How to set HTTP headers (for cache-control)?

How to enable browser caching for my site? Do I just put cache-control:public somewhere up in my header like this?

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"
Cache-Control:public;
>
```

I am using the latest version of PHP developing on the latest version of XAMPP.

http   browser-cache

	edited May 1 '17 at 15:19	asked Dec 18 '10 at 21:37
	Elias Ojala **115** 6	andrew **2,074** 6 35 52

> what server side language are you using? PHP?, ASP?, JSP? the way you set the headers is similar but not quite the same. Or if you are caching images... often this is done in your Apache (or web server) config – scunliffe Dec 18 '10 at 21:51

> Sadly that "solution" simply generates an invalid DOCTYPE ;-) If you wish to do it from HTML (I wouldn't recommend it), you'd use META HTTP-EQUIV – user166390 Dec 19 '10 at 3:54

8 Answers

To use cache-control in HTML, you use the meta tag, e.g.

```
<meta http-equiv="Cache-control" content="public">
```

The value in the content field is defined as one of the four values below.

Some information on the `Cache-Control` header is as follows

> HTTP 1.1. Allowed values = PUBLIC | PRIVATE | NO-CACHE | NO-STORE.
>
> Public - may be cached in public shared caches.
> Private - may only be cached in private cache.
> No-Cache - may not be cached.
> No-Store - may be cached but not archived.
>
> The directive CACHE-CONTROL:NO-CACHE indicates cached information should not be used and instead requests should be forwarded to the origin server. This directive has the same semantics as the PRAGMA:NO-CACHE.
>
> Clients **SHOULD** include both PRAGMA: NO-CACHE and CACHE-CONTROL: NO-CACHE when a no-cache request is sent to a server not known to be HTTP/1.1 compliant. Also see EXPIRES.
>
> Note: It may be better to specify cache commands in HTTP than in META statements, where they can influence more than the browser, but proxies and other intermediaries that may cache information.

	edited Mar 25 '13 at 13:41	answered Dec 18 '10 at 21:40
	Community ♦ **1** 1	Codemwnci **42.1k** 9 80 118

10   This doesn't really help me. I need to know where I actually set these values. Look at out relative experience levels and modify your answer accordingly. – andrew Dec 18 '10 at 22:03

7   This is a great beginners guide to HTTP cache headers: mobify.com/blog/beginners-guide-to-http-cache-headers – shawnjan May 1 '13 at 18:18

14   HTML5 forbids this and `<meta>` has always been a terrible and flaky way to specify caching. – Kornel May 2 '14 at 16:56

2   The quoted document is not correct with respect to the `no-store` value (despite the document itself referencing RFC 2068) - `no-store` prevents the document being stored/cached at all, anywhere. Whereas `no-cache` does allow it to be stored, but it must check with the server every time. Browsers will tend to store `no-cache` pages to enable back button functionality etc. – MrWhite Apr 1 '15 at 8:08

2   Google provides one of the easiest references for HTTP caching IMO:

You can set the headers in PHP by using:

```php
<?php
  //set headers to NOT cache a page
  header("Cache-Control: no-cache, must-revalidate"); //HTTP 1.1
  header("Pragma: no-cache"); //HTTP 1.0
  header("Expires: Sat, 26 Jul 1997 05:00:00 GMT"); // Date in the past

  //or, if you DO want a file to cache, use:
  header("Cache-Control: max-age=2592000"); //30days (60sec * 60min * 24hours * 30days)

?>
```

Note that the exact headers used will depend on your needs (and if you need to support HTTP 1.0 and/or HTTP 1.1)

edited May 1 '17 at 1:50
Elias Ojala
115 6

answered Dec 19 '10 at 21:25
scunliffe
44.4k 18 99 143

As I wrote (in http://www.williamferreira.net/blog/2011/10/04/controle-de-cache-apache/) is best to use the file .htacces. However beware of the time you leave the contents in the cache.

Use:

```
<FilesMatch "\.(ico|pdf|flv|jpg|jpeg|png|gif|js|css|swf)$">
Header set Cache-Control "max-age=604800, public"
</FilesMatch>
```

Where: 604800 = 7 days

PS: This can be used to reset any header

answered Oct 5 '11 at 15:55
William
507 4 3

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3   Your link seems to be dead – AntonioCS Apr 10 '15 at 10:44

The page at http://www.askapache.com/htaccess/apache-speed-cache-control.html suggests using something like this:

> ### Add Cache-Control Headers
>
> This goes in your root .htaccess file but if you have access to httpd.conf that is better.
>
> This code uses the FilesMatch directive and the Header directive to add Cache-Control Headers to certain files.
>
> ```
> # 480 weeks
> <FilesMatch "\.(ico|pdf|flv|jpg|jpeg|png|gif|js|css|swf)$">
> Header set Cache-Control "max-age=290304000, public"
> </FilesMatch>
> ```

edited Jan 11 at 11:54
Ivar
2,157 10 27 38

answered May 1 '11 at 11:28
angry kiwi
3,351 13 61 98

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2   Is order in this important? "max-age=290304000, public" Or "public, max-age=290304000" or both are equally right? – Satya Prakash Sep 8 '13 at 8:02

1   Order does not matter if the values are not conflicting (like `cache` and `no-cache`). `max-age` and `public` do not conflict so order does not matter. – Blaise Nov 25 '14 at 13:50

Note that since it uses the `Header` directive, you have to enable `mod_headers` . – Skippy le Grand Gourou Jan 25 at 13:05

For Apache server, you should check mod_expires for setting Expires and Cache-Control headers.

Alternatively, you can use Header directive to add Cache-Control on your own:

```
Header set Cache-Control "max-age=290304000, public"
```

This is the best `.htaccess` I have used in my actual website:

```
<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>

##Tweaks##
Header set X-Frame-Options SAMEORIGIN

## EXPIRES CACHING ##
<IfModule mod_expires.c>
ExpiresActive On
ExpiresByType image/jpg "access 1 year"
ExpiresByType image/jpeg "access 1 year"
ExpiresByType image/gif "access 1 year"
ExpiresByType image/png "access 1 year"
ExpiresByType text/css "access 1 month"
ExpiresByType text/html "access 1 month"
ExpiresByType application/pdf "access 1 month"
ExpiresByType text/x-javascript "access 1 month"
ExpiresByType application/x-shockwave-flash "access 1 month"
ExpiresByType image/x-icon "access 1 year"
ExpiresDefault "access 1 month"
</IfModule>
## EXPIRES CACHING ##

<IfModule mod_headers.c>
    Header set Connection keep-alive
    <filesmatch "\.(ico|flv|gif|swf|eot|woff|otf|ttf|svg)$">
        Header set Cache-Control "max-age=2592000, public"
    </filesmatch>
    <filesmatch "\.(jpg|jpeg|png)$">
        Header set Cache-Control "max-age=1209600, public"
    </filesmatch>
    <filesmatch "\.(eot|woff|otf|ttf|svg)$">
        Header set Cache-Control "max-age=2592000, public"
    </filesmatch>
    # css and js should use private for proxy caching
https://developers.google.com/speed/docs/best-practices/caching#LeverageProxyCaching
    <filesmatch "\.(css)$">
        Header set Cache-Control "max-age=31536000, private"
    </filesmatch>
    <filesmatch "\.(js)$">
        Header set Cache-Control "max-age=1209600, private"
    </filesmatch>
    <filesMatch "\.(x?html?|php)$">
        Header set Cache-Control "max-age=600, private, must-revalidate"
    </filesMatch>
</IfModule>
```

2   Almost perfect example of a .htaccess file... It would be complete if specific images were included & how to write the path to the image AND where to put the .htaccess file (eg. in image dir or index dir)?...eg. '<IfModule mod_headers.c> <Files /img/myimage.jpg> Header append Cache-Control "max-age=3600, must-revalidate" </Files></IfModule>'... would this work?... OR... or pasted to img dir '<filesmatch "^(example\.jpg|sample\.png)$">Header set Cache-Control "max-age=31536000, public"</filesmatch>'... An *all the same* strategy seems risky - anyway specific examples would be great if poss – Marco-UandL Nov 27 '16 at 20:31

1   just FYI: gzip compression on JS and CSS files can help to break your SSL encryption. If you rely on security, do not turn gzip on – Eduard Void May 17 '17 at 7:14

OWASP recommends the following,

Whenever possible ensure the cache-control HTTP header is set with no-cache, no-store, must-revalidate, private; and that the pragma HTTP header is set with no-cache.

```
<IfModule mod_headers.c>
    Header set Cache-Control "private, no-cache, no-store, proxy-revalidate, no-transform"
    Header set Pragma "no-cache"
</IfModule>
```

answered Oct 22 '15 at 17:47

Won Jun Bae
2,001　2　23　33

The meta cache control tag allows Web publishers to define how pages should be handled by caches. They include directives to declare what should be cacheable, what may be stored by caches, modifications of the expiration mechanism, and revalidation and reload controls.

The allowed values are:

Public - may be cached in public shared caches
Private - may only be cached in private cache
no-Cache - may not be cached
no-Store - may be cached but not archived

Please be careful about case sensitivity. Add the following meta tag in the source of your webpage. The difference in spelling at the end of the tag is either you use " /> = xml or "> = html.

```
<meta http-equiv="Cache-control" content="public">
<meta http-equiv="Cache-control" content="private">
<meta http-equiv="Cache-control" content="no-cache">
<meta http-equiv="Cache-control" content="no-store">
```

Source-> MetaTags

answered Dec 5 '12 at 11:25

Karthik N G
1,071　11　13

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correction: no-store should not be cached, no cache is allowed to be cached but must be checked with the server before being reserved - see palizine.plynt.com/issues/2008Jul/cache-control-attributes – DangerMouse Jan 2 '13 at 11:14