

[Code](#) [Issues 2.2k](#) [Pull requests 91](#) [Discussions](#) [Actions](#) [Projects 8](#)[Edit](#)

# Blazor App HttpClient can't fetch due to being blocked by CORS #22988

[Unanswered](#) sassy224 asked this question in [General](#)

sassy224 on Jun 15, 2020

## Describe the bug

Use HttpClient to post request to another site will result in exception

Access to fetch at 'https://login.microsoftonline.com/xxxxxxxxxxx/oauth2/token' from origin 'https://localhost:44384' has been blocked by CORS policy: No 'Access-Control-Allow-Origin' header is present on the requested resource. If an opaque response serves your needs, set the request's mode to 'no-cors' to fetch the resource with CORS disabled.

## To Reproduce

- Create a new Blazor WebAssembly App targets .Net Core 3.1 (all package versions are 3.2.0)  
-Edit method IncrementCount in Counter.razor:

```
private async void IncrementCount()
{
    currentCount++;

    HttpClient client = new HttpClient();
    var grantString =
    $"{@"grant_type=password&username=username&password=password&client_id=clientID&client_secret=clientSec

    grantString += $"{@"&resource=https://xxxx.dynamics.com/";

    var authorizationStr =
    Convert.ToBase64String(Encoding.ASCII.GetBytes($"clientID:clientSecret"));
    var authenticationHeader = new AuthenticationHeaderValue("Basic", authorizationStr);

    var requestMessage = new HttpRequestMessage(HttpMethod.Post,
    "https://login.microsoftonline.com/xxxxxxxxxxx/oauth2/token");
    if (authenticationHeader != null)
    {
        requestMessage.Headers.Authorization = authenticationHeader;
```

```
var response = await client.SendAsync(requestMessage).ConfigureAwait(false);
var result1 = await response.Content.ReadAsStringAsync().ConfigureAwait(false);

}
```

- Run blazor, navigate to Counter, press button, error is shown in console.

## Exceptions (if any)

Access to fetch at 'https://login.microsoftonline.com/xxxxxxxxxx/oauth2/token' from origin 'https://localhost:44356' has been blocked by CORS policy: No 'Access-Control-Allow-Origin' header is present on the requested resource. If an opaque response serves your needs, set the request's mode to 'no-cors' to fetch the resource with CORS disabled.

## Further technical details

- ASP.NET Core version: 3.1
- Include the output of `dotnet --info`

```
.NET SDK (reflecting any global.json):
Version:   5.0.100-preview.5.20279.10
Commit:   8139f1b74e
```

```
Runtime Environment:
OS Name:     Windows
OS Version:  10.0.18363
OS Platform: Windows
RID:        win10-x64
Base Path:   C:\Program Files\dotnet\sdk\5.0.100-preview.5.20279.10\
```

```
Host (useful for support):
Version: 5.0.0-preview.5.20278.1
Commit:  4ae4e2fe08
```

```
.NET SDKs installed:
2.1.202 [C:\Program Files\dotnet\sdk]
2.1.500 [C:\Program Files\dotnet\sdk]
2.1.507 [C:\Program Files\dotnet\sdk]
2.1.508 [C:\Program Files\dotnet\sdk]
2.1.509 [C:\Program Files\dotnet\sdk]
2.1.511 [C:\Program Files\dotnet\sdk]
2.1.512 [C:\Program Files\dotnet\sdk]
2.1.513 [C:\Program Files\dotnet\sdk]
2.1.514 [C:\Program Files\dotnet\sdk]
2.1.515 [C:\Program Files\dotnet\sdk]
```

```
2.1.801 [C:\Program Files\dotnet\sdk]
2.1.802 [C:\Program Files\dotnet\sdk]
2.2.207 [C:\Program Files\dotnet\sdk]
3.1.200-preview-015002 [C:\Program Files\dotnet\sdk]
3.1.301 [C:\Program Files\dotnet\sdk]
3.1.400-preview-015151 [C:\Program Files\dotnet\sdk]
5.0.100-preview.5.20279.10 [C:\Program Files\dotnet\sdk]
```

.NET runtimes installed:

```
Microsoft.AspNetCore.All 2.1.6 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.9 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.11 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.12 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.13 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.15 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.16 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.17 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.18 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.1.19 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.2.3 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.All 2.2.8 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.All]
Microsoft.AspNetCore.App 2.1.6 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.9 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.11 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.12 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.13 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.15 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.16 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.17 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.18 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.1.19 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.2.3 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 2.2.8 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 3.1.2 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 3.1.5 [C:\Program Files\dotnet\shared\Microsoft.AspNetCore.App]
Microsoft.AspNetCore.App 5.0.0-preview.5.20279.2 [C:\Program
```

Files\dotnet\shared\Microsoft.AspNetCore.App]

```
Microsoft.NETCore.App 2.0.9 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.6 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.9 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.11 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.12 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.13 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.15 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.16 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.17 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.18 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.1.19 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.2.3 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 2.2.8 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 3.1.2 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 3.1.5 [C:\Program Files\dotnet\shared\Microsoft.NETCore.App]
Microsoft.NETCore.App 5.0.0-preview.5.20278.1 [C:\Program
```

Microsoft.WindowsDesktop.App 5.0.0-preview.5.20270.5 [C:\Program Files\dotnet\shared\Microsoft.WindowsDesktop.App]

- The IDE (VS / VS Code/ VS4Mac) you're running on, and it's version

VS 2019 16.6.2



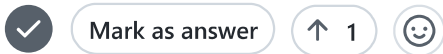
7 suggested answers · 7 replies

Oldest | Newest | Top



**davidfowl** on Jun 15, 2020 Collaborator

Is there a question? Blazor wasm has the same restrictions running JavaScript in the browser (it all runs in the same sandbox)



0 replies

Write a reply



**sassy224** on Jun 15, 2020 Author

Is there a question? Blazor wasm has the same restrictions running JavaScript in the browser (it all runs in the same sandbox)

Are you saying that this issue is by design? I can see the same snippet works fine in Blazor server app, console app, desktop app. Can you elaborate more on why Blazor wasm doesn't work?



2 replies



**javiercn** on Jun 19, 2020 Collaborator

You can enable cross-origin requests provided that the server supports CORS using the following extension method `HttpRequest.SetBrowserRequestMode(BrowserRequestMode.Cors)`

**Andras-Csanyi** on Jun 15, 2020

Are you saying that this issue is by design? I can see the same snippet works fine in Blazor server app, console app, desktop app. Can you elaborate more on why Blazor wasm doesn't work?

Yup. Blazor WebAssembly runs in your browser where particular security features are forced. One of them you met. If you run Blazor Server Side then your code runs (communicates other sites) at your server - which is not your browser - and send the DOM changes to your browser via SignalR. That is the difference. It is a [SO](#) article explains some details, there are might be better articles about it.



Mark as answer



0 replies

**sassy224** on Jun 15, 2020 **Author**

Yup. Blazor WebAssembly runs in your browser where particular security features are forced. One of them you met. If you run Blazor Server Side then your code runs (communicates other sites) at your server - which is not your browser - and send the DOM changes to your browser via SignalR. That is the difference. It is a [SO](#) article explains some details, there are might be better articles about it.

Thanks, very useful and clear for me. So in my issue, the only way it can work is the other site (<https://login.microsoftonline.com/xxxxxxxxxx/oauth2/token>) must return response with header including Access-Control-Allow-Origin = "\*", right?



Mark as answer



0 replies

**javiercn** on Jun 19, 2020 **Collaborator**



Mark as answer



2 replies

**eXappk** on Nov 5, 2020

Where i can add this line into my code?

**yogyogi** on Jan 3, 2021

You can use CORS in Blazor Webassembly as well as configuring other fetch options ?? How to do it.

Write a reply

**ricksparx** on Oct 22, 2020

Hi @javiercn ,below is my code where i am setting the default browser as CORS but still getting the same error.

Could you please give us your working code repo.

```
builder.Services.AddTransient(sp => new HttpClient(new DefaultBrowserOptionsMessageHandler(new WebAssemblyHttpHandler()))
```

```
{  
  //DefaultBrowserRequestCache = BrowserRequestCache.NoStore,  
  //DefaultBrowserRequestCredentials = BrowserRequestCredentials.Omit,  
  DefaultBrowserRequestMode = BrowserRequestMode.Cors,  
})  
{  
  BaseAddress = new Uri(builder.HostEnvironment.BaseAddress),  
});
```



Mark as answer



3 replies

**javiercn** on Oct 22, 2020

Collaborator

Is the server returning the appropriate CORS headers in response?

**ricksparx** on Oct 23, 2020

Thank You @javiercn I did this via proxy. I created a Proxy API and routed my endpoint via this proxy API

**eXappk** on Nov 4, 2020

Write a reply



**michalss** on Nov 29, 2020

Need this as well pls



Mark as answer



1



0 replies

Write a reply

### Category



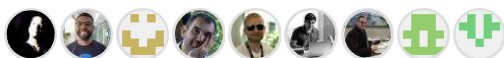
General

### Labels



None yet

### 9 participants



### Converted from issue

This discussion was converted from issue #22988 on June 15, 2020 23:35.

### Events



**pranavkm** Unmarked an Answer 2y



**javiercn** Marked an Answer 2y



**javiercn** Unmarked an Answer 2y



**davidfowl** Marked an Answer 2y

