

```

# Apache Server Configs v2.1.0 | MIT License
# https://github.com/h5bp/server-configs-apache

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

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

# -----
# | Cross-domain AJAX requests |
# -----

# Enable cross-origin AJAX requests.
# http://code.google.com/p/html5security/wiki/CrossOriginRequestSecurity
# http://enable-cors.org/

# <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/HTML/CORS_Enabled_Image
# http://blog.chromium.org/2011/07/using-cross-domain-images-in-webgl-and.html
# http://hacks.mozilla.org/2011/11/using-cors-to-load-webgl-textures-from-cross-domain-images/

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

```

```
</ITModule>

# -----
# | Web fonts access |
# -----

# Allow access from all domains for web fonts

<IfModule mod_headers.c>
    <FilesMatch "\.(eot|otf|ttf|woff)$">
        Header set Access-Control-Allow-Origin "*"
    </FilesMatch>
</IfModule>

# #####
# # ERRORS #
# #####

# -----
# | 404 error prevention for non-existing redirected folders |
# -----

# Prevent Apache from returning a 404 error for a rewrite if a directory
# with the same name does not exist.
# http://httpd.apache.org/docs/current/content-negotiation.html#multiviews
# http://www.webmasterworld.com/apache/3808792.htm

Options -MultiViews

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

# You can customize what Apache returns to the client in case of an error (see
# http://httpd.apache.org/docs/current/mod/core.html#errordocument).

ErrorDocument 404 /404.html

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

```

# -----
# | Better website experience |
# -----

# Force IE to render pages in the highest available mode in the various
# cases when it may not: http://hsivonen.iki.fi/doctype/ie-mode.pdf.

<IfModule mod_headers.c>
    Header set X-UA-Compatible "IE=edge"
    # `mod_headers` can't match based on the content-type, however, we only
    # want to send this header for HTML pages and not for the other resources
    <FilesMatch "\.(appcache|crx|css|curl|eot|gif|htc|ico|jpe?
gl|jsl|m4a|m4v|manifest|mp4|oex|ogal|ogg|ogv|opus|otf|pdf|png|safariextz|svgz?
|ttf|vcf|webapp|webm|webpl|woff|xml|xpi)$">
        Header unset X-UA-Compatible
    </FilesMatch>
</IfModule>

# -----
# | Cookie setting from iframes |
# -----

# Allow cookies to be set from iframes in IE.
# http://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>

# #####
# # MIME TYPES AND ENCODING #
# #####

# -----
# | Proper MIME types for all files |
# -----

<IfModule mod_mime.c>

```

Audio

```
AddType audio/mp4          m4a f4a f4b
AddType audio/ogg           oga ogg opus
```

Data interchange

```
AddType application/json    json map
```

JavaScript

Normalize to standard type (it's sniffed in IE anyways):

<http://tools.ietf.org/html/rfc4329#section-7.2>

```
AddType application/javascript    js
```

Video

```
AddType video/mp4          f4v f4p m4v mp4
AddType video/ogg           ogv
AddType video/webm          webm
AddType video/x-flv         flv
```

Web fonts

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

*# Browsers usually ignore the font MIME types and sniff the content,
however, Chrome shows a warning if other MIME types are used for the
following fonts.*

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

Make SVGZ fonts work on iPad:

<https://twitter.com/FontSquirrel/status/14855840545>

```
AddType image/svg+xml          svgz
AddEncoding gzip                 svgz
```

Other

```
AddType application/octet-stream    safariextz
AddType application/x-chrome-extension    crx
AddType application/x-opera-extension    oex
AddType application/x-web-app-manifest+json    webapp
AddType application/x-xpinstall         xpi
AddType application/xml                 atom rdf rss xml
```

```
AddType image/webp                webp
AddType image/x-icon               cur
AddType text/cache-manifest        appcache manifest
AddType text/vtt                   vtt
AddType text/x-component            htc
AddType text/x-vcard               vcf
```

```
</IfModule>
```

```
# -----
# | UTF-8 encoding |
# -----
```

```
# Use UTF-8 encoding for anything served as `text/html` or `text/plain`.
```

```
AddDefaultCharset utf-8
```

```
# Force UTF-8 for certain file formats.
```

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

```
    AddCharset utf-8 .atom .css .js .json .rss .vtt .webapp .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>

# -----
# | Suppressing / Forcing the "www." at the beginning of URLs |
# -----

# The same content should never be available under two different URLs especially
# not with and without "www." at the beginning. This can cause SEO problems
# (duplicate content), therefore, you should choose one of the alternatives and
# redirect the other one.

# By default option 1 (no "www.") is activated:
# http://no-www.org/faq.php?q=class_b

# If you'd prefer to use option 2, just comment out all the lines from option 1
# and uncomment the ones from option 2.

# IMPORTANT: NEVER USE BOTH RULES AT THE SAME TIME!

# -----

# Option 1: rewrite www.example.com → example.com

<IfModule mod_rewrite.c>
RewriteCond %{HTTPS} !=on
RewriteCond %{HTTP_HOST} ^www\.(.+)$ [NC]
RewriteRule ^ http://%1%{REQUEST_URI} [R=301,L]
</IfModule>

# -----

# Option 2: rewrite example.com → www.example.com

# Be aware that the following might not be a good idea if you use "real"
# subdomains for certain parts of your website.

# <IfModule mod_rewrite.c>

```

```
# RewriteCond %{HTTPS} !=on
# RewriteCond %{HTTP_HOST} !^www\. [NC]
# RewriteCond %{SERVER_ADDR} !=127.0.0.1
# RewriteCond %{SERVER_ADDR} !=::1
# RewriteRule ^ http://www.%{HTTP_HOST}%{REQUEST_URI} [R=301,L]
# </IfModule>

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

# -----
# | Clickjacking |
# -----

# Protect web site against clickjacking.

# The example below sends the `X-Frame-Options` response header with the value
# `DENY`, informing browsers not to display the web page content in any frame.

# This might not be the best setting for everyone. You should read about the
# other two possible values for `X-Frame-Options`: `SAMEORIGIN` and `ALLOW-FROM`
# http://tools.ietf.org/html/rfc7034#section-2.1.

# Keep in mind that while you could send the `X-Frame-Options` header for all
# of your site's pages, this has the potential downside that it forbids even
# non-malicious framing of your content (e.g.: when users visit your site using
# a Google Image Search results page).

# Nonetheless, you should ensure that you send the `X-Frame-Options` header for
# all pages that allow a user to make a state changing operation (e.g: pages
# that contain one-click purchase links, checkout or bank-transfer confirmation
# pages, pages that make permanent configuration changes, etc.).

# Sending the `X-Frame-Options` header can also protect your web site against
# more than just clickjacking attacks: https://cure53.de/xfo-clickjacking.pdf.

# http://tools.ietf.org/html/rfc7034
# http://blogs.msdn.com/b/ieinternals/archive/2010/03/30/combatting-clickjacking-with-x-frame-options.aspx
# https://www.owasp.org/index.php/Clickjacking
```

```
# <IfModule mod_headers.c>
#   Header set X-Frame-Options "DENY"
#   <FilesMatch "\.(appcache|crx|css|curl|eot|gif|htc|icol|jpe?
gl|js|m4a|m4v|manifest|mp4|oex|ogal|ogg|ogv|opus|otf|pdf|png|safari-ext|svgz?
|ttf|vcf|webapp|webm|webpl|woff|xml|xpi)$">
#       Header unset X-Frame-Options
#   </FilesMatch>
# </IfModule>

# -----
# | Content Security Policy (CSP) |
# -----

# You can mitigate the risk of cross-site scripting and other content-injection
# attacks by setting a Content Security Policy which whitelists trusted sources
# of content for your site.

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

# For more details on how to craft a reasonable policy for your site, read:
# http://html5rocks.com/en/tutorials/security/content-security-policy (or the
# specification: http://w3.org/TR/CSP). Also, to make things easier, you can
# use an online CSP header generator such as: http://cspisawesome.com/.

# <IfModule mod_headers.c>
#   Header set Content-Security-Policy "script-src 'self'; object-src 'self'"
#   <FilesMatch "\.(appcache|crx|css|curl|eot|gif|htc|icol|jpe?
gl|js|m4a|m4v|manifest|mp4|oex|ogal|ogg|ogv|opus|otf|pdf|png|safari-ext|svgz?
|ttf|vcf|webapp|webm|webpl|woff|xml|xpi)$">
#       Header unset Content-Security-Policy
#   </FilesMatch>
# </IfModule>

# -----
# | 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 hidden files and directories.
# This includes directories used by version control systems such as Git and SVN.

<IfModule mod_rewrite.c>
    RewriteCond %{SCRIPT_FILENAME} -d [OR]
    RewriteCond %{SCRIPT_FILENAME} -f
    RewriteRule "(^|/)\." - [F]
</IfModule>

# -----

# Block access to backup and source files.
# These files may be left by some text editors and can pose a great security
# danger when anyone has access to them.

<FilesMatch "(^#.#|\. (bak|config|dist|fla|incl|ini|log|psd|sh|sql|sw[op])| (^)$">

    # 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>

```

```
# -----
# | Reducing MIME-type security risks |
# -----

# Prevent some browsers from MIME-sniffing the response.

# This reduces exposure to drive-by download attacks and should be enable
# especially if the web server is serving user uploaded content, content
# that could potentially be treated by the browser as executable.

# http://blogs.msdn.com/b/ie/archive/2008/07/02/ie8-security-part-v-comprehensive-
# protection.aspx
# http://msdn.microsoft.com/en-us/library/ie/gg622941.aspx
# http://mimesniff.spec.whatwg.org/

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

# -----
# | Reflected Cross-Site Scripting (XSS) attacks |
# -----

# (1) Try to re-enable the Cross-Site Scripting (XSS) filter built into the
#     most recent web browsers.
#
#     The filter is usually enabled by default, but in some cases it may be
#     disabled by the user. However, in IE for example, it can be re-enabled
#     just by sending the `X-XSS-Protection` header with the value of `1`.
#
# (2) Prevent web browsers from rendering the web page if a potential reflected
#     (a.k.a. a non-persistent) XSS attack is detected by the filter.
#
#     By default, if the filter is enabled and browsers detect a reflected
#     XSS attack, they will attempt to block the attack by making the smallest
#     possible modifications to the returned web page.
#
#     Unfortunately, in some browsers (e.g.: IE), this default behavior may
#     allow the XSS filter to be exploited, thereby, it's better to tell
#     browsers to prevent the rendering of the page altogether, instead of
#     attempting to modify it.
```

```
# attempting to modify it.
#
# http://hackademix.net/2009/11/21/ies-xss-filter-creates-xss-vulnerabilities
#
# IMPORTANT: Do not rely on the XSS filter to prevent XSS attacks! Ensure that
# you are taking all possible measures to prevent XSS attacks, the most obvious
# being: validating and sanitizing your site's inputs.
#
# http://blogs.msdn.com/b/ie/archive/2008/07/02/ie8-security-part-iv-the-xss-filter.aspx
# http://blogs.msdn.com/b/ieinternals/archive/2011/01/31/controlling-the-internet-
explorer-xss-filter-with-the-x-xss-protection-http-header.aspx
# https://www.owasp.org/index.php/Cross-site_Scripting_%28XSS%29

# <IfModule mod_headers.c>
#     #                                     (1)     (2)
#     Header set X-XSS-Protection "1; mode=block"
#     <FilesMatch "\.(appcache|crx|css|curl|eot|gif|htc|ico|jpe?
gl|js|m4a|m4v|manifest|mp4|oex|ogal|ogg|ogv|opus|otf|pdf|png|safariextz|svgz?
|ttf|vcf|webapp|webml|webpl|woff|xml|xpi)$">
#         Header unset X-XSS-Protection
#     </FilesMatch>
# </IfModule>

# -----
# | Secure Sockets Layer (SSL) |
# -----

# Rewrite secure requests properly to prevent SSL certificate warnings, e.g.:
# prevent `https://www.example.com` when your certificate only allows
# `https://secure.example.com`.

# <IfModule mod_rewrite.c>
#     RewriteCond %{SERVER_PORT} !^443
#     RewriteRule ^https://example-domain-please-change-me.com%(REQUEST_URI) [R=301,L]
# </IfModule>

# -----
# | HTTP Strict Transport Security (HSTS) |
# -----

# Force client-side SSL redirection.
```

```
# If a user types "example.com" in his browser, the above rule will redirect
# him to the secure version of the site. That still leaves a window of oppor-
# tunity (the initial HTTP connection) for an attacker to downgrade or redirect
# the request. The following header ensures that browser will ONLY connect to
# your server via HTTPS, regardless of what the users type in the address bar.
# http://tools.ietf.org/html/draft-ietf-websec-strict-transport-sec-14#section-6.1
# http://www.html5rocks.com/en/tutorials/security/transport-layer-security/

# (!) Remove the `includeSubDomains` optional directive if the subdomains are
# not using HTTPS.

# <IfModule mod_headers.c>
#   Header set Strict-Transport-Security "max-age=16070400; includeSubDomains"
# </IfModule>

# -----
# | Server software information                               |
# -----

# Avoid displaying the exact Apache version number, the description of the
# generic OS-type and the information about Apache's compiled-in modules.

# ADD THIS DIRECTIVE IN THE `httpd.conf` AS IT WILL NOT WORK IN THE `.htaccess`!

# ServerTokens Prod

# #####
# # WEB PERFORMANCE                                     #
# #####

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

<IfModule mod_deflate.c>

# Force compression for mangled headers.
# http://developer.yahoo.com/blogs/ydn/posts/2010/12/pushing-beyond-gzipping
<IfModule mod_setenvif.c>
    <IfModule mod_headers.c>
```

```

        SetEnvIfNoCase ^(\Accept-Encoding X-cept-Encoding X(15)|^(15)|-(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 MIME-types
# (for Apache versions below 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).
<IfModule mod_filter.c>
    AddOutputFilterByType DEFLATE application/atom+xml \
        application/javascript \
        application/json \
        application/rss+xml \
        application/vnd.ms-fontobject \
        application/x-font-ttf \
        application/x-web-app-manifest+json \
        application/xhtml+xml \
        application/xml \
        font/opentype \
        image/svg+xml \
        image/x-icon \
        text/css \
        text/html \
        text/plain \
        text/x-component \
        text/xml

</IfModule>

</IfModule>

# -----
# | Content transformations |
# -----

# Prevent some of the mobile network providers from modifying the content of
# your site: http://www.w3.org/Protocols/rfc2616/rfc2616-sec14.html#sec14.9.5.

# <IfModule mod_headers.c>
#     Header set Cache-Control "no-transform"

```

```

# </IfModule>

# -----
# | ETag removal |
# -----

# Since we're sending far-future expires headers (see below), ETags can
# be removed: http://developer.yahoo.com/performance/rules.html#etags.

# `FileETag None` is not enough for every server.
<IfModule mod_headers.c>
    Header unset ETag
</IfModule>

```

FileETag None

```

# -----
# | Expires headers (for better cache control) |
# -----

# The following expires headers are set pretty far in the future. If you don't
# control versioning with filename-based cache busting, consider lowering the
# cache time for resources like CSS and JS to something like 1 week.

<IfModule mod_expires.c>

    ExpiresActive on
    ExpiresDefault "access plus 1 month"

    # CSS
    ExpiresByType text/css "access plus 1 year"

    # Data interchange
    ExpiresByType application/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/x-icon "access plus 1 week"

    # HTML components (HTCs)

```

```

ExpiresByType text/x-component "access plus 1 month"

# HTML
ExpiresByType text/html "access plus 0 seconds"

# JavaScript
ExpiresByType application/javascript "access plus 1 year"

# Manifest files
ExpiresByType application/x-web-app-manifest+json "access plus 0 seconds"
ExpiresByType text/cache-manifest "access plus 0 seconds"

# Media
ExpiresByType audio/ogg "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 video/mp4 "access plus 1 month"
ExpiresByType video/ogg "access plus 1 month"
ExpiresByType video/webm "access plus 1 month"

# Web feeds
ExpiresByType application/atom+xml "access plus 1 hour"
ExpiresByType application/rss+xml "access plus 1 hour"

# Web fonts
ExpiresByType application/font-woff "access plus 1 month"
ExpiresByType application/vnd.ms-fontobject "access plus 1 month"
ExpiresByType application/x-font-ttf "access plus 1 month"
ExpiresByType font/opentype "access plus 1 month"
ExpiresByType image/svg+xml "access plus 1 month"

</IfModule>

<Files ~ "(index\.html|favicon\.ico)">
  ExpiresDefault "access plus 0 seconds"
  FileETag None
  <IfModule mod_headers.c>
    Header unset ETag
    Header set Cache-Control "max-age=0, no-cache, no-store, must-revalidate"
    Header set Pragma "no-cache"

```

Header set Expires "Wed, 11 Jan 1984 05: 00: 00 GMT"

</IfModule>

</Files>

```
# -----  
# | Filename-based cache busting |  
# -----
```

*# If you're not using a build process to manage your filename version rewving,
you might want to consider enabling the following directives to route all
requests such as `/css/style.12345.css` to `/css/style.css`.*

To understand why this is important and a better idea than `.css?v231`, read:
<http://stevesouders.com/blog/2008/08/23/rewving-filenames-dont-use-querystring>*

```
# <IfModule mod_rewrite.c>  
#     RewriteCond %{REQUEST_FILENAME} !-f  
#     RewriteRule ^(.+)?\.(?!(css|png|jpe?g|gif))$ $1.$3 [L]  
# </IfModule>
```

```
# -----  
# | File concatenation |  
# -----
```

Allow concatenation from within specific CSS and JS files, e.g.:
Inside of `script.combined.js` you could have
<!--#include file="libs/jquery.js" -->
<!--#include file="plugins/jquery.idletimer.js" -->
and they would be included into this single file.

```
# <IfModule mod_include.c>  
#     <FilesMatch "\.combined\.js$">  
#         Options +Includes  
#         AddOutputFilterByType INCLUDES application/javascript application/json  
#         SetOutputFilter INCLUDES  
#     </FilesMatch>  
#     <FilesMatch "\.combined\.css$">  
#         Options +Includes  
#         AddOutputFilterByType INCLUDES text/css  
#         SetOutputFilter INCLUDES  
#     </FilesMatch>
```

```
# </IfModule>
```

```
# -----  
# | Persistent connections |  
# -----
```

```
# Allow multiple requests to be sent over the same TCP connection;  
# http://httpd.apache.org/docs/current/en/mod/core.html#keepalive.
```

```
# Enable if you serve a lot of static content but, be aware of the  
# possible disadvantages!
```

```
# <IfModule mod_headers.c>  
#   Header set Connection Keep-Alive  
# </IfModule>
```