

Boolector at the SMTCOMP'14

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Major changes since SMTCOMP'12:

- **new lemmas on demand (LOD) engine:**
array operations and arrays as **lambda terms** and **uninterpreted functions**
- **don't care reasoning to speed up LOD**
 - Boolector (justification)
 - Boolector (dual propagation)

Further improvements:

- support for SMT-LIB v2 macros (**define-fun**)
- new **model generation** algorithm (fixes performance drop of older versions)
- internal **model validation** for satisfiable instances
- **cloning** support (cf. cloning in Lingeling)
- API call **tracing** (record/replay sequences that trigger erroneous behavior)
- **model-based** testing
- fixes in both **rewrite** engine and the **incremental** API
- fixed and reenabled the previously disabled **unconstrained** optimization