

ProcessInfoRec structure

#include <Processes.h>

typedef struct ProcessInfoRec {		<u>Size</u>	<u>Offset</u>	<u>Description</u>
<u>unsigned long</u>	processInfoLength;	4	0	length of record
<u>StringPtr</u>	processName;	4	4	name of process
<u>ProcessSerialNumber</u>	processNumber;	8	8	psn of the process
<u>unsigned long</u>	processType;	4	16	file type of app file
<u>OSType</u>	processSignature;	4	20	signature of app file
<u>unsigned long</u>	processMode;	4	24	'SIZE' resource flags
<u>Ptr</u>	processLocation;	4	28	address of partition
<u>unsigned long</u>	processSize;	4	32	partition size
<u>unsigned long</u>	processFreeMem;	4	36	free bytes in heap
<u>ProcessSerialNumber</u>	processLauncher;	8	40	process that launched
<u>unsigned long</u>	processLaunchDate;	4	48	time when launched
<u>unsigned long</u>	processActiveTime;	4	52	accumulated CPU time
<u>FSSpecPtr</u>	processAppSpec;	4	56	location of the file
} ProcessInfoRec ;		60		

Notes: You specify the values for three fields of the process information record: processInfoLength, processName and processAppSpec. You must either set the processName and processAppSpec fields to NIL or set these fields to point to storage that you have allocated for them. The **GetProcessInformation** function returns information in all other fields of the process information record.

The processInfoLength field is the number of bytes in the process information record. For compatibility, you should specify the length of the record in this field. The name returned in the processName field is the name of the application or desk accessory. For applications, this field contains the name of the application as designated by the user at the time the application was opened. For example, for foreground applications, the processName field is the name as it appears in the Application menu. For desk accessories, the processName field contains the name of the 'DRVR' resource. You must specify NIL in the processName field if you do not want the application name or the desk accessory name returned. Otherwise, you should allocate at least 32 bytes of storage for the string pointed to by the processName field. Note that the processName field specifies the name of either the application or the 'DRVR' resource, whereas the processAppSpec field specifies the location of the file.

The processNumber field specifies the process serial number. The process serial number is a 64-bit number; the meaning of these bits is internal to the **Process Manager**. You should not interpret the value of the process serial number.

The processType field indicates the file type of the application, generally 'APPL' for applications, and 'appe' for background-only applications launched at startup. If the process is a desk accessory, the processType field is the type of the file containing the 'DRVR' resource.

The processSignature field indicates the signature of the file containing the application or the 'DRVR' resource (for example, the signature of the TeachText application is 'ttx').

The processMode field indicates whether the process is an application or desk accessory. For applications, this field also returns information specified in the application's 'SIZE' resource. This information is returned as flags. You can refer to these flags by using these constants.

modeDeskAccessory

modeMultiLaunch

modeNeedSuspendResume

modeCanBackground

modeDoesActivateOnFGSwitch

modeOnlyBackground

modeGetFrontClicks

modeGetAppDiedMsg

mode32BitCompatible

modeHighLevelEventAware

modeLocalAndRemoteHLEvents

modeStationeryAware

modeUseTextEditServices

The processLocation field is the beginning address of the application partition.

The processSize field is the number of bytes in the application's partition (including the heap, stack, and A5 world).

The processFreeMem field is the number of free bytes in the application's heap. The processLauncher field is the process serial number of the process that launched the application or desk accessory. If the original launcher of the process is no longer open, this field contains the constant kNoProcess.

The processLaunchDate field contains the value of the Ticks global variable at the time that the process was launched.

The processActiveTime field represents the accumulated time, in ticks, during which the process has used the CPU, including both foreground and background processing time.

The processAppSpec field specifies the address of a file specification record that stores the location of the file containing the application or 'DRVr' resource. You should specify NIL in the processAppSpec field if you do not want the FSSpec record of the file returned.