SIF 3.0 Framework (.NET)

Version

**Author:** Rafidzal Rafiq, SIF Solution Architect

**Revision:** 1.0

**Published:** Sep 2017

Copyright © 2017,

Table of Contents

1. Introduction 3

2. SIF 3 Framework Installation & Verification 3

2.1. Download the SIF 3 Framework 3

2.2. Load the SIF 3 Framework into Visual Studio 3

2.3. Create an Environment 3

2.4. Start the Environment Provider 4

2.5. Start the demo student Provider 4

2.6. Run the demo student Consumer 4

2.7. Review expected behaviour 4

# Introduction

It is assumed that the following documents have already been read:

* Sif3Framework .NET Developer’s Guide
* Sif3Framework .NET Demo Usage Guide

# SIF 3 Framework Installation & Verification

**Task:**

* Download the SIF 3 Framework
* Load the SIF 3 Framework into Visual Studio
* Create an Environment
* Start the Environment Provider
* Start the demo student Provider
* Run the demo student Consumer

## Download the SIF 3 Framework

The SIF 3 Framework can be downloaded from GitHub. To do so, use the following link and click on the “Download ZIP” button.

<https://github.com/nsip/Sif3Framework-dotNet>

Once downloaded, extract to an appropriate directory.

## Load the SIF 3 Framework into Visual Studio

The Visual Studio Solutions for this framework can be found under the Code directory. For the demo projects to be run, the Sif3Framework and Sif3FrameworkDemo Solutions need to be loaded into Visual Studio and built. If loaded for the first time, Visual Studio may require time to retrieve associated third party libraries that have been referenced via NuGet.

Once opened in Visual Studio, no additional configuration should be required to run the demo projects. This framework has been maintained using Visual Studio 2015, but should load in the Express version.

## Create an Environment

Before a Service Consumer and Object Service Provider can interact, an Environment must be created to manage the session information between them. Once an Environment has been defined, then the Service Consumer and Object Service Provider are able to register to that Environment. This registration is managed by an Environment Provider.

Environment definition generally falls under the domain of a SIF Administrator. However, creation of an initial Environment for this demo is performed by running the *Scripts\BAT\Demo execution\DemoAuSetup.bat* script. This script uses the Sif.Framework.Demo.Setup project to create and populate a demo database with an initial Environment definition. An SQLite database is used so that no configuration changes are required to be able to run this demo out of the box.

NOTE: Before running the scripts mentioned above, the Sif3Framework.sln Solution needs to be loaded into Visual Studio first for the Sif.Framework.Demo.Setup project to be built.

All mandatory data associated with the applications (e.g. applicationKey, sharedSecret) has been predefined for these demos.

## Start the Environment Provider

Open the Sif3Framework Solution in Visual Studio and simply run it (by clicking on the Internet Explorer button shown below).

Internet Explorer button

If the Internet Explorer button is not visible, it will be necessary to make the Sif.Framework.EnvironmentProvider project of the Solution the single start-up project.

The Sif.Framework.EnvironmentProvider project has been configured to run in IIS Express on a particular port (as specified in the Visual Studio Project properties). This port is referenced in the Environment configured from the previous section.

For the moment, ignore the “HTTP Error 403.14 – Forbidden” message that appears in the popped up Internet Explorer window on start-up. As this is a Web API service, the fact that it does not have a home page is not relevant for this demo.

## Start the demo student Provider

Load the Sif3FrameworkDemo Solution into Visual Studio, set the single start-up project to Sif.Framework.Demo.Au.Provider and simply run it (by clicking on the Internet Explorer button shown below).

Internet Explorer button

As with the Sif.Framework.EnvironmentProvider, the Sif.Framework.Demo.Au.Provider project has been configured to run in IIS on a particular port.

## Run the demo student Consumer

Once the Environment Provider and student Provider have been successfully started, run the *Scripts\BAT\Demo execution\DemoAuConsumer.bat* script to start the student Consumer. This script runs the Sif.Framework.Demo.Au.Consumer Project of the Sif3FrameworkDemo Solution.

## Review expected behaviour

The scenario illustrated in this demo is one where a Consumer is making a call for student data in a Direct Environment. As such, once this data has been consumed, the demo has been completed.

In this case, the student Consumer simply prints student details to the console based upon the CRUD operations executed. Once the details have been printed, the Environment Provider and student Provider instances can be stopped.