How to Add Azure AD Authentication to KBVault

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Contents

Purpose

This guide is intended to help you integrate KBVault with AD authentication using Azure/Office365. This guide does not show how to setup the initial Federation with Azure/Office365, for that you will need to do a fair amount of work not described in this document. If you need consulting services to do so, please feel free to contact me. This guide assumes you have a basic understanding of IIS, MSSQL, Visual Studio, AD, and Azure

Prerequisites

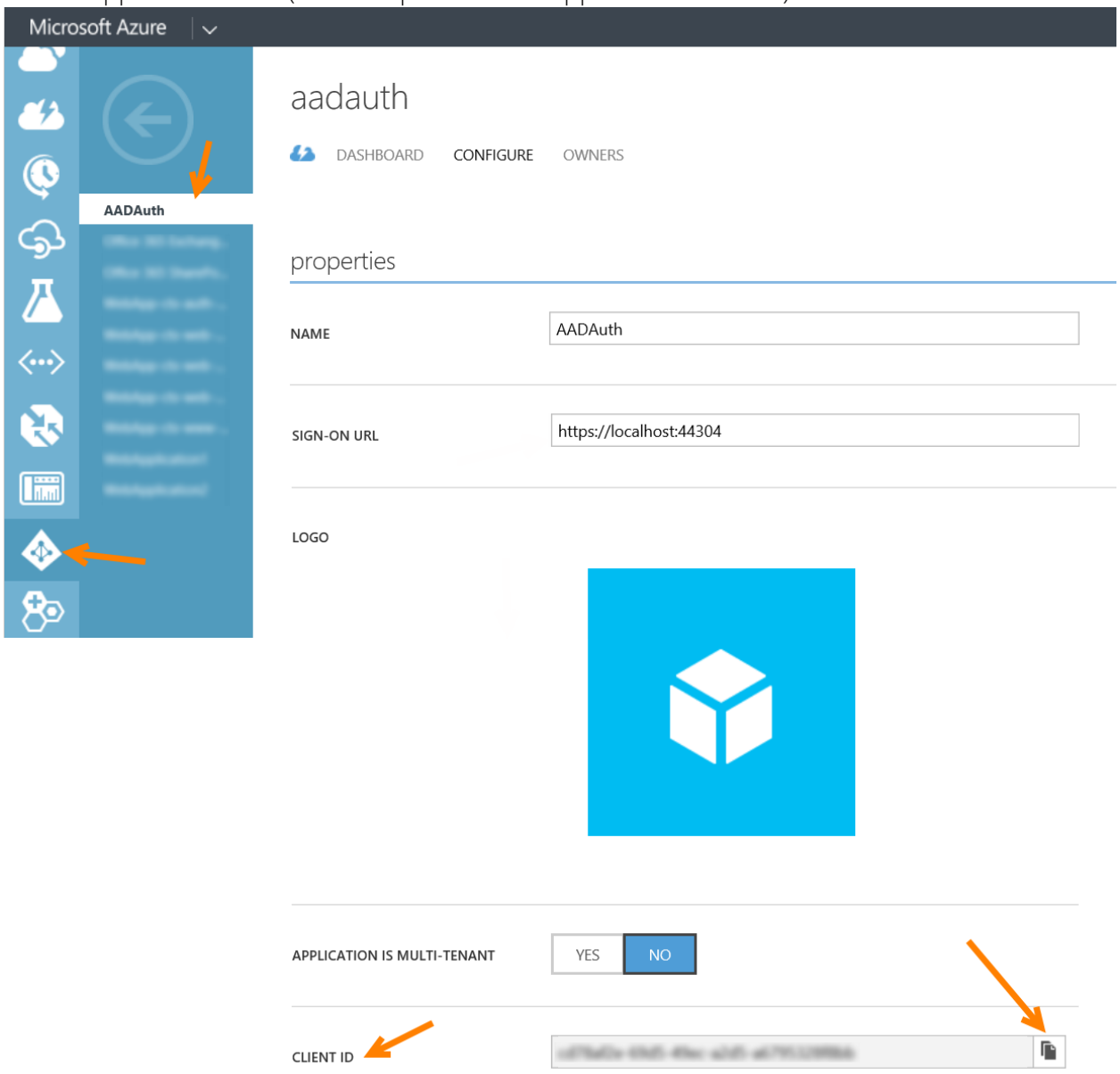
- IIS Website (KBVault in this example)
- MSSQL or MSSQL Express
- Visual Studio 2013
- Admin access to Azure with the ability to add an application
- Existing Azure/AD integration with your organization
- KBVault source code (https://kbvault.codeplex.com)
- Time and patience

Initial Steps

1. Launch Visual Studio 2013
2. Open the KBVault project
3. Open Package Manger (Tools -> NuGet Package Manager -> Package Manager Console)
4. Run The (4) four commands below to install the packages needed for AAD Authentication.
   4.1. Install-Package Microsoft.Owin.Security.OpenIdConnect -Pre
   4.2. Install-Package Microsoft.Owin.Security.Cookies –Pre
   4.3. Install-Package Microsoft.Owin.Host.SystemWeb –Pre
   4.4. Install-Package jQuery –Pre

Create Azure App

1. Create App in Azure AD (the example uses and app called AADAuth)



Create Classes

2. In the root of the Project, create a new Class called Startup.cs (Right Click KBVault.Web -> Add -> Class). Clear out all of the default code and paste this code into it:

```
using Microsoft.Owin;
using Owin;
[assembly: OwinStartup(typeof(OldFashionOWIN.Startup))]
namespace OldFashionOWIN
{
    public partial class Startup
    {
        public void Configuration(IAppBuilder app)
        {
            ConfigureAuth(app);
        }
    }
}
```

3. Locate your Client ID (from step 1) and Website hostname (the name people will type into their browsers)

4. In the App_Start folder create a new Class called Startup.Auth.cs (**Right Click App_Start -> Add -> Class**). Clear out all of the default code and paste the code below into it. NOTE: Change the items in RED (ClientID, Authority) to reflect your organizations ClientID and Authority URL. You can find your ClientID on the Configuration Page for the application created previously AADAuth.

```
using Microsoft.Owin.Security;
using Microsoft.Owin.Security.Cookies;
using Microsoft.Owin.Security.OpenIdConnect;
using Owin;
namespace OldFashionOWIN
{
    public partial class Startup
    {
        public void ConfigureAuth(IAppBuilder app)
        {
app.SetDefaultSignInAsAuthenticationType(CookieAuthenticationDefaults.AuthenticationT
ype);
            app.UseCookieAuthentication(new CookieAuthenticationOptions());
            app.UseOpenIdConnectAuthentication(
                new OpenIdConnectAuthenticationOptions
                {
                    ClientId = "cp78fakee-6915-47ek-m2g5-z6496321f8sl",
                    Authority = "https://login.windows.net/yourwebsite.onmicrosoft.com"
                });
        }
    }
}
```

Enable Authorization

5. To enable Authorization edit the following files located under KBVailt.Web/Controllers

   Go to **Controllers/HomeController.cs** and add the following bits shown in RED

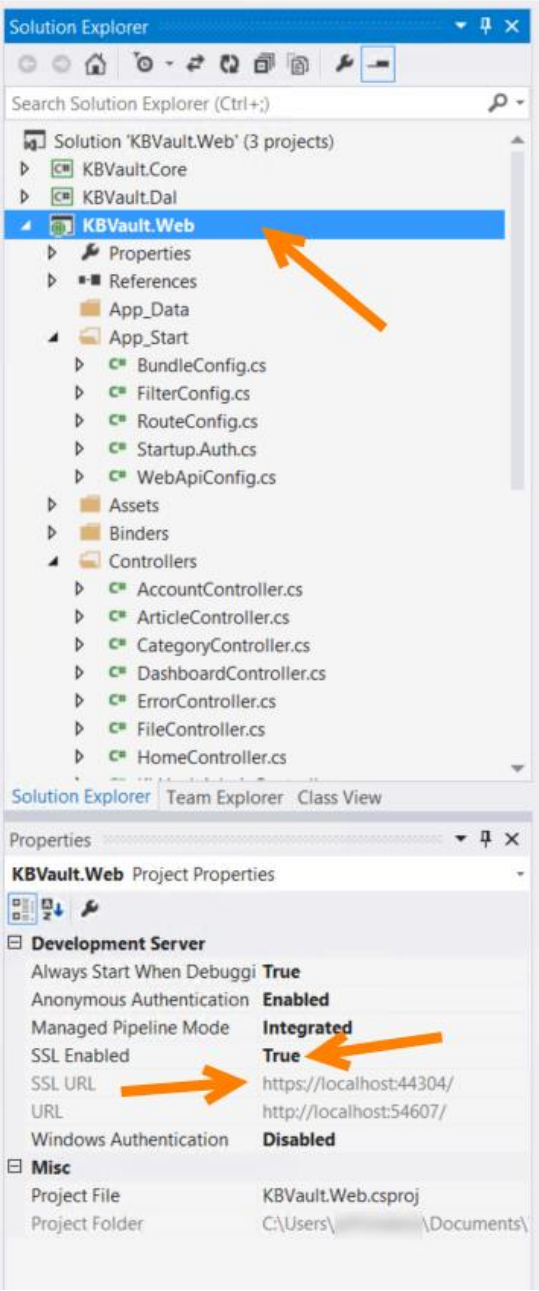
   ```
   [Authorize]
   public class HomeController : KbVaultPublicController
   {
   ```

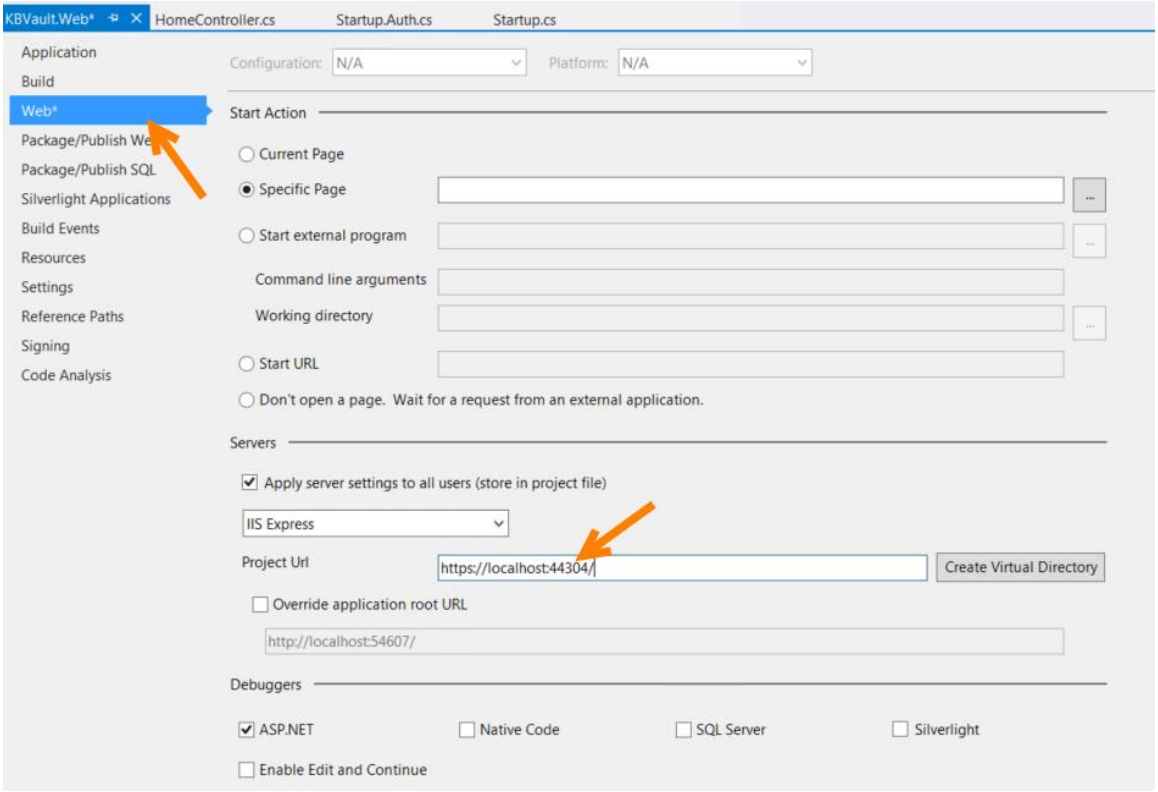
   Go to **Controllers/KbVaultAdminController.cs** and add the following bits shown in RED

   ```
   [Authorize]
   public class KbVaultAdminController : Controller
   {
   ```

Set Website to Use HTTPS

6. Make sure to set the project to use HTTPS:




KBVault.Web*
HomeController.cs
Startup.Auth.cs
Startup.cs
Application
Build
Web*
Package/Publish We
Package/Publish SQL
Silverlight Applications
Build Events
Resources
Settings
Reference Paths
Signing
Code Analysis
Configuration: N/A
Platform: N/A
Start Action
Current Page
Specific Page
Start external program
Command line arguments
Working directory
Start URL
Don't open a page. Wait for a request from an external application.
Servers
Apply server settings to all users (store in project file)
IIS Express
Project Url
https://localhost:44304/
Create Virtual Directory
Override application root URL
http://localhost:54607/
Debuggers
ASP.NET
Native Code
SQL Server
Silverlight
Enable Edit and Continue

Edit the Web.config

7. Open the Web.config file
8. Change the Database Connection String (if needed)

```
<connectionStrings>
   <add name="KbVaultEntities"
connectionString="metadata=res://*/KBVaultEntityModel.csdl|res://*/KBVaultEntityModel.ssdl|res://*/KBVaultEntityModel.msl;provider=System.Data.SqlClient;provider connection string=&quot;data source=.\dev;initial catalog=kbvault;integrated security=True;multipleactiveresultsets=True;application name=EntityFramework&quot;"
providerName="System.Data.EntityClient" />
 </connectionStrings>
```

9. Locate the lines shown below

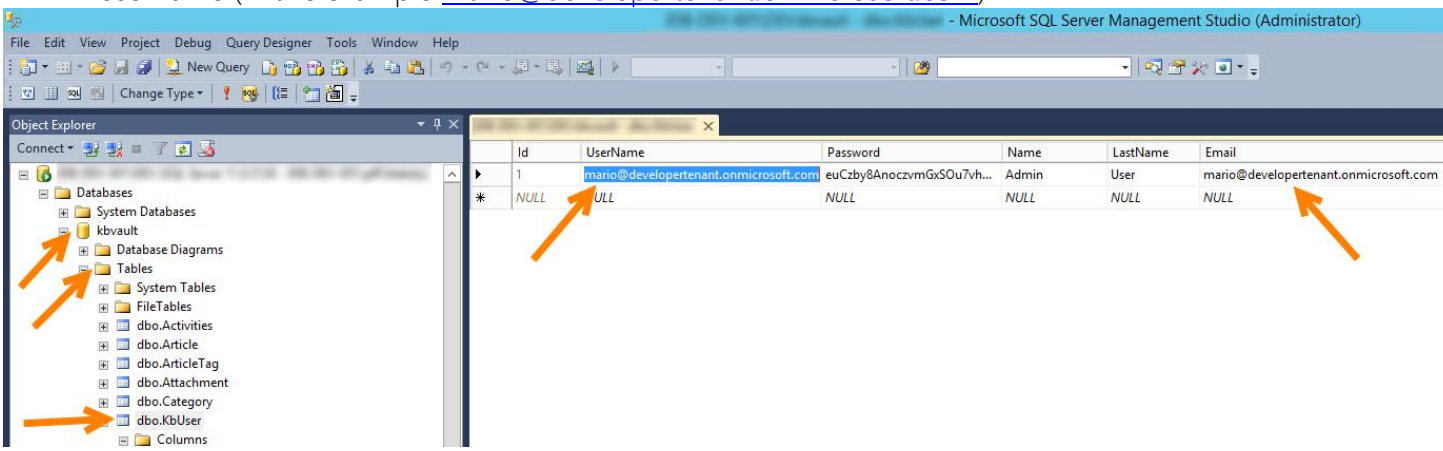
```
<httpRuntime targetFramework="4.5" />
<compilation debug="true" targetFramework="4.5" />
<authentication mode="Forms">
  <forms loginUrl="~/Account/Login" timeout="2880" />
</authentication>
<pages>
  <namespaces>
```

9.1. Change the code to look like this:

```
<httpRuntime targetFramework="4.5" />
<compilation debug="true" targetFramework="4.5" />
<authentication mode="None">
</authentication>
<pages>
  <namespaces>
```

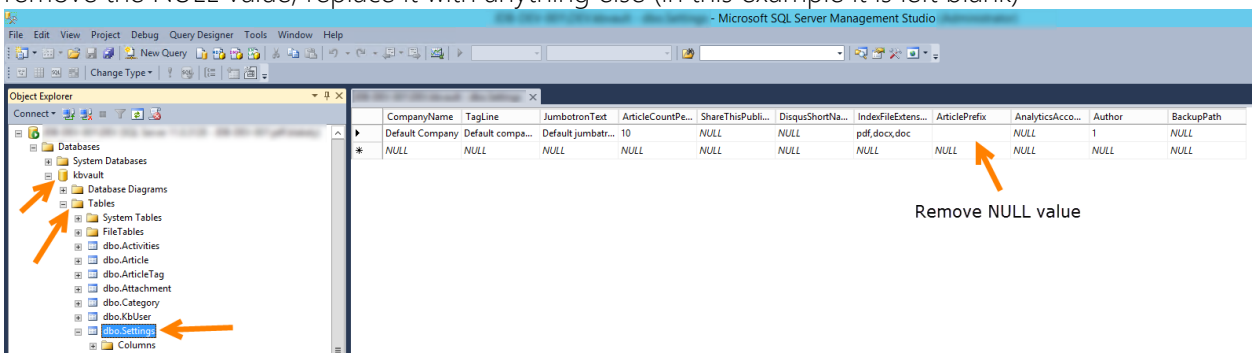
Add AD User(s) to the Database

10. In order to log in, you will need to manually add (at lease 1) user to SQL DB for Admin backend access. Make sure the UserName and Email fields are exactly the same as the Azure AD username (in this example mario@developertenant.onmicrosoft.com)



Edit Settings Table in the Database

11. To fix an issue with the Search feature edit the ArticlePrefix column in the dbo.Settings Table and remove the NULL value, replace it with anything else (in this example it is left blank)



Edit Detail.cshtml.

12. Since Forms Based authentication isn't being used, remove the following line of code in the Detail.cshtml file located in KBVault.Web\Views\Home

BEFORE:

```
<!--
    RIGHT SIDEBAR
-->
<div class="col-xs-2">
    <div class="row clearfix">
        @Html.AntiForgeryToken()
        <a href="javascript:void(0)"
    </div>
```

AFTER:

```
<!--
    RIGHT SIDEBAR
-->
<div class="col-xs-2">
    <div class="row clearfix">
        <a href="javascript:void(0)"
    </div>
```

Test

13. In Visual Studio Press F5 (debug) and you should see: