Package 'R2PPT'

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Type Package

Title Simple R Interface to Microsoft PowerPoint using rcom or RDCOMClient.

Depends R (>= 2.3.0)

Suggests rcom, RDCOMClient

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Description R2PPT provides a simple set of wrappers to easily use rcom
or RDCOMClient for generating Microsoft PowerPoint presentations.

License GPL (>= 2)

X-CRAN-Original-Package R2PPT

OS_type windows

Repository CRAN

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NeedsCompilation no

R topics documented:

PPT.AddBlankSlide   *Add a Blank Slide to current PowerPoint presentation*

Description

Adds a slide to the current PowerPoint presentation of Microsoft type 'ppLayoutBlank'.

Usage

```
PPT.AddBlankSlide(ppt)
```

Arguments

ppt   List of COM objects as initialised by PPT.Init. See example.

Value

ppt   Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See http://sunsite.univie.ac.at/rcom for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.AddTitleSlide,PPT.AddTextSlide,
PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:
myPres<-PPT.Init()
#or
#myPres<-PPT.Init(method="RDCOMClient")
myPres<-PPT.AddBlankSlide(myPres)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
rm(myPres)

## End(Not run)
```

PPT.AddDataFrame *Adds a R data frame to the current slide*

Description

Adds a R data frame to the current slide using the 'AddOLEObject' PowerPoint method.

Usage

```
PPT.AddDataFrame(ppt, df = stop("Data frame must be specified"),
size = c(120, 110, 480, 320), row.names = TRUE, col.names = TRUE)
```

Arguments

ppt	Required list of COM objects as initialised by PPT.Init. See example.
df	a R dataframe.
size	Optional numeric vector of size 4 (Left,Top,Width,Height) giving the dimensions of the R data frame as it appears in the PowerPoint slide.
row.names	logical; include data frame row names?
col.names	logical; include data frame column names?

Details

The function saves the data frame as a temporary csv file and then inserts this into presentation using the PowerPoint 'AddOLEObject' method. PowerPoint treats this as an embedded Excel file which is convenient for further editing of the data frame.

Value

ppt	Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See http://sunsite.univie.ac.at/rcom for more details on rcom and http://www.omegahat.
org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.AddTitleSlide,PPT.AddTextSlide,
PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:

ctl <- c(4.17,5.58,5.18,6.11,4.50,4.61,5.17,4.53,5.33,5.14)
trt <- c(4.81,4.17,4.41,3.59,5.87,3.83,6.03,4.89,4.32,4.69)
group <- gl(2,10,20, labels=c("Ctl","Trt"))
weight <- c(ctl, trt)
my.df<-data.frame(weight=weight,group=group)

opar <- par(mfrow = c(2,2), oma = c(0, 0, 1.1, 0))
plot(lm(weight ~ group,data=my.df), las = 1)      # Residuals, Fitted, ...
par(opar)


myPres<-PPT.Init(visible=TRUE)
myPres<-PPT.AddBlankSlide(myPres)
myPres<-PPT.AddGraphicstoSlide(myPres,size= c(200, 10, 500, 500))
myPres<-PPT.AddDataFrame(myPres, df = my.df,row.names=FALSE,size=c(30,100,100,300))
myPres<-PPT.Present(myPres)

### Double click the data frame in PowerPoint to edit further..


## End(Not run)
```

PPT.AddGraphicstoSlide

Adds an R graphics output to the current slide of current PowerPoint presentation

Description

Adds an R graphics output to the current slide of the PowerPoint presentation using the PowerPoint 'AddPicture' method. Graphics output can either be a graphical output file or the current R graphics device as specified by `dev.cur`.

Usage

```
PPT.AddGraphicstoSlide(ppt, file = NULL, size = c(10, 10, 700, 500), dev.out.type = "jpeg")
```

Arguments

ppt	List of COM objects as initialised by PPT.Init. See example.
file	Optional filename giving the full file path to R graphics output. See example.
size	Optional numeric vector of size 4 (Left,Top,Width,Height) giving the dimensions of the R graphics in the PowerPoint slide. Defaults to c(10, 10, 700, 500) which covers most of the slide.
dev.out.type	Optional character type of output to use when using current graphics device. Defaults to "jpeg". Ignored if file is specified.

Value

ppt	Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See <http://sunsite.univie.ac.at/rcom> for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

[PPT.Init](),[PPT.AddTitleSlide](),[PPT.AddTextSlide](),
[PPT.AddTitleOnlySlide](),[PPT.Present](),[PPT.ApplyTemplate](),[savePlot]()

Examples

```
## Not run:
myPres<-PPT.Init(visible=TRUE)
myPres<-PPT.AddTitleSlide(myPres,title="How to add R graphics to PowerPoint!")

## Example adding graphic from file
myPres<-PPT.AddBlankSlide(myPres)
jpeg(file="testRplot1.jpeg",quality=100,height=960,width=960)
plot(rnorm(100))
dev.off()
# You must give full file path
myPres<-PPT.AddGraphicstoSlide(myPres,file=paste(getwd(),"testRplot1.jpeg",sep="/"))
unlink(paste(getwd(),"testRplot1.jpeg",sep="/"))
## Example adding graphic from current graphics device
myPres<-PPT.AddBlankSlide(myPres)
hist(rnorm(100))
myPres<-PPT.AddGraphicstoSlide(myPres,size= c(10, 10, 300, 500))
hist(runif(100))
myPres<-PPT.AddGraphicstoSlide(myPres,size= c(350, 10, 300, 500))


## End(Not run)
```

PPT.AddTextSlide   *Add a text layout slide to current PowerPoint presentation*

Description

Adds a slide to the current PowerPoint presentation of Microsoft type 'ppLayoutText'.

Usage

```
PPT.AddTextSlide(ppt, title = NULL, title.fontsize = NULL, title.font = NULL, text = NULL, text.fontsi
```

Arguments

ppt	List of COM objects as initialised by PPT.Init. See example.
title	Optional title text.
title.fontsize	Optional numeric title font size.
title.font	Optional character title font.
text	Optional character text.
text.fontsize	Optional numeric text font size.
text.font	Optional character text font.

Value

ppt   Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See http://sunsite.univie.ac.at/rcom for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.AddTitleSlide,PPT.AddTextSlide,
PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:
myPres<-PPT.Init()
#or
#myPres<-PPT.Init(method="RDCOMClient")
myPres<-PPT.AddBlankSlide(myPres)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
rm(myPres)

## End(Not run)
```

PPT.AddTitleOnlySlide   *Add a TitleOnly slide to current PowerPoint presentation*

Description

Adds a slide to the current PowerPoint presentation of Microsoft type 'ppLayoutTitleOnly'.

Usage

```
PPT.AddTitleOnlySlide(ppt, title = NULL, title.fontsize = NULL, title.font = NULL)
```

Arguments

`ppt`	Required list of COM objects as initialised by PPT.Init. See example.
`title`	Optional title text.
`title.fontsize`	Optional numeric title font size.
`title.font`	Optional character title font.

Value

`ppt`	Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones `<wayne_betws@hotmail.com>`

References

See http://sunsite.univie.ac.at/rcom for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.AddTitleSlide,PPT.AddTextSlide,
PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:
myPres<-PPT.Init()
#or
#myPres<-PPT.Init(method="RDCOMClient")
myPres<-PPT.AddBlankSlide(myPres)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
rm(myPres)

## End(Not run)
```

PPT.AddTitleSlide *Add a title slide to current PowerPoint presentation*

Description

Adds a slide to the current PowerPoint presentation of Microsoft type 'ppLayoutTitle'.

Usage

```
PPT.AddTitleSlide(ppt, title = NULL, subtitle = NULL, title.font = NULL, title.fontsize = NULL, subtit
```

Arguments

ppt	Required list of COM objects as initialised by PPT.Init. See example.
title	Optional title text.
subtitle	Optional subtitle text.
title.font	Optional character title font.
title.fontsize	Optional numeric title font size.
subtitle.font	Optional character subtitle font.
subtitle.fontsize	
	Optional numeric subtitle font size.

Value

ppt	Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones <'wayne_betws@hotmail.com'>

References

See <http://sunsite.univie.ac.at/rcom> for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.AddTitleSlide,PPT.AddTextSlide,
PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:
myPres<-PPT.Init()
#or
#myPres<-PPT.Init(method="RDCOMClient")
myPres<-PPT.AddBlankSlide(myPres)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
rm(myPres)

## End(Not run)
```

PPT.ApplyTemplate   *Applies a Template Design to current PowerPoint presentation*

Description

Applies a Template Design to current PowerPoint presentation.

Usage

```
PPT.ApplyTemplate(ppt,file)
```

Arguments

ppt   Required list of COM objects as initialised by PPT.Init. See example.

file   Required filename giving the full file path of PowerPoint Template file. See
             example.

Value

ppt   Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the
example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See <http://sunsite.univie.ac.at/rcom> for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.Present,PPT.SaveAs,PPT.Close,PPT.AddTitleSlide,PPT.AddTextSlide,
PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:
myPres<-PPT.Init() # or myPres<-PPT.Init(method="RDCOMClient")
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")

#### Must specify full file path to PowerPoint template file. For PowerPoint 2000 & 2003 should be something like:
myPres<-PPT.ApplyTemplate(myPres,file="C:/Program Files/Microsoft Office/Templates/Presentation Designs/Carnati
### For PowerPoint 2007 should be something like:
myPres<-PPT.ApplyTemplate(myPres,file="C:/Program Files/Microsoft Office/Templates/1033/ClassicPhotoAlbum.potx'

## End(Not run)
```

PPT.Close   *Close a PowerPoint presentation*

Description

Closes a PowerPoint presentation.

Usage

```
PPT.Close(ppt)
```

Arguments

ppt   Required list of COM objects as initialised by PPT.Init. See example.

Value

ppt   Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the
example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See <http://sunsite.univie.ac.at/rcom> for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

[PPT.Init](#),[PPT.SaveAs](#),[PPT.AddTitleSlide](#),[PPT.AddTextSlide](#),
[PPT.AddTitleOnlySlide](#),[PPT.Present](#),[PPT.ApplyTemplate](#),[PPT.AddGraphicstoSlide](#)

Examples

```
## Not run:
#Example of generating a presentation without making it visible (can be a lot quicker!).
myPres<-PPT.Init(visible=FALSE)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
myPres<-PPT.SaveAs(myPres,file=paste(getwd(),"test R2PPT Pres.ppt",sep="/"))
myPres<-PPT.Close(myPres)
rm(myPres)

### Open presentation
myPres<-PPT.Open(file=paste(getwd(),"test R2PPT Pres.ppt",sep="/"))
myPres<-PPT.Present(myPres)

## End(Not run)
```

PPT.getAbsolutePath   *Gets the absolute pathname string.*

Description

Gets the absolute pathname string.

Usage

```
PPT.getAbsolutePath(pathname,workDirectory=getwd(),expandTilde=FALSE,...)
```

Arguments

pathname	Required filename. See example
workDirectory	Working driectory. Defaults to current R working directory.
expandTilde	Optional. Expand tildas? Defaults to FALSE.
...	Optional extra arguments.

Value

Returns a character string of the absolute pathname.

Author(s)

Henrik Bengtsson (<http://www.braju.com/R/>) and modified by Wayne Jones <wayne_betws@hotmail.com>

References

See function "getAbsolutePath" from package Rutils: http://cran.r-project.org/web/packages/R.utils/index.html.

Examples

```
## Not run:
PPT.getAbsolutePath("myfilename.R")

## End(Not run)
```

PPT.Init   *Initialises a PowerPoint presentation*

Description

Initialises a PowerPoint presentation by using either rcom or RDCOMClient.

Usage

```
PPT.Init(visible=TRUE, method = c("rcom", "RDCOMClient"), addPres = TRUE)
```

Arguments

visible	Optional logical specifying if PowerPoint is visible from initialisation. Useful for debugging. Defaults to TRUE.
method	Choice of underlying COM technology method to implement R2PPT. Choice of either rcom or RDCOMClient. Defaults to rcom.
addPres	Add a presentation at initialisation? Defaults to TRUE.

Value

ppt	Invisibly returns an initialised list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See <http://sunsite.univie.ac.at/rcom> for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.AddTitleSlide,PPT.AddTextSlide,
PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:
myPres<-PPT.Init()
#or
#myPres<-PPT.Init(method="RDCOMClient")
myPres<-PPT.AddBlankSlide(myPres)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
rm(myPres)

## End(Not run)
```

PPT.Open   *Open an existing PowerPoint presentation*

Description

Opens an existing PowerPoint presentation.

Usage

```
PPT.Open(file=stop("filename must be specified"),method=c("rcom","RDCOMClient"))
```

Arguments

file	Required filename giving the full file path to existing PowerPoint presentation. See example.
method	Choice of underlying COM technology to open the PowerPoint presentation. Choice of either rcom or RDCOMClient. Defaults to rcom.

Value

ppt   Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See http://sunsite.univie.ac.at/rcom for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.SaveAs,PPT.Close,PPT.AddTitleSlide,PPT.AddTextSlide,
PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:
#Create and save a presentation

myPres<-PPT.Init(visible=FALSE)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
myPres<-PPT.SaveAs(myPres,file=paste(getwd(),"test R2PPT Pres.ppt",sep="/"))
myPres<-PPT.Close(myPres)
rm(myPres)

#Open the saved presentation and carry on...

myPres<-PPT.Open(file=paste(getwd(),"test R2PPT Pres.ppt",sep="/"))
myPres<-PPT.AddTitleOnlySlide(myPres,title="Carry on appending to existing PPT file!")


## End(Not run)
```

PPT.Present   *Run the PowerPoint presentation slideshow*

Description

Runs the specified PowerPoint presentation as a full screen slideshow.

Usage

```
PPT.Present(ppt)
```

Arguments

ppt   Required list of COM objects as initialised by PPT.Init. See example.

Value

ppt   Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the example.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See http://sunsite.univie.ac.at/rcom for more details on rcom and http://www.omegahat. org/RDCOMClient/ for more details on RDCOMClient.

See Also

PPT.Init,PPT.SaveAs,PPT.Close,PPT.AddTitleSlide,PPT.AddTextSlide, PPT.AddTitleOnlySlide,PPT.Present,PPT.ApplyTemplate,PPT.AddGraphicstoSlide

Examples

```
## Not run:
myPres<-PPT.Init(visible=FALSE)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
myPres<-PPT.SaveAs(myPres,file=paste(getwd(),"test R2PPT Pres.ppt",sep="/"))
myPres<-PPT.Present(myPres)
```

```
## End(Not run)
```

PPT.SaveAs   *Save a PowerPoint presentation to file*

Description

Saves a PowerPoint presentation to a specified file.

Usage

```
PPT.SaveAs(ppt,file)
```

Arguments

ppt   Required list of objects of class 'COMobject' as initialised by PPT.Init. See
            example.

file   Required filename to R graphics output. See example.

Value

ppt   Invisibly returns a list of COM objects.

Warning

You must save the returned list of COM objects initialised with PPT.Init to an R object. See the
example. No overwrite warning is given.

Author(s)

Wayne Jones <wayne_betws@hotmail.com>

References

See <http://sunsite.univie.ac.at/rcom> for more details on rcom and http://www.omegahat.org/RDCOMClient/ for more details on RDCOMClient.

See Also

[PPT.Init](),[PPT.Close](),[PPT.AddTitleSlide](),[PPT.AddTextSlide](),
[PPT.AddTitleOnlySlide](),[PPT.Present](),[PPT.ApplyTemplate](),[PPT.AddGraphicstoSlide]()

Examples

```
## Not run:
#Example of generating a presentation without making it visible (can be a lot quicker!).
myPres<-PPT.Init(visible=FALSE)
myPres<-PPT.AddBlankSlide(myPres)
myPres<-PPT.AddTitleSlide(myPres,title="Title Slide",subtitle="Subtitle here")
myPres<-PPT.AddTitleOnlySlide(myPres,title="Title Only",title.fontsize=40,title.font="Arial")
myPres<-PPT.AddTextSlide(myPres,title="Text Slide",text="Text1 \rText2 \rText3",text.font="Arial")
myPres<-PPT.SaveAs(myPres,file=paste(getwd(),"test R2PPT Pres.ppt",sep="/"))
myPres<-PPT.Close(myPres)
rm(myPres)

### Open presentation
myPres<-PPT.Open(file=paste(getwd(),"test R2PPT Pres.ppt",sep="/"))
myPres<-PPT.Present(myPres)

## End(Not run)
```

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