Differentiated Value Proposition
RobotWare 6

RobotWare raises the bar in robot control by improving flexibility while maintaining its world-class performance. It’s open and future-proof design improves productivity and enables new application functionality in a feature rich and familiar environment.

- Open controller architecture
- Smartphone simplicity
- All features from RW5 and a lot more…
RobotWare
Overview

Software for ABB embedded industrial robot controllers

Features
- State-of-the-art motion control
- State-of-the-art I/O system
- Modular programming language
- Advanced networking & connectivity
- Large selection of HMI devices
- PC based configuration tools (RobotStudio®)

Architecture
- Modularized design
- Fully parameterized configuration
- Scriptable behavior
- Advanced Simulation support
Features
User-interface going forward

- Standard tablets for commissioning
- Motion sensing jogging device
- ABB CP 600 operator panels

Benefits
- Intuitive and standardized tools
- Improved and enhanced functionality
- Based on commercially available hardware and software standards
Features
New look and feel

- Simple outlined icons that are clean and easily understood.
- RobotWare, RobotStudio and RobotStudio Online in harmony, looks like a family
Features
Robot web services

- Programming interface based on HTML5 which allows connect from any device, regardless of operating system
- Enables application developers to easily create custom applications interacting with IRC5
- No client side installation necessary, run from any web-browser
- Free of charge, no option needed
Features
Installation Manager

- Makes software installation and the addition of new options hassle free and easy.
- Designed to vastly improve robot set up time and system reconfiguration thanks to a flexible licensing mechanism.
- New intuitive user interface.
- RobotWare and additional software (RW Add-in) can be installed and updated independently.
Features
RobotWare add-ins

- RobotWare Add-ins is installable additional software packages that extends the capabilities of RobotWare.
- RobotWare add-ins is the recommended way for 3rd party developers to add new features to RobotWare.

Benefits

- Version handling of the add-in packages.
- Easy upgrade of the software on the controller without complete re-installation of the system.
- Digital signing and pre-packaging to deliver a tamper proof distribution of the add-in.
- Improved license management.
- Possibility to specify dependencies between options in an add-in and between products, for instance, between an add-in and options in RobotWare.
Improved productivity
Faster

- The restart time will be significantly improved
- The jogging will be made more responsive*
- The installation time will be shortened

*beta version RW6.0; complete RW6.01
Improved productivity
Improved process modes

- Optimize robot behavior based on application needs.
- Select motion process mode
  - Optimal cycle time (default)
  - High accuracy
  - Stiff mode
  - Candidate: Energy mode, future release
- Two versions
  - Static, mode change requires restart (free)
  - Dynamic, run-time mode change from RAPID (option 602-1)
Improved productivity
Singularity avoidance

- When an 6 axis robot is used as palletizer robot motion can be disturbed by singularities
- Singularity occurs when axis 5 is at 0 degrees
- RW6 will enable wrist singularity avoidance
- It will be possible to turn the movement mode on and off from Rapid.
Improved productivity
SaveMove Visualizer

- SafeMove Visualizer shows graphical representations of SafeMove configurations.
- The application perfectly illustrates safety zones for fast and precise analysis of a zone or axis violation.
- The SafeMove visualizer will be included in SafeMove option of RobotWare 6
More robust
Motion error handler

- Sensor (vision) generated robot paths have become common
- These paths can not be verified and can cause production stops
- RW6 provide the possibility to recover from motion errors
  - Collisions
  - Out of reach
Many robot applications rely on sensors.

EGM enables external sensors/computers to control the robot motion.

EGM provides ways to input absolute positions or even modify the path.

Path can be updated every 4 ms with a controller lag of 8 to 20 ms.
RobotWare 6
Upgrade and compatibility

- RobotWare 6.0 requires the new main computer
- RAPID fully compatible except Spot configuration
- Limited CFG changes (mostly fieldbus related)
- License concept different
- All RW5 options are supported in RW6

- Automatic tool for upgrade from RW5.15 to RW5.60 is available
- Automatic tool for upgrade from RW5.60 to RW6.0 will be available
RobotWare 6 Training

- RobotWare 6 is a natural upgrade from RobotWare 5, all users will feel familiar.
- The existing IRC5 and RobotWare trainings are still fully relevant.
- New e-learnings will be offered for:
  - Installation manager and RobotWare Add-ins
  - Externally Guided Motion
RobotWare
Summary

- RobotWare 6 improves productivity in a feature rich and familiar environment
  - New user interface concepts
  - Motion error handler
  - Singularity avoidance
  - SafeMove visualizer
- Improves flexibility while maintaining its world-class performance
  - Faster
  - Installation manager
  - Motion process modes
- The biggest release of RobotWare for developers since the introduction of IRC5
  - Robot Web Services
  - External guided motion