Subject: Re: "marching ants" rubberband box Posted by David Fanning on Wed, 04 Sep 2002 17:31:45 GMT View Forum Message <> Reply to Message

Ted Graves (graves@helix.mgh.harvard.edu) writes:

- > Just wondering if anyone had implemented (or knew of a simple way to
- > implement) a "marching ants" rubberband box.

Oh, oh. Yet one more reason to spend less time playing tennis and more time reading the literature. :-(

What the hell is a "marching ants" rubberband box!?

Cheers,

David

--

David W. Fanning, Ph.D.

Fanning Software Consulting, Inc.

Phone: 970-221-0438, E-mail: david@dfanning.com

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: "marching ants" rubberband box Posted by mperrin+news on Wed, 04 Sep 2002 19:11:04 GMT View Forum Message <> Reply to Message

David Fanning <david@dfanning.com> wrote:

> Ted Graves (graves@helix.mgh.harvard.edu) writes:

>

- >> Just wondering if anyone had implemented (or knew of a simple way to
- >> implement) a "marching ants" rubberband box.

>

- > Oh, oh. Yet one more reason to spend less time playing tennis
- > and more time reading the literature. :-(

>

> What the hell is a "marching ants" rubberband box!?

In Photoshop or the Gimp, selecting an image region will bound it with a line of little moving dots, in order to show the edges of the selection region. These little moving dots are sometimes referred to as "Marching Ants".

Perhaps one way to implement this in IDL would be via manipulation of the color table - draw one line of two colors, and then alternate what those colors are via the color table rather than redrawing. Of course this then

reduces the number of colors for the rest of your image by two.

- Marshall

Subject: Re: "marching ants" rubberband box Posted by David Fanning on Wed, 04 Sep 2002 19:26:30 GMT View Forum Message <> Reply to Message

Marshall Perrin (mperrin+news@arkham.berkeley.edu) writes:

- > Perhaps one way to implement this in IDL would be via manipulation of the
- > color table draw one line of two colors, and then alternate what those
- > colors are via the color table rather than redrawing. Of course this then
- > reduces the number of colors for the rest of your image by two.

Oh my gosh, Marshall! You must have one of those 8-bit government computers, left over from the 1930's. The rest of us are using 24-bit color, I'm sure. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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Subject: Re: "marching ants" rubberband box Posted by David Fanning on Wed, 04 Sep 2002 19:32:01 GMT View Forum Message <> Reply to Message

Marshall Perrin (mperrin+news@arkham.berkeley.edu) writes:

- > In Photoshop or the Gimp, selecting an image region will bound it with
- > a line of little moving dots, in order to show the edges of the selection
- > region. These little moving dots are sometimes referred to as "Marching Ants".

Oh, right.

Ted must have more free time than I have, if he wants to do this in IDL. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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Subject: Re: "marching ants" rubberband box Posted by Mark Hadfield on Wed, 04 Sep 2002 20:05:51 GMT View Forum Message <> Reply to Message

"David Fanning" <david@dfanning.com> wrote in message news:MPG.17e00d99d9f0ed30989993@news.frii.com...

- > Ted must have more free time than I have, if he
- > wants to do this in IDL. :-)

You're not fooling anyone, David. How could you resist such a challenge? The little marching ants will gnaw away at your brain and ruin your tennis game until you solve it. In fact, I bet you've \*already\* written a marching-ants object and are just trying to raise our interest before you show it to us.

--

Mark Hadfield "Ka puwaha te tai nei, Hoea tatou" m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: "marching ants" rubberband box Posted by David Fanning on Wed, 04 Sep 2002 21:27:59 GMT View Forum Message <> Reply to Message

Mark Hadfield (m.hadfield@niwa.co.nz) writes:

- > You're not fooling anyone, David. How could you resist such a challenge? The
- > little marching ants will gnaw away at your brain and ruin your tennis game
- > until you solve it. In fact, I bet you've \*already\* written a marching-ants
- > object and are just trying to raise our interest before you show it to us.

Alright, I admit it. I thought about it for a few minutes. But my therapist says I'm doing the right thing getting out in the fresh air and bashing a ball around. She thinks

in a few years I might actually have a life. :-) Cheers, David David W. Fanning, Ph.D. Fanning Software Consulting, Inc. Phone: 970-221-0438, E-mail: david@dfanning.com Coyote's Guide to IDL Programming: http://www.dfanning.com/ Toll-Free IDL Book Orders: 1-888-461-0155 Subject: Re: "marching ants" rubberband box Posted by Robert Stockwell on Wed, 04 Sep 2002 23:24:06 GMT View Forum Message <> Reply to Message Mark Hadfield wrote: > "David Fanning" <david@dfanning.com> wrote in message > news:MPG.17e00d99d9f0ed30989993@news.frii.com... > >> Ted must have more free time than I have, if he >> wants to do this in IDL. :-) > > > You're not fooling anyone, David. How could you resist such a challenge? The > little marching ants will gnaw away at your brain and ruin your tennis game > until you solve it. In fact, I bet you've \*already\* written a marching-ants > object and are just trying to raise our interest before you show it to us. > > Mark Hadfield "Ka puwaha te tai nei, Hoea tatou" > m.hadfield@niwa.co.nz > National Institute for Water and Atmospheric Research (NIWA) > It, of course, should be able to march clockwise, and counterclockwise. It should have multiple lanes at differing speeds. And it should also do Escher-like stairways in 3D space. HOW CAN YOU RESIST!??!

bob

Subject: Re: "marching ants" rubberband box Posted by mperrin+news on Thu, 05 Sep 2002 01:16:06 GMT

View Forum Message <> Reply to Message

David Fanning <david@dfanning.com> wrote:

> Marshall Perrin (mperrin+news@arkham.berkeley.edu) writes:

>

- >> Perhaps one way to implement this in IDL would be via manipulation of the
- >> color table draw one line of two colors, and then alternate what those
- >> colors are via the color table rather than redrawing. Of course this then
- >> reduces the number of colors for the rest of your image by two.

>

- > Oh my gosh, Marshall! You must have one of those 8-bit government
- > computers, left over from the 1930's. The rest of us are using
- > 24-bit color, I'm sure. :-)

You would not \*believe\* the number of old Sun boxes with wretched video cards floating around in the average astronomy department. Telescopes last for decades - why shouldn't computers do too? \*grumble\*

- Marshall

Subject: Re: "marching ants" rubberband box Posted by ronn on Thu, 05 Sep 2002 11:38:50 GMT View Forum Message <> Reply to Message

Hi Ted.

I think you can do this pretty easy in Object Graphics. You would draw the box with an IDLgrPolyline object and then just change the stippling pattern to mimic motion at each event (cursor motion or timing). The stippling pattern is a bitmask that you pass with the linestyle keyword. Look at the init method of IDLgrPolyline and the linestyle keyword.

In Direct Graphics it would be possible but not very pretty and lots of code.

-Ronn

--

Ronn Kling KRS, inc.

email: ronn@rlkling.com

"Application Development with IDL" i 21/2 programming book updated for IDL5.5!

"Calling C from IDL, Using DLM's to extend your IDL code"!

"Power Graphics with IDL, A Beginner's Guide to Object Graphics", NEW BOOK! http://www.rlkling.com/

Subject: Re: "marching ants" rubberband box Posted by David Fanning on Thu, 05 Sep 2002 12:16:41 GMT View Forum Message <> Reply to Message

ronn kling (ronn@rlkling.com) writes:

- > I think you can do this pretty easy in Object Graphics. You would draw the
- > box with an IDLgrPolyline object and then just change the stippling pattern
- > to mimic motion at each event (cursor motion or timing). The stippling
- > pattern is a bitmask that you pass with the linestyle keyword. Look at the
- > init method of IDLgrPolyline and the linestyle keyword.

In Photoshop, the ants keep marching while you are drawing the box and even afterwards, when there is no movement at all. The only way to simulate that would be timer events, but there would be a lot of them. And--I don't know--it doesn't seem like science to me. The fact that there doesn't seem to be much in the way of CPU time taken up while the ants do their thing makes me think it must be some kind of build-in system functionality. It kind of smacks of Microsoft, don't you think? At least it reminds me of that stupid paper clip that always annoys the hell out of me when I exit Excel. :-(

Cheers.

David

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Subject: Re: "marching ants" rubberband box Posted by Pavel A. Romashkin on Thu, 05 Sep 2002 15:52:02 GMT View Forum Message <> Reply to Message

## David Fanning wrote:

- > At least it reminds me of that stupid paper clip
- > that always annoys the hell out of me when I exit Excel. :-(

You know, that one can be turned off. Or, like I have, you can change it to a purring cat. If you choose to do that, you will immediately see that some department of Microsoft had \*way\* too much time on their hands, because the cat sleeps, scratches, meows, sleeps, catches butterflies and does all sorts of other things. And it behaves differently in different Office programs.

Oh well. It has a lot more personality than the clip. I even leave it on the desktop now, while I could not stand the clip. Cheers.

Pavel

Subject: Re: "marching ants" rubberband box Posted by graves on Fri, 06 Sep 2002 19:03:04 GMT View Forum Message <> Reply to Message

- > In Photoshop, the ants keep marching while you are drawing the
- > box and even afterwards, when there is no movement at all.
- > The only way to simulate that would be timer events, but
- > there would be a lot of them. And--I don't know--it doesn't
- > seem like science to me. The fact that there doesn't seem
- > to be much in the way of CPU time taken up while the ants
- > do their thing makes me think it must be some kind of build-in
- > system functionality.

This had occurred to me also, that marching ants would require a lot of the CPU unless the operation was incorporated into the OS and didn't require an endless string of timer events.

Thanks for the suggestions. I too was entranced by this devilish programming challenge. :)

Ted graves@helix.mgh.harvard.edu