

Systems and Methods for Optimizing Control Systems for a Process Environment

Abstract

The invention provides methods, systems and computer program products for control system optimization. Information corresponding to an implemented control system is retrieved, and a plurality of function blocks, and equipment components related to the plurality of the function blocks are identified. The plurality of function blocks are grouped into function block groups based on one or more attributes shared by function blocks within said function block group. A plurality of equipment component groups are generated, wherein each equipment component group corresponds uniquely to one function block group and includes equipment components related to function blocks within a function block group that uniquely corresponds to said equipment component group. Interconnections are identified between equipment components within each equipment component group. A control system topology is generated based on identified equipment components, and interconnections therebetween.

[Use Figure 5 as representative figure, if necessary]