EcoStruxure Control Expert v14.1: key objectives

Customer Challenge

Always looking for ways to speed-up engineering time

Our Value Proposition

Increase productivity during engineering, commissioning and operation, reducing time to market.

Our Solution

Performance improvement

- Performance Improvement (Upload)
- Device Management: edit DIO numbers.
- Faster Installation (Libset)
- Flexible design
  - Init values on DFB
  - SET_VAL
- Migration from Quantum: SRAM on M580, LL984 display, AKF library

Flexible design

Migration to M580
Control Expert V14.1 supports M580 CIP Safety

Customer Challenge
Safety & Standard application in the same controller
Wide support of safety architecture,
CIP-Safety to connect to smart safety devices

Our Solution

Our Value Proposition
Leverage engineering skills and programming habits with a unique software platform for M580 process and safety

Technical highlights
- Control Expert V14.1 supports M580 CIP Safety: Safe communications with connected products through Ethernet
- SAFE Signature: to know if “safety code” evolved or not
Go faster…from engineering to maintenance

Go faster to Upload from Controller

Nota : Tests done on a set of representatives projects, versus Unity Pro V11

Simplified installation

Libset versions < V10 are no more installed by default, and can be installed when needed with new Libset Installer interface.
Devices management is made easier

Remove and add DIO device without impact on status #
After addition or update a device, the **Device Number** can be selected among valid range, thus allowing easy update.

Manage PRM Profibus Devices from GSD with the Project
Enhanced default DTM **naming rules** (based on Product Name and Revision)
**import/export GSD DTM Library** between Control Expert Projects

Requires Control Expert V14.1 and PRM Gateway DTM: V1.3.2.0 minimum
https://www.se.com/fr/fr/download/document/PRM-Gateway-DTM_V1_3_2_0/
Migration to M580: keep some Quantum values and habits

SRAM is available on all M580 CPUs
Allowing mapping of new DDDT to original SRAM addresses (e.g.: to keep a legacy SCADA system…) and use of SRAM Viewer
And M580 SRAM limits are extended, for easy migration of large Quantum projects

LL984 display is enhanced to display 16 bits data in 32 bits format

AKF library supported on M580
Flexibility in design

New SET_VAL function block
Set dynamically the value of any variable within the program

Init values on private DFB variables
Init values can now be set on private variables of DFB instances and types.
Misc. improvements

Save Data **from M340 and Premium** and restore **to M580**

**Support x80 range**
- Support new OPC UA **BMENUA0100** module
- RTU x80 IEC60870/DNP3 module **BMENOR0200** (*)
- Support new version of firmware for X80 ERT Time Stamping Module – Time synchronized from CPU (in catalog: **BMXERT1604.2**)

Predictive Power Supply Maintenance library (**PWS_DIAG, PWS_CMD**) is now integrated in Control Expert library, with updated documentation.

(*) will require additional Hot Fix
Companion Tools

Unity Loader V14 SP1 is available Q4 2019

Unity DIF V14 is available Q4 2019
  – compatibility with Control Expert V14.0 and 14.1 projects
  – comparison of projects with Program Units
  – improved pdf report