

Internet, www, browser

Ref.: <http://en.wikipedia.org/wiki/Internet>

The Internet (ARPANET ... 1969)

The Internet is the global system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to link devices worldwide.

IP address (Internet Protocol) – a unique address identifying all computers on the Internet.

IP addresses are [binary numbers](#), but they are usually stored in text files and displayed in [human-readable](#) notations, such as 172.16.254.1 (for IPv4), and 2001:db8:0:1234:0:567:8:1 (for IPv6).

IP address, or "internet protocol address", is a unique identifying number given to every single computer on the Internet. Like a car license plate, an IP address is a special serial number used for identification.

Domain name

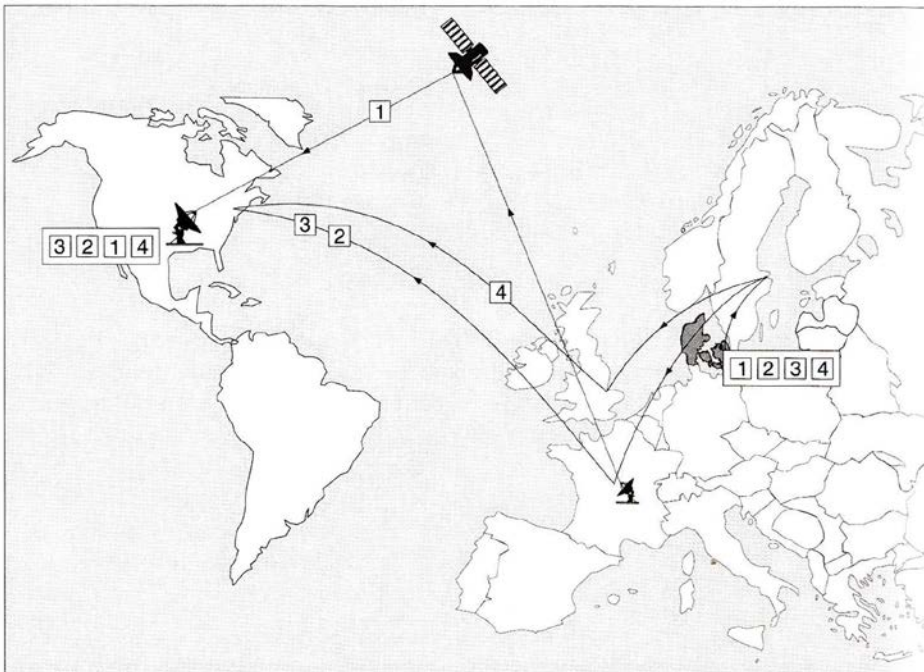
For nearly every web server, the IP address is invisibly translated into a natural English "domain name" for ease of use. But technically speaking, the IP address is the true identifier of a web server... the domain name is simply a redirector pointer to help people find the web server.

Example: 159.20.6.38 = www.dr.dk

Internet Protocols (IP)

All communication on the Internet is handled by a set of guidelines - protocols:

http, https, ftp, mailto (smtp) ...



De data, man sender af sted over nettet, følger ikke nogen bestemt vej gennem de mange under-netværk, som Internet består af. Alle data, som sendes via nettet, splittes op i små portioner – pakker. Hver enkelt pakke indeholder informationer om dens modtager og afsender, samt hvilken plads den har i rækken. Afhængigt af trafikken kan serverne kanalisere datapakkerne gennem forskellige ruter. De enkelte datapakker kan endda vælge forskellige ruter for sidenhen at blive samlet hos modtageren. Da pakkerne er nummererede, har det ingen betydning, at pakkerne måske ikke kommer frem i den rækkefølge, de blev afsendt i. Og modtagerens server sørger automatisk for at efterlyse tabte datapakker og ignorere gentagne data. Her er vist tre forskellige – tænkte – ruter, som et brev til Microsoft-bossen Bill Gates kan følge.

WWW – World Wide Web (http://)

WWW - an application on the Internet based on a protocol named http and a language named html.

URL-address

[protocol]://[domain].[country code] example: <http://www.dr.dk>

The very first website (Tim Berners-Lee, 1990)

<http://info.cern.ch/>

Mosaic - the first browser to display text and images inline (1993):

<http://www.wired.com/2010/04/0422mosaic-web-browser/>

Request-Response Model

Traditional Request - Response Model

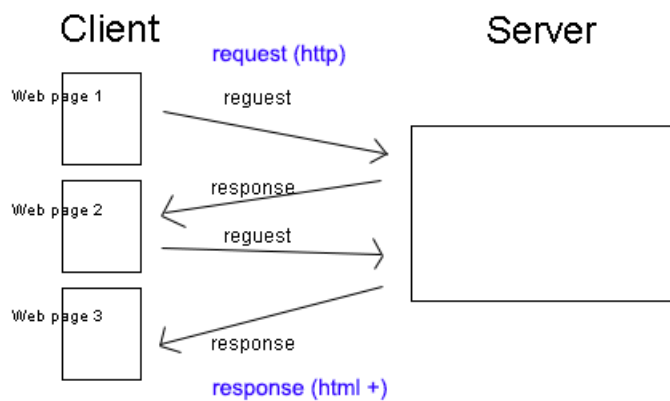


Fig: Request-response Model

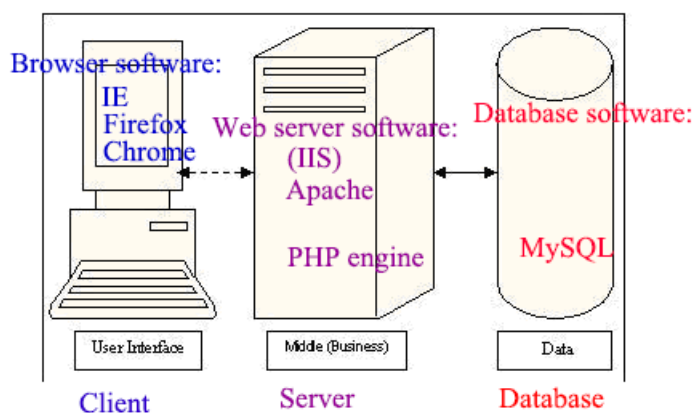
The architecture on the Internet (3-Tier Model)

Fig: 3-Tier Model

The web server could be in one place, the database server in another and the clients all over...

Browser: Google Chrome

Most popular browsers: http://www.w3schools.com/browsers/browsers_stats.asp