

The Secrets of .htaccess on web

Yogendra Sharma

admin@Cybermonsters.net

Abstract:

Apache's .htaccess(hypertext access) configuration file can be a very powerful tool in a web developer's toolkit if used properly. It can be found in the webroot of your server and can be easily edited using any text editor. In this article I'm going to show you "The Secrets of .htaccess on web"

Before I start with this article I'd like to start by saying that abusing the .htaccess file will hurt the performance of your website. The .htaccess file should only be used if you have no other way to achieve certain things.

Make sure to back up your current .htaccess file before applying any of the following hacks.

Table of contents:

1. Prevent Hotlinking.
2. Block All Requests From User Agents.
3. Redirect Everyone Except Specified
4. SEO Friendly 301 Redirects
5. Creating a Custom Error Page
6. Create an IP Banlist
7. Set Default Email Address For Server Admin
8. Disable Display of Download Request
9. Protect a Specific File
10. Compress Components With mod_deflate
11. Add Expires Headers
12. Setting the Default Page
13. Password Protect Your Directories and Files
14. Redirect an Old Domain to a New Domain
15. Force Caching
16. Compress Components By Enabling Gzip
17. Remove "category" from a URL
18. Disable Directory Browsing

- 19.Redirect WordPress Feeds to FeedBurner
- 20.Deny Comments from No Referrer Requests
- 21.Remove File Extension From URL
- 22.Remove www from URL
- 23.Add Trailing Slash to URL
- 24. Remove the www. from your website's URL

1. Prevent Hotlinking

If you don't want other sites to link directly to your images on your server, you can redirect the png/jpg request to a particular image (saying something like "this site is trying to steal my images") with code like this:

Add the following code at the bottom of your .htaccess file to prevent hotlinking.

```
Options +FollowSymlinks
# Protect Hotlinking
RewriteEngine On
RewriteCond %{HTTP_REFERER} !^$
RewriteCond %{HTTP_REFERER} !^http://(www.)?domainname.com/[nc]
RewriteRule .*.(gif|jpg|png)$ http://domainname.com/img/test.png [nc]
```

this says that requests ending with .jpg or .png (not case sensitive) should be redirected to yourdomain.com/test.jpg and that this will be the last rule to be applied (the L flag).

2. Block All Requests From User Agents

It's possible to block all unwanted user agents that might be potentially harmful or perhaps just to keep the server load as low as possible.

```
01 #Block bad bots
02 SetEnvIfNoCase user-Agent ^FrontPage [NC,OR]
03 SetEnvIfNoCase user-Agent ^Java.* [NC,OR]
04 SetEnvIfNoCase user-Agent ^Microsoft.URL [NC,OR]
05 SetEnvIfNoCase user-Agent ^MSFrontPage [NC,OR]
```

```
06 SetEnvIfNoCase user-Agent ^Offline.Explorer [NC,OR]
07 SetEnvIfNoCase user-Agent ^[Ww]eb[Bb]andit [NC,OR]
08 SetEnvIfNoCase user-Agent ^Zeus [NC]
09 <limit get="" post="" head="">
10 Order Allow,Deny
11 Allow from all
12 Deny from env=bad_bot
13 </limit>
```

3. Redirect Everyone Except Specified IPs

If for some reason you would want to deny everyone or allow only a specific group of IP addresses to access your website, add the following code to your .htaccess file:

```
1 ErrorDocument 403 http://www.domainname.com
2 Order deny,allow
3 Deny from all
4 Allow from 124.34.48.165
5 Allow from 102.54.68.123
```

4. SEO Friendly 301 Redirects

If you've transferred domain names or wish to redirect a specific page or pages without getting penalty from search engines such as Google, use the following code:

```
1 Redirect 301 /d/file.html http://www.domainname.com/r/file.html
```

5. Creating a Custom Error Page

Are you as tired as me of the default layout of 404 error pages? Well now you can easily create your own and refer to it like this:

```
1 ErrorDocument 401 /error/401.php
2 ErrorDocument 403 /error/403.php
3 ErrorDocument 404 /error/404.php
4 ErrorDocument 500 /error/500.php
```

6. Create an IP Banlist

Tired of getting the same bs comments specific user over and over again? Just ban the bastard like this by adding the following code to your .htaccess file:

```
1 allow from all
2 deny from 123.45.6.7
3 deny from 012.34.5
```

You can deny access based upon IP address or an IP block. The above blocks access to the site from 123.45.6.7, and from any sub domain under the IP block 012.34.5. (012.34.5.1, 012.34.5.2, 012.34.5.3, etc.) I have yet to find a useful application of this, maybe if there is a site scraping your content you can block them

7. Set Default Email Address For Server Admin

Using the following code you can specify the default email address for the server's admin.

```
1 ServerSignature EMail
2 SetEnv SERVER_ADMIN default@domain.com
```

8. Disable Display of Download Request

Usually when downloading something from a web site, you'll be prompted if you wish to open the file or save it on your hard-disk. To prevent the server from prompting users whether they wish to open or save the file and to just save the file, use the following code:

```
1 AddType application/octet-stream .pdf
2 AddType application/octet-stream .zip
3 AddType application/octet-stream .mov
```

9. Protect a Specific File

The following code allows you to deny access to any file you wish by throwing an 403 error when it is trying to be accessed. In the following example I've chosen to protect the .htaccess file by adding an extra layer of security.

```
1 #Protect the .htaccess File
2 <files .htaccess="">
3 order allow,deny
4 deny from all
5 </files>
```

10. Compress Components With mod_deflate

As an alternative to compressing files with Gzip, you can use mod_deflate(which is supposedly faster). Place the following code at the top of your .htaccess file(tip: you can also add .jpg|.gif|.png|.tiff|.ico mod_deflate those):

```
1 <ifmodule mod_deflate.c="">
2 <filesmatch .(js|css)$="">
3 SetOutputFilter DEFLATE
4 </filesmatch>
5 </ifmodule>
```

11. Add Expires Headers

The following code shows you how to add an expiration date on the headers.

```
1 <filesmatch .(ico|pdf|flv|jpg|jpeg|png|gif|swf)$="">
2 Header set Expires "Wed, 21 May 2010 20:00:00
  GMT"
3 </filesmatch>
```

12. Setting the Default Page

You can set the default page of a directory to the page of your choice. For example in this code the default page is set as about.html instead of index.html

```
1 #Serve Alternate Default Index Page
2 DirectoryIndex about.html
```

13. Password Protect Your Directories and Files

You can enable password authentication for any directory or file on your server by using the following code:

```
01 #password-protect a file
02 <files secure.php="">
03 AuthType Basic
04 AuthName "Prompt"
05 AuthUserFile /home/path/.htpasswd
06 Require valid-user
07 </files>
08
09 # password-protect a directory
10 resides
11 AuthType basic
12 AuthName "This directory is protected"
13 AuthUserFile /home/path/.htpasswd
14 AuthGroupFile /dev/null
15 Require valid-user
```

14. Redirect an Old Domain to a New Domain

By using the .htaccess file you can redirect a old domain name to a new domain by adding the following code into the htaccess file. Basically what it does is it will remap the old domain to the new one.

```
1 #Redirect from an old domain to a new domain
2 RewriteEngine On
3 RewriteRule ^(.*)$ http://www.domainname.com/$1 [R=301,L]
```

15. Force Caching

The following code will not directly increase the loading speed of your website. What it will do is, load the content of your site faster when the same user revisits your website by sending 304 status when requested components have not been modified. You can change the cache expiry by changing the number of seconds(it's currently set at 1 day).

```
1 FileETag MTime Size
2 ExpiresActive on
3 ExpiresDefault "access plus 86400 seconds"
```

16. Compress Components By Enabling Gzip

By making use of Gzip you can compress files in order to make your website load faster.

```
1 AddOutputFilterByType DEFLATE text/html text/plain text/xml application/xml
  application/xhtml+xml text/javascript text/css application/x-javascript
2 BrowserMatch ^Mozilla/4 gzip-only-text/html
3 BrowserMatch ^Mozilla/4.0[678] no-gzip
4
5 BrowserMatch bMSIE !no-gzip !gzip-only-text/html
```

17. Remove "category" from a URL

To transform this url: <http://yourdomain.com/category/blue> to -> <http://yourdomain.com/blue>, just add the following code at the bottom of your .htaccess file.

```
1 RewriteRule ^category/(.+)$ http://www.yourdomain.com/$1 [R=301,L]
```

18. Disable Directory Browsing

To prevent people from accessing any directories that might contain valuable information or reveal security weaknesses(e.g. plugin directories of wordpress), add the following code to your .htaccess file:

```
1 Options All -Indexes
```

19. Redirect WordPress Feeds to FeedBurner

The following snippet redirects WordPress' default RSS feed feedburner's feed.

```
1 #Redirect wordpress content feeds to feedburner
2 <ifmodule mod_rewrite.c="">
3 RewriteEngine on
4 RewriteCond %{HTTP_USER_AGENT} !FeedBurner [NC]
5 RewriteCond %{HTTP_USER_AGENT} !FeedValidator [NC]
6 RewriteRule ^feed/?([_0-9a-z-
  ]+)?/?$http://feeds.feedburner.com/yourfeed [R=302,NC,L]
7 </ifmodule>
```

20. Deny Comments from No Referrer Requests

The problem is that bots just post comments about how to increase your private parts all naturally to your blogs without coming from any other site. It's like they fall from the sky. This neat hack prevents people from posting if they did not come from somewhere else(they can comment just fine if they came from e.g. google).

```
1 RewriteEngine On
2 RewriteCond %{REQUEST_METHOD} POST
3 RewriteCond %{REQUEST_URI} .wp-comments-post\.php*
4 RewriteCond %{HTTP_REFERER} !.*yourblog.com.* [OR]
5 RewriteCond %{HTTP_USER_AGENT} ^$
6 RewriteRule (.*?) ^http://%{REMOTE\_ADDR}/\$ [R=301,L]
```

21. Remove File Extension From URL

What the following code does is, it removes the .php extension(you can change it to whatever you like e.g. html) in a url. It makes the URL prettier & SEO friendlier.

```
1 RewriteRule ^(([/]+/*)*[^\.]*)$ /$1.php [L]
```

22. Remove www from URL

If you wish to take out the www from your website's URL and transform it from <http://www.example.com> into <http://example.com>, add the following to your .htaccess.

```
1 #remove www from URI
2 RewriteEngine On
3 RewriteCond %{HTTP_HOST} ^www\.domain\.com$
  [NC]
4 RewriteRule ^(.*)$ http://domain.com/$1 [L,R=301]
```

23. Add Trailing Slash to URL

Some search engines remove the trailing slash from urls that look like directories - e.g. Yahoo does it. But - it could result into duplicated content problems when the same page content is accessible under different urls. The following code makes sure there's a slash at the end of your URL:

```
1 #trailing slash enforcement
```



```
2 RewriteBase /
3 RewriteCond %{REQUEST_FILENAME} !-f
4 RewriteCond %{REQUEST_URI} !#
5 RewriteCond %{REQUEST_URI} !(.*)/$
6 RewriteRule ^(.*)$ http://domain.com/$1/ [L,R=301]
```

24. Remove the www. from your website's URL

Below I've provided a simple htaccess snippet to forcefully remove the "www" from your website's URL.

```
1 # Redirect if www.yourdomain.com to yourdomain.com
2 RewriteCond %{HTTP_HOST} ^www\.example\.com
  [NC]
3 RewriteRule (.*?) http://example.com/$1 [R=301,L]
```