

How To Access Data With C Sharp(C#)

The following C# code example demonstrates how to configure a connection to download data from an Earthdata Login enabled server. Note that you will need a secure way to configure the Earthdata Login username and password.

```

using System;
using System.Net;
using System.IO;

// Connector class for downloading a resource from an Earthdata Login enabled service
//
class EarthdataLoginConnector
{
    public static void Main()
    {
        string resource = "<url of resource>";
        string urs = "https://urs.earthdata.nasa.gov";
        string username = "<URS user ID>";
        string password = "<URS user password>";

        try
        {
            // Ideally the cookie container will be persisted to/from file

            CookieContainer myContainer = new CookieContainer();

            // Create a credential cache for authenticating when redirected to Earthdata Login

            CredentialCache cache = new CredentialCache();
            cache.Add(new Uri(urs), "Basic", new NetworkCredential(username, password));

            // Execute the request

            HttpWebRequest request = (HttpWebRequest) WebRequest.Create(resource);
            request.Method = "GET";
            request.Credentials = cache;
            request.CookieContainer = myContainer;
            request.PreAuthenticate = false;
            request.AllowAutoRedirect = true;
            HttpWebResponse response = (HttpWebResponse)request.GetResponse();

            // Now access the data

            long length = response.ContentLength;
            string type = response.ContentType;
            Stream stream = response.GetResponseStream();
            StreamReader reader = new StreamReader(stream);

            // Process the stream data (e.g. save to file)

            ...

            // Tidy up

            stream.Close();
            reader.Close();
        }
        catch(Exception ex)
        {
            System.Console.WriteLine("Error: " + ex.Message);
        }
    }
}

```