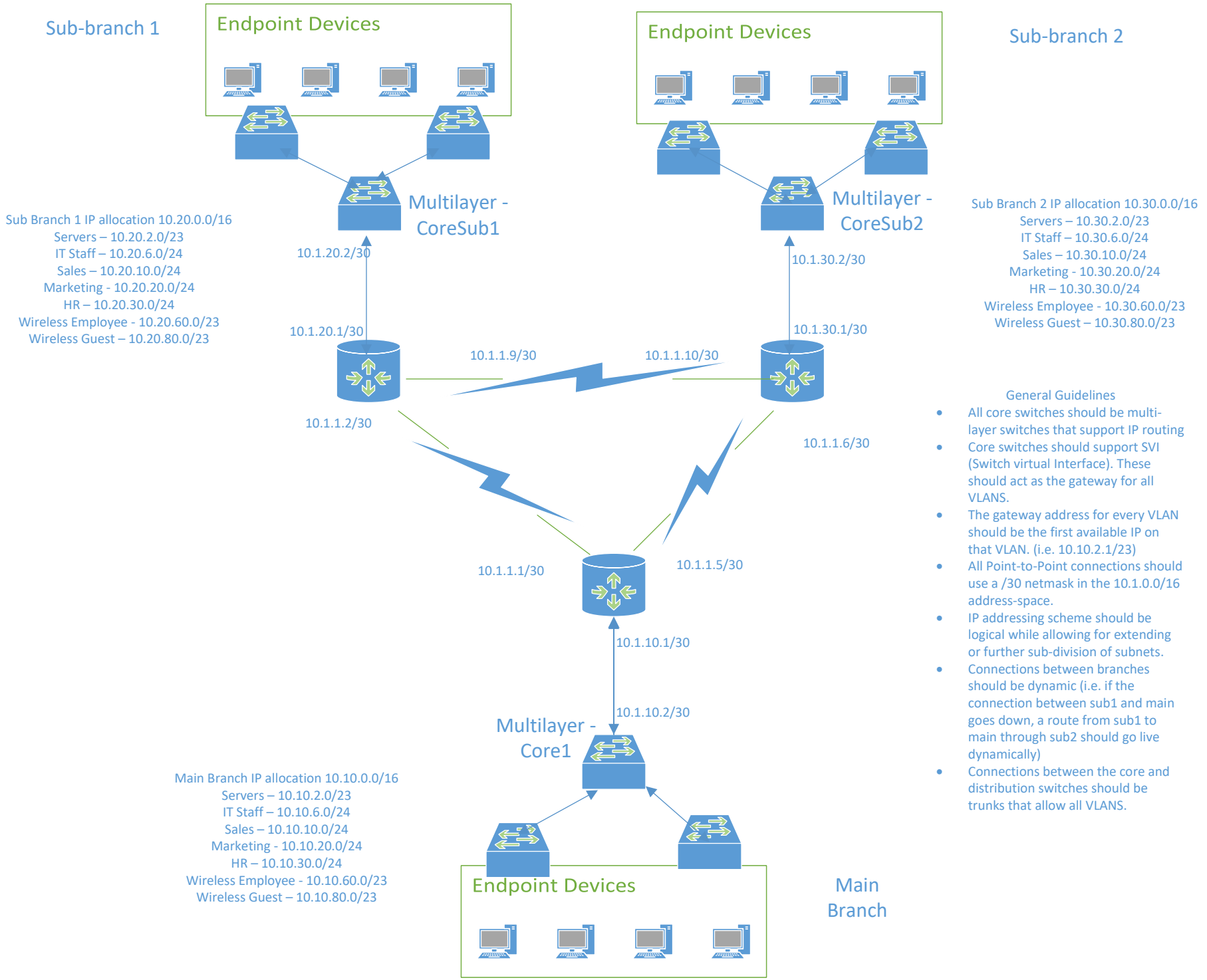
Sub-branch 1
Endpoint Devices
Endpoint Devices
Sub-branch 2
Multilayer - CoreSub1
Multilayer - CoreSub2
Sub Branch 1 IP allocation 10.20.0.0/16
Servers – 10.20.2.0/23
IT Staff – 10.20.6.0/24
Sales – 10.20.10.0/24
Marketing - 10.20.20.0/24
HR – 10.20.30.0/24
Wireless Employee - 10.20.60.0/23
Wireless Guest – 10.20.80.0/23
Sub Branch 2 IP allocation 10.30.0.0/16
Servers – 10.30.2.0/23
IT Staff – 10.30.6.0/24
Sales – 10.30.10.0/24
Marketing - 10.30.20.0/24
HR – 10.30.30.0/24
Wireless Employee - 10.30.60.0/23
Wireless Guest – 10.30.80.0/23
10.1.20.2/30
10.1.30.2/30
10.1.20.1/30
10.1.30.1/30
10.1.1.9/30
10.1.1.10/30
10.1.1.2/30
10.1.1.6/30
10.1.1.1/30
10.1.1.5/30
10.1.10.1/30
10.1.10.2/30
Multilayer - Core1
Main Branch IP allocation 10.10.0.0/16
Servers – 10.10.2.0/23
IT Staff – 10.10.6.0/24
Sales – 10.10.10.0/24
Marketing - 10.10.20.0/24
HR – 10.10.30.0/24
Wireless Employee - 10.10.60.0/23
Wireless Guest – 10.10.80.0/23
Endpoint Devices
Main Branch
General Guidelines
All core switches should be multi-layer switches that support IP routing
Core switches should support SVI (Switch virtual Interface). These should act as the gateway for all VLANS.
The gateway address for every VLAN should be the first available IP on that VLAN. (i.e. 10.10.2.1/23)
All Point-to-Point connections should use a /30 netmask in the 10.1.0.0/16 address-space.
IP addressing scheme should be logical while allowing for extending or further sub-division of subnets.
Connections between branches should be dynamic (i.e. if the connection between sub1 and main goes down, a route from sub1 to main through sub2 should go live dynamically)
Connections between the core and distribution switches should be trunks that allow all VLANS.