

CoCoALib - Design #1721

Verbose messages: print level?

19 Jan 2023 14:01 - John Abbott

Status:	Closed	Start date:	19 Jan 2023
Priority:	Normal	Due date:	
Assignee:	Anna Maria Bigatti	% Done:	100%
Category:	Improving	Estimated time:	0.00 hour
Target version:	CoCoALib-0.99850	Spent time:	1.95 hour
Description			
Discussion: Should a verbose message indicate at what level it first appears?			
Context: SetVerbosityLevel(99); produced a lot more output than I wanted, but I am too lazy to search through doc (or the source code) to find out what level triggers the many messages I do not want. If the message indicated that it appears at or above level 80 (say), then I can simply try level 79.			
2023-03 Also added indentation for depth of call D see below: #1721.7			
Related issues:			
Related to CoCoA-5 - Feature #1731: Verbosity level in CoCoA5		In Progress	27 Mar 2023
Related to CoCoALib - Design #1768: Limit indentation in verbose mesgs?		Closed	19 Nov 2023

History

#1 - 14 Feb 2023 21:20 - John Abbott

Does anyone have any comments? Better ideas?

#2 - 27 Feb 2023 12:15 - Anna Maria Bigatti

Yes!!! That's a great idea!

It would be impossible to keep the documentation up to date... and tedious to read.

#3 - 27 Feb 2023 12:31 - Anna Maria Bigatti

- % Done changed from 0 to 20

Proposed look (invented numbers) [depth:level] space space

```
NewOrdvArith(ord)[3:40] -- called --  
MinPolyQuotDef[3:60] time cycle: --> 7e-05  
MinPolyQuotDef[3:50] Total time --> 5.1e-05
```

instead of current [depth]: space

```
NewOrdvArith(ord)[3]: -- called --  
MinPolyQuotDef[3]: time cycle: --> 7e-05  
MinPolyQuotDef[3]: Total time --> 5.1e-05
```

#4 - 27 Feb 2023 20:12 - John Abbott

- Status changed from New to In Progress

I wonder whether the format you propose is too terse, but then making it longer perhaps produces too much output? Not so convinced by the colon... perhaps I just need to get used to it. **[3:40]** looks like a time to me!

What about **[depth @ level]**? Then it would look like:

```
NewOrdvArith(ord) [3@40] -- called --  
MinPolyQuotDef [3@60] time cycle: --> 7e-05  
MinPolyQuotDef [3@50] Total time --> 5.1e-05
```

Mmmm, not sure it is really any better. Other suggestions? Possibly **[depth v level]** e.g. [3v40]

Maybe using the "pipe" (vertical bar) symbol: **[3|40]** So it would look like this:

```
NewOrdvArith(ord) [3|40] -- called --  
MinPolyQuotDef [3|60] time cycle: --> 7e-05  
MinPolyQuotDef [3|50] Total time --> 5.1e-05
```

Anna Any chance you could implement this change over the next week (while I'm absent)?

#5 - 14 Mar 2023 22:04 - Anna Maria Bigatti

- % Done changed from 20 to 30

John Abbott wrote:

What about **D depth - L level** e.g. D3-L40

```
NewOrdvArith(ord) D3-L40 -- called --  
MinPolyQuotDef D3-L60 time cycle: --> 7e-05  
MinPolyQuotDef D3-L50 Total time --> 5.1e-05
```

Anna Any chance you could implement this change over the next week (while I'm absent)?

I'll try tomorrow

#6 - 14 Mar 2023 22:51 - John Abbott

I Tjink I might prefer to info to be inside (square?) brackets:
something like this:

```
NewOrdvArith(ord) [D3-L40] -- called --  
MinPolyQuotDef [D3-L60] time cycle: --> 7e-05  
MinPolyQuotDef [D3-L50] Total time --> 5.1e-05
```

Or conceivably even like this:

```
[D3-L40] NewOrdvArith(ord) -- called --  
[D3-L60] MinPolyQuotDef time cycle: --> 7e-05  
[D3-L50] MinPolyQuotDef Total time --> 5.1e-05
```

Try a few ideas and see what you think is nicest to read.

#7 - 15 Mar 2023 08:03 - Anna Maria Bigatti

- Status changed from In Progress to Feedback
- Assignee set to Anna Maria Bigatti
- % Done changed from 30 to 90

You inspired me: I chose this look because this is how I've always desired the indentation for depth!
Reference: file verbose.C, function VerboseLog::operator()(long level)

```
/**/ SetVerbosityLevel(95);  
/**/ use R ::= QQ[x,y,z];  
/**/ I := ideal(x^2-1, y^2-2, z^3);  
/**/ IsRadical(I);  
  
[D1,L20,myTestIsRadical_0dim] trying z  
[D2,L80,MinPolyModular] 1: prime is 1073741831  
[D3,L90,MinPolyQuotDef] time cycle: --> 7.4e-05
```

```
[D3,L90,MinPolyQuotDef] Total time --> 5.7e-05
time: p*f --> 6e-06
time: NF --> 2.2e-05
time: coefficients --> 1.1e-05
time: LinDepMill --> 1.8e-05
Post-cycle --> 1.6e-05
[D2,L80,MinPolyModular] 2: prime is 1073741833
[D3,L90,MinPolyQuotDef] time cycle: --> 7e-05
[D3,L90,MinPolyQuotDef] Total time --> 5.2e-05
time: p*f --> 8e-06
time: NF --> 2.1e-05
time: coefficients --> 8e-06
time: LinDepMill --> 1.5e-05
Post-cycle --> 1.5e-05
[D2,L90,MinPolyModular] Reconstruction time: 3.8e-05
[D2,L90,MinPolyModular] Verification-QQ time:7.7e-05
false
```

#8 - 26 Mar 2023 14:56 - John Abbott

That looks nice! I have increased to two 2 spaces after the close square bracket.

#9 - 27 Mar 2023 19:41 - Anna Maria Bigatti

- Related to Feature #1731: Verbosity level in CoCoA5 added

#10 - 12 Apr 2023 14:53 - Anna Maria Bigatti

- Description updated

#11 - 12 Apr 2023 14:53 - Anna Maria Bigatti

- Description updated

#12 - 12 Apr 2023 14:54 - Anna Maria Bigatti

- Description updated

#13 - 12 Apr 2023 14:56 - Anna Maria Bigatti

- Status changed from Feedback to Closed

- % Done changed from 90 to 100

#14 - 19 Nov 2023 19:34 - John Abbott

- Related to Design #1768: Limit indentation in verbose msgs? added