CODESYS® Application Composer

Engineering IEC 61131-3 Application Software for Automation Systems
CODESYS Application Composer

The CODESYS Application Composer is a development tool for the efficient creation of application variants consisting of recurring function blocks.

Functional principle
Complete control applications can be manufactured, i.e. assembled and parameterized, from previously created software modules.

Modules are functional program units that can correspond both to machine or plant components and to software functions.

In addition to the program code they typically contain components such as visualization elements, parameterization or I/O assignments.

Creation of modules
Software developers create object-oriented function blocks (FBs) with the desired functionality. The FBs are declared to the Application Composer as modules via the module declaration. The parameters, I/Os, visualizations, alarms and devices of the module as well as the relationship to other modules are defined in the declaration. The modules created can be combined and made available by the module manufacturer in the form of application-specific libraries.

Creation of control applications
The selection and assembly of the modules take place in the module tree. Each entry corresponds to a module instance. When inserting new elements into the module tree, only suitable modules are offered for the selection. The parameterization, the I/O configuration and the visualization selection for the module instances are defined in the module properties.

At the same time, sequence step modules can be configured with the aid of a convenient sequence editor.

The complete application code including visualization and I/O configuration is generated from the module configuration via a menu command using the integrated generators. Application-specific code can be added in the form of extension modules and remains unchanged if the code is generated again.

Typical areas of application for the CODESYS Application Composer
- series-produced machines that are customer-specifically equipped and set up: machine configuration direct from the sales process
- special machines or plants that are constructed from recurring units
- plants that are constructed of many basic modules of the same type, e.g. in building automation or process technology

Your advantages at a glance:
- improvement of the reusability and quality of the application parts
- increase in efficiency through automated generation of applications from pre-defined modules
- seamless integration into the CODESYS Development System
- immediate usability thanks to the generators provided and the application concept
- simple ordering and installation through the CODESYS Store (http://store.codesys.com/)
Inspiring Automation Solutions

CODESYS – the manufacturer-independent
IEC 61131-3 automation software.

CODESYS Product Families:

- Runtime
- Visualization
- Fieldbus
- Motion + CNC
- Safety
- Services

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territories. For more information on geographic
restrictions, please contact support@codesys.com.