

# Police Station Network Implementation

<sup>[1]</sup> Mr. M.E.Ingale <sup>[2]</sup> Mayur B. Thakare <sup>[3]</sup> Kamini D. Sagar <sup>[4]</sup> Supria M. Ghuge  
<sup>[1]</sup> Assistant professor <sup>[2][3][4]</sup> UG scholar

<sup>[1][2][3][4]</sup> Department of Electronics and Telecommunication

Sandip Institute of Technology & Research Centre, Nashik, Savitribai Phule Pune University, Pune

**Abstract:—** In this network implementation we are supposed to access multiple PC's without using internet with LAN and the protocols that we are using are TFTP and FTP for sharing data and this whole network system is designed for security purpose and for handling system with command.

## I. INTRODUCTION

In different area of the police station network we are planning to use protocols of multiple routing. The project initiates from the different police station department to the control room. This technology also implements to let the admin part and the important terms and staff would be allowed to utilize the network resources at the time of urgency. The important security concepts have also been implemented so that the forbidden information of the police record would not be accessible for unknown person.

## II. HISTORY

In past years this network implementation system is designed for the hospitals, airports, and hotels. This system has not been implemented for the police department, so we decided to implement this network for security and fast work process.

In past days and in recent days also the SATARK and CCTNS are used to share information, but these networks are not easy to handle and not very secure.

Because the internet is required to run the whole system and the security problem is also being faced by the users, so we come to plan the network implementation for police dept. without using internet and with high security.

## III. LITERATURE SURVEY

We had gone to the commissioner's office to know about what system they are using to share data regarding to crime and criminal records. We came to know that they are using CCTNS network, in that software hacking chances are more and internet problems are present and that can be accessed by any common person, so therefore the data is not secure. So we plan to implement such a network system that

will be more secure and easily handle but can't be accessed by common user.

## IV. METHODOLOGY

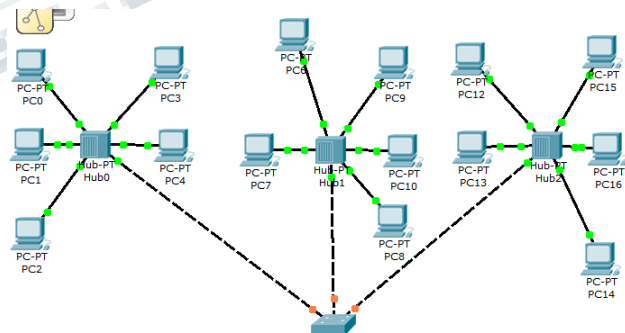
Being a wireless network, it has a few securities that need to be taken care of while designing the network. Security risks are-

**Insertion attacks:** Process of placing unauthorized devices on the wireless network without going through a security process and review.

### **Interception and monitoring wireless traffic:**

An attacker can sniff and capture legitimate traffic

## V. PROPOSED SYSTEM



Purpose of the project is to connect PCs using communication protocols. So we have made the network first using packet tracer software and have to set the IP addresses. In short, we are making our own system without using internet with several commands used for the networking system are handled by user. This system is a proper way to stop the hacking process and the other problem faced by different applications which are recently used by the department of police for recording purposes.

**International Journal of Engineering Research in Electronics and Communication  
Engineering (IJERECE)  
Vol 4, Issue 2, February 2017**

**Software Used:** Packet Tracer 5.3.2

**Operating System:** Microsoft Windows XP, Vista, 7

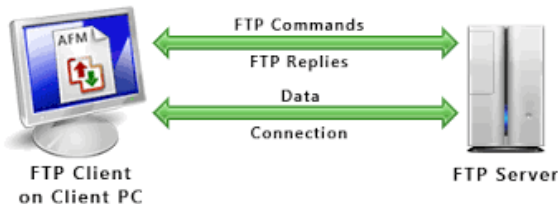
**Packet tracer:** A Cisco router simulator that can be utilized in training and education and research for simple computer network simulations. The tool is created by Cisco Systems and provided for free distribution to faculty, students, and alumni who are or have participated in the Cisco Networking Academy. The purpose is to offer users a tool to learn the principles of networking as well as develop Cisco technology specific skills.

**Features** Its current version supports an array of simulated Application Layer protocols, as well as basic routing with RIP, OSPF, and EIGRP, to the current CCNA curriculum. While Packet Tracer aims to provide a realistic simulation of functional networks, the application itself utilizes only a small number of features found within the actual hardware running a current CiscoIOS version. Thus, Packet Tracer is unsuitable for modeling production networks. With the introduction of version 5.3, several new features were added, including BGP. BGP is not part of the CCNA curriculum, but part of the CCNP curriculum.

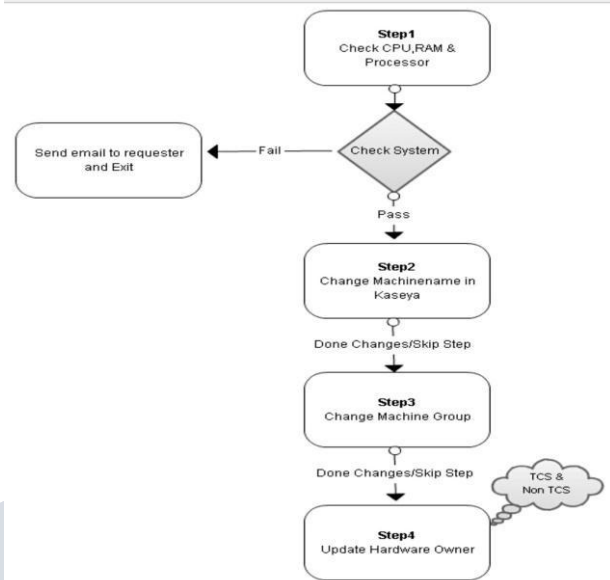
**Packet Tracer** (version 5.3.2) The logical workspace allows users to get a global view of network through simulation mode. On this workspace, devices are added, linked, and configured. The physical dimension is given to the logical network topology by physical workspace. And important for wireless labs, where the distance parameter is one of the factors that determine whether a device is able to connect or not to another device.

**VI. PROTOCOL FTP**

FTP uses TCP. Errors are handled by the TCP layer. Data and control information transmission is handled by the underlying TCP layer. FTP is more complex than TFTP, thus requires a larger memory footprint. Separation of user data and control information by using separate TCP connections.

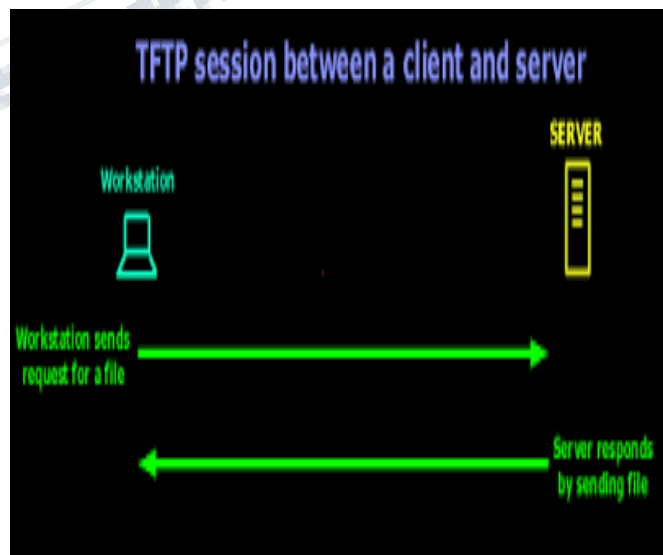


**Flowchart:**



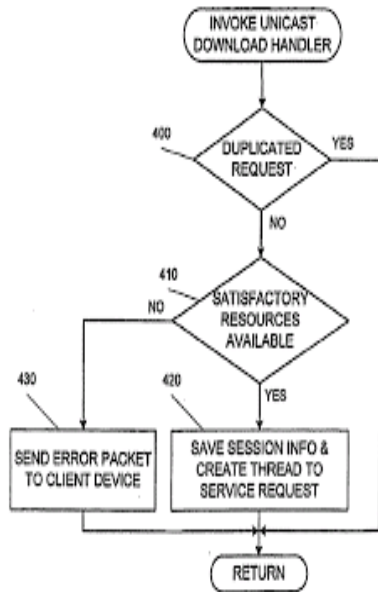
**TFTP**

It does not provide authentication. It uses UDP and hence no connections. It also uses a simple lock-step protocol; packets need to be acknowledged. TFTP is very useful; it uses the equally simple UDP transport protocol. TFTP clients or servers have a very small footprint and are thus suited for use in boot loaders.



**International Journal of Engineering Research in Electronics and Communication Engineering (IJERECE)**  
**Vol 4, Issue 2, February 2017**

**Flowchart:**



**VII.COMPARISION OF FTP AND TFTP**

SR NO.	PARAMETER	FTP	TFTP
1	Abbreviation	File transfer protocol	Trivial file transfer protocol
2	Authentication	Authentication is required in FTP for communication between client and server	No authentication is required in TFTP
3	Service	Uses TCP service which is a connection oriented service	UDP service which is connection less service
4	Software	software is larger than TFTP	software is smaller than FTP and fits into read only memory of the diskless workstation
5	Complexity	more complex	less complex

6	Command/message	Have many commands	less commands
---	-----------------	--------------------	---------------

**VIII. SYSTEM OVERVIEW**

**A. Advantages**

1. Small space required to implementation.
2. Power consumption is less.
3. This will provide safety and reliability to user.

**B. Future Scope**

1. We can implement this project for multiple police stations Over one city.
2. We also use this same system for other purpose.

**IX. CONCLUSION**

This project is based on the networking protocols which are used to access multiple pc's To become system reliable by using this system the work of police department will become more faster ,easy and secured regarding data of crime and criminal.

**REFERENCES**

- 1E. Lear, —Uniform Resource Identifier (URI) Scheme and Applicability Statement for the TFTP, in RFC 3617, 2003.
- 2 Data communication and networking by Frozen.
- 3Nur Nabila Mohamed, Habibah Hashim, Yusnani Mohd Yusoff, Mohd Anuar Mat Isa, —Securing TFTP packet: A preliminary study, in 2013 IEEE 4th Control and System Graduate Research Colloquium, pp. 158–161, 2013.