The attached example demonstrates SQL Race C# functions.

The example exposes two C# functions, one with 2 input/1 output parameter(s) and another with 1 input/2 output parameter(s) (any number of input/output can be specified as required).

Use the C# Class Library project template.

The following modules must be referenced:

* MAT.OCS.Core
* MESL.SQLRace.Domain
* MESL.SQLRace.Enumerators
* MESL.SQLRace.Functions.Interfaces
* MESL.SQLRace.Functions.Types

Each function is implemented in a class that implements IDotNetFunction and is exported via the following attribute:

[Export(typeof(IDotNetFunction))]

With the following namespaces:

using MESL.SqlRace.Domain.Functions;

using MESL.SqlRace.Domain.Functions.DotNet;

using MESL.SqlRace.Enumerators;

using MESL.SqlRace.Functions.Interfaces.Enums;

using MAT.OCS.Core;

The function is defined and build in:

public void Initialize(IFunctionManager functionManager)

The function properties match those you would specify when creating a function from the editor.

Remember to assign “this” to the ImplementationDefinition.

Note: RelativePath can be set to override the location of the function within the parameter browser.

and executed in:

public void Execute(IExecutionContext executionContext)

where the timestamp of each input(s) is accessed by:

executionContext.FunctionInput.Timestamps[]

and values for each input via:

executionContext.FunctionInput.Values[][]

(input parameter index, input value)

The indexes of input parameters can be looked up by name:

executionContext.FunctionInput.InputParameterIndexes

The combined status of the inputs is accessed by:

executionContext.FunctionInput.Statuses[]

NB: if the status is DataStatusType.Missing, then assign double.NaN to the corresponding output values to indicate no value.

output values are assigned to each output parameter for each input value, via:

executionContext.FunctionOutput.OutputParametersValues[][]

(output parameter index, output value)

The indexes of output parameters can be looked up by name:

executionContext.FunctionOutput.OutputParameterIndexes

Copy just the output module to:

C:\Users\<user>\Documents\McLaren Electronic Systems\SQL Race\Functions\ or sub folder.

Restart ATLAS10 and on inspecting the parameter browser, you should see:



