How to cache static files in ASP.NET Core?

Asked 1 year, 8 months ago   Active 3 months ago   Viewed 6k times

6

I can't seem to enable caching of static files in ASP.NET Core 2.2. I have the following in my
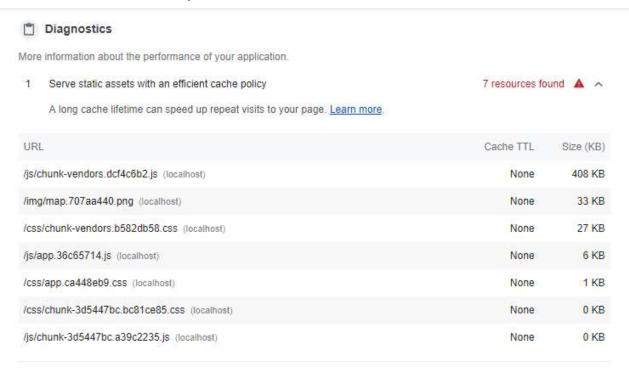Configure :

```
public void Configure(IApplicationBuilder app, IHostingEnvironment env) {
  if (env.IsDevelopment()) {
    app.UseDeveloperExceptionPage();
    app.UseCors(...);
  }
  else {
    app.UseHsts();
  }

  app.UseHttpsRedirection();
  app.UseAuthentication();
  app.UseSignalR(routes => { routes.MapHub<NotifyHub>("/..."); });

  app.UseResponseCompression();
  app.UseStaticFiles();
  app.UseSpaStaticFiles(new StaticFileOptions() {
    OnPrepareResponse = (ctx) => {
      ctx.Context.Response.Headers[HeaderNames.CacheControl] = "public, max-age=31557600"; //
cache for 1 year
    }
  });
  app.UseMvc();

  app.UseSpa(spa => {
    spa.Options.SourcePath = "ClientApp";
    if (env.IsDevelopment()) {
      spa.UseVueCli(npmScript: "serve", port: 8080);
    }
  });
}
```

When I try and Audit the production site on HTTPS using chrome I keep getting "Serve static
assets with an efficient cache policy":

Diagnostics

More information about the performance of your application.

1   Serve static assets with an efficient cache policy   7 resources found ⚠ ^

A long cache lifetime can speed up repeat visits to your page. Learn more.

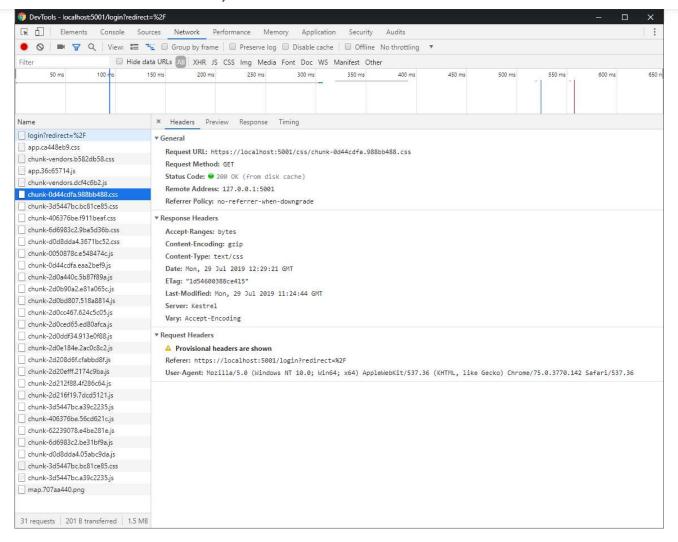| URL	Cache TTL	Size (KB)
/js/chunk-vendors.dcf4c6b2.js (localhost)	None	408 KB
/img/map.707aa440.png (localhost)	None	33 KB
/css/chunk-vendors.b582db58.css (localhost)	None	27 KB
/js/app.36c65714.js (localhost)	None	6 KB
/css/app.ca448eb9.css (localhost)	None	1 KB
/css/chunk-3d5447bc.bc81ce85.css (localhost)	None	0 KB
/js/chunk-3d5447bc.a39c2235.js (localhost)	None	0 KB

In the network tab there is no mention of caching in the headers, when I press F5 it seems everything is served from disk cache. But, how can I be sure my caching setting is working if the audit is showing its not?

vue.js   asp.net-core   caching   static-files

Share   Improve this question   Follow

asked Jul 29 '19 at 12:38

M   **Colton Scottie**
497   3   12

2 Answers

Active   Oldest   Votes

I do not know what **UseSpaStaticFiles** is but you can add cache options in **UseStaticFiles**. You have missed to set an **Expires** header.

8

```
// Use static files
app.UseStaticFiles(new StaticFileOptions {
    OnPrepareResponse = ctx =>
    {
        // Cache static files for 30 days
```

```
        }
    });
```

Beware that you also need a way to invalidate cache when you make changes to static files.

I have written a blog post about this: [Minify and cache static files in ASP.NET Core](#)

Share Improve this answer Follow

edited Jul 7 '20 at 14:38
bside
619 1 7 14

answered Jul 29 '19 at 12:53
Fredrik Stigsson
323 1 7

> Hi FS. Question; for cache invalidation, why did you decide to not use the MVC 'asp-append-version' tag. I.e. --> <script asp-append-version="true" src="..."></script> – TheLegendaryCopyCoder Jul 9 '20 at 14:59

> Hi, I want to use pure HTML and pure JavaScript as much as possible. – Fredrik Stigsson Jul 12 '20 at 9:11

This is working in ASP.NET Core 2.2 to 3.1:

5

I know this is a bit similar to Fredrik's answer but you don't have to type literal strings in order to get the cache control header

```
app.UseStaticFiles(new StaticFileOptions()
{
    HttpsCompression =
Microsoft.AspNetCore.Http.Features.HttpsCompressionMode.Compress,
    OnPrepareResponse = (context) =>
    {
        var headers = context.Context.Response.GetTypedHeaders();
        headers.CacheControl = new Microsoft.Net.Http.Headers.CacheControlHeaderValue
        {
            Public = true,
            MaxAge = TimeSpan.FromDays(30)
        };
    }
});
```

Share Improve this answer Follow

edited Jan 12 at 18:43
JHBonarius
6,582 3 12 28

answered Mar 13 '20 at 18:36
HMZ
1,851 1 11 20

> you are missing Expires header. – Ali Jul 8 '20 at 7:29

> @Ali If a response contains both the `Expires` header and the `max-age` directive, `max-age` takes precedence. Reference: 13.2.4 Expiration Calculations - [w3.org/Protocols/rfc2616/rfc2616-sec13.html](#) The max-age directive takes priority over Expires, so if max-age is present in a response, the calculation is simply: – webStuff Nov 6 '20 at 1:18 ✏

Join Stack Overflow to learn, share knowledge, and build your career.

Sign up ✕