

```

# 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 #
#####

# -----
# | 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>

# -----
# | Cross-origin 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

<IfModule 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

```

```
        Header set Access-Control-Allow-Origin * env=IS_LUKS
    </FilesMatch>
</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 "\.
(appache|atom|bbaw|bmp|crx|css|curl|eot|f4[abpv]|flv|geojson|gif|htcl|icol|jpe?
|j|j|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?|x|oc|xml|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 topojson
    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>
```

```
# #####
# # REWRITES #
# #####
```

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

```
# (1) Turn on the rewrite engine (this is necessary in order for
#     the `RewriteRule` directives to work).
#
#     https://httpd.apache.org/docs/current/mod/mod\_rewrite.html#RewriteEngine
#
# (2) Enable the `FollowSymLinks` option if it isn't already.
#
#     https://httpd.apache.org/docs/current/mod/core.html#options
#
# (3) If your web host doesn't allow the `FollowSymLinks` option,
#     you need to comment it out or remove it, and then uncomment
#     the `Options +SymLinksIfOwnerMatch` line (4), but be aware
#     of the performance impact.
#
#     https://httpd.apache.org/docs/current/misc/perf-tuning.html#symlinks
#
# (4) Some cloud hosting services will require you set `RewriteBase`.
#
#     https://www.rackspace.com/knowledge\_center/frequently-asked-question/why-is-modrewrite-not-working-on-my-site
#     https://httpd.apache.org/docs/current/mod/mod\_rewrite.html#rewritebase
#
# (5) Depending on how your server is set up, you may also need to
#     use the `RewriteOptions` directive to enable some options for
#     the rewrite engine.
#
#     https://httpd.apache.org/docs/current/mod/mod\_rewrite.html#rewriteoptions
#
# (6) Set %(ENV:PROTO) variable, to allow rewrites to redirect with the
#     appropriate schema automatically (http or https).
```

```
<IfModule mod_rewrite.c>
```

```
    # (1)
```

```
    RewriteEngine On
```

```
    # (2)
```

```
    Options +FollowSymLinks
```

```
    # (3)
```



```

# Options +SymLinksIfOwnerMatch

# (4)
# RewriteBase /

# (5)
# RewriteOptions <options>

# (6)
RewriteCond %{HTTPS} =on
RewriteRule ^ - [env=proto:https]
RewriteCond %{HTTPS} !=on
RewriteRule ^ - [env=proto:http]

</IfModule>

# -----
# | Forcing `https://` |
# -----

# Redirect from the `http://` to the `https://` version of the URL.
# https://wiki.apache.org/httpd/RewriteHTTPToHTTPS

# <IfModule mod_rewrite.c>
#   RewriteEngine On
#   RewriteCond %{HTTPS} !=on
#   RewriteRule ^(.*)$ https://%{HTTP_HOST}/$1 [R=301,L]
# </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), and 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/fan.php?no=class h

```

```

# http://no-www.org/faq.php#4-033_0
#
# If you would prefer to use `Option 2`, just comment out all the
# lines from `Option 1` and uncomment the ones from `Option 2`.
#
# (!) NEVER USE BOTH RULES AT THE SAME TIME!

# -----

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

<IfModule mod_rewrite.c>
    RewriteEngine On
    RewriteCond %{HTTPS} !=on
    RewriteCond %{HTTP_HOST} ^www\.(.+$) [NC]
    RewriteRule ^ %{ENV:PROTO}://%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>
#     RewriteEngine On
#     RewriteCond %{HTTPS} !=on
#     RewriteCond %{HTTP_HOST} !^www\. [NC]
#     RewriteCond %{SERVER_ADDR} !=127.0.0.1
#     RewriteCond %{SERVER_ADDR} !=::1
#     RewriteRule ^ %{ENV:PROTO}://www.%{HTTP_HOST}%{REQUEST_URI} [R=301,L]
# </IfModule>

<IfModule mod_rewrite.c>
    RewriteEngine On
    RewriteCond %{REQUEST_FILENAME} !-f
    RewriteRule ^ index.php [QSA,L]
</IfModule>

# #####
# # SECURITY
#

```

```
# # SECURITY #
# #####

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

# Protect website against clickjacking.
#
# The example below sends the `X-Frame-Options` response header with
# the value `DENY`, informing browsers not to display the content of
# the web page in any frame.
#
# This might not be the best setting for everyone. You should read
# about the other two possible values the `X-Frame-Options` header
# field can have: `SAMEORIGIN` and `ALLOW-FROM`.
# https://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 website's pages, this has the potential downside that
# it forbids even non-malicious framing of your content (e.g.: when
# users visit your website 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 website
# against more than just clickjacking attacks:
# https://cure53.de/xfo-clickjacking.pdf.
#
# https://tools.ietf.org/html/rfc7034
# http://blogs.msdn.com/b/ieinternals/archive/2010/03/30/combating-clickjacking-with-x-
frame-options.aspx
# https://www.owasp.org/index.php/Clickjacking

# <IfModule mod_headers.c>

#     Header set X-Frame-Options "DENY"
```

```

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

# <FilesMatch "\.
(appache|atom|bba|bmp|css|curl|eot|f4[abpv]|flv|geo|json|gif|htcl|icol|jpe?
|jsl|json(1d)?
|m4[av]|manifest|map|mp4|oexl|og[agv]|opus|otf|pdf|png|rdf|rssl|safari|ext|svgz?
|swf|topo|json|tt[cf]|txt|vcard|vcf|vtt|webap|web[mp]|webmani|fest|woff2?|x1|ocl|xml|xpi)$">
#     Header unset X-Frame-Options
# </FilesMatch>

# </IfModule>

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

# 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>

#     Header set Content-Security-Policy "script-src 'self'; object-src 'self'"

# # `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 "\.
(appache|atom|bbaw|bmpl|crl|css|curl|eot|f4[abpw]|flv|geo.json|gif|htcl|icol|jpe?
gl|jsl|json(1d)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rss|safari|extz|svgz?
|swf|topo.json|tt[cf]|txt|vcard|vcf|vtt|webappl|web[mp]|webmanifest|woff2?|xloc|xml|xpi)$">
#     Header unset Content-Security-Policy
# </FilesMatch>

# </IfModule>

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

# Block access to directories without a default document.
#
# You should leave the following uncommented, as you shouldn't allow
# anyone to surf through every directory on your server (which may
# includes rather private places such as 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|in[ci]|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>

```
# -----  
# | HTTP Strict Transport Security (HSTS) |  
# -----  
  
# Force client-side SSL redirection.  
#  
# If a user types `example.com` in their browser, even if the server  
# redirects them to the secure version of the website, that still leaves  
# a window of opportunity (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 browser's  
# address bar.  
#  
# (!) Remove the `includeSubDomains` optional directive if the website's  
# subdomains are not using HTTPS.  
#  
# http://www.html5rocks.com/en/tutorials/security/transport-layer-security/  
# https://tools.ietf.org/html/draft-ietf-websec-strict-transport-sec-14#section-6.1  
# http://blogs.msdn.com/b/ieinternals/archive/2014/08/18/hsts-strict-transport-security-attacks-mitigations-deployment-https.aspx  
  
# <IfModule mod_headers.c>  
#     Header always set Strict-Transport-Security "max-age=16070400; includeSubDomains"  
# </IfModule>  
  
# -----  
# | Reducing MIME type security risks |  
# -----  
  
# Prevent some browsers from MIME-sniffing the response.  
#  
# This reduces exposure to drive-by download attacks and cross-origin  
# data leaks, and should be left uncommented, especially if the server  
# is serving user-uploaded content or content that could potentially be  
# treated as executable by the browser.  
#  
# http://www.slideshare.net/hasegawayosuke/owasp-hasegawa
```

```
# http://blogs.msdn.com/b/ie/archive/2008/07/02/ie8-security-part-v-comprehensive-protection.aspx
# https://msdn.microsoft.com/en-us/library/ie/gg622941.aspx
# https://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 most web browsers.
```

```
#  
# The filter is usually enabled by default, but in some cases it  
# may be disabled by the user. However, in Internet Explorer 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 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.: Internet Explorer),  
# this default behavior may allow the XSS filter to be exploited,  
# thereby, it's better to inform browsers to prevent the rendering  
# of the page altogether, instead of attempting to modify it.
```

```
# https://hackademix.net/2009/11/21/ies-xss-filter-creates-xss-vulnerabilities
```

```
# (!) 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 website'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"
```

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

```
# <FilesMatch "\.
(appache|atom|bbaw|bml|crl|css|curl|eot|f4[abpv]|flv|geo|json|gif|htcl|icol|jpe?
|js|json|ld)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rss|safari|extz|svgz?
|swf|topo|json|tt[cf]|txt|vcard|vcf|vtt|webapp|web[mp]|webmanifest|woff2?|x|ocl|xml|xpi)$">
# Header unset X-XSS-Protection
# </FilesMatch>
```

```
# </IfModule>
```

```
# -----
# | Server-side technology information |
# -----
```

```
# Remove the `X-Powered-By` response header that:
```

```
#
# * is set by some frameworks and server-side languages
# (e.g.: ASP.NET, PHP), and its value contains information
# about them (e.g.: their name, version number)
```

```
#
# * doesn't provide any value as far as users are concern,
# and in some cases, the information provided by it can
# be used by attackers
```

```
# (!) If you can, you should disable the `X-Powered-By` header from the
# language / framework level (e.g.: for PHP, you can do that by setting
# `expose_php = off` in `php.ini`)
```

```

# -----
#
# https://php.net/manual/en/ini.core.php#ini.expose\_php

<IfModule mod_headers.c>
    Header unset X-Powered-By
</IfModule>

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

# Prevent Apache from adding a trailing footer line containing
# information about the server to the server-generated documents
# (e.g.: error messages, directory listings, etc.)
#
# https://httpd.apache.org/docs/current/mod/core.html#serversignature

ServerSignature Off

# -----

# Prevent Apache from sending in the `Server` response header its
# exact version number, the description of the generic OS-type or
# information about its compiled-in modules.
#
# (!) The `ServerTokens` directive will only work in the main server
# configuration file, so don't try to enable it in the `.htaccess` file!
#
# https://httpd.apache.org/docs/current/mod/core.html#servertokens

#ServerTokens Prod

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

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

<IfModule mod_deflate.c>

```

*# Force compression for mangled `Accept-Encoding` request headers
https://developer.yahoo.com/blogs/ymn/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/woff" \
    "font/woff2" \
```

```
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>
```

```
# -----
# vim: syntax=apache: ft=conf
```

```
# | Content transformation |
# -----

# Prevent intermediate caches or proxies (e.g.: such as the ones
# used by mobile network providers) from modifying the website's
# content.
#
# https://tools.ietf.org/html/rfc2616#section-14.9.5
#
# (!) If you are using `mod_pagespeed`, please note that setting
# the `Cache-Control: no-transform` response header will prevent
# `PageSpeed` from rewriting `HTML` files, and, if the
# `ModPagespeedDisableRewriteOnNoTransform` directive isn't set
# to `off`, also from rewriting other resources.
#
# https://developers.google.com/speed/pagespeed/module/configuration#notransform

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

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

# Allow concatenation from within specific files.
#
# e. g. :
#
# If you have the following lines in a file called, for
# example, `main.combined.js`:
#
#     <!--#include file="js/jquery.js" -->
#     <!--#include file="js/jquery.timer.js" -->
#
# Apache will replace those lines with the content of the
# specified files.

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

# -----

```



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

# If you're not using a build process to manage your filename version
# revving, you might want to consider enabling the following directives
# to route all requests such as `/style.12345.css` to `/style.css`.
#
# To understand why this is important and even a better solution than
# using something like `*.css?v231`, please see:
# http://www.stevesouders.com/blog/2008/08/23/revving-filenames-dont-use-querystring/

# <IfModule mod_rewrite.c>
#     RewriteEngine On
#     RewriteCond %{REQUEST_FILENAME} !-f
#     RewriteRule ^(.+?)\.(\d+)\. (bmp|css|curl|gif|ico|jpe?g|js|png|svgz?|webp|webmanifest)$
#1.$3 [L]
# </IfModule>
```