Managed and Unmanaged modules in the PI CMP system using both managed and native engines

GUI
(Pascal, C++, Win32)
[ausfarm.exe]

Third party model
[plant.dll]

PI Engine
(C++)
[prot.dll]

CMP Engine
(C++)
[prot.dll]

PIWrapper
(C++)
[piwrapper.dll]

CMPServices
(C#)
[cmpservices.dll]

GUI
(C#, VB.net, VCL.net, other managed code)

PI Engine Interface
(C# class library)
[piengineint.dll]

PI Components

Implementation key

Native - unmanaged
Customisable module
Managed CLR
Provided by CSIRO PI

Win32 implementations of models using TFarmwiseInstance wrapper

Message interpretation. Handles some component processes.

Component/Simulation wrapper classes

Process control & Component descriptions

Messages

Descriptions

CMP Messages

Description/Init interface

CMPPsocket generic model functionality

XML services TTypedValue

Time server, Sequencer

Messages

Descriptions

Descriptions

CMP Messages & description interface

CMP Messages & description interface

Descriptions

Process control & Component descriptions

Descriptions

Descriptive/TBaseComp generic model functionality

Third party models

Model logic class
(Any managed code)
[CMPPComp mymodel.dll]