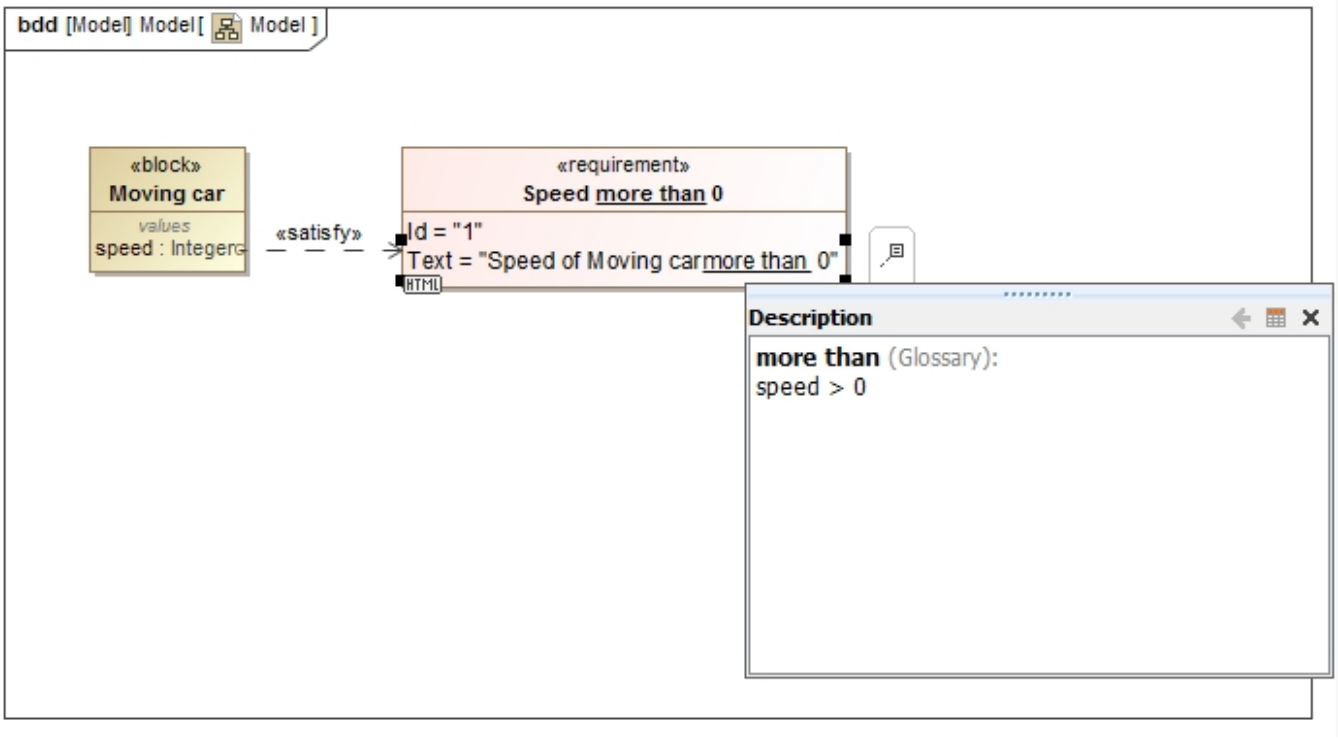
Extraction of Constraints from Text Based Requirements

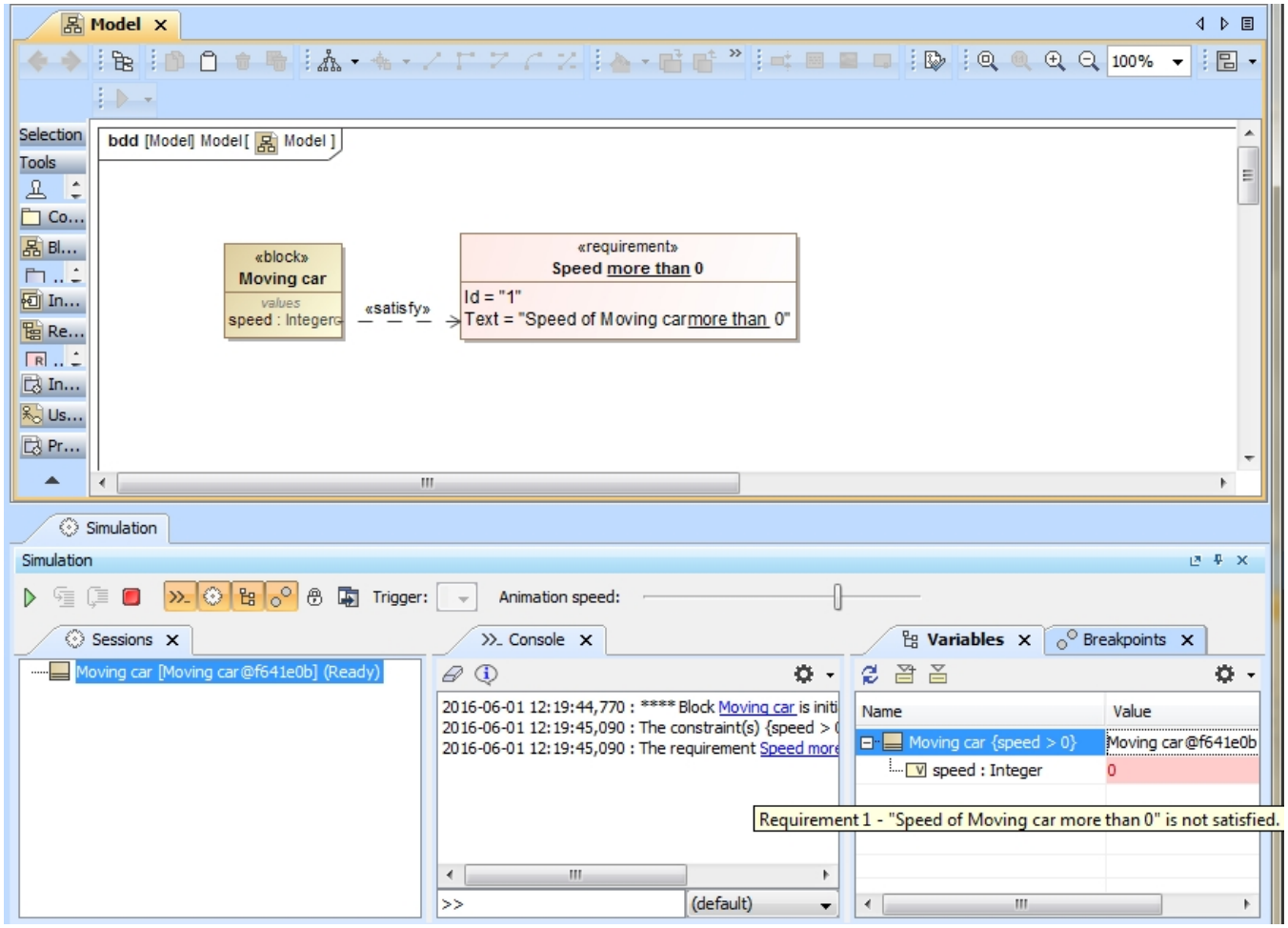
As of version 18.4, another new addition to Magic Model Analyst's already impressive repertoire, is the ability to automatically extract constraint equations from the text of a requirement.
For example, if a requirement text states that a moving car must have speed more than 0, then the constraint equation “speed > 0” is automatically extracted from the requirement text and will be evaluated upon running of a simulation.
While typing the requirement text, a shortcut menu appears as soon as you type some keywords which are available in the Glossary, see the example as follows



Constraints within text-based requirements.

For the constraint to execute properly, the requirement should be linked to a property, such as in the above example, a satisfy relation is used to link between the property and the requirement.

When the simulation is run, the constraint is evaluated and color-coded according to the result of the simulation, red if the constraint fails and green if it passes, as shown in figure below. Additionally, a mouse over the variable will display a tooltip.



Running a simulation evaluates the constraint within the requirement and color-codes it.