

CoCoALib - Slug #329

Why is DMPI slower than DMPClean?

12 Mar 2013 10:16 - John Abbott

Status:	New	Start date:	12 Mar 2013
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	Improving	Estimated time:	0.00 hour
Target version:	CoCoALib-1.0	Spent time:	0.00 hour
Description			
<p>Try the following program; and then again but making P a NewPolyRing_DMPI. The times I get are: clean=20s, DMPI=25s. There must be something wrong.</p>			
<pre>const long N = 10000000; const long nvars = 12; cout << ShortDescription << endl; ring Q = RingQQ(); SparsePolyRing P = NewPolyRing(Q, nvars); clog << "P = " << P << endl; double StartTime = CpuTime(); vector<RingElem> v; v.reserve(N); RandomSeqBigInt rnd(-power(2,130), power(2,130)); RandomSeqLong RndExp(0,100); vector<long> expv(nvars); for (long i=0; i < N; ++i) { RingElem coeff = RingElem(Q, BigRat(NextValue(rnd), NextValue(rnd))); for (long j=0; j < nvars; ++j) expv[j] = NextValue(RndExp); v.push_back(monomial(P, coeff, expv)); } clog << "vector filled after time " << CpuTime()-StartTime << "\n";</pre>			
Related issues:			
Related to CoCoALib - Bug #680: DistrMPolyClean does not use MemPool for summ...		Resolved	13 Apr 2015

History

#1 - 01 Apr 2014 17:42 - Anna Maria Bigatti

- Target version set to CoCoALib-0.99533 Easter14

#2 - 04 Apr 2014 17:11 - John Abbott

- Target version changed from CoCoALib-0.99533 Easter14 to CoCoALib-1.0

#3 - 13 May 2015 09:54 - Redmine Admin

- Category set to Improving