

Package ‘R2PPT’

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Title Simple R Interface to Microsoft PowerPoint using RDCOMClient

Suggests RDCOMClient

Version 2.2.0

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Description Provides a simple set of wrappers to easily use RDCOMClient for generating Microsoft PowerPoint presentations. Warning: this package is soon to be archived from CRAN.

License GPL-3

Depends R (>= 2.3.0)

URL <https://github.com/waynegitshell/R2PPT/>

NeedsCompilation no

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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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitsshell/R2PPT/> for R2PPT source code.

See Also

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

Examples

```
## Not run:  
myPres<-PPT.Init()  
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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitsshell/R2PPT/> for R2PPT source code.

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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

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)
windows()
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.fontsize = NULL, text.font = NULL)
```

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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

See Also

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

Examples

```
## Not run:
myPres<-PPT.Init()
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

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

Value

<code>ppt</code>	Invisibly returns a list of COM objects.
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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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

See Also

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

Examples

```
## Not run:
myPres<-PPT.Init()
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	<i>Add a title slide to current PowerPoint presentation</i>
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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, subtitle.font = NULL, subtitle.fontsize = NULL)
```

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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

See Also

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

Examples

```
## Not run:
myPres<-PPT.Init()
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	<i>Applies a Template Design to current PowerPoint presentation</i>
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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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitsshell/R2PPT/> for R2PPT source code.

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:/Templates/Designs/Carnation.pot")
### For PowerPoint 2007 should be something like:
myPres<-PPT.ApplyTemplate(myPres,file="C:/Templates/1033/ClassicPhotoAlbum.potx")

## End(Not run)
```

PPT.Close	<i>Close a PowerPoint presentation</i>
-----------	----------------------------------------

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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

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.Init

Initialises a PowerPoint presentation

Description

Initialises a PowerPoint presentation by using RDCOMClient.

Usage

```
PPT.Init(visible=TRUE, method = "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. Legacy function input, always uses RDCOMClient now.
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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

See Also

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

Examples

```
## Not run:
myPres<-PPT.Init()
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="RDCOMClient")
```

Arguments

file	Required filename giving the full file path to existing PowerPoint presentation. See example.
method	Choice of underlying COM technology method to implement R2PPT. Legacy function input, always uses RDCOMClient now.

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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

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.w.jones@shell.com>

References

See <https://github.com/omegahat/RDCOMClient> for more details on RDCOMClient and <https://github.com/waynegitshell/R2PPT/> for R2PPT source code.

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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