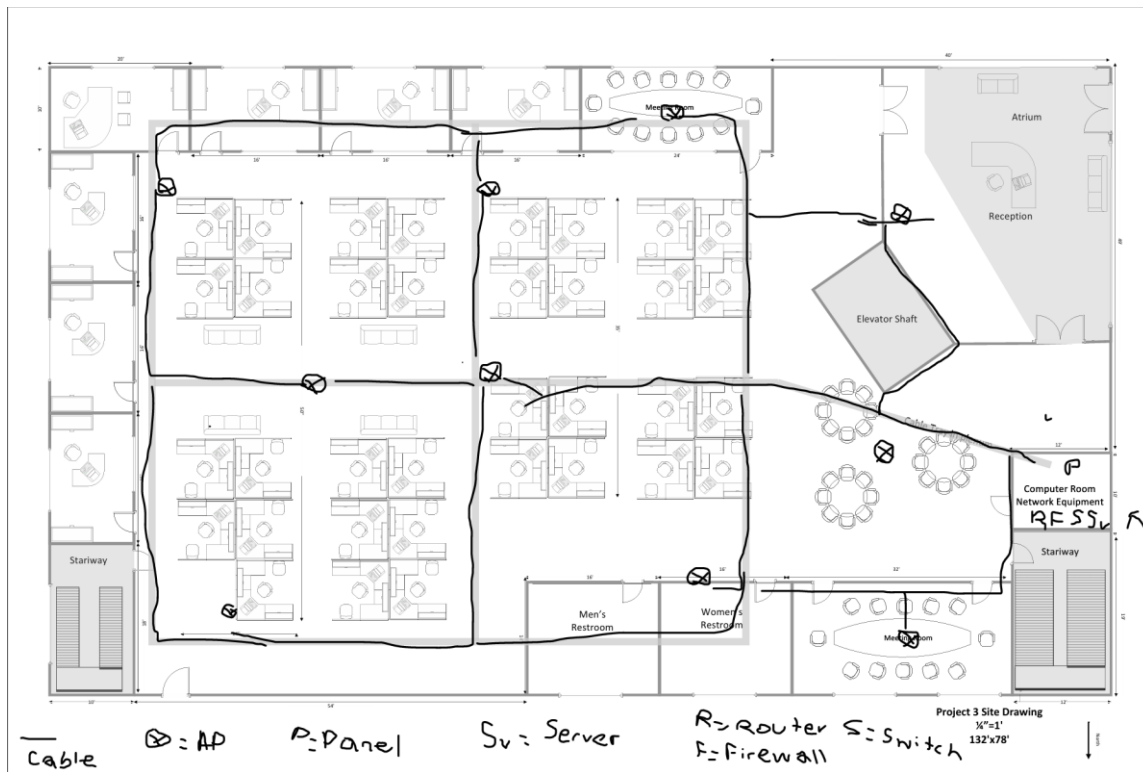


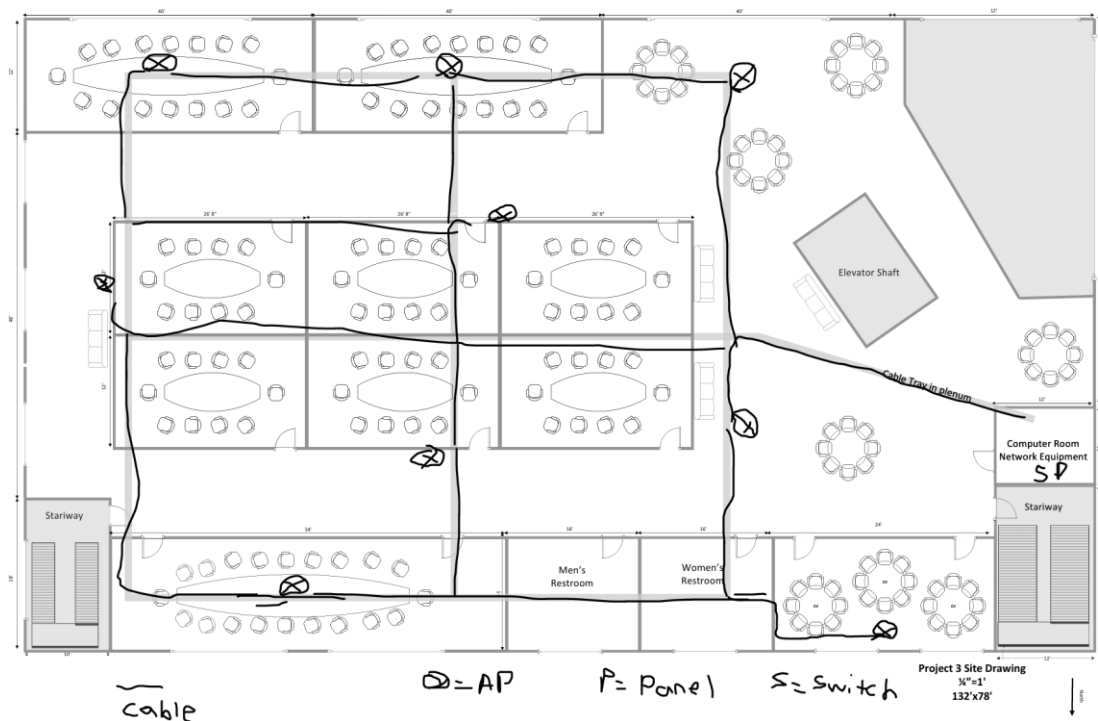
Project 4: The Site Survey

Alexis Fenderson

Logical Network Drawing – Floor One



Logical Network Drawing – Floor Two



Hardware Selections & Security Implementation:

Meraki MR56 Internal Antenna x 11



Reasons:

- Good for high-density office deployment
- Can be installed on the ceiling
- Mounting kit included
- 2.4 GHz and 5GHz
- Conforms to UL 2043 (Plenum rating)
- Good scalability
- Lifetime hardware warranty
- Cisco

Meraki MR57 Internal Antenna x 8



Reasons:

- Supports 6 GHz
- Four 4:4 MU-MIMO 802.11ax compatible
- Conforms to UL 2043 (Plenum rating)
- Mounting hardware included
- Lifetime hardware warranty
- Concealed mount plate with anti-temper cable bay

Meraki MS130-24P-HW Switches x 2



Reasons:

- 802.3bt PoE up to 30W per port
- 24 Ports
- Managed via Cisco Meraki dashboard
- Integrated wall mount

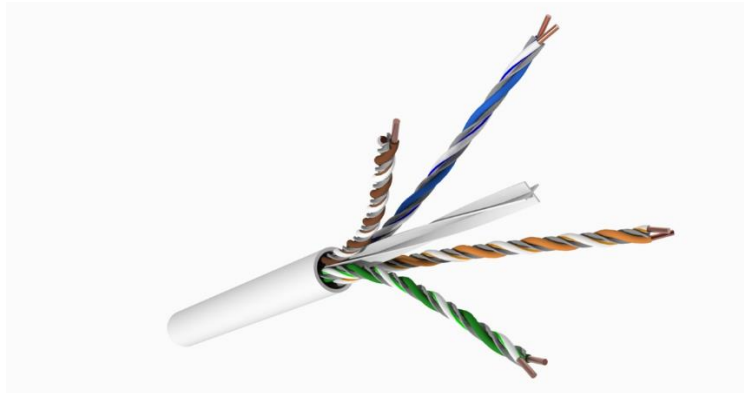
Meraki MX105 - Firewall



Reasons:

- Advanced Malware Protection with Cisco Threat Grid
- Layer 7 firewall and content filtering
- Compatibility
- Unified management for security, SD-WAN, Wi-Fi, switching, MDM, and IoT
- SSL decryption/inspection, data loss prevention (DLP), CASB

SYSTIMAX GigaREACH XL "Extended Distance" 1073A Category 6 U/UTP Cable



Reasons:

- CMP Rated
- Good data speed
- Falls in accordance with SYSTIMAX warranty

SYSTIMAX GigaSPEED XL MGS400 Information Outlet Category 6 Data Jacks



Reasons:

- Supports IEEE 802.3bt Type 4 (90 W)
- Cat6
- Falls in accordance with SYSTIMAX warranty

SYSTIMAX 1100 GS3 PANEL - 48 PORT 760206805 | 1100-U-GS3-48 x 2

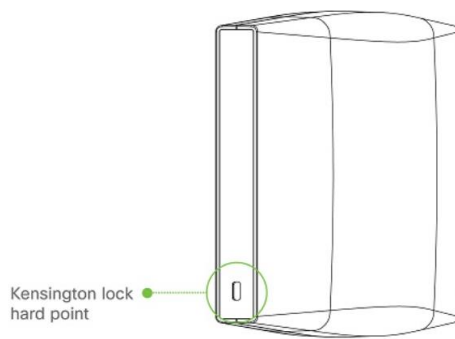


Reasons:

- Expansion opportunities
- High-impact, flame retardant, thermoplastic | Powder-coated steel
- Falls in accordance with SYSTIMAX warranty

Security Implementation:

Access Point Lock Box x 19



Reasons:

- Comes with Access Point mounting kit
- Prevents accidental dislocation of AP or theft

Protocols & Configurations:

- Disable older protocols (WEP/ WPA2) if not needed.
- Enable WPA3 on Access Points
- Enable WIDS/WIPS on AP's and turn on rouge AP alerts
- Creation of separate VLANS for employee's vs guests
- Creation of Separate SSID for employee and guest networks
 - o Creation of self-registration via Meraki
- Implement separation of network via firewall. Allow employees access to required systems and block guest network in tandem.

Software:

1. Meraki Dashboard
 - a. Ease of use with hardware selections
 - b. Variety of Security implementation like SSID creation and VLAN
 - c. Disable and Enable certain functions like WIDS/WIPS on AP's
 - d. Can implement MFA with installation of [Duo Mobile](#)
 - e. Because the hardware all runs on the same system, implementation of security is easier and can be done through one portal.
2. [Cisco Identity Services Engine](#)
 - a. Second monitoring of network/additional layer of protection.
 - b. Detect unusual activity or possible rogue devices
 - c. Can create/update customs policies for remembering devices or allowing trusted users access.
3. Microsoft NPS
 - a. Authenticate users using 802.1x
 - b. Can implement MFA with installation of an [Azure Extension](#)