

Project Title : College Management Network

Team Members

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Revisión -1 Seminar Project

This College Network Scenario is about designing a topology of a network that is a LAN (Local Area Network) for a College in which various computers of different departments are set up so that they can interact and communicate with each other by interchanging data. To design a networking scenario for a college which connect various departments to each other's, it puts forward communication among different departments. CNS is used to design a systematic and well-planned topology, satisfying all the necessities of the college (i.e. client). CNS come up with a network with good performance.

Objectives

The main objective of the proposed network is to update the existing network and also enhance its capabilities and increase the flexibility of the network which will eventually provide good security.

MODULES:-

- *Principle Room*
- *HOD Department*
- *Server Room*
- *Computer Department*
- *Internet Lab*
- *Library Department*
- *IT Department*
- *Lobby Area(Waiting Area)*
- *Others.*

*All this Modules are connected by the use of
Switches and Routers*

Advantages of college Network

1. Strengthen industry connections

- *Networking is all about forming trust and sharing knowledge, contacts and information between one another which, in return, should help you to reach those all important career goals.*

2. Get ahead in your career

- *Networking with industry professionals can help you to become visible and noticed by industry experts who may help you to advance in your career.*

3. Career advice

- *An important benefit of networking is the ability to take advice from experienced peers in the industry. You can discuss common challenges and current opportunities available*

4. New ideas and fresh perspectives

- *If you're ever looking for new ideas on topics for an essay or project, then going to your network of contacts should definitely help.*

5. New job opportunities

- *By meeting new people, it's likely that you'll be meeting more people with knowledge of available vacancies or recruiters who are looking for talented individuals interested in your stream of work.*

Network Requirements

1: The new system should be able to reduce internet downtime.

Download and upload links should be maintained above 5 Mbps speed requirement.

2: Network will be scalable.

3: The system should support remote access.

4: Should comprise of data centers with necessary security features and support.

IP Addressing Plan

IT DEPARTMENT (192.168.1.0)	
HOD CABIN	192.168.1.2
IT LAB 1	192.168.1.3
IT LAB 2	192.168.1.4
IT LAB 3	192.168.1.5
IT LAB 4	192.168.1.6
Printer 0	192.168.1.7

COMPUTER DEPARTMENT (192.168.2.0)	
CS HOD CABIN	192.168.2.2
CS LAB 1	192.168.2.3
CS LAB 2	192.168.2.4
CS LAB 3	192.168.2.5
CS LAB 4	192.168.2.6
Printer 7	192.168.2.7

SERVER ROOM (1.0.0.0)	
FTP SERVER	1.0.0.4
PC1	1.0.0.5
DNS SERVER	1.0.0.2
WEB SERVER	1.0.0.3

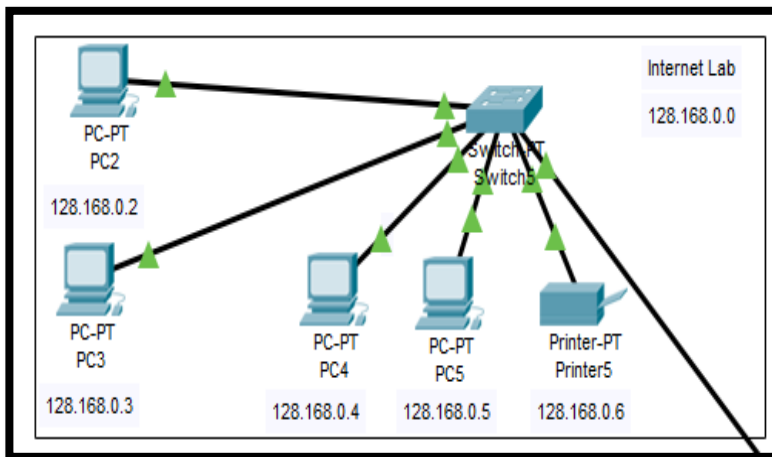
INTERNET LAB (128.168.0.0)	
PC2	128.168.0.2
PC3	128.168.0.3
PC4	128.168.0.4
PC5	128.168.0.5
Printer 5	128.168.0.6

PRINCIPLE ROOM (192.168.4.0)	
PC 0	192.168.4.2
LAPTOP 0	192.168.4.3

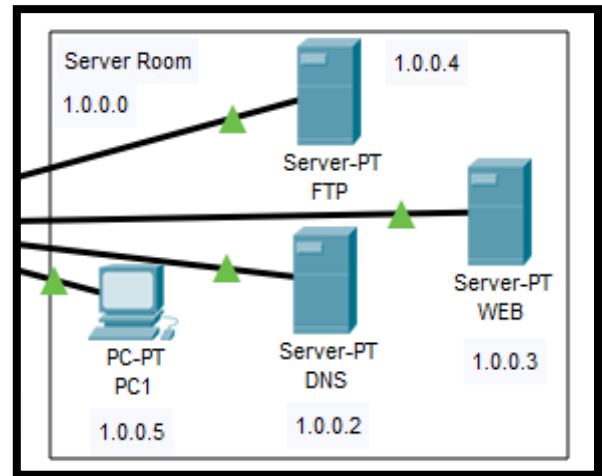
OTHERS (192.168.3.0)	
OFFICE	192.168.3.2
Printer 2	192.168.3.6
EXAM CELL	192.168.3.3
Printer 3	192.168.3.7
ENQUIRY	192.168.3.4
TPO	192.168.3.5
Printer 4	192.168.3.8

Network Design

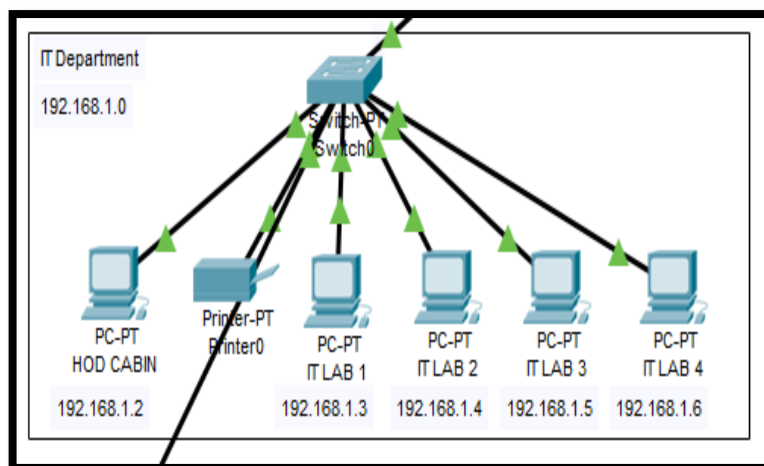
Internet Lab



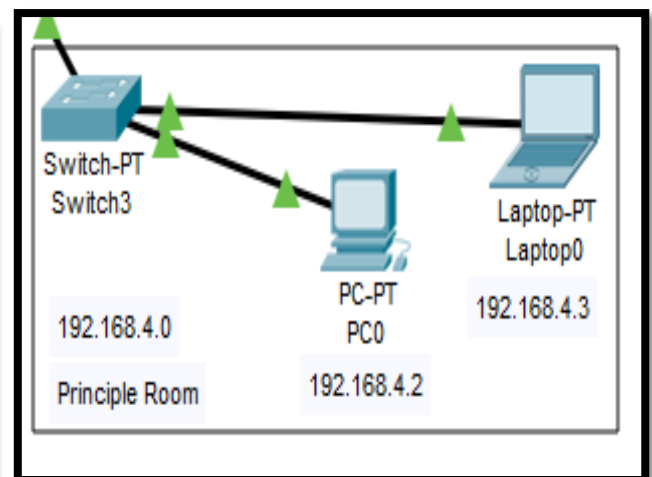
Server Room



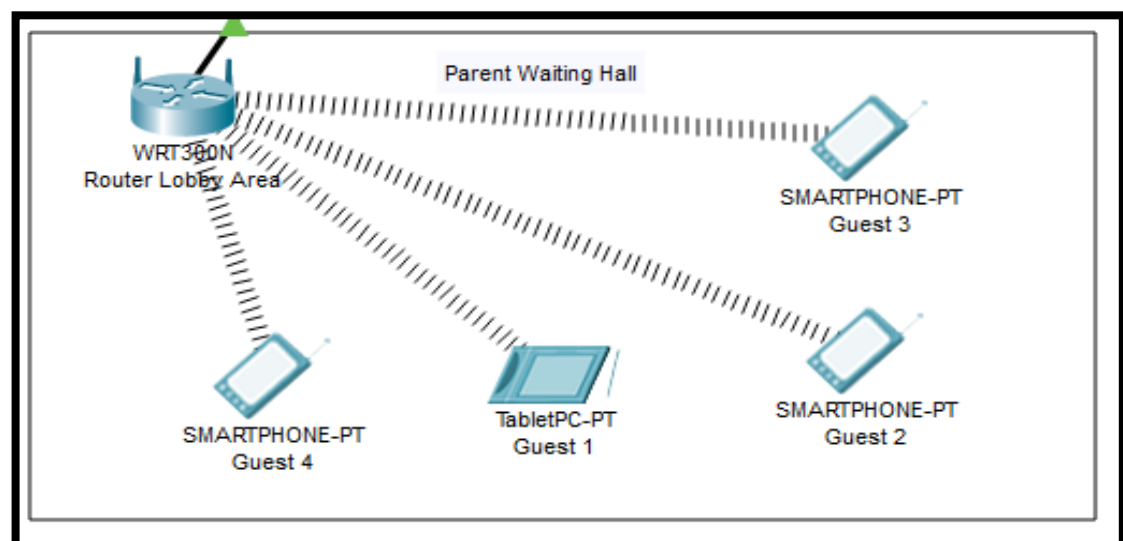
IT Department



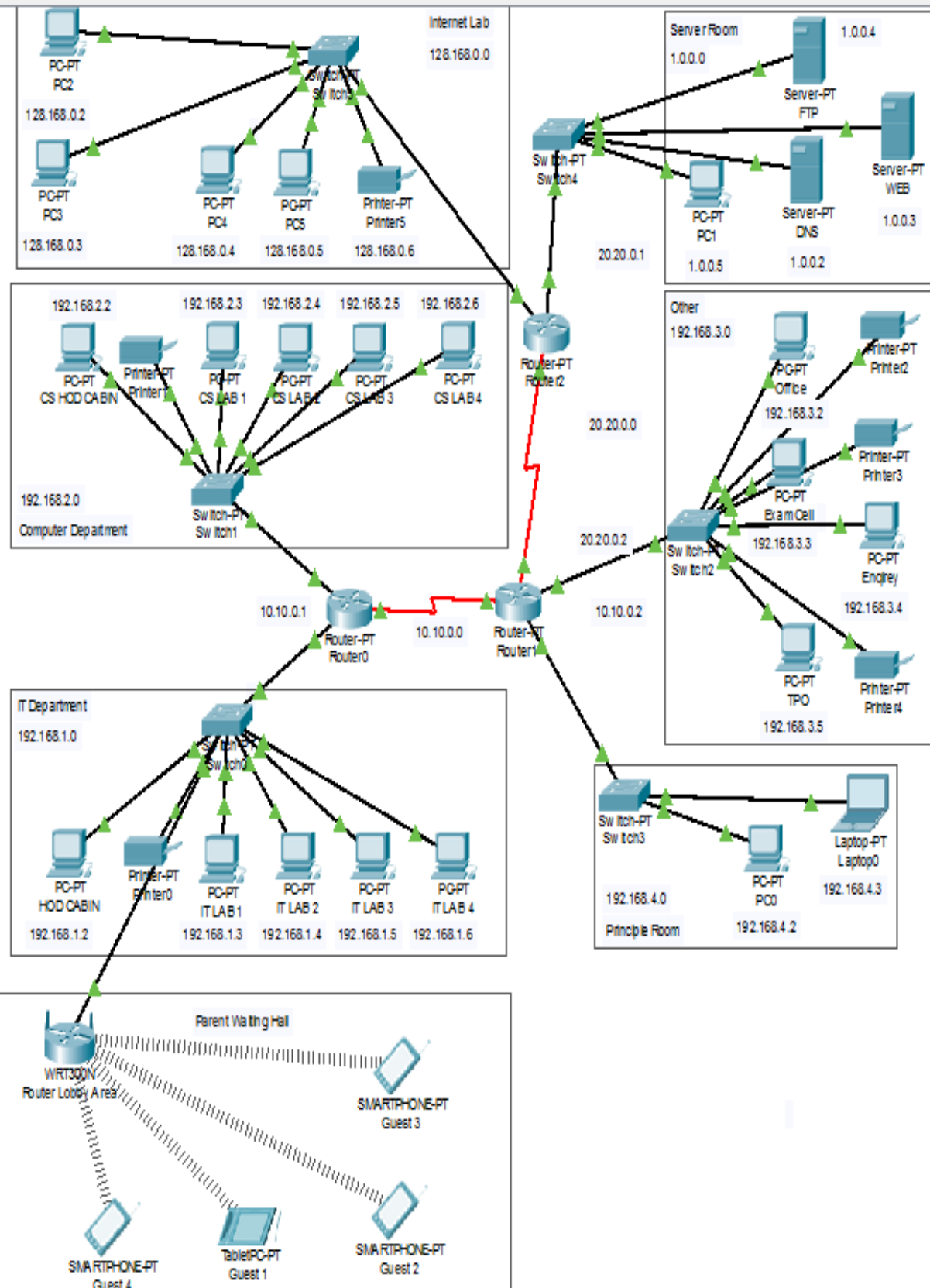
Principle Room



Parent's Waiting Hall



Full Network Design



Summary

The outcome of the proposed system will be a fail-safe backbone network infrastructure which meets the requirements for readily available access to information and security of the private network, and also ensures optimized productivity when telecommunication services are accessed. The installed equipment allowed to organize high-speed wired and wireless Internet access throughout the whole complex of College buildings as well as providing transfer of all types of data throughout the single optimized network.

-----Thank You Madam! -----