

Simulink[®] PLC Coder[™] Release Notes

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Simulink® PLC Coder™ Release Notes

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Summary by Version

This table provides quick access to what's new in each version. For clarification, see “Using Release Notes” on page 1.

Version (Release)	New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
New Product V1.0 (R2010a)	Yes Details	Not applicable	Bug Reports	Printable Release Notes: PDF Current product documentation

Using Release Notes

Use release notes when upgrading to a newer version to learn about:

- New features
- Changes
- Potential impact on your existing files and practices

Review the release notes for other MathWorks™ products required for this product (for example, MATLAB® or Simulink®). Determine if enhancements, bugs, or compatibility considerations in other products impact you.

If you are upgrading from a software version other than the most recent one, review the current release notes and all interim versions. For example, when you upgrade from V1.0 to V1.2, review the release notes for V1.1 and V1.2.

What Is in the Release Notes

New Features and Changes

- New functionality
- Changes to existing functionality

Version Compatibility Considerations

When a new feature or change introduces a reported incompatibility between versions, the **Compatibility Considerations** subsection explains the impact.

Compatibility issues reported after the product release appear under Bug Reports at The MathWorks™ Web site. Bug fixes can sometimes result in incompatibilities, so review the fixed bugs in Bug Reports for any compatibility impact.

Fixed Bugs and Known Problems

The MathWorks offers a user-searchable Bug Reports database so you can view Bug Reports. The development team updates this database at release time and as more information becomes available. Bug Reports include provisions for any known workarounds or file replacements. Information is available for bugs existing in or fixed in Release 14SP2 or later. Information is not available for all bugs in earlier releases.

Access Bug Reports using your MathWorks Account.

Version 1.0 (R2010a) Simulink PLC Coder

This table summarizes what's new in Version 1.0 (R2010a):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports	Printable Release Notes: PDF Current product documentation

New Product

Simulink® PLC Coder™ generates hardware-independent IEC 61131 structured text from Simulink models, Stateflow® charts, and Embedded MATLAB® functions. The structured text is generated in PLCopen and other file formats supported by widely used integrated development environments (IDEs). As a result, you can compile and deploy your application to numerous programmable logic controller (PLC) and programmable automation controller (PAC) devices.

Simulink PLC Coder generates test benches that help you verify the structured text using PLC and PAC IDEs and simulation tools.

Key features:

- Automatic generation of IEC 61131-3 structured text
- Simulink support, including reusable subsystems, PID controller blocks, and lookup tables
- Stateflow support, including graphical functions, truth tables, and state machines
- Embedded MATLAB support, including if-else statements, loop constructs, and math operations

- Support for multiple data types, including Boolean, integer, enumerated, and floating-point, as well as vectors, matrices, buses, and tunable parameters
- IDE support, including B&R Automation Studio®, PLCopen, Rockwell Automation® RSLogix™ 5000, and Smart Software Solutions CoDeSys
- Test-bench creation

Simulink PLC Coder Compatibility Summary

This table summarizes new features and changes that might cause incompatibilities when you upgrade from an earlier version, or when you use files on multiple versions. Details are provided in the description of the new feature or change.

Version (Release)	New Features and Changes with Version Compatibility Impact
Latest Version V1.0 (R2010a)	Not applicable