The Internet System and Services

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Abstract: One of the greatest breakthroughs in the electronics world is the internet system which has brought the whole world together. Many are ignorant of the many services offered by this system while those who know these do not know how to explore them. This study explained concisely the concept of the internet system, its development and how to get connected. Also various services that are offered by the system are itemized with how they can be explored.

Key words: Internet system, services, LAN, WAN, MAN, HTML

INTRODUCTION

The need to communicate, learn and exchange ideas, data and information is an inherent part of man's daily living. Man, has since creation been looking for a way of achieving the afore mentioned. The emergence of the computers systems and its ability to be networked together in various sizes and location gave birth to one of the fastest and easiest mode of communication. The sizes of these networks are generally categorized into three different groups: Local Area Networks (LAN), Metropolitan Area Network (MAN) and Wide Area Network (WAN). LAN is the smallest network in size and are normally contained in a building or small group of building limited to a geographical distance of 2.5 km. The MAN, is a group of LAN, located in a city while the WAN which is the largest network in size is the interconnecting of any number of LANs and MANs. WAN can connects networks across cities, states, countries and even the world.

The internet which is the acronym for international network is a global network of computers linked together by cables, optic fibre, telephone lines microwave and satellite link to form large single information pool (Edeko, 1997). It is a vast computer network consisting of many smaller networks that,when connected, span the entire globe It is a world wide communication medium which provides information pool from where people all over the world exchange, retrieve, disseminate and store information.

DEVELOPMENT OF THE INTERNET SYSTEM

The internet was originally the outcome of a strategic study during the cold war years into how US authorities could communicate and command centers function after a nuclear strike. The internet began as network of four computers located at the university of Califolia at Los Angelos, the university of Califolia at Santa Barbara, University of Utah and the Stanford Research Institute. This first network was created by 1969 for the US department of Defense, by the companies named Bolt Beranek and Newman and the network was called ARPA net. ARPA means Advanced Research Project Agency. The networks grew and by 1972, about 40 networks were developed (Jimin, 1998).

World wide web (www): The World Wide Web, also know as the web, the WWW or W_3 was initially developed by the European laboratory for particle physics, in order to build a distributed hypermedia system (Jimin, 1998). It is an interconnected assembly of resources available on the internet that can be displayed by means of a type of software program known as a web browser or web navigator. A browser is an interactive program that permits a user to view information from WWW. The information contains selectable items that allow the user to view other information. The document on the web are written in the Hypertext Markup Language (HTML). HTML embeds commands that determine formatting along with the text to be displayed. The system aims to provide global access to a universe of documents. To access the www, you need a web browser to read documents and retrieve them onto your computer from other sources. Example of such is the Netscape Navigator, Internet Explorer, Firefox Morzilla etc. With Universal Resources Locator URL on your system, the WWW browser is enable to go directly to any title held in any WWW server.

www search tool : The internet is like a huge library with vast resources of information available. It is impossible to keep track of the numerous services it provides as well as account for frequent changes.

Without a means of searching, cataloguing and indexing; finding information on the net will be an uphill task (Steve, 1994). The www search tools provide a way of searching for information on the net. Some search engines are specialized for particular tasks while some are multi functional. Examples of search tools are Alta vista, Google, Excites, Yahoo, Info seek, WebCrawler e.t.c.

With the search tools, you just typed key words in the information you are seeking for and it returned to you useful information which is the sorted, indexed and categorized for its database-all automatically!

GETTING CONNECTED TO INTERNET

Certain equipment and tools are needed before one can be connected to the internet.

A personal computer: A personal computer is needed before one can be connected with the internet. The computer must have the appropriate software with the programs properly configured for the various services.

Modems: Modems are Modulator/Demodulator circuits. It enables you to establish communication between two computers over an existing telephone line. Computers deal with digital signals. The modem converts the digital signal from a computer terminal to analogue signal so that the data can be transmitted over telephone lines while reaching its destination, these analogue signals are demodulated by another MODEM into digital signal which the computer accepts.

Phone line/VSAT: The normal telephone line is good enough for any link with internet. An alternative to this is the use of the VSAT (Very Small Aperture Terminal) the VSAT is often used by companies, schools and business or ganization.

Internet Service Provider (ISP): ISP is your gateway to internet. Is a company that sell to you a connection to the internet. All you need is an account with ISP and then you can have computer and MODEM connected to your ISP and hence log in and out of internet. ISP normally charge fees for their services and will issue you your unique (IP address) Internet address.

INTERNET SERVICES

Email: Email which stands for Electronic mail is the most popular service provided by internet. It is a method of sending message to anyone who has an email address. It is simply a written text; typed in your email program of your computer and addressed to the person you wish to send the message to. E mail uses the office paradigm in which a message contains a header that specifies the sender, recipient and subject, followed by a body that contains the text of the message(Steve, 994). To participate in email a person must be assigned a mailbox into which messages can be placed. Each mailbox has address and an e mail address is a string divided into two parts by at the rate of character. The first is a mailbox identifier and the second is the name of the computer in which the mail box resides. Examples of email address are ojo@yahoo.com, tolu@hotmail.com. Sending an email is much easier, faster and cheaper than sending equivalent information in written form through the post office because the information sent are receive immediately at the destination. Although the email was originally intended to provide communication between pairs of people, computer programs can be used to send, receive or forward e-mail. A mail exploder program uses a database of mailing list to provide communication among large groups of participants. When a message is sent to a mailing list, the exploder forwards a copy to each member on the list. A computer dedicated to the task of forwarding mail is called a mail gateway or mail relay.

Muultimedia on the web: Multimedia on the web is the integration of text, graphics, video, animation and sound. (Steve, 1994). These development increase the types of information available on the web, expand its' potential uses and make the internet a more entertaining place to explore.

To run a multimedia applications a browser may need an additional program called plug in or help applications. With the multimedia internet audio conferencing is possible whereby you are enable to talk to other people over the web. Video conferencing is also possible which allows you to watch program that are available on the web.

Internet teleconference: With the internet, people on the net can conduct real-time discussion. You simply type in your contribution to any discussion topic and also read other peoples contributions. This is made possible with the Internet Relay chat. In the discussion group you can enter and leave the discussion when you like.

E learning: The internet has the potentials to bring about a profound change in education for all professions. Traditional approaches to teaching, lecturing and tutoring confined to classroom are beginning to be extended by new approaches using the more recent technology of online classrooms, multimedia, courseware, distant courses, online workshops, media education and also conferencing.

Traditionally, courses offered by universities are made known to school leavers through the university leaflets. The internet however is offering a different approach, it is providing an attractive venue for universities worldwide to promote and advertise their courses to a much wider domestic and international audience. Ample course information enables an informed selection before enrollment can be made available on the internet. It is a perfect means for distance education. Courses can be offered on the internet and students supervised, tutored and consulted through the internet. Learning materials can be downloaded, instructions given via e_mail and assessment made. For the university community, the internet can be ideal place to store lecture notes, tutorial material, assignment sheets etc. Also registration, fee payment and examinational are now possible through the internet.

Distance education: Distant learning is a means of learning at a physical distance from universities and colleges for awards and degrees, as well as for courses, seminars and workshops.

The internet provides an excellent venue for distance education; the internet gave a new dimension for distance education, by providing a virtual learning environment and enhances accessibility to information and courses. They help to create a community of learners that was not previously possible in traditional classroom settings or through conventional methods of distance learning.

PROFESSIONAL SOCIETIES AND ASSOCIATION THROUGH THE NET

Professional societies are very important communities and regulatory organization for professionals. Being a member of one or more professional societies is a useful part of a practicing professional. Many societies produce their own magazines for their members, as well as transactions and journal publications and make them available on the internet.

Members can be updated through the news letters published on the net. With this, the internet has begun to break the geographical barriers between their members.

Online publications: The advents of the internet brought an excellent environment for academic and professional communities to publish the result of their research for their peer and for wider communities. It has provided and enhanced access to information and revolutionizes the way libraries and publishers conduct their business. This publication can be in form of books, journals, magazines, report, soft wares and newsletters.

Online publication comes in different formats; It may be text, multimedia including audio and video. These publications are not vulnerable to vandalism and negligence, nor will they deteriorate due to poor paper and binding quality, they are convenient to catalogue and documented. They also offer dramatic reduction in the physical space requirement and are readily available for online transfer.

Online career information: One of the internet most useful applications for students and practicing professionals is for finding online information about professional careers. It is a great luxury for job seekers. There are many sites that are dedicated to job-seekers through which they can apply for employment world wide.

Usenet: This is a collection of news and discussion groups called newsgroup. This facility on the net allows members of this group to share news with one another. With this you can join in any discussion about everything you could possibly be interested in, such as, commercial news, business opportunities, sport news, technical news and so on.

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