Subject: Re: IDL 5.0 (TvRd LoadCt) problems with true colors ???
Posted by David Foster on Wed, 18 Feb 1998 08:00:00 GMT

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Kevin Ivory wrote:
>
> Rene Preusker wrote:
>>
>> I try to use true color features of idl 5.02 under
>> Linux 5.0.32 (Matrox Milenium 24 bpp). tvrd
>> gives strange results. But perhaps I understand
>> ...
>> Is there any idea what's going wrong? Are there any positive
>> expiriences with IDL, Linux and True Color?
>

You might try SAFE_TVRD.PRO, a routine I wrote when we were having
problems with TVRD() under Solaris 2.X. It uses DEVICES, COPY=[]
and a temporary pixmap. We found problems especially if you are
reading from a scrollable draw widget, but you can also have
problems if the widget is iconified or obstructed. I haven't
tested to see if the problem persisted into IDL 5.0 (we did
experience it in 4.x).

Dave

```
------ SAFE_TVRD.PRO -----------------------------------------
;   SAFE_TVRD.PRO   6-11-97   DSFoster
;
; This function is a safer version of IDL's TVRD() function. First,
; there was a bug related to the reading from a scrollable draw. Also,
; the TVRD() function uses an X routine that has problems if the
; window is obscured or iconized. This routine uses the DEVICE, COPY=
; command to first copy the window contents to a new window pixmap,
; and then reads from this pixmap into the array.
;
; Modifications
;
;  6-11-97 DSF Check validity of draw widget.

FUNCTION safe_tvrd, draw_widget, xsize, ysize

on_error, 2

if (widget_info(draw_widget, /valid_id) eq 0) then begin
     return, -1
endif else if (widget_info(draw_widget, /name) ne 'DRAW') then begin
     return, -1
```

```
endif else begin
    old_window = !d.window
    window, xsize=xsize, ysize=ysize, /free, /pixmap   ; New window

    widget_control, draw_widget, get_value=window
    device, copy=[0,0, xsize,ysize, 0,0, window]     ; Copy

    image = tvrd()                        ; Read into array
    wdelete, !d.window
    if (old_window ne -1) then wset, old_window
    return, image
endelse

END
```

-------- SAFE_TVRD.DOC ---
SAFE_TVRD

This function replaces IDL's TVRD() function for reading the
contents of a window into an array. The TVRD() function returns
unexpected results if the window is scrollable or is obscured
onscreen. This function uses IDL's DEVICE, COPY=[] function
to more safely read the window contents.

Calling Sequence

  Array = SAFE_TVRD(Draw_widget, Xsize, Ysize)

Arguments

  Draw_widget

    The widget id of the draw widget which you will be
    reading into the array. Note that this is NOT the
    window id!

  Xsize, Ysize

    The dimensions of the window in the draw widget.

Outputs

  Array

    Returns the image read from the draw widget. Returns -1
    if the Draw_widget is not a valid draw widget ID.

Hope this is useful.

Dave

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