RSLOGIX™ 5000

Enterprise Series Programming Software

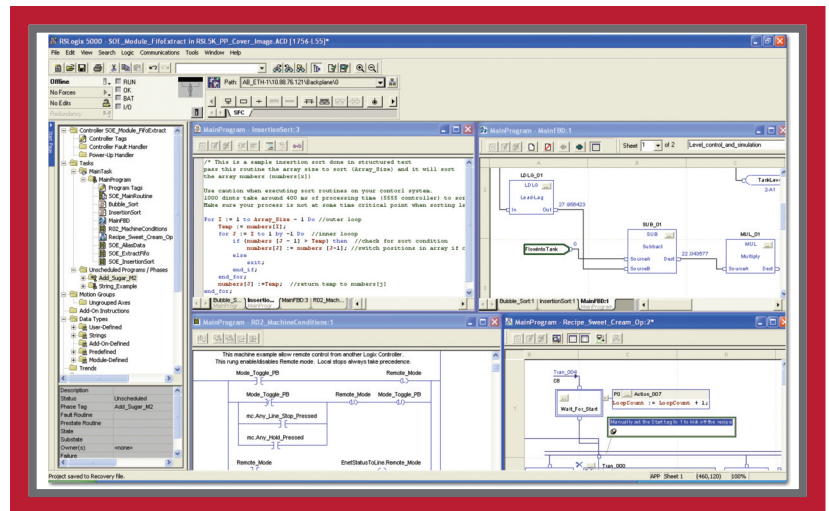
RSLogix 5000

With RSLogix 5000 Enterprise Series programming software, you need only one software package for sequential, safety, process, drive, and motion control programming. This environment is common to the Allen-Bradley® Logix™5000 platforms: ControlLogix®, GuardLogix®, CompactLogix™, and SoftLogix™5800, as well as PowerFlex® 700S with DriveLogix™.

Version 17 Highlights

- Runtime Partial Import of Routines, Phases, Programs, and New Add-on Instructions.

- Advanced Process Control Function Block Instructions.

- Multi-Lingual project documentation with language switching.

- Full Project XML (L5X) Import/Export

- Hardware support for 1756-L65, 1769-L23 family of packaged controllers, Stratix Industrial Switches.

- Controller online change logging.

- Multi-Axis Programmable Jerk Motion Control.

- RSLogix Architect Library Management.

- Clock Synchronization via CIP Sync.

- Adding PowerFlex 4 & 7 drives online on EtherNet/IP™ and ControlNet.

- GuardLogix SIL 3 Instructions Extensions.

- Controller Organizer Report.

- FactoryTalk AssetCentre Archive Check-in/Check-out.

RSLogix 5000 Enterprise Series software is available in Chinese, English, French, German, Italian, Japanese, Korean, Portuguese, and Spanish. Translations include online help, software menus, and dialog boxes. The Instructions' on-line help and the release notes are limited to English.

Enhance Your Productivity

Whether you are a controls, service or maintenance engineer you know that productivity is an important key to your company's success, as well as your own. To help you be successful, we have designed RSLogix 5000 from the ground up to enhance your productivity regardless of job type, industry and company location.

RSLogix 5000 is a design and configuration tool that:

- Can be used for discrete, process, batch, motion, safety and drive based applications.

- Supports the scalable family of Logix Programmable Automation Controllers (PACs).

- Allows you to segment your application into smaller reusable programs, routines and instructions that can be created using different programming languages: ladder diagram, function block diagram, structured text and sequential function chart.

- Includes an extensive set of built-in instructions that you can augment by creating your own user defined Add-On Instructions.

- Eliminates physical memory addresses, improving code readability and simplifying code documentation through tag-based programming.

- Allows modifications and upgrades to be made at runtime without stopping the application.

- Promotes code reuse and standardization by offering user-defined, add-on instructions for creation of custom instructions and libraries.

- Provides you with the ability to create user defined data types to easily represent specific components of your application in one structure.

- Shares data with other Rockwell Automation software products to reduce data entry time, provide auditing and make code re-use and handling easier.

ALLEN-BRADLEY • ROCKWELL SOFTWARE

Rockwell Automation

- Makes documenting code simpler and quicker.

- Is easy to learn because of extensive tutorials and comprehensive on-line help.

- Allows you to import/export the entire project or sections of code for editing with third party tools and for easy sharing with others.

- Allows for different levels of security and intellectual property protection.

- Allows for easy debugging and application maintenance with I/O forcing, run time editing, runtime addition of select I/O modules, and trending.

- Simplifies maintenance because you can always obtain the original source in the programming languages it was written directly from the controller.

- Simplifies access to I/O module configuration via easy-to-use dialogs and predefined data structures.

- Allows for manual and automatic firmware updates of modules.

- Offers runtime partial import of programs, routines and add-on instructions (AOIs), which allows sweeping control strategy changes without effecting production.

Intuitive Programming Environment

The software displays the IEC 61131-3 compliant, multi-tasking operating system of a Logix controller as a graphical tree with tasks, programs, and routines. Multi-user access to the PAC with automatic change propagation permits simultaneous work on a controller and reduces system startup time and cost

Drag-and-drop instructions, logic, routines, programs, and tasks either within a single project or between RSLogix 5000 projects to create project libraries. You can also re-use program elements from the RSLogix 5 and RSLogix 500 software products.

One controller project can include multiple routines using these languages:

Use this editor:	To:
Relay ladder	• develop traditional PLC applications • manage motion and servo control needs • perform messaging and serial communications
Function block diagram	• create flow representations of your application • use specialized process and drive control blocks built into the environment • develop process and drive control strategies
Structured text	• use a textual-based language to program complex mathematical operations • take advantage of the same functions and instructions offered in relay ladder and function block diagram
Sequential function chart	• use a highly-visual language to manage program and routine execution • sequence machine states • more easily program machines with repetitive operations
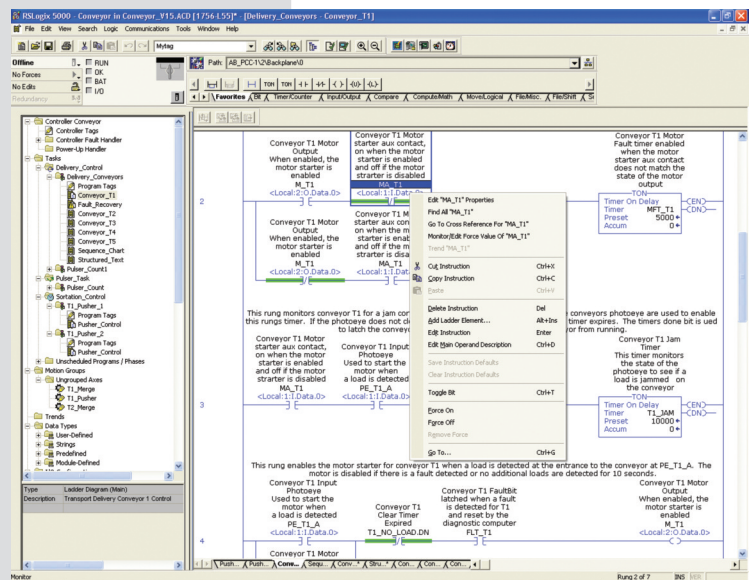
Reduce Documentation Development Time

The software automatically searches for tag descriptions if they are not provided. An alias tag, array tag, or custom data type leverages the descriptions from its base tag or the data type. With custom data types, the software concatenates the tag's root description with the datatype's member description. This creates a very specific description, saves you development time, and improves the resulting documentation.

The add-on instruction editor automatically generates on-line help for every instruction by leveraging information that is entered in the instruction's definition, its parameters and its configuration. This, in conjunction with being able to import/export user defined Add-On Instructions to an XML file, allows you to distribute self-contained and documented instructions.

Robust, Specialized Instruction Set

In addition to standard instructions, the software includes:

- industry-specific instructions for process, batch, drive, SIL3 safety and motion applications.

- ASCII instructions to manipulate string data.

- message instructions to send and receive data across different devices.

- sequential function chart components to structure your application.

- basic mathematical and trigonometric functions.

- table manipulation including FIFO, LIFO, File math, search and sort.

- integrated alarming.

RSLogix 5000 also allows you to create your own custom instruction blocks.

3
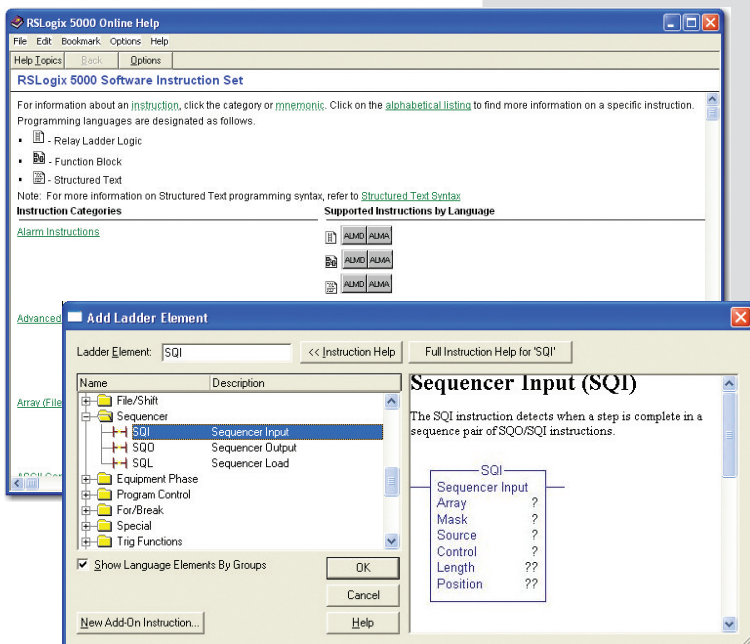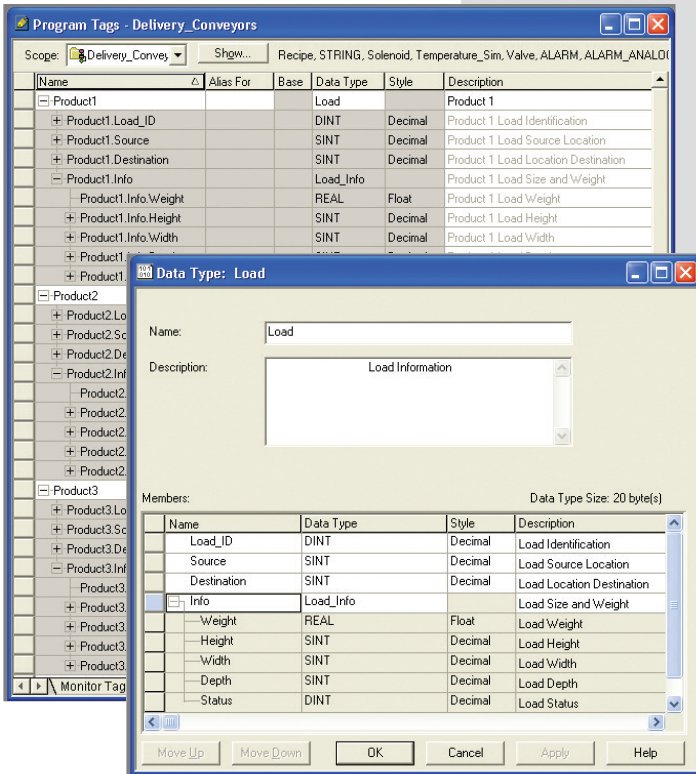
Powerful Data Editor

Programs created by the software use IEC 61131-3 compliant, symbolic data addressing. You can create a tag by simply assigning a name and defining the data type. This improves code readability, simplifies code documentation, and eliminates physical memory addresses. Each tag is stored individually in the controller, so you can create new tags while online with a controller in Run mode.

You can create:

- tags that are either accessible by a single program or accessible by all the programs within the controller.

- customized data types by combining multiple data elements into a structure.

- tables of information using arrays of any data type or data structure.

The tags that you create in your RSLogix 5000 project can be accessed and made available to other software either online in the controller or offline in the project file.

Highly-Integrated Motion Capabilities

RSLogix 5000 software provides native, highly integrated motion control that can be utilized with ControlLogix and CompactLogix controllers.

An extensive set of built-in, ready-to-use motion instructions allows you to configure, program and monitor your control system. These instructions, including multi-axis linear and circular interpolation and Kinematics robot transformations, allow for a wide range of motion applications to be easily addressed.

The easy-to-use motion configuration wizard leads you through configuring the parameters of a motion axis, allowing you to quickly create and monitor dynamically complex motion profiles and CAMs using the graphical motion profile editor built into RSLogix 5000. While online, you can also use the built-in marker test, direction test, and auto-tune features to reduce axis setup time.

The latest enhancement to the motion instruction set includes the ability to configure multi-axis programmable jerk for the multi-axis move instructions. This allows users to optimize the need for speed and smoothness by specifying acceleration and deceleration jerk rates on single and multi-axis moves.
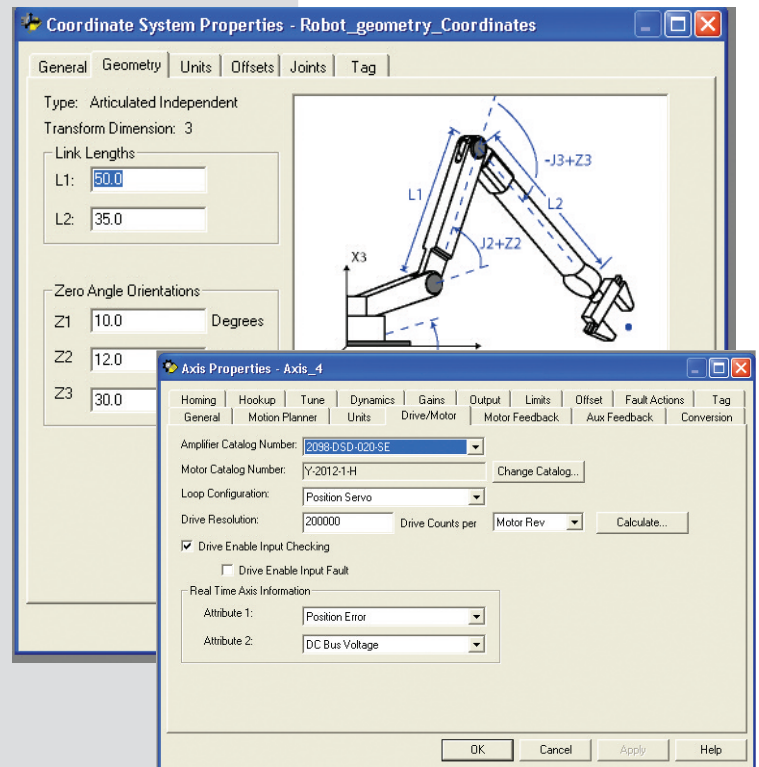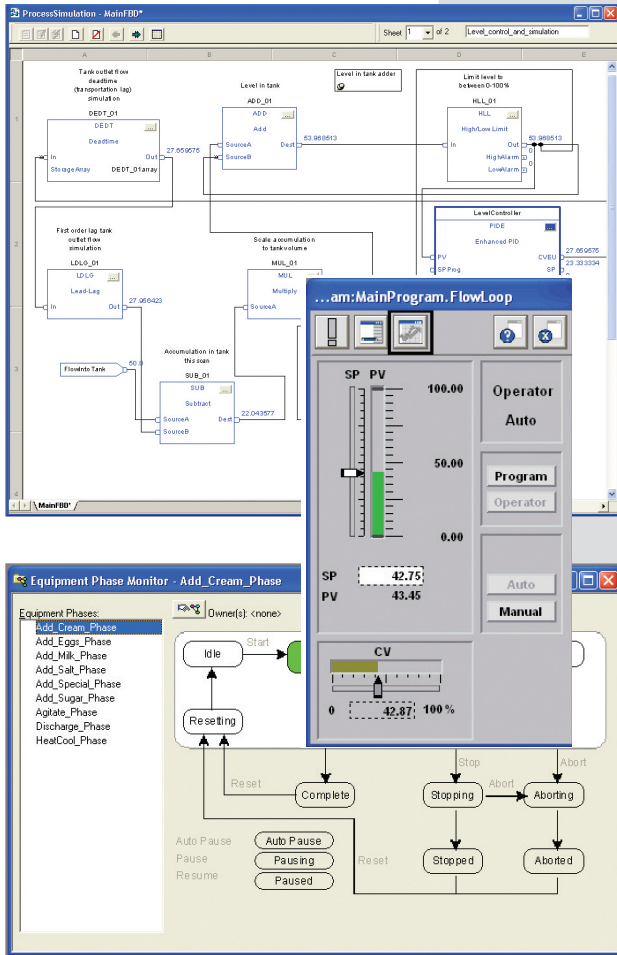
Integrated Process Control

Take advantage of the software to address your batch and continuous process applications:

- An integrated set of process control instructions are available in function block diagram and structured text languages. Embed structured text in sequential function charts to create simple batch procedures.

- The Advanced Process Control (APC) option provides three new instructions that are useful for applications with multiple interacting inputs/outputs or with long deadtimes: Internal Model Control (IMC), Coordinated Control (CC), and Modular Multivariable Control (MMC).

- The PhaseManager option embeds an Equipment Phase state model in RSLogix 5000 software for batch and machine control applications. This encourages modular code design and promotes code re-use because it leverages the ISA S88.01 equipment and recipe models for batch control and the PackML guidelines for machine control. PhaseManager also supports premier integration with FactoryTalk Batch software.

- The PIDE autotuner option simplifies startup by setting gains automatically.

- The standard FactoryTalk View Functional Block faceplates streamline development and maintenance by linking control loops to user interface displays.
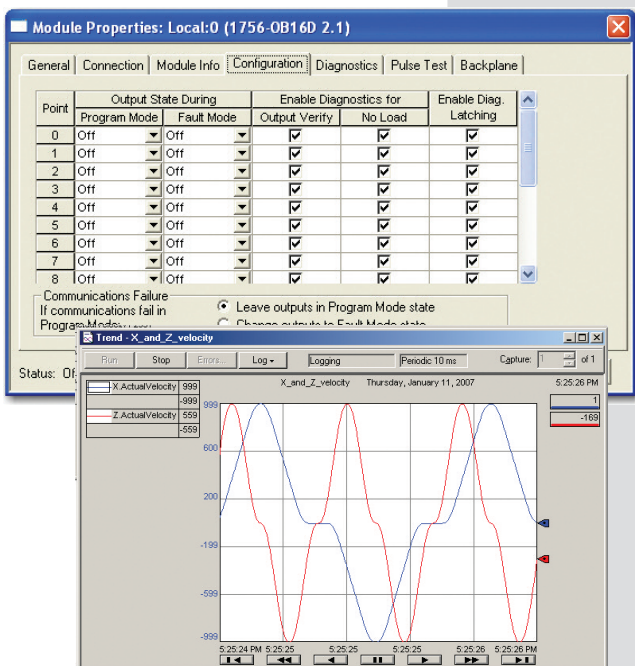
Superior Diagnostic Capabilities

RSLogix 5000 provides easy and unmatched data access to diagnose and troubleshoot devices throughout your control system. Whether controllers, I/O, or field-side devices, RSLogix 5000 makes identifying and analyzing problems in your control system easy and fast, reducing downtime and improving productivity.

RSLogix 5000 supports native, pre-defined I/O module profiles that allow you to configure and diagnose I/O hardware on a per terminal or channel basis.

RSLogix 5000 also uses the RSTrendX component found in other Rockwell Software products, such as FactoryTalk View Enterprise Series software, to provide graphical, real-time data histograms for diagnostic and monitoring functions. Trend as many as eight separate values together as fast as 1msec. Multiple trends can be active simultaneously.

5

Protect Your Control System

RSLogix 5000 provides multiple options to protect your control system and applications with a layered security approach.

With the Logix CPU Security tool, Logix controllers can be locked. When locked, a controller prevents program modifications by preventing RSLogix 5000 software from accessing the controller.

Source protection can be applied to individual routines and user-defined Add-On Instructions for intellectual property protection.

- Source protection is configurable to optionally allow viewing of routines but prevent routine modification.

- Source protected routines and instructions are encrypted so content is not compromised on import and export.

- Source protection is enforced by the software and the controller.

Centrally administered security is supported by using FactoryTalk Security.

- FactoryTalk Security allows you to administer security based on users, groups and controllers.

- More than 50 individual actions can be secured. Examples of securable actions include tag value modification, project uploading and downloading, tag forcing, and program creation.

- FactoryTalk Security Server is included on your RSLogix 5000 CD.
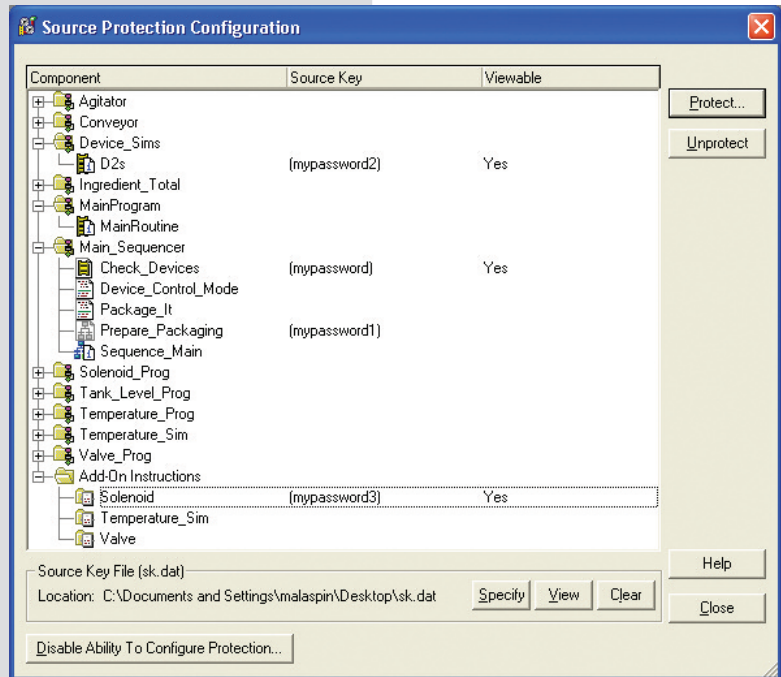
Open Access to Project Contents

You can access various portions of your project by:

- Full Project Import/Export – this ASCII representation of a controller project provides access to create and manipulate the project using other text editors in XML format or RSLogix 5000.

- Partial Import/Export of user defined data types, trends, programs, routines, and phases let you create external libraries of code in XML format that can be imported into RSLogix 5000.

- User documentation in multiple languages.

- Ladder Diagram Rung Partial Import/Export – this XML-based, ASCII file contains user-selected rungs and their rung comments, tags, and data type definitions. This lets you create external libraries of code that can be imported.

- Import/Export user defined Add-On Instructions – XML export and import of add on instructions allows you to easily move your instructions between projects and share them with other users.

- Windows Clipboard – cut/copy/paste code and information between RSLogix 5000 Enterprise Series software and other Windows-based tools.

- Import/Export Tag Definitions – the Comma Separated Value (CSV) export extracts tags for use by third-party tools such as Microsoft Excel.
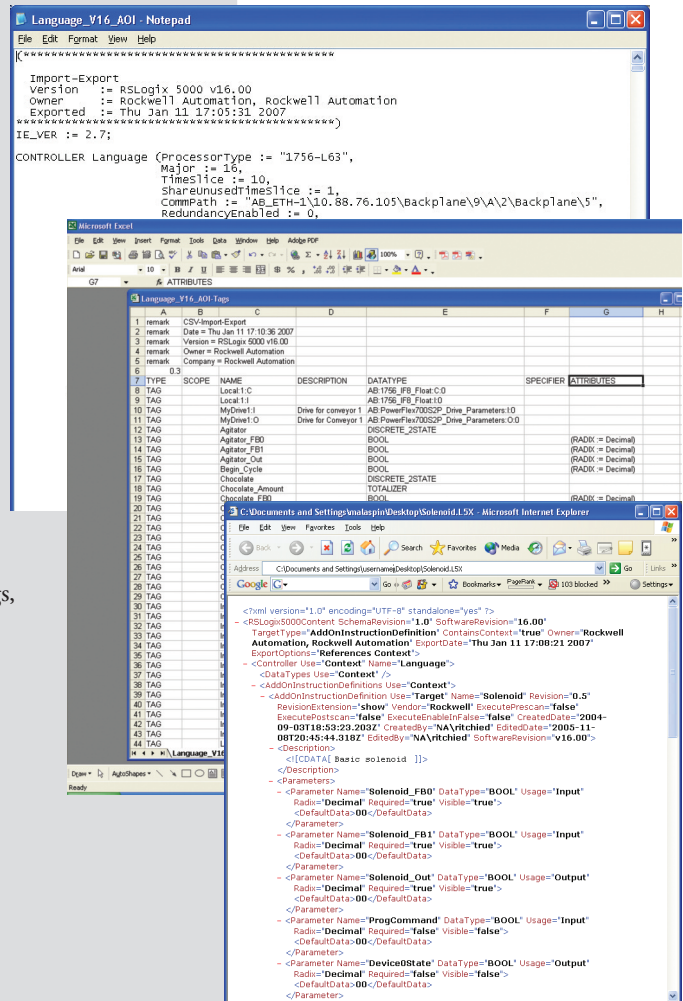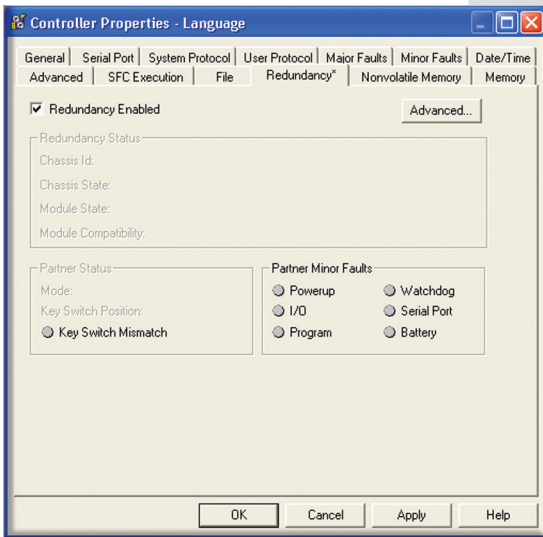
Controller Redundancy Support

ControlLogix Redundancy allows a pair of redundant controllers to work as a unit in which the secondary controller chassis takes control if the primary controller chassis fails. TÜV certified for fault tolerant SIL2 safety applications, ControlLogix redundancy can be applied to any system that requires the highest available uptime.

RSLogix 5000 software:

- Does not require any programming to enable redundancy – simply configure your RSLogix 5000 project for redundancy by just checking a check-box.

- Supports Add-On Instructions which allows you to re-use specific code in the same application or on other projects.

- Supports user-manageable synchronization points to optimize system performance.

- Allows you to easily upgrade redundant controller firmware at runtime without impacting running system.

- Supports up to 2 controllers in the redundant chassis pair.
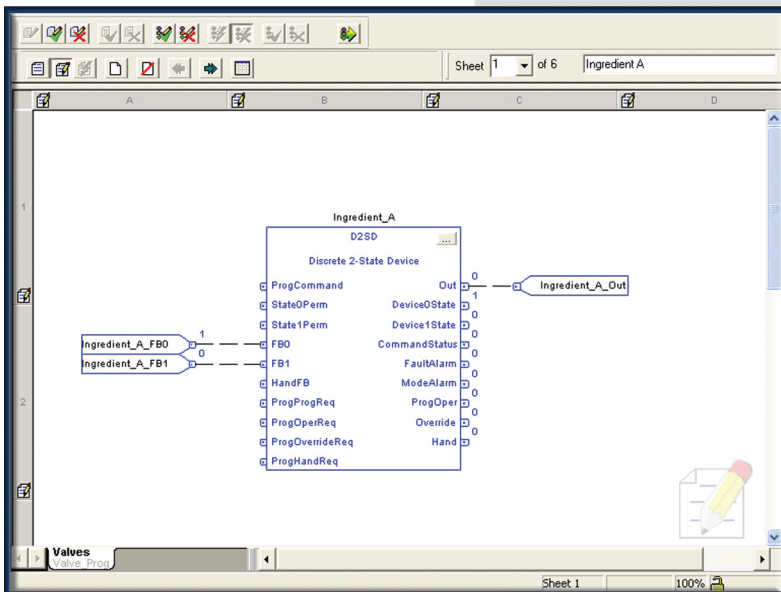
Make Modifications and Upgrades At RunTime

RSLogix 5000 software allows you to:

- Import routines, programs, phases, and new add-on instructions at runtime

- Make sweeping control strategy changes without affecting production.

- Easily make modifications to your application code and I/O configuration at runtime without having to stop your application.

- Edit any routine regardless of programming language at runtime.

- Add 1756 I/O modules at runtime in a local chassis or a remote chassis when using ControlLogix programmable automation controllers.

- Reduce development time and programming errors by not having to reserve and manage the controller memory.

- Add new tags and new user defined data types online.

Easily Configure and Manage I/O Modules

With RSLogix 5000 software, the majority of the I/O modules are easily and quickly configurable via dedicated module profiles. In addition, these profiles allow you easy access to status and diagnostic information. Furthermore, modules status annunciation is represented in the RSLogix 5000 I/O tree.

Integration and documentation of I/O data in your application is very simple because I/O module configuration and status are available as pre-defined, descriptive data structures. Thus, there is no need to search through manuals to find out where the I/O data is mapped in the controller's memory and create and manage symbols for each memory location in the effort to document your code.

A common tag database in the controller allows HMI development to directly reference I/O and controller tags without the need to manage another database in your HMI software.
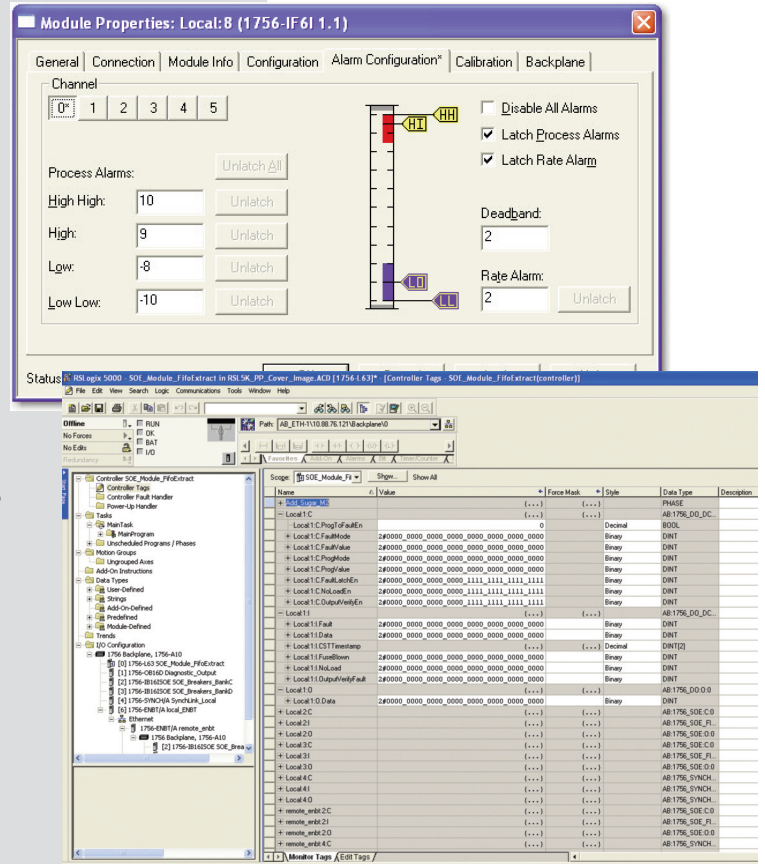
Integrated SIL3 Safety

The GuardLogix option for RSLogix 5000 brings together the benefits of the Logix platform – common programming environment, common networks, and common control engine – with integrated safety control in an easy-to-use environment while providing Safety Integrity Level (SIL) 3 control. The inclusion of the new BG certified metal forming instructions for press control expands the already extensive TUV certified instruction set.

The combination of the GuardLogix hardware and RSLogix 5000 software provides better information sharing, reduced training costs, faster programming and commissioning and offers multi-disciplined control across process, discrete, motion, drive, and safety applications, as well as seamless connectivity to plant-wide information systems.

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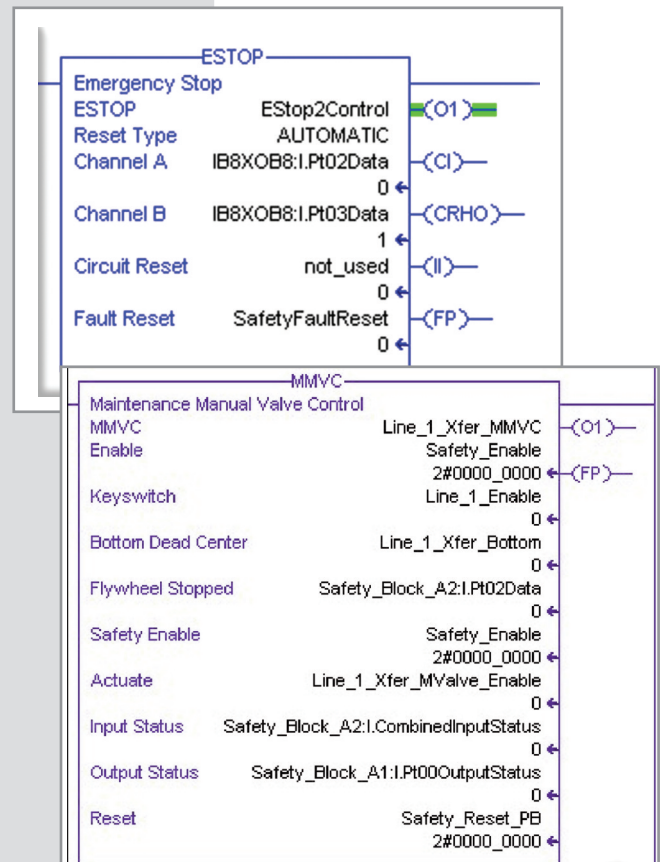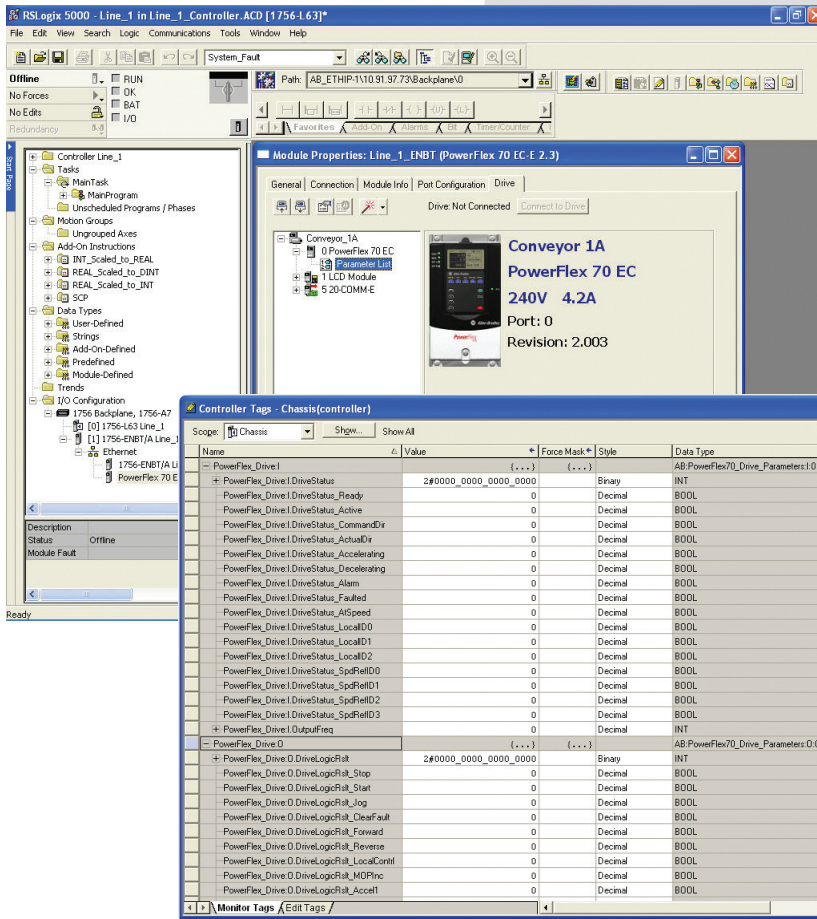
Integrated Drive Configuration

RSLogix 5000 includes full configuration and download support for the Rockwell Automation PowerFlex® family of drives. By integrating this part of the system into a single software package, management of drives in a control system is a whole lot easier because there is only one software package to buy and learn.

Integrated PowerFlex configuration and setup wizards streamline drives installation with EtherNet/IP and ControlNet networks by eliminating the task of individually programming the required drive parameters and tags. You no longer have to complete complicated programming functions when installing drives or constantly refer back to user manuals for specific parameter and tag information.

Easy-to-use tools require no specialized knowledge

- Dynamically select drive parameters transmitted as network I/O.

- Auto-generation of descriptive tag names eliminates the need to enter individual tag descriptions.

- Auto-generation of respective tag data types eliminates the need to convert from one type to another.

- Wizards walk you through drive parameter configuration.

Eliminate errors associated with duplicating drive configurations in multiple software packages.

- Use one software tool to configure your entire Logix/drive system.

- Configuration of both controller and drive network connections from a single location eliminates I/O mismatch errors.

- Online addition of drives on EtherNet/IP and ControlNet allows system expansion without effecting production.

- Diagnostic, fault, alarm, and event information are integral to RSLogix 5000

- Single repository of configuration data speeds drive replacement

- Allows continual use with DriveExplorer and DriveTools SP via import/export function

Access, edit and save drive information to the control system project with ease.

- Drive configuration is saved as part of the RSLogix 5000 project file and also stored in the Logix controller, so there's no need to store and maintain multiple files – you only need one file for both the controller and all drive configurations.

Easy to Maintain

- Diagnostic, fault, alarm, and event information are integral to RSLogix 5000.

- Single repository of configuration data speeds drive replacement.

- Continue to use Drive Explorer and Drive Tools SP to import and export drive configuration files to an from RSLogix 5000.

9

Easily Create Your Own Instructions

By using the extensive RSLogix 5000 software built-in instruction set and other user defined Add-On Instructions you can save engineering time by creating your own re-usable Add-On Instructions. This feature allows you to promote consistency between projects by developing commonly used control algorithms that can be tested once and re-used multiple times.

Use the Relay Ladder Logic, Function Block Diagram and Structured Text editors to create your Add-On Instructions and re-use them in any of the programming languages. Each time you use one of your Add-On Instructions, it is animated using data values from that specific instance making de-bugging significantly simpler.

Prevent change or protect your intellectual property by locking Add-On Instructions (view only or no view) and reduce documentation development time with the automatically generated on-line help for each Add-On Instruction. Furthermore, export/import Add-On Instructions to an XML formatted L5X file for easy sharing and off-line editing.

All RSLogix 5000 Editions, except the Service Edition, allow for the creation and off line editing of Add-On Instructions. An optional programming editor may be required depending on the programming language used to create a particular Add-On Instruction.
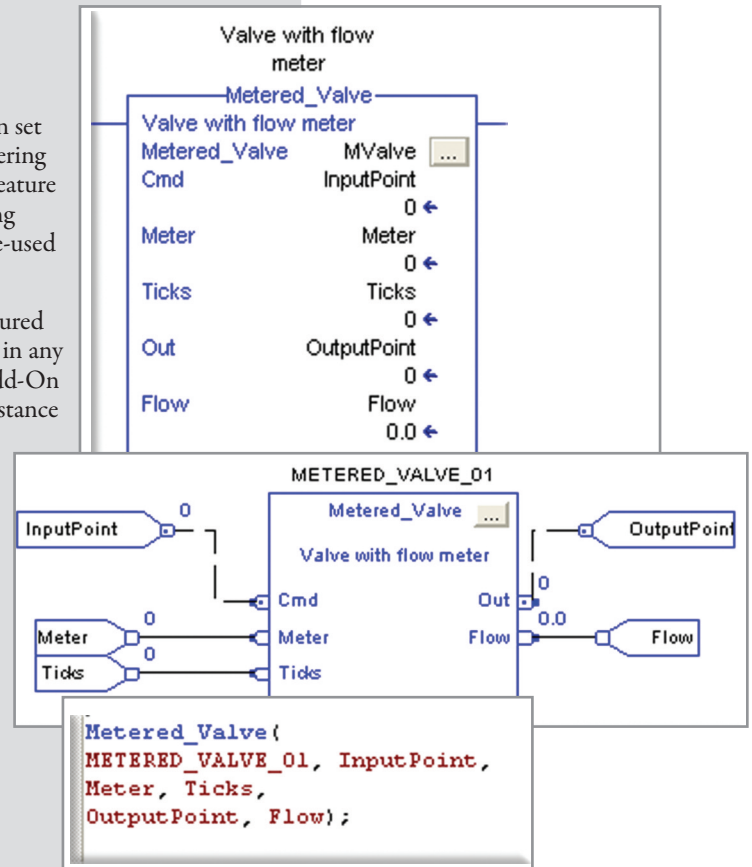
## Integrated FactoryTalk Alarming Reduces Engineering Time

Alarming is embedded in the controller with two instructions available in RSLogix 5000 software, a digital and analog alarm block that are fully self-contained.

The Logix Alarm configuration includes all the information necessary to display alarms in version 5 of FactoryTalk View SE, providing seamless integration with your HMI and reduced HMI development and validation.

A new event based (change-of-state) communications mechanism ensures alarm notifications are broadcast to the HMI only when an alarm state changes. This greatly reduces data polling, freeing up valuable controller resources as well as network bandwidth.

Management of alarm state and timestamps by the controller improves information accuracy and insures consistency of the alarm information delivered to the operator.

The engineering effort to maintain the alarming system is also significantly simpler. Changes made to the alarming system are made in only one place, at the controller, reducing engineering effort and the potential for mistakes.
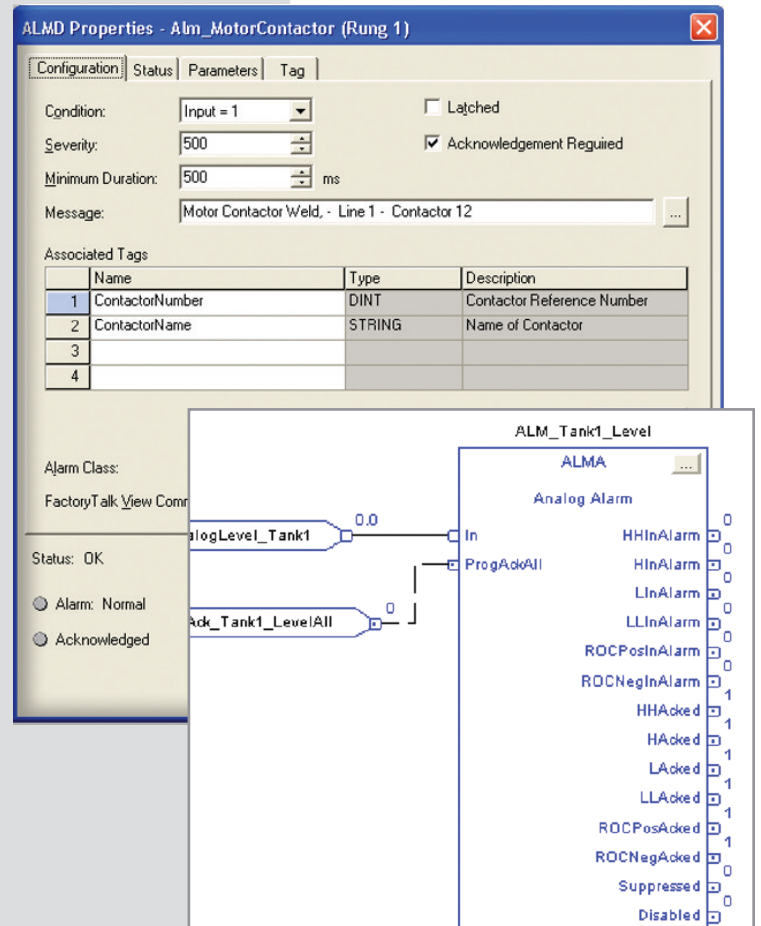
Localized Software for Global Use

RSLogix 5000 software is available in localized versions to address the global needs of your company allowing for reduced training costs and improved productivity.

The user interface, and user documentation is localized. The Instructions' on-line help and the release notes are limited to English.

Available Localized Versions:

- Chinese
- Japanese
- English
- Korean
- French
- Portuguese
- German
- Spanish
- Italian
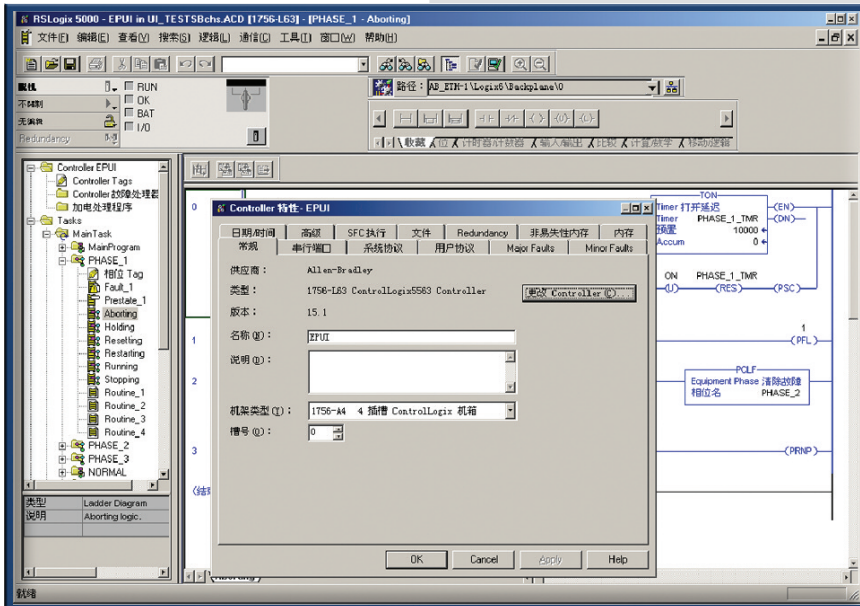
What's New in RSLogix 5000 Version 17

Runtime Partial Import

This software feature allows you to deploy and maintain continuous applications without the risk of downtime. While the system is running, you will be able to add new programs, routines, and add-on instructions as well as replace existing programs and routines. Even sweeping control strategy changes can be implemented without effecting production.

In addition, you can download routines without effecting online data. New tags and UDTs will be automatically created as needed with values initiated from the import file, while data values of existing tags will be maintained. This enhancement allows you to deploy changes or additions to a running system that were developed and tested off-line.
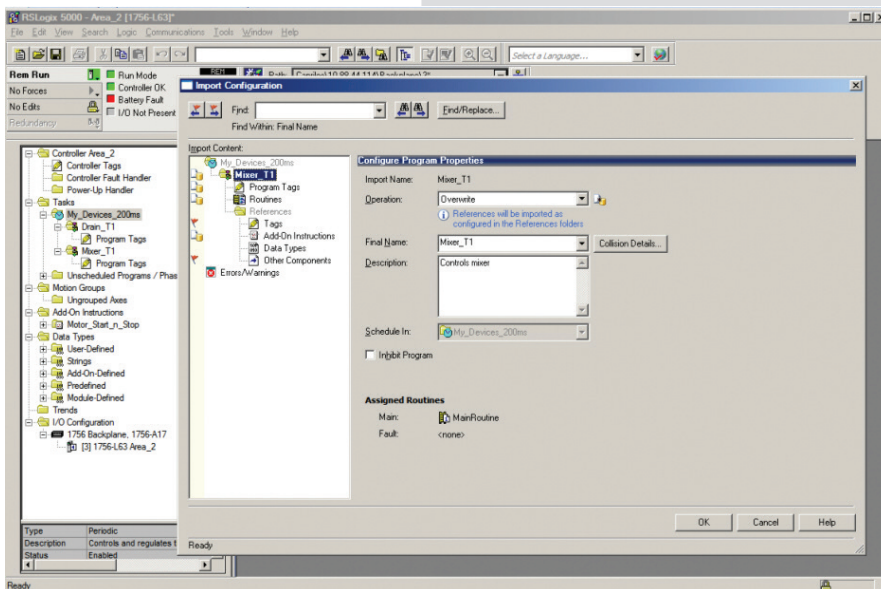
Multi-Lingual Project Documentation with Language Switching

This software enhancement reduces engineering costs by allowing you to globally deploy a single RSLogix 5000 project file that enables you to switch the rung comments, text boxes, and tag descriptions to be viewed in the native language of the user. Viewing the desired language is easy with the new pull-down menu that enables customers to switch the localized user documentation view to their desired language as needed.

You can create and manage multiple sets of localized user documentation (rung comments, tags' descriptions, text boxes, etc.) within a single project. Perform translations manually within RSLogix 5000 or externally via a documentation tab separated value (TXT) import/export file.

RSLogix 5000 software supports both single (European) and double byte (Unicode/Asian) character sets.

Ideal for machine builders and end users with the same applications running at international locations, this feature improves project revisions management and system maintainability because local maintenance personnel will be able to view information needed to troubleshoot code in their desired language.
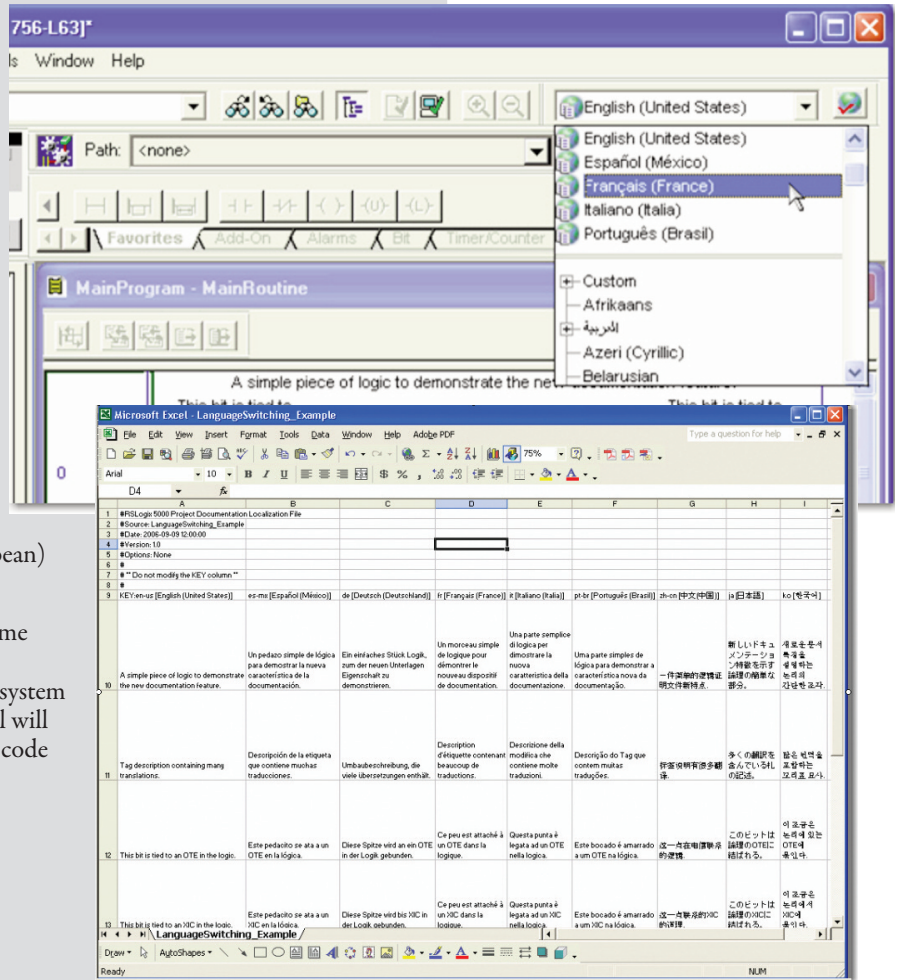
Advanced Process Control

RSLogix 5000 now offers three optional advanced process control (APC) instructions that are useful for applications with multiple interacting inputs/outputs, lengthy dead times and other applications that are difficult to control with traditional PID instructions.

The new advanced process control blocks include: internal model control (IMC), which controls a single process variable by manipulating a single controller output; coordinated control (CC), which manages a single process variable by manipulating as many as three different outputs; and modular multivariable control (MMC), which runs two interacting process variables using up to three outputs. All three instructions have built-in auto-tuners for convenient configuration.

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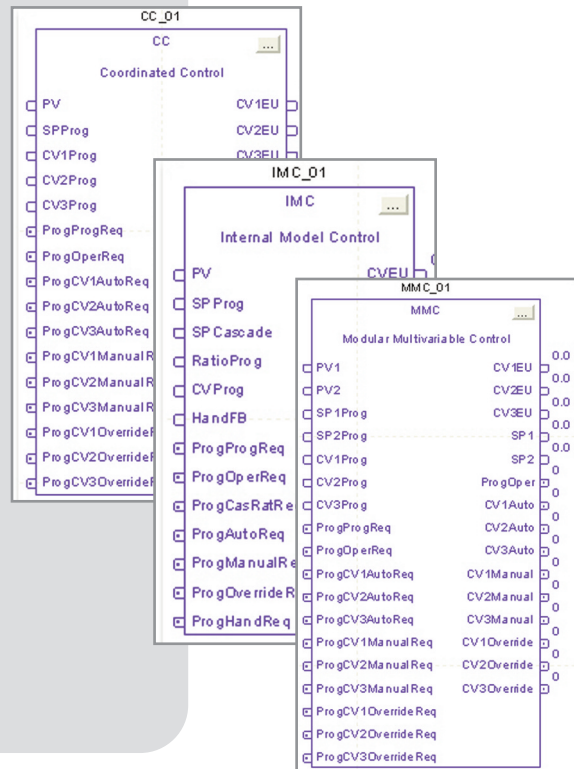
Controller Online Project Change Logging

ControlLogix and GuardLogix controllers can now track online changes via an internal log and change counters and store the changes to the CompactFlash card for later review. With each modification in the controller, a counter increments and a record is created consisting of information such as:

- Time of occurrence
- Entry Description
- Windows User Name
- Workstation (PC) name

Several types of changes are captured in Controller Log including:

- Download (from Programming Terminal or Compact Flash card)
- Store to Compact Flash
- Online Edits occurred
- Forces Enabled / Disabled
- Flash Updates
- Mode Changes (from Programming Terminal or key switch)
- Major Faults Occurred / Cleared
- Controller Properties Changed
- Redundancy Switchover
- User Custom Entry

Project logging provides oversight management and is critical to many FDA regulated applications. RSLogix 5000 makes accessing and analyzing the change log easy as no special tools are required to read the data from the CompactFlash card.

Full Project XML (L5X) Import/Export

Project development is now more productive with the addition of Full Project XML (L5X) Import/Export software feature. This file is similar to the ASCII text L5K file, but uses an XML format. XML is a widely recognized open standard. Entire RSLogix 5000 projects can be built or manipulated in any external XML editing tool such as Word or Excel, imported into RSLogix 5000, then downloaded to the Logix controller.

This productivity enhancing tool is ideal for users who standardize on application logic, but may use different controllers and I/O based on the size of the machine being built. You can take advantage of this tool to import standardized libraries of code, build tools to auto-generate projects, and extract/merge code fragments to build new projects.

13

What's Optional

RSLogix 5000 software provides a great deal of functionality, most of which is included with the Professional Edition. There are other editions with varying functionality that can be extended by selection of separately available options. This allows you to purchase just what is needed.

Function Block Diagram, Structured Text and Sequential Function Chart Programming Editors

RSLogix 5000 software allows you to mix and match IEC61131-3 compliant programming languages on a per routine basis. All supported programming languages share the same development environment, tag database and user interface. This allows for reduced training and more productivity.

The Relay Ladder Logic (RLL) programming language is standard with all Editions of RSLogix 5000 software. The three additional programming editors are:

- Function Block Diagram (9324-FBDENE)
- Structured Text (9324-RLDSTXE)
- Sequential Function Chart (9324-RLDSFCE)

The programming editors can be added as separate options or together (9324-RLDMLPE) to the RSLogix 5000 Mini, Standard, and Standard/NetWorx Editions.

All programming languages are included with the RSLogix 5000 Lite (9324-RLD250xxE), Full (9324-RLD600xxE and 9324-RLD600xxF) and Professional (9324-RLD700NXxxE and 9324-RLD700NXxxF) Editions.
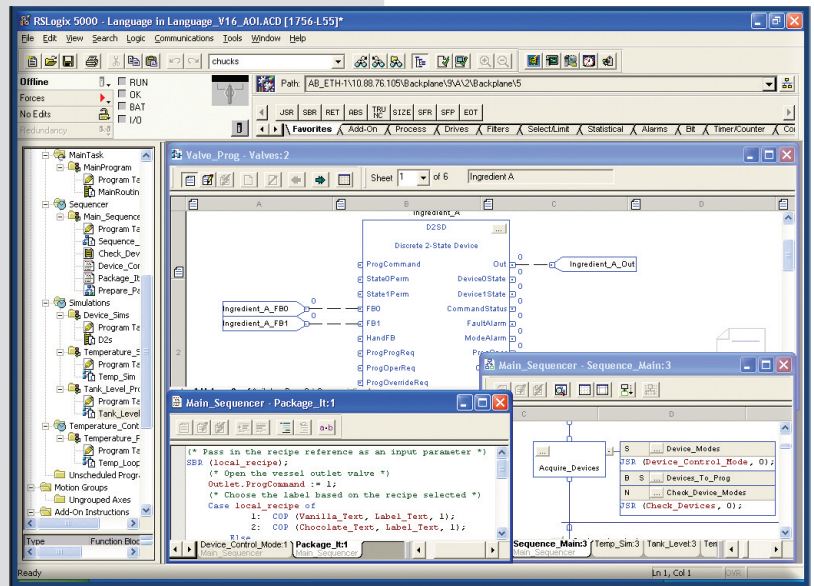
SIL3 Safety Programming Editor

When you use RSLogix 5000 software in conjunction with GuardLogix controllers you can program SIL3 Safety rated applications.

The SIL3 Safety Programming Editor supports a comprehensive set of TÜV and BG certified safety application instructions, including new metal forming instruction for press automation.

The SIL3 Safety Programming Editor is included with the RSLogix 5000 Full (9324-RLD600xxE and 9324-RLD600xxF) and Professional (9324-RLD700NXxxE and 9324-RLD700NXxxF) Editions.

The SIL3 Safety Programming Editor (9324-RLDGLXE) can be added as a separate option to the RSLogix Standard, and Standard/NetWorx Editions.
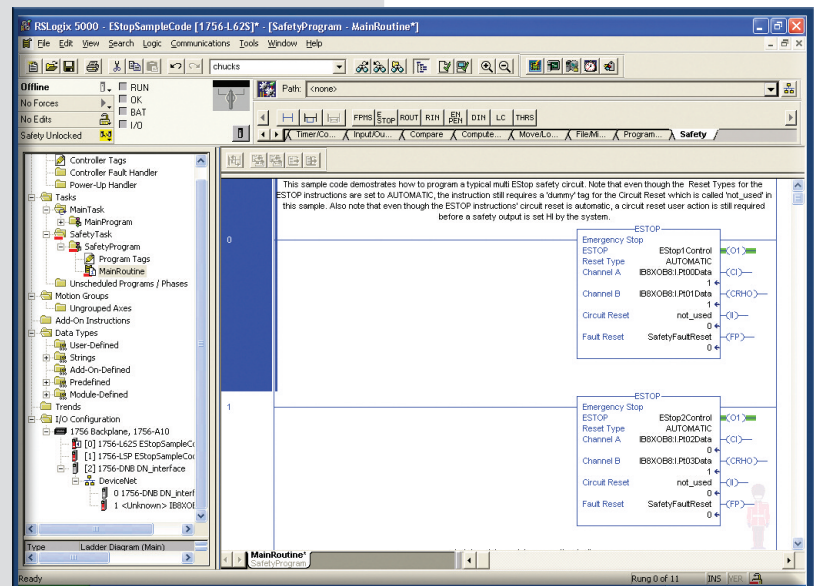
PhaseManager

PhaseManager embeds a state machine model in the Logix controllers. It follows the ISA-88.01 phase state model for batch control and PackML machine control model. It also provides a framework for entering phase state logic. Phase state transitions are managed by the controller and programmatically via dedicated instructions.

Additionally, the PhaseManager is designed to provide tight integration with FactoryTalk Batch software.

PhaseManager is included with the RSLogix 5000 Full (9324-RLD600xxE and 9324-RLD600xxF) and Professional (9324-RLD700NXxxE and 9324-RLD700NXxxF) Editions.

PhaseManager (9324-RLDPME) can be added as a separate option to the RSLogix Mini, Lite, Standard, and Standard/NetWorx Editions.
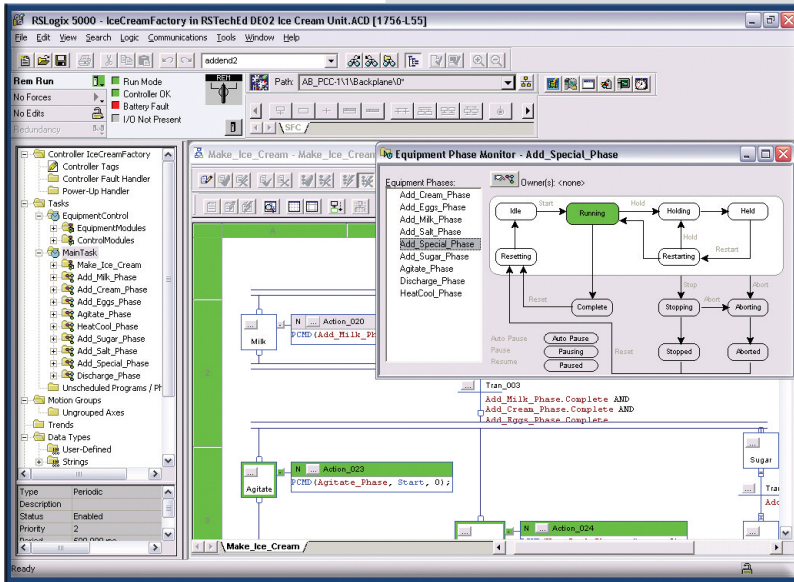
FuzzyDesigner

The FuzzyDesigner Option for RSLogix 5000 allows you to create your own custom fuzzy logic algorithms for use in any of the Logix5000 family of controllers.

FuzzyDesigner provides a feature-rich fuzzy logic design environment which integrates with Logix through the use of the new Add-on Instruction feature. Once you create your custom algorithm, it compiles to an Add-on Instruction which can be imported into your controller projects.

The FuzzyDesigner option can then monitor and tune instances of your instruction running in the controller, making it easier to set up an effective fuzzy logic control scheme.

FuzzyDesigner (9324-RLDFZYENE) can be added as a separate option to the RSLogix Mini, Lite, Standard, Standard/NetWorx, Full and Professional Editions.
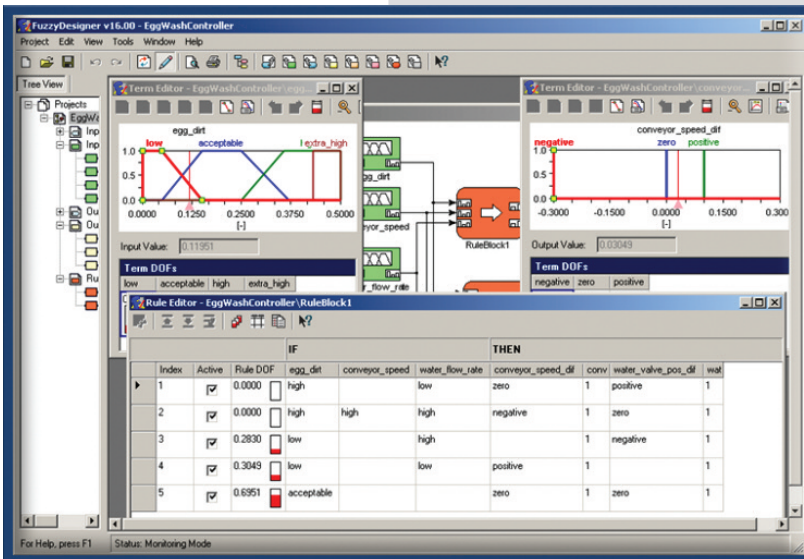
Advanced Process Control

Adding to the Rockwell Automation commitment to provide a complete process solution, RSLogix 5000 now offers three optional advanced process control (APC) instructions that are useful for applications with multiple interacting inputs/outputs or with long deadtimes. All with built-in auto-tuners for convenient configuration, these instructions are the most recent addition to the award winning Rockwell Automation process offering.

The new advanced process control blocks include:

- Internal Model Control (IMC) which controls a single process variable by manipulating a single controller output

- Coordinated Control (CC) which controls a single process variable by manipulating as many as three different outputs.

- Modular Multivariable Control (MMC) which controls two interacting process variables to their setpoints using up to three controller outputs.
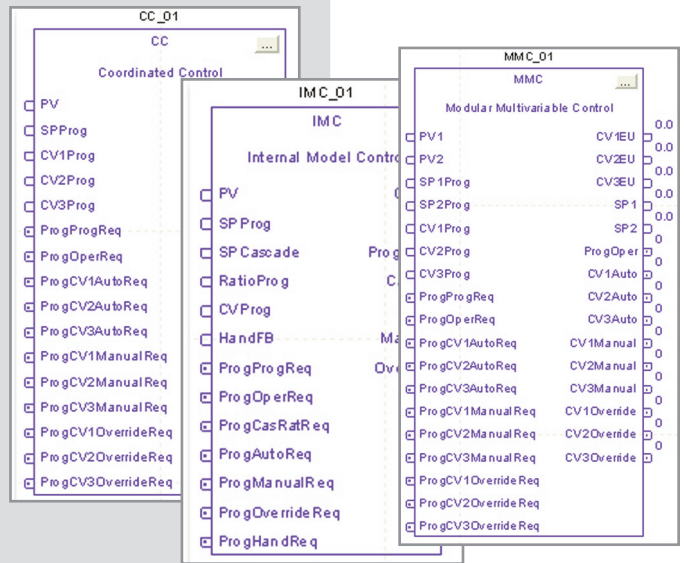
Advanced Process Control Instructions can be added as an RSLogix option:

- 9324-RLDAPCENE provides a license to use instructions in RSLogix 5000 and in a single controller.

- 9324-RLDAPCCLENE provides a license to use instructions in an additional controller (pay to deploy).

RSNetWorx

The RSNetWorx software configures and manages the communications between devices on Rockwell Automation's NetLinx Open Network Architecture: DeviceNet, ControlNet, or EtherNet/IP networks.

A version of RSNetWorx software is available for each of these networks, allowing you to take maximum advantage of the synergy between the networks while also leveraging the unique characteristics of each network.

RSNetWorx for DeviceNet, ControlNet and EtherNet/IP software is included with RSLogix 5000 Standard/ NetWorx (9324-RLD300NXxxE) and Professional (9324-RLD700NXxxE and 9324-RLD700NXxxF) software Editions.

RSNetWorx for DeviceNet (9357-DNETL3), ControlNet (9357-CNETL3) and EtherNet/IP (9357-ENETL3) software can be added individually or together (9357-ANETL3) to the other RSLogix 5000 software packages.
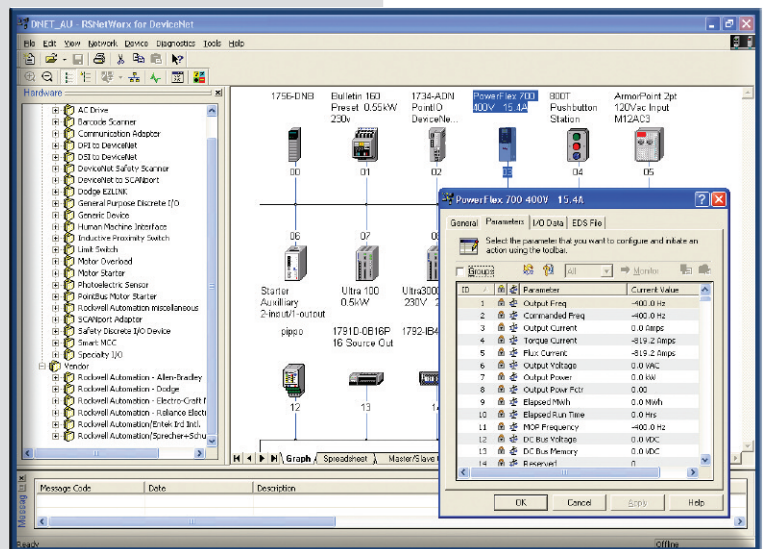
RSLogix Architect

The RSLogix Architect software gives you a single place to manage all Logix5000-based controller configurations, helping you efficiently manage controller configuration files, network configurations and produced and consumed tag relationships. Customers can create pages that represent their entire control architecture including: networks and control hardware such as controllers, I/O, and communication modules.

One of the newest ehancements to RSLogix Architect is a cross-controller search function. You can now search for tags, data types or any other string across all the controller projects within an RSLogix Architect project. Controller project content viewing within RSLogix Architect provides a view similar to the RSLogix 5000 controller organizer, allowing you to create new components and navigate to RSLogix 5000 with direct context.

Library management of RSLogix 5000 add-on instructions and structures allows for centralized storage of user defined add-on instructions and data types.

The enhancement helps customers use instructions and data types in RSLogix 5000 projects, facilitate standardization and simplify reuse to reduce development costs.

RSLogix Architect also supports FTSecurity and also features a redesigned and refined user interface that eliminates the separate configuration mode, enables undo and redo and supports I/O configuration offline.

The RSLogix Architect software is included with RSLogix 5000 Professional (9324-RLD700NXxxE and 9324-RLD700NXxxF) Edition.

RSLogix Architect (9326-LGXARCHENE) software can be added to the other RSLogix 5000 packages.
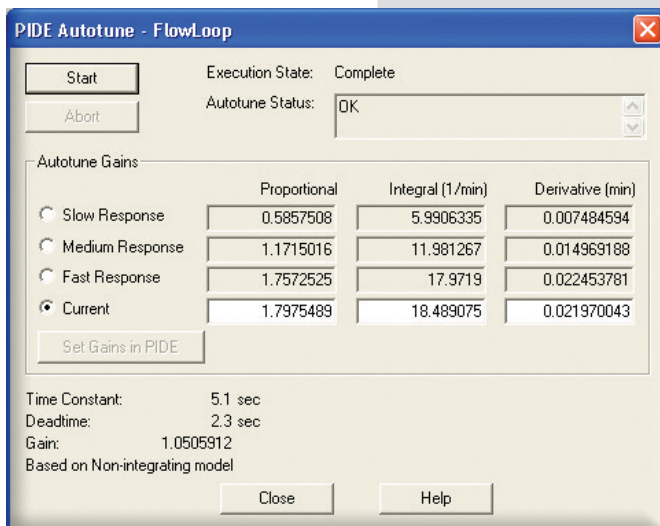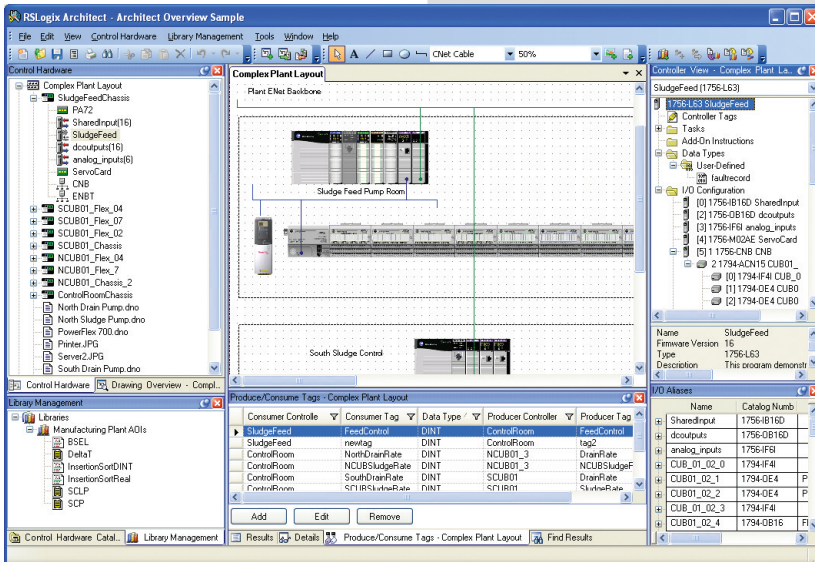
PIDE Autotuner

The PIDE Autotuner feature provides a simple, open loop auto-tuner built into the Enhanced PID (PIDE) instruction. It is used in conjunction with the RSLogix 5000 Function Block Diagram programming editor.

The PIDE Autotuner can be run from RSLogix 5000 software and from the PIDE faceplate in FactoryTalk View.

The PIDE Autotuner software is included with RSLogix 5000 Full (9324-RLD600xxE and 9324-RLD600xxF) and Professional (9324-RLD700NXxxE and 9324-RLD700NXxxF) Editions.

The PIDE Autotuner (9323-ATUNEENE) can be added as an option to the other RSLogix 5000 packages.

RSLogix Emulate 5000

The RSLogix Emulate 5000 software is a Windows-based desktop engineering tool that is capable of emulating a Logix5000 controller. It can be used in conjunction with RSLogix 5000 software to execute and test your application code without the need to physically connect to the hardware.

By using RSLogix Emulate 5000 software prior to project startup, you can dramatically reduce costly programming errors that would normally be found on the plant floor.

RSLogix Emulate 5000 software allows you to:

- Test your HMI screens.

- Take control of your application's execution speed to better monitor code operation and identify potential timing issues.

- Use the trace point debugging instruction to trace application program tags when certain events occur.

- Use the break point instruction to halt the program execution based on errors or events at predetermined locations to better analyze your process.

RSLogix Emulate 5000 software is included with RSLogix 5000 Professional (9324-RLD700NXxxE and 9324-RLD700NXxxF) Edition.

RSLogix Emulate 5000 (9310-WED200ENE) software can be added as an option to the Standard, Standard/NetWorx, and Full Editions of RSLogix 5000 software.
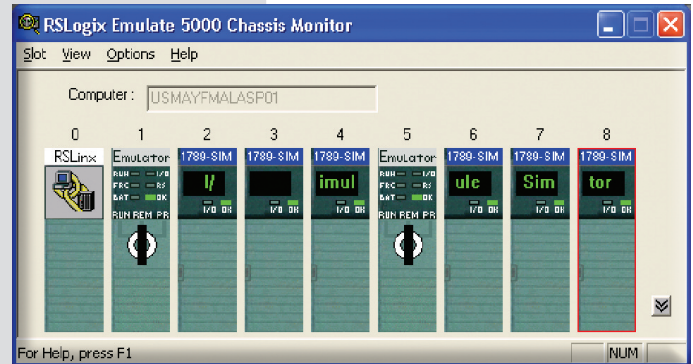
RSFieldbus Configuration Software

RSFieldbus is a full-function graphic configuration environment that includes and OPC HSE server. With this software, you can configure devices offline, without physical instrumentation. Online, you can deploy, monitor, and modify device and control configurations.

As a system tool, RSFieldbus can be used for remote setup, configuration, operation, and maintenance of FOUNDATION Fieldbus devices. It also includes auto detection and tag-based addressing of FOUNDATION Fieldbus devices to simplify development.

Employing the ISA S88 hierarchy and terminology to organize the system devices, RSFieldbus includes configurable templates, a library of pre-configured objects, and control strategies. It also supports user-developed strategies.

RSFieldbus software 9308RSFBxxxENE is available separately.
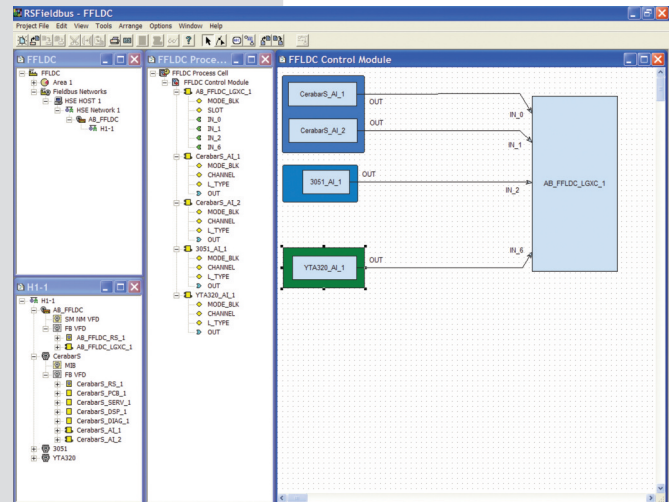
Package Descriptions

RSLogix 5000 Professional Edition

This package is intended for power users that would like a comprehensive set of tools that address all of their application needs at an attractive price. This package supports the entire Logix5000 controller family whether they are standalone or system-connected over EtherNet/IP, ControlNet or DeviceNet. RSLogix 5000 Professional Edition is well suited for design engineers at OEM, system integrators and end-users sites.

Cat#: Node-Locked Activation: 9324-RLD700NXxxE
Concurrent Activation: 9324-RLD700NXxxF

RSLogix 5000 Full Edition

This package is intended for experienced programmers that would like to use all of the programming languages available with RSLogix 5000 at a convenient price. RSLogix 5000 Full Edition supports the entire Logix5000 controller family used in standalone configurations.

Cat#: Node-Locked Activation: 9324-RLD600xxE
Concurrent Activation: 9324-RLD600xxF

RSLogix 5000 Standard/NetWorx Edition

This package is intended for experienced programmers that just need to use the Relay Ladder Diagram (RLL) programming language. This package supports the entire Logix5000 controller family whether they are standalone or system-connected over EtherNet/IP, ControlNet, or DeviceNet.

Cat#: Node-Locked Activation: 9324-RLD300NXxxE
Concurrent Activation: N/A

RSLogix 5000 Standard Edition

This package is intended for experienced programmers that just need to use the Relay Ladder Diagram (RLL) programming language. This package supports the entire Logix5000 controller family used in standalone configurations.

Cat#: Node-Locked Activation: 9324-RLD300xxE
Concurrent Activation: 9324-RLD300xxF

RSLogix 5000 Lite Edition

This package is intended for design engineers that only use the CompactLogix and FlexLogix controllers on standalone applications that would like to use all of the programming languages at a convenient price. Additionally, RSLogix 5000 Lite Edition supports integrated motion programming for the CompactLogix 1768-L4x controllers.

Cat#: Node-Locked Activation: 9324-RLD250xxE
Concurrent Activation: N/A

RSLogix 5000 Mini Edition

This package is intended for design engineers at OEM sites that only use the CompactLogix and FlexLogix controllers on standalone applications and that just need to use the Relay Ladder Diagram (RLL) programming language.

Cat#: Node-Locked Activation: 9324-RLD200xxE
Concurrent Activation: N/A

RSLogix 5000 Service Edition

This package is intended for maintenance personnel at end-users sites that only need to be able to upload/download and monitor Logix5000 controllers based applications. With this package, customers can view and monitor application code written in any programming language but cannot make edits. If needed, the functionality of this package can be further reduced to limit the ability to change data values, block forcing and even inhibit upload/download of applications.

Cat#: Node-Locked Activation: 9324-RLD000xxE

Concurrent Activation: N/A

Node-locked Activation locks the software activation to a single computer for the exclusive use of a single user. Node-locked activation can be either local or mobile.

Concurrent Activation locks the software activation to an activation server computer. The activation server manages a pool of activations and shares them with client computers over a network connection. Client computers must be configured to search for activations on the activation server. An activation file is not required on each client computer. Concurrent activations can be either floating or borrowed.

Select the RSLogix 5000 Enterprise Series Software Package

Available Features	Service Edition 9324-RLD000xxE☛≈	Mini Edition 9324-RLD200xxE☛	Lite Edition 9324-RLD250xxE☛	Standard Edition: Node Locked 9324-RLD300xxE Concurrent License ☉ 9324-RLD300xxF☛	Standard/NetWorx Edition 9324-RLD300NXxxE☛	Full Edition: Node Locked 9324-RLD600xxE Concurrent License ☉ 9324-RLD600xxF☛	Professional Edition: Node Locked 9324-RLD700NXxxE Concurrent License ☉ 9324-RLD700NXxxF☛
Logix5000 controllers supported	All≈	CompactLogix FlexLogix	CompactLogix FlexLogix	All	All	All‡	All
Relay ladder diagram editor§	Upload/download and view	Full support	Full support	Full support	Full support	Full support	Full support
Function block diagram editor 9324-RLDFBDENE§	Upload/download and view	Upload/download Available separately	Full support	Upload/download Available separately	Upload/download Available separately	Full support	Full support
Sequential function chart editor 9324-RLDSFCE§ £	Upload/download and view	Upload/download Available separately	Full support	Upload/download Available separately	Upload/download Available separately	Full support	Full support
Structured text editor 9324-RLDSTXE§	Upload/download and view	Upload/download Available separately	Full support	Upload/download Available separately	Upload/download Available separately	Full support	Full support
PhaseManager 9324-RLDPME	Upload/download and view	Upload/download Available separately	Upload/download Available separately	Upload/download Available separately	Upload/download Available separately	Full support	Full support
GuardLogix Safety 9324-RLDGLXE☉	Upload/download and view	NA	NA	Upload/download Available separately	Upload/download Available separately	Full support	Full support
Highly integrated motion	Upload/download and view	Upload/download	Full support	Full support	Full support	Full support	Full support
Graphical trending	Full support	Full support❖	Full support❖	Full support	Full support	Full support	Full support
DriveExecutive Lite 9303-4DTE01ENE	Available separately	Available separately	Available separately	Included	Included	Included	Included
PIDE autotune 9323-ATUNEENE	Available separately	Available separately	Available separately	Available separately	Available separately	Included	Included
Advanced Process Control instructions - Design license for RSLogix 5000 and runtime license for one controller 9324-RLDAPCENE	Upload/Download and View Only	Available separately	Available separately	Available separately	Available separately	Available separately	Available separately
Advanced Process Control instructions - Runtime license for one controller (pay to deploy) 9324-RLDAPCLENE	Upload/Download and View Only	Available separately	Available separately	Available separately	Available separately	Available separately	Available separately
FactoryTalk AssetCentre audit support	Included	Included	Included	Included	Included	Included	Included
FuzzyDesigner 9324-RLDFZYENE☉	NA	Available separately	Available separately	Available separately	Available separately	Available separately	Available separately
RSLogix Emulate 5000 9310-WED200ENE*	Available separately	NA	NA	Available separately	Available separately	Available separately	Included
Logix CPU security	Included	Included	Included	Included	Included	Included	Included
Routine source protection	Included	Included	Included	Included	Included	Included	Included
FactoryTalk Security Server Support (FactoryTalk AP install required - included on disk)	Included	Included	Included	Included	Included	Included	Included
Security Server Emulator (FactoryTalk AP install required - included on disk)	Included	Included	Included	Included	Included	Included	Included
RSLinx Classic software	Lite included	Lite included	Lite included	Lite included	Lite included	Lite included	Lite included
RSNetWorx for ControlNet software RSNetWorx for DeviceNet software RSNetWorx for EtherNet/IP software❅	Available separately	Available separately	Available separately	Available separately	Included	Available separately	Included
RSLogix Architect 9326-LGXARCHENE❖	Available separately	Available separately	Available separately	Available separately	Available separately	Available separately	Included
RSLogix 5000 project compare	Included	Included	Included	Included	Included	Included	Included
FactoryTalk View SE demo (50 tags/2 hours)	Available separately	Available separately	Available separately	Available separately	Available separately	Available separately	Included
Upgrades	Refer to StepFoward™ Program						

☛Replace *xx* in the catalog number with the appropriate language designation: ZH=Chinese, EN=English, FR=French, DE=German, IT=Italian, JP=Japanese, KO=Korean, PT=Portuguese, and ES=Spanish.
≈Service Edition supports controllers running firmware revision 12 and later.
‡Full Edition supports controllers running firmware revision 10 and later.
§ A multiple language editor package is available as 9324-RLDMLPE. It contains the function block, sequential function chart, and structured text editors at a reduced price.
❅RSNetWorx for ControlNet software is 9357-CNETL3. RSNetWorx for DeviceNet software is 9357-DNETL3. RSNetWorx for EtherNet/IP software is 9357-ENETL3. They are available together as 9357-ANETL3.
⌘The multiple language editor package (9324-RLDMLPE) is not the same as an upgrade, but it extends the programming languages to match those in a Full package.
❖As of RSLogix 5000 programming software, version 15.
☉As of RSLogix 5000 programming software, version 16. Software is designed to grab highest functionality license first I.e.; if Standard, Full and Professional Concurrent licenses are available on the FT Activation server, RSLogix 5000 will grab highest functionality license first.
£The Structured Text editor option is required to program Actions in ST language.
* RSLogix Emulate 5000 does not support Microsoft® Windows Vista at this time.

RSLogix 5000 Enterprise Series software requirements

Description	Value
personal computer	Pentium® II 450 MHz minimum Pentium III 733 MHz (or better) recommended
software requirements	Supported operating systems: RSLogix 5000 v.17 has been tested on the following operating systems: • Microsoft® Windows XP Professional with Service Pack 2 and 3 • Microsoft® Windows Server 2003 R2 Standard Edition with Service Pack 1 and User Account Control (UAC) turned off • Microsoft® Windows 2000 Professional with Service Pack 4 • Microsoft® Windows Vista Home Basic with SPI • Microsoft® Windows Vista Business with SPI RSLogix 5000 is expected to operate correctly on the following operating systems, but has not been tested: • Microsoft® • Microsoft® Windows XP Home • Microsoft® Windows Server 2003 Standard Edition with Service Pack 1 • Microsoft® Windows 2000 Professional with Service Pack 1, 2, or 3 • Microsoft® Windows Vista Ultimate • Microsoft® Windows Vista Home Premium Note: The Chinese, Japanese, and Korean Editions of RSLogix 5000 are supported only on Microsoft® Windows XP, Microsoft® Windows Vista and Microsoft® Windows Server 2003. RSLogix 5000 software is supported for 32-bit architectures (x86) and has not been tested with 64-bit architectures (x64).
RAM	128 Mbytes of RAM minimum 256 Mbytes of RAM recommended
hard disk space	3Gbytes of free hard disk space (or more based on application requirements)
optical drives	DVD
video requirements	256-color VGA graphics adapter 800 x 600 minimum resolution (True Color 1024 x 768 recommended)

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www.rockwellautomation.com

Power, Control and Information Solutions

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation SA/NV, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846