Stackbasierte Sprachen

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What?

- PSSS
  - PostScript Sat Solver
- Input: Sat-Problem in DIMACS CNF
- Output: Variable Assignment (if possible)

How does it work?

- Read Input File
- Validate Input
- Evaluate Formulas
- Present result

Input

- Conjunctive Normal Form (CNF)

$$(x_1 \vee \neg x_5 \vee x_4) \wedge (\neg x_1 \vee x_5 \vee x_3 \vee x_4) \wedge (\neg x_3 \vee \neg x_4)$$

- DIMACS (MiniSAT [1])

```
c
c some interesting comments
c
p cnf 5 3
1 -5 4 0
-1 5 3 4 0
-3 -4 0
```

[1] http://www.dwheeler.com/essays/minisat-user-guide.html

Output

- DIMACS format

```
c
c some interesting comments
c
( x1 | -x5 | x4)          =  t | -t | t       = t
(-x1 |  x5 | x3 | x4)    = -t |  t | f | t   = t
(-x3 | x4)                = -f |  t          = t
```

Relation to PostScript

- vars in userdict
- loop with marks
- cxv exec
- evaluation via dynamic code generation

Demo & Code

Questions ?