Microsoft Services Final Project

Router Configuration

- Routers have three adapters:
  LAN connected to each office internal network.
  WAN and External are connected to the External Virtual Switch.
- Configure NAT and LAN Routing on the Routers.
- Configure static route on the Routers to forward traffic to the other branch offices.
- Configure your Routers as Caching-Only DNS Servers.

Active Directory Configuration

- Your plan is to install two additional domain controllers in each office.
- First start with Vancouver office (VanDC1).

Active Directory Site and Services

- Rename the Default-First-Site-Name to Vancouver.
- Create a new Active Directory Site other offices (Calgary,Toronto and Montreal).
- Create Subnets for each site.
- Rename the DEFAULTIPSITELINK to Vancouver-Calgary.
- Create other Site Links between offices and add the corresponding sites to each site link.
  Vancouver-Toronto
  Vancouver-Montreal
  Calgary-Toronto
  Calgary-Montreal
  Toronto-Montreal

- Change the Replication Interval of all the site links to 15 minutes.
- Install other domain controllers

DNS

- Create revers lookup zone for each office.
- Check all the NS records on each of the DNS zones.
- Enable Aging/Scavenging for all DNS Zones with the default intervals.
- Enable automatic scavenging of stale records on all Domain Controllers with the default interval.
- Make sure there is no Forwarder added on all Domain Controllers.

DHCP

- Create and configure a DHCP Scope for each office on DC1.

Scope Range: 192.168.x.1 to 192.168.x.254

Excluded Ranges: First 30 ip addresses and last 14 ip addresses

Scope Options: Domain Name, DNS Servers and Default Gateway based on the network diagram for each office.

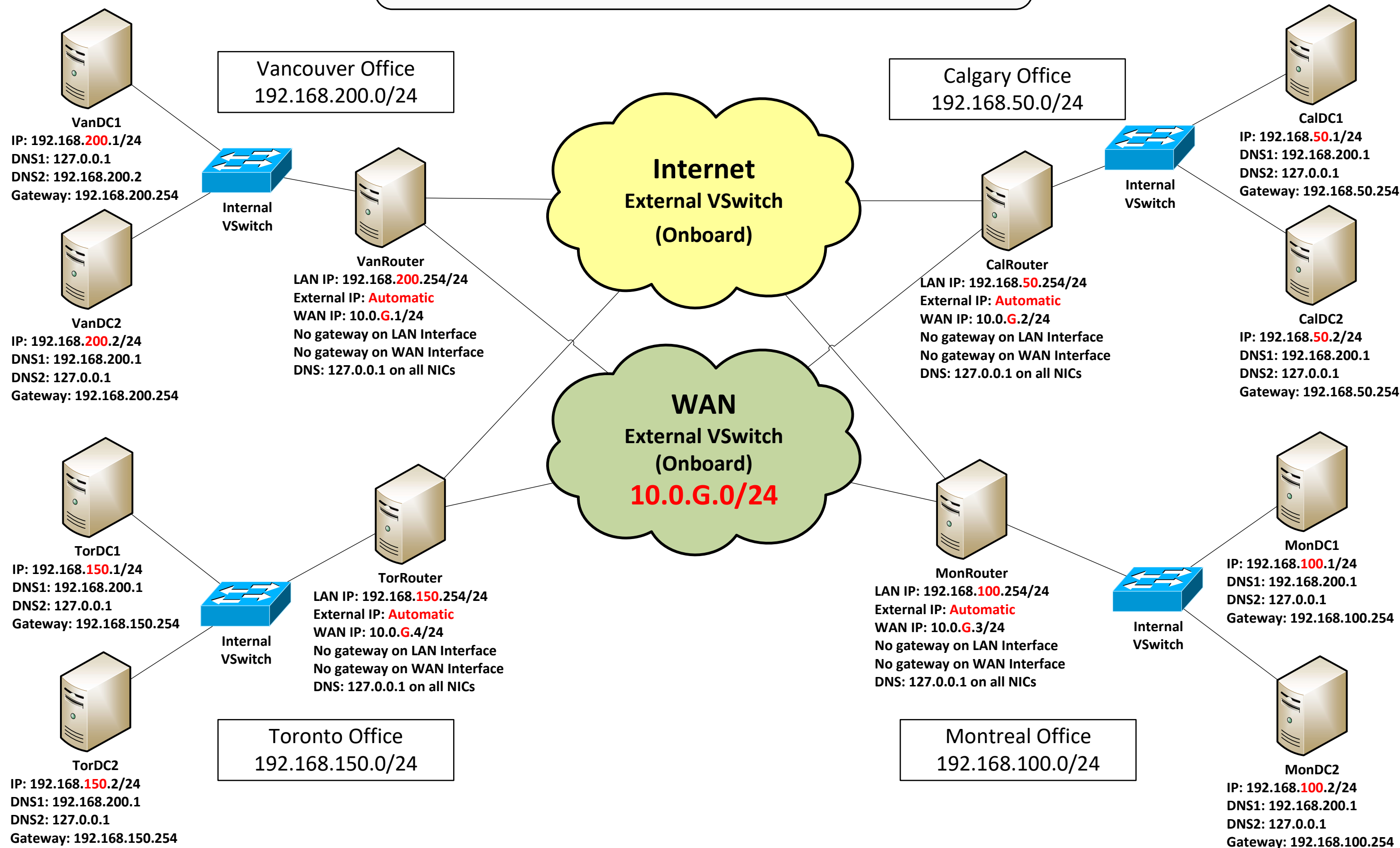Configure DC1 and DC2 in each of the offices as DHCP failover.

Submit a professional project document. Explain the entire configuration in full details and take screenshot each step of the configuration.

Configuration 80% (Will be presented by the group in the lab)

Professional Documentation 20%

Good luck,

Microsoft Services – Final Project

Vancouver Office
192.168.200.0/24

VanDC1
IP: 192.168.200.1/24
DNS1: 127.0.0.1
DNS2: 192.168.200.2
Gateway: 192.168.200.254

VanDC2
IP: 192.168.200.2/24
DNS1: 192.168.200.1
DNS2: 127.0.0.1
Gateway: 192.168.200.254

Internal VSwitch

VanRouter
LAN IP: 192.168.200.254/24
External IP: Automatic
WAN IP: 10.0.G.1/24
No gateway on LAN Interface
No gateway on WAN Interface
DNS: 127.0.0.1 on all NICs

Internet
External VSwitch (Onboard)

WAN
External VSwitch (Onboard)
10.0.G.0/24

Calgary Office
192.168.50.0/24

CalDC1
IP: 192.168.50.1/24
DNS1: 192.168.200.1
DNS2: 127.0.0.1
Gateway: 192.168.50.254

CalDC2
IP: 192.168.50.2/24
DNS1: 192.168.200.1
DNS2: 127.0.0.1
Gateway: 192.168.50.254

Internal VSwitch

CalRouter
LAN IP: 192.168.50.254/24
External IP: Automatic
WAN IP: 10.0.G.2/24
No gateway on LAN Interface
No gateway on WAN Interface
DNS: 127.0.0.1 on all NICs

TorDC1
IP: 192.168.150.1/24
DNS1: 192.168.200.1
DNS2: 127.0.0.1
Gateway: 192.168.150.254

TorDC2
IP: 192.168.150.2/24
DNS1: 192.168.200.1
DNS2: 127.0.0.1
Gateway: 192.168.150.254

Internal VSwitch

TorRouter
LAN IP: 192.168.150.254/24
External IP: Automatic
WAN IP: 10.0.G.4/24
No gateway on LAN Interface
No gateway on WAN Interface
DNS: 127.0.0.1 on all NICs

Toronto Office
192.168.150.0/24

MonRouter
LAN IP: 192.168.100.254/24
External IP: Automatic
WAN IP: 10.0.G.3/24
No gateway on LAN Interface
No gateway on WAN Interface
DNS: 127.0.0.1 on all NICs

Internal VSwitch

MonDC1
IP: 192.168.100.1/24
DNS1: 192.168.200.1
DNS2: 127.0.0.1
Gateway: 192.168.100.254

MonDC2
IP: 192.168.100.2/24
DNS1: 192.168.200.1
DNS2: 127.0.0.1
Gateway: 192.168.100.254

Montreal Office
192.168.100.0/24

G is your Group Number