



Note: This API calls are shared between DOS and Win16 personality.

DPMI is a shared interface for DOS applications to access Intel 80286+ CPUs services. DOS DMPI host provides core services for protected mode applications. Multitasking OS with DOS support also provides DMPI in most cases. Windows standard and extended mode kernel is a DPMI client app. Standard and extended mode kernel differs minimally and shares common codebase. Standard Windows kernel works under DOSX extender. DOSX is a specialized version of 16-bit DPMI Extender (but it is standard DPMI host). Standard mode is just DPMI client, enhanced mode is DPMI client running under Virtual Machine Manager (really, multitasker which allow to run many DOS sessions). Both modes shares DPMI interface for kernel communication. The OS/2 virtual DOS Protected Mode Interface (VDPMI) device driver provides Version 0.9 DPMI support for virtual DOS machines. Win16 (up to Windows ME) provides Version 0.9 DPMI support. Windows in Standard Mode provides DPMI services only for Windows Applications, not DOS sessions.

DPMI host often merged with DPMI extender. Usually DPMI extender provide DPMI host standard services and DOS translation or True DPMI services.

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Int 31H, AH=06H, AL=00H

Version

0.9

Brief

Lock Linear Region

Input

```
AX = 0600H
BX:CX = starting linear address of memory to lock
SI:DI = size of region to lock (bytes)
```

Return

```
if function successful
Carry flag = clear
```

```
if function unsuccessful
Carry flag = set
AX = error code
8013H    physical memory unavailable
8017H    lock count exceeded
8025H    invalid linear address (unallocated pages)
```

Notes

Locks the specified linear address range.

If the function returns an error, none of the memory has been locked.

If the specified region overlaps part of a page at the beginning or end of the region, the page(s) will be locked.

This function may be called more than once for a given page; the DPMI host maintains a lock count for each page.

This function is ignored by DPMI implementations that do not support virtual memory; the function will return the Carry flag clear to indicate success, but has no other effect. DPMI hosts which support virtual memory may also choose to ignore this function, but such hosts must be able to handle page faults transparently at arbitrary points during a client's execution, including within interrupt and exception handlers.

See also

Note

Text based on <http://www.delorie.com/djgpp/doc/dpmi/>

DPMI	
Process manager	INT 2FH 1680H, 1687H
Signals	
Memory manager	
Misc	INT 2FH 1686H, 168AH
Devices	

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