This sample demonstrates using a Composition XML file to specify the composition of the application. It's an extension to the previous basic sample, Program As Component .

Project name: "D.UsingXml"

For information on how to get the code, and run the sample, please see About Basic Samples .

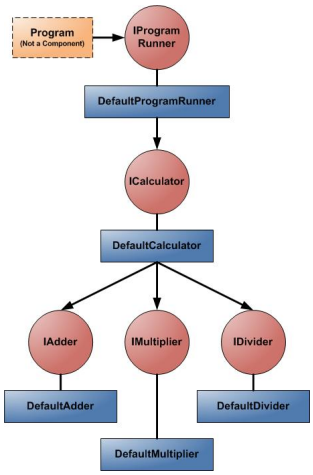
Description

The functionality and composition of this sample is exactly the same as the previous sample , but it uses an XML file to specify the composition of the components, instead of using ComponetContext's API to do so.

A file, called CalculatorComposition.xml, is added to the project. It specifies the components to be registered in the context. The XML file is specified as "Embedded Resource" in the project, so it is embedded in the assembly by Visual Studio upon compilation. Then, it is read and registered in the Composer using ComponentContext.ProcessCompositionXmlFromResource extension method.

Using such XML files, allows declarative specification of the components and assemblies, instead of having to reference them directly in the code. Furthermore, if such XML files are read from the file system instead of the assembly's resource, it allows changing the composition without having to recompile the code.

Dependency Diagram



Sample output

CONSTRUCTOR - DefaultProgramRunner
CONSTRUCTOR - DefaultCalculator
CONSTRUCTOR - DefaultAdder
SET PLUG - DefaultCalculator.Adder
CONSTRUCTOR - DefaultMultiplier
SET PLUG - DefaultCalculator.Multiplier
CONSTRUCTOR - DefaultDivider
SET PLUG - DefaultCalculator.Divider
SET PLUG - DefaultProgramRunner.Calculator METHOD CALL - DefaultProgramRunner.Run() METHOD CALL - DefaultCalculator.Add(67, 12)
METHOD CALL - DefaultAdder.Add(67, 12)
67 + 12 = 79 METHOD CALL - DefaultCalculator.Subtract(67, 12)
METHOD CALL - DefaultAdder.Add(67, -12)
67 - 12 = 55 METHOD CALL - DefaultCalculator.Multiply(67, 12)
METHOD CALL - DefaultMultiplier.Multiply(67, 12)
67 * 12 = 804 METHOD CALL - DefaultCalculator.Divide(67, 12)
METHOD CALL - DefaultDivider.Divide(67, 12)
METHOD CALL - DefaultCalculator.Remainder(67, 12)
METHOD CALL - DefaultDivider.Remainder(67, 12)
67 / 12 = 5 (with remainder = 7)