

---

# Section 1 Introduction

## General

Control Builder Professional (CB Professional) is a programming tool for creating control solutions when using the AC 800M hardware.

The Control Builder comes with type solutions for simple logic control, device control, loop control, alarm handling etc. packaged as standard libraries.

It provides a wizard function for hardware definition files, support for multi-user engineering, and an evaluation mode for testing and evaluating new applications against a running application.

Control Builder supports five different programming languages, Function Block Diagram, Structured Text, Instruction List, Ladder Diagram and Sequential Function Chart according to IEC 61131-3. In addition to this, it supports the Control Module language and Diagrams (Diagrams are only available if they are created by Function Designer). Other useful functionality is high integrity controllers for SIL applications, online debugger, test and simulation mode etc.

## Product Overview

Control Builder is a fully integrated control system function in the 800xA system. It provides tools for programming applications and configure hardware units from the AC 800M family.

It is accessed through the Project Explorer interface, and runs on any of the following platforms:

- US English version of Windows Server 2008 Standard or Enterprise edition:
  - R2 with Service Pack 1
  - 32-bit (x86) R1 with Service Pack 2
- US English version of Windows 7 Professional or Enterprise edition with Service Pack 1:
  - 64-bit (x64)
  - 32-bit (x86)

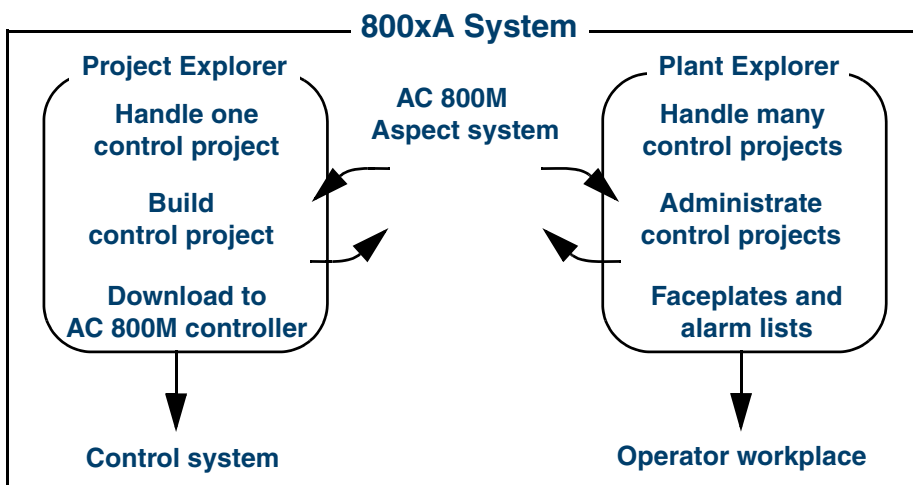


Figure 1. Project Explorer and Plant Explorer are two separate interfaces in Process Portal for building and maintaining control projects.

This section gives an introduction to the Project Explorer interface. Once you are familiar with the basics within this book, you are advised to look up the manual *AC 800M Configuration (3BSE035980\*)* which describes more thoroughly the 800xA programming functions that can be accessed through the Project Explorer.



An introduction to the Plant Explorer can be found in the manual, *Operator Workplace, Configuration (3BSE030322\*)*.

## Project Explorer

The Control Builder user interface is called Project Explorer and this is where you create and build your projects. A project contains the entire configuration needed for a AC 800M based control solution, including control applications and hardware settings. Context menus are helpful while configuring hardware units or connecting parameters etc. You right-click an object to open its corresponding context menu.

Both the software (programs, functions, etc.) and the hardware (the actual hardware connected to the controller) are modelled in a project. The relationships are visualized in [Figure 2](#).

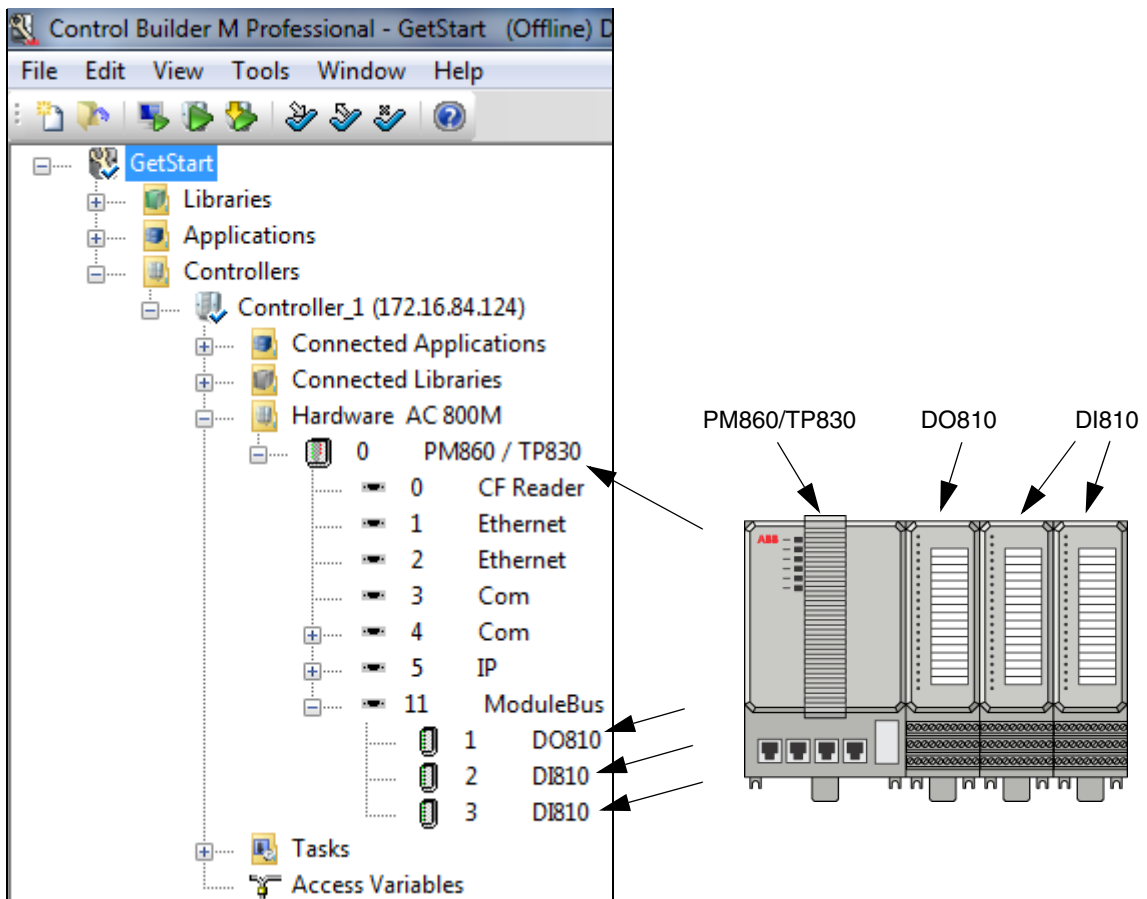


Figure 2. Project Explorer and actual hardware setup.