

Package ‘alabaster.string’

June 25, 2025

Title Save and Load Biostrings to/from File

Version 1.9.0

Date 2023-12-29

Description Save Biostrings objects to file artifacts, and load them back into memory.
This is a more portable alternative to serialization of such objects into RDS files.
Each artifact is associated with metadata for further interpretation;
downstream applications can enrich this metadata with context-specific properties.

License MIT + file LICENSE

Depends Biostrings, alabaster.base

Imports utils, methods, S4Vectors

Suggests BiocStyle, rmarkdown, knitr, testthat

VignetteBuilder knitr

RoxygenNote 7.2.3

biocViews DataImport, DataRepresentation

git_url <https://git.bioconductor.org/packages/alabaster.string>

git_branch devel

git_last_commit 9bcfeb5

git_last_commit_date 2025-04-15

Repository Bioconductor 3.22

Date/Publication 2025-06-25

Author Aaron Lun [aut, cre]

Maintainer Aaron Lun <infinite.monkeys.with.keyboards@gmail.com>

Contents

readXStringSet	2
saveObject,XStringSet-method	2
Index	4

readXStringSet	<i>Read an XStringSet from disk.</i>
----------------	--------------------------------------

Description

Read a [XStringSet](#) object from its on-disk representation. This is usually not directly called by users, but is instead called by dispatch in [readObject](#).

Usage

```
readXStringSet(path, metadata, ...)
```

Arguments

path	String containing a path to a directory, itself created using the saveObject method for XStringSet objects.
metadata	Named list of metadata for this object, see readObjectFile for details.
...	Further arguments passed to internal altReadObject calls.

Value

An [XStringSet](#) subclass containing DNA, RNA, protein or custom sequences. This may also be a [QualityScaledDNAStringSet](#) with quality scores.

See Also

["saveObject,XStringSet-method"](#), to save an [XStringSet](#) to disk.

Examples

```
library(Biostrings)
stuff <- DNAStringSet(c("AAA", "CC", "G", "TTTT"))

tmp <- tempfile()
saveObject(stuff, tmp)
readObject(tmp)
```

saveObject,XStringSet-method	<i>Save a XStringSet to disk</i>
------------------------------	----------------------------------

Description

Save a [XStringSet](#) to its on-disk representation.

Usage

```
## S4 method for signature 'XStringSet'
saveObject(x, path, ...)
```

Arguments

<code>x</code>	A XStringSet or any of its subclasses such as a QualityScaledXStringSet .
<code>path</code>	String containing the path to a directory in which to save <code>x</code> .
<code>...</code>	Further arguments to pass to specific methods.

Value

The contents of `x` are saved into a path, and `NULL` is invisibly returned.

Author(s)

Aaron Lun

See Also

[readXStringSet](#), to read the `XStringSet` back into the R session.

Examples

```
library(Biostrings)
stuff <- DNASTringSet(c("AAA", "CC", "G", "TTTT"))

tmp <- tempfile()
saveObject(stuff, tmp)
list.files(tmp, recursive=TRUE)
```

Index

altReadObject, [2](#)

loadXStringSet (readXStringSet), [2](#)

QualityScaledDNAStrngSet, [2](#)

QualityScaledXStringSet, [3](#)

readObject, [2](#)

readObjectFile, [2](#)

readXStringSet, [2](#), [3](#)

saveObject, [2](#)

saveObject, XStringSet-method, [2](#)

stageObject, XStringSet-method
 (saveObject, XStringSet-method),
 [2](#)

XStringSet, [2](#), [3](#)