



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

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## VioGetState

This call returns the current settings of the palette registers, overscan (border) colour, blink/background intensity switch, colour registers, underline location, or target [VioSetMode](#) display configuration.

### Syntax

```
VioGetState (RequestBlock, VioHandle)
```

### Parameters

- RequestBlock (PVOID) - input/output : Address of the video state structures consisting of six different structures depending on the request type:

Type	Definition
0	Get palette registers
1	Get overscan (border) color
2	Get blink/background intensity switch
3	Get color registers
4	Reserved
5	Get the scan line for underlining
6	Get target VioSetMode display configuration.
7	Reserved

The six structures, depending on request type, are:

- VIOPALSTATE:Applies to EGA, VGA, or IBM Personal System/2 Display Adapter.
  - length (USHORT) - input : Length of structure, including length.
    - 38 Maximum valid value.
  - type (USHORT) - input : 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) - output:Color value for each palette register. The maximum number of entries in the color value array is 16.

- VIOOVERSCAN: Applies to CGA, VGA, or IBM Personal System/2 Display Adapter.
  - length (USHORT) - input : Length of structure, including length. Only valid value.
  - type (USHORT) - input : Request type 1 for overscan (border) color.
  - color (USHORT) - input : Color value.
  
- VIOINTENSITY: Applies to CGA, EGA, MCGA, VGA, or IBM Personal System/2 Display Adapter.
  - length (USHORT) - input: Length of structure, including length. Only valid value.
  - type (USHORT) - input: Request type 2 for blink/background intensity switch.
  - switch (USHORT) - output: Switch set as:
    - 0 Blinking foreground colors enabled.
    - 1 High intensity background colors enabled.
  
- VIOCOLORREG: Applies to VGA, or IBM Personal System/2 Display Adapter.
  - length (USHORT) - input : Length of structure, including length.
    - 12 Length in bytes.
  - type (USHORT) - input : Request type 3 for color registers.
  - first color (USHORT) - input : First color register to get in the color register sequence; must be specified in the range 0 through 255. The color registers are returned in sequential order.
  - number color (USHORT) - input : Number of color registers to get; must be specified in the range 1 through 256.
  - dataarea (PCH) - input : Far address of a data area where the color registers are returned. The size of the data area must be three bytes times the number of color registers to get. The format of each entry returned is as follows:

Byte 1	Red value
Byte 2	Green value
Byte 3	Blue value

- VIOSETULINELOC:Applies to EGA, VGA, or IBM Personal System/2 Display Adapter.
  - length (USHORT) - input : Length of structure, including length. Length in bytes.
  - type (USHORT) - input : Request type 5 to get the scan line for underlining. Underlining is enabled only when the foreground color is 1 or 9.
  - scanline (USHORT) - output : The value returned is in the range 0 through 31 and is the scan line minus 1. A value of 32 means underlining is disabled.
  
- VIOSETTARGET
  - length (USHORT) - input : Length of structure, including length. Length in bytes.
  - type (USHORT) - input : Request type 6 to get display configuration selected to be the target of the next VioSetMode.
  - select (USHORT) - output: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, Get Target VioSetMode Display Configuration, and request type = 5, Get Underline Location, are not supported in the family API.

## 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 = VioGetState(RequestBlock, VioHandle);

PVOID   RequestBlock; /* Request block */
HVIO    VioHandle;    /* Vio 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 VioGetState:FAR
INCL_VIO EQU 1
    
```

```

PUSH@ OTHER RequestBlock ;Request block
PUSH WORD VioHandle ;Vio handle
CALL VioGetState
    
```

Returns WORD

### Family API

DOS	Process Manager	<a href="#">DosBeep</a> <a href="#">DosExit</a> <a href="#">DosSleep</a> <a href="#">DosExecPgm</a>
	File Manager	<a href="#">DosChDir</a> <a href="#">DosChgFilePtr</a> <a href="#">DosClose</a> <a href="#">DosDelete</a> <a href="#">DosDupHandle</a> <a href="#">DosMkDir</a> <a href="#">DosMove</a> <a href="#">DosQCurDir</a> <a href="#">DosQCurDisk</a> <a href="#">DosSetFileMode</a> <a href="#">DosOpen</a> <a href="#">DosQFileInfo</a> <a href="#">DosRead</a> <a href="#">DosQFileMode</a> <a href="#">DosQFSInfo</a> <a href="#">DosQVerify</a> <a href="#">DosRmDir</a> <a href="#">DosSelectDisk</a> <a href="#">DosFindClose</a> <a href="#">DosFindFirst</a> <a href="#">DosFindNext</a> <a href="#">DosSetFileInfo</a> <a href="#">DosSetVerify</a> <a href="#">DosWrite</a> <a href="#">DosFileLocks</a> <a href="#">DosSetFHandState</a> <a href="#">DosNewSize</a> <a href="#">DosBufReset</a> <a href="#">DosQFHandState</a> <a href="#">DosSetFSInfo</a> <a href="#">DosShutdown</a>
	Memory Manager	<a href="#">DosFreeSeg</a> <a href="#">DosSubAlloc</a> <a href="#">DosSubFree</a> <a href="#">DosSubSet</a> <a href="#">DosAllocHuge</a> <a href="#">DosAllocSeg</a> <a href="#">DosReallocHuge</a> <a href="#">DosReallocSeg</a> <a href="#">DosGetHugeShift</a> <a href="#">DosCreateCSAlias</a>
	NLS	<a href="#">DosCaseMap</a> <a href="#">DosGetCtryInfo</a> <a href="#">DosGetDBCSEv</a> <a href="#">DosSetCtryCode</a> <a href="#">DosGetCollate</a> <a href="#">DosGetMessage</a> <a href="#">DosInsMessage</a> <a href="#">DosPutMessage</a>
	Date and Time	<a href="#">DosSetDateTime</a> <a href="#">DosGetDateTime</a>
	Devices	<a href="#">DosDevConfig</a> <a href="#">DosDevIOCtl</a> <a href="#">DosDevIOCtl2</a>
	Signals	<a href="#">DosHoldSignal</a> <a href="#">DosSetSigHandler</a>
	Misc	<a href="#">BadDynLink</a> <a href="#">DosGetEnv</a> <a href="#">DosGetMachineMode</a> <a href="#">DosGetVersion</a> <a href="#">DosError</a> <a href="#">DosErrClass</a> <a href="#">DosSetVec</a>
KBD	<a href="#">KbdCharIn</a> <a href="#">KbdFlushBuffer</a> <a href="#">KbdGetStatus</a> <a href="#">KbdSetStatus</a> <a href="#">KbdStringIn</a> <a href="#">KbdPeek</a>	

<b>Family API</b>	
VIO	<a href="#">VioGetBuf</a> <a href="#">VioGetConfig</a> <a href="#">VioGetCurPos</a> <a href="#">VioGetCurType</a> <a href="#">VioGetPhysBuf</a> <a href="#">VioReadCellStr</a> <a href="#">VioReadCharStr</a> <a href="#">VioScrollUp</a> <a href="#">VioScrollDn</a> <a href="#">VioScrollLf</a> <a href="#">VioScrollRt</a> <a href="#">VioScrUnLock</a> <a href="#">VioSetCurPos</a> <a href="#">VioSetCurType</a> <a href="#">VioSetMode</a> <a href="#">VioGetMode</a> <a href="#">VioShowBuf</a> <a href="#">VioWrtCellStr</a> <a href="#">VioWrtCharStr</a> <a href="#">VioWrtCharStrAtt</a> <a href="#">VioWrtNAttr</a> <a href="#">VioWrtNCell</a> <a href="#">VioWrtNChar</a> <a href="#">VioWrtTTY</a> <a href="#">VioScrLock</a> <a href="#">VioPopUp</a>
Tools	<a href="#">BIND</a>
Modules	<a href="#">DOSCALLS.DLL</a> <a href="#">VIOCALLS.DLL</a> <a href="#">KBDCALLS.DLL</a> <a href="#">MSG.DLL</a>
Libraries	<a href="#">API.LIB</a> <a href="#">OS2386.LIB</a> <a href="#">FAPI.LIB</a> <a href="#">DOSCALLS.LIB</a> <a href="#">SUBCALLS.LIB</a>

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