Microsoft Solver Foundation

Release 3.0.1.10599 (v3.0)

Please consult the following pages to answer basic questions about the usage, functionality, and system requirements for the Microsoft Solver Foundation. For direct queries and feature suggestions, please go to our MSDN code gallery located at <http://code.msdn.microsoft.com/solverfoundation>. For news and information about Solver Foundation, see <http://blogs.msdn.com/solverfoundation/>. To install Solver Foundation, see <http://msdn.microsoft.com/en-us/library/ff524499(v=VS.93).aspx>.

Installation Requirements

Solver Foundation runs on the following operating systems (with the latest service pack):

* Windows 7: 32 or 64 bit.
* Windows Vista: 32 or 64 bit.
* Windows Server 2003, 2008: 32 or 64 bit.

Solver Foundation requires the following package:

* NET Framework 4.

The follow program is optional, but recommended to be installed:

* Microsoft Excel 2007 or Microsoft Excel 2010 with the .NET programmability support option. If you receive a setup error stating that the “Microsoft.VisualStudio.Office.Runtime” was not found, then most likely this Excel option was not correctly installed. One can verify this by running the Office setup and ensuring that the Excel “.NET Programmability Support” item is enabled.

Additional Requirements for developers:

1. Visual Studio 2010.
2. Iron Python version 2.0 or higher to run Iron Python examples.

Folder Structure

Files found in the install directory

When installing Solver Foundation, you are asked to specify the install location. By default, Solver Foundation is installed under either "Program Files" or "Program Files (x86)". Here, you can find the subdirectory "Microsoft Solver Foundation\3.0.1.10599 ".

The Microsoft.Solver.Foundation.dll is installed into the .NET GAC, and the .NET Framework 4.0 reference assembly directory.

The remainder of this section refer to folders under the "Microsoft Solver Foundation\3.0.1. 10599" directory.

Bin:

Contains MSFCLI.exe, a command line interface to Solver Foundation, which allows users to solve .MPS, .QPS and .OML models.

Contains StochasticCli.exe, a command line interface to Solver Foundation, which allows users to solve stochastic models (in SMPS and .OML formats).

Documents:

Solver Foundation EULA, overview, and programming primers using the Solver Foundation Services, Solver-specific API's, OML Syntax, Simulation capabilities, and information for running Solver Foundation for Excel.

MSFforExcel:

Contains the VSTO setup for Microsoft Solver Foundation for Excel.

Plugins:

Contains Gurobi, Mosek ™, Ziena, LINDO, and Frontline plug-in binaries.

The "Samples" Directory

The samples are located in the "My Documents" (XP) or "Documents" (Vista, Windows 7), under "Microsoft Solver Foundation\Samples" folders.

Running API Examples

1. Search the Samples directory and click on any project file. The test problem will open in Visual Studio.
2. Choose whether you want to run in Release or Debug mode.
3. Press F5, which will both compile and run the program.