



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=0DH, AL=03H

Version

1.0

Brief

Free Serialization on Shared Memory

Input

AX = 0D03H
SI:DI = shared memory block handle
DX = option flags

Bit	Significance
0	0 = release exclusive serialization 1 = release shared serialization
1	0 = don't free pending serialization 1 = free pending serialization (see Note)
2-15	reserved, must be zero

if function successful

```
Carry flag = clear
```

```
if function unsuccessful
```

```
Carry flag = set
```

```
AX = error code
```

```
8002H   invalid state (client does not own a successful serialization of the  
specified type)
```

```
8023H   invalid handle
```

Notes

Releases a shared memory block serialization that was previously obtained with Int 31H Function 0D02H.

For each client, the DPMI host maintains four different local (virtual machine) serialization counts (exclusive, shared, pending shared, and pending exclusive) for each shared memory block, as well as a global serialization count. The global serialization count is only updated when the sum of a virtual machine's exclusive and shared serialization counts goes from 0 to 1 (serialize) or 1 to 0 (free).

A client's interrupt handler can call this function with bit 1 of DX set to cancel a serialization request that has suspended the main thread of execution of the same client. In such cases, the original serialization request will return with the Carry flag set and AX = 8005H.

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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