



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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# LocalInit

## Brief

Initializes a local heap within a specified memory segment.

## Syntax

```
BOOL LocalInit(  
    WORD wSegment,  
    WORD wOffset,  
    WORD wHeapSize  
);
```

## Parameters

- **wSegment** - The selector of the segment in which to initialize the local heap.
- **wOffset** - The offset within the segment at which the heap should start.
- **wHeapSize** - The size, in bytes, of the heap to initialize.

## Return Code

- Returns **non-zero** if the heap is successfully initialized.
- Returns **0** if initialization fails.

## Notes

- `LocalInit`

is specific to the 16-bit Windows environment and is not supported in Win32 or later.

- The function sets up a local heap manager within the provided segment, enabling local memory allocation functions to operate within that segment.

- Applications typically call

`LocalInit`

during initialization of a data segment or a dynamically allocated memory block intended for use as a local heap.

- The heap size (

`wHeapSize`

) must be large enough to accommodate heap management overhead.

- For compatibility and performance reasons, modern Windows applications should use the standard heap functions (e.g.,

`HeapCreate`

,

`HeapAlloc`

) instead.

## Example Code

### C Binding

```
#include <windows.h>

BOOL InitializeLocalHeap(WORD seg, WORD offset, WORD size) {
    return LocalInit(seg, offset, size);
}
```

### MASM Binding

```
; Assume AX = segment, DX = offset, CX = heap size
push cx          ; wHeapSize
push dx          ; wOffset
push ax          ; wSegment
call LocalInit   ; Returns AX = non-zero if success
```

## See also

- [LocalAlloc](#) - Allocates memory from the local heap.

- [LocalFree](#) - Frees memory allocated from the local heap.
- [LocalSize](#) - Retrieves the size of a local memory block.
- [LocalReAlloc](#) - Reallocates a local memory block.

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<b>Module Management</b>	<a href="#">GetVersion</a> <a href="#">GetModuleHandle</a> <a href="#">GetModuleUsage</a> <a href="#">GetModuleFileName</a> <a href="#">GetProcAddress</a> <a href="#">MakeProInstance</a> <a href="#">FreeProInstance</a> <a href="#">GetInstanceData</a> <a href="#">Catch</a> <a href="#">Throw</a> <a href="#">GetCodeHandle</a> <a href="#">LoadLibrary</a> <a href="#">FreeLibrary</a>
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<b>Local Memory Management</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>
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<b>String Manipulation</b>	<a href="#">AnsiUpper</a> <a href="#">AnsiLower</a> <a href="#">AnsiNext</a> <a href="#">AnsiPrev</a> <a href="#">AnsiUpperBuff</a> <a href="#">AnsiLowerBuff</a> <a href="#">Istrcmp</a> <a href="#">Istrcmpi</a> <a href="#">IsCharAlpha</a> <a href="#">IsCharAlphaNumeric</a> <a href="#">IsCharUpper</a> <a href="#">IsCharLower</a> <a href="#">_wsprintf</a> <a href="#">wvsprintf</a>
<b>Atom Management</b>	<a href="#">InitAtomTable</a> <a href="#">AddAtom</a> <a href="#">DeleteAtom</a> <a href="#">FindAtom</a> <a href="#">GetAtomName</a> <a href="#">GlobalAddAtom</a> <a href="#">GlobalDeleteAtom</a> <a href="#">GlobalFindAtom</a> <a href="#">GlobalGetAtomName</a>
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<b>Window Management</b>	<a href="#">CreateWindow</a> <a href="#">CreateWindowEx</a> <a href="#">DestroyWindow</a> <a href="#">ShowWindow</a> <a href="#">CloseWindow</a> <a href="#">OpenIcon</a> <a href="#">MoveWindow</a> <a href="#">SetWindowPos</a> <a href="#">BringWindowToTop</a> <a href="#">GetWindow</a> <a href="#">GetParent</a> <a href="#">SetParent</a> <a href="#">GetNextWindow</a> <a href="#">GetTopWindow</a> <a href="#">GetWindowRect</a> <a href="#">GetClientRect</a> <a href="#">AdjustWindowRect</a> <a href="#">AdjustWindowRectEx</a> <a href="#">EnableWindow</a> <a href="#">IsWindowEnabled</a> <a href="#">IsWindowVisible</a> <a href="#">IsIconic</a> <a href="#">IsZoomed</a> <a href="#">IsWindow</a> <a href="#">IsChild</a> <a href="#">FindWindow</a> <a href="#">EnumWindows</a> <a href="#">EnumChildWindows</a> <a href="#">EnumTaskWindows</a> <a href="#">GetDesktopWindow</a> <a href="#">GetDesktopHwnd</a> <a href="#">WindowFromPoint</a> <a href="#">ChildWindowFromPoint</a> <a href="#">GetWindowText</a> <a href="#">SetWindowText</a> <a href="#">GetWindowTextLength</a> <a href="#">GetClassName</a> <a href="#">GetWindowLong</a> <a href="#">SetWindowLong</a> <a href="#">GetWindowWord</a> <a href="#">SetWindowWord</a> <a href="#">GetWindowTask</a> <a href="#">GetWindowPlacement</a> <a href="#">SetWindowPlacement</a> <a href="#">ArrangeIconicWindows</a> <a href="#">CascadeChildWindows</a> <a href="#">TileChildWindows</a> <a href="#">ShowOwnedPopups</a> <a href="#">AnyPopup</a> <a href="#">GetLastActivePopup</a> <a href="#">SetActiveWindow</a> <a href="#">GetActiveWindow</a> <a href="#">SetFocus</a> <a href="#">GetFocus</a> <a href="#">SetCapture</a> <a href="#">GetCapture</a> <a href="#">ReleaseCapture</a> <a href="#">SetSysModalWindow</a> <a href="#">GetSysModalWindow</a> <a href="#">LockWindowUpdate</a> <a href="#">RedrawWindow</a> <a href="#">UpdateWindow</a> <a href="#">InvalidateRect</a> <a href="#">InvalidateRgn</a> <a href="#">ValidateRect</a> <a href="#">ValidateRgn</a> <a href="#">GetUpdateRect</a> <a href="#">GetUpdateRgn</a> <a href="#">ExcludeUpdateRgn</a> <a href="#">BeginDeferWindowPos</a> <a href="#">DeferWindowPos</a> <a href="#">EndDeferWindowPos</a> <a href="#">FlashWindow</a>
<b>Message Handling</b>	<a href="#">GetMessage</a> <a href="#">PeekMessage</a> <a href="#">PostMessage</a> <a href="#">PostAppMessage</a> <a href="#">SendMessage</a> <a href="#">ReplyMessage</a> <a href="#">InSendMessage</a> <a href="#">WaitMessage</a> <a href="#">TranslateMessage</a> <a href="#">DispatchMessage</a> <a href="#">GetMessagePos</a> <a href="#">GetMessageTime</a> <a href="#">GetMessageExtraInfo</a> <a href="#">PostQuitMessage</a> <a href="#">RegisterWindowMessage</a> <a href="#">SetMessageQueue</a> <a href="#">GetQueueStatus</a> <a href="#">GetInputState</a> <a href="#">QuerySendMessage</a>

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<b>Menus</b>	CreateMenu CreatePopupMenu DestroyMenu GetMenu SetMenu GetSystemMenu GetSubMenu AppendMenu InsertMenu ModifyMenu DeleteMenu RemoveMenu ChangeMenu CheckMenuItem EnableMenuItem HighlightMenuItem GetMenuState GetMenuString GetMenuItemCount GetMenuItemID DrawMenuBar TrackPopupMenu GetMenuCheckMarkDimensions SetMenuItemBitmaps IsMenu
<b>Clipboard</b>	OpenClipboard CloseClipboard EmptyClipboard GetClipboardOwner GetOpenClipboardWindow SetClipboardData GetClipboardData CountClipboardFormats EnumClipboardFormats RegisterClipboardFormat GetClipboardFormatName IsClipboardFormatAvailable GetPriorityClipboardFormat SetClipboardViewer GetClipboardViewer ChangeClipboardChain
<b>Caret</b>	CreateCaret DestroyCaret SetCaretPos GetCaretPos HideCaret ShowCaret SetCaretBlinkTime GetCaretBlinkTime
<b>Cursor and Icon</b>	SetCursor GetCursor SetCursorPos GetCursorPos ShowCursor ClipCursor GetClipCursor LoadCursor LoadIcon CreateCursor CreateIcon CopyCursor CopyIcon DestroyCursor DestroyIcon CreateCursorIconIndirect
<b>Scroll Bars</b>	SetScrollPos GetScrollPos SetScrollRange GetScrollRange ShowScrollBar EnableScrollBar CalcChildScroll
<b>Dialog Boxes</b>	DialogBox DialogBoxIndirect DialogBoxParam DialogBoxIndirectParam CreateDialog CreateDialogIndirect CreateDialogParam CreateDialogIndirectParam EndDialog GetDlgItem SetDlgItemText GetDlgItemText SetDlgItemInt GetDlgItemInt CheckDlgButton IsDlgButtonChecked CheckRadioButton SendDlgItemMessage GetNextDlgGroupItem GetNextDlgTabItem GetDlgCtrlID IsDialogMessage MapDialogRect GetDialogBaseUnits DefDlgProc DlgDirList DlgDirListComboBox DlgDirSelect DlgDirSelectEx DlgDirSelectComboBox DlgDirSelectComboBoxEx
<b>Device Context Management</b>	GetDC GetDCEX GetWindowDC ReleaseDC SaveDC RestoreDC CreateDC CreateCompatibleDC DeleteDC ResetDC
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<b>Drawing Functions</b>	SetPixel GetPixel MoveTo LineTo Polyline Polygon PolyPolygon Rectangle RoundRect Ellipse Arc Chord Pie FloodFill ExtFloodFill DrawFocusRect PatBlt BitBlt StretchBlt StretchDIBits SetDIBits GetDIBits SetDIBitsToDevice
<b>Regions</b>	CreateRectRgn CreateRectRgnIndirect CreateRoundRectRgn CreateEllipticRgn CreateEllipticRgnIndirect CreatePolygonRgn CreatePolyPolygonRgn CombineRgn EqualRgn OffsetRgn FillRgn FrameRgn InvertRgn PaintRgn SelectClipRgn ExcludeClipRect IntersectClipRect OffsetClipRgn GetClipBox GetRgnBox PtInRegion RectInRegion SetRectRgn
<b>Bitmaps</b>	CreateBitmap CreateBitmapIndirect CreateCompatibleBitmap CreateDiscardableBitmap CreateDIBitmap CreateDIBPatternBrush SetBitmapBits GetBitmapBits SetBitmapDimension GetBitmapDimension
<b>Brushes and Pens</b>	CreateSolidBrush CreateHatchBrush CreatePatternBrush CreateBrushIndirect CreatePen CreatePenIndirect SetBrushOrg GetBrushOrg SelectObject GetObject DeleteObject GetStockObject UnrealizeObject

Group	Functions
<b>Fonts and Text</b>	CreateFont CreateFontIndirect CreateScalableFontResource AddFontResource RemoveFontResource EnumFonts EnumFontFamilies GetTextMetrics GetTextExtent GetTextFace GetCharWidth GetCharABCWidths GetOutlineTextMetrics GetGlyphOutline GetKerningPairs SetTextColor GetTextColor SetBkColor GetBkColor SetBkMode GetBkMode SetTextAlign GetTextAlign SetTextCharacterExtra GetTextCharacterExtra SetTextJustification TextOut ExtTextOut TabbedTextOut GetTabbedTextExtent
<b>Metafiles</b>	CreateMetaFile CloseMetaFile DeleteMetaFile CopyMetaFile GetMetaFile GetMetaFileBits SetMetaFileBits PlayMetaFile PlayMetaFileRecord EnumMetaFile IsValidMetaFile
<b>Printing</b>	StartDoc EndDoc StartPage EndPage SetAbortProc AbortDoc QueryAbort OpenJob CloseJob DeleteJob WriteSpool StartSpoolPage EndSpoolPage SpoolFile
<b>Palettes</b>	CreatePalette SelectPalette RealizePalette GetPaletteEntries SetPaletteEntries ResizePalette AnimatePalette UpdateColors GetNearestPaletteIndex GetNearestColor SetSystemPaletteUse GetSystemPaletteUse GetSystemPaletteEntries
<b>Device Capabilities</b>	GetDeviceCaps GetRasterizerCaps GetEnvironment SetEnvironment GetAspectRatioFilter Escape CreateIC
<b>Miscellaneous GDI</b>	SetROP2 GetROP2 SetPolyFillMode GetPolyFillMode SetStretchBltMode GetStretchBltMode SetMapperFlags GetMapperFlags LineDDA MulDiv GetCurrentPosition GetBoundsRect SetBoundsRect FastWindowFrame
<b>Timer</b>	SetTimer KillTimer GetTickCount GetTimerResolution GetCurrentTime
<b>Hooks</b>	SetWindowsHook SetWindowsHookEx UnhookWindowsHook UnhookWindowsHookEx CallNextHookEx DefHookProc CallMsgFilter
<b>Communications</b>	OpenComm CloseComm ReadComm WriteComm SetCommState GetCommState GetCommError TransmitCommChar SetCommEventMask GetCommEventMask SetCommBreak ClearCommBreak UngetCommChar BuildCommDCB EscapeCommFunction FlushComm EnableCommNotification
<b>Networking (WNet)</b>	WNetErrorText WNetOpenJob WNetCloseJob WNetAbortJob WNetHoldJob WNetReleaseJob WNetCancelJob WNetSetJobCopies WNetWatchQueue WNetUnwatchQueue WNetLockQueueData WNetUnlockQueueData WNetGetConnection WNetGetCaps WNetDeviceMode WNetBrowseDialog WNetGetUser WNetAddConnection WNetCancelConnection WNetGetError WNetGetErrorText WNetEnable WNetDisable WNetRestoreConnection WNetWriteJob WNetConnectDialog WNetDisconnectDialog WNetConnectionDialog WNetViewQueueDialog WNetPropertyDialog WNetGetDirectoryType WNetDirectoryNotify WNetGetPropertyText
<b>System Information</b>	GetSystemMetrics GetSysColor SetSysColors SystemParametersInfo GetFreeSystemResources GetSystemDebugState GetDoubleClickTime SetDoubleClickTime SwapMouseButton GetKeyState GetAsyncKeyState GetKeyboardState SetKeyboardState mouse_event GetMouseEventProc EnableHardwareInput IsUserIdle LockInput MessageBeep WinHelp
<b>Window Classes</b>	RegisterClass RegisterClassEx UnregisterClass GetClassInfo GetClassInfoEx GetClassWord SetClassWord GetClassLong SetClassLong GetClassName
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Group	Functions
<b>Miscellaneous</b>	<a href="#">InitApp</a> <a href="#">ExitWindows</a> <a href="#">ExitWindowsExec</a> <a href="#">OLDEXITWINDOWS</a> <a href="#">BEAR11</a> <a href="#">BEAR86</a> <a href="#">BEAR182</a> <a href="#">UserSeeUserDo</a> <a href="#">OldSetDeskPattern</a> <a href="#">SetRect</a> <a href="#">SetRectEmpty</a> <a href="#">CopyRect</a> <a href="#">IsRectEmpty</a> <a href="#">PtInRect</a> <a href="#">OffsetRect</a> <a href="#">InflateRect</a> <a href="#">IntersectRect</a> <a href="#">UnionRect</a> <a href="#">EqualRect</a> <a href="#">SubtractRect</a>

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