 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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DosQPathInfo

DosQPathInfo returns attribute and extended attribute information for a file or subdirectory.

Syntax

```
 DosQPathInfo (PathName, PathInfoLevel, PathInfoBuf, PathInfoBufSize,
Reserved)
```

Parameters

- PathName (PSZ) - input : Address of the ASCIIZ full path name of the file or subdirectory. Global file name characters can be used in the name only for PathInfoLevels five and six.

DosQSysInfo is called by an application during initialization to determine the maximum path length allowed by OS/2.

- PathInfoLevel (USHORT) - input : Level of path information required. A value of 1, 2, 3, 5, or 6 can be specified. Level 4 is reserved. The structures described in PathInfoBuf indicate the information returned for each of these levels.
- PathInfoBuf (PBYTE) - output : Address of the storage area containing the requested level of path information. Path information, where applicable, is based on the most recent DosClose, DosBufReset, DosSetFileInfo, or DosSetPathInfo.

- Level 1 Information

PathInfoBuf contains the following structure, to which path information is returned:

- filedate (FDATE) - Structure containing the date of creation.

:::15-9 - Year, in binary, of creation :::8-5 - Month, in binary, of creation :::4-0 - Day, in binary, of creation.

- filetime (FTIME) - Structure containing the time of creation.

:::15-11 - Hours, in binary, of creation :::10-5 - Minutes, in binary, of creation :::4-0 - Seconds, in binary number of two-second increments, of creation.

- fileaccessdate (FDATE) - Structure containing the date of last access. See FDATE in filedate.
- fileaccesstime (FTIME) - Structure containing the time of last access. See FTIME in filetime.
- writeaccessdate (FDATE) - Structure containing the date of last write. See FDATE in filedate.
- writeaccesstime (FTIME) - Structure containing the time of last write. See FTIME in filetime.
- filesize (ULONG) - File size.
- filealloc (ULONG) - Allocated file size.
- fileattrib (USHORT) - Attributes of the file, defined in DosSetFileMode.

- Level 2 Information

PathInfoBuf contains a structure similar to the Level 1 structure, with the addition of the cbList field after the fileattrib field.

- cbList (ULONG) - On output, this field contains the length of the entire EA set for the file object. This value can be used to calculate the size of the buffer required to hold EA information returned when PathInfoLevel = 3 is specified.

- Level 3 Information

PathInfoBuf contains an EAOP structure, which has the following format:

- fpGEAList (PGEALIST) : Address of GEAList. GEAList is a packed array of variable length “get EA” structures, each containing an EA name and the length of the name.
- fpFEAList (PFEALIST) : Address of FEAList. FEAList is a packed array of variable length “full EA” structures, each containing an EA name and its corresponding value, as well as the lengths of the name and the value.
- oError (ULONG): Offset into structure where error has occurred.

On input, PathInfoBuf is an EAOP structure. fpGEAList points to a GEA list defining the attribute names whose values are returned. fpFEAList points to a data area where the relevant FEA list is returned. The length field of this FEA list is valid, giving the size of the FEA list buffer. oError points to the offending GEA entry in case of error. Following is the format of the GEAList structure:

- cbList (ULONG) : Length of the GEA list, including the length itself.
- list (GEA) : List of GEA structures. A GEA structure has the following format:
  - cbName (BYTE) : Length of EA ASCIIZ name, which does not include the null character.

:::szName (CHAR) : ASCIIZ name of EA. :On output, PathInfoBuf is unchanged. The buffer pointed to by fpFEAList is filled in with the returned information. If the buffer fpFEAList points to isn't large enough to hold the returned information (ERROR_BUFFER_OVERFLOW) cbList is still valid, assuming there's at least enough space for it. Its value is the size of the entire EA set for the file, even though only a subset of attributes was requested. Following is the format of the FEAList structure: ::cbList (ULONG) : Length of the FEA list, including the length itself. ::list (FEA) : List of FEA structures. An FEA structure has the following format: :::Flags (BYTE) : Bit indicator describing the characteristics of the EA being defined. ::: 7 - Critical EA. :::6-0 - Reserved and must be set to zero. :::If bit 7 is set to 1, this indicates a critical EA. If bit 7 is 0, this means the EA is noncritical; that is, the EA is not essential to the intended use by an application of the file with which it is associated. :::cbName (BYTE) : Length of EA ASCIIZ name, which does not include the null character. :::cbValue (USHORT) : Length of EA value, which cannot exceed 64KB. :::szName (PSZ) : Address of the ASCIIZ name of EA. :::aValue (PSZ) : Address of the free-format value of EA. :::`'Note:'` The szName and aValue fields are not included as part of header or include files. Because of their variable lengths, these entries must be built manually.

- Level 5 Information

::Level 5 returns the fully qualified ASCIIZ name of PathName in PathInfoBuf. The PathName may contain global file name characters.

- Level 6 Information

::Level 6 requests a file system to verify the correctness of PathName per its rules of syntax. An erroneous name is indicated by an error return code. The PathName may contain global file name characters.

- PathInfoBufSize (USHORT) - output: Length of PathInfoBuf.
- Reserved (ULONG) - input: Reserved, must be set to zero.

Return Code

rc (USHORT) - return:Return code descriptions are:

- 0 NO_ERROR
- 3 ERROR_PATH_NOT_FOUND
- 32 ERROR_SHARING_VIOLATION
- 111 ERROR_BUFFER_OVERFLOW
- 124 ERROR_INVALID_LEVEL
- 206 ERROR_FILENAME_EXCED_RANGE
- 254 ERROR_INVALID_EA_NAME
- 255 ERROR_EA_LIST_INCONSISTENT

Remarks

For DosQPathInfo to return information contained in any of the file information levels, the file object must be opened for read access, with a deny-write sharing mode specified for access by other processes. Thus, if the file object is already accessed by another process that holds conflicting sharing and access rights, a call to DosQPathInfo fails.

Bindings

C

```
typedef struct _FDATE {   /* fdate */
  unsigned day   : 5;     /* binary day for directory entry */
  unsigned month : 4;     /* binary month for directory entry */
  unsigned year  : 7;     /* binary year for directory entry */
} FDATE;

typedef struct _FTIME {       /* ftime */
  unsigned twosecs : 5;       /* binary number of two-second increments */
  unsigned minutes : 6;       /* binary number of minutes */
  unsigned hours   : 5;       /* binary number of hours */
```

```
} FTIME;

typedef struct _FILESTATUS {   /* fsts */
  FDATE  fdateCreation;        /* date of file creation */
  FTIME  ftimeCreation;        /* time of file creation */
  FDATE  fdateLastAccess;      /* date of last access */
  FTIME  ftimeLastAccess;      /* time of last access */
  FDATE  fdateLastWrite;       /* date of last write */
  FTIME  ftimeLastWrite;       /* time of last write */
  ULONG  cbFile;               /* file size (end of data) */
  ULONG  cbFileAlloc;          /* file allocated size */
  USHORT attrFile;             /* attributes of the file */
} FILESTATUS;

typedef struct _GEA {       /* gea */
  BYTE cbName;             /* name length not including NULL */
  CHAR szName[1];          /* attribute name */
} GEA;

typedef struct _GEALIST {   /* geal */
  ULONG  cbList;           /* total bytes of structure including full list */
  GEA list[1];             /* variable length GEA structures */
} GEALIST;

typedef struct _FEA {       /* fea */
  BYTE fEA;                /* flags */
  BYTE cbName;             /* name length not including NULL */
  USHORT cbValue;          /* value length */
} FEA;

typedef struct _FEALIST {   /* feal */
  ULONG  cbList;           /* total bytes of structure including full list */
  FEA list[1];             /* variable length FEA structures */
} FEALIST;

typedef struct _EAOP {      /* eaop */
  PGEALIST fpGEAList;      /* general EA list */
  PFEALIST fpFEAList;      /* full EA list */
  ULONG  oError;
} EAOP;

#define INCL_DOSFILEMGR

USHORT  rc = DosQPathInfo(PathName, PathInfoLevel, PathInfoBuf,
                          PathInfoBufSize, 0);

PSZ     PathName;         /* File or directory path name string */
USHORT  PathInfoLevel;    /* Data required  */
PBYTE   PathInfoBuf;      /* Data buffer (returned) */
USHORT  PathInfoBufSize;  /* Data buffer size */
ULONG   0;                /* Reserved (must be zero)  */
```

```
USHORT  rc;             /* return code */
```

MASM

```
FDATE   struc
  fdate_fs  dw  ?
FDATE   ends

FTIME   struc
  ftime_fs  dw  ?
FTIME   ends

FILESTATUS struc
  fsts_fdateCreation   dw (size FDATE)/2 dup (?) ;date of file creation
  fsts_ftimeCreation   dw (size FTIME)/2 dup (?) ;time of file creation
  fsts_fdateLastAccess dw (size FDATE)/2 dup (?) ;date of last access
  fsts_ftimeLastAccess dw (size FTIME)/2 dup (?) ;time of last access
  fsts_fdateLastWrite  dw (size FDATE)/2 dup (?) ;date of last write
  fsts_ftimeLastWrite  dw (size FTIME)/2 dup (?) ;time of last write
  fsts_cbFile          dd  ? ;file size (end of data)
  fsts_cbFileAlloc     dd  ? ;file allocated size
  fsts_attrFile        dw  ? ;attributes of the file
FILESTATUS ends

GEA    struc
  gea_cbName      db  ?          ;name length not including NULL
  gea_szName      db  1 dup (?)  ;attribute name
GEA    ends

GEALIST    struc
  geal_cbList     dd  ?      ;total bytes of structure including full list
  geal_list       db  size GEA * 1 dup (?) ;variable length GEA structures
GEALIST    ends

FEA   struc
  fea_fEA         db  ? ;flags
  fea_cbName      db  ? ;name length not including NULL
  fea_cbValue     dw  ? ;value length
FEA   ends

FEALIST struc
  feal_cbList     dd  ?      ;total bytes of structure including full list
  feal_list       db  size FEA * 1 dup (?) ;variable length FEA structures
FEALIST ends

EAOP    struc
  eaop_fpGEAList  dd  ? ;general EA list
  eaop_fpFEAList  dd  ? ;full EA list
  eaop_oError     dd  ? ;
```

```
EAOP    ends

EXTRN DosQPathInfo:FAR
INCL_DOSFILEMGR     EQU 1

PUSH@  ASCIIZ PathName        ;File or directory path name string
PUSH   WORD   PathInfoLevel   ;Data required
PUSH@  OTHER  PathInfoBuf     ;Data buffer (returned)
PUSH   WORD   PathInfoBufSize ;Data buffer size
PUSH   DWORD  0               ;Reserved (must be zero)
CALL   DosQPathInfo

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
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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