Internet

In the 60´s the agency ARPA created the network ARPAnet. It soon spreaded to universities and other institutions. The Internet is a network of smaller networks, which are connected whit servers and use a common system languge TCP/IP. The ARPNnet was followes by the World Wide Web, whic was created in 1989 and is accesible over URL address. FTP protocol is used for downloading files.

Key words: **-WWW**
          -URL
          -TCP/IP
          -FTP
          -HTML
          -HTTP

So what is "the Internet"? The Internet is a gigantic collection of millions of computers, all linked together on a computer network. The network allows all of the computers to communicate with one another. A home computer may be linked to the Internet using a phone-line modem, DSL or cable modem that talks to an Internet service provider (ISP) In general, all of the machines on the Internet can be categorized as two types: servers and clients. Those machines that provide services (like Web servers or FTP servers) to other machines are servers. And the machines that are used to connect to those services are clients.Glej sliko 1.

WWW (World Wide Web)

Tim Berners- Lee invented the World Wide Web (WWW) when he discovered a way to jump to different files on his computer using the random, or unplanne, links between them. He then wrote a simple coding system, called HTML (Hyper Text Markup Language), to create links to files on any computer connected to the network. This was possible becouse each file had an invidual addres, or URL (Uniform Resource Locator). He then used a set of transfer rules, called HTTP (Hyper Text Transfer Protocol), to link web files together across the Internet. Berners also invented the worlds first browser. The WWW become available to everyone in 1991 and the number of internet users grev from 600,000 to 40 million in five years. Today, that number is much larger and there are now many browsers that provide Web pages, information and other services. You can also do research download music files, play interactive games, shop, talk in chat rooms and send a receive e-mail on the WWW.

Protocols

Once a client has connected to a service on a particular port, it accesses the service using a specific protocol. The protocol is the pre-defined way that someone who wants to use a service talks with that service. The "someone" could be a person, but more often it is a computer program like a Web browser. Protocols are often text, and simply describe how the client and server will have their conversation.

URL (Uniform Resource Locator)

Let's say that you are sitting at your computer, surfing the Web, and you get a call from a friend who says, "I just read a great article! Type in this URL and check it out. It's at http://computer.howstuffworks.com/web-server.htm." So you type that URL into your browser and press return. And magically, no matter where in the world that URL lives, the page pops up on your screen. Glej sliko 2.

IP Addresses

To keep all of these machines straight, each machine on the Internet is assigned a unique address called an IP address. IP stands for Internet protocol, and these addresses are 32-bit numbers, normally expressed as four "octets" in a "dotted decimal number." A typical IP address looks like this: **216.27.61.137**

Every machine on the Internet has a unique IP address. A server has a static IP address that does not change very often. A home machine that is dialing up through a modem often has an IP address that is assigned by the ISP when the machine dials in. That IP address is unique for that session -- it may be different the next time the machine dials in. This way, an ISP only needs one IP address for each modem it supports, rather than for each customer.

TCP (Transport Control Protocol)

is another protocl that extends IP with features useful for most higher-level protocols such as HTTP. (Lots of other protocols also use TCP: FTP, Gopher, SMTP, POP, IMAP, NNTP etc.) Some protocols use UDP instead of TCP.

FTP (file transfer protocol)

FTP is a client/server application, which means that you make use of an intermediary 'server' computer to transfer files between your own and someone else's computer. Basically what you do is to copy your file to the FTP server then tell the recipient where it is so that they can go and pick it up. It's a bit like having a Post Office Box Number. The objectives of FTP are **1) to promote sharing of files (computerprograms and/or data)**, **2) to encourage indirect or implicit (via programs) use of remote computers, 3) to shield a user from variations in file storage systems among hosts, and 4) to transfer data reliably and efficiently.** Glej sliko 3.

HTML (Hyper Text Markup Language)

It is not a compiled programming language such as C, Java or Basic. It is an interpreted language that functions only with a specialized piece of software, called a browser. HTML is a format for interactively displaying text and graphics together. It has more in common with a word processor than with a programming language.The way a browser marks up the text is similar to how one would markup a handwritten document. If someone wanted to bring attention to the headline or title of the document, they might take a pencil and underline it. HTML is that pencil.

HTTP (HyperText Transfer Protocol)

Is an application-level protocol for distributed, collaborative, hypermedia information systems. It is a generic, stateless, protocol which can be used for many tasks beyond its use for hypertext, such as name servers and distributed object management systems, through extension of its request methods, error codes and headers. A feature of HTTP is the typing and negotiation of data representation, allowing systems to be built independently of the data being transferred. HTTP has been in use by the World-Wide Web global information initiative since 1990.One important point here is that this request string is all the server ever sees. So the server doesn't care if the request came from a browser, a link checker, a validator, a search engine robot or if you typed it in manually. It just performs the request and returns the result.