



Database First Approach

This article is about OAuth 2.0 authorization scheme integration with ASP.NET MVC REST Web API.



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May 13 2018

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118.4k

[WebApiOAuth2.zip](#)
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REST Web API is a light-weight essential component of web development in order to share the data across multiple client machines or devices e.g. mobile devices, desktop applications or any website. Authorization of REST Web API is an equally important part for sharing data across multiple client machines and devices in order to protect data sensitivity from any outside breaches and to authenticate the utilization of the target REST Web API.

Authorization of REST Web API can be done via a specific username/password with the combination of a secret key, but, for this type of authorization scheme, REST Web API access needs to be authenticated per call to the hosting server. Also, we as the owner of the server have no way to verify who is utilizing our REST Web API, whether it's the clients that we have allowed access to or if some malicious user is also using our API(s) without our knowledge. Finally, since the username/password is packed to a base64 format automatically by the browser, if any malicious user traces my browser activity and gets ahold of my REST Web API calls they can easily decrypt base64 format and could use my REST Web API for malicious activities.

Hmmmm.....scary stuff! Not to mention that despite the fact that I have authorized my REST Web API, it is still open for malicious users to utilize without even my knowledge. So, what to do? To answer that a new authorization scheme is introduced which can also be utilized in Login flow of any web application as well, but, I will be focusing on it from a REST Web API perspective. So, this new scheme of authorization is OAuth 2.0 which is a token based authorization scheme.

Let's compare OAuth 2.0 authorization scheme to the traditional [username/password authorization scheme](#) from REST Web API perspective, i.e.,

Username/Password REST Web API Authorization	VS	OAuth 2.0 REST Web API Authorization
1. Access Authorization to same or different REST Web API(s) on the same server is authenticated on each call with provided username/password.		Access Authorization is authenticated only once based on the system's existing user credential, then on successful authorization, an access token is provided for a specific period of time REST Web API(s) call can utilize the access to

<p>REST Web API(s) cannot track the user who is consuming the REST Web API(s). Its utilization is based on mutual trust between Producer and consumer.</p>	<p>Or ASK A QUESTION or CONTRIBUTE</p> <p>Web API(s), so, REST Web API call can track the user who is consuming the REST Web API.</p>
<p>hackers can easily decrypt the request headers.</p>	<p>access to request header.</p>
<p>All client machines or devices code needs to be updated in case of the change in username/password for malicious activities.</p>	<p>Access token is activated for a specific time period. Change in system user's credential will not require the change of code in target consumer client machines and devices. Update credential generated a new access token.</p>
<p>5. Username/Password is fixed.</p>	<p>Access token is generated automatically based on system user's credential.</p>

Today, I shall demonstrate OAuth 2.0 mechanism to authorize a REST Web API which will also give us the benefit of [Authorize] attribute via OWIN security layer.



Following are a few prerequisites before you proceed any further,

1. Knowledge of [OAuth 2.0](#).
2. Knowledge of [ASP.NET MVC5](#).
3. Knowledge of [C# programming](#).
4. Knowledge of [REST Web API](#).

You can download the complete source code or you can follow the step by step discussion below. The sample code is developed in Microsoft Visual Studio 2015 Enterprise.

Let's begin now:

Step 1

Create a new Web API project and name it "WebApiOAuth2".

Step 2

Install the following NuGet packages into your project, i.e.,

1. Microsoft.Owin.Security.OAuth
2. Microsoft.Owin.Cors
3. Microsoft.AspNet.WebApi.Core
4. Microsoft.AspNet.WebApi.Owin



Create DB OAuth / API" database into your SQL Server and execut

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```

01. USE [DB_Oauth_API]
02. GO

04. DROP PROCEDURE [dbo].[LoginByUsernamePassword]
05. GO
06. /***** Object: Table [dbo].[Login] Script Date: 5/10/2018 2:37:02 PM *****/
07. DROP TABLE [dbo].[Login]
08. GO
09. /***** Object: Table [dbo].[Login] Script Date: 5/10/2018 2:37:02 PM *****/
10. SET ANSI_NULLS ON
11. GO
12. SET QUOTED_IDENTIFIER ON
13. GO
14. SET ANSI_PADDING ON
15. GO
16. CREATE TABLE [dbo].[Login](
17.     [id] [int] IDENTITY(1,1) NOT NULL,
18.     [username] [varchar](50) NOT NULL,
19.     [password] [varchar](50) NOT NULL,
20.     CONSTRAINT [PK_Login] PRIMARY KEY CLUSTERED
21. (
22.     [id] ASC
23. )WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = OFF) ON [PRIMARY]
24. ) ON [PRIMARY]
25.
26. GO
27. SET ANSI_PADDING OFF
28. GO
29. SET IDENTITY_INSERT [dbo].[Login] ON
30.
31. INSERT [dbo].[Login] ([id], [username], [password]) VALUES (1, N'admin', N'adminpass')
32. SET IDENTITY_INSERT [dbo].[Login] OFF
33. /***** Object: StoredProcedure [dbo].[LoginByUsernamePassword] Script Date: 5/10/2018 2:37:02 PM *****/
34. SET ANSI_NULLS ON
35. GO
36. SET QUOTED_IDENTIFIER ON
37. GO
38. -- =====
39. -- Author: <Author,,Asma Khalid>
40. -- Create date: <Create Date,,15-Mar-2016>
41. -- Description: <Description,,You are Allow to Distribute this Code>
42. -- =====
43. CREATE PROCEDURE [dbo].[LoginByUsernamePassword]
44.     @username varchar(50),
45.     @password varchar(50)
46. AS
47. BEGIN
48.     SELECT id, username, password
49.     FROM Login
50.     WHERE username = @username
51.     AND password = @password
52. END
53.
54. GO

```


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[CONTRIBUTE](#)

```
.data source=SQL Server e.g. |localhost;initial catalog=SQL Database;persist security info=True;user id=SQL Username;password=SQL Password;
```

Rename "Controllers/ValueController.cs" file to "Controllers/WebApiController.cs".

Step 5

Open, "Controllers/WebApiController.cs" file replace following code,

```
01. using System;
02. using System.Collections.Generic;
03. using System.Linq;
04. using System.Net;
05. using System.Net.Http;
06. using System.Web.Http;
07.
08. namespace WebApiOauth2.Controllers
09. {
10.     [Authorize]
11.     public class WebApiController : ApiController
12.     {
13.         // GET api/WebApi
14.         public IEnumerable<string> Get()
15.         {
16.             return new string[] { "Hello REST API", "I am Authorized" };
17.         }
18.
19.         // GET api/WebApi/5
20.         public string Get(int id)
21.         {
22.             return "Hello Authorized API with ID = " + id;
23.         }
24.
25.         // POST api/WebApi
26.         public void Post([FromBody]string value)
27.         {
28.         }
29.
30.         // PUT api/WebApi/5
31.         public void Put(int id, [FromBody]string value)
32.         {
33.         }
34.
35.         // DELETE api/WebApi/5
36.         public void Delete(int id)
37.         {
38.         }
39.     }
40. }
```

In the above code, I have created very simple and basic REST Web API(s). Notice [Authorize] attribute is already placed at the top of the controller to make the REST Web API(s) access secure.



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```

01. using System;
02. using System.Collections.Generic;

05. using Microsoft.Owin.Security.OAuth;
06.
07. namespace WebApiOauth2
08. {
09.     public static class WebApiConfig
10.     {
11.         public static void Register(HttpConfiguration config)
12.         {
13.             // Web API configuration and services
14.             // Configure Web API to use only bearer token authentication.
15.             config.SuppressDefaultHostAuthentication();
16.             config.Filters.Add(new HostAuthenticationFilter(OAuthDefaults.Authentication)
17.
18.             // Web API routes
19.             config.MapHttpAttributeRoutes();
20.
21.             config.Routes.MapHttpRoute(
22.                 name: "DefaultApi",
23.                 routeTemplate: "api/{controller}/{id}",
24.                 defaults: new { id = RouteParameter.Optional }
25.             );
26.
27.             // WebAPI when dealing with JSON & JavaScript!
28.             // Setup json serialization to serialize classes to camel (std. json format)
29.             var formatter = GlobalConfiguration.Configuration.Formatters.JsonFormatter;
30.             formatter.SerializerSettings.ContractResolver = new Newtonsoft.Json.Seriali
31.
32.             // Adding JSON type web api formatting.
33.             config.Formatters.Clear();
34.             config.Formatters.Add(formatter);
35.         }
36.     }
37. }

```

In the above code the following two lines of code will add authentication filter for Oauth 2.0 authorization scheme and surpass any existing authorization scheme i.e.

```

01. surpass any existing authorization scheme i.e.
02. // Web API configuration and services
03. // Configure Web API to use only bearer token authentication.
04. config.SuppressDefaultHostAuthentication();
05. config.Filters.Add(new HostAuthenticationFilter(OAuthDefaults.Authentication)

```

Step 7

Now, open "App_Start/Startup.Auth.cs" file and replace following code in it i.e.

```

using System;
using Microsoft.AspNet.Identity;
using Microsoft.AspNet.Identity.Owin;

```

C# Corner
 Microsoft.Owin.Security.Google;
 WebApiOAuth2.Models;
 Microsoft.Owin.Security.OAuth;
 WebApiOAuth2.Helper Code.OAuth2;

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```

public partial class Startup
{
    #region Public /Protected Properties.

    /// <summary>
    /// OAUTH options property.
    /// </summary>
    public static OAuthAuthorizationServerOptions OAuthOptions { get; private set; }

    /// <summary>
    /// Public client ID property.
    /// </summary>
    public static string PublicClientId { get; private set; }

    #endregion

    // For more information on configuring authentication, please visit http://go.microsoft.co
    Id=301864
    public void ConfigureAuth(IAppBuilder app)
    {
        // Enable the application to use a cookie to store information for the signed in user
        // and to use a cookie to temporarily store information about a user logging in with a
        // Configure the sign in cookie
        app.UseCookieAuthentication(new CookieAuthenticationOptions
        {
            AuthenticationType = DefaultAuthenticationTypes.ApplicationCookie,
            LoginPath = new PathString("/Account/Login"),
            LogoutPath = new PathString("/Account/LogOff"),
            ExpireTimeSpan = TimeSpan.FromMinutes(5.0),
        });

        app.UseExternalSignInCookie(DefaultAuthenticationTypes.ExternalCookie);

        // Configure the application for OAuth based flow
        PublicClientId = "self";
        OAuthOptions = new OAuthAuthorizationServerOptions
        {
            TokenEndpointPath = new PathString("/Token"),
            Provider = new AppOAuthProvider(PublicClientId),
            AuthorizeEndpointPath = new PathString("/Account/ExternalLogin"),
            AccessTokenExpireTimeSpan = TimeSpan.FromHours(4),
            AllowInsecureHttp = true //Don't do this in production ONLY FOR DEVELOPING: ALLOW
        };

        // Enable the application to use bearer tokens to authenticate users
        app.UseOAuthBearerTokens(OAuthOptions);

        // Enables the application to temporarily store user information when they are verifyi
        or authentication process.
        app.UseTwoFactorSignInCookie(DefaultAuthenticationTypes.TwoFactorCookie, TimeSpan.From

        // Enables the application to remember the second login verification factor such as
        // Once you check this option, your second step of verification during the login pr

```



Comment the following lines to enable logg:

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```
//app.UseMicrosoftAccountAuthentication(
//    clientId: "",
//    clientSecret: "");

//    consumerKey: "",
//    consumerSecret: "");

//app.UseFacebookAuthentication(
//    appId: "",
//    appSecret: "");

//app.UseGoogleAuthentication(new GoogleOAuth2AuthenticationOptions()
//{
//    ClientId = "",
//    ClientSecret = ""
//});
}
```

In the above piece of code, "PublicClientId" is used when "AuthorizeEndpointPath" is utilized for unique instantiation from client-side. Following lines of code will enable the OAuth 2.0 authorization scheme, i.e.

```
01. from client side. Following lines of code will enable the OAuth 2.0 authorization scheme
02. // Configure the application for OAuth based flow
03. PublicClientId = "self";
04. OAuthOptions = new OAuthAuthorizationServerOptions
05. {
06.     TokenEndpointPath = new PathString("/Token"),
07.     Provider = new AppOAuthProvider(PublicClientId),
08.     AuthorizeEndpointPath = new PathString("/Account/ExternalLogin"),
09.     AccessTokenExpireTimeSpan = TimeSpan.FromHours(4),
10.     AllowInsecureHttp = true //Don't do this in production ONLY FOR DEVELOP
11. };
12.
13. // Enable the application to use bearer tokens to authenticate users
14. app.UseOAuthBearerTokens(OAuthOptions);
```

OAuthAuthorizationOptions are explained as follow i.e.

- *TokenEndpointPath* ->
This is the path which will be called in order to authorize the user credentials and in return it will return the generated access token.
- *Provider* ->
You need to implement this class (which I have in this tutorial) where you will verify the user credential and create identity claims in order to return the generated access token.
- *AuthorizeEndpointPath* ->
In this tutorial, I am not using this property as I am not taking consent of external logins. So, if you are using external logins then you can update this path to get user consent then required access token will be



AccessTokenExpiryTimeSpan ->

This is the time period you want your access token to be accessible. The shorter time span is recommended for sensitive API(s).

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Use this property for developer environment.

More properties can be studied [here](#).

Step 8

Now, create "Helper_Code/OAuth2/AppOAuthProvider.cs" file and replace following code in it i.e.

```

01.  //-----
02.  // <copyright file="AppOAuthProvider.cs" company="None">
03.  //     Copyright (c) Allow to distribute this code.
04.  // </copyright>
05.  // <author>Asma Khalid</author>
06.  //-----
07.
08.  namespace WebApiOAuth2.Helper_Code.OAuth2
09.  {
10.      using Microsoft.Owin.Security;
11.      using Microsoft.Owin.Security.Cookies;
12.      using Microsoft.Owin.Security.OAuth;
13.      using Models;
14.      using System;
15.      using System.Collections.Generic;
16.      using System.Linq;
17.      using System.Security.Claims;
18.      using System.Threading.Tasks;
19.      using System.Web;
20.
21.      /// <summary>
22.      /// Application OAUTH Provider class.
23.      /// </summary>
24.      public class AppOAuthProvider : OAuthAuthorizationServerProvider
25.      {
26.          #region Private Properties
27.
28.          /// <summary>
29.          /// Public client ID property.
30.          /// </summary>
31.          private readonly string _publicClientId;
32.
33.          /// <summary>
34.          /// Database Store property.
35.          /// </summary>
36.          private OAuth_APISentities databaseManager = new OAuth_APISentities();
37.
38.          #endregion
39.
40.          #region Default Constructor method.
41.
42.          /// <summary>
43.          /// Default Constructor method.

```



```

47. public AppOAuthProvider(string publicClientId)
48. {
49.     //TODO: Pull from configuration
50.     if (publicClientId == null)
51.     {
52.
53.         // Settings.
54.         _publicClientId = publicClientId;
55.     }
56.
57.
58. #endregion
59.
60. #region Grant resource owner credentials override method.
61.
62. /// <summary>
63. /// Grant resource owner credentials overload method.
64. /// </summary>
65. /// <param name="context">Context parameter</param>
66. /// <returns>Returns when task is completed</returns>
67. public override async Task GrantResourceOwnerCredentials(OAuthGrantResourceOwner
68. {
69.     // Initialization.
70.     string usernameVal = context.UserName;
71.     string passwordVal = context.Password;
72.     var user = this.databaseManager.LoginByUsernamePassword(usernameVal, passwordVal);
73.
74.     // Verification.
75.     if (user == null || user.Count() <= 0)
76.     {
77.         // Settings.
78.         context.SetError("invalid_grant", "The user name or password is incorrect");
79.
80.         // Return info.
81.         return;
82.     }
83.
84.     // Initialization.
85.     var claims = new List<Claim>();
86.     var userInfo = user.FirstOrDefault();
87.
88.     // Setting
89.     claims.Add(new Claim(ClaimTypes.Name, userInfo.username));
90.
91.     // Setting Claim Identities for OAUTH 2 protocol.
92.     ClaimsIdentity oAuthClaimIdentity = new ClaimsIdentity(claims, OAuthDefaults.AuthenticationType);
93.     ClaimsIdentity cookiesClaimIdentity = new ClaimsIdentity(claims, CookieAuthenticationDefaults.AuthenticationType);
94.
95.     // Setting user authentication.
96.     AuthenticationProperties properties = CreateProperties(userInfo.username);
97.     AuthenticationTicket ticket = new AuthenticationTicket(oAuthClaimIdentity, properties);
98.
99.     // Grant access to authorize user.
100.    context.Validated(ticket);
101.    context.Request.Context.Authentication.SignIn(cookiesClaimIdentity);
102. }
103.
104. #endregion
105.
106. #region Token endpoint override method.

```

```

117. // Token endpoint override method
118. // </summary>
119. // <param name="context">Context parameter</param>
120. // <returns>Returns when task is completed</returns>
121. public override Task TokenEndpoint(OAuthTokenEndpointContext context)
122. {
123.     // Adding.
124.     context.AdditionalResponseParameters.Add(property.Key, property.Value);
125. }
126.
127. // Return info.
128. return Task.FromResult<object>(null);
129. }
130.
131. #endregion
132.
133. #region Validate Client authentication override method
134.
135. // <summary>
136. // Validate Client authentication override method
137. // </summary>
138. // <param name="context">Context parameter</param>
139. // <returns>Returns validation of client authentication</returns>
140. public override Task ValidateClientAuthentication(OAuthValidateClientAuthenticationContext context)
141. {
142.     // Resource owner password credentials does not provide a client ID.
143.     if (context.ClientId == null)
144.     {
145.         // Validate AuthoORIZATION.
146.         context.Validated();
147.     }
148.
149.     // Return info.
150.     return Task.FromResult<object>(null);
151. }
152.
153. #endregion
154.
155. #region Validate client redirect URI override method
156.
157. // <summary>
158. // Validate client redirect URI override method
159. // </summary>
160. // <param name="context">Context parameter</param>
161. // <returns>Returns validation of client redirect URI</returns>
162. public override Task ValidateClientRedirectUri(OAuthValidateClientRedirectUriContext context)
163. {
164.     // Verification.
165.     if (context.ClientId == _publicClientId)
166.     {
167.         // Initialization.
168.         Uri expectedRootUri = new Uri(context.Request.Uri, "/");
169.
170.         // Verification.
171.         if (expectedRootUri.AbsoluteUri == context.RedirectUri)
172.         {
173.             // Validating.
174.             context.Validated();
175.         }
176.     }
177. }

```



```

173.         // Return info.
174.         return Task.FromResult<object>(null);
175.     }
176. #endregion

```

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```

179.
180.     /// <summary>
181.     /// Create Authentication properties method.
182.     /// </summary>
183.     /// <param name="userName">User name parameter</param>
184.     /// <returns>Returns authenticated properties.</returns>
185.     public static AuthenticationProperties CreateProperties(string userName)
186.     {
187.         // Settings.
188.         IDictionary<string, string> data = new Dictionary<string, string>
189.         {
190.             { "userName", userName }
191.         };
192.
193.         // Return info.
194.         return new AuthenticationProperties(data);
195.     }
196.
197. #endregion
198. }
199. }

```

In the above code, "GrantResourceOwnerCredentials(...)" method is the key method which is called when TokenEndpointPath is called. Notice that "GrantResourceOwnerCredentials(...)" method is used by "grant_type=password" scheme. If you are using "grant_type=client_credentials" scheme then you need to override "GrantClientCredentials(...)" method. Other methods are part of "OAuthAuthorizationServerProvider" class, use them as they are. In "GrantResourceOwnerCredentials(...)" method we are verifying the system login user and then create the require identities claims and then generate the returning access token ticket i.e.

```

01. #region Grant resource owner credentials override method.
02.
03.     /// <summary>
04.     /// Grant resource owner credentials overload method.
05.     /// </summary>
06.     /// <param name="context">Context parameter</param>
07.     /// <returns>Returns when task is completed</returns>
08.     public override async Task GrantResourceOwnerCredentials(OAuthGrantResourceOwnerCredent:
09.     {
10.         // Initialization.
11.         string usernameVal = context.UserName;
12.         string passwordVal = context.Password;
13.         var user = this.databaseManager.LoginByUsernamePassword(usernameVal, passwordVal).To
14.
15.         // Verification.
16.         if (user == null || user.Count() <= 0)
17.         {
18.             // Settings.
19.             context.SetError("invalid_grant", "The user name or password is incorrect.");
20.
21.             // Return info.
22.             return;

```

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```

25. // Initialization.
26. var claims = new List<Claim>();
27. var userInfo = user.FirstOrDefault();
28.
29. // Setting

32. // Setting Claim Identities for OAUTH 2 protocol.
33. ClaimsIdentity oAuthClaimIdentity = new ClaimsIdentity(claims, OAuthDefaults.Authenti
34. ClaimsIdentity cookiesClaimIdentity = new ClaimsIdentity(claims, CookieAuthenticati
35.
36. // Setting user authentication.
37. AuthenticationProperties properties = CreateProperties(userInfo.username);
38. AuthenticationTicket ticket = new AuthenticationTicket(oAuthClaimIdentity, properti
39.
40. // Grant access to authorize user.
41. context.Validated(ticket);
42. context.Request.Context.Authentication.SignIn(cookiesClaimIdentity);
43. }
44.
45. #endregion

```

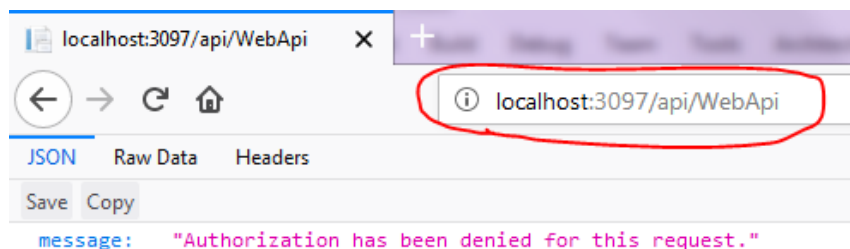
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Step 9

Now, execute the project and use the following link in the browser to see your newly created [REST Web API](#) method in action as follows:


01. | yourlink:port/api/WebApi



In the above snippet, you will notice that since now our REST Web API has been authorized, therefore, we cannot directly execute the REST Web API URL in the browser.

Step 10

Let's test out REST Web API in REST Web API client. I am using Firefox plugin i.e. "**RESTED**". At, first, I simply try to hit the REST Web API without any authorization details and I will get following response i.e.



CUS
:chain FAQ

GET http://localhost:3097/api/WebApi

Content-Type application/json

Send request

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Response (0.098s) - http://localhost:3097/api/WebApi

401 Unauthorized

Headers >

```
{
  "message": "Authorization has been denied for this request."
}
```

Step 11

Now, I will provide the system user authorization to get access token and then use that access token as a header in the REST Web API and try to hit the REST Web API which will return the following response, i.e.

Request

POST http://localhost:3097/Token

Send request

Headers >

Content-Type application/x-www-form-urlencoded

Request body >

Type URLEncoded form data


grant_type	password
username	admin
password	adminPass

Response (0.616s) - http://localhost:3097/Token

200 OK

Headers >

```
{
  "access_token": "g3tZs6T5Ruvfw52rFpx2-INUAwZa-ewFRsxaA0NuTE4Gt4IDPEVLlgN3ICDeSUGo45mmJxDLkGg28hy0S4EnwEPhyyNKq1yUx33AIgSt51Lj8it1h00azLtGf9uz6H5w7zwJcg3dCIHzHrR0R_u_p41Y366Iu_5721dZgSw3IfMn4GeGvQZgDc0CE7u0J_Co1pV3WLEnFwtXHPAYcmtZvV0hR7LtIGmKJNgQuzt8",
  "token_type": "bearer",
  "expires_in": 14399,
  "userName": "admin",
  ".issued": "Thu, 10 May 2018 09:20:22 GMT",
  ".expires": "Thu, 10 May 2018 13:20:22 GMT"
}
```



CUS
chain FAQ

GET http://localhost:3097/api/WebApi/

Content-Type: application/json

Authorization: Bearer gJtZs6T5RwvfpwS2rFpx2-NUAWZa-ewfRxxaAONuTE4GI4IDPEVLg

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Response (0.064s) - http://localhost:3097/api/WebApi/

200 OK

Headers >

```
[
  "Hello REST API",
  "I am Authorized"
]
```

Request

GET http://localhost:3097/api/WebApi/5

Content-Type: application/json

Authorization: Bearer gJtZs6T5RwvfpwS2rFpx2-NUAWZa-ewfRxxaAONuTE4GI4IDPEVLg

Response (0.086s) - http://localhost:3097/api/WebApi/5

200 OK

Headers >

```
"Hello Authorized API with ID = 5"
```

Notice in the above snippets that access token is provided as "Authorization" header with "Bearer access_token" scheme in order to call the REST Web API. Also, notice the path when the token is being generated i.e. "{your_site_url}/Token".

Conclusion

In this article, you learned about OAuth 2.0 authorization scheme integration with ASP.NET MVC REST Web API. You also learned about the short comparison between user/password based authorization and OAuth 2.0 token based authorization. You also learned about OAuth 2.0 scheme authentication mechanism for local system users with the Entity Framework database first approach.



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ASP.NET MVC

OAuth 2.0

REST Web API

Asma Khalid **TOP 500**

Computer Programmer by Profession, Computer Scientist by Heart, Fanatic Explorer, Technology Centric. I am a Versatile Computer Science Evangelist. Enjoy doodling with technology.

<http://www.asmak9.com/>

190

2.2m

3

2

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Or how would i implement token refresh

Vaughan Trebilco

1710 56 0

Mar 03, 2019

0 1 Reply

Look into this thread <https://bit.ly/2DnfDLy>

Asma Khalid

190 9.6k 2.2m

Mar 11, 2019

0



Hello Asma. Is there a way to make the token never expire?

Vaughan Trebilco

1710 56 0

Mar 03, 2019

0 1 Reply



Token will eventually expire.

Asma Khalid

190 9.6k 2.2m

Mar 11, 2019

0



Hello Asma. In a controller I can get the user name associated with a token like this: User.Identity.Name; How do I get the token value so I can store it in a database?

Vaughan Trebilco

1710 56 0

Feb 24, 2019

0 1 Reply



You need to store the access token as claims cookies then you can use following line to retrieve your access token in Controller var authenticateInfo = await HttpContext.Authentication.GetAuthenticateInfoAsync("Bearer");string accessToken = authenticateInfo.Properties.Items["Token.access_token"];

C# Corner
:chain FAQ

ASK A QUESTION

CONTRIBUTE

Hello Asma, I asked this question previously and passed your reply below? "The delete is for a user to logout of the app. I'm not sure what you read but it's a very basic functionality of any service I know of. All you have to do on your end is either delete the token or flag it as such so that it can't be used."

Vaughan Trebilco

Feb 12, 2019

1710 56 0

0 1 Reply



Here is a thing you can not delete the token as it is cached as cookies. The only way that works is to either explicitly/forced log out or flag the token in your DB. The will expire at its expiration time only

Asma Khalid

Feb 13, 2019

190 9.6k 2.2m

0



Hi, thanks for this article, can this generated token be used in asp.net mvc controller to authorize action methods? (not from javascript). Imagine we authenticate asp.net mvc with the api and get the token and save it in a cookie. Then how can we authorize action methods by using that token?

reza shirazi

Feb 10, 2019

1759 7 0

0 2 Reply



Use [Authorize] annotation at method level instead of controller level.

Asma Khalid

Feb 11, 2019

190 9.6k 2.2m

0



Hi Asma, I was asking about a separate MVC project where it authenticates and authorizes itself using the API project. Appreciate your response.

reza shirazi

Feb 12, 2019

1759 7 0

0



Thanks again this article has been extremely helpful. I'm not sure why but I have a spec that asks to delete the registration despite the timeout feature. Response should be "Registration is removed. The token is now invalid". Do you know how this would be done?

Vaughan Trebilco

Feb 07, 2019

1710 56 0

0 1 Reply



Revoking explicit token access is difficult as it goes against its nature since the whole process works with cookie expiration. But, to achieve it you need to either explicitly sign out the user access the token and do a little work to store token in Db and then do verification via Db and remove the token to revoke access. Look into this thread <https://bit.ly/2DnfDLy>

Asma Khalid

Feb 08, 2019

190 9.6k 2.2m

0



Wow, this was awesome. I searched high and low for something like this: updated, simple, beautiful, full example. It was hard! Kudos to you!

Marco Gaertner

Feb 02, 2019

1763 3 0

0 1 Reply



Thank you.

Asma Khalid

Feb 04, 2019

190 9.6k 2.2m

0



How i can logout Specific user

Osama Ahmed

Dec 31, 2018

1758 8 0


0 1 Reply

Look into this <https://bit.ly/2GPJukL>

CUS
:chain FAQ

C# Corner

C# Corner



Hi Asma nice tutorial. When i run code in VS it works but when i try to use it in IIS 7 I get folowinfg error:The controller for path "Token" was not found or does not implement IController

Niklas Ryden

1747 19 0

ASK A QUESTION

CONTRIBUTE

Dec 13, 2018

0 6 Reply 6



[HttpException]: The controller for path '/EAVismaBusinessAPI_deploy/token' was not found or does not implement IController. at System.Web.Mvc.DefaultControllerFactory.GetControllerInstance(RequestContext requestContext, Type controllerType) at System.Web.Mvc.MvcHandler.ProcessRequestInit(HttpContextBase httpContext, IController& controller, IControllerFactory& factory) at System.Web.Mvc.MvcHandler.BeginProcessRequest(HttpContextBase httpContext, AsyncCallback callback, Object state) at System.Web.HttpApplication.CallHandlerExecutionStep.System.Web.HttpApplication.IExecutionStep.Execute() at System.Web.HttpApplication.ExecuteStepImpl(IExecutionStep step) at System.Web.HttpApplication.ExecuteStep(IExecutionStep step, Boolean& completedSynchronously)

Niklas Ryden

Dec 14, 2018

1747 19 0

0



I can get other controllers e.g http://eatest:8081/api/StockBalace with [Authorize] removed on the controller to work

Niklas Ryden

Dec 14, 2018

1747 19 0

0



I have tested the deployment on IIS7 & IIS8 and it is working fine. Tell me at what point this error occurs? How are you consuming the API? Ensure you have deploy the package with Release mode. I have tested in Chrome & Firefox.

Asma Khalid

Dec 14, 2018

190 9.6k 2.2m

0



Yes I know but I need to call other methods that require username as a parameter. So how do I get the username that was used for the initial username and password login?

Vaughan Trebilco

Dec 12, 2018

1710 56 0

0 3 Reply



It depends on your workflow. In case of API user credentials or any secret key is known to consumer of the API with mutual trust. In case of OAuth authorization via login workflow you can store require user info in session to access it globally within the session of particular user. Observe in my provided consumption via REST client that I have provided the user credentials first to acquire the token. This means I already have knowledge of the login credentials. I hope this solve your issue.

Asma Khalid

Dec 12, 2018

190 9.6k 2.2m

0



Hi again and thanks again for you very good example. the answer to my question turned out as easy as this. I just added "string username = User.Identity.Name;" to the get method.

Vaughan Trebilco

Dec 13, 2018

1710 56 0

0



Great to know....

Asma Khalid

Dec 14, 2018

190 9.6k 2.2m

0

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