ThermoFisher
SCIENTIFIC

Paradigm SDK - Getting Started with VB.NET

Preparation

- If possible, install this on a clean PC (newly installed operating system), or in a Virtual Machine.
- Install Visual Studio 2019 or later

Overview

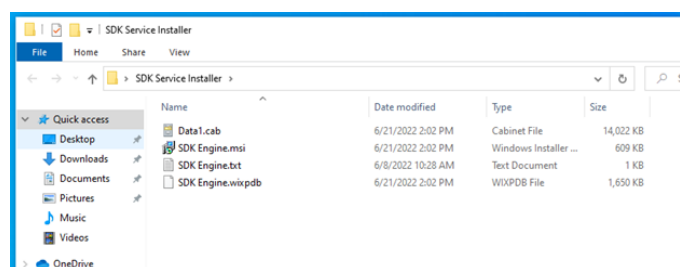The basic steps that are needed before one can use the Paradigm SDK are:

1. Install the base OMNIC Paradigm software for the instrument to which you are connecting.
2. Install the Paradigm SDK Engine and Paradigm SDK Client modules.
3. Create a console app in Microsoft Visual Studio[1].

Install OMNIC Paradigm software

See the OMNIC Paradigm software help topics on knowledge1.thermofisher.com for more information about installing and using OMNIC Paradigm software.

Install the Paradigm SDK

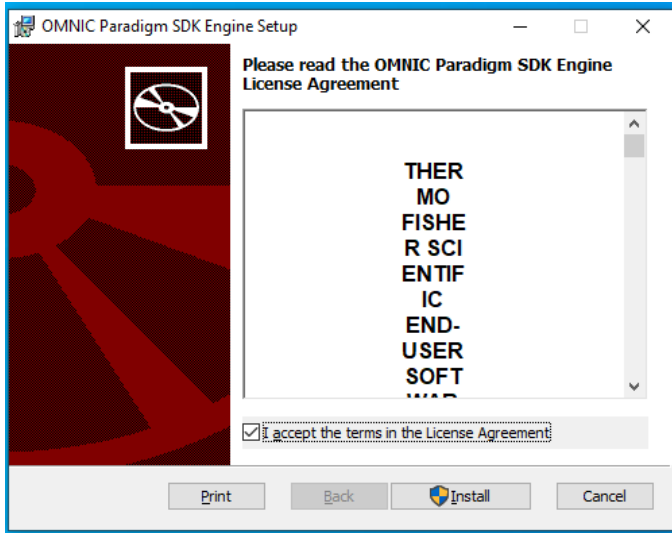Navigate to the SDK Engine Installer
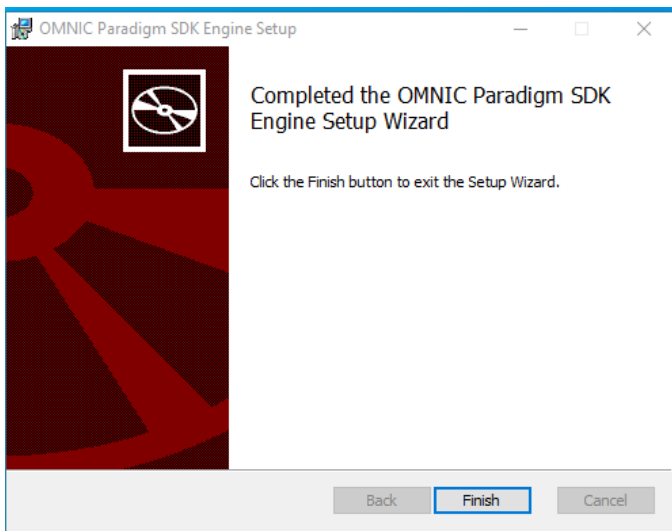

Run the SDK Engine Installer

Accept the terms of the license agreement.

Install.

Finish.

Now find the SDK Client Installer and take the same steps to finish SDK installation.

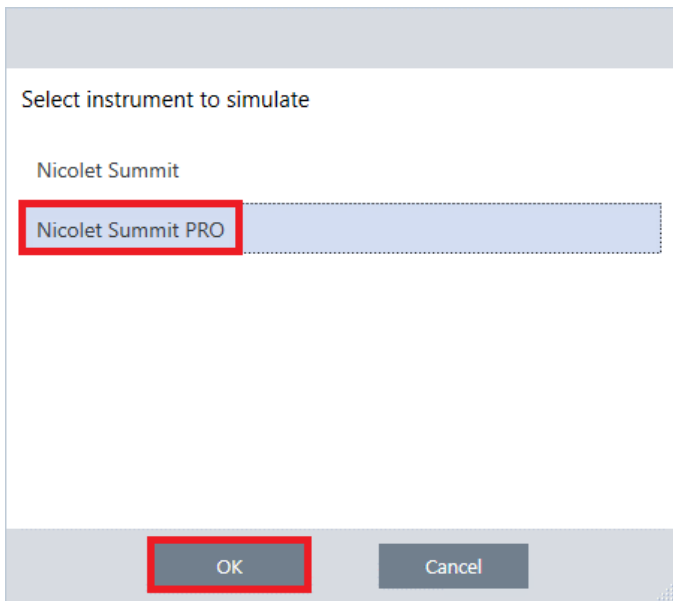The SDK Documentation (including a copy of *this* document) is installed to C:\Users\Public\Documents\Thermo Scientific\SDK
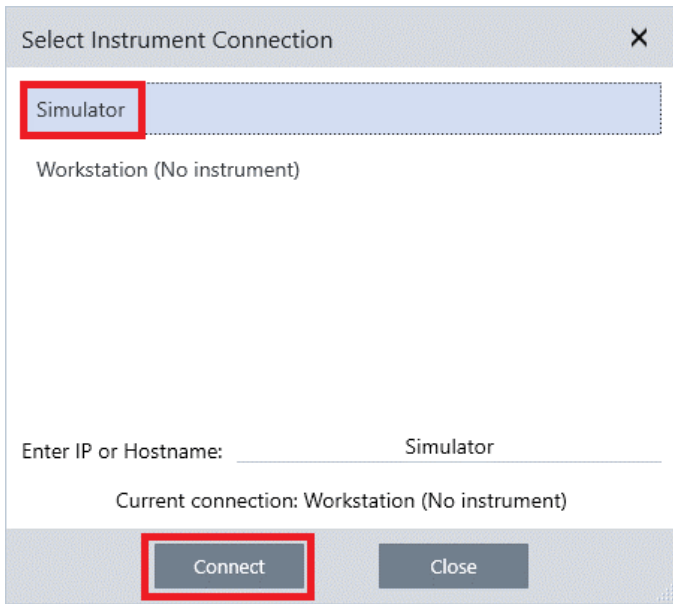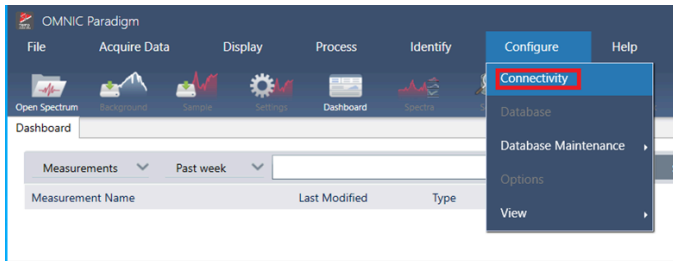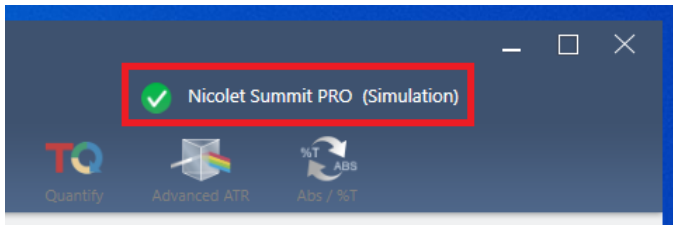
Configure OMNIC Paradigm Software

Start OMNIC Paradigm from the desktop

Simulator (Optional)

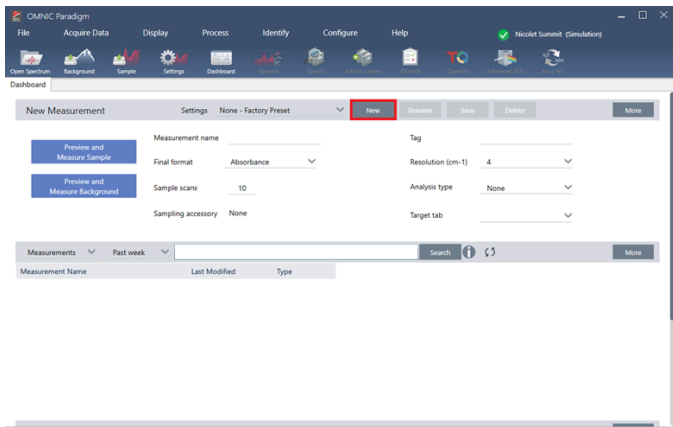If you do not have an instrument, you can use the simulator:

Notice that Paradigm indicates it is now simulating an instrument:
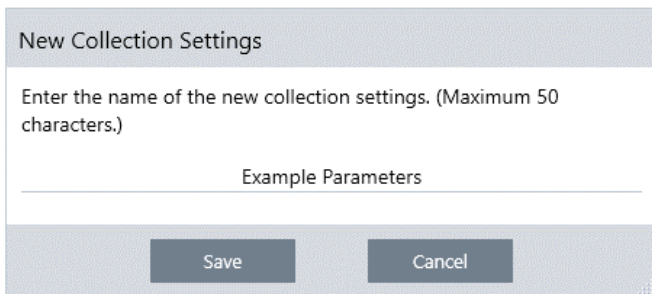
Configuring Named Parameter Sets

The SDK will use named parameter sets from OMNIC Paradigm software. We will create one now named "Example Parameters".
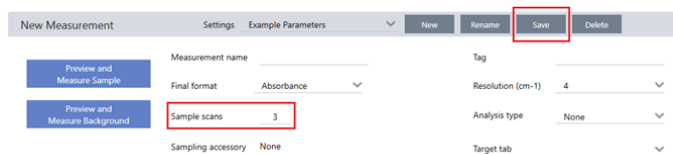
Select New

Enter the name "Example Parameters" and select save

Make any changes to the Parameters that you want. For example, change sample scans from 10 to 3. Notice that the Save button is now active. Save the changes.

Setup VB.NET

Create a Visual Basic compatible project in Visual Studio. This can be a console app, Windows Forms app, WPF app, etc. The project type must include the "Visual Basic" tag as well as be appended with (.NET Framework).

To ensure that all the necessary references are functioning correctly, copy the example code from the Module1.Vb program included in your SDK download into your new Visual Basic project.

Download the below NuGet packages:

- Microsoft.CSharp v4.0.0
- Newtonsoft.Json v13.0.1
- System.Security.Principle.Windows v4.5.1

Locate and add the below .dll files as references in your Visual Basic project. Note: After running the SDK installer, the following .dll files can be found in the and `../Program Files/Thermo Scientific/` directory.

- Paradigm.Core.Contracts.dll (`../Program Files/Thermo Scientific/SDK Engine`)
- Paradigm.Lib.dll (`../Program Files/Thermo Scientific/SDK Client`)
- SDK.Core.dll (`../Program Files/Thermo Scientific/SDK Client`)
- SDK.Engine.Contracts.dll (`../Program Files/Thermo Scientific/SDK Client`)
- System.IO.Abstractions (`../Program Files/Thermo Scientific/SDK Client`)
- Microsoft.Entensions.Logging.Abstractions (`../Program Files/Thermo Scientific/SDK Client`)

Run the example program to ensure proper configuration.

1. Microsoft and Visual Studio are trademarks of the Microsoft group of companies.↩?