Documentation

I made a lab in Cisco Packet Tracer. My goal was to create two LAN's and connect one to another. I added two laptops, servers, MLS(Multilayer Switch) and a router of course. This was the devices I add to make this lab works properly. At one of the servers I turn on a DNS service, so I can add an A record(A record is used to map a name to an IPv4 address).On the other server I turn on the DHCP service and created a pool to assign IP address, Subnet mask, Default Gateway and DNS server dynamically to hosts who wants to connect to the network and to not do it manually.

I configured QoS to Router 0. I created classes in which I gave them names like Voice, Video and Important(It means an important traffic). I choose to do it with DSCP and classificate the traffic by priority and I gave the highest priority to the Voice traffic(Highest combination for classification could be ,,EF''), then it was the Video and after that it's the ,,Important'' traffic. One of the ways to prioritezed the traffic was by ACL(Access Control List) where I permit the protocols I want to be permitted by my internal router's interface(They were ports 53, 80, 443 and ICMP). The way I connect the two subnets was helped by OSPF(Open-Shortes-Path-First). I configure on them both OSPF, give them the same subnet IP's and they become OSPF neighbors and both LSA their routing tables one to another.

To finally check if everything works I try to ping from the Laptop the DNS server and it works. You can try it yourself! Thanks foryour attention! :)