



This is part of **Family API** which allow to create dual-os version of program runs under OS/2 and DOS

**Note:** This is legacy API call. It is recommended to use 32-bit equivalent

2021/09/17 04:47 · prokushev · [0 Comments](#)

2021/08/20 03:18 · prokushev · [0 Comments](#)

## VioSetState

This call performs one of the following functions; set palette registers, sets the overscan (border) colour, set the blink/background intensity switch, set color registers, set the underline location, or set the target VioSetMode display configuration.

### Syntax

```
VioSetState (RequestBlock, VioHandle)
```

### Parameters

- RequestBlock (PVOID) - input : Address of the video state structures consisting of six different structures depending on the request type:
  - 0 - Set palette registers
  - 1 - Set overscan (border) color
  - 2 - Set blink/background intensity switch
  - 3 - Set color registers
  - 4 - Reserved
  - 5 - Set underline location
  - 6 - Set target VioSetMode display configuration
  - 7 - Reserved

The six structures, depending on request type, are:

|              | <b>Applies to</b>                                             | <b>length (USHORT) - input : Length of structure, including length.</b> | <b>reqtype (USHORT) - input</b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|---------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VIOPALSTATE  | EGA, VGA, or IBM Personal System/2 Display Adapter            | 38 - Maximum valid value                                                | Request type 0 for palette registers                  | <p>palette (USHORT) - input: First palette register in the palette register sequence; must be specified in the range 0 through 15. The palette registers are returned in sequential order. The number returned is based upon length.</p> <p>color (USHORT*(length-6)/2) - input : Color value for each palette register. The maximum number of entries in the color value array is 16</p>                                                                                                                                                                                      |
| VIOOVERSCAN  | CGA, VGA, or IBM Personal System/2 Display Adapter            | Only valid value.                                                       | Request type 1 for overscan (border) color.           | Color value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| VIOINTENSITY | CGA, EGA, MCGA, VGA, or IBM Personal System/2 Display Adapter | Only valid value.                                                       | Request type 2 for blink/background intensity switch. | <p>switch (USHORT) - input : Switch set as:</p> <p>0 - Blinking foreground colors enabled.</p> <p>1 - High intensity background colors enabled.</p>                                                                                                                                                                                                                                                                                                                                                                                                                            |
| VIOCOLORREG  | VGA, or IBM Personal System/2 Display Adapter                 | 12 - Only valid value.                                                  | Request type 3 for color registers.                   | <p>first color (USHORT) - input : First color register to set in the color register sequence; must be specified in the range 0 through 255. The color registers are set in sequential order.</p> <p>number color (USHORT) - input : Number of color registers to set; must be specified in the range 1 through 256.</p> <p>dataarea (PCH) - input : Far address of a data area containing one three-byte entry for each color register to be set. The format of each entry is as follows:</p> <p>Byte 1 - Red value</p> <p>Byte 2 - Green value</p> <p>Byte 3 - Blue value</p> |

|               | <b>Applies to</b>                                  | <b>length (USHORT) - input : Length of structure, including length.</b> | <b>reqtype (USHORT) - input</b>                                                                                       |                                                                                                                                    |
|---------------|----------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| VIOSETLINELOC | EGA, VGA, or IBM Personal System/2 Display Adapter | Only valid value.                                                       | Request type 5 to set the scan line for underlining. Underlining is enabled only when the foreground color is 1 or 9. | scanline (USHORT) - input : Scan line minus 1. Values of 0 through 31 are acceptable. A value of 32 means underlining is disabled. |
| VIOSETTARGET  |                                                    | Only valid value.                                                       | Request type 6 to set display configuration to be the target of the next VioSetMode.                                  | :select (USHORT) - input : Configuration:<br>0 - Default selection algorithm. See VioSetMode.<br>1 - Primary<br>2 - Secondary      |

- VioHandle (HVIO) - input : Reserved word of 0s.

## Return Code

;rc (USHORT) - return:Return code descriptions are: \*0 NO\_ERROR \*355 ERROR\_VIO\_MODE \*421 ERROR\_VIO\_INVALID\_PARMS \*436 ERROR\_VIO\_INVALID\_HANDLE \*438 ERROR\_VIO\_INVALID\_LENGTH \*465 ERROR\_VIO\_DETACHED \*494 ERROR\_VIO\_EXTENDED\_SG

## Remarks

### Family API Considerations

Request type = 6, Set Target VioSetMode Display Configuration, and request type = 5, Set Underline Location, are not supported in the family API.

Some options operate differently in the DOS mode than in the OS/2 mode. Therefore, the following considerations applies to VioSetMode when coding for the DOS mode:

- VioSetMode clears the screen.

## Bindings

### C

```
typedef struct _VIOPALSTATE {
```

```
    USHORT  cb;                                /* Length of this structure in bytes */
    USHORT  type;                              /* Request type=0 get palette registers */
    USHORT  iFirst;                            /* First palette register to return */
    USHORT  acolor[1];                        /* Color value palette register */
}VIOPALSTATE;
typedef VIOPALSTATE far *PVIOPALSTATE;

typedef struct _VIOOVERSCAN {
    USHORT  cb;                                /* Length of this structure */
    USHORT  type;                              /* Request type=1 get overscan
                                           (border) color */
    USHORT  color;                            /* Color value */
}VIOOVERSCAN;
typedef VIOOVERSCAN far *PVIOOVERSCAN;

typedef struct _VIOINTENSITY {
    USHORT  cb;                                /* Length of this structure */
    USHORT  type;                              /* Request type=2 get blink/background
                                           intensity switch */
    USHORT  fs;                               /* Value of blink/background switch */
}VIOINTENSITY;
typedef VIOINTENSITY far *PVIOINTENSITY;

typedef struct _VIOCOLORREG { /* viocreg */
    USHORT  cb;
    USHORT  type;
    USHORT  firstcolorreg;
    USHORT  numcolorregs;
    PCH     colorregaddr;
}VIOCOLORREG;
typedef VIOCOLORREG far *PVIOCOLORREG;

typedef struct _VIOSETULINELOC { /* viouline */
    USHORT  cb;
    USHORT  type;
    USHORT  scanline;
}VIOSETULINELOC;
typedef VIOSETULINELOC far *PVIOSETULINELOC;

typedef struct _VIOSETTARGET { /* viosett */
    USHORT  cb;
    USHORT  type;
    USHORT  defaultalgorithm;
}VIOSETTARGET;
typedef VIOSETTARGET far *PVIOSETTARGET;

#define INCL_VIO

USHORT  rc = VioSetState(RequestBlock, VioHandle);
```

```

PVOID      RequestBlock;  /* Request block */
HVIO       VioHandle;     /* Video handle */

USHORT     rc;            /* return code */

```

## MASM

```

VIOPALSTATE struc
    viopal_cb          dw ? ;Length of this structure in bytes
    viopal_type        dw ? ;Request type=0 get palette registers
    viopal_iFirst      dw ? ;First palette register to return
    viopal_acolor      dw 1 dup (?) ;Color value palette register
VIOPALSTATE ends

VIOOVERSCAN struc
    vios_cb           dw ? ;Length of this structure
    vios_type         dw ? ;Request type=1 get overscan (border) color
    vios_color        dw ? ;Color value
VIOOVERSCAN ends

VIOINTENSITY struc
    vioint_cb         dw ? ;Length of this structure
    vioint_type       dw ? ;Request type=2 get blink/background
                        ; intensity switch
    vioint_fs         dw ? ;Value of blink/background switch
VIOINTENSITY ends

VIOCOLORREG struc
    viocreg_cb        dw ? ;
    viocreg_type      dw ? ;
    viocreg_firstcolorreg dw ? ;
    viocreg_numcolorregs dw ? ;
    viocreg_colorregaddr dd ? ;
VIOCOLORREG ends

VIOSETULINELOC struc
    viouline_cb       dw ? ;
    viouline_type     dw ? ;
    viouline_scanline dw ? ;
VIOSETULINELOC ends

VIOSETTARGET struc
    viosett_cb        dw ? ;
    viosett_type      dw ? ;
    viosett_defaultalgorithm dw ? ;
VIOSETTARGET ends

EXTRN VioSetState:FAR
INCL_VIO EQU 1

```

```
PUSH@ OTHER RequestBlock ;Request block
PUSH WORD VioHandle ;Video handle
CALL VioSetState
```

Returns **WORD**

[http://www.edm2.com/index.php/VioSetState\\_\(OS/2\\_1.x\)](http://www.edm2.com/index.php/VioSetState_(OS/2_1.x))

From:

<http://185.82.219.184/doku/> - **osFree wiki**

Permanent link:

<http://185.82.219.184/doku/doku.php?id=en:docs:fapi:viosetstate&rev=1634199992>

Last update: **2021/10/14 08:26**

