

```
# Inspired by
# https://github.com/mmistakes/made-mistakes-jekyll/blob/master/.htaccess
# https://github.com/fvsch/scripts-and-snippets/blob/master/apache/rewrite-well-known.conf

# Apache Server Configs v2.14.0 | MIT License
# https://github.com/h5bp/server-configs-apache

# (!) Using `.htaccess` files slows down Apache, therefore, if you have
# access to the main server configuration file (which is usually called
# `httpd.conf`), you should add this logic there.
#
# https://httpd.apache.org/docs/current/howto/htaccess.html.

#####
# # CROSS-ORIGIN RESOURCE SHARING (CORS) #
#####

# -----
# | Cross-origin requests |
# -----

# Allow cross-origin requests.
#
# https://developer.mozilla.org/en-US/docs/Web/HTTP/Access_control_CORS
# http://enable-cors.org/
# http://www.w3.org/TR/cors/

# <IfModule mod_headers.c>
#     Header set Access-Control-Allow-Origin "*"
# </IfModule>

# -----
# | CORS-enabled images |
# -----

# Send the CORS header for images when browsers request it.
#
# https://developer.mozilla.org/en-US/docs/Web/HTML/CORS_enabled_image
# https://blog.chromium.org/2011/07/using-cross-domain-images-in-webgl-and.html

# -----
# | CORS-enabled scripts |
# -----
```

```

<!Module mod_setenvif.c>
  <IfModule mod_headers.c>
    <FilesMatch "\.(bmp|curl|gif|ico|jpe?g|png|svgz?|webp)$">
      SetEnvIf Origin ":" IS_CORS
      Header set Access-Control-Allow-Origin "*" env=IS_CORS
    </FilesMatch>
  </IfModule>
</IfModule>

# -----
# | Cross-origin web fonts |
# -----

# Allow cross-origin access to web fonts.

<IfModule mod_headers.c>
  <FilesMatch "\.(eot|otf|tt[cf]|woff2?)$">
    Header set Access-Control-Allow-Origin "*"
  </FilesMatch>
</IfModule>

# -----
# | Cross-origin resource timing |
# -----

# Allow cross-origin access to the timing information for all resources.
#
# If a resource isn't served with a `Timing-Allow-Origin` header that
# would allow its timing information to be shared with the document,
# some of the attributes of the `PerformanceResourceTiming` object will
# be set to zero.
#
# http://www.w3.org/TR/resource-timing/
# http://www.stevesouders.com/blog/2014/08/21/resource-timing-practical-tips/

# <IfModule mod_headers.c>
#   Header set Timing-Allow-Origin: "*"
# </IfModule>

# #####
# # ERRORS #
# ..

```

```
# #####
```

```
# -----  
# | Custom error messages/pages |  
# -----
```

```
# Customize what Apache returns to the client in case of an error.  
# https://httpd.apache.org/docs/current/mod/core.html#errordocument
```

```
ErrorDocument 404 /404.html
```

```
# -----  
# | Error prevention |  
# -----
```

```
# Disable the pattern matching based on filenames.  
#  
# This setting prevents Apache from returning a 404 error as the result  
# of a rewrite when the directory with the same name does not exist.  
#  
# https://httpd.apache.org/docs/current/content-negotiation.html#multiviews
```

```
Options -MultiViews
```

```
# #####  
# # INTERNET EXPLORER #  
# #####
```

```
# -----  
# | Document modes |  
# -----
```

```
# Force Internet Explorer 8/9/10 to render pages in the highest mode  
# available in the various cases when it may not.  
#  
# https://hsivonen.fi/doctype/#ie8  
#  
# (!) Starting with Internet Explorer 11, document modes are deprecated.  
# If your business still relies on older web apps and services that were  
# designed for older versions of Internet Explorer, you might want to  
# consider enabling `Enterprise Mode` throughout your company.
```

```

#
# https://msdn.microsoft.com/en-us/library/ie/bg182625.aspx#docmode
# http://blogs.msdn.com/b/ie/archive/2014/04/02/stay-up-to-date-with-enterprise-mode-for-internet-explorer-11.aspx

<IfModule mod_headers.c>

    Header set X-UA-Compatible "IE=edge"

    # `mod_headers` cannot match based on the content-type, however,
    # the `X-UA-Compatible` response header should be send only for
    # HTML documents and not for the other resources.

    <FilesMatch "\.
(appcache|atom|bbaw|bmp|crx|css|curl|eot|f4[abpv]|flv|geojson|gif|htc|ico|jpe?
|js|json|ld)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rss|safariextz|svgz?
|swf|topojson|tt[cf]|txt|vcard|vcf|vtt|webapp|web[mp]|webmanifest|woff2?|xld|xll|xpi)$">
        Header unset X-UA-Compatible
    </FilesMatch>

</IfModule>

# -----
# | Iframes cookies |
# -----

# Allow cookies to be set from iframes in Internet Explorer.
#
# https://msdn.microsoft.com/en-us/library/ms537343.aspx
# http://www.w3.org/TR/2000/CR-P3P-20001215/

# <IfModule mod_headers.c>
#     Header set P3P "policyref=\"/w3c/p3p.xml\", CP=\"IDC DSP COR ADM DEVI TAIi PSA PSD
IVAI IVDi CONi HIS OUR IND CNT\""
# </IfModule>

# #####
# # MEDIA TYPES AND CHARACTER ENCODINGS #
# #####

```

```
# -----
# / Media types /
# -----

# Serve resources with the proper media types (f.k.a. MIME types),
#
# https://www.iana.org/assignments/media-types/media-types.xhtml
# https://httpd.apache.org/docs/current/mod/mod_mime.html#addtype

<IfModule mod_mime.c>

    # Data interchange

    AddType application/atom+xml          atom
    AddType application/json              json map topjson
    AddType application/ld+json           jsonld
    AddType application/rss+xml           rss
    AddType application/vnd.geo+json      geojson
    AddType application/xml               rdf xml

    # JavaScript

    # Normalize to standard type.
    # https://tools.ietf.org/html/rfc4329#section-7.2

    AddType application/javascript         js

    # Manifest files

    AddType application/manifest+json     webmanifest
    AddType application/x-web-app-manifest+json webapp
    AddType text/cache-manifest            appcache

    # Media files

    AddType audio/mp4                      f4a f4b m4a
    AddType audio/ogg                       oga ogg opus
    AddType image/bmp                       bmp
    AddType image/svg+xml                   svg svgz
    AddType image/webp                       webp
    AddType video/mp4                       f4v f4p m4v mp4
```

```
AddType video/ogg                ogv
AddType video/webm                webm
AddType video/x-flv               flv
```

```
# Serving `.ico` image files with a different media type
# prevents Internet Explorer from displaying them as images:
# https://github.com/h5bp/html5-
boilerplate/commit/37b5fec090d00f38de64b591bcddcb205aadf8ee
```

```
AddType image/x-icon             cur ico
```

```
# Web fonts
```

```
AddType application/font-woff    woff
AddType application/font-woff2    woff2
AddType application/vnd.ms-fontobject eot
```

```
# Browsers usually ignore the font media types and simply sniff
# the bytes to figure out the font type.
# https://mimesniff.spec.whatwg.org/#matching-a-font-type-pattern
#
# However, Blink and WebKit based browsers will show a warning
# in the console if the following font types are served with any
# other media types.
```

```
AddType application/x-font-ttf   ttc ttf
AddType font/opentype             otf
```

```
# Other
```

```
AddType application/octet-stream safariextz
AddType application/x-bb-appworld bbaw
AddType application/x-chrome-extension crx
AddType application/x-opera-extension oex
AddType application/x-xpinstall xpi
AddType text/vcard vcard vcf
AddType text/vnd.rim.location.xloc xloc
AddType text/vtt vtt
AddType text/x-component htc
```

```
</IfModule>
```

```
# -----
# | Character encodings |
# -----

# Serve all resources labeled as `text/html` or `text/plain`
# with the media type `charset` parameter set to `UTF-8`.
#
# https://httpd.apache.org/docs/current/mod/core.html#adddefaultcharset

AddDefaultCharset utf-8

# -----

# Serve the following file types with the media type `charset`
# parameter set to `UTF-8`.
#
# https://httpd.apache.org/docs/current/mod/mod_mime.html#addcharset

<IfModule mod_mime.c>
    AddCharset utf-8 .atom \
        .bbaw \
        .css \
        .geojson \
        .js \
        .json \
        .jsonld \
        .manifest \
        .rdf \
        .rss \
        .topojson \
        .vtt \
        .webapp \
        .webmanifest \
        .xloc \
        .xml
</IfModule>

# #####
# # URL REWRITES #
# #####
```

```

# -----
# | Rewrite engine |
# -----

# Turning on the rewrite engine and enabling the `FollowSymLinks` option is
# necessary for the following directives to work.

# If your web host doesn't allow the `FollowSymLinks` option, you may need to
# comment it out and use `Options +SymLinksIfOwnerMatch` but, be aware of the
# performance impact: http://httpd.apache.org/docs/current/misc/perf-tuning.html#symlinks

# Also, some cloud hosting services require `RewriteBase` to be set:
# http://www.rackspace.com/knowledge\_center/frequently-asked-question/why-is-mod-rewrite-not-working-on-my-site

<IfModule mod_rewrite.c>
    Options +FollowSymLinks
    # Options +SymLinksIfOwnerMatch
    RewriteEngine On
    RewriteBase /
</IfModule>

# #####
# # SECURITY #
# #####

# -----
# | File access |
# -----

# Block access to directories without a default document.
# Usually you should leave this uncommented because you shouldn't allow anyone
# to surf through every directory on your server (which may includes rather
# private places like the CMS's directories).

<IfModule mod_autoindex.c>
    Options -Indexes
</IfModule>

# -----

```



```
..

# Block access to all hidden files and directories with the exception of
# the visible content from within the `/.well-known/` hidden directory.
#
# These types of files usually contain user preferences or the preserved
# state of an utility, and can include rather private places like, for
# example, the `.git` or `.svn` directories.
#
# The `/.well-known/` directory represents the standard (RFC 5785) path
# prefix for "well-known locations" (e.g.: `/.well-known/manifest.json`,
# `/.well-known/keybase.txt`), and therefore, access to its visible
# content should not be blocked.
#
# https://www.mnot.net/blog/2010/04/07/well-known
# https://tools.ietf.org/html/rfc5785

<IfModule mod_rewrite.c>
    RewriteEngine On
    RewriteCond %{REQUEST_URI} "!(^/)\.well-known/([^. /?]+)$" [NC]
    RewriteCond %{SCRIPT_FILENAME} -d [OR]
    RewriteCond %{SCRIPT_FILENAME} -f
    RewriteRule "(^/)\." - [F]
</IfModule>

# -----

# Block access to files that can expose sensitive information.
#
# By default, block access to backup and source files that may be
# left by some text editors and can pose a security risk when anyone
# has access to them.
#
# http://feross.org/cmsexploit/
#
# (!) Update the `<FilesMatch>` regular expression from below to
# include any files that might end up on your production server and
# can expose sensitive information about your website. These files may
# include: configuration files, files that contain metadata about the
# project (e.g.: project dependencies), build scripts, etc..

<FilesMatch "(^# +#\ \ (bak|conf|dist|fla|info|ini|log|orig|sh|sql|source|)\.*)">
```

```
# Apache < 2.3
<IfModule !mod_authz_core.c>
    Order allow,deny
    Deny from all
    Satisfy All
</IfModule>
```

```
# Apache ≥ 2.3
<IfModule mod_authz_core.c>
    Require all denied
</IfModule>
```

```
</FilesMatch>
```

Block access from libwww-perl bots

```
<IfModule mod_rewrite.c>
    RewriteCond %{HTTP_USER_AGENT} libwww-perl.*
    RewriteRule .* - [F,L]
</IfModule>
```

| Content Security Policy (CSP) |

from <https://github.com/h5bp/server-configs-apache/blob/master/src/security/content-security-policy.conf>

Mitigate the risk of cross-site scripting and other content-injection
attacks.
#

This can be done by setting a `Content Security Policy` which
whitelists trusted sources of content for your website.
#

The example header below allows ONLY scripts that are loaded from
the current website's origin (no inline scripts, no CDN, etc).
That almost certainly won't work as-is for your website!

"

```

#
# To make things easier, you can use an online CSP header generator
# such as: http://cspisawesome.com/.
#
# http://content-security-policy.com/
# http://www.html5rocks.com/en/tutorials/security/content-security-policy/
# http://www.w3.org/TR/CSP11/).

<IfModule mod_headers.c>

# ???
# Content-Security-Policy: default-src 'self' ; script-src 'self' data: 'unsafe-inline'
https://fiery-heat-4665.firebaseio.com/,*://*.google-analytics.com/*; style-src 'self'
data: 'unsafe-inline' ; img-src 'self' data: ; font-src 'self' ; connect-src * ; media-src
'self' ; block-all-mixed-content;

# Header set Content-Security-Policy-Report-Only: "script-src 'self'; object-src
'self'; report-uri https://report-uri.io/report/nhocom/reportOnly"

# `mod_headers` cannot match based on the content-type, however,
# the `Content-Security-Policy` response header should be send
# only for HTML documents and not for the other resources.

# <FilesMatch "\.
(appcache|atom|bbaw|bml|crl|css|curl|eot|f4[abpv]|flv|geo.json|gif|htcl|icol|jpe?
|j|j|json|ld)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rss|safari-extend|svgz?
|swf|topo.json|tt[cf]|txt|vcard|vcf|vtt|webapp|web[mp]|webmanifest|woff2?|x|oc|x|xml|xpi)$">
# Header unset Content-Security-Policy-Report-Only
# </FilesMatch>

</IfModule>

# -----
# | X-Frame-Options |
# -----

# from https://developer.mozilla.org/en-US/docs/Web/HTTP/X-Frame-Options
# The X-Frame-Options HTTP response header can be used to indicate whether or
# not a browser should be allowed to render a page in a <frame>, <iframe> or
# <object>. Sites can use this to avoid clickjacking attacks, by ensuring that
" content-security-policy: report-only"

```

their content is not embedded into other sites.

```
<IfModule mod_headers.c>  
  Header always append X-Frame-Options SAMEORIGIN  
</IfModule>
```

```
# -----  
# | X-Xss-Protection |  
# -----
```

Used to configure the built in reflective XSS protection found in Internet Explorer, Chrome and Safari (Webkit). Valid settings for the header are 0, which disables the protection, 1 which enables the protection and 1; mode=block which tells the browser to block the response if it detects an attack rather than sanitising the script.

```
<IfModule mod_headers.c>  
  Header always set X-Xss-Protection "1; mode=block"  
</IfModule>
```

```
# -----  
# | X-Content-Type-Options |  
# -----
```

Prevents Google Chrome and Internet Explorer from trying to mime-sniff the content-type of a response away from the one being declared by the server. Reduces exposure to drive-by downloads and the risks of user uploaded content that, with clever naming, could be treated as a different content-type, like an executable.

```
<IfModule mod_headers.c>  
  Header always set X-Content-Type-Options "nosniff"  
</IfModule>
```

```
# #####  
# # WEB PERFORMANCE #  
# #####
```

```
# -----  
# | Compression |  
# -----
```

```

<IfModule mod_deflate.c>

    # Force compression for mangled `Accept-Encoding` request headers
    # https://developer.yahoo.com/blogs/ydn/pushing-beyond-gzipping-25601.html

    <IfModule mod_setenvif.c>
        <IfModule mod_headers.c>
            SetEnvIfNoCase ^(\Accept-EncodXngl X-cept-Encodingl X(15)l |(15)l |(15))$
            ^((gzip|deflate)\s*, ?\s*)+([X"]-){4,13}$ HAVE_Accept-Encoding
            RequestHeader append Accept-Encoding "gzip, deflate" env=HAVE_Accept-Encoding
        </IfModule>
    </IfModule>

# -----

# Compress all output labeled with one of the following media types.
#
# (!) For Apache versions below version 2.3.7 you don't need to
# enable `mod_filter` and can remove the `<IfModule mod_filter.c>`
# and `</IfModule>` lines as `AddOutputFilterByType` is still in
# the core directives.
#
# https://httpd.apache.org/docs/current/mod/mod_filter.html#addoutputfilterbytype

<IfModule mod_filter.c>
    AddOutputFilterByType DEFLATE "application/atom+xml" \
        "application/javascript" \
        "application/json" \
        "application/ld+json" \
        "application/manifest+json" \
        "application/rdf+xml" \
        "application/rss+xml" \
        "application/schema+json" \
        "application/vnd.geo+json" \
        "application/vnd.ms-fontobject" \
        "application/x-font-ttf" \
        "application/x-javascript" \
        "application/x-web-app-manifest+json" \
        "application/xhtml+xml" \
        "application/xml" \

```

```
"font/eot" \
"font/opentype" \
"image/bmp" \
"image/svg+xml" \
"image/vnd.microsoft.icon" \
"image/x-icon" \
"text/cache-manifest" \
"text/css" \
"text/html" \
"text/javascript" \
"text/plain" \
"text/vcard" \
"text/vnd.rim.location.xloc" \
"text/vtt" \
"text/x-component" \
"text/x-cross-domain-policy" \
"text/xml"
```

```
</IfModule>
```

```
# -----

# Map the following filename extensions to the specified
# encoding type in order to make Apache serve the file types
# with the appropriate `Content-Encoding` response header
# (do note that this will NOT make Apache compress them!).
#
# If these files types would be served without an appropriate
# `Content-Enable` response header, client applications (e.g.:
# browsers) wouldn't know that they first need to uncompress
# the response, and thus, wouldn't be able to understand the
# content.
#
# https://httpd.apache.org/docs/current/mod/mod\_mime.html#addencoding
```

```
<IfModule mod_mime.c>
```

```
    AddEncoding gzip          svgz
```

```
</IfModule>
```

```
</IfModule>
```

```

# -----
# | ETags |
# -----

# Remove `ETags` as resources are sent with far-future expires headers.
#
# https://developer.yahoo.com/performance/rules.html#etags
# https://tools.ietf.org/html/rfc7232#section-2.3

# `FileETag None` doesn't work in all cases.
<IfModule mod_headers.c>
    Header unset ETag
</IfModule>

FileETag None

# -----
# | Expires headers |
# -----

# Serve resources with far-future expires headers.
#
# (!) If you don't control versioning with filename-based
# cache busting, you should consider lowering the cache times
# to something like one week.
#
# https://httpd.apache.org/docs/current/mod/mod_expires.html

<IfModule mod_expires.c>

    ExpiresActive on
    ExpiresDefault "access plus 1 month"

# CSS

    ExpiresByType text/css "access plus 1 year"

# Data interchange

    ExpiresByType application/atom+xml "access plus 1 hour"
    ExpiresByType application/rdf+xml "access plus 1 hour"

```

```
ExpiresByType application/rss+xml "access plus 1 hour"

ExpiresByType application/json "access plus 0 seconds"
ExpiresByType application/ld+json "access plus 0 seconds"
ExpiresByType application/schema+json "access plus 0 seconds"
ExpiresByType application/vnd.geo+json "access plus 0 seconds"
ExpiresByType application/xml "access plus 0 seconds"
ExpiresByType text/xml "access plus 0 seconds"
```

Favicon (cannot be renamed!) and cursor images

```
ExpiresByType image/vnd.microsoft.icon "access plus 1 week"
ExpiresByType image/x-icon "access plus 1 week"
```

HTML

```
ExpiresByType text/html "access plus 0 seconds"
```

JavaScript

```
ExpiresByType application/javascript "access plus 1 year"
ExpiresByType application/x-javascript "access plus 1 year"
ExpiresByType text/javascript "access plus 1 year"
```

Manifest files

```
ExpiresByType application/manifest+json "access plus 1 week"
ExpiresByType application/x-web-app-manifest+json "access plus 0 seconds"
ExpiresByType text/cache-manifest "access plus 0 seconds"
```

Media files

```
ExpiresByType audio/ogg "access plus 1 month"
ExpiresByType image/bmp "access plus 1 month"
ExpiresByType image/gif "access plus 1 month"
ExpiresByType image/jpeg "access plus 1 month"
ExpiresByType image/png "access plus 1 month"
ExpiresByType image/svg+xml "access plus 1 month"
ExpiresByType image/webp "access plus 1 month"
ExpiresByType video/mp4 "access plus 1 month"
ExpiresByType video/ogg "access plus 1 month"
```



```

ExpiresByType video/webm "access plus 1 month"

# Web fonts

# Embedded OpenType (EOT)
ExpiresByType application/vnd.ms-fontobject "access plus 1 month"
ExpiresByType font/eot "access plus 1 month"

# OpenType
ExpiresByType font/opentype "access plus 1 month"

# TrueType
ExpiresByType application/x-font-ttf "access plus 1 month"

# Web Open Font Format (WOFF) 1.0
ExpiresByType application/font-woff "access plus 1 month"
ExpiresByType application/x-font-woff "access plus 1 month"
ExpiresByType font/woff "access plus 1 month"

# Web Open Font Format (WOFF) 2.0
ExpiresByType application/font-woff2 "access plus 1 month"

# Other

ExpiresByType text/x-cross-domain-policy "access plus 1 week"

</IfModule>

# #####
# # REDIRECTS #
# #####

# -----
# Remove index.html
# -----

# If it's a request to index(.html)
RewriteCond %{THE_REQUEST} \ /(.+)?index(\.html)?(\?.*)? \ [NC]
# Remove it.
RewriteRule ^(.+)?index(\.html)?$ /%1 [R=301,L]

```

```

# -----
# Put well known resources in the .well-known folder
# https://github.com/fvrsch/scripts-and-snippets/blob/master/apache/rewrite-well-known.conf
# -----

RewriteCond %{REQUEST_FILENAME} !-f

# Some very common, then less common "well-known" patterns
# RewriteCond %{REQUEST_URI} =/favicon.jpg [OR]
# RewriteCond %{REQUEST_URI} =/favicon.ico [OR]
RewriteCond %{REQUEST_URI} =/robots.txt [OR]
RewriteCond %{REQUEST_URI} =/crossdomain.xml [OR]
# RewriteCond %{REQUEST_URI} =/apple-touch-icon.png [OR]
# RewriteCond %{REQUEST_URI} =/apple-touch-icon-precomposed.png [OR]
RewriteCond %{REQUEST_URI} =/foaf.rdf [OR]
RewriteCond %{REQUEST_URI} =/w3c/p3p.xml [OR]
RewriteCond %{REQUEST_URI} ^/google[\da-f]{16}\.html$ [OR]
RewriteCond %{REQUEST_URI} ^/y_key_[\da-f]{16}\.html$ [OR]
RewriteCond %{REQUEST_URI} =/BingSiteAuth.xml$ [OR]
RewriteCond %{REQUEST_URI} =/myopenid-hosted-verification.html [OR]
RewriteCond %{REQUEST_URI} =/humans.txt

# To further limit possible issues (e.g. if you mess up the conditions above),
# we only match files at the root, not folders or files in subfolders
RewriteRule ^([a-z0-9\-\.\_]+)$ /.well-known/$1 [L,NC]

# #####
# # esvi:ji specific #
# #####

# RewriteEngine On
# RewriteRule ^(play|pause|scores|about)$ / [R=301,L]

# DISCLAIMER: User Agent sniffing is bad, I know
# This is used to tell iOS devices to use another appcache file
# because it doesn't cache audio files
# RewriteEngine On
# RewriteCond %{HTTP_USER_AGENT} (iPad|iPhone|iPod) [NC]
# RewriteRule ^manifest.appcache$ /manifest_ios.appcache [L]

```