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

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

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