PRAGMADEV
modeling and testing tools

A new generation of model checker with PragmaDev Studio V6.0.

Paris - France - June 14th, 2022 - *PragmaDev Studio* V6.0 introduces a new generation of model checker and the support of the new SDL broadcast, making it the best modeling tool to specify and design safe communicating software.

Following a long collaboration with ENSTA Bretagne research lab, PragmaDev has integrated in its latest release of PragmaDev Studio, ENSTA Bretagne model checker OBP (Observer Based Prover).

The primary objective of model checking is to explore all possible scenarios in the model. During the exploration it is possible to detect dead locks, unreachable model branches, or to verify properties. This is a major feature that leads to a safer and more secure design.

The key characteristic of OBP is that it does not rely on a dedicated language. It relies on a third party executor to execute the model. In PragmaDev Studio V6 OBP is interacting with PragmaDev SDL executor to execute the transitions. OBP does not actually know anything about the model it is exploring. It is the same principle with the properties. OBP evaluates complex properties made of atomic properties that are evaluated by the execution engine.

Communicating systems inherently create a lot of possible cases due to the fact that their designs are based on concurrent state machines. This creates a lot of possible paths of execution. PragmaDev Studio has built-in ways to reduce the state size during exploration:

- **Reduce the possible parameter values of the incoming messages as well as the number of messages.**

- **Exclude some internal variables from the global model state.**

"*The support for broadcast and the integration of this new model checker make PragmaDev Studio the best modeling tool to specify and design safe communicating systems.*" says Emmanuel Gaudin, PragmaDev Founder & CEO.

The main new features are:

- **Introduction of a new model checker.**

- **Support of SDL and SDL-RT broadcast.**

- **Native 64 bit Windows.**

About PragmaDev

PragmaDev is a privately held company based in Paris France that provides two sets of tools: PragmaDev Process to describe and verify business processes, and PragmaDev Studio to specify and design communicating systems: PragmaDev customers include Airbus, Nokia, Renault, the French Army, Wipro, ST-Microelectronics, Korean Telecom, the European Space Agency, Toshiba, and LG Electronics.

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