Network Design Implementation

Monticello First Church Of God needed a network developed that covered around 6000 square feet. The building contains two floors of which are 3000 square feet each.

As a networking student, I felt that I had the necessary skills to implement a full scale network, at low cost to the organization, but with adequate quality of service. In designing and implemented this network the most helpful tool used was the various Cisco books I’ve obtained over the years. They range from network topologies to command line interface.

Peripherals
This network contains a total of 4 router/access point devices, and one switch.
1. Cisco Catalyst 2950 Series Switch
2. Linksys E1200 Router
3. NetGear N600 Router
4. Cisco Meraki MR12 Access Point
5. TP-Link 7210N Access Point
All devices were used to their full potential and placed in positions that best suited the task at hand.

Network Specifications
• Minimum of 50 users over a wifi network
• Minimum of 10 users hard wired, or dedicated network access
• Wireless coverage upstairs and downstairs
• Remote facility network access located over a span of one quarter of a mile from the church
• Separate wireless network for office use only