

# Rewrite Cheat Sheet

## Common Variables

### HTTP Headers

- HTTP\_USER\_AGENT
  - HTTP\_REFERER
  - HTTP\_COOKIE
  - HTTP\_FORWARDED
  - HTTP\_HOST
  - HTTP\_PROXY\_CONNECTION
  - HTTP\_ACCEPT
- SCRIPT\_FILENAME
  - PATH\_INFO
  - QUERY\_STRING
  - AUTH\_TYPE
- TIME\_MON
  - TIME\_DAY
  - TIME\_HOUR
  - TIME\_MIN
  - TIME\_SEC
  - TIME\_WDAY
  - TIME

### server internals

- DOCUMENT\_ROOT
- SERVER\_ADMIN
- SERVER\_NAME
- SERVER\_ADDR
- SERVER\_PORT
- SERVER\_PROTOCOL
- SERVER\_SOFTWARE

### specials

- API\_VERSION
- THE\_REQUEST
- REQUEST\_URI
- REQUEST\_FILENAME
- IS\_SUBREQ
- HTTPS

### connection & request

- REMOTE\_ADDR
  - REMOTE\_HOST
  - REMOTE\_PORT
  - REMOTE\_USER
  - REMOTE\_IDENT
  - REQUEST\_METHOD
- TIME\_YEAR

### date and time

## Variable Descriptions

- REQUEST\_FILENAME
  - The full local filesystem path to the file or script matching the request, if this has already been determined by the server at the time REQUEST\_FILENAME is referenced. Otherwise, such as when used in virtual host context, the same value as REQUEST\_URI.
- HTTPS
  - Will contain the text "on" if the connection is using SSL/TLS, or "off" otherwise. (This variable can be safely used regardless of whether or not mod\_ssl is loaded).

## Flag Descriptions

- '**nocase|NC**' (**no case**) :: This makes the test case-insensitive - differences between 'A-Z' and 'a-z' are ignored, both in the expanded *TestString* and the *CondPattern*.
- '**ornext|OR**' (**or next condition**) (**RewriteCond Only**) :: Use this to combine rule conditions with a local OR instead of the implicit AND.
- '**last|L**' :: Stop the rewriting process immediately and don't apply any more rules.
- '**proxy|P**' :: Force the substitution URL to be internally sent as a proxy request.
- '**qsappend|QSA**' :: Appends any query string created in the rewrite target to any query string that was in the original request URL.
- '**redirect|R[=code]**' :: Forces an external redirect, optionally with the specified HTTP status code.
- '**forbidden|F**' :: Returns a 403 FORBIDDEN response to the client browser.

## Good Examples

- Adding www to all requests
  - RewriteCond %{HTTP\_HOST} !^www [NC]
  - RewriteRule ^ http://www.%{HTTP\_HOST}%{REQUEST\_URI} [R,L,QSA]
- Forcing all requests to HTTPS
  - RewriteCond %{HTTPS} off
  - RewriteRule ^ https://%{HTTP\_HOST}%{REQUEST\_URI} [R,L,QSA]
- Redirect a specific subweb to another domain
  - RewriteRule ^/?subweb/(.\*) http://other.example.com/\$1 [R,L,QSA]
- Block specific IPs from access
  - RewriteCond %{REMOTE\_ADDR} ^127.0.0
  - RewriteRule ^ - [F,L]
- Creating a filesystem alias with modrewrite
  - RewriteRule ^/?alias/(.\*) /var/www/vhosts/\$1/httpdocs/\$1 [L,R]
- A condition to stop CMS software from over-riding fullstatus (added before the offending rewriterule)
  - RewriteCond \${REQUEST\_URI} !server-status [NC]

## Bad Examples

- Recursive rewrite
  - RewriteRule ^ http://www.%{HTTP\_HOST}%{REQUEST\_URI} [R,L,QSA]

## Gotchas

- Some rewrites may conflict with existing rewrites provided by many CMS packages (wordpress, drupal, joomla, etc). Check for any existing rewrites in a .htaccess file.
- Rewriterule and rewritecond can only be used in the following contexts: server config, virtual host, directory, .htaccess

## Common Troubleshooting

- Enable the rewrite logs with RewriteLog and RewriteLevel
  - RewriteLog <file path>
  - RewriteLogLevel 3 # ranges from 0 to 9
- Check your regular expressions against a PCRE checker (they are very bountiful on the Internet [<http://tinyurl.com/3hop7xu>]).
- Utilize curl to test redirects (R), `curl -I example.com`