



## Exercise: Create a WCF Based Extension

Service Layer

PUBLIC

## INTRODUCTION

You want to develop additional functionality for SAP Business One. In a first step, you want to create a simple program to connect to an existing SAP Business One database using the SAP Business One Service Layer.

In this exercise, you will perform the following tasks:

1. Configure the Service Layer service
2. Install WCF Data Services
3. Create project in Visual Studio
4. Connect to Service Layer
5. Disconnect from Service Layer

## PREREQUISITE:

- This document is using the **C Sharp** (C#) language
- This document is using the Microsoft Visual Studio 2015
- Use the demo database for SAP Business One, version for SAP HANA
- Credentials: User code: **manager**

## GUIDELINES:

The screenshots provided here are for your reference only and may differ from the actual screenshots in your system.

## 1. TASK – CONFIGURE THE SERVICE LAYER SERVICE

- 1.1. Set the configuration option **MetadataWithoutSession** to true.
- 1.2. Set the configuration option **WCFCompatible** to true.
- 1.3. Restart the Service Layer service

## 2. TASK - INSTALL WCF DATA SERVICES

- 2.1. Download and run the installer to install the [WCF Data Services 5.6.0 tools](#) on your computer.

## 3. TASK – CREATE PROJECT IN VISUAL STUDIO

- 3.1. Open Visual Studio and choose *File → New → Project*
- 3.2. Select the **Windows Forms Application** template from *Installed → Templates → Windows* section.
- 3.3. Install NuGet packages - Microsoft.Data.Edm, Microsoft.Data.Odata, Microsoft.Data.Services.Client and System.Spatial
- 3.4. Connect to the Service Layer using a third-party tool, like the Postman.
- 3.5. Add the metadata as service or file directly by selecting “Add Service Reference” into your Microsoft Visual Studio project, the metadata will be validated automatically.
- 3.6. Create two buttons on the default form the first one should be used for handling the Connect and the second one should handle the Disconnect event. Add a *Textbox* item for displaying the results.

## 4. TASK - CONNECT TO SERVICE LAYER

- 4.1. Create the variable **slContext** for ServiceLayer object – ensure it is defined as a member of the extension application class or globally.
- 4.2. Create the variable **CookieString** for Cookies – ensure it is defined as a member of the extension application class or globally.
- 4.3. Create the variable **ServiceLayerSession** for Service Layer Session – ensure it is defined as a member of the extension application class or globally.

- 4.4. Create the function **SLSendingRequest** for specifying the web service call request details.
- 4.5. Create the function **SLReceivingResponse** to work with the web service response.
- 4.6. Create the function **RemoteSSLTLSCertificateValidate** for certificate validation.
- 4.7. Write the code for connecting to the Service Layer, which should be executed after pressing the **Connect** button.
- 4.8. To Test the function, connect to the Service Layer and display the SessionID into the TextBox.

## 5. TASK - DISCONNECT FROM SERVICE LAYER

- 5.1. Write the code for disconnecting from the Service Layer, which should be executed after pressing the **Disconnect** button.
- 5.2. To test the disconnect from the Service Layer.



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