WebWare™ SDK
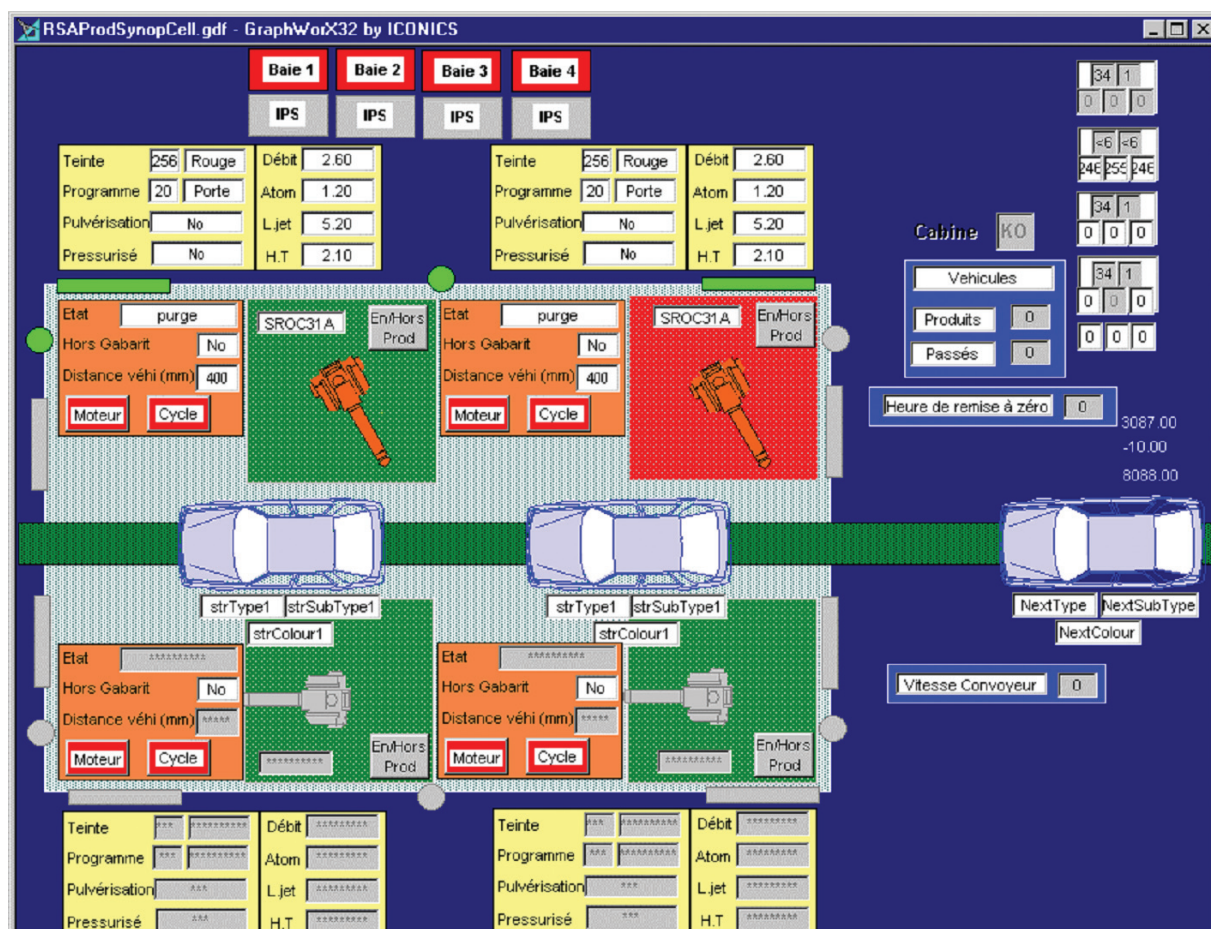
Industrial Software Products

Custom Human Mashine Interface created with WebWare SDK.

WebWare SDK is used to develop custom PC applications that interact with ABB robots. With WebWare SDK you don't need to understand all the details of robot communication and networking protocols. Instead, you can focus your effort where it is most needed, understanding the needs of the user and designing an application to meet those needs.

Process Control

WebWare SDK is used, in combination with third-party tools, to create plant floor operator stations. In addition to providing an operator interface, factory floor applications often implement high-level decision logic for the production process. For example, a PC application may be used to integrate robots, PLC, vision system, input from bar code scanners, and other equipment into a cell control application. WebWare SDK provides the tools needed to integrate robots into such an application.

WebWare SDK is used in plant floor applications including:

• Transferring program between the PC and robot

• Reading and writing robot I/O and RAPID variables

• Starting and stopping robot execution

• Receiving messages and events from the robot

• Reading current robot position

ABB

WebWare™ SDK

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ActiveX Controls

WebWare SDK includes a collection of ActiveX controls for quickly constructing PC operator stations. Both visual and non-visual controls are included, providing users with powerful pro- grammatic control and visual components linked directly to robot data. ActiveX controls are gener- ally the preferred method of integrating robot data into PC applications developed with Microsoft Visual Studio.
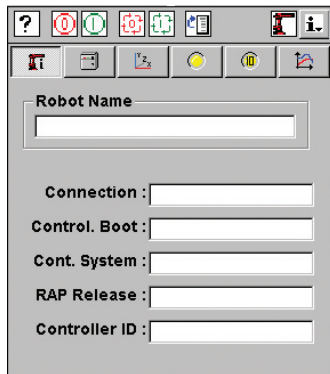
Use WebWare's ActiveX Controls with Microsoft Visual Studio to quickly and easily add functionality to custom applications.

OPC Server

OPC (OLE for Process Control) is a standard protocol used for data acquisition and alarm han- dling. Using the OPC Server, developers can inte- grate data from ABB robots into most third-party SCADA environments. Common SCADA toolkits include products from Wonderware, Rockwell Automation, Iconics, Ci Technologies, National Instruments, and several others.
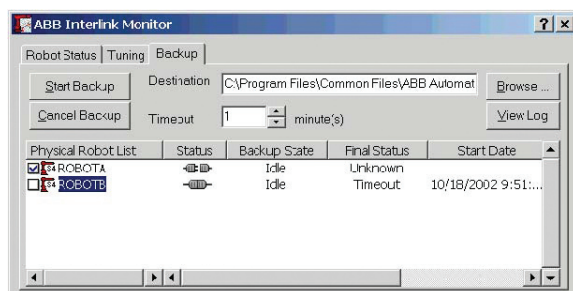
It's simple and easy to integrate data from ABB robots infto SCADA applications with the OPC Server.

ABB Virtual Controller

Use WebWare SDK in combination with ABB VirtualRobot Technology to support offline HMI development and debugging. Rather than using a real robot for application testing, developers can test their PC application at their desk, using the Virtual Controller to execute their robot program with simulated I/O.
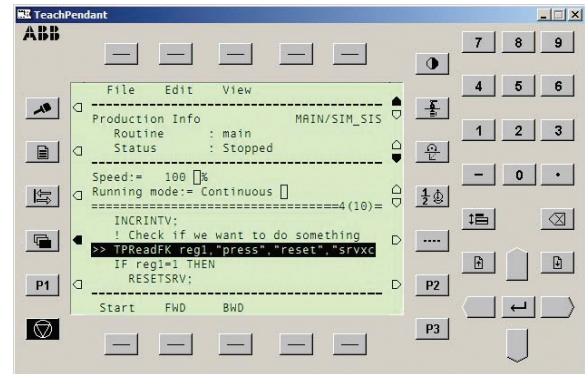
No need for a real robot - use the VirtualRobot to test and debug custom applications at your desktop.

Development Environments

WebWare SDK is used in conjunction with third- party software development tools and supports Microsoft component object standards. Typical application development environments include Microsoft Visual Studio as well as many SCADA toolkits.

Connecting to WebWare Server

PC applications developed with WebWare SDK can work in conjunction with WebWare Server by feeding data directly to the server database. You can programmatically create custom database tables and populate those tables with applica- tion data. These data are then available for use in online charts and tables.

PC REQUIREMENTS
Pentium processor (500 mhz minimum)
128 Mb RAM memory
2 GB of hard disk space
Network interface card (Ethernet)
Microsoft Visual Basic
Microsoft Windows 2000, or Windows XP

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