

Implementing WS-Security in a C# Web Service Client

This document gives an overview of setting up WS Security for communicating with a GRHID™ Server with a C# client. Microsoft provides an add-on for C# called Web Services Enhancements that provides support for WS-Security.

It is assumed that the reader already knows how to create a C# web services client using a WSDL and how to deploy a web services client.

This article: <http://www.codeproject.com/cs/webservices/WSecurity.asp> provides a good general overview of how to install Web Services Enhancements.

Installing Web Services Enhancements

The examples in this document are written using Web Services Enhancements (WSE) 2.0 SP3 for Microsoft .NET. This can be downloaded here:

<http://www.microsoft.com/downloads/details.aspx?familyid=1ba1f631-c3e7-420a-bc1e-ef18bab66122&displaylang=en>

Install WSE according to the instructions given by the Microsoft download.

After WSE is installed, go to the Solutions Explorer window and right click on the solution file. Select 'WSE Settings 2.0...' from the menu in the dialog box that comes up, check the checkbox that says to enable this project for Web Services Enhancements.

Modifying Your Code to Support Web Services Enhancements

After your project has been set up for Web Services Enhancements – the next step is to modify your web services client code to supply a username and password.

This method will add a username and password to your web services calls:

```
//Set up wssecurity. Set username and password into security token.  
  
static private void addSecurityToken(WebServicesClientProtocol  
wsService, String username, String password)  
{  
    SoapContext context = wsService.RequestSoapContext;  
  
    context.Security.Tokens.Add(  
        new UsernameToken(username, password,  
        PasswordOption.SendHashed));  
}
```

For the wsService argument, pass the name of the auto-generated web services interface generated by C#. This call should be made before making any web services calls. Once this has been done, all web services calls will supply the username and password token.