



# Clients, Servers and URLs

Addresses on the Web are expressed with URLs - Uniform Resource Locators - which specify a protocol (http), a servername (www.apache.org), a URL-path (/docs/current/getting-started.html), and possibly a query string (?arg=value) used to pass additional arguments to the server.

A client (e.g., a web browser) connects to the server (an Apache HTTP Server) with the specified protocol, and makes a request for a resource using the URL path.

The server will send a response consisting of a status code and, optionally, a response body. The status code indicates whether the request was successful, and, if not, what kind of error condition there was. This tells the client know what it should do with the response.

## Hostnames and DNS

In order to connect to a server, the client will first have to resolve the servername to an IP address - the location on the Internet where the server resides. Thus, in order for your web server to be reachable, it is necessary that the servername be in DNS.

## Configuration Files and Directives

The Apache Server is configured via text files. These files may be located in a variety of places, depending on how exactly you installed the server. If installed from source, the default location of the configuration files is /usr/local/apache2/conf. The default configuration file is usually called httpd.conf.

## Web Site Content

Web site content can be divided into static and dynamic content.

Static content includes HTML files, image files, CSS files, and other files. The DocumentRoot directive specifies where you should place these files. This directive is either set globally, or per virtual host. Typically, a document called *index.html* will be served when a directory is requested without a file name. Dynamic content is anything that is generated at request time, and may change from one request to another.

## Log Files and Troubleshooting

One of the most valuable assets are the log files, and, in particular, the error log. The location of the error log is defined by the ErrorLog directive, which may be set globally, or per virtual host. Entries in the error log tell you what went wrong, and when. They often also tell you how to fix it. Each error log message contains an error code, which you can search for online for even more detailed descriptions of how to address the problem. You can also configure your error log to contain a log ID which you can then correlate to an access log entry, so that you can determine what request caused the error condition.

## Downloading Apache Server

The Apache HTTP Server Project is pleased to announce the release of version 2.4.43 of the Apache HTTP Server ("Apache" and "httpd"). This version of Apache is our latest GA release of the new generation 2.4.x branch of Apache HTTPD and represents fifteen years of innovation by the project, and is recommended over all previous releases. Apache release 2.4.3

Source and binaries can be downloaded from [downloads.apache.org](http://downloads.apache.org).

