A client is an application or system that accesses a service made available by a server. The server is often (but not always) on another computer system, in which case the client accesses the service by way of a network.[1] The term was first applied to devices that were not capable of running their own stand-alone programs, but could interact with remote computers via a network. These dumb terminals were clients of the time-sharing mainframe computer

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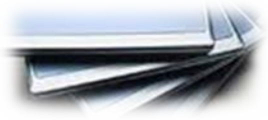
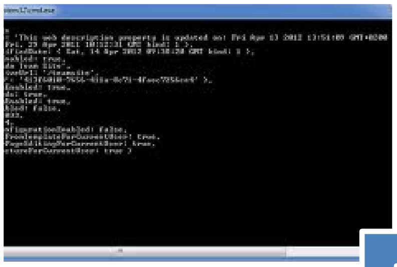
Flash Adobe Flash Player is a ubiquitous browser plugin ready for RIAs. Flex 2 is also deployed to the Flash Player (version 9+).

Ajax Asynchronous JavaScript provides new methods of using JavaScript, and other languages to improve the user experience.JavaScript JavaScript is an ubiquitous client side platform for creating and delivering rich Web applications that can also run across a wide variety of devices. It is a dialect of the scripting language ECMAScript.



jQuery Cross-browser JavaScript library designed to simplify and speed up the client-side scripting of HTML. Microsoft Silverlight Microsoft's browser plugin that enables animation, vector graphics and high-definition video playback, programmed using XAML and .NET programming languages. HTML5 and CSS3 Latest HTML proposed standard combined with the latest proposed standard for CSS natively supports much of the client-side functionality provided by other frameworks such as Flash and Silverlight.



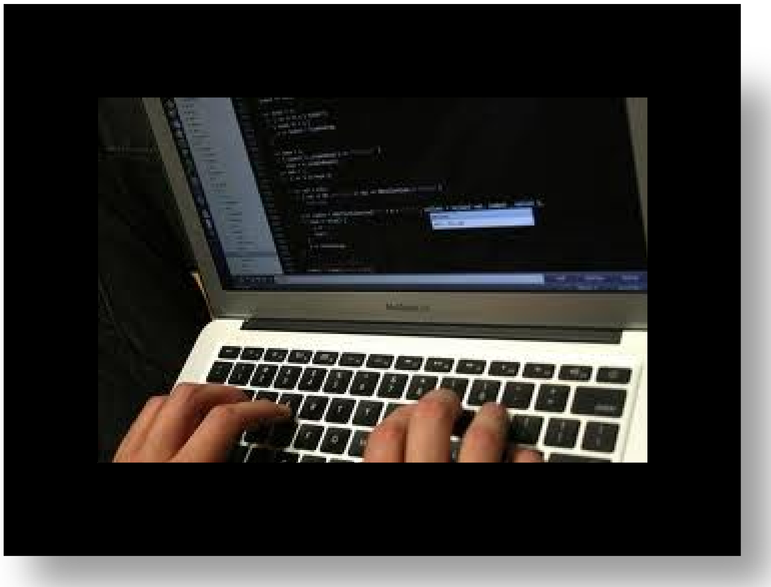
```
:
: 'This web description property is updated on: Fri Apr 13 2012 13:51:09 GMT+0200
Fri, 29 Apr 2011 10:32:31 GMT kind: 1 },
dFiedDate: { Sat, 14 Apr 2012 09:38:28 GMT kind: 1 },
nabled: true,
da Team Site',
veUrl: '/teamsite',
: '613f6010-7656-41a-8c71-4faec7256ce4' },
Enabled: true,
ds: true,
Enabled: true,
kind: false,
833,
4,
nfigurationEnabled: false,
FromTemplateForCurrentUser: true,
PageEditingForCurrentUser: true,
storeForCurrentUser: true }
```

Looking at these items from an "umbrella approach", client side coding such as XHTML is executed and stored on a local client (in a web browser) whereas server side code is not available to a client and is executed on a web server which generates the appropriate XHTML which is then sent to the client.

The nature of client side coding allows you to alter the HTML on a local client and refresh the pages with updated content (locally), web designers must bear in mind the importance and relevance to security with their server side scripts. If a server side script accepts content from a locally modified client side script, the web development of that page is poorly sanitized with relation to security.

The client–server model is still used today. Client and server can run on the same machine and connect via UNIX domain sockets, or other inter-process communication techniques such as shared memory, or named pipes.

Using Internet sockets a user may connect to a service operating on a possibly remote system through the Internet protocol suite. Servers set up listening sockets, and clients initiate connections that a server may accept. Web browsers are clients that connect to web servers and retrieve web pages for display. Most people use email clients to retrieve their email from their internet service provider's mail storage servers.



Online chat uses a variety of clients, which vary depending on the chat protocol being used. Multiplayer online games may run as Game Clients on each local computer.

Increasingly, existing large client applications are being switched to websites, making the browser a sort of universal client. This avoids the hassle of downloading a large piece of software onto any computer you want to use the application on. An example of this is the rise of webmail.

In personal computers and computer workstations, the difference between client and server operating system is often just a matter of marketing - the server version may contain more operating system components, allow more simultaneous logins, and may be more expensive, while the client version may contain more end-user software.

A fat client, also known as a rich client or thick client, is a client that performs the bulk of any data processing operations itself, and does not necessarily rely on the server. The fat client is most common in the form of a personal computer, as the personal computers or laptops can operate independently.

Programming languages and/or development tools for rich clients typically include Delphi, .NET Framework, Java, Flash, and Visual Studio.

A thin client is a minimal sort of client. Thin clients use the resources of the host computer. A thin client's job is generally just too graphically display pictures provided by an application server, which performs the bulk of any required data processing.

Programming environments for thin clients include JavaScript/AJAX (client side automation), ASP, JSP, Ruby on Rails, Python's Django, PHP and other (depends on server-side backend and uses HTML pages or rich media like Flash, Flex or Silverlight on client).

A hybrid client is a mixture of the above two client models. Similar to a fat client, it processes locally, but relies on the server for storage data. This approach offers features from both the fat client (multimedia support, high performance) and the thin client (high manageability, flexibility).