



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](#)

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## 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

|                |  |                   |   |
|----------------|--|-------------------|---|
|                |  |                   | 4   |
| VIOSETULINELOC | 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 -  
**Return Code**  
Primary ::2 - Secondary

;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 _VIOSETTLINELOC { /* viouline */
```

```
USHORT  cb;  
USHORT  type;  
USHORT  scanline;  
}VIOSETTLINELOC;
```

```
typedef VIOSETTLINELOC far *PVIOSETTLINELOC;
```

```
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))

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