

SynTQ SimApi Installation

Introduction

This document describes how and where to install the SynTQ SimApi plug-in for Umetrics.

The SynTQ SimApi is compatible with Simca 13.0 and Simca-Online 13.3.

The SynTQ SimApi requires an instance of SynTQ Server to be running on the same PC or on an accessible network server.

SimApi Configuration

Before Simca can start to extract data from synTQ, it needs to know how to connect to the synTQ database. Only two values are required to accomplish this; the server IP address and the port number of the synTQ Server Configuration Service. These two values allow the server manager objects to be created. The SynTQ Database connection details are retrieved by the ConfigProvider object.

To configure the SimApi, the Plugin.Configure method must be called. This causes the SimApi to display a form allowing the user to enter these values and to call a test function. This is the only time the SimApi is allowed or required to have any direct interaction with the user.

Configuration Files

A number of components in the SimApi require configuration and each one has separate configuration files.

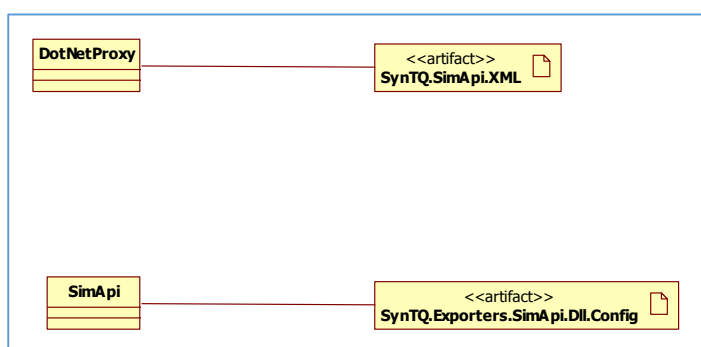


Figure 1: Configuration Files

SynTQ.Exporters.SimApi.dll.Config

This file contains information common to all connections made using the SimApi. The items stored are the log file name and location and the logging level required. The app.config file forms part of the SynTQ.Exporters.SimApi project.

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
  <logFilepath>C:\ProgramData\Umetrics\SimApi\SynTQSimApiLog.log</logFilepath>
  <!--Log level is one of the following:-->
  <!-- 0 - None -->
  <!-- 1 - Error -->
  <!-- 2 - Warning -->
  <!-- 3 - Info -->
  <!-- 4 - Verbose (includes detailed exception information -->
  <logLevel>3</logLevel>
  <identity>SynTQSimApi - Simca/Simpler</identity>
  <ServerName>localhost</ServerName>
  <PortNumber>4301</PortNumber>
</configuration>
```

SynTQ.SimApi.XML

The SimApi is created by the DotNetProxy using reflection. The proxy therefore needs to know the name of the SimApi to create and this is stored in the Optimal.DotNetProxy.xml file.

```
<?xml version="1.0" encoding="utf-8" ?>  
<settings>  
  <setting key="PluginPath" value="SynTQ.Exporters.SimApi.dll"/>  
</settings>
```

Deployment

Simca and Simca-Online require that all SimApi files created for this interface are located in the runtime folders for each application as follows;

Application	Installation Folder
Simca	Program Files\Umetrics\SIMCA 13.0\Program\Simpler
Simca-online	Program Files\Umetrics\SIMCA-online 13.3

For the SimApi to function, it must be able to access a running synTQ server instance.

Required Files

The following files form the SynTQ.Simapi:

- SynTQ.Exporters.Data.dll
- SynTQ.Exporters.DataRetrieval.dll
- SynTQ.Exporters.SimApi.Common.dll
- SynTQ.Exporters.SimApi.Configuration.dll
- SynTQ.Exporters.SimApi.dll
- SynTQ.Exporters.SimApi.Utilities.dll
- SynTQ.SimApi.dll
- Umetrics.SimApi.dll

These additional files are required in order to create the SynTQ Server components used to access the SynTQ database:

- MicrosoftApplicationBlocks.ExceptionManagement.dll
- MicrosoftApplicationBlocks.ExceptionManagement.Interfaces.dll
- Mvp.xml.dll
- OpcDaNet.dll
- Optimal.Opc.dll
- SynTQ.Client.Common.dll
- SynTQ.Interface.Common.dll
- SynTQ.Interface.Licensing.dll
- SynTQ.Interface.Managers.dll
- SynTQ.Interface.Messaging.dll
- SynTQ.Interface.ReadingTypes.dll

These files may also be required and are included in the install package:

- msvcp110.dll
- msvcr110.dll

The following configuration files will also be required:

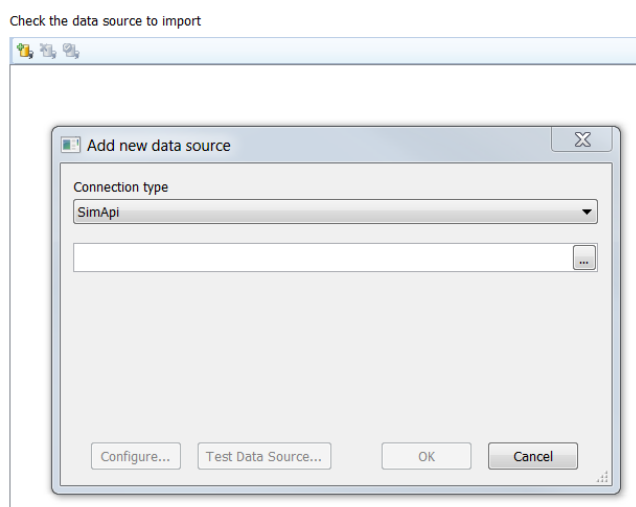
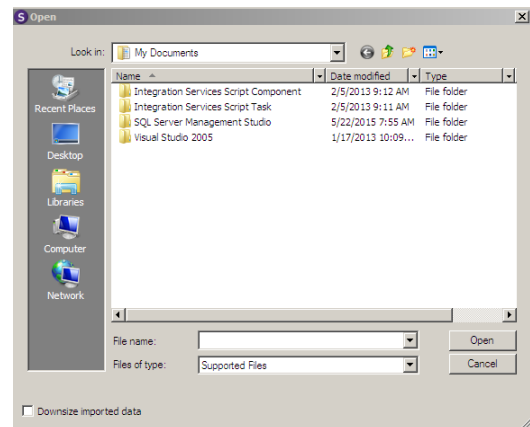
- SynTQ.Exporters.SimApi.dll.Config
- SynTQ.SimApi.xml

All of these files will be installed in the folders indicated above.

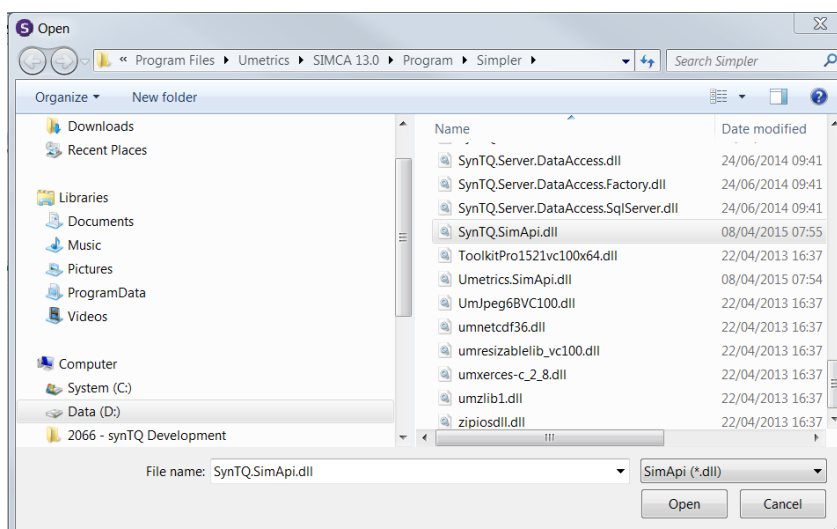
Configuration

The following sequence demonstrates how to integrate the SynTQ.SimApi into Simca.

1. Open Simca and select *File* then *New Regular Project* from the menu and then select New Regular Project from the *Create New Project* dialog.
2. If the Open dialog appears then click on *Cancel*. Then click on the *File* menu, select *New Spreadsheet* and then *From Database* and the *Add New Data Source* dialog will appear as below.

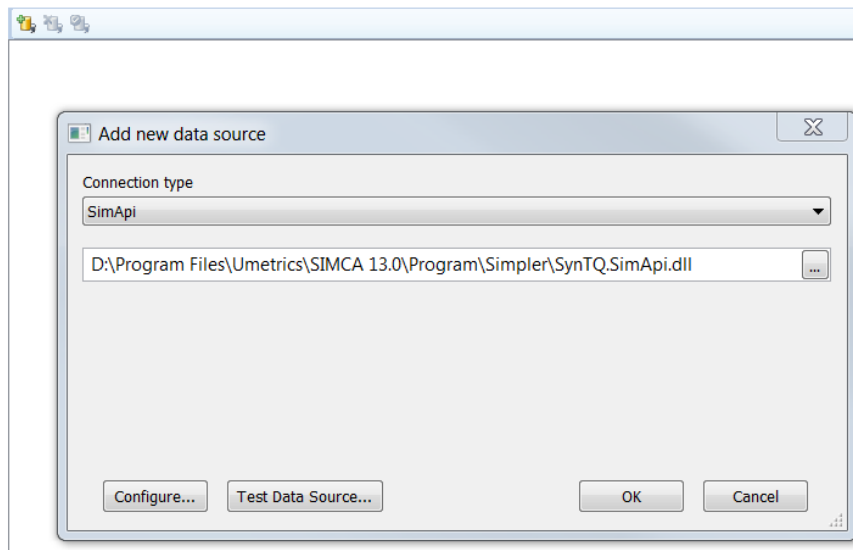


3. Select *SimApi* from the *Connection Type* combo box then click on the ellipsis button at the right hand side of the box below.

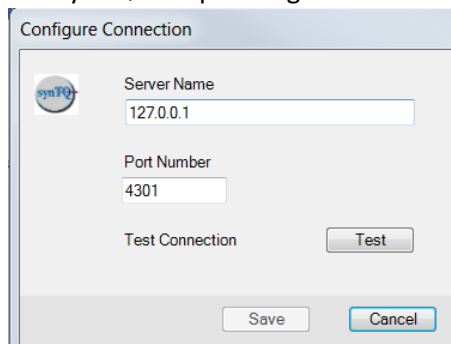


4. The *Open* file dialog will close and the *Add New Data Source* dialog will be populated with the file path of the SynTQ.SimApi.dll as below.

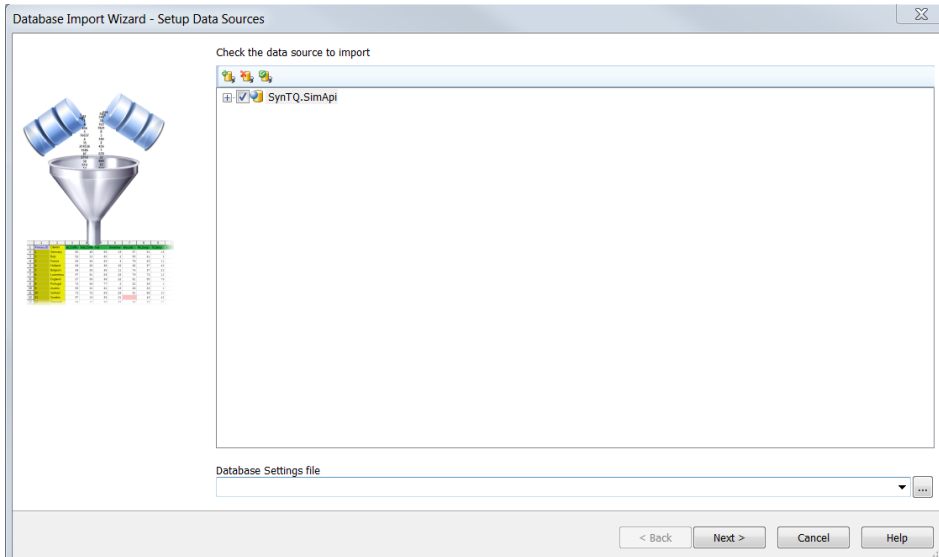
Check the data source to import



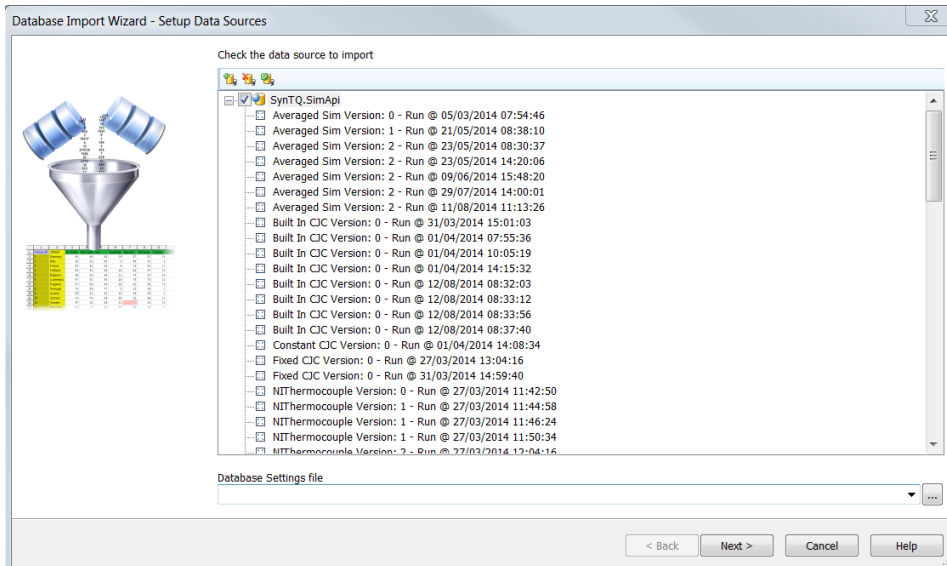
5. Click on the *Test Data Source* button and wait whilst a connection to SynTQ server and the database are created.
6. Click *OK* to close the *Simca Import* dialog and then click on *Configure* button. This will open the SynTQ.SimApi configuration dialog as below.



7. Enter the server name or IP address and port number and then press *Test*. After a few seconds, a dialog will appear indicating the result of the test. If successful, click the *Save* button and the new configuration will be stored and the dialog will close.
8. The new data source, *SynTQ.Simapi* will now be present in the list.



- If you expand the *SynTQ.SimApi* item, a list of orchestrations and runs will be loaded and displayed. This may take some time if there are a lot of items to load.



The SynTQ.SimApi is now ready to use.