

```

# Apache Server Configs v2.11.0 | 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
    </FilesMatch>
  </IfModule>
</IfModule>

```

```
Header set Access-Control-Allow-Origin * env=IS_LUKS
</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.  
#  
# http://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?
gl|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]|woff2?|xlocl|xml|xpi)$">
        Header unset X-UA-Compatible
    </FilesMatch>
</IfModule>

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

# Allow cookies to be set from iframes in Internet Explorer.
#
# 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
IvArI 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/json          json map topojson
AddType application/ld+json        jsonld
AddType application/vnd.geo+json   geojson
AddType application/xml            atom rdf rss xml
```

```
# JavaScript
```

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

```
AddType application/javascript    js
```

```
# Manifest files
```

```
# If you are providing a web application manifest file (see
# the specification: https://w3c.github.io/manifest/), it is
# recommended that you serve it with the `application/manifest+json`
# media type.
```

```
#
```

```
# Because the web application manifest file doesn't have its
# own unique file extension, you can set its media type either
# by matching:
```

```
#
```

```
# 1) the exact location of the file (this can be done using a
# directive such as `<Location>`, but it will NOT work in
# the `.htaccess` file, so you will have to do it in the main
# server configuration file or inside of a `<VirtualHost>`
# container)
```

```
#
```

```
# e.g.:
```

```
#
```

```
#     <Location "/.well-known/manifest.json">
#         AddType application/manifest+json          json
#     </Location>
```

```
#
```

```
# 2) the filename (this can be problematic as you will need to
```

```
# ensure that you don't have any other file with the same name
# as the one you gave to your web application manifest file)
#
# e. g. :
#
# <Files "manifest.json">
#     AddType application/manifest+json          json
# </Files>
```

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

Media files

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

```
# 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 \  
.rdf \  
.rss \  
.topojson \  
.vtt \  
.webapp \  
.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`.  
#
```



```

..
# http://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

<IfModule mod_rewrite.c>

    # (1)
    RewriteEngine On

    # (2)
    Options +FollowSymlinks

    # (3)
    # Options +SymLinksIfOwnerMatch

    # (4)
    # RewriteBase /

    # (5)
    # RewriteOptions <options>

</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/faq.php?q=class_b
```

```
#
```

```
# 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 ^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>
```

```
# RewriteEngine On
```

```
# RewriteCond %{HTTPS} !=on
```

```
# RewriteCond %{HTTP_HOST} !^www\.(.+)$ [NC]
```

```
# 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 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
# https://tools.ietf.org/html/rfc7034#section-2.1
```

```
# 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|bbaw|bml|crl|css|curl|eot|f4[abpv]|flv|geojson|gif|htcl|icol|jpe?
gl|jsl|json(1d)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rssl|safariextz|svgz?
|swf|topojson|tt[cf]|txt|vcard|vcf|vtt|webapp|web[mp]|woff2?|x|oc|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!
#
# For more details on how to craft a reasonable policy for your website,
# read: http://www.html5rocks.com/en/tutorials/security/content-security-policy/
# (or the specification: http://www.w3.org/TR/CSP11/). 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'"
#   # `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|bmp|crx|css|curl|eot|f4[abpw]|flv|geo.json|gif|htcl|icol|jpe?
gl|jst|json(1d)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rss|safariextz|svgz?
|swf|topo.json|tt[cf]|txt|vcard|vcf|vtt|webapp|web[mp]|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 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
```

<http://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. 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.
```

```
#  
# http://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 "\.

*(appcache|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|safari-extended|svgz?
|swf|topojson|ttf|txt|vcard|vcf|vtt|webapp|web[mp]|woff2?|x|oc|x|xml|xpi)\$">*

Header unset X-XSS-Protection

</FilesMatch>

</IfModule>

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

*# 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 |
-----*

```

# https://varvy.com/pagespeed/enable-compression.html
<ifModule mod_gzip.c>
    mod_gzip_on Yes
    mod_gzip_dechunk Yes
    mod_gzip_item_include file \.(html?|txt|css|js|php|pl)$
    mod_gzip_item_include handler ^cgi-script$
    mod_gzip_item_include mime ^text/. *
    mod_gzip_item_include mime ^application/x-javascript.*
    mod_gzip_item_exclude mime ^image/. *
    mod_gzip_item_exclude rspheader ^Content-Encoding:.*gzip.*
</ifModule>

<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-EncodXng|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 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/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) would not know that they should need to -----
```

```
# 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>
```

```
# -----
# | 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://www.mediawiki.org/wiki/Manual: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 year"

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 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)$ $1.$3 [L]
# </IfModule>
```