



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

2021/09/01 04:23 · prokushev · [0 Comments](#)

# LocalShrink

(Source: Windows 3.0 SDK, Microsoft Knowledge Base Article Q21581)

## Brief

Shrinks the specified local heap to the size given by the `wSize` parameter. The minimum size for the automatic local heap is defined in the application's module-definition file .

## Syntax

```
WORD WINAPI LocalShrink(  
HANDLE hSeg,  
WORD wSize  
);
```

## Parameters

`hSeg` – Handle (selector) of the segment that contains the local heap. If `hSeg` is zero, the function reduces the local heap in the current data segment (DGROUP) .

`wSize` – Specifies the desired size of the local heap after shrinkage, in bytes .

## Return Value

The return value specifies the actual size of the local heap after shrinkage, in bytes . If the heap could not be shrunk to the requested size, the return value may be larger than `wSize`.

## Notes

Windows will not shrink that portion of the data segment that contains the stack and the static variables .

When an application calls LocalAlloc and there is not enough memory within the application's data segment, Windows uses memory from the global heap and appends it to the data segment. Releasing this temporary memory becomes an issue for the programmer. Using LocalShrink compacts and shrinks the data segment to the smallest possible size .

LocalShrink cannot move FIXED or locked blocks when compacting the local heap. Therefore, free space may still remain in the heap, and the final size may not be as small as requested. The function compacts as much as possible given this constraint .

To determine the new size of the whole data segment, use the GlobalSize function .

This function is rarely used in practice; Windows usually manages the local heap size automatically.

## Example Code

### C Binding

```
#include <windows.h>

// Shrink the local heap of the current data segment to 256 bytes
WORD wNewSize = LocalShrink(0, 256);
```

### MASM Binding

```
; AX = segment handle (0 for current data segment), BX = desired size in bytes
push ax ; hSeg
push bx ; wSize
call LocalShrink ; Returns AX = new heap size
```

## See also

- [LocalInit](#)
- [LocalAlloc](#)
- [LocalCompact](#)

Group	Functions
<b>Module manager</b>	GETVERSION GETMODULEHANDLE GETMODULEUSAGE GETMODULEFILENAME GETPROCADDRESS MAKEPROCINSTANCE FREEPROCINSTANCE GETINSTANCEDATA CATCH THROW GETCODEHANDLE LOADLIBRARY
<b>Global Memory Manager</b>	GlobalAlloc GlobalCompact GlobalDiscard GlobalFree GlobalLock GlobalReAlloc GlobalSize GlobalUnlock GlobalFlags
<b>Local Memory Manager</b>	<a href="#">LocalInit</a> <a href="#">LocalAlloc</a> <a href="#">LocalCompact</a> <a href="#">LocalDiscard</a> <a href="#">LocalFree</a> <a href="#">LocalLock</a> <a href="#">LocalFreeze</a> <a href="#">LocalMelt</a> <a href="#">LocalReAlloc</a> <a href="#">LocalSize</a> <a href="#">LocalUnlock</a> <a href="#">LocalHandleDelta</a> <a href="#">LockData</a> <a href="#">UnlockData</a> <a href="#">LocalFlags</a>

Group	Functions
<b>Task Scheduler</b>	GetCurrentTask Yield SetPriority
<b>Resource Manager</b>	AddFontResource RemoveFontResource LoadBitmap LoadCursor LoadIcon LoadMenu LoadString LoadAccelerators FindResource LoadResource AllocResource LockResource FreeResource AccessResource SizeofResource SetResourceHandler
<b>String Translation</b>	<a href="#">AnsiUpper</a> <a href="#">AnsiLower</a> <a href="#">AnsiNext</a> <a href="#">AnsiPrev</a>
<b>Atom Manager</b>	<a href="#">InitAtomTable</a> <a href="#">AddAtom</a> <a href="#">DeleteAtom</a> <a href="#">FindAtom</a> <a href="#">GetAtomName</a>
<b>Windows Initialization File</b>	GetProfileInt GetProfileString WriteProfileString
<b>Debugging</b>	FatalExit
<b>File I/O</b>	_lopen _lcreat _lseek _lread _lwrite _lclose OpenFile GetTempFileName GetTempDrive
<b>Registry</b>	<a href="#">RegOpenKey</a> <a href="#">RegCreateKey</a> <a href="#">RegCloseKey</a> <a href="#">RegDeleteKey</a> <a href="#">RegSetValue</a> <a href="#">RegQueryValue</a> <a href="#">RegEnumKey</a>

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Last update: **2026/03/04 06:49**

