

Hands-On Assignment #4

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Hands-On Assignment 4

This assignment showcases a potential network layout for three telecommunication closets located in Constant Hall. Each telecommunication closet will have a budget for the switches and wires required for each room. An additional budget table will include the price of three essential servers required for the network. The network diagram will show how all switches, servers, and wires are connected to the network backbone and how the trunk lines will be interconnected to three rooms. Overall, this layout optimizes the reliability and efficiency of internet access within Constant Hall while also being cost-efficient.

Budget Table For Each Telecommunication Closets

Telecomm Closet 1 (Next to Room 1005)			
Item	Quantity	Cost Per Item	Total
S5860-20SQ, 24 Port Ethernet Switch	9	\$1,599.00	\$7,995.00
Core Switch	1	\$14,199.00	\$14,199.00
Multimode Fiber Optics Cable	2	\$26.56	\$26.56
Total Cost			\$22,220.56

Telecomm Closet 2 (Next to office 2145)			
Item	Quantity	Cost Per Item	Total
S5860-20SQ, 24 Port Ethernet Switch	4	\$1,599.00	\$6,396.00
Core Switch	1	\$14,199.00	\$14,199.00
Multimode Fiber Optics Cable	4	\$26.56	\$26.56
Total Cost			\$20,621

Telecomm Closet 3 (Next to office 2054)			
Item	Quantity	Cost Per Item	Total
S5860-20SQ, 24 Port Ethernet Switch	4	\$1,599.00	\$6,396.00
Core Switch	1	\$14,199.00	\$14,199.00
Multimode Fiber Optics Cable	4	\$26.56	\$106.24

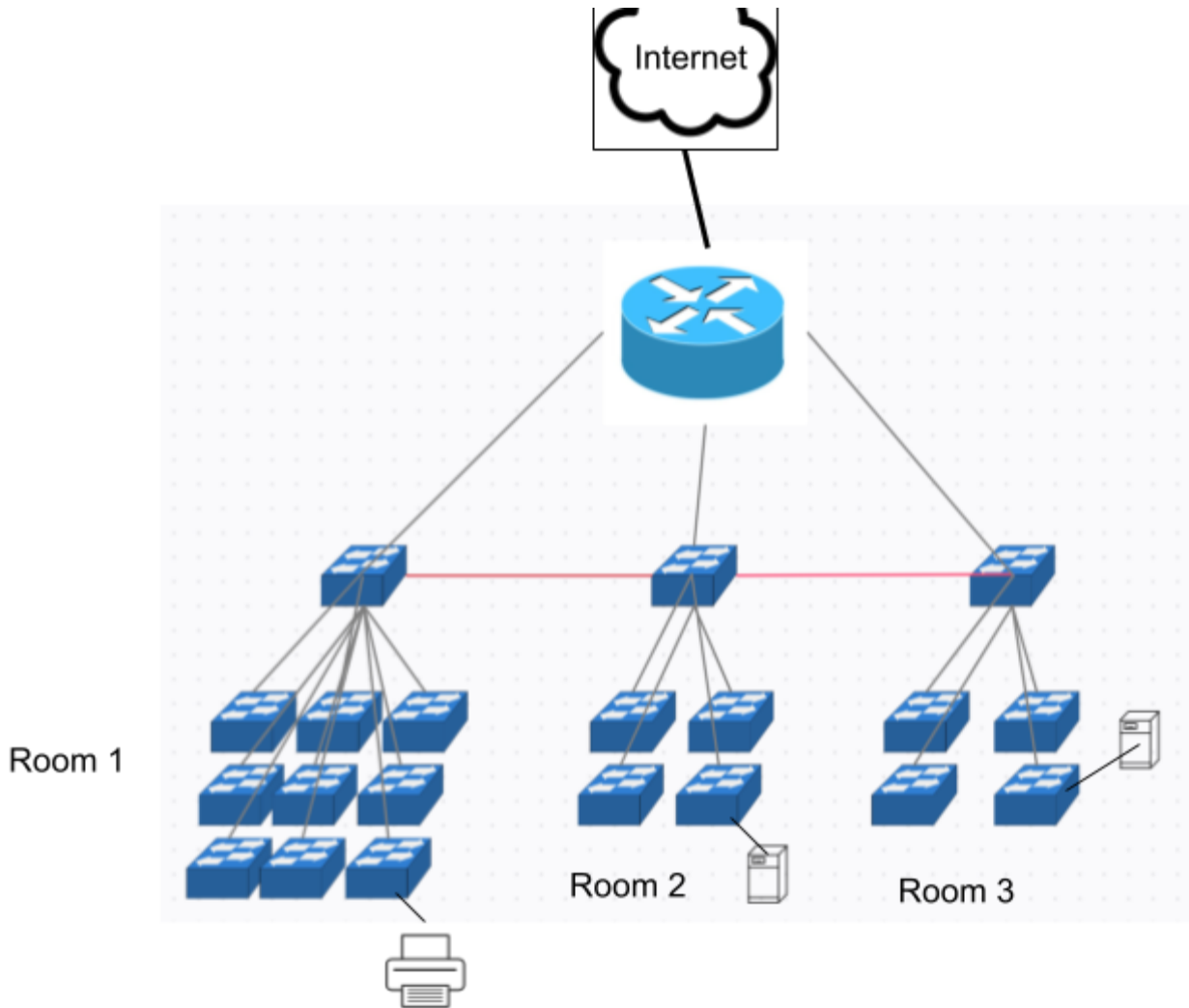
Total Cost	\$20,701
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Budget Table for Servers and Miscellaneous

Server Budget Table			
Item	Quantity	Cost Per Item	Total
Dell Storage File Server	2	\$7269.01	\$14,538.01
Web Server	1	\$59.51/month	\$714.12/year
Cisco Router	1	\$3495	\$3,495
Total Cost			\$18,747.13

****The sum of the total cost from all budget tables is \$84,289.69***

Network Diagram



Red Lines = Trump Wires

Grey Lines = Ethernet

