

Recording Verification status of runtime values

Cameo Simulation Toolkit supports recording verification status of runtime values. You can verify and record the status of constraints during runtime. If constraints are not met during the simulation, cells in the Requirement/Instance table will be highlighted in red on the **Variables** pane. You can do the normal recording verification status of runtime values by using the [resultLocation](#) tag in [SimulationConfig](#). The instances with recorded values in slots are created at the end of simulation.

The Requirement(s) table shows that the constraint in the requirement is not met, thus the requirement is colored in red as follows

The screenshot shows the Cameo Simulation Toolkit interface. At the top, there is a Requirement table with the following data:

#	Id	Name	Text	Satisfied By	Design Value	Verification Status
1	1	Weight	The gross weight of the car shall be no more than 1700 kg	weight : kg = 1800.0 [Car]	1800.0 [Car::weight]	Fail

Below the Requirement table is the Variables table, which is highlighted in blue. It contains the following data:

Name	Value
Car {weight <= 1700.0}	Car@18e88d
weight : kg	1800.0000

The Requirement(s) table showing the constraint within a requirement which is not met and colored in red.

If you right-click on the **Variables** pane and select **Export Value To > Instance**, the variables will be evaluated and colored in red if there are constraint failures in the instance table, as shown in the following figure

The screenshot shows the Cameo Simulation Toolkit interface. At the top, there is an Instance Table with the following data:

#	Name	Weight : Kg
1	car1	2000.0
2	car2	1800.0

Below the Instance Table is the Variables table, which is highlighted in blue. It contains the following data:

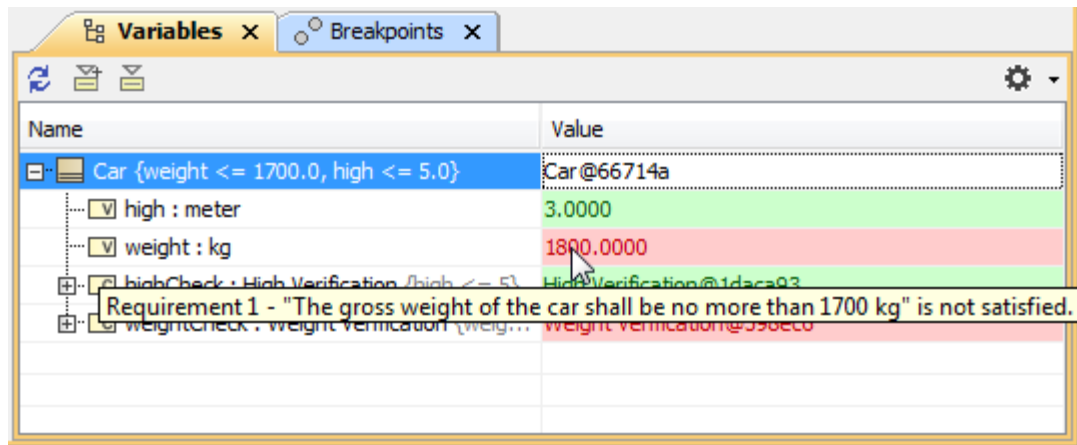
Name	Value
Car {weight <= 1700.0}	Car@18e88d
weight : kg	1800.0000

A red box highlights the Instance Table, and a red arrow points to it from the Variables table. A context menu is open over the Variables table, showing the following options:

- Expand Recursively
- Export Value To
 - Instance...
 - New Instance...
- Save To Default Value(s)
- Show in Timeline
- Go To
- Select in Containment Tree Alt+B
- Create Sequence Diagram

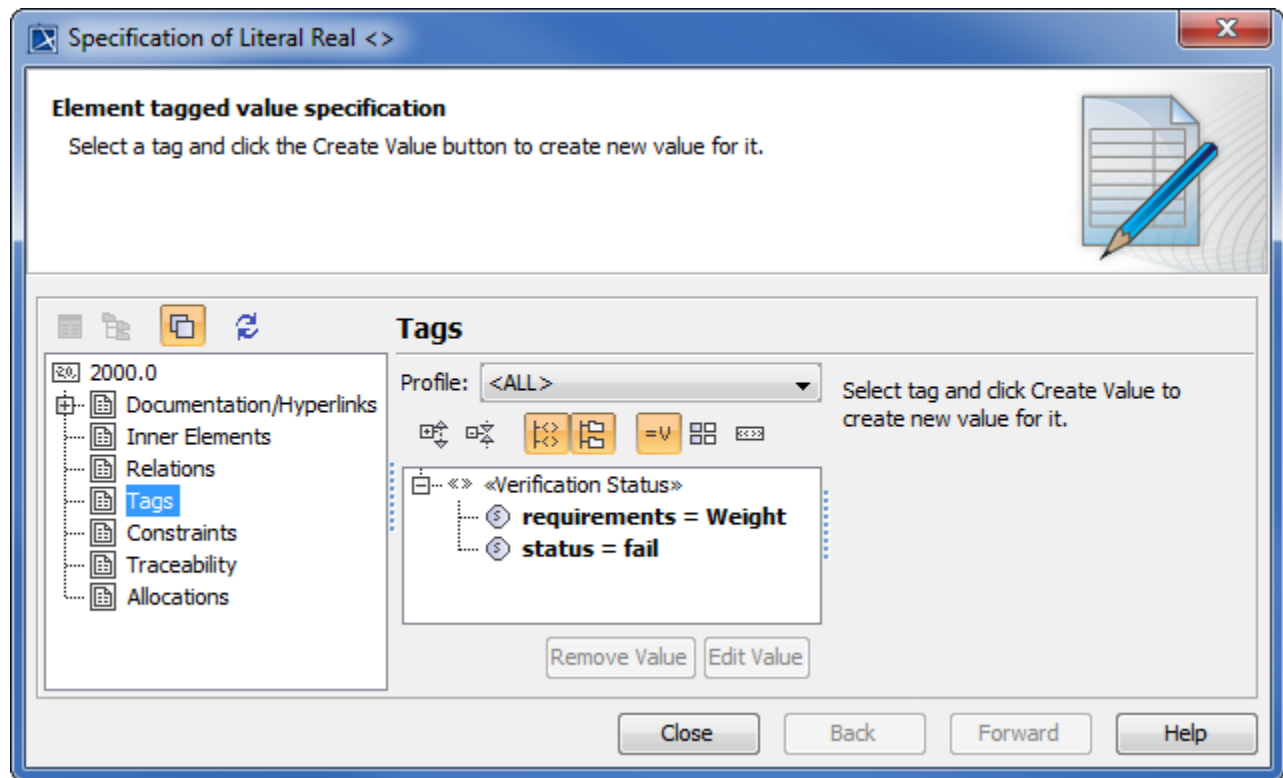
The instance table showing the constraints after being exported to an Instance.

The status (pass/fail), related requirements, and instances for constraints are recorded using the **VerificationStatus** stereotype that is applied on the **Value** specification of the properties that you are working on. You can also see the detail of the constraint failure in the tooltip when hovering the mouse over any highlighted red values in the Requirement/Instance table as shown in the following figure



The simulation console showing the variables which have met or not met the constraints.

If the **VerificationStatus** state on the **Value** specification fails, the active validation will be marked for notification with the **fail** status tag as shown in the following figure



The Specification dialog showing verification status with the fail status tag.

The **VerificationStatus** stereotype, as shown in the figure above, has the tags as follows

Tag	Description
requirements	This tag has the name of the requirement(s) as its value.
status	The status tag value is the result of the verification, either pass or fail.

Related pages

- [Requirement Table](#)
- [Variables pane](#)