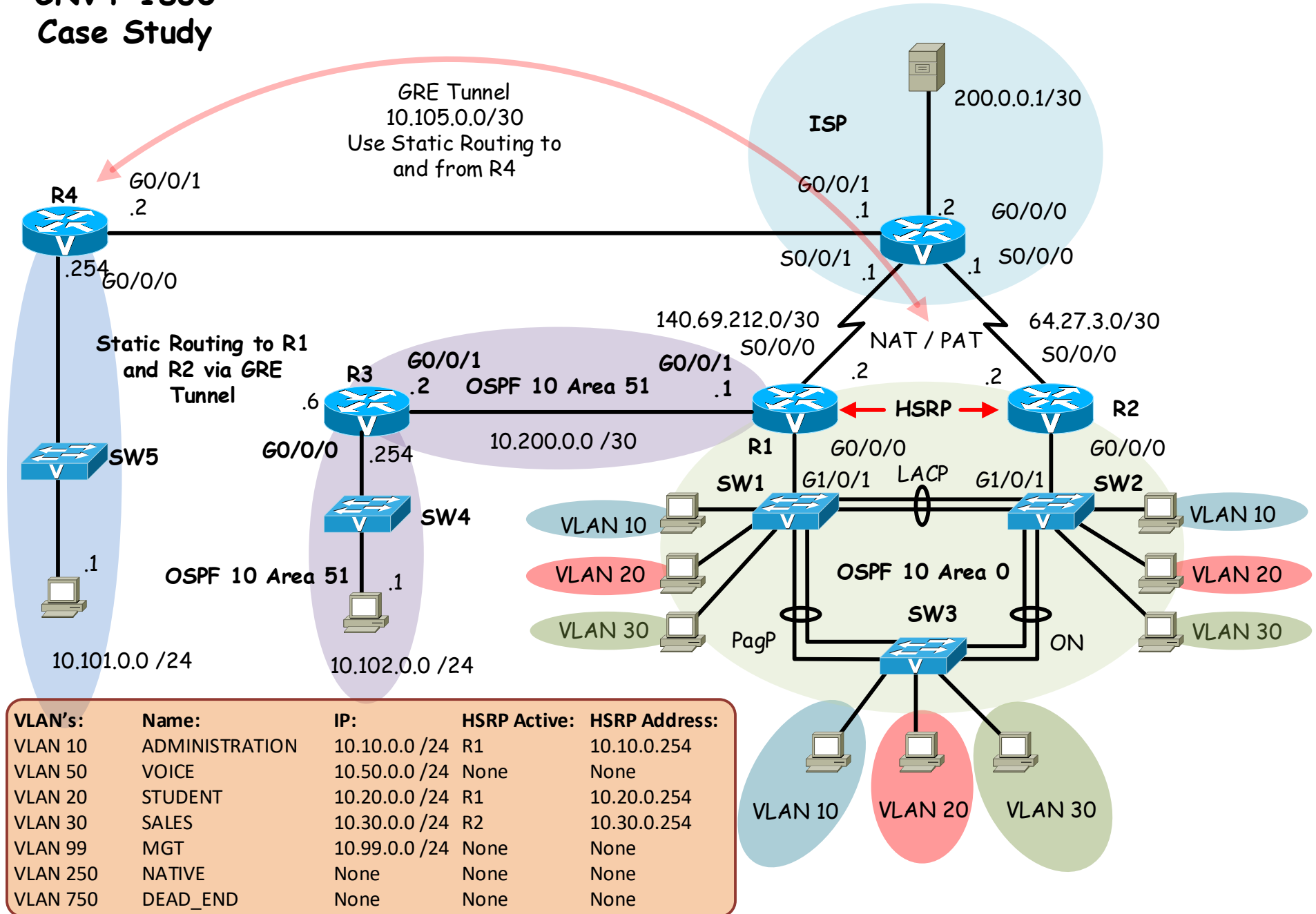


CNVT 1830

Case Study



Notes:

R1 OSPF:

Designated Router for:

VLAN's 10, 20

Backup Designated Router for:

VLAN's 30, 99

R2 OSPF:

Designated Router for:

VLAN's 30, 99

Backup Designated Router for:

VLAN's 10, 20

Ether-Channel SW1 - SW2:

SW1 Ports G1/0/2-3

SW2 Ports G1/0/2-3

LACP

Ether-Channel SW1 - SW3:

SW1 Ports G1/0/4-5

SW3 Ports G1/0/2-3

PagP

Ether-Channel SW2 - SW3:

SW2 Ports G1/0/4-5

SW3 Ports G1/0/4-5

ON

1. All traffic from the 10.101.0.0/24 network will return to the central network by the GRE VPN tunnel of 10.105.0.0/30 network address space via static routing.
2. All traffic going to the 10.101.0.0/24 network will use static routing over the GRE VPN and be redistributed within the OSPF routers,
3. All traffic leaving the network will exit via the HSRP virtual interfaces.
4. R1 will be the Active Router for HSRP as well as the OSPF Designated Router for VLAN's 10 and 20, R2 will be the HSRP Backup.
5. R2 will be the Active Router for HSRP as well as the OSPF Designated Router for VLAN's 30 and 99, R1 will be the HSRP Backup.
6. Ether-Channel will be configured according to the chart above.
7. All Access ports should be set to protect Spanning-Tree and unused ports should be disabled and placed into VLAN 750.
8. All other security measures applicable, should be applied to all Access ports.
9. Access Control Lists should be placed on all routers to protect against outside attacks as well as limit remote access to SSH and/or CDP

10. All traffic should use NAT/PAT to external addresses assigned by your company from the IANA IPv4 address space of 175.44.2.0/29
11. Use the 175.44.2.1 address as the static NAT address for the 10.102.0.1 Web server including PAT.
12. Reserve three (3) addresses for future expansion.
13. All access addresses except for the Web server should be via DHCP with a domain of jmowry.com, a lease of three (3) days, and DNS of 8.8.8.8 and 8.8.4.4.
14. Each group will present their solution via PowerPoint, as well as a printed copy of all configurations and any additional relevant material. The printout must list the group member names, what each member was responsible for, and be typed using Word or a PDF format in a 12pt font. **The printout is not a copy of the presentation slides!**