

# Package ‘staplr’

January 11, 2021

**Type** Package

**Title** A Toolkit for PDF Files

**Version** 3.1.1

**Depends** R (>= 3.4.0)

**Description** Provides function to manipulate PDF files:

fill out PDF forms;

merge multiple PDF files into one;

remove selected pages from a file;

rename multiple files in a directory;

rotate entire pdf document;

rotate selected pages of a pdf file;

Select pages from a file;

splits single input PDF document into individual pages;

splits single input PDF document into parts from given points.

'staplr' requires Java 8 installed on your system.

**SystemRequirements** Java 8 or higher

**License** GPL-3

**LazyData** true

**RoxygenNote** 7.1.1

**Imports** tcltk, stringr, assertthat, glue, XML, rJava

**Suggests** lattice, testthat, pdftools

**Encoding** UTF-8

**BugReports** <https://github.com/pridiltal/staplr/issues>

**NeedsCompilation** no

**Author** Priyanga Dilini Talagala [aut, cre],

Ogan Mancarci [aut],

Daniel Padfield [aut],

Granville Matheson [aut]

**Maintainer** Priyanga Dilini Talagala <pritalagala@gmail.com>

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## R topics documented:

get_fields . . . . .	2
identity_form_fields . . . . .	3
remove_pages . . . . .	4
rename_files . . . . .	6
rotate_pages . . . . .	7
rotate_pdf . . . . .	8
select_pages . . . . .	10
set_fields . . . . .	11
split_from . . . . .	12
split_pdf . . . . .	14
staple_pdf . . . . .	15
staplr . . . . .	16
<b>Index</b>	<b>17</b>

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get_fields	<i>Get form fields from a pdf form</i>
------------	--

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### Description

If the toolkit Pdftk is available in the system, it will be called to get form fields from a pdf file.

See the reference for detailed usage of pdftk.

### Usage

```
get_fields(
  input_filepath = NULL,
  convert_field_names = FALSE,
  encoding_warning = TRUE
)
```

### Arguments

`input_filepath` the path of the input PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.

`convert_field_names`

By default pdftk will encode certain characters of the field names in plain text UTF-8 so if using a non-latin alphabet, your field names might be illegible. Setting this to TRUE will turn the UFT-8 code into characters. However this process it not guaranteed to be perfect as pdftk does not differentiate between encoded text and regular text using escape characters. If you have field names that intentionally include components that look like encoded characters this will attempt to fix them. Use this option only when necessary. If TRUE, remember to set it to TRUE when using [set\\_fields](#) as well.

encoding\_warning

If field names include strings that look like plain text UTF-8 codes, the function will return a warning by default, suggesting setting `convert_field_names` to `codeTRUE`. If `encoding_warning` is `FALSE`, these warnings will be silenced.

### Value

A list of fields. With type, name and value components. To use with `set_fields` edit the value element of the fields you want to modify. If the field of type "button", the value will be a factor. In this case the factor levels describe the possible values for the field. For example for a checkbox the typical level names would be "Off" and "Yes", corresponding to non checked and checked states respectively.

### Author(s)

Ogan Mancarci

### References

<https://www.pdflabs.com/tools/pdftk-the-pdf-toolkit/>

### See Also

`link{set_fields}`

### Examples

```
## Not run:
pdfFile = system.file('testForm.pdf', package = 'staplr')
fields = get_fields(pdfFile)

## End(Not run)
```

---

idenfity\_form\_fields *Identify text form fields*

---

### Description

Helps identification of text forum fields by creating a file that is filled with field names. Some pdf editors show field names when you mouse over the fields as well.

### Usage

```
idenfity_form_fields(
  input_filepath = NULL,
  output_filepath = NULL,
  overwrite = TRUE,
  convert_field_names = FALSE,
  encoding_warning = TRUE
)
```

**Arguments**

- `input_filepath` the path of the input PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.
- `output_filepath` the path of the output PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.
- `overwrite` If a file exists in `output_filepath`, should it be overwritten.
- `convert_field_names` By default pdftk will encode certain characters of the field names in plain text UTF-8 so if using a non-latin alphabet, your field names might be illegible. Setting this to TRUE will turn the UFT-8 code into characters. However this process it not guaranteed to be perfect as pdftk does not differentiate between encoded text and regular text using escape characters. If you have field names that intentionally include components that look like encoded characters this will attempt to fix them. Use this option only when necessary. If TRUE, remember to set it to TRUE when using [set\\_fields](#) as well.
- `encoding_warning` If field names include strings that look like plain text UTF-8 codes, the function will return a warning by default, suggesting setting `convert_field_names` to codeTRUE. If `encoding_warning` is FALSE, these warnings will be silenced.

**Examples**

```
## Not run:
pdfFile = system.file('testForm.pdf',package = 'staplr')
idenfity_form_fields(pdfFile, 'testOutput.pdf')

## End(Not run)
```

---

remove_pages	<i>Remove selected pages from a file</i>
--------------	--

---

**Description**

If the toolkit Pdfftk is available in the system, it will be called to remove the given pages from the seleted PDF files.

See the reference for detailed usage of pdftk.

**Usage**

```
remove_pages(
  rmpages,
  input_filepath = NULL,
  output_filepath = NULL,
  overwrite = TRUE
)
```

**Arguments**

<code>rmpages</code>	a vector of page numbers to be removed
<code>input_filepath</code>	the path of the input PDF file. The default is set to NULL. IF NULL, it prompts the user to select the folder interactively.
<code>output_filepath</code>	the path of the output PDF file. The default is set to NULL. IF NULL, it prompts the user to select the folder interactively.
<code>overwrite</code>	If a file exists in <code>output_filepath</code> , should it be overwritten.

**Value**

this function returns a PDF document with the remaining pages

**Author(s)**

Priyanga Dilini Talagala

**References**

<https://www.pdfplabs.com/tools/pdftk-the-pdf-toolkit/>

**Examples**

```
## Not run:
# This command prompts the user to select the file interactively.
# Remove page 2 and 3 from the selected file.
remove_pages(rmpages = c(3,6))

## End(Not run)

## Not run:
if (requireNamespace("lattice", quietly = TRUE)) {
  dir <- tempdir()
  for(i in 1:3) {
    pdf(file.path(dir, paste("plot", i, ".pdf", sep = "")))
    print(lattice::xyplot(iris[,1] ~ iris[,i], data = iris))
    dev.off()
  }
  output_file <- file.path(dir, paste('Full1_pdf.pdf', sep = ""))
  staple_pdf(input_directory = dir, output_filepath = output_file)
  input_path <- file.path(dir, paste("Full_pdf.pdf", sep = ""))
  output_path <- file.path(dir, paste("trimmed_pdf.pdf", sep = ""))
  remove_pages(rmpages = 1, input_path, output_path)
}

## End(Not run)
```

---

rename_files	<i>Rename multiple files</i>
--------------	------------------------------

---

**Description**

Rename multiple files in a directory and write renamed files back to directory

**Usage**

```
rename_files(input_directory = NULL, new_names)
```

**Arguments**

input_directory	the path of the input PDF files. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.
new_names	a vector of names for the output files.

**Value**

this function writes renamed files back to directory

**Author(s)**

Priyanga Dilini Talagala

**References**

<https://www.pdfplabs.com/tools/pdftk-the-pdf-toolkit/>

**Examples**

```
## Not run:  
#if the directory contains 3 PDF files  
rename_files(new_names = paste("file",1:3))  
  
## End(Not run)
```

---

rotate_pages	<i>Rotate selected pages of a pdf file</i>
--------------	--

---

### Description

If the toolkit Pdftk is available in the system, it will be called to rotate the given pages of the selected PDF files

See the reference for detailed usage of pdftk.

### Usage

```
rotate_pages(  
    rotatepages,  
    page_rotation = c(0, 90, 180, 270),  
    input_filepath = NULL,  
    output_filepath = NULL,  
    overwrite = TRUE  
)
```

### Arguments

rotatepages	a vector of page numbers to be rotated
page_rotation	An integer value from the vector c(0, 90, 180, 270). Each option sets the page orientation as follows: north: 0, east: 90, south: 180, west: 270. Note that the orientation cannot be cumulatively changed (eg. 90 (east) will always turn the page so the beginning of the page is on the right side)
input_filepath	the path of the input PDF file. The default is set to NULL. IF NULL, it prompts the user to select the folder interactively.
output_filepath	the path of the output PDF file. The default is set to NULL. IF NULL, it prompts the user to select the folder interactively.
overwrite	If a file exists in output_filepath, should it be overwritten.

### Value

this function returns a PDF document with the remaining pages

### Author(s)

Priyanga Dilini Talagala

### References

<https://www.pdflabs.com/tools/pdftk-the-pdf-toolkit/>

## Examples

```
## Not run:
# This command prompts the user to select the file interactively.
# Rotate page 2 and 6 to 90 degrees clockwise
rotate_pages(rotatepages = c(3,6), page_rotation = 90)

## End(Not run)

## Not run:
if (requireNamespace("lattice", quietly = TRUE)) {
  dir <- tempdir()
  for(i in 1:3) {
    pdf(file.path(dir, paste("plot", i, ".pdf", sep = "")))
    print(lattice::xyplot(iris[,1] ~ iris[,i], data = iris))
    dev.off()
  }
  output_file <- file.path(dir, paste('Full_pdf.pdf', sep = ""))
  staple_pdf(input_directory = dir, output_file)
  input_path <- file.path(dir, paste("Full_pdf.pdf", sep = ""))
  output_path <- file.path(dir, paste("Rotated_pgs_pdf.pdf", sep = ""))
  rotate_pages(rotatepages = c(2,3), page_rotation = 90, input_path, output_path)
}

## End(Not run)
```

---

 rotate\_pdf

*Rotate entire pdf document*


---

## Description

If the toolkit Pdftk is available in the system, it will be called to rotate the entire PDF document

See the reference for detailed usage of pdftk.

## Usage

```
rotate_pdf(
  page_rotation = c(0, 90, 180, 270),
  input_filepath = NULL,
  output_filepath = NULL,
  overwrite = TRUE
)
```

## Arguments

**page\_rotation** An integer value from the vector `c(0, 90, 180, 270)`. Each option sets the page orientation as follows: north: 0, east: 90, south: 180, west: 270. Note that the orientation cannot be cummulatively changed (eg. 90 (east) will always turn the page so the beginning of the page is on the right side)

`input_filepath` the path of the input PDF file. The default is set to NULL. IF NULL, it prompts the user to select the folder interactively.

`output_filepath` the path of the output PDF file. The default is set to NULL. IF NULL, it prompts the user to select the folder interactively.

`overwrite` If a file exists in `output_filepath`, should it be overwritten.

### Value

this function returns a PDF document with the rotated pages

### Author(s)

Priyanga Dilini Talagala

### References

<https://www.pdfplabs.com/tools/pdftk-the-pdf-toolkit/>

### Examples

```
## Not run:
# This command prompts the user to select the file interactively.
# Rotate the entire PDF document to 90 degrees clockwise
rotate_pdf(page_rotation = 90)

## End(Not run)

## Not run:
if (requireNamespace("lattice", quietly = TRUE)) {
  dir <- tempdir()
  for(i in 1:3) {
    pdf(file.path(dir, paste("plot", i, ".pdf", sep = "")))
    print(lattice::xyplot(iris[,1] ~ iris[,i], data = iris))
    dev.off()
  }
  output_file <- file.path(dir, paste('Full_pdf.pdf', sep = ""))
  staple_pdf(input_directory = dir, output_file)
  input_path <- file.path(dir, paste("Full_pdf.pdf", sep = ""))
  output_path <- file.path(dir, paste("rotated_pdf.pdf", sep = ""))
  rotate_pdf( page_rotation = 90, input_path, output_path)
}

## End(Not run)
```

---

select_pages	<i>Select pages from a file</i>
--------------	---------------------------------

---

### Description

If the toolkit Pdftk is available in the system, it will be called to combine the selected pages in a new pdf file.

See the reference for detailed usage of pdftk.

### Usage

```
select_pages(  
  selpages,  
  input_filepath = NULL,  
  output_filepath = NULL,  
  overwrite = TRUE  
)
```

### Arguments

selpages	a vector of page numbers to be selected
input_filepath	the path of the input PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.
output_filepath	the path of the output PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.
overwrite	If a file exists in output_filepath, should it be overwritten.

### Value

this function returns a PDF document with the remaining pages

### Author(s)

Granville Matheson, Priyanga Dilini Talagala

### References

<https://www.pdfplabs.com/tools/pdftk-the-pdf-toolkit/>

### Examples

```
## Not run:  
# This command prompts the user to select the file interactively.  
# Select page 3 and 6 from the selected file.  
select_pages(selpages = c(3,6))
```

```

## End(Not run)

## Not run:
if (requireNamespace("lattice", quietly = TRUE)) {
  dir <- tempdir()
  for(i in 1:3) {
    pdf(file.path(dir, paste("plot", i, ".pdf", sep = "")))
    print(lattice::xyplot(iris[,1] ~ iris[,i], data = iris))
    dev.off()
  }
  output_file <- file.path(dir, paste('Full_pdf.pdf', sep = ""))
  staple_pdf(input_directory = dir, output_file)
  input_path <- file.path(dir, paste("Full_pdf.pdf", sep = ""))
  output_path <- file.path(dir, paste("trimmed_pdf.pdf", sep = ""))
  select_pages(selpages = 1, input_path, output_path)
}

## End(Not run)

```

---

set\_fields

*Set fields of a pdf form*


---

## Description

If the toolkit Pdftk is available in the system, it will be called to fill a pdf form with given a list of fields. List of fields can be acquired by [get\\_fields](#) function.

See the reference for detailed usage of pdftk.

## Usage

```

set_fields(
  input_filepath = NULL,
  output_filepath = NULL,
  fields,
  overwrite = TRUE,
  convert_field_names = FALSE,
  flatten = FALSE
)

```

## Arguments

**input\_filepath** the path of the input PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.

**output\_filepath** the path of the output PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.

**fields** Fields returned from [get\\_fields](#) function. To make changes in a PDF, edit the values component of an element within this list

overwrite	If a file exists in output_filepath, should it be overwritten.
convert_field_names	If you set convert_field_names when using <a href="#">get_fields</a> you should set this to TRUE as well so the fields can be matched correctly.
flatten	If TRUE, the form fields will be flattened and turned into plain text.

### Author(s)

Ogan Mancarci

### References

<https://www.pdfplabs.com/tools/pdftk-the-pdf-toolkit/>

### See Also

[get\\_fields](#)

### Examples

```
## Not run:
pdfFile = system.file('testForm.pdf',package = 'staplr')
fields = get_fields(pdfFile)

fields$TextField1$value = 'this is text'
fields$TextField2$value = 'more text'
fields$RadioGroup$value = 2
fields$checkBox$value = 'Yes'

set_fields(pdfFile, 'filledPdf.pdf', fields)

## End(Not run)
```

---

split\_from

*Splits single input PDF document into parts from given points*

---

### Description

If the toolkit Pdftk is available in the system, it will be called to Split a single input PDF document into two parts from a given point

See the reference for detailed usage of pdftk.

**Usage**

```
split_from(
  pg_num,
  input_filepath = NULL,
  output_directory = NULL,
  prefix = "part",
  overwrite = TRUE
)
```

**Arguments**

pg_num	A vector of non-negative integers. Split the pdf document into parts from the numbered pages.
input_filepath	the path of the input PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.
output_directory	the path of the output directory
prefix	A string for output filename prefix
overwrite	If a file exists in output_filepath, should it be overwritten.

**Value**

this function splits a single input PDF document into individual pages

**Author(s)**

Priyanga Dilini Talagala and Ogan Mancarci

**References**

<https://www.pdfplabs.com/tools/pdftk-the-pdf-toolkit/>

**Examples**

```
## Not run:
# Split the pdf from page 10
split_from(pg_num=10)

## End(Not run)

## Not run:
if (requireNamespace("lattice", quietly = TRUE)) {
  dir <- tempdir()
  for(i in 1:4) {
    pdf(file.path(dir, paste("plot", i, ".pdf", sep = "")))
    print(lattice::xyplot(iris[,1] ~ iris[,i], data = iris))
    dev.off()
  }
  staple_pdf(input_directory = dir, output_filepath = file.path(dir, 'Full_pdf.pdf'))
}
```

```

input_path <- file.path(dir, "Full_pdf.pdf")
split_from(pg_num=2, input_filepath = input_path ,output_directory = dir )
}

## End(Not run)

```

---

split\_pdf

*Splits single input PDF document into individual pages.*


---

### Description

If the toolkit Pdftk is available in the system, it will be called to Split a single input PDF document into individual pages.

See the reference for detailed usage of pdftk.

### Usage

```
split_pdf(input_filepath = NULL, output_directory = NULL, prefix = "page_")
```

### Arguments

`input_filepath` the path of the input PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.

`output_directory`  
the path of the output directory

`prefix` A string for output filename prefix

### Value

this function splits a single input PDF document into individual pages

### Author(s)

Priyanga Dilini Talagala and Ogan Mancarci

### References

<https://www.pdfplabs.com/tools/pdftk-the-pdf-toolkit/>

### Examples

```

## Not run:
split_pdf()

## End(Not run)

## Not run:
if (requireNamespace("lattice", quietly = TRUE)) {

```

```

dir <- tempdir()
for(i in 1:3) {
pdf(file.path(dir, paste("plot", i, ".pdf", sep = "")))
print(lattice::xyplot(iris[,1] ~ iris[,i], data = iris))
dev.off()
}
staple_pdf(input_directory = dir, output_filepath = file.path(dir, 'Full_pdf.pdf'))
split_pdf(input_filepath = file.path(dir, paste("Full_pdf.pdf", sep = "")),output_directory = dir )
}

## End(Not run)

```

---

staple\_pdf

---

*Merge multiple PDF files into one*


---

### Description

If the toolkit Pdftk is available in the system, it will be called to merge the PDF files.

See the reference for detailed usage of pdftk.

### Usage

```

staple_pdf(
  input_directory = NULL,
  input_files = NULL,
  output_filepath = NULL,
  overwrite = TRUE
)

```

### Arguments

input_directory	the path of the input PDF files. The default is set to NULL. If NULL, it prompt the user to select the folder interactively.
input_files	a vector of input PDF files. The default is set to NULL. If NULL and input_directory is also NULL, the user is propted to select a folder interactively.
output_filepath	the path of the output PDF file. The default is set to NULL. IF NULL, it prompt the user to select the folder interactively.
overwrite	If a file exists in output_filepath, should it be overwritten.

### Value

this function returns a combined PDF document

### Author(s)

Priyanga Dilini Talagala and Daniel Padfield

## References

<https://www.pdfabs.com/tools/pdftk-the-pdf-toolkit/>

## Examples

```
## Not run:
staple_pdf()

## End(Not run)

## Not run:
if (requireNamespace("lattice", quietly = TRUE)) {
  dir <- tempdir()
  for(i in 1:3) {
    pdf(file.path(dir, paste("plot", i, ".pdf", sep = "")))
    print(lattice::xyplot(iris[,1] ~ iris[,i], data = iris))
    dev.off()
  }
  output_file <- file.path(dir, paste('Full_pdf.pdf', sep = ""))
  staple_pdf(input_directory = dir, output_filepath = output_file)
}

## End(Not run)
```

---

staplr

*staplr: A package containing a toolkit for PDF files*

---

## Description

This package provides function to manipulate PDF files: merging multiple PDF files into one.

## Author(s)

Priyanga Dilini Talagala, Ogan Mancarci and Daniel Padfield

## References

<https://www.pdfabs.com/tools/pdftk-the-pdf-toolkit/>

## See Also

The core functions in this package: [staple\\_pdf](#), [remove\\_pages](#), [split\\_pdf](#), [rename\\_files](#)

# Index

`get_fields`, [2](#), [11](#), [12](#)

`idenfity_form_fields`, [3](#)

`remove_pages`, [4](#), [16](#)

`rename_files`, [6](#), [16](#)

`rotate_pages`, [7](#)

`rotate_pdf`, [8](#)

`select_pages`, [10](#)

`set_fields`, [2-4](#), [11](#)

`split_from`, [12](#)

`split_pdf`, [14](#), [16](#)

`staple_pdf`, [15](#), [16](#)

`staplr`, [16](#)