

# Package ‘sss’

July 23, 2025

**Version** 0.2.2  
**License** GPL-2 | GPL-3  
**Title** Import Files in the Triple-s (Standard Survey Structure) Format  
**Description** Tools to import survey files in the '.sss' (triple-s) format.  
The package provides the function 'read.sss()' that reads the '.asc'  
(or '.csv') and '.sss' files of a triple-s survey data file.  
See also <<https://triple-s.org/>>.  
**URL** <http://andrie.github.io/sss/>, <https://andrie.github.io/sss/>  
**BugReports** <https://github.com/andrie/sss/issues>  
**Depends** R (>= 2.11.0)  
**Imports** utils, xml2, methods, assertthat  
**Suggests** testthat, covr, knitr, rmarkdown, dplyr, spelling, utf8  
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**VignetteBuilder** knitr  
**Language** en-US  
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**Repository** CRAN  
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|---------------|----------------------------------------|
| fast.read.fwf | <i>Read fixed-width files quickly.</i> |
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**Description**

Experimental replacement for [utils::read.fwf](#) that runs much faster. However, it is much less flexible than `utils::read.fwf`.

**Usage**

```
fast.read.fwf(  
  file,  
  widths,  
  col.names = NULL,  
  colClasses = NA,  
  tz = "",  
  dec = ".",  
  ...  
)
```

**Arguments**

|            |                                                                                                                                                                                                                                                                                                                                                       |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| file       | Character vector: name of file                                                                                                                                                                                                                                                                                                                        |
| widths     | Numeric vector: column widths. Negative numbers mean "skip this many columns". Use an NA as the final element if there are likely to be extra characters at the end of each row after the last one that you're interested in.                                                                                                                         |
| col.names  | names for the columns that are NOT skipped                                                                                                                                                                                                                                                                                                            |
| colClasses | can be used to control type conversion; see <a href="#">read.table()</a> . It is an optional vector whose names must be part of col.names. There is one extension of the <a href="#">read.table()</a> rules: a colClasses string starting POSIXct will trigger automatic conversion to POSIXct, using the rest of the string as the format specifier. |
| tz         | used in auto-conversion to <a href="#">POSIXct()</a> when colClasses is set                                                                                                                                                                                                                                                                           |
| dec        | the character to be assumed for decimal points. Passed to <a href="#">utils::type.convert()</a>                                                                                                                                                                                                                                                       |
| ...        | ignored                                                                                                                                                                                                                                                                                                                                               |

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|               |                                                       |
|---------------|-------------------------------------------------------|
| namesMultiple | <i>Reads all "codes" inside the triple-s "record"</i> |
|---------------|-------------------------------------------------------|

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**Description**

This function parses the record node and extracts all "codes" nodes into a data.frame

**Usage**

```
namesMultiple(names, length, sep = "_")
```

**Arguments**

|        |                                                                              |
|--------|------------------------------------------------------------------------------|
| names  | character vector defining the string that separates field and subfield names |
| length | Numeric vector that indicates the number of times each row must be repeated  |
| sep    | Character vector defining the string that separates field and subfield names |

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|                  |                                                                                              |
|------------------|----------------------------------------------------------------------------------------------|
| parseSSSmetadata | <i>Parses a triple-s XML (sss) metadata file, as specified by the triple-s XML standard.</i> |
|------------------|----------------------------------------------------------------------------------------------|

---

**Description**

This function reads and parses a .sss XML metadata file as well as its associated .asc data file. The .sss standard defines a standard survey structure.

**Usage**

```
parseSSSmetadata(x, XMLdoc)
```

**Arguments**

|        |                                                                                                          |
|--------|----------------------------------------------------------------------------------------------------------|
| x      | An XML document - as returned by <a href="#">xml2::read_xml()</a> , or <a href="#">readSSSmetadata()</a> |
| XMLdoc | No longer used. Use x instead.                                                                           |

**See Also**

[readSSSmetadata](#), [read.sss](#), [readSSSdata](#)

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|          |                                                                                         |
|----------|-----------------------------------------------------------------------------------------|
| read.sss | <i>Reads a triple-s XML (asc) data file, as specified by the triple-s XML standard.</i> |
|----------|-----------------------------------------------------------------------------------------|

---

## Description

This function reads and parses a .sss XML metadata file as well as its associated .asc data file. The sss standard defines a standard survey structure.

## Usage

```
read.sss(
  sssFilename,
  ascFilename = guess_asc_filename(sssFilename),
  sep = "_",
  verbose = FALSE
)
```

## Arguments

|             |                                                                                                                           |
|-------------|---------------------------------------------------------------------------------------------------------------------------|
| sssFilename | Character string: name of .sss file containing the survey metadata                                                        |
| ascFilename | Character string: name of .asc (or .csv) file containing survey data. If this is not provided, guesses the filename using |
| sep         | Character vector defining the string that separates question and subquestion labels, e.g. c("Q_1", "Q_2")                 |
| verbose     | If TRUE, prints messages when reading data files. Defaults to FALSE.                                                      |

## Value

A data frame with one element (column) for each variable in the data set.

The resulting data.frame contains several attributes:

- `variable.labels`: a named list of value labels with one element per variable, either NULL or a named character vector
- `label.table`: a named list with one element per question. Every element is a named character string that contains the label codes for that question.

## References

<https://triple-s.org/>

## See Also

Other read functions: [readSSSdata\(\)](#), [readSSSmetadata\(\)](#)

**Examples**

```
example <- system.file("sampledata/sample-1.sss", package = "sss")

# read.sss() automatically guesses the data file name
read.sss(system.file("sampledata/sample-1.sss", package = "sss"))

read.sss(system.file("sampledata/sample-2.sss", package = "sss"))

read.sss(system.file("sampledata/sample-3.sss", package = "sss"))
```

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|             |                                                                                         |
|-------------|-----------------------------------------------------------------------------------------|
| readSSSdata | <i>Reads a triple-s XML (asc) data file, as specified by the triple-s XML standard.</i> |
|-------------|-----------------------------------------------------------------------------------------|

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**Description**

This function reads an ‘.asc’ data file.

**Usage**

```
readSSSdata(x, ascFilename)
```

**Arguments**

|             |                                                  |
|-------------|--------------------------------------------------|
| x           | Name of .asc file containing the survey metadata |
| ascFilename | No longer used. Use x instead.                   |

**See Also**

[read.sss\(\)](#), [readSSSmetadata\(\)](#)

Other read functions: [read.sss\(\)](#), [readSSSmetadata\(\)](#)

**Examples**

```
sampleRoot <- system.file("sampledata", package = "sss")
filenameSSS <- file.path(sampleRoot, "sample-1.sss")
filenameASC <- file.path(sampleRoot, "sample-1.asc")

readSSSdata(filenameSSS)
readSSSmetadata(filenameSSS)
```

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|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| readSSSmetadata | <i>Reads a triple-s XML (sss) metadata file, as specified by the triple-s XML standard.</i> |
|-----------------|---------------------------------------------------------------------------------------------|

---

### Description

This function reads a .sss XML metadata file. The .sss standard defines a standard survey structure

### Usage

```
readSSSmetadata(x, SSSfilename)
```

### Arguments

|             |                                                  |
|-------------|--------------------------------------------------|
| x           | Name of .sss file containing the survey metadata |
| SSSfilename | No longer used. Use x instead.                   |

### See Also

[parseSSSmetadata\(\)](#), [read.sss\(\)](#), [readSSSdata\(\)](#)

Other read functions: [read.sss\(\)](#), [readSSSdata\(\)](#)

### Examples

```
sampleRoot <- system.file("sampledata", package = "sss")
filenameSSS <- file.path(sampleRoot, "sample-1.sss")
filenameASC <- file.path(sampleRoot, "sample-1.asc")

readSSSdata(filenameSSS)
readSSSmetadata(filenameSSS)
```

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|      |                                     |
|------|-------------------------------------|
| repN | <i>Repeats each element n times</i> |
|------|-------------------------------------|

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### Description

Each element is repeated n times. This is used to construct a vector of the new length after accounting for fields of type multiple

### Usage

```
repN(n)
```

### Arguments

|   |                                                                             |
|---|-----------------------------------------------------------------------------|
| n | Numeric vector that indicates the number of times each row must be repeated |
|---|-----------------------------------------------------------------------------|

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