

Project Title : College Management Network

Team Members

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Abstract:

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*

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

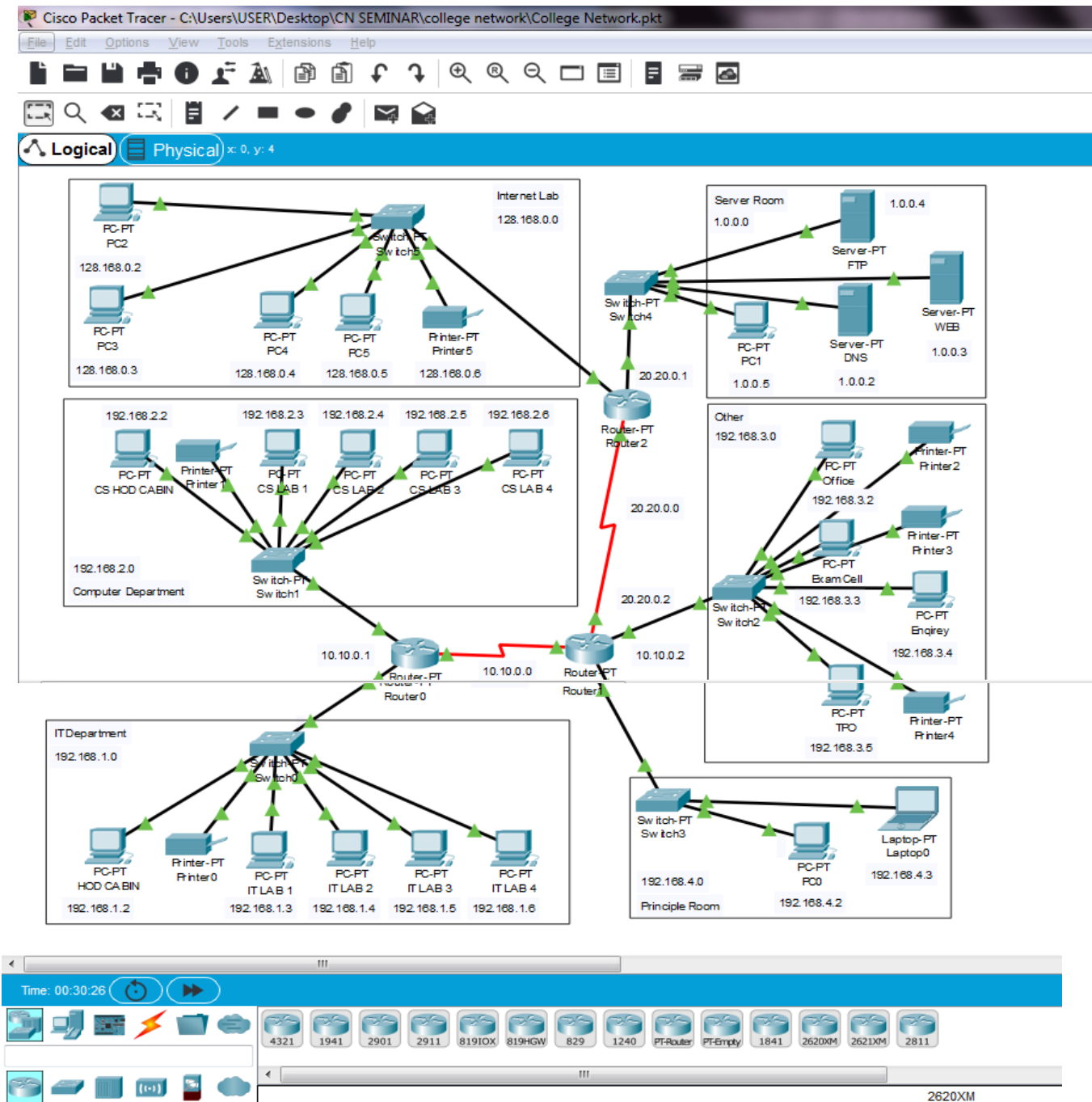
INTERNET LAB (128.168.0.0)	
PC2	128.168.0.2
PC3	128.168.0.3
PC4	128.168.0.4
PC5	128.168.0.5
Printer 5	128.168.0.6

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

Up to Now This Modules Have complete



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 hospital buildings as well as providing transfer of all types of data throughout the single optimized network.

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