

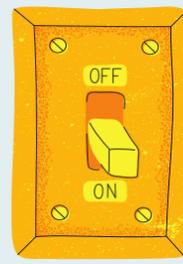
Wiring ODU Contant Hall

This is a plane for wiring ODU Constant Hall. This includes a diagram of three boxes depicting each of the three telecommunication closets and includes my choice of where to house the servers. The type of wiring used to connect the closets, as well as the fiber optic cable connecting to the campus backbone, and my budget.

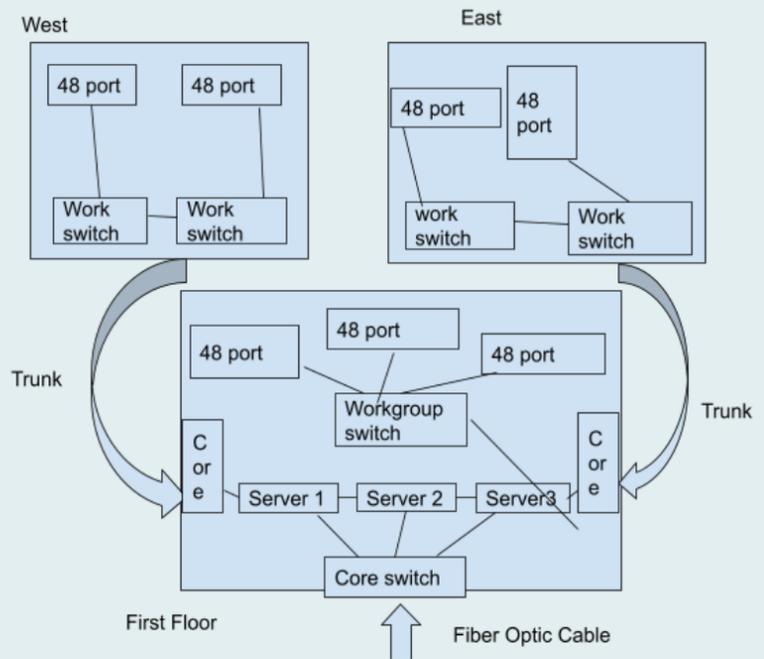
These are the things I will be using:

I will use 3 core switches which are layer 3 stackable, they cost

I will use 5 workgroup switches which are smart-managed layer 2, it cost \$279 each



This is a diagram that shows where the switches and servers should be installed and where the trunk lines will run that interconnect the three rooms



Budget

48 Port patch panels: 10 Cable Matters UL Listed Rackmount or Wall Mount 48 Port Network Patch Panel (Cat6 Patch Panel / RJ45 Patch Panel) (Amazon.com)
Price \$70 each; overall price - \$700

Workgroup switch: 5 S2800S-24T4F-P, 24-Port Gigabit Ethernet L2+ Smart Managed PoE+ Switch, 24 x PoE+ Ports @220W, with 4 x 1Gb SFP Uplinks (FS.com).
Price: \$279.00 each; overall price - \$1,395

Layer 3 stackable core switch: 3 48-Port Ethernet L3 Managed Switch, 48x 1Gb SFP, 4x 10Gb SFP+ Uplinks, Stackable Switch, Broadcom Chip (FS.com).
Price: \$2,119 each; overall price - \$6,357

Ethernet network cat 5e cable: media bridge Ethernet Cable (50 Feet) - Supports Cat6 / Cat5e / Cat5 Standards, 550MHz, 10Gbps - RJ45 Computer Networking Cord (Part# 31-399-50X) (Amazon.com).
Price: \$15.84 each; overall price - \$316.8

Budget Total: \$8,768.8

