CoCoA-5 - Slug #191

Slow lex gbasis

19 Jun 2012 18:22 - John Abbott

Status:	Closed		Start date:	19 Jun 2012
Priority:	Normal		Due date:	
Assignee:	John Abbott		% Done:	100%
Category:	Portability		Estimated time:	0.00 hour
Target version:	CoCoA-5.0.3		Spent time:	0.50 hour

Description

The following example comes from an exercise I gave during *Algebra Computazionale*

```
Use QQ[a,b,x,y,z], Lex;
I := Ideal(x-a^3-b^3-3, y-a^5-b^5-5, z-a^7-b^7-7);
t0 := CpuTime();
RGB := ReducedGBasis(I);
PrintLn "Tempo impiegato per calcolare RGB: ", DecimalStr(CpuTime()-t0);
```

On my computer, with the latest development version of CoCoA-5 and CoCoALib, the time taken is about 850s. On a student's computer (MS Windows, I believe), using the version of CoCoA-5 which was available 1-2 months ago on the website, the same computation takes about 60s.

I am mentioning this because I think we have not recently changed anything in the G-basis computation code...

I've put this in CoCoALib because I believe that's where the problem lies (even though it came to light when using CoCoA-5).

Related issues:

Related to CoCoA-5 - Feature #19: How to get the version number of CoCoA-5?	**Closed**	**04 Nov 2011**

History

#1 - 20 Jun 2012 09:32 - Anna Maria Bigatti

- Status changed from New to In Progress

John Abbott wrote:

> The following example comes from an exercise I gave during *Algebra Computazionale*
> [...]
> On my computer, with the latest development version of CoCoA-5 and CoCoALib, the time taken is about 850s. On a student's computer (MS Windows, I believe), using the version of CoCoA-5 which was available 1-2 months ago on the website, the same computation takes about 60s.

Also my current version takes about 60s.
I guess you have some experimental part in your working version....
I think I really should add some extra info to **VersionInfo** ;-)

#2 - 20 Jun 2012 16:20 - John Abbott

- Status changed from In Progress to Closed

- % Done changed from 0 to 100

I did make veryclean; sync with CVS, and make.
Now mine takes about a minute too... very odd!

No idea why it was so slow before :-(

#3 - 21 Jun 2012 16:24 - Anna Maria Bigatti

John Abbott wrote:

> No idea why it was so slow before :-(

I had a similar problem to what you described yesteray: old cocoa running while compiling the new one. Maybe the old one is not deleted until it is linking time.

#4 - 13 Jul 2012 15:53 - Anna Maria Bigatti

- Project changed from CoCoA to CoCoALib

#5 - 13 Jul 2012 15:53 - Anna Maria Bigatti

- Category set to Various

#6 - 13 Jul 2012 15:54 - Anna Maria Bigatti

- Project changed from CoCoALib to CoCoA-5

- Category deleted (Various)

#7 - 13 Jul 2012 15:54 - Anna Maria Bigatti

- Target version set to CoCoA-5.0.3

#8 - 21 May 2013 18:33 - Anna Maria Bigatti

- Category set to Portability

- Assignee set to John Abbott