

# Fuzzy Logic Toolbox Release Notes

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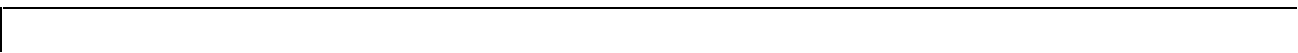
The “Fuzzy Logic Toolbox 2.1 Release Notes” on page 1-1 describe the changes introduced in the latest version of the Fuzzy Logic Toolbox. The following topics are discussed in these Release Notes:

- “New Features” on page 1-2
- “Known Software and Documentation Problems” on page 1-3

The Fuzzy Logic Toolbox Release Notes also provide information about the earlier versions of the product, in case you are upgrading from a version that was released prior to Release 12. If you are upgrading from a release earlier than Release 12, you should see the “Fuzzy Logic Toolbox 2.1 Release Notes” on page 1-1.

## **Printing the Release Notes**

If you would like to print the Release Notes, you can link to a PDF version.



## Fuzzy Logic Toolbox 2.1 Release Notes

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# Fuzzy Logic Toolbox 2.1 Release Notes

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## New Features

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**Note** There were no significant updates to the Fuzzy Logic Toolbox for Release 13. However, there are two significant bug fixes. Otherwise, the version of the Fuzzy Logic Toolbox that appeared on the Release 12 CD is essentially the same as the version that appears on the Release 13 CD.

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This section introduces the new features and enhancements added in the Fuzzy Logic Toolbox 2.1 since the Fuzzy Logic Toolbox 2.0.1 (Release 11.0).

### **Wizard For Fuzzy Logic Controller Block**

The Fuzzy Logic Toolbox supports a new wizard for the Fuzzy Logic Controller block. This block now automatically generates a customized block diagram representation for most Fuzzy Inference Systems (FISs). This block diagram uses only built-in Simulink blocks and allows for generation of efficient and compact code using Real-Time Workshop.

## Known Software and Documentation Problems

This section describes an open Fuzzy Logic Toolbox 2.1 software bug.

### **ODE Solver Performance**

Because most FISs contain non-smooth blocks such as Min or Max, the default ODE solver can perform poorly in some cases. One remedy is to choose a stiff solver. Several stiff solver choices are available on the Solver page of the Simulation Parameters dialog box in Simulink.

Because of blocks such as Min and Max, zero-crossing detection can also negatively impact the simulation speed. You can disable zero crossing detection on the Advanced page of the Simulation Parameters dialog box. Since this can affect the accuracy of the simulation, it is wise to compare results with and without zero-crossing detection before you disable it.

