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# ASL Integration Document

## Basic Authorisation

Version 0.7

## Document control

Current Version:	0.7
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## Document revisions

Version Number	Date Modified	Modified By	Reason for Modification
0.5	11 July 2018	ICT	Added basic token authorization
0.6	24 July 2018	Data Management	Business edit
0.7	13 April 2021	Data and Reporting	Review following upgrade of SIF model

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## 1. Introduction

### 1.1 Purpose of the document

The purpose of this document is to provide steps and procedures to integrate Australian School List (ASL) web services including:

- a. Quick Test - through Swagger (web-based UI).
- b. Sample codes for integration.

### 1.2 Document audience

This document is intended for:

1. The technical development team, as a reference for the development of the system.
2. Any other stakeholder who is interested in or should understand how the ASL data can be consumed.

### 1.3 Environment

The environment for ASL web service is <https://aslapi.acara.edu.au/swagger/ui/index>

For access, please register through this form: <https://asl.acara.edu.au/sif-registration>

### 1.4 Support

For more information, please send an email to [aslsupport@acara.edu.au](mailto:aslsupport@acara.edu.au)

## 2. Quick Test – through Swagger

ASL web services application is integrated with swagger interface, which can be accessed directly through a web-browser at <https://aslapi.acara.edu.au/swagger/>

By clicking Show/Hide indicated below, 3 functions (API endpoints) will be shown below:

aslapi.acara.edu.au/swagger/ui/index#/Schools

swagger http://aslapi.acara.edu.au/swagger/docs/v1 api\_key

### ASLAPI

#### Schools Show/Hide

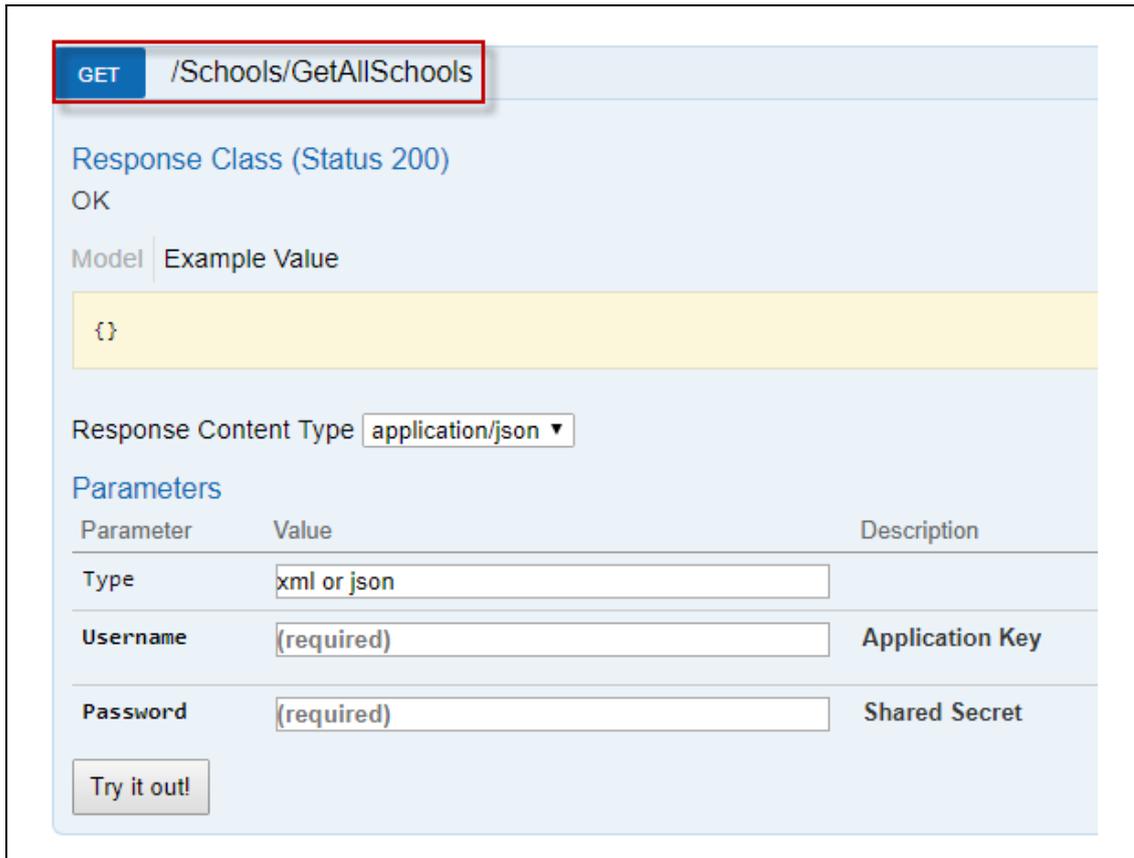
- GET /Schools/GetAllSchools
- GET /Schools/GetSchoolsByState
- GET /Schools/GetSchoolByID

[ BASE URL: , API VERSION: v1 ]

## 2.1 Function: /Schools/GetAllSchools

This function is used to get all schools registered on the ASL. When clicking the GET button (indicated in red box below), it will expand and prompt for 3 parameters:

- Type: valid values are **xml** or **json**. This is an optional field which by default is set to json format.
- Username: this is the application key or email address that you registered through ASL form.
- Password: this is the shared secret that is emailed to you by the registration system.
- Click on the **Try it out** button to submit and you will get the response in the specified type format.



GET /Schools/GetAllSchools

Response Class (Status 200)  
OK

Model | Example Value

```
{}
```

Response Content Type

### Parameters

Parameter	Value	Description
Type	<input type="text" value="xml or json"/>	
Username	<input type="text" value="(required)"/>	Application Key
Password	<input type="text" value="(required)"/>	Shared Secret

## 2.2 Function: /Schools/GetSchoolsByState

This function is used to get all schools within a specified state. When clicking the GET button (indicated in red box below), it will expand and prompt for 4 parameters:

- State: valid values are: **NSW, VIC, QLD, SA, WA, TAS, NT, ACT**.
- Type: valid values are **xml** or **json**. This is an optional field which by default is set to json format.
- Username: this is the application key or email address that you registered through ASL form.
- Password: this is the shared secret that is emailed to you by the registration system.
- Click on the **Try it out** button to submit and you will get the response in the specified type format.

GET /Schools/GetSchoolsByState

Response Class (Status 200)  
OK

Model | Example Value

```
{}
```

Response Content Type

**Parameters**

Parameter	Value	Description
<b>State</b>	<input type="text" value="(required)"/>	
<b>Type</b>	<input type="text"/>	
<b>Username</b>	<input type="text" value="(required)"/>	<b>Application Key</b>
<b>Password</b>	<input type="text" value="(required)"/>	<b>Shared Secret</b>

## 2.3 Function: /Schools/GetSchoolByID

This function is used to get one school's information by providing the ACARA ID for that school. When clicking the GET button (indicated in red box below), it will expand and prompt for 4 parameters:

- ACARAID: the ACARA ID for the school.
- Type: valid values are **xml** or **json**. This is an optional field which by default is set to json format.
- Username: this is the application key or email address that you registered through ASL form.
- Password: this is the shared secret that is emailed to you by the registration system.
- Click on the **Try it out** button to submit and you will get the response in the specified type format.

GET /Schools/GetSchoolByID

Response Class (Status 200)  
OK

Model | Example Value

```
{ }
```

Response Content Type

Parameters

Parameter	Value	Description
ACARAID	<input type="text" value="(required)"/>	
Type	<input type="text"/>	
Username	<input type="text" value="(required)"/>	Application Key
Password	<input type="text" value="(required)"/>	Shared Secret

### 3. Sample codes for integration

The provided sample code is written in Visual Studio C# .Net Framework 4.6.1.

<https://asl.acara.edu.au/docs/default-source/default-document-library/asl-client.zip>

Supported SIF Datamodel is 3.4.6 (latest as of 27 May 2020) and sourced from <https://github.com/nsip/sif3-framework-dotnet/releases>

**Code overview:**

The screenshot displays a Visual Studio IDE with a C# code file and a Solution Explorer. The code implements a method to retrieve data from an ASL API using basic authentication. Annotations highlight key parts of the code:

- Retrieving data with basic authorization:** Points to the switch statement in the `GetResponse` method that sets the `httprequest` based on the `functioncall` parameter.
- Validate output with SIF Datamodel 3.4.2:** Points to the final lines of code where the response is processed, including replacing escaped characters and deserializing the JSON into a `SchoolInfoType` list.

The Solution Explorer on the right shows a project named 'Sif.Specification.DataModel.Au.v3\_4\_2' with files for `Properties`, `References`, and `DataModelTypes.cs`. A callout box indicates the source: 'Downloaded from: https://github.com/nsip/sif3-framework-dotnet/releases'.

```

private static string username = "<Your_Application_Key>";
private static string password = "<Your_Shared_Secret>";
private static string website = "http://aslapi.acara.edu.au";

public static void GetResponse(string website, string username, string password, int functioncall)
{
    string httprequest = null;
    switch (functioncall)
    {
        case 1: httprequest = "schools/getallschools"; break;
        case 2: httprequest = "schools/getschoolsbystate?state=act"; break;
        default: httprequest = "schools/getschoolbyid?acaraid=43943"; break;
    }

    var httpclient = new HttpClient();
    httpclient.BaseAddress = new Uri(website);
    httpclient.DefaultRequestHeaders.Add("Accept", "application/json");
    string basickey = Convert.ToBase64String(Encoding.UTF8.GetBytes(username + ":" + password));
    httpclient.DefaultRequestHeaders.Authorization = new AuthenticationHeaderValue("Basic", basickey);

    HttpResponseMessage httpresponse;
    string responsedata = null;
    httpresponse = httpclient.GetAsync(httprequest.ToString()).Result;
    if (httpresponse.IsSuccessStatusCode)
    {
        responsedata = httpresponse.Content.ReadAsStringAsync().Result;
    }

    responsedata = responsedata.Replace("\\Role\\:\\012A\\", "");
    responsedata = responsedata.Replace("Pri/Sec", "PriSec");
    var schoolsinfo = JsonConvert.DeserializeObject<List<SchoolInfoType>>(responsedata);
    Console.WriteLine("School name: {0}", schoolsinfo[0].SchoolName);
}
    
```