

AJAX = Asynchronous JavaScript and XML

AJAX is not a new programming language, but a technique for creating better, faster, and more interactive web applications.

With AJAX, your JavaScript can communicate directly with the server, using the JavaScript XMLHttpRequest object. With this object, your JavaScript can trade data with a web server, without reloading the page.

AJAX uses asynchronous data transfer (HTTP requests) between the browser and the web server, allowing web pages to request small bits of information from the server instead of whole pages.

The AJAX technique makes Internet applications smaller, faster and more user-friendly.

AJAX is a browser technology independent of web server software.

AJAX is Based on Web Standards

AJAX is based on the following web standards:

- JavaScript
- XML
- HTML
- CSS

The web standards used in AJAX are well defined, and supported by all major browsers. AJAX applications are browser and platform independent.

AJAX is About Better Internet Applications

Web applications have many benefits over desktop applications; they can reach a larger audience, they are easier to install and support, and easier to develop.

However, Internet applications are not always as "rich" and user-friendly as traditional desktop applications.

With AJAX, Internet applications can be made richer and more user-friendly.

You Can Start Using AJAX Today

There is nothing new to learn.

AJAX is based on existing standards. These standards have been used by most developers for several years.

AJAX Uses HTTP Requests

In traditional JavaScript coding, if you want to get any information from a database or a file on the server, or send user information to a server, you will have to make an HTML form and GET or POST data to the server. The user will have to click the "Submit" button to send/get the information, wait for the server to respond, then a new page will load with the results.

Because the server returns a new page each time the user submits input, traditional web applications can run slowly and tend to be less user-friendly.

With AJAX, your JavaScript communicates directly with the server, through the JavaScript **XMLHttpRequest** object

With an HTTP request, a web page can make a request to, and get a response from a web server - without reloading the page. The user will stay on the same page, and he or she will not notice that scripts request pages, or send data to a server in the background.

The XMLHttpRequest Object

By using the XMLHttpRequest object, a web developer can update a page with data from the server after the page has loaded!

AJAX was made popular in 2005 by Google (with Google Suggest).

Google Suggest is using the XMLHttpRequest object to create a very dynamic web interface: When you start typing in Google's search box, a JavaScript sends the letters off to a server and the server returns a list of suggestions.

The XMLHttpRequest object is supported in Internet Explorer 5.0+, Safari 1.2, Mozilla 1.0 / Firefox, Opera 8+, and Netscape 7.