Subject: Re: Wt/Motif Interface (was: Real Number on PV-WAVE) Posted by Mark D. Williams on Mon, 29 Nov 1999 08:00:00 GMT View Forum Message <> Reply to Message

## "R. Kyle Justice" wrote:

- >> Then you must not be developing "elegant" user-interfaces through
- >> direct calls to the Motif toolkit via the Wt functions. This is
- >> the epitome of "obscure."
- >> But even when you have found the little-known resource that does just
- >> what you want, there is only a 50/50 chance that setting it will have
- >> any effect.
- >> It's too bad IDL users don't have the "joy" of going through this process
- > since they
- >> don't have the illusion of so many interface design choices :-)

Just as you note, it is a tradeoff between obscurity/difficulty and flexibility. For the

additional flexibility that the Wt layer affords, I don't mind putting up with some

obscurity and having to deal with the O'Reilly Motif "tomes". What the Ww layer gives you in cross-platform portability (it is the only interface design layer that

works consistently on Windows) you give up in interface flexibility.

There are some historical reasons behind Ww being the only supported layer on both Motif and Windows. When VNI first developed PV-WAVE on the Windows platform, they ported a subset of their Wt functions from Motif to the Microsoft Foundation Classes. How's that for obscure? I don't envy the programmers that accomplished that their jobs. The subset of Wt/Motif that VNI chose to port to Windows was exactly the functions necessary to get Ww to work properly. So it is a good bet that if VNI is using a Wt function in the Ww layer functions, that particular Wt function is supported on Windows, too. At least, that Wt function, in the specific way that it is called from the Ww function is supported:-)

Now, I suppose this is all fine and good for someone coming to the task with a good familiarity with UNIX/Motif. It is admittedly problematic and not quite desirable for the programmer coming to PV-WAVE from either a Visual Basic or MSVC++ background.

Regards, Mark Williams Resource Engineering, Inc.

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Regards, Mark Williams Resource Engineering, Inc.

Subject: Re: Wt/Motif Interface (was: Real Number on PV-WAVE) Posted by rkj on Tue, 30 Nov 1999 08:00:00 GMT

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Mark D. Williams (markw@resource-eng.com) wrote:

- : "R. Kyle Justice" wrote:
- : > > Then you must not be developing "elegant" user-interfaces through
- : > > direct calls to the Motif toolkit via the Wt functions. This is
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- : a Wt function in the Ww layer functions, that particular Wt function is
- : supported on Windows, too. At least, that Wt function, in the specific way
- : that it is called from the Ww function is supported :-)

Actually, I primarily develop in a UNIX environement (I would not recommend Wt if you want cross-platform independence. Definitely stick with the Ww functions). This is my gripe -- many of the Motif resources appear to have no effect when accessed through the Wt layer. For instance, why can I set the "no resize" resources for bulletin board and form layouts just fine, but I can't for row-column layouts? One good side effect (pun intended) is that I have learned a lot about Motif. Just staring at the "tomes" makes one a better programmer ;-)

: Now, I suppose this is all fine and good for someone coming to the task : with a good familiarity with UNIX/Motif. It is admittedly problematic and : not quite desirable for the programmer coming to PV-WAVE from either : a Visual Basic or MSVC++ background.

I don't know if you meant to imply that I am coming from the perspective/background of a Windows programmer (\*shudder\* :-P). Anyway, this stuff would be pretty mind-boggling for a brilliant Xlib guru (I refuse to consult the even more ancient tomes -- volumes 1,2,4,and 5. As an engineer I don't feel worthy :-O). But then again, a brilliant Xlib guru would not be writing code in PV-Wave, or would they???

- : Regards,
- : Mark Williams
- : Resource Engineering, Inc.

Kyle

PS And I have not even mentioned "secret" keywords known only by VNI tech support and the few that gain access to this "gnosis" (i.e. /Raise for WtSet and /Fast for SPAWN. If you know others, please e-mail me!).

Subject: Re: Wt/Motif Interface (was: Real Number on PV-WAVE) Posted by Mark D. Williams on Wed, 01 Dec 1999 08:00:00 GMT View Forum Message <> Reply to Message

"R. Kyle Justice" wrote:

- > Actually, I primarily develop in a UNIX environement (I would not recommend
- > Wt if you want cross-platform independence. Definitely stick with the Ww
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- > : Now, I suppose this is all fine and good for someone coming to the task
- > : with a good familiarity with UNIX/Motif. It is admittedly problematic and
- > : not quite desirable for the programmer coming to PV-WAVE from either
- > : a Visual Basic or MSVC++ background.
- > I don't know if you meant to imply that I am coming from the perspective/

> background of a Windows programmer (\*shudder\* :-P).

No, I didn't mean to imply this. My post more reflects my current bias as one whose primary development background is on a UNIX platform, but in my

current job, what development work I do is almost all on Windoze, both in PV-WAVE and Visual Basic. PV-WAVE on Windows requires some shifts in thinking, and a different bag of tricks to get the sometimes-quirky Ww layer into behaving on Windows--like spinning a WwTimer off to allow event processing to catch up, or the helpful WtProcessEvent(..., /Drain).

- > PS And I have not even mentioned "secret" keywords known only by VNI tech
- > support and the few that gain access to this "gnosis" (i.e. /Raise for
- > WtSet and /Fast for SPAWN. If you know others, please e-mail me!).

These are good ones to know, for sure! About the only other "secret" WtSet keywords I have played with in the past involved using /Manage and /UnManage along with /Child for a WwOptionMenu to explicitly set the selected item.

> Anyway, this stuff would be pretty mind-boggling for a brilliant Xlib guru

Ah, sometimes I long for good ol' UNIX.

Regards, Mark Williams Resource Engineering, Inc.

Subject: Re: Wt/Motif Interface (was: Real Number on PV-WAVE)
Posted by rkj on Thu, 02 Dec 1999 08:00:00 GMT
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Mark D. Williams (markw-xxxnospamxxx@resource-eng.com) wrote: : "R. Kyle Justice" wrote:

{snip}

- : > PS And I have not even mentioned "secret" keywords known only by VNI tech
- : > support and the few that gain access to this "gnosis" (i.e. /Raise for
- :> WtSet and /Fast for SPAWN. If you know others, please e-mail me!).
- : These are good ones to know, for sure! About the only other "secret"
- : WtSet keywords I have played with in the past involved using /Manage and
- : /UnManage along with /Child for a WwOptionMenu to explicitly set the
- : selected item.

After consulting the 6.21 docs, it appears that /Raise keyword is now official. It was not included in the 6.0 docs. The /Fast option has \*not\* been added however. This is a \*really\* important keyword if you use SPAWN a lot and get memory crashes. I wasted many hours until I was let in on this secret.

{snip}

- : Regards,
- : Mark Williams
- : Resource Engineering, Inc.

Kyle

Subject: Re: Wt/Motif Interface (was: Real Number on PV-WAVE)
Posted by nittler on Tue, 14 Dec 1999 08:00:00 GMT
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First of all, thanks Mark for your answer to my question about setting the scroll position in wwtext. I have been programming in PV-WAVE for eight years now without really being aware of the Tips database. I'm not sure why.

- >> Wt if you want cross-platform independence. Definitely stick with the Ww
- >> functions).

>

I always have, mainly because I have no clue about motif programming. However, now that I have been doing widget programming in IDL there is a lot of things annoyingly missing from the ww layer in Pv-WAVE.

Of course, I was hoping for a method of setting the WWTEXT scroll position that would work on windows as well. I am in a weird position of only ever having used PV-WAVE on Unix, but trying to port some of my code to windows (for an overseas colleague), but not actually having a Wave license on Windows. Thus, I am sending my colleague programs, asking him to test them and then debugging by trial and error.

- >> : Now, I suppose this is all fine and good for someone coming to the task
- >> : with a good familiarity with UNIX/Motif. It is admittedly problematic and
- >> : not quite desirable for the programmer coming to PV-WAVE from either
- >> : a Visual Basic or MSVC++ background.

How about someone who learned to program using PV-WAVE?

- >> thinking, and a different bag of tricks to get the sometimes-quirky
- > Ww layer into behaving on Windows--like spinning a WwTimer off to
- > allow event processing to catch up, or the helpful WtProcessEvent(...,
- > /Drain).

>

This sounds interesting; what the hell are you talking about?

Cheers, Larry

Larry R. Nittler Laboratory for Extraterrestrial Physics,

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Greenbelt MD 20771

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