

```
#add handler that allows html, xml, and json to work dynamically as PHP
#https://httpd.apache.org/docs/current/mod/mod_mime.html#addtype
#https://httpd.apache.org/docs/current/mod/mod_mime.html#addhandler
#AddType application/x-httpd-php .html .xml .json
AddHandler php5-script .html
#AddHandler php5-script .html .xml .json
<FilesMatch "^(sitemap)\.xml$" >
AddHandler php5-script .xml
</FilesMatch>

#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 correct media type (MIME type) for resources
#https://httpd.apache.org/docs/current/mod/mod_mime.html#addtype
<Files "manifest.json">
AddType application/manifest+json .json
</Files>
<Files "opensearch.xml">
AddType application/opensearchdescription+xml .xml
</Files>
AddType application/atom+xml .atom
AddType application/json .json
AddType application/ld+json .jsonld
AddType application/rdf+xml .rdf
AddType application/rss+xml .rss
AddType application/xml .xml
AddType application/vnd.ms-fontobject .eot
AddType application/x-font-ttf .ttc .ttf
AddType font/ttf .ttf
AddType font/opentype .otf
AddType font/otf .otf
AddType application/font-woff .woff
AddType font/x-woff .woff
AddType application/font-woff2 .woff2
AddType image/svg+xml .svg

#compress html, css, javascript, font, and miscellaneous resources
#https://httpd.apache.org/docs/current/mod/mod_deflate.html
```

```
#https://httpd.apache.org/docs/current/mod/mod_deflate.html
<IfModule mod_deflate.c>
AddOutputFilterByType DEFLATE "text/css" "text/html" "text/javascript" "text/plain"
"text/xml" "application/x-javascript" "application/javascript" "application/json"
"application/ld+json" "application/manifest+json" "application/rdf+xml"
"application/rss+xml" "application/x-font-woff" "application/x-font-ttf"
"application/vnd.ms-fontobject" "font/eot" "font/opentype" "font/otf" "font/ttf" "font/x-
woff" "image/bmp" "image/jpeg" "image/svg+xml" "image/vnd.microsoft.icon" "image/x-icon"
</IfModule>
```

#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

#set expires headers to improve caching

#https://httpd.apache.org/docs/current/mod/mod_expires.html

```
<IfModule mod_headers.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"
```

#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 1 month"
```

```
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"
```

#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"
```

```
</IfModule>
```

*#remove the 'X-Powered-By' response header set by some frameworks and server-side languages
#security measure - its value contains information about them: name, version number, etc.*

```

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

#redirect to custom error page(s)
#http://httpd.apache.org/docs/current/custom-error.html
ErrorDocument 404 /~jason/404.html

#redirects and aliases for mapping older files to current files
#https://httpd.apache.org/docs/current/mod/mod_alias.html#redirect
Redirect 301 "/~jason/about.php" "/~jason/about.html"
Redirect 301 "/~jason/contact.php" "/~jason/contact.html"
Redirect 301 "/~jason/files.php" "/~jason/code.html"
Redirect 301 "/~jason/index.php" "/~jason/index.html"
Redirect 301 "/~jason/index.php" "https://www.lib.montana.edu/~jason/"
Redirect 301 "/~jason/metadata.php" "/~jason/metadata.html"
Redirect 301 "/~jason/portfolio.php" "/~jason/resume.html"
Redirect 301 "/~jason/resume.php" "/~jason/resume.html"
Redirect 301 "/~jason/sandbox.php" "/~jason/code.html"
Redirect 301 "/~jason/talks.php" "/~jason/talks.html"
#RedirectMatch 301 "/home/jason/public_html/files/search-ux/(. *.).html"
"https://www.lib.montana.edu/~jason/files.html"

#rewrite rules for URLs and directory patterns
#https://httpd.apache.org/docs/current/mod/mod_rewrite.html#RewriteEngine
#https://httpd.apache.org/docs/current/mod/core.html#options
#https://httpd.apache.org/docs/current/mod/mod_rewrite.html#rewritebase
#https://httpd.apache.org/docs/current/mod/mod_rewrite.html#rewriteoptions
<IfModule mod_rewrite.c>
    #Options +FollowSymLinks
    #Options +SymLinksIfOwnerMatch
    RewriteEngine On

    #check for 200 header, legitimate url
    RewriteCond %{ENV:REDIRECT_STATUS} 200
    RewriteRule .* - [L]

    #redirect from the `http://` to the `https://` version of the URL.
    #https://wiki.apache.org/httpd/RewriteHTTPToHTTPS
    RewriteCond %{HTTPS} !=on
    #RewriteRule ^(.*)$ https://%{HTTP_HOST}/~jason/$1 [R=301,L]

```

```
#RewriteRule ^(/~jason/index\.html|about\.html|code\.html|talks\.html)$ https://%(HTTP_HOST)/~jason/$1 [R=301,L]
RewriteRule
^(index\.html|about\.html|code\.html|contact\.html|search\.html|sitemap\.html|talks\.html)$
https://%(HTTP_HOST)/~jason/$1 [R=301,L]

#remove need to have .html extension in filename
#RewriteCond %(REQUEST_FILENAME).html -f
#RewriteRule ^(.*)$ $1.html [L,QSA]
</IfModule>
```