# Regular Expressions Syntax

^ Start of string

$ End of string

. Any single character

(a|b) a or b

(...) Group section

[abc] In range (a, b or c)

[^abc] Not in range

\s White space

a? Zero or one of a

a\* Zero or more of a

a\*? Zero or more, ungreedy

a+ One or more of a

a+? One or more, ungreedy

a{3} Exactly 3 of a

a{3,} 3 or more of a

a{,6} Up to 6 of a

a{3,6} 3 to 6 of a

a{3,6}? 3 to 6 of a, ungreedy

\ Escape character

[:punct:] Any punctuation symbol

[:space:] Any space character

[:blank:] Space or tab

# Server Variables: HTTP Headers

%{HTTP\_USER\_AGENT}

%{HTTP\_REFERER}

%{HTTP\_COOKIE}

%{HTTP\_FORWARDED}

%{HTTP\_HOST}

%{HTTP\_PROXY\_CONNECTION}

%{HTTP\_ACCEPT}

# Server Variables: Server Internals

%{DOCUMENT\_ROOT}

%{SERVER\_ADMIN}

%{SERVER\_NAME}

%{SERVER\_ADDR}

%{SERVER\_PORT}

%{SERVER\_PROTOCOL}

%{SERVER\_SOFTWARE}

Very Cool RegEx Explainer:

<http://rick.measham.id.au/paste/explain.pl?regex=%5Cd%2B%28.%5Cd%2B%29%3F%28%5BeE%5D%5Cd%2B%29%3F>

Useful regular expression tester at: [http:/­/re­gex­pal.com/](http://regexpal.com/)

# Sample Rule: Site Moved

|  |
| --- |
| # Site moved perman­ently |
| Rewrit­eCond %{HTTP­\_HOST} ^www.d­oma­in.io$ [NC] |
| Rewrit­eRule ^(.\*)$ [http:/­/ww­w.d­oma­in2.io/$1](http://www.domain2.io/$1) [R=301,L] |

Rewrites domain.io to domain­2.io

# Sample Rule: Temporary Page Move

|  |
| --- |
| # Page has moved tempor­arily |
| Rewrit­eRule ^page.h­tml$ new\_pa­ge.html [R,NC,L] |

Rewrites domain.co­m/p­age.html to domain.co­m/n­ew\_­pag­e.html

# Sample Rule: Nice URLs

|  |
| --- |
| # Nice URLs (no query string) |
| Rewrit­eRule ^([A-Z­a-z­0-9­-]+)/?$ stuff.p­hp?­name=$1 [L] |

Rewrites domain.co­m/c­ate­gor­y-n­ame-1/ to domain.io/stuff.ph­p?n­ame­=ca­teg­ory­-name-1

# Server Variables: Special

|  |
| --- |
| %{API\_­VER­SION} |
| %{THE\_­REQ­UEST} |
| %{REQU­EST­\_URI} |
| %{REQU­EST­\_FI­LENAME} |
| %{IS\_S­UBREQ} |
| %{HTTPS} |

# Server Variables: Request

|  |
| --- |
| %{REMO­TE\_­ADDR} |
| %{REMO­TE\_­HOST} |
| %{REMO­TE\_­PORT} |
| %{REMO­TE\_­USER} |
| %{REMO­TE\_­IDENT} |
| %{REQU­EST­\_ME­THOD} |
| %{SCRI­PT\_­FIL­ENAME} |
| %{PATH­\_INFO} |
| %{QUER­Y\_S­TRING} |
| %{AUTH­\_TYPE} |

# Server Variables: Time

|  |
| --- |
| %{TIME­\_YEAR} |
| %{TIME­\_MON} |
| %{TIME­\_DAY} |
| %{TIME­\_HOUR} |
| %{TIME­\_MIN} |
| %{TIME­\_SEC} |
| %{TIME­\_WDAY} |
| %{TIME} |

# **mod\_re­write Cheat Sheet**

Logo, company name

Description automatically generated

# Rewrit­eRule Flags

|  |  |
| --- | --- |
| C | Chained with next rule |
| CO=cookie | Set specified cookie |
| E=var:­value | Set enviro­nmental variable “var” to “value” |
| F | Forbidden (403 header) |
| G | Gone - no longer exists |
| H=handler | Set handler |
| L | Last - stop processing rules |
| N | Next - continue processing |
| NC | Case insens­itive |
| NE | Do not escape output |
| NS | Ignore if subrequest |
| P | Proxy |
| PT | Pass through |
| R[=code] | Redirect to new URL, with optional code (see below) |
| QSA | Append query string |
| S=x | Skip next x rules |
| T=mime­-type | Set mime type |

# Rewrit­eCond Flags

|  |  |
| --- | --- |
| NC | Case insens­itive |
| OR | Combine with next rule using 'OR' instead of the default of 'AND' |

# Redire­ction Header Codes

|  |  |
| --- | --- |
| 301 | Moved perman­ently |
| 302 | Moved tempor­arily (default) |

# Directives

|  |  |
| --- | --- |
| Rewrit­eEngine | RewriteMap |
| Rewrit­eOp­tions | Rewrit­eBase |
| RewriteLog | Rewrit­eCond |
| Rewrit­eLo­gLevel | Rewrit­eRule |
| Rewrit­eLock |  |