# CoCoALib - Support #1481

# Release CoCoALib 0.99800

28 Aug 2020 15:39 - John Abbott

Status:	Closed	Start date:	28 Aug 2020
Priority:	Normal	Due date:	
Assignee:	Anna Maria Bigatti	% Done:	100%
Category:	Various	Estimated time:	5.50 hours
Target version:	CoCoALib-0.99800	Spent time:	5.30 hours

#### Description

Everything related to making a CoCoALib release:

- Redmine Roadmap: close or postpone issue
- Redmine Release issues: check percentages, check timings
- Finalize
- make veryclean; make (full make, with all tests and examples and CoCoA-5..)
- cd src/tests/; make valgrind
- cd src/CoCoA-5; make ManExamples (readline may truncate echo lines if too long)
- cvs log -d ">2020-05-01" -S -N > LOG-CoCoA.txt
- ~/shell-scripts/cocoalib-cvs-snapshot
- · upload examples
- upload manual
- update webpage
- publish manual (arXiv? ResearchGate?)
- · close release on Redmine

### --> send message to facebook page

#### Related issues:

Related to CoCoALib - Support #467: Keep CoCoALib web page up to date! All p	Closed	12 Mar 2014
Related to CoCoALib - Support #1452: Release CoCoALib-0.99710	Closed	30 Apr 2020
Related to CoCoALib - Support #1687: Release CoCoALib 0.99850	In Progress	13 Jun 2022
Related to CoCoALib - Support #1555: Software licence	Closed	21 Dec 2020
Related to CoCoALib - Design #854: Function MakeTermOrd should be renamed Mak	Closed	24 Mar 2016
Related to CoCoALib - Support #1674: DocTeX.t2t missing several "index entries"	Closed	17 Mar 2022

# History

# #1 - 28 Aug 2020 15:40 - John Abbott

Summary of main changes:

- changed BigRat ctors: it is now possible to construct BigRat directly from an integer (but beware of incorrect BigRat(2/3) which does compile...)
- power now checks for overflow (so very large powers cannot be computed directly)
- renamed FrobeniusNorm2 to FrobeniusNormSq
- renamed HadamardBound to HadamardBoundSq (also extended to work over any ring)
- revised semantics for UnivariateIndetIndex: now gives error if arg is constant poly
- extlib libnormaliz must now be at least version 3.8.10
- renamed (normaliz) Generators to TriangulationGenerators (following similar change in normaliz itself)
- added new fns **resultant** and **discriminant** for univariate polys (previously only multivariate)
- added new fns syz(const FreeModule& F, const std::vector<RingElem>& g)
- added new fns FlattenByRows and FlattenByCols
- added new fn interreduced (translated from CoCoA-5 by Julian Danner, cleaned by JAA)
- added new fn CanonicalBasis
- added new fns CertifyNotPower and StarRoot
- added new fns factor\_TrialDiv (changed from SmoothFactor) and factor\_PollardRho; improved factor for BigInt
- added new fn IsPowerOf2 for BigRat (previously only for BigInt)
- renamed TensorMat to KroneckerProd
- REJECTED idea of new fn PowerOfMinusOne (returns a long)
- added new fns IsOne and IsMinusOne for MachineInt
- added new fn RingElemVec which reads a comma-separated list of RingElem inside square brackets
- changed log: now requires arg to be positive (also more accurate for some BigRat values)
- added new fn LogAbs equiv to log(abs(arg))

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- corrected bug in exponent(BigRat), and also in FloatStr(BigRat)
- new file SparsePolyOps-vector which will collect functions on vectors of RingElem
- extended MachineInt to accept long long args (probably not 100% robust!)

Add other new features as they appear...

#### #2 - 05 Feb 2022 20:30 - John Abbott

- Status changed from New to In Progress
- % Done changed from 0 to 50

#### #3 - 16 Feb 2022 20:49 - John Abbott

- Status changed from In Progress to Resolved
- % Done changed from 50 to 80

# #4 - 18 Feb 2022 15:33 - Anna Maria Bigatti

- Related to Support #467: Keep CoCoALib web page up to date! All pages! added

#### #5 - 23 Feb 2022 11:39 - Anna Maria Bigatti

- Subject changed from Release CoCoALib 0.99720 to Release CoCoALib 0.99800
- Description updated

#### #6 - 07 Mar 2022 10:05 - Anna Maria Bigatti

- Related to Support #1452: Release CoCoALib-0.99710 added

### #7 - 07 Mar 2022 10:05 - Anna Maria Bigatti

- Description updated

#### #8 - 07 Mar 2022 17:37 - Anna Maria Bigatti

- Description updated

#### #9 - 14 Mar 2022 17:02 - Anna Maria Bigatti

- Description updated

#### #10 - 25 Mar 2022 10:39 - Anna Maria Bigatti

- % Done changed from 80 to 90

All is done now, except publishing the documentation (I'm still investigating some technical issues related to txt2tags, causing broken links).

#### #11 - 13 Jun 2022 15:10 - John Abbott

Can we close this issue now? After all, 0.99800 has been released!

#### #12 - 30 Nov 2022 18:31 - Anna Maria Bigatti

- Status changed from Resolved to Closed
- Assignee set to Anna Maria Bigatti
- % Done changed from 90 to 100

# Anna Maria Bigatti wrote:

All is done now, except publishing the documentation (I'm still investigating some technical issues related to txt2tags, causing broken links).

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#### #13 - 30 Nov 2022 18:31 - Anna Maria Bigatti

- Estimated time set to 5.50 h

# #14 - 28 Mar 2024 15:29 - Anna Maria Bigatti

- Related to Support #1687: Release CoCoALib 0.99850 added

# #15 - 28 Mar 2024 16:00 - Anna Maria Bigatti

- Related to Design #854: Function MakeTermOrd should be renamed MakeTermOrdMat? added

# #16 - 28 Mar 2024 16:05 - Anna Maria Bigatti

- Related to deleted (Design #854: Function MakeTermOrd should be renamed MakeTermOrdMat?)

#### #17 - 28 Mar 2024 16:10 - Anna Maria Bigatti

- Related to Support #1555: Software licence added

# #18 - 28 Mar 2024 16:22 - Anna Maria Bigatti

- Related to Design #854: Function MakeTermOrd should be renamed MakeTermOrdMat? added

# #19 - 28 Mar 2024 16:30 - Anna Maria Bigatti

- Related to Support #1674: DocTeX.t2t missing several "index entries" added

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