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, exnhanced mode is DPMI client running under Virtual Machime 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.

2021/08/05 10:15 · prokushev · 0 Comments

Int 31H, AH=06H, AL=03H

Version

0.9

Brief

Relock Real Mode Region

Input

```
AX = 0603H
BX:CX = starting linear address of memory to relock
SI:DI = size of region to relock (bytes)
```

Return

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

```
if function unsuccessful
Carry flag = set
AX = error code
8002H   invalid state (region not marked as pageable)
8013H   physical memory unavailable
8025H   invalid linear address (region is above 1 MB boundary)
```

Notes

Relocks a memory region that was previously declared as pageable with the Mark Real Mode Region as Pageable function (Int 31H Function 0602H).

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

If the specified region overlaps part of a page at the beginning or end of the region, the page(s) will not be relocked.

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.

If Function 0602H is implemented as a “no-operation” on a particular DPMI host, this function will likewise do nothing. In other words, this function should not be used to lock memory, but only to restore the default state of the host's conventional memory locking.

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	

2021/08/13 14:23 · prokushev · 0 Comments