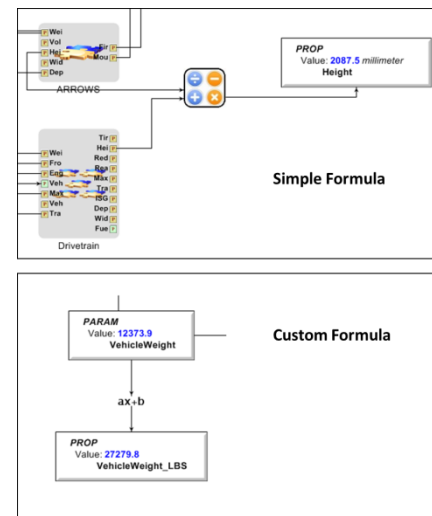


CyPhyFormulaEvaluator

Overview

There are 2 types of formulas in the CyPhy model used for describing calculation of property, parameter and metric quantities in the model. SimpleFormula are used for addition, multiplication, minimum, maximum, and average while CustomFormula is a user defined expression using names of property/parameter/metric or user define variable names. Incoming connections to a formula connects property/parameter/metric objects to the formula represents inputs used in the formula calculation. Outgoing connections represent output destinations to assign the calculated value to. This interpreter evaluates both types of formulas in a CyPhy model.



Supported Context

Standalone Run by User

ComponentAssembly models:

ComponentAssemblies can contain formulas where the inputs and outputs can reside inside the assembly itself or child assemblies and components. Child assemblies and components can also contain formulas. This interpreter evaluates all the formulas inside the ComponentAssembly plus any child assemblies and components.

TestBench models:

A TestBench model and its child assemblies and components. This interpreter evaluates all the formulas inside the TestBench plus any child assemblies and components.

Component models:

The interpreter evaluates all the formulas contained inside a Component.

Run by Other Interpreters:

Other interpreters can also run this interpreter as a first step to calculate values of all the property, parameter, and metric objects in the model before executing interpreter specific logic.