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.

```
      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

<PRE> 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 */ </PRE>

MASM

<PRE> 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 </PRE>