The Skeptik Proof Compression System

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Abstract. This paper describes Skeptik: a system for compressing and improving proofs obtained by automated reasoning tools.

1 Introduction

2 User Interface

3 Supported Proof Formats

3.1 TraceCheck Format

3.2 The veriT Proof Format

3.3 The Skeptik Proof Format

4 Available Proof Compression Algorithms

4.1 RPI

4.2 LU

4.3 LUniv

4.4 RPI[3]LU and RPI[3]LUniv

4.5 RedRec

4.6 Split

4.7 TautologyElimination

4.8 StructuralHashing

4.9 DAGification

4.10 Subsumption

4.11 Pebbling

5 Implementation Details

ToDo: statistics about the code

5.1 Organization of the Code

ToDo: brief description of the package structure

5.2 Data Structures for Formulas

5.3 Data Structures for Proofs

5.4

6 Conclusions and Future Work

ToDo: limitation: memory consumption in Scala underlying symbols are strings