Network Centre Visit

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University of Missouri has an intercampus network among the four campus i.e. Kansas City, Columbia, St. Louis, Rolla. The service provider for this network is MORE net. The link speed is mostly 10Gig network among these campuses. In UMKC the network is distributed between Campus Buildings and Student housing. Student housing is majorly wireless network. The campus buildings operate on two switches while student housing operates on a single switch which again gets connected to the switches of campus buildings. These switches eventually connect to Palo Alto which makes it available to iGATE.

UMKC has Cisco 3-layer design network model. Core layer holds Cisco 6509E device which transmits using Gigabit Ethernet link. In distribution layer there is one switch per building with variety of devices i.e. Cisco 3560G, Cisco 4500x, Cisco 3750G which might operate using 10 Gigabit Ethernet link or less. Access layer can have multiple switches per building with variety of density closets ranging from low to high. Devices used i.e. Cisco 3560G, Cisco 4506, Cisco 3850. Every building is backed by UPS and generator to deal with power failure keeping link intact. The two things which may cause network loss is power interruption and optical fibre damage. To avoid optical fibre damage digging is not allowed in campus. Earlier copper cables were used as wire for communication which is replaced by optical fibre now. One thing is clear the size space required has been reduced drastically. The map present in network centre showed how all the buildings are connected i.e. a data packet starting from Flarsheim Hall must pass through Millers Nicholas Building to reach student union. There are set of network routes connecting the buildings. I was astonished of the fact that how such a million of optical fibres are managed and kept a track upon. It must be taking a lot for the maintenance and understanding of connectivity physically than on map.