SIF Framework (.NET)

Version 6.0.0

Implementing a SIF Consumer

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# Introduction

This document outlines the steps necessary to implement a SIF Consumer using the .NET version of the SIF Framework.

Before attempting the steps in this document, it is assumed that the following document has already been read:

* SIF Framework Setup Guide

# Pre-requisite libraries

In Visual Studio, create a new Console Application Project (.NET 6.0 recommended).

Once done, the following libraries need to be added to the project:

* SIF Framework libraries

## SIF Framework libraries

Using “Manage NuGet Packages…”, add the following package to this project.

* Sif.Framework
* Sif.Framework.EntityFrameworkCore
* Sif.Specification.DataModel.Au

# Project configuration

## SIF 3.0 Framework configuration

In the project, create an appsettings.json configuration file and ensure that the following properties are correctly set:

* Build Action – Content
* Copy to Output Directory – Copy if newer

Add the following entries to uniquely identify your Consumer application to the Environment Provider:

* consumer.environment.sharedSecret
* consumer.environment.template.applicationKey
* consumer.environment.template.authenticationMethod
* consumer.environment.template.dataModelNamespace
* consumer.environment.template.instanceId (if known)
* consumer.environment.template.solutionId (if known)
* consumer.environment.template.userToken (if known)

These values should have been provided by the SIF Administrator of the Environment Provider your application is connecting with.

# Define the SIF Data Model Object

For the implementation of a SIF Consumer, a SIF Data Model Object class needs to be specified. A requirement for the use of this Framework is that the class must implement the IDataModel interface. For an example implementation (of a student), refer to one of the Consumer demo projects.

It is important that the model object used will serialise (XML) to meet the SIF Data Model Specification for a locale. To assist with this requirement, the Sif3Specification Solution can be used as a reference for any data model objects used. Of particular importance are the namespaces used for types.

# Create the SIF Consumer

To implement the SIF Consumer, create a new class that extends the BasicConsumer class with the previously defined SIF Data Model Object class as the generic type. Implement the constructors to simply call upon the “base” constructors of the BasicConsumer class.