Project Report On

Company Management System by CISCO Packet Tracer

Company Management System by SMTP and FTP

Course: CSE-312: Computer Networking Lab

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Overview

1. Motivation:

Basically we try to develop a project based on company management . Actually when we started to develop our project we think, what we learn from our class and where we can implement it. Then we think that for making a national company , the owner should always make a good communication network. And for making good communication with maintaining a security system ,a company needs its own server. By using this server, all the branches employers connected to each other by transferring mail and sharing their file. According to this concept, we try to develop our project.

2. Application:

- This project is basically developed for managing a company.
- It is also used for different types of small institutions.
- A certain number of people can use this project to communicate to each other.

In our project, We want to develop a new company networking management system by Cisco packet tracer. In our opinion , a national company has some brunch. Like Barisal branch, Khulna brunch, Rajshahi brunch etc. Some users are connected with each brunch. Some brunch is connected with a switch. Many switches are connected with each other. And every switch is connected with a Head server. Every user is connected with each other. In Primary level, Users are connected with each other by transferring email by using SMTP. Users also transfer any kind of file by using FTP. Day by day, we also include more useful features for our project.

Procedure

1. Theory:

For SMTP:

Step 1: Take a Server from Cisco. Take some client device. And connect those devices with the server by using PT Switch.

Step 2: Configure the IP of the server. **Server > Desktop > IP Configure**. And also Configure the IP of each client. **Client > Desktop > IP Configure**

Step 3: Now entire into the server database. **Server > Services > Email**.

- Set the domain name like **ek18.com**
- Now set the user and password and add to the server database.

Step4: Get into the device. Desktop > Email > Configure Mail

- Set your name .eg: **Laptop 1**
- Set email address. Eg: **lap2@ek18.com**
- Set Incoming mail server and outgoing mail server with server ip.
- Now set the user and password and add to the client database.

Step 5: Send an email from a device.

Desktop > Email > Compose

Step 6: Receive mail from another device.

Desktop > Email > Received Mail

For FTP:

Step 1: Take a Server from Cisco. Take some client device. And connect those devices with the server by using PT Switch.

Step 2: Configure the IP of the server. **Server > Desktop > IP Configure**. And also Configure the IP of each client. **Client > Desktop > IP Configure**

Step 3: Now entire into the server database. Server > Services > Email.

- Set the domain name like **ek18.com**
- Now set the user and password and add to the server database.
- There is no need to register the client from the client side database. It's a limitation for FTP protocol.

Some command For FTP protocol:

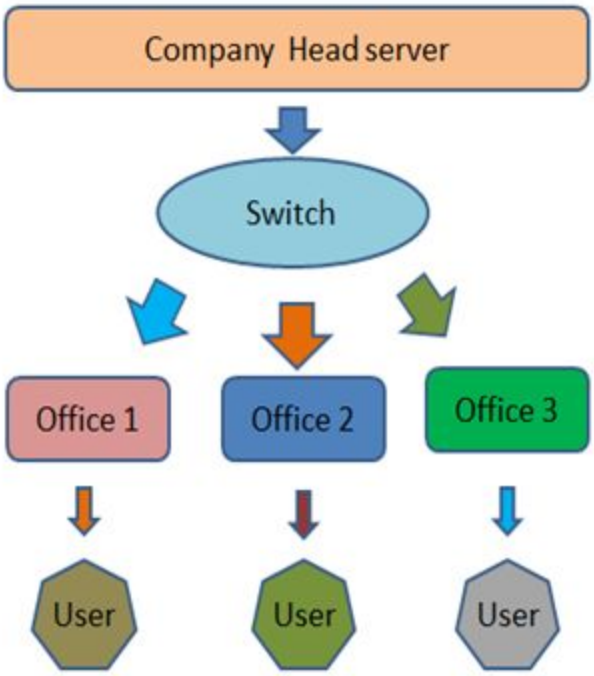
➔ **ftp > get:** Download/ Read
➔ **ftp > put:** Upload/Write
➔ **ftp > quit:** Exit from ftp Server
➔ **ftp > rename:** Rename the file name
➔ **ftp > dir:** Show the file list
➔ **ftp > delete:** Delete a file
➔ **ftp > pwd:** Show the file location

2. Component:

For SMTP AND FTP we used the same component. Like -

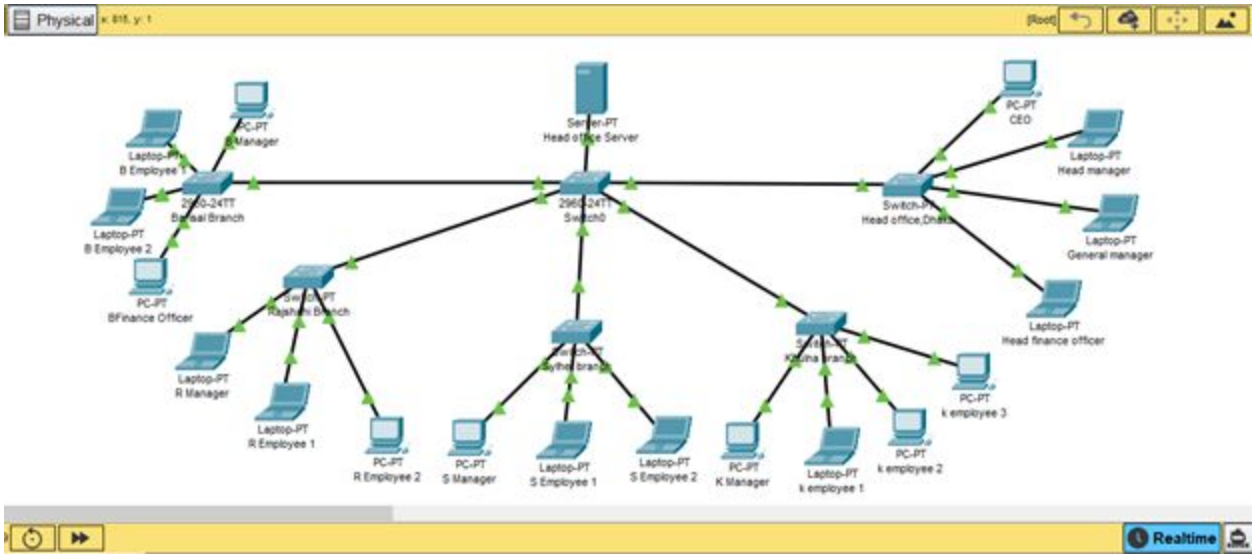
1. One Server,
2. Many PT switch,
3. Many Client Device,
4. Simple Copper Wire,
5. First Ethernet Port.

3. Methodology:

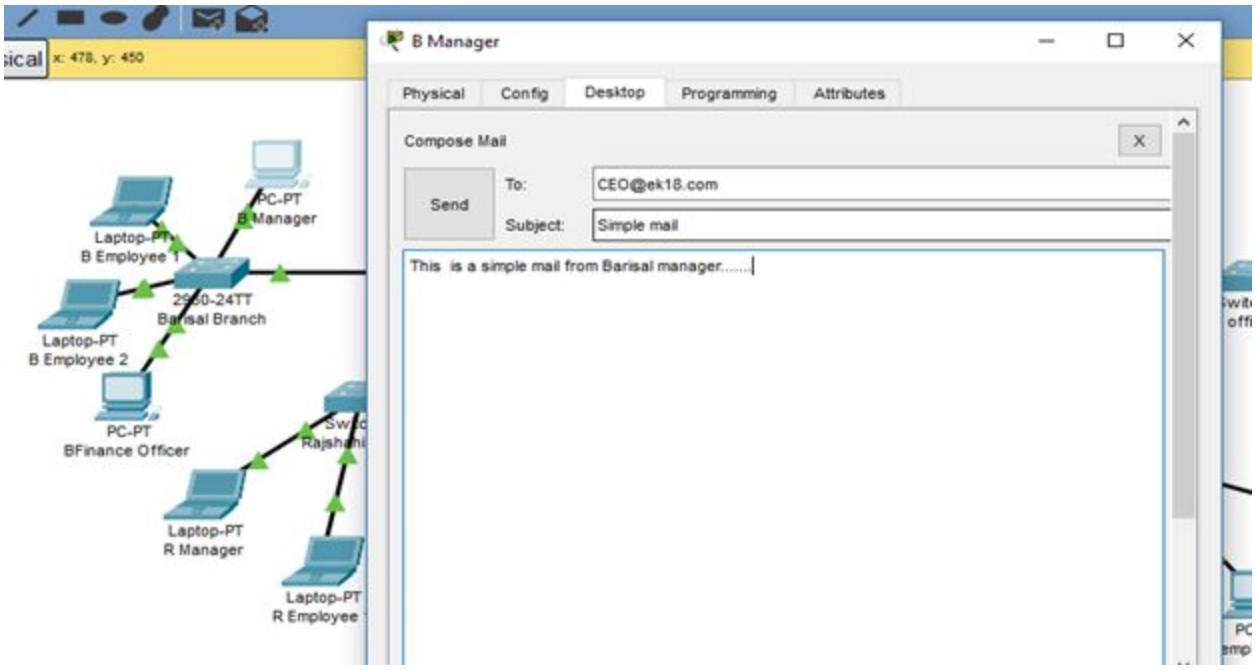


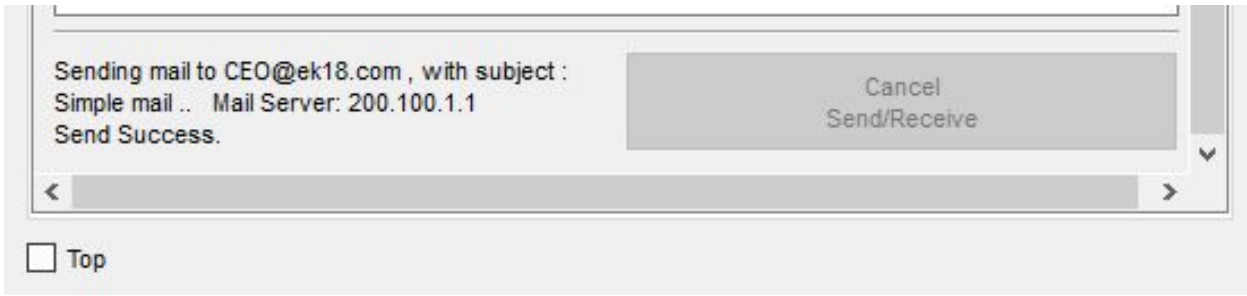
Result

Overall view of our project:

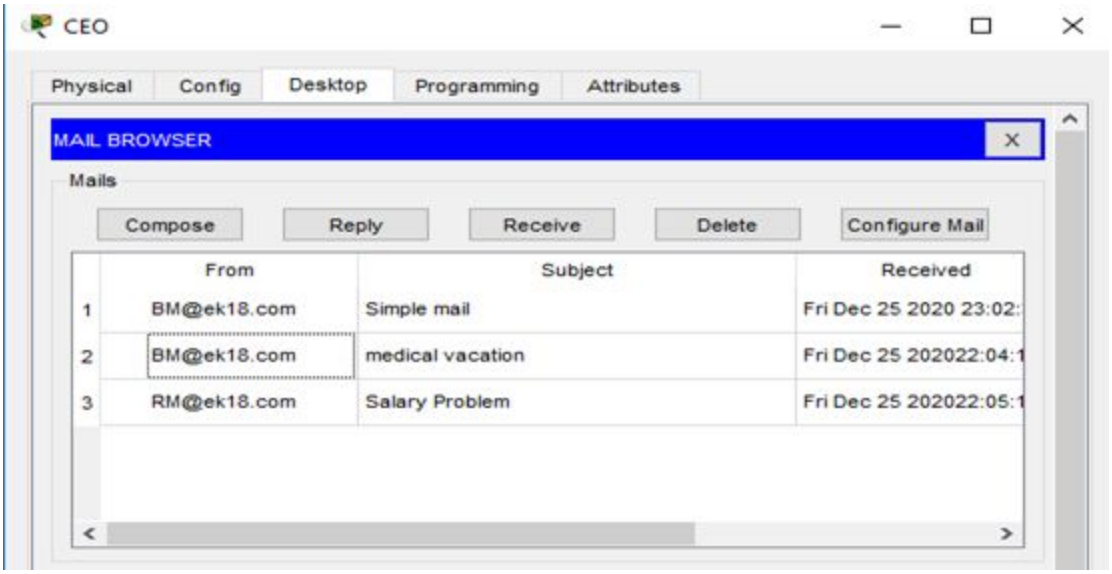


Mail transfer by using SMTP:

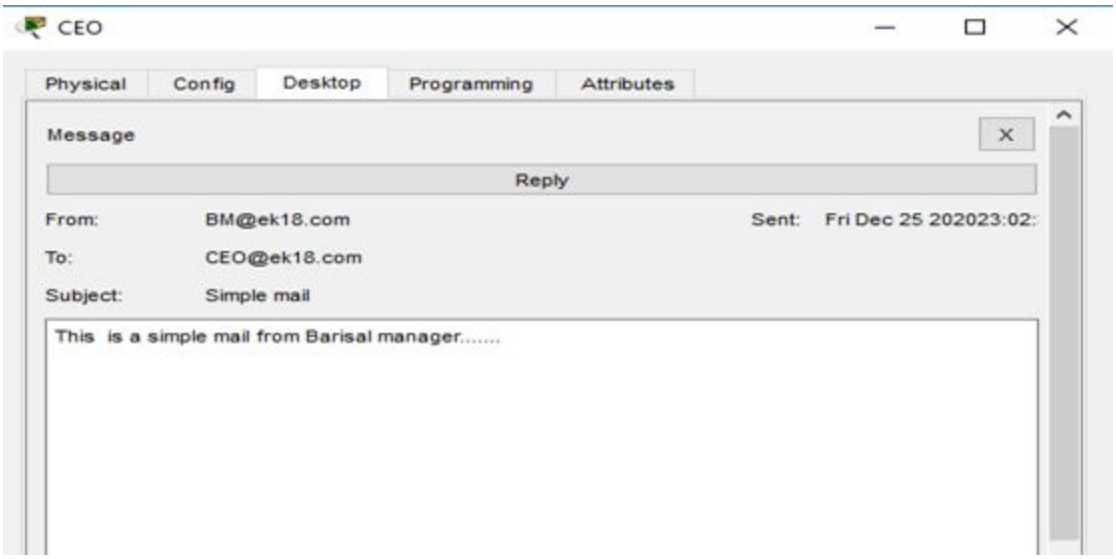




Received mail from CEO:

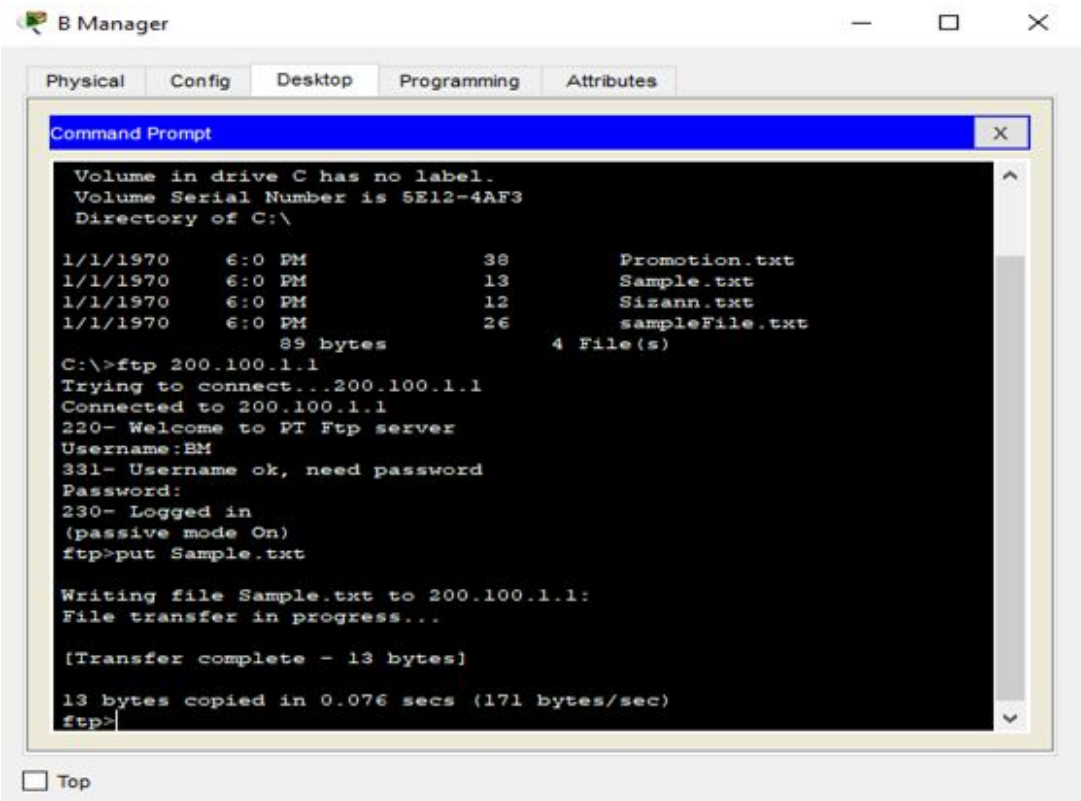


Showing the mail in CEO PC:

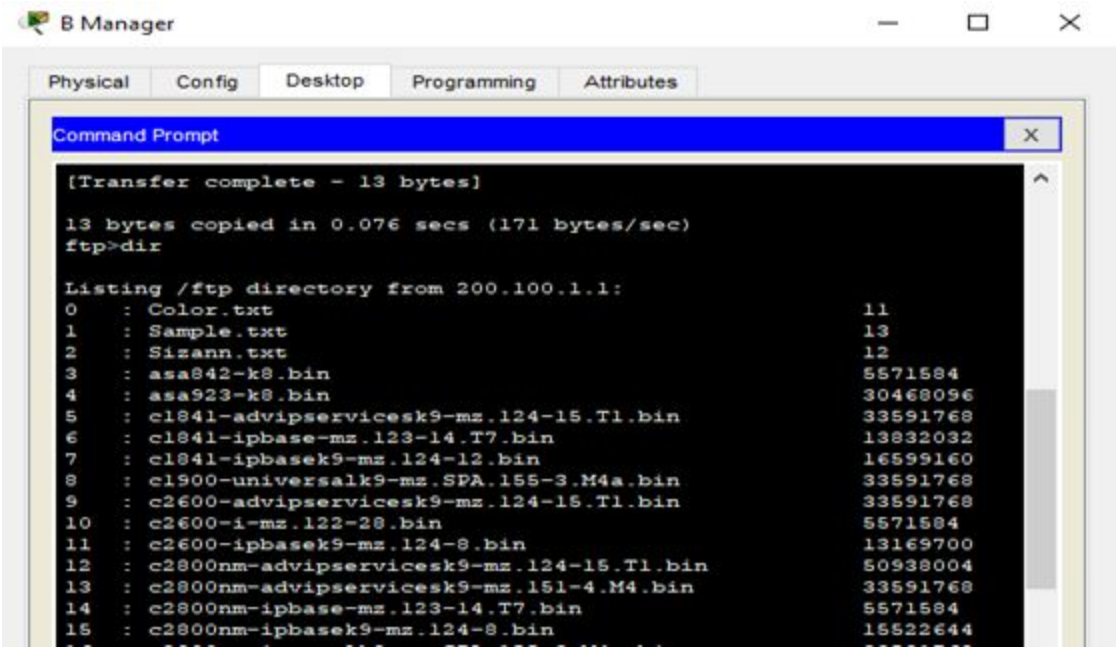


File share using FTP:

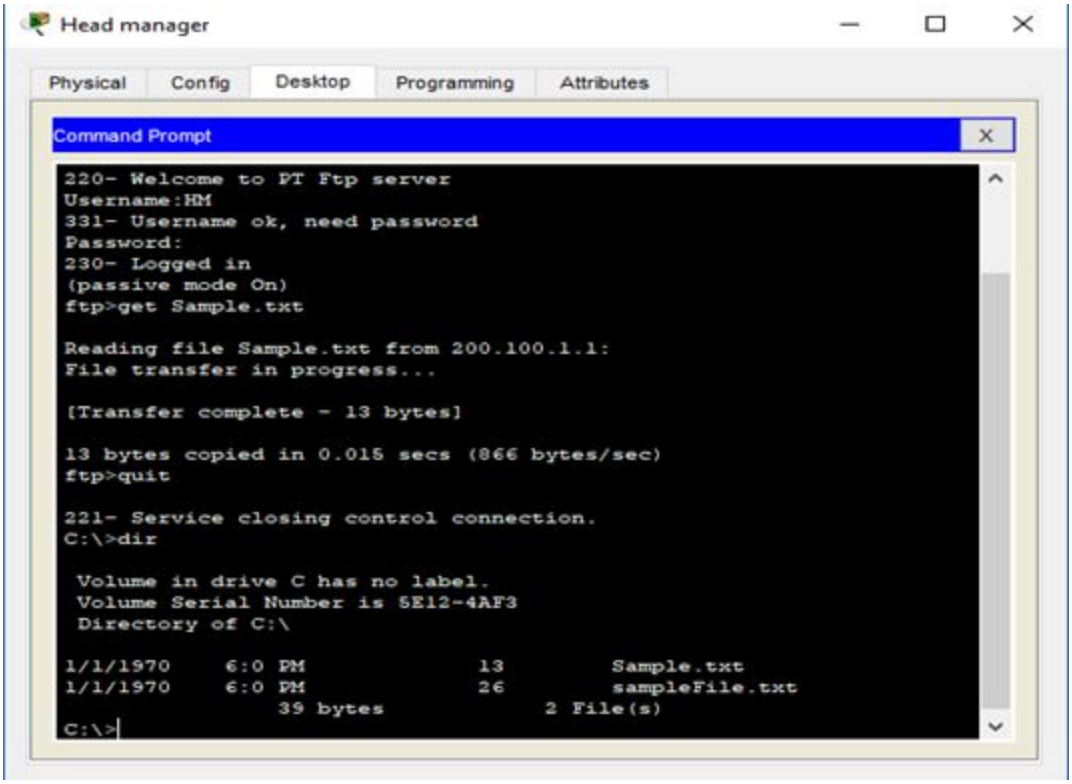
Barisal manager share a file named “Sample” into the ftp server



Now check the file into the FTP server:



Now access and download the file from the Head manager device:



Conclusion

1. Limitation:

In the company management system a company can share any kind of information with each other but in our project only mail and files can be transferred.

There is a security issue with the FTP server. Since there is no opportunity to register on the client side in Cisco Packet Tracer, if someone goes to the username and password of a client, someone from outside will be able to access the file.

2. Future Plan:

In this project we have mentioned a few districts and branches and used only SMTP and FTP protocols.

Our future plan is that there will be separate servers for all the districts and divisions of Bangladesh and they will be under one main server.

And here are a few more protocols to use to make information transfer more reliable.

3. Future Plan:

The main objective of this company management system was to enable all the employees of a company to transfer all the information among themselves through a dedicated network. Where everyone will be connected to a specific server. We have tried to make this networking channel reliable. In the future we will add some more features here so that the employees can use it more easily.

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