# A Fast SAT Solver for Isabelle in Standard ML

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**Abstract**

This contribution contains a fast SAT solver for Isabelle written in Standard ML. By loading the theory `DPT_SAT_Solver`, the SAT solver installs itself (under the name "dptsat") and certain Isabelle tools like Refute will start using it automatically. This is a port of the DPT (Decision Procedure Toolkit) SAT Solver written in OCaml.

Theory `DPT_SAT_Tests` tests the solver on a few hundred problems.

# Contents

**theory** `DPT_SAT_Solver`
**imports** `Main`
**begin**

⟨*ML*⟩

**end**

**theory** `DPT_SAT_Tests`
**imports** `DPT_SAT_Solver`
**begin**

⟨*ML*⟩

**end**