

# **Apache - The OTHER Web Server**

**Christopher Eric Kidd**

**Assistant Professor**

**Business and Professional Programs Division**

**Prestonsburg Community College**

**One Bert Combs Drive**

**Prestonsburg, KY 41653**

**[chris.kidd@kctcs.edu](mailto:chris.kidd@kctcs.edu)**

## **Abstract**

This is one of several sessions outlining the use of open-source software. This session will provide an introduction and demonstration of the Apache Web Server software. The intent of this session is to increase the awareness of this software product by providing examples and detailed information relating to its use. Topics to be covered include: computer hardware requirements, various operating systems compatibility, software installation, ease of use, functionality, expandability, and specific comparisons to other current professional products. The installation and demonstration of the software will be provided.

## **Introduction**

The Apache Software Foundation is the home of the Apache Web Server project, which is only one of several open-source projects. The web server project started in 1995 as the result of several web masters working together to make changes to the public domain HTTP daemon developed by Rob McCool at the National Center for Supercomputing Applications, University of Illinois, Urbana-Champaign. ([http://httpd.apache.org/ABOUT\\_APACHE.html](http://httpd.apache.org/ABOUT_APACHE.html)) And eight years later, the Apache Web server is used by thousands of schools and businesses to host their web site, competing with Microsoft's IIS (Internet Information Server) for the number one web server product on the Internet. And as stated on the main page of the Apache web server project page, "The August 2002 [Netcraft Web Server Survey](#) found that 63% of the web sites on the Internet are using Apache, thus making it more widely used than all other web servers combined." (<http://httpd.apache.org>)

I begin using Apache in 1997 when I built a web server for internal use for a company as a no/low cost way of disseminating information. The software came bundled with Slackware Linux, the operating system I chose for the server, and was installed with the rest of the operating system. Since that time I have, downloaded the software and installed it with various different configurations/modules depending upon what was planned for the web site.

## **So what do I need to run Apache?**

If you are running Linux, you may already have it installed and don't even know it. Also, anyone who has a Mac with OS X also has Apache already installed

(<http://www.apple.com/creative/webpro/technology/amp/index.html>)

Basically if you have a computer with the following operating systems you can install and run Apache:

- Microsoft Windows 95/98/ME/NT/2000/XP
- Netware version 5.0 and higher,
- IBM OS/2,
- Linux,
- and most UNIX.

If you are planning to build/buy a computer, as long as you plan to use one of the above operating systems it will work. I prefer to install Apache on a system running Linux, but would not think twice about installing it on computer running the Microsoft Windows, Novell Netware, or Mac operating system.

### **Is it easy to install?**

The process of installing the software is straightforward and can be easy to do thanks to the included instructions (readme file).

\* If you plan to setup a new Linux system Apache can be installed along with Linux and requires no effort other than selecting it from a list of software packages to install.

\* If you have an existing Linux system, first check to see if Apache is installed. If not, then you will need to install it yourself. NOTE: This can be the hardest part of installing Apache, depending upon your experience with Linux.

1. Download it from <http://www.apache.org>
2. You will now have to uncompress(unzip) the file,
3. Then un-tar the uncompressed file,
4. Then compile the software (please read the included readme file for details)
5. Then do the actual installation using MAKE.

\* If you plan to buy a new Mac with OS X or use a Mac with OS X already installed, you have no installing to do since it comes as part of the operating system.

\* If you plan on using a new or existing Microsoft Windows system, you will need to:

1. Download it from <http://www.apache.org>
2. You will now have to uncompress(unzip) the file,
3. Run the setup program to install Apache onto the system.

### **It is installed, now what?**

At this point Apache is installed and ready to run with default settings. Based on how you want Apache to work for you, you may or may not to make changes to the configuration file. If you do, the file you will need to edit is httpd.conf. Editing this file is not too difficult because the developers have included comments throughout the document, telling you what/how to change a setting to best meet your needs. From this file you can configure Apache to host one web site or

dozens upon dozens of sites. It is also this file where you can setup your server to communicate with web browsers securely (provided you have SSL configured already).

### **Time to upload your website and let the world take a look.**

Once you have made any necessary changes to the configuration file you are ready to post your web site for the world to see. Depending upon how and who installed Apache, you will put your web content in one of two locations:

.../apache/htdocs or  
/var/www

on a Linux system. The first location is the default setup if you download, compile and install Apache yourself. Also, this can be the default setup depending upon the Linux distribution you use. The latter is a more common location found in newer distributions. All you have to do is upload your documents to this directory, make any necessary file permission changes, and your site is viewable to the world.

### **The session**

I will install and configure Apache for both Linux and Windows during the session to demonstrate the ease of install and easy of use of this product. I will also demonstrate various configurations as time permits. I fully believe live demonstrations of software is the best way to get a good understanding of how to use it and I plan for this session to be a good way for anyone wanting to learn more about how install and use Apache.

### **References**

[http://httpd.apache.org/ABOUT\\_APACHE.html](http://httpd.apache.org/ABOUT_APACHE.html), © 1999-2002, The Apache Software Foundation, 6 April 2003.

<http://httpd.apache.org>, © 1999-2002, The Apache Software Foundation, 6 April 2003.

"AMP now available on Max OS X", © 2003,  
<<http://www.apple.com/creative/webpro/technology/amp/index.html>> 4 April 2003