This is part of **Win16 API** which allow to create versions of program from one source code to run under OS/2 and Win16. Under OS/2 program can be running under Win-OS/2 if program is Windows NE executable, and with help on Windows Libraries for OS/2, if it is OS/2 NE executable. Here is a WLO to OS/2 API mapping draft

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LocalAlloc

Brief

Allocates a block of memory from the local heap of the current data segment.

Syntax

```
HLOCAL WINAPI LocalAlloc(
UINT uFlags,
UINT uBytes
);
```

Parameters

- uFlags – Allocation attributes. Common flags:
    - LMEM_FIXED (0x0000) – Allocates fixed memory; the return value is a pointer.
    - LMEM_MOVEABLE (0x0002) – Allocates movable memory; returns a handle.
    - LMEM_ZEROINIT (0x0040) – Initializes the memory to zero.
    - LMEM_DISCARDABLE (0x0F00) – Makes the block discardable (only with LMEM_MOVEABLE).
    - LMEM_NOCOMPACT (0x0010) – Prevents heap compaction for this allocation.
    - LMEM_NODISCARD (0x0020) – Prevents discarding of other blocks.

Shorthands: LHND (LMEM_MOVEABLE | LMEM_ZEROINIT), LPTR (LMEM_FIXED | LMEM_ZEROINIT).

- uBytes – Number of bytes to allocate. If zero and LMEM_MOVEABLE is set, returns a handle to a discarded object.

Return Value

If successful, returns a handle to the allocated object. For LMEM_FIXED, this handle is actually a pointer.

Returns NULL on failure. Call GetLastError for extended error information.

Notes

- For movable blocks, use LocalLock to obtain a pointer before accessing the memory.
- The internal lock count of a new block is zero.

Example Code

C Binding

```
HLOCAL hMem = LocalAlloc(LMEM_MOVEABLE | LMEM_ZEROINIT, 1024);
HLOCAL hMem2 = LocalAlloc(LHND, 1024);
```

MASM Binding

```
push 0042h ; LMEM_MOVEABLE | LMEM_ZEROINIT
push 0400h ; 1024 bytes
call LocalAlloc
```

See also

LocalReAlloc LocalFree LocalLock

Group	Functions
Module manager	GETVERSION GETMODULEHANDLE GETMODULEUSAGE GETMODULEFILENAME GETPROCADDRESS MAKEPROCINSTANCE FREEPROCINSTANCE GETINSTANCEDATA CATCH THROW GETCODEHANDLE LOADLIBRARY
Global Memory Manager	GlobalAlloc GlobalCompact GlobalDiscard GlobalFree GlobalLock GlobalReAlloc GlobalSize GlobalUnlock GlobalFlags
Local Memory Manager	LocalInit LocalAlloc LocalCompact LocalDiscard LocalFree LocalLock LocalFreeze LocalMelt LocalReAlloc LocalSize LocalUnlock LocalHandleDelta LockData UnlockData LocalFlags
Task Scheduler	GetCurrentTask Yield SetPriority
Resource Manager	AddFontResource RemoveFontResource LoadBitmap LoadCursor LoadIcon LoadMenu LoadString LoadAccelerators FindResource LoadResource AllocResource LockResource FreeResource AccessResource SizeofResource SetResourceHandler
String Translation	AnsiUpper AnsiLower AnsiNext AnsiPrev
Atom Manager	InitAtomTable AddAtom DeleteAtom FindAtom GetAtomName
Windows Initialization File	GetProfileInt GetProfileString WriteProfileString
Debugging	FatalExit
File I/O	_lopen _lcreat _llseek _lread _lwrite _lclose OpenFile GetTempFileName GetTempDrive

Group	Functions
Registry	RegOpenKey RegCreateKey RegCloseKey RegDeleteKey RegSetValue RegQueryValue RegEnumKey

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