

# Small-Proof Big-Data Benchmark Result

4/25/2013

# Benchmark Result

- Parameters
  - Security Parameter  $k$ : 32
  - Max size of the stream  $n$ : 128
- Execution time in seconds

#Update / #Query		100 / 20	100 / 40	200 / 40
Prover	Update	157.846	166.264	337.752
	Query	0.132	0.328	0.342
Verifier	Update	0.071	0.072	0.143
	Verify	0.032	0.065	0.069

# Prover Analysis

- Callgrind
  - Matrix-Vector product for label update (37.41%)
  - Data conversion for MySQL (31.31%)
  - Binary representation for label-to-digest conversion (4.48%)

