

Project Details

LINKS: <https://gurutechnetworks.otombenard.com/assetsProject/project3>

<https://www.youtube.com/watch?v=z4uTWsXbZaM&list=PLyEymK89ZUabd7h9FK4dGVdONbxFEJoyk&index=7>

As a part of your end year networking project, you are required to ==design and implement Vic Modern Hotel network.== The hotel has three floors; in the first floor there three departments (Reception, store and Logistics), in the second floor there are three departments (Finance, HR and Sales/Marketing), while the third floor hosts the IT and Admin. Therefore, the following are part of the considerations during the design and implementation;

- There should be three routers connecting each floor (all placed in the server room in IT department).
- All routers should be connected to each other using serial DCE cable.
- The network between the routers should be 10.10.10.0/30, 10.10.10.4/30 and 10.10.10.8/30.
- Each floor is expected to have one switch (placed in the respective floor).
- Each floor is expected to have WIFI networks connected to laptops and phones.
- Each department is expected to have a printer.
- Each department is expected to be in different VLAN with the following details;

1st Floor;

- Reception- VLAN 80, Network of 192.168.8.0/24
- Store- VLAN 70, Network of 192.168.7.0/24
- Logistics- VLAN 60, Network of 192.168.6.0/24

2nd Floor;

- Finance- VLAN 50, Network of 192.168.5.0/24
- HR- VLAN 40, Network of 192.168.4.0/24
- Sales- VLAN 30, Network of 192.168.3.0/24

3rd Floor;

- Admin- VLAN 20, Network of 192.168.2.0/24

- IT- VLAN 10, Network of 192.168.1.0/24
- Use OSPF as the routing protocol to advertise routes.
- All devices in the network are expected to obtain IP address dynamically with their respective router configured as the DHCP server.
- All the devices in the network are expected to communicate with each other.
- Configure SSH in all the routers for remote login.
- In IT department, add PC called Test-PC to port fa0/1 and use it to test remote login.
- Configure port security to IT-dept switch to allow only Test-PC to access port fa0/1 (use sticky method to obtain mac-address with violation mode of shutdown.)