

.htaccess

made easy

BOOK EXCERPT: HTACCESS
CHARACTER DEFINITIONS

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2.7 Character Definitions

This isn't an exhaustive list of characters, but rather sort of a cheat-sheet of the most commonly used regular expressions, flags, and status-codes. No need to memorize any of this — it's here as a quick-guide for easy copy, paste, and go. There's really not too many of them, and they're easily picked up as you work with .htaccess. So without further ado...

Character/Flag	Definition
#	Instructs the server to ignore the line. Used for including comments.
[F]	Forbidden: instructs the server to return a 403 Forbidden to the client.
[L]	Last rule: instructs the server to stop rewriting after the preceding directive is processed.
[N]	Next: instructs Apache to rerun the rewrite rule until all rewriting is complete.
[G]	Gone: instructs the server to deliver Gone (no longer exists) status message.
[P]	Proxy: instructs server to handle requests by mod_proxy.
[C]	Chain: instructs server to chain the current rule with the previous rule.
[R]	Redirect: instructs Apache to redirect to the specified URL. Note that the default status-code for the [R] flag is 302 (temporary redirect); for permanent redirects use [R=301].
[NC]	No Case: defines any associated argument as case-insensitive.
[PT]	Pass Through: instructs mod_rewrite to pass the rewritten URL for further processing.
[OR]	Or: specifies a logical “or” that ties two expressions together such that either one proving true will cause the associated rule to be applied.
[NE]	No Escape: instructs the server to parse output without escaping characters.

Character/Flag	Definition
[NS]	No Subrequest: instructs the server to skip the directive if internal sub-request.
[QSA]	Append Query String: directs server to add the query string to the end of the expression.
[S=x]	Skip: instructs the server to skip the next “x” number of rules if a match is detected.
[E=var:value]	Environmental Variable: instructs the server to set the variable “var” to “value”.
[T=MIME-type]	Mime Type: declares the mime type of the target resource.
[xyz]	Character class: any character within square brackets will be a match. For example, “[xyz]” will match any of the characters x, y, or z.
[xyz]+	Character class in which any combination of items within the brackets will be a match. For example, “[xyz]+” will match any number of x’s, y’s, z’s, or any combination thereof.
[^xyz]	Not within a character class. For example, [^xyz] will match any character that isn’t x, y, or z.
[a-z]	A dash “-” between two characters within a character class denotes the range of characters between them. For example, [a-zA-Z] matches all lowercase and uppercase letters.
a{n}	Exact number, n, of the preceding character, a. For example, x{3} matches exactly three x’s.
a{n,}	Specifies n or more of the preceding character. For example, x{3,} matches three or more x’s.
a{n,m}	Specifies a range of numbers, between n and m, of the preceding character, a. For example, x{3,7} matches three, four, five, six, or seven x’s.
()	Used to group characters together, thereby considering them as a single unit. For example, (htaccess)?book will match “book”, with or without the “htaccess” prefix.
^	Denotes the beginning of a regular expression. For example, “^Hello” will match any string that begins with “Hello”. Without the caret “^”, “Hello” would match anywhere in the string.
\$	Denotes the end of a regular expression. For example, “world\$” will match any string that ends with “world”. Without the dollar sign “\$”, “world” would match anywhere in the string.

Character/Flag	Definition
?	Declares as optional the preceding character. For example, “monzas?” will match “monza” or “monzas”. In other words, “x?” matches zero or one of “x”.
!	Declares negation. For example, “!string” matches everything except “string”.
.	A literal dot (or period) indicates any single arbitrary character.
-	Instructs Apache to NOT rewrite the URL. Example syntax: “example.com - [F]”
+	Matches one or more of the preceding character. For example, “G+” matches one or more G’s, while “+” will match one or more characters of any kind.
*	Matches zero or more of the preceding character. For example, use “. *” as a wildcard.
	Declares a logical “or” operator. For example, “(x y)” matches “x” or “y”.
\	Escape special characters such as: ^ \$! . * () [] { }
\.	Indicates a literal dot (escaped).
/*	Zero or more slashes.
.*	Zero or more arbitrary characters.
^\$	Defines an empty string.
^.*\$	The standard pattern for matching everything.
[^/.]	Defines one character that is neither a slash nor a dot.
[^/.]+	Defines any number of characters that contains neither slash nor dot.
http://	This is a literal statement — in this case, the literal character string, “http://”.
^example.*	Matches a string that begins with the term “example”, followed by any character(s).

Character/Flag	Definition
<code>^example\.com\$</code>	Defines the exact string, "example.com".
<code>-d</code>	Tests if string is an existing directory.
<code>-f</code>	Tests if string is an existing file.
<code>-s</code>	Tests if file in test string has a non-zero value.

Server status-codes

Lastly, here is a short-list of some of the most-commonly used status-codes (e.g., used when redirecting and rewriting URLs):

- **301** – Moved Permanently
- **302** – Moved Temporarily
- **403** – Forbidden
- **404** – Not Found
- **410** – Gone

For a complete list of status-code definitions, visit: <https://htaccessbook.com/g>

About the .htaccess Character Reference

This guide is an excerpt from the book *.htaccess made easy*, a practical guide for administrators, designers & developers. Learn more @ htaccessbook.com