

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
<b>Description</b> The following example comes from an exercise I gave during <i>Algebra Computazionale</i>  <pre>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);</pre> 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).			
<b>Related issues:</b> Related to CoCoA-5 - Feature #19: How to get the version number of CoCoA-5? <span>Closed</span> <span>04 Nov 2011</span>			

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*