



AccuSQL



AccuTrack

Implementing SSO (Single Sign-On) with Web Gateway MVC

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Preface

This guide is intended as an example of how you can adapt our custom SSO solution to an existing portal or authentication page you have student's login to already and pass the information over to Web Gateway. This guide only shows a sample SSO portal to test the functionality and learn how this process works in order to implement this process with your existing authentication portal. This guide is intended for advanced users, IT teams, and/or data support teams and not end-users.

Step 1: Configure the Sample Portal file

To begin you'll need to copy and paste the following code into notepad and save the file you'll use to test this process. Hopefully during this process you'll have a clear understanding of what each section of this HTML code is handling.

```
<html>
  <head>
  </head>
  <body>
    <form action="http://localhost/WGMVC2019/Account/SSOLogon" _method="POST">
      <input type="hidden" id="apiKey" name="apiKey" value="c1a0073d427749a2ba92c2914aca1a41"/>
    <dl>
      <dt style="color:rgb(66, 139, 202);font-weight:bold;">User Id:</dt>
      <dd><input type="text" id="userId" name="userId" placeholder="User Id" size="35" required/>
      </dd>
      <br>
      <dt style="color:rgb(66, 139, 202);font-weight:bold;">Index of labID to Logon:</dt>
      <dd><input type="text" id="locationId" name="locationId" placeholder="Location Id"
value="0"size="5"/>
      </dd>
      <p><em>(Defaults to 0 which is no specific lab)</em></p>
      <br>
      <dt style="color:rgb(66, 139, 202);font-weight:bold;">Return URL on logout:</dt>
      <dd><input type="text" id="returnUrl" name="returnUrl" placeholder="Return URL"
value=http://localhost/SSOsample size="100"/>
      </dd>
      <p><em>(Uses "Web Gateway MVC - Home" by default)</em></p>
      <br>
      <dt style="color:rgb(66, 139, 202);font-weight:bold;">Should this user be treated as a tutor?</dt>
      <dd>
        <select id="isTutor" name="isTutor" placeholder="Is Tutor" value="false" size="2"/>
        <option value="true">True</option>
        <option selected="selected" value="false">False</option>
        </select>
      </dd>
      <p><em>(Defaults to "False")</em></p>
      <br>
    </dl>
    <input type="submit" value="Logon to Web Gateway" style="font-size:12pt;color:white;background-
color:rgb(66, 139, 202);border:2px solid rgb(66, 200, 202);padding:10px"/>
  </form>
</body>
</html>
```

Now save this file as "index.htm" and place it in a folder named "C:\SSOsample" on the computer that will be hosting or acting as the IIS (Internet Information Services) server.

There are 3 important places to change in the text (page 3) that you copied into the **index.htm** file which are:

1. **<http://localhost/WGMVC2019/Account/SSOLogon>** (line 5) – This will need to be changed to point to the Web Gateway MVC hosted on the IIS Server. Specifically you'll change the portion after the localhost in bold above to the instance name you have set in Web Gateway MVC.
2. **"c1a0073d427749a2ba92c2914aca1a41"** (line 6) – This will need to be changed to the value located in the "C:/WebGatewayMVC19/ClientBin/api.xml" file on your Web Gateway Installation. It should look something like this:

```
<apiInfo>  
  <token>c1a0073d427749a2ba92c2914aca1a41</token>  
</apiInfo>
```

This information located in the XML file can be changed to a different API Key, but must remain the same in the code and in that file for the token to work.

3. The last option is the return URL or the page that you want the user sent back to after they sign-out of Web Gateway MVC. In this example we'll be using the following location:

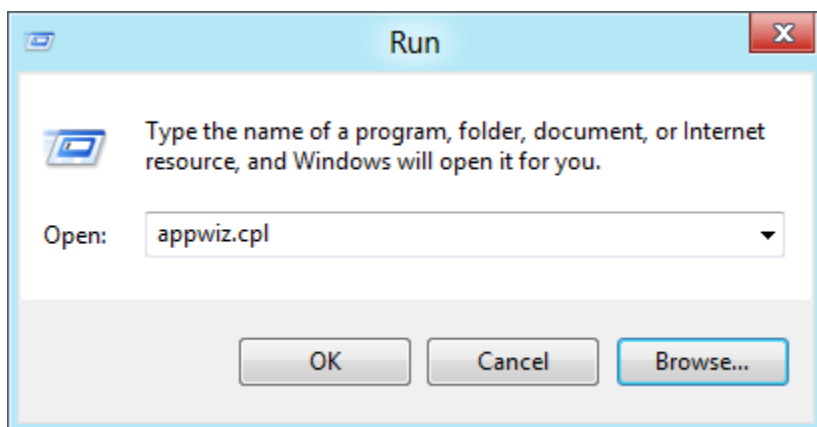
<http://localhost/SSOsample>

Step 2: Setup the Sample Portal on your IIS Server

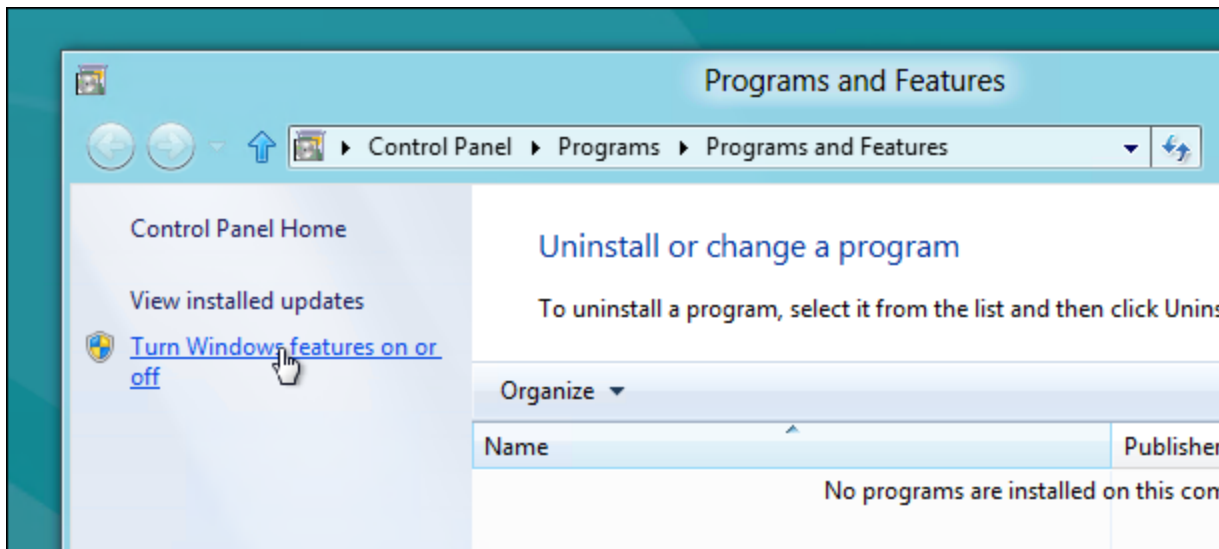
At this point in this guide you'll need to make and host a website from the "index.htm" file that we created previously. This website would be equivalent to the Web Portal that may already exist that your Students sign-in via CAS, SAML, Shibboleth, Banner, Windows LDAP/AD (Active Directory), etc. Hopefully by performing this exercise you'll see how you would need to update your current student portal to send students over to Web Gateway once they have been authenticated. To begin you'll need to install/enable IIS 7 or later on your Windows-based computer. If you have already setup IIS then skip to the next section.

Installing/Enabling IIS

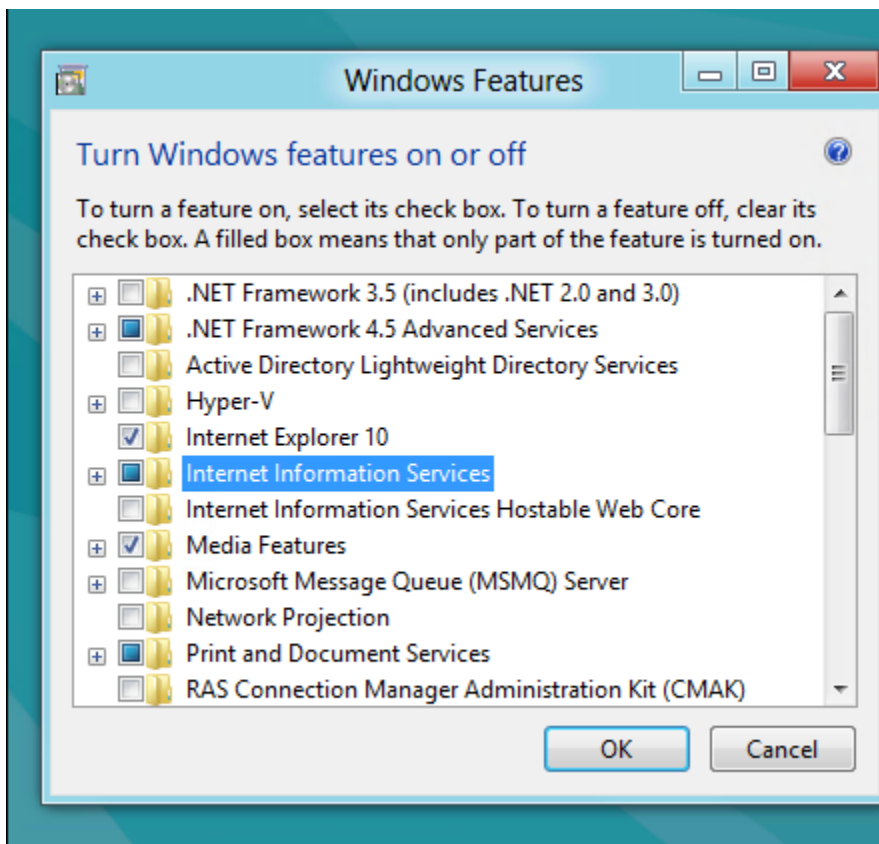
In keeping with Microsoft's modular design of everything these days IIS in Windows is still an optional "Windows Feature". To install it, press the **Windows + R** key combination to bring up a **Run** box, then type "*appwiz.cpl*" in the window that appears and **press enter**.



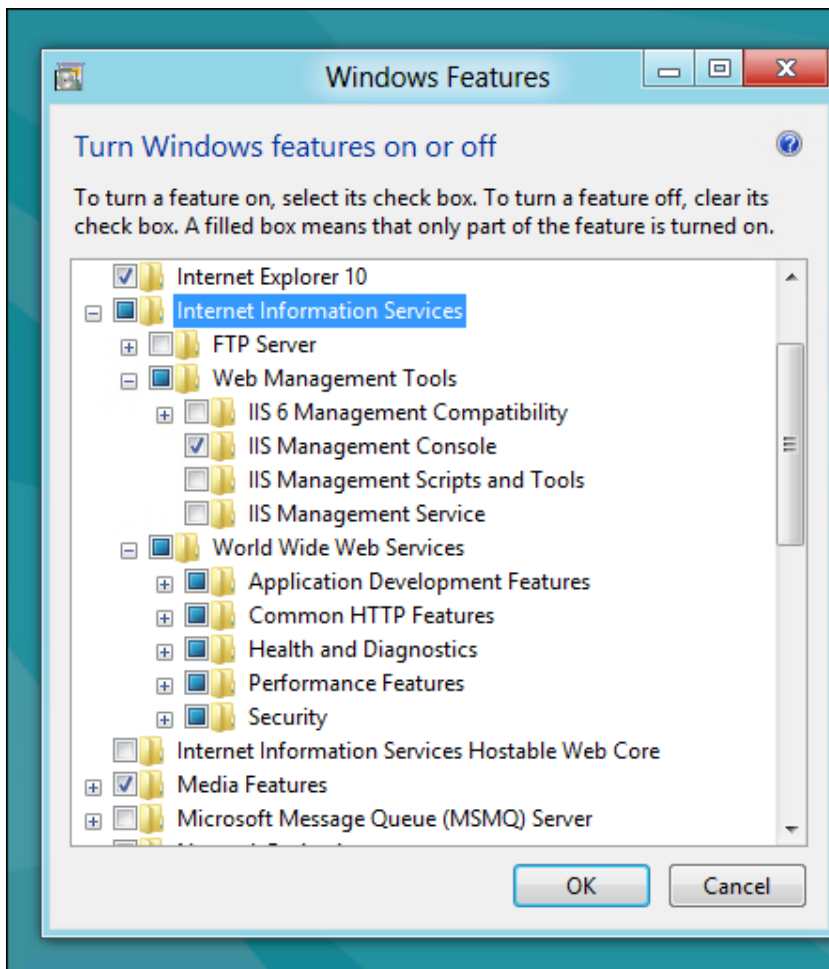
This will open the **Program and Features** part of the **Windows Control Panel** – now on the left-hand side click on the "Turn Windows features on or off" link.



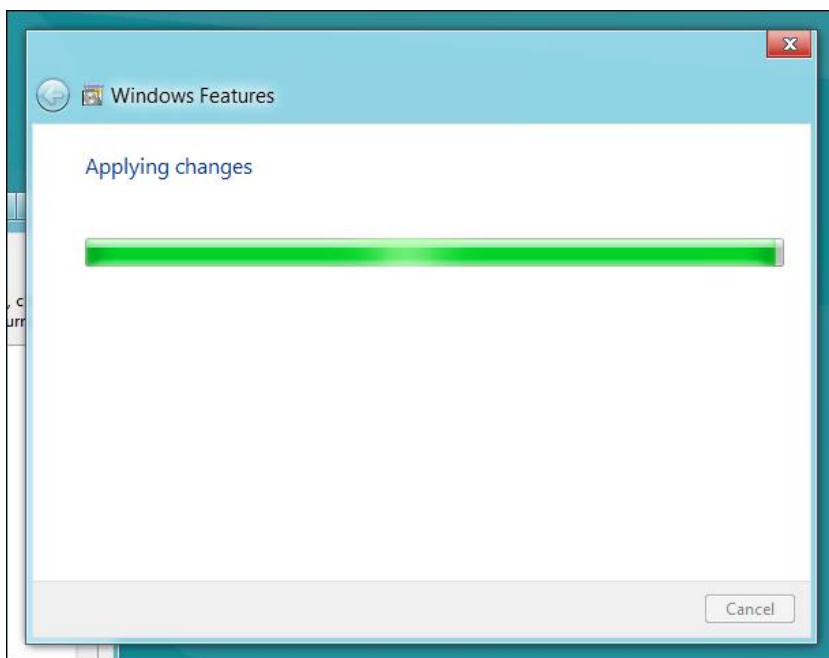
Now click on the **Internet Information Services** check box.



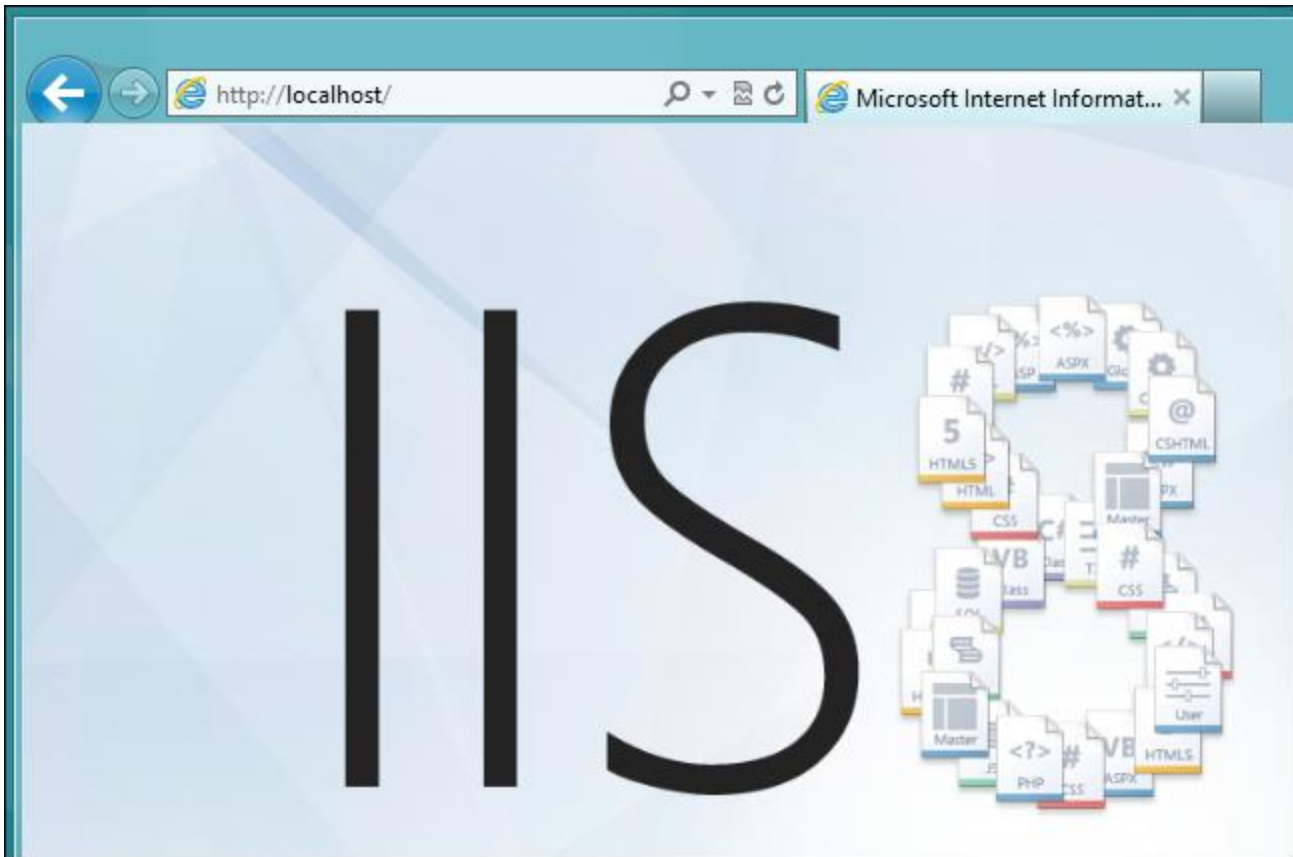
If you're a developer you are going to want to expand it and explore the sub-components as well. By default it installs all the stuff needed to host a website, and you are probably going to need some of the more developer centric components as well.



After clicking OK, this dialog will appear on your screen for a while.



When it's done, open your browser, and navigate to: <http://localhost>

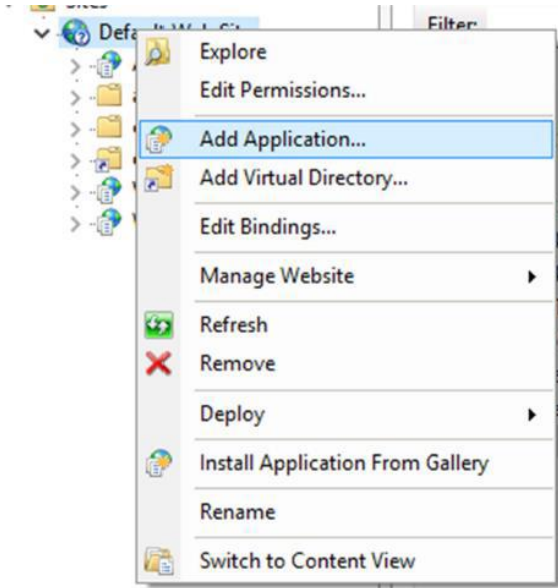


That's all there is to it. This may look different depending on your version but it should be at least IIS 7.

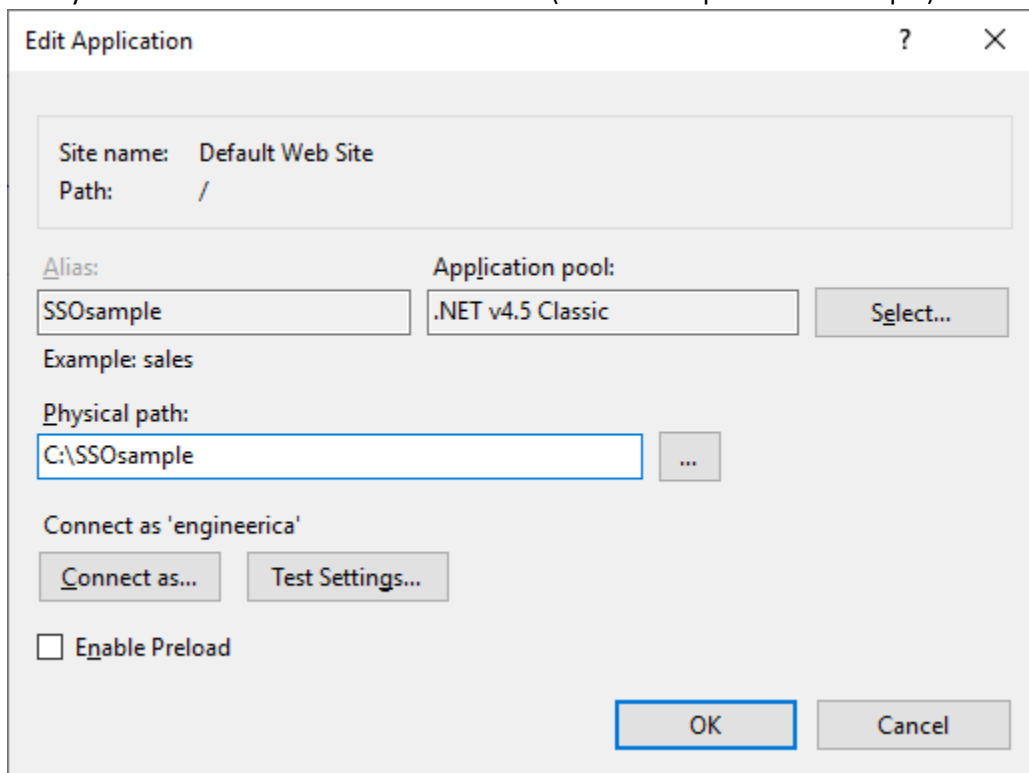
Open IIS and add your Student Portal

Once your IIS has been enabled on your computer or server you'll need to add the Application to the Default Website. Here are the steps to setup this mockup of a Student Portal (basically the index.htm we created previously). Here are the steps:

1. Add the Application to your to your Default Web Site. Right-click the **Default Web Site** in IIS and then select the **Add Application** option.

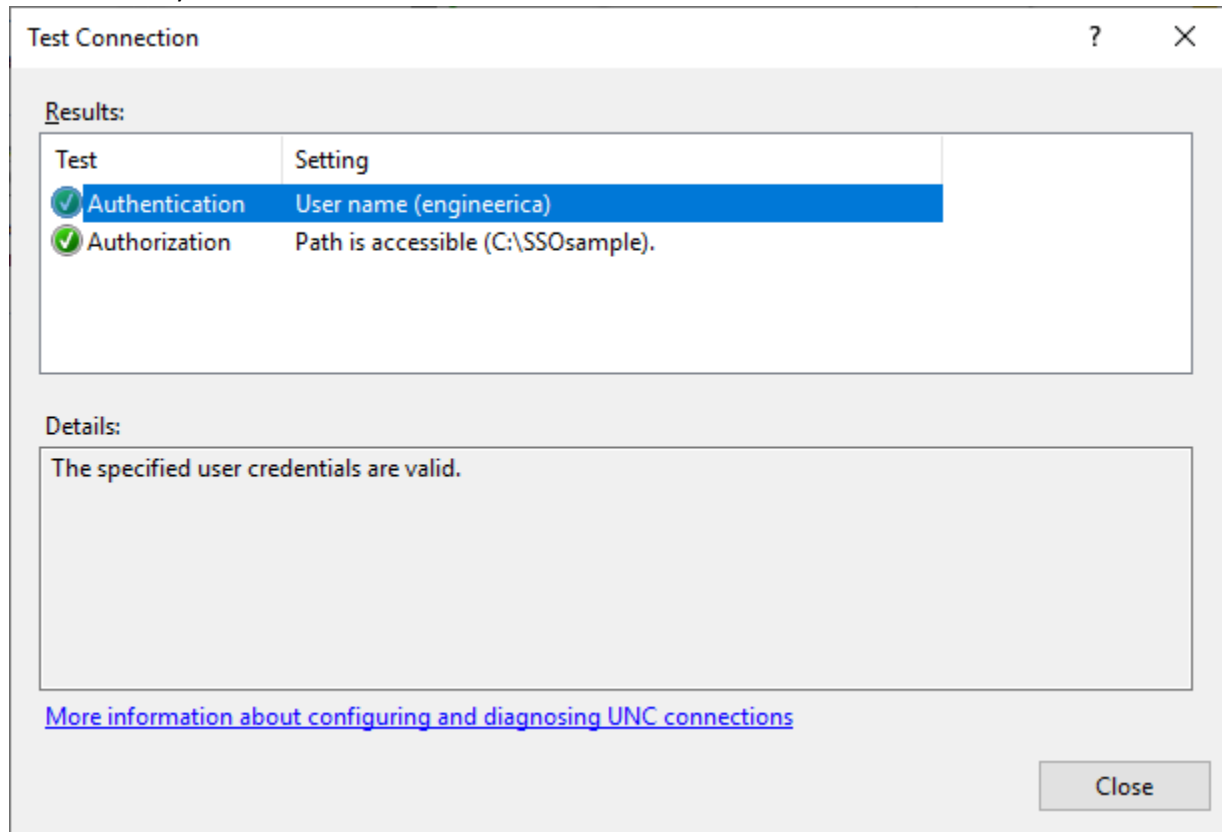


2. Next you'll need to name the Alias as desired (in this example it is SSOsample).

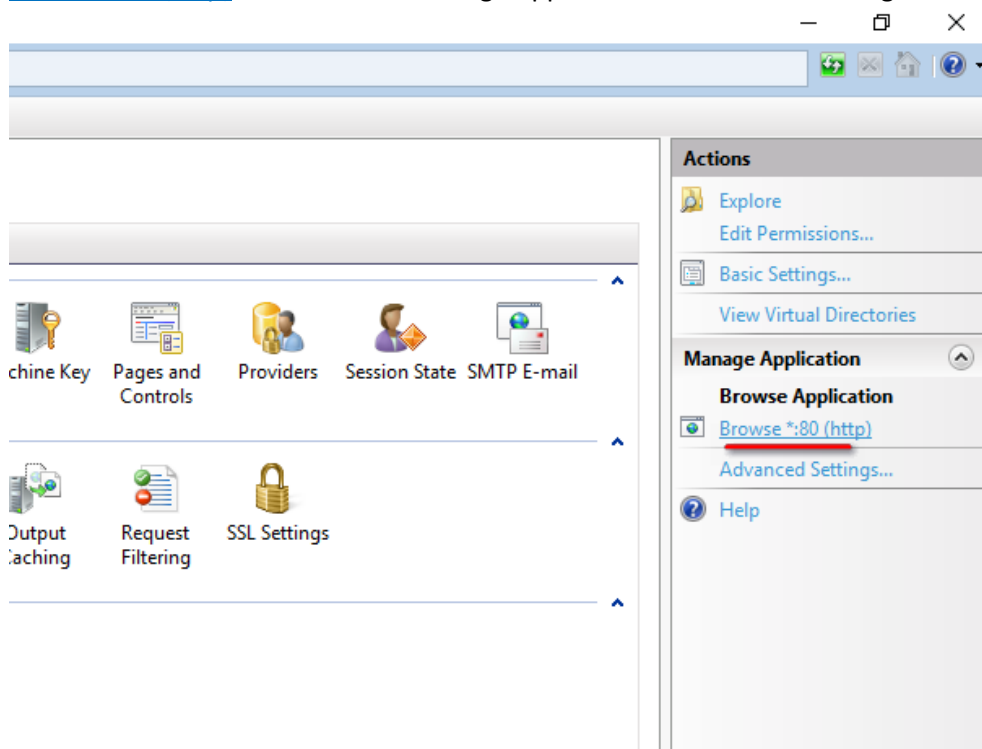


3. And typically we'll use a local admin or domain admin account on the "Connect As" information. Click the Test Settings button to test the settings before clicking OK. Once you get 2 green checks in the Test Connection screen as

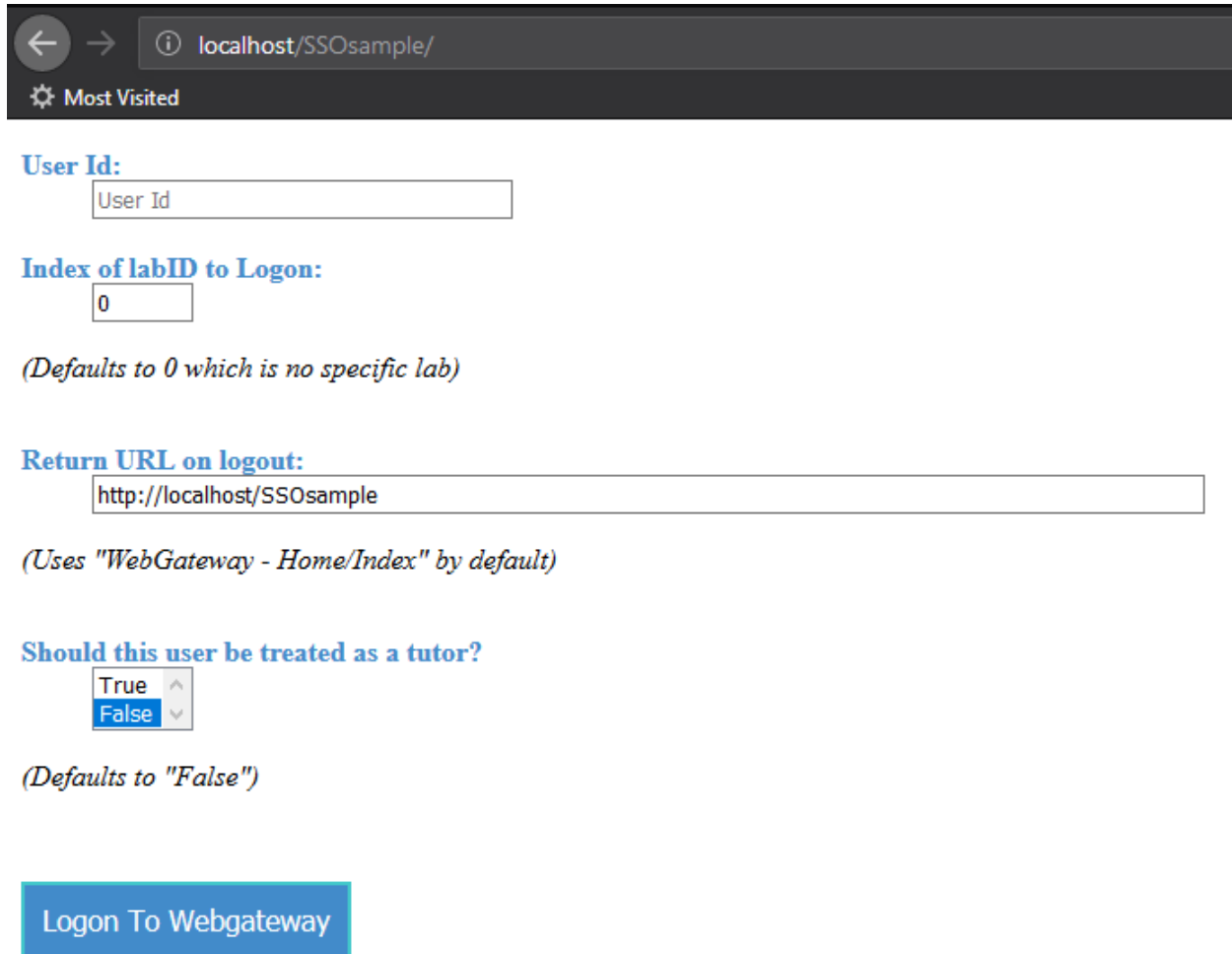
shown below you can click Close and then OK to continue.



- Next you'll want to browse the website to ensure that it has been setup properly. To do this Click on the [Browse *:80 \(http\)](#) link under the Manage Application section in the far right column on IIS.



5. If this process was successful you'll get this screen to come up:



← → ⓘ localhost/SSOsample/

⚙ Most Visited

User Id:

Index of labID to Logon:

(Defaults to 0 which is no specific lab)

Return URL on logout:

(Uses "WebGateway - Home/Index" by default)

Should this user be treated as a tutor?

True

False

(Defaults to "False")

Lagon To Webgateway

6. That's it! Now we can move on to testing the SSO sample Application.

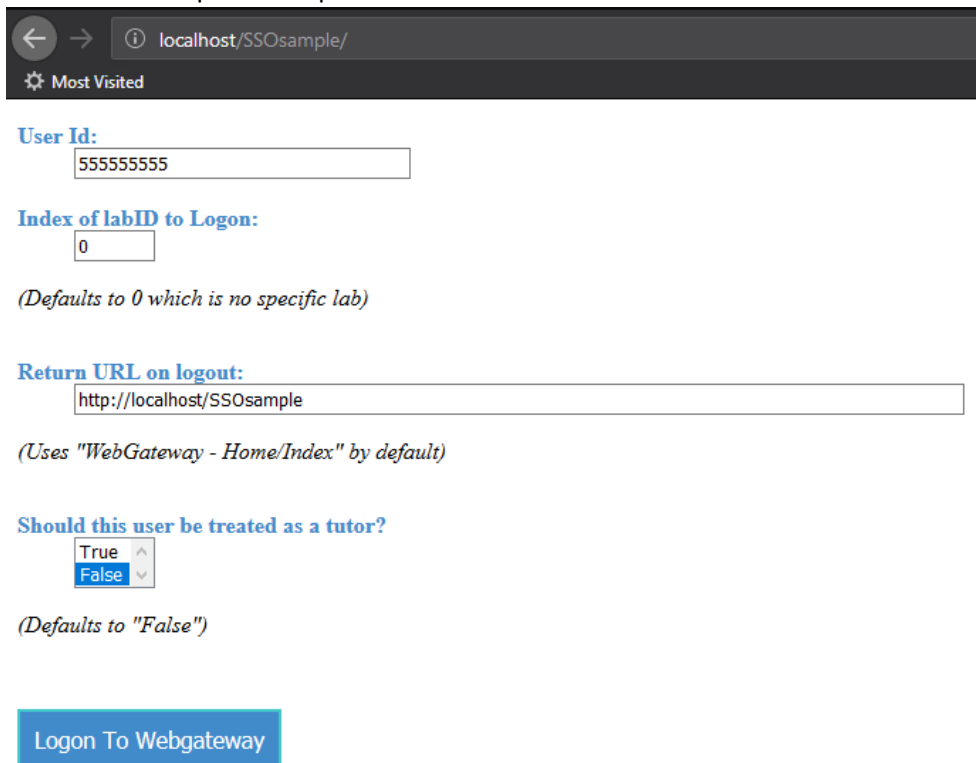
Step 3: Testing your SSO Application

In order for this next step to work you must first setup these 2 items:

1. Web Gateway should be already be setup and connected to your AccuTrack/AccuSQL database. More information on this is in our [AccuTrack/AccuSQL Documentation](#).
2. And you must also have uploaded to the AccuTrack/AccuSQL database your Student's, Tutor's, and Admin's ID numbers used in the SSO authentication system to the AccuSQL database as either the User ID or CardNumber fields. More information on this is in our [AccuTrack/AccuSQL Import Guide](#).

As long as those pre-requisites are met we can now test the system using a Student, Tutor, or Admin ID number. Typically this would be where your student portal has the student login to the Authentication method but in this SSO sample application we'll simply provide the ID and Pre-shared token to simulate this process. Here is what a typical Student login test will look like:

1. Start by completing the form that loads when you go to the website you just setup:
<http://localhost/SSOsample>
2. Here is an example and explanation of each field:



User Id:
55555555

Index of labID to Logon:
0
(Defaults to 0 which is no specific lab)

Return URL on logout:
http://localhost/SSOsample
(Uses "WebGateway - Home/Index" by default)

Should this user be treated as a tutor?
True
False
(Defaults to "False")

Logon To Webgateway

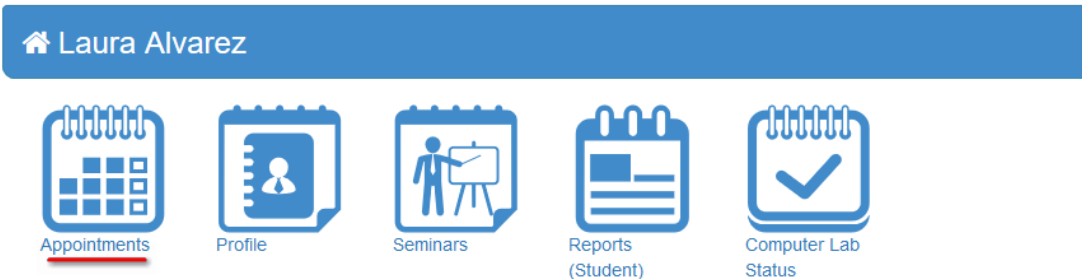
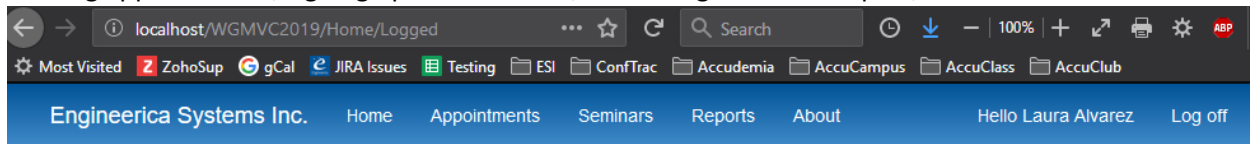
- **User ID:** This is the Student, Tutor, or Admin ID number that you want to test. In this example, since we are connected to the "Tutoring Sample" database that comes with AccuTrack/AccuSQL, we are using "55555555" for a sample Student's ID.
- **Index of labID to Login:** Typically this is left as 0, but can be changed based on the number order of the local lab in AccuSQL. This is also setup when you configure web gateway so it may not be necessary in the current version. If you have questions about this typically our support team can help find the number of the Local Lab. In this example we are not connecting to a specific Local Lab so we left it the default of "0" in this field.

- **Return URL on logout:** This is the URL that you want the users to reach when they logoff or logout of Web Gateway MVC. This could be to a page on your institution's portal or even website's homepage. In this example we are using "<http://localhost/SSOsample>" if you are testing this setup.
- **Should this user be treated as a tutor?** This option is no longer necessary as Web Gateway MVC handles the check based on the role in AccuTrack or AccuSQL. Changing this option should have no effect now.
- **Web Gateway's Token (hidden in html)** This will need to be changed to the value located in the "C:/WebGatewayMVC19/ClientBin/api.xml" file on your Web Gateway Installation. It should look something like this:

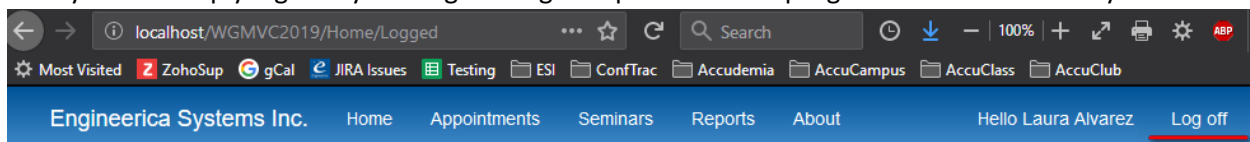
```
<apiInfo>
  <token>c1a0073d427749a2ba92c2914aca1a41</token>
</apiInfo>
```

This information located in the XML file can be changed to a different API Key, but must remain the same in the HTML code and in that XML file for the token to work. By passing this information along with the Student's ID this is what will give them access to the Web Gateway MVC application.

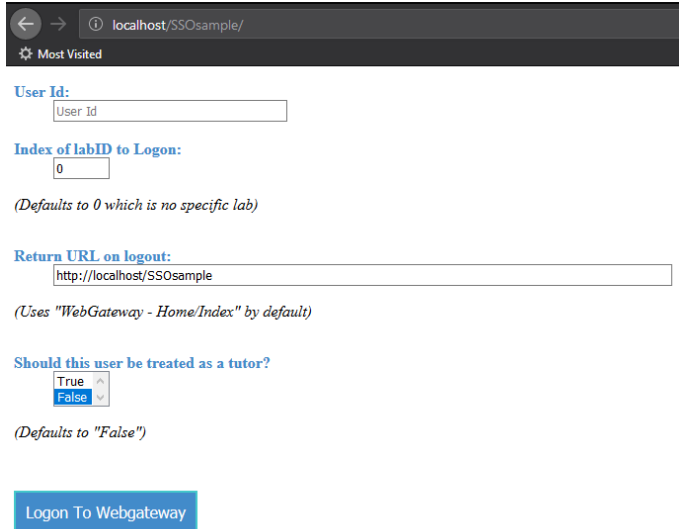
3. Finally, click the "Login to Web Gateway" button to see this process work if it has been setup properly.
4. Once you click that button the interface for Web Gateway MVC should appear and you can now test scheduling or viewing appointments, signing up for a seminar, or running a student report, etc.



5. Now you can simply logout by clicking the Log off option in the top-right of the Web Gateway MVC interface.



6. Finally you will see the Return URL that you have setup on the previous portal screen.



localhost/SSOsample/

Most Visited

User Id:

User Id

Index of labID to Logon:

0

(Defaults to 0 which is no specific lab)

Return URL on logout:

http://localhost/SSOsample

(Uses "WebGateway - Home/Index" by default)

Should this user be treated as a tutor?

True
False

(Defaults to "False")

Logon To Webgateway

Troubleshooting your SSO Sample Application

In this section we explore various ways that you can overcome common obstacles to setting up this Sample SSO Application.

Why will IIS not install/enable on my computer?

- This could be for security reasons that your institution's IT team has disabled the option for you to install/enable certain or all additional Windows services. Please check with your IT team to see if they can help you with this process.

Why can I not get the SSO Application to run in IIS?

- You may need to go back through the instructions and make sure that the name of the file is "index.htm" and is placed in the proper location so that IIS can find it.
- Also you may not be using a local or domain admin Window's User Account that has permission to access the application files on this computer.

Why when I send over the Student's ID in the SSO Application not all the options are displayed?

- If a Student is unrecognized the system may still show the page with access to no options. Simply logout and try retyping the student's ID. You may need to ensure that the imports are sending the student's ID used in this process on a regular basis.

I am stuck setting this up on my computer/server so who can help?

- If you need help understanding this process or setting this Sample SSO Application up we can be reached at: support@accutrack.org
- If you have questions about how your existing Student Portal will be able to send this SSO information to work we ask for that you contact your application, web development, or data support team.