What’s New RobotStudio® 5.13

New Functionality RobotStudio 5.13

Smart Components
Smart Components offers a new way of creating simulations by adding behavior to the simulated objects. It brings life to the graphical component libraries by the addition of so-called Base Smart Components for basic motion, signal logic, arithmetic, parametric modeling, sensors etc, etc. Moreover, Smart Component authoring can be separated from its use in a simulation. The internal logic of the user-created, composite Smart Component is hidden to the component user that only needs to know how to connect it to other high-level Smart Components of the simulation. This allows Smart Components for common equipment to be re-used over and over again, thus saving valuable time.

The Base Smart Components available in RobotStudio 5.13 will cover the most cases, which removes the need for customization in e.g. Visual Studio Tools for Applications (VSTA). Advanced users still have the possibility to develop their own customized smart components using Microsoft Visual Studio C# or any other programming language that supports Microsoft .NET Framework.

Smart Components is a replacement to the Event Manager. Instead of adding the simulation logic to the centralized Event Manager, the logic is distributed to the simulation objects themselves. However, the Event Manager will still be available for backwards compatibility.
Document Manager

The Document Manager allows you to search and browse RobotStudio documents like libraries, geometries and so on in large numbers and from different locations. Commonly used folders can be added to a gallery such as the standard gallery for ABB Library components. Two modes are supported: Searching and Browsing.

ScreenMaker

ScreenMaker is fully integrated with RobotStudio and need no longer be installed as a separate product. It allows easy creation of FlexPendant operator panels.
**Developer Tools**

PC-SDK and FlexPendant SDK are now integrated in the RobotStudio installer and can be installed with the Complete or Custom installation option.

**Targets on Edge**

Support for target creation using geometry.

**Start and Stop of Tasks in Offline browser**

Tasks (both motion tasks and background tasks) can be selectively started and stopped from the Offline browser.
Improved support for task frame alignment

It is easier to define and modify the task frame in RobotStudio 5.13. By default, the task frame is aligned with the robot base frame in ‘System From Layout’. This corresponds to setting the base frame translation and rotation equal to zero in the Motion Configuration database of the controller (MOC.CFG).

When moving the task frame, the user gets the options to move or keep the base frame location. Correspondingly, when adjusting the base frame using the Set Position tool, the user gets the option to adjust the task frame.

Place by Two Frames

New place option

Support for LOCAL procedures in RAPID

RobotStudio now supports RAPID procedures declared as LOCAL.
Mirror function

Geometric entities such as parts, bodies, and curves can now be mirrored around its local origin.