CS646 – Spring 2018 – Project 2

Data Center

Detroit, MI - World Headquarters

San Jose, CA - West Coast Headquarters

New York, NY - East Coast Headquarters

Seattle, WA - Branch
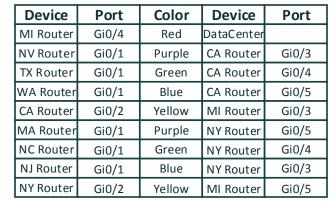
Dallas, TX - Branch

Las Vegas, NV - Branch

Newark, NJ - Branch

Raleigh, NC - Branch

Boston, MA - Branch

Device	Port	Color	Device	Port
MI Router	Gi0/4	Red	DataCenter	
NV Router	Gi0/1	Purple	CA Router	Gi0/3
TX Router	Gi0/1	Green	CA Router	Gi0/4
WA Router	Gi0/1	Blue	CA Router	Gi0/5
CA Router	Gi0/2	Yellow	MI Router	Gi0/3
MA Router	Gi0/1	Purple	NY Router	Gi0/5
NC Router	Gi0/1	Green	NY Router	Gi0/4
NJ Router	Gi0/1	Blue	NY Router	Gi0/3
NY Router	Gi0/2	Yellow	MI Router	Gi0/5

Note all switches have their last copper port (either 24 or 48) connected to Gi0/0 of their local router
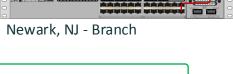
IP Blocks Recommendation:

MI: 10.4.0.0/16
CA: 10.1.0.0/16
NY: 10.2.0.0/16
TX: 10.3.0.0/16
WA: 10.9.0.0/16
NV: 10.5.0.0/16
NJ: 10.6.0.0/16
NC: 10.7.0.0/16
MA: 10.8.0.0/16

Carve /31 blocks out of 10.255.255.0/24 for the point-to-point links. Stay consistent. You are encouraged to design your own IP scheme.

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Norm (PC)   Fa1/0/3

Alice (PC)   Fa1/0/1

Bob (PC)   Fa1/0/2

PC

PC

PC

PC

Printer

Printer

Phone

Phone

Phone

Phone

Printer

Printer

Data Center
10.100.0.0/16

DHCP Server
10.100.1.150

Update Server
10.100.1.160