№1 Имена: HQBR-R conf – hostname (Имя) – com - con; HQBR-SRVCLI (СLI) hostnamectl set-hostname (Имя) – exec bash

ip-адресация: CLI параметры соединения - ipV4 – вручную – вводим ip, маску, шлюз(ISP-CLI), DNS (8.8.8.8)

HQBR-R: Conf – int gi (1/0/12) – ip add (1.1.1.2/30) – ip firewall disable – com – con

BR-SRV: echo (172.16.100.2/28) > /etc/net/ifaces/ens192/ipv4address –

еcho via default (172.16.100.1) > /etc/net/ifaces/ens192/ipv4route –

+днс (HQ-SRV) echo nameserver (192.168.100.2) > /etc/net/ifaces/ens192/resolv.conf

Systemctl restart network ip a

№2 Nat(динам марш): HQBR-R conf – object-group network LOCAL\_NET – ip add-range (192.168.100.1-192.168.100.62172.16.100.1-172.16.100.14) - ex – object-group network PUBLIC\_POOL – ip add (1.1.1.22.2.2.2) – ex – nat source – pool TRANSLATE\_ADDRESS – ip add (1.1.1.22.2.2.2) – ex – ruleset SNAT – to int gi 1/0/1 – rule 1 - match source-add LOCAL\_NET – action source-nat pool TRANSLATE\_ADDRESS – enable – end - conf – ip route 0.0.0.0/0 (1.1.1.12.2.2.1)– ex – com – con (проверка ping 8.8.8.8, 8.8.8.8 source ip (192.168.100.1172.16.100.1), sh ip nat tr

Туннель: HQBR-R conf – tunnel gre 10 – ip firewall disable – local add (1.1.1.22.2.2.2) – remote add (2.2.2.21.1.1.2) – ip add (10.10.10.12/30) – mtu 1426 – ttl 18 – enable – end – com – con (проверка ping 10.10.10.12)

Ospf: HQBR-R conf – router ospf 10 – router-id (1.1.1.12.2.2.2) – area 1.1.1.1 – network (192.168.100.0/26172.16.100.0/28)– enable – ex – enable – ex – tunnel gre 10 - ip ospf instance 10 - ip ospf area 1.1.1.1 – ip ospf – end – com – con (проверка sh ip ospf neig, sh ip route)

эффективно управлять большими и сложными сетями, обеспечивая быструю сходимость OSPF топ выбор для масштабирования

№3 DHCP(респредел): HQ-R conf – ip dhcp-server - ip dhcp-server pool LAN\_HQ - network (192.168.100.0/26) – add-range (192.168.100.1-192.168.100.62) – excluded-add-range (192.168.100.1) - excluded-add-range (192.168.100.10) – add (192.168.100.2) mac-add(находится на HQ\_SRV ip) (00:0c:29:ef:2d:9b) - default-router 192.168.100.1 – dns-server 192.168.100.2 – end – com – con

HQ-SRVCLI: vim /etc/net/ifaces/ens192/options (меняем на dhcp); dhcpcd (проверка ip a)

№4 Учетки: CLI меню – центр управления; HQ-SRV: useradd admin -c “Admin” – passwd admin – P@ssw0rd – usermod -aG wheel admin (проверка cat /etc/passwd); HQ-R: conf – username admin – password P@ssw0rd – end – com – con; BR-SRV: useradd branch-admin -c ‘’Branch-admin” - passwd branch-admin – P@ssw0rd; BR-R: conf – username branch-admin – password P@ssw0rd – privilege 15 – end – com – con; BRHQ-R: conf – username network-admin – password P@ssw0rd – privilege 15 – end – com – con; BR-SRV: useradd network-admin -c ‘’Network-admin” - passwd network-admin – P@ssw0rd

№5 Прпуск iperf3: CLI su – apt-get update – apt-get install iperf3 (проверка от CLI>ISP iperf3 -c 3.3.3.1; от ISP>CLI iperf3 -R -c 3.3.3.1 + 2 скрины iperf3- измеряет пропускную способность сети с CLI(3.3.3.2)>ISP(3.3.3.1) обьем за 10сек \*гб средняя способность \*гб В режиме реверс -R

№6 Backup: HQBR-R conf – archive – type local – count-backup 30 – time-period 1440 – by-commit – end – com – con (проверка dir flash:bachup) 2 скрина

№7 SSH: HQ-R conf – object-group service SRV\_SSH – port 2222 - ex– object-groupe network SERVER\_IP – ip add 192.168.100.2 – ex – nat destination – pool SERVER\_POOL – ip add 192.168.100.2 – ip port 22 – ex – rulest DNAT – ftom int gi 1/0/1 – rule 1 – match destination-add PUBLIC\_POOL – match protocol tcp – match destination-port SRV\_SSH – action destination-nat pool SERVER\_POOL – enabe – end – com – con

№8 Запрет: HQ-R conf – ip access-list extended NO\_ACCESS\_SSH\_CLI – rule 1 – action deny – match protocol tcp – match source-address 3.3.3.2 255.255.255.252 – match destination-port 2222 – enable – ex – rule 2 - action permit – enable – ex – ex – int gi 1/0/1 – server-acl input N0\_ACCESS\_SSH\_CLI – end – com - con