



Note: In a Uniform Resource Locator, it is a must to have, from HTTP protocol to Domain name.

Given below are some URL related to the field of Education.

http://www.moe.gov.lk	- Ministry of Education
http://www.nie.lk	- National Institute of Education
http://www.doenets.lk	- Department of Examinations
http://www.edupub.gov.lk	- Educational Publications Department

## what is an IP address?

Internet Protocol (IP) addresses are used to individually identify all the computers in the Internet. The IP address is indicated in four values from 0 to 255 separated by a decimal point. This is called Dotted Decimal Notation.

**Example**      172.64.85.42  
                  193.213.78.154

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## what is a domain name?

Let us consider the domain name edupub.gov.lk of the Uniform Resource Locator given above. Here gov represents the government and lk represents Sri Lanka. Thus, lk domain which comes after gov domain is the top level domain name. Domain name gives an identity to all the websites which exist in the Internet.

Following are the names used to represent the fields which the domains belong to.

Domain	Meaning
com	Commercial
org	Non profitable organizations
gov	Public
edu	Education
net	Web

The following country domains are used to represent the country related to the domain.

Domain	Meaning
in	India
au	Australia
jp	Japan
uk	United Kingdom
us	United States


The domain at the right - most corner of a domain name is called the Top Level Domain.


### Example

URL	Domain Name	Top Level Domain
http://www.google.com	google.com	com
http://www.edupub.gov.lk	edupub.gov.lk	lk
http://www.nie.lk/pages/syllabus.asp	nie.lk	lk
http://www.unicode.org/consortium/consort.html	unicode.org	org

The Internet is a Wide Area Network (WAN) which is based on a Client Server Model. Hence, all the computers in Internet belong either to the type of servers or clients.

The computer that distributes the resources required by the client computer is called the "server".

The activity of retrieving information from the server computers to client computers is called "downloading". 

The activity of providing information from client computers to server computers is called "uploading". 

Hence, transfer of information between server and client computers is two-way.

### Let us identify some Internet server computers.

Web Server - Storing web pages and providing these to the client computers

Mail Server - Storing electronic mail and providing them to the client computers

DNS Server - translating URL to IP addresses

## Services of the Internet

1.

### World Wide Web (WWW)

World Wide Web is a service provided by the Internet and it is a large collection of electronic documents saved in computers all around the world connected to the Internet.

Sir Tim Berners Lee is considered the father of www. A user who uses www can access web sites through a Web Browser.

A Web Browser is an application software. Following are some examples of Web Browsers.

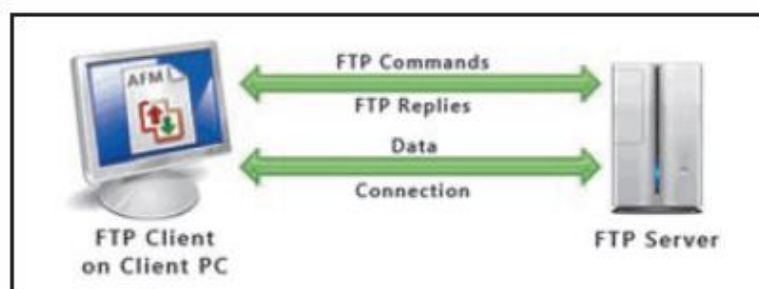


2.

### File Transfer Protocol (FTP)

File of smaller size can be sent with an e mail as an attachment. But files with larger capacities cannot be sent in an e mail attachments.

FTP is used to transfer large files of one computer in the Internet to another computer. This protocol is operated on TCP/IP and used to upload files of a client computer to the Internet and to download files from server computers in the Internet.



3.

## **Remote Access**

Controlling and operating a computer in the Internet remotely is performed through remote access. Following are certain functions which can be performed through Remote Access after accessing the Internet.

1. Installing software of server computers to client computers.
2. Fixing problems on client computers.

Using remote access functionality sometimes hackers steal important data and information stored on computers without owner's knowledge (This is called hacking).

4.

## **File Sharing**

The main objective of computer networking is to share resources. Such resource sharing includes file sharing. Thus, sharing of various files in the Internet take place often.



### **Example**

1. When you check exam results on line, that file is accessed by a large number of clients at the same time.
2. Thousands of users can be connected to a web site at the same time.

5.

## **Streaming of Media**

Internet provides much assistance to share all sorts of information which consists of multimedia such as text, images audio and video. Downloading images, songs and videos etc from the Internet can be considered as an example.

6.

## **Search Engines**

Web sites largely contain information on the Internet. These websites should obtain information. For this, you should know the address (URL) of the web site. However, the unlimited number of websites in the Internet makes it practically very difficult.

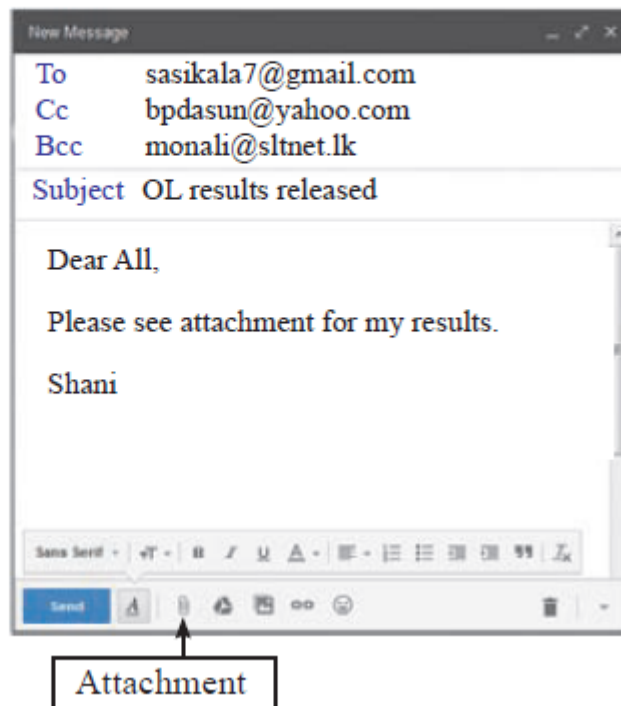
Search engines are designed for the Internet users to find any information easily.





## Sending an email

Sending an e mail can be performed in the following manner.



- Type the receiver's email address in To (sasikala7@gmail.com)
- Type the email address of the others (bpdasun@yahoo.com) who should receive the copies of the email in Cc (Carbon copy)
- Type the email addresses of those who should receive the mail without the awareness of those receivers typed

**TO: Primary Addressee(s)**  
All recipients can see list  
**CC: Secondary Addressee(s)**  
All recipients can see list  
**BCC: Tertiary Addressee(s)**  
No recipients can see list

under To and Cc in Bcc (Blind carbon copy). Those who receive Bcc copies can view all the receivers of the mail. However, the receivers typed under To and Cc cannot view the receivers of Bcc copies (monali@sltnet.lk)

- The person who receives Bcc copy (monali@sltnet.lk), can see all the e mail addresses (sasikala7@gmail.com) and (bpdasun@yahoo.com) that this letter sent. Persons under To and Cc (sasikala7@gmail.com) and (bpdasun@yahoo.com) cannot see the e mail address of Bcc
- Type the title or relevant subject related to the mail in Subject. (O/L results released)
- Attach other file or files which should be sent with the e mail by clicking the attachment button with the paper clip icon. (Results.jpg)
- Send the email by clicking "Send".

e mails are categorized inside an e mail account for easy use.

- Inbox - To store mails received
- Drafts - To store mails that are composed to be sent but could not be completed
- Sent - To store mails sent
- Trash/Deleted - To store mails for a certain period that are deleted
- Spam/Junk - To store mails that are unwanted

Unwanted e mails stored in a separate folder without disturbing the Inbox are known as Spam.

2.

## Sending instant messages - IM

Two persons can exchange short messages very fast (chat) over the Internet using the chat facility.





3.

## **Video conference**

Video conferencing is conducting a conversation between two or more persons in different (remote) locations using audio and video transmission over computer networks.



**The requirements are as follows for a video conference**

- Computers
- Web cam
- Internet connection
- Communication software (with audiovisual facilities)

4.

## **Social Networks**

Social networks are, used to maintain social relationships over the Internet.

These social networks facilitate the people to exchange personal details, photographs, videos and daily activities. As a result, social relationships are widened and also can create social issues.

Given below are some examples of social networks.



5.

## **Cloud Computing**

Cloud computing is the practice of using a network of remote servers hosted on the Internet to store, manage and process data, rather than a local server or a personal computer. The main services of cloud computing are

## Advantages and Disadvantages

<b>Advantages</b>	<ul style="list-style-type: none"><li>• Lower software cost</li><li>• Improve performance</li><li>• Fewer maintenance issues</li><li>• Instant software updates</li></ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"><li>• Requires a constant Internet connections</li><li>• Does not work well in low speed Internet connections</li></ul>