



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](#)

DosGetPID

This call returns the current process ID, thread ID, and the process ID of the parent process.

Syntax

```
DosGetPID (ProcessIDs)
```

Parameters

- ProcessIDs (PPIDINFO) - output : Address of the structure where the ID information is returned.
 - pid (PID) : Current process identifier.
 - tid (TID) : Thread (of the current process) identifier.
 - pidParent (PID) : Parent process (of the current process) identifier.

Return Code

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

- 0 NO_ERROR

Remarks

The process ID may be used to generate uniquely named temporary files, or for communication with signals. For more information on signals, see [DosFlagProcess](#) and [DosSendSignal](#).

In the OS/2 environment, thread IDs are used with calls that manipulate threads in the current process. For more information, see [DosSuspendThread](#), [DosResumeThread](#), [DosGetPrty](#), and [DosSetPrty](#).

If the application is executing in the OS/2 environment, it is more efficient to obtain these variables by calling [DosGetInfoSeg](#) instead of [DosGetPID](#). However, applications written to the family API cannot depend on the availability of [DosGetInfoSeg](#).

To get an ID for a process other than the current process or its parent process, issue [DosGetPPID](#).

Bindings

MASM

```
PIDINFO struc
    pidi_pid      dw ? ;current process' process ID
    pidi_tid      dw ? ;current process' thread ID
    pidi_pidParent dw ? ;process ID of the parent
PIDINFO ends

EXTRN DosGetPID:FAR
INCL_DOSPROCESS EQU 1

PUSH@ OTHER ProcessIDsArea ;Process IDs (returned)
CALL DosGetPID

Returns NONE
```

C

```
typedef struct _PIDINFO { /* pidi */
    PID pid; /* current process' process ID */
    TID tid; /* current process' thread ID */
    PID pidParent; /* process ID of the parent */
} PIDINFO;

#define INCL_DOSPROCESS

USHORT rc = DosGetPID(ProcessIDsArea);

PPIDINFO ProcessIDsArea; /* Process IDs (returned) */
USHORT rc; /* return code */
```

Example

The following example demonstrates how to create a process, obtain process ID information, and kill a process. Process1 invokes process2 to run asynchronously. It obtains and prints some PID information, and then kills process2.

```
/* ---- process1.c ---- */
#define INCL_DOSPROCESS
#include <os2.h>
#define START_PROGRAM "process2.exe" /* Program pointer */
```

```

main()
{
    CHAR          ObjFail [50];          /* Object name buffer */
    RESULTCODES  ReturnCodes;          /*
    PIDINFO      PidInfo;
    PID          ParentID;             /*
    USHORT       rc;

    printf("Process1 now running. \n");

    /** Start a child process. **/
    if(!(DosExecPgm(ObjFail,            /* Object name buffer */
                  sizeof(ObjFail),    /* Length of obj. name buffer */
                  EXEC_ASYNC,         /* Execution flag - asynchronous */
                  NULL,                /* No args. to pass to process2*/
                  NULL,                /* Process2 inherits process1's
                                      environment */
                  &ReturnCodes,       /* Ptr. to resultcodes struct. */
                  START_PROGRAM)))    /* Name of program file */
        printf("Process2 started. \n");

    /** Obtain Process ID information and print it **/
    if(!(rc=DosGetPID(&PidInfo)))      /* Process ID's (returned) */
        printf("DosGetPID: current process ID is %d; thread ID is %d; parent
process ID is %d.\n",
              PidInfo.pid, PidInfo.tid, PidInfo.pidParent);
    if(!(rc=DosGetPPID(
        ReturnCodes.codeTerminate, /* Process whose parent is wanted */
        &ParentID)))              /* Address to put parent's PID */
        printf("Child process ID is %d; Parent process ID is %d.\n",
              ReturnCodes.codeTerminate, ParentID);

    /** Terminate process2 **/
    if(!(rc=DosKillProcess(DKP_PROCESSTREE, /* Action code - kill process
                                           and descendants */
                          ReturnCodes.codeTerminate))) /* PID of root of process tree
*/
        printf("Process2 terminated by process1.\n");
}

```

```

/* ---- process2.c ---- */

#define INCL_DOSPROCESS

#include <os2.h>

#define SLEEPTIME 500L
#define RETURN_CODE 0

```

```
main()
{
    printf("Process2 now running.\n");

    /* Sleep to allow process1 to kill it */
    DosSleep(SLEEPTIME);           /* Sleep interval */
    DosExit(EXIT_PROCESS,          /* Action Code */
            RETURN_CODE);         /* Result Code */
}
```

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Last update: **2021/10/16 14:09**

