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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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# **MouGetPtrShape**

This call allows a process to get (copy) the pointer shape for the session.

## **Syntax**

MouGetPtrShape (PtrBuffer, PtrDefRec, DeviceHandle)

### **Parameters**

- PtrBuffer (PBYTE) output: Address of an area in application storage where the pointer draw device driver returns the pointer bit image. See MouSetPtrShape for a further description of the resulting content of this buffer.
- PtrDefRec (PPTRSHAPE) input/output: Address of a structure in application storage where the
  application stores the data necessary for the pointer device driver to return information about
  the Row by Col image for each bit plane for the mode the display is currently running. See
  MouSetPtrShape for a further description of the contents of this structure.
  - TotLength (USHORT): Length of the pointer buffer available for the pointer device driver to build a Row by Col image for each bit plane for the mode the display is currently running. This value is supplied by the application. If the value is too small, pointer draw places the true length of the image in this field, and returns an error.
  - ∘ col (USHORT)

Number of columns in the mouse shape. In graphics modes, this field contains the pel width (columns) of the mouse shape for the session and must be greater than or equal to 1. In text modes, col must equal 1.

• row (USHORT)

Number of rows in the mouse shape. In graphics modes, this field contains the pel height (rows) of the mouse shape for the session and must be greater than or equal to 1. In text modes, row must equal 1.

coloffset (USHORT)

This value is returned by the mouse device driver to indicate the relative column offset within the pointer image. The value defines the center (hotspot) of the pointer image. This value is a signed number that represents either character or pel offset, depending on the display mode.

rowoffset (USHORT)

This value is returned by the mouse device driver to indicate the relative row offset within the pointer image. The value defines the center (hotspot) of the pointer image. This value is a signed number that represents either character or pel offset, depending on the display mode.

• DeviceHandle (HMOU) - input:Handle of the mouse device from a previous MouOpen.

For all OS/2 system-supported modes, TotLength is specified in bytes and is equal to:

- Mono & Text Modes
  - For text mode height and width must be 1, so length is always 4.

```
TotLength = (height in chars) * (width in chars) * 2 * 2
= 1 * 1 * 2 * 2
= 4
```

- Graphics Mode
  - Width-in-pels must be a multiple of 8.
  - TotLength = (height in pels)\*(width in pels)\*(bits per pel)\*2/8
- Modes 4 and 5 (320 X 200)
  - o TotLength = (height) \* (width) \* 2 \* 2 / 8
- Mode 6 (640 X 200)
- TotLength = (height) \* (width) \* 1 \* 2 / 8

Length calculations produce byte boundary buffer sizes.

### **Return Code**

```
rc (USHORT) - return
```

Return code descriptions are:

- 0 NO ERROR
- 385 ERROR MOUSE NO DEVICE
- 387 ERROR MOUSE INV PARMS
- 466 ERROR MOU DETACHED
- 501 ERROR MOUSE NO CONSOLE
- 505 ERROR MOU EXTENDED SG

### **Remarks**

The application passes a parameter list with the same meaning as defined for MouSetPtrShape to the mouse device driver. The mouse device driver copies the parameters that describe the pointer shape and attributes into the pointer definition control block pointed to by the PtrDefRec parameter. The word 0 (buffer length = TotLength) pointer definition record parameter field must contain the size in bytes of the application buffer where the device driver is to insert the sessions pointer image. All other words in the parameter list are returned to the application by MouGetPtrShape.

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If the buffer size is insufficient, the TotLength field contains the actual size in bytes of the returned pointer image.

The pointer shape may be set by the application with MouSetPtrShape or may be the default image provided by the installed Pointer Device Driver.

# **Bindings**

#### C

```
typedef struct PTRSHAPE { /* moups */
                            /* total length necessary to build image */
 USHORT cb;
 USHORT col;
                            /* # of columns in mouse shape */
 USHORT row;
                          /* number of rows in mouse shape */
                           /* column coordinate of pointer image hotspot */
 USHORT colHot:
                           /* row coordinate of pointer image hotspot */
 USHORT rowHot;
} PTRSHAPE;
#define INCL MOU
USHORT.
        rc = MouGetPtrShape(PtrBuffer, PtrDefRec, DeviceHandle);
PBYTE
            PtrBuffer;
                           /* Pointer shape buffer */
                           /* Pointer definition struct */
            PtrDefRec:
PPTRSHAPE
                          /* Mouse device handle */
            DeviceHandle:
HMOU
USHORT
                           /* return code */
            rc:
```

#### **MASM**

```
PTRSHAPE struc
 moups cb
               dw ? ; total length necessary to build image
 moups col
               dw ? ;# of columns in mouse shape
 moups row
               dw ? ; number of rows in mouse shape
                   ? ; column coordinate of pointer image hotspot
 moups colHot dw
 moups rowHot
                   ? ; row coordinate of pointer image hotspot
PTRSHAPE ends
EXTRN MouGetPtrShape:FAR
                    E0U 1
INCL MOU
PUSH@ OTHER
              PtrBuffer
                             ; Pointer shape buffer
               PtrDefRec
                             ;Pointer definition struct
PUSH@ OTHER
              DeviceHandle
                            ; Mouse device handle
PUSH
      WORD
      MouGetPtrShape
CALL
```

#### Returns WORD

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