



LESSON 5

E-LEARNING

POINT 1. THE INTERNET STRUCTURE

The main stages of Internet development:

ARPANET (Advanced Research Projects Agency net)

NFSNET (National Fond for Science net)

NFSNET Backboon - INTERNET
Internet is a global net.

POINT 1. THE INTERNET STRUCTURE

Structure:

Internet consists of local nets.

There are 3 categories of computers:

Hosts (nodes) handle the client access.

Servers provide information.

Clients use information.

POINT 1. THE INTERNET STRUCTURE

Every host or host group of Internet is served by some organization (provider).

Servers

WEB (World Wide Web)- for work with WWW

Mail – for receiving and transmitting the mail

FTP (file transfer protocol) – for file storage which are used for client download

NNTP (network news transfer protocol) – for teleconferencing- and news service

DNS (domain name system) – for converting the letter (domain) addresses into IP-addresses

POINT 2. THE MAIN PRINCIPLES OF NETWORK

- ◆ No rules and limits to presentation of information
- ◆ Information interchange between all the computers
- ◆ No limits to computer type and OS
- ◆ No hierarchy between PC connected to the Internet

POINT 2. THE MAIN PRINCIPLES OF NETWORK

IP-addressing

Every computer connected has its IP-address.

IP-address is a group of numbers (dotted decimal or octat). A dotted decimal is 1 byte of 32-bits address and cannot be more then 255.

The 32-bits address has 2 parts: net number and host number.

POINT 2. THE MAIN PRINCIPLES OF NETWORK

Dynamic address is an IP-address given automatic and used during limited time period.

For example, 108.25.17.100

POINT 2. THE MAIN PRINCIPLES OF NETWORK

Domain addressing

Domain address (URL – uniform resource locator) is a symbol (letter) group of domains with points.

There is a hierarchy. The 1.st level domain is the last one. It is an organization type or country. The 2.nd level domain is often an organization activity character. The 3.d level domain is a computer name (gov, mil, edu, com, org, net)

POINT 2. THE MAIN PRINCIPLES OF NETWORK

DNS is a method of address hierarchy construction in the net and a mechanism of getting an IP-address.

IP-address ↔ DNS ↔ URL
85.156.231.62 ↔ *http://www.vedu.ru*