WWW Server Setup Tips

Donnie Barnes, djb@redhat.com V1.0, March 27, 1996

1 Preface

"Red Hat Tips" are documentation meant to help Red Hat users with specific tasks. Some of these documents are for new users, some are for advanced users. Hopefully each document will also be of help for both new and advanced users. If you have contributions to make, please send them to tech-sup@redhat.com. If you have changes that need to be made to individual Tips, send them to the author of that document.

2 Introduction

The basic text of this document was donated by Mark Cornick (thanks Mark!). This Red Hat Tips file will help you with the basics of setting up the Apache WWW server. You'll need to be root during this entire process.

3 Getting Started

First, install the apache RPM. This will install the Apache binary, create needed directories, and set up Apache to start automatically when the system is booted.

Since Apache was released, a security hole has been found in the "phf" CGI program included. You should remove it:

```
rm /home/httpd/cgi-bin/phf
```

4 Setting up the Server

After the apache RPM is installed, several directories will be created on your system:

```
/etc/httpd/conf      - configuration files
/var/log/httpd       - log files
/home/httpd/html     - where your HTML files will go
/home/httpd/cgi-bin  - where CGI programs go
/home/httpd/icons    - some icons used for directory indexing, etc.
```

A sample home page will be installed in /home/httpd/html, and several sample CGI programs will be installed in /home/httpd/cgi-bin.

Before starting up the server, you may want to take a look at some of the configuration files in /etc/httpd/conf. These include:

- access.conf: This file controls access to your WWW server. One of the things you might want to change here are the “allow” and “deny” lines, which restrict who can get WWW pages. By default, all hosts are allowed. You may, for instance, want to change this so that all hosts are allowed, except for one problem host:

  ```
  <Limit GET>
  order allow,deny
  allow from all
  deny from b1ff.eleet.com
  {\(<\)}/Limit>
  ```

  This will prohibit the host b1ff.eleet.com from accessing the server, but allow all other hosts. Another example is to restrict access to only your own domain (for an internal WWW server):

  ```
  <Limit GET>
  order deny,allow
  deny from all
  allow from gizmonics.edu
  {\(<\)}/Limit>
  ```

  This allows only hosts in the gizmonics.edu domain to access to server.

- httpd.conf: This file has some general configuration information for your WWW server. One thing you should change here is the ServerAdmin line, which should have the address of your site’s “webmaster”:

  ```
  ServerAdmin webmantis@spaceghost.com
  ```

  If you want to run “virtual hosts”, this is where you’ll set up that information. Virtual hosts are beyond the scope of this document - consult the Apache documentation at http://www.apache.org/ for more on this.

- mime.types: You shouldn’t change anything in here.

- srm.conf: This file contains information about directories, files, and file types on your server. Most of this can be left as is; however, if you want to support server-side includes on your server, you should uncomment some of the AddType lines, as indicated in the file’s comments. Server-side includes are a potential security risk, so they are disabled by default.

5 Starting up a Web Site

Now you’re ready to start adding pages to your WWW server. Just move any HTML files, graphics, etc. you want to appear on your server into the /home/httpd/html directory. You can create subdirectories in here as well. Make sure that any files intended for public viewing are set to be world readable:

```
chmod a+r (name-of-file)
```

The file named `index.html` will be loaded by default if no file name is specified in the URL; that is,

```
http://yourhost.com/index.html
```

is the same as

```
http://yourhost.com/
```

So, you should name the main home page of your server as `index.html`.

You should be all set to go now; to start up the server, just type as root:

```
httpd
```

(The next time you boot your system, the server will start automatically.)

Try using a WWW browser to access your server. From X you could use:

```
arena http://localhost/
```

If you get your home page, you're all set! If not, you may get some errors. These are common:

- "File Not Found: the file index.html was not found on this server" means you need to create an `index.html` file, as indicated above.
- "Forbidden: you're not allowed to access index.html on this server" means you need to make the index.html file world-readable:

  ```
  chmod a+r /home/httpd/html/index.html
  ```

6 Further Reading

You now have a basic WWW server running. There are several books that can help you do more advanced things like use CGI to process forms, use imagemaps, etc. "Managing Internet Information Services" by Liu, Peek, Jones, Buus, and Nye (O'Reilly, 1994) has several chapters on WWW servers, and also covers FTP, Gopher, and other services you may wish to provide.

7 Copyright Notice