

CoCoA-5 - Design #1530

VersionInfo -- better field names?

04 Nov 2020 12:28 - John Abbott

Status:	Closed	Start date:	04 Nov 2020
Priority:	Normal	Due date:	
Assignee:	Anna Maria Bigatti	% Done:	100%
Category:	enhancing/improving	Estimated time:	2.22 hours
Target version:	CoCoA-5.4.0	Spent time:	2.25 hours
Description The order of the fields printed by VersionInfo is alphabetical. This means that some pieces of info are ordered strangely. For example, I find it strange that BoostVersion should be the first piece of info printed out. Can we pick better names?			

History

#1 - 04 Nov 2020 12:30 - John Abbott

I would like VersionInfo to tell me also how many bits are in SmallExponent_t (since this does seem to affect execution time significantly). It would make sense for this information to appear next to the number of bits in machine int and long; so the field names must be chosen to be alphabetically close.

PS relevant source is **BuiltInFunctions.C** around **line 625**

#2 - 10 Nov 2020 13:58 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

I suggest for the "Num bits" fields to the names **NumBits_MachineInt**, **NumBits_MachineLong** and **NumBits_SmallExponent_t** (or **NumBits_Exponent?**)

Not sure what to suggest for BOOST; I would like it to be near the info about external libs used in CoCoALib...

I had hoped to convert the compilation date into ISO format (YYYY-MM-DD), but that looks to be tedious :-(

#3 - 13 Nov 2020 14:34 - Anna Maria Bigatti

- Assignee set to John Abbott

and add Boost into the ExternalLibs record

#4 - 13 Nov 2020 16:00 - John Abbott

- Assignee deleted (John Abbott)

Anna will do the following

- (1) move the info about BOOST into the subrecord ExternalLibs (*i.e.* added to the list of ext libs from CoCoALib)
- (2) rename the "numbits" fields to **NumBits_int**, **NumBits_long** and **NumBits_exponent** (or **NumBits_SmallExponent?**)

See comment 1 for pointer to relevant source code.

#5 - 20 Nov 2020 08:56 - Anna Maria Bigatti

- Assignee set to Anna Maria Bigatti

- % Done changed from 10 to 80

Done.

I added "Boost" only in BuiltinFunctions.C.

I have also the code for adding it in ExternalLibs.C (commented out), but I believe John does not want it there, because not used within CoCoALib itself.

```
...
ExternalLibs := [
  record[name := "Boost", version := "107300"],
  record[name := "GMP", version := "60200"],
  record[name := "Frobby", version := "UNKNOWN (0.9.4?)"],
  record[name := "Gfan", version := "UNKNOWN"],
  record[name := "CDD", version := "UNKNOWN"],
  record[name := "MathSAT", version := "MathSAT5 version 5.5.1 (5a0ab3b56ce0) (Dec 11 2017 10:57:23, gmp 5.1
.3, clang/LLVM 6.0, 64-bit)"]
],
NumBits_SmallExponent_t := 32,
NumBits_int := 32,
NumBits_long := 64
]
```

#6 - 08 Jan 2021 11:24 - John Abbott

- Status changed from In Progress to Closed

- % Done changed from 80 to 100

- Estimated time set to 2.22 h