ENABLING OBJECT ORIENTED CAPABILITIES
IN AUTOMATION SYSTEMS

ABSTRACT

The invention relates to systems and methods that support object oriented access to information at multiple levels in a control architecture, for example. Such data access can be facilitated as a layer adjacent to or part of an MES system or as a white box cooperating to encapsulate data such as in the controller or the MES layer, for example. In addition, such object oriented data access can be built into a controller as a standard behavior of controller data types and tags of those data types. In this manner, data can be encapsulated as a data object to expose properties and/or methods related to the data utilizing a common interface with each data consumer. Thus, the data consumer can employ object oriented concepts, such as properties, methods, scope qualifiers, access qualifiers (private, protected, public enterprise), polymorphism, inheritance and the like directly with their automation system components.

FIG. 1