



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. 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: 0 - Default selection algorithm. See VioSetMode. 1 - Primary 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 _VIOSETLINELOC { /* viouline */
  USHORT  cb;
  USHORT  type;
  USHORT  scanline;
}VIOSETLINELOC;
typedef VIOSETLINELOC far *PVIOSETLINELOC;

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
    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**

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

From:

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

Permanent link:

<http://ftp.osfree.org/doku/doku.php?id=en:docs:fapi:vioresetstate&rev=1634199992>

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

