



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                  | 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. |
|              |                                                               |                                                                         |                                                       | color (USHORT*(length-6)/2) - input : Color value for each palette register. The maximum number of entries in the color value array is 16                                                                                         |
| 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. | switch (USHORT) - input : Switch set as:                                                                                                                                                                                          |
|              |                                                               |                                                                         |                                                       | 0 - Blinking foreground colors enabled.<br>1 - High intensity background colors enabled.                                                                                                                                          |
| VIOCOLORREG  | VGA, or IBM Personal System/2 Display Adapter                 | 12 - Only valid value.                                                  | Request type 3 for color registers.                   | 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.                                         |
|              |                                                               |                                                                         |                                                       | number color (USHORT) - input : Number of color registers to set; must be specified in the range 1 through 256.                                                                                                                   |
|              |                                                               |                                                                         |                                                       | 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:                                                                    |
|              |                                                               |                                                                         |                                                       | Byte 1 - Red value                                                                                                                                                                                                                |
|              |                                                               |                                                                         |                                                       | Byte 2 - Green value                                                                                                                                                                                                              |
|              |                                                               |                                                                         |                                                       | Byte 3 - Blue value                                                                                                                                                                                                               |

|               | <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

### 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

```
<PRE> 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 */ </PRE>
```

## MASM

```
<PRE> 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
```

```
vioos_cb          dw ? ;Length of this structure
vioos_type        dw ? ;Request type=1 get overscan (border) color
vioos_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 </PRE>

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

From:

<http://www.osfree.org/doku/> - **osFree wiki**

Permanent link:

<http://www.osfree.org/doku/doku.php?id=en:docs:fapi:vioresetstate&rev=1634199907>

Last update: **2021/10/14 08:25**

