Package 'R2PPT'

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Title Simple R Interface to Microsoft PowerPoint using RDCOMClient
Suggests RDCOMClient
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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 OS_type windows Repository CRAN Date/Publication 2022-04-26 14:30:05 UTC R topics documented:
PPT.AddBlankSlide PPT.AddDataFrame PPT.AddGraphicstoSlide PPT.AddTextSlide PPT.AddTitleOnlySlide PPT.AddTitleSlide PPT.ApplyTemplate PPT.Close PPT.Close 1 PPT.Init 1 PPT.Open 1 PPT.Present 1 PPT.SaveAs 1
Index 1'

2 PPT.AddBlankSlide

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/waynegitshell/R2PPT/ for R2PPT source code.
```

See Also

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

```
## 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)</pre>
```

PPT.AddDataFrame 3

```
## 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 dimen-

sions 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/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:
ctl \leftarrow 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"))</pre>
weight <- c(ctl, trt)</pre>
my.df<-data.frame(weight=weight,group=group)</pre>
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)</pre>
myPres<-PPT.AddBlankSlide(myPres)</pre>
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)</pre>
### 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
```

```
## 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()</pre>
```

6 PPT.AddTextSlide

```
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)</pre>
```

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)</pre>
```

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.w.jones@shell.com>

8 PPT.AddTitleSlide

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)</pre>
```

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, 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.

PPT.ApplyTemplate 9

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)</pre>
```

PPT.ApplyTemplate

Applies a Template Design to current PowerPoint presentation

Description

Applies a Template Design to current PowerPoint presentation.

Usage

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

PPT.ApplyTemplate

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/waynegitshell/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
```

```
## 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)</pre>
```

PPT.Close 11

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.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
```

```
## 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)</pre>
```

12 PPT.Init

```
rm(myPres)
### Open presentation
myPres<-PPT.Open(file=paste(getwd(),"test R2PPT Pres.ppt",sep="/"))
myPres<-PPT.Present(myPres)
## End(Not run)</pre>
```

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	specitying if	PowerPoint is visible from initialisation. \	∪seful
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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.

PPT.Open 13

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)</pre>
```

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>

14 PPT.Present

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)</pre>
```

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.

PPT.SaveAs 15

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)</pre>
```

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.

16 PPT.SaveAs

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
```

```
## 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)</pre>
```

Index

```
* IO
                                                  PPT.Open, 13
    PPT.AddBlankSlide, 2
                                                  PPT. Present, 2, 4, 5, 7–11, 13, 14, 14, 15, 16
    PPT.AddDataFrame, 3
                                                  PPT. SaveAs, 10, 11, 14, 15, 15
    PPT.AddGraphicstoSlide, 4
                                                  savePlot, 5
    PPT.AddTextSlide, 6
    PPT.AddTitleOnlySlide, 7
    PPT.AddTitleSlide, 8
    PPT.ApplyTemplate, 9
    PPT.Close, 11
    PPT.Init, 12
    PPT. Open, 13
    PPT.Present, 14
    PPT. SaveAs, 15
* connection
    PPT.AddBlankSlide, 2
    PPT.AddDataFrame, 3
    PPT.AddGraphicstoSlide, 4
    PPT.AddTextSlide, 6
    PPT.AddTitleOnlySlide, 7
    PPT.AddTitleSlide, 8
    PPT.ApplyTemplate, 9
    PPT.Close, 11
    PPT.Init, 12
    PPT.Open, 13
    PPT.Present, 14
    PPT. SaveAs, 15
PPT.AddBlankSlide, 2
PPT.AddDataFrame, 3
PPT.AddGraphicstoSlide, 2, 4, 4, 7–11,
         13–16
PPT.AddTextSlide, 2, 4, 5, 6, 7–11, 13–16
PPT.AddTitleOnlySlide, 2, 4, 5, 7, 7, 8–11,
         13-16
PPT.AddTitleSlide, 2, 4, 5, 7, 8, 8, 9–11,
         13–16
PPT.ApplyTemplate, 2, 4, 5, 7–9, 9, 10, 11,
        13–16
PPT.Close, 10, 11, 14-16
PPT.Init, 2, 4, 5, 7-11, 12, 13-16
```