Package ‘spam64’

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**Type**  Package

**Title**  64-Bit Extension of the SPArse Matrix R Package 'spam'

**Version**  2.1-1

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**Description**  Provides the Fortran code of the R package 'spam' with 64-bit integers. Loading this package together with the R package 'spam' enables the sparse matrix class ``spam'' to handle huge sparse matrices with more than \(2^{31}-1\) non-zero elements.

**Suggests**  spam (== 2.1-1)

**License**  LGPL-2

**URL**  http://www.math.uzh.ch/furrer/software/spam/

**NeedsCompilation**  yes

**Repository**  CRAN

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Description

spam64 is the 64-bit extension of the package 'spam', itself a collection of functions for sparse matrix algebra.

General overview

Unless one works with very large datasets, spam is sufficient and we refer to the documentation thereof.

In case one needs to handle matrices or Cholesky factors with more than $2^{31}$ elements, 'spam64' is needed. This packages provided the 64-bit extension to 'spam' such that there is no 32-bit addressing limit.

Unless forced, a 64-bit representation is used when only needed.

Author(s)

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Some Fortran routines were written by Youcef Saad, Esmond G. Ng, Barry W. Peyton, Joseph W.H. Liu, Alan D. George.

References

'spam64':

'spam':

Examples

```r
require('spam')
spam(1)
str(spam(1))

require('spam64')
spam(1)
str(spam(1))

options(spam.force64=TRUE)
```
spam(1)
str(spam(1))

## Citations:
citation('spam64')
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