VioGetState

Bindings: C, MASM

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

VioGetState (RequestBlock, VioHandle)

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.

6	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.

6	Only valid value.

type (**USHORT**) - input Request type 2 for blink/background intensity switch.

switch (**USHORT**) - output **Switch set as**:

Value	Definition
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.

datarea (**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.

6	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.

6	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**:

Value	Definition
0	Default selection algorithm. See VioSetMode.
1	Primary
2	Secondary.

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

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

C bindings

```
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 bindings:

```
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
```

From:
http://cocorico.osfree.org/doku/ - **osFree wiki**

Permanent link:
http://cocorico.osfree.org/doku/doku.php?id=en:ibm:prcp:vio:getstate&rev=1473848891

Last update: **2016/09/14 10:28**