ACL2 Sedan: 2009 Model Year

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Abstract

ACL2s, “The ACL2 Sedan,” is a development environment for ACL2 based in Eclipse. The most important feature is a robust script management interface, characterized by “the line” delineating accepted source code, that integrates intelligently with the familiar command line interface. Other features include online syntax checking and highlighting, one-click book certification, and enhanced termination analysis. A basic graphics library enables proving theorems about programs with a graphical interface. Selectable session modes include beginner-friendly configurations that restrict the theorem prover, and unrestricted configurations with or without nonstandard extensions to ACL2. Now third parties such as course administrators can write and distribute their own session modes to ACL2s users/students. Hundreds of students have used ACL2s in graduate and undergraduate classes based on ACL2, and prebuilt images and source code for all components are freely available on the Web.