

Contribution of Engineering thoughts in the field of Computer Networking with the application of various Networks

Pravina H. Bhatt

Vadodara Institute of Engineering, Vadodara, India

Email: pravina169bhatt@gmail.com,

Abstract—The transition in intelligent system is inspired by computer networks which is soft take off for many sectors to get updated together. In this paper we are elaborating such concepts resided behind such technologies for the implementation of various types of networks. IT is the combination of biological network and technology that yields intelligent system. Here we will elaborate the study about ATM, Internet and vast hub of such networking implemented sectors.

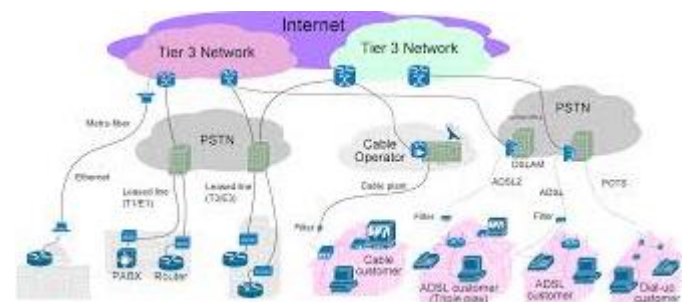
Keywords—Asynchronous Transfer Mode (ATM), multithreading, Internet, Transfer Protocols, computer networks, glossary

I. INTRODUCTION

Computer network is a broadcastings network which allows processors to altercate the data. In computer networks, networked computing devices exchange data with each other along network links (data connections). The connections between nodes are established using either cable media or wireless media. The best-known computer network is the Internet.

Asynchronous Transfer Mode (ATM) has revolutionized telecommunications, and has become an integral part of the networking infrastructure.

This introductory well-structured text on ATM networks describes their development, architecture, congestion control, deployment, and signaling in an intuitive, accessible way.



II. BASIC EXPLANATION

An Engineering Approach to Computer Networking simultaneously studies all three major network technologies-Asynchronous Transfer Mode (ATM), Internet, and telephony. You will find clear overviews of these technologies and extensive, up-to-date coverage of all essential networking topics: protocol layering; multiple accesses; switching; scheduling; naming, addressing, and routing; error and flow control; and traffic management. For each topic, the book identifies fundamental constraints and analyzes the pros and cons of several alternative solutions. Through detailed descriptions of common protocols used in telephone, Internet, and ATM networks-as well as a tour of system design and protocol implementation techniques-this book shows you how these concepts are put to use in real networks.

Practical in focus, Engineering Approach to Computer Networking features many real-world examples and is supported with on-line material including:

Microsoft PowerPoint slides covering the material in the book.
A multithreaded, packet-level network simulator that allows users to simulate arbitrary protocols.

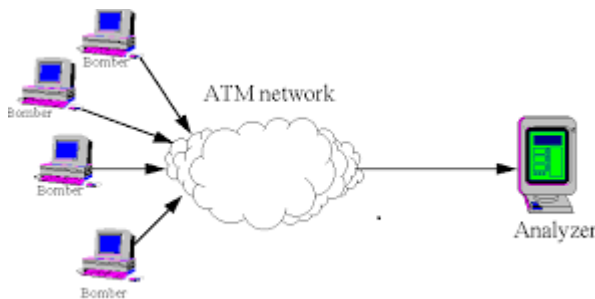
Simulation exercises covering multiple access, error control, flow control, routing, and scheduling.

A bibliography with links to Web sites referred to in the text.

A searchable glossary.

Solutions to all exercises.

With this deeper understanding of network structure and hands-on experience implementing protocols, you will have an excellent command of the field and be better equipped to design powerful and efficient networks and leading-edge networking software.

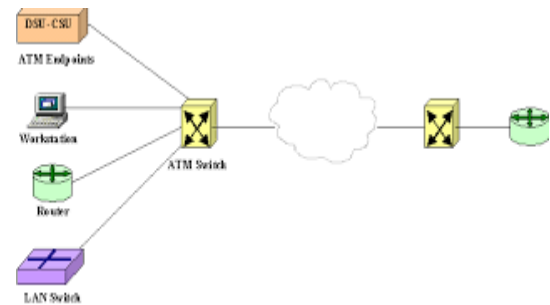


III.CARRIER THESAURUS

Industries across the career spectrum and around the world depend on computer networking to keep employees connected and business flowing. And these networks need administrators - hard-working men and women who know their way around a computer and aren't afraid to take a hands-on approach to troubleshooting.

Though network administration isn't for everyone, it offers plenty of rewarding - and profitable - challenges for those who can soak up technical knowledge and put it to practical use. Here are five of the biggest reasons why it could be just the career path you're looking for.

- . You'll learn as you go
- You'll be in demand, and demand keeps growing
- It's an inroad to nearly any industry
- It opens up new career branches
- It's a challenge worthy of your skill



IV.ISSUES IN IMPLEMENTING SUCH NETWORKS

The 5 most common problems associated with Windows clients over a networked infrastructure.

A network is defined as a group (2 or more) of systems such as Windows desktop and server platforms that connect together for the purpose of sharing resources. Typical resources include printers, storage devices and folders that include files and other data that users may wish to use. Networks are used to give centralized access (secure access) to networked resources and generally, the entire network (whether it be a home based office, or a corporation's infrastructure) all connect up to the biggest shared resource in use today – the World Wide Web. Tie all of these dissimilar systems and resources together and you can start to see why so many people have issues connecting to, staying connected to or just plain 'setting up' their networks. Keeping a network operational after it is created is another challenge – especially when you start to use it over unsecured connections.

The problems many people; such as end-users, administrators and business owners face today are usually common. Foreexample, how many times have you heard 'I cannot connect to the network' or something of that nature? This is because since Windows systems came to the market, they have never been easy to set up and work with and worse, keep problem-free. Now, tie in the fact that many people have moved, tried to use, or otherwise integrated other types of systems such as Apple, Unix or Linux on their networks, you can see why more and more issues arise each and every day. As well, there is a huge mobile market growing by leaps and bounds. These same users now wish to connect their mobiles such as Blackberry's, iPhones and Palms to their home or corporate networks adding a new layer of complexity to the mix. To complicate things further, wireless (not a new technology) is a booming market growing bigger than ever with newer, faster and more secure technologies (such as 802.11n) which seem to come to market yearly and bring a new host of issues to the 'connectivity' issues you may already face. All of these technologies, systems and resources

once connected (and that is, if you connected them correctly), now suffer from many of the same issues.

This article lays out what seems to be most common of these problems and I provide some helpful tips to give you ideas on how to troubleshoot or circumvent just about any common network issue you may find. This article focuses on Windows Networking problems. With Windows client systems (such as Windows XP, Vista and 7), you will find that these top five issues are absolutely the most common amongst most Windows users today. These are not listed in any order – they are all equally to blame or all should be equally considered because they all work together to produce the same result – a network that operates correctly, or one that is expensive and does not do anything for you.

Top 5 Networking Issues with Windows Clients

- 1: Initial Configuration
- 2: Credential, Permission and Rights Problems
- 3: Network Performance
- 4: TCP/IP and other Protocol Problems
- 5: General Security Concerns



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