 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

2021/09/17 04:47 · prokushev · 0 Comments
2021/08/20 03:18 · prokushev · 0 Comments

DosGetInfoSeg

This call returns the address of a global and local information segment, specific to a process.

Syntax

DosGetInfoSeg (GlobalSeg, LocalSeg)

Parameters

- GlobalSeg (PSEL) - output : Address of the global information segment structure, as defined below:
  - time (ULONG): Time in seconds since 1/1/1970.
  - millisecs (ULONG): Time in milliseconds.
  - hours (UCHAR): Current hour.
  - minute (UCHAR): Current minute.
  - seconds (UCHAR): Current second.
  - hundredsec (UCHAR): Current hundredth of a second.
  - timezone (USHORT): Minutes from UTC; if hex FFFFH, timezone is undefined.
  - interval (USHORT): Timer interval in tenths of milliseconds.
  - day (UCHAR): Day.
  - month (UCHAR): Month.
  - year (USHORT): Year.
  - weekday (UCHAR): Day-of-week:

Value	Definition
0	Sunday
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday

- majorversion (UCHAR): Major version number.
- minorversion (UCHAR): Minor version number.

- revision (UCHAR): Revision letter.
- currentsession (UCHAR): Current foreground full-screen session.
- maxnumsessions (UCHAR): Maximum number of full-screen sessions.
- hugeshift (UCHAR): Shift count for huge segments.
- protmodeind (UCHAR): Protect-mode-only indicator:

Value	Definition
0	DOS mode and OS/2 mode.
1	OS/2 mode only.

- lastprocess (USHORT) : Process ID of the current foreground process.
- dynvarflag (UCHAR) : Dynamic variation flag:

Value	Definition
0	Absolute
1	Enabled

- maxwait (UCHAR) : Maximum wait in seconds.
- mintimeslice (USHORT) : Minimum timeslice in milliseconds.
- maxtimeslice (USHORT) : Maximum timeslice in milliseconds.
- bootdrive (USHORT) : Drive from which the system was booted:

Value	Definition
1	Drive A.
2	Drive B.
.	
.	
.	
n	Drive n.

- traceflags (UCHAR): 32 system trace major code flags. Each bit corresponds to a trace major code, hex 00-FFH. The most significant bit (left-most) of the first byte corresponds to major code hex 00H.

Value	Definition
0	Trace disabled.
1	Trace enabled.

- maxtextsessions (UCHAR): Maximum number of VIO windowable sessions.
- maxpmsessions (UCHAR): Maximum number of Presentation Manager sessions.

- LocalSeg (PSEL) - output : Address of the selector for the local information segment structure, as defined below:
  - processid (PID): Current process ID.
  - parentprocessid (PID): Parent process ID.
  - threadprty (USHORT): Priority of current thread.
  - threadid (TID): Current thread ID.
  - sessionid (USHORT): Current session ID.
  - procstatus (UCHAR): Process status.
  - unused (UCHAR): Unused.
  - foregroundprocess (BOOL): Current process is in foreground (has keyboard focus). Value

-1 implies yes, 0 implies no.
- typeProcess (UCHAR): Type of process:

Value	Definition
0	Full screen protect mode session.
1	Requires real mode.
2	VIO windowable protect mode session.
3	Presentation Manager protect mode session.
4	Detached protect mode process.

- unused (UCHAR): Unused.
- environmentsel (SEL): Environment selector.
- cmdlineoff (USHORT): Command line offset in the segment addressed by environmentsel.
- dataseglen (USHORT): Length of data segment in bytes.
- stacksize (USHORT): Stack size in bytes.
- heapsize (USHORT): Heap size in bytes.
- hmodule (HMODULE): Module handle.
- dssel (SEL): Data segment selector.

Return Code

rc (USHORT) - return:Return code description is:

- 0 NO_ERROR

Remarks

Items of general interest are kept in the global information segment. Items of information specific to a particular process are kept in the local information segment. This information can be directly read by the application program. Both of these segments are defined as read-only segments. The application program cannot modify this data.

Assuming n1, n2, and n3 are the maximum number of full-screen sessions, VIO-windowable sessions, and Presentation Manager sessions, the first 0 through (n1-1) session numbers are assigned to full-screen sessions. The next n2 session numbers are assigned to VIO-windowable sessions, and the next n3 session numbers are assigned to Presentation Manager sessions. Session numbers in the range (n1+n2+n3) through 255 are reserved. Applications should use (n1+n2+n3-1) as an upper boundary. Applications should not assume that all session numbers starting with (n1+n2) and higher are Presentation Manager sessions.

The application program must be careful when referencing the date or time fields in the global information segment. A timer interrupt can be received by the system in between the instructions that read the individual fields, changing the data in these fields. For example, if the time is currently 23:59:59 on Tuesday, 6/2/87, the program can read the hours field (23). A timer interrupt can now be received, changing the time to 00:00:00 on Wednesday, 6/3/87. The program reads the rest of the time field (0 minutes) and the date field. The program would then think the current time and date is 23:00:00 on Wednesday, 6/3/87, which is incorrect.

The application program should read all time and date fields it uses as quickly as possible. It can then compare the least significant time field it uses (milliseconds, hundredths, seconds, or minutes) against the current value in the global information segment. If the value has not changed, the rest of the information is valid. If the value has changed, the program time or date information should be read again, as the information is updated while the program reads it.

Bindings

C

```
typedef struct _GINFOSEG {
  ULONG   time;               /* time in seconds */
  ULONG   msecs;              /* milliseconds    */
  UCHAR   hour;               /* hours */
  UCHAR   minutes;            /* minutes */
  UCHAR   seconds;            /* seconds */
  UCHAR   hundredths;         /* hundredths */
  USHORT  timezone;           /* minutes from UTC */
  USHORT  cusecTimerInterval; /* timer interval (units = 0.0001 seconds) */
  UCHAR   day;                /* day */
  UCHAR   month;              /* month */
  USHORT  year;               /* year */
  UCHAR   weekday;            /* day of week */
  UCHAR   uchMajorVersion;    /* major version number */
  UCHAR   uchMinorVersion;    /* minor version number */
  UCHAR   chRevisionLetter;   /* revision letter */
  UCHAR   sgCurrent;          /* current foreground session */
  UCHAR   sgMax;              /* maximum number of sessions */
  UCHAR   cHugeShift;         /* shift count for huge elements */
  UCHAR   fProtectModeOnly;   /* protect mode only indicator */
  USHORT  pidForeground;      /* pid of last process in foreground session
*/
  UCHAR   fDynamicSched;      /* dynamic variation flag */
  UCHAR   csecMaxWait;        /* max wait in seconds */
  USHORT  cmsecMinSlice;      /* minimum timeslice (milliseconds) */
  USHORT  cmsecMaxSlice;      /* maximum timeslice (milliseconds) */
  USHORT  bootdrive;          /* drive from which the system was booted */
  UCHAR   amecRAS[32];        /* system trace major code flag bits */
  UCHAR   csgWindowableVioMax;/* maximum number of VIO windowable sessions
*/
  UCHAR   csgPMMax;           /* maximum number of pres. services sessions
*/
} GINFOSEG;

typedef struct _LINFOSEG {
  PID     pidCurrent;        /* current process id */
  PID     pidParent;         /* process id of parent */
```

```
  USHORT  prtyCurrent;        /* priority of current thread */
  TID     tidCurrent;         /* thread ID of current thread */
  USHORT  sgCurrent;          /* session */
  UCHAR   rfProcStatus;       /* process status */
  UCHAR   dummy1;
  BOOL    fForeground;        /* current process has keyboard focus */
  UCHAR   typeProcess;        /* process type */
  UCHAR   dummy2;
  SEL     selEnvironment;     /* environment selector */
  USHORT  offCmdLine;         /* command line offset */
  USHORT  cbDataSegment;      /* length of data segment */
  USHORT  cbStack;            /* stack size */
  USHORT  cbHeap;             /* heap size */
  HMODULE hmod;               /* module handle of the application */
  SEL     selDS;              /* data segment handle of the application */
} LINFOSEG;

#define INCL_DOSINFOSEG

USHORT  rc = DosGetInfoSeg(GlobalSeg, LocalSeg);

PSEL    GlobalSeg;      /* Address to place global segment (selector) */
PSEL    LocalSeg;       /* Address to place local segment (selector) */

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

MASM

```
GINFOSEG struc
  gis_time                dd  ? ;time in seconds
  gis_msecs               dd  ? ;milliseconds
  gis_hour                db  ? ;hours
  gis_minutes             db  ? ;minutes
  gis_seconds             db  ? ;seconds
  gis_hundredths          db  ? ;hundredths
  gis_timezone            dw  ? ;minutes from UTC
  gis_cusecTimerInterval  dw  ? ;timer interval (units = 0.0001 seconds)
  gis_day                 db  ? ;day
  gis_month               db  ? ;month
  gis_year                dw  ? ;year
  gis_weekday             db  ? ;day of week
  gis_uchMajorVersion     db  ? ;major version number
  gis_uchMinorVersion     db  ? ;minor version number
  gis_chRevisionLetter    db  ? ;revision letter
  gis_sgCurrent           db  ? ;current foreground session
  gis_sgMax               db  ? ;maximum number of sessions
  gis_cHugeShift          db  ? ;shift count for huge elements
  gis_fProtectModeOnly    db  ? ;protect mode only indicator
  gis_pidForeground       dw  ? ;pid of last process in foreground session
  gis_fDynamicSched       db  ? ;dynamic variation flag
```

```
  gis_csecMaxWait         db  ? ;max wait in seconds
  gis_cmsecMinSlice       dw  ? ;minimum timeslice (milliseconds)
  gis_cmsecMaxSlice       dw  ? ;maximum timeslice (milliseconds)
  gis_bootdrive           dw  ? ;drive from which the system was booted
  gis_amecRAS             db  32 dup (?) ;system trace major code flag bits
  gis_csgWindowableVioMax db  ? ;maximum number of VIO windowable sessions
  gis_csgPMMax            db  ? ;maximum number of pres. services sessions
GINFOSEG ends

LINFOSEG struc
  lis_pidCurrent      dw  ? ;current process id
  lis_pidParent       dw  ? ;process id of parent
  lis_prtyCurrent     dw  ? ;priority of current thread
  lis_tidCurrent      dw  ? ;thread ID of current thread
  lis_sgCurrent       dw  ? ;session
  lis_rfProcStatus    db  ? ;process status
  lis_dummy1          db  ? ;
  lis_fForeground     dw  ? ;current process has keyboard focus
  lis_typeProcess     db  ? ;process type
  lis_dummy2          db  ? ;
  lis_selEnvironment  dw  ? ;environment selector
  lis_offCmdLine      dw  ? ;command line offset
  lis_cbDataSegment   dw  ? ;length of data segment
  lis_cbStack         dw  ? ;stack size
  lis_cbHeap          dw  ? ;heap size
  lis_hmod            dw  ? ;module handle of the application
  lis_selDS           dw  ? ;data segment handle of the application
LINFOSEG ends

EXTRN  DosGetInfoSeg:FAR
INCL_DOSINFOSEG     EQU 1

PUSH@  WORD    GlobalSeg     ;Global segment selector (returned)
PUSH@  WORD    LocalSeg      ;Local segment selector (returned)
CALL   DosGetInfoSeg

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

2018/08/25 15:05 · prokushev · 0 Comments

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Last update: **2021/12/16 03:04**