## NMF: Unit testing results\*

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NMF version 0.20 as of October 31, 2013

## 1 Details

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RUNIT TEST PROTOCOL -- Thu Oct 31 16:21:42 2013
*****************
Number of test functions: 82
Number of deactivated test functions: 4
Number of errors: 0
Number of failures: 0
1 Test Suite :
package:NMF - 82 test functions, 0 errors, 0 failures
Details
*********
Test Suite: package:NMF
Test function regexp: ^test.
Test file regexp: ^runit.*.[rR]$
Involved directory:
/tmp/Rpkglib_6997333d1b43/NMF/tests
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.aheatmap.R
test.mfrow: (1 checks) ... OK (0.44 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.algorithms.r
test.brunet: (16 checks) ... OK (3.53 seconds)
test.cversions.brunet: (1 checks) ... OK (0.99 seconds)
test.cversions.lee: (1 checks) ... OK (1.1 seconds)
test.cversions.lnmf : DEACTIVATED, Algorithm 'lnmf' is not fully working.
test.cversions.ns: (1 checks) ... OK (1.25 seconds)
test.cversions.offset: (1 checks) ... OK (2.25 seconds)
test.frobenius: (16 checks) ... OK (5.14 seconds)
test.KL: (16 checks) ... OK (4.14 seconds)
test.lee: (16 checks) ... OK (3.31 seconds)
test.lnmf : DEACTIVATED, Algorithm 'lnmf' is not fully working.
test.ns: (16 checks) ... OK (3.68 seconds)
test.offset: (16 checks) ... OK (3.87 seconds)
test.port_brunet: (9 checks) ... OK (4.23 seconds)
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 $<sup>^*\</sup>mbox{Vignette}$  computed on Thu Oct 31 16:21:42 2013

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test.snmf: (44 checks) ... OK (8.62 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.bioc.r
test.access: (26 checks) ... OK (0.03 seconds)
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Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.distance.r
test.KL: (9 checks) ... OK (1.58 seconds)
test.rss: (4 checks) ... OK (0.06 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.interface.r
test.compare: (5 checks) ... OK (10.44 seconds)
test.nmf.callback: (22 checks) ... OK (15.02 seconds)
test.nmf.custom: (87 checks) ... OK (1.56 seconds)
test.nmf.default: (8 checks) ... OK (0.24 seconds)
test.nmf.dots: (11 checks) ... OK (0.87 seconds)
test.nmf.method: (36 checks) ... OK (10.15 seconds)
test.nmf.model: (22 checks) ... OK (0.64 seconds)
test.nmfModel.formula: (12 checks) ... OK (0.9 seconds)
test.nmf.multirank: (10 checks) ... OK (5.44 seconds)
test.nmf.options: (18 checks) ... OK (5.06 seconds)
test.nmf.parameters: (53 checks) ... OK (0.82 seconds)
test.nmf.seed.argument: (149 checks) ... OK (9.76 seconds)
test.nmf.seed.equivalent: (11 checks) ... OK (10.35 seconds)
test.nmf.seed.fault: (4 checks) ... OK (2.69 seconds)
test.nmf.seed.repro: (8 checks) ... OK (13.28 seconds)
test.nmf.stop: (6 checks) ... OK (2.22 seconds)
test.parallel: (6 checks) ... OK (11.16 seconds)
test.registry: (9 checks) ... OK (0.14 seconds)
test.seed: (33 checks) ... OK (0.13 seconds)
test.summary: (3 checks) ... OK (2.79 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.NMFclass.r
test.basis: (2 checks) ... OK (0 seconds)
test.class.NMFns: (65 checks) ... OK (0.03 seconds)
test.class.NMFstd: (28 checks) ... OK (0.01 seconds)
test.coef: (2 checks) ... OK (0 seconds)
test.connectivity: (3 checks) ... OK (0.01 seconds)
test.deviance: (9 checks) ... OK (0.01 seconds)
test.dimensions: (4 checks) ... OK (0 seconds)
test.dimnames: (173 checks) ... OK (0.05 seconds)
test.entropy: (5 checks) ... OK (0 seconds)
test.misc: (9 checks) ... OK (0 seconds)
test.nmfModel: (363 checks) ... OK (0.11 seconds)
test.NMF.rnmf: (93 checks) ... OK (1.11 seconds)
test.predict: (10 checks) ... OK (0.01 seconds)
test.purity: (5 checks) ... OK (0 seconds)
test.sparseness: (13 checks) ... OK (0.01 seconds)
test.subset: (50 checks) ... OK (0.04 seconds)
test.syntheticNMF: (5 checks) ... OK (1.16 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.NMFfit-class.r
test.deviance: (0 checks) ... OK (0 seconds)
test.isNMFfit: (6 checks) ... OK (2.69 seconds)
test.niter: (4 checks) ... OK (0.97 seconds)
test.nmf.equal: (304 checks) ... OK (1.94 seconds)
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Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.NMFSet.r
test.fit: (9 checks) ... OK (3.06 seconds)
test.interface: (6 checks) ... OK (1.73 seconds)
test.join.multipleAndSingleRunsMethods: (2 checks) ... OK (3.28 seconds)
test.join.multipleRuns: (2 checks) ... OK (4.14 seconds)
test.join.singleRuns: (7 checks) ... OK (0.69 seconds)
test.multipleruns: (2 checks) ... OK (1.65 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.NMFStrategy-class.r
test.accessors: (26 checks) ... OK (0.04 seconds)
test.constructor: (16 checks) ... OK (0.04 seconds)
test.constructorMethod: (3 checks) ... OK (0.02 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.options.r
test.nmf.getOption: (2 checks) ... OK (0 seconds)
test.nmf.options: (9 checks) ... OK (0 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.parallel.r
test.ForeachBackend: (4 checks) ... OK (1.42 seconds)
test.gVariable: (11 checks) ... OK (9.73 seconds)
test.nmf: (59 checks) ... OK (44.33 seconds)
test.setupBackend: (4 checks) ... OK (0.09 seconds)
test.shared_memory_doMC: (12 checks) ... OK (6.09 seconds)
test.shared_memory_doMPI : DEACTIVATED, NMF shared memory feature does not currently work with doMPI.
test.shared_memory_doParallel: (12 checks) ... OK (10.12 seconds)
test.shared_memory_doSEQ: (11 checks) ... OK (6.47 seconds)
Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.seed.r
test.nndsvd: (10 checks) ... OK (0.03 seconds)
test.none: (6 checks) ... OK (0.04 seconds)
test.random: (26 checks) ... OK (0.14 seconds)
test.restore : DEACTIVATED, The option 'restore.seed' is deprecated. Related tests are now in test.seed.
test.seed.effect: (15 checks) ... OK (18.1 seconds)
test.zzz.all: (297 checks) ... OK (18.01 seconds)
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Test file: /tmp/Rpkglib_6997333d1b43/NMF/tests/runit.utils.r
test.nmfWrapper: (16 checks) ... OK (0.91 seconds)
test.rmatrix: (16 checks) ... OK (0.02 seconds)
Total execution time
*********
user system elapsed 272.397 36.390 294.956
```

## **Session Information**

- R version 3.0.2 (2013-09-25), x86\_64-pc-linux-gnu
- Locale: LC\_CTYPE=en\_US.UTF-8, LC\_NUMERIC=C, LC\_TIME=en\_US.UTF-8, LC\_COLLATE=en\_US.UTF-8, LC\_MONETARY=en\_US.UTF-8, LC\_MESSAGES=en\_US.UTF-8, LC\_PAPER=en\_US.UTF-8, LC\_NAME=C, LC\_ADDRESS=C, LC\_TELEPHONE=C, LC\_MEASUREMENT=en\_US.UTF-8, LC\_IDENTIFICATION=C
- $\bullet$  Base packages: base, datasets, graphics, gr<br/>Devices, methods, parallel, stats, utils

- Other packages: BH 1.51.0-3, bigmemory 4.4.3, bigmemory.sri 0.1.2, Biobase 2.22.0, BiocGenerics 0.8.0, cluster 1.14.4, doMPI 0.2, doParallel 1.0.3, fastICA 1.2-0, foreach 1.4.1, iterators 1.0.6, NMF 0.20, pkgmaker 0.18.2, RColorBrewer 1.0-5, Rcpp 0.10.5, RcppOctave 0.11.3, registry 0.2, Rmpi 0.6-3, rngtools 1.2.3, RUnit 0.4.26, stringr 0.6.2, synchronicity 1.1.0
- Loaded via a namespace (and not attached): codetools 0.2-8, colorspace 1.2-4, compiler 3.0.2, dichromat 2.0-0, digest 0.6.3, ggplot2 0.9.3.1, grid 3.0.2, gridBase 0.4-6, gtable 0.1.2, labeling 0.2, MASS 7.3-29, munsell 0.4.2, plyr 1.8, proto 0.3-10, reshape2 1.2.2, scales 0.2.3, tools 3.0.2, xtable 1.7-1