
Subject: Re: "marching ants" rubberband box
Posted by [David Fanning](#) on Wed, 04 Sep 2002 17:31:45 GMT
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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.
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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
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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
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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

--

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Subject: Re: "marching ants" rubberband box
Posted by [David Fanning](#) on Wed, 04 Sep 2002 19:32:01 GMT
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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

--

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Subject: Re: "marching ants" rubberband box

Posted by [Mark Hadfield](#) on Wed, 04 Sep 2002 20:05:51 GMT

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"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, Hoesa 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

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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.

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Subject: Re: "marching ants" rubberband box

Posted by [Robert Stockwell](#) on Wed, 04 Sep 2002 23:24:06 GMT

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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. :-)

>

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> 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, Hoesa 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
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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
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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" 1½ programming book updated for IDL5.5!

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

Subject: Re: "marching ants" rubberband box
Posted by [David Fanning](#) on Thu, 05 Sep 2002 12:16:41 GMT
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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
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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

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> 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
