

Chapter-7

Web Hosting

The process of storing web pages on a server is called web hosting. The companies that provide web hosting services are called web hosts. Hosting allows individuals and organizations to make their website accessible via the World Wide Web. They own and manage web servers. Servers offer uninterrupted connectivity, software packages for databases etc..

Types of web hosting

The type of web hosting is decided by amount of space needed for hosting, number of visitors to website, database and programming language support etc. Web hosts provide different types of hosting packages. Web hosting is classified into three types shared hosting, virtual hosting and dedicated hosting.

a) **Shared hosting**:- It is the common type of web hosting. It is called shared because many websites reside on one web server connected to the Internet. They share resources (RAM, CPU etc). Shared hosting is not suitable for websites with high bandwidth, large storage space etc. It is not suitable for small sites with less traffic. Shared servers are cheaper and easy to use. Updates and security issues are handled by the hosting company. The main disadvantage of shared hosting is that other sites will slow down if any one of the site has heavy traffic as bandwidth is shared by many sites.

b) **Dedicated hosting**:- In dedicated hosting a web site uses (lease) an entire server and its resources. The web server is not shared with other servers. It is mostly used by websites that receive a large volume of traffic. The web sites of large organizations, government

departments etc use dedicated web hosting. The advantage of dedicated web hosting is that servers are hosted in data center which has internet connection, uninterrupted power supply etc.

Colocation is a form of dedicated hosting in which the client can use their own server and other facilities are provided by service provider.

c) **Virtual Private Server:-** A virtual Private Server (VPS) is a physical server that is virtually partitioned into several servers. Each VPS works like a dedicated server and has its own operating system, software etc. Each VPS works as an independent server. The user of VPS can install and configure any type of softwares. VPS is also called virtual dedicated server (VDS). This type of hosting is suitable for websites that requires more features at less expense. Some popular virtualization softwares are Vmware, Free VPS, Virtualbox, Microsoft Hyper-V etc.

Buying Hosting Space

The process of storing web pages on a server is called web hosting. Several factors are to be considered while purchasing hosting space such as amount of space needed, support technology, web server (Windows or Linux Server), database facility etc.

Domain name registration

Domain names are used to identify a web site on the internet. Most web hosting companies offer domain registration facility. The domain name chosen must be unique. It can be done using the website www.whois.net which checks domain name with ICANN (Internet Corporation for Assigned Names and Numbers) database. When a user inputs the domain name the web page will be displayed using DNS server. The domain name is connected with IP address of the web server using Address record (**'A' record**). The 'A record' can be modified by logging into the control panel of the

domain. The A record is used to store IP address of web server connected to a domain name.

WHOIS is a public database which helps to find out information about a specific domain name. WHOIS database contains name, address, telephone number and e-mail address of who owns the domain (Registrant).

FTP client software

An FTP client software is used to transfer files of a web site to a web server. FTP client establishes a connection with a remote server to transfer files. It needs a user name and password. Now a days SSH FTP (SFTP) protocol is used to send user name and password in an encrypted form. It uses SSH protocol. Once the client is authenticated the client can upload files. Some of the popular FTP clients are File Zilla, Cute FTP, Smart FTP ..etc.

Free hosting

Free hosting provides web hosting free of charge. They often display advertisements in websites to meet the expenses. They often allow only limited support.

Disadvantages of free web hosting are

- 1) The free hosting plans do not provide the separate domain name. Instead, they only offer the sub domain upon their own domain name.
- 2) There is no customer support.
- 3) Limited Bandwidth and Speed

Content Management System

A content management system is a web application which allows creating, publishing, editing and modifying web sites. It provides templates for designing web sites. CMSs are often used in blogs, shopping sites. The content management system (CMS) has two elements Content management application (CMA) and Content display application

(CDA) .The main advantage of CMS is nontechnical people can manage the contents of web sites.Also people who has no knowledge of web programming can create dynamic web sites.Joomla and Wordpress are examples of content management systems.

Advantages of Content Management Systems are,

- 1.Non-technical people can easily create and manage web sites.
- 2.It is easy to maintain CMS based sites.
- 3.Design changes are simple.

Responsive web design

Responsive web design is an approach to web design aimed at providing an optimal viewing and interactive experience.Itmakes your web page look good on all devices (desktops, tablets, and phones).The term ‘Responsive Web Designing’ was coined by Ethan Marcotee.Responsive web designing uses flexible images,videos,layouts etc..

Summary:-

- The process of storing web pages on a web server is called web hosting.
- A website is a collection of web pages.
- A web server is a computer that stores web pages.
- Apache is an example of a free web server.
- Web hosts are companies that provide space on a server owned or leased for use.
- The three types of web hosting are Shared hosting,Dedicated hosting and Virtual Private Server (VPS).
- Domain names are used to identify a website in the internet.
- ICANN stands for Internet Corporation for Assigned Names and Numbers .
- FTP(File Transfer Protocol) is used to transfer files from one computer to another.
- A content management system (**CMS**) is a system used to manage the content of a Web site.Wordpress,Drupal,Joomla!, ExpressionEngine(Ee) are some of the popular CMS .

- Responsive Web Design makes your web page look good on all devices (desktops, tablets, and phones).

Previous Questions

1)What type of hosting will you use to support a government website ?Give its advantages . **March 2016**

2)Identify the odd one :

(a) Word Press (b) File Zilla (c) Joomla (d) Drupal **March 2016**

3)What type of hosting package is suitable for a multinational online shopping site .Mention any two advantages of the package. **March 2016**

4)What is the need of registering a domain name for a website ?Explain the procedure of domain name registration . **March 2016**