**Authenticating WCF Service with Username and Password over SSL**

By default, this type of authentication is not enabled by the WCF framework and thus has to be configured.

There are various methods as to how this can be implemented; though this method is specific on how to consume the PayU SOAP web service, which the .Net framework implements as a .Net **Service Reference**.

We will attempt to configure the **Service Reference** to perform Message and Transport level security over SSL with user name and password; by customising the WCF Request.

The customisation will require that the security tokens are attached to the Request prior to it being sent; and this is achieved by manipulating the message by injecting a custom security header.

**Summary: The attached files need to be included to your project and will perform in this manner -**

**IEndpointBehavior** will attach an **IClientMessageInspector** instance to the request pipeline. With the **IClientMessageInspector** we injected custom headers to the request. One of the custom headers was the **SecurityHeader** which handles the **Username Tokens** needed to communicate with the PayU Web Service.

To attach the behavior to the service client we have two options, using xml configuration files (web.config/app.config) or directly adding it to the [Behaviors](http://msdn.microsoft.com/en-us/library/system.servicemodel.description.serviceendpoint.behaviors.aspx) property of [ServiceEndPoint](http://msdn.microsoft.com/en-us/library/system.servicemodel.description.serviceendpoint.aspx):

EnterpriseAPISoapClient client = new EnterpriseAPISoapClient();

client.Endpoint.Behaviors.Add(new InspectorBehavior(new ClientInspector(new SecurityHeader(\_PayUBusinessRPPSettings.soap\_username, \_PayUBusinessRPPSettings.soap\_password))));

Sample service model configuration:

<system.serviceModel>

<bindings>

<basicHttpBinding>

<binding name="EnterpriseAPISoapServiceSoapBinding1" closeTimeout="00:01:00"

openTimeout="00:01:00" receiveTimeout="00:10:00" sendTimeout="00:01:00"

allowCookies="false" bypassProxyOnLocal="false" hostNameComparisonMode="StrongWildcard"

maxBufferSize="65536" maxBufferPoolSize="524288" maxReceivedMessageSize="65536"

messageEncoding="Text" textEncoding="utf-8" transferMode="Buffered"

useDefaultWebProxy="true">

<readerQuotas maxDepth="32" maxStringContentLength="8192" maxArrayLength="16384"

maxBytesPerRead="4096" maxNameTableCharCount="16384" />

<security mode="None">

<transport clientCredentialType="None" proxyCredentialType="None"

realm="" />

<message clientCredentialType="UserName" algorithmSuite="Default" />

</security>

</binding>

</basicHttpBinding>

</bindings>

<client>

<endpoint address="https://staging.payu.co.za/service/PayUAPI"

binding="basicHttpBinding" bindingConfiguration="EnterpriseAPISoapServiceSoapBinding"

contract="PayUService.EnterpriseAPISoap" name="EnterpriseAPISoapPort" />

</client>

<diagnostics>

<messageLogging

logEntireMessage="true"

logMalformedMessages="false"

logMessagesAtServiceLevel="true"

logMessagesAtTransportLevel="false"

maxMessagesToLog="3000"

maxSizeOfMessageToLog="2000"/>

</diagnostics>

</system.serviceModel>