Subject: Adding more to a Window.Save PDF page Posted by Dick Jackson on Fri, 23 Jun 2017 00:26:03 GMT

View Forum Message <> Reply to Message

Hi all,

Here's a simplified explanation of what I'm doing with my widget application and Function Graphics, and what I'm having trouble with. I make a draw widget and use the Plot() function to make a plot, which the user can interact with:

```
wDraw = Widget_Window(...)
; after /Realizing widgets
Widget_Control, wDraw, GET_VALUE=oWindow
oWindow.Select
oPlot = Plot(...)
oLegend = Legend(...)
```

And I also have a Widget Table with other details.

Once the user is happy with what is shown in the plot and the table, I'd like to provide a Print feature to make a PDF that shows both of those on one page.

I know the table won't come automatically (I'll have to lay that out with TEXT() objects, which is fine), but is there a way I can use oPlot and oLegend (or simply, oWindow) as *part* of what I want on a PDF page and add other things to that page? I know that oWindow.Save, 'myfile.pdf' creates a lovely PDF page of the current state of the window (which contains the plot), but I want to add other things to the page.

If I could make a new oPDFWindow object and add oPlot and oLabel to it, then add my table text objects, I could then do oPDFWindow.Save and I'm set.

oWindow is a GraphicsWin object, which Help, /OBJECTS tells me has:

```
Known Procedure Methods:
IDLITWINDOW::ADD

... so I tried:

oPDFWindow = GraphicsWin()
oPDFWindow.Add, oPlot

and I got:

% IDLGRMODEL::ADD: Invalid object reference: <ObjHeapVar434720>.
```

... as that Add method seems to be looking for regular "object graphics" objects.

The Plot() function calls the procedure "Graphic" which goes down a pretty deep rabbit hole... Has anyone else been down there?

Yes, I could make a routine to create the plots/legend, and call it once when I send it to screen and again when I send it to PDF, but I'd like to print to PDF the current state of the plots/legend, which the user may have customized on-screen.

Other ideas? Thanks for reading.

Cheers,
-Dick

Dick Jackson Software Consulting Inc. Victoria, BC, Canada --- http://www.d-jackson.com

Subject: Re: Adding more to a Window.Save PDF page Posted by Helder Marchetto on Thu, 29 Jun 2017 07:14:20 GMT View Forum Message <> Reply to Message

On Friday, June 23, 2017 at 2:26:06 AM UTC+2, Dick Jackson wrote:

> Hi all,

> Here's a simplified explanation of what I'm doing with my widget application and Function Graphics, and what I'm having trouble with. I make a draw widget and use the Plot() function to make a plot, which the user can interact with:

```
> wDraw = Widget_Window(...)
> ; after /Realizing widgets
> Widget_Control, wDraw, GET_VALUE=oWindow
> oWindow.Select
> oPlot = Plot(...)
> oLegend = Legend(...)
> And I also have a Widget_Table with other details.
```

> Once the user is happy with what is shown in the plot and the table, I'd like to provide a Print feature to make a PDF that shows both of those on one page.

> I know the table won't come automatically (I'll have to lay that out with TEXT() objects, which is fine), but is there a way I can use oPlot and oLegend (or simply, oWindow) as *part* of what I

want on a PDF page and add other things to that page? I know that oWindow.Save, 'myfile.pdf' creates a lovely PDF page of the current state of the window (which contains the plot), but I want to add other things to the page.

```
>
> If I could make a new oPDFWindow object and add oPlot and oLabel to it, then add my table
text objects, I could then do oPDFWindow. Save and I'm set.
> oWindow is a GraphicsWin object, which Help, /OBJECTS tells me has:
>
    Known Procedure Methods:
>
>
      IDLITWINDOW::ADD
> ... so I tried:
>
> oPDFWindow = GraphicsWin()
> oPDFWindow.Add, oPlot
> and I got:
>
> % IDLGRMODEL::ADD: Invalid object reference: <ObjHeapVar434720>.
>
> ... as that Add method seems to be looking for regular "object graphics" objects.
>
> The Plot() function calls the procedure "Graphic" which goes down a pretty deep rabbit hole...
Has anyone else been down there?
>
> Yes, I could make a routine to create the plots/legend, and call it once when I send it to screen
and again when I send it to PDF, but I'd like to print to PDF the current state of the plots/legend,
which the user may have customized on-screen.
>
```

- > Other ideas? Thanks for reading.
- > Cheers.
- > -Dick

>

>

- > Dick Jackson Software Consulting Inc.
- > Victoria, BC, Canada --- http://www.d-jackson.com

Hi Dick,

I'm not sure if this would solve your problem, but I just faced a similar problem and I will try solving it this way. How about using the copyWindow() method?

I'm using function graphics and I have two widget_window(s) with image and plot. I would like to export a movie of image+plot. Combining both in the same widget window is not an option because I cannot then export a single one of them. Therefore, I think that the only option is:

```
ww = window(dimensions=[2*nx,ny], /buffer)
o1 = image(sourceObj1.copyWindow(), margin=0, layout=[2,1,1], current=ww)
o2 = image(sourceObj2.copyWindow(), margin=0, layout=[2,1,2], current=ww)
```

ww.save, myFileName

You can of course play with window dimensions and margin to get the right fit. I hope it helps.

Cheers, Helder

Subject: Re: Adding more to a Window.Save PDF page Posted by Dick Jackson on Tue, 25 Jul 2017 18:35:17 GMT

View Forum Message <> Reply to Message

On Thursday, 29 June 2017 00:14:23 UTC-7, Helder wrote: > On Friday, June 23, 2017 at 2:26:06 AM UTC+2, Dick Jackson wrote: >> Hi all,

>>

>> Here's a simplified explanation of what I'm doing with my widget application and Function Graphics, and what I'm having trouble with. I make a draw widget and use the Plot() function to make a plot, which the user can interact with:

>>
>> wDraw = Widget_Window(...)
>>
>> ; after /Realizing widgets
>>
>> Widget_Control, wDraw, GET_VALUE=oWindow
>>
>> oWindow.Select
>>
>> oPlot = Plot(...)
>> oLegend = Legend(...)
>>
>> And I also have a Widget_Table with other details.

>>

>> Once the user is happy with what is shown in the plot and the table, I'd like to provide a Print feature to make a PDF that shows both of those on one page.

>>

>> I know the table won't come automatically (I'll have to lay that out with TEXT() objects, which is fine), but is there a way I can use oPlot and oLegend (or simply, oWindow) as *part* of what I want on a PDF page and add other things to that page? I know that oWindow.Save, 'myfile.pdf' creates a lovely PDF page of the current state of the window (which contains the plot), but I want to add other things to the page.

>>

>> If I could make a new oPDFWindow object and add oPlot and oLabel to it, then add my table text objects, I could then do oPDFWindow.Save and I'm set.

>>

>> oWindow is a GraphicsWin object, which Help, /OBJECTS tells me has:

>>

```
Known Procedure Methods:
>>
       IDLITWINDOW::ADD
>>
>>
>> ... so I tried:
>>
>> oPDFWindow = GraphicsWin()
>> oPDFWindow.Add, oPlot
>>
>> and I got:
>>
>> % IDLGRMODEL::ADD: Invalid object reference: <ObjHeapVar434720>.
>> ... as that Add method seems to be looking for regular "object graphics" objects.
>>
>> The Plot() function calls the procedure "Graphic" which goes down a pretty deep rabbit
hole... Has anyone else been down there?
>>
>> Yes, I could make a routine to create the plots/legend, and call it once when I send it to screen
and again when I send it to PDF, but I'd like to print to PDF the current state of the plots/legend,
which the user may have customized on-screen.
>>
>> Other ideas? Thanks for reading.
>>
>> Cheers,
>> -Dick
>>
>> Dick Jackson Software Consulting Inc.
>> Victoria, BC, Canada --- http://www.d-jackson.com
>
> Hi Dick.
> I'm not sure if this would solve your problem, but I just faced a similar problem and I will try
solving it this way. How about using the copyWindow() method?
> I'm using function graphics and I have two widget_window(s) with image and plot. I would like
to export a movie of image+plot. Combining both in the same widget_window is not an option
because I cannot then export a single one of them. Therefore, I think that the only option is:
>
> ww = window(dimensions=[2*nx,ny], /buffer)
> o1 = image(sourceObj1.copyWindow(), margin=0, layout=[2,1,1], current=ww)
> o2 = image(sourceObj2.copyWindow(), margin=0, layout=[2,1,2], current=ww)
> ww.save, myFileName
>
> You can of course play with window dimensions and margin to get the right fit.
> I hope it helps.
>
> Cheers.
> Helder
```

Thanks for the idea, Helder. (sorry for the delayed reply... when you posted, I was just getting

ready to go away on holiday)

This might be handy, with the difference being that it would take a screen-resolution (and window size-dependent) snapshot, rather than a high-quality PDF. But that might be good enough.

Thanks again, Helder.

Cheers,

-Dick

Dick Jackson Software Consulting Inc. Victoria, BC, Canada --- http://www.d-jackson.com